ZCC Cutting Tools
Europe GmbH



Catalogue Principal

Version 2023

2023

– FR –

Bienvenue chez ZCC Cutting Tools Europe,

pour la version actualisée de notre catalogue principal. Toute l'équipe ZCC Cutting Tools et moi-même avons le plaisir de vous présenter notre gamme de produits et de solutions dont l'évolution constante vise à optimiser la qualité et la rentabilité que vous attendez.

Parallèlement à nos catalogues de nouveaux produits, publiés deux fois par an, ce catalogue principal propose toujours un aperçu optimal de notre offre et des innovations permanentes de ZCC-CT.

« La plus-value grâce au partenariat » restera toujours notre exigence et la promesse que nous faisons à nos clients. Notre offre ne se limite donc pas au contenu de ce catalogue. Elle inclut le développement et les tests de vos solutions personnalisées dans le centre d'essais et de démonstration de notre siège européen à Düsseldorf, mais aussi des prestations de service étendues telles que la gestion des outils et la mise à disposition des données correspondantes, la préparation des outils et les formations clients adaptées à vos besoins. N'hésitez pas à nous contacter, nous sommes à votre disposition.

Le catalogue principal est divisé en trois grands domaines d'application. La partie A ci-après contient les outils de tournage, la partie B les outils de fraisage et la partie C les outils de perçage. ZCC-CT a consacré un catalogue distinct aux systèmes d'outils et aux têtes d'alésage modulaires. N'hésitez pas à contacter votre interlocuteur privilégié ou notre service commercial interne si vous avez besoin d'autres catalogues ou d'informations complémentaires.

Nous vous remercions de votre confiance et nous réjouissons de notre excellente collaboration à venir.
Votre équipe ZCC Cutting Tools Europe, un partenaire toujours à vos côtés.

Quanliang Zhao

Directeur général
ZCC Cutting Tools Europe GmbH



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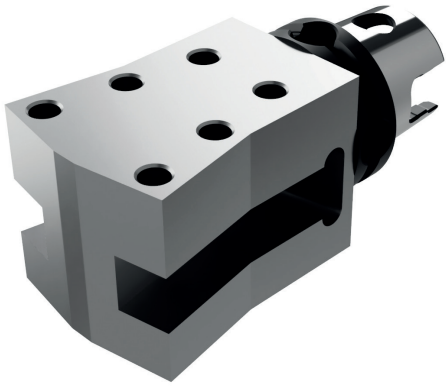
Member of Minmetals Group

Outils spéciaux – Obtenez des outils optimisés

Les applications spéciales nécessitent des solutions spéciales et optimisées. Dans tous les segments industriels, les outils spéciaux peuvent présenter des avantages économiques, techniques ou procéduraux par rapport aux outils standard. Nous déterminons à vos côtés le potentiel exact au cas par cas et en prenant en compte vos contraintes propres. Ensuite, le service de développement de ZCC Cutting Tools Europe se charge de vous concevoir une solution personnalisée à notre siège européen à Düsseldorf pour vous garantir un usinage économique.

Pourquoi choisir les outils spéciaux de ZCC Cutting Tools ?

Nous nous chargeons de concevoir des solutions d'outil personnalisées pour les opérations d'usinage les plus diverses. Dans ce cadre, nous travaillons à vos côtés dès le début et développons des outils exclusifs parfaitement adaptés à vos besoins et à vos priorités. Nos solides compétences s'étendent du développement à la logistique en passant par la fabrication. Faites confiance à notre expertise pour la réussite de vos projets.



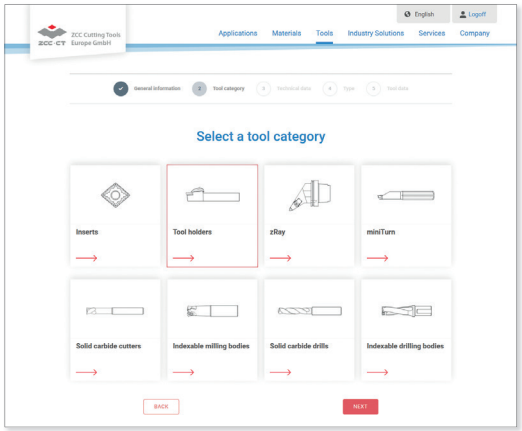
Exemple : porte-outil spécial



Exemple : foret étagé spécial en carbure monobloc

Votre outil spécial personnel en toute facilité

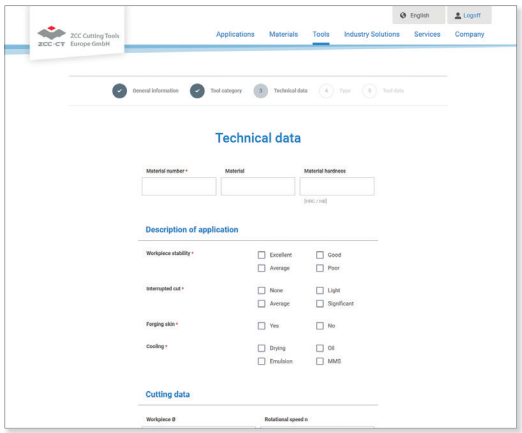
Avez-vous besoin d'outils optimisés et spécialement conçus afin d'améliorer certaines de vos applications au niveau commercial, technique ou logistique ? ZCC Cutting Tools vous conseille et vous assiste pour la planification, la conception et la commande. Grâce à notre nouvel outil en ligne permettant de transmettre vos demandes d'outil spécial, vous obtenez rapidement une offre personnalisée (www.zccct-europe.com).



Page d'accueil « Outil en ligne pour les outils spéciaux » avec sélection de la catégorie d'outil

Sélection de la catégorie d'outil

En scannant le code QR figurant sur cette page, vous serez directement redirigé vers la page d'accueil de notre outil en ligne et vous pourrez commencer par sélectionner la catégorie d'outils souhaitée. C'est très simple.



Définition des paramètres d'outil pertinents

Définition des paramètres d'outils

Vous êtes guidé durant toute la durée du processus de demande. Vous avez également la possibilité d'ajouter des esquisses et des modèles 3D.

Votre moyen rapide et direct d'obtenir des outils spéciaux de ZCC Cutting Tools Europe.

Accéder directement au nouveau **formulaire d'outil spécial** sur notre site Internet.



Siège ZCC Cutting Tools, Zhuzhou, Chine



Production de porte-outils



Frittage de plaquettes

Tournage A	Tournage général	A1-A379
	Gorges et tronçonnage	A380-A457
	Filetage	A458-A500
Fraisage B	Plaquettes de fraisage	B1-B263
	Fraises carbure monobloc	B264-B526
Perçage C	Forets à plaquettes	C1-C37
	Forets carbure monobloc	C38-C151
	Alésoirs carbure monobloc	C152-C171
	Outils de filetage carbure monobloc	C172-C200
Informations techniques D		D1-D12
Index E		E1-E10

TOURNAGE GÉNÉRAL



Tournage général

Vue d'ensemble des produits	**A2-A15**
Vue d'ensemble des brise-copeaux	**A16-A26**
Vue d'ensemble des brise-copeaux	**A27-A35**
Vue d'ensemble des nuances	**A36-A41**
Domaines d'application des nuances	**A42-A47**
Code ISO – plaquette de tournage	**A48-A49**
Tableau de conversion métrique/impérial	**A50**
Plaquettes négatives	**A51-A115**
Plaquettes positives	**A116-A157**
Code ISO – plaquettes de coupe PCBN et PCD	**A158-A159**
Plaquettes de coupe PCBN et PCD	**A160-A197**
Code ISO – plaquettes de coupe céramiques	**A198-A199**
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Vue d'ensemble des barres d'alésage	**A320-A321**
Code ISO – Barres d'alésage	**A322-A323**
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Recommandations de données de coupe	**A366-A379**
Résolution de problèmes	**A502-A503**
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Plaquettes en carbure et cermet

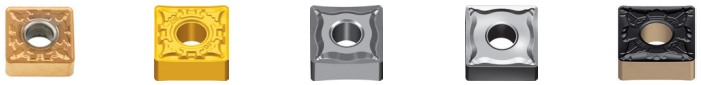
Négatives, réversible – Finition



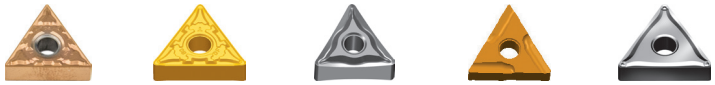
CNEG-NF	CNMG-ADF	CNMG-DF	CNMG-EF	CNMG-SF	CNMG-XF	
12	12	09 12	09 12	09 12	12	Longueur d'arête
A52	A51	A51	A51	A51	A52	Page



DNEG-NF	DNEG-NGF	DNMG-ADF	DNMG-DF	DNMG-EF	DNMG-FM	DNMG-SF	DNMG-XF	
15	15	15	11 15	11 15	15	11 15	11 15	Longueur d'arête
A66	A66	A62	A62	A66	A66	A62	A63	Page



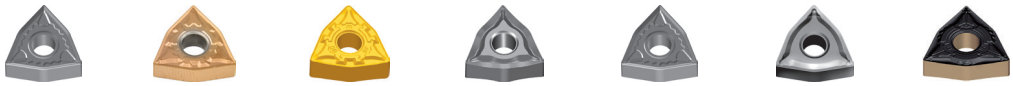
SNMG-ADF	SNMG-DF	SNMG-EF	SNMG-SF	SNMG-XF	
12	12	09 12 15	09 12	12	Longueur d'arête
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TNMG-ADF	TNMG-DF	TNMG-EF	TNMG-FM	TNMG-SF	
16	16 22	11 16 22	16	16	Longueur d'arête
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VNEG-NF	VNEG-NGF	VNMG-ADF	VNMG-DF	VNMG-EF	VNMG-SF	VNMG-XF	
16	16	16	16	16	16	16	Longueur d'arête
A100	A101	A100	A100	A100	A101	A102	Page



WNEG-NF	WNMG-ADF	WNMG-DF	WNMG-EF	WNMG-NF	WNMG-SF	WNMG-XF	
08	08	06 08	06 08	06	06 08	06 08	Longueur d'arête
A106	A105	A105	A106	A106	A105	A107	Page

Négatives, réversible, Wiper – Finition



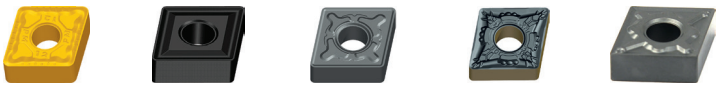
CNMG-WG	DNMX-WG	TNMX-WG	WNMG-WG	
12	11 15	16	08	Longueur d'arête
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Plaquettes en carbure et cermet

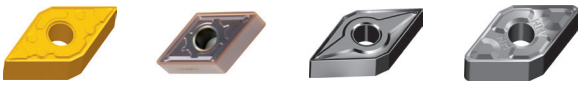
Négatives, réversible – Semi-finition



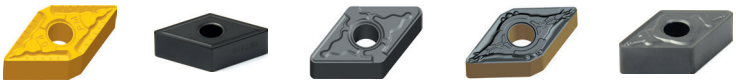
CNMG	CNMG-DM	CNMG-EG	CNMG-EM	CNMG-NM	
12 16 19	09 12 16 19	12	12 16	12	Longueur d'arête
A61	A54	A54	A54	A56	Page



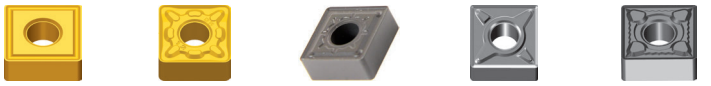
CNMG-PM	CNMG-TC	CNMG-TK	CNMG-XM	CNMG-ZM	
09 12 16 19	12 16	12	12 16 19	12	Longueur d'arête
A53	A56	A56	A53	A55	Page



DNMG-DM	DNMG-EG	DNMG-EM	DNMG-NM	
11 15	15	11 15	15	Longueur d'arête
A64	A67	A67	A67	Page



DNMG-PM	DNMG-TC	DNMG-TK	DNMG-XM	DNMG-ZM	
11 15	15	15	11 15	15	Longueur d'arête
A64	A67	A68	A63	A65	Page



SNMG	SNMG-DM	SNMG-EG	SNMG-EM	SNMG-NM	
12 25	09 12 15 19	12	12 15	12	Longueur d'arête
A83	A75	A75	A76	A77	Page



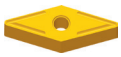
SNMG-PM	SNMG-TC	SNMG-TK	SNMG-XM	
09 12 15 19	12 15	12	12 15 19	Longueur d'arête
A74	A76	A76	A73	Page

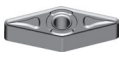


TNMG	TNMG-DM	TNMG-EG	TNMG-EM	TNMG-PM	TNMG-TC	TNMG-XM	TNMG-ZM	
16 22 27 33	11 16 22	16	16 22	11 16 22	16 22	16 22	16	Longueur d'arête
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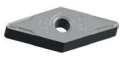
Plaquettes en carbure et cermet

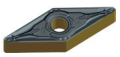
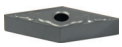
Négatives, réversible – Semi-finition



VNMG	VNMG-DM	VNMG-EM	VNMG-NM	
16	16	16	16	Longueur d'arête
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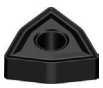



VNMG-PM	VNMG-SNR	VNMG-TC	VNMG-XM	VNMG-ZM	
16	16	16	16	16	Longueur d'arête
A104	A104	A104	A102	A104	Page






WNMG-DM	WNMG-EG	WNMG-EM	WNMG-NM	
06 08	08	06 08	08	Longueur d'arête
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WNMG-PM	WNMG-TC	WNMG-TK	WNMG-XM	WNMG-ZM	
06 08	08	08	06 08	08	Longueur d'arête
A109	A110	A110	A107	A109	Page



RNMG	
12	Longueur d'arête
A112	Page

Négatives, réversible – Semi-finition à ébauche





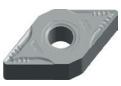



CNMA	DNMA	SNMA	SNUN	TNMA	WNMA	
12 16 19	15	12 15 19	12 19	16 22	06 08	Longueur d'arête
A61	A69	A84	A86	A99	A111	Page

Négatives, réversible – Ébauche





CNMG-DR	CNMG-ER	CNMG-SNR	DNMG-DR	DNMG-ER	DNMG-SNR	
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Plaquettes en carbure et cermet

Négatives, réversible – Ébauche

						
SNMG-DR	**SNMG-ER**	**SNMG-SNR**	**TNMG-DR**	**TNMG-ER**	**TNMG-SNR**	
12 15 19 25	12 15 19	12	16 22 27	16 22	16	Longueur d'arête
A77	A78	A78	A94	A95	A92	Page

						
WNMG-DR	**WNMG-SNR**					
06 08	08					Longueur d'arête
A111	A109					Page

Négatif, non-réversible – Ébauche

						
CNMM	**CNMM-DR**	**CNMM-ER**	**CNMM-HDR**	**CNMM-HPR**	**CNMM-LR**	
12 19	12 16 19 25	25	12 16 19 25	19 25	12 16 19 25	Longueur d'arête
A60	A58	A58	A60	A60	A59	Page

						
DNMM-DR	**DNMM-ER**	**DNMM-HDR**	**DNMM-LR**			
15	15	15	15			Longueur d'arête
A70	A70	A70	A70			Page

						
SNMM	**SNMM-DR**	**SNMM-ER**	**SNMM-HDR**	**SNMM-HPR**	**SNMM-LR**	
19 25	15 19 25	25	12 15 19 25	19 25	12 15 19 25	Longueur d'arête
A85	A79	A79	A81	A82	A80	Page

						
TNMM	**TNMM-DR**	**TNMM-HDR**	**TNMM-LR**			
16 22 27	16 22 27	22 27	16			Longueur d'arête
A99	A95	A97	A95			Page

Forme spéciale – Finition

						
CNMG-RF	**CNMM-RF**	**CNMM-RH**	**KNUX**	**LNUX-RF**	**LNUX-RH**	
19	19	19	16	19 30	19 30	Longueur d'arête
A114	A114	A114	A113	A115	A115	Page

Plaquettes en carbure et cermet

Positive – Super finition



CCGT-SF	CCGT-USF	CPGT-SF	DCGT-SF	DPGT-SF	
06 09	06 09	06 09	07 11	07 11	Longueur d'arête
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TBGH	TCGT-SF	TPGH	TPGT-SF		
06	06 09 11	09 11	09 11		Longueur d'arête
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VBGT-SF	VCGT-SF				
11	11 16				Longueur d'arête
A150	A153				Page

Positive – Finition



CCMT-AHF	CCMT-EF	CCMT-HF	CCMT-XF	CPMT-HF	
06 09 12	06 09 12	06 09 12	06 09	06	Longueur d'arête
A117	A118	A117	A118	A124	Page



DCMT-AHF	DCMT-EF	DCMT-HF	DCMT-XF	SCMT-AHF	SCMT-EF	SCMT-HF	SCMT-XF	
07 11	07 11	07 11	07 11	09	09	09	09	Longueur d'arête
A125	A126	A126	A126	A134	A134	A135	A134	Page



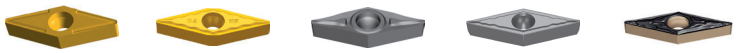
TCMT-AHF	TCMT-EF	TCMT-HF	TCMT-XF					
11 16	09 11 16	09 11 16	09 11 16					Longueur d'arête
A141	A142	A141	A141					Page



VBET-NF	VBET-NGF	VBMT-AHF	VBMT-EF	VBMT-HF	VBMT-XF			
16	16	16	11 16	11	11 16			Longueur d'arête
A149	A151	A148	A148	A149	A148			Page

Plaquettes en carbure et cermet

Positive – Finition



VCGT	VCGT-HF	VCGT-NF	VCMT-EF	VCMT-XF	
13	11	16	16	11 16	Longueur d'arête
A153	A153	A153	A156	A156	Page

Positive – Semi-finition



CCMT-EM	CCMT-HM	CCMT-XM	CPGW	CCMW	CPMT-HM	
06 09 12	06 09 12	09 12	06	09 12	09	Longueur d'arête
A119	A120	A119	A124	A121	A124	Page



DCMT-EM	DCMT-HM	DCMT-XM	DCMW	
07 11	07 11	11	11	Longueur d'arête
A127	A128	A127	A129	Page



SCMT-EM	SCMT-HM	SCMT-XM	SPMW	
09 12	09 12	09 12	09 12	Longueur d'arête
A134	A135	A135	A138	Page



TCMT	TCMT-EM	TCMT-HM	TCMT-XM	TCMW	
22	09 11 16	09 11 16	16	16	Longueur d'arête
A144	A142	A143	A142	A143	Page



VBMT-EM	VBMT-HM	VBMT-XM	VCMT-EM	VCMT-XM	
11 16	16	16	16	16	Longueur d'arête
A151	A151	A151	A156	A156	Page

Positive – Ébauche



CCMT-HR	CCMT-TC	DCMT-HR	RCMT · RCGT	RCMX	RCMX-PV	SCMT-HR	TCMT-HR	
06 09 12	06 09 12	11	08 10 12 16 20 25	08 10 12 16 20 25 32	32	09 12	09 11 16 22	Longueur d'arête
A121	A121	A129	A132	A133	A133	A136	A143	Page

Plaquettes en carbure et cermet

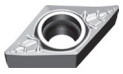
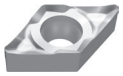
Positive – Ébauche




VBMT-HR	VBMT-SNR	
16	16	Longueur d'arête
A152	A152	Page

Positive – Usinage de l'aluminium




CCGX-LC	CCGX-LH	DCGX-LC	DCGX-LH	RCGX-LH	
06 09 12	06 09 12	07 11	07 11	08 12	Longueur d'arête
A122	A122	A129	A130	A132	Page





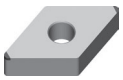



SCGX-LC	SCGX-LH	TCGX-LC	TCGX-LH	VCGX-LC	VCGX-LH	
09 12	09 12	09 11 16	09 11 16	11 16 22	11 16 22	Longueur d'arête
A136	A137	A145	A145	A154	A155	Page

Plaquettes en PCBN & PCD

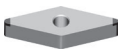
Négatif

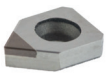






CNGA-2	CNGA-2W	DNGA-2	SNGA-4	TNGA-3	
12	12	15	12	16	Longueur d'arête
A160	A160	A161	A162	A163	Page





VNGA-2	WNGA-3	ZNEX	
16	08	04	Longueur d'arête
A164	A165	A166	Page





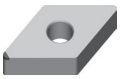
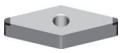




CNGN	CNGN-M	RNGN	SNGN	SNGN-M	WNGN	WNGN-M	
09 12	12	09 12	12	12	08	08	Longueur d'arête
A173	A173	A174	A175	A175	A176	A176	Page

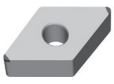
Plaquettes en PCBN & PCD

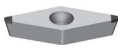
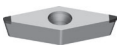
Négatif

CNGA	DNGA	VNGA	
12	15	16	Longueur d'arête
A177	A178	A179	Page

Positive

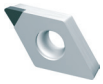
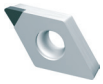
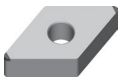
CCGW-2	DCGW-2	TCGW-3	VBGW-2	VCGW-2	
06 09 12	07 11	11 16	16	11 16	Longueur d'arête
A167	A169	A170	A171	A172	Page





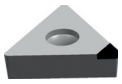


CCGT	CCGT-1MED	CCGT-L	CCGW	CCGW-L	
06 09 12	06 09	09 12	06 09 12	06 09 12	Longueur d'arête
A180	A180	A181	A182	A183	Page

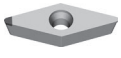
DCGT	DCGT-1MED	DCGW	
07 11	07 11	07 11	Longueur d'arête
A184	A185	A186	Page




TCGT	TCGT-1MED	TCGT-L	TCGW	TCGW-L	
11 16	11 16	11 16	11 16	11 16	Longueur d'arête
A187	A187	A188	A189	A190	Page








VBGT	VBGT-1MED	VBGW	VCGT	VCGT-1MED	VCGW	
11 16	16	11 16	11 16	11 16	11 16 22	Longueur d'arête
A191	A191	A192	A193	A194	A195	Page

Plaquettes en céramique

Négatif








CNGA	CNGN	CNGX	DNGA	DNGN	DNGX	
12 16	12 16	12	15	15	15	Longueur d'arête
A200	A201	A203	A204	A205	A206	Page

Plaquettes en céramique

Négatif



RNGA

12	Longueur d'arête
A207	Page



RNGN

06 09 12 15 19 25	
A208	Page



SNGA

12	Longueur d'arête
A210	Page



SNGN

12 15 19	Longueur d'arête
A211	Page



SNGX

12	Longueur d'arête
A213	Page



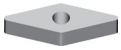
TNGA

16 22	Longueur d'arête
A214	Page



TNGN

16 22	Longueur d'arête
A215	Page



VNGA

16	Longueur d'arête
A216	Page



WNGA

08	Longueur d'arête
A217	Page

Positive



RCGX

06 09 12 19	Longueur d'arête
A218	Page



RPGN

12	Longueur d'arête
A219	Page



RPGX

09	Longueur d'arête
A220	Page

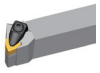


TPGN

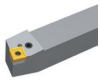
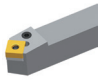
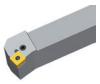
11 16	Longueur d'arête
A221	Page

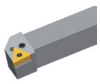
Porte-outil de tournage extérieur

Porte-outil avec double serrage

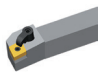
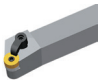
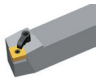
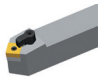
							
DCLNR/L	**DDJNR/L**	**DSBNR/L**	**DTGNR/L**	**DVJNR/L**	**DVVNN**	**DWLNR/L**	
95°	93°	75°	90°	93°	72,5°	95°	Angle
A230	A231	A232	A233	A235	A234	A236	Page

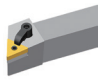
Porte-outil avec système de serrage à levier

								
PCBNR/L	**PCLNR/L**	**PDJNR/L**	**PDNNR/L**	**PSBNR/L**	**PSDNN**	**PSKNR/L**	**PSSNR/L**	
75°	95°	93°	63°	75°	45°	75°	45°	Angle
A237	A238	A240	A241	A242	A244	A245	A246	Page

				
PTFNR/L	**PTGNR/L**	**PTTNR/L**	**PWLNR/L**	
91°	90°	60°	95°	Angle
A247	A249	A248	A251	Page

Porte-outil avec serrage à bride et levier

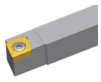
								
MCBNR/L	**MCLNR/L**	**MDJNR/L**	**MDPNN**	**MRDNN**	**MRGNR/L**	**MSBNR/L**	**MSDNN**	
75°	95°	93°	62,5°	45°	90°	75°	45°	Angle
A252	A253	A254	A255	A267	A268	A256	A259	Page

								
MSKNR/L	**MSRNR/L**	**MTFNR/L**	**MTGNR/L**	**MTJNR/L**	**MTJNR/L-Z**	**MVJNR/L**	**MVVNN**	
75°	75°	90°	90°	93°	93°	93°	72,5°	Angle
A258	A257	A263	A260	A261	A262	A265	A264	Page

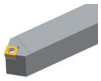

MWLNR/L
95°
A266

Porte-outil de tournage extérieur

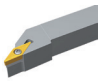
Porte-outils avec système de serrage à vis



SCACR/L	SCLCR/L	SDACR/L	SDJCR/L	SDNCN	SRDCN	SRGCR/L	SSBCR/L	
90°	95°	90°	93°	63°	45°	90°	75°	Angle
A269	A270	A271	A272	A273	A288	A289	A279	Page

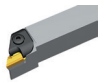


SSDCN	SSKCR/L	SSSCR/L	STACR/L	STFCR/L	STGCR/L	STTCR/L	SVABR/L	
45°	75°	45°	90°	90°	90°	60°	90°	Angle
A280	A281	A282	A283	A284	A285	A286	A275	Page



SVJBR/L	SVJCR/L	SVVBN	SVVCN	SWACR/L				
93°	93°	72,5°	72,5°	90°				Angle
A274	A278	A276	A277	A287				Page

Porte-outil avec serrage à bride



CKJNR/L	CKNNR/L							
93°	63°							Angle
A290	A291							Page

Porte-outils pour plaquettes céramique et CBN



CCLNR/L	CDJNR/L	CRDNN	CSDNN	CSKNR/L	CSRNR/L	CTJNR/L	CTUNR/L	
95°	93°	45°	45°	75°	75°	93°	93°	Angle
A292	A294	A298	A299	A296	A297	A293	A295	Page



JCLNR/L	JDJNR/L	JSDNN						
95°	93°	45°						Angle
A300	A301	A302						Page

Porte-outil de tournage extérieur

Chariotage



SCACR/L-SC	SCLCR/L-SC	SDACR/L-SC	SDHCR/L-SC	SDJCR/L-SC	SDNCN-SC	SVACR/L-SC	SVJCR/L-SC	
90°	95°	90°	107,5°	93°	63°	90°	93°	Angle
A306	A307	A308	A309	A310	A311	A312	A313	Page

Technique ferroviaire



RW-PCLNR/L	RW-PLANR/L	RW-PLFNR/L		
90°	90°	90°		Angle
A318	A316	A317		Page

Barre d'alésage

Barre d'alésage en acier avec système de serrage à levier



A***-PCLNR/L	A***-PDSNR/L	A***-PDUNR/L	A***-PSKNR/L	A***-PTFNR/L	
95°	45°	93°	75°	90°	Angle
A324	A326	A327	A329	A330	Page

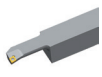


S***-PCLNR/L	S***-PDSNR/L	S***-PDUNR/L	S***-PSKNR/L	S***-PTFNR/L	S***-PWLNR/L	
95°	45°	93°	75°	90°	95°	Angle
A324	A326	A327	A329	A330	A332	Page

Barre d'alésage en acier avec système de serrage à vis



A***-SCLCR/L	A***-SDQCR/L	A***-SDUCR/L	A***-SDZCR/L	
95°	107.5°	93°	95°	Angle
A334	A336	A337	A338	Page



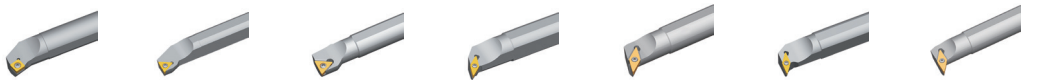
S***-SCFCR/L	S***-SCLCR/L	S***-SCLPR/L	S***-SDQCR/L	S***-SDQPR/L	S***-SDUCR/L	S***-SDUPR/L	S***-SDZCR/L	
90°	95°	95°	107.5°	107.5°	93°	93°	95°	Angle
A352	A334	A348	A336	A349	A337	A350	A338	Page

Barre d'alésage

Barre d'alésage en acier avec système de serrage à vis



A***-SSKCR/L	A***-STFCR/L	A***-SVQBR/L	A***-SVUBR/L	
75°	90°	107.5°	93°	Angle
A339	A341	A345	A346	Page



S***-SSKCR/L	S***-STFCR/L	S***-STUPR/L	S***-SVQBR/L	S***-SVQCR/L	S***-SVUBR/L	S***-SVUCR/L	
75°	90°	93°	107.5°	107.5°	93°	93°	Angle
A339	A341	A351	A345	A343	A346	A344	Page

Barre d'alésage carbure monobloc avec système de serrage à vis



C***-SCLPR/L	C***-SDQPR/L	C***-SDUPR/L	C***-STUPR/L	C***-SVQCR/L	C***-SVUCR/L	C***-SZLNR/L	
95°	107.5°	93°	93°	107.5°	93°	95°	Angle
A354	A356	A358	A360	A363	A364	A365	Page



E***-SCLCR/L	E***-SCLPR/L	E***-SDQCR/L	E***-SDUCR/L	E***-STFCR/L	E***-STFPR/L	E***-SVUCR/L	
95°	95°	107.5°	93°	90°	90°	93°	Angle
A355	A354	A357	A359	A361	A362	A364	Page

Notes

Tournage général Vue d'ensemble des brise-copeaux

Plaquettes négatives

Finition

XF P





Brise-copeaux réversible pour la finition dans le domaine d'utilisation P. Excellent contrôle des copeaux avec de faibles pressions de coupe.

RF P

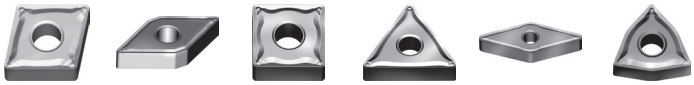




Brise-copeaux réversible pour les opérations de finition à semi-finition.

SF P M K





Brise-copeaux réversible pour les nuances Cermet. Géométrie rectifiée pour un meilleur contrôle copeau et un bon état de surface. Idéal pour les opérations avec des profondeurs de coupe et des avances faibles.

DF P K





Brise-copeaux réversible avec contrôle d'usinage avancé. Approprié pour usinage de finition à usinage moyen des aciers et de la fonte.

ADF P M





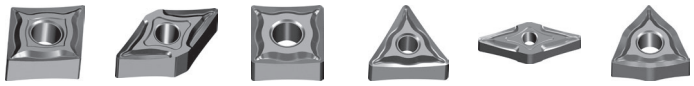
Brise-copeaux réversible rectifié avec contrôle d'usinage avancé. Large domaine d'application grâce à l'excellent équilibre entre acuité d'arête et protection d'arête.

Plaquettes négatives

Finition

EF M S

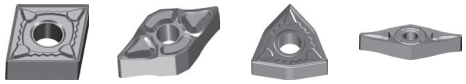




Brise-copeaux réversible, arête rectifiée et grand angle de coupe, pour l'usinage de finition des aciers inoxydables.

NF S M

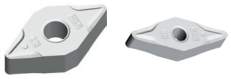




Brise-copeaux réversible, avec arête rectifiée et grand angle de coupe pour opérations de finition. Tolérance E, pour une grande répétabilité.

NGF S M





Brise-copeaux réversible, avec arête rectifiée et grand angle de coupe pour opérations de finition. Tolérance E, pour une grande répétabilité.

Wiper

WG P M K





Brise-copeaux réversible, avec géométrie Wiper. Permet d'obtenir une finition de surface uniforme tout en doublant l'avance.

Semi-finition

XM P





Brise-copeaux réversible pour la semi-finition dans le domaine d'utilisation P. Excellent contrôle des copeaux à des avances élevées et faibles.

Tournage général Vue d'ensemble des brise-copeaux

Plaquettes négatives

Semi-finition

DM P K





Brise-copeaux réversible, pour usinage moyen. Large domaine d'application grâce à l'excellent équilibre entre acuité d'arête et protection d'arête.

ZM P





Brise-copeaux réversible, pour semi-finition. Large gamme d'applications grâce à la stabilité d'arête et un grand angle de coupe. Particulièrement approprié pour les aciers inoxydables.

PM P K





Brise-copeaux réversible, pour semi-finition. Large gamme d'applications dans les aciers et la fonte.

TC K P





Brise-copeaux réversible sur toute la périphérie. Fiabilité de résultats grâce à une grande stabilité d'arête.

TK K





Brise-copeaux réversible pour la semi-finition dans le domaine d'utilisation K. Excellente combinaison d'arête tranchante et de résistance aux chocs.

Plaquettes négatives

Semi-finition

NM S M





Brise-copeaux réversible, avec arête rectifiée et grand angle de coupe, pour semi-finition de matériaux difficiles à usiner.

EM M S

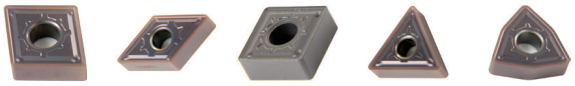




Brise-copeaux réversible, arête rectifiée et grand angle de coupe. Approprié pour la semi-finition des aciers inoxydables.

EG M S





Brise-copeaux réversible, arête rectifiée et grand angle de coupe. Large domaine d'application pour la semi-finition d'aciers inoxydables.

Basic P K





Brise-copeaux réversible sur toute la périphérie d'arête, pour usinage des aciers et de la fonte.

Ébauche

DR Réversible P K





Brise-copeaux réversible, avec angle de coupe positif et bonne acuité d'arête, pour usinage d'ébauche légère à moyenne des aciers et de la fonte.

Tournage général Vue d'ensemble des brise-copeaux

Plaquettes négatives

Ébauche

DR Non-réversible **P** **K**





Brise-copeaux non réversible, avec angle de coupe positif et bonne acuité d'arête, pour ébauche légère à moyenne d'acier et de fonte.

RH **P**

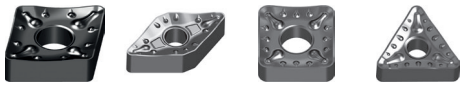




Brise-copeaux réversible pour la semi-finition jusqu'à l'ébauche.

LR **P** **M**





Brise-copeaux non-réversible avec géométrie unique pour mieux contrôler le copeau. Efforts de coupe réduits. Ebauche légère des aciers, aciers inoxydables et fonte.

ER Réversible **M** **S**





Brise-copeaux réversible, avec grand angle de coupe, pour efforts de coupe réduits. Approprié pour l'ébauche des aciers inoxydables.

ER Non-réversible **M** **S**





Brise-copeaux non-réversible, avec grand angle de coupe, pour efforts de coupe réduits. Approprié pour l'ébauche des aciers inoxydables.

Plaquettes négatives

Ébauche

HDR P K





Brise-copeaux non-réversible avec acuité d'arête homogène et résistance à la déformation. Particulièrement approprié pour l'ébauche des aciers et aciers inoxydables.

HPR P K





Brise-copeaux non-réversible avec acuité d'arête homogène et large poche à copeaux. Particulièrement approprié pour les grosses ébauches d'acier et de fonte.

Flat K





Plaquette de coupe réversible sans brise-copeaux. Acuité d'arête homogène, sans géométrie. Particulièrement appropriée pour l'ébauche des fontes.

SNR M S N





Brise-copeaux réversible, pour l'ébauche. Large domaine d'application grâce à l'excellent équilibre entre acuité et protection d'arête.

Plaquettes de coupe PCBN et PCD

Flat N H





Brise-copeaux non-réversible sans géométrie, pour usinage avec CBN et PCD. Tolérance G, pour une grande répétabilité.

Tournage général Vue d'ensemble des brise-copeaux

Plaquettes négatives

Plaquettes de coupe PCBN et PCD

Flat H K





CBN monobloc pour aciers traités et fontes grises

Plaquettes céramiques

Flat K H





Brise-copeaux non-réversible sans géométrie, pour applications céramiques. Tolérance G, pour une haute répétabilité.

Plaquettes positives

Super finition

USF P M

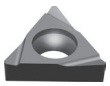




Brise-copeaux non-réversible pour super finition. Arête rectifiée avec grande poche à copeaux, particulièrement approprié pour l'usinage de petites pièces. Tolérance G, pour une grande répétabilité.

R/L P M

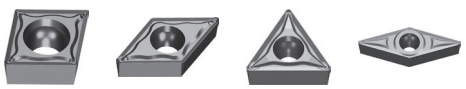




Brise-copeaux non-réversible pour super finition. Particulièrement approprié pour état de surface très fins. Tolérance G, pour une grande répétabilité.

SF P M





Brise-copeaux non-réversible pour les nuances Cermet. Géométrie rectifiée pour un meilleur contrôle copeau et un bon état de de surface. Idéal pour les usinages avec des profondeurs de coupe et des avances faibles.

Plaquettes positives

Finition

XF P




Brise-copeaux non réversible pour la finition dans les aciers. Excellent contrôle des copeaux avec de faibles pressions de coupe.

HF P K




Brise-copeaux non-réversible avec excellent contrôle copeau. Approprié pour la finition à semi-finition d'acier et de fonte.

AHF M S P




Brise-copeaux non-réversible rectifié avec contrôle copeau avancé. Large domaine d'application grâce à l'excellent équilibre entre acuité et protection d'arête.

EF M S




Brise-copeaux non-réversible, arête rectifiée et grand angle de coupe, pour la finition des aciers inoxydables.

NF M S




Brise-copeaux non-réversible, avec arête rectifiée et grand angle de coupe pour la finition. Tolérance E, pour une grande répétabilité.

Plaquettes positives

Finition

NGF M S





Brise-copeaux non-réversible, avec arête rectifiée et grand angle de coupe pour la finition. Tolérance E, pour une grande répétabilité.

Semi-finition

XM P

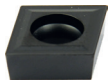




Brise-copeaux non réversible pour la semi-finition dans les aciers. Excellent contrôle des copeaux à des avances élevées et faibles.

TC K P





Brise-copeaux non-réversible avec un bon contrôle copeau. Approprié pour la finition à semi-finition des aciers et des fontes.

HM P K

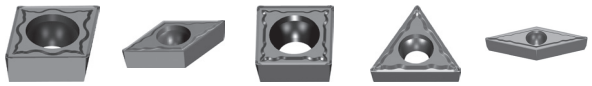




Brise-copeaux non-réversible, pour semi-finition. Large domaine d'application grâce à l'excellent équilibre entre acuité et protection d'arête.

EM M S





Brise-copeaux non-réversible, arête rectifiée et grand angle de coupe. Fiabilité des résultats dans la semi-finition des aciers inoxydables.

Plaquettes positives

Semi-finition

Basic P K




Brise-copeaux non-réversible avec préparation d'arête périphérique, pour usinage général des aciers et des fontes.

Ébauche

Flat K




Plaquette de coupe non-réversible sans brise-copeaux. Particulièrement approprié pour l'ébauche de fonte.

HR P K




Brise-copeaux non-réversible, avec angle de coupe positif, pour l'ébauche légère à moyenne d'acier et de fonte.

SNR S M




Brise-copeaux non-réversible, pour l'ébauche. Large domaine d'application grâce à l'excellent équilibre entre acuité et préparation d'arête.

Basic P K




Brise-copeaux non-réversible avec préparation d'arête périphérique, pour usinage général des aciers et des fontes.

Plaquettes positives

Usinage de l'aluminium

LC N





Brise-copeaux non-réversible, avec excellente acuité d'arête rectifiée, avec angle de coupe positif. Tolérance G, pour une grande répétabilité.

LH N





Brise-copeaux non-réversible, pour l'usinage d'alliages de fonte d'aluminium. Arête rectifiée avec angle de coupe positif. Tolérance G, pour une grande répétabilité.

Plaquettes de coupe PCBN et PCD

Flat N H





Brise-copeaux non-réversible. Arête rectifiée avec angle de coupe positif. Tolérance G, pour une grande répétabilité.

MED N



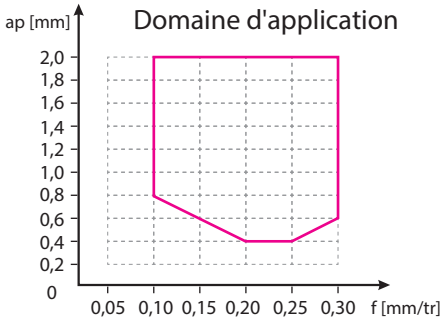


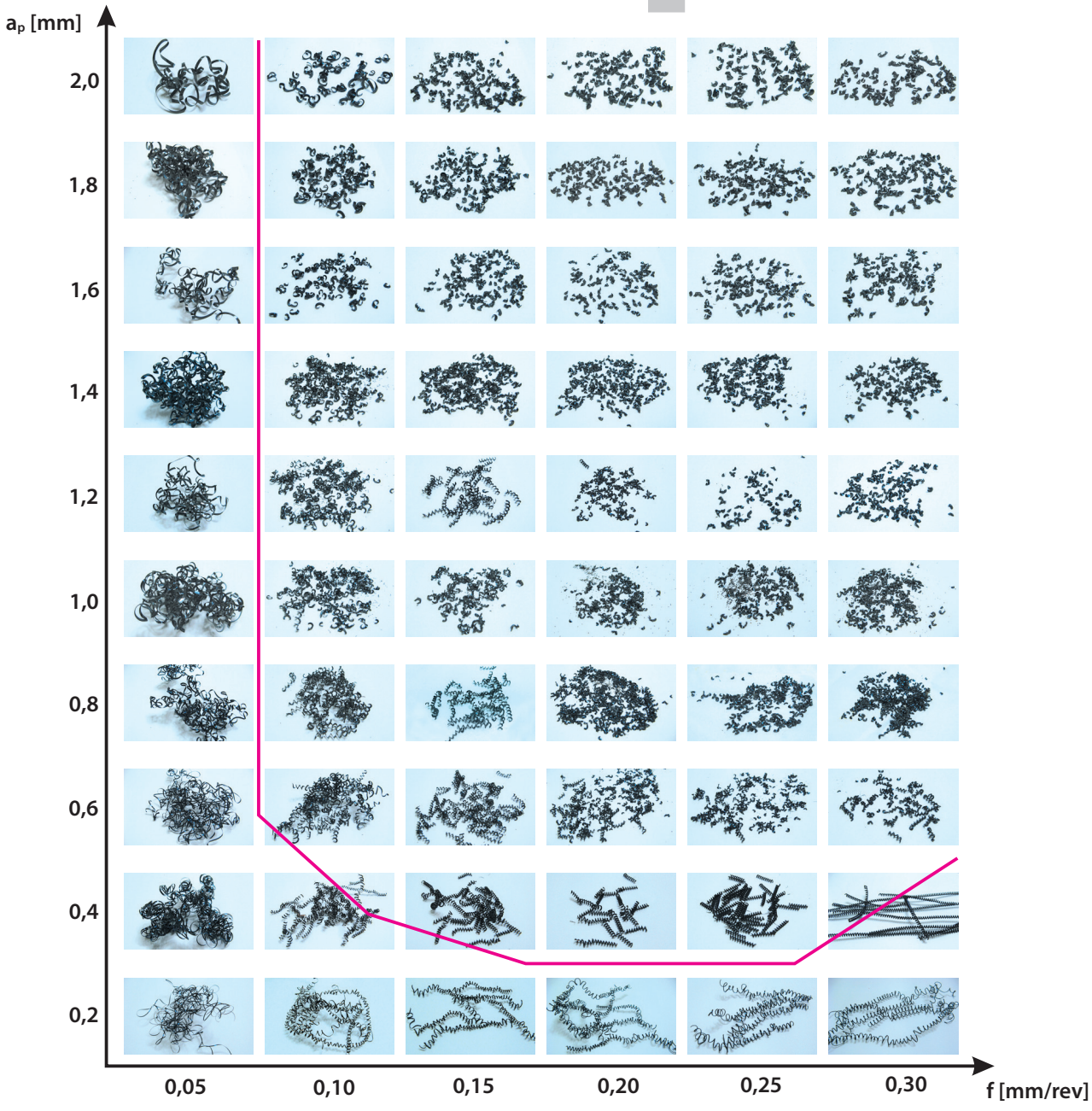
Brise-copeaux réalisé au laser pour les opérations de finition et semi-finition.

Tournage général

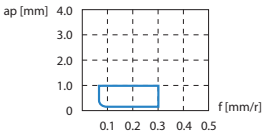
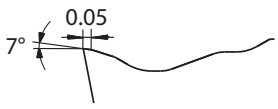
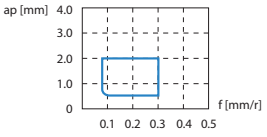
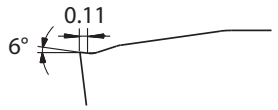
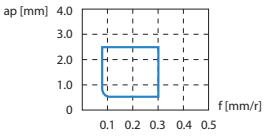
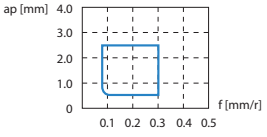
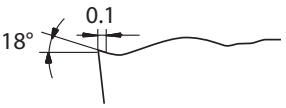
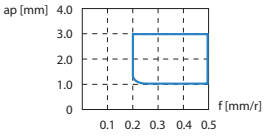
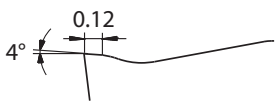
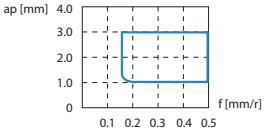
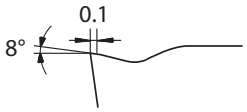
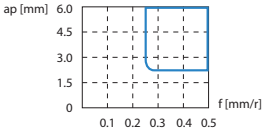
Domaine d'application des brise-copeaux

Exemple
Plaquette : CNMG120408-DF
Porte-outil : PCLNL2525M12
Matière : Acier C45
V_C : 200 m/min

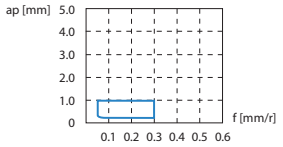
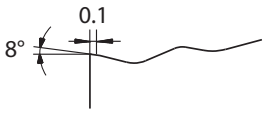
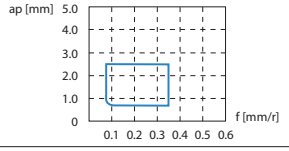
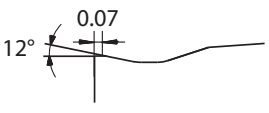
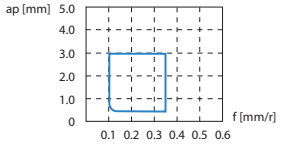
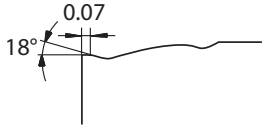
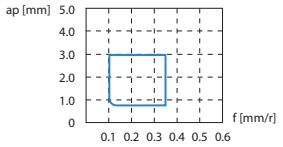
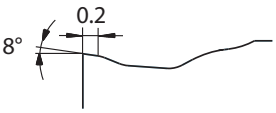
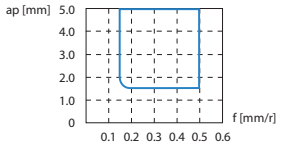
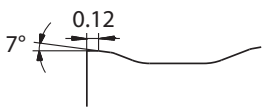
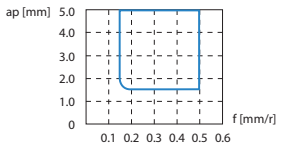
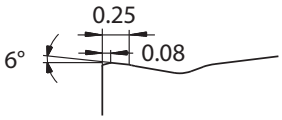
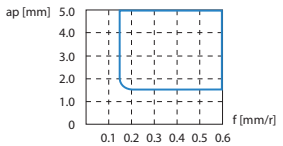
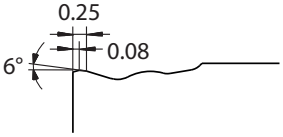
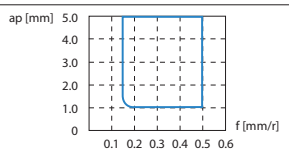
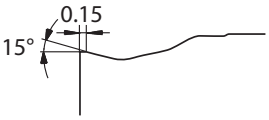
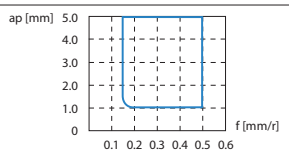
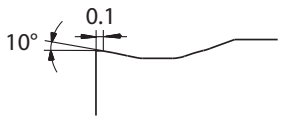
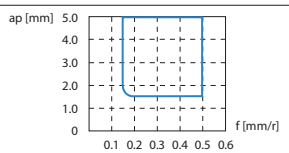
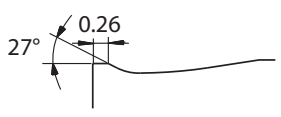
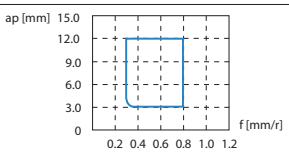
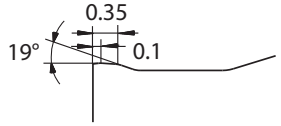




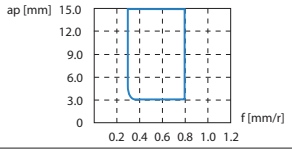
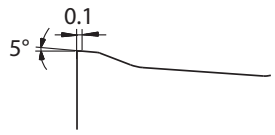
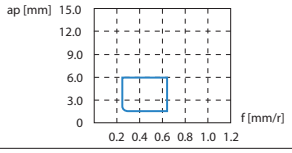
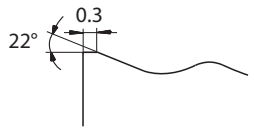
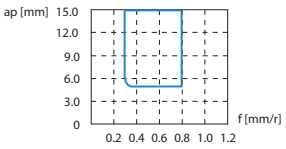
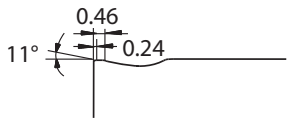
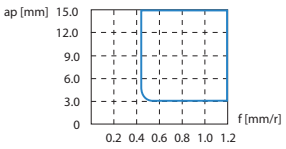
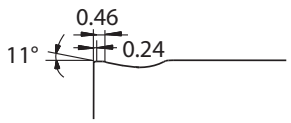
P Plaquettes positives

Brise-copeau	Application		Domaine d'utilisation	Profil de l'arête de coupe
SF	Super finition	●		
HF	Finition	● ✱		
AHF	Finition	● ✱		
XF	Finition	● ✱		
HM	Semi-finition	● ✱		
XM	Semi-finition	● ✱		
HR	Ébauche	● ✱ ✱		

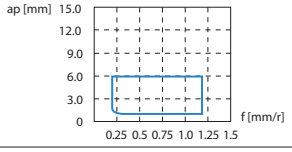
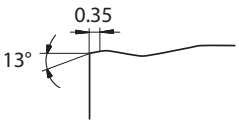
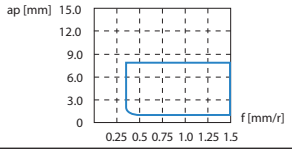
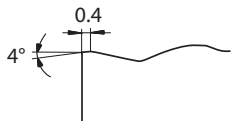
P Plaquettes négatives

Brise-copeau	Application		Domaine d'utilisation	Profil de l'arête de coupe
SF	Super finition	●		
DF	Finition	● ✱		
XF	Finition	● ✱		
ADF	Finition	● ✱		
DM	Semi-finition	● ✱		
PM	Semi-finition	● ✱ ✱		
ZM	Semi-finition	● ✱ ✱		
XM	Semi-finition	● ✱		
WG	Semi-finition	● ✱		
Basic	Semi-finition	● ✱		
DR	Ébauche	● ✱ ✱		

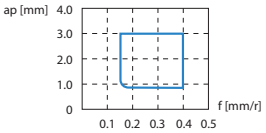
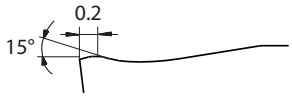
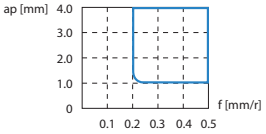
P Plaquettes négatives

Brise-copeau	Application		Domaine d'utilisation	Profil de l'arête de coupe
DR (non-réversible)	Ébauche			
LR (non-réversible)	Ébauche			
HDR (non-réversible)	Ébauche			
HPR (non-réversible)	Ébauche			

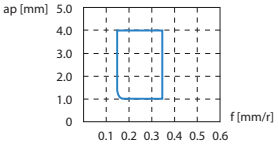
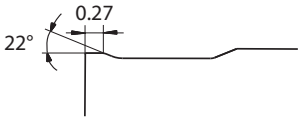
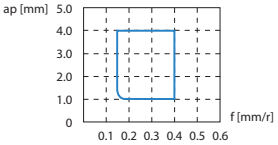
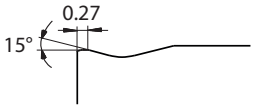
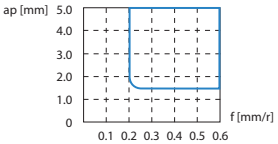
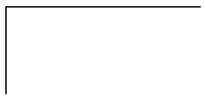
P Plaquettes négatives (Secteur ferroviaire)

Brise-copeau	Application		Domaine d'utilisation	Profil de l'arête de coupe
RF	Finition			
RH	Ébauche			

K Plaquettes positives

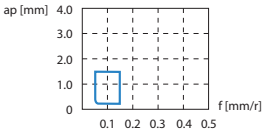
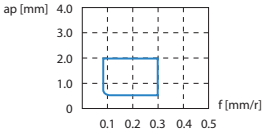
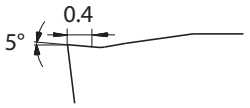
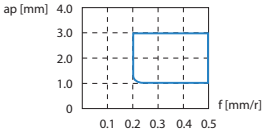
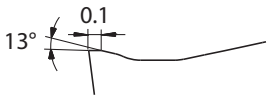
Brise-copeau	Application		Domaine d'utilisation	Profil de l'arête de coupe
TC	Semi-finition			
Flat	Ébauche			

K Plaquettes négatives

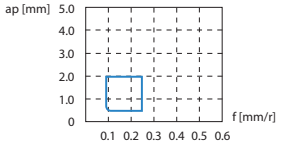
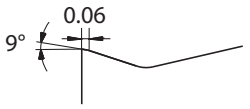
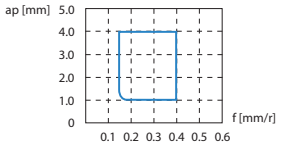
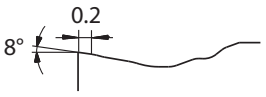
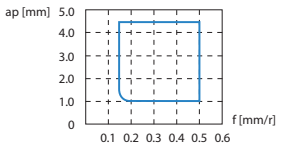
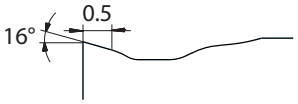
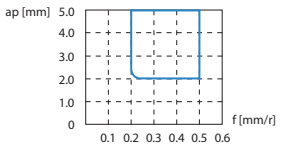
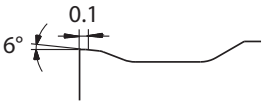
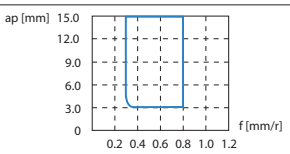
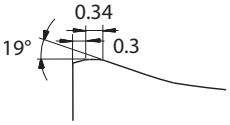
Brise-copeau	Application		Domaine d'utilisation	Profil de l'arête de coupe
TK	Semi-finition			
TC	Semi-finition			
Flat	Ébauche			

Tournage général Domaines d'application des brise-copeaux

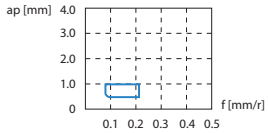
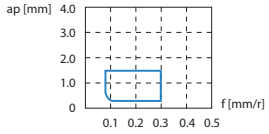
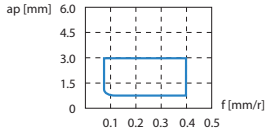
M Plaquettes positives

Brise-copeau	Application		Domaine d'utilisation	Profil de l'arête de coupe
USF	Super finition	●		
EF	Finition	● ✱		
EM	Semi-finition	● ✱ ✱		

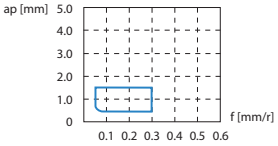
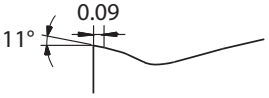
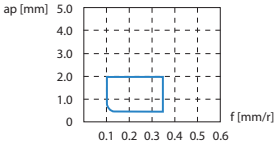
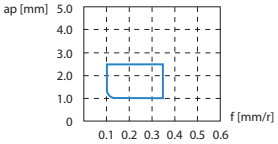
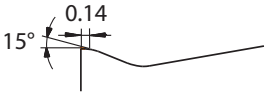
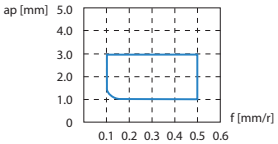
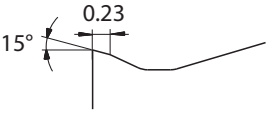
M Plaquettes négatives

Brise-copeau	Application		Domaine d'utilisation	Profil de l'arête de coupe
EF	Finition	●		
EM	Semi-finition	● ✱		
EG	Semi-finition	● ✱		
ER	Ébauche	● ✱ ✱		
ER (non-réversible)	Ébauche	● ✱ ✱		

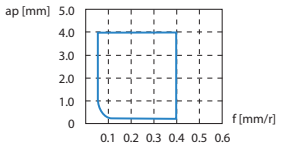
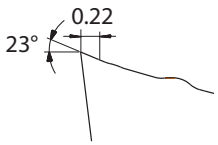
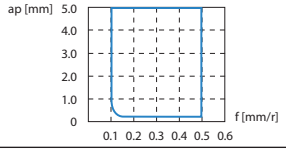
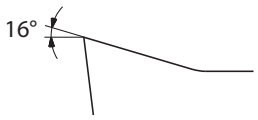
S Plaquettes positives

Brise-copeau	Application		Domaine d'utilisation	Profil de l'arête de coupe
NF	Finition			
NGF	Finition			
SNR	Ébauche			

S Plaquettes négatives

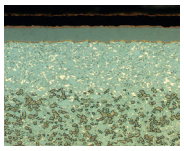
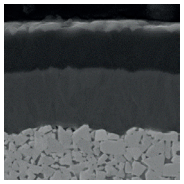
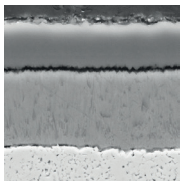
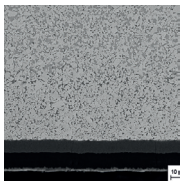
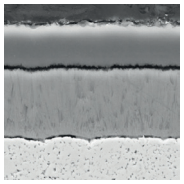
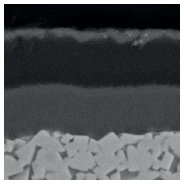
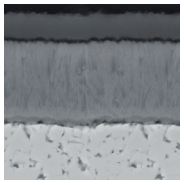
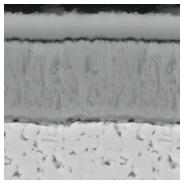
Brise-copeau	Application		Domaine d'utilisation	Profil de l'arête de coupe
NF	Finition			
NGF	Semi-finition			
NM	Semi-finition			
SNR	Ébauche			

N Plaquettes positives

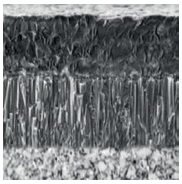
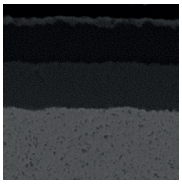
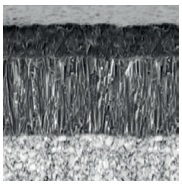
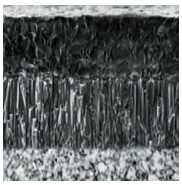
Brise-copeau	Application		Domaine d'utilisation	Profil de l'arête de coupe
LC	Finition	●		
LH	Finition	●		

Notes

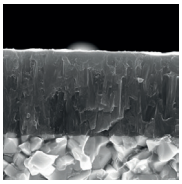
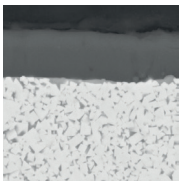
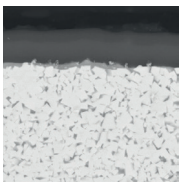
Carbure revêtu CVD

Nuance	ISO	Microstructure	Description de nuances
YBC103	P05 – P15		Nuance P10 dotée d'une remarquable résistance à l'usure à des vitesses de coupesupérieures. Le procédé de frittage et des technologies de revêtement CVD dernièregénération permettent un large spectre d'utilisation dans le domaine des matériaux P.
YB6315	P05 – P20		Nuance carbure revêtu CVD P10-P20 pour les applications de finition à semi-finition dans les aciers, les aciers moulés, et les aciers au chrome. Excellente performance à haute vitesse de coupe et température, avec une très bonne résistance à l'usure.
YBC152	P10 – P20		Nuance carbure revêtu CVD P10-P20 pour la semi-finition et la finition des aciers et aciers moulés. Excellente performance à haute vitesse de coupe et haute température, avec une excellente résistance à l'usure.
YBC203	P15 – P25		Nuance P20 dotée d'une excellente résistance à l'usure et ténacité pour un usinage fiable. Les derniers procédés de frittage et technologies de revêtement CVD permettent de couvrir un large éventail d'applications dans les aciers.
YBC252	P20 - P35		Nuance carbure revêtu CVD, substrat P20-P35 pour les opérations d'ébauche à semi-finition des aciers et aciers moulés. Résistance à l'usure et ténacité optimale pour un large champ d'applications.
YBC352	P20 - P40		Nuance carbure revêtu CVD P20-P40 pour l'ébauche des aciers et aciers moulés. Excellente résistance à l'usure et ténacité pour un large champ d'applications.
YBM153	M10 - M25		Nuance carbure revêtu CVD M10-M25 pour la semi-finition à finition des aciers inoxydables. Haute résistance à l'usure et bonnes caractéristiques contre la déformation plastique à haute vitesse de coupe.
YBM253	M15 - M35		Nuance carbure revêtu CVD M15-M35 pour l'ébauche à semi-finition des aciers inoxydables dans un large champ d'applications. Haute résistance à l'usure et bonnes caractéristiques contre la déformation plastique à haute vitesse de coupe.

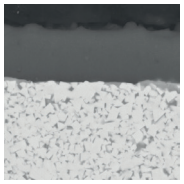
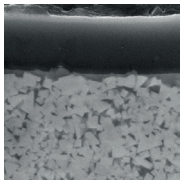
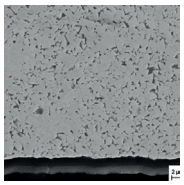
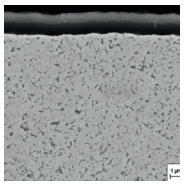
Carbure revêtu CVD

Nuance	ISO	Microstructure	Description de nuances
YBD102	K05 - K20		Nuance carbure revêtu K05-K20. Optimisé pour la semi-finition des fontes, spécifiquement les fontes nodulaires et les fontes aciérées à haute vitesse de coupe.
YB7315	K10 - K25		Nuance carbure revêtu CVD sur substrat K10-K25. Optimisé pour les opérations débauche à semi-finition dans les fontes. Résistance à l'usure et ténacité améliorées à haute vitesse de coupe.
YBD152	K10 - K25		Nuance carbure revêtu K10-K25. Optimisé pour la semi-finition et l'ébauche des fontes. Bonne résistance à l'usure et ténacité à haute vitesse.
YBD152C	K10 - K25		Nuance carbure revêtu CVD Al2O3 épais sur substrat K05-K25. Optimisé pour l'ébauche et la semi-finition des fontes. Excellente résistance à l'usure et ténacité à haute vitesse en combinaison avec un brise-copeau TC.

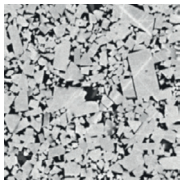
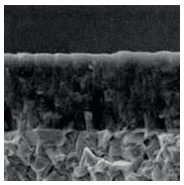
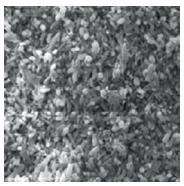
Carbure revêtu PVD

Nuance	ISO	Microstructure	Description de nuances
YBG101	N05 - N20		Nuance de carbure N05–N20 avec revêtement PVD pour l'usinage de finition à semi-finition des aluminiums. Combiné aux brise-copeaux en aluminium, le revêtement, appliqué uniquement à la surface de la face de coupe, réduit la formation d'arêtes rapportées et assure une coupe douce.
YBG102	S05 - S15		Nuance carbure revêtu PVD S05-S15 pour la semi-finition à la finition des superalliages, aciers inoxydables, et aluminium. Bonne résistance à l'usure pour un large champ d'applications.
YBG105	S05 - S20		Nuance carbure revêtu PVD multicouches S05-S20 pour la semi-finition à la finition des superalliages, ainsi que les aciers inoxydables. Bonne résistance à l'usure et stabilité thermique pour un large champ d'applications.

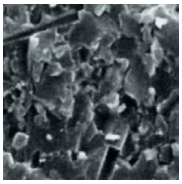
Carbure revêtu PVD

Nuance	ISO	Microstructure	Description de nuances
YBG205	P10 - P30 M20 - M40 S15-S25		Nuance de carbure P10–P30/M20–M40/S15–S25 avec revêtement PVD multicouche pour l'usinage de finition à semi-finition d'acier inoxydable, superalliages et acier (fraisage). Très bonne résistance à l'usure et thermique dans un vaste domaine d'utilisation.
YB9320	P10 - P30 M10 - M25		Nuance de carbure P10–P30/M10–M25 avec revêtement PVD multicouche pour l'usinage de finition à semi-finition d'acier inoxydable, superalliages et acier (gorge/fraisage). Très bonne résistance à l'usure grâce à l'amélioration de l'adhérence du revêtement et résistance thermique dans un vaste domaine d'utilisation.
YPD201	S20 – S30		Nuances de carbure pour la semi-finition, jusqu'à l'ébauche, de matériaux à hauterésistance et fortement alliés. Nuance haute performance à haute résistance à l'usure.Le rapport équilibré entre dureté et contraintes résiduelles ouvre la porte à un large spectre d'utilisation.
YBS103	S10 – S20		Nuance de tournage pour l'usinage de matériaux en base nickel. Un substrat spécial en carbure et la technologie de revêtement PVD dernière génération permettent d'atteindre une très bonne tenue à l'usure et une stabilité thermique élevée.

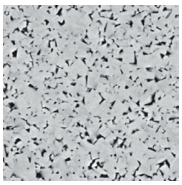
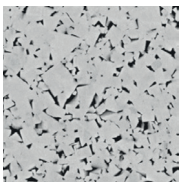
Céramique

Nuance	ISO	Microstructure	Description de nuances
CA1000	K10 - K25 H10 - H25		Nuance céramique mixte non revêtue K10-K25/H10-H25 pour les opérations de finition à semi-finition dans les aciers traités et fontes nodulaires. Bonne résistance à l'usure et ténacité.
CM1000	K10 - K25 H10 - H25		Nuance céramique mixte revêtue H10–H25/K10–K25 pour les opérations de finition à semi-finition dans les aciers trempés, les aciers d'outil, les aciers rapides et les fontes nodulaires. Bonne résistance à l'usure et ténacité.
CN1000	K05 - K15		Nuance céramique mixte non revêtue K05-K15 Si3N4 pour les opérations de finition à semi-finition dans les fontes grises. Bonne résistance à l'usure et stabilité thermique.

Céramique

Nuance	ISO	Microstructure	Description de nuances
CS1000	S05 – S20		Nuance céramique SiAlON sans revêtement pour la semi-finition à l'ébauche d'alliages à base de Ni ou de cobalt à des vitesses de coupe moyennes à faibles.
CW1400	S10 – S20 H10-H20		Nuance céramique à whiskers non revêtue pour les vitesses de coupe moyennes à basses dans les aciers rapides, les matériaux à haute teneur en chrome et les alliages à base de cobalt, également avec interruptions de coupe Bonne résistance à l'usure, à l'usure en entaille et stabilité thermique.
CW1800	S10 – S25		Nuance céramique à whiskers non revêtue pour les opérations de finition à l'usinage d'ébauche général d'alliages à base de Ni comme Inconel, Nimonic ou Hastelloy. Bonne résistance à l'usure, à l'usure en entaille et stabilité thermique.

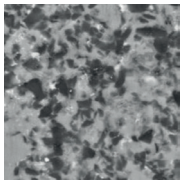
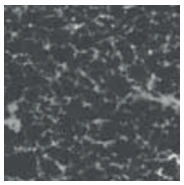
Carbure non revêtu

Nuance	ISO	Microstructure	Description de nuances
YD101	N05 - N20 K05 - K20		Nuance carbure non revêtu N05-N20/K05-K20 pour les opération de semi-finition à finition dans les aluminiums et autres matériaux.
YD201	N10 - N30 K10 - K30		Nuance carbure non revêtu N10-N30/K10-K30 pour les applications de semi-finition dans les aluminiums et autres matériaux.

CBN

Nuance	ISO	Microstructure	Description de nuances
YCB112	S10 – S20		Nuance S10–S20 CBN brasée sans revêtement pour la finition d'acier trempé et superalliages. Très bonne résistance à l'usure et stabilité thermique.

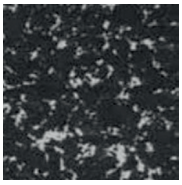
CBN

Nuance	ISO	Microstructure	Description de nuances
YCB113	H01 - H10		Nuance CBN brasé H01-H10 pour la superfinition des aciers traités en coupe continue. Très haute résistance à l'usure et bonne productivité à haute vitesse de coupe.
YCB121	H10 - H25		Nuance CBN brasé H10-H25 pour la semi-finition à finition des aciers traités en coupe continue à légèrement interrompue. Bonne résistance à l'usure et ténacité pour usage général.
YCB131	H20 - H35		Nuance CBN brasé H20-H35 pour la semi-finition à finition des aciers traités en coupe interrompue. Bonne résistance à l'usure et ténacité optimisée pour un process optimisé.
YCB113C	H01 - H10		Nuance H01–H10 CBN brasée avec revêtement pour la finition d'acier trempé en coupe continu. Grande résistance à l'usure et productivité à des vitesses de coupe élevées.
YCB121C	H10 - H25		Nuance H10–H25 CBN brasée avec revêtement pour la finition à la semi-finition d'acier trempé en coupe continu à légèrement interrompue. Bonne résistance à l'usure et bonne ténacité pour une utilisation universelle.
YCB131C	H20 - H25		Nuance H20–H35 CBN brasée avec revêtement pour la finition à la semi-finition d'acier trempé avec coupe interrompue. Bonne résistance à l'usure et ténacité optimale pour un processus sûr.
YCB215	K10 - K20		Nuance K10 –K20 CBN brasée sans revêtement pour la finition à la semi-finition de fontes. Bonne résistance à l'usure et conductivité thermique.
YZB630	H20 - H30		Nuance H20-H30 entièrement en CBN sans revêtement pour la semi-finition d'acier trempé avec coupe légèrement à moyennement interrompue. Bonne combinaison entre la résistance à l'usure et la stabilité thermique.

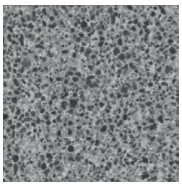
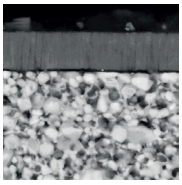
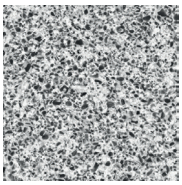
CBN

Nuance	ISO	Microstructure	Description de nuances
YZB630C	H20 - H30		Nuance H20-H30 entièrement en CBN avec revêtement pour la semi-finition d'acier trempé avec coupe légèrement à moyennement interrompue. Bonne combinaison entre la résistance à l'usure et la stabilité thermique.
YZB223	K10 - K25		Nuance céramique mixte non revêtue K10-K25/H10-H25 pour les opérations de finition à semi-finition dans les aciers traités et fontes nodulaires. Bonne résistance à l'usure et ténacité.

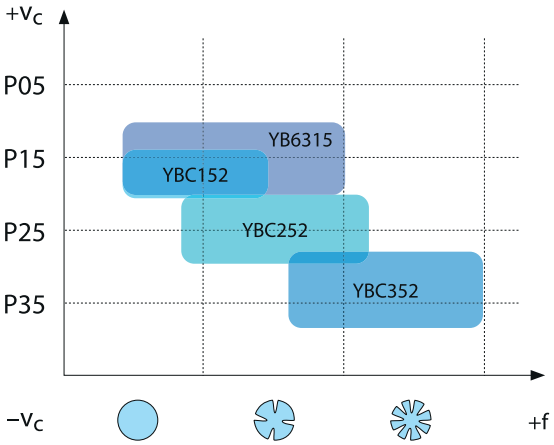
PCD

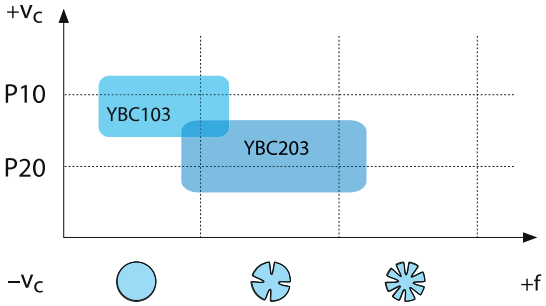
Nuance	ISO	Microstructure	Description de nuances
YCD421	N01 - N10		Nuance PCD brasé N01-N10 pour la superfinition des alliages d'aluminium (jusqu'à 12% Si), des composites, des alliages de cuivre, magnésium, et autres alliages non ferreux. Nuance à taille de grain moyen pour une bonne résistance à l'usure dans un large c

Cermet

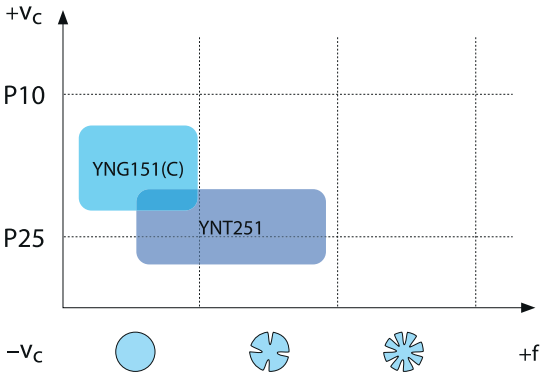
Nuance	ISO	Microstructure	Description de nuances
YNG151	P05 – P15		Nuance cermet non revêtu P05-P15 pour les opérations de superfinition des aciers et aciers inoxydables. Bonne résistance contre la déformation plastique pour bon état de surface.
YNG151C	P05 – P15		Nuance cermet revêtu PVD P05-P15 pour les opérations de superfinition des aciers et aciers inoxydables. Bonne résistance à l'usure et bonnes caractéristiques contre la déformation plastique pour un bon état de surface.
YNT251	P10 - P25		Nuance cermet non revêtu P10-P25 pour la semi-finition à la finition des aciers et aciers inoxydables. Bonne résistance à l'usure et ténacité. Approprié également pour la coupe légèrement interrompue.

Nuances de carbure avec revêtement CVD pour l'acier

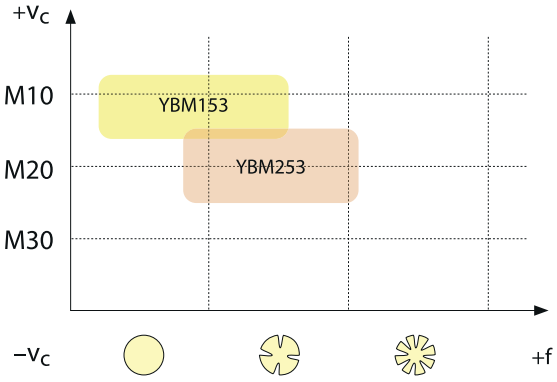




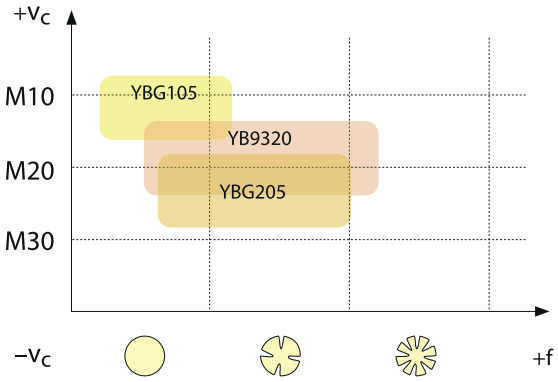
Nuances de cermet pour l'acier



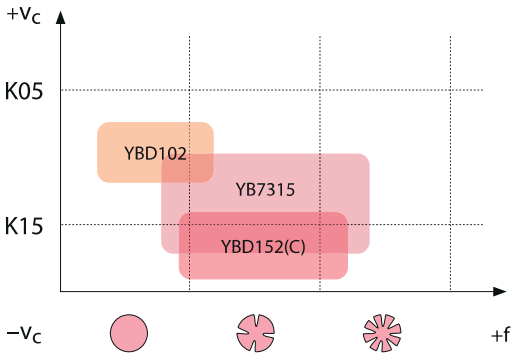
Nuances de carbure avec revêtement CVD pour l'acier inoxydable



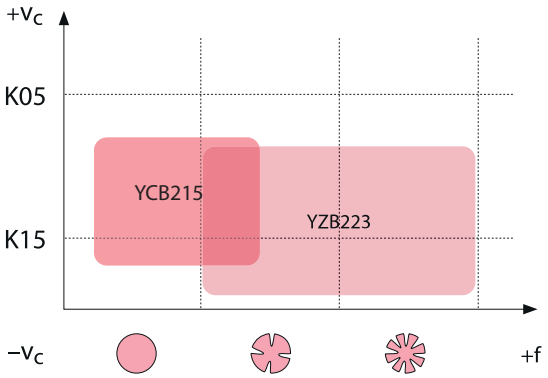
Nuances de carbure avec revêtement PVD pour l'acier inoxydable



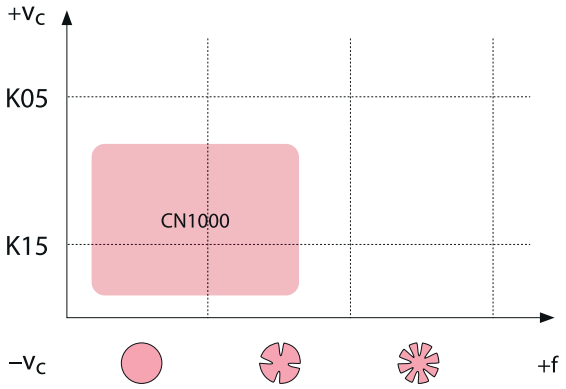
Nuances de carbure avec revêtement CVD pour la fonte



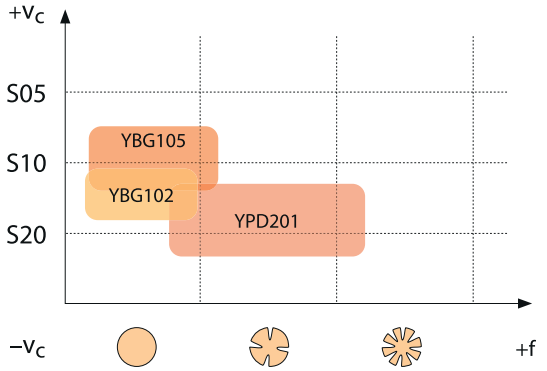
Nuances CBN pour la fonte

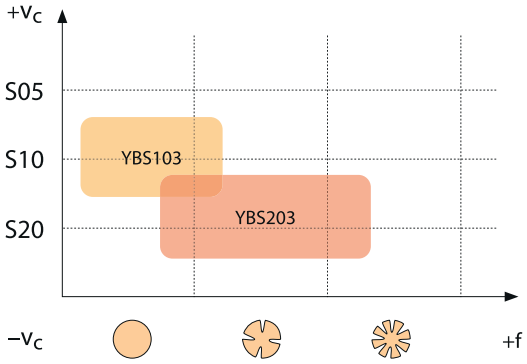


Nuances de céramique pour la fonte

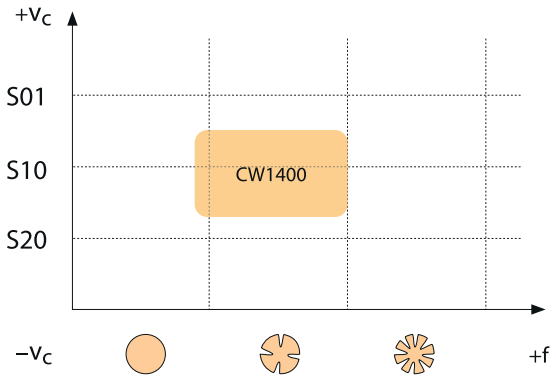


Nuances de carbure avec revêtement PVD pour les superalliages

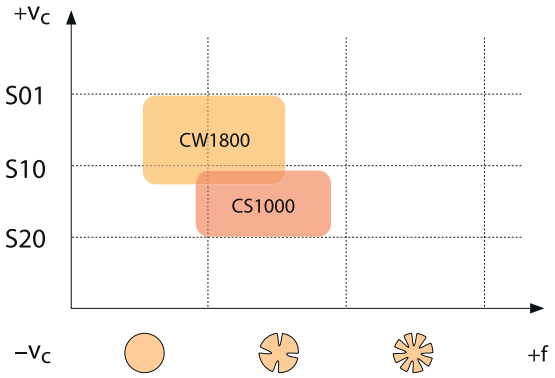




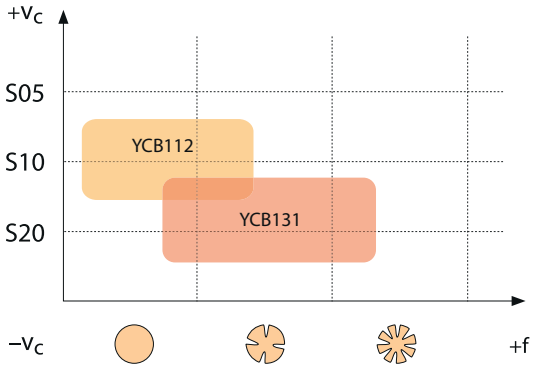
Nuances de céramique pour les alliages à base Co/HSS



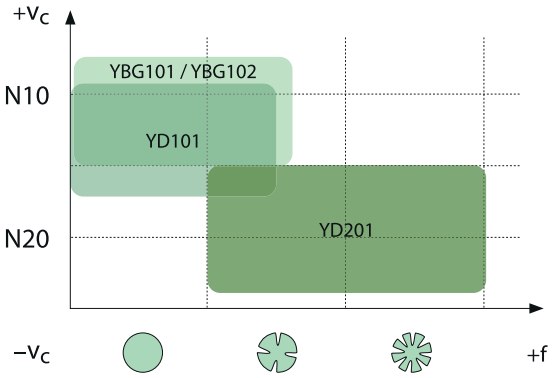
Nuances de céramique pour les alliages à base de Ni



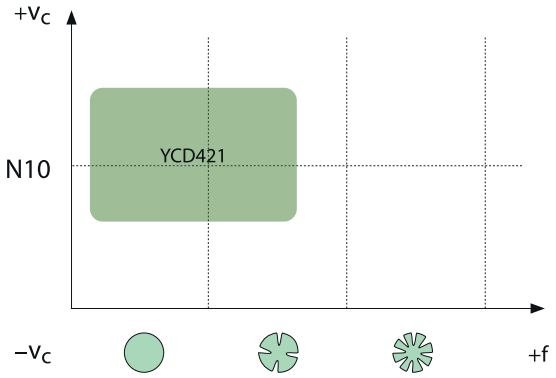
Nuances CBN pour les superalliages



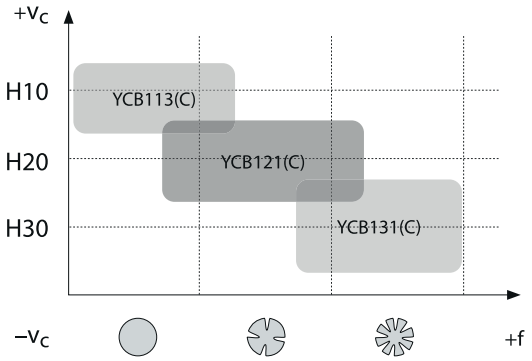
Nuances de carbure pour les métaux non ferreux



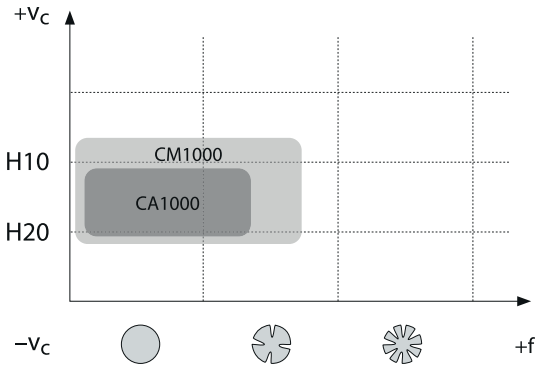
Nuances PCD pour les métaux non ferreux



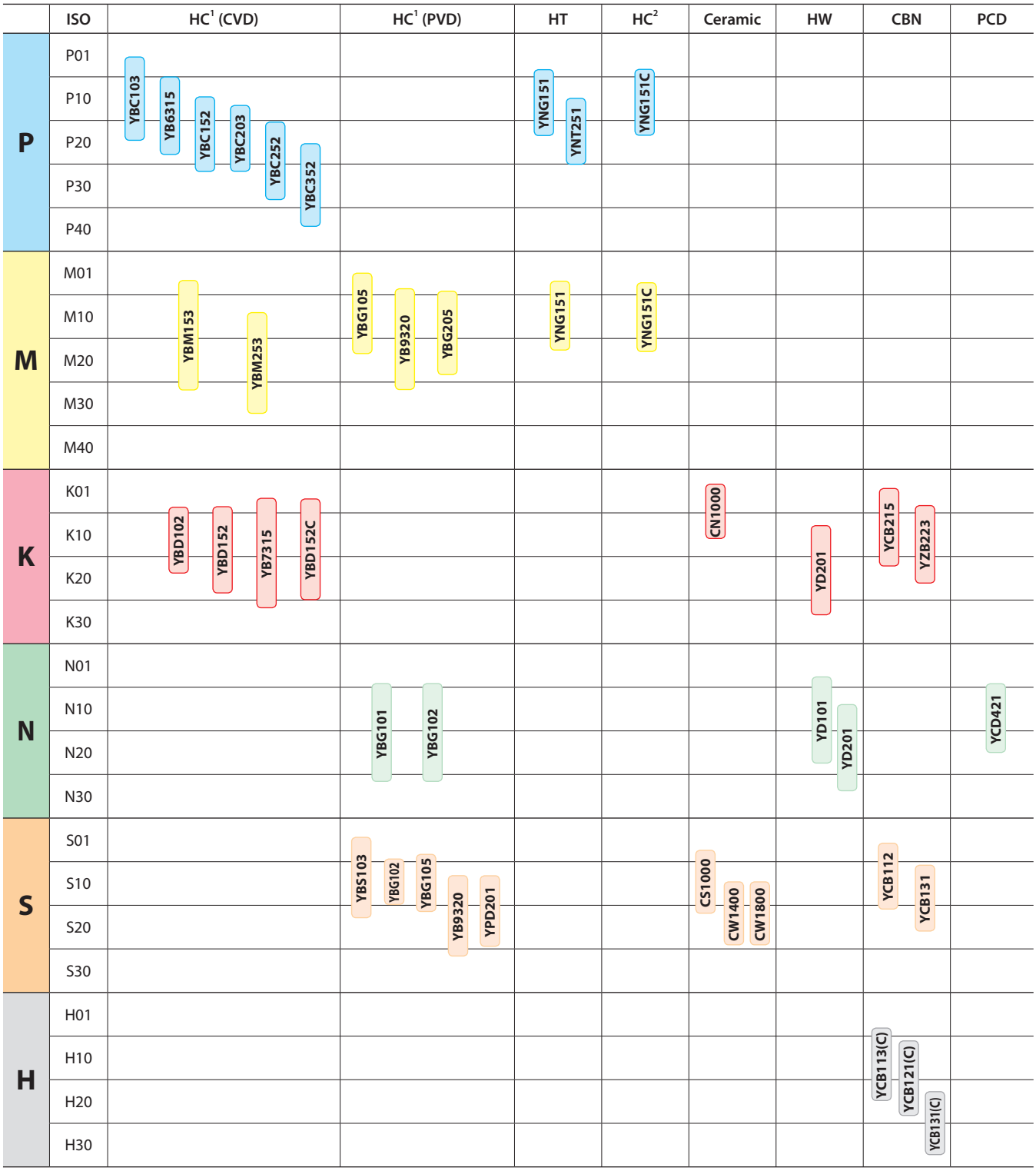
Nuances CBN pour l'acier traité



Nuances de céramique pour l'acier traité



Domaines d'application des nuances – tournage général



P	Acier
M	Acier inoxydable
K	Fonte
N	Métaux non-ferreux
S	Réfractaires et superalliages
H	Matériaux durs

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

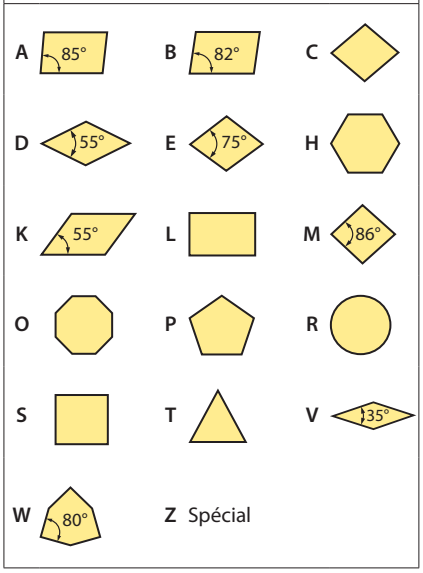
Tournage général

Code ISO – plaquette de tournage

Standard ISO

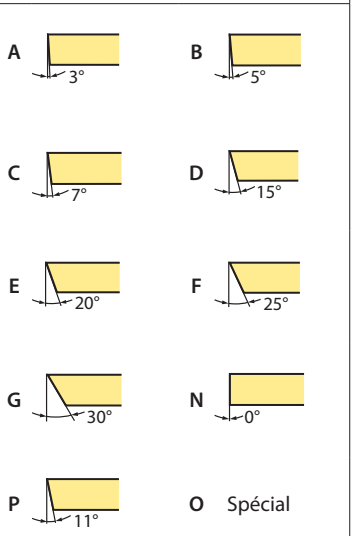
T	N	M	G	22	04	08	(N)	–	DM
1	2	3	4	5	6	7	8		9

Forme de plaquette



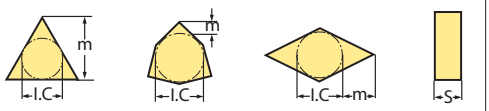
1

Angle de dépouille



2

Classe de tolérance

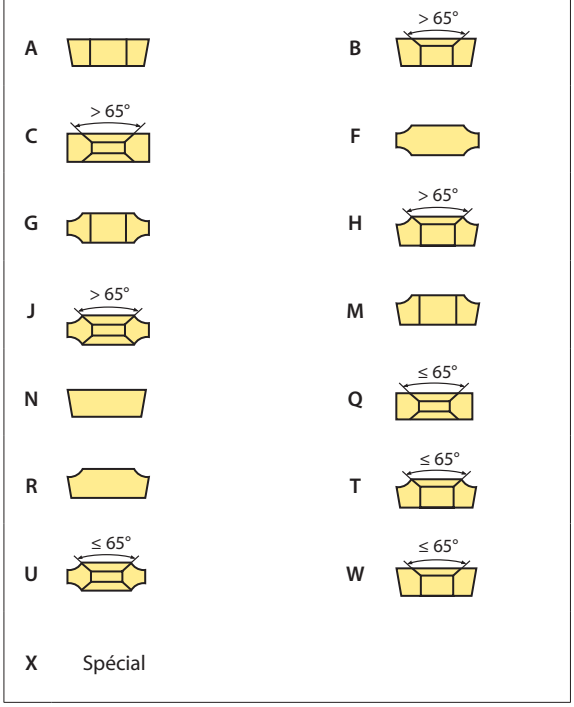


Code	I.C [mm]	m [mm]	S [mm]
A	±0,025	±0,005	±0,025
C	±0,025	±0,013	±0,025
E	±0,025	±0,025	±0,025
F	±0,013	±0,005	±0,025
G	±0,025	±0,025	±0,130
H	±0,013	±0,013	±0,025
J	±0,05–0,15	±0,005	±0,025
K	±0,05–0,15	±0,013	±0,025
L	±0,05–0,15	±0,025	±0,025
M	±0,05–0,15	±0,08–0,20	±0,130
N	±0,05–0,15	±0,08–0,20	±0,025
U	±0,08–0,25	±0,13–0,38	±0,130

3

Caractéristiques de fixation (métrique)

Forme de plaquette



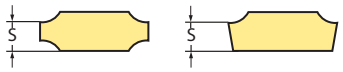
4

Longueur d'arête l [mm]

I.C [mm]	Forme de plaquette C	D	R	S	T	V	W	K
3,97					06			
5,0			05					
5,56					09			
6,0			06					
6,35	06	07			11	11		
8,0			08					
9,525	09	11	09	09	16	16	06	16
10,0			10					
12,0			12					
12,7	12	15	12	12	22	22	08	
15,875	16		15	15	27			
16,0		19	16					
19,05	19		19	19	33			
20,0			20					
25,0	25	25	25					
25,4			25	25				
31,75			31					
32			32					

5

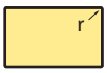
Epaisseur plaquette s [mm]



Code	S	Code	S
00	0,79	**T5**	5,95
T0	0,99	**06**	6,35
01	1,59	**T6**	6,75
T1	1,98	**07**	7,94
02	2,38	**09**	9,52
T2	2,58	**T9**	9,72
03	3,18	**11**	11,11
T3	3,97	**12**	12,70
04	4,76		
T4	4,96		
05	5,56		

6

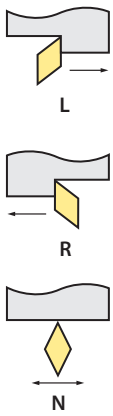
Rayon de plaquette r [mm]



Code	r
00	–
02	0,2
04	0,4
08	0,8
12	1,2
16	1,6
20	2,0
24	2,4
32	3,2
X	Spécial
MO	Plaquettes rondes

7

Sens de coupe



8

Vue d'ensemble des brise-copeaux
(à partir de la page A16)

9

Standard ANSI

T	N	M	G	4	3	2	(N)	–	DM
1	2	3	4	5	6	7	8		9

Cercle inscrit

Code	[mm]	Pouce
2	6.35	0.250
3	9.525	0.375
4	12.7	0.500
5	15.875	0.625
6	19.05	0.750
8	25.4	1.000

5

Épaisseur de plaquette

Code	[mm]	Pouce
2	3.18	0.125
3	4.76	0.187
4	6.35	0.250
5	7.94	0.313
6	9.52	0.375

6

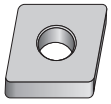
Rayon de plaquette

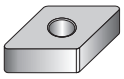
Code	[mm]	Pouce
0	0.2	0.008
1	0.4	0.016
2	0.8	0.031
3	1.2	0.047
4	1.6	0.063
5	2.0	0.079
6	2.4	0.094

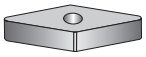
7

Tableau de comparaison pour les plaquettes ISO (métrique/impérial)

Forme plaquette négative

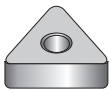
Type C Forme de plaquette	ISO	Inch
	090304	321
	090308	322
	120404	431
	120408	432
	120412	433
	120416	434
	160608	542
	160612	543
	160616	544
	190608	642
	190612	643
	190616	644
	190624	646
	250724	856
	250732	858
	250924	866
	250932	868

Type D Forme de plaquette	ISO	Inch
	110404	331
	110408	332
	110412	333
	150404	431
	150408	432
	150412	433
	150604	441
	150608	442
	150612	443
	150616	444
	190608	542
	190612	543

Type V Forme de plaquette	ISO	Inch
	160404	331
	160408	332
	160412	333

Type R Forme de plaquette	ISO	Inch
	0903MO	32
	1204MO	43

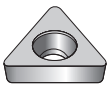
Type W Forme de plaquette	ISO	Inch
	06T304	3(2.5)1
	06T308	3(2.5)2
	06T312	3(2.5)3
	060404	331
	060408	332
	060412	333
	080404	431
	080408	432
	080412	433

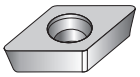
Type T Forme de plaquette	ISO	Inch
	113304	221
	110308	222
	160404	331
	160408	332
	160412	333
	220404	431
	220408	432
	220412	433
	220416	434
	270608	542
	270612	543
	270616	544

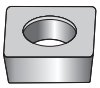
Type S Forme de plaquette	ISO	Inch
	090304	321
	090308	322
	090312	323
	120404	431
	120408	432
	120412	433
	120416	434
	150608	542
	150612	543
	150616	544
	190412	633
	190424	636
	190612	643
	190616	644
	250724	856
	250732	858
	250924	866
	250932	868

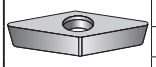
Forme plaquette positive

Type C Forme de plaquette	ISO	Inch
	060202	2(1.5)0
	060204	2(1.5)1
	060208	2(1.5)2
	09T302	3(2.5)0
	09T304	3(2.5)1
	09T308	3(2.5)2
	120404	431
	120408	432
	120412	433

Type T Forme de plaquette	ISO	Inch
	06T102	1.2(1.2)0
	06T104	1.2(1.2)1
	06T108	1.2(1.2)2
	090202	1.8(1.5)0
	090204	1.8(1.5)1
	090208	1.8(1.5)2
	110202	2(1.5)0
	110204	2(1.5)1
	110208	2(1.5)2
	110302	220
	110304	221
	110308	222
	16T302	30
	16T304	31
	16T308	32
	16T312	33
	160400	330
	220408	432
	220412	433
	220416	434
	270408	532
	27041 2	533
	330612	643
	330616	644

Type D Forme de plaquette	ISO	Inch
	070202	2(1.5)0
	070204	2(1.5)1
	070208	2(1.5)2
	11T302	3(2.5)0
	11T304	3(2.5)1
	11T308	3(2.5)2
	11T312	3(2.5)3

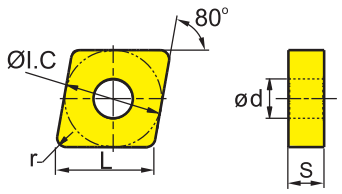
Type S Forme de plaquette	ISO	Inch
	060204	2(1.5)1
	09T302	3(2.5)0
	09T304	3(2.5)1
	09T308	3(2.5) 2
	120404	431
	120408	432
	120412	433
	150404	531
	150408	532
	150412	533
	190408	632
	190412	633
	190416	634

Type V Forme de plaquette	ISO	Inch
	110202	2(1.5)0
	110204	2(1.5)1
	110208	2(1.5)2
	110302	220
	110304	221
	110308	222
	160402	330
	160404	331
	160408	332
	160412	333

Plaquette de tournage

● Bonnes conditions d'usinage
⊛ Conditions d'usinage normales
⊛ Conditions d'usinage défavorables

CNMG	L	I.C	S	d
09 03	9,7	9,525	3,18	3,81
12 04	12,9	12,7	4,76	5,16



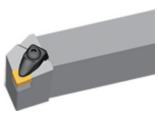
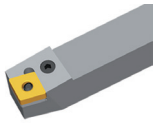
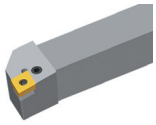
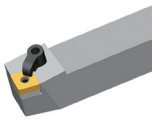
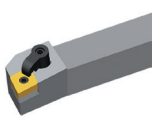
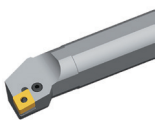
	HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
P	●	●	●	⊛	⊛	⊛									⊛	⊛				●	⊛	●		
M								○	⊛				○	○	⊛	⊛	⊛	○	○	⊛	○			
K										⊛	⊛	⊛	⊛											
N																							●	⊛
S													○	○	⊛	⊛	⊛	○					○	⊛
H																								

	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YB5103	YNG151	YNT251	YNG151C	YD101	YD201
WG	**CNMG120404-WG**	0,4	0,25-3,00	0,05-0,25			○																					
	CNMG120408-WG	0,8	0,5-5,0	0,15-0,70			●		●						○													
	CNMG120412-WG	1,2	0,8-6,0	0,20-0,75			●																					
Wiper																												
ADF	**CNMG120404-ADF**	0,4	0,5-3,0	0,05-0,30		●														●	●							
	CNMG120408-ADF	0,8	0,5-3,0	0,1-0,4		●														○	●			●				
	CNMG120412-ADF	1,2	0,8-3,0	0,15-0,50		○															●			●				
Finition																												
DF	**CNMG090304-DF**	0,4	0,25-1,50	0,07-0,30			●		●																			
	CNMG090308-DF	0,8	0,3-1,5	0,1-0,3			●		○																			
	CNMG120404-DF	0,4	0,25-1,50	0,07-0,30			●		●																			
	CNMG120408-DF	0,8	0,3-1,5	0,1-0,4			●		●																			
Finition	**CNMG120412-DF**	1,2	0,35-1,50	0,10-0,35			●		●																			
EF	**CNMG090304-EF**	0,4	0,5-2,0	0,05-0,20							○									●								
	CNMG090308-EF	0,8	0,5-2,0	0,05-0,25							○									●								
	CNMG120404-EF	0,4	0,5-2,5	0,05-0,20							●									●								
	CNMG120408-EF	0,8	0,5-2,5	0,05-0,25							●									●								
Finition	**CNMG120412-EF**	1,2	0,5-2,5	0,10-0,35							○									○								
SF	**CNMG090304-SF**	0,4	0,05-0,50	0,05-0,30																						●		
	CNMG120404-SF	0,4	0,1-1,5	0,05-0,30																						●		
	CNMG120408-SF	0,8	0,1-1,5	0,10-0,35																						●		
Finition																												

● En stock ○ Sur demande
YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

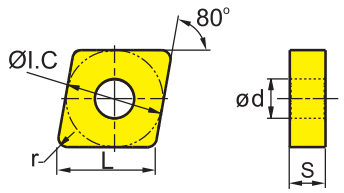
DCLNR/L	PCBNR/L	PCLNR/L	MCBNR/L	MCLNR/L	A***-PCLNR/L
Kr: 95°	Kr: 75°	Kr: 95°	Kr: 75°	Kr: 95°	Kr: 95°
					
A230	A237	A238	A252	A253	A324

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

CN**	L	I.C	S	d
12 04	12,9	12,7	4,76	5,16

Plaquette de tournage

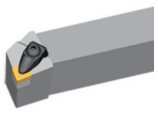
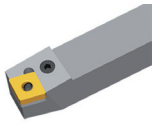
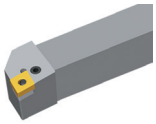
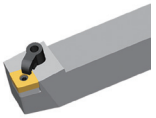
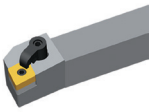
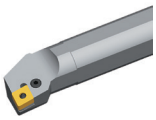


Plaquette négative CN**					HC¹ (CVD)										HC¹ (PVD)						HT		HC²	HW	
					P																				
					M																				
					K																				
					N																				
					S																				
					H																				
ISO		r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
NF	**CNEG120404-NF**	0,4	0,2-2,5	0,05-0,30													○	●								○	
	CNEG120408-NF	0,8	0,2-2,5	0,10-0,35													○	●								○	
	CNEG120412-NF	1,2	0,2-2,5	0,13-0,40													○	●								○	
Finition																											
XF	**CNMG120404-XF**	0,4	0,5-2,5	0,1-0,25	●		●																				
	CNMG120408-XF	0,8	0,5-2,5	0,1-0,30	●		●																				
	CNMG120412-XF	1,2	0,5-2,5	0,1-0,35	●		●																				
Finition																											

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

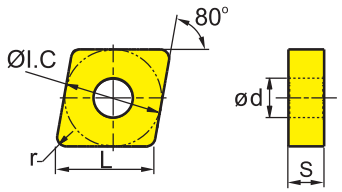
DCLNR/L	PCBNR/L	PCLNR/L	MCBNR/L	MCLNR/L	S***-PCLNR/L
Kr: 95°	Kr: 75°	Kr: 95°	Kr: 75°	Kr: 95°	Kr: 95°
					
A230	A237	A238	A252	A253	A324

Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

CNMG	L	I.C	S	d
09 03	9,7	9,525	3,18	3,81
12 04	12,9	12,7	4,76	5,16
16 06	16,1	15,875	6,35	6,35
19 06	19,3	19,05	6,35	7,94

Plaquette de tournage

● Bonnes conditions d'usinage
✵ Conditions d'usinage normales
✵ Conditions d'usinage défavorables



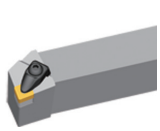
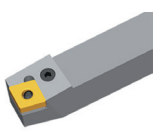
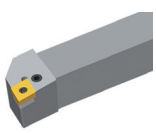
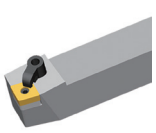
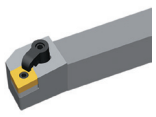
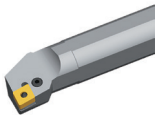
Plaquette négative CN**		HC¹ (CVD)										HC¹ (PVD)							HT		HC²	HW	
	P	●	●	●	✵	✵	✵									✵	✵		●	✵	●		
	M							○	✵				○	○	✵	✵	✵	○	○	✵	○		
	K									●	✵	✵	✵										
	N													●	✵							●	✵
	S												○	○	✵	✵	✵	○				○	✵
	H																						
ISO		r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
PM Semi-finition	**CNMG090304-PM**	0,4	0,4-4,0	0,1-0,3					●																		
	CNMG090308-PM	0,8	0,5-4,0	0,15-0,50					●																		
	CNMG120404-PM	0,4	0,4-5,5	0,1-0,3			●		●				●		●												
	CNMG120408-PM	0,8	0,5-5,5	0,15-0,50			●		●	●			●		●												
	CNMG120412-PM	1,2	0,8-5,5	0,18-0,60			●		●				●		●												
	CNMG120416-PM	1,6	1,0-5,5	0,23-0,65			●		●				●		●												
	CNMG160608-PM	0,8	0,5-7,2	0,15-0,50			○		●				○		○												
	CNMG160612-PM	1,2	0,8-7,2	0,18-0,60			●		●				●		●												
	CNMG160616-PM	1,6	1,0-7,2	0,23-0,65					●				●		○												
	CNMG190608-PM	0,8	0,5-8,6	0,15-0,50					●																		
	CNMG190612-PM	1,2	0,8-8,6	0,18-0,60					●				○		●												
	CNMG190616-PM	1,6	1,0-8,6	0,23-0,65					○						○												
XM Semi-finition	**CNMG120404-XM**	0,4	1-4,2	0,2-0,3	●			○																			
	CNMG120408-XM	0,8	1-4,2	0,2-0,4	●			●																			
	CNMG120412-XM	1,2	1-4,2	0,2-0,6	●			●																			
	CNMG120416-XM	1,6	1-4,2	0,2-0,65	●			●																			
	CNMG160608-XM	0,8	1-5,6	0,2-0,4	●			●																			
	CNMG160612-XM	1,2	1-5,6	0,2-0,6	●			●																			
	CNMG160616-XM	1,6	1-5,6	0,2-0,65	○			●																			
	CNMG190608-XM	0,8	1-6,65	0,2-0,4	●			●																			
	CNMG190612-XM	1,2	1-6,65	0,2-0,6	○			●																			
	CNMG190616-XM	1,6	1-6,65	0,2-0,65	○			●																			

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DCLNR/L	PCBNR/L	PCLNR/L	MCBNR/L	MCLNR/L	A***-PCLNR/L
Kr: 95°	Kr: 75°	Kr: 95°	Kr: 75°	Kr: 95°	Kr: 95°
					
A230	A237	A238	A252	A253	A324

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

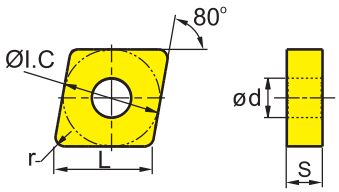
Tournage général Plaquettes négatives

Plaquette de tournage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

CNMG	L	I.C	S	d
09 03	9,7	9,525	3,18	3,81
12 04	12,9	12,7	4,76	5,16
16 06	16,1	15,875	6,35	6,35
19 06	19,3	19,05	6,35	7,94

Plaquette négative CN**



	ISO	r	a_p	f	HC¹ (CVD)											HC¹ (PVD)						HT		HC²	HW	
					YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
	CNMG090304-DM	0,4	0,4-4,0	0,1-0,3			●		●																		
	CNMG090308-DM	0,8	0,5-4,0	0,15-0,50			●		●																		
	CNMG090312-DM	1,2	0,5-3,0	0,1-0,4					○																		
	CNMG120404-DM	0,4	0,4-5,5	0,1-0,3			●		●																		
DM	**CNMG120408-DM**	0,8	0,5-5,5	0,15-0,50		○	●		●	●	○	●															
	CNMG120412-DM	1,2	0,8-5,5	0,18-0,60		○	●		●		○	○															
	CNMG120416-DM	1,6	1,0-5,5	0,23-0,65			○		●																		
	CNMG160608-DM	0,8	0,5-7,2	0,15-0,50			○		●																		
	CNMG160612-DM	1,2	0,8-7,2	0,18-0,60			●		●																		
	CNMG160616-DM	1,6	1,0-7,2	0,23-0,65			●		●																		
	CNMG190608-DM	0,8	0,5-8,6	0,15-0,50			●		●																		
	CNMG190612-DM	1,2	0,8-8,6	0,18-0,60			●		●																		
	CNMG190616-DM	1,6	1,0-8,6	0,23-0,65					●																		
EG	**CNMG120404-EG**	0,4	0,5-4,0	0,05-0,30							●	●								○	●						
	CNMG120408-EG	0,8	0,5-4,0	0,1-0,4							●	●								●	●						
	CNMG120412-EG	1,2	0,5-4,0	0,2-0,5								●								●	●						
EM	**CNMG120404-EM**	0,4	0,5-4,0	0,05-0,30							●	●								●							
	CNMG120408-EM	0,8	0,5-5,7	0,15-0,45							●	●								●							
	CNMG120412-EM	1,2	0,5-5,7	0,25-0,60							●	●								●							
	CNMG160608-EM	0,8	0,5-7,2	0,15-0,45							●	●								●							
	CNMG160612-EM	1,2	0,5-7,2	0,25-0,60							●	●								●							

DM Semi-finition



EG Semi-finition



EM Semi-finition

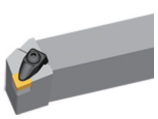
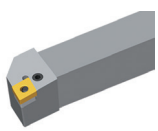
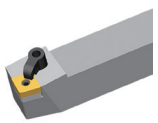
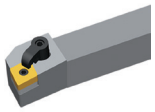
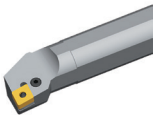


● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

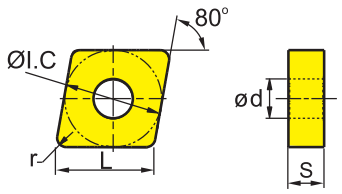
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Kr: 95°	Kr: 75°	Kr: 95°	Kr: 75°	Kr: 95°	Kr: 95°
					
A230	A237	A238	A252	A253	A324

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

CNMG	L	I.C	S	d
12 04	12,9	12,7	4,76	5,16

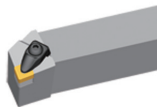
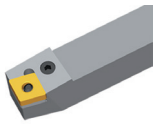
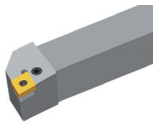
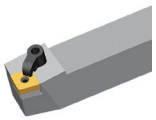
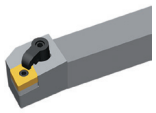
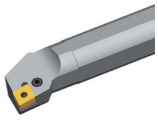


Plaquette négative CN**					HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
					YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
P					●	●	●	◐	◐	◐										◐	◐			●	◐	●		
M											○	◐					○	○	◐	◐	◐	◐	○	○	◐	○		
K													●	◐	◐	◐												
N																	●	●									●	◐
S																	○	○	◐	◐	◐	◐	○				○	◐
H																												
ISO		r	a_p	f																								
ZM	**CNMG120404-ZM**	0,4	0,5-3,0	0,05-0,30		●																						
	CNMG120408-ZM	0,8	0,5-4,0	0,1-0,5		○																						
Semi-finition																												

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

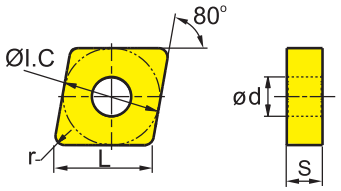
DCLNR/L	PCBNR/L	PCLNR/L	MCBNR/L	MCLNR/L	S***-PCLNR/L
Kr: 95°	Kr: 75°	Kr: 95°	Kr: 75°	Kr: 95°	Kr: 95°
					
A230	A237	A238	A252	A253	A324

Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

CNMG	L	I.C	S	d
12 04	12,9	12,7	4,76	5,16
16 06	16,1	15,875	6,35	6,35

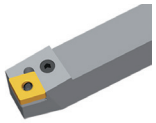
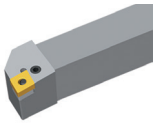
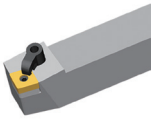
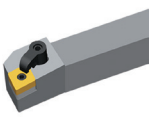
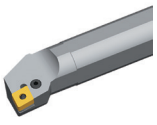


Plaquette négative CN**					HC¹ (CVD)										HC¹ (PVD)						HT		HC²	HW	
					YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
P					○	○	○	◉	◉	◉										◉	◉			◉	◉	○		
M											○	◉					○	○	◉	◉	◉	○	○	◉	◉	○		
K													●	◉	◉	◉												
N																	●	●									●	◉
S																	○	○	◉	◉	◉	○					○	◉
H																												
ISO		r	a_p	f																								
NM	**CNMG120404-NM**	0,4	0,2-3,0	0,05-0,30														○	●									
	CNMG120408-NM	0,8	0,2-4,0	0,1-0,5														○	●	●	●						○	
	CNMG120412-NM	1,2	0,2-4,0	0,2-0,6														○	●									
Semi-finition																												
TC	**CNMG120404-TC**	0,4	0,5-5,0	0,08-0,40										●		●												
	CNMG120408-TC	0,8	0,5-5,0	0,15-0,50										●		●												
	CNMG120412-TC	1,2	0,5-5,0	0,2-0,6										●		●												
	CNMG120416-TC	1,6	0,5-5,0	0,20-0,65										●		○												
	CNMG160608-TC	0,8	1-7	0,15-0,50										●		●												
	CNMG160612-TC	1,2	1-7	0,2-0,6										●		●												
	CNMG160616-TC	1,6	1-7	0,20-0,65										●		○												
TK	**CNMG120408-TK**	0,8	0,2-0,4	0,2-0,4										○														
	CNMG120412-TK	1,2	0,2-0,4	0,2-0,45										○														
	CNMG120416-TK	1,6	0,2-0,4	0,2-0,5										●														
Semi-finition																												

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DCLNR/L	PCBNR/L	PCLNR/L	MCBNR/L	MCLNR/L	S***-PCLNR/L
Kr: 95°	Kr: 75°	Kr: 95°	Kr: 75°	Kr: 95°	Kr: 95°
					
A230	A237	A238	A252	A253	A324

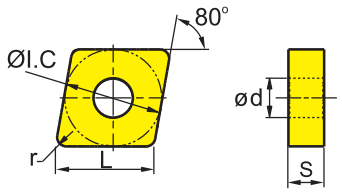
Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

CNMG	L	I.C	S	d
12 04	12,9	12,7	4,76	5,16
16 06	16,1	15,875	6,35	6,35
19 06	19,3	19,05	6,35	7,94
25 09	25,79	25,4	9,525	9,12

Plaquette négative CN**



	ISO	r	a_p	f	HC[1] (CVD)										HC[1] (PVD)							HT		HC[2]	HW	
					YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
DR	**CNMG120408-DR**	0,8	0,7-7,0	0,2-0,5		○	●		●	●			●		●													
	CNMG120412-DR	1,2	1-7	0,25-0,70		○	●		●	●			●		●													
	CNMG120416-DR	1,6	1,5-7,0	0,32-0,75			○		●				○		●													
	CNMG160608-DR	0,8	0,7-8,0	0,2-0,5					●				●		○													
	CNMG160612-DR	1,2	1-8	0,25-0,70		○	●		●	○			●		●													
	CNMG160616-DR	1,6	1,5-8,0	0,3-0,8		○	●		●	●			○		○													
	CNMG190608-DR	0,8	0,7-10,0	0,2-0,5			●		●				○		●													
	CNMG190612-DR	1,2	1-10	0,25-0,70		○	●		●	●			○		●													
	CNMG190616-DR	1,6	1,5-10,0	0,3-0,8			●	●	●	●			○		●													
	CNMG190624-DR	2,4	2-10	0,32-0,90		○			●						○													
	CNMG250924-DR	2,4	2-15	0,4-1,0					●																			
SNR	**CNMG120408-SNR**	0,8	1-3	0,1-0,4															●			●	●					
	CNMG120412-SNR	1,2	1-3	0,2-0,6															●			●	●					
	CNMG160608-SNR	0,8	2-6	0,1-0,4															●			●	●				○	
	CNMG190616-SNR	1,6	2-7	0,2-0,6															○				●				○	

DR — Ébauche

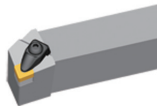
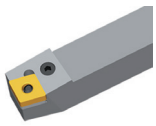
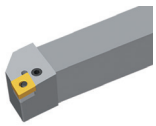
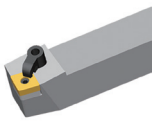
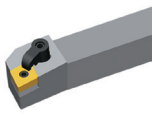
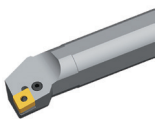
SNR — Ébauche

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC[1] Carbure revêtu
HT Cermet non revêtu
HC[2] Cermet revêtu
HW Carbure non revêtu

Porte-outil

DCLNR/L	PCBNR/L	PCLNR/L	MCBNR/L	MCLNR/L	S***-PCLNR/L
Kr: 95°	Kr: 75°	Kr: 95°	Kr: 75°	Kr: 95°	Kr: 95°
					
A230	A237	A238	A252	A253	A324

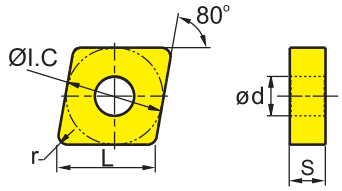
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

CN**	L	I.C	S	d
12 04	12,9	12,7	4,76	5,16
16 06	16,1	15,875	6,35	6,35
19 06	19,3	19,05	6,35	7,94
25 07	25,79	25,4	7,94	9,12
25 09	25,79	25,4	9,525	9,12

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquette de tournage

Plaquette négative CN**



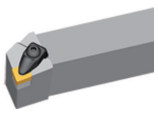
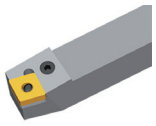
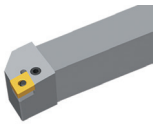
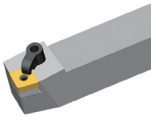
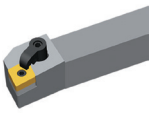
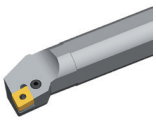
	HC¹ (CVD)											HC¹ (PVD)						HT		HC²	HW	
P	●	●	●	◉	◉	◉									◉	◉		●	◉	●		
M							●	◉				●	●	◉	◉	◉	●	●	◉	●		
K									●	◉	◉	◉										
N												●	●								●	◉
S												●	●	◉	◉	◉	●				●	◉
H																						

	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
DR	**CNMM120412-DR**	1,2	1,0-7,5	0,25-0,70		○	●		●	●	○	○																
	CNMM160612-DR	1,2	1,0-9,5	0,25-0,70			●		●																			
	CNMM160616-DR	1,6	1,5-9,5	0,32-0,90			●		●	○																		
	CNMM190612-DR	1,2	1-12	0,25-0,70		○	●		●	●		●																
Ébauche	**CNMM190616-DR**	1,6	1,5-12,0	0,32-0,90			●		●	●																		
	CNMM190624-DR	2,4	2-12	0,35-1,20		○	●		●																			
	CNMM250924-DR	2,4	2,0-12,5	0,2-1,2			●		●	○																		
ER	**CNMG120408-ER**	0,8	2,0-7,6	0,15-0,55								○																
	CNMG120412-ER	1,2	2,0-7,6	0,25-0,80								○																
	CNMG160612-ER	1,2	2-10	0,35-0,80								○																
	CNMG160616-ER	1,6	2-10	0,45-1,00								○																
Ébauche	**CNMG190612-ER**	1,2	2,0-11,4	0,35-1,00					○			○								○								
	CNMG190616-ER	1,6	2,0-11,4	0,45-1,10								○																
ER	**CNMM250724-ER**	2,4	2,0-12,5	0,3-1,4					●																			
	CNMM250732-ER	3,2	2,0-12,5	0,45-1,80					○																			
	CNMM250924-ER	2,4	2,0-12,5	0,3-1,4					●			○																
Ébauche	**CNMM250932-ER**	3,2	2,0-12,5	0,45-1,80					●																			

● En stock ○ Sur demande
YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DCLNR/L	PCBNR/L	PCLNR/L	MCBNR/L	MCLNR/L	S***-PCLNR/L
Kr: 95°	Kr: 75°	Kr: 95°	Kr: 75°	Kr: 95°	Kr: 95°
					
A230	A237	A238	A252	A253	A324

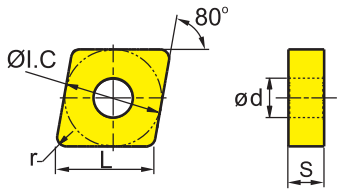
Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

● Bonnes conditions d'usinage
⊛ Conditions d'usinage normales
✺ Conditions d'usinage défavorables

CNMM	L	I.C	S	d
12 04	12,9	12,7	4,76	5,16
16 06	16,1	15,875	6,35	6,35
19 06	19,3	19,05	6,35	7,94
25 09	25,79	25,4	9,525	9,12

Plaquette négative CN**



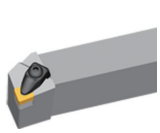
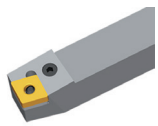
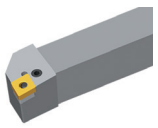
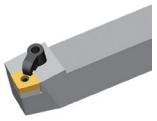
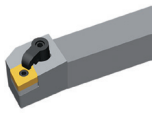
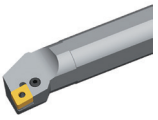
	HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW		
P	●	●	●	⊛	⊛	⊛									⊛	⊛			●	⊛	●			
M							○	⊛					○	○	⊛	⊛	⊛	○	○	⊛	○			
K									●	⊛	⊛	⊛												
N													●	●									●	⊛
S													●	●	⊛	⊛	⊛	●					●	⊛
H																								

	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
LR  Ébauche	**CNMM120408-LR**	0,8	1-5	0,1-0,5			●		●																			
	CNMM120412-LR	1,2	2-6	0,2-0,7			●		●			●																
	CNMM120416-LR	1,6	2,0-6,5	0,25-0,80					●																			
	CNMM160608-LR	0,8	1-7	0,2-0,6			●		●			○																
	CNMM160612-LR	1,2	1,0-7,5	0,2-0,7			●		●			●																
	CNMM160616-LR	1,6	1,0-8,5	0,25-0,80	○		●	○	●																			
	CNMM190612-LR	1,2	2,0-10,5	0,2-0,7			●		●																			
	CNMM190616-LR	1,6	2,0-10,5	0,3-1,0			●		●			●																
	CNMM190624-LR	2,4	2,0-10,5	0,3-1,1			●		○																			
	CNMM250924-LR	2,4	2,0-12,5	0,3-1,2			○		●																			

● En stock ○ Sur demande
YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DCLNR/L	PCBNR/L	PCLNR/L	MCBNR/L	MCLNR/L	S***-PCLNR/L
Kr: 95°	Kr: 75°	Kr: 95°	Kr: 75°	Kr: 95°	Kr: 95°
					
A230	A237	A238	A252	A253	A324

Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

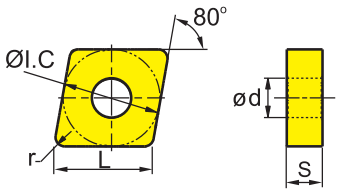
Tournage général Plaquettes négatives

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

CNMM	L	I.C	S	d
12 04	12,9	12,7	4,76	5,16
16 06	16,1	15,875	6,35	6,35
19 06	19,3	19,05	6,35	7,94
25 09	25,79	25,4	9,525	9,12

Plaquette négative CN**



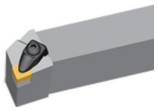
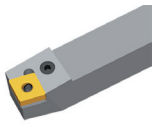
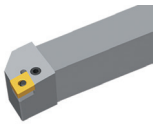
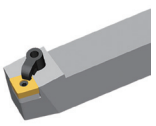
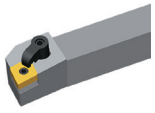
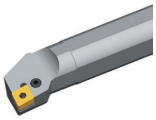
	ISO	r	a_p	f	HC¹ (CVD)										HC¹ (PVD)						HT		HC²	HW	
					YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
Basic	**CNMM120404**	0,4	0,5-7,0	0,1-0,5																						
	CNMM190612	1,2	0,5-10,5	0,1-0,8																						
Semi-finition	**CNMM190616**	1,6	0,5-10,5	0,1-1,0																						
HDR	**CNMM120408-HDR**	0,8	1-7	0,2-0,6			●		●																	
	CNMM120412-HDR	1,2	1-7	0,3-0,8			○		●																	
	CNMM120416-HDR	1,6	1-7	0,4-1,0			●		●																	
	CNMM160612-HDR	1,2	1,5-7,5	0,3-0,8			●		●																	
	CNMM160616-HDR	1,6	1,5-8,5	0,4-1,0			○		●																	
	CNMM160624-HDR	2,4	1,5-10,5	0,8-1,2			○		○																	
	CNMM190608-HDR	0,8	2,0-12,5	0,3-0,7			○																			
	CNMM190612-HDR	1,2	2,0-12,5	0,35-0,80			○		●																	
	CNMM190616-HDR	1,6	2,0-12,5	0,5-1,1			○	●	●							○										
	CNMM190624-HDR	2,4	2,0-12,5	0,8-1,2			●		●																	
Ébauche	**CNMM250924-HDR**	2,4	2,0-12,5	0,8-1,4			○		●																	
HPR	**CNMM190616-HPR**	1,6	2,0-10,5	0,5-1,0					○																	
	CNMM190624-HPR	2,4	2,0-10,5	0,7-1,4			●		○																	
Ébauche	**CNMM250924-HDR**	2,4	2,0-12,5	0,7-1,4					●	●																

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DCLNR/L	PCBNR/L	PCLNR/L	MCBNR/L	MCLNR/L	S***-PCLNR/L
Kr: 95°	Kr: 75°	Kr: 95°	Kr: 75°	Kr: 95°	Kr: 95°
					
A230	A237	A238	A252	A253	A324

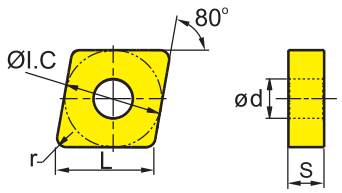
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

CN**	L	I.C	S	d
12 04	12,9	12,7	4,76	5,16
16 06	16,1	15,875	6,35	6,35
19 06	19,3	19,05	6,35	7,94

Plaquette négative CN**



	HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
P	○	○	○	◉	◉	◉									◉	◉				○	◉	○		
M							○	◉					○	○	◉	◉	◉	○	○	◉	○			
K									●	◉	◉	◉												
N													●	●									●	◉
S													○	○	◉	◉	◉	○					○	◉
H																								

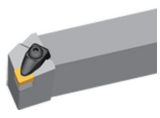
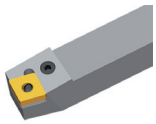
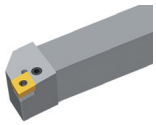
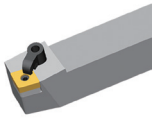
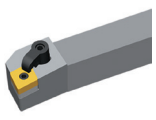
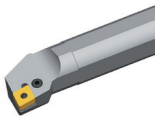
	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
Flat	**CNMA120404**	0,4	0,2-5,0	0,05-0,40									○															
	CNMA120408	0,8	0,2-5,0	0,05-0,50									●	●	●	●												
	CNMA120412	1,2	0,2-5,0	0,1-0,6									●	●	●	●											○	
	CNMA120416	1,6	0,2-5,0	0,10-0,65									●		●	○												
	CNMA160608	0,8	0,2-7,0	0,1-0,5									○															
	CNMA160612	1,2	0,2-7,0	0,1-0,6									●		●													
	CNMA160616	1,6	0,2-7,0	0,15-0,65									○		●													
	CNMA190612	1,2	0,2-8,0	0,15-0,70									○		●													
	CNMA190616	1,6	0,2-8,0	0,15-0,70									●		●													
Basic	**CNMG120404**	0,4	0,1-5,0	0,05-0,50					○																			
	CNMG120408	0,8	0,1-5,0	0,1-0,6					○						○													
	CNMG120412	1,2	0,1-5,0	0,1-0,7			○		○																			
	CNMG160612	1,2	0,1-7,0	0,1-0,7																								
	CNMG190608	0,8	0,1-8,0	0,1-0,7																								
	CNMG190612	1,2	0,1-8,0	0,1-0,8																								
	CNMG190616	1,6	0,1-8,0	0,1-1,0																								

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

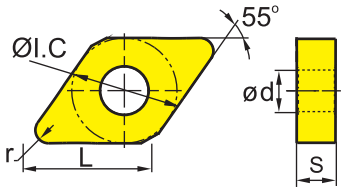
DCLNR/L	PCBNR/L	PCLNR/L	MCBNR/L	MCLNR/L	S***-PCLNR/L
Kr: 95°	Kr: 75°	Kr: 95°	Kr: 75°	Kr: 95°	Kr: 95°
					
A230	A237	A238	A252	A253	A324

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Plaquette de tournage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

DN**	L	I.C	S	d
11 04	11,6	9,525	4,76	3,81
15 04	15,5	12,7	4,76	5,16
15 06	15,5	12,7	6,35	5,16



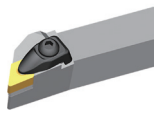
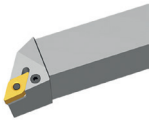
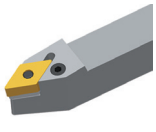
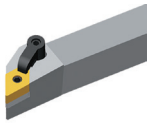
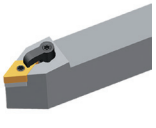
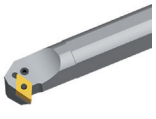
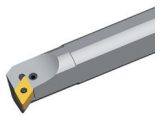
Plaquette négative DN**					HC¹ (CVD)											HC¹ (PVD)						HT		HC²	HW	
				P																						
				M																						
				K																						
				N																						
				S																						
				H																						
ISO		r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
WG	**DNMX110404-WG**	0,4	0,2-1,5	0,08-0,30			○																				
	DNMX110408-WG	0,8	0,5-3,5	0,15-0,50			●		●																		
	DNMX150408-WG	0,8	0,5-5,0	0,15-0,70			○																				
	DNMX150608-WG	0,8	0,5-5,0	0,15-0,70			○		○																		
Wiper	**DNMX150612-WG**	1,2	0,8-6,0	0,20-0,75			○																				
ADF	**DNMG150604-ADF**	0,4	0,5-6,0	0,15-0,50		○															●			○			
	DNMG150608-ADF	0,8	0,1-4,0	0,08-0,50		○														●	●			○			
	DNMG150612-ADF	1,2	0,5-4,0	0,15-0,50		○															●						
Finition																											
DF	**DNMG110404-DF**	0,4	0,15-2,00	0,08-0,25			●		●																		
	DNMG110408-DF	0,8	0,15-2,00	0,1-0,3			●		●																		
	DNMG110412-DF	1,2	0,35-1,50	0,15-0,50			○																				
	DNMG150404-DF	0,4	0,15-2,00	0,08-0,25			●		●																		
	DNMG150408-DF	0,8	0,15-2,00	0,1-0,3			●		●																		
	DNMG150412-DF	1,2	0,35-1,50	0,15-0,50					○																		
	DNMG150604-DF	0,4	0,8-6,0	0,18-0,60			●		●																		
	DNMG150608-DF	0,8	0,15-2,00	0,1-0,3			●		●																		
Finition	**DNMG150612-DF**	1,2	0,2-2,5	0,10-0,35			●																				
SF	**DNMG110404-SF**	0,4	0,05-0,50	0,05-0,25																					●		
	DNMG150404-SF	0,4	0,05-0,50	0,05-0,25																					●		
	DNMG150408-SF	0,8	0,05-0,50	0,10-0,35																					●		
	DNMG150604-SF	0,4	0,05-0,50	0,05-0,25																					●		
Finition	**DNMG150608-SF**	0,8	0,05-0,50	0,10-0,35																					●		

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

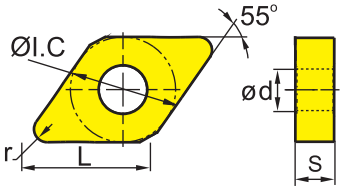
DDJNR/L	PDJNR/L	PDNNR/L	MDJNR/L	MDPNN	S***-PDSNR/L	A***-PDUNR/L
Kr: 93°	Kr: 93°	Kr: 63°	Kr: 93°	Kr: 62°30'	Kr: 62°30'	Kr: 93°
						
A231	A240	A241	A254	A255	A326	A327

Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

DNMG	L	I.C	S	d
11 04	11,6	9,525	4,76	3,81
15 06	15,5	12,7	6,35	5,16

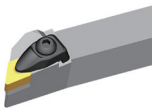
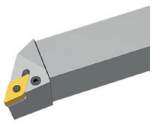
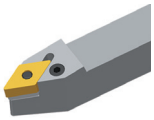
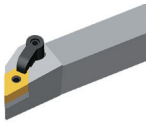
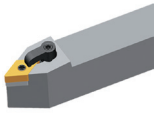
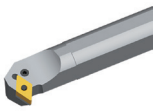
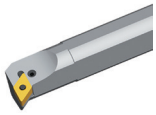


Plaquette négative DN**					HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
					P																						
					M																						
					K																						
					N																						
					S																						
					H																						
ISO		r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
XF	**DNMG110404-XF**	0,4	0,5-2,0	0,1-0,25	●																						
	DNMG110408-XF	0,8	0,5-2,0	0,1-0,30	○																						
	DNMG150604-XF	0,4	0,5-2,5	0,1-0,25	●			●																			
	DNMG150608-XF	0,8	0,5-2,5	0,1-0,30	●			●																			
Finition	**DNMG150612-XF**	1,2	0,5-2,5	0,1-0,35	●			●																			
XM	**DNMG110404-XM**	0,4	1-3,85	0,2-0,4	●			○																			
	DNMG110408-XM	0,8	1-3,85	0,2-0,4	●			○																			
	DNMG110412-XM	1,2	1-3,85	0,2-0,6	●			○																			
	DNMG150604-XM	0,4	1-5,25	0,2-0,4	●			●																			
	DNMG150608-XM	0,8	1-5,25	0,2-0,4	●			●																			
Semi-finition	**DNMG150612-XM**	1,2	1-5,25	0,2-0,6	●			●																			
	DNMG150616-XM	1,6	1-5,25	0,2-0,65	●			●																			

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DDJNR/L	PDJNR/L	PDNNR/L	MDJNR/L	MDPNN	S***-PDSNR/L	A***-PDUNR/L
Kr: 93°	Kr: 93°	Kr: 63°	Kr: 93°	Kr: 62°30'	Kr: 62°30'	Kr: 93°
						
A231	A240	A241	A254	A255	A326	A327

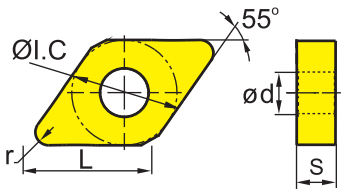
Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

DNMG	L	I.C	S	d
11 04	11,6	9,525	4,76	3,81
15 04	15,5	12,7	4,76	5,16
15 06	15,5	12,7	6,35	5,16

Plaquette négative DN**



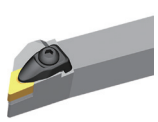
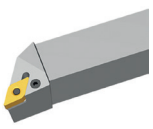
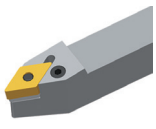
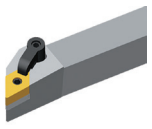
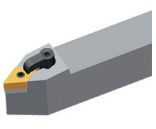
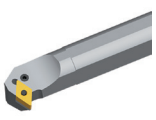
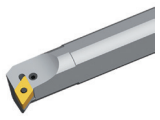
	ISO	r	a_p	f	HC¹ (CVD)										HC¹ (PVD)						HT		HC²	HW	
							YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
DM	**DNMG110404-DM**	0,4	0,4-5,0	0,1-0,3			●		●																		
	DNMG110408-DM	0,8	0,5-5,0	0,15-0,50			●		●																		
	DNMG110412-DM	1,2	0,8-5,0	0,18-0,50			●		●																		
	DNMG150404-DM	0,4	0,4-6,0	0,1-0,3			●		●																		
	DNMG150408-DM	0,8	0,5-6,0	0,15-0,50			●		●																		
	DNMG150412-DM	1,2	0,8-6,0	0,18-0,60			○		●																		
Semi-finition	**DNMG150604-DM**	0,4	1-6	0,23-0,65			●		●																		
	DNMG150608-DM	0,8	0,5-6,0	0,15-0,50		○	●		●			●															
	DNMG150612-DM	1,2	0,8-6,0	0,18-0,60		○	●		●																		
	DNMG150616-DM	1,6	1-6	0,23-0,65		○	●		●																		
PM	**DNMG110404-PM**	0,4	0,4-5,0	0,1-0,3					●				○														
	DNMG110408-PM	0,8	0,5-5,0	0,15-0,50			○		●				●														
	DNMG110412-PM	1,2	0,8-5,0	0,18-0,50					○				●														
	DNMG150404-PM	0,4	0,4-6,0	0,1-0,3			○																				
	DNMG150408-PM	0,8	0,5-6,0	0,15-0,50			●		●				●		●												
	DNMG150412-PM	1,2	0,8-6,0	0,18-0,60					○						○												
Semi-finition	**DNMG150416-PM**	1,6	1-6	0,23-0,65					○																		
	DNMG150604-PM	0,4	0,4-6,0	0,1-0,3			●		●				●		○												
	DNMG150608-PM	0,8	0,5-6,0	0,15-0,50			●		●	●			●		●												
	DNMG150612-PM	1,2	0,8-6,0	0,18-0,60			●		●				●		●												
	DNMG150616-PM	1,6	1-6	0,23-0,65					●																		

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

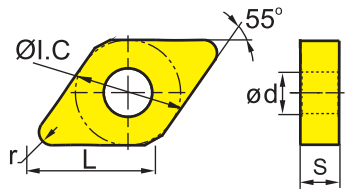
DDJNR/L	PDJNR/L	PDNNR/L	MDJNR/L	MDPNN	S***-PDSNR/L	A***-PDUNR/L
Kr: 93°	Kr: 93°	Kr: 63°	Kr: 93°	Kr: 62°30'	Kr: 62°30'	Kr: 93°
						
A231	A240	A241	A254	A255	A326	A327

Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

DNMG	L	I.C	S	d
15 06	15,5	12,7	6,35	5,16



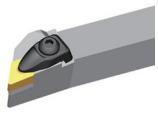
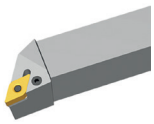
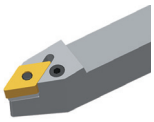
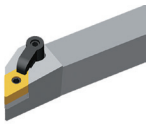
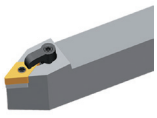
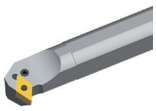
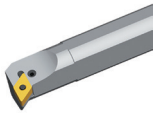
Plaquette négative DN**					HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
					YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
P					○	○	○	◍	◍	◍											◍	◍		○	◍	○		
M											○	◍					○	○	◍	◍	◍	◍	○	○	◍	○		
K													○	◍	◍	◍												
N																	○	○									○	◍
S																	○	○	◍	◍	◍	◍	○				○	◍
H																												
ISO		r	a_p	f																								
ZM	**DNMG150612-ZM**	1,2	1,0-5,5	0,15-0,60		○			●																			
Semi-finition																												

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DDJNR/L	PDJNR/L	PDNNR/L	MDJNR/L	MDPNN	S***-PDSNR/L	S***-PDUNR/L
Kr: 93°	Kr: 93°	Kr: 63°	Kr: 93°	Kr: 62°30'	Kr: 62°30'	Kr: 93°
						
A231	A240	A241	A254	A255	A326	A327

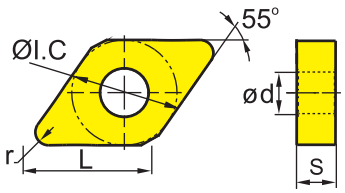
Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

DN**	L	I.C	S	d
11 04	11,6	9,525	4,76	3,81
15 04	15,5	12,7	4,76	5,16
15 06	15,5	12,7	6,35	5,16

Plaquette négative DN**



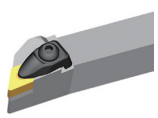
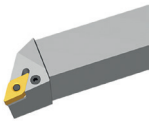
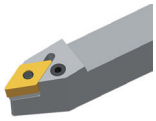
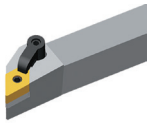
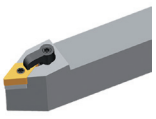
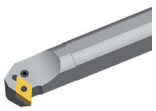
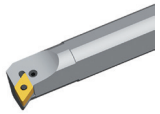
					HC¹ (CVD)										HC¹ (PVD)						HT		HC²	HW	
					P																				
					M																				
					K																				
					N																				
					S																				
					H																				
	ISO		r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
EF	**DNMG110404-EF**		0,4	0,1-1,5	0,05-0,20							○							●								
	DNMG110408-EF		0,8	0,1-1,5	0,1-0,4							○							●								
	DNMG150404-EF		0,4	0,1-1,5	0,05-0,30														●								
	DNMG150408-EF		0,8	0,1-1,5	0,1-0,4														●								
	DNMG150604-EF		0,4	0,1-1,5	0,05-0,30							●							●								
Finition	**DNMG150608-EF**		0,8	0,1-1,5	0,1-0,4							●							●								
	DNMG150612-EF		1,2	0,1-1,5	0,15-0,50														●								
FM	**DNMG150604L-FM**		0,4	0,5-3,0	0,05-0,30					●									●								
	DNMG150604R-FM		0,4	0,5-3,0	0,05-0,30			●		●									●								
	DNMG150608L-FM		0,8	0,5-3,0	0,1-0,5			○		●									●								
Finition	**DNMG150608R-FM**		0,8	0,5-3,0	0,1-0,5			●		●									●								
NF	**DNEG150404-NF**		0,4	0,2-3,0	0,05-0,30														○								
	DNEG150408-NF		0,8	0,2-3,0	0,1-0,4														○								
	DNEG150604-NF		0,4	0,2-3,0	0,05-0,30													○	●							○	
Finition	**DNEG150608-NF**		0,8	0,2-3,0	0,1-0,4													○	●							○	
NGF	**DNEG150608-NGF**		0,8	0,2-3,0	0,05-0,40														●								
	DNEG150612-NGF		1,2	0,2-3,0	0,1-0,5														●								
Finition																											

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DDJNR/L	PDJNR/L	PDNNR/L	MDJNR/L	MDPNN	S***-PDSNR/L	A***-PDUNR/L
Kr: 93°	Kr: 93°	Kr: 63°	Kr: 93°	Kr: 62°30'	Kr: 62°30'	Kr: 93°
						
A231	A240	A241	A254	A255	A326	A327

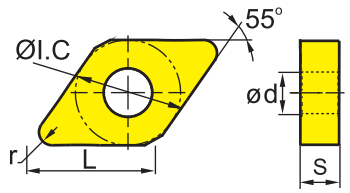
Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

DNMG	L	I.C	S	d
11 04	11,6	9,525	4,76	3,81
15 04	15,5	12,7	4,76	5,16
15 06	15,5	12,7	6,35	5,16

Plaquette négative DN**



	HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW		
P	○	○	○	◉	◉	◉									◉	◉			○	◉	○			
M							○	◉				○	○	◉	◉	◉	◉	○	○	◉	○			
K									◉	◉	◉	◉												
N												○	○										○	◉
S													○	○	◉	◉	◉	○					○	◉
H																								

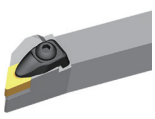
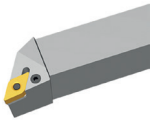
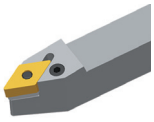
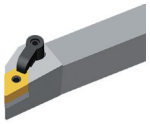
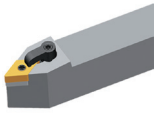
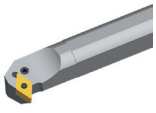
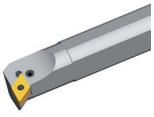
	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
EG	**DNMG150604-EG**	0,4	1-3	0,05-0,30							●										●							
	**DNMG150608-EG**	0,8	1-3	0,1-0,4							●	○								●	●							
	DNMG150612-EG	1,2	1-3	0,2-0,6							●	●								●	●							
Semi-finition																												
EM	**DNMG110404-EM**	0,4	0,5-4,4	0,05-0,30							●									●								
	DNMG110408-EM	0,8	0,5-4,4	0,10-0,45							●									●								
	DNMG150404-EM	0,4	0,5-6,4	0,05-0,30							○									○								
	**DNMG150408-EM**	0,8	0,5-6,4	0,10-0,45							○									●								
	DNMG150412-EM	1,2	0,5-6,4	0,1-0,6							○																	
Semi-finition	**DNMG150604-EM**	0,4	0,2-6,4	0,05-0,30							●	●								●								
	DNMG150608-EM	0,8	0,5-6,4	0,10-0,45							●	●								●								
	DNMG150612-EM	1,2	0,5-6,4	0,1-0,6							●	●								●								
NM	**DNMG150412-NM**	1,2	0,2-4,0	0,2-0,6														○										
	**DNMG150608-NM**	0,8	0,2-4,0	0,1-0,4															●									
	DNMG150612-NM	1,2	0,2-4,0	0,2-0,6														○	●									
Semi-finition																												
TC	**DNMG150608-TC**	0,8	0,5-5,0	0,15-0,40										●		●												
	**DNMG150612-TC**	1,2	0,5-5,0	0,2-0,6										●		○												
Semi-finition																												

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

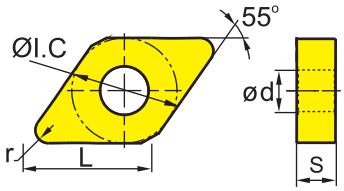
DDJNR/L	PDJNR/L	PDNNR/L	MDJNR/L	MDPNN	S***-PDSNR/L	A***-PDUNR/L
Kr: 93°	Kr: 93°	Kr: 63°	Kr: 93°	Kr: 62°30'	Kr: 62°30'	Kr: 93°
						
A231	A240	A241	A254	A255	A326	A327

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

DNMG	L	I.C	S	d
15 06	15,5	12,7	6,35	5,16

Plaquette de tournage



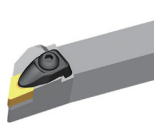
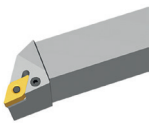
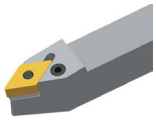
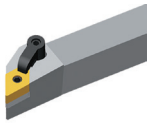
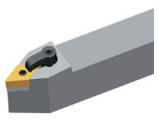
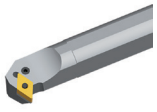
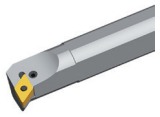
Plaquette négative DN**					HC¹ (CVD)											HC¹ (PVD)						HT		HC²	HW	
					P																					
					M																					
					K																					
					N																					
					S																					
					H																					
ISO		r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
TK	**DNMG150608-TK**	0,8	0,2-0,4	0,2-0,4										○														
	DNMG150612-TK	1,2	0,2-0,4	0,2-0,45										○														
Semi-finition																												
DR	**DNMG150608-DR**	0,8	1-6	0,2-0,5			●		●				●		●													
	DNMG150612-DR	1,2	1-6	0,25-0,70			●		●				●		●													
	DNMG150616-DR	1,6	1-6	0,32-0,75			●						●		○													
Ébauche																												
SNR	**DNMG150608-SNR**	0,8	0,2-6,0	0,1-0,5															●		○	●						
	DNMG150612-SNR	1,2	0,2-6,0	0,2-0,6															○		○	●						
Ébauche																												

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

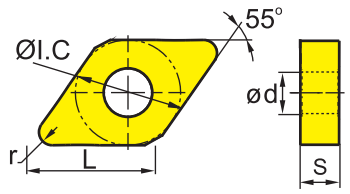
DDJNR/L	PDJNR/L	PDNNR/L	MDJNR/L	MDPNN	S***-PDSNR/L	S***-PDUNR/L
Kr: 93°	Kr: 93°	Kr: 63°	Kr: 93°	Kr: 62°30'	Kr: 62°30'	Kr: 93°
						
A231	A240	A241	A254	A255	A326	A327

Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

DN**	L	I.C	S	d
15 06	15,5	12,7	6,35	5,16



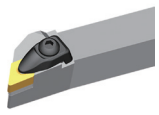
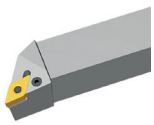
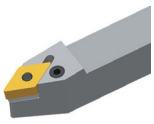
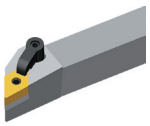
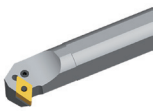
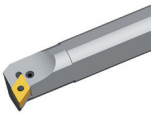
Plaquette négative DN**					HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
					P																							
					M																							
					K																							
					N																							
					S																							
					H																							
	ISO		r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
Flat	**DNMA150604**		0,4	0,2-6,0	0,1-0,3									●		○												
	DNMA150608		0,8	0,2-6,0	0,1-0,6									●		●												
	DNMA150612		1,2	0,2-6,0	0,15-0,70									●		●												
Semi-finition	**DNMA150616**		1,6	0,2-6,0	0,2-0,8											○												
ER	**DNMG150608-ER**		0,8	2-6	0,15-0,55								○															
	DNMG150612-ER		1,2	2-6	0,25-0,80								○															
Ébauche																												

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

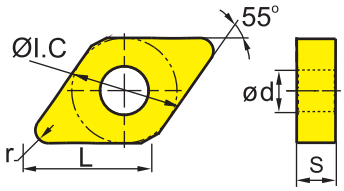
DDJNR/L	PDJNR/L	PDNNR/L	MDJNR/L	MDPNN	S***-PDSNR/L	S***-PDUNR/L
Kr: 93°	Kr: 93°	Kr: 63°	Kr: 93°	Kr: 62°30'	Kr: 62°30'	Kr: 93°
						
A231	A240	A241	A254	A255	A326	A327

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

DNMM	L	I.C	S	d
15 06	15,5	12,7	6,35	5,16

Plaquette de tournage



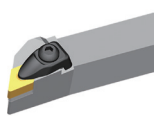
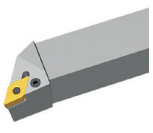
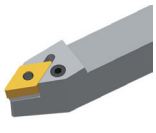
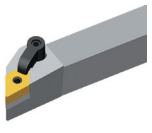
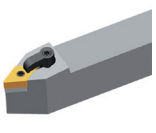
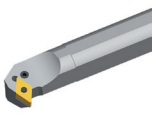
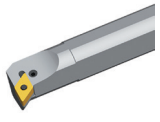
Plaquette négative DN**					HC¹ (CVD)											HC¹ (PVD)						HT		HC²	HW	
	ISO		r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
P						○	○	○	◉	◉	◉										◉	◉			◉	◉	○		
M												○	◉					○	○	◉	◉	◉	◉	○	◉	◉	○		
K														◉	◉	◉	◉												
N																		○	○									○	◉
S																		○	○	◉	◉	◉	◉	○				○	◉
H																													
DR	**DNMM150608-DR**		0,8	0,7-6,0	0,20-0,55			●		●																			
	DNMM150612-DR		1,2	1-6	0,25-0,70			●		●	●																		
	DNMM150616-DR		1,6	1,5-6,0	0,32-0,90			●		●																			
	Ébauche																												
ER	**DNMM150608-ER**		0,8	0,7-6,0	0,20-0,55							○																	
	DNMM150612-ER		1,2	1-6	0,25-0,70								○																
	Ébauche																												
HDR	**DNMM150608-HDR**		0,8	1-7	0,25-0,60			●		○																			
	DNMM150612-HDR		1,2	1-7	0,3-0,8			○																					
	DNMM150616-HDR		1,6	1,5-7,0	0,4-1,0			○																					
	Ébauche																												
LR	**DNMM150608-LR**		0,8	2-6	0,1-0,6			●		●			●																
	DNMM150612-LR		1,2	2-6	0,2-0,8					●			○																
	DNMM150616-LR		1,6	2-6	0,25-1,00			●		●																			
	Ébauche																												

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

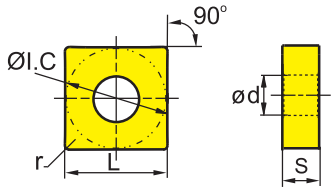
DDJNR/L	PDJNR/L	PDNNR/L	MDJNR/L	MDPNN	S***-PDSNR/L	S***-PDUNR/L
Kr: 93°	Kr: 93°	Kr: 63°	Kr: 93°	Kr: 62°30'	Kr: 62°30'	Kr: 93°
						
A231	A240	A241	A254	A255	A326	A327

Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SNMG	L	I.C	S	d
09 03	9,525	9,525	3,18	3,81
12 04	12,7	12,7	4,76	5,16



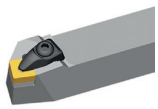
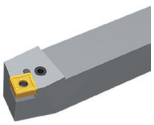
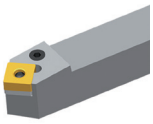
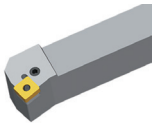
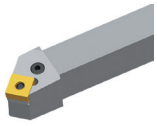
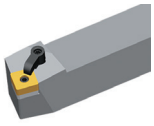
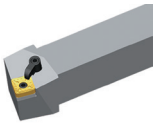
	Plaquette négative SN**				HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
					YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
P					○	○	○	◉	◉	◉										◉	◉			○	◉	○			
M											○	◉					○	○	◉	◉	◉	○		○	◉	○			
K													◉	◉	◉	◉													
N																	○	○									○	◉	
S																	○	○	◉	◉	◉	○					○	◉	
H																													
	ISO		r	a_p	f																								
ADF	**SNMG120404-ADF**		0,4	0,5-5,0	0,1-0,3	●															●								
	SNMG120408-ADF		0,8	0,5-5,0	0,12-0,50	●															●								
	SNMG120412-ADF		1,2	1-5	0,2-0,6	●															●								
Finition																													
DF	**SNMG120408-DF**		0,8	0,3-1,5	0,1-0,4		●		●																				
	SNMG120412-DF		1,2	0,35-1,50	0,15-0,50		●		●																				
Finition																													
SF	**SNMG090304-SF**		0,4	0,05-0,50	0,05-0,20																					●			
	SNMG090308-SF		0,8	0,05-0,50	0,10-0,35																					○			
	SNMG120404-SF		0,4	0,05-0,50	0,05-0,20																					○			
	SNMG120408-SF		0,8	0,05-0,50	0,10-0,35																					○			
Finition																													

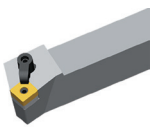
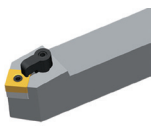
● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DSBNR/L	PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	MSBNR/L	MSRNR/L
Kr: 75°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°
						
A232	A242	A244	A245	A246	A256	A257

MSKNR/L	MSDNN	S***-PSKNR/L
Kr: 75°	Kr: 45°	Kr: 75°
		
A258	A259	A329

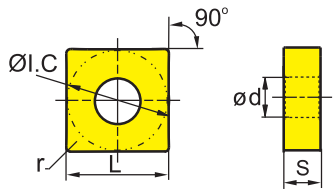
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SNMG	L	I.C	S	d
09 03	9,525	9,525	3,18	3,81
12 04	12,7	12,7	4,76	5,16
15 06	15,875	15,875	6,35	6,35

Plaquette négative SN**



	HC¹ (CVD)											HC¹ (PVD)						HT		HC²	HW	
P	○	○	○	◉	◉	◉									◉	◉		○	◉	○		
M						○	◉					○	○	◉	◉	◉	○	○	◉	○		
K								○	◉	◉	◉											
N												○	○								○	◉
S												○	○	◉	◉	◉	○				○	◉
H																						

ISO		r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
EF	**SNMG090304-EF**	0,4	0,5-2,0	0,05-0,30							●									●								
	SNMG090308-EF	0,8	0,5-2,0	0,05-0,40							●									●								
	SNMG090312-EF	1,2	0,5-2,0	0,05-0,45							○																	
	SNMG120404-EF	0,4	0,8-3,0	0,05-0,30																●								
	SNMG120408-EF	0,8	0,8-3,0	0,1-0,4																●								
	SNMG120412-EF	1,2	0,8-3,0	0,15-0,45							○									●								
	SNMG150608-EF	0,8	1-4	0,1-0,4							○																	
	SNMG150612-EF	1,2	1-4	0,15-0,45							○																	

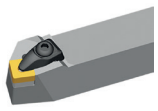
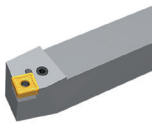
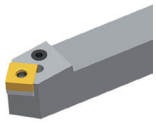
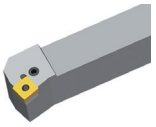
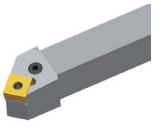
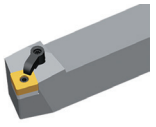
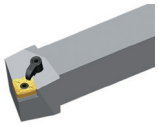
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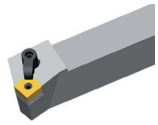
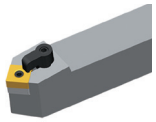
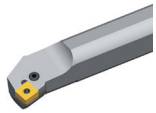
● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DSBNR/L	PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	MSBNR/L	MSRNR/L
Kr: 75°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°
						
A232	A242	A244	A245	A246	A256	A257

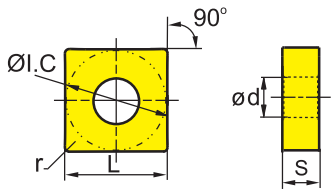
MSKNR/L	MSDNN	S***-PSKNR/L
Kr: 75°	Kr: 45°	Kr: 75°
		
A258	A259	A329

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SNMG	L	I.C	S	d
12 04	12,7	12,7	4,76	5,16
15 06	15,875	15,875	6,35	6,35
19 06	19,05	19,05	6,35	7,94

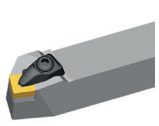
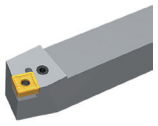
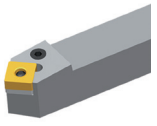
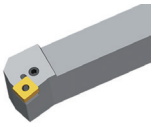
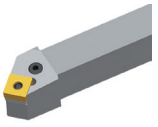
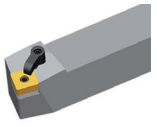
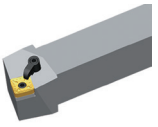


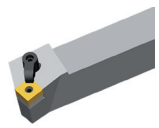
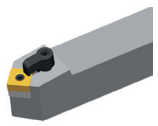
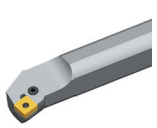
					HC¹ (CVD)											HC¹ (PVD)							HT		HC²		HW	
					YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
		ISO	r	a_p	f																							
XF		**SNMG120404-XF**	0,4	0,5-2,5	0,1-0,25	●			●																			
		SNMG120408-XF	0,8	0,5-2,5	0,1-0,30	●			●																			
Finition																												
XM		**SNMG120404-XM**	0,4	1-4,2	0,2-0,4	○			○																			
		SNMG120408-XM	0,8	1-4,2	0,2-0,4	●			●																			
		SNMG120412-XM	1,2	1-4,2	0,2-0,6	●			●																			
		SNMG120416-XM	1,6	1-4,2	0,2-0,65	○			○																			
		SNMG150608-XM	0,8	1-5,25	0,2-0,4	●			●																			
		SNMG150612-XM	1,2	1-5,25	0,2-0,6	●			●																			
		SNMG150616-XM	1,6	1-5,25	0,2-0,65	○			●																			
		SNMG190608-XM	0,8	1-6,65	0,2-0,4	○			○																			
		SNMG190612-XM	1,2	1-6,65	0,2-0,6	○			○																			
		SNMG190616-XM	1,6	1-6,65	0,2-0,65	○			○																			
		SNMG190624-XM	2,4	1-6,65	0,2-1,2	○			○																			
Semi-finition																												

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DSBNR/L	PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	MSBNR/L	MSRNR/L
Kr: 75°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°
						
A232	A242	A244	A245	A246	A256	A257

MSKNR/L	MSDNN	S***-PSKNR/L
Kr: 75°	Kr: 45°	Kr: 75°
		
A258	A259	A329

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

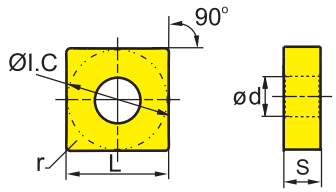
Tournage général Plaquettes négatives

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SNMG	L	I.C	S	d
09 03	9,525	9,525	3,18	3,81
12 04	12,7	12,7	4,76	5,16
15 06	15,875	15,875	6,35	6,35
19 06	19,05	19,05	6,35	7,94

Plaquette négative SN**



	HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBC152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
P	○	○	○	◉	◉	◉										◉	◉			○	◉	○		
M							○	◉						○	○	◉	◉	◉	○	○	◉	○		
K									◉	◉	◉	◉												
N													○	○									○	◉
S													◉	○	○	◉	◉	◉	○				○	◉
H																								

	ISO	r	a_p	f
PM	**SNMG090304-PM**	0,4	0,4-4,5	0,1-0,3					○															
	SNMG090308-PM	0,8	0,5-4,5	0,15-0,50					○			●	●											
	SNMG090312-PM	1,2	0,6-4,5	0,2-0,6					○															
	SNMG120404-PM	0,4	0,4-6,0	0,1-0,3		●			○				○											
	SNMG120408-PM	0,8	0,5-6,0	0,15-0,50		●			●			○	●											
	SNMG120412-PM	1,2	0,8-6,0	0,18-0,60		●			●			○	●											
	SNMG120416-PM	1,6	1-6	0,23-0,65		○			○			○	○											
	SNMG150608-PM	0,8	0,7-7,5	0,14-0,50		○			○															
	SNMG150612-PM	1,2	0,8-7,5	0,18-0,60		○			●			●	●											
	SNMG190612-PM	1,2	1,0-7,5	0,20-0,65		○			●			●	●											



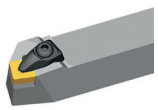
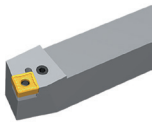
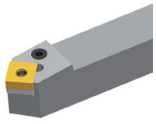
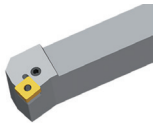
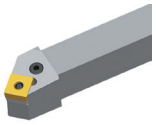
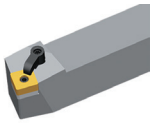
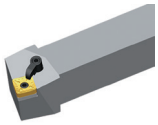
Semi-finition

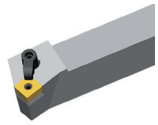
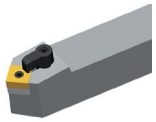
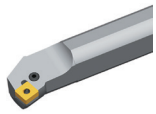
● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DSBNR/L	PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	MSBNR/L	MSRNR/L
Kr: 75°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°
						
A232	A242	A244	A245	A246	A256	A257

MSKNR/L	MSDNN	S***-PSKNR/L
Kr: 75°	Kr: 45°	Kr: 75°
		
A258	A259	A329

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

SNMG	L	I.C	S	d
09 03	9,525	9,525	3,18	3,81
12 04	12,7	12,7	4,76	5,16
15 06	15,875	15,875	6,35	6,35
19 06	19,05	19,05	6,35	7,94

Plaquette de tournage

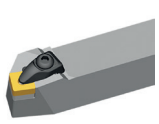
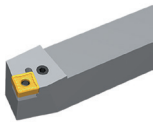
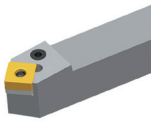
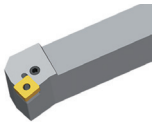
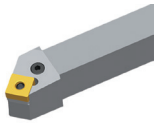
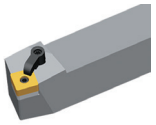
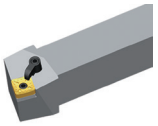
Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

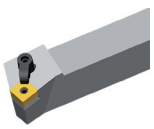
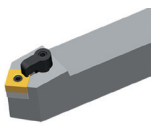
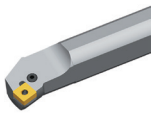
Plaquette négative SN**					HC[1] (CVD)											HC[1] (PVD)							HT		HC[2]	HW		
					YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201	
	ISO		r	a_p	f																								
DM	**SNMG090304-DM**		0,4	0,4-4,5	0,1-0,3			●		●																			
	SNMG090308-DM		0,8	0,5-4,5	0,15-0,50			●		●																			
	SNMG120404-DM		0,4	0,4-6,0	0,1-0,3			●		●																			
	SNMG120408-DM		0,8	0,5-6,0	0,15-0,50			●		●	○																		
	SNMG120412-DM		1,2	0,8-6,0	0,18-0,60			●		●																			
	SNMG120416-DM		1,6	1-6	0,23-0,65			○		●																			
Semi-finition	**SNMG150608-DM**		0,8	0,8-7,5	0,1-0,5			●		●																			
	SNMG150612-DM		1,2	0,8-7,5	0,18-0,60			●		●																			
	SNMG190612-DM		1,2	1-9	0,18-0,60			●		●																			
	SNMG190616-DM		1,6	1-9	0,23-0,65			○		●																			
EG	**SNMG120408-EG**		0,8	0,5-4,0	0,1-0,5								●								●	●							
	SNMG120412-EG		1,2	0,5-4,0	0,2-0,6								●								●								
Semi-finition																													

● En stock ○ Sur demande
YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC[1] Carbure revêtu
HT Cermet non revêtu
HC[2] Cermet revêtu
HW Carbure non revêtu

Porte-outil

DSBNR/L	PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	MSBNR/L	MSRNR/L
Kr: 75°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°
						
A232	A242	A244	A245	A246	A256	A257

MSKNR/L	MSDNN	S***-PSKNR/L
Kr: 75°	Kr: 45°	Kr: 75°
		
A258	A259	A329

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

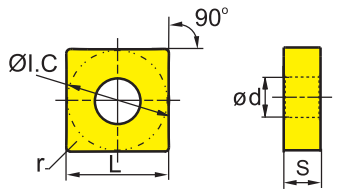
Tournage général Plaquettes négatives

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SNMG	L	I.C	S	d
12 04	12,7	12,7	4,76	5,16
15 06	15,875	15,875	6,35	6,35

Plaquette négative SN**



	HC¹ (CVD)											HC¹ (PVD)						HT		HC²	HW	
P	○	○	○	◉	◉	◉									◉	◉			○	◉	○		
M							○	◉				○	○	◉	◉	◉	○	○	◉	○			
K									○	◉	◉	◉											
N												○	○									○	◉
S													○	○	◉	◉	◉	○				○	◉
H																							

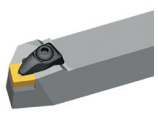
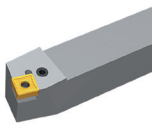
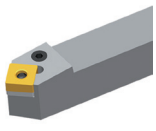
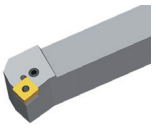
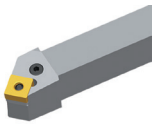
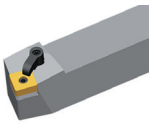
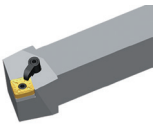
	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
EM	**SNMG120404-EM**	0,4	0,50-6,35	0,05-0,30								○								●								
	SNMG120408-EM	0,8	0,50-6,35	0,20-0,45							●	●								●								
	SNMG120412-EM	1,2	0,50-6,35	0,25-0,60							●	●								●								
	SNMG120416-EM	1,6	0,50-6,35	0,30-0,75								○																
Semi-finition	**SNMG150612-EM**	1,2	0,5-8,0	0,25-0,60							○	●								●								
	SNMG150616-EM	1,6	0,5-8,0	0,30-0,75								○								●								
TC	**SNMG120404-TC**	0,4	0,5-5,0	0,08-0,25										●														
	SNMG120408-TC	0,8	0,5-5,0	0,15-0,40										●		●												
	SNMG120412-TC	1,2	0,5-5,0	0,2-0,5										●		●												
Semi-finition	**SNMG150616-TC**	1,6	1-7	0,2-0,7										●														
TK	**SNMG120412-TK**	1,2	0,2-0,4	0,2-0,45										●														
Semi-finition																												

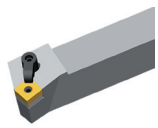
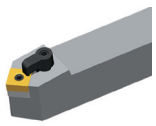
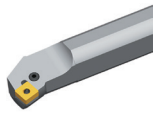
● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DSBNR/L	PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	MSBNR/L	MSRNR/L
Kr: 75°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°
						
A232	A242	A244	A245	A246	A256	A257

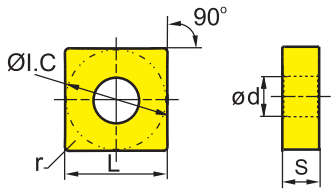
MSKNR/L	MSDNN	S***-PSKNR/L
Kr: 75°	Kr: 45°	Kr: 75°
		
A258	A259	A329

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SNMG	L	I.C	S	d
12 04	12,7	12,7	4,76	5,16
15 06	15,875	15,875	6,35	6,35
19 06	19,05	19,05	6,35	7,94
25 09	25,4	25,4	9,525	9,12



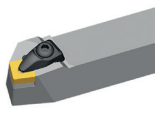
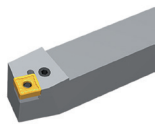
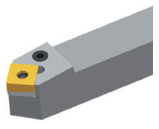
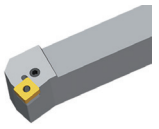
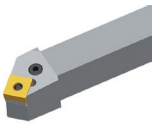
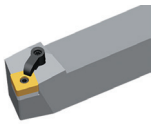
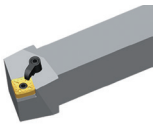
Plaquette négative SN**		HC[1] (CVD)											HC[1] (PVD)							HT		HC[2]	HW		
		P																						
		M																						
		K																						
		N																						
		S																						
		H																						
ISO		r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
NM	**SNMG120408-NM**	0,8	0,5-5,0	0,1-0,4													○	●								○	
	SNMG120412-NM	1,2	0,5-5,0	0,15-0,50														○									
Semi-finition																											
DR	**SNMG120408-DR**	0,8	0,7-7,0	0,2-0,5			○		●				●		●												
	SNMG120412-DR	1,2	1-7	0,25-0,70			●		●	●			○		●												
	SNMG120416-DR	1,6	1,5-7,0	0,32-0,75			○		●				●		●												
	SNMG150612-DR	1,2	1-8	0,25-0,70					●				○		●												
	SNMG150616-DR	1,6	1,5-8,0	0,3-0,8			○		●				○		○												
	SNMG190612-DR	1,2	1-10	0,25-0,70			●		●	●					●												
	SNMG190616-DR	1,6	1,5-10,0	0,3-0,8	○		●	●	●	●			○		●												
	SNMG190624-DR	2,4	2-10	0,32-0,90					●	○																	
Ébauche	**SNMG250924-DR**	2,4	2-15	0,4-1,2					●	○																	

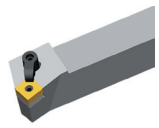
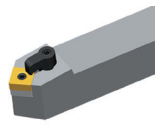
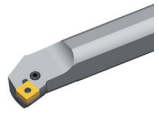
● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC[1] Carbure revêtu
HT Cermet non revêtu
HC[2] Cermet revêtu
HW Carbure non revêtu

Porte-outil

DSBNR/L	PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	MSBNR/L	MSRNR/L
Kr: 75°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°
						
A232	A242	A244	A245	A246	A256	A257

MSKNR/L	MSDNN	S***-PSKNR/L
Kr: 75°	Kr: 45°	Kr: 75°
		
A258	A259	A329

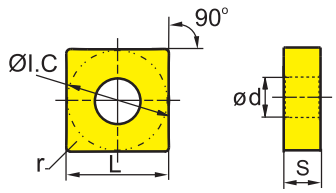
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SNMG	L	I.C	S	d
12 04	12,7	12,7	4,76	5,16
15 06	15,875	15,875	6,35	6,35
19 06	19,05	19,05	6,35	7,94

Plaquette négative SN**



	HC¹ (CVD)											HC¹ (PVD)						HT		HC²	HW	
	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
P	○	○	○	◉	◉	◉										◉	◉			○	◉	○		
M							○	◉						○		◉	◉	◉		○	◉	○		
K									●	◉	◉	◉												
N													○	○									○	◉
S														○		◉	◉	◉					○	◉
H																								

	ISO	r	a_p	f
ER	**SNMG120408-ER**	0,8	2,0-7,6	0,20-0,55
	SNMG120412-ER	1,2	2,0-7,6	0,3-0,6
	SNMG150612-ER	1,2	2,0-9,6	0,3-0,6
	SNMG190612-ER	1,2	2,0-11,4	0,3-0,6
	SNMG190616-ER	1,6	2,0-11,4	0,35-0,80
SNR	**SNMG120408-SNR**	0,8	1-4	0,2-0,6

Ébauche

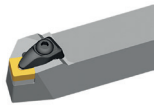
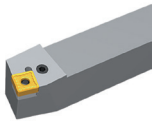
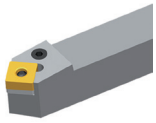
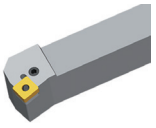
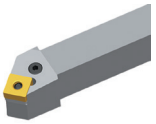
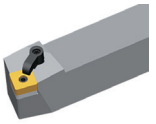
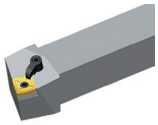
Ébauche

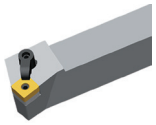
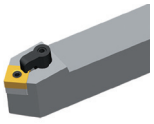
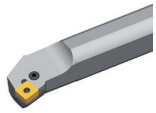
● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DSBNR/L	PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	MSBNR/L	MSRNR/L
Kr: 75°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°
						
A232	A242	A244	A245	A246	A256	A257

MSKNR/L	MSDNN	S***-PSKNR/L
Kr: 75°	Kr: 45°	Kr: 75°
		
A258	A259	A329

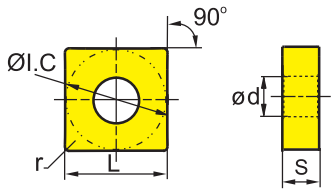
Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SNMM	L	I.C	S	d
15 06	15,875	15,875	6,35	6,35
19 06	19,05	19,05	6,35	7,94
25 07	25,4	25,4	7,94	9,12
25 09	25,4	25,4	9,525	9,12

Plaquette négative SN**



	HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
P	●	●	●	◍	◍	◍									◍	◍			●	◍	●		
M							○	◍				○	○	◍	◍	◍	◍	○	○	◍	○		
K									◍	◍	◍	◍											
N												●	●									●	◍
S												●	●	◍	◍	◍	◍	●				●	◍
H																							

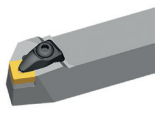
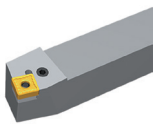
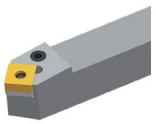
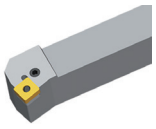
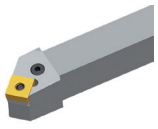
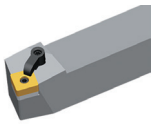
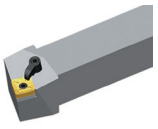
	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
DR Ébauche	**SNMM150612-DR**	1,2	1-7	0,25-0,60					●																			
	SNMM150616-DR	1,6	1,5-9,0	0,32-0,90			○		●	●																		
	SNMM190608-DR	0,8	2,0-10,5	0,25-0,50					○																			
	SNMM190612-DR	1,2	2,0-10,5	0,25-0,60			●		●	●																		
	SNMM190616-DR	1,6	2,0-10,5	0,35-0,90			●		●	●																		
	SNMM190624-DR	2,4	2,0-10,5	0,4-1,1			●	●	●																			
	SNMM250716-DR	1,6	2,5-12,5	0,4-1,0					●																			
	SNMM250724-DR	2,4	2,5-12,5	0,5-1,2			○		●																			
	SNMM250924-DR	2,4	2,5-12,5	0,5-1,2					●	●																		
ER Ébauche	**SNMM250724-ER**	2,4	2,8-18,0	0,45-1,40					●		○	●																
	SNMM250732-ER	3,2	2,8-18,0	0,32-1,40					●																			
	SNMM250924-ER	2,4	2,8-18,0	0,45-1,40					●	○		○																
	SNMM250932-ER	3,2	2,8-18,0	0,55-1,80					●																			

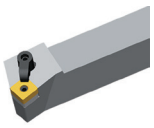
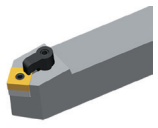
● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DSBNR/L	PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	MSBNR/L	MSRNR/L
Kr: 75°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°
						
A232	A242	A244	A245	A246	A256	A257

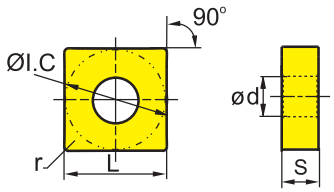
MSKNR/L	MSDNN
Kr: 75°	Kr: 45°
	
A258	A259

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

SNMM	L	I.C	S	d
12 04	12,7	12,7	4,76	5,16
15 06	15,875	15,875	6,35	6,35
19 06	19,05	19,05	6,35	7,94
25 09	25,4	25,4	9,525	9,12

Plaquette de tournage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables



Plaquette négative SN**					HC¹ (CVD)										HC¹ (PVD)						HT		HC²		HW	
					P																					
					M																					
					K																					
					N																					
					S																					
					H																					
ISO		r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
LR	**SNMM120408-LR**	0,8	1-6	0,1-0,5			○		●																			
	SNMM120412-LR	1,2	1-6	0,2-0,6			○		●																			
	SNMM120416-LR	1,6	1-6	0,25-0,70					○																			
	SNMM150612-LR	1,2	1,5-7,0	0,1-0,5					●																			
	SNMM150616-LR	1,6	1,5-7,0	0,1-0,5			○		○																			
	SNMM190612-LR	1,2	2-10	0,25-0,70			○		●																			
	SNMM190616-LR	1,6	2-10	0,3-1,0			○		●																			
	SNMM190624-LR	2,4	2-10	0,3-1,1			○		●																			
	SNMM250924-LR	2,4	3,0-12,5	0,3-1,2			○		●	○																		

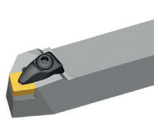
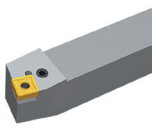
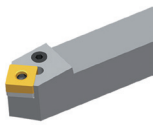
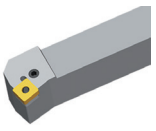
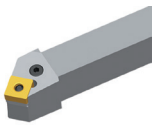
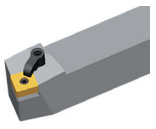
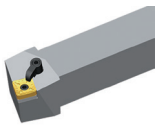
Ébauche

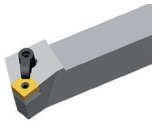
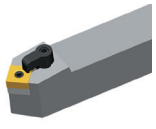
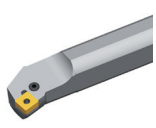
● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DSBNR/L	PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	MSBNR/L	MSRNR/L
Kr: 75°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°
						
A232	A242	A244	A245	A246	A256	A257

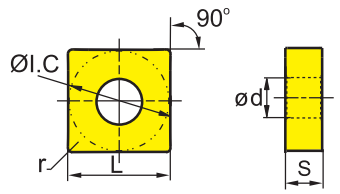
MSKNR/L	MSDNN	S***-PSKNR/L
Kr: 75°	Kr: 45°	Kr: 75°
		
A258	A259	A329

Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

SNMM	L	I.C	S	d
12 04	12,7	12,7	4,76	5,16
15 06	15,875	15,875	6,35	6,35
19 06	19,05	19,05	6,35	7,94
25 07	25,4	25,4	7,94	9,12
25 09	25,4	25,4	9,525	9,12

Plaquette de tournage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

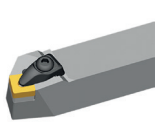
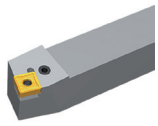
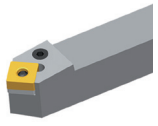
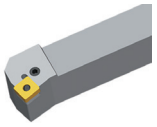
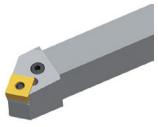
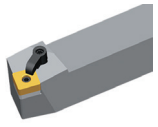
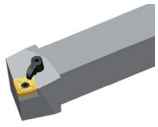
Plaquette négative SN**		HC¹ (CVD)										HC¹ (PVD)							HT		HC²	HW		
	P	○	○	○	◉	◉	◉								◉	◉			○	◉	○			
	M							○	◉				○	○	◉	◉	◉	○	○	◉	○			
	K									◉	◉	◉	◉											
	N												○	○								◉	◉	
	S												○	○	◉	◉	◉	○				◉	◉	
	H																							

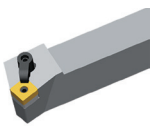
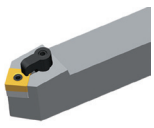
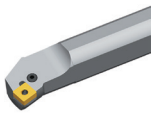
	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
HDR  Ébauche	**SNMM120408-HDR**	0,8	1-6	0,1-0,6					●																			
	SNMM120412-HDR	1,2	1,5-6,0	0,2-0,7					○																			
	SNMM150608-HDR	0,8	1-7	0,2-0,6						○																		
	SNMM150612-HDR	1,2	1-7	0,25-0,70			●		●																			
	SNMM150616-HDR	1,6	1,5-9,0	0,32-1,00					○																			
	SNMM190612-HDR	1,2	2,0-10,5	0,25-0,70			○		○																			
	SNMM190616-HDR	1,6	2,0-10,5	0,35-1,00			●		●			○																
	SNMM190624-HDR	2,4	2,0-10,5	0,4-1,2			●		●																			
	SNMM250724-HDR	2,4	2,5-12,5	0,5-1,4					●																			
	SNMM250924-HDR	2,4	2,5-12,5	0,5-1,4			●		●	●																		

● En stock ○ Sur demande
YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DSBNR/L	PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	MSBNR/L	MSRNR/L
Kr: 75°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°
						
A232	A242	A244	A245	A246	A256	A257

MSKNR/L	MSDNN	S***-PSKNR/L
Kr: 75°	Kr: 45°	Kr: 75°
		
A258	A259	A329

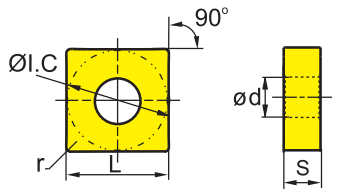
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SNMM	L	I.C	S	d
19 06	19,05	19,05	6,35	7,94
25 09	25,4	25,4	9,525	9,12

Plaquette négative SN**



	HC¹ (CVD)											HC¹ (PVD)						HT		HC²	HW	
	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
P	○	○	○	◉	◉	◉										◉	◉			◉	◉	○		
M							○	◉					○	○	◉	◉	◉	○	○	○	◉	○		
K									◉	◉	◉	◉												
N													○	○									○	◉
S													○	○	◉	◉	◉	○					○	◉
H																								

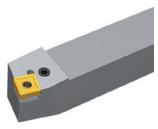
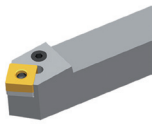
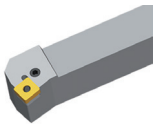
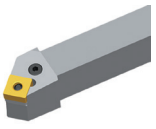
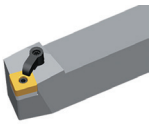
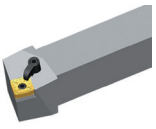
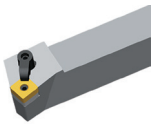
	ISO	r	a_p	f
HPR	**SNMM190616-HPR**	1,6	2,0-10,5	0,35-1,00
	SNMM190624-HPR	2,4	2,0-10,5	0,4-1,2
	SNMM250924-HPR	2,4	2,0-12,5	0,5-1,4
Ébauche				

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

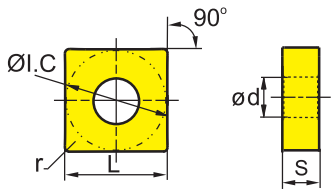
PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	MSBNR/L	MSRNR/L	MSKNR/L
Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°	Kr: 75°
						
A242	A244	A245	A246	A256	A257	A258

Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SNMG	L	I.C	S	d
12 04	12,7	12,7	4,76	5,16
25 07	25,4	25,4	7,94	9,12
25 09	25,4	25,4	9,525	9,12



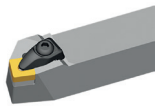
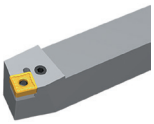
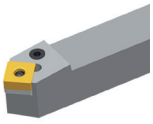
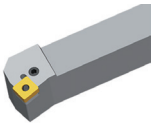
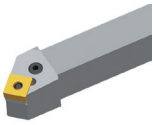
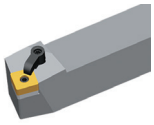
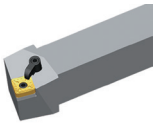
Plaquette négative SN**					HC[1] (CVD)										HC[1] (PVD)							HT		HC[2]	HW	
					P																						
					M																						
					K																						
					N																						
					S																						
					H																						
ISO		r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
Basic	**SNMG120408**	0,8	0,5-6,0	0,1-0,6			●		●																		
	SNMG120412	1,2	0,5-6,0	0,1-0,7			○		○																		
	SNMG250724	2,4	1-9	0,1-1,1																							
Semi-finition	**SNMG250924**	2,4	1-9	0,1-1,1																							

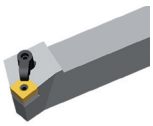
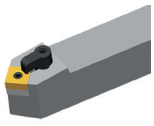
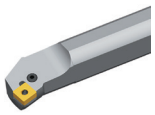
● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC[1] Carbure revêtu
HT Cermet non revêtu
HC[2] Cermet revêtu
HW Carbure non revêtu

Porte-outil

DSBNR/L	PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	MSBNR/L	MSRNR/L
Kr: 75°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°
						
A232	A242	A244	A245	A246	A256	A257

MSKNR/L	MSDNN	S***-PSKNR/L
Kr: 75°	Kr: 45°	Kr: 75°
		
A258	A259	A329

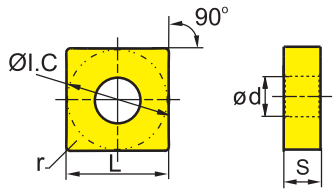
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SN**	L	I.C	S	d
12 04	12,7	12,7	4,76	5,16
15 06	15,875	15,875	6,35	6,35
19 06	19,05	19,05	6,35	7,94
25 07	25,4	25,4	7,94	9,12

Plaquette négative SN**



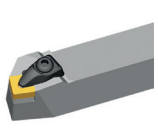
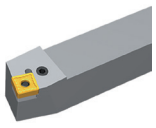
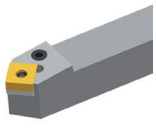
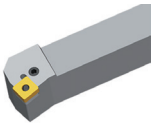
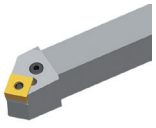
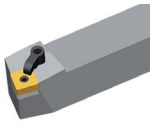
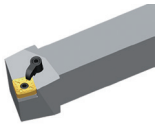
	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
					HC¹ (CVD)												HC¹ (PVD)							HT		HC²	HW	
	P				●	●	●	◉	◉	◉										◉	◉			●	◉	●		
	M										○	◉					○	○	◉	◉	◉	○	○	○	◉	○		
	K												○	◉	◉	◉												
	N																●	●									●	◉
	S																○	○	◉	◉	◉	○	○				○	◉
	H																											
Flat	**SNMA120408**	0,8	0,5-5,0	0,1-0,5									●	●	●													
	SNMA120412	1,2	0,5-5,0	0,2-0,7									○	○	●	○												
	SNMA120416	1,6	0,5-5,0	0,2-1,0									○	●	○													
	SNMA150608	0,8	0,8-7,0	0,1-0,5											○													
	SNMA150612	1,2	0,8-7,0	0,2-0,7											●													
	SNMA190612	1,2	0,8-7,0	0,2-0,7									○		●													
	SNMA190616	1,6	0,8-7,0	0,3-0,8									○		●													
Basic	**SNMM250724-1**	2,4	2,0-12,5	0,3-1,2					●	●																		

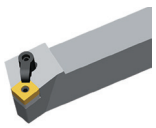
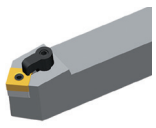
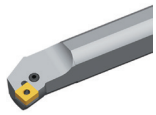
● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DSBNR/L	PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	MSBNR/L	MSRNR/L
Kr: 75°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°
						
A232	A242	A244	A245	A246	A256	A257

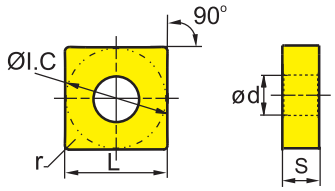
MSKNR/L	MSDNN	S***-PSKNR/L
Kr: 75°	Kr: 45°	Kr: 75°
		
A258	A259	A329

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SNMM	L	I.C	S	d
19 06	19,05	19,05	6,35	7,94
25 09	25,4	25,4	9,525	9,12



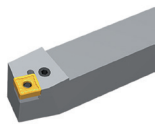
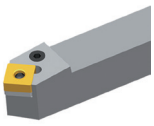
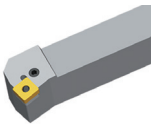
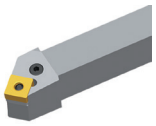
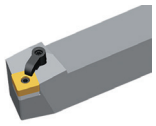
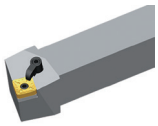
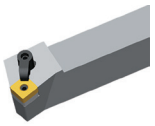
Plaquette négative SN**					HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
					YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
P					○	○	○	◉	◉	◉											◉	◉		◉	◉	○		
M											○	◉					○	○	◉	◉	◉	○		◉	◉	○		
K													◉	◉	◉	◉												
N																	○	○									◉	◉
S																	○	○	◉	◉	◉	○					○	◉
H																												
ISO			r	a_p																								
Basic	**SNMM190612**		1,2	1,5-10,5	0,2-0,7				○																			
	SNMM190616		1,6	0,5-10,5	0,2-1,0				○																			
	SNMM250924		2,4	2,0-12,5	0,3-1,2				●																			

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

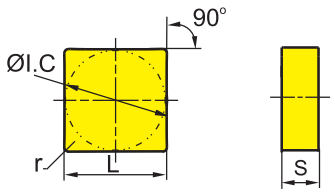
PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	MSBNR/L	MSRNR/L	MSKNR/L
Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°	Kr: 75°
						
A242	A244	A245	A246	A256	A257	A258

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SNUN	L	I.C	S
12 04	12,7	12,7	4,76
19 04	19,05	19,05	4,76

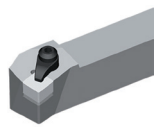
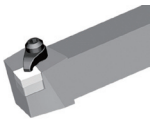
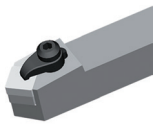


Plaquette négative SN**					HC¹ (CVD)										HC¹ (PVD)						HT		HC²	HW	
					YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
P					○	○	○	◉	◉	◉										◉	◉			○	◉	○		
M											○	◉					○	○	◉	◉	◉	◉	○	○	◉	○		
K													○	◉	◉	◉												
N																	○	○									○	◉
S																	○	○	◉	◉	◉	◉	○				○	◉
H																												
ISO			r	a_p																								
Flat	**SNUN120408**		0,8	0,7-6,0	0,2-0,5										●													
	SNUN120412		1,2	0,7-6,0	0,25-0,60								○		○													
	SNUN190412		1,2	0,9-6,0	0,25-0,60																						○	

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

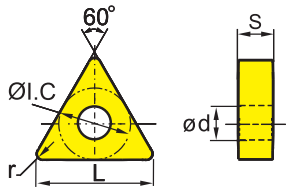
CSKNR/L	CSRNR/L	CSDNN
Kr: 75°	Kr: 75°	Kr: 45°
		
A296	A297	A299

Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

TN**	L	I.C	S	d
16 04	16,5	9,525	4,76	3,81
22 04	22	12,7	4,76	5,16



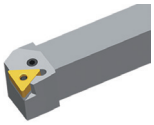
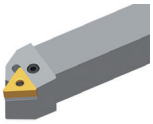
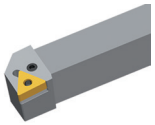
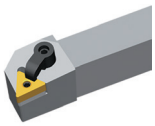
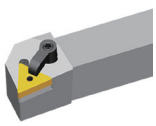
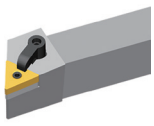
					HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
					YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
	P				○	○	○	◉	◉	◉										◉	◉			◉	◉	○		
	M										○	◉					○	○	◉	◉	◉	○		○	◉	○		
	K												◉	◉	◉	◉												
	N																○	○									○	◉
	S																○	○	◉	◉	◉	○					○	◉
	H																											
ISO			r	a_p	f																							
WG	**TNMX160408-WG**		0,8	0,5-5,0	0,15-0,70		●																					
	TNMX160412-WG		1,2	0,8-6,0	0,20-0,75		○																					
Wiper																												
ADF	**TNMG160404-ADF**		0,4	0,5-5,0	0,05-0,30	●															●			●				
	TNMG160408-ADF		0,8	0,5-5,0	0,1-0,4	●														○	●			●				
	TNMG160412-ADF		1,2	0,5-5,0	0,2-0,5	●															●							
Finition																												
DF	**TNMG160404-DF**		0,4	0,15-2,00	0,08-0,25		●		●																			
	TNMG160408-DF		0,8	0,15-2,00	0,1-0,3		●		●																			
	TNMG160412-DF		1,2	0,35-1,50	0,15-0,50		●		●																			
	TNMG220408-DF		0,8	0,3-1,5	0,1-0,4		●		●																			
Finition	**TNMG220412-DF**		1,2	0,35-1,50	0,15-0,50		●																					

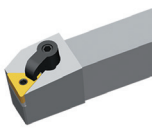
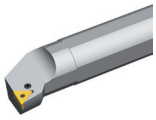
● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DTGNR/L	PTFNR/L	PTTNR/L	PTGNR/L	MTGNR/L	MTJNR/L	MTJNR/L
Kr: 91°	Kr: 91°	Kr: 60°	Kr: 90°	Kr: 90°	Kr: 93°	Kr: 93°
						
A233	A247	A248	A249	A260	A261	A262

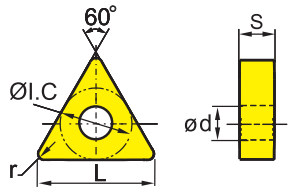
MTFNR/L	S***-PTFNR/L
Kr: 91°	Kr: 90°
	
A263	A330

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

TNMG	L	I.C	S	d
16 04	16,5	9,525	4,76	3,81

Plaquette de tournage

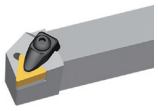
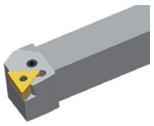
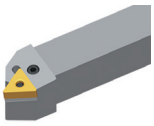
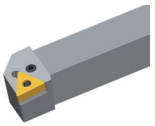
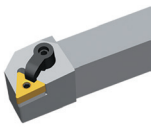
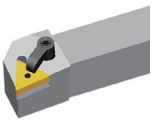
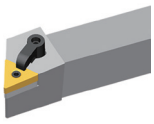


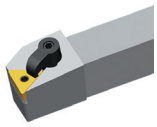
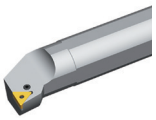
Plaquette négative TN**					HC¹ (CVD)											HC¹ (PVD)						HT		HC²	HW	
					YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
P					○	○	○	◉	◉	◉											◉	◉		○	◉	○		
M											○	◉					○	○	◉	◉	◉	◉	○	○	◉	○		
K													○	◉	◉	◉												
N																	○	○									○	◉
S																	○	○	◉	◉	◉	◉	○				○	◉
H																												
ISO			r	a_p																								
SF	**TNMG160404-SF**		0,4	0,05-1,00																				○		●		
	TNMG160408-SF		0,8	0,05-1,00																						●		
Finition																												

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DTGNR/L	PTFNR/L	PTTNR/L	PTGNR/L	MTGNR/L	MTJNR/L	MTJNR/L
Kr: 91°	Kr: 91°	Kr: 60°	Kr: 90°	Kr: 90°	Kr: 93°	Kr: 93°
						
A233	A247	A248	A249	A260	A261	A262

MTFNR/L	S***-PTFNR/L
Kr: 91°	Kr: 90°
	
A263	A330

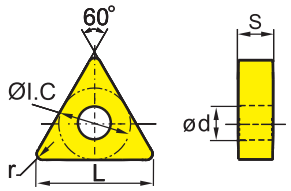
Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

TNMG	L	I.C	S	d
11 03	11	6,35	3,18	2,26
16 04	16,5	9,525	4,76	3,81
22 04	22	12,7	4,76	5,16

Plaquette négative TN**



	HC[1] (CVD)											HC[1] (PVD)							HT		HC[2]	HW		
P	○	○	○	❁	❁	❁									❁	❁				○	❁	○			
M								○	❁				○	○	❁	❁	❁	○	○	❁	○				
K										❁	❁	❁	❁												
N														○	○									○	❁
S													○	○	❁	❁	❁	○						○	❁
H																									

	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
EF	**TNMG110304-EF**	0,4	0,1-1,0	0,05-0,20																●								
	TNMG110308-EF	0,8	0,1-1,0	0,05-0,40																●								
	TNMG160404-EF	0,4	0,1-1,5	0,05-0,30							●									●								
	TNMG160408-EF	0,8	0,1-1,5	0,1-0,4							●									●								
	TNMG160412-EF	1,2	0,2-2,5	0,15-0,40							○									●								
	TNMG220404-EF	0,4	0,5-2,5	0,05-0,25							○									●								
	TNMG220408-EF	0,8	0,5-2,5	0,1-0,4							○									●								

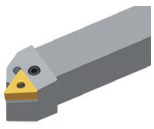
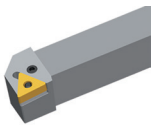
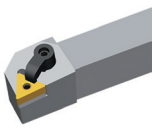
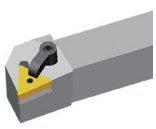
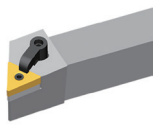

Finition

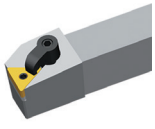
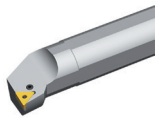
● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC[1] Carbure revêtu
HT Cermet non revêtu
HC[2] Cermet revêtu
HW Carbure non revêtu

Porte-outil

DTGNR/L	PTFNR/L	PTTNR/L	PTGNR/L	MTGNR/L	MTJNR/L	MTJNR/L
Kr: 91°	Kr: 91°	Kr: 60°	Kr: 90°	Kr: 90°	Kr: 93°	Kr: 93°
						
A233	A247	A248	A249	A260	A261	A262

MTFNR/L	S***-PTFNR/L
Kr: 91°	Kr: 90°
	
A263	A330

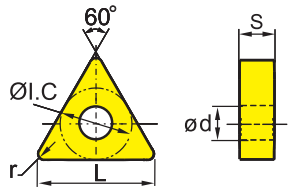
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Tournage général Plaquettes négatives

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

TNMG	L	I.C	S	d
16 04	16,5	9,525	4,76	3,81
22 04	22	12,7	4,76	5,16



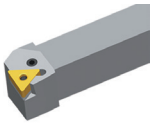
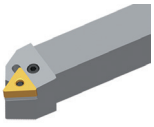
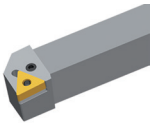
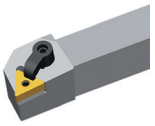
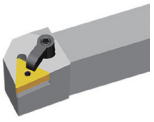
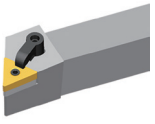
Plaquette négative TN**					HC¹ (CVD)											HC¹ (PVD)						HT		HC²	HW	
					YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
	ISO	r	a_p	f	P	P	P	P	P	P	M	M	K	N	S	H	N	S	S	S	S	S	S	M	P	P	N	S
FM	**TNMG160404L-FM**	0,4	0,5-3,0	0,1-0,3					●										●									
	TNMG160404R-FM	0,4	0,5-3,0	0,1-0,3			○		●										●									
	TNMG160408L-FM	0,8	0,5-3,0	0,15-0,50			○		●										●									
	TNMG160408R-FM	0,8	0,5-3,0	0,15-0,50			●		●										●									
Finition																												
XM	**TNMG160404-XM**	0,4	1-5,6	0,2-0,4	●			○																				
	TNMG160408-XM	0,8	1-5,6	0,2-0,4	●			●																				
	TNMG160412-XM	1,2	1-5,6	0,2-0,6	●			●																				
	TNMG160416-XM	1,6	1-5,6	0,2-0,65	○			●																				
	TNMG220408-XM	0,8	1-7,7	0,2-0,4	●			●																				
	TNMG220412-XM	1,2	1-7,7	0,2-0,6	●			●																				
Semi-finition	**TNMG220416-XM**	1,6	1-7,7	0,2-0,65	○			●																				

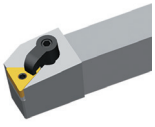
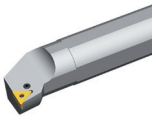
● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DTGNR/L	PTFNR/L	PTTNR/L	PTGNR/L	MTGNR/L	MTJNR/L	MTJNR/L
Kr: 91°	Kr: 91°	Kr: 60°	Kr: 90°	Kr: 90°	Kr: 93°	Kr: 93°
						
A233	A247	A248	A249	A260	A261	A262

MTFNR/L	S***-PTFNR/L
Kr: 91°	Kr: 90°
	
A263	A330

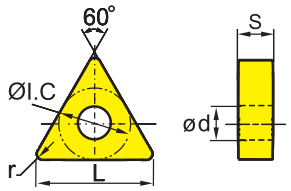
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

TNMG	L	I.C	S	d
11 03	11	6,35	3,18	2,26
16 04	16,5	9,525	4,76	3,81
22 04	22	12,7	4,76	5,16

Plaquette négative TN**



	HC[1] (CVD)											HC[1] (PVD)							HT		HC[2]	HW		
	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
P	○	○	○	◉	◉	◉										◉	◉			○	○	○		
M							○	◉						○	○	◉	◉	◉	○	○	◉	○		
K									◉	◉	◉	◉												
N													○	○									○	◉
S														○	○	◉	◉	◉	○				○	◉
H																								

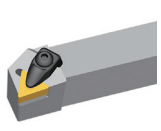
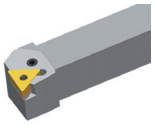
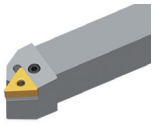
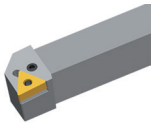
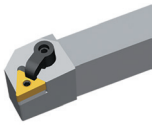
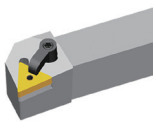
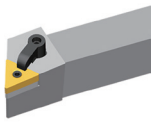
	ISO	r	a_p	f
DM Semi-finition	**TNMG110308-DM**	0,8	0,3-3,0	0,1-0,4
	TNMG160404-DM	0,4	0,4-5,0	0,1-0,3
	TNMG160408-DM	0,8	0,5-5,0	0,15-0,50
	TNMG160412-DM	1,2	0,8-5,0	0,18-0,60
	TNMG220404-DM	0,4	0,4-6,6	0,1-0,3
	TNMG220408-DM	0,8	0,5-6,6	0,15-0,50
	TNMG220412-DM	1,2	0,8-6,6	0,18-0,60
	TNMG220416-DM	1,6	1,0-6,6	0,23-0,65
PM Semi-finition	**TNMG110304-PM**	0,4	0,4-3,0	0,1-0,3
	TNMG110308-PM	0,8	0,4-3,0	0,15-0,40
	TNMG160404-PM	0,4	0,4-5,0	0,1-0,3
	TNMG160408-PM	0,8	0,5-5,0	0,15-0,50
	TNMG160412-PM	1,2	0,8-5,0	0,18-0,60
	TNMG220408-PM	0,8	0,5-6,6	0,15-0,50
	TNMG220412-PM	1,2	0,8-6,6	0,18-0,60
	TNMG220416-PM	1,6	1,0-6,6	0,23-0,65

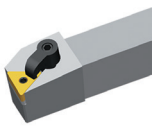
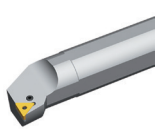
● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC[1] Carbure revêtu
HT Cermet non revêtu
HC[2] Cermet revêtu
HW Carbure non revêtu

Porte-outil

DTGNR/L	PTFNR/L	PTTNR/L	PTGNR/L	MTGNR/L	MTJNR/L	MTJNR/L
Kr: 91°	Kr: 91°	Kr: 60°	Kr: 90°	Kr: 90°	Kr: 93°	Kr: 93°
						
A233	A247	A248	A249	A260	A261	A262

MTFNR/L	S***-PTFNR/L
Kr: 91°	Kr: 90°
	
A263	A330

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

TNMG	L	I.C	S	d
16 04	16,5	9,525	4,76	3,81

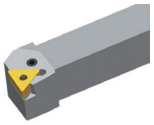
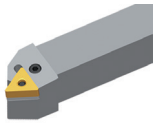
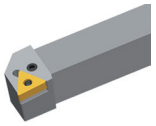
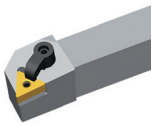
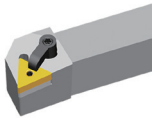
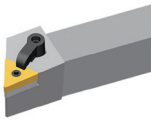
Plaquette de tournage

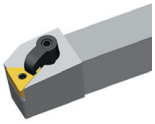
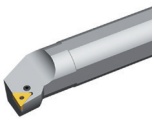
Plaquette négative TN**					HC¹ (CVD)											HC¹ (PVD)						HT		HC²	HW	
					P																					
					M																					
					K																					
					N																					
					S																					
					H																					
ISO		r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
ZM	**TNMG160404-ZM**	0,4	0,5-5,0	0,08-0,30		●																					
	TNMG160408-ZM	0,8	0,5-5,0	0,1-0,4		●																					
	TNMG160412-ZM	1,2	0,5-5,0	0,1-0,6		●																					
Semi-finition																											
SNR	**TNMG160408-SNR**	0,8	1-5,6	0,1-0,5																		●					
Ébauche																											

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DTGNR/L	PTFNR/L	PTTNR/L	PTGNR/L	MTGNR/L	MTJNR/L	MTJNR/L
Kr: 91°	Kr: 91°	Kr: 60°	Kr: 90°	Kr: 90°	Kr: 93°	Kr: 93°
						
A233	A247	A248	A249	A260	A261	A262

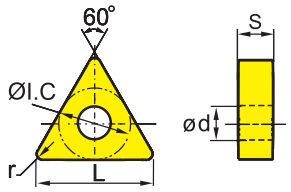
MTFNR/L	S***-PTFNR/L
Kr: 91°	Kr: 90°
	
A263	A330

Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

TNMG	L	I.C	S	d
16 04	16,5	9,525	4,76	3,81
22 04	22	12,7	4,76	5,16



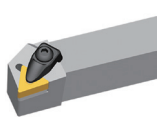
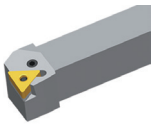
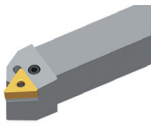
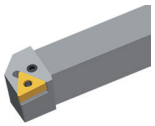
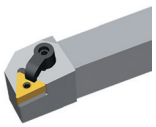
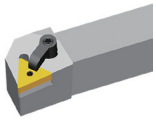
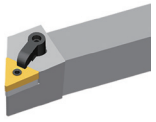
Plaquette négative TN**		HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
		YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
P		○	○	○	◍	◍	◍										◍	◍			○	◍	○		
M								○	◍					○	○	◍	◍	◍	○	○	○	◍	○		
K										◍	◍	◍	◍												
N														○	○									◍	◍
S														○	○	◍	◍	◍	○					○	◍
H																									
ISO																									
EG	**TNMG160404-EG**	0,4	0,5-4,0	0,1-0,3														●							
	TNMG160408-EG	0,8	0,5-4,0	0,1-0,4					●	●							●	●							
	TNMG160412-EG	1,2	0,5-4,0	0,15-0,50						●							●								
Semi-finition																									
EM	**TNMG160404-EM**	0,4	0,5-4,8	0,05-0,30					●	○							●								
	TNMG160408-EM	0,8	0,5-4,8	0,10-0,45					●	●							●								
	TNMG160412-EM	1,2	0,5-4,8	0,1-0,6					●	●							●								
	TNMG220408-EM	0,8	0,5-6,6	0,10-0,45					●	●							●								
Semi-finition	**TNMG220412-EM**	1,2	0,5-6,6	0,1-0,6					○	●							●								
	TNMG220416-EM	1,6	0,5-6,6	0,10-0,65						●							●								
TC	**TNMG160404-TC**	0,4	0,5-3,0	0,05-0,20							●		●												
	TNMG160408-TC	0,8	0,5-3,0	0,08-0,25							●		●												
	TNMG160412-TC	1,2	1-3	0,1-0,3							●		●												
	TNMG220412-TC	1,2	1-6	0,15-0,40							●		●												
Semi-finition	**TNMG220416-TC**	1,6	1-6	0,2-0,5							●														

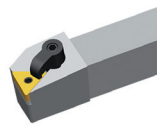
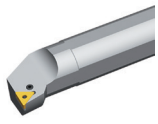
● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DTGNR/L	PTFNR/L	PTTNR/L	PTGNR/L	MTGNR/L	MTJNR/L	MTJNR/L
Kr: 91°	Kr: 91°	Kr: 60°	Kr: 90°	Kr: 90°	Kr: 93°	Kr: 93°
						
A233	A247	A248	A249	A260	A261	A262

MTFNR/L	S***-PTFNR/L
Kr: 91°	Kr: 90°
	
A263	A330

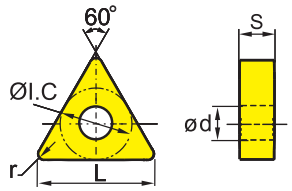
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

TNMG	L	I.C	S	d
16 04	16,5	9,525	4,76	3,81
22 04	22	12,7	4,76	5,16
27 06	27,5	15,875	6,35	6,35

Plaquette négative TN**



	ISO	r	a_p	f	HC¹ (CVD)										HC¹ (PVD)						HT		HC²		HW	
					YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
DR	**TNMG160408-DR**	0,8	0,7-6,0	0,20-0,55			●		●				●		●													
	TNMG160412-DR	1,2	1-6	0,25-0,65			●		●				○		●													
	TNMG220408-DR	0,8	0,7-7,0	0,20-0,55					●						○													
	TNMG220412-DR	1,2	1-7	0,25-0,65			○		●						●													
	TNMG220416-DR	1,6	1,5-7,0	0,32-0,75					●				○		●													
	TNMG270608-DR	0,8	1,5-12,0	0,35-0,55																								
	TNMG270612-DR	1,2	2-12	0,35-0,75					○																			

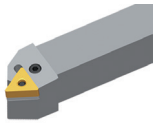
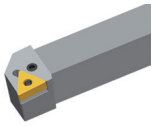
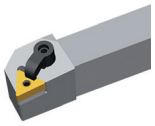
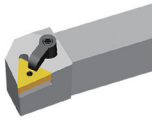
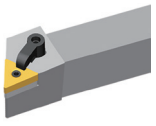
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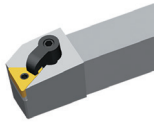
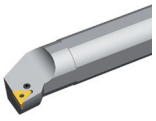
● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DTGNR/L	PTFNR/L	PTTNR/L	PTGNR/L	MTGNR/L	MTJNR/L	MTJNR/L
Kr: 91°	Kr: 91°	Kr: 60°	Kr: 90°	Kr: 90°	Kr: 93°	Kr: 93°
						
A233	A247	A248	A249	A260	A261	A262

MTFNR/L	S***-PTFNR/L
Kr: 91°	Kr: 90°
	
A263	A330

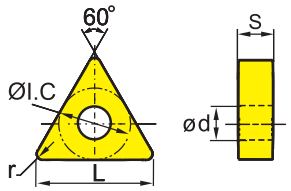
Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

TN**	L	I.C	S	d
16 04	16,5	9,525	4,76	3,81
22 04	22	12,7	4,76	5,16
27 06	27,5	15,875	6,35	5,16

Plaquette négative TN**



	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
					HC¹ (CVD)												HC¹ (PVD)							HT		HC²	HW	
P					○	○	○	◉	◉	◉										◉	◉			○	○	○		
M											○	◉					○	○	◉	◉	◉	○	○	○	◉	○		
K													○	◉	◉	◉												
N																	○	○									○	◉
S																	○	○	◉	◉	◉	○					○	◉
H																												
DR	**TNMM160408-DR**	0,8	0,7-6,0	0,20-0,55			○		●																			
	TNMM160412-DR	1,2	1-6	0,25-0,70			○																					
	TNMM220408-DR	0,8	0,7-8,0	0,20-0,55			○		○																			
	TNMM220412-DR	1,2	1-8	0,25-0,70					●																			
	TNMM220416-DR	1,6	1,5-8,0	0,32-0,90					○																			
	TNMM270612-DR	1,2	2,5-11,0	0,25-0,70					○																			
	TNMM270616-DR	1,6	2,5-11,0	0,3-0,9					○																			
ER	**TNMG160408-ER**	0,8	2,0-5,6	0,15-0,55								○																
	TNMG160412-ER	1,2	2,0-5,6	0,15-0,60								○																
	TNMG220408-ER	0,8	2,0-7,7	0,15-0,55								○																
	TNMG220412-ER	1,2	2,0-7,7	0,15-0,60								○																
LR	**TNMM160408-LR**	0,8	1-5	0,1-0,5			●		●			●																
	TNMM160412-LR	1,2	1,5-6,0	0,1-0,6			○		○			○																

Images: DR — Ébauche; ER — Ébauche; LR — Ébauche

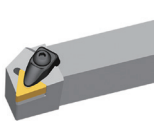
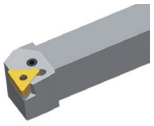
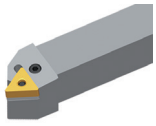
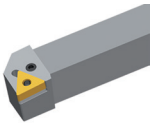
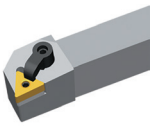
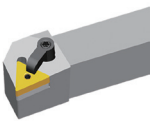
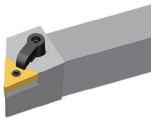
● En stock ○ Sur demande

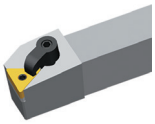
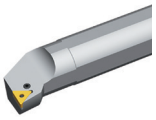
YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Porte-outil

DTGNR/L	PTFNR/L	PTTNR/L	PTGNR/L	MTGNR/L	MTJNR/L	MTJNR/L
Kr: 91°	Kr: 91°	Kr: 60°	Kr: 90°	Kr: 90°	Kr: 93°	Kr: 93°
						
A233	A247	A248	A249	A260	A261	A262

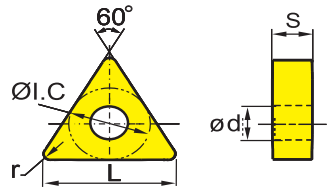
MTFNR/L	S***-PTFNR/L
Kr: 91°	Kr: 90°
	
A263	A330

Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

TNMM	L	I.C	S	d
22 04	22	12,7	4,76	5,16
27 06	27,5	15,875	6,35	6,35



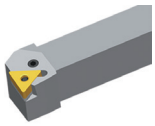
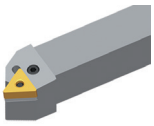
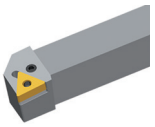
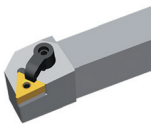
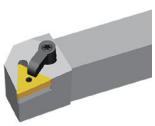
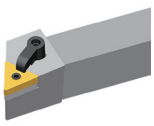
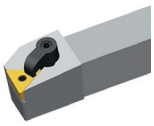
Plaquette négative TN**					HC¹ (CVD)										HC¹ (PVD)							HT		HC²	HW	
P					○	○	○	◐	◐	◐								◐	◐			○	◐	○			
M										○	◐				○	○	◐	◐	◐	◐	○	○	◐	○			
K												◐	◐	◐	◐												
N															○	○										◐	◐
S															○	○	◐	◐	◐	◐	○					○	◐
H																											
ISO		r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
HDR	**TNMM220412-HDR**	1,2	2-9	0,25-0,80			○																				
	TNMM220416-HDR	1,6	2-9	0,35-1,00					○																		
	TNMM270616-HDR	1,6	2-6	0,35-1,00					●																		
	TNMM270624-HDR	2,4	2-7	0,4-1,2					●			○															
Usinage difficile																											

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

PTFNR/L	PTTNR/L	PTGNR/L	MTGNR/L	MTJNR/L	MTJNR/L	MTFNR/L
Kr: 91°	Kr: 60°	Kr: 90°	Kr: 90°	Kr: 93°	Kr: 93°	Kr: 91°
						
A247	A248	A249	A260	A261	A262	A263

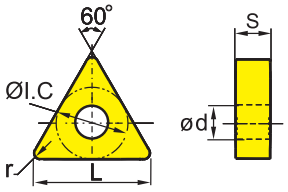
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

TNMG	L	I.C	S	d
16 04	16,5	9,525	4,76	3,81
22 04	22	12,7	4,76	5,16
27 06	27,5	15,875	6,35	6,35
33 09	33	19,05	9,525	7,94

Plaquette négative TN**



	HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
P																							
M																							
K																							
N																							
S																							
H																							

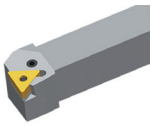
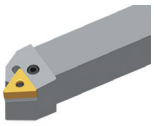
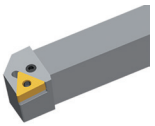
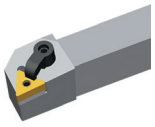
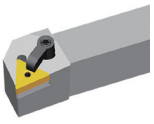
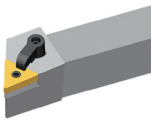
	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
Basic	**TNMG160404**	0,4	0,2-4,0	0,05-0,20					○																			
	TNMG160408	0,8	0,2-4,0	0,08-0,30			●		●																			
	TNMG160412	1,2	0,2-4,0	0,1-0,4			●																					
	TNMG220404	0,4	0,2-6,0	0,05-0,20					○																			
	TNMG220408	0,8	0,2-6,0	0,1-0,3																								
	TNMG220416	1,6	0,2-6,0	0,1-0,5					○																			
Semi-finition	**TNMG270612**	1,2	0,2-9,0	0,1-0,5					○																			
	TNMG270616	1,6	0,2-9,0	0,1-0,5					○																			
	TNMG330916	1,6	0,2-11,0	0,1-0,5					○																			
	TNMG330924	2,4	0,2-11,0	0,1-0,7																								

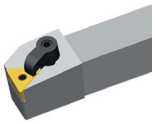
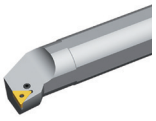
● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DTGNR/L	PTFNR/L	PTTNR/L	PTGNR/L	MTGNR/L	MTJNR/L	MTJNR/L
Kr: 91°	Kr: 91°	Kr: 60°	Kr: 90°	Kr: 90°	Kr: 93°	Kr: 93°
						
A233	A247	A248	A249	A260	A261	A262

MTFNR/L	S***-PTFNR/L
Kr: 91°	Kr: 90°
	
A263	A330

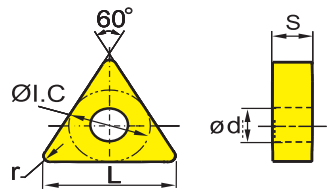
Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

TN**	L	I.C	S	d
16 04	16,5	9,525	4,76	3,81
22 04	22	12,7	4,76	5,16
27 06	27,5	15,875	6,35	6,35

Plaquette négative TN**



	HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
P	○	○	○	◉	◉	◉										◉	◉			○	◉	○		
M							○	◉					○	○	◉	◉	◉	◉	○	○	◉	○		
K									◉	◉	◉	◉												
N													○	○									◉	◉
S													○	○	◉	◉	◉	◉	○				○	◉
H																								

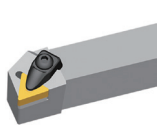
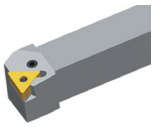
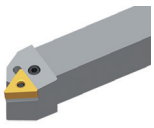
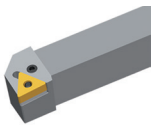
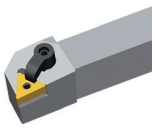
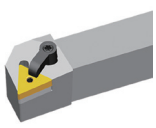
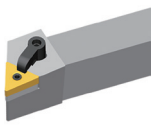
	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
Flat	**TNMA160404**	0,4	0,2-4,0	0,05-0,20									○		●													
	TNMA160408	0,8	0,2-4,0	0,08-0,30									●	●	●													
	TNMA160412	1,2	0,2-4,0	0,1-0,4									○		●													
	TNMA160416	1,6	0,5-4,0	0,05-0,50									○		○													
	TNMA220404	0,4	0,2-6,0	0,05-0,20											●													
	TNMA220408	0,8	0,2-6,0	0,1-0,3									●		●													
	TNMA220412	1,2	0,2-6,0	0,1-0,4											●	●												
	TNMA220416	1,6	0,2-6,0	0,1-0,5												○												
Basic	**TNMM160404**	0,4	0,2-7,0	0,05-0,60					○																			
	TNMM160408	0,8	0,5-7,0	0,05-0,60					○																			
	TNMM220408	0,8	0,5-7,0	0,05-0,60					○																			
	TNMM220412	1,2	1-7	0,1-0,6																								
	TNMM220416	1,6	0,5-7,0	0,05-0,60					○																			
	TNMM270616	1,6	0,5-6,5	0,05-0,70					○																			

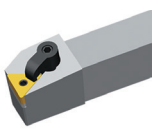
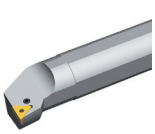
● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DTGNR/L	PTFNR/L	PTTNR/L	PTGNR/L	MTGNR/L	MTJNR/L	MTJNR/L
Kr: 91°	Kr: 91°	Kr: 60°	Kr: 90°	Kr: 90°	Kr: 93°	Kr: 93°
						
A233	A247	A248	A249	A260	A261	A262

MTFNR/L	S***-PTFNR/L
Kr: 91°	Kr: 90°
	
A263	A330

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

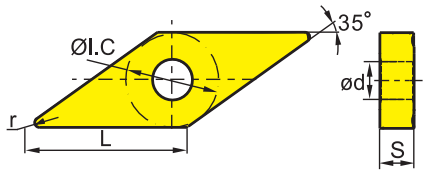
Tournage général Plaquettes négatives

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

VN**	L	I.C	S	d
16 04	16,6	9,525	4,76	3,81

Plaquette négative VN**



	HC¹ (CVD)											HC¹ (PVD)						HT		HC²	HW	
	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
P	○	○	○	◉	◉	◉										◉	◉			○	◉	○		
M							○	◉					○	○	◉	◉	◉	○	○	○	◉	○		
K									◉	◉	◉	◉												
N													○	○									○	◉
S													○	○	◉	◉	◉	○					○	◉
H																								

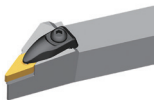
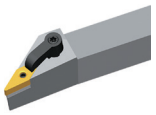
ISO		r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
ADF	**VNMG160404-ADF**	0,4	0,5-2,5	0,1-0,3		●															●							
	VNMG160408-ADF	0,8	0,5-2,5	0,1-0,5		●															●							
Finition																												
DF	**VNMG160404-DF**	0,4	0,25-1,50	0,07-0,30			○		●																			
	VNMG160408-DF	0,8	0,3-1,5	0,1-0,4			●		●																			
Finition																												
EF	**VNMG160404-EF**	0,4	0,1-1,5	0,05-0,25							●									●								
	VNMG160408-EF	0,8	0,2-2,5	0,08-0,35							●									●								
	VNMG160412-EF	1,2	0,2-2,5	0,10-0,45							○																	
Finition																												
NF	**VNEG160404-NF**	0,4	0,2-4,0	0,05-0,30															●								○	
	VNEG160408-NF	0,8	0,2-4,0	0,05-0,50															●								○	
Finition																												

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

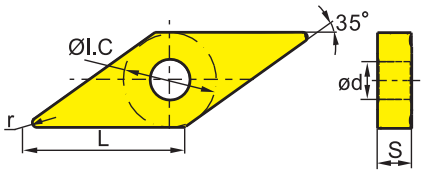
DVVNN	DVJNR/L	MVVNN	MVJNR/L
Kr: 72°30'	Kr: 93°	Kr: 72°30'	Kr: 93°
			
A234	A235	A264	A265

Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

VN**	L	I.C	S	d
16 04	16,6	9,525	4,76	3,81

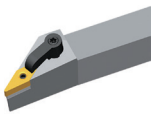


Plaquette négative VN**					HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
					YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
P					○	○	○	◉	◉	◉										◉	◉			○	○	○		
M											○	◉						○	○	◉	◉	◉	○	○	○	○		
K													◉	◉	◉	◉												
N																	○	○									○	◉
S																		○	○	◉	◉	◉	○				○	◉
H																												
ISO		r	a_p	f																								
NGF	**VNEG160408-NGF**	0,8	0,2-3,0	0,1-0,3															●									
	VNEG160412-NGF	1,2	0,2-3,0	0,1-0,5															○									
Finition																												
SF	**VNMG160404-SF**	0,4	0,05-3,00	0,05-0,20																						●		
	VNMG160408-SF	0,8	0,05-3,00	0,05-0,35																						○		
Finition																												

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

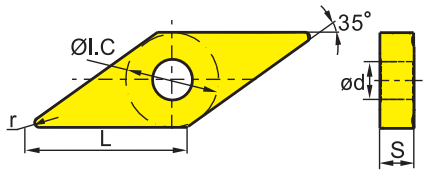
DVVNN	DVJNR/L	MVVNN	MVJNR/L
Kr: 72°30'	Kr: 93°	Kr: 72°30'	Kr: 93°
			
A234	A235	A264	A265

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

VNMG	L	I.C	S	d
16 04	16,6	9,525	4,76	3,81

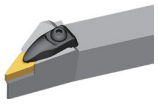
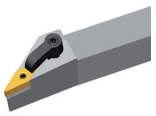


Plaquette négative VN**					HC¹ (CVD)											HC¹ (PVD)						HT		HC²	HW	
					P																					
					M																					
					K																					
					N																					
					S																					
					H																					
ISO		r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
XF	**VNMG160404-XF**	0,4	0,5-2,5	0,1-0,25	●																						
	VNMG160408-XF	0,8	0,5-2,5	0,1-0,30	●																						
	VNMG160412-XF	1,2	0,5-2,5	0,1-0,35	●																						
Finition																											
XM	**VNMG160404-XM**	0,4	1-5,6	0,2-0,4	●			○																			
	VNMG160408-XM	0,8	1-5,6	0,2-0,4	●			●																			
	VNMG160412-XM	1,2	1-5,6	0,2-0,6	●			●																			
Semi-finition	**VNMG160416-XM**	1,6	1-5,6	0,2-0,65	○			○																			

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

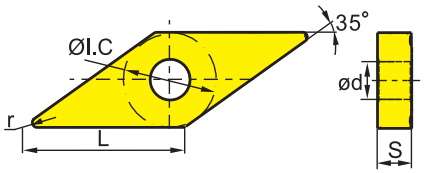
DVVNN	DVJNR/L	MVVNN	MVJNR/L
Kr: 72°30'	Kr: 93°	Kr: 72°30'	Kr: 93°
			
A234	A235	A264	A265

Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

VNMG	L	I.C	S	d
16 04	16,6	9,525	4,76	3,81



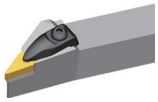
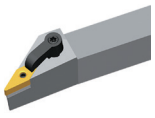
	HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
P	○	○	○	◉	◉	◉									◉	◉				○	◉	○		
M							○	◉				○	○	◉	◉	◉	○		○	◉	○			
K									◉	◉	◉	◉												
N												○	○									○	◉	
S												○	○	◉	◉	◉	○					○	◉	
H																								

	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YB5103	YNG151	YNT251	YNG151C	YD101	YD201
Basic	**VNMG160404**	0,4	0,2-6,0	0,05-0,60			○																					
	VNMG160408	0,8	0,2-6,0	0,08-0,60			○																					
Semi-finition																												
DM	**VNMG160408-DM**	0,8	0,5-4,0	0,15-0,50			●		●																			
	VNMG160412-DM	1,2	0,8-4,0	0,18-0,60			●		●																			
Semi-finition																												
EM	**VNMG160404-EM**	0,4	0,2-3,0	0,05-0,30							●									●								
	VNMG160408-EM	0,8	0,5-4,0	0,10-0,45							●									●								
Semi-finition																												
NM	**VNMG160412-NM**	1,2	0,2-4,0	0,05-0,40															●									
Semi-finition																												

● En stock ○ Sur demande
YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DVVNN	DVJNR/L	MVVNN	MVJNR/L
Kr: 72°30'	Kr: 93°	Kr: 72°30'	Kr: 93°
			
A234	A235	A264	A265

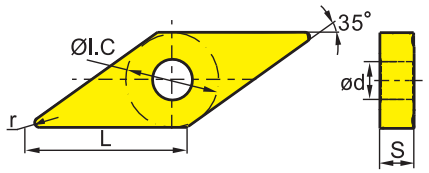
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Tournage général Plaquettes négatives

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

VNMG	L	I.C	S	d
16 04	16,6	9,525	4,76	3,81



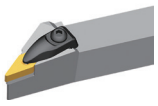
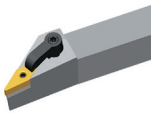
Plaquette négative VN**		HC¹ (CVD)										HC¹ (PVD)						HT		HC²	HW	
P		○	○	○	◉	◉	◉								◉	◉		○	◉	○		
M								○	◉						○	○	◉	◉	○	◉	○		
K										○	◉	◉	◉										
N															○	○					○	◉	
S															○	○	◉	◉		○		○	◉	
H																							
ISO		r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
PM	**VNMG160404-PM**	0,4	0,4-4,0	0,13-0,40			●		●				●		○													
	VNMG160408-PM	0,8	0,5-4,0	0,15-0,50			●		●				●		●													
	VNMG160412-PM	1,2	0,8-4,0	0,18-0,60					●				●															
Semi-finition																												
TC	**VNMG160404-TC**	0,4	0,5-2,0	0,05-0,20										●		●												
	VNMG160408-TC	0,8	0,5-2,0	0,08-0,25										●		●												
	VNMG160412-TC	1,2	0,5-3,0	0,08-0,30										●		●												
Semi-finition																												
ZM	**VNMG160404-ZM**	0,4	0,5-3,0	0,08-0,30		○																						
	VNMG160408-ZM	0,8	0,5-3,0	0,1-0,4		●																						
Semi-finition																												
SNR	**VNMG160408-SNR**	0,8	0,2-2,0	0,1-0,4														●		○	●							
	VNMG160412-SNR	1,2	0,2-2,0	0,1-0,5														●		○	●							
Ébauche																												

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DVVNN	DVJNR/L	MVVNN	MVJNR/L
Kr: 72°30'	Kr: 93°	Kr: 72°30'	Kr: 93°
			
A234	A235	A264	A265

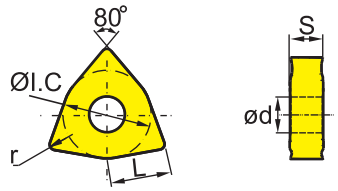
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

WNMG	L	I.C	S	d
06 T3	6,5	9,525	3,97	3,81
06 04	6,5	9,525	4,76	3,81
08 04	8,7	12,7	4,76	5,16

Plaquette négative WN**



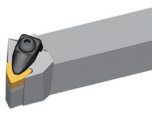
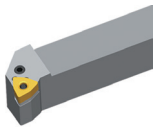
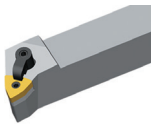
	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
					P	P	P	P	P	P	M	M	K	K	K	K	N	N	S	S	S	S	S	HT	HT	HC²	HW	HW
ADF	**WNMG080404-ADF**	0,4	0,2-2,5	0,05-0,30		●															●			●				
	WNMG080408-ADF	0,8	0,5-2,5	0,05-0,40		●														○	●			●				
	WNMG080412-ADF	1,2	0,5-2,5	0,05-0,50		●															●							
Finition																												
DF	**WNMG060404-DF**	0,4	0,15-2,00	0,08-0,25			●	●																				
	WNMG060408-DF	0,8	0,15-2,00	0,1-0,3			●	●																				
	WNMG080404-DF	0,4	0,15-2,00	0,08-0,25			●	●																				
	WNMG080408-DF	0,8	0,15-2,00	0,1-0,3			●	○																				
Finition	**WNMG080412-DF**	1,2	0,2-2,5	0,10-0,35			●	●																				
SF	**WNMG060404-SF**	0,4	0,05-0,50	0,05-0,20																						●		
	WNMG060408-SF	0,8	0,05-0,50	0,05-0,35																						●		
	WNMG06T304-SF	0,4	0,05-0,50	0,05-0,20																						●		
	WNMG06T308-SF	0,8	0,05-0,50	0,05-0,35																						●		
	WNMG080404-SF	0,4	0,05-0,50	0,05-0,20																						●		
Finition	**WNMG080408-SF**	0,8	0,05-0,50	0,05-0,35																						●		

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DWLNR/L	PWLNR/L	MWLNR/L	S***-PWLNR/L
Kr: 95°	Kr: 95°	Kr: 95°	Kr: 95°
			
A236	A251	A266	A332

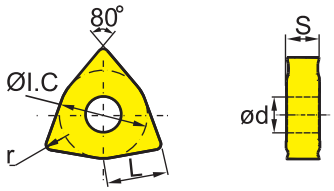
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

WN**	L	I.C	S	d
06 T3	6,5	9,525	3,97	3,81
06 04	6,5	9,525	4,76	3,81
08 04	8,7	12,7	4,76	5,16

Plaquette négative WN**



	HC¹ (CVD)											HC¹ (PVD)						HT		HC²	HW	
	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
P	○	○	○	◉	◉	◉										◉	◉			○	◉	○		
M							○	◉						○	○	◉	◉	◉	○	○	◉	○		
K									◉	◉	◉	◉												
N													○	○									○	◉
S														○	○	◉	◉	◉	○				○	◉
H																								

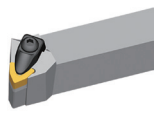
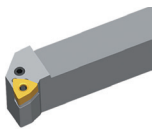
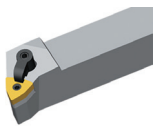
	ISO	r	a_p	f
WG	**WNMG080408-WG**	0,8	0,5-5,0	0,15-0,70
	WNMG080412-WG	1,2	0,8-6,0	0,20-0,75
Wiper				
EF	**WNMG060404-EF**	0,4	0,1-1,5	0,05-0,30
	WNMG060408-EF	0,8	0,1-1,5	0,1-0,4
	WNMG06T308-EF	0,8	0,1-1,5	0,1-0,4
	WNMG080404-EF	0,4	0,1-1,5	0,05-0,30
Finition	**WNMG080408-EF**	0,8	0,1-1,5	0,1-0,4
NF	**WNEG080404-NF**	0,4	0,2-3,0	0,05-0,30
	WNEG080408-NF	0,8	0,2-2,5	0,05-0,30
Finition				
NF	**WNMG060408-NF**	0,8	0,2-2,5	0,05-0,30
Finition				

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DWLNR/L	PWLNR/L	MWLNR/L	S***-PWLNR/L
Kr: 95°	Kr: 95°	Kr: 95°	Kr: 95°
			
A236	A251	A266	A332

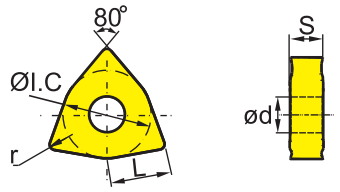
Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

WNMG	L	I.C	S	d
06 04	6,5	9,525	4,76	3,81
08 04	8,7	12,7	4,76	5,16

Plaquette négative WN**



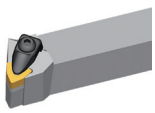
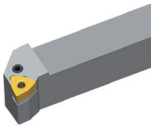
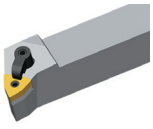
	HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
P	●	●	●	◉	◉	◉									◉	◉				●	◉	●		
M								○	◉				○	○	◉	◉	◉	○		○	◉	○		
K										◉	◉	◉	◉											
N														●	●								●	◉
S														●	●	◉	◉	◉	○				○	◉
H																								

	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
XF	**WNMG060404-XF**	0,4	0,5-2,0	0,1-0,25	●																							
	**WNMG060408-XF**	0,8	0,5-2,0	0,1-0,30	●																							
	WNMG080408-XF	0,8	0,5-2,5	0,1-0,30	●																							
Finition	**WNMG080412-XF**	1,2	0,5-2,5	0,1-0,35	●																							
XM	**WNMG060404-XM**	0,4	1-2,1	0,2-0,4	●			○																				
	**WNMG060408-XM**	0,8	1-2,1	0,2-0,4	●			●																				
	WNMG060412-XM	1,2	1-2,1	0,2-0,6	●			●																				
	WNMG080404-XM	0,4	1-2,8	0,2-0,4	●			●																				
	WNMG080408-XM	0,8	1-2,8	0,2-0,4	●			●																				
Semi-finition	**WNMG080412-XM**	1,2	1-2,8	0,2-0,6	●			●																				
	WNMG080416-XM	1,6	1-2,8	0,2-0,65	○			○																				

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DWLNR/L	PWLNR/L	MWLNR/L	S***-PWLNR/L
Kr: 95°	Kr: 95°	Kr: 95°	Kr: 95°
			
A236	A251	A266	A332

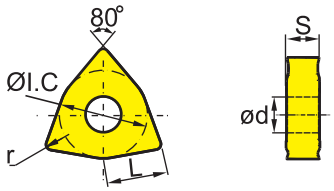
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

WNMG	L	I.C	S	d
06 T3	6,5	9,525	3,97	3,81
06 04	6,5	9,525	4,76	3,81
08 04	8,7	12,7	4,76	5,16

Plaquette négative WN**



	HC¹ (CVD)											HC¹ (PVD)						HT		HC²	HW	
P	○	○	○	◉	◉	◉									◉	◉		○	◉	○		
M							○	◉				○	○	◉	◉	◉	○	○	◉	○		
K									○	◉	◉											
N												○	○								○	◉
S												○	○	◉	◉	◉	○				○	◉
H																						

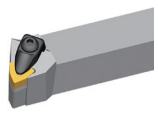
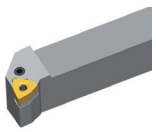
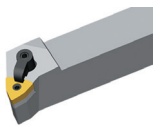
	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
DM Semi-finition	**WNMG060408-DM**	0,8	0,5-3,0	0,15-0,50			●		●																			
	WNMG060412-DM	1,2	0,8-3,0	0,18-0,60		○	●		●																			
	WNMG06T308-DM	0,8	0,5-3,0	0,15-0,15					○																			
	WNMG080404-DM	0,4	0,5-4,0	0,1-0,4			●		●																			
	WNMG080408-DM	0,8	0,5-4,0	0,15-0,50		○	●		●	●		●																
	WNMG080412-DM	1,2	0,8-4,0	0,18-0,60		○	●		●																			
	WNMG080416-DM	1,6	1-4	0,23-0,65			●		●																			
EG Semi-finition	**WNMG080408-EG**	0,8	0,5-4,0	0,05-0,40							○	●								●	●							
	WNMG080412-EG	1,2	0,5-4,0	0,05-0,60							○	●								●	●							
EM Semi-finition	**WNMG060404-EM**	0,4	0,5-3,0	0,05-0,30							○	●								●								
	WNMG060408-EM	0,8	0,5-3,0	0,1-0,5							●	●								●								
	WNMG06T304-EM	0,4	0,5-3,0	0,05-0,30							●																	
	WNMG06T308-EM	0,8	0,5-3,0	0,1-0,5							●																	
	WNMG06T312-EM	1,2	0,5-3,0	0,1-0,7							○									○								
	WNMG080404-EM	0,4	1-4	0,05-0,30							●	●								●								
	WNMG080408-EM	0,8	1-4	0,1-0,5							●	●								●								
	WNMG080412-EM	1,2	1-4	0,1-0,7							●	●								●								

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DWLNR/L	PWLNR/L	MWLNR/L	S***-PWLNR/L
Kr: 95°	Kr: 95°	Kr: 95°	Kr: 95°
			
A236	A251	A266	A332

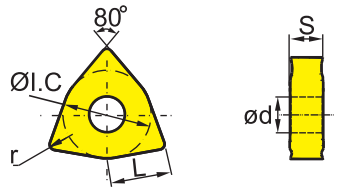
Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

WNMG	L	I.C	S	d
06 04	6,5	9,525	4,76	3,81
08 04	8,7	12,7	4,76	5,16

Plaquette négative WN**



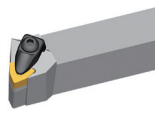
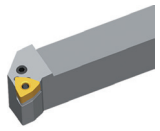
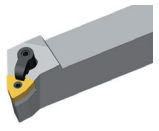
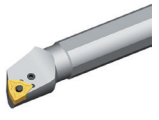
	HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
P	○	○	○	◉	◉	◉										◉	◉			○	◉	○		
M							○	◉					○			◉	◉	◉		○	◉	○		
K									◉	◉	◉	◉												
N													○	○									○	◉
S													○			◉	◉	◉					○	◉
H																								

	ISO	r	a_p	f																				
PM	**WNMG060408-PM**	0,8	0,5-3,0	0,15-0,50			●		●				●	●										
	WNMG060412-PM	1,2	0,8-3,0	0,18-0,60			●		○				○											
	WNMG080404-PM	0,4	0,4-4,0	0,12-0,40			●		●				●	●										
	WNMG080408-PM	0,8	0,5-4,0	0,15-0,50			●		●	●			●	●										
Semi-finition	**WNMG080412-PM**	1,2	0,8-4,0	0,18-0,60			●		●				●	●										
	WNMG080416-PM	1,6	1-4	0,23-0,65					●				●	●										
ZM	**WNMG080408-ZM**	0,8	0,5-4,0	0,1-0,5		●																		
	WNMG080412-ZM	1,2	1,0-5,5	0,15-0,60		●																		
Semi-finition																								
SNR	**WNMG080408-SNR**	0,8	1-3	0,1-0,5											○			●	○					
	WNMG080412-SNR	1,2	1-3	0,2-0,6															●					
Ébauche																								

● En stock ○ Sur demande
YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DWLNR/L	PWLNR/L	MWLNR/L	S***-PWLNR/L
Kr: 95°	Kr: 95°	Kr: 95°	Kr: 95°
			
A236	A251	A266	A332

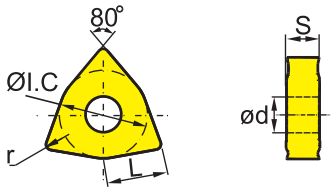
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Tournage général Plaquettes négatives

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

WNMG	L	I.C	S	d
08 04	8,7	12,7	4,76	5,16

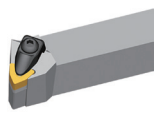
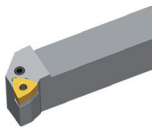
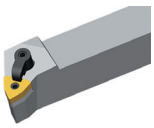
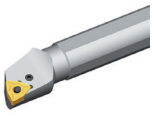


Plaquette négative WN**					HC¹ (CVD)										HC¹ (PVD)						HT		HC²	HW	
					YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
P					○	○	○	◉	◉	◉										◉	◉			○	○	○		
M											○	◉					○	○	◉	◉	◉	◉	○	○	◉	○		
K													●	◉	◉	◉												
N																	●	●									●	◉
S																	○	○	◉	◉	◉	◉	○				○	◉
H																												
ISO			r	a_p																								
NM	**WNMG080404-NM**		0,4	0,2-3,0	0,05-0,30													●									
	WNMG080408-NM		0,8	0,2-3,0	0,1-0,3												●	●	○								
	WNMG080412-NM		1,2	0,2-4,0	0,1-0,4												●	●									
Semi-finition																												
TC	**WNMG080404-TC**		0,4	0,5-3,0	0,08-0,25									●		○											
	WNMG080408-TC		0,8	0,5-4,0	0,15-0,40									●		●											
	WNMG080412-TC		1,2	0,5-4,0	0,2-0,6									●		●											
Semi-finition																												
TK	**WNMG080408-TK**		0,8	0,2-0,4	0,2-0,4									●													
	WNMG080412-TK		1,2	0,2-0,4	0,2-0,45									○													
	WNMG080416-TK		1,6	0,2-0,4	0,2-0,5									○													
Semi-finition																												

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

DWLNR/L	PWLNR/L	MWLNR/L	S***-PWLNR/L
Kr: 95°	Kr: 95°	Kr: 95°	Kr: 95°
			
A236	A251	A266	A332

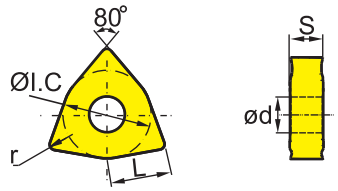
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

WN**	L	I.C	S	d
06 T3	6,5	9,525	3,97	3,81
06 04	6,5	9,525	4,76	3,81
08 04	8,7	12,7	4,76	5,16

Plaquette négative WN**



	HC¹ (CVD)										HC¹ (PVD)							HT		HC²	HW	
P	○	○	○	◉	◉	◉									◉	◉		○	◉	○		
M							○	◉				○	○	◉	◉	◉	○	○	◉	○		
K									○	◉	◉	◉										
N													○	○							○	◉
S												○	○	◉	◉	◉	○				○	◉
H																						

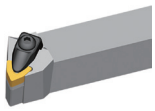
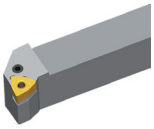
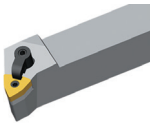
	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
DR	**WNMG060408-DR**	0,8	0,7-3,5	0,20-0,45			●		●				●		●													
	WNMG060412-DR	1,2	0,8-3,5	0,25-0,55			●		●				○		○													
	WNMG080408-DR	0,8	0,7-5,0	0,20-0,55			●		●	●			●		●													
	WNMG080412-DR	1,2	1-5	0,25-0,70		○	●		●	●			●		●													
	WNMG080416-DR	1,6	1,5-5,0	0,32-0,75			○		●				●		○													
Flat	**WNMA060408**	0,8	0,5-3,0	0,1-0,3									●		●													
	WNMA060412	1,2	0,5-3,0	0,15-0,30											●													
	WNMA06T308	0,8	0,5-3,0	0,1-0,3																								
	WNMA080404	0,4	0,5-4,0	0,08-0,25									○		●	○												
	WNMA080408	0,8	0,5-4,0	0,15-0,30									●		●	●												
	WNMA080412	1,2	0,5-5,0	0,15-0,30									●	○	●	●												
	WNMA080416	1,6	0,5-5,0	0,2-0,5									○	○		○												

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

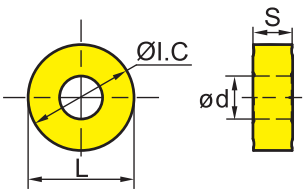
DWLNR/L	PWLNR/L	MWLNR/L	S***-PWLNR/L
Kr: 95°	Kr: 95°	Kr: 95°	Kr: 95°
			
A236	A251	A266	A332

Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

RNMG	L	I.C	S	d
12 04	12,7	12,7	4,76	5,16

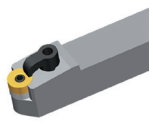
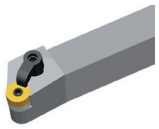


Plaquette négative RN**				HC¹ (CVD)										HC¹ (PVD)						HT		HC²	HW	
			P	●	●	●	◉	◉	◉									◉	◉			●	◉	●		
			M							○	◉							○	○	◉	◉	◉	◉	○	◉	○		
			K									◉	◉	◉	◉											
			N																						◉	◉	
			S															○	○	◉	◉	◉	◉			◉	◉	
			H																									
	ISO		a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
Basic	**RNMG120400**		0,5-7,0	0,1-1,8										○	○												
Semi-finition																												

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

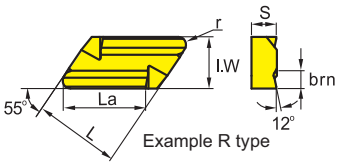
MRDNN	MRGNR/L
	
A267	A268

Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

● Bonnes conditions d'usinage
⊛ Conditions d'usinage normales
✺ Conditions d'usinage défavorables

KNUX	L	l.W	S
16 04		9,525	4,76

Plaquette de tournage



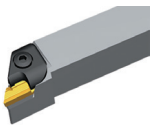
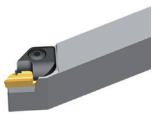
Plaquette négative KN**		ISO	La	brn	r	a_p	f	HC¹ (CVD) YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	HC¹ (PVD) YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	HT YNG151	YNT251	HC² YNG151C	HW YD101	YD201
		P						●	●	●	⊛	⊛	✺										⊛	⊛			●	⊛	●		
		M												○	⊛					○	○	⊛	⊛	⊛	⊛	○	○	⊛	○		
		K														●	⊛	⊛	⊛												
		N																		●	●									●	⊛
		S																		○	○	⊛	⊛	⊛	⊛	○				○	⊛
		H																													
KNUX	**KNUX160405L11**		16	2,2	0,5	0,2-6,0	0,05-0,70					●																		○	
	KNUX160405L12		16	2,2	0,5	0,2-6,0	0,05-0,70																								
	KNUX160405R11		16	2,2	0,5	0,2-6,0	0,05-0,70					●																		○	
	KNUX160405R12		16	2,2	0,5	0,2-6,0	0,05-0,70																								
	KNUX160410L11		16	2,2	1	0,2-6,0	0,05-0,70																								
Finition	**KNUX160410L12**		16	2,2	1	0,2-6,0	0,05-0,70			○																					
	KNUX160410R11		16	2,2	1	0,2-6,0	0,05-0,70					●																			
	KNUX160410R12		16	2,2	1	0,2-6,0	0,05-0,70																								

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

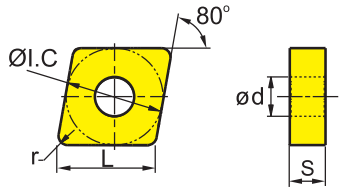
CKJNR/L	CKNNR/L
Kr: 93°	Kr: 63°
	
A290	A291

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

CN**	L	I.C	S	d
19 07	19,3	19,05	7,94	7,93
19 11	19,3	19,05	11	7,8



Plaquette négative CN**					HC¹ (CVD)											HC¹ (PVD)						HT		HC²	HW	
					P																					
					M																					
					K																					
					N																					
					S																					
					H																					
ISO		r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
RF	**CNMG191140-RF**	4	1,0-5,5	0,20-0,60			●																				
Finition																											
RF	**CNMM190740-RF**	4	1,0-5,5	0,20-0,60			●																				
	CNMM191140-RF	4	1,0-5,5	0,20-0,60			●																				
Finition																											
RH	**CNMM190740-RH**	4	1,5-7,0	0,35-1,20			●		●																		
	CNMM191140-RH	4	1,5-7,0	0,35-1,20			●		●																		
Ébauche																											

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil
PCLNR/L
Kr: 95°



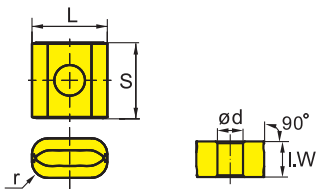
A318

Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

LNUX	L	I.C	S	d
19 19	19,05	10	19,05	6,35
30 19	30	10	19,05	6,35

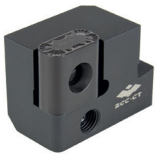


Plaquette négative LN**					HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
					YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
P					○	○	○	◎	◎	◎											◎	◎		○	◎	○		
M											○	◎					○	○	◎	◎	◎	◎	○	○	◎	○		
K													○	◎	◎	◎												
N																	○	○									○	◎
S																	○	○	◎	◎	◎	◎	○				○	◎
H																												
ISO		r	a_p	f																								
RF	**LNUX191940-RF**	4	1,0-5,5	0,20-0,60			●		●																			
	LNUX301940-RF	4	1,0-6,0	0,20-0,70			●		○																			
Usinage difficile																												
RH	**LNUX191940-RH**	4	1,5-7,0	0,35-1,20			●		●																			
	LNUX301940-RH	4	1,5-8,0	0,35-1,40			●		●																			
Usinage difficile																												

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

PLANR/L	PLFNR/L
Kr: 90°	Kr: 90°
	
A316	A317

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

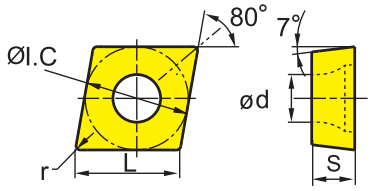
Tournage général Plaquettes positives

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

CCGT	L	I.C	S	d
06 02	6,4	6,35	2,38	2,8
09 T3	9,7	9,525	3,97	4,4

Plaquette positive CC**



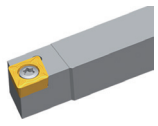
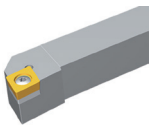
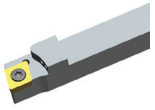
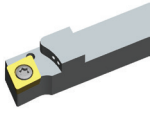
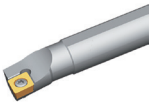
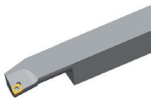
	HC¹ (CVD)											HC¹ (PVD)						HT		HC²	HW	
	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
P	●	●	●	◉	◉	◉											◉			●	◉	●		
M							○	◉						○	○		◉	◉	◉	○	◉	○		
K									●	◉	◉	◉												
N													●	●									◉	◉
S													○	○			◉	◉	○				◉	◉
H																								

	ISO	r	a_p	f																				
SF	**CCGT060202-SF**	0,2	0,05-2,00	0,05-0,18																●		●		
	CCGT060204-SF	0,4	0,05-2,00	0,05-0,35																●	●	●		
	CCGT09T304-SF	0,4	0,05-2,00	0,05-0,35																●	●	●		
Finition																								
USF	**CCGT060202L-USF**	0,2	0,05-2,00	0,05-0,18												○								
	CCGT060204L-USF	0,4	0,05-2,00	0,05-0,35												○								
	CCGT09T301L-USF	0,1	0,2-2,0	0,01-0,08													●							
	CCGT09T302L-USF	0,2	0,2-2,0	0,05-0,18												●								
Finition	**CCGT09T304L-USF**	0,4	0,2-2,0	0,05-0,20												○								
USF	**CCGT09T304R-USF**	0,4	0,2-2,0	0,05-0,20												○								
Finition																								

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

SCACR/L	SCLCR/L	SCACR/L-SC	SCLCR/L-SC	S***-SCLCR/L	S***-SCFCR/L	S***-SCLCR
Kr: 90°	Kr: 95°	Kr: 90°	Kr: 95°	Kr: 95°	Kr: 90°	Kr: 95°
						
A269	A270	A306	A307	A334	A352	A353

E***-SCLCR/L
Kr: 95°

A355

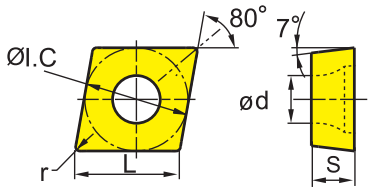
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

CCMT	L	I.C	S	d
06 02	6,4	6,35	2,38	2,8
09 T3	9,7	9,525	3,97	4,4
12 04	12,9	12,7	4,76	5,56

Plaquette positive CC**



	HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW		
	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
P	○	○	○	◉	◉	◉										◉	◉			○	◉	○		
M							○	◉						○	○	◉	◉	◉	○	○	◉	○		
K									◉	◉	◉	◉												
N													○	○									◉	◉
S														○	○	◉	◉	◉	○				○	◉
H																								

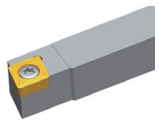
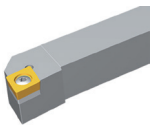
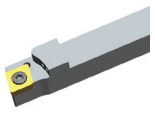
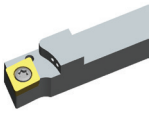
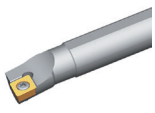
	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
AHF	**CCMT060204-AHF**	0,4	0,2-2,5	0,05-0,20		●															●		●	●				
	CCMT060208-AHF	0,8	0,3-2,5	0,05-0,30		○															●							
	CCMT09T302-AHF	0,2	0,08-2,00	0,04-0,15																						●		
	CCMT09T304-AHF	0,4	0,2-3,0	0,05-0,30		●														○	●		○		●			
	CCMT09T308-AHF	0,8	0,3-3,0	0,05-0,40		●														○	●				●			
	CCMT120404-AHF	0,4	0,5-4,0	0,05-0,30		○														○	●							
	CCMT120408-AHF	0,8	0,8-4,0	0,08-0,40		●															●							
HF	**CCMT060202-HF**	0,2	0,06-1,70	0,03-0,11			●		●																			
	CCMT060204-HF	0,4	0,1-1,7	0,05-0,17			●		●						○													
	CCMT060208-HF	0,8	0,1-1,7	0,05-0,30			○		●																	●		
	CCMT09T302-HF	0,2	0,08-2,00	0,04-0,15			●		●															○				
	CCMT09T304-HF	0,4	0,11-2,00	0,06-0,23			●		●				○		●													
	CCMT09T308-HF	0,8	0,15-2,00	0,08-0,30			●		●				○		●													
	CCMT120404-HF	0,4	0,14-2,40	0,07-0,27			●		●																			
	CCMT120408-HF	0,8	0,2-3,0	0,08-0,30			●		○																			

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

SCACR/L	SCLCR/L	SCACR/L-SC	SCLCR/L-SC	A***-SCLCR/L	S***-SCFCR/L	S***-SCLCR
Kr: 90°	Kr: 95°	Kr: 90°	Kr: 95°	Kr: 95°	Kr: 90°	Kr: 95°
						
A269	A270	A306	A307	A334	A352	A353

E***-SCLCR/L
Kr: 95°

A355

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

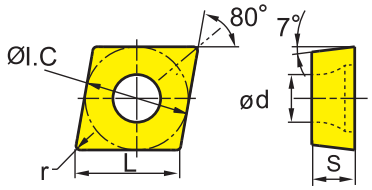
Tournage général Plaquettes positives

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

CCMT	L	I.C	S	d
06 02	6,4	6,35	2,38	2,8
09 T3	9,7	9,525	3,97	4,4
12 04	12,9	12,7	4,76	5,56

Plaquette positive CC**



	HC¹ (CVD)											HC¹ (PVD)						HT		HC²	HW	
P	○	○	○	◉	◉	◉									◉	◉		○	◉	○		
M							○	◉				○	○	◉	◉	◉	○	○	◉	○		
K									●	◉	◉	◉										
N												●	●								●	◉
S												●	○	◉	◉	◉	○				●	◉
H																						

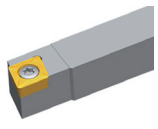
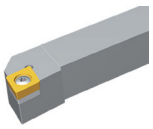
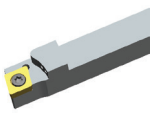
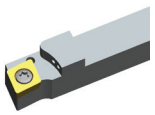
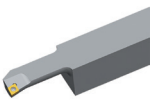
	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
EF Finition	**CCMT060202-EF**	0,2	0,06-1,70	0,03-0,11							●									●								
	CCMT060204-EF	0,4	0,1-1,7	0,05-0,17							●									●								
	CCMT09T302-EF	0,2	0,08-2,00	0,04-0,15							○									●								
	CCMT09T304-EF	0,4	0,11-2,00	0,06-0,23							●								○	●								
	CCMT09T308-EF	0,8	0,15-2,00	0,08-0,30							●								○	●								
	CCMT120404-EF	0,4	0,14-2,40	0,07-0,27							●									●								
	CCMT120408-EF	0,8	0,2-3,0	0,1-0,3							●									●								
XF Finition	**CCMT060202-XF**	0,2	0,5-1,5	0,08-0,15				●																				
	CCMT060208-XF	0,8	0,5-1,5	0,08-0,20	●																							
	CCMT09T302-XF	0,2	0,5-2,0	0,08-0,15	●			●																				
	CCMT09T308-XF	0,8	0,5-2,0	0,08-0,25	●			○																				

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

SCACR/L	**SCLCR/L**	**SCACR/L-SC**	**SCLCR/L-SC**	**A***-SCLCR/L**	**S***-SCFCR/L**	**S***-SCLCR**
Kr: 90°	Kr: 95°	Kr: 90°	Kr: 95°	Kr: 95°	Kr: 90°	Kr: 95°
						
A269	A270	A306	A307	A334	A352	A353

E*-SCLCR/L**
Kr: 95°

A355

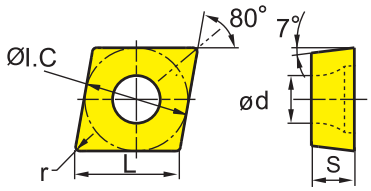
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

CCMT	L	I.C	S	d
06 02	6,4	6,35	2,38	2,8
09 T3	9,7	9,525	3,97	4,4
12 04	12,9	12,7	4,76	5,56

Plaquette positive CC**



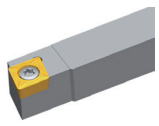
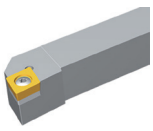
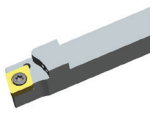
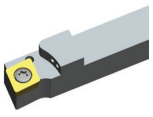
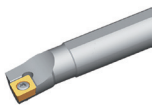
	HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
P	○	○	○	◉	◉	◉									◉	◉			○	◉	○		
M							○	◉					○	○	◉	◉	◉	○	○	◉	○		
K									●	◉	◉	◉											
N													●	●								●	◉
S													○	○	◉	◉	◉	○				○	◉
H																							

ISO		r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
EM Semi-finition	**CCMT060204-EM**	0,4	0,2-2,4	0,06-0,17							●	●								●								
	CCMT060208-EM	0,8	0,4-2,4	0,08-0,23							●	○								●								
	CCMT09T304-EM	0,4	0,25-3,00	0,08-0,23							●	●								●								
	CCMT09T308-EM	0,8	0,5-3,0	0,1-0,3							●	●								●								
	CCMT120404-EM	0,4	0,3-3,6	0,09-0,27								●								●								
	CCMT120408-EM	0,8	0,6-3,6	0,12-0,36							●	●								●								
	CCMT120412-EM	1,2	0,72-3,60	0,14-0,43								○																
XM Semi-finition	**CCMT09T304-XM**	0,4	1-2,5	0,15-0,3	●			○																				
	CCMT09T308-XM	0,8	1-2,5	0,15-0,35	●			●																				
	CCMT09T312-XM	1,2	1-2,5	0,15-0,4	●			●																				
	CCMT120404-XM	0,4	1-3,0	0,15-0,3	○			○																				
	CCMT120408-XM	0,8	1-3,0	0,15-0,35	○			○																				
	CCMT120412-XM	1,2	1-3,0	0,15-0,4	○			○																				

● En stock ○ Sur demande
YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

SCACR/L	SCLCR/L	SCACR/L-SC	SCLCR/L-SC	A***-SCLCR/L	S***-SCFCR/L	S***-SCLCR
Kr: 90°	Kr: 95°	Kr: 90°	Kr: 95°	Kr: 95°	Kr: 90°	Kr: 95°
						
A269	A270	A306	A307	A334	A352	A353

E***-SCLCR/L
Kr: 95°

A355

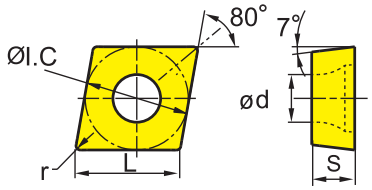
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

CCMT	L	I.C	S	d
06 02	6,4	6,35	2,38	2,8
09 T3	9,7	9,525	3,97	4,4
12 04	12,9	12,7	4,76	5,56

Plaquette positive CC**



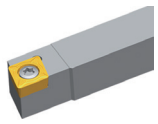
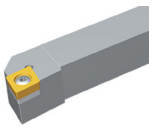
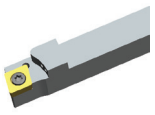
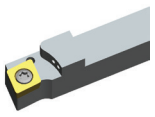
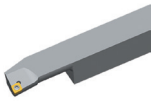
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					P																							
					M																							
					K																							
					N																							
					S																							
					H																							
HM	**CCMT060204-HM**	0,4	0,2-2,4	0,06-0,17			●		●			●	●		●													
	CCMT060208-HM	0,8	0,2-3,0	0,08-0,20			●		●				●		●													
	CCMT09T304-HM	0,4	0,25-3,00	0,08-0,23			●		●			●	●		●													
	CCMT09T308-HM	0,8	0,5-3,0	0,1-0,3			●		●			●	●		●													
	CCMT120404-HM	0,4	0,3-3,6	0,09-0,27			●		●				○		●													
	CCMT120408-HM	0,8	0,6-3,6	0,12-0,36			●		●				●		●													
Semi-finition	**CCMT120412-HM**	1,2	0,72-3,60	0,14-0,43			●		○				○															

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

SCACR/L	SCLCR/L	SCACR/L-SC	SCLCR/L-SC	A***-SCLCR/L	S***-SCFCR/L	S***-SCLCR
Kr: 90°	Kr: 95°	Kr: 90°	Kr: 95°	Kr: 95°	Kr: 90°	Kr: 95°
						
A269	A270	A306	A307	A334	A352	A353

E***-SCLCR/L
Kr: 95°

A355

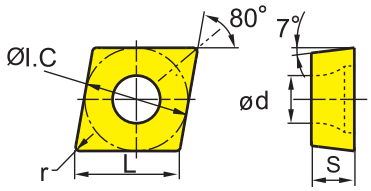
Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

CC**	L	I.C	S	d
06 02	6,4	6,35	2,38	2,8
09 T3	9,7	9,525	3,97	4,4
12 04	12,9	12,7	4,76	5,56

Plaquette positive CC**



	HC¹ (CVD)										HC¹ (PVD)							HT		HC²	HW	
P	●	●	●	◉	◉	◉									◉	◉		●	◉	●		
M						○	◉				○	○	◉	◉	◉	◉	○	○	◉	○		
K								◉	◉	◉												
N											●	●									◉	◉
S											○	○	◉	◉	◉	◉					○	◉
H																						

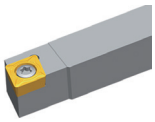
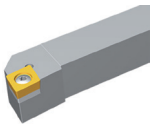
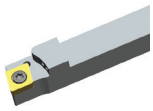
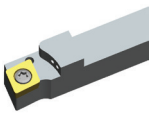
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Basic	**CCMW09T304**	0,4	0,1-5,0	0,05-0,50																								○
	CCMW120404	0,4	0,2-5,0	0,05-0,50																							○	○
	CCMW120408	0,8	0,5-5,0	0,08-0,50											○													
Semi-finition																												
TC	**CCMT060204-TC**	0,4	0,5-3,0	0,1-0,3										○		●												
	CCMT09T304-TC	0,4	0,5-3,0	0,1-0,3										○		●												
	CCMT09T308-TC	0,8	0,5-3,0	0,1-0,4										●		●												
	CCMT120404-TC	0,4	1-4	0,1-0,3										●		●												
Semi-finition	**CCMT120408-TC**	0,8	1-4	0,1-0,4										●		●												
HR	**CCMT060204-HR**	0,4	0,5-3,0	0,05-0,24			●	●																				
	CCMT060208-HR	0,8	0,8-3,2	0,09-0,26			●	○							●													
	CCMT09T304-HR	0,4	0,2-4,0	0,05-0,30			●	●							●													
	CCMT09T308-HR	0,8	1-4	0,12-0,35			●	●					●		●													
Ébauche	**CCMT120408-HR**	0,8	1,2-4,8	0,14-0,42			●	●					●		●													
	CCMT120412-HR	1,2	1,44-4,80	0,17-0,50			●	●					○															

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

SCACR/L	SCLCR/L	SCACR/L-SC	SCLCR/L-SC	A***-SCLCR/L	S***-SCFCR/L	S***-SCLCR
Kr: 90°	Kr: 95°	Kr: 90°	Kr: 95°	Kr: 95°	Kr: 90°	Kr: 95°
						
A269	A270	A306	A307	A334	A352	A353

E***-SCLCR/L
Kr: 95°

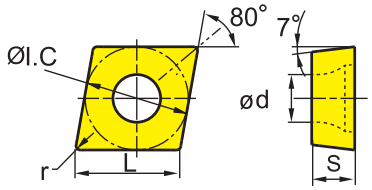
A355

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

CCGX	L	I.C	S	d
06 02	6,4	6,35	2,38	2,8
09 T3	9,7	9,525	3,97	4,4
12 04	12,9	12,7	4,76	5,56



Plaquette positive CC**					HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
				P																							
				M																							
				K																							
				N																							
				S																							
				H																							
	ISO		r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
LC	**CCGX060202-LC**		0,2	0,3-3,0	0,05-0,15												●									●	
	CCGX060204-LC		0,4	0,5-3,0	0,1-0,3												●									●	
	CCGX09T302-LC		0,2	0,5-4,0	0,1-0,2												●									●	
	CCGX09T304-LC		0,4	0,5-5,0	0,1-0,3												●									●	
	CCGX09T308-LC		0,8	0,5-5,0	0,15-0,60												●									●	
	CCGX120404-LC		0,4	0,5-7,0	0,1-0,3												●									●	
	CCGX120408-LC		0,8	0,5-7,0	0,15-0,60												●									●	
LH	**CCGX060202-LH**		0,2	0,3-3,0	0,05-0,15													●								●	
	CCGX060204-LH		0,4	0,5-3,0	0,1-0,3													●								●	
	CCGX060208-LH		0,8	0,6-3,0	0,15-0,40																					●	
	CCGX09T302-LH		0,2	0,4-5,0	0,05-0,15													●								●	
	CCGX09T304-LH		0,4	0,5-5,0	0,1-0,3													●								●	
	CCGX09T308-LH		0,8	0,5-5,0	0,15-0,60													●								●	
	CCGX120402-LH		0,2	0,4-7,0	0,05-0,15													○								○	
	CCGX120404-LH		0,4	0,5-7,0	0,1-0,3													●								●	
	CCGX120408-LH		0,8	0,5-7,0	0,15-0,60													●								●	
	CCGX120412-LH		1,2	0,5-7,0	0,15-0,80													○								●	

LC — Usinage aluminium

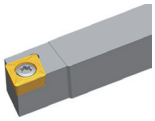
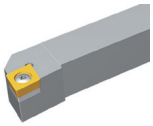
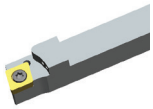
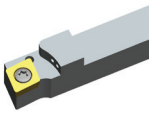
LH — Usinage aluminium

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Porte-outil

SCACR/L	SCLCR/L	SCACR/L-SC	SCLCR/L-SC	A***-SCLCR/L	S***-SCFCR/L	S***-SCLCR
Kr: 90°	Kr: 95°	Kr: 90°	Kr: 95°	Kr: 95°	Kr: 90°	Kr: 95°
						
A269	A270	A306	A307	A334	A352	A353

E***-SCLCR/L
Kr: 95°

A355

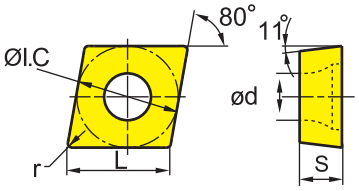
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

CP**	L	I.C	S	d
06 02	6,4	6,35	2,38	2,8
09 T3	9,7	9,525	3,97	4,4

Plaquette positive CP**



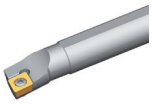
	HC¹ (CVD)											HC¹ (PVD)						HT		HC²	HW	
P	○	○	○	◎	◎	◎									◎	◎		○	◎	○		
M							○	◎							○	○	◎	◎	◎	○	◎	○	
K									◎	◎	◎	◎											
N													○	○								○	◎
S													○	○	◎	◎	◎	○				○	◎
H																							

	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
HF	**CPMT060204-HF**	0,4	0,1-1,5	0,04-0,18			○								○					○								
	CPMT060208-HF	0,8	0,1-1,5	0,05-0,25																○								
Finition																												
SF	**CPGT060202-SF**	0,2	0,05-2,00	0,05-0,25																				○		○		
	CPGT060204-SF	0,4	0,05-2,00	0,05-0,35																				●		●		
	CPGT09T304-SF	0,4	0,05-2,00	0,05-0,35																				●		●		
Finition																												
Flat	**CPGW060204**	0,4	0,5-1,5	0,05-0,40																							○	
Semi-finition																												
HM	**CPMT09T304-HM**	0,4	0,2-3,5	0,05-0,35																●								
	CPMT09T308-HM	0,8	0,2-3,5	0,10-0,55					○																			
Semi-finition																												

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil	
S*-SCLPR/L	**C***-SCLPR/L
Kr: 95°	Kr: 95°
	
A348	A354

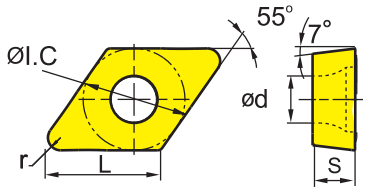
Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

DC**	L	I.C	S	d
07 02	7,8	6,35	2,38	2,8
11 T3	11,6	9,525	3,97	4,4

Plaquette positive DC**



	HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
P	○	○	○	◉	◉	◉									◉	◉			○	◉	○		
M							○	◉				○	○	◉	◉	◉	○		○	◉	○		
K									◉	◉	◉	◉											
N												○	○									○	◉
S												○	○	◉	◉	◉	○					○	◉
H																							

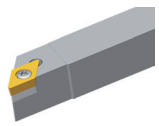
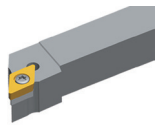
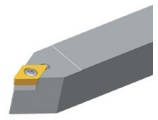
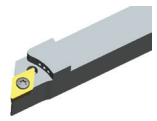
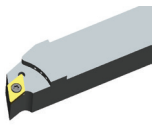
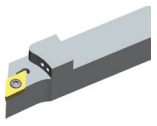
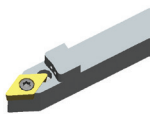
	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
AHF	**DCMT070204-AHF**	0,4	0,2-2,5	0,05-0,20		○														○	●				●			
	DCMT11T302-AHF	0,2	0,5-3,0	0,05-0,15		○														●	●				●	●		
	DCMT11T304-AHF	0,4	0,5-3,0	0,05-0,30		●														●	●				●			
	DCMT11T308-AHF	0,8	0,5-3,0	0,05-0,40		●															●				●	●		
Finition																												
SF	**DCGT070202-SF**	0,2	0,05-1,50	0,05-0,15																				●	●	○		
	DCGT070204-SF	0,4	0,05-1,50	0,05-0,20																				○		●		
	DCGT070208-SF	0,8	0,05-1,50	0,05-0,30																						●		
	DCGT11T302-SF	0,2	0,05-2,00	0,05-0,15														○						○	●	●		
Finition	**DCGT11T304-SF**	0,4	0,05-2,00	0,05-0,20																				●	●	●		
	DCGT11T308-SF	0,8	0,05-2,00	0,05-0,30																				●		●		

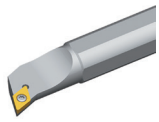
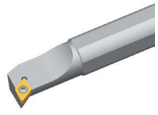
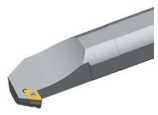
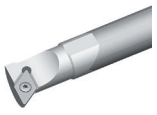
● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

SDACR/L	SDJCR/L	SDNCN	SDACR/L-SC	SDHCR/L-SC	SDJCR/L-SC	SDNCN-SC
Kr: 90°	Kr: 93°	Kr: 62°30'	Kr: 90°	Kr: 107°30'	Kr: 93°	Kr: 62°30'
						
A271	A272	A273	A308	A309	A310	A311

S***-SDQCR/L	A***-SDUCR/L	S***-SDZCR/L	E***-SDQCR/L
Kr: 107°30'	Kr: 93°	Kr: 85°	Kr: 107°30'
			
A336	A337	A338	A357

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

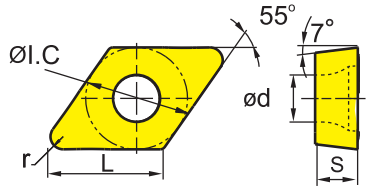
Tournage général Plaquettes positives

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

DCMT	L	I.C	S	d
07 02	7,8	6,35	2,38	2,8
11 T3	11,6	9,525	3,97	4,4

Plaquette positive DC**



	HC¹ (CVD)											HC¹ (PVD)						HT		HC²	HW	
P	○	○	○	❁	❁	❁									❁	❁		○	❁	○		
M							○	❁					○	○	❁	❁	○	○	❁	○		
K									❁	❁	❁	❁										
N													○	○							○	❁
S													○	○	❁	❁	○	○			○	❁
H																						

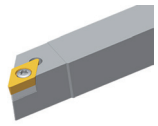
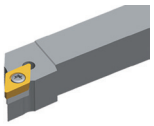
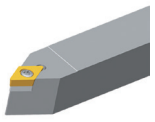
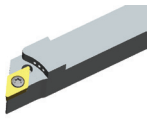
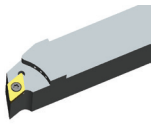
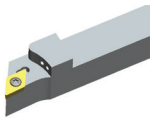
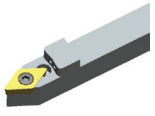
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EF	**DCMT070202-EF**	0,2	0,06-1,50	0,03-0,11							○									○								
	DCMT070204-EF	0,4	0,08-1,50	0,05-0,17							●									●								
	DCMT11T302-EF	0,2	0,08-2,00	0,04-0,15							○									●								
	DCMT11T304-EF	0,4	0,11-2,00	0,06-0,23							●									●								
Finition	**DCMT11T308-EF**	0,8	0,15-2,00	0,08-0,30							●								●	●								
HF	**DCMT070202-HF**	0,2	0,06-1,50	0,03-0,11			○		●																			
	DCMT070204-HF	0,4	0,08-1,50	0,05-0,17			●		●																			
	DCMT070208-HF	0,8	0,08-1,50	0,05-0,30			●		○																			
	DCMT11T302-HF	0,2	0,08-2,00	0,04-0,15			○		●											○								
Finition	**DCMT11T304-HF**	0,4	0,11-2,00	0,06-0,23			●		●				○		●													
	DCMT11T308-HF	0,8	0,15-2,00	0,08-0,30			●		●				●															
XF	**DCMT070202-XF**	0,2	0,5-1,5	0,08-0,15				○																				
	DCMT070204-XF	0,4	0,5-1,5	0,08-0,15	○																							
	DCMT070208-XF	0,8	0,5-1,5	0,08-0,25	○																							
	DCMT11T304-XF	0,4	0,5-2,0	0,08-0,15	○																							
Finition	**DCMT11T308-XF**	0,8	0,5-2,0	0,08-0,25	○																							

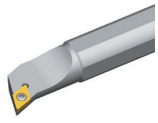
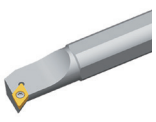
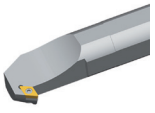
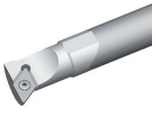
● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

SDACR/L	SDJCR/L	SDNCN	SDACR/L-SC	SDHCR/L-SC	SDJCR/L-SC	SDNCN-SC
Kr: 90°	Kr: 93°	Kr: 62°30'	Kr: 90°	Kr: 107°30'	Kr: 93°	Kr: 62°30'
						
A271	A272	A273	A308	A309	A310	A311

S***-SDQCR/L	A***-SDUCR/L	S***-SDZCR/L	E***-SDQCR/L
Kr: 107°30'	Kr: 93°	Kr: 85°	Kr: 107°30'
			
A336	A337	A338	A357

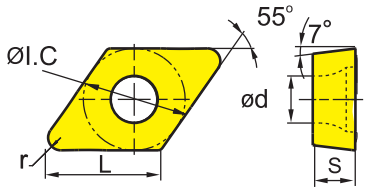
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

DCMT	L	I.C	S	d
07 02	7,8	6,35	2,38	2,8
11 T3	11,6	9,525	3,97	4,4

Plaquette positive DC**



	HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
P	○	○	○	⊛	⊛	⊛									⊛	⊛				○	⊛	○		
M							○	⊛				○	○	⊛	⊛	⊛	○		○	⊛	○			
K									⊛	⊛	⊛	⊛												
N												○	○										○	⊛
S												○	○	⊛	⊛	⊛	○						○	⊛
H																								

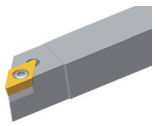
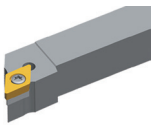
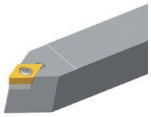
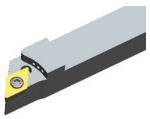
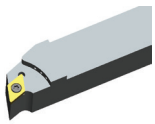
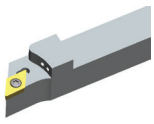
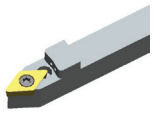
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EM	**DCMT070204-EM**	0,4	0,19-2,25	0,06-0,17							●	●								●								
	DCMT070208-EM	0,8	0,38-2,25	0,08-0,23							●	○								●								
	DCMT11T304-EM	0,4	0,25-3,00	0,08-0,23							●	●								●								
Semi-finition	**DCMT11T308-EM**	0,8	0,5-3,0	0,1-0,3							●	●								●								
XM	**DCMT11T304-XM**	0,4	1-2,5	0,15-0,3	●			○																				
	DCMT11T308-XM	0,8	1-2,5	0,15-0,35	●			●																				
	DCMT11T312-XM	1,2	1-2,5	0,15-0,4	●			●																				
Semi-finition																												

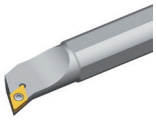
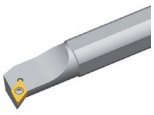
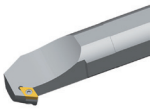
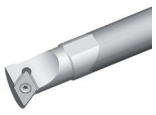
● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

SDACR/L	SDJCR/L	SDNCN	SDACR/L-SC	SDHCR/L-SC	SDJCR/L-SC	SDNCN-SC
Kr: 90°	Kr: 93°	Kr: 62°30'	Kr: 90°	Kr: 107°30'	Kr: 93°	Kr: 62°30'
						
A271	A272	A273	A308	A309	A310	A311

S***-SDQCR/L	A***-SDUCR/L	S***-SDZCR/L	E***-SDQCR/L
Kr: 107°30'	Kr: 93°	Kr: 85°	Kr: 107°30'
			
A336	A337	A338	A357

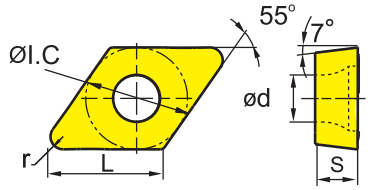
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

DCMT	L	I.C	S	d
07 02	7,8	6,35	2,38	2,8
11 T3	11,6	9,525	3,97	4,4

Plaquette positive DC**



	HC¹ (CVD)											HC¹ (PVD)						HT		HC²	HW	
P	○	○	○	◉	◉	◉									◉	◉		○	◉	○		
M							○	◉				○	○	◉	◉	◉	○	○	◉	○		
K									◉	◉	◉											
N												○	○								○	◉
S												○	○	◉	◉	◉	○				○	◉
H																						

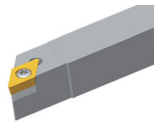
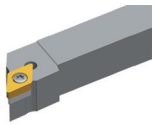
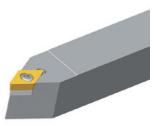
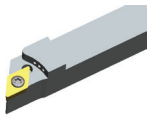
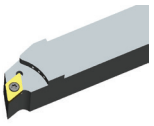
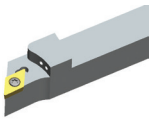
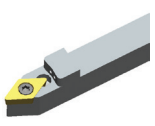
	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
HM	**DCMT070204-HM**	0,4	0,19-2,25	0,06-0,17		○	●		●				●		●					●								
	DCMT070208-HM	0,8	0,38-2,25	0,08-0,23			●		●				●		●													
	DCMT11T304-HM	0,4	0,25-3,00	0,08-0,23		○	●		●				●		●						●							
	DCMT11T308-HM	0,8	0,5-3,0	0,1-0,3			●		●				●		●						●							
Semi-finition	**DCMT11T312-HM**	1,2	0,6-3,0	0,12-0,36					○				○		○													

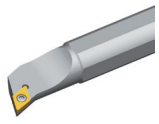
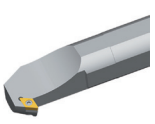
● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

SDACR/L	SDJCR/L	SDNCN	SDACR/L-SC	SDHCR/L-SC	SDJCR/L-SC	SDNCN-SC
Kr: 90°	Kr: 93°	Kr: 62°30'	Kr: 90°	Kr: 107°30'	Kr: 93°	Kr: 62°30'
						
A271	A272	A273	A308	A309	A310	A311

S***-SDQCR/L	A***-SDUCR/L	S***-SDZCR/L	E***-SDQCR/L
Kr: 107°30'	Kr: 93°	Kr: 85°	Kr: 107°30'
			
A336	A337	A338	A357

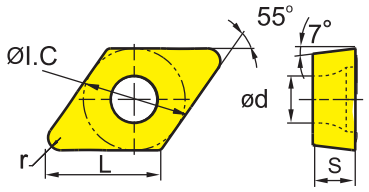
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

DC**	L	I.C	S	d
07 02	7,8	6,35	2,38	2,8
11 T3	11,6	9,525	3,97	4,4

Plaquette positive DC**



	HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
P	●	●	●	◉	◉	◉										◉	◉			●	◉	●		
M							○	◉					○	○	◉	◉	◉	◉	●	○	◉	○		
K									◉	◉	◉	◉												
N													●	●									●	◉
S													○	○	◉	◉	◉	◉	●				○	◉
H																								

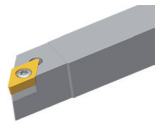
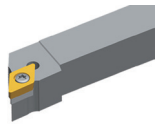
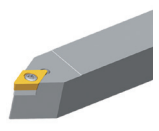
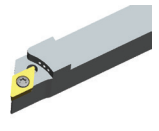
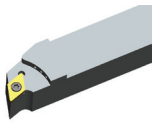
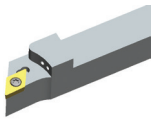
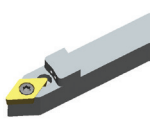
	ISO	r	a_p	f																				
Flat	**DCMW11T304**	0,4	0,5-5,0	0,05-0,20								○												
	DCMW11T308	0,8	0,4-5,0	0,1-0,4								○												
Semi-finition																								
HR	**DCMT11T304-HR**	0,4	1-4	0,1-0,3			○	●			●	●												
	DCMT11T308-HR	0,8	1-4	0,12-0,35			●	●			●	●												
	DCMT11T312-HR	1,2	1,2-4,0	0,14-0,42			○	●			○													
Ébauche																								
LC	**DCGX070201-LC**	0,1	0,3-4,0	0,05-0,10																			●	
	DCGX070202-LC	0,2	0,3-4,0	0,05-0,15									●										●	
	DCGX070204-LC	0,4	0,5-4,0	0,1-0,3									●										●	
	DCGX11T302-LC	0,2	0,3-5,5	0,05-0,15									●										●	
Usinage aluminium	**DCGX11T304-LC**	0,4	0,5-5,5	0,1-0,3									●										●	
	DCGX11T308-LC	0,8	0,5-5,5	0,15-0,60									●										●	

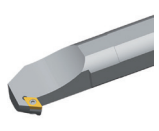
● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

SDACR/L	SDJCR/L	SDNCN	SDACR/L-SC	SDHCR/L-SC	SDJCR/L-SC	SDNCN-SC
Kr: 90°	Kr: 93°	Kr: 62°30'	Kr: 90°	Kr: 107°30'	Kr: 93°	Kr: 62°30'
						
A271	A272	A273	A308	A309	A310	A311

S***-SDQCR/L	A***-SDUCR/L	S***-SDZCR/L	E***-SDQCR/L
Kr: 107°30'	Kr: 93°	Kr: 85°	Kr: 107°30'
			
A336	A337	A338	A357

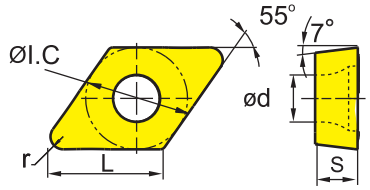
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

DCGX	L	I.C	S	d
07 02	7,8	6,35	2,38	2,8
11 T3	11,6	9,525	3,97	4,4

Plaquette positive DC**



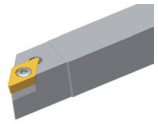
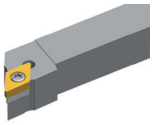
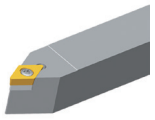
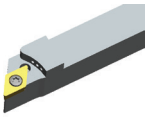
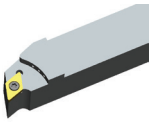
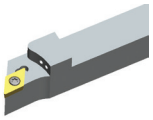
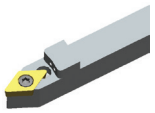
	HC¹ (CVD)											HC¹ (PVD)						HT		HC²	HW	
P	●	●	●	◉	◉	◉									◉	◉		●	◉	●		
M							●	◉				●	●	◉	◉	◉	●	●	◉	●		
K									●	◉	◉	◉										
N												●	●								●	◉
S												●	●	◉	◉	◉	●				●	◉
H																						

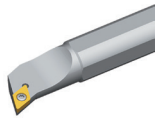
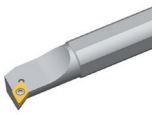
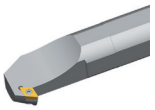
	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
LH	**DCGX070202-LH**	0,2	0,3-4,0	0,05-0,15														●									●	
	DCGX070204-LH	0,4	0,5-4,0	0,1-0,3														●									●	
	DCGX070208-LH	0,8	0,5-4,0	0,15-0,60														○									●	
	DCGX11T302-LH	0,2	0,3-5,5	0,05-0,15														●									●	
Usinage aluminium	**DCGX11T304-LH**	0,4	0,5-5,5	0,1-0,3														●									●	
	DCGX11T308-LH	0,8	0,5-5,5	0,15-0,60														●									●	

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

SDACR/L	SDJCR/L	SDNCN	SDACR/L-SC	SDHCR/L-SC	SDJCR/L-SC	SDNCN-SC
Kr: 90°	Kr: 93°	Kr: 62°30'	Kr: 90°	Kr: 107°30'	Kr: 93°	Kr: 62°30'
						
A271	A272	A273	A308	A309	A310	A311

S***-SDQCR/L	A***-SDUCR/L	S***-SDZCR/L	E***-SDQCR/L
Kr: 107°30'	Kr: 93°	Kr: 85°	Kr: 107°30'
			
A336	A337	A338	A357

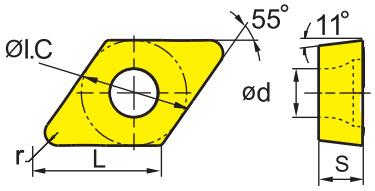
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

DPGT	L	I.C	S	d
07 02	7,8	6,35	2,38	2,8
11 T3	11,6	9,525	3,97	4,4

Plaquette positive DP**



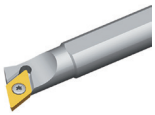
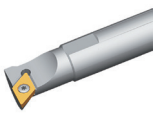
	HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
P	○	○	○	◎	◎	◎									◎	◎			○	◎	○		
M							○	◎				○	○	◎	◎	◎	○		○	◎	○		
K									◎	◎	◎	◎											
N												○	○									○	◎
S													○	○	◎	◎	◎	○				○	◎
H																							

	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
SF	**DPGT070202-SF**	0,2	0,05-2,00	0,05-0,15																				○		●		
	DPGT070204-SF	0,4	0,05-2,00	0,05-0,30																				●		●		
	DPGT11T304-SF	0,4	0,05-2,00	0,1-0,3																				●		●		
	DPGT11T308-SF	0,8	0,05-2,00	0,1-0,4																				○		○		
Finition																												

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

S***-SDQPR/L	S***-SDUPR/L	C***-SDQPR/L
Kr: 107°30'	Kr: 93°	Kr: 107°30'
		
A349	A350	A356

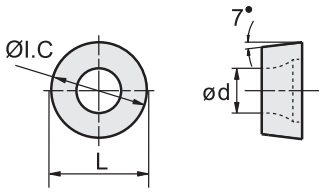
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Tournage général Plaquettes positives

RC**	L	I.C	S	d
08 03	8	8	3,18	3,36
10 T3	10	10	3,97	3,6
12 04	12	12	4,76	4,44
16 06	16	16	6,35	5,5
20 06	20	20	6,35	6,5
25 07	25	25	7,94	7,7

Plaquette de tournage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

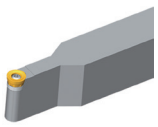
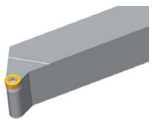
Plaquette positive RC**				HC¹ (CVD)										HC¹ (PVD)							HT		HC²	HW	
			P																						
			M																						
			K																						
			N																						
			S																						
			H																						
ISO		a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
Basic	**RCMT0803MO**	0,5-3,0	0,1-0,4					●				●															
	RCMT10T3MO	0,5-4,0	0,1-0,5					○				●															
	RCMT1204MO	0,8-5,0	0,1-0,6			○		●				●		●													
	RCMT1606MO	1-6	0,1-0,8			●		●			○	●															
Semi-finition	**RCMT2006MO**	1,2-8,0	0,1-1,0			○		●																			
	RCMT2507MO	1,4-10,0	0,1-1,2			○		○																			
LH	**RCGX0803MO-LH**	1-4	0,2-0,5																							●	
	RCGX1204MO-LH	1,2-5,0	0,2-0,6																							●	
Usinage aluminium																											

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

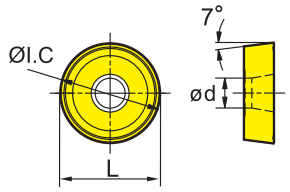
SRDCN	SRGCR/L
	
A288	A289

Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

RCMX	L	I.C	S	d
08 03	8	8	3,18	3,36
10 03	10	10	3,18	4,4
12 04	12	12	4,76	4,4
16 06	16	16	6,35	5,5
20 06	20	20	6,35	6,5
25 07	25	25	7,94	7,2
32 09	32	32	9,52	10,2

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquette de tournage



Plaquette positive RC**				HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
				P																						
				M																						
				K																						
				N																						
				S																						
				H																						
	ISO		a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
Basic		**RCMX0803MO**	0,5-4,0	0,1-0,5					●																		
		RCMX1003MO	0,5-5,0	0,1-0,6					●																		
		RCMX1204MO	1-6	0,1-0,8			○		●																		
		RCMX1606MO	1-7	0,2-0,9			○		●			○								○								
		RCMX2006MO	1-9	0,2-1,0			●		●						●													
		RCMX2507MO	2-10	0,25-1,20					●																			
		RCMX3209MO	2-13	0,25-1,40			○		●																			
Basic		**RCMX2507MO-1**	2-9	0,1-0,4			○																					
Basic		**RCMX3209MO-PV**	3-12	0,1-0,4			○		●																			

Ébauche légère

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

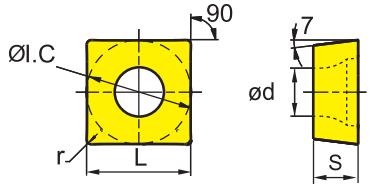
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SCMT	L	I.C	S	d
09 T3	9,525	9,525	3,97	4,4
12 04	12,7	12,7	4,76	5,56

Plaquette positive SC**



	HC¹ (CVD)											HC¹ (PVD)						HT		HC²	HW	
P	○	○	○	◉	◉	◉									◉	◉		○	◉	○		
M							○	◉				○	○	◉	◉	◉	○	○	◉	○		
K									◉	◉	◉											
N												○	○								○	◉
S												○	○	◉	◉	◉	○				○	◉
H																						

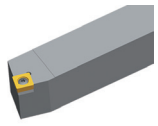
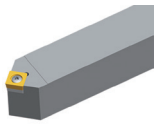
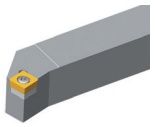
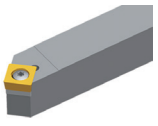
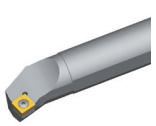
	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
AHF	**SCMT09T304-AHF**	0,4	0,5-3,0	0,05-0,30		●															●			○			
	SCMT09T308-AHF	0,8	0,5-3,0	0,05-0,40		●															●			●			
Finition																												
EF	**SCMT09T302-EF**	0,2	0,07-2,00	0,05-0,15																●								
	SCMT09T304-EF	0,4	0,11-2,00	0,06-0,23																●								
	SCMT09T308-EF	0,8	0,15-2,00	0,08-0,30																●								
Finition																												
EM	**SCMT09T304-EM**	0,4	0,25-3,00	0,08-0,23							○	○								●								
	SCMT09T308-EM	0,8	0,5-3,0	0,1-0,3							●	●								●								
	SCMT120404-EM	0,4	0,3-3,6	0,09-0,27							○	○								●								
	SCMT120408-EM	0,8	0,6-3,6	0,12-0,36							○	○								●								
	SCMT120412-EM	1,2	0,72-3,60	0,14-0,43								○								●								
Finition																												
XF	**SCMT09T304-XF**	0,4	0,5-2,0	0,08-0,25	●																							
	SCMT09T308-XF	0,8	0,5-2,0	0,08-0,30	●			○																				
Finition																												

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

SSBCR/L	SSDCN	SSKCR/L	SSSCR/L	S***-SSKCR/L
Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°
				
A279	A280	A281	A282	A339

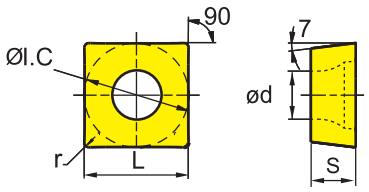
Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

SCMT	L	I.C	S	d
09 T3	9,525	9,525	3,97	4,4
12 04	12,7	12,7	4,76	5,56

Plaquette positive SC**



	HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
P	○	○	○	◎	◎	◎									◎	◎			○	◎	○		
M							○	◎				○	○	◎	◎	◎	○		○	◎	○		
K									◎	◎	◎	◎											
N												○	○									○	◎
S												○	○	◎	◎	◎	○					○	◎
H																							

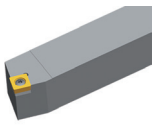
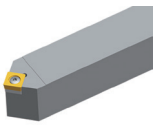
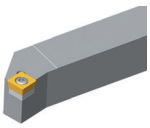
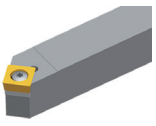
	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
HF	**SCMT09T302-HF**	0,2	0,15-2,00	0,05-0,15																								
	SCMT09T304-HF	0,4	0,11-2,00	0,05-0,23					●																			
	SCMT09T308-HF	0,8	0,15-2,00	0,05-0,30			●		●																			
Finition																												
HM	**SCMT09T304-HM**	0,4	0,25-3,00	0,08-0,23			●		●				●		●													
	SCMT09T308-HM	0,8	0,5-3,0	0,1-0,3			●		●				●		●													
	SCMT120404-HM	0,4	0,3-3,6	0,09-0,27			●		●																			
	SCMT120408-HM	0,8	0,6-3,6	0,12-0,36			○		●				●		●													
Semi-finition	**SCMT120412-HM**	1,2	0,72-3,60	0,14-0,43					●																			
XM	**SCMT09T304-XM**	0,4	1-2,5	0,15-0,3	○			○																				
	SCMT09T308-XM	0,8	1-2,5	0,15-0,35	○			○																				
	SCMT09T312-XM	1,2	1-2,5	0,15-0,4	○			○																				
	SCMT120408-XM	0,8	1-3,0	0,15-0,35	○			○																				
Semi-finition	**SCMT120412-XM**	1,2	1-3,0	0,15-0,4	○			○																				

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

SSBCR/L	SSDCN	SSKCR/L	SSSCR/L	S***-SSKCR/L
Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°
				
A279	A280	A281	A282	A339

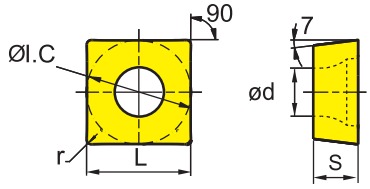
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Tournage général Plaquettes positives

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SC**	L	I.C	S	d
09 T3	9,525	9,525	3,97	4,4
12 04	12,7	12,7	4,76	5,565,5



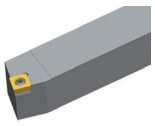
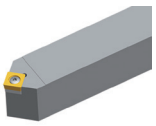
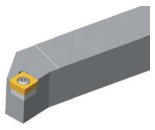
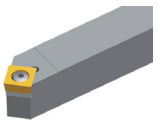
Plaquette positive SC**					HC¹ (CVD)										HC¹ (PVD)						HT		HC²	HW	
				P																					
				M																					
				K																					
				N																					
				S																					
				H																					
ISO		r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
HR	**SCMT09T304-HR**	0,4	0,2-4,0	0,05-0,40			○		●						○												
	SCMT09T308-HR	0,8	1-4	0,12-0,35			●		●				●		●												
	SCMT09T312-HR	1,2	1,2-4,0	0,14-0,42					○																		
	SCMT120404-HR	0,4	0,5-4,0	0,05-0,50			○		○																		
Ébauche	**SCMT120408-HR**	0,8	1,2-4,8	0,14-0,42			●		●				●		●												
	SCMT120412-HR	1,2	1,44-4,80	0,17-0,50			●		●				●		○												
LC	**SCGX09T304-LC**	0,4	0,5-5,0	0,1-0,5																						●	
	SCGX09T308-LC	0,8	0,5-5,0	0,15-0,60																						●	
	SCGX120408-LC	0,8	1-7	0,15-0,60													●									●	
Usinage aluminium																											

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

SSBCR/L	SSDCN	SSKCR/L	SSSCR/L	S***-SSKCR/L
Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°
				
A279	A280	A281	A282	A339

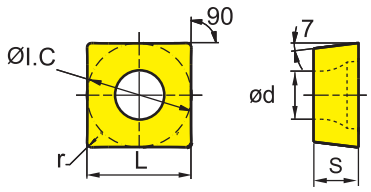
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SCGX	L	I.C	S	d
09 T3	9,525	9,525	3,97	4,4
12 04	12,7	12,7	4,76	5,56

Plaquette positive SC**



	HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
P	○	○	○	◉	◉	◉										◉	◉			○	◉	○		
M							○	◉						○	○	◉	◉	◉	○	○	◉	○		
K									◉	◉	◉	◉												
N													○	○									◉	◉
S														○	○	◉	◉	◉	○				◉	◉
H																								

	ISO	r	a_p	f																				
LH	**SCGX09T302-LH**	0,2	0,5-4,0	0,05-0,15										○									●	
	SCGX09T304-LH	0,4	0,5-4,0	0,1-0,3																			●	
	SCGX09T308-LH	0,8	0,5-4,0	0,15-0,60																			●	
	SCGX120408-LH	0,8	0,5-5,0	0,15-0,60										○									●	

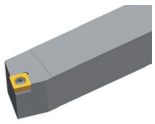
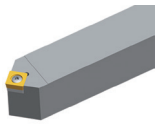
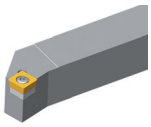
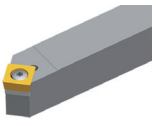
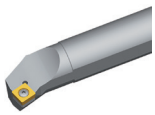


Usinage aluminium

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

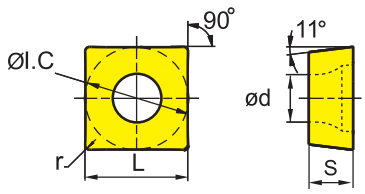
SSBCR/L	SSDCN	SSKCR/L	SSSCR/L	S***-SSKCR/L
Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°
				
A279	A280	A281	A282	A339

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SPMW	L	I.C	S	d
09 T3	9,525	9,525	3,97	4,4
12 04	12,7	12,7	4,76	5,56



Plaquette positive SP**					HC¹ (CVD)										HC¹ (PVD)						HT		HC²	HW	
				P	●	●	●	◉	◉	◉									◉	◉			●	◉	●		
				M							○	◉							◉	◉	◉	◉	○	◉	○		
				K									◉	◉	◉	◉											
				N													●	●								●	◉
				S													○	○	◉	◉	◉	○				○	◉
				H																							
ISO		r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
Flat	**SPMW09T304**	0,4	0,5-4,0	0,1-0,4											○												
	SPMW09T308	0,8	0,5-4,0	0,2-0,4											○												
	SPMW120408	0,8	1-6	0,3-0,6											○												

● En stock ○ Sur demande

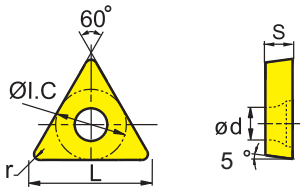
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

TBGH	L	I.C	S	d
06 01	6,87	3,97	1,59	2,2



Plaquette positive TB**					HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
					YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
P					○	○	○	◍	◍	◍											◍	◍		○	◍	○		
M											○	◍						○	○	◍	◍	◍	○	○	◍	○		
K													○	◍	◍	◍												
N																	○	○									○	◍
S																		○	○	◍	◍	◍	○				○	◍
H																												
ISO		r	a_p	f																								
	TBGH060102L	0,2	0,5-3,5	0,05-0,40														●						●				
	TBGH060104L	0,4	0,5-3,5	0,05-0,40														○						●				

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

A Tournage
B Fraisage
C Perçage
D Informations techniques
E Index

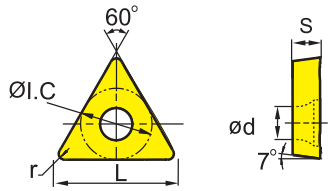
Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

TCGT	L	I.C	S	d
06 T1	6,87	3,97	1,98	2,2
09 02	9,63	5,56	2,38	2,5
11 03	11	6,35	3,18	2,8

Plaquette positive TC**



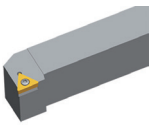
	HC¹ (CVD)											HC¹ (PVD)						HT		HC²	HW	
P	○	○	○	◉	◉	◉									◉	◉		○	◉	○		
M							●	◉					●	●	◉	◉	◉	●	◉	●		
K									●	◉	◉	◉										
N													●	●							●	◉
S													●	●	◉	◉	◉	●			●	◉
H																						

	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
SF Finition	**TCGT06T102-SF**	0,2	0,05-2,00	0,05-0,15																						●		
	TCGT090202-SF	0,2	0,05-2,00	0,05-0,15																				○		○		
	TCGT090204-SF	0,4	0,05-2,00	0,1-0,3																						●		
	TCGT090208-SF	0,8	0,05-2,00	0,10-0,35																						●		
	TCGT110302-SF	0,2	0,05-2,00	0,05-0,15																						○		
	TCGT110304-SF	0,4	0,05-2,00	0,1-0,3																				●		●		
	TCGT110308-SF	0,8	0,05-2,00	0,10-0,35																						○		

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

STGCR/L	E***-STFCR/L
Kr: 91°	Kr: 90°
	
A285	A361

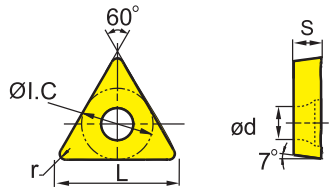
Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

TCMT	L	I.C	S	d
09 02	9,63	5,56	2,38	2,5
11 02	11	6,35	2,38	2,8
16 T3	16,5	9,525	3,97	4,4

Plaquette positive TC**



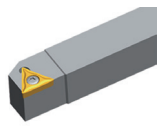
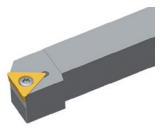
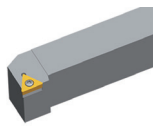
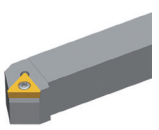
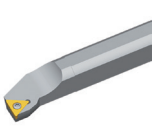
	ISO	r	a_p	f	HC¹ (CVD)										HC¹ (PVD)							HT		HC²	HW	
					YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
AHF	**TCMT110204-AHF**	0,4	0,2-2,5	0,05-0,30	●																●						
	TCMT110208-AHF	0,8	0,2-2,5	0,1-0,4	●																●						
	TCMT16T304-AHF	0,4	0,5-3,0	0,05-0,30	●																●						
	TCMT16T308-AHF	0,8	0,5-3,5	0,1-0,4	●																●						
Finition																											
HF	**TCMT090202-HF**	0,2	0,06-1,70	0,03-0,13			○		●															○				
	TCMT090204-HF	0,4	0,1-1,7	0,05-0,19			○		●																			
	TCMT090208-HF	0,8	0,15-1,70	0,10-0,25					○																			
	TCMT110202-HF	0,2	0,08-2,00	0,05-0,20					●																			
	TCMT110204-HF	0,4	0,1-2,0	0,05-0,30			○		●						○													
	TCMT110208-HF	0,8	0,1-2,0	0,05-0,35			●		●					●														
	TCMT16T304-HF	0,4	0,11-2,00	0,05-0,23			○		●																			
Finition	**TCMT16T308-HF**	0,8	0,2-3,5	0,05-0,30																								
XF	**TCMT090202-XF**	0,2	0,5-1,5	0,08-0,15				○																				
	TCMT090204-XF	0,4	0,5-1,5	0,08-0,20	●																							
	TCMT110202-XF	0,2	0,5-2,0	0,08-0,15				○																				
	TCMT110204-XF	0,4	0,5-2,0	0,08-0,20	●																							
	TCMT110208-XF	0,8	0,5-2,5	0,08-0,25	●																							
	TCMT16T304-XF	0,4	0,5-2,5	0,08-0,20	●																							
Finition	**TCMT16T308-XF**	0,8	0,5-2,5	0,08-0,25	●																							

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

STACR/L	STFCR/L	STGCR/L	STTCR/L	S***-STFCR/L	E***-STFCR/L
Kr: 90°	Kr: 91°	Kr: 91°	Kr: 60°	Kr: 91°	Kr: 90°
					
A283	A284	A285	A286	A341	A361

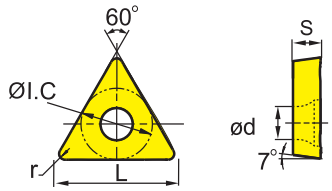
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

TCMT	L	I.C	S	d
09 02	9,63	5,56	2,38	2,5
11 02	11	6,35	2,38	2,8
16 T3	16,5	9,525	3,97	4,4

Plaquette positive TC**



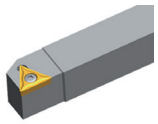
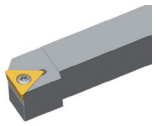
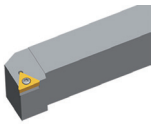
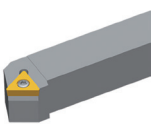
		ISO	r	a_p	f	HC¹ (CVD)										HC¹ (PVD)						HT		HC²	HW	
						YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
EF		**TCMT090202-EF**	0,2	0,06-1,70	0,03-0,13																						
		TCMT090204-EF	0,4	0,1-1,7	0,05-0,19															●							
		TCMT110202-EF	0,2	0,2-2,0	0,05-0,13															○							
		TCMT110204-EF	0,4	0,2-2,0	0,05-0,20															●							
		TCMT16T304-EF	0,4	0,3-3,0	0,05-0,23															●							
Finition		**TCMT16T308-EF**	0,8	0,3-3,0	0,1-0,4							●								●							
EM		**TCMT090204-EM**	0,4	0,19-2,25	0,06-0,17							○								●							
		TCMT110204-EM	0,4	0,2-2,7	0,05-0,30							○								●							
		TCMT110208-EM	0,8	0,8-2,7	0,08-0,30															●							
		TCMT16T304-EM	0,4	0,25-3,00	0,08-0,23							●								●							
Semi-finition		**TCMT16T308-EM**	0,8	0,5-3,0	0,1-0,3							●	●							●							
XM		**TCMT16T304-XM**	0,4	1-3,0	0,15-0,3	○			○																		
		TCMT16T308-XM	0,8	1-3,0	0,15-0,35	○			○																		
		TCMT16T312-XM	1,2	1-3,0	0,15-0,4	○			○																		
Semi-finition																											

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

STACR/L	STFCR/L	STGCR/L	STTCR/L	S***-STFCR/L	E***-STFCR/L
Kr: 90°	Kr: 91°	Kr: 91°	Kr: 60°	Kr: 91°	Kr: 90°
					
A283	A284	A285	A286	A341	A361

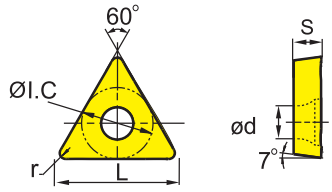
Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

TC**	L	I.C	S	d
09 02	9,63	5,56	2,38	2,5
11 02	11	6,35	2,38	2,8
16 T3	16,5	9,525	3,97	4,4
22 04	22	12,7	4,76	5,5

Plaquette positive TC**



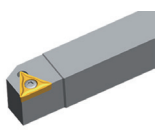
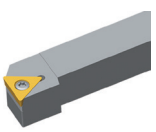
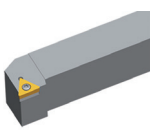
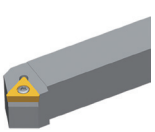
	ISO	r	a_p	f	HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
					YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
Flat	**TCMW16T308**	0,8	0,5-5,0	0,05-0,60											○													
Semi-finition																												
HM	**TCMT090204-HM**	0,4	0,19-2,25	0,06-0,17			●		●				●		●													
	TCMT090208-HM	0,8	0,38-2,25	0,08-0,23			○		○						○													
	TCMT110204-HM	0,4	0,2-2,7	0,07-0,20			●		●				●		●													
	TCMT110208-HM	0,8	0,5-2,7	0,1-0,3			●		●						●													
	TCMT16T304-HM	0,4	0,25-3,00	0,08-0,23			●		●				●		●													
Semi-finition	**TCMT16T308-HM**	0,8	0,5-3,0	0,1-0,3			●		●				●		●													
	TCMT16T312-HM	1,2	0,6-3,0	0,12-0,36			○		●																			
HR	**TCMT090204-HR**	0,4	0,5-3,0	0,1-0,3					○																			
	TCMT090208-HR	0,8	0,5-3,5	0,08-0,50					○						○													
	TCMT110204-HR	0,4	0,5-3,0	0,1-0,4					●																			
	TCMT110208-HR	0,8	1-4	0,1-0,5					●																			
	TCMT16T304-HR	0,4	0,5-4,0	0,1-0,4					●				●															
Ébauche	**TCMT16T308-HR**	0,8	1-4	0,12-0,35					●				●		●													
	TCMT16T312-HR	1,2	1,2-4,0	0,14-0,42			○						○		●													
	TCMT220408-HR	0,8	1,2-4,8	0,14-0,42			○		●						●													

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

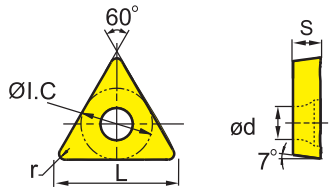
STACR/L	STFCR/L	STGCR/L	STTCR/L	S***-STFCR/L	E***-STFCR/L
Kr: 90°	Kr: 91°	Kr: 91°	Kr: 60°	Kr: 91°	Kr: 90°
					
A283	A284	A285	A286	A341	A361

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

TCMT	L	I.C	S	d
22 04	22	12,7	4,76	5,5

Plaquette de tournage



Plaquette positive TC**		HC¹ (CVD)										HC¹ (PVD)						HT		HC²	HW	
P		○	○	○	◉	◉	◉								◉	◉		○	◉	○		
M								○	◉			○	○	◉	◉	◉	○	○	◉	○		
K										●	◉	◉	◉									
N												○	○								○	◉
S												○	○	◉	◉	◉	○				○	◉
H																						
ISO		r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
Basic	**TCMT220408**	0,8	1,2-4,8	0,14-0,42									●															

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

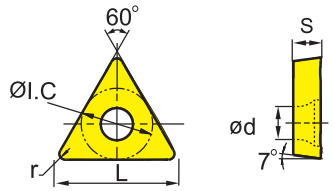
Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

TCGX	L	I.C	S	d
09 02	9,63	5,56	2,38	2,5
11 02	11	6,35	2,38	2,8
16 T3	16,5	9,525	3,97	4,4

Plaquette positive TC**



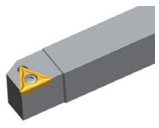
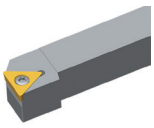
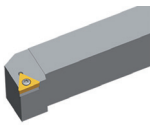
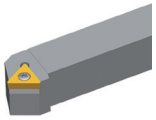
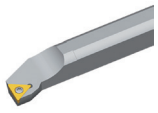
	HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
P	○	○	○	◉	◉	◉									◉	◉				○	◉	○		
M							○	◉					○	○	◉	◉	◉	○	○	◉	○			
K									●	◉	◉	◉												
N													●	●									●	◉
S													●	●	◉	◉	◉	●					●	◉
H																								

	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
LC	**TCGX090202-LC**	0,2	0,3-4,0	0,05-0,15													●										●	
	TCGX090204-LC	0,4	0,5-4,0	0,1-0,3													●										●	
	TCGX110202-LC	0,2	0,3-5,0	0,05-0,15													●										●	
	TCGX110204-LC	0,4	0,5-5,0	0,1-0,3													●										●	
	TCGX110208-LC	0,8	0,5-5,0	0,15-0,60													●										●	
Usinage aluminium	**TCGX16T304-LC**	0,4	0,5-7,0	0,1-0,3																							●	
	TCGX16T308-LC	0,8	0,5-7,0	0,15-0,60													●										●	
LH	**TCGX090202-LH**	0,2	0,3-4,0	0,05-0,15														○									●	
	TCGX090204-LH	0,4	0,5-4,0	0,1-0,3																							●	
	TCGX110202-LH	0,2	0,3-5,0	0,05-0,15														○									●	
	TCGX110204-LH	0,4	0,5-5,0	0,1-0,3														●									●	
	TCGX110208-LH	0,8	0,5-5,0	0,15-0,60																							●	
Usinage aluminium	**TCGX16T302-LH**	0,2	0,5-7,0	0,05-0,15																							●	
	TCGX16T304-LH	0,4	0,5-7,0	0,1-0,3														○									●	
	TCGX16T308-LH	0,8	0,5-7,0	0,15-0,60														○									●	

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

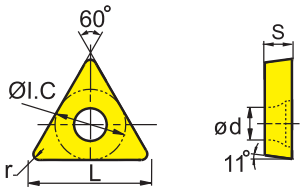
STACR/L	STFCR/L	STGCR/L	STTCR/L	S***-STFCR/L	E***-STFCR/L
Kr: 90°	Kr: 91°	Kr: 91°	Kr: 60°	Kr: 91°	Kr: 90°
					
A283	A284	A285	A286	A341	A361

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

TPGH	L	I.C	S	d
09 02	9,63	5,56	2,38	2,8
11 03	11	6,35	3,18	3,18



Plaquette positive TP**					HC¹ (CVD)											HC¹ (PVD)						HT		HC²	HW	
				P	○	○	○	◉	◉	◉								◉	◉				○	◉	○		
				M							○	◉					○	○	◉	◉	◉	○	○	◉	○		
				K									◉	◉	◉	◉											
				N													○	○								◉	◉
				S													○	○	◉	◉	◉	○				○	◉
				H																							
	ISO		r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
Finition	**TPGH090202L**		0,2	0,2-3,0	0,05-0,15												●						●	●			
	TPGH090204L		0,4	0,2-3,0	0,05-0,30												●						●	●			
	TPGH110302L		0,2	0,2-3,5	0,05-0,15												●						●	●			
	TPGH110304L		0,4	0,2-3,5	0,05-0,30												●						●	●			

● En stock ○ Sur demande

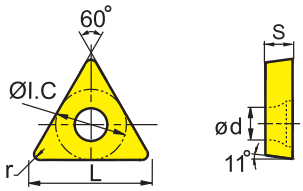
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

TPGT	L	I.C	S	d
09 02	9,63	5,56	2,38	2,5
11 03	11	6,35	3,18	2,8



Plaquette positive TP**					HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
					YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
P					●	●	●	◐	◐	◐										◐	◐			●	◐	●		
M											○	◐						○	○	◐	◐	◐	○	○	◐	○		
K													◐	◐	◐	◐												
N																	◐	◐									◐	◐
S																	○	○	○	◐	◐	◐	○				○	◐
H																												
ISO		r	a_p	f																								
SF	**TPGT090202-SF**	0,2	0,05-2,00	0,05-0,15																						●		
	TPGT090204-SF	0,4	0,05-2,00	0,05-0,25														○						●		●		
	TPGT090208-SF	0,8	0,05-2,00	0,05-0,35																				●				
	TPGT110302-SF	0,2	0,05-2,00	0,05-0,15																				●		●		
Finition	**TPGT110304-SF**	0,4	0,05-2,00	0,05-0,25																				○		●		
	TPGT110308-SF	0,8	0,05-2,00	0,05-0,35																						●		

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

S***-STUPR/L	C***-STUPR/L	E***-STFPR/L
Kr: 93°	Kr: 93°	Kr: 90°
		
A351	A360	A362

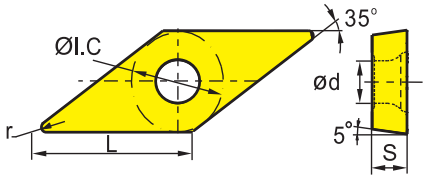
Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

VBMT	L	I.C	S	d
11 02	11	6.35	2.38	2.8
11 03	11	6.35	3.18	2.8
16 04	16.5	9.525	4.76	4.4

Plaquette positive VB**



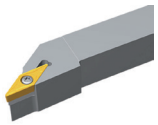
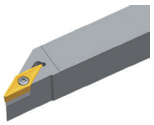
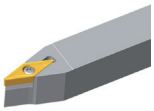
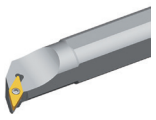
	ISO	r	a_p	f	HC¹ (CVD)										HC¹ (PVD)						HT		HC²	HW	
					YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
AHF	**VBMT160404-AHF**	0.4	0.2-3.0	0.05-0.30		●															●						
	VBMT160408-AHF	0.8	0.8-3.5	0.08-0.40		●															●						
Finition																											
EF	**VBMT110302-EF**	0.2	0.06-1.70	0.03-0.13																●							
	VBMT110304-EF	0.4	0.1-1.7	0.05-0.19							●									●							
	VBMT110308-EF	0.8	0.13-1.70	0.07-0.26							●									○							
	VBMT160404-EF	0.4	0.1-1.8	0.05-0.20							●									●							
Finition	**VBMT160408-EF**	0.8	0.14-1.80	0.07-0.27							●									●							
XF	**VBMT110202-XF**	0.2	0.5-2.0	0.08-0.20				○																			
	VBMT110204-XF	0.4	0.5-2.0	0.08-0.20	●																						
	VBMT110302-XF	0.2	0.5-2.0	0.08-0.20				○																			
	VBMT110304-XF	0.4	0.5-2.0	0.08-0.20	●																						
Finition	**VBMT160404-XF**	0.4	0.5-2.5	0.08-0.20	●																						
	VBMT160408-XF	0.8	0.5-2.5	0.08-0.25	●																						

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

SVJBR/L	SVABR/L	SVVBN	S***-SVQBR/L	S***-SVUBR/L	S***-SVXBR/L
Kr: 93°	Kr: 90°	Kr: 72°30'	Kr: 107°30'	Kr: 93°	Kr: 93°
					
A274	A275	A276	A345	A346	A347

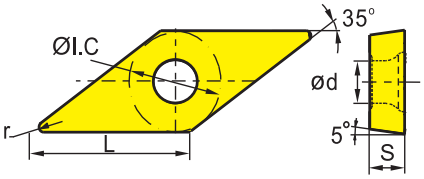
Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

VB**	L	I.C	S	d
11 02	11	6,35	2,38	2,8
16 04	16,5	9,525	4,76	4,4

Plaquette positive VB**



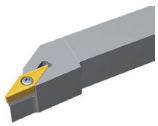
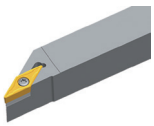
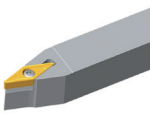
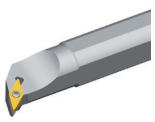
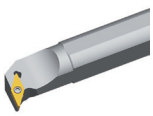
	HC¹ (CVD)	HC¹ (PVD)	HT	HC²	HW
P	● ● ● ◉ ◉ ◉	◉ ◉	● ◉	●	
M	○ ◉	○ ○ ◉ ◉ ◉ ○	○ ◉	○	
K	◉ ◉ ◉ ◉				
N		● ●			● ◉
S		○ ○ ◉ ◉ ◉ ○			○ ◉
H					

	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
HF	**VBMT110202-HF**	0,2	0,2-2,0	0,05-0,15																								
	VBMT110204-HF	0,4	0,2-2,0	0,05-0,35																						○		
	VBMT110208-HF	0,8	0,2-2,0	0,05-0,40																								
Finition																												
NF	**VBET160404-NF**	0,4	0,2-3,0	0,05-0,30														○	●									
	VBET160408-NF	0,8	0,2-3,0	0,08-0,40														○	●									
Finition																												

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

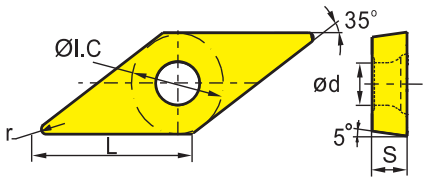
SVJBR/L	SVABR/L	SVVBN	S***-SVQBR/L	S***-SVUBR/L	S***-SVXBR/L
Kr: 93°	Kr: 90°	Kr: 72°30'	Kr: 107°30'	Kr: 93°	Kr: 93°
					
A274	A275	A276	A345	A346	A347

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

VBGT	L	I.C	S	d
11 03	11	6,35	3,18	2,8

Plaquette de tournage

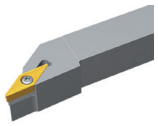
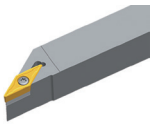
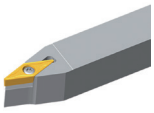


Plaquette positive VB**					HC¹ (CVD)										HC¹ (PVD)						HT		HC²	HW	
					P																				
					M																				
					K																				
					N																				
					S																				
					H																				
ISO		r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
SF	**VBGT110302-SF**	0,2	0,05-2,00	0,05-0,15																			○	○	●		
	VBGT110304-SF	0,4	0,05-2,00	0,05-0,20																				○	●		
Finition																											

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

SVJBR/L	SVABR/L	SVVBN	S***-SVXBR/L
Kr: 93°	Kr: 90°	Kr: 72°30'	Kr: 93°
			
A274	A275	A276	A347

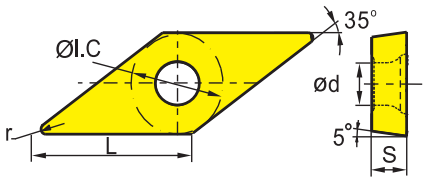
Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

VB**	L	I.C	S	d
11 03	11	6,35	3,18	2,8
16 04	16,5	9,525	4,76	4,4

Plaquette positive VB**



	HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YB5103	YNG151	YNT251	YNG151C	YD101	YD201
P	○	○	○	⊛	⊛	⊛										⊛	⊛			○	⊛	○		
M							○	⊛						○	○	⊛	⊛	⊛	○	○	⊛	○		
K									○	⊛	⊛	⊛												
N													○	○									○	⊛
S														○	○	⊛	⊛	⊛	○				○	⊛
H																								

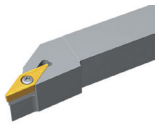
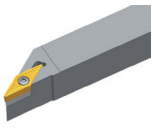
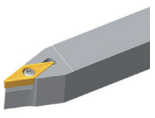
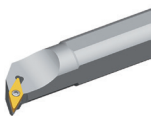
	ISO	r	a_p	f	HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
					YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YB5103	YNG151	YNT251	YNG151C	YD101	YD201
NGF	**VBET160408-NGF**	0,8	0,2-3,0	0,08-0,30														●								
	VBET160412-NGF	1,2	0,2-3,0	0,1-0,4														●								
Finition																										
EM	**VBMT110304-EM**	0,4	0,15-2,00	0,07-0,20							●								●								
	VBMT110308-EM	0,8	0,2-2,0	0,09-0,27			○				●								●								
	VBMT160404-EM	0,4	0,23-2,70	0,07-0,20							●								●								
Semi-finition	**VBMT160408-EM**	0,8	0,45-2,70	0,09-0,27							●								●								
HM	**VBMT160404-HM**	0,4	0,23-2,70	0,07-0,20			●		●		●		●														
	VBMT160408-HM	0,8	0,45-2,70	0,09-0,27			●		●		●	●	●		●											○	
Semi-finition	**VBMT160412-HM**	1,2	0,54-2,70	0,11-0,32			●		●																		
XM	**VBMT160404-XM**	0,4	1-2,5	0,15-0,25	●		○																				
	VBMT160408-XM	0,8	1-2,5	0,15-0,3	●		○																				
	VBMT160412-XM	1,2	1-2,5	0,15-0,35	●		○																				
Semi-finition																											

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

SVJBR/L	SVABR/L	SVVBN	S***-SVQBR/L	S***-SVUBR/L	S***-SVXBR/L
Kr: 93°	Kr: 90°	Kr: 72°30'	Kr: 107°30'	Kr: 93°	Kr: 93°
					
A274	A275	A276	A345	A346	A347

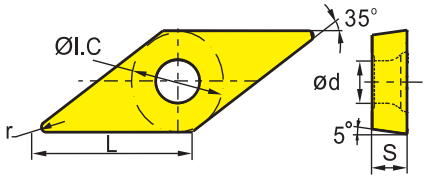
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Tournage général Plaquettes positives

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

VBMT	L	I.C	S	d
16 04	16,5	9,525	4,76	4,4



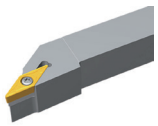
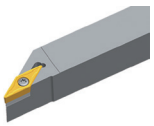
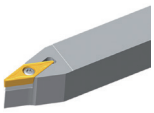
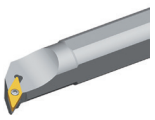
Plaquette positive VB**					HC¹ (CVD)											HC¹ (PVD)						HT		HC²	HW	
P					○	○	○	◉	◉	◉									◉	◉			○	◉	○		
M											○	◉				○	○	◉	◉	◉	◉	○	○	◉	○		
K													○	◉	◉	◉											
N																○	○									○	◉
S																○	○	◉	◉	◉	◉	○				○	◉
H																											
ISO		r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
HR	**VBMT160404-HR**	0,4	0,5-3,0	0,1-0,3			●		●																		
	VBMT160408-HR	0,8	0,9-3,6	0,11-0,32			○		●																		
	VBMT160412-HR	1,2	1,08-3,60	0,13-0,38			○		●																		
Ébauche																											
SNR	**VBMT160408-SNR**	0,8	0,5-4,0	0,1-0,3															●				○				
	VBMT160412-SNR	1,2	0,5-4,0	0,3-0,6															●			○	○				
Ébauche																											

● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

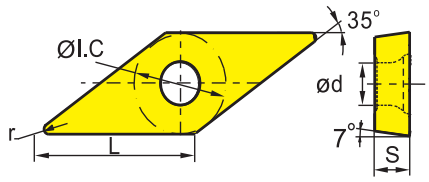
SVJBR/L	SVABR/L	SVVBN	S***-SVQBR/L	S***-SVUBR/L	S***-SVXBR/L
Kr: 93°	Kr: 90°	Kr: 72°30'	Kr: 107°30'	Kr: 93°	Kr: 93°
					
A274	A275	A276	A345	A346	A347

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

VCGT	L	I.C	S	d
11 03	11	6,35	3,18	2,8
16 04	16,5	9,525	4,76	4,4

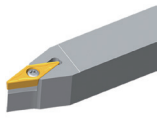
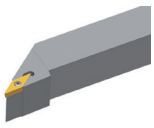
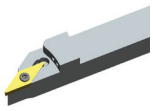
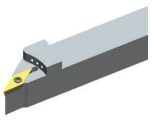
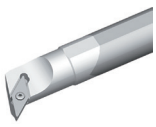


					HC¹ (CVD)											HC¹ (PVD)							HT		HC²	HW	
					YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
P					●	●	●	◍	◍	◍										◍	◍			◍	◍	●		
M											○	◍					○	○	◍	◍	◍	◍	○	○	◍	○		
K													◍	◍	◍	◍												
N																	●	●									◍	◍
S																	○	○	◍	◍	◍	◍	○				○	◍
H																												
ISO		r	a_p	f																								
HF	**VCGT110304-HF**	0,4	0,2-2,0	0,05-0,30															○									
Finition																												
NF	**VCGT160408-NF**	0,8	0,2-2,0	0,1-0,4															●									
Finition																												
SF	**VCGT110302-SF**	0,2	0,05-1,00	0,05-0,15																				●	●	●		
	VCGT110304-SF	0,4	0,05-1,00	0,05-0,25														○		●				●	○	●		
	VCGT160404-SF	0,4	0,05-1,50	0,05-0,25																						●		
Finition																												

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

SVVCN	SVJCR/L	SVACR/L-SC	SVJCR/L-SC	S***-SVQCR/L	S***-SVUCR/L	C***-SVQCR/L
Kr: 72°30'	Kr: 93°	Kr: 90°	Kr: 93°	Kr: 107°30'	Kr: 93°	Kr: 107°30'
						
A277	A278	A312	A313	A343	A344	A363

C***-SVUCR/L
Kr: 93°

A364

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

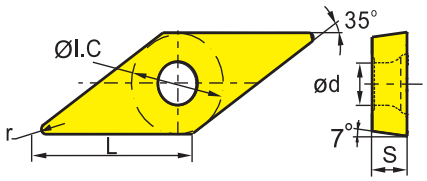
Tournage général Plaquettes positives

Plqs. tournage/fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

VCGX	L	I.C	S	d
11 03	11	6,35	3,18	2,8
16 04	16,6	9,525	4,76	4,4
22 05	22	12,7	5,56	5,5

Plaquette de tournage/fraisage VC**



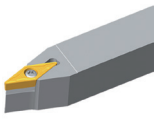
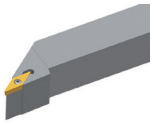
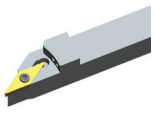
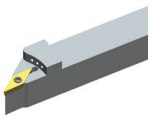
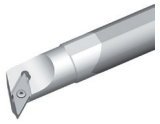
	ISO	r	a_p	f	HC¹ (CVD) YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	HC¹ (PVD) YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	HT YNG151	YNT251	HC² YNG151C	HW YD101	YD201
LC	**VCGX110301-LC**	0,1	0,3-3,0	0,05-0,10													●			●							●	
	VCGX110302-LC	0,2	0,3-3,0	0,05-0,15													●			○							●	
	VCGX110304-LC	0,4	0,5-3,0	0,1-0,3													●										●	
	VCGX110308-LC	0,8	1-3	0,1-0,5													●										●	
	VCGX160404-LC	0,4	0,5-5,0	0,1-0,3													●										●	
	VCGX160408-LC	0,8	0,5-5,0	0,15-0,60													●										●	
	VCGX160412-LC	1,2	0,5-5,0	0,15-0,80													○										●	
	VCGX220530-LC	3	0,5-7,0	0,25-1,00													●										○	●

Usinage aluminium

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Porte-outil

SVVCN	SVJCR/L	SVACR/L-SC	SVJCR/L-SC	S***-SVQCR/L	S***-SVUCR/L	C***-SVQCR/L
Kr: 72°30'	Kr: 93°	Kr: 90°	Kr: 93°	Kr: 107°30'	Kr: 93°	Kr: 107°30'
						
A277	A278	A312	A313	A343	A344	A363

C***-SVUCR/L
Kr: 93°

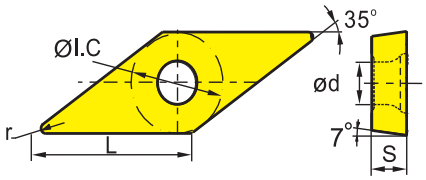
A364

Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

VCGX	L	I.C	S	d
11 02	11	6,35	2,38	2,8
11 03	11	6,35	3,18	2,8
16 04	16,6	9,525	4,76	4,4
22 05	22	12,7	5,56	5,5

Plqs. tournage/fraisage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquette de tournage/fraisage VC**		HC[1] (CVD)											HC[1] (PVD)							HT		HC[2]	HW	
	P																							
	M																							
	K																							
	N																							
	S																							
	H																							

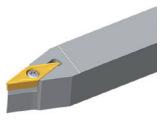
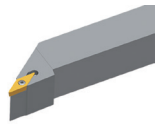
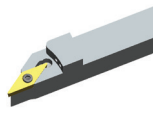
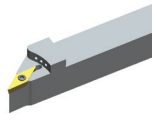
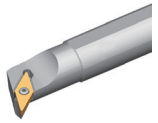
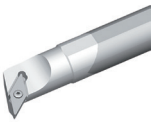
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LH	**VCGX110204-LH**	0,4	0,5-3,0	0,1-0,3														●									●	
	VCGX110301-LH	0,1	0,5-3,0	0,05-0,10																							●	●
	VCGX110302-LH	0,2	0,3-3,0	0,05-0,15														●									●	○
	VCGX110304-LH	0,4	0,5-3,0	0,1-0,3														●									●	○
	VCGX110308-LH	0,8	0,5-3,0	0,15-0,60														○									●	
	VCGX160402-LH	0,2	0,5-5,0	0,05-0,10														●									●	
	VCGX160404-LH	0,4	0,5-5,0	0,1-0,3														●									●	
	VCGX160408-LH	0,8	0,5-5,0	0,15-0,60														●									●	
	VCGX160412-LH	1,2	0,5-5,0	0,15-0,80														○									●	
	VCGX220530-LH	3	0,5-7,0	0,25-1,00														○									●	○

Usinage aluminium

● En stock ○ Sur demande

HC[1] Carbure revêtu
HT Cermet non revêtu
HC[2] Cermet revêtu
HW Carbure non revêtu

Porte-outil

SVVCN	SVJCR/L	SVACR/L-SC	SVJCR/L-SC	S***-SVQCR/L	S***-SVUCR/L	C***-SVQCR/L
Kr: 72°30'	Kr: 93°	Kr: 90°	Kr: 93°	Kr: 107°30'	Kr: 93°	Kr: 107°30'
						
A277	A278	A312	A313	A343	A344	A363

C***-SVUCR/L
Kr: 93°

A364

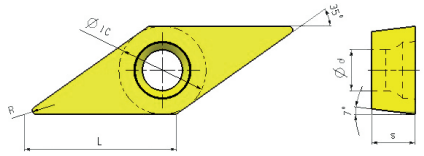
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Plaquette de tournage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

VCMT	L	I.C	S	d
11 03	11	6.35	3.18	2.8
16 04	16	9.525	4.76	4.4

Plaquette positive VC**



	HC¹ (CVD)											HC¹ (PVD)						HT		HC²	HW	
P	○	○	○	◉	◉	◉									◉	◉		○	◉	○		
M							○	◉				○	○	◉	◉	◉	○	○	◉	○		
K									○	◉	◉	◉										
N												○	○								○	◉
S												○	○	◉	◉	◉	○				○	◉
H																						

	ISO	r	a_p	f	YBC103	YB6315	YBC152	YBC203	YBC252	YBC352	YBM153	YBM253	YBD102	YB7315	YBD152	YBD152C	YBG101	YBG102	YBG105	YBG205	YB9320	YPD201	YBS103	YNG151	YNT251	YNG151C	YD101	YD201
XF	**VCMT110302-XF**	0.2	0.5-2.0	0.08-0.20				○																				
	VCMT110304-XF	0.4	0.5-2.0	0.08-0.20	●																							
	VCMT110308-XF	0.8	0.5-2.0	0.08-0.25	●																							
	VCMT160404-XF	0.4	0.5-2.5	0.08-0.20	●																							
Finition	**VCMT160408-XF**	0.8	0.5-2.5	0.08-0.25	●																							
EF	**VCMT160404-EF**	0.4	0.5-2.5	0.05-0.20																●								
Semi-finition																												
EM	**VCMT160404-EM**	0.4	0.5-2.5	0.05-0.35							○									●								
	VCMT160408-EM	0.8	0.5-2.5	0.10-0.45							○									●								
Semi-finition																												
XM	**VCMT160412-XM**	1.2	1-2.5	0.15-0.35	○			○																				
Semi-finition																												

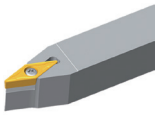
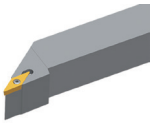
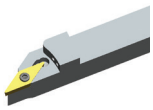
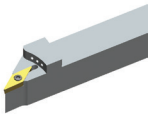
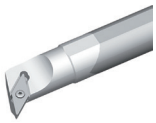
● En stock ○ Sur demande

YBC152F, YBC252F, YBM153F, YBM253F disponibles

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification A48 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil

SVVCN	SVJCR/L	SVACR/L-SC	SVJCR/L-SC	S***-SVQCR/L	S***-SVUCR/L	C***-SVQCR/L
Kr: 72°30'	Kr: 93°	Kr: 90°	Kr: 93°	Kr: 107°30'	Kr: 93°	Kr: 107°30'
						
A277	A278	A312	A313	A343	A344	A363

C***-SVUCR/L
Kr: 93°

A364

A Tournage
B Fraisage
C Perçage
D Informations techniques
E Index

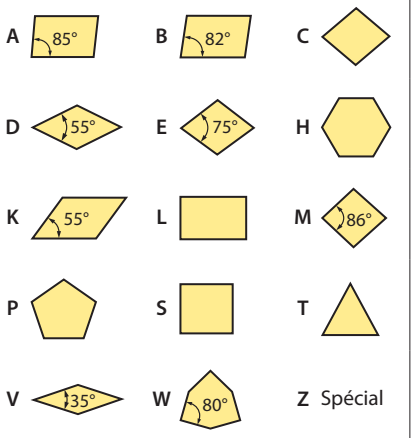
Codification A48 | Choix nuances A42 | Info. techniques A501 | Paramètres A366

Tournage général

Code ISO – plaquettes de coupe PCBN et PCD

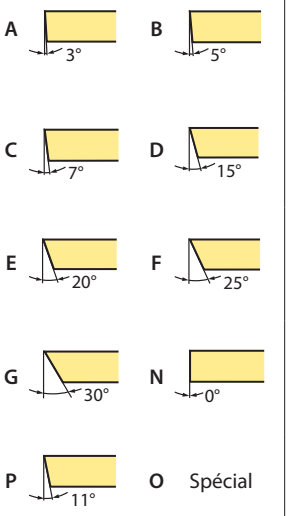
C	N	G	A	12	04	08	T	020	20	–	2	(W)
1	2	3	4	5	6	7	8	9	10		11	12

Forme de plaquette



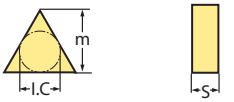
1

Angle de dépouille



2

Classe de tolérance

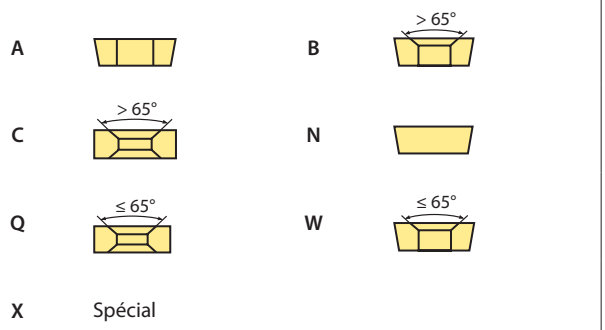


Code	I.C [mm]	m [mm]	S [mm]
A	±0,025	±0,005	±0,025
C	±0,025	±0,013	±0,025
E	±0,025	±0,025	±0,025
F	±0,013	±0,005	±0,025
G	±0,025	±0,025	±0,130
H	±0,013	±0,013	±0,025
J	±0,05–0,15	±0,005	±0,025
K	±0,05–0,15	±0,013	±0,025
L	±0,05–0,15	±0,025	±0,025
M	±0,05–0,15	±0,08–0,20	±0,130
N	±0,05–0,15	±0,08–0,20	±0,025
U	±0,08–0,25	±0,13–0,38	±0,130

3

Caractéristiques de fixation (métrique)

Forme de plaquette



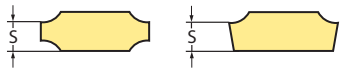
4

Longueur d'arête l [mm]

I.C [mm]	Forme de plaquette C	D	S	T	V	W
3,97				06		
5,0						
5,56				09		
6,0						
6,35	06	07		11	11	
8,0						
9,525	09	11	09	16	16	06
10,0						
12,0						
12,7	12	15	12	22	22	08
15,875	16		15	27		
16,0		19				
19,05	19		19	33		
20,0						
25,0	25	25				
25,4			25			
31,75						
32						

5

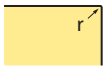
Epaisseur plaquette s [mm]



Code	S	Code	S
02	2,38	**06**	6,35
T2	2,58	**T6**	6,75
03	3,18	**07**	7,94
T3	3,97	**09**	9,52
04	4,76	**T9**	9,72
T4	4,96	**11**	11,11
05	5,56	**12**	12,70
T5	5,95		

6

Rayon de plaquette r [mm]



Code	r
00	–
02	0,2
04	0,4
08	0,8
12	1,2
16	1,6
20	2,0
24	2,4
32	3,2
X	Spécial
MO	Plaquette ronde métrique

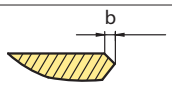
7

Version d'arête

Code	Arête de coupe	Forme de plaquette
E	Tonnélée	
F	Arête vive	
T	Chanfrein	
S	Chanfrein + Tonnelage	

8

Largeur du chanfrein b [mm]



Code	b
010	0,10
015	0,15
020	0,20
025	0,25
030	0,30
035	0,35
040	0,40
045	0,45
050	0,50
100	1,00
200	2,00

9

Angle du chanfrein α



Code	α
05	5°
10	10°
15	15°
20	20°
25	25°
30	30°

10

Nombre d'arêtes

Code	Forme
1	
2	
3	
4	

11

Code fabricant

Code	Description
W	Wiper
HS	Fullface (pas monobloc)
M	Bridage spécifique CBN
CB	Brise-copeau (CBN)
MED	Brise-copeau semi-finition à finition (PCD)
ROF	Brise-copeau ébauche (PCD)
L (L/R)	Arête complète à gauche ou à droite (PCD)

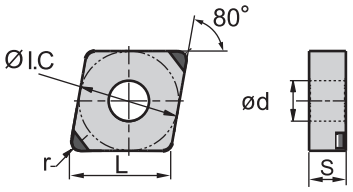
12

● Bonnes conditions d'usinage
◈ Conditions d'usinage normales
✺ Conditions d'usinage défavorables

CNGA	L	I.C	S	d
12 04	12,9	12,7	4,76	5,16

Plaquette de tournage (CBN)

Plaquette négative CN**



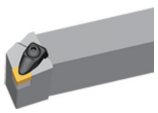
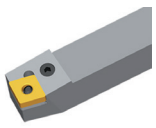
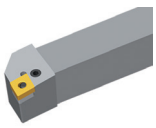
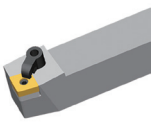
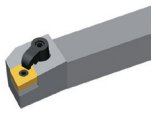
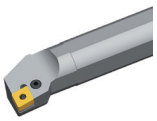
	BL (CBN)	BC (CBN)	BH (CBN)
P			
M			
K			●
N			
S	○ ◈		
H	○ ◈ ✺	○ ◈ ✺	

	ISO	r	a_p	f	YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215
	**CNGA120402S01020-2**	0,2	0,08-0,50	0,05-0,15			○			○		
	CNGA120402S01225-2	0,2	0,08-0,50	0,05-0,15		○			○			
	CNGA120404E-2	0,4	0,08-0,50	0,05-0,20	○			○				
	CNGA120404S01020-2	0,4	0,08-0,50	0,05-0,20			●			○		○
	CNGA120404S01225-2	0,4	0,08-0,50	0,05-0,20		●			○			
	CNGA120408E-2	0,8	0,08-0,50	0,05-0,25	○			○				
	CNGA120408S01525-2	0,8	0,08-0,50	0,05-0,25		●		●	●			
	CNGA120408S02020-2	0,8	0,08-0,50	0,05-0,25			●			●		
	CNGA120412E-2	1,2	0,08-0,50	0,05-0,30	○			○				
	CNGA120412S01020-2	1,2	0,08-0,50	0,05-0,30								●
	CNGA120412S01525-2	1,2	0,08-0,50	0,05-0,30		●		●	●			
	CNGA120412S02020-2	1,2	0,08-0,50	0,05-0,30			●			○		
	CNGA120416S01020-2	1,6	0,08-0,50	0,05-0,35								○
	CNGA120416S01525-2	1,6	0,08-0,50	0,05-0,35		○		○	○			
	CNGA120416S02020-2	1,6	0,08-0,50	0,05-0,35			○			○		
	**CNGA120408S01525-2W**	0,8	0,08-0,50	0,05-0,25		●		○	○			
	CNGA120408S02020-2W	0,8	0,08-0,50	0,05-0,25						○		

● En stock ○ Sur demande

BL Nuance à taux de CBN faible
BC CBN revêtu
BH Nuance à taux de CBN élevé

Porte-outil

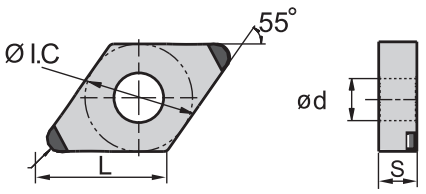
DCLNR/L	PCBNR/L	PCLNR/L	MCBNR/L	MCLNR/L	S***-PCLNR/L
Kr: 95°	Kr: 75°	Kr: 95°	Kr: 75°	Kr: 95°	Kr: 95°
					
A230	A237	A238	A252	A253	A324

Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (CBN)

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

DNGA	L	I.C	S	d
15 06	15,5	12,7	6,35	5,16



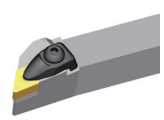
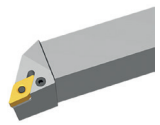
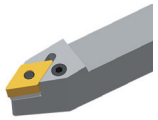
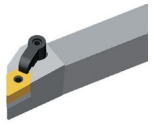
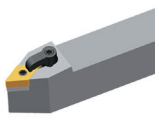
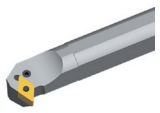
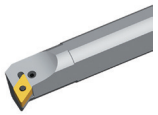
	BL (CBN)				BC (CBN)			BH (CBN)
P								
M								
K								○
N								
S	○			◎				
H		○	◎	◉	○	◎	◉	

	ISO	r	a_p	f	YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215
	**DNGA150604E-2**	0,4	0,08-0,50	0,05-0,20	○			○				
	DNGA150604S01020-2	0,4	0,08-0,50	0,05-0,20			○			○		○
	DNGA150604S01225-2	0,4	0,08-0,50	0,05-0,20		○		○	○			
	DNGA150608E-2	0,8	0,08-0,50	0,05-0,25	○			○				
	DNGA150608S01020-2	0,8	0,08-0,50	0,05-0,25								○
	DNGA150608S01525-2	0,8	0,08-0,50	0,05-0,25		●		●	●			
	DNGA150608S02020-2	0,8	0,08-0,50	0,05-0,25			●			●		
	DNGA150612S01020-2	1,2	0,08-0,50	0,05-0,30								○
	DNGA150612S01525-2	1,2	0,08-0,50	0,05-0,30		●		○	○			
	DNGA150612S02020-2	1,2	0,08-0,50	0,05-0,30			●			○		

● En stock ○ Sur demande

BL Nuance à taux de CBN faible
BC CBN revêtu
BH Nuance à taux de CBN élevé

Porte-outil

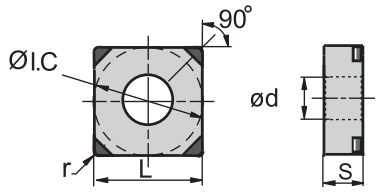
DDJNR/L	PDJNR/L	PDNNR/L	MDJNR/L	MDPNN	S***-PDSNR/L	S***-PDUNR/L
Kr: 93°	Kr: 93°	Kr: 63°	Kr: 93°	Kr: 62°30'	Kr: 62°30'	Kr: 93°
						
A231	A240	A241	A254	A255	A326	A327

Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

● Bonnes conditions d'usinage
⊛ Conditions d'usinage normales
✺ Conditions d'usinage défavorables

SNGA	L	I.C	S	d
12 04	12,7	12,7	4,76	5,16

Plaquette de tournage (CBN)

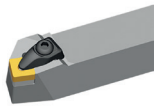
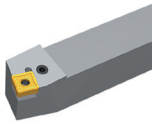
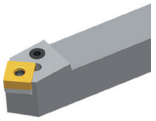
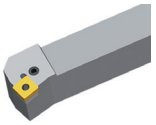
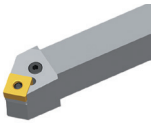
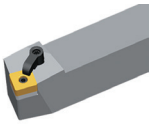
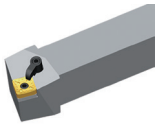


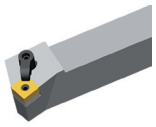
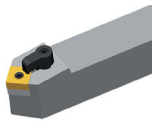
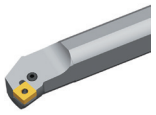
Plaquette négative SN**		r	a_p	f	BL (CBN) YCB112	BL (CBN) YCB113	BL (CBN) YCB121	BL (CBN) YCB131	BC (CBN) YCB113C	BC (CBN) YCB121C	BC (CBN) YCB131C	BH (CBN) YCB215
P												
M												
K												●
N												
S					●			⊛				
H						●	⊛	✺	●	⊛	✺	
ISO												
	**SNGA120408S01020-4**	0,8	0,08-0,50	0,05-0,25								○
	SNGA120408S01525-4	0,8	0,08-0,50	0,05-0,25		○		○	○			
	SNGA120408S02020-4	0,8	0,08-0,50	0,05-0,25			○			○		
	SNGA120412S01020-4	1,2	0,08-0,50	0,05-0,30								○
	SNGA120412S01525-4	1,2	0,08-0,50	0,05-0,30		○		○	○			
	SNGA120412S02020-4	1,2	0,08-0,50	0,05-0,30			○			○		

● En stock ○ Sur demande

BL Nuance à taux de CBN faible
BC CBN revêtu
BH Nuance à taux de CBN élevé

Porte-outil

DSBNR/L	**PSBNR/L**	**PSDNN**	**PSKNR/L**	**PSSNR/L**	**MSBNR/L**	**MSRNR/L**
Kr: 75°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°
						
A232	A242	A244	A245	A246	A256	A257

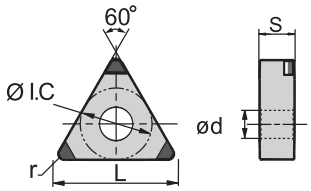
MSKNR/L	**MSDNN**	**S***-PSKNR/L**
Kr: 75°	Kr: 45°	Kr: 75°
		
A258	A259	A329

Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

TNGA	L	I.C	S	d
16 04	16,5	9,525	4,76	3,81

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

Plaquette de tournage (CBN)

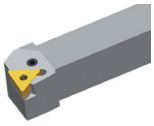
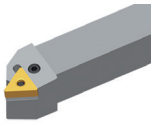
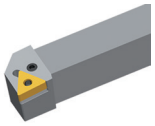
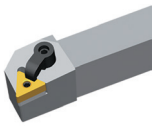
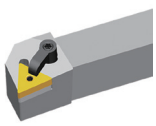
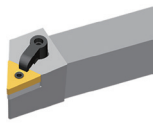


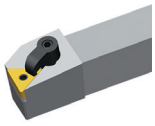
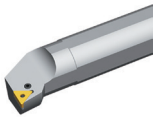
Plaquette négative TN**					BL (CBN)				BC (CBN)			BH (CBN)
					YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215
P												
M												
K												●
N												
S					○			◌				
H						○	◌	◌	○	◌	◌	
ISO		r	a_p	f								
	**TNGA160404S01020-3**	0,4	0,08-0,50	0,05-0,20			○			○		○
	TNGA160404S01225-3	0,4	0,08-0,50	0,05-0,20		○			○			
	TNGA160408S01020-3	0,8	0,08-0,50	0,05-0,25								○
	TNGA160408S01525-3	0,8	0,08-0,50	0,05-0,25		○		○	○			
	TNGA160408S02020-3	0,8	0,08-0,50	0,05-0,25			●			○		
	TNGA160412S01020-3	1,2	0,08-0,50	0,05-0,30								○
	TNGA160412S01525-3	1,2	0,08-0,50	0,05-0,30		○		○	○			
	TNGA160412S02020-3	1,2	0,08-0,50	0,05-0,30			○			○		

● En stock ○ Sur demande

BL Nuance à taux de CBN faible
BC CBN revêtu
BH Nuance à taux de CBN élevé

Porte-outil

DTGNR/L	PTFNR/L	PTTNR/L	PTGNR/L	MTGNR/L	MTJNR/L	MTJNR/L-Z
Kr: 91°	Kr: 91°	Kr: 60°	Kr: 90°	Kr: 90°	Kr: 93°	Kr: 93°
						
A233	A247	A248	A249	A260	A261	A262

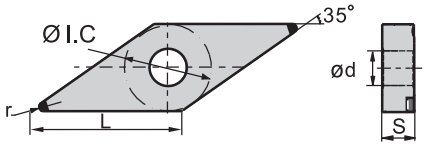
MTFNR/L	S***-PTFNR/L
Kr: 91°	Kr: 90°
	
A263	A330

Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (CBN)

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

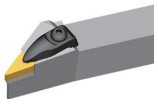
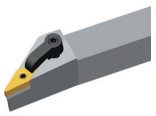
VNGA	L	I.C	S	d
16 04	16,6	9,525	4,76	3,81

Plaquette négative VN**					BL (CBN)				BC (CBN)			BH (CBN)
												
				P								
				M								
				K								○
				N								
				S	○			◉				
				H		○	◉	◉	○	◉	◉	
	ISO		r	a_p	f	YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215
	**VNGA160404S01020-2**		0,4	0,08-0,50	0,05-0,20			●			○		○
	VNGA160404S01225-2		0,4	0,08-0,50	0,05-0,20		●			○			
	VNGA160408S01020-2		0,8	0,08-0,50	0,05-0,25								○
	VNGA160408S01525-2		0,8	0,08-0,50	0,05-0,25		●			○			
	VNGA160408S02020-2		0,8	0,08-0,50	0,05-0,25			●			○		

● En stock ○ Sur demande

BL Nuance à taux de CBN faible
BC CBN revêtu
BH Nuance à taux de CBN élevé

Porte-outil

DVVNN	DVJNR/L	MVVNN	MVJNR/L
Kr: 72°30'	Kr: 93°	Kr: 72°30'	Kr: 93°
			
A234	A235	A264	A265

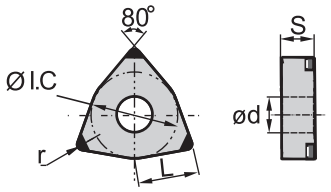
Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

WNGA	L	I.C	S	d
08 04	8,69	12,7	4,76	5,16

Plaquette de tournage (CBN)

Plaquette négative WN**



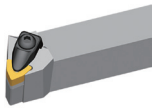
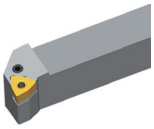
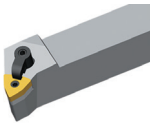
	BL (CBN)				BC (CBN)			BH (CBN)
P								
M								
K								●
N								
S	○			◈				
H		○	◈	❋	○	◈	❋	

ISO	r	a_p	f	YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215
WNGA080404S01020-3	0,4	0,08-0,50	0,05-0,20			○			○		○
WNGA080404S01225-3	0,4	0,08-0,50	0,05-0,20		○			○			
WNGA080408S01020-3	0,8	0,08-0,50	0,05-0,25								○
WNGA080408S01525-3	0,8	0,08-0,50	0,05-0,25		○			○			
WNGA080408S02020-3	0,8	0,08-0,50	0,05-0,25			○			○		
WNGA080412S01020-3	1,2	0,08-0,50	0,05-0,30								○
WNGA080412S01525-3	1,2	0,08-0,50	0,05-0,30		○		○	○			
WNGA080412S02020-3	1,2	0,08-0,50	0,05-0,30			○			○		

● En stock ○ Sur demande

BL Nuance à taux de CBN faible
BC CBN revêtu
BH Nuance à taux de CBN élevé

Porte-outil

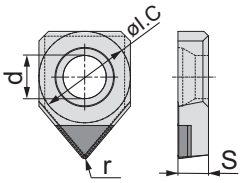
DWLNR/L	PWLNR/L	MWLNR/L	S***-PWLNR/L
Kr: 95°	Kr: 95°	Kr: 95°	Kr: 95°
			
A236	A251	A266	A332

Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

ZNEX	I.C	S	d
04 01	4,76	1,59	2,3

Plaquette de tournage (CBN)

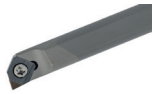


Plaquette négative ZN**					BL (CBN)				BC (CBN)			BH (CBN)
					YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215
	ZNEX040102S01515	0,2	0,08-0,50	0,05-0,15		○	○					
	ZNEX040104S01515	0,4	0,08-0,50	0,05-0,20		○	○					

● En stock ○ Sur demande

BL Nuance à taux de CBN faible
BC CBN revêtu
BH Nuance à taux de CBN élevé

Porte-outil
SZLNR/L
Kr: 95°



A365

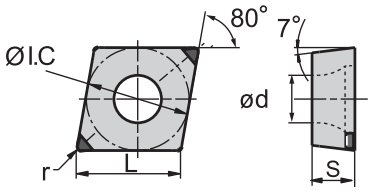
Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (CBN)

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

CCGW	L	I.C	S	d
06 02	6,4	6,35	2,38	2,8
09 T3	9,7	9,525	3,97	4,4
12 04	12,9	12,7	4,76	5,5

Plaquette positive CC**



	BL (CBN)	BC (CBN)	BH (CBN)
P			
M			
K			○
N			
S	○	◔	
H	○ ◔ ◔ ◔	○ ◔ ◔	

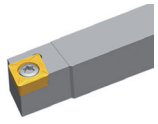
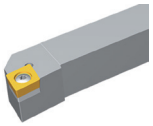
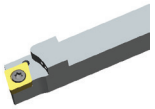
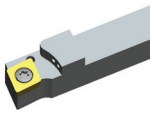
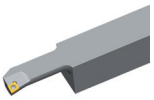
	ISO	r	a_p	f	YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215
	CCGW060202S01020-2	0,2	0,08-0,50	0,05-0,20			○			○		○
	CCGW060202S01225-2	0,2	0,08-0,50	0,05-0,200,05-0,15		○			○			
	CCGW060204S01020-2	0,4	0,08-0,50	0,05-0,20			○			○		○
	CCGW060204S01225-2	0,4	0,08-0,50	0,05-0,20		○			○			
	CCGW060208S01020-2	0,8	0,08-0,50	0,05-0,25								○
	CCGW060208S01525-2	0,8	0,08-0,50	0,05-0,25		○			○			
	CCGW060208S02020-2	0,8	0,08-0,50	0,05-0,25			○			○		
	CCGW09T302S01020-2	0,2	0,08-0,50	0,05-0,15			○			○		○
	CCGW09T302S01225-2	0,2	0,08-0,50	0,05-0,15		○			○			
	CCGW09T304E-2	0,4	0,08-0,50	0,05-0,20	○			○				
	CCGW09T304S01020-2	0,4	0,08-0,50	0,05-0,20			●			○		○
	**CCGW09T304S01225-2**	0,4	0,08-0,50	0,05-0,20		●			○			
	CCGW09T308E-2	0,8	0,08-0,50	0,05-0,25	○			○				
	CCGW09T308S01020-2	0,8	0,08-0,50	0,05-0,25								●
	CCGW09T308S01525-2	0,8	0,08-0,50	0,05-0,25		●		○	○			
	CCGW09T308S02020-2	0,8	0,08-0,50	0,05-0,25			●			●		
	CCGW09T312E-2	1,2	0,08-0,50	0,05-0,30	○			○				
	CCGW120404S01020-2	0,4	0,08-0,50	0,05-0,20			○			○		○
	CCGW120404S01225-2	0,4	0,08-0,50	0,05-0,20		○			○			
	CCGW120408S01020-2	0,8	0,08-0,50	0,05-0,25								○
	CCGW120408S01525-2	0,8	0,08-0,50	0,05-0,25		○		○	○			
	CCGW120408S02020-2	0,8	0,08-0,50	0,05-0,25			○			○		
	CCGW120412S01020-2	1,2	0,08-0,50	0,05-0,30								○
	CCGW120412S01525-2	1,2	0,08-0,50	0,05-0,30		○		○	○			
	CCGW120412S02020-2	1,2	0,08-0,50	0,05-0,30			○			○		

● En stock ○ Sur demande

BL Nuance à taux de CBN faible
BC CBN revêtu
BH Nuance à taux de CBN élevé

Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil

SCACR/L	SCLCR/L	SCACR/L-SC	SCLCR/L-SC	A***-SCLCR/L	S***-SCFCR/L	S***-SCLCR
Kr: 90°	Kr: 95°	Kr: 90°	Kr: 95°	Kr: 95°	Kr: 90°	Kr: 95°
						
A269	A270	A306	A307	A334	A352	A353

E***-SCLCR/L
Kr: 95°

A355

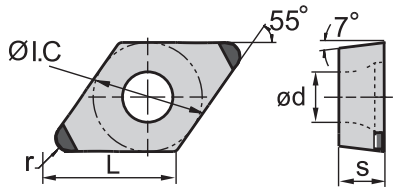
Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (CBN)

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

DCGW	L	I.C	S	d
07 02	7,8	6,35	2,38	2,8
11 T3	11,6	9,525	3,97	4,4

Plaquette positive DC**



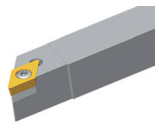
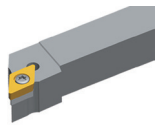
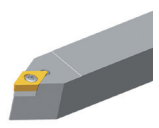
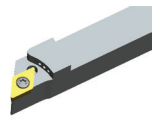
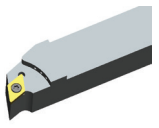
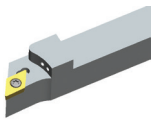
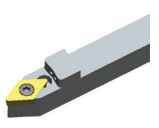
	BL (CBN)	BC (CBN)	BH (CBN)
P			
M			
K			○
N			
S	○	◉	
H	○ ◉ ◉	○ ◉ ◉	

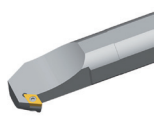
ISO	r	a_p	f	YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215
DCGW070202S01020-2	0,2	0,08-0,50	0,05-0,15			●			○		
DCGW070202S01225-2	0,2	0,08-0,50	0,05-0,15		○			○			
DCGW070204S01020-2	0,4	0,08-0,50	0,05-0,20			●			○		○
DCGW070204S01225-2	0,4	0,08-0,50	0,05-0,20		●			○			
DCGW070208S01020-2	0,8	0,08-0,50	0,05-0,25								○
DCGW070208S01525-2	0,8	0,08-0,50	0,05-0,25		●			○			
DCGW070208S02020-2	0,8	0,08-0,50	0,05-0,25			●			○		
DCGW11T302S01020-2	0,2	0,08-0,50	0,05-0,15			○			○		○
DCGW11T302S01225-2	0,2	0,08-0,50	0,05-0,15		○			○			
DCGW11T304E-2	0,4	0,08-0,50	0,05-0,20	○			○				
DCGW11T304S01020-2	0,4	0,08-0,50	0,05-0,20			●			○		●
DCGW11T304S01225-2	0,4	0,08-0,50	0,05-0,20		●			○			
DCGW11T308E-2	0,8	0,08-0,50	0,05-0,25	○			○				
DCGW11T308S01020-2	0,8	0,08-0,50	0,05-0,25								●
DCGW11T308S01525-2	0,8	0,08-0,50	0,05-0,25		●		○	●			
DCGW11T308S02020-2	0,8	0,08-0,50	0,05-0,25			●			●		
DCGW11T312E-2	1,2	0,08-0,50	0,05-0,30	○			○				

● En stock ○ Sur demande

BL Nuance à taux de CBN faible
BC CBN revêtu
BH Nuance à taux de CBN élevé

Porte-outil

SDACR/L	SDJCR/L	SDNCN	SDACR/L-SC	SDHCR/L-SC	SDJCR/L-SC	SDNCN-SC
Kr: 90°	Kr: 93°	Kr: 62°30'	Kr: 90°	Kr: 107°30'	Kr: 93°	Kr: 62°30'
						
A271	A272	A273	A308	A309	A310	A311

S***-SDQCR/L	A***-SDUCR/L	S***-SDZCR/L	E***-SDQCR/L
Kr: 107°30'	Kr: 93°	Kr: 85°	Kr: 107°30'
			
A336	A337	A338	A357

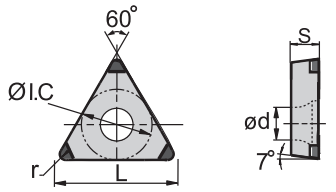
Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (CBN)

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

TCGW	L	I.C	S	d
11 02	11	6,35	2,38	2,5
16 T3	16,5	9,525	3,97	4,4

Plaquette positive TC**



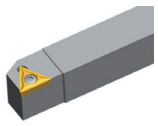
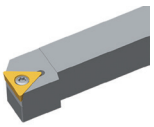
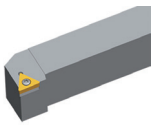
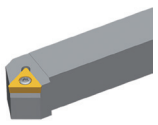
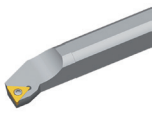
	BL (CBN)	BC (CBN)	BH (CBN)
P			
M			
K			●
N			
S	○		
H	○ ❁ ❁	○ ❁ ❁	

	ISO	r	a_p	f	YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215
	**TCGW110204S01020-3**	0,4	0,08-0,50	0,05-0,20			○			○		○
	TCGW110204S01225-3	0,4	0,08-0,50	0,05-0,20		○			○			
	TCGW110208S01020-3	0,8	0,08-0,50	0,05-0,25								○
	TCGW110208S01525-3	0,8	0,08-0,50	0,05-0,25		○			○			
	TCGW110208S02020-3	0,8	0,08-0,50	0,05-0,25			○			○		
	TCGW16T304S01020-3	0,4	0,08-0,50	0,05-0,20			●			○		○
	TCGW16T304S01225-3	0,4	0,08-0,50	0,05-0,20		●			○			
	TCGW16T308S01020-3	0,8	0,08-0,50	0,05-0,25								○
	TCGW16T308S01525-3	0,8	0,08-0,50	0,05-0,25		●			○			
	TCGW16T308S02020-3	0,8	0,08-0,50	0,05-0,25			●			○		

● En stock ○ Sur demande

BL Nuance à taux de CBN faible
BC CBN revêtu
BH Nuance à taux de CBN élevé

Porte-outil

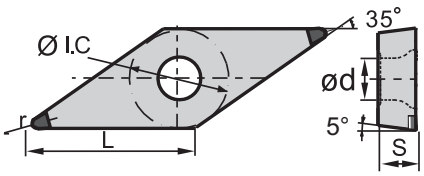
STACR/L	STFCR/L	STGCR/L	STTCR/L	S***-STFCR/L	E***-STFCR/L
Kr: 90°	Kr: 91°	Kr: 91°	Kr: 60°	Kr: 91°	Kr: 90°
					
A283	A284	A285	A286	A341	A361

Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (CBN)

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

VBGW	L	I.C	S	d
16 04	16,6	9,525	4,76	4,4



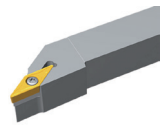
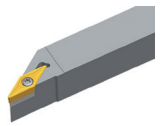
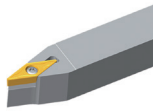
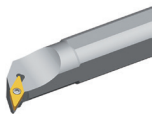
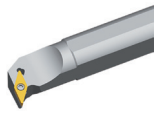
	BL (CBN)	BC (CBN)	BH (CBN)
P			
M			
K			○
N			
S	○	⊛	
H	○ ⊛ ⊛ ⊛	○ ⊛ ⊛	

	ISO	r	a_p	f	YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215
	**VBGW160404S01020-2**	0,4	0,08-0,50	0,05-0,20			●			○		○
	VBGW160404S01225-2	0,4	0,08-0,50	0,05-0,20		●			○			
	VBGW160408S01020-2	0,8	0,08-0,50	0,05-0,25								○
	VBGW160408S01525-2	0,8	0,08-0,50	0,05-0,25		●			○			
	VBGW160408S02020-2	0,8	0,08-0,50	0,05-0,25			●			○		

● En stock ○ Sur demande

BL Nuance à taux de CBN faible
BC CBN revêtu
BH Nuance à taux de CBN élevé

Porte-outil

SVJBR/L	SVABR/L	SVVBN	S***-SVQBR/L	S***-SVUBR/L	S***-SVXBR/L
Kr: 93°	Kr: 90°	Kr: 72°30'	Kr: 107°30'	Kr: 93°	Kr: 93°
					
A274	A275	A276	A345	A346	A347

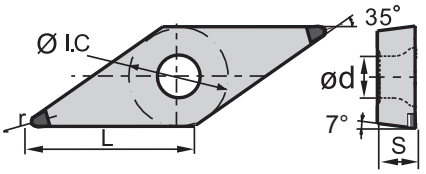
Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (CBN)

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

VCGW	L	I.C	S	d
11 03	11,1	6,35	3,18	2,8
16 04	16,6	9,525	4,76	4,4

Plaquette positive VC**



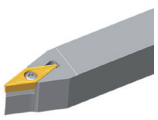
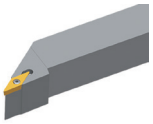
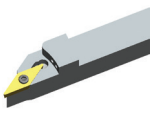
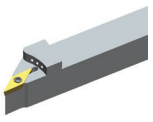
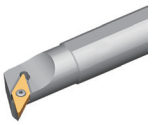
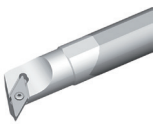
	BL (CBN)	BC (CBN)	BH (CBN)
P			
M			
K			●
N			
S	○ ❁		
H	○ ❁ ❁	○ ❁ ❁	

ISO	r	a_p	f	YCB112	YCB113	YCB121	YCB131	YCB113C	YCB121C	YCB131C	YCB215
VCGW110302E-2	0,2	0,08-0,50	0,05-0,15	○			○				
VCGW110304E-2	0,4	0,08-0,50	0,05-0,20	○			○				
VCGW160404E-2	0,4	0,08-0,50	0,05-0,20	○			○				
VCGW160404S01020-2	0,4	0,08-0,50	0,05-0,20			●			○		○
VCGW160404S01225-2	0,4	0,08-0,50	0,05-0,20		●			○			
VCGW160408E-2	0,8	0,08-0,50	0,05-0,25	○			○				
VCGW160408S01020-2	0,8	0,08-0,50	0,05-0,25								○
VCGW160408S01525-2	0,8	0,08-0,50	0,05-0,25		●			○			
VCGW160408S02020-2	0,8	0,08-0,50	0,05-0,25			●			○		
VCGW160412E-2	1,2	0,08-0,50	0,05-0,30	○			○				

● En stock ○ Sur demande

BL Nuance à taux de CBN faible
BC CBN revêtu
BH Nuance à taux de CBN élevé

Porte-outil

SVVCN	SVJCR/L	SVACR/L-SC	SVJCR/L-SC	S***-SVQCR/L	S***-SVUCR/L	C***-SVQCR/L
Kr: 72°30'	Kr: 93°	Kr: 90°	Kr: 93°	Kr: 107°30'	Kr: 93°	Kr: 107°30'
						
A277	A278	A312	A313	A343	A344	A363

C***-SVUCR/L
Kr: 93°

A364

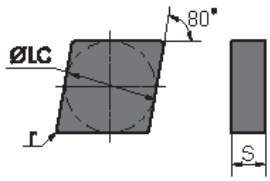
Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (CBN)

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

CNGN	L	I.C	S
09 03	9,7	9,525	3,18
12 04	12,9	12,7	4,76

Plaquette négative CN**



	BL (CBN)	BC (CBN)	BH (CBN)
P			
M			
K			⊛
N			
S			
H	⊛	⊛	

	ISO	r	a_p	f	YZB630	YZB630C	YZB223
	**CNGN090308S01525**	0,8	0,5-2,0	0,3-0,5	○	○	
	CNGN090308T01525	0,8	0,5-2,0	0,3-0,5			○
	CNGN090312S01525	1,2	0,5-2,0	0,3-0,5	○	○	
	CNGN090312T01525	1,2	0,5-2,0	0,3-0,5			○
	CNGN120408S01525	0,8	0,5-2,0	0,3-0,5	○	○	
	CNGN120408T01525	0,8	0,5-2,0	0,3-0,5			●
	CNGN120412S01525	1,2	0,5-2,0	0,3-0,5	●	○	
	CNGN120412T01525	1,2	0,5-2,0	0,3-0,5			●
	CNGN120416S01525	1,6	0,5-2,0	0,3-0,5	○	○	
	**CNGN120408T01525-M**	0,8	0,5-2,0	0,3-0,5			○
	CNGN120412T01525-M	1,2	0,5-2,0	0,3-0,5			○
	CNGN120416T01525-M	1,6	0,5-2,0	0,3-0,5			○

● En stock ○ Sur demande

BL Nuance à taux de CBN faible
BC CBN revêtu
BH Nuance à taux de CBN élevé

Porte-outil
CCLNR/L
Kr: 95°



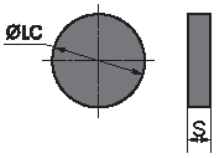
A292

Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

RNGN	I.C	S
09 03	9,525	3,18
12 04	12,7	4,76

Plaquette de tournage (CBN)

Plaquette négative RN**				BL (CBN)	BC (CBN)	BH (CBN)
			P			
			M			
			K			⊛
			N			
			S			
			H	⊛	⊛	
ISO		a_p	f	YZB630	YZB630C	YZB223
	**RNGN090300S01525**	0,5-2,0	0,3-0,5	○	○	
	RNGN090300T01525	0,5-2,0	0,3-0,5			○
	RNGN120400S01525	0,5-2,0	0,3-0,5	○	○	
	RNGN120400T01525	0,5-2,0	0,3-0,5			●

● En stock ○ Sur demande

BL Nuance à taux de CBN faible
BC CBN revêtu
BH Nuance à taux de CBN élevé

Porte-outil
CRDNN



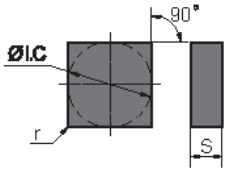
A298

Codification > A158 Choix nuances > A42 Info. techniques > A501 Paramètres > A366

Plaquette de tournage (CBN)

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

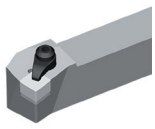
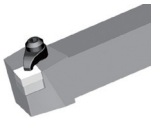
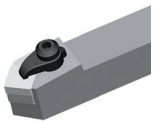
SNGN	L	I.C	S
12 04	12,7	12,7	4,76

Plaquette négative SN**					BL (CBN)	BC (CBN)	BH (CBN)
				P			
				M			
				K			⊛
				N			
				S			
				H	⊛	⊛	
ISO		r	a_p	f	YZB630	YZB630C	YZB223
	**SNGN120408S01525**	0,8	0,5-2,0	0,3-0,5	○	○	
	SNGN120408T01525	0,8	0,5-2,0	0,3-0,5			●
	SNGN120412S01525	1,2	0,5-2,0	0,3-0,5	○	○	
	SNGN120412T01525	1,2	0,5-2,0	0,3-0,5			○
	SNGN120416T01525	1,6	0,5-2,0	0,3-0,5			●
	**SNGN120412T01525-M**	1,2	0,5-2,0	0,3-0,5			○
	SNGN120416T01525-M	1,6	0,5-2,0	0,3-0,5			●

● En stock ○ Sur demande

BL Nuance à taux de CBN faible
BC CBN revêtu
BH Nuance à taux de CBN élevé

Porte-outil

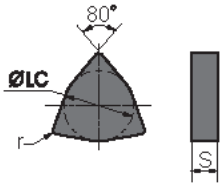
CSKNR/L	CSRNR/L	CSDNN
Kr: 75°	Kr: 75°	Kr: 45°
		
A296	A297	A299

Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

WNGN	L	I.C	S
08 04	8,69	12,7	4,76

Plaquette de tournage (CBN)

Plaquette négative WN**						BL (CBN)	BC (CBN)	BH (CBN)
					P			
					M			
					K			○
					N			
					S			
					H	⊛	⊛	
	ISO	r	a_p	f		YZB630	YZB630C	YZB223
	**WNGN080408T01525**	0,8	0,5-2,0	0,3-0,5				○
	WNGN080412T01525	1,2	0,5-2,0	0,3-0,5				○
	WNGN080416T01525	1,6	0,5-2,0	0,3-0,5				○
	**WNGN080408T01525-M**	0,8	0,5-2,0	0,3-0,5				○
	WNGN080412T01525-M	1,2	0,5-2,0	0,3-0,5				○
	WNGN080416T01525-M	1,6	0,5-2,0	0,3-0,5				○

● En stock ○ Sur demande

BL Nuance à taux de CBN faible
BC CBN revêtu
BH Nuance à taux de CBN élevé

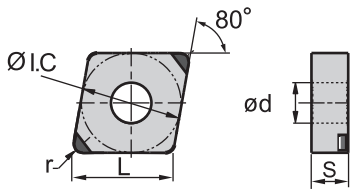
Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (PCD)

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

CNGA	L	I.C	S	d
12 04	12,9	12,7	4,76	5,16

Plaquette négative CN**



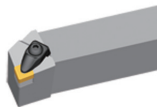
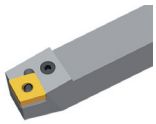
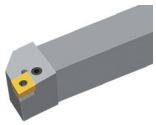
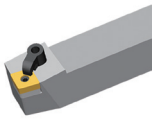
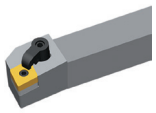
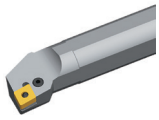
					DP
					YCD421
	ISO	r	a_p	f	
	CNGA120402F-1	0,2	0,08-0,50	0,05-0,15	○
	CNGA120404F-1	0,4	0,08-0,50	0,05-0,20	○
	CNGA120408F-1	0,8	0,08-0,50	0,05-0,25	○
	CNGA120412F-1	1,2	0,08-0,50	0,05-0,30	○

P M K N S H

● En stock ○ Sur demande

DP Diamant polycristallin

Porte-outil

DCLNR/L	PCBNR/L	PCLNR/L	MCBNR/L	MCLNR/L	S***-PCLNR/L
Kr: 95°	Kr: 75°	Kr: 95°	Kr: 75°	Kr: 95°	Kr: 95°
					
A230	A237	A238	A252	A253	A324

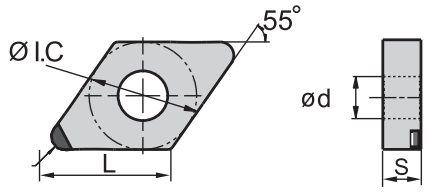
Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

DNGA	L	I.C	S	d
15 06	15,5	12,7	6,35	5,16

Plaquette de tournage (PCD)

Plaquette négative DN**

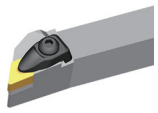
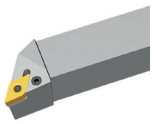
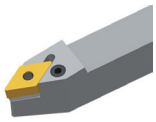
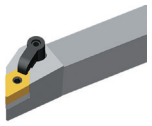
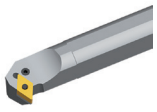
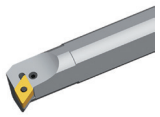


		ISO	r	a_p	f	DP YCD421
P						
M						
K						
N						○
S						
H						
		**DNGA150602F-1**	0,2	0,08-0,50	0,05-0,15	○
		DNGA150604F-1	0,4	0,08-0,50	0,05-0,20	○
		DNGA150608F-1	0,8	0,08-0,50	0,05-0,25	○

● En stock ○ Sur demande

DP Diamant polycristallin

Porte-outil

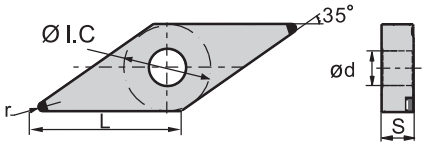
DDJNR/L	PDJNR/L	PDNNR/L	MDJNR/L	MDPNN	S***-PDSNR/L	S***-PDUNR/L
Kr: 93°	Kr: 93°	Kr: 63°	Kr: 93°	Kr: 62°30'	Kr: 62°30'	Kr: 93°
						
A231	A240	A241	A254	A255	A326	A327

Plaquette de tournage (PCD)

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

VNGA	L	I.C	S	d
16 04	16,6	9,525	4,76	3,81

Plaquette négative VN**



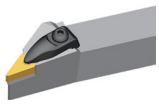
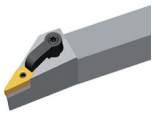
	DP
P	
M	
K	
N	○
S	
H	

	ISO	r	a_p	f	YCD421
	**VNGA160402F-1**	0,2	0,08-0,50	0,05-0,15	○
	VNGA160404F-1	0,4	0,08-0,50	0,05-0,20	○

● En stock ○ Sur demande

DP Diamant polycristallin

Porte-outil

DVVNN	DVJNR/L	MVVNN	MVJNR/L
Kr: 72°30'	Kr: 93°	Kr: 72°30'	Kr: 93°
			
A234	A235	A264	A265

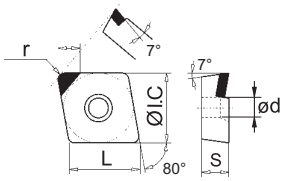
Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (PCD)

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

CCGT	L	I.C	S	d
06 02	6,4	6,35	2,38	2,8
09 T3	9,7	9,525	3,97	4,4
12 04	12,9	12,7	4,76	5,56

Plaquette positive CC**



DP

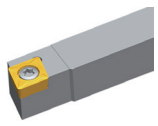
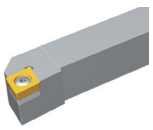
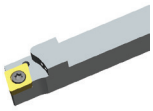
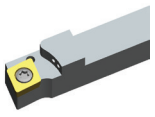
P
M
K
N ○
S
H

	ISO	r	a_p	f	YCD421
	**CCGT060202F-1**	0,2	0,05-0,50	0,05-0,15	○
	CCGT060204F-1	0,4	0,08-0,50	0,05-0,20	●
	CCGT060208F-1	0,8	0,08-0,50	0,05-0,25	○
	CCGT09T302F-1	0,2	0,08-0,50	0,05-0,15	○
	CCGT09T304F-1	0,4	0,08-0,50	0,05-0,20	○
	CCGT09T308F-1	0,8	0,08-0,50	0,05-0,25	○
	CCGT120402F-1	0,2	0,08-0,50	0,05-0,15	○
	CCGT120404F-1	0,4	0,08-0,50	0,05-0,20	○
	CCGT120408F-1	0,8	0,08-0,50	0,05-0,25	○
	**CCGT060204F-1MED**	0,4	0,08-0,50	0,05-0,20	○
	CCGT060208F-1MED	0,8	0,08-0,50	0,05-0,25	○
	CCGT09T302F-1MED	0,2	0,08-0,50	0,05-0,15	○
	CCGT09T304F-1MED	0,4	0,08-0,50	0,05-0,20	○
	CCGT09T308F-1MED	0,8	0,08-0,50	0,05-0,25	○

● En stock ○ Sur demande

DP Diamant polycristallin

Porte-outil

SCACR/L	SCLCR/L	SCACR/L-SC	SCLCR/L-SC	A***-SCLCR/L	S***-SCFCR/L	S***-SCLCR
Kr: 90°	Kr: 95°	Kr: 90°	Kr: 95°	Kr: 95°	Kr: 90°	Kr: 95°
						
A269	A270	A306	A307	A334	A352	A353

E***-SCLCR/L
Kr: 95°

A355

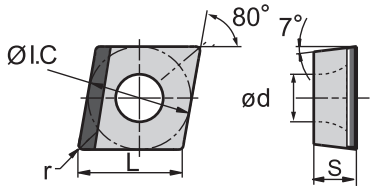
Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (PCD)

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

CCGT	L	I.C	S	d
09 T3	9,7	9,525	3,97	4,4
12 04	12,9	12,7	4,76	5,56

Plaquette positive CC**



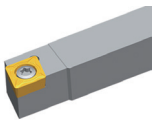
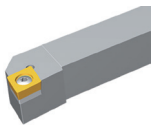
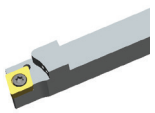
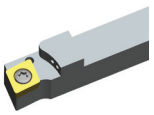
	DP
P	
M	
K	
N	○
S	
H	

	ISO	r	a_p	f	YCD421
	**CCGT09T308-LL**	0,8	0,08-0,50	0,05-0,25	○
	CCGT09T308-LR	0,8	0,08-0,50	0,05-0,25	○
	CCGT120404-LL	0,4	0,08-0,50	0,05-0,20	○
	CCGT120404-LR	0,4	0,08-0,50	0,05-0,20	○
	CCGT120408-LL	0,8	0,08-0,50	0,05-0,25	○
	CCGT120408-LR	0,8	0,08-0,50	0,05-0,25	○

● En stock ○ Sur demande

DP Diamant polycristallin

Porte-outil

SCACR/L	**SCLCR/L**	**SCACR/L-SC**	**SCLCR/L-SC**	**A***-SCLCR/L**	**S***-SCFCR/L**	**S***-SCLCR**
Kr: 90°	Kr: 95°	Kr: 90°	Kr: 95°	Kr: 95°	Kr: 90°	Kr: 95°
						
A269	A270	A306	A307	A334	A352	A353

E*-SCLCR/L**
Kr: 95°

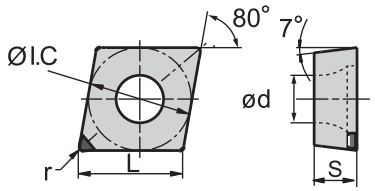
A355

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

CCGW	L	I.C	S	d
06 02	6,4	6,35	2,38	2,8
09 T3	9,7	9,525	3,97	4,4
12 04	12,9	12,7	4,76	5,56

Plaquette de tournage (PCD)

Plaquette positive CC**

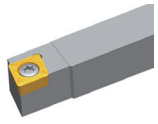
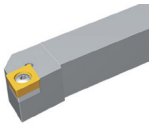
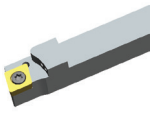
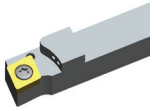
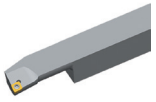


	ISO	r	a_p	f	YCD421
P					
M					
K					
N					○
S					
H					
DP					
	**CCGW060202F-1**	0,2	0,08-0,50	0,05-0,15	○
	CCGW060204F-1	0,4	0,08-0,50	0,05-0,20	○
	CCGW09T304F-1	0,4	0,08-0,50	0,05-0,20	●
	CCGW09T308F-1	0,8	0,08-0,50	0,05-0,25	●
	CCGW120404F-1	0,4	0,08-0,50	0,05-0,20	●
	CCGW120408F-1	0,8	0,08-0,50	0,05-0,25	●

● En stock ○ Sur demande

DP Diamant polycristallin

Porte-outil

SCACR/L	**SCLCR/L**	**SCACR/L-SC**	**SCLCR/L-SC**	**A***-SCLCR/L**	**S***-SCFCR/L**	**S***-SCLCR**
Kr: 90°	Kr: 95°	Kr: 90°	Kr: 95°	Kr: 95°	Kr: 90°	Kr: 95°
						
A269	A270	A306	A307	A334	A352	A353

E*-SCLCR/L**
Kr: 95°

A355

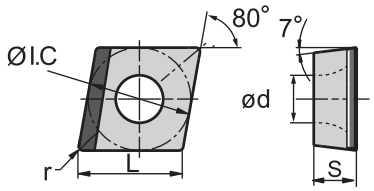
Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

CCGW	L	I.C	S	d
06 02	6,4	6,35	2,38	2,8
09 T3	9,7	9,525	3,97	4,4
12 04	12,9	12,7	4,76	5,56

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquette de tournage (PCD)

Plaquette positive CC**



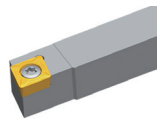
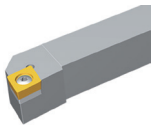
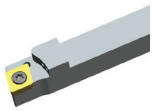
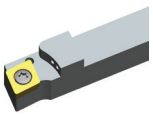
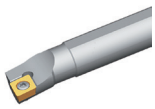
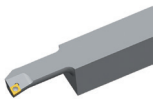
	P	M	K	N	S	H
DP				○		

	ISO	r	a_p	f	YCD421
	**CCGW060204-LL**	0,2	0,08-0,50	0,05-0,20	○
	CCGW060204-LR	0,4	0,08-0,50	0,05-0,20	○
	CCGW09T304-LL	0,4	0,08-0,50	0,05-0,20	○
	CCGW09T304-LR	0,4	0,08-0,50	0,05-0,20	○
	CCGW09T308-LL	0,8	0,08-0,50	0,05-0,25	○
	CCGW09T308-LR	0,8	0,08-0,50	0,05-0,25	○
	CCGW120404-LL	0,4	0,08-0,50	0,05-0,20	○
	CCGW120404-LR	0,4	0,08-0,50	0,05-0,20	○
	CCGW120408-LL	0,8	0,08-0,50	0,05-0,25	○
	CCGW120408-LR	0,8	0,08-0,50	0,05-0,25	○

● En stock ○ Sur demande

DP Diamant polycristallin

Porte-outil

SCACR/L	SCLCR/L	SCACR/L-SC	SCLCR/L-SC	A***-SCLCR/L	S***-SCFCR/L	S***-SCLCR
Kr: 90°	Kr: 95°	Kr: 90°	Kr: 95°	Kr: 95°	Kr: 90°	Kr: 95°
						
A269	A270	A306	A307	A334	A352	A353

E***-SCLCR/L
Kr: 95°

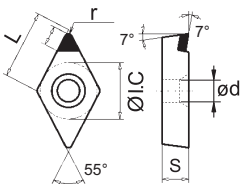
A355

Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (PCD)

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

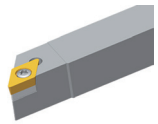
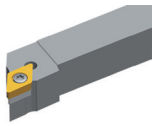
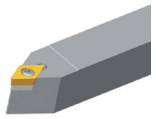
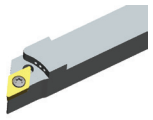
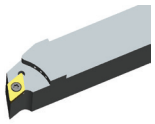
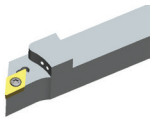
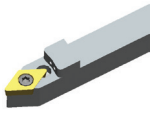
DCGT	L	I.C	S	d
07 02	7,8	6,35	2,38	2,8
11 T3	11,6	9,525	3,97	4,4

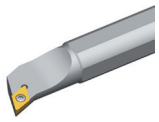
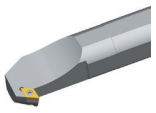
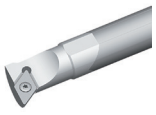
Plaquette positive DC**						DP
					P	
					M	
					K	
					N	○
					S	
					H	
	ISO	r	a_p	f	YCD421	
	**DCGT070202F-1**	0,2	0,08-0,50	0,05-0,15	○	
	DCGT070204F-1	0,4	0,08-0,50	0,05-0,20	○	
	DCGT11T302F-1	0,2	0,08-0,50	0,05-0,15	●	
	DCGT11T304F-1	0,4	0,08-0,50	0,05-0,20	●	
	DCGT11T308F-1	0,8	0,08-0,50	0,05-0,25	○	

● En stock ○ Sur demande

DP Diamant polycristallin

Porte-outil

SDACR/L	**SDJCR/L**	**SDNCN**	**SDACR/L-SC**	**SDHCR/L-SC**	**SDJCR/L-SC**	**SDNCN-SC**
Kr: 90°	Kr: 93°	Kr: 62°30'	Kr: 90°	Kr: 107°30'	Kr: 93°	Kr: 62°30'
						
A271	A272	A273	A308	A309	A310	A311

S*-SDQCR/L**	**A***-SDUCR/L**	**S***-SDZCR/L**	**E***-SDQCR/L**
Kr: 107°30'	Kr: 93°	Kr: 85°	Kr: 107°30'
			
A336	A337	A338	A357

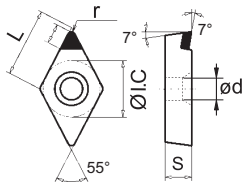
Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (PCD)

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

DCGT	L	I.C	S	d
07 02	7,8	6,35	2,38	2,8
11 T3	11,6	9,525	3,97	4,4

Plaquette positive DC**



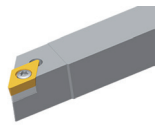
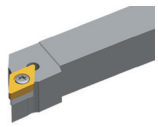
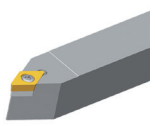
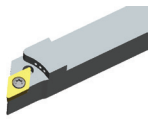
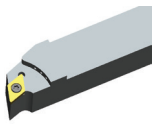
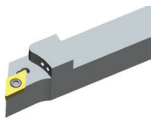
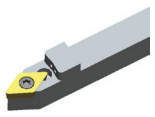
	P	M	K	N	S	H
DP				○		

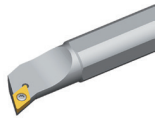
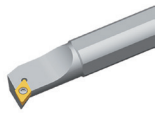
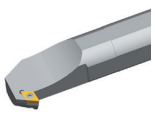
	ISO	r	a_p	f	YCD421
	**DCGT070202F-1MED**	0,2	0,08-0,50	0,05-0,15	○
	DCGT070204F-1MED	0,4	0,08-0,50	0,05-0,20	○
	DCGT070208F-1MED	0,8	0,08-0,50	0,05-0,25	○
	**DCGT11T302F-1MED**	0,2	0,08-0,50	0,05-0,15	○
	DCGT11T304F-1MED	0,4	0,08-0,50	0,05-0,20	○
	DCGT11T308F-1MED	0,8	0,08-0,50	0,05-0,25	○

● En stock ○ Sur demande

DP Diamant polycristallin

Porte-outil

SDACR/L	SDJCR/L	SDNCN	SDACR/L-SC	SDHCR/L-SC	SDJCR/L-SC	SDNCN-SC
Kr: 90°	Kr: 93°	Kr: 62°30'	Kr: 90°	Kr: 107°30'	Kr: 93°	Kr: 62°30'
						
A271	A272	A273	A308	A309	A310	A311

S***-SDQCR/L	A***-SDUCR/L	S***-SDZCR/L	E***-SDQCR/L
Kr: 107°30'	Kr: 93°	Kr: 85°	Kr: 107°30'
			
A336	A337	A338	A357

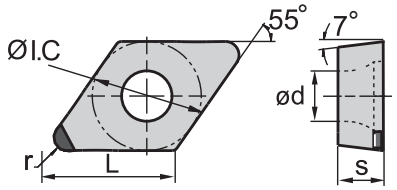
Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (PCD)

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

DCGW	L	I.C	S	d
07 02	7,8	6,35	2,38	2,8
11 T3	11,6	9,525	3,97	4,4

Plaquette positive DC**

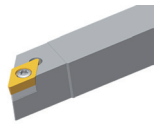
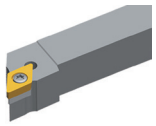
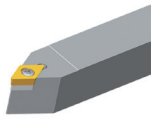
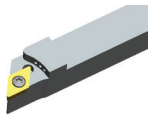
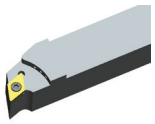
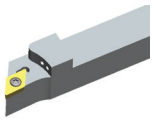
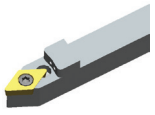


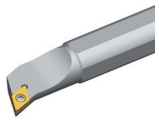
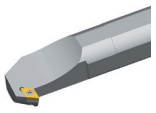
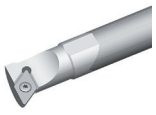
					DP
					YCD421
P					
M					
K					
N					○
S					
H					
ISO		r	a_p	f	
	**DCGW070202F-1**	0,2	0,08-0,50	0,05-0,15	●
	DCGW070204F-1	0,4	0,08-0,50	0,05-0,20	●
	DCGW070208F-1	0,8	0,08-0,50	0,05-0,25	○
	DCGW11T302F-1	0,2	0,08-0,50	0,05-0,15	●
	DCGW11T304F-1	0,4	0,08-0,50	0,05-0,20	●

● En stock ○ Sur demande

DP Diamant polycristallin

Porte-outil

SDACR/L	SDJCR/L	SDNCN	SDACR/L-SC	SDHCR/L-SC	SDJCR/L-SC	SDNCN-SC
Kr: 90°	Kr: 93°	Kr: 62°30'	Kr: 90°	Kr: 107°30'	Kr: 93°	Kr: 62°30'
						
A271	A272	A273	A308	A309	A310	A311

S***-SDQCR/L	A***-SDUCR/L	S***-SDZCR/L	E***-SDQCR/L
Kr: 107°30'	Kr: 93°	Kr: 85°	Kr: 107°30'
			
A336	A337	A338	A357

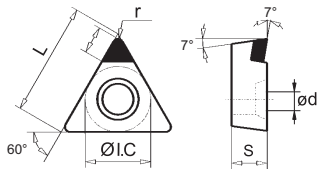
Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (PCD)

● Bonnes conditions d'usinage
✳ Conditions d'usinage normales
✳ Conditions d'usinage défavorables

TCGT	L	I.C	S	d
11 02	11	6,35	2,38	2,8
16 T3	16,5	9,525	3,97	4,4

Plaquette positive TC**



P	
M	
K	
N	○
S	
H	

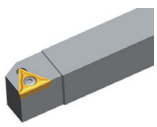
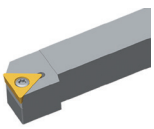
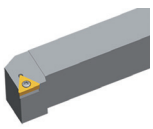
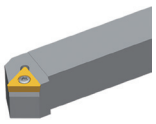
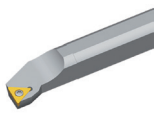
DP

	ISO	r	a_p	f	YCD421
	**TCGT110202F-1**	0,2	0,08-0,50	0,05-0,15	○
	TCGT110204F-1	0,4	0,08-0,50	0,05-0,20	○
	TCGT110208F-1	0,8	0,08-0,50	0,05-0,25	○
	TCGT16T302F-1	0,2	0,08-0,50	0,05-0,15	○
	TCGT16T304F-1	0,4	0,08-0,50	0,05-0,20	○
	TCGT16T308F-1	0,8	0,08-0,50	0,05-0,25	○
	**TCGT110202F-1MED**	0,2	0,08-0,50	0,05-0,15	○
	TCGT110204F-1MED	0,4	0,08-0,50	0,05-0,20	○
	TCGT110208F-1MED	0,8	0,08-0,50	0,05-0,25	○
	TCGT16T302F-1MED	0,2	0,08-0,50	0,05-0,15	○
	TCGT16T304F-1MED	0,4	0,08-0,50	0,05-0,20	○
	TCGT16T308F-1MED	0,8	0,08-0,50	0,05-0,25	○

● En stock ○ Sur demande

DP Diamant polycristallin

Porte-outil

STACR/L	STFCR/L	STGCR/L	STTCR/L	S***-STFCR/L	E***-STFCR/L
Kr: 90°	Kr: 91°	Kr: 91°	Kr: 60°	Kr: 91°	Kr: 90°
					
A283	A284	A285	A286	A341	A361

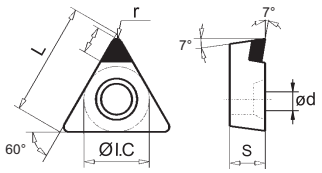
Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (PCD)

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

TCGT	L	I.C	S	d
11 02	11	6,35	2,38	2,8
16 T3	16,5	9,525	3,97	4,4

Plaquette positive TC**



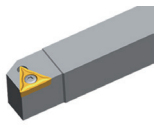
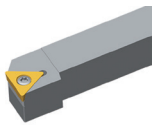
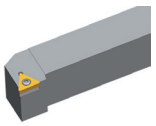
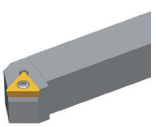
	DP
P	
M	
K	
N	○
S	
H	

	ISO	r	a_p	f	YCD421
	**TCGT110202-L**	0,2	0,08-0,50	0,05-0,15	○
	TCGT110204-L	0,4	0,08-0,50	0,05-0,20	○
	TCGT110208-L	0,8	0,08-0,50	0,05-0,25	○
	TCGT16T302-L	0,2	0,08-0,50	0,05-0,15	○
	TCGT16T304-L	0,4	0,08-0,50	0,05-0,20	○
	TCGT16T308-L	0,8	0,08-0,50	0,05-0,25	○

● En stock ○ Sur demande

DP Diamant polycristallin

Porte-outil

STACR/L	STFCR/L	STGCR/L	STTCR/L	S***-STFCR/L	E***-STFCR/L
Kr: 90°	Kr: 91°	Kr: 91°	Kr: 60°	Kr: 91°	Kr: 90°
					
A283	A284	A285	A286	A341	A361

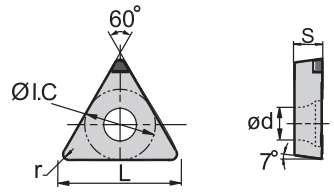
Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (PCD)

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

TCGW	L	I.C	S	d
11 02	11	6,35	2,38	2,8
16 T3	16,5	9,525	3,97	4,4

Plaquette positive TC**



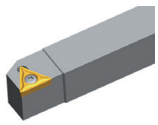
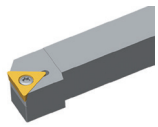
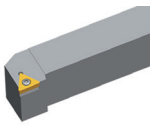
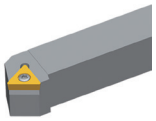
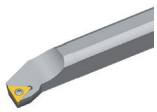
	DP
P	
M	
K	
N	●
S	
H	

	ISO	r	a_p	f	YCD421
	**TCGW110202F-1**	0,2	0,08-0,50	0,05-0,15	○
	TCGW110204F-1	0,4	0,08-0,50	0,05-0,20	●
	TCGW110208F-1	0,8	0,08-0,50	0,05-0,25	○
	TCGW16T304F-1	0,4	0,08-0,50	0,05-0,20	●
	TCGW16T308F-1	0,8	0,08-0,50	0,05-0,25	○
	TCGW16T312F-1	1,2	0,08-0,50	0,05-0,30	○

● En stock ○ Sur demande

DP Diamant polycristallin

Porte-outil

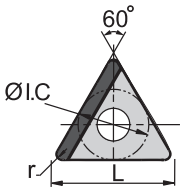
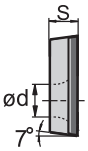
STACR/L	STFCR/L	STGCR/L	STTCR/L	S***-STFCR/L	E***-STFCR/L
Kr: 90°	Kr: 91°	Kr: 91°	Kr: 60°	Kr: 91°	Kr: 90°
					
A283	A284	A285	A286	A341	A361

Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (PCD)

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

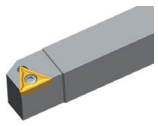
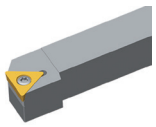
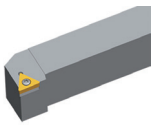
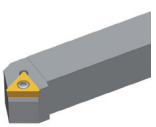
TCGW	L	I.C	S	d
11 02	11	6,35	2,38	2,8
16 T3	16,5	9,525	3,97	4,4

Plaquette positive TC**					
 				P	DP
				M	
				K	
				N	○
				S	
				H	
	ISO	r	a_p	f	YCD421
	**TCGW110202-L**	0,2	0,08-0,50	0,05-0,15	○
	TCGW110204-L	0,4	0,08-0,50	0,05-0,20	○
	TCGW110208-L	0,8	0,08-0,50	0,05-0,25	○
	TCGW16T302-L	0,2	0,08-0,50	0,05-0,15	○
	TCGW16T304-L	0,4	0,08-0,50	0,05-0,20	○
	TCGW16T308-L	0,8	0,08-0,50	0,05-0,25	○

● En stock ○ Sur demande

DP Diamant polycristallin

Porte-outil

STACR/L	**STFCR/L**	**STGCR/L**	**STTCR/L**	**S***-STFCR/L**	**E***-STFCR/L**
Kr: 90°	Kr: 91°	Kr: 91°	Kr: 60°	Kr: 91°	Kr: 90°
					
A283	A284	A285	A286	A341	A361

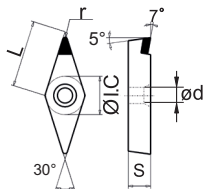
Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (PCD)

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

VBGT	L	I.C	S	d
11 03	11	6,35	3,18	2,8
16 04	16,6	9,525	4,76	4,4

Plaquette positive VB**

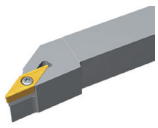
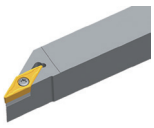
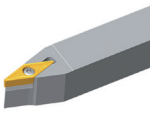
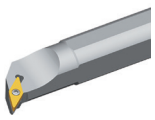
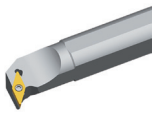


					DP
					P
					M
					K
					N
					S
					H
ISO		r	a_p	f	YCD421
	**VBGT110302F-1**	0,2	0,08-0,50	0,05-0,15	○
	VBGT110304F-1	0,4	0,08-0,50	0,05-0,20	○
	VBGT110308F-1	0,8	0,08-0,50	0,05-0,25	○
	VBGT160402F-1	0,2	0,08-0,50	0,05-0,15	○
	VBGT160404F-1	0,4	0,08-0,50	0,05-0,20	○
	VBGT160408F-1	0,8	0,08-0,50	0,05-0,25	○
	**VBGT160404F-1MED**	0,4	0,08-0,50	0,05-0,20	○
	VBGT160408F-1MED	0,8	0,08-0,50	0,05-0,25	○

● En stock ○ Sur demande

DP Diamant polycristallin

Porte-outil

SVJBR/L	SVABR/L	SVVBN	S***-SVQBR/L	S***-SVUBR/L	S***-SVXBR/L
Kr: 93°	Kr: 90°	Kr: 72°30'	Kr: 107°30'	Kr: 93°	Kr: 93°
					
A274	A275	A276	A345	A346	A347

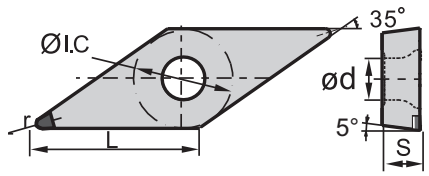
Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (PCD)

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

VBGW	L	I.C	S	d
11 03	11	6,35	3,18	2,8
16 04	16,6	9,525	4,76	4,4

Plaquette positive VB**

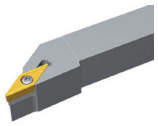
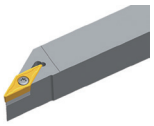
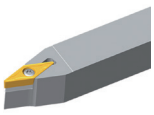
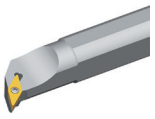
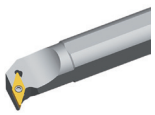


					DP
					YCD421
P					
M					
K					
N					○
S					
H					
ISO		r	a_p	f	
	**VBGW110302F-1**	0,2	0,08-0,50	0,05-0,15	○
	VBGW110304F-1	0,4	0,08-0,50	0,05-0,20	●
	VBGW160402F-1	0,2	0,08-0,50	0,05-0,15	○
	VBGW160404F-1	0,4	0,08-0,50	0,05-0,20	●
	VBGW160408F-1	0,8	0,08-0,50	0,05-0,25	○

● En stock ○ Sur demande

DP Diamant polycristallin

Porte-outil

SVJBR/L	SVABR/L	SVVBN	S***-SVQBR/L	S***-SVUBR/L	S***-SVXBR/L
Kr: 93°	Kr: 90°	Kr: 72°30'	Kr: 107°30'	Kr: 93°	Kr: 93°
					
A274	A275	A276	A345	A346	A347

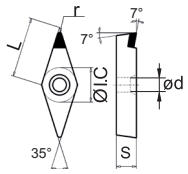
Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (PCD)

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

VCGT	L	I.C	S	d
11 02	11	6,35	2,38	2,8
16 04	16,6	9,525	4,76	4,4

Plaquette positive VC**



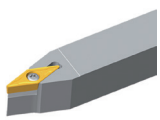
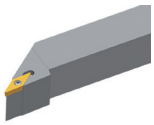
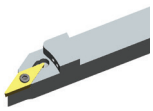
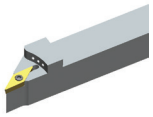
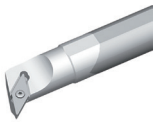
	DP
P	
M	
K	
N	○
S	
H	

	ISO	r	a_p	f	YCD421
	**VCGT110202F-1**	0,2	0,08-0,50	0,05-0,15	○
	VCGT110204F-1	0,4	0,08-0,50	0,05-0,20	○
	VCGT160402F-1	0,2	0,08-0,50	0,05-0,15	○
	VCGT160404F-1	0,4	0,08-0,50	0,05-0,20	○
	VCGT160408F-1	0,8	0,08-0,50	0,05-0,25	○

● En stock ○ Sur demande

DP Diamant polycristallin

Porte-outil

SVVCN	SVJCR/L	SVACR/L-SC	SVJCR/L-SC	S***-SVQCR/L	S***-SVUCR/L	C***-SVQCR/L
Kr: 72°30'	Kr: 93°	Kr: 90°	Kr: 93°	Kr: 107°30'	Kr: 93°	Kr: 107°30'
						
A277	A278	A312	A313	A343	A344	A363

C***-SVUCR/L
Kr: 93°

A364

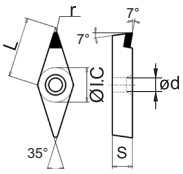
Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (PCD)

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

VCGT	L	I.C	S	d
11 03	11	6,35	3,18	2,8
16 04	16,6	9,525	4,76	4,4

Plaquette positive VC**



DP

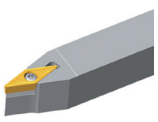
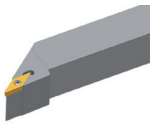
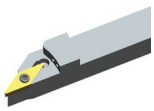
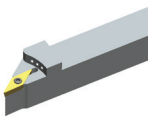
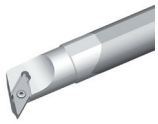
P
M
K
N
S
H

	ISO	r	a_p	f	YCD421
	**VCGT110302F-1MED**	0,2	0,08-0,50	0,05-0,15	○
	VCGT110304F-1MED	0,4	0,08-0,50	0,05-0,20	○
	VCGT160404F-1MED	0,4	0,08-0,50	0,05-0,20	○
	VCGT160408F-1MED	0,8	0,08-0,50	0,05-0,25	○
	VCGT160412F-1MED	1,2	0,08-0,50	0,05-0,30	○

● En stock ○ Sur demande

DP Diamant polycristallin

Porte-outil

SVVCN	SVJCR/L	SVACR/L-SC	SVJCR/L-SC	S***-SVQCR/L	S***-SVUCR/L	C***-SVQCR/L
Kr: 72°30'	Kr: 93°	Kr: 90°	Kr: 93°	Kr: 107°30'	Kr: 93°	Kr: 107°30'
						
A277	A278	A312	A313	A343	A344	A363

C***-SVUCR/L
Kr: 93°

A364

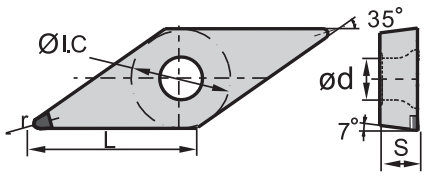
Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (PCD)

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

VCGW	L	I.C	S	d
11 03	11	6,35	3,18	2,8
16 04	16,6	9,525	4,76	4,4

Plaquette positive VC**

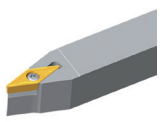
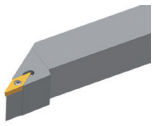
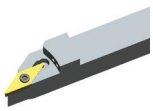
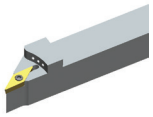
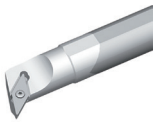


					DP
					YCD421
P					
M					
K					
N					○
S					
H					
ISO		r	a_p	f	
	**VCGW110302F-1**	0,2	0,08-0,50	0,05-0,15	○
	VCGW110304F-1	0,4	0,08-0,50	0,05-0,20	○
	VCGW160404F-1	0,4	0,08-0,50	0,05-0,20	○
	VCGW160408F-1	0,8	0,08-0,50	0,05-0,25	○

● En stock ○ Sur demande

DP Diamant polycristallin

Porte-outil

SVVCN	SVJCR/L	SVACR/L-SC	SVJCR/L-SC	S***-SVQCR/L	S***-SVUCR/L	C***-SVQCR/L
Kr: 72°30'	Kr: 93°	Kr: 90°	Kr: 93°	Kr: 107°30'	Kr: 93°	Kr: 107°30'
						
A277	A278	A312	A313	A343	A344	A363

C***-SVUCR/L
Kr: 93°

A364

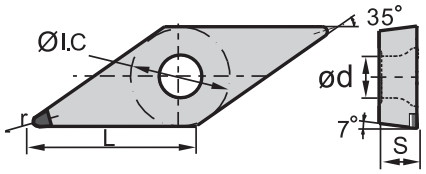
A Tournage
B Fraisage
C Perçage
D Informations techniques
E Index

Codification A158 Choix nuances A42 Info. techniques A501 Paramètres A366

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

VCGX	L	I.C	S	d
22 05	22	12,7	5,56	5,5

Plaquette de tournage (PCD)

Plaquette positive VC**						DP
					P	
					M	
					K	
					N	○
					S	
					H	
ISO		r	a_p	f	YCD421	
	**VCGX220530-1**	3	0,5-7,0	0,25-1,00	○	

● En stock ○ Sur demande

DP Diamant polycristallin

Codification > A158 Choix nuances > A42 Info. techniques > A501 Paramètres > A366

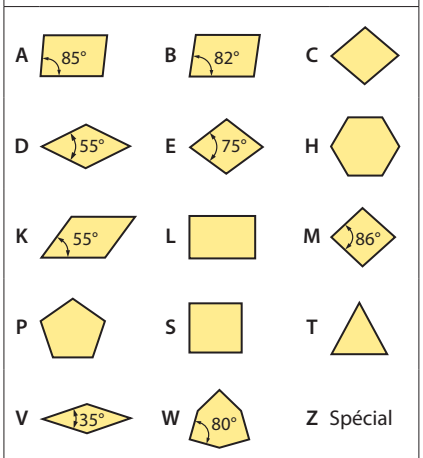
Notes

Tournage général

Code ISO – plaquettes de coupe céramiques

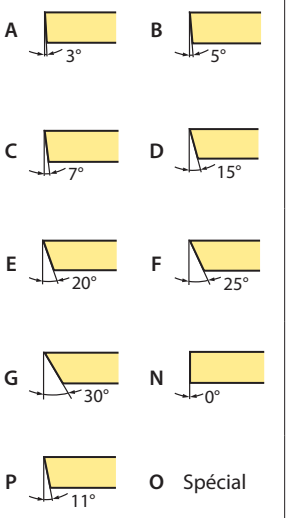
T	N	G	A	12	04	08	T	020	20
1	2	3	4	5	6	7	8	9	10

Forme de plaquette



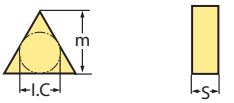
1

Angle de dépouille



2

Classe de tolérance

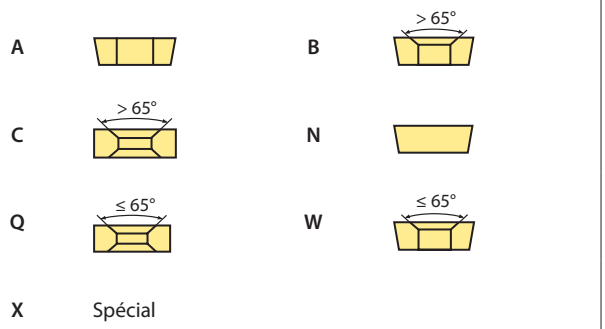


Code	I.C [mm]	m [mm]	S [mm]
A	±0,025	±0,005	±0,025
C	±0,025	±0,013	±0,025
E	±0,025	±0,025	±0,025
F	±0,013	±0,005	±0,025
G	±0,025	±0,025	±0,130
H	±0,013	±0,013	±0,025
J	±0,05–0,15	±0,005	±0,025
K	±0,05–0,15	±0,013	±0,025
L	±0,05–0,15	±0,025	±0,025
M	±0,05–0,15	±0,08–0,20	±0,130
N	±0,05–0,15	±0,08–0,20	±0,025
U	±0,08–0,25	±0,13–0,38	±0,130

3

Caractéristiques de fixation (métrique)

Forme de plaquette



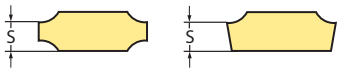
4

Longueur d'arête l [mm]

I.C [mm]	Forme de plaquette C	D	S	T	V	W
3,97				06		
5,0						
5,56				09		
6,0						
6,35	06	07		11	11	
8,0						
9,525	09	11	09	16	16	06
10,0						
12,0						
12,7	12	15	12	22	22	08
15,875	16		15	27		
16,0		19				
19,05	19		19	33		
20,0						
25,0	25	25				
25,4			25			
31,75						
32						

5

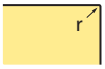
Epaisseur plaquette s [mm]



Code	S	Code	S
02	2,38	**06**	6,35
T2	2,58	**T6**	6,75
03	3,18	**07**	7,94
T3	3,97	**09**	9,52
04	4,76	**T9**	9,72
T4	4,96	**11**	11,11
05	5,56	**12**	12,70
T5	5,95		

6

Rayon de plaquette r [mm]



Code	r
00	–
02	0,2
04	0,4
08	0,8
12	1,2
16	1,6
20	2,0
24	2,4
32	3,2
X	Spécial
MO	Plaquettes rondes

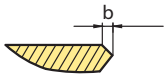
7

Version d'arête

Code	Arête de coupe	Forme de plaquette
E	Tonnelée	
F	Arête vive	
T	Chanfrein	
S	Chanfrein + tonnelage	

8

Largeur du chanfrein b [mm]



Code	b
010	0,10
015	0,15
020	0,20
025	0,25
030	0,30
035	0,35
040	0,40
045	0,45
050	0,50
100	1,00
200	2,00

9

Angle du chanfrein α



Code	α
05	5°
10	10°
15	15°
20	20°
25	25°
30	30°

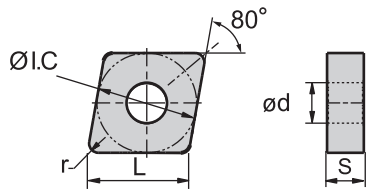
10

Plaquette de tournage (céramique)

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

CNGA	L	I.C	S	d
12 04	12,9	12,7	4,76	5,16
16 06	16,1	15,875	6,35	6,35

Plaquette négative CN**



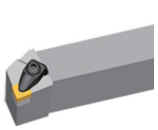
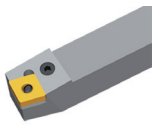
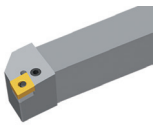
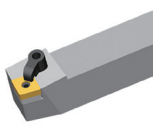
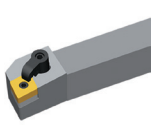
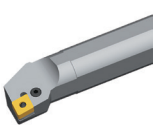
	CM	CC	CN	CR
P	○			
M				
K	○		◉	
N				
S			◉	◉ ◉
H		○		

	ISO	r	a_p	f	CA1000	CM1000	CN1000 CS1000	CW1400 CW1800
	**CNGA120404S02020**	0,4	0,1-0,3	0,08-0,25		●		
	CNGA120404T01020	0,4	0,1-0,3	0,08-0,25		○		
	CNGA120404T02020	0,4	0,1-0,3	0,08-0,25	○	●	●	
	CNGA120408S01520	0,8	0,1-0,25	0,5-2,5				○
	CNGA120408S02020	0,8	0,1-0,4	0,1-0,3		●		
	CNGA120408T00520	0,8	0,1-0,25	0,5-2,5				○ ●
	CNGA120408T01020	0,8	0,1-0,4	0,1-0,3		○		
	CNGA120408T02020	0,8	0,1-0,4	0,1-0,3	○	●	○	
	CNGA120412S01520	1,2	0,1-0,3	0,5-2,5				○
	CNGA120412S02020	1,2	0,1-0,5	0,1-0,3		●		
	CNGA120412T00520	1,2	0,1-0,3	0,5-2,5				○
	CNGA120412T02020	1,2	0,1-0,5	0,1-0,3	○	○	●	
	CNGA120416S01520	1,6	0,1-0,35	0,5-3,0				○
	CNGA120416T00520	1,6	0,1-0,35	0,5-3,0				○ ○
	CNGA160612T02020	1,2	0,2-2,0	0,1-0,3			●	

● En stock ○ Sur demande

CM Céramique mixte
CC Céramique mixte, revêtue
CN Céramique Si3N4
CR Céramique Al2O3, renforcée

Porte-outil

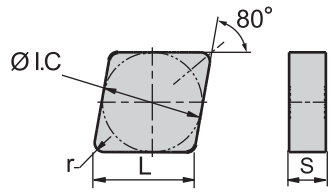
DCLNR/L	PCBNR/L	PCLNR/L	MCBNR/L	MCLNR/L	S***-PCLNR/L
Kr: 95°	Kr: 75°	Kr: 95°	Kr: 75°	Kr: 95°	Kr: 95°
					
A230	A237	A238	A252	A253	A324

Codification A198 Choix nuances A42 Info. techniques A501 Paramètres A366

CNGN	L	I.C	S
12 07	12,9	12,7	7,94
12 04	12,9	12,7	4,76
16 06	16,1	15,875	6,35
16 07	16,1	15,875	7,94

Plaquette de tournage (céramique)

● Bonnes conditions d'usinage
❁ Conditions d'usinage normales
❁ Conditions d'usinage défavorables



Plaquette négative CN**		CM	CC	CN	CR
	P	●			
	M				
	K	●		❁	
	N				
	S			●	❁ ❁
	H		○		

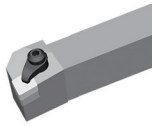
	ISO	r	a_p	f	CA1000	CM1000	CN1000 CS1000	CW1400 CW1800
	CNGN120404T00520	0,4	0,1-0,25	0,5-2,0				○
	CNGN120404T02020	0,4	0,1-0,3	0,08-0,25	○			
	CNGN120408S01520	0,8	0,1-0,25	0,5-2,5				○
	CNGN120408S02020	0,8	0,1-0,4	0,1-0,3		○		
	CNGN120408T00520	0,8	0,1-0,25	0,5-2,5				●
	CNGN120408T02020	0,8	0,1-0,4	0,1-0,3	●		●	
	CNGN120412S01520	1,2	0,1-0,3	0,5-2,5				○
	CNGN120412T00520	1,2	0,1-0,3	0,5-2,5				●
	CNGN120412T02020	1,2	0,1-0,5	0,1-0,3	○		○	
	CNGN120416S01520	1,6	0,1-0,35	0,5-3,0				○
	CNGN120416T00520	1,6	0,1-0,35	0,5-3,0				●
	CNGN120416T02020	1,6	0,5-2,0	0,1-0,35			○	
	CNGN120708S01520	0,8	0,1-0,25	0,5-2,5				○
	CNGN120708T00520	0,8	0,1-0,25	0,5-2,5				●
	CNGN120708T02020	0,8	0,1-0,4	0,1-0,3	○			
	CNGN120712S01520	1,2	0,1-0,3	0,5-2,5				○
	CNGN120712S02025	1,2	0,1-0,3	0,5-2,5				○
	CNGN120712T00520	1,2	0,1-0,3	0,5-2,5				●
	CNGN120712T00525	1,2	0,1-0,3	0,5-2,5			○	○ ○
	CNGN120712T02020	1,2	0,1-0,5	0,1-0,3	●		○	
	CNGN120716S01520	1,6	0,1-0,35	0,5-3,0				○
	CNGN120716T00520	1,6	0,1-0,35	0,5-3,0				○
	CNGN120716T01520	1,6	0,1-0,35	0,5-3,0				○
	CNGN120716T02020	1,6	0,1-0,6	0,1-0,4	○		○	
	CNGN160616T02020	1,6	0,1-0,6	0,1-0,4	○			
	CNGN160712T01525	1,2	0,2-2,0	0,1-0,3			○	
	CNGN160716T01525	1,6	0,1-0,6	0,1-0,4	○			
	CNGN160716T02020	1,6	0,5-2,0	0,1-0,35			○	

● En stock ○ Sur demande

CM Céramique mixte
CC Céramique mixte, revêtue
CN Céramique Si3N4
CR Céramique Al2O3, renforcée

Codification A198 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil
CCLNR/L
Kr: 95°



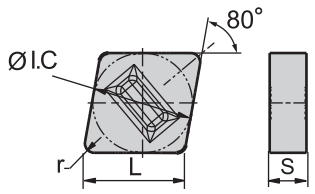
A292

Codification > A198 Choix nuances > A42 Info. techniques > A501 Paramètres > A366

Plaquette de tournage (céramique)

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

CNGX	L	I.C	S
12 07	12,9	12,7	7,94

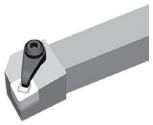


Plaquette négative CN**					CM		CC		CN		CR	
				P	○							
				M								
				K	○				⊛			
				N								
				S					●		⊛	⊛
				H			○					
ISO		r	a_p	f	CA1000		CM1000		CN1000	CS1000	CW1400	CW1800
	CNGX120712T02020	1,2	0,2-2,0	0,1-0,3					●			
	CNGX120716T02020	1,6	0,5-2,0	0,1-0,35					○			

● En stock ○ Sur demande

CM Céramique mixte
CC Céramique mixte, revêtue
CN Céramique Si3N4
CR Céramique Al2O3, renforcée

Porte-outil
JCLNR/L
Kr: 95°



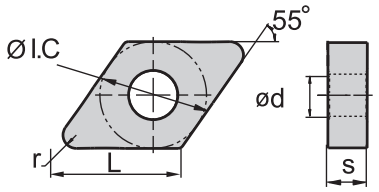
A300

Codification A198 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (céramique)

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

DNGA	L	I.C	S	d
15 06	15,5	12,7	6,35	5,16
15 04	15,5	12,7	4,76	5,16

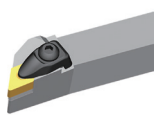
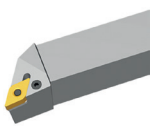
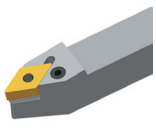
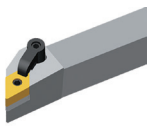
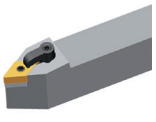
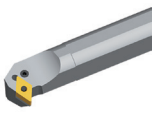
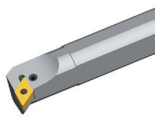


Plaquette négative DN**					CM	CC	CN	CR
				P				
				M				
				K				
				N				
				S				
				H				
	ISO	r	a_p	f	CA1000	CM1000	CN1000 CS1000	CW1400 CW1800
	DNGA150404T02020	0,4	0,1-0,3	0,08-0,25		○		
	DNGA150408S01520	0,8	0,1-0,25	0,5-2,5				○
	DNGA150408T00520	0,8	0,1-0,25	0,5-2,5				●
	DNGA150408T02020	0,8	0,1-0,4	0,1-0,3		○		
	DNGA150412S01520	1,2	0,1-0,3	0,5-2,5				○
	DNGA150412T00520	1,2	0,1-0,3	0,5-2,5				●
	DNGA150412T02020	1,2	0,1-0,5	0,1-0,3		○	○	○
	DNGA150416S01520	1,6	0,1-0,35	0,5-3,0				○
	DNGA150416T00520	1,6	0,1-0,35	0,5-3,0				○
	DNGA150604S02020	0,4	0,1-0,3	0,08-0,25		●		
	DNGA150604T01020	0,4	0,1-0,3	0,08-0,25		○		
	DNGA150604T02020	0,4	0,1-0,3	0,08-0,25		●	○	
	DNGA150608S02020	0,8	0,1-0,4	0,1-0,3		●		
	DNGA150608T02020	0,8	0,1-0,4	0,1-0,3		○	●	
	DNGA150612S02020	1,2	0,1-0,5	0,1-0,3		●		
	DNGA150612T01020	1,2	0,1-0,5	0,1-0,3		○		
	DNGA150612T02020	1,2	0,1-0,5	0,1-0,3		●	○	
	DNGA150616T02020	1,6	0,5-2,0	0,1-0,35			○	

● En stock ○ Sur demande

CM Céramique mixte
CC Céramique mixte, revêtue
CN Céramique Si3N4
CR Céramique Al2O3, renforcée

Porte-outil

DDJNR/L	PDJNR/L	PDNNR/L	MDJNR/L	MDPNN	S***-PDSNR/L	S***-PDUNR/L
Kr: 93°	Kr: 93°	Kr: 63°	Kr: 93°	Kr: 62°30'	Kr: 62°30'	Kr: 93°
						
A231	A240	A241	A254	A255	A326	A327

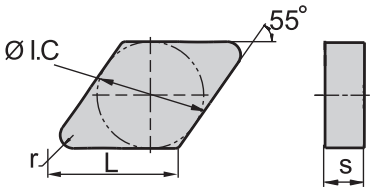
Codification A198 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (céramique)

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

DNGN	L	I.C	S
15 07	15,5	12,7	7,94
15 04	15,5	12,7	4,76

Plaquette négative DN**

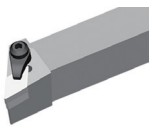


	ISO	r	a_p	f	CM: CA1000	CC: CM1000	CN: CN1000	CN: CS1000	CR: CW1400	CR: CW1800
P					○					
M										
K					○		◍			
N										
S								○	◍	◍
H						○				
	DNGN150408S01520	0,8	0,1-0,25	0,5-2,5					○	
	DNGN150408T00520	0,8	0,1-0,25	0,5-2,5						●
	DNGN150408T02020	0,8	0,1-0,4	0,1-0,3	○	○				
	DNGN150412S01520	1,2	0,1-0,3	0,5-2,5					○	
	DNGN150412T00520	1,2	0,1-0,3	0,5-2,5						●
	DNGN150412T02020	1,2	0,1-0,5	0,1-0,3	○					
	DNGN150416S01520	1,6	0,1-0,35	0,5-3,0					○	
	DNGN150416T00520	1,6	0,1-0,35	0,5-3,0						○
	DNGN150704T02020	0,4	0,1-0,3	0,08-0,25	○		○			
	DNGN150708T01520	0,8	0,1-0,25	0,5-2,5					○	
	DNGN150708T02020	0,8	0,1-0,4	0,1-0,3	●		○			
	DNGN150712T02020	1,2	0,1-0,5	0,1-0,3	○		○			
	DNGN150716T01520	1,6	0,1-0,35	0,5-3,0					○	
	DNGN150716T02020	1,6	0,1-0,6	0,1-0,4	○					

● En stock ○ Sur demande

CM Céramique mixte
CC Céramique mixte, revêtue
CN Céramique Si3N4
CR Céramique Al2O3, renforcée

Porte-outil
CDJNR/L
Kr: 93°



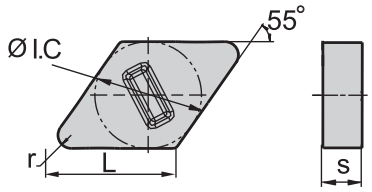
A294

Codification A198 Choix nuances A42 Info. techniques A501 Paramètres A366

● Bonnes conditions d'usinage
✲ Conditions d'usinage normales
✲ Conditions d'usinage défavorables

DNGX	L	I.C	S
15 07	15,5	12,7	7,94

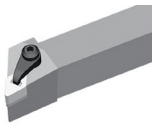
Plaquette de tournage (céramique)



Plaquette négative DN**						CM		CC		CN		CR	
					P	●							
					M								
					K	●				✲			
					N								
					S					●		✲ ✲	
					H			○					
ISO		r	a_p	f		CA1000		CM1000		CN1000	CS1000	CW1400	CW1800
	**DNGX150708T02020**	0,8	0,15-1,5	0,1-025						○			
	DNGX150712T02020	1,2	0,2-2,0	0,1-0,3						○			
	DNGX150716T02020	1,6	0,5-2,0	0,1-0,35						○			

● En stock ○ Sur demande

CM Céramique mixte
CC Céramique mixte, revêtue
CN Céramique Si3N4
CR Céramique Al2O3, renforcée

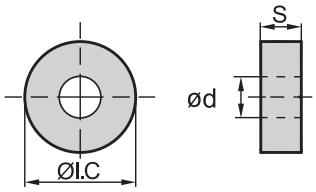
Porte-outil
JDJNR/L
Kr: 93°

A301

Codification A198 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (céramique)

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

RNGA	I.C	S	d
12 04	12,7	4,76	



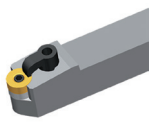
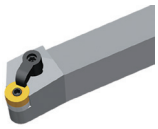
Plaquette négative RN**				CM	CC	CN	CR
			P	○			
			M				
			K	○		⊛	
			N				
			S			○	⊛ ⊛
			H		○		
ISO		a_p	f	CA1000	CM1000	CN1000 CS1000	CW1400 CW1800
	RNGA120400T02020	0,1-0,6	0,1-0,4	○	○		



● En stock ○ Sur demande

CM Céramique mixte
CC Céramique mixte, revêtue
CN Céramique Si3N4
CR Céramique Al2O3, renforcée

Porte-outil

MRDNN	MRGNR/L
	
A267	A268

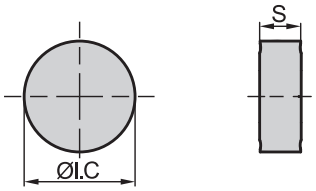
Codification A198 Choix nuances A42 Info. techniques A501 Paramètres A366

RNGN	I.C	S
06 03	6,35	3,18
09 04	9,525	4,76
09 03	9,525	3,18
12 07	12,7	7,94
12 04	12,7	4,76
15 07	15,875	7,94
19 07	19,05	7,94
25 10	25,4	10,05
25 07	25,4	7,94

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquette de tournage (céramique)

Plaquette négative RN**



	ISO	a_p	f	CM CA1000	CC CM1000	CN CN1000	CN CS1000	CR CW1400	CR CW1800
P				○	○				
M									○
K								○	○
N				○					
S								○	
H									○
	RNGN060300T01020	0,1-0,3	0,08-0,25	○	○				
	RNGN090300S01520	0,1-0,3	0,5-2,5						○
	RNGN090300T00520	0,1-0,3	0,5-2,5					○	○
	RNGN090300T02020	0,1-0,3	0,1-0,3	○					
	RNGN090400S01520	0,1-0,3	0,5-2,5					○	
	RNGN090400T00520	0,1-0,3	0,5-2,5						○
	RNGN090400T02020	0,1-0,3	0,1-0,3	○					
	RNGN120400S01520	0,1-0,35	0,5-3,0					○	
	RNGN120400S02020	0,1-0,6	0,1-0,4		●				
	RNGN120400T00520	0,1-0,35	0,5-3,0						●
	RNGN120400T01020	0,5-2,0	0,1-0,2				○		
	RNGN120400T01525	0,1-0,6	0,1-0,4		○				
	RNGN120400T02020	0,1-0,6	0,1-0,4	○		○			
	RNGN120700S01520	0,1-0,35	0,5-3,0					○	
	RNGN120700S02020	0,1-0,6	0,1-0,4		●				
	RNGN120700T00520	0,1-0,35	0,5-3,0					●	●
	RNGN120700T00525	0,1-0,35	0,5-3,0				○	○	○
	RNGN120700T01520	0,1-0,35	0,5-3,0					○	
	RNGN120700T01525	0,2-2,0	0,1-0,3			○			
	RNGN120700T02020	0,2-2,0	0,1-0,3	●		●			
	RNGN150700T02020	0,1-0,6	0,1-0,5	○					
	RNGN190700S01520	0,1-0,4	0,5-3,0					○	
	RNGN190700T00520	0,1-0,4	0,5-3,0						○
	RNGN190700T03020	0,1-0,7	0,1-0,5	○					
	RNGN250700T19015	0,1-0,7	0,1-0,8	○					
	RNGN251000T05020	0,1-0,7	0,1-0,5	○					

● En stock ○ Sur demande

CM Céramique mixte
CC Céramique mixte, revêtue
CN Céramique Si3N4
CR Céramique Al2O3, renforcée

Codification A198 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil
CRDNN



A298

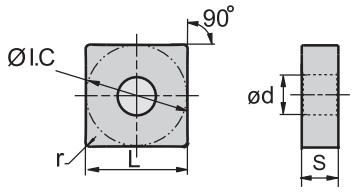
Codification > A198 Choix nuances > A42 Info. techniques > A501 Paramètres > A366

Plaquette de tournage (céramique)

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SNGA	L	I.C	S	d
12 04	12,7	12,7	4,76	5,16

Plaquette négative SN**



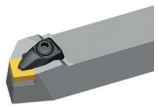
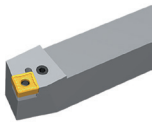
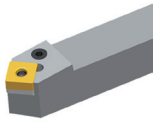
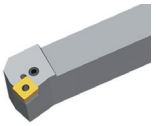
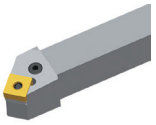
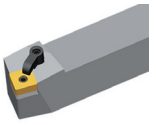
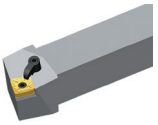
	CM	CC	CN	CR
P	●			
M				
K	●		❁	
N				
S			●	❁ ❁
H		○		

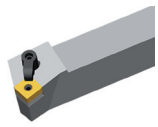
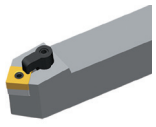
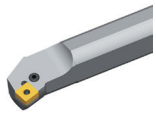
ISO	r	a_p	f	CA1000	CM1000	CN1000 CS1000	CW1400 CW1800
SNGA120404T02020	0,4	0,1-1,0	0,1-0,2			○	
SNGA120408S02020	0,8	0,1-0,4	0,1-0,3		○		
SNGA120408T02020	0,8	0,1-0,4	0,1-0,3	○	○	○	
SNGA120412T02020	1,2	0,2-2,0	0,1-0,3			○	

● En stock ○ Sur demande

CM Céramique mixte
CC Céramique mixte, revêtue
CN Céramique Si3N4
CR Céramique Al2O3, renforcée

Porte-outil

DSBNR/L	PSBNR/L	PSDNN	PSKNR/L	PSSNR/L	MSBNR/L	MSRNR/L
Kr: 75°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 45°	Kr: 75°	Kr: 75°
						
A232	A242	A244	A245	A246	A256	A257

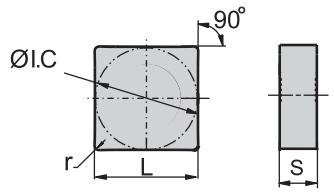
MSKNR/L	MSDNN	S***-PSKNR/L
Kr: 75°	Kr: 45°	Kr: 75°
		
A258	A259	A329

Codification A198 Choix nuances A42 Info. techniques A501 Paramètres A366

SNGN	L	I.C	S
12 07	12,7	12,7	7,94
12 04	12,7	12,7	4,76
15 07	15,875	15,875	7,94
19 07	19,05	19,05	7,94

Plaquette de tournage (céramique)

● Bonnes conditions d'usinage
⊛ Conditions d'usinage normales
⊛ Conditions d'usinage défavorables



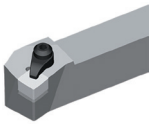
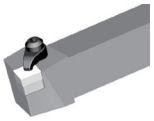
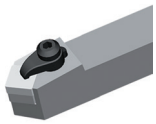
	ISO	r	a_p	f	CM CA1000	CC CM1000	CN CN1000	CN CS1000	CR CW1400	CR CW1800
P	SNGN120404T02020	0,4	0,1-0,3	0,08-0,25	○					
P	SNGN120408S01520	0,8	0,1-0,25	0,5-2,5					○	
P	SNGN120408S02020	0,8	0,1-0,4	0,1-0,3		○				
P	SNGN120408T00520	0,8	0,15-1,5	0,1-025			○			●
P	SNGN120408T02020	0,8	0,1-0,4	0,1-0,3	○		●			
P	SNGN120412S01520	1,2	0,1-0,3	0,5-2,5					○	
P	SNGN120412T00520	1,2	0,1-0,3	0,5-2,5						●
P	SNGN120412T02020	1,2	0,1-0,5	0,1-0,3	○		○			
P	SNGN120416S01520	1,6	0,1-0,35	0,5-3,0					○	
P	SNGN120416T00520	1,6	0,1-0,35	0,5-3,0						○
P	SNGN120416T02020	1,6	0,1-0,6	0,1-0,4	○		○			
P	SNGN120704T02020	0,4	0,1-0,3	0,08-0,25	●					
P	SNGN120708S01520	0,8	0,1-0,25	0,5-2,5					○	
P	SNGN120708T00520	0,8	0,1-0,25	0,5-2,5						●
P	SNGN120708T02020	0,8	0,1-0,4	0,1-0,3	○	○	○			
P	SNGN120712S01520	1,2	0,1-0,3	0,5-2,5					○	
P	SNGN120712T00520	1,2	0,1-0,3	0,5-2,5						●
P	SNGN120712T02020	1,2	0,1-0,5	0,1-0,3	○	○	●			
P	SNGN120716S01520	1,6	0,1-0,35	0,5-3,0					○	
P	SNGN120716T00520	1,6	0,1-0,35	0,5-3,0						○
P	SNGN120716T01520	1,6	0,1-0,35	0,5-3,0					○	
P	SNGN120716T02020	1,6	0,1-0,6	0,1-0,4	○					
P	SNGN150708T02020	0,8	0,1-0,4	0,1-0,3	○					
P	SNGN150712T02020	1,2	0,1-0,5	0,1-0,3	●		○			
P	SNGN150716T02020	1,6	0,1-0,6	0,1-0,4	●		○			
P	SNGN190716S02030	1,6	0,5-2,0	0,1-0,35			○			
P	SNGN190716T03020	1,6	0,1-0,6	0,1-0,4	○					

● En stock ○ Sur demande

CM Céramique mixte
CC Céramique mixte, revêtue
CN Céramique Si3N4
CR Céramique Al2O3, renforcée

Codification A198 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil

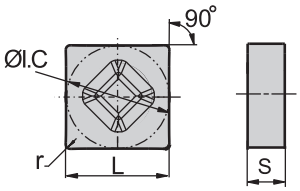
CSKNR/L	CSRNR/L	CSDNN
Kr: 75°	Kr: 75°	Kr: 45°
		
A296	A297	A299

Codification > A198 Choix nuances > A42 Info. techniques > A501 Paramètres > A366

Plaquette de tournage (céramique)

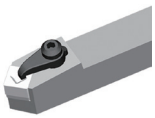
- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SNGX	L	I.C	S
12 07	12,7	12,7	7,94

Plaquette négative SN**						CM		CC		CN		CR	
					P	○							
					M								
					K	○				⊛			
					N								
					S					●		⊛	⊛
					H			○					
ISO		r	a_p	f		CA1000		CM1000		CN1000	CS1000	CW1400	CW1800
	**SNGX120712T02020**	1,2	0,2-2,0	0,1-0,3						○			
	SNGX120716T02020	1,6	0,5-2,0	0,1-0,35						○			

● En stock ○ Sur demande

CM Céramique mixte
CC Céramique mixte, revêtue
CN Céramique Si3N4
CR Céramique Al2O3, renforcée

Porte-outil
JSDNN
Kr: 45°

A302

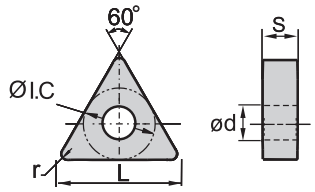
Codification A198 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (céramique)

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

TNGA	L	I.C	S	d
16 04	16,5	9,525	4,76	3,86
22 04	22	12,7	4,76	5,16

Plaquette négative TN**



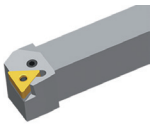
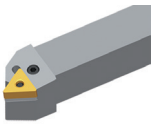
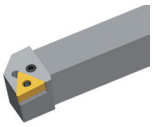
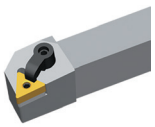
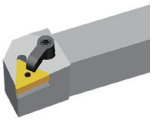
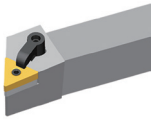
	CM	CC	CN	CR
P	○			
M				
K	○		✱	
N				
S			○	✱ ✱
H		○		

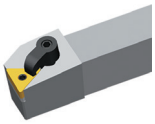
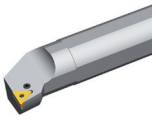
ISO	r	a_p	f	CA1000	CM1000	CN1000 CS1000	CW1400 CW1800
TNGA160404S02020	0,4	0,1-0,3	0,08-0,25		●		
TNGA160404T01020	0,4	0,1-0,3	0,08-0,25		○	●	
TNGA160404T02020	0,4	0,1-0,3	0,08-0,25		○		
TNGA160408S02020	0,8	0,1-0,4	0,1-0,3		●		
TNGA160408T02020	0,8	0,1-0,4	0,1-0,3		○	●	
TNGA160412T02020	1,2	0,1-0,5	0,1-0,3		○	●	
TNGA220408T02020	0,8	0,15-1,5	0,1-025			○	
TNGA220412T02020	1,2	0,2-2,0	0,1-0,3			○	
TNGA220416T02020	1,6	0,5-2,0	0,1-0,35			○	

● En stock ○ Sur demande

CM Céramique mixte
CC Céramique mixte, revêtue
CN Céramique Si3N4
CR Céramique Al2O3, renforcée

Porte-outil

DTGNR/L	PTFNR/L	PTTNR/L	PTGNR/L	MTGNR/L	MTJNR/L	MTJNR/L-Z
Kr: 91°	Kr: 91°	Kr: 60°	Kr: 90°	Kr: 90°	Kr: 93°	Kr: 93°
						
A233	A247	A248	A249	A260	A261	A262

MTFNR/L	S***-PTFNR/L
Kr: 91°	Kr: 90°
	
A263	A330

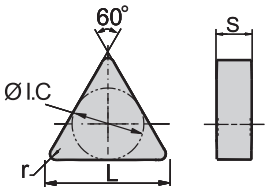
Codification A198 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (céramique)

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

TNGN	L	I.C	S
16 04	16,5	9,525	4,76
16 07	16,5	9,525	7,94
22 04	22	12,7	4,76

Plaquette négative TN**



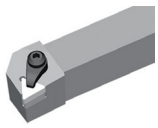
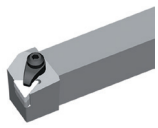
	CM	CC	CN	CR
P	●			
M				
K	●		⊛	
N				
S			●	⊛⊛
H		○		

	ISO	r	a_p	f	CA1000	CM1000	CN1000 CS1000	CW1400 CW1800
	**TNGN160404T02020**	0,4	0,1-0,3	0,08-0,25	○			
	TNGN160408S02020	0,8	0,1-0,4	0,1-0,3		○		
	TNGN160408T02020	0,8	0,1-0,4	0,1-0,3	○		○	
	TNGN160412T02020	1,2	0,1-0,5	0,1-0,3	○		○	
	TNGN160416T02020	1,6	0,5-2,0	0,1-0,35			○	
	TNGN160708T02020	0,8	0,15-1,5	0,1-025			○	
	TNGN160712T02020	1,2	0,1-0,5	0,1-0,3	○			
	TNGN220408T02020	0,8	0,1-0,4	0,1-0,3	○		○	
	TNGN220412T02020	1,2	0,1-0,5	0,1-0,3	○		○	
	TNGN220416T02020	1,6	0,1-0,6	0,1-0,4	○		○	

● En stock ○ Sur demande

CM Céramique mixte
CC Céramique mixte, revêtue
CN Céramique Si3N4
CR Céramique Al2O3, renforcée

Porte-outil

CTJNR/L	CTUNR/L
Kr: 93°	Kr: 93°
	
A293	A295

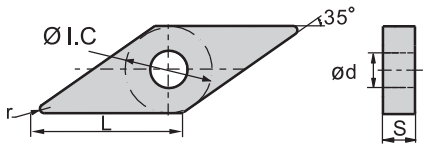
Codification A198 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (céramique)

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

VNGA	L	I.C	S	d
16 07	16,6	9,525	7,94	3,81
16 04	16,6	9,525	4,76	3,81

Plaquette négative VN**



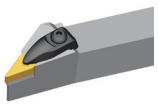
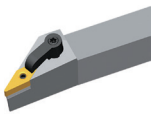
	CM	CC	CN	CR
P	○			
M				
K	○		✱	
N				
S			●	✱ ✱
H		○		

	ISO	r	a_p	f	CA1000	CM1000	CN1000 CS1000	CW1400 CW1800
	**VNGA160404S02020**	0,4	0,1-0,3	0,08-0,25		●		
	VNGA160404T01020	0,4	0,1-0,3	0,08-0,25		○		
	VNGA160408S02020	0,4	0,1-0,4	0,1-0,3		●		
	VNGA160408T01020	0,8	0,1-0,4	0,1-0,3		○		
	VNGA160408T02020	0,8	0,1-0,4	0,1-0,3		●		
	VNGA160708S02020	0,8	0,1-0,4	0,1-0,3		●		

● En stock ○ Sur demande

CM Céramique mixte
CC Céramique mixte, revêtue
CN Céramique Si3N4
CR Céramique Al2O3, renforcée

Porte-outil

DVVNN	DVJNR/L	MVVNN	MVJNR/L
Kr: 72°30'	Kr: 93°	Kr: 72°30'	Kr: 93°
			
A234	A235	A264	A265

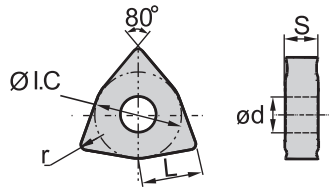
Codification A198 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (céramique)

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

WNGA	L	I.C	S	d
08 04	8,69	12,7	4,76	5,16

Plaquette négative WN**



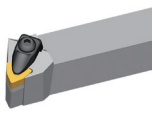
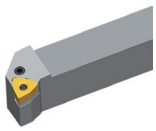
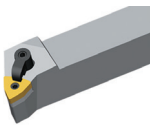
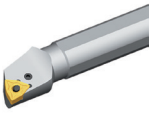
	CM	CC	CN	CR
P	○			
M				
K	○		✱	
N				
S			●	✱ ✱
H		○		

	ISO	r	a_p	f	CA1000	CM1000	CN1000	CS1000	CW1400	CW1800
	**WNGA080404T01020**	0,4	0,1-0,3	0,08-0,25		○				
	WNGA080404T02020	0,4	0,1-0,3	0,08-0,25		○				
	WNGA080408S02020	0,8	0,1-0,4	0,1-0,3		○				
	WNGA080408T02020	0,8	0,1-0,4	0,1-0,3		○	●			
	WNGA080412S02020	1,2	0,1-0,5	0,1-0,3		○				
	WNGA080412T02020	1,2	0,1-0,5	0,1-0,3		○	●			
	WNGA080416T01525	1,6	0,5-2,0	0,1-0,35			○			
	WNGA080416T02020	1,6	0,5-2,0	0,1-0,35			●			

● En stock ○ Sur demande

CM Céramique mixte
CC Céramique mixte, revêtue
CN Céramique Si3N4
CR Céramique Al2O3, renforcée

Porte-outil

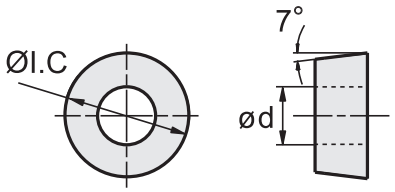
DWLNR/L	PWLNR/L	MWLNR/L	S***-PWLNR/L
Kr: 95°	Kr: 95°	Kr: 95°	Kr: 95°
			
A236	A251	A266	A332

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RCGX	I.C	S	d
06 04	6	4,76	
06 07	6	7,94	
06 06	6	6,35	
09 07	9	7,94	
12 07	12	7,94	
19 10	19	10	

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquette de tournage (céramique)



Plaquette positive RC**		CM	CC	CN	CR
	P	○			
	M				
	K	○		⊛	
	N				
	S			●	⊛ ⊛
	H		◯		

	ISO	a_p	f	CA1000	CM1000	CN1000 CS1000	CW1400 CW1800
	RCGX060400S01520	0,1-0,25	0,5-2,5				○
	RCGX060400T00520	0,1-0,25	0,5-2,5				○
	RCGX060600S02020	0,1-0,3	0,08-0,25	○			
	RCGX060600T01020	0,1-0,25	0,5-2,5				○
	RCGX060700T00525	0,1-0,25	0,5-2,5			○	○ ○
	RCGX090700S01520	0,1-0,3	0,5-2,5				○
	RCGX090700T00520	0,1-0,3	0,5-2,5				○
	**RCGX090700T00525**	0,1-0,3	0,5-2,5			○	○ ○
	RCGX090700T20015	0,1-0,3	0,1-0,3	○			
	RCGX120700E	0,5-2,0	0,1-0,2			○	
	RCGX120700S01020	0,5-2,0	0,1-0,2			○	
	RCGX120700S01520	0,1-0,35	0,5-3,0				○
	RCGX120700T00520	0,1-0,35	0,5-3,0				○
	RCGX120700T00525	0,1-0,35	0,5-3,0			○	○ ○
	RCGX120700T01020	0,1-0,35	0,5-3,0		○		○
	RCGX191000T02020	0,1-0,6	0,1-0,5		○		

● En stock ○ Sur demande

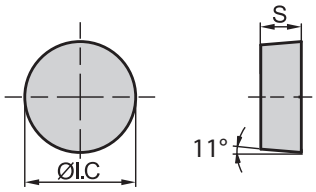
CM Céramique mixte
CC Céramique mixte, revêtue
CN Céramique Si3N4
CR Céramique Al2O3, renforcée

Codification > A198 Choix nuances > A42 Info. techniques > A501 Paramètres > A366

Plaquette de tournage (céramique)

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

RPGN	I.C	S
12 04	12,7	4,76



Plaquette positive RP**				CM		CC		CN		CR	
			P	○							
			M								
			K	○				✲			
			N								
			S					●		✲	✲
			H			○					
ISO		a_p	f	CA1000		CM1000		CN1000	CS1000	CW1400	CW1800
	RPGN120400S01520	0,1-0,35	0,5-3,0							○	
	RPGN120400T00520	0,1-0,35	0,5-3,0								○

● En stock ○ Sur demande

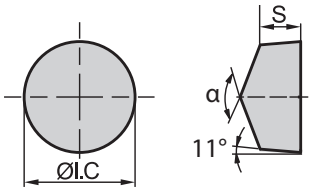
CM Céramique mixte
CC Céramique mixte, revêtue
CN Céramique Si3N4
CR Céramique Al2O3, renforcée

Codification A198 Choix nuances A42 Info. techniques A501 Paramètres A366

● Bonnes conditions d'usinage
✲ Conditions d'usinage normales
✲ Conditions d'usinage défavorables

RPGX	I.C	S
09 07	9,525	7,94

Plaquette de tournage (céramique)



Plaquette positive RP**				CM		CC		CN		CR	
			P	○							
			M								
			K	○				✲			
			N								
			S					●		✲	✲
			H			○					
ISO		a_p	f	CA1000		CM1000		CN1000	CS1000	CW1400	CW1800
	RPGX090700T00525	0,1-0,3	0,5-2,5							○	○

● En stock ○ Sur demande

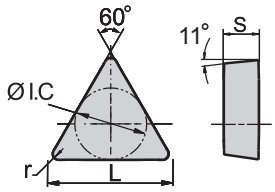
CM Céramique mixte
CC Céramique mixte, revêtue
CN Céramique Si3N4
CR Céramique Al2O3, renforcée

Codification A198 Choix nuances A42 Info. techniques A501 Paramètres A366

Plaquette de tournage (céramique)

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

TPGN	L	I.C	S
11 03	11	6,35	3,18
16 03	16,5	9,525	3,18



Plaquette positive TP**		r	a_p	f	CM	CC	CN	CR
					CA1000	CM1000	CN1000 CS1000	CW1400 CW1800
	TPGN110304T02020	0,4	0,1-0,3	0,08-0,25		○		
	TPGN160304T01020	0,4	0,1-0,3	0,08-0,25		○		
	TPGN160308T01020	0,8	0,1-0,4	0,1-0,3		○		

● En stock ○ Sur demande

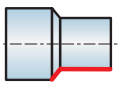
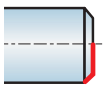
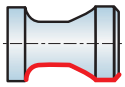
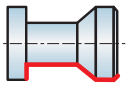
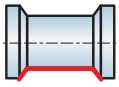
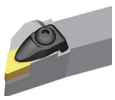
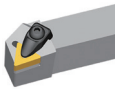
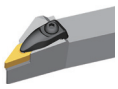
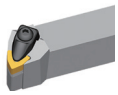
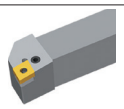
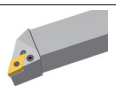
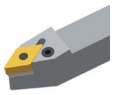
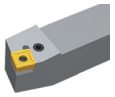
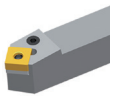
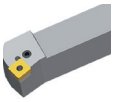
CM Céramique mixte
CC Céramique mixte, revêtue
CN Céramique Si3N4
CR Céramique Al2O3, renforcée

A Tournage
B Fraisage
C Perçage
D Informations techniques
E Index

Codification A198 Choix nuances A42 Info. techniques A501 Paramètres A366

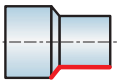
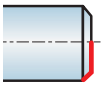
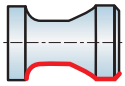
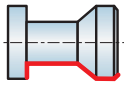
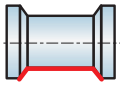
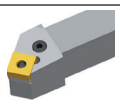
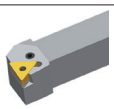
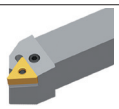
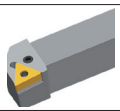
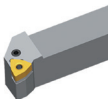
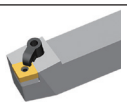
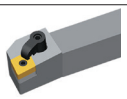
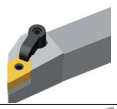
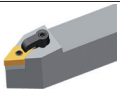
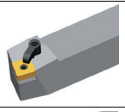
Tournage général Vue d'ensemble des porte-outils de tournage extérieur

Porte-outils de tournage extérieur

	Porte-outils	Application					Pièce		Page
		Chariotage	Dressage	Copiage	Copiage	Copiage	Stable	Instable	
									
D	DCLNR/L 95° 	●	●				●		A230
	DDJNR/L 93° 			●	●	●	●	●	A231
	DSBNR/L 75° 	●					●		A232
	DTGNR/L 91° 	●					●		A233
	DVVNN 72.5° 					●	●		A234
	DVJNR/L 93° 			●	●		●	●	A235
	DWLNR/L 95° 	●	●				●		A236
P	PCBNR/ L 75° 	●					●		A237
	PCLNR/ L 95° 	●	●				●		A238
	PDJNR/ L 93° 			●	●	●	●	●	A240
	PDNNR/ L 63° 					●	●		A241
	PSBNR/ L 75° 	●					●		A242
	PSDNN 45° 	●				●	●		A244
	PSKNR/ L 75° 		●				●		A245

● Recommandation

Porte-outils de tournage extérieur

	Porte-outils		Application					Pièce		Page
			Chariotage	Dressage	Copiage	Copiage	Copiage	Stable	Instable	
										
P	PSSNR/ L 45°		●	●				●		A246
	PTFNR/L 91°			●				●		A247
	PTTNR/L 60°		●					●		A248
	PTGNR/L 90°		●					●		A249
	PWLNR/L 95°		●	●				●		A251
	PLANR/L 90°		●	●			●	●		A316
	PLFNR/L 90°		●					●		A317
	PCLNR/L 95°		●	●				●		A318
M	MCBNR/L 75°		●					●		A252
	MCLNR/L 95°		●	●				●		A253
	MDJNR/L 93°				●	●	●	●	●	A254
	MDPNN 62.5°						●	●		A255
	MSBNR/L 75°		●					●		A256
	MSRNR/L 75°		●					●		A257

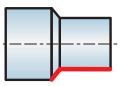
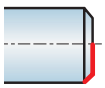
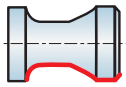
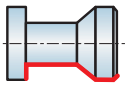
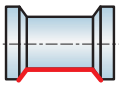
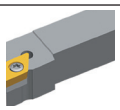
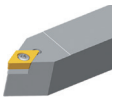
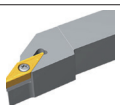
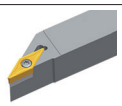
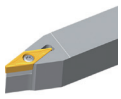
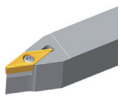
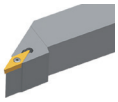
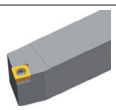
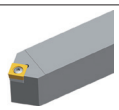
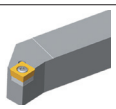
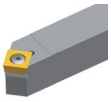
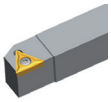
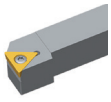
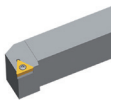
● Recommandation

Porte-outils de tournage extérieur

Porte-outils		Application					Pièce		Page
		Chariotage	Dressage	Copiage	Copiage	Copiage	Stable	Instable	
M	MSKNR/L 75°		●				●		A258
	MSDNN 45°					●	●		A259
	MTGNR/L 90°	●					●		A260
	MTJNR/L 93°	●					●		A261
	MTJNR/L-Z 93°		●		●		●		A262
	MTFNR/L 91°		●				●		A263
	MVVNN 72,5°					●	●		A264
	MVJNR/L 93°			●	●		●	●	A265
	MWLNR/L 95°	●	●				●		A266
	MRGNR/L –			●			●		A268
	MRDNN –					●	●		A267
S	SCACR/L 90°	●					●	●	A269
	SCLCR/L 95°	●	●				●	●	A270
	SDACR/L 90°				●		●	●	A271

● Recommandation

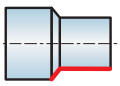
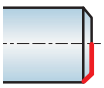
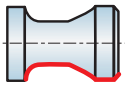
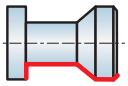
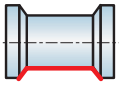
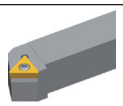
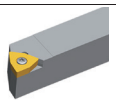
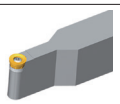
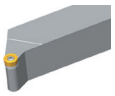
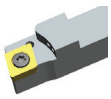
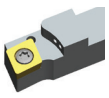
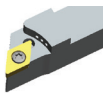
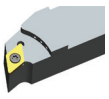
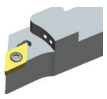
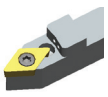
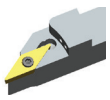
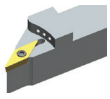
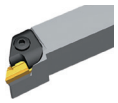
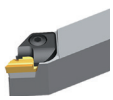
Porte-outils de tournage extérieur

	Porte-outils		Application					Pièce		Page
			Chariotage	Dressage	Copiage	Copiage	Copiage	Stable	Instable	
										
S	SDJCR/L 93°		●			●		●	●	A272
	SDNCN 63°						●	●	●	A273
	SVJBR/L 93°		●			●		●	●	A274
	SVABR/L 90°		●			●		●	●	A275
	SVVBN 72,5°						●	●	●	A276
	SVVCN 72,5°						●	●	●	A277
	SVJCR/L 93°		●			●		●	●	A278
	SSBCR/L 75°		●					●		A279
	SSDCN 45°						●	●		A280
	SSKCR/L 75°			●				●		A281
	SSSCR/L 45°		●					●		A282
	STACR/L 90°		●					●	●	A283
	STFCR/L 91°			●				●		A284
	STGCR/L 91°		●					●	●	A285

● Recommandation

Tournage général Vue d'ensemble des porte-outils de tournage extérieur

Porte-outils de tournage extérieur

Porte-outils		Application					Pièce		Page
		Chariotagz	Dressage	Copiage	Copiage	Copiage	Stable	Instable	
									
S	STTCR/L 60° 	●					●		A286
	SWACR/L 90° 	●					●	●	A287
	SRDCN – 					●	●		A288
	SRGCR/L – 			●			●		A289
	SCACR/L-SC 90° 	●					●	●	A306
	SCLCR/L-SC 95° 	●	●				●	●	A307
	SDACR/L-SC 90° 				●		●	●	A308
	SDHCR/L-SC 107°30' 				●		●	●	A309
	SDJCR/L-SC 93° 	●			●		●	●	A310
	SDNCN-SC 62°30' 					●	●	●	A311
	SVACR/L-SC 90° 	●			●		●	●	A312
	SVJCR/L-SC 93° 	●			●		●	●	A313
C	CKJNR/L 93° 	●			●		●		A290
	CKNNR/L 63° 					●	●		A291

● Recommandation

Notes

Tournage général

Code ISO – porte-outils de tournage extérieur

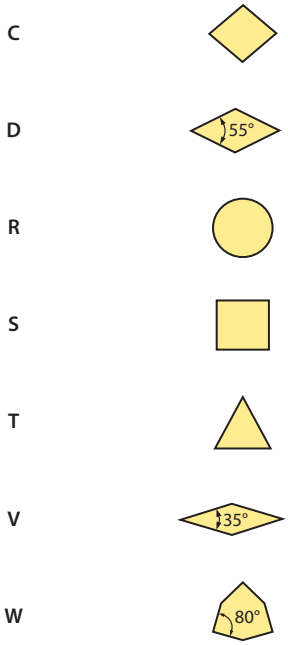
P	C	L	N	L	25	25	M	12
1	2	3	4	5	6	7	8	9

Système de serrage

Code	Description	
P	Système de serrage à levier	
M	Serrage à bride et levier	
S	Système de serrage à vis	
C/J	Serrage par bride	
D	Serrage double	

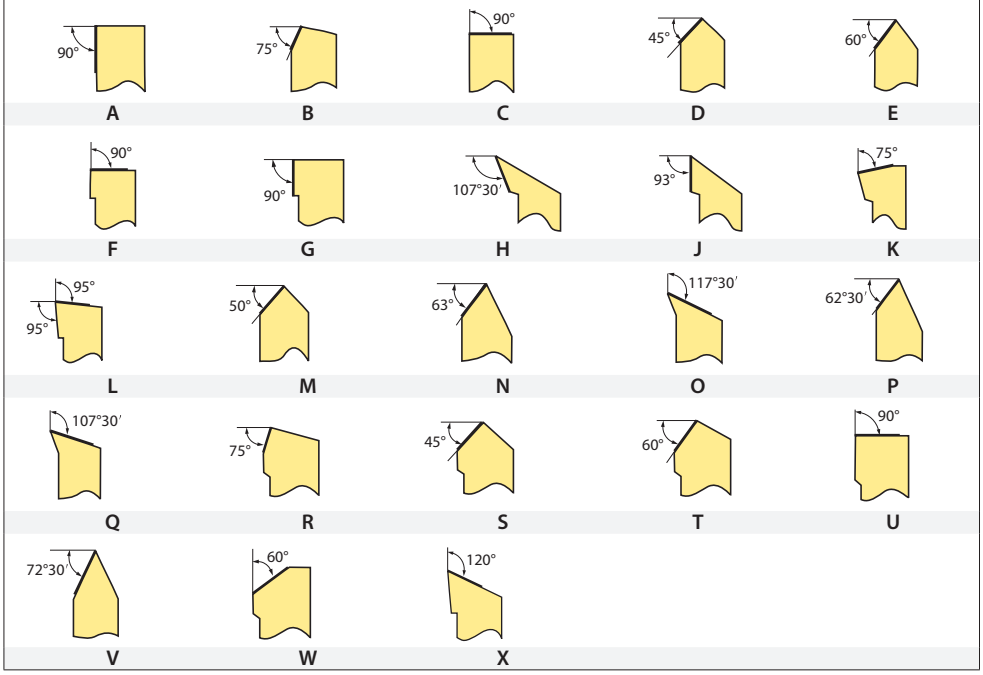
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Forme de plaquette



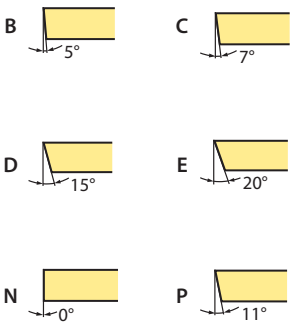
2

Forme de porte-outils et angle d'attaque

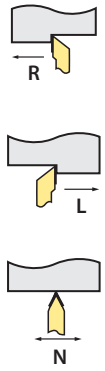


3

Angle de dépouille



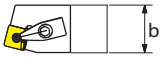
4

Sens de coupe


5

Hauteur du corps [mm]	
	
Code	h
12	12
16	16
20	20
25	25
32	32
40	40
50	50

6

Largeur du corps [mm]	
	
Code	b
12	12
16	16
20	20
25	25
32	32
40	40
50	50

7

Longueur porte-outils L [mm]	
	
Code	L
H	100
K	125
M	150
P	170
Q	180
R	200
S	250
T	300

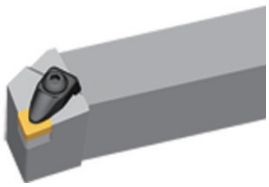
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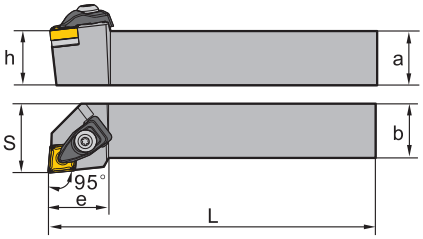
Longueur d'arête l [mm]							
I.C [mm]	Forme de plaquette						
	C	D	R	S	T	V	W
5,56					**09**		
6,35	**06**	**07**			**11**		
9,525	**09**	**11**	**09**	**09**	**16**	**16**	**06**
12,7	**12**	**15**	**12**	**12**	**22**	**22**	**08**
15,875	**16**	**19**	**15**	**15**	**27**		
19,05	**19**		**19**	**19**	**33**		
25,4	**25**		**25**	**25**	**44**		
32			**32**				

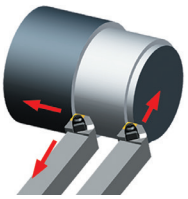
9

Porte-outil (extérieur) CN** D-Serrage

DCLNR/L Kr: 95°







Article	✻	Stock		Dimensions (mm)						Plaquettes
		R	L	a	b	L	h	s	e	
DCLNR/L1616H09		●	○	16	16	100	16	20	24	CN**0903**
DCLNR/L2020K09		●	●	20	20	125	20	25	24	CN**0903**
DCLNR/L2525M09		●	●	25	25	150	25	32	24	CN**0903**
DCLNR/L2020K12		●	●	20	20	125	20	25	28	CN**1204**
DCLNR/L2525M12		●	●	25	25	150	25	32	28	CN**1204**
DCLNR/L3225P12		●	●	32	25	170	32	32	28	CN**1204**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	CN**0903**	CN**1204**
	h	16-25	20-32
	Bride	C1RA	C2RA
	Vis (bride)	CM5×22C (4,0 Nm)	CM6×25C (7,0 Nm)
	Vis (cale-support)	SM5×8.65XA1	SM6×10XA1
	Cale-support	C09BM	C12BM
	Ressort	SPR6	SPR4
	Clé (cale-support)	WH30L	WH40L
	Clé (bride)	WH30L	WH40L

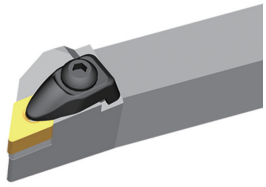
Plaquette

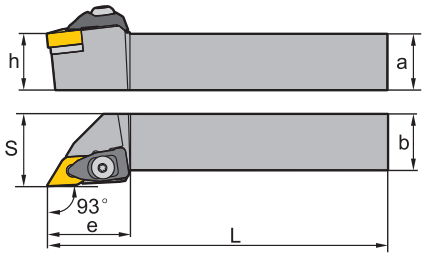
					
Wiper	**Finition**	**Semi-finition**	**Ébauche**	**Usinage fonte grise**	**PCBN/PCD**
A51	A52	A53	A57	A61	A177

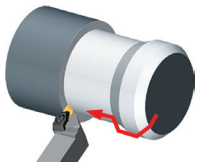
Codification > A228 Choix nuances > A42 Info. techniques > A501 Paramètres > A366

Porte-outil (extérieur) DN** D-Serrage

DDJNR/L Kr: 93°







Article	✲	Stock		Dimensions (mm)						Plaquettes
		R	L	a	b	L	h	s	e	
DDJNR/L1616H11		●	●	16	16	100	16	20	30	DN**1104**
DDJNR/L2020K11		●	●	20	20	125	20	25	30	DN**1104**
DDJNR/L2525M11		●	●	25	25	150	25	32	30	DN**1104**
DDJNR/L3225P11		○	○	32	25	170	32	32	30	DN**1104**
DDJNR/L2020K15		●	●	20	20	125	20	25	35	DN**1506**
DDJNR/L2525M15		●	●	25	25	150	25	32	35	DN**1506**
DDJNR/L3232P15		●	●	32	32	170	32	40	35	DN**1506**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	DN**1104**	DN**1506**
	h	**16-32**	**20-32**
	Bride	C1RA	C2RA
	Vis (bride)	CM5×22C (4,0 Nm)	CM6×25C (7,0 Nm)
	Vis (cale-support)	SM5×8.65XA1	SM6×10XA1
	Cale-support	D11BM	D15BM
	Ressort	SPR6	SPR4
	Clé (cale-support)	WH30L	WH40L
	Clé (bride)	WH30L	WH40L

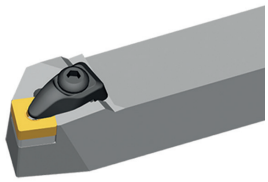
Plaquette

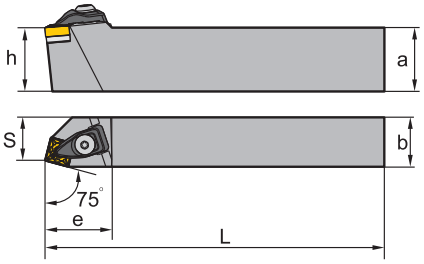
					
Wiper	**Finition**	**Semi-finition**	**Ébauche**	**Usinage fonte grise**	**PCBN/PCD**
A62	A63	A63	A68	A69	A178

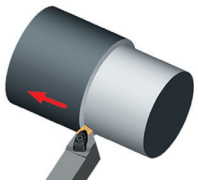
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) SN** D-Serrage

DSBNR/L Kr: 75°







Article	✻	Stock		Dimensions (mm)						Plaquettes
		R	L	a	b	L	h	s	e	
DSBNR/L1616H09		○		16	16	100	16	13	26	SN**0903**
DSBNR/L2020K12		●	●	20	20	125	20	17	34	SN**1204**
DSBNR/L2525M12		●	●	25	25	150	25	22	34	SN**1204**
DSBNR/L3225P12		●	●	32	25	170	32	22	34	SN**1204**
DSBNR/L3232P15		●	●	32	32	170	32	27	41	SN**1506**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	SN**0903**	SN**1204**	SN**1506**
	h	16	20-32	32
	Bride	C1RA	C2RA	C3RA
	Vis (bride)	CM5×22C (4,0 Nm)	CM6×25C (7,0 Nm)	CM6×25C (7,0 Nm)
	Vis (cale-support)	SM5×8.65XA1	SM6×10XA1	SM6×10XA2
	Cale-support	S09BM	S12BM	S15BM
	Ressort	SPR6	SPR4	SPR4
	Clé (cale-support)	WH30L	WH40L	WH40L
	Clé (bride)	WH30L	WH40L	WH40L

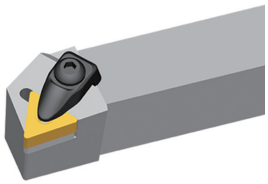
Plaquette

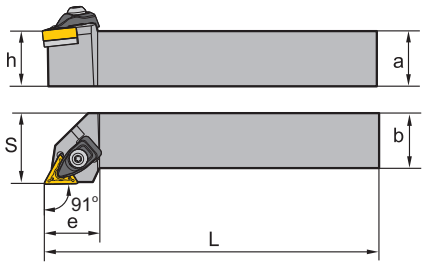
				
Finition	**Semi-finition**	**Ébauche**	**Usinage fonte grise**	**PCBN/PCD**
A73	A73	A78	A84	A162

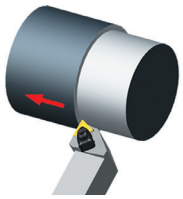
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) TN** D-Serrage

DTGNR/L Kr: 91°







Article	✲	Stock		Dimensions (mm)						Plaquettes
		R	L	a	b	L	h	s	e	
DTGNR/L1616H16		●	●	16	16	100	16	20	25	TN**1604**
DTGNR/L2020K16		●	●	20	20	125	20	25	25	TN**1604**
DTGNR/L2525M16		●	●	25	25	150	25	32	25	TN**1604**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	TN**1604**
	h	**16-25**
	Bride	C1RA
	Vis (bride)	CM5×22C (4,0 Nm)
	Vis (cale-support)	SM5×8.65XA1
	Cale-support	T16BM
	Ressort	SPR6
	Clé (cale-support)	WH30L
	Clé (bride)	WH30L

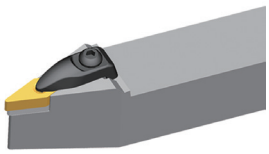
Plaquette

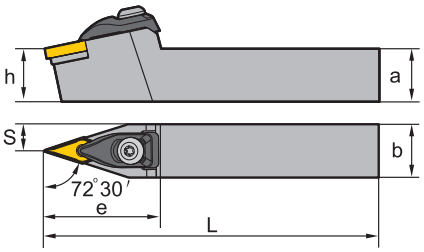
					
Wiper	**Finition**	**Semi-finition**	**Ébauche**	**Usinage fonte grise**	**PCBN/PCD**
A87	A88	A90	A92	A99	A163

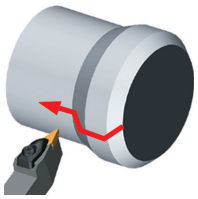
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) VN** D-Serrage

DVVNN Kr: 72°30'







Article	✻	Stock	Dimensions (mm)						Plaquettes
			a	b	L	h	s	e	
DVVNN2020K16		●	20	20	125	20	10	44	VN**1604**
DVVNN2525M16		●	25	25	150	25	12,5	44	VN**1604**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**VN**1604****
	h	**20-25**
	Bride	C6RA
	Vis (bride)	CM5×22C (4,0 Nm)
	Vis (cale-support)	SM5×8.65XA1
	Cale-support	V16BM
	Ressort	SPR6
	Clé (cale-support)	WH30L
	Clé (bride)	WH30L

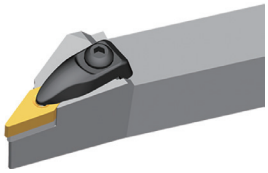
Plaquette

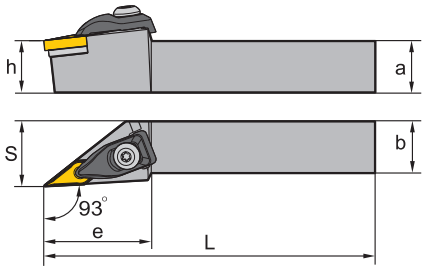
				
Finition	**Semi-finition**	**Ébauche**	**Usinage fonte grise**	**PCBN/PCD**
A102	A102	A104	A103	A179

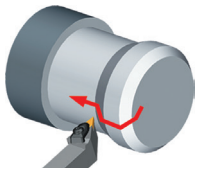
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) VN** D-Serrage

DVJNR/L Kr: 93°







Article	✲	Stock		Dimensions (mm)						Plaquettes
		R	L	a	b	L	h	s	e	
DVJNR/L2020K16		●	●	20	20	125	20	25	41	VN**1604**
DVJNR/L2525M16		●	●	25	25	150	25	32	41	VN**1604**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**VN**1604****
	h	**20-25**
	Bride	C6RA
	Vis (bride)	CM5×22C (4,0 Nm)
	Vis (cale-support)	SM5×8.65XA1
	Cale-support	V16BM
	Ressort	SPR6
	Clé (bride)	WH30L
	Clé (cale-support)	WH30L

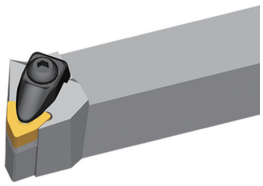
Plaquette

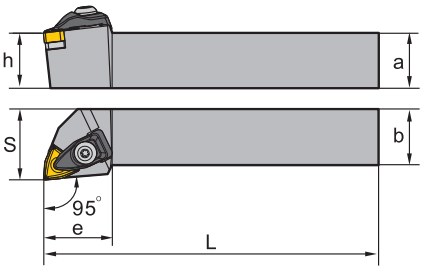
				
Finition	**Semi-finition**	**Ébauche**	**Usinage fonte grise**	**PCBN/PCD**
A102	A102	A104	A103	A179

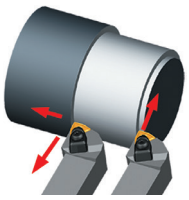
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) WN** D-Serrage

DWLNR/L Kr: 95°







Article	✻	Stock R	Stock L	Dimensions (mm) a	b	L	h	s	e	Plaquettes
DWLNR/L1616H06		●	●	16	16	100	16	25	24	WN**0604**
DWLNR/L2020K06		●	●	20	20	125	20	25	24	WN**0604**
DWLNR/L2525M06		●	●	25	25	150	25	32	24	WN**0604**
DWLNR/L2020K08		●	●	20	20	125	20	25	31	WN**0804**
DWLNR/L2525M08		●	●	25	25	150	25	32	31	WN**0804**
DWLNR/L3225P08		●	●	32	25	170	32	32	31	WN**0804**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	WN**0604**	WN**0804**
	h	**16-25**	**20-32**
	Bride	C1RA	C2RA
	Vis (bride)	CM5×22C (4,0 Nm)	CM6×25C (7,0 Nm)
	Vis (cale-support)	SM5×8.65XA1	SM6×10XA1
	Cale-support	W06BM	W08BM
	Ressort	SPR6	SPR4
	Clé (cale-support)	WH30L	WH40L
	Clé (bride)	WH30L	WH40L

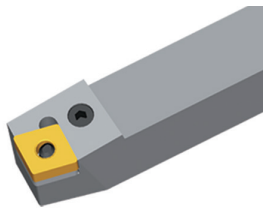
Plaquette

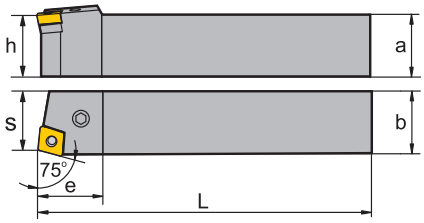
					
Wiper	**Finition**	**Semi-finition**	**Ébauche**	**Usinage fonte grise**	**PCBN/PCD**
A106	A107	A107	A109	A111	A165

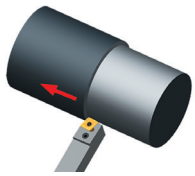
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) CN** P-Serrage

PCBNR/L Kr: 75°







Version à droite

Article	✲	Stock		Dimensions (mm)						Plaquettes
		R	L	a	b	L	h	s	e	
PCBNR/L2020K12		●	●	20	20	125	20	17	27	CN**1204**
PCBNR/L2525M12		●	●	25	25	150	25	22	27	CN**1204**
PCBNR/L3232P12		●	●	32	32	170	32	27	27	CN**1204**
PCBNR/L2525M16		●	●	25	25	150	25	22	33	CN**1606**
PCBNR/L3232P16		●	●	32	32	170	32	27	33	CN**1606**
PCBNR/L3232P19		●	●	32	32	170	32	27	38	CN**1906**
PCBNR/L4040S19		●	●	40	40	250	40	35	38	CN**1906**
PCBNR/L4040S2507		●	●	40	40	250	40	35	50	CN**2507**
PCBNR/L4040S2509		●	●	40	40	250	40	35	50	CN**2509**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	CN**1204**	CN**1606**	CN**1906**	CN**2507**	CN**2509**
	h	20-32	25-32	32-40	40	40
	Levier	L4	L5	L6	L8	L8
	Vis	LEM8×21 (10,2 Nm)	LEM8×25 (10,2 Nm)	LEM10×27 (16,6 Nm)		
	Vis				LEM12×36A (25,2 Nm)	LEM12×36A (25,2 Nm)
	Cale-support	C12AP	C16AP	C19AP	C25AP-07	C25AP
	Goupille ca-le-supp.	SP4	SP5	SP6	SP8	SP8
	Clé	WH30L	WH30L	WH40L	WH50L	WH50L

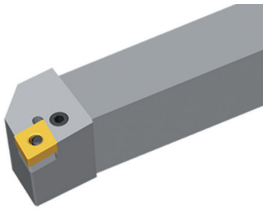
Plaquette

					
Wiper	**Finition**	**Semi-finition**	**Ébauche**	**Usinage fonte grise**	**PCBN/PCD**
A51	A52	A53	A57	A61	A177

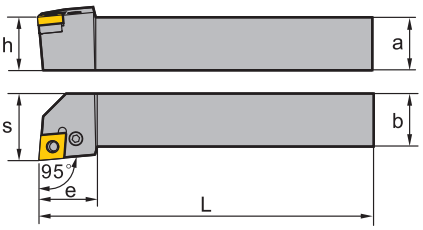
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

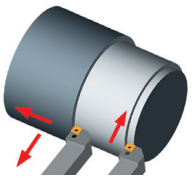
Porte-outil (extérieur) CN** P-Serrage

PCLNR/L Kr: 95°



Version à droite





Article	✻	Stock R	Stock L	Dimensions (mm) a	b	L	h	s	e	Plaquettes
PCLNR/L1616H09		●	●	16	16	100	16	20	20	CN**0903**
PCLNR/L2020K09		●	●	20	20	125	20	25	22	CN**0903**
PCLNR/L2525M09		○	●	25	25	150	25	32	22	CN**0903**
PCLNR/L1616H12		○	○	16	16	100	16	20	20	CN**1204**
PCLNR/L2020K12		●	●	20	20	125	20	25	28	CN**1204**
PCLNR/L2525M12		●	●	25	25	150	25	32	28	CN**1204**
PCLNR/L3232P12		●	●	32	32	170	32	40	28	CN**1204**
PCLNR/L2525M16		●	●	25	25	150	25	32	33	CN**1606**
PCLNR/L3232P16		●	●	32	32	170	32	40	33	CN**1606**
PCLNR/L3232P19		●	●	32	32	170	32	40	38	CN**1906**
PCLNR/L4040S19		●	●	40	40	250	40	50	38	CN**1906**
PCLNR/L4040S2507		●	●	40	40	250	40	50	49	CN**2507**
PCLNR/L4040S2509		●	●	40	40	250	40	50	49	CN**2509**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	CN**0903**	CN**1204**	CN**1606**	CN**1906**	CN**2507**	CN**2509**
	h	16-25	16-32	25-32	32-40	40	40
	Levier	L3	L4	L5	L6	L8	L8
	Vis		LEM8×21 (10,2 Nm)	LEM8×25 (10,2 Nm)	LEM10×27 (16,6 Nm)		
	Vis	LEM6×13,4A (7,0 Nm)				LEM12×36A (25,2 Nm)	LEM12×36A (25,2 Nm)
	Cale-support	C09AP	C12AP	C16AP	C19AP	C25AP-07	C25AP
	Goupille ca-le-supp.	SP10	SP4	SP5	SP6	SP8	SP8
	Clé	WH25L	WH30L	WH30L	WH40L	WH50L	WH50L

Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) CN**

Plaquette

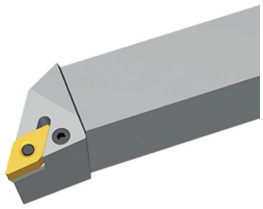
					
Wiper	**Finition**	**Semi-finition**	**Ébauche**	**Usinage fonte grise**	**PCBN/PCD**
A51	A52	A53	A57	A61	A177

A Tournage
B Fraisage
C Perçage
D Informations techniques
E Index

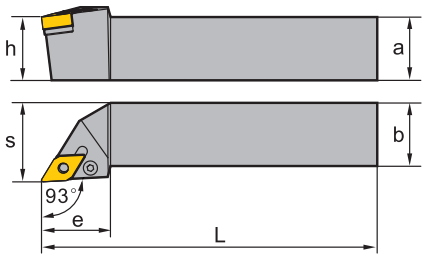
Codification > A228 Choix nuances > A42 Info. techniques > A501 Paramètres > A366

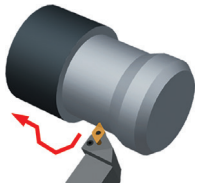
Porte-outil (extérieur) DN** P-Serrage

PDJNR/L Kr: 93°



Version à droite





Article	*	Stock R	Stock L	a	b	L	h	s	e	Plaquettes
PDJNR/L1616H11		●	●	16	16	100	16	20	25	DN**1104**
PDJNR/L2020K11		●	●	20	20	125	20	25	25	DN**1104**
PDJNR/L2525M11		●	●	25	25	150	25	32	30	DN**1104**
PDJNR/L2020K15-3		●	○	20	20	125	20	25	35	DN**1504**
PDJNR/L2525M15-3		●	●	25	25	150	25	32	35	DN**1504**
PDJNR/L3232P15-3		●	●	32	32	170	32	40	35	DN**1504**
PDJNR/L2020K15		●	○	20	20	125	20	25	35	DN**1506**
PDJNR/L2525M15		●	●	25	25	150	25	32	35	DN**1506**
PDJNR/L3232P15		●	●	32	32	170	32	40	35	DN**1506**

● En stock ○ Sur demande

* Avec arrosage interne

Pièces détachées

	Plaquette	DN**1104**	DN**1504**	DN**1506**
	h	**16-32**	**20-32**	**20-32**
	Levier	L3	L4	L4B
	Vis		LEM8×21 (10,2 Nm)	LEM8×21 (10,2 Nm)
	Vis	LEM6×13,4A (7,0 Nm)		
	Cale-support	D11AP	D15AP	D15AP
	Goupille ca-le-supp.	SP3	SP4	SP4
	Clé	WH25L	WH30L	WH30L

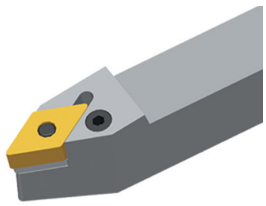
Plaquette

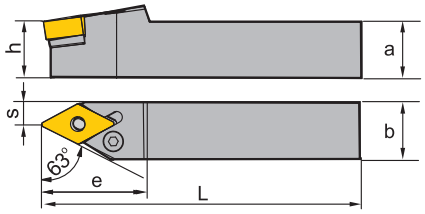
					
Wiper	**Finition**	**Semi-finition**	**Ébauche**	**Usinage fonte grise**	**PCBN/PCD**
A62	A63	A63	A68	A69	A178

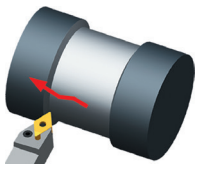
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) DN** P-Serrage

PDNNR/L Kr: 63°







Version à gauche

Article	✲	Stock		Dimensions (mm)						Plaquettes
		R	L	a	b	L	h	s	e	
PDNNR/L2020K15-3		●	○	20	20	125	20	8	37	DN**1504**
PDNNR/L2525M15-3		●	○	25	25	150	25	12,5	37	DN**1504**
PDNNR/L3232P15-3		●	●	32	32	170	32	16	37	DN**1504**
PDNNR/L2020K15		●	●	20	20	125	20	8	37	DN**1506**
PDNNR/L2525M15		●	●	25	25	150	25	12,5	37	DN**1506**
PDNNR/L3232P15		●	●	32	32	170	32	16	37	DN**1506**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**DN**1504****	**DN**1506****
	h	**20-32**	**20-32**
	Levier	L4	L4B
	Vis	LEM8×21 (10,2 Nm)	LEM8×21 (10,2 Nm)
	Cale-support	D15AP	D15AP
	Goupille ca-le-supp.	SP4	SP4
	Clé	WH30L	WH30L

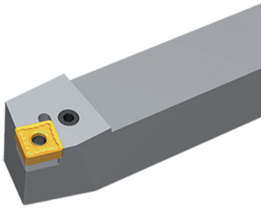
Plaquette

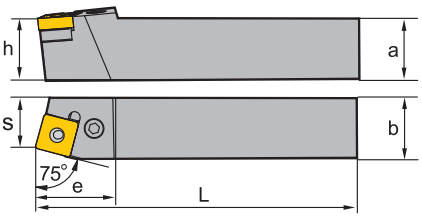
Wiper	**Finition**	**Semi-finition**	**Ébauche**	**Usinage fonte grise**	**PCBN/PCD**
A62	A63	A63	A68	A69	A178

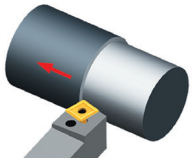
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) SN** P-Serrage

PSBNR/L Kr: 75°







Version à droite

Article	✻	Stock R	Stock L	Dimensions (mm) a	b	L	h	s	e	Plaquettes
PSBNR/L1616H09		●	○	16	16	100	16	13	21	SN**0903**
PSBNR/L2020K09		●	○	20	20	125	20	17	23	SN**0903**
PSBNR/L2020K12		●	●	20	20	125	20	17	28	SN**1204**
PSBNR/L2525M12		●	●	25	25	125	25	22	28	SN**1204**
PSBNR/L3225P12		●	○	32	25	170	32	22	28	SN**1204**
PSBNR/L3232P12		●	○	32	32	170	32	27	28	SN**1204**
PSBNR/L2525M15		●	○	25	25	150	25	22	35	SN**1506**
PSBNR/L3232P15		●	●	32	32	170	32	27	35	SN**1506**
PSBNR/L3232P19		●	●	32	32	170	32	27	40	SN**1906**
PSBNR/L4040S19		●	●	40	40	250	40	35	40	SN**1906**
PSBNR/L4040S2507		○	○	40	40	250	40	35	48	SN**2507**
PSBNR/L4040S2509		○	○	40	40	250	40	35	48	SN**2509**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	SN**0903**	SN**1204**	SN**1506**	SN**1906**	SN**2507**	SN**2509**
	h	16-20	20-32	25-32	32-40	40	40
	Levier	L3	L4	L5	L6	L8	L8
	Vis		LEM8×21 (10,2 Nm)	LEM8×25 (10,2 Nm)	LEM10×27 (16,6 Nm)		
	Vis	LEM6×13,4A (7,0 Nm)				LEM12×36A (25,2 Nm)	LEM12×36A (25,2 Nm)
	Cale-support	S09AP	S12AP	S15AP	S19AP	S25AP	
	Cale-support						S25AP-09
	Goupille cale-supp.	SP10	SP4	SP5	SP6	SP8	SP8
	Clé	WH25L	WH30L	WH30L	WH40L	WH50L	WH50L

Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

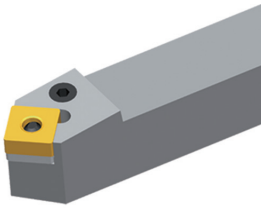
Porte-outil (extérieur) SN**

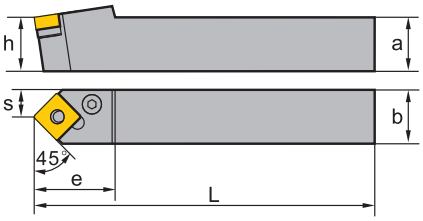
Plaquette				
				
Finition	**Semi-finition**	**Ébauche**	**Usinage fonte grise**	**PCBN/PCD**
A73	A73	A78	A84	A162

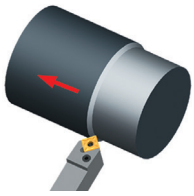
Codification > A228 Choix nuances > A42 Info. techniques > A501 Paramètres > A366

Porte-outil (extérieur) SN** P-Serrage

PSDNN Kr: 45°







Article	✻	Stock	Dimensions (mm)						Plaquettes
			a	b	L	h	s	e	
PSDNN1212F09		○	12	12	80	12	6	21	SN**0903**
PSDNN1616H09		●	16	16	100	16	8	23	SN**0903**
PSDNN2020K12		●	20	20	125	20	10	30	SN**1204**
PSDNN2525M12		●	20	20	150	20	12,5	30	SN**1204**
PSDNN3232P12		●	32	32	170	32	16	40	SN**1204**
PSDNN2525M15		●	25	25	150	25	12,5	40	SN**1506**
PSDNN3232P15		●	32	32	170	32	16	40	SN**1506**
PSDNN3232P19		●	32	32	170	32	16	40	SN**1906**
PSDNN4040S19		●	40	40	250	40	20	40	SN**1906**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	SN**0903**	SN**0903**	SN**1204**	SN**1506**	SN**1906**
	h	12	16	20-32	25-32	32-40
	Levier	L3B	L3	L3	L5	L6
	Vis	LEM5×12B (4,0 Nm)				
	Vis				LEM8×25 (10,2 Nm)	LEM10×27 (16,6 Nm)
	Vis		LEM6×13,4A (7,0 Nm)	LEM6×13,4A (7,0 Nm)		
	Cale-support		S09AP	S12AP	S15AP	S19AP
	Goupille ca-le-supp.		SP10	SP10	SP5	SP6
	Clé		WH25L	WH25L	WH30L	WH40L
	Clé	WT09IP				

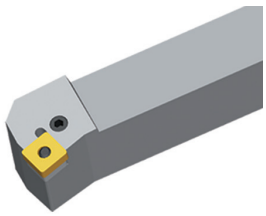
Plaquette

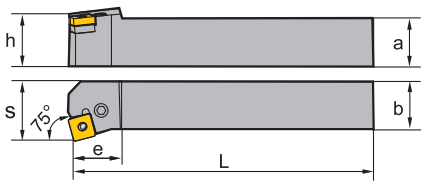
Finition	Semi-finition	Ébauche	Usinage fonte grise	PCBN/PCD
A73	A73	A78	A84	A162

Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) SN** P-Serrage

PSKNR/L Kr: 75°







Version à droite

Article	✲	Stock		Dimensions (mm)						Plaquettes
		R	L	a	b	L	h	s	e	
PSKNR/L1616H09		○	○	16	16	100	16	20	17	SN**0903**
PSKNR/L2020K09		●	○	20	20	125	20	25	20	SN**0903**
PSKNR/L2020K12		●	●	20	20	125	20	25	26	SN**1204**
PSKNR/L2525M12		●	●	25	25	150	25	32	26	SN**1204**
PSKNR/L3232P12		●	●	32	32	170	32	40	26	SN**1204**
PSKNR/L2525M15		●	○	25	25	150	25	32	32	SN**1506**
PSKNR/L3232P15		●	●	32	32	170	32	40	32	SN**1506**
PSKNR/L3232P19		●	●	32	32	170	32	40	36	SN**1906**
PSKNR/L4040S19		○	○	40	40	250	40	50	40	SN**1906**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	SN**0903**	SN**1204**	SN**1506**	SN**1906**
	h	16-20	20-32	25-32	32-40
	Levier	L3	L4	L5	L6
	Vis		LEM8×21 (10,2 Nm)	LEM8×25 (10,2 Nm)	LEM10×27 (16,6 Nm)
	Vis	LEM6×13,4A (7,0 Nm)			
	Cale-support	S09AP	S12AP	S15AP	S19AP
	Goupille ca-le-supp.	SP10	SP4	SP5	SP6
	Clé	WH25L	WH30L	WH30L	WH40L

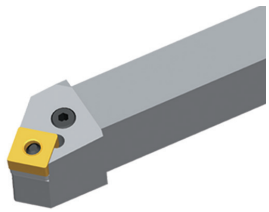
Plaquette

				
Finition	**Semi-finition**	**Ébauche**	**Usinage fonte grise**	**PCBN/PCD**
A73	A73	A78	A84	A162

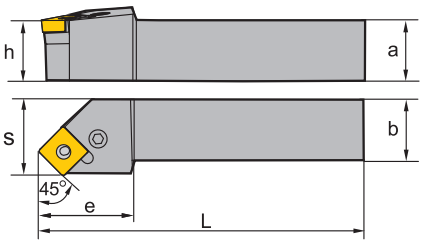
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

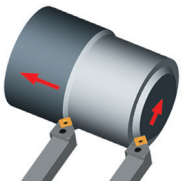
Porte-outil (extérieur) SN** P-Serrage

PSSNR/L Kr: 45°



Version à droite





Article	✻	Stock R	Stock L	Dimensions (mm) a	b	L	h	s	e	Plaquettes
PSSNR/L1616H09		●	●	16	16	100	16	20	25	SN**0903**
PSSNR/L2020K12		●	●	20	20	125	20	25	30	SN**1204**
PSSNR/L2525M12		●	●	25	25	150	25	32	30	SN**1204**
PSSNR/L3232P12		●	●	32	32	170	32	40	40	SN**1204**
PSSNR/L2525M15		●	●	25	25	150	25	32	30	SN**1506**
PSSNR/L3232P15		●	●	32	32	170	32	40	40	SN**1506**
PSSNR/L3232P19		●	●	32	32	170	32	40	40	SN**1906**
PSSNR/L4040S19		●	●	40	40	250	40	50	50	SN**1906**
PSSNR/L4040S2507		●	●	40	40	250	40	50	50	SN**2507**
PSSNR/L4040S2509		●	●	40	40	250	40	50	50	SN**2509**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	SN**0903**	SN**1204**	SN**1506**	SN**1906**	SN**2507**	SN**2509**
	h	**16**	**20-32**	**25-32**	**32-40**	**40**	**40**
	Levier	L3	L4	L5	L6	L8	L8
	Vis		LEM8×21 (10,2 Nm)	LEM8×25 (10,2 Nm)	LEM10×27 (16,6 Nm)		
	Vis	LEM6×13,4A (7,0 Nm)				LEM12×36A (25,2 Nm)	LEM12×36A (25,2 Nm)
	Cale-support	S09AP	S12AP	S15AP	S19AP	S25AP	
	Cale-support						S25AP-09
	Goupille ca-le-supp.	SP10	SP4	SP5	SP6	SP8	SP8
	Clé	WH25L	WH30L	WH30L	WH40L	WH50L	WH50L

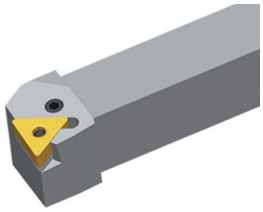
Plaquette

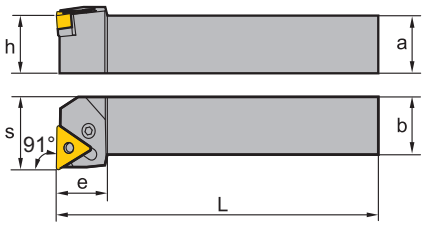
				
Finition	**Semi-finition**	**Ébauche**	**Usinage fonte grise**	**PCBN/PCD**
A73	A73	A78	A84	A162

Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) TN** P-Serrage

PTFNR/L Kr: 91°







Version à droite

Article	✲	Stock		Dimensions (mm)						Plaquettes
		R	L	a	b	L	h	s	e	
PTFNR/L1616H16		●	●	16	16	100	16	20	20	TN**1604**
PTFNR/L2020K16		●	●	20	20	125	20	25	20	TN**1604**
PTFNR/L2525M16		●	●	25	25	150	25	32	20	TN**1604**
PTFNR/L2525M22		●	●	25	25	150	25	32	25	TN**2204**
PTFNR/L3232P22		●	●	32	32	170	32	40	25	TN**2204**
PTFNR/L3232P27		●	○	32	32	170	32	40	34	TN**2706**
PTFNR/L4040S27		○	○	40	40	250	40	50	34	TN**2706**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	TN**1604**	TN**2204**	TN**2706**
	h	**16-25**	**25-32**	**32-40**
	Levier	L3	L4	L5
	Vis		LEM8×21 (10,2 Nm)	LEM8×25 (10,2 Nm)
	Vis	LEM6×13,4A (7,0 Nm)		
	Cale-support	T16AP	T22AP	T27AP
	Goupille ca-le-supp.	SP3	SP4	SP5
	Clé	WH25L	WH30L	WH30L

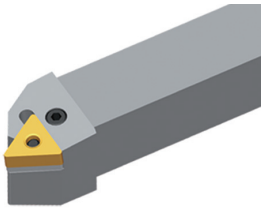
Plaquette

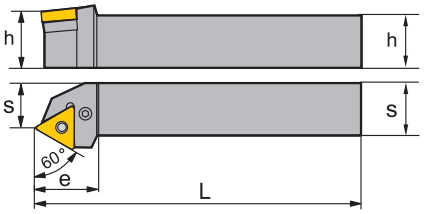
						
Wiper	**Finition**	**Semi-finition**	**Ébauche**	**Usinage difficile**	**Usinage fonte grise**	**PCBN/PCD**
A87	A88	A90	A92	A97	A99	A163

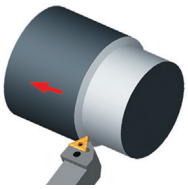
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) TN** P-Serrage

PTTNR/L Kr: 60°







Version à droite

Article	✻	Stock R	Stock L	Dimensions (mm) a	b	L	h	s	e	Plaquettes
PTTNR/L1616H16		●		16	16	100	16	13	25	TN**1604**
PTTNR/L2020K16		●	○	20	20	125	20	17	25	TN**1604**
PTTNR/L2525M22		●	●	25	25	150	20	22	32	TN**2204**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	TN**1604**	TN**2204**
	h	**16-25**	**20**
	Levier	L3	L4
	Vis		LEM8×21 (10,2 Nm)
	Vis	LEM6×13,4A (7,0 Nm)	
	Cale-support	T16AP	T22AP
	Goupille ca-le-supp.	SP3	SP4
	Clé	WH25L	WH30L

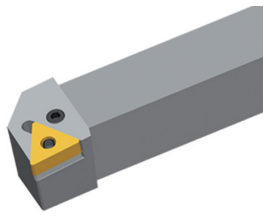
Plaquette

Wiper	Finition	Semi-finition	Ébauche	Usinage difficile	Usinage fonte grise	PCBN/PCD
A87	A88	A90	A92	A97	A99	A163

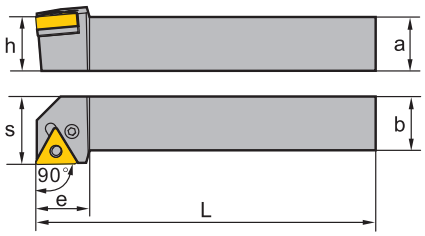
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

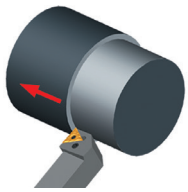
Porte-outil (extérieur) TN** P-Serrage

PTGNR/L Kr: 90°



Version à droite





Article	✻	Stock		Dimensions (mm)						Plaquettes
		R	L	a	b	L	h	s	e	
PTGNR/L1010E11		●		10	10	70	10	14	16	TN**1103**
PTGNR/L1212F11		●	●	12	12	80	12	16	14	TN**1103**
PTGNR/L1616H11		●		16	16	100	16	20	18	TN**1103**
PTGNR/L2020K11		●	○	20	20	125	20	25	19	TN**1103**
PTGNR/L2525M11		○	○	25	25	150	25	32	20	TN**1103**
PTGNR/L1616H16		●	●	16	16	100	16	20	20	TN**1604**
PTGNR/L2020K16		●	●	20	20	125	20	25	20	TN**1604**
PTGNR/L2525M16		●	●	25	25	150	25	32	20	TN**1604**
PTGNR/L3232P16		●	○	32	32	170	32	40	20	TN**1604**
PTGNR/L2525M22		●	●	25	25	150	25	32	28	TN**2204**
PTGNR/L3232P22		●	●	32	32	170	32	40	28	TN**2204**
PTGNR/L3232P27		●	○	32	32	170	32	40	33	TN**2706**
PTGNR/L4040S27		○	○	40	40	250	40	50	33	TN**2706**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**TN**1103****	**TN**1604****	**TN**2204****	**TN**2706****
	h	**10-25**	**16-32**	**25-32**	**32-40**
	Levier	L2	L3	L4	L5
	Vis	LEM5×9B (4,0 Nm)			
	Vis			LEM8×21 (10,2 Nm)	LEM8×25 (10,2 Nm)
	Vis		LEM6×13,4A (7,0 Nm)		
	Cale-support		T16AP	T22AP	T27AP
	Goupille ca-le-supp.		SP3	SP4	SP5
	Clé		WH25L	WH30L	WH30L
	Clé	WT09IP			

Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) TN**

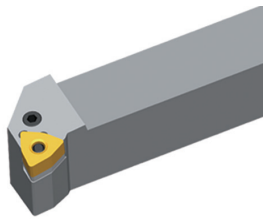
Plaquette

 Wiper	 Finition	 Semi-finition	 Ébauche	 Usinage difficile	 Usinage fonte grise	 PCBN/PCD
A87	A88	A90	A92	A97	A99	A163

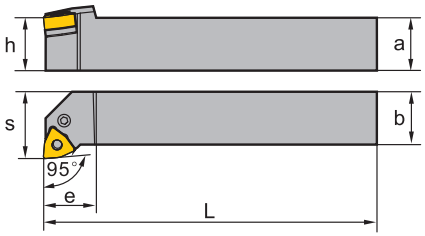
Codification > A228 Choix nuances > A42 Info. techniques > A501 Paramètres > A366

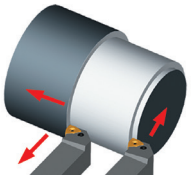
Porte-outil (extérieur) WN** P-Serrage

PWLNR/L Kr: 95°



Version à droite





Article	✻	Stock		Dimensions (mm)						Plaquettes
		R	L	a	b	L	h	s	e	
PWLNR/L1616H06		●	●	16	16	100	16	20	20	WN**0604**
PWLNR/L2020K06		●	●	20	20	125	20	25	20	WN**0604**
PWLNR/L2525M06		●	●	25	25	150	25	32	20	WN**0604**
PWLNR/L2020K08		●	●	20	20	125	20	25	26	WN**0804**
PWLNR/L2525M08		●	●	25	25	150	25	32	26	WN**0804**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**WN**0604****	**WN**0804****
	h	**16-25**	**20-25**
	Levier	L3	L4
	Vis		LEM8×21 (10,2 Nm)
	Vis	LEM6×13,4A (7,0 Nm)	
	Cale-support	W06AP	W08AP
	Goupille ca-le-supp.	SP3	SP4
	Clé	WH25L	WH30L

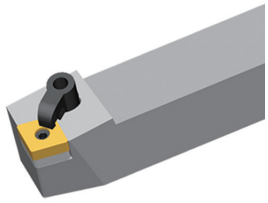
Plaquette

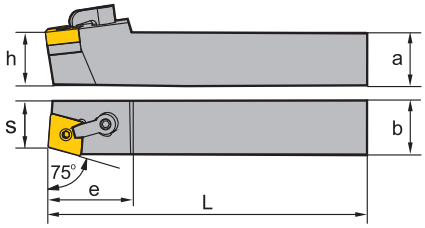
					
Wiper	**Finition**	**Semi-finition**	**Ébauche**	**Usinage fonte grise**	**PCBN/PCD**
A106	A107	A107	A109	A111	A165

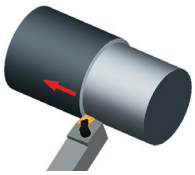
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) CN** M-Serrage

MCBNR/L Kr: 75°







Version à droite

Article	✻	Stock R	Stock L	Dimensions (mm) a	b	L	h	s	e	Plaquettes
MCBNR/L2020K12		●	○	20	20	125	20	17	32	CN**1204**
MCBNR/L2525M12		●	●	25	25	150	20	22	32	CN**1204**
MCBNR/L3225P12		●	●	32	25	170	32	22	32	CN**1204**
MCBNR/L2525M16		○	○	25	25	150	25	22	40	CN**1606**
MCBNR/L3232P16		●	●	32	32	170	32	27	40	CN**1606**
MCBNR/L3232P19		○	○	32	32	170	32	27	45	CN**1906**
MCBNR/L4040R19		○	●	40	40	200	40	35	45	CN**1906**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	CN**1204**	CN**1204**	CN**1606**	CN**1906**
	h	**20**	**25-32**	**25-32**	**32-40**
	Bride	C1RD	C1RD	C2RD	C5RD
	Goupille d'arrêt	TM6×17	TM6×17	TM8×21	TM10×21
	Vis (bride)	DM6×25 (7,0 Nm)	DM6×30 (7,0 Nm)	DM6×30 (7,0 Nm)	
	Vis (bride)				DM8×30X (10,2 Nm)
	Cale-support	C12BM	C12BM	C16BM	C19BM
	Clé (goupille d'arrêt)	WH30L	WH30L	WH30L	WH40L
	Clé (bride)	WH30L	WH30L	WH30L	WH40L

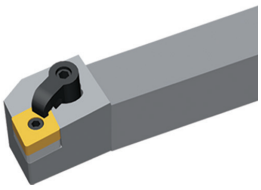
Plaquette

					
Wiper	**Finition**	**Semi-finition**	**Ébauche**	**Usinage fonte grise**	**PCBN/PCD**
A51	A52	A53	A57	A61	A177

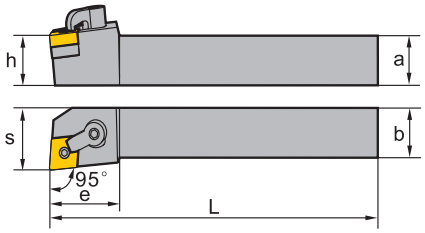
Codification > A228 Choix nuances > A42 Info. techniques > A501 Paramètres > A366

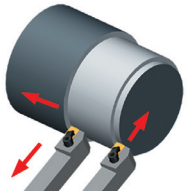
Porte-outil (extérieur) CN** M-Serrage

MCLNR/L Kr: 95°



Version à droite





Article	✻	Stock		Dimensions (mm)						Plaquettes
		R	L	a	b	L	h	s	e	
MCLNR/L2020K12		●	●	20	20	125	20	25	32	CN**1204**
MCLNR/L2525M12		●	●	25	25	150	25	32	32	CN**1204**
MCLNR/L3225P12		●	●	32	25	170	32	32	32	CN**1204**
MCLNR/L2525M16		●	●	25	25	150	25	32	38	CN**1606**
MCLNR/L3232P16		●	●	32	32	170	32	40	38	CN**1606**
MCLNR/L3232P19		●	●	32	32	170	32	40	45	CN**1906**
MCLNR/L4040R19		●	○	40	40	200	40	50	45	CN**1906**
MCLNR/L4040S25		○	○	40	40	250	40	50	38	CN**2509**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	CN**1204**	CN**1204**	CN**1606**	CN**1906**	CN**2509**
	h	20	25-32	25-32	32-40	40
	Bride	C1RD	C1RD	C2RD	C5RD	C6RD
	Goupille d'arrêt	TM6×17	TM6×17	TM8×21	TM10×21	TM12×29 (25,2 Nm)
	Vis (bride)	DM6×25 (7,0 Nm)	DM6×30 (7,0 Nm)	DM6×30 (7,0 Nm)		
	Vis (bride)				DM8×30X (10,2 Nm)	DM10×35X (16,6 Nm)
	Cale-support	C12BM	C12BM	C16BM	C19BM	
	Cale-support					C25BM-09
	Clé (bride)	WH30L	WH30L	WH30L	WH40L	WH50L
	Clé (goupille d'arrêt)	WH30L	WH30L	WH30L	WH40L	WH40L

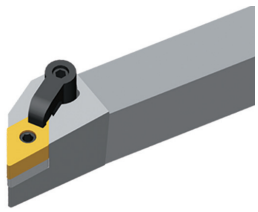
Plaquette

					
Wiper	**Finition**	**Semi-finition**	**Ébauche**	**Usinage fonte grise**	**PCBN/PCD**
A51	A52	A53	A57	A61	A177

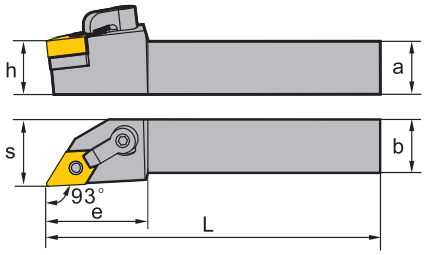
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

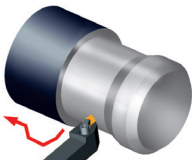
Porte-outil (extérieur) DN** M-Serrage

MDJNR/L Kr: 93°



Version à droite





Article	*	Stock R	Stock L	a	b	L	h	s	e	Plaquettes
MDJNR/L2020K11		●	●	20	20	125	20	25	32	DN**1104**
MDJNR/L2525M11		●	●	25	25	150	25	32	32	DN**1104**
MDJNR/L3225P11		●	○	32	25	170	32	32	32	DN**1104**
MDJNR/L2020K15		●	●	20	20	125	20	25	38	DN**1506**
MDJNR/L2525M15		●	●	25	25	150	25	32	38	DN**1506**
MDJNR/L3225P15		●	●	32	25	170	32	32	38	DN**1506**

● En stock ○ Sur demande

* Avec arrosage interne

Pièces détachées

	Plaquette h	DN**1104** 20	DN**1104** 25-32	DN**1506** 20	DN**1506** 25-32
	Bride	C1RD	C1RD	C2RD	C2RD
	Goupille d'arrêt	TM5×13	TM5×13	TM6×19	TM6×19
	Vis (bride)	DM6×25 (7,0 Nm)	DM6×30 (7,0 Nm)	DM6×25 (7,0 Nm)	DM6×30 (7,0 Nm)
	Cale-support	D11BM	D11BM	D15BM	D15BM
	Clé (bride)	WH30L	WH30L	WH30L	WH30L
	Clé (goupille d'arrêt)	WH20L	WH20L	WH30L	WH30L

Plaquette





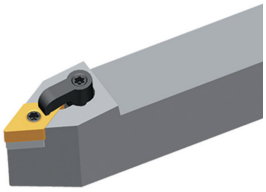


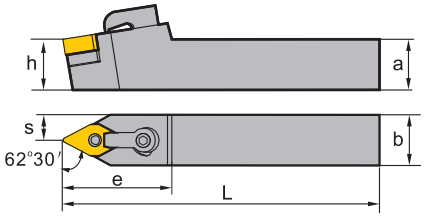

Wiper	Finition	Semi-finition	Ébauche	Usinage fonte grise	PCBN/PCD
A62	A63	A63	A68	A69	A178

Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) DN** M-Serrage

MDPNN Kr: 62°30'







Article	✻	Stock	Dimensions (mm)						Plaquettes
			a	b	L	h	s	e	
MDPNN2020K11		●	20	20	125	20	10	35	DN**1104**
MDPNN2525M11		●	25	25	150	25	12,5	35	DN**1104**
MDPNN2020K15		●	20	20	125	20	10	40	DN**1506**
MDPNN2525M15		●	25	25	150	25	12,5	40	DN**1506**
MDPNN3225P15		●	32	25	170	32	12,5	40	DN**1506**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	DN**1104**	DN**1104**	DN**1506**	DN**1506**
	h	20	25-32	20	25-32
	Bride	C1RD	C1RD	C2RD	C2RD
	Goupille d'arrêt	TM5×13	TM5×13	TM6×19	TM6×19
	Vis (bride)	DM6×25 (7,0 Nm)	DM6×30 (7,0 Nm)	DM6×25 (7,0 Nm)	DM6×30 (7,0 Nm)
	Cale-support	D11BM	D11BM	D15BM	D15BM
	Clé (bride)	WH30L	WH30L	WH30L	WH30L
	Clé (goupille d'arrêt)	WH20L	WH20L	WH30L	WH30L

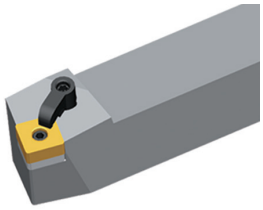
Plaquette

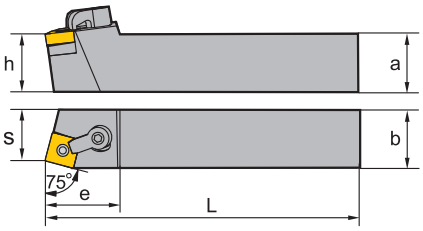
					
Wiper	**Finition**	**Semi-finition**	**Ébauche**	**Usinage fonte grise**	**PCBN/PCD**
A62	A63	A63	A68	A69	A178

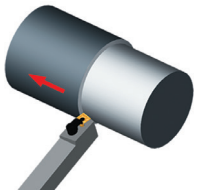
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) SN** M-Serrage

MSBNR/L Kr: 75°







Version à droite

Article	✻	Stock R	Stock L	Dimensions (mm) a	b	L	h	s	e	Plaquettes
MSBNR/L2020K12		●	●	20	20	125	20	17	32	SN**1204**
MSBNR/L2525M12		●	○	25	25	150	25	22	32	SN**1204**
MSBNR/L3225P12			●	32	25	170	32	22	32	SN**1204**
MSBNR/L2525M15		●	○	25	25	150	25	22	38	SN**1506**
MSBNR/L3232P15		●	●	32	32	170	32	29	38	SN**1506**
MSBNR/L4032R15		○		40	32	200	40	27	38	SN**1506**
MSBNR/L3232P19		●	●	32	32	170	32	27	45	SN**1906**
MSBNR/L4040R19		○	●	40	40	200	40	35	45	SN**1906**
MSBNR/L4040R25		●	○	40	40	200	40	35	50	SN**2507**
MSBNR/L4040S2509		○	○	40	40	250	40	35	50	SN**2509**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	SN**1204**	SN**1204**	SN**1506**	SN**1906**	SN**2507**	SN**2509**
	h	**20**	**25-32**	**25-40**	**32-40**	**40**	**40**
	Bride	C1RD	C1RD	C2RD	C5RD	C6RD	C6RD
	Goupille d'arrêt	TM6×17	TM6×17	TM8×21	TM10×21	TM12×29	TM12×29
	Vis (bride)	DM6×25 (7,0 Nm)	DM6×30 (7,0 Nm)	DM6×30 (7,0 Nm)			
	Vis (bride)				DM8×30X (10,2 Nm)	DM10×35X (16,6 Nm)	DM10×35X (16,6 Nm)
	Cale-support	S12BM	S12BM	S15BM	S19BM	S25BM	S25BM
	Clé (bride)	WH30L	WH30L	WH30L	WH40L	WH40L	WH40L
	Clé (goupille d'arrêt)	WH31L	WH31L	WH30L	WH40L	WH50L	WH50L

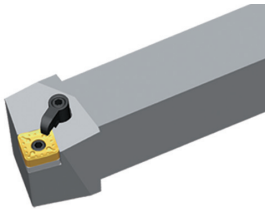
Plaquette

				
Finition	**Semi-finition**	**Ébauche**	**Usinage fonte grise**	**PCBN/PCD**
A73	A73	A78	A84	A162

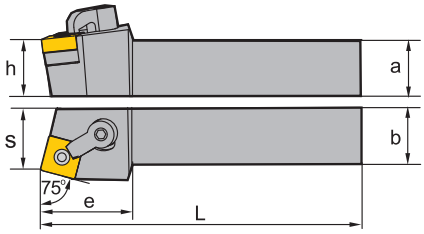
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

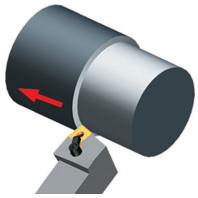
Porte-outil (extérieur) SN** M-Serrage

MSRNR/L Kr: 75°



Version à droite





Article	✲	Stock		Dimensions (mm)						Plaquettes
		R	L	a	b	L	h	s	e	
MSRNR/L2020K12		●	●	20	20	125	20	22	36	SN**1204**
MSRNR/L2525M12		●	●	25	25	150	25	27	36	SN**1204**
MSRNR/L3225P12			○	32	25	170	32	27	36	SN**1204**
MSRNR/L2525M15		●	○	25	25	150	25	27	40	SN**1506**
MSRNR/L3232P15		●	●	32	32	170	32	35	40	SN**1506**
MSRNR/L4032R15		○		40	32	200	40	35	40	SN**1506**
MSRNR/L3232P19		○	○	32	32	170	32	35	45	SN**1906**
MSRNR/L4040R19		○		40	40	200	40	43	45	SN**1906**
MSRNR/L4040R2509		○	○	40	40	200	40	43	50	SN**2509**
MSRNR/L4040S2509		○	○	40	40	250	40	43	50	SN**2509**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	SN**1204**	SN**1204**	SN**1506**	SN**1906**	SN**2509**
	h	20	25-32	25-40	32-40	40
	Bride	C1RD	C1RD	C2RD	C5RD	C6RD
	Goupille d'arrêt	TM6×17	TM6×17	TM8×21	TM10×21	TM12×29
	Vis (bride)	DM6×25 (7,0 Nm)	DM6×30 (7,0 Nm)	DM6×30 (7,0 Nm)		
	Vis (bride)				DM8×30X (10,2 Nm)	DM10×35X (16,6 Nm)
	Cale-support	S12BM	S12BM	S15BM	S19BM	S25BM
	Clé (bride)	WH30L	WH30L	WH30L	WH40L	WH40L
	Clé (goupille d'arrêt)	WH31L	WH31L	WH30L	WH40L	WH50L

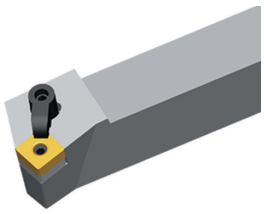
Plaquette

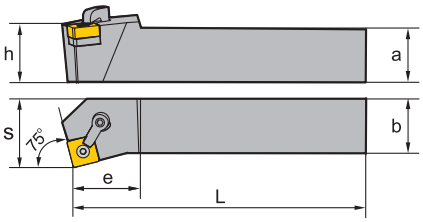
				
Finition	**Semi-finition**	**Ébauche**	**Usinage fonte grise**	**PCBN/PCD**
A73	A73	A78	A84	A162

Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) SN** M-Serrage

MSKNR/L Kr: 75°







Version à droite

Article	✻	Stock R	Stock L	Dimensions (mm) a	b	L	h	s	e	Plaquettes
MSKNR/L2020K12		●	●	20	20	125	20	25	32	SN**1204**
MSKNR/L2525M12		●	●	25	25	150	25	32	32	SN**1204**
MSKNR/L3225P12		●	○	32	25	170	32	32	32	SN**1204**
MSKNR/L2525M15		●	○	25	25	150	25	32	28	SN**1506**
MSKNR/L3232P15		●	○	32	32	170	32	40	38	SN**1506**
MSKNR/L4032R15			○	40	32	200	40	40	38	SN**1506**
MSKNR/L3232P19		●	●	32	32	170	32	40	45	SN**1906**
MSKNR/L4040R19		○	○	40	40	200	40	50	45	SN**1906**
MSKNR/L4040S2509		○	●	40	40	250	40	50	50	SN**2509**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	SN**1204**	SN**1204**	SN**1506**	SN**1906**	SN**2509**
	h	20	25-32	25-40	32-40	40
	Bride	C1RD	C1RD	C2RD	C5RD	C6RD
	Goupille d'arrêt	TM6×17	TM6×17	TM8×21	TM10×21	TM12×29
	Vis (bride)	DM6×25 (7,0 Nm)	DM6×30 (7,0 Nm)	DM6×30 (7,0 Nm)		
	Vis (bride)				DM8×30X (10,2 Nm)	DM10×35X (16,6 Nm)
	Cale-support	S12BM	S12BM	S15BM	S19BM	S25BM
	Clé (bride)	WH30L	WH30L	WH30L	WH40L	WH40L
	Clé (goupille d'arrêt)	WH30L	WH30L	WH30L	WH40L	WH50L

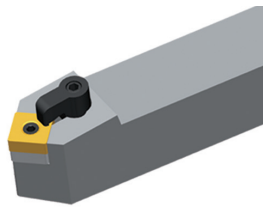
Plaquette

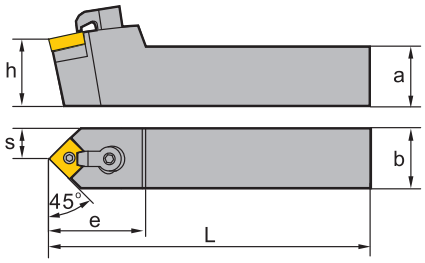
 Finition	 Semi-finition	 Ébauche	 Usinage fonte grise	 PCBN/PCD
A73	A73	A78	A84	A162

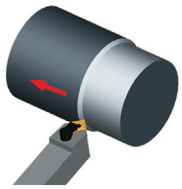
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) SN** M-Serrage

MSDNN Kr: 45°







Article	✻	Stock	Dimensions (mm)						Plaquettes
			a	b	L	h	s	e	
MSDNN2020K12		●	20	20	125	20	10	35	SN**1204**
MSDNN2525M12		●	25	25	150	25	12,5	35	SN**1204**
MSDNN3225P12		●	32	25	170	32	12,5	35	SN**1204**
MSDNN2525M15		●	25	25	150	25	12,5	42	SN**1506**
MSDNN3232P15		○	32	32	170	32	16	42	SN**1506**
MSDNN4032R15		○	40	32	200	40	16	42	SN**1506**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**SN**1204****	**SN**1204****	**SN**1506****
	h	**20**	**25-32**	**25-40**
	Bride	C1RD	C1RD	C2RD
	Goupille d'arrêt	TM6×17	TM6×17	TM8×21
	Vis (bride)	DM6×25 (7,0 Nm)	DM6×30 (7,0 Nm)	DM6×30 (7,0 Nm)
	Cale-support	S12BM	S12BM	S15BM
	Clé (bride)	WH30L	WH30L	WH30L
	Clé (goupille d'arrêt)	WH30L	WH30L	WH30L

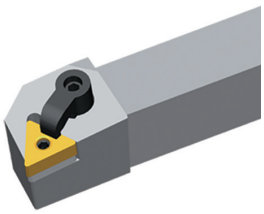
Plaquette

				
Finition	**Semi-finition**	**Ébauche**	**Usinage fonte grise**	**PCBN/PCD**
A73	A73	A78	A84	A162

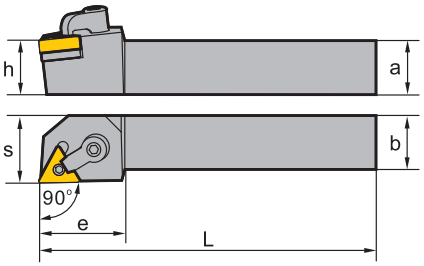
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

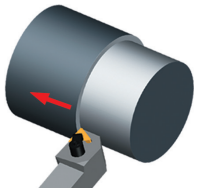
Porte-outil (extérieur) TN** M-Serrage

MTGNR/L Kr: 90°



Version à droite





Article	✻	Stock R	Stock L	Dimensions (mm) a	b	L	h	s	e	Plaquettes
MTGNR/L2020K16		●	○	20	20	125	20	25	33	TN**1604**
MTGNR/L2525M16		●	●	25	25	150	25	32	33	TN**1604**
MTGNR/L3225P16		●	○	32	25	170	32	32	33	TN**1604**
MTGNR/L2525M22		●	○	25	25	150	25	32	35	TN**2204**
MTGNR/L3225P22		○	○	32	25	170	32	32	35	TN**2204**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	TN**1604**	TN**1604**	TN**2204**
	h	20	25-32	25-32
	Bride	C1RD	C1RD	C2RD
	Goupille d'arrêt	TM5×13	TM5×13	TM6×17
	Vis (bride)	DM6×25 (7,0 Nm)	DM6×30 (7,0 Nm)	DM6×30 (7,0 Nm)
	Cale-support	T16BM	T16BM	T22BM
	Clé (bride)	WH30L	WH30L	WH30L
	Clé (goupille d'arrêt)	WH20L	WH20L	WH30L

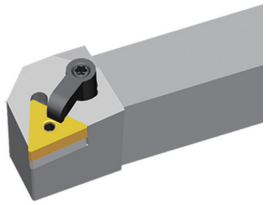
Plaquette

Wiper	Finition	Semi-finition	Ébauche	Usinage difficile	Usinage fonte grise	PCBN/PCD
A87	A88	A90	A92	A97	A99	A163

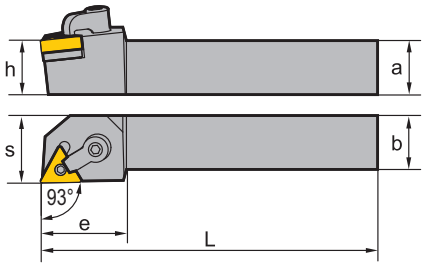
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

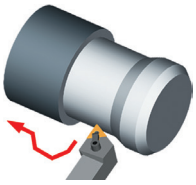
Porte-outil (extérieur) TN** M-Serrage

MTJNR/L Kr: 93°



Version à droite





Article	✻	Stock		Dimensions (mm)						Plaquettes
		R	L	a	b	L	h	s	e	
MTJNR/L2020K16		●		20	20	125	20	25	32	TN**1604**
MTJNR/L2525M16		○	○	25	25	150	25	32	32	TN**1604**
MTJNR/L3225P16		○		32	25	170	32	32	32	TN**1604**
MTJNR/L2525M22		○		25	25	150	25	32	36	TN**2204**
MTJNR/L3225P22		○	●	32	25	170	32	32	36	TN**2204**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	TN**1604**	TN**1604**	TN**2204**
	h	20	25-32	25-32
	Bride	C1RD	C1RD	C2RD
	Goupille d'arrêt	TM5×13	TM5×13	TM6×17
	Vis (bride)	DM6×25 (7,0 Nm)	DM6×30 (7,0 Nm)	DM6×30 (7,0 Nm)
	Cale-support	T16BM	T16BM	T22BM
	Clé (bride)	WH30L	WH30L	WH30L
	Clé (goupille d'arrêt)	WH20L	WH20L	WH30L

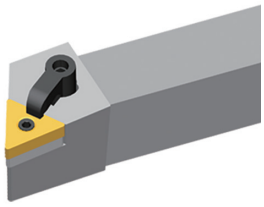
Plaquette

Wiper	Finition	Semi-finition	Ébauche	Usinage difficile	Usinage fonte grise	PCBN/PCD
A87	A88	A90	A92	A97	A99	A163

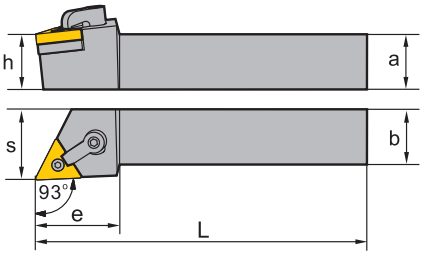
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

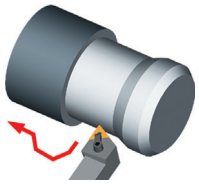
Porte-outil (extérieur) TN** M-Serrage

MTJNR/L-Z Kr: 93°



Version à droite





Article	✻	Stock		Dimensions (mm)						Plaquettes
		R	L	a	b	L	h	s	e	
MTJNR/L2020K16-Z		●	●	20	20	125	20	25	32	TN**1604**
MTJNR/L2525M16-Z		●	●	25	25	150	25	32	32	TN**1604**
MTJNR/L3225P16-Z		●	○	32	25	170	32	32	32	TN**1604**
MTJNR/L2525M22-Z		●	●	25	25	150	25	32	36	TN**2204**
MTJNR/L3225P22-Z		●	○	32	25	170	32	32	36	TN**2204**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	TN**1604**	TN**1604**	TN**2204**
	h	20	25-32	25-32
	Bride	C1RD	C1RD	C2RD
	Goupille d'arrêt	TM5×13	TM5×13	TM6×17
	Vis (bride)	DM6×25 (7,0 Nm)	DM6×30 (7,0 Nm)	DM6×30 (7,0 Nm)
	Cale-support	T16BM	T16BM	T22BM
	Clé (bride)	WH30L	WH30L	WH30L
	Clé (goupille d'arrêt)	WH20L	WH20L	WH30L

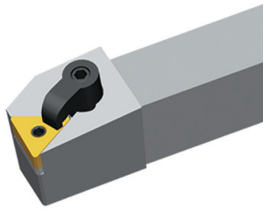
Plaquette

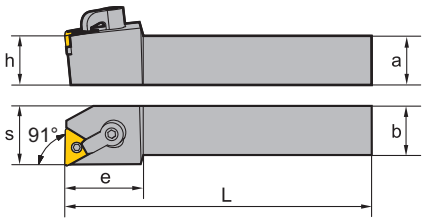
Wiper	Finition	Semi-finition	Ébauche	Usinage difficile	Usinage fonte grise	PCBN/PCD
A87	A88	A90	A92	A97	A99	A163

Codification > A228 Choix nuances > A42 Info. techniques > A501 Paramètres > A366

Porte-outil (extérieur) TN** M-Serrage

MTFNR/L Kr: 91°







Version à droite

Article	✻	Stock R	Stock L	Dimensions (mm) a	b	L	h	s	e	Plaquettes
MTFNR/L2020K16		●	○	20	20	125	20	25	32	TN**1604**
MTFNR/L2525M16		●	●	25	25	150	25	32	32	TN**1604**
MTFNR/L3225P16		●		32	25	170	32	32	32	TN**1604**
MTFNR/L2525M22		●	○	25	25	150	25	32	36	TN**2204**
MTFNR/L3225P22		●	○	32	25	170	32	32	36	TN**2204**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	TN**1604**	TN**1604**	TN**2204**
	h	20	25-32	25-32
	Bride	C1RD	C1RD	C2RD
	Goupille d'arrêt	TM5×13	TM5×13	TM6×17
	Vis (bride)	DM6×25 (7,0 Nm)	DM6×30 (7,0 Nm)	DM6×30 (7,0 Nm)
	Cale-support	T16BM	T16BM	T22BM
	Clé (bride)	WH30L	WH30L	WH30L
	Clé (goupille d'arrêt)	WH20L	WH20L	WH30L

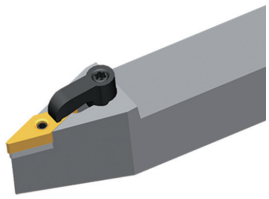
Plaquette

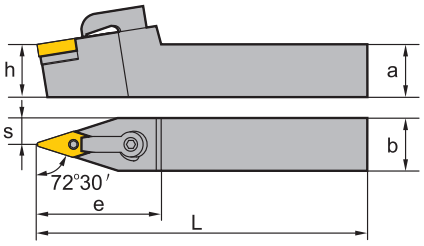
Wiper	Finition	Semi-finition	Ébauche	Usinage difficile	Usinage fonte grise	PCBN/PCD
A87	A88	A90	A92	A97	A99	A163

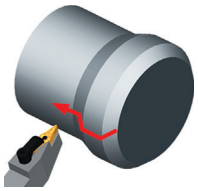
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) VN** M-Serrage

MVVNN Kr: 72°30'







Article	✻	Stock	Dimensions (mm)						Plaquettes
			a	b	L	h	s	e	
MVVNN2020K16		●	20	20	125	20	10	45	VN**1604**
MVVNN2525M16		●	25	25	150	25	12,5	45	VN**1604**
MVVNN3225P16		○	32	25	170	32	12,5	45	VN**1604**
MVVNN3232P16		●	32	32	170	32	16	45	VN**1604**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**VN**1604****	**VN**1604****
	h	**20**	**25-32**
	Bride	C3RD	C3RD
	Goupille d'arrêt	TM5×13	TM5×13
	Vis (bride)	DM6×25 (7,0 Nm)	DM6×30 (7,0 Nm)
	Cale-support	V16BM	V16BM
	Clé (bride)	WH30L	WH30L
	Clé (goupille d'arrêt)	WH20L	WH20L

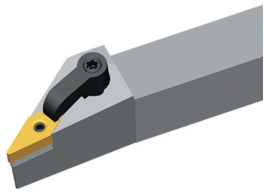
Plaquette

				
Finition	**Semi-finition**	**Ébauche**	**Usinage fonte grise**	**PCBN/PCD**
A102	A102	A104	A103	A179

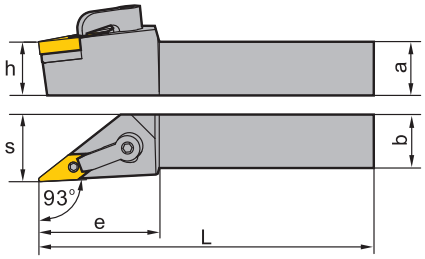
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) VN** M-Serrage

MVJNR/L Kr: 93°



Version à droite





Article	✻	Stock		Dimensions (mm)						Plaquettes
		R	L	a	b	L	h	s	e	
MVJNR/L2020K16		●	●	20	20	125	20	25	45	VN**1604**
MVJNR/L2525M16		●	●	25	25	150	25	32	45	VN**1604**
MVJNR/L3225P16		●	●	32	25	170	32	32	45	VN**1604**
MVJNR/L3232P16		●	●	32	32	170	32	40	45	VN**1604**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	VN**1604**	VN**1604**
	h	20	25-32
	Bride	C3RD	C3RD
	Goupille d'arrêt	TM5×13	TM5×13
	Vis (bride)	DM6×25 (7,0 Nm)	DM6×30 (7,0 Nm)
	Cale-support	V16BM	V16BM
	Clé (bride)	WH30L	WH30L
	Clé (goupille d'arrêt)	WH20L	WH20L

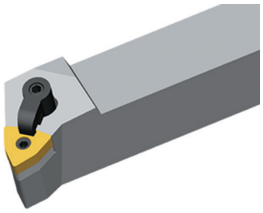
Plaquette

Finition	Semi-finition	Ébauche	Usinage fonte grise	PCBN/PCD
A102	A102	A104	A103	A179

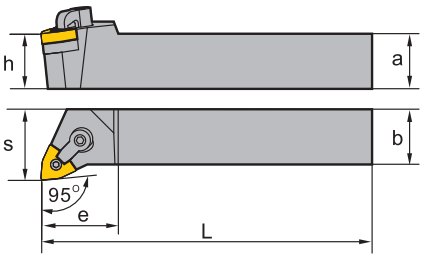
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

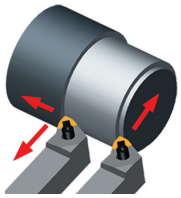
Porte-outil (extérieur) WN** M-Serrage

MWLNR/L Kr: 95°



Version à droite





Article	✻	Stock R	Stock L	Dimensions (mm) a	b	L	h	s	e	Plaquettes
MWLNR/L2020K06		●	●	20	20	125	20	25	30	WN**0604**
MWLNR/L2525M06		●	●	25	25	150	25	32	30	WN**0604**
MWLNR/L2020K08		●	●	20	20	125	20	25	30	WN**0804**
MWLNR/L2525M08		●	●	25	25	150	25	32	35	WN**0804**
		○		25	25	170	25	32	35	WN**0804**
MWLNR/L3232P08		●	●	32	32	170	32	40	35	WN**0804**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	WN**0604**	WN**0604**	WN**0804**	WN**0804**
	h	20	25	20	25-32
	Bride	C1RD	C1RD	C1RD	C1RD
	Goupille d'arrêt	TM5×13	TM5×13	TM6×17	TM6×17
	Vis (bride)	DM6×25 (7,0 Nm)	DM6×30 (7,0 Nm)	DM6×25 (7,0 Nm)	DM6×30 (7,0 Nm)
	Cale-support	W06BM	W06BM	W08BM	W08BM
	Clé (bride)	WH30L	WH30L	WH30L	WH30L
	Clé (goupille d'arrêt)	WH20L	WH20L	WH30L	WH30L

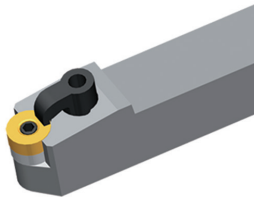
Plaquette

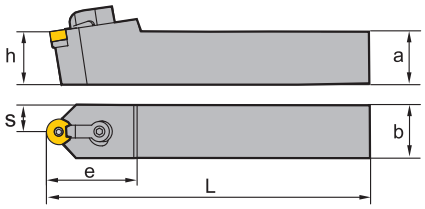
					
Wiper	**Finition**	**Semi-finition**	**Ébauche**	**Usinage fonte grise**	**PCBN/PCD**
A106	A107	A107	A109	A111	A165

Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) RN** M-Serrage

MRDNN







Version à droite

Article	✻	Stock	Dimensions (mm)						Plaquettes
			a	b	L	h	s	e	
MRDNN2020K12		○	20	20	125	20	10	35	RN**1204**
MRDNN2525M12		○	25	25	150	25	12,5	35	RN**1204**
MRDNN3225P12		○	32	25	170	32	12,5	35	RN**1204**
MRDNN3232P12		○	32	32	170	32	16	35	RN**1204**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	RN**1204**	RN**1204**
	h	**20**	**25-32**
	Bride	C1RD	C1RD
	Goupille d'arrêt	TM6×17	TM6×17
	Vis (bride)	DM6×25 (7,0 Nm)	DM6×30 (7,0 Nm)
	Cale-support	R12BM	R12BM
	Clé (bride)	WH30L	WH30L
	Clé (goupille d'arrêt)	WH30L	WH30L

Plaquette



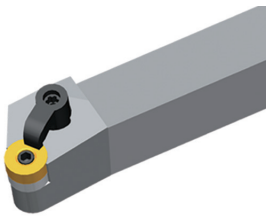
Usinage fonte grise

A112

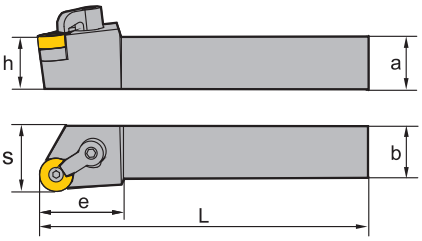
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

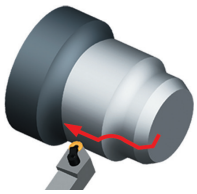
Porte-outil (extérieur) RN** M-Serrage

MRGNR/L



Version à droite





Article	✻	Stock		Dimensions (mm)						Plaquettes
		R	L	a	b	L	h	s	e	
MRGNR/L2020K12		○	○	20	20	125	20	25	32	RN**1204**
MRGNR/L2525M12		○	●	25	25	150	25	32	32	RN**1204**
MRGNR/L3225P12		○	○	32	25	170	32	32	32	RN**1204**
MRGNR/L3232P12		○	○	32	32	170	32	40	32	RN**1204**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	RN**1204**	RN**1204**
	h	20	25-32
	Bride	C1RD	C1RD
	Goupille d'arrêt	TM6×17	TM6×17
	Vis (bride)	DM6×25 (7,0 Nm)	DM6×30 (7,0 Nm)
	Cale-support	R12BM	R12BM
	Clé (bride)	WH30L	WH30L
	Clé (goupille d'arrêt)	WH30L	WH30L

Plaquette



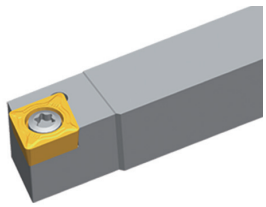
Usinage fonte grise

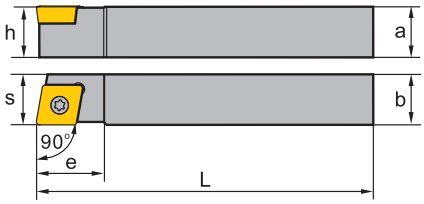
A112

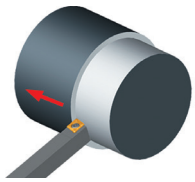
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) CC** S-Serrage

SCACR/L Kr: 90°







Version à droite

Article	✲	Stock		Dimensions (mm)						Plaquettes
		R	L	a	b	L	h	s	e	
SCACR/L1010E06		●	●	10	10	70	10	10,5	10	CC**0602**
SCACR/L1212F09		●	●	12	12	80	12	12,7	16	CC**09T3**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	CC**0602**	CC**09T3**
	h	**10**	**12**
	Vis	I60M2,5×6,5 (1,0 Nm)	I60M3,5×8 (2,7 Nm)
	Clé (vis)	WT07IP	WT15IP

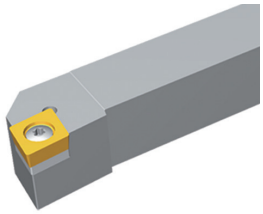
Plaquette

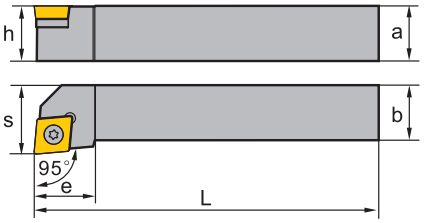
Finition	Semi-finition	Ébauche	Usinage aluminium	Usinage fonte grise	PCBN/PCD
A116	A119	A121	A122	A121	A180

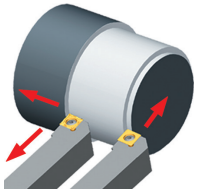
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) CC** S-Serrage

SCLCR/L Kr: 95°







Version à droite

Article	✻	Stock R	Stock L	Dimensions (mm) a	b	L	h	s	L_2	e	Plaquettes
SCLCR/L0808D06		●	●	8	8	60	8	10	10	10	CC**0602**
SCLCR/L1010E06		●	●	10	10	70	10	12	10	10	CC**0602**
SCLCR/L1212F09		●	●	12	12	80	12	16	16	16	CC**09T3**
SCLCR/L1616H09		●	●	16	16	100	16	20	16	16	CC**09T3**
SCLCR/L2020K09		●	●	20	20	125	20	25	25	25	CC**09T3**
SCLCR/L1616H12		●	●	16	16	100	16	20	18	18	CC**1204**
SCLCR/L2020K12		●	●	20	20	125	20	25	25	25	CC**1204**
SCLCR/L2525M12		●	●	25	25	150	25	32	26	26	CC**1204**
SCLCR/L3225P12		○	○	32	25	170	32	32	26	26	CC**1204**
SCLCR/L3232P12		●	●	32	32	170	32	40	28	28	CC**1204**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	CC**0602**	CC**09T3**	CC**1204**
	h	8-10	12-20	16-32
	Vis	I60M2,5×6,5 (1,0 Nm)	I60M3,5×8 (2,7 Nm)	
	Vis			I60M4×11X (3,4 Nm)
	Vis (cale-support)			SM6×10XA
	Cale-support			C12BS
	Clé (vis)	WT07IP	WT15IP	WT15IP
	Clé (cale-support)			WH40L

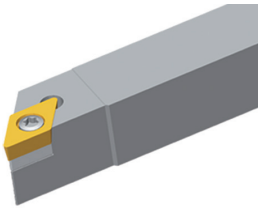
Plaquette

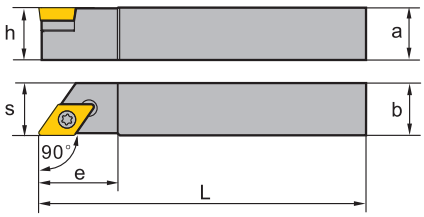
Finition	Semi-finition	Ébauche	Usinage aluminium	Usinage fonte grise	PCBN/PCD
A116	A119	A121	A122	A121	A180

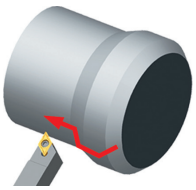
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) DC** S-Serrage

SDACR/L Kr: 90°







Version à droite

Article	✻	Stock		Dimensions (mm)						Plaquettes
		R	L	a	b	L	h	s	e	
SDACR/L1010E07		●	●	10	10	70	10	10,5	15	DC**0702**
SDACR/L1212F11		●	●	12	12	80	12	12,5	15	DC**11T3**
SDACR/L1616H11		●	●	16	16	100	16	16,7	24	DC**11T3**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	DC**0702**	DC**11T3**	DC**11T3**
	h	10	12	16
	Vis	I60M2,5×6,5 (1,0 Nm)	I60M3,5×8 (2,7 Nm)	I60M3,5×12 (2,7 Nm)
	Vis (cale-support)			SM5×8.65XA
	Cale-support			D11BS
	Clé (vis)	WT07IP	WT15IP	WT15IP
	Clé (cale-support)			WH35L

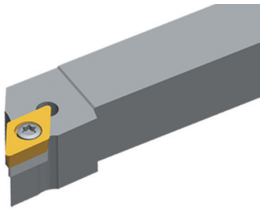
Plaquette

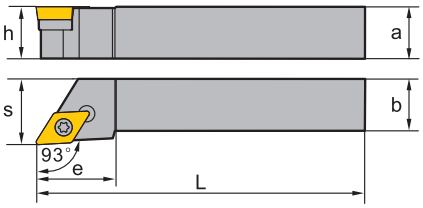
Finition	Semi-finition	Ébauche	Usinage aluminium	Usinage fonte grise	PCBN/PCD
A126	A127	A129	A129	A129	A184

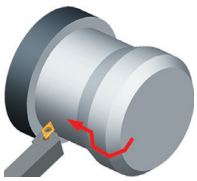
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) DC** S-Serrage

SDJCR/L Kr: 93°







Version à droite

Article	✻	Stock R	Stock L	Dimensions (mm) a	b	L	h	s	e	Plaquettes
SDJCR/L1010E07		●	●	10	10	70	10	12	15	DC**0702**
SDJCR/L1212F07		●	●	12	12	80	12	16	15	DC**0702**
SDJCR/L1616H07		●	●	16	16	100	16	20	18	DC**0702**
SDJCR/L1616H11		●	●	16	16	100	16	20	24	DC**11T3**
SDJCR/L2020K11		●	●	20	20	125	20	25	24	DC**11T3**
SDJCR/L2525M11		●	●	25	25	150	25	32	29	DC**11T3**
SDJCR/L3225P11		●	●	32	25	170	32	32	29	DC**11T3**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	DC**0702**	DC**11T3**
	h	**10-16**	**16-32**
	Vis	I60M2,5×6,5 (1,0 Nm)	I60M3,5×12 (2,7 Nm)
	Vis (cale-support)		SM5×8.65XA
	Cale-support		D11BS
	Clé (vis)	WT07IP	WT15IP
	Clé (cale-support)		WH35L

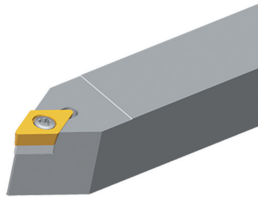
Plaquette

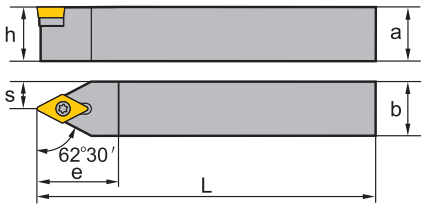
Finition	Semi-finition	Ébauche	Usinage aluminium	Usinage fonte grise	PCBN/PCD
A126	A127	A129	A129	A129	A184

Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) DC** S-Serrage

SDNCN Kr: 62°30'







Article	✲	Stock	Dimensions (mm)						Plaquettes
			a	b	L	h	s	e	
SDNCN1010E07		●	10	10	70	10	5	20	DC**0702**
SDNCN1212F07		●	12	12	80	12	6	20	DC**0702**
SDNCN1212H11		●	12	12	100	12	6	30	DC**11T3**
SDNCN1616H11		●	16	16	100	16	8	30	DC**11T3**
SDNCN2020K11		●	20	20	125	20	10	30	DC**11T3**
SDNCN2525M11		●	25	25	150	25	12,5	30	DC**11T3**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	DC**0702**	DC**11T3**	DC**11T3**
	h	10-12	12	16-25
	Vis	I60M2,5×6,5 (1,0 Nm)	I60M3,5×8 (2,7 Nm)	I60M3,5×12 (2,7 Nm)
	Vis (cale-support)			SM5×8.65XA
	Cale-support			D11BS
	Clé (vis)	WT07IP	WT15IP	WT15IP
	Clé (cale-support)			WH35L

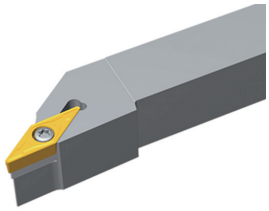
Plaquette

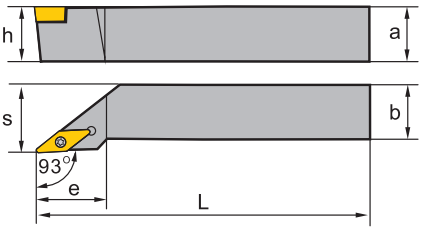
Finition	Semi-finition	Ébauche	Usinage aluminium	Usinage fonte grise	PCBN/PCD
A126	A127	A129	A129	A129	A184

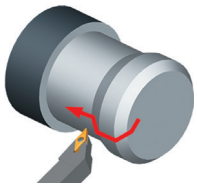
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) VB** S-Serrage

SVJBR/L Kr: 93°







Version à droite

Article	✻	Stock R	Stock L	Dimensions (mm) a	b	L	h	s	e	Plaquettes
SVJBR/L1212F11			●	12	12	80	12	16	27	VB**1103**
SVJBR/L1616H11		●	●	16	16	100	16	20	27	VB**1103**
SVJBR/L2525M11		●	●	25	25	150	25	32	27	VB**1103**
SVJBR/L1616H16		●	●	16	16	100	16	20	36	VB**1604**
SVJBR/L2020K16		●	●	20	20	125	20	25	41	VB**1604**
SVJBR/L2525M16		●	●	25	25	150	25	32	41	VB**1604**
SVJBR/L3225P16		●	●	32	25	170	32	32	41	VB**1604**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	VB**1103**	VB**1604**
	h	12-25	16-32
	Vis	I60M2,5×6,5 (1,0 Nm)	I60M3,5×12 (2,7 Nm)
	Vis (cale-support)		SM5×8.65XA
	Cale-support		V16BS
	Clé (vis)	WT07IP	WT15IP
	Clé (cale-support)		WH35L

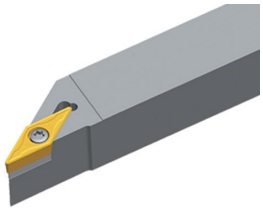
Plaquette

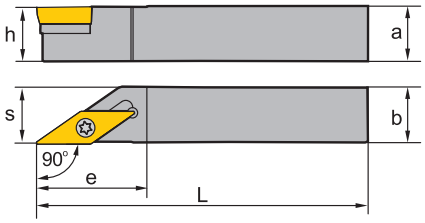
Finition	Semi-finition	Ébauche	PCBN/PCD
A148	A151	A152	A191

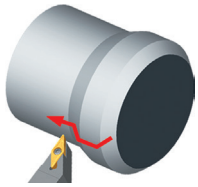
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) VB** S-Serrage

SVABR/L Kr: 90°







Version à droite

Article	✻	Stock		Dimensions (mm)						Plaquettes
		R	L	a	b	L	h	s	e	
SVABR/L1010F11		●	●	10	10	80	10	10,5	28	VB**1103**
SVABR/L1616H16		●	○	16	16	100	16	16,5	28	VB**1604**
SVABR/L2020K16		●	○	20	20	125	20	20,5	28	VB**1604**
SVABR/L2525M16		●	●	25	25	150	25	25,5	28	VB**1604**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**VB**1103****	**VB**1604****
	h	**10**	**16-32**
	Vis	I60M2,5×6,5 (1,0 Nm)	I60M3,5×12 (2,7 Nm)
	Vis (cale-support)		SM5×8.65XA
	Cale-support		V16BS
	Clé (vis)	WT07IP	WT15IP
	Clé (cale-support)		WH35L

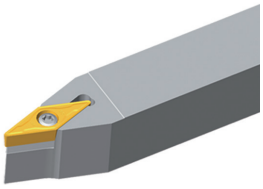
Plaquette

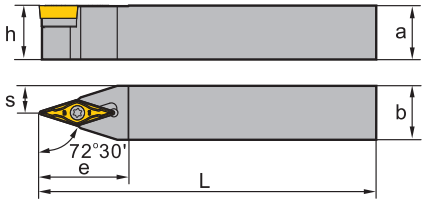
			
Finition	**Semi-finition**	**Ébauche**	**PCBN/PCD**
A148	A151	A152	A191

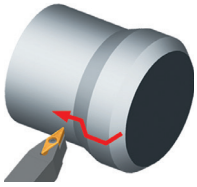
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) VB** S-Serrage

SVVBN Kr: 72°30'







Article	*	Stock	Dimensions (mm)						Plaquettes
			a	b	L	h	s	e	
SVVBN1616H11		●	16	16	100	16	8	27	VB**1103**
SVVBN2020K11		●	20	20	125	20	10	30	VB**1103**
SVVBN1616H16		●	16	16	100	16	8	33	VB**1604**
SVVBN2020K16		●	20	20	125	20	10	33	VB**1604**
SVVBN2525M16		●	25	25	150	25	12,5	38	VB**1604**

● En stock ○ Sur demande

* Avec arrosage interne

Pièces détachées

	Plaquette	VB**1103**	VB**1604**
	h	12-25	16-32
	Vis	I60M2,5×6,5 (1,0 Nm)	I60M3,5×12 (2,7 Nm)
	Vis (cale-support)		SM5×8.65XA
	Cale-support		V16BS
	Clé (vis)	WT07IP	WT15IP
	Clé (cale-support)		WH35L

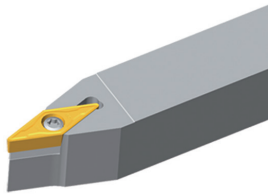
Plaquette

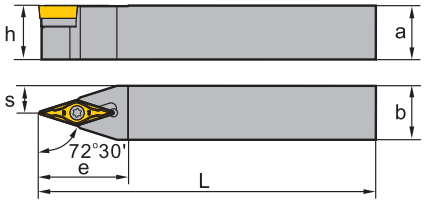
Finition	Semi-finition	Ébauche	PCBN/PCD
A148	A151	A152	A191

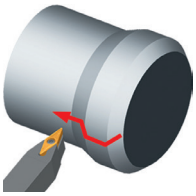
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) VC** S-Serrage

SVVCN Kr: 72°30'







Article	✲	Stock	Dimensions (mm)						Plaquettes
			a	b	L	h	s	e	
SVVCN1212F11		●	12	12	80	12	6	27	VC**1103**
SVVCN1616H11		●	16	16	100	16	8	27	VC**1103**
SVVCN2020K11		●	20	20	125	20	10	30	VC**1103**
SVVCN1212M11		●	12	12	150	12	6	27	VC**1103**
SVVCN2525M11		●	25	25	150	25	12,5	38	VC**1103**
SVVCN1616H16		●	16	16	100	16	8	33	VC**1604**
SVVCN2020K16		●	20	20	125	20	10	33	VC**1604**
SVVCN2525M16		●	25	25	150	25	12,5	38	VC**1604**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	VC**1103**	VC**1604**
	h	12-25	16-32
	Vis	I60M2,5×6,5 (1,0 Nm)	I60M3,5×12 (2,7 Nm)
	Vis (cale-support)		SM5×8.65XA
	Cale-support		V16BSC
	Clé (vis)	WT07IP	WT15IP
	Clé (cale-support)		WH35L

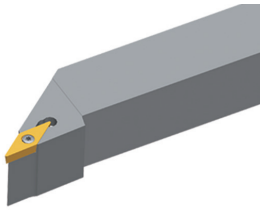
Plaquette

Finition	Semi-finition	Usinage aluminium	PCBN/PCD
A156	A156	A154	A193

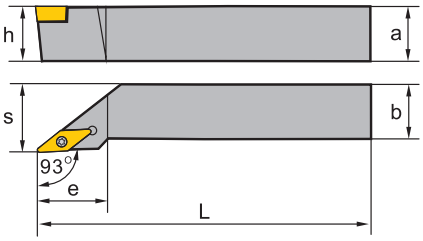
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

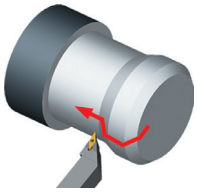
Porte-outil (extérieur) VC** S-Serrage

SVJCR/L Kr: 93°



Version à droite





Article	✻	Stock R	Stock L	Dimensions (mm) a	b	L	h	s	e	Plaquettes
SVJCR/L1010E11		●		10	10	70	10	12	22	VC**1103**
SVJCR/L1212F11		●	●	12	12	80	12	16	27	VC**1103**
SVJCR/L1616H11		●	●	16	16	100	16	20	27	VC**1103**
SVJCR/L2020K11		●	●	20	20	125	20	25	27	VC**1103**
SVJCR/L2525M11		●	●	25	25	150	25	32	27	VC**1103**
SVJCR/L1616H16		●	●	16	16	100	16	20	36	VC**1604**
SVJCR/L2020K16		●	●	20	20	125	20	25	41	VC**1604**
SVJCR/L2020M16		●	●	20	20	150	20	25	41	VC**1604**
SVJCR/L2525M16		●	●	25	25	150	20	32	41	VC**1604**
SVJCR/L3225P16		○	○	32	25	170	32	32	41	VC**1604**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	VC**1103**	VC**1604**
	h	**10-25**	**16-32**
	Vis	I60M2,5×6,5 (1,0 Nm)	I60M3,5×12 (2,7 Nm)
	Vis (cale-support)		SM5×8.65XA
	Cale-support		V16BSC
	Clé (vis)	WT07IP	WT15IP
	Clé (cale-support)		WH35L

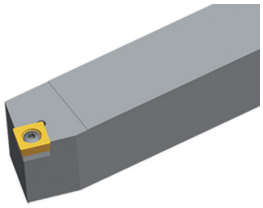
Plaquette

Finition	Semi-finition	Usinage aluminium	PCBN/PCD
A156	A156	A154	A193

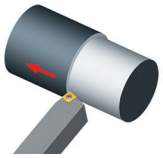
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage en acier SC** S-Serrage

SSBCR/L Kr: 75°







Version à droite

Article	✻	Stock R	Stock L	Dimensions (mm) a	b	L	h	s	e	Plaquettes
SSBCR/L1212F09		●	●	12	12	80	12	11	16	SC**09T3**
SSBCR/L1616H09		●	●	16	16	100	16	13	16	SC**09T3**
SSBCR/L2020K12		●	●	20	20	125	20	17	25	SC**1204**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	SC**09T3**	SC**09T3**	SC**1204**
	h	**12**	**16**	**20**
	Vis	I60M3,5×8 (2,7 Nm)	I60M3,5×8 (2,7 Nm)	
	Vis			I60M4×11X (3,4 Nm)
	Vis (cale-support)		SM5×8.65XA	SM6×10XA
	Cale-support		S09BS	S12BS
	Clé (vis)	WT15IP	WT15IP	WT15IP
	Clé (cale-support)		WH35L	WH40L

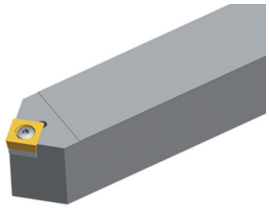
Plaquette

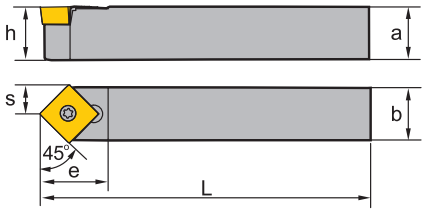
			
Finition	**Semi-finition**	**Ébauche**	**Usinage aluminium**
A134	A135	A136	A136

Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage en acier SC** S-Serrage

SSDCN Kr: 45°







Version à droite

Article	✲	Stock	Dimensions (mm)						Plaquettes
			a	b	L	h	s	e	
SSDCN1212F09		●	12	12	80	12	6	15,5	SC**09T3**
SSDCN1616H09		●	16	16	100	16	8	15,5	SC**09T3**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	SC**09T3**	SC**09T3**
	h	12	16
	Vis	I60M3,5×8 (2,7 Nm)	I60M3,5×8 (2,7 Nm)
	Vis (cale-support)		SM5×8.65XA
	Cale-support		S09BS
	Clé (vis)	WT15IP	WT15IP
	Clé (cale-support)		WH35L

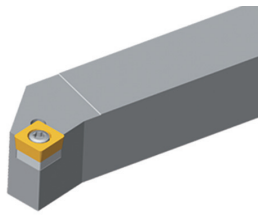
Plaquette

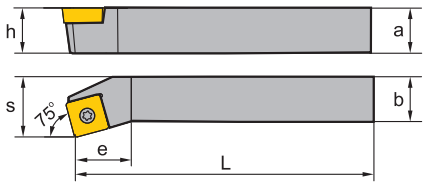
Finition	Semi-finition	Ébauche	Usinage aluminium
A134	A135	A136	A136

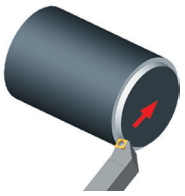
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage en acier SC** S-Serrage

SSKCR/L Kr: 75°







Version à droite

Article	✲	Stock		Dimensions (mm)						Plaquettes
		R	L	a	b	L	h	s	e	
SSKCR/L1616H09		●	●	16	16	100	16	20	13	SC**09T3**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**SC**09T3****
	h	**16**
	Vis	I60M3,5×8 (2,7 Nm)
	Vis (cale-support)	SM5×8.65XA
	Cale-support	S09BS
	Clé (vis)	WT15IP
	Clé (cale-support)	WH35L

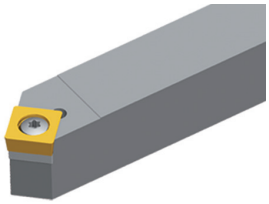
Plaquette

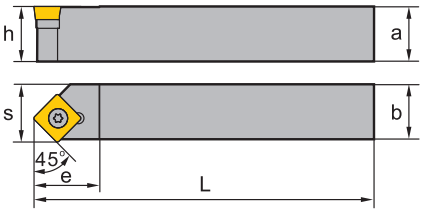
			
Finition	**Semi-finition**	**Ébauche**	**Usinage aluminium**
A134	A135	A136	A136

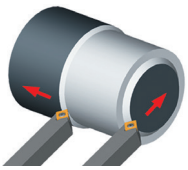
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage en acier SC** S-Serrage

SSSCR/L Kr: 45°







Version à droite

Article	✲	Stock R	Stock L	Dimensions (mm) a	b	L	h	s	e	Plaquettes
SSSCR/L1616H09		●	●	16	16	100	16	17	17	SC**09T3**
SSSCR/L2020K12		●	●	20	20	125	20	21	21	SC**1204**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	SC**09T3**	SC**1204**
	h	**16**	**20**
	Vis	I60M3,5×12 (2,7 Nm)	
	Vis		I60M4×11X (3,4 Nm)
	Vis (cale-support)		SM6×10XA
	Cale-support		S12BS
	Clé (vis)	WT15IP	WT15IP
	Clé (cale-support)		WH40L

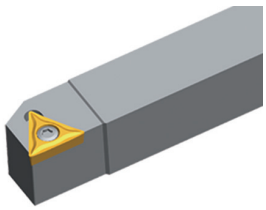
Plaquette

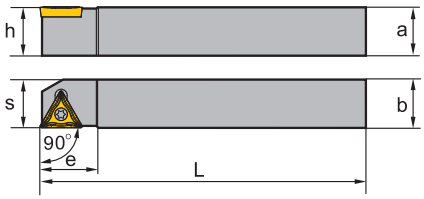
			
Finition	**Semi-finition**	**Ébauche**	**Usinage aluminium**
A134	A135	A136	A136

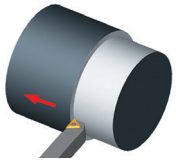
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) TC** S-Serrage

STACR/L Kr: 90°







Version à droite

Article	✲	Stock		Dimensions (mm)						Plaquettes
		R	L	a	b	L	h	s	e	
STACR/L1212F11		●	●	12	12	80	12	12,5	14	TC**1102**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**TC**1102****
	h	**12**
	Vis	I60M2,5×6,5 (1,0 Nm)
	Clé (vis)	WT07IP

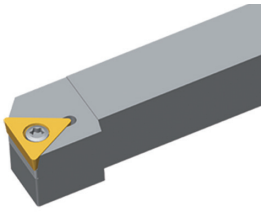
Plaquette

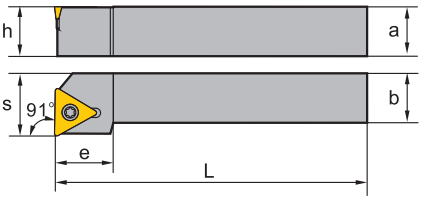
Finition	**Semi-finition**	**Ébauche**	**Usinage aluminium**	**PCBN/PCD**
A141	A142	A143	A145	A187

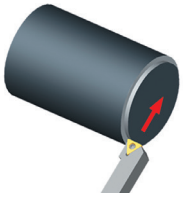
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) TC** S-Serrage

STFCR/L Kr: 91°







Version à droite

Article	✻	Stock R	Stock L	Dimensions (mm) a	b	L	h	s	e	Plaquettes
STFCR/L1212F11		●	○	12	12	80	12	16	14	TC**1102**
STFCR/L1616H11		●	○	16	16	100	16	20	14	TC**1102**
STFCR/L1616H16		●	○	16	16	100	16	20	19	TC**16T3**
STFCR/L2020K16		●	●	20	20	125	20	25	19	TC**16T3**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**TC**1102****	**TC**16T3****
	h	**12-16**	**16-20**
	Vis	I60M2,5×6,5 (1,0 Nm)	I60M3,5×12 (2,7 Nm)
	Vis (cale-support)		SM5×8.65XA
	Cale-support		T16BS
	Clé (vis)	WT07IP	WT15IP
	Clé (cale-support)		WH35L

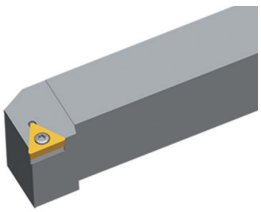
Plaquette

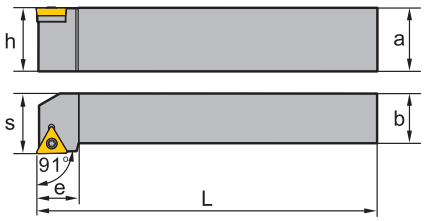
					
Finition	**Semi-finition**	**Ébauche**	**Usinage aluminium**	**Usinage fonte grise**	**PCBN/PCD**
A141	A142	A143	A145	A143	A187

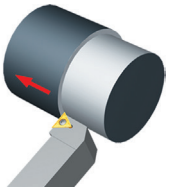
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) TC** S-Serrage

STGCR/L Kr: 91°







Version à droite

Article	✻	Stock		Dimensions (mm)						Plaquettes
		R	L	a	b	L	h	s	e	
STGCR/L0808D09		○		8	8	60	8	10	11	TC**0902**
STGCR/L1010E09		●	○	10	10	70	10	12	11	TC**0902**
STGCR/L1212F11		●	●	12	12	80	12	16	14	TC**1102**
STGCR/L1616H11		●	●	16	16	100	16	20	16	TC**1102**
STGCR/L2020K16		●	●	20	20	125	20	25	21	TC**16T3**
STGCR/L2525M16		●	●	25	25	150	25	25	21	TC**16T3**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**TC**0902****	**TC**1102****	**TC**16T3****
	h	**8-10**	**12-16**	**20-25**
	Vis	I60M2,2×5,5 (0,8 Nm)	I60M2,5×6,5 (1,0 Nm)	I60M3,5×12 (2,7 Nm)
	Vis (cale-support)			SM5×8.65XA
	Cale-support			T16BS
	Clé (vis)	WT06IP	WT07IP	WT15IP
	Clé (cale-support)			WH35L

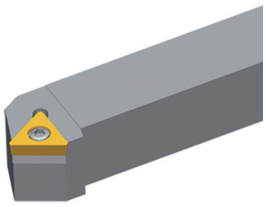
Plaquette

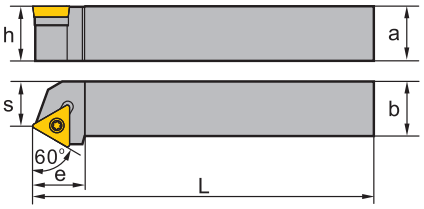
Finition	**Semi-finition**	**Ébauche**	**Usinage aluminium**	**Usinage fonte grise**	**PCBN/PCD**
A141	A142	A143	A145	A143	A187

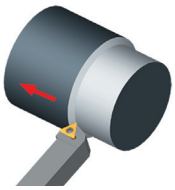
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) TC** S-Serrage

STTCR/L Kr: 60°







Version à droite

Article	*	Stock R	Stock L	Dimensions (mm) a	b	L	h	s	e	Plaquettes
STTCR/L1616H11		●	○	16	16	100	16	13	14	TC**1102**
STTCR/L1616H16		●	●	16	16	100	16	13	19	TC**16T3**
STTCR/L2020K16		●	●	20	20	125	20	17	19	TC**16T3**

● En stock ○ Sur demande

* Avec arrosage interne

Pièces détachées

	Plaquette	TC**1102**	TC**16T3**
	h	16	16-20
	Vis	I60M2,5×6,5 (1,0 Nm)	I60M3,5×12 (2,7 Nm)
	Vis (cale-support)		SM5×8.65XA
	Cale-support		T16BS
	Clé (vis)	WT07IP	WT15IP
	Clé (cale-support)		WH35L

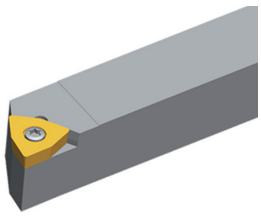
Plaquette

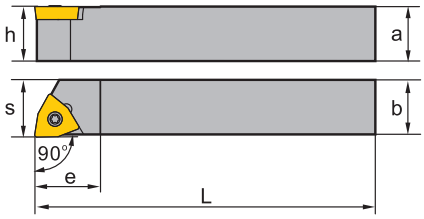
					
Finition	**Semi-finition**	**Ébauche**	**Usinage aluminium**	**Usinage fonte grise**	**PCBN/PCD**
A141	A142	A143	A145	A143	A187

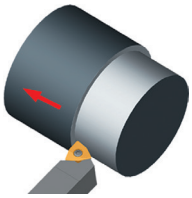
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) WC** S-Serrage

SWACR/L Kr: 90°







Version à droite

Article	✻	Stock		Dimensions (mm)						Plaquettes
		R	L	a	b	L	h	s	e	
SWACR/L1010E04		●	○	10	10	70	10	10,5	10	WC**0402**
SWACR/L1212F04		●	○	12	12	80	12	12	14	WC**0402**
SWACR/L1616H06		●	●	16	16	100	16	16,5	20	WC**06T3**
SWACR/L2020K08		●	●	20	20	125	20	20,5	24	WC**0804**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	WC**0402**	WC**06T3**	WC**0804**
	h	**10-12**	**16**	**20**
	Vis	I60M2,5×6,5 (1,0 Nm)	I60M3×7 (1,8 Nm)	I60M3,5×12 (2,7 Nm)
	Clé (vis)	WT07IP	WT10IP	WT15IP

Plaquette



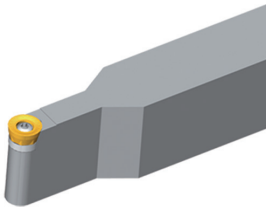
Semi-finition

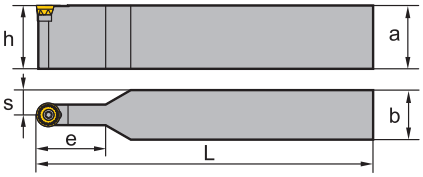
C35

Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) RC** S-Serrage

SRDCN







Article	✲	Stock	Dimensions (mm)						Plaquettes	
			a	b	L	h	s	e		
SRDCN1616H08		○	16	16	100	16	8	16	RCGX0803MO	RCMT0803MO
SRDCN2020K08		●	20	20	125	20	10	16	RCGX0803MO	RCMT0803MO
SRDCN2020K12		●	20	20	125	20	10	35	RCGX1204MO	RCMT1204MO
SRDCN2525M12		●	25	25	150	25	12,5	35	RCGX1204MO	RCMT1204MO
SRDCN3225P12		●	32	25	170	32	12,5	35	RCGX1204MO	RCMT1204MO
SRDCN2020K10		●	20	20	125	20	10	25	RCMT10T3MO	
SRDCN2525M10		●	25	25	150	25	12,5	25	RCMT10T3MO	
SRDCN3225P16		●	32	25	170	32	12,5	35	RCMT1606MO	
SRDCN3232P16		●	32	32	170	32	16	40	RCMT1606MO	
SRDCN4040S16		●	40	40	250	40	20	50	RCMT1606MO	
SRDCN4040S20		●	40	40	250	40	20	50	RCMT2006MO	

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	RCGX0803MO	RCGX1204MO	RCMT10T3MO	RCMT1606MO	RCMT2006MO
	h	16-20	20-32	20-25	32-40	40
	Vis	I60M3×7 (1,8 Nm)	I60M3,5×12 (2,7 Nm)	I60M3,5×10 (2,7 Nm)		I43M6×16 (9,1 Nm)
	Vis				I60M4×15X (3,4 Nm)	
	Vis (cale-support)		SM5×8.65XA		SM6×10XA	
	Cale-support		R12BS		R16BS	
	Clé (vis)	WT10IP	WT15IP	WT15IP	WT15IP	
	Clé (vis)					WT25IT
	Clé (cale-support)		WH35L		WH40L	

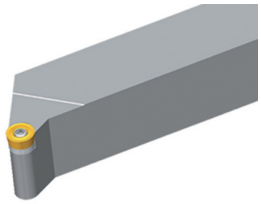
Plaquette

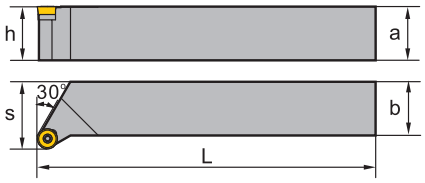
	
Usinage aluminium	**Usinage fonte grise**
A132	A132

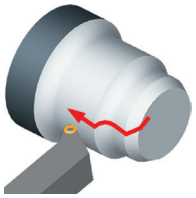
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) RC** S-Serrage

SRGCR/L







Version à droite

Article	✻	Stock		Dimensions (mm)					Plaquettes	
		R	L	a	b	L	h	s		
SRGCR/L1616H08		●	●	16	16	100	16	20	RCGX0803MO-LH	RCMT0803MO
SRGCR/L2020K12		●	○	20	20	125	20	27	RCGX1204MO	RCMT1204MO
SRGCR/L2525M12		●	○	25	25	150	25	32	RCGX1204MO	RCMT1204MO
SRGCR/L2525M10		●	○	25	25	100	25	32	RCMT10T3MO	
SRGCR/L2020K10		●	○	20	20	125	20	25	RCMT10T3MO	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**RCGX0803MO-LH**	**RCGX1204MO**	**RCMT10T3MO**
	h	**16**	**20-25**	**16-25**
	Vis	I60M3,5×10 (2,7 Nm)	I60M3,5×12 (2,7 Nm)	I60M3,5×10 (2,7 Nm)
	Vis (cale-support)		SM5×8.65XA	
	Cale-support		R12BS	
	Clé (vis)	WT15IP	WT15IP	WT15IP
	Clé (cale-support)		WH35L	

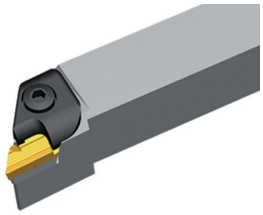
Plaquette

	
Usinage aluminium	**Usinage fonte grise**
A132	A132

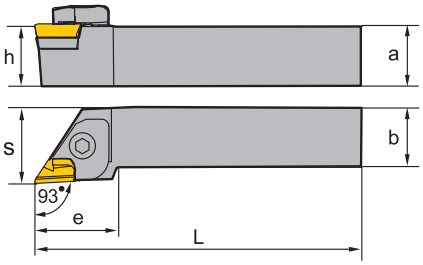
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

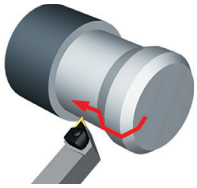
Porte-outil KNUX** C-Serrage

CKJNR/L Kr: 93°



Version à droite





Article	*	Stock R	Stock L	a	b	L	h	s	e	Plaquettes
CKJNL2525M16			●	25	25	150	25	32	32	KNUX1604**L
CKJNL3232P16			●	32	32	170	32	40	32	KNUX1604**L
CKJNL4040R16			●	40	40	200	40	50	32	KNUX1604**L
CKJNR2525M16		●		25	25	150	25	32	32	KNUX1604**R
CKJNR3232P16		●		32	32	170	32	40	32	KNUX1604**R
CKJNR4040R16		○		40	40	200	40	50	32	KNUX1604**R

● En stock ○ Sur demande

* Avec arrosage interne

Pièces détachées

	Plaquette	KNUX1604**L	KNUX1604**R
	h	25-40	25-40
	Bride	C6L1T	C6R1T
	Goupille d'arrêt	P0515	P0515
	Vis (bride)	CM6×25A (7,0 Nm)	CM6×25A (7,0 Nm)
	Vis (cale-support)	SM3×10B	SM3×10B
	Cale-support		K16CC
	Cale-support	K16CCL	
	Ressort (bride)	SPR1	SPR1
	Goupille d'arrêt	SPR2	SPR2
	Clé (bride)	WH40L	WH40L
	Clé (cale-support)	WH20L	WH20L

Plaquette

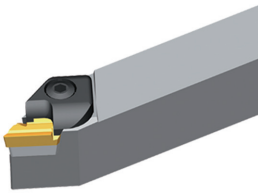


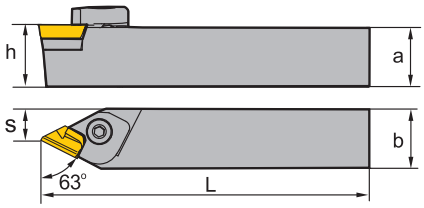
Finition
A113

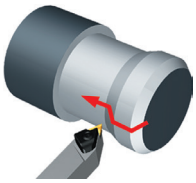
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil KNUX** C-Serrage

CKNNR/L Kr: 63°







Version à droite

Article	✻	Stock R	Stock L	Dimensions (mm) a	b	L	h	s	Plaquettes
CKNNL2525M16			●	25	25	150	25	14,3	KNUX1604**L
CKNNL3232P16			○	32	32	170	32	16,8	KNUX1604**L
CKNNR2525M16		●		25	25	150	25	14,3	KNUX1604**R

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	KNUX1604**L	KNUX1604**R
	h	**25-32**	**25-32**
	Bride	C6L1T	C6R1T
	Goupille d'arrêt	P0515	P0515
	Vis (bride)	CM6×25A (7,0 Nm)	CM6×25A (7,0 Nm)
	Vis (cale-support)	SM3×10B	SM3×10B
	Cale-support		K16CC
	Cale-support	K16CCL	
	Ressort (bride)	SPR1	SPR1
	Goupille d'arrêt	SPR2	SPR2
	Clé (bride)	WH40L	WH40L
	Clé (cale-support)	WH20L	WH20L

Plaquette

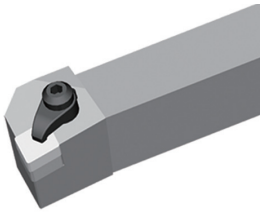


Finition
A113

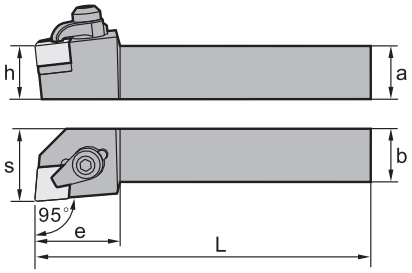
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

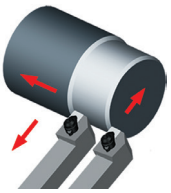
Porte-outil (extérieur) CN** C-Serrage

CCLNR/L Kr: 95°



Version à droite





Article	✻	Stock		Dimensions (mm)						Plaquettes	
		R	L	a	b	L	h	s	e		
CCLNR/L2020K12		○	○	20	20	125	20	27	32	CNGN1204**	CNGN1207**
CCLNR/L2525M12		○	●	25	20	100	25	27	36	CNGN1204**	CNGN1207**
CCLNR/L2525M16			○	25	25	150	25	32	36	CNGN1604**	CNGN1606**
CCLNR/L3225P16		○	○	32	25	170	32	32	36	CNGN1604**	CNGN1606**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	CNGN1204**	CNGN1207**	CNGN1604**	CNGN1606**
	h	20-25	20-25	25-32	25-32
	Bride	C1RC	C1RC	C2RC	C2RC
	Vis (bride)	CM6×30B (7,0 Nm)	CM6×30B (7,0 Nm)	CM8×30B (10,2 Nm)	CM8×30B (10,2 Nm)
	Vis (cale-support)	SM3×10B	SM3×10B	SM4×12B	SM4×12B
	Cale-support	C12CC-04	C12CC-07	C16CC-04	C16CC-06
	Ressort	SPR1	SPR1	SPR3	SPR3
	Clé (bride)	WH40L	WH40L	WH50L	WH50L
	Clé (cale-support)	WH20L	WH20L	WH30L	WH30L

Plaquette



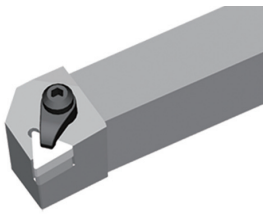
PCBN/PCD

A173

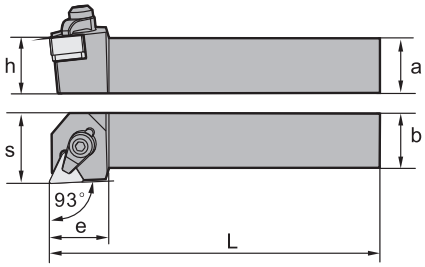
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

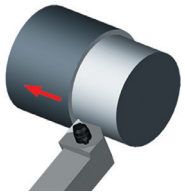
Porte-outil (extérieur) TN** C-Serrage

CTJNR/L Kr: 93°



Version à droite





Article	✲	Stock		Dimensions (mm)						Plaquettes	
		R	L	a	b	L	h	s	e		
CTJNR/L2020K16		○	○	20	20	125	20	25	30	TNGN1604**	TNGN1607**
CTJNR/L2525M16		○	○	25	25	150	25	32	30	TNGN1604**	TNGN1607**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	TNGN1604**	TNGN1607**
	h	**20-25**	**20-25**
	Bride	C1RC	C1RC
	Vis (bride)	CM6×30B (7,0 Nm)	CM6×30B (7,0 Nm)
	Vis (cale-support)	SM3×10B	SM3×10B
	Cale-support	T16CC-04	T16CC-07
	Ressort	SPR1	SPR1
	Clé (bride)	WH40L	WH40L
	Clé (cale-support)	WH20L	WH20L

Plaquette



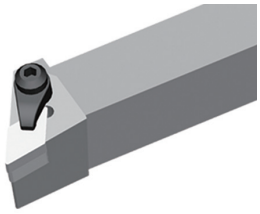
Semi-finition

A215

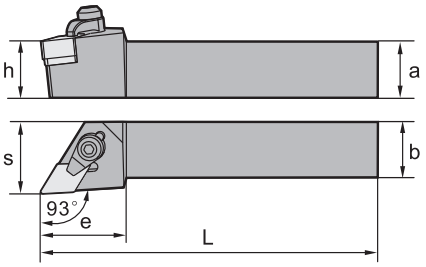
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

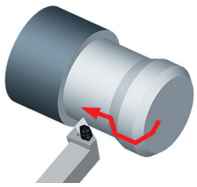
Porte-outil (extérieur) DN** C-Serrage

CDJNR/L Kr: 93°



Version à droite





Article	✻	Stock R	Stock L	Dimensions (mm) a	b	L	h	s	e	Plaquettes	
CDJNR/L2525M15		●	●	25	25	150	25	32	32	DNGN1504**	DNGN1507**
CDJNR/L3225P15		○	○	32	25	170	32	32	32	DNGN1504**	DNGN1507**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	DNGN1504**	DNGN1507**
	h	25-32	25-32
	Bride	C1RC	C1RC
	Vis (bride)	CM6×30B (7,0 Nm)	CM6×30B (7,0 Nm)
	Vis (cale-support)	SM3×10B	SM3×10B
	Cale-support	D15CC-04	D15CC-07
	Ressort	SPR1	SPR1
	Clé (bride)	WH40L	WH40L
	Clé (cale-support)	WH20L	WH20L

Plaquette

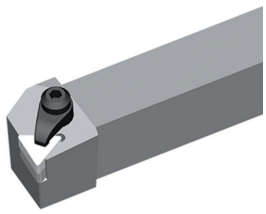


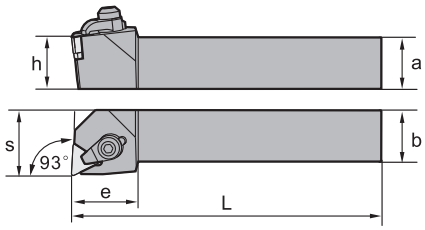
Semi-finition
A205

Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) TN** C-Serrage

CTUNR/L Kr: 93°







Version à droite

Article	✲	Stock		Dimensions (mm)						Plaquettes	
		R	L	a	b	L	h	s	e		
CTUNR/L2525M16		○	○	25	25	150	25	32	27	TNGN1604**	TNGN1607**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	TNGN1604**	TNGN1607**
	h	**20-25**	**20-25**
	Bride	C1RC	C1RC
	Vis (bride)	CM6×30B (7,0 Nm)	CM6×30B (7,0 Nm)
	Vis (cale-support)	SM3×10B	SM3×10B
	Cale-support	T16CC-04	T16CC-07
	Ressort	SPR1	SPR1
	Clé (bride)	WH40L	WH40L
	Clé (cale-support)	WH20L	WH20L

Plaquette



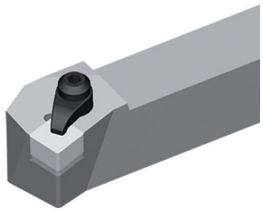
Semi-finition

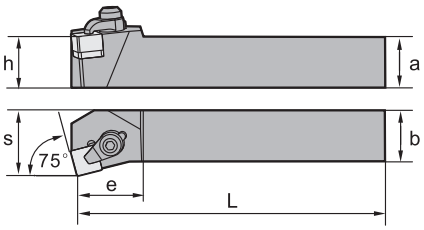
A215

Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) SN** C-Serrage

CSKNR/L Kr: 75°







Version à droite

Article	✻	Stock R	Stock L	Dimensions (mm) a	b	L	h	s	e	Plaquettes	
CSKNR/L2020K12		○	○	20	20	125	20	25	25	SNGN1204**	SNGN1207**
CSKNR/L2525M12		○	○	25	25	170	25	32	25	SNGN1204**	SNGN1207**
CSKNR/L3225P12		○	○	32	25	170	32	32	25	SNGN1204**	SNGN1207**
CSKNR/L3225P15		○	○	32	25	170	32	32	32	SNGN1507**	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	SNGN1204**	SNGN1207**	SNGN1507**
	h	**20-32**	**20-32**	**32**
	Bride	C1RC	C1RC	C2RC
	Vis (bride)	CM6×30B (7,0 Nm)	CM6×30B (7,0 Nm)	CM8×30B (10,2 Nm)
	Vis (cale-support)	SM3×10B	SM3×10B	SM4×12B
	Cale-support	S12CC-04	S12CC-07	S15CC-07
	Ressort	SPR1	SPR1	SPR3
	Clé (bride)	WH40L	WH40L	WH50L
	Clé (cale-support)	WH20L	WH20L	WH30L

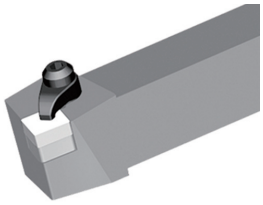
Plaquette

	
Usinage fonte grise	**PCBN/PCD**
A86	A175

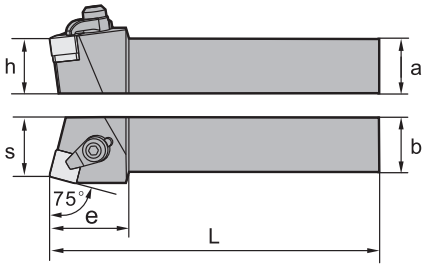
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

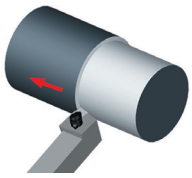
Porte-outil (extérieur) SN** C-Serrage

CSRNR/L Kr: 75°



Version à droite





Article	✻	Stock		Dimensions (mm)						Plaquettes	
		R	L	a	b	L	h	s	e		
CSRNR/L2020K12		○	○	20	20	125	20	22	32	SNGN1204**	SNGN1207**
CSRNR/L2525M12		○	○	25	20	100	25	27	32	SNGN1204**	SNGN1207**
CSRNR/L3225P12		○	○	32	25	170	32	27	32	SNGN1204**	SNGN1207**
CSRNR/L3225P15		○		32	25	170	32	32	40	SNGN1507**	
CSRNR/L4040R15		○	○	40	40	200	40	43	40	SNGN1507**	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	SNGN1204**	SNGN1207**	SNGN1507**
	h	20-32	20-32	32-40
	Bride	C1RC	C1RC	C2RC
	Vis (bride)	CM6×30B (7,0 Nm)	CM6×30B (7,0 Nm)	CM8×30B (10,2 Nm)
	Vis (cale-support)	SM3×10B	SM3×10B	SM4×12B
	Cale-support	S12CC-04	S12CC-07	S15CC-07
	Ressort	SPR1	SPR1	SPR3
	Clé (bride)	WH40L	WH40L	WH50L
	Clé (cale-support)	WH20L	WH20L	WH30L

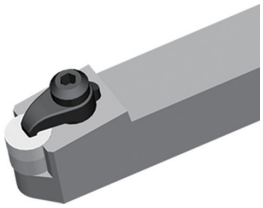
Plaquette

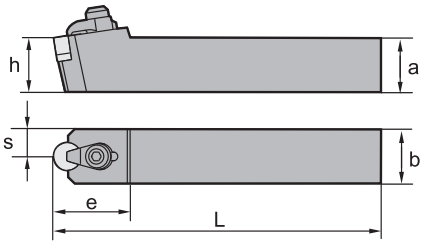
	
Usinage fonte grise	**PCBN/PCD**
A86	A175

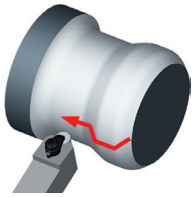
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) RN** C-Serrage

CRDNN







Article	✻	Stock	Dimensions (mm)						Plaquettes	
			a	b	L	h	s	e		
CRDNN2020K12		○	20	20	125	20	10	32	RNGN1204**	RNGN1207**
CRDNN2525M12		○	25	25	150	25	12,5	32	RNGN1204**	RNGN1207**
CRDNN3225P12		○	32	25	170	32	12,5	32	RNGN1204**	RNGN1207**
CRDNN3232P15		○	32	32	170	32	17,5	40	RNGN1507**	
CRDNN4040R15		○	40	40	200	40	20	40	RNGN1507**	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	RNGN1204**	RNGN1207**	RNGN1507**
	h	**20-32**	**20-32**	**32-40**
	Bride	C1RC	C1RC	C2RC
	Vis (bride)	CM6×30B (7,0 Nm)	CM6×30B (7,0 Nm)	CM8×30B (10,2 Nm)
	Vis (cale-support)	SM3×10B	SM3×10B	SM4×12B
	Cale-support	R12CC-04	R12CC-07	R15CC-07
	Ressort	SPR1	SPR1	SPR3
	Clé (bride)	WH40L	WH40L	WH50L
	Clé (cale-support)	WH20L	WH20L	WH30L

Plaquette



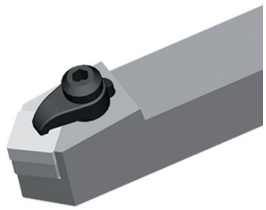
PCBN/PCD

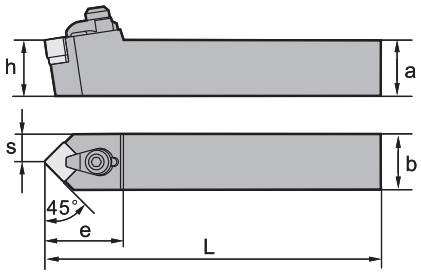
A174

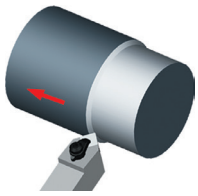
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) SN** C-Serrage

CSDNN Kr: 45°







Article	✲	Stock	Dimensions (mm)						Plaquettes	
			a	b	L	h	s	e		
CSDNN2020K12		○	20	20	125	20	10	35	SNGN1204**	SNGN1207**
CSDNN2525M12		●	25	25	150	25	12,5	30	SNGN1204**	SNGN1207**
CSDNN3225P12		○	32	25	170	32	12,5	35	SNGN1204**	SNGN1207**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	SNGN1204**	SNGN1207**
	h	**20-32**	**20-32**
	Bride	C1RC	C1RC
	Vis (bride)	CM6×30B (7,0 Nm)	CM6×30B (7,0 Nm)
	Vis (cale-support)	SM3×10B	SM3×10B
	Cale-support	S12CC-04	S12CC-07
	Ressort	SPR1	SPR1
	Clé (bride)	WH40L	WH40L
	Clé (cale-support)	WH20L	WH20L

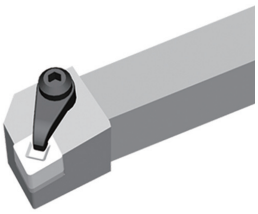
Plaquette

	
Usinage fonte grise	**PCBN/PCD**
A86	A175

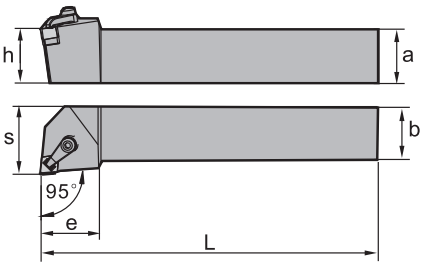
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

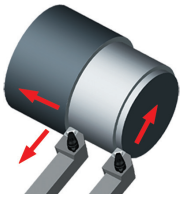
Porte-outil (extérieur) CN** J-Serrage

JCLNR/L Kr: 95°



Version à droite





Article	✻	Stock		Dimensions (mm)						Plaquettes
		R	L	a	b	L	h	s	e	
JCLNR/L2020K12		○	○	20	20	125	20	29	32	CNGX1207**
JCLNR/L2525M12		○	○	25	25	150	25	32	32	CNGX1207**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	CNGX1207**
	h	20-25
	Bride	C1RJ
	Vis (bride)	CM6×30B (7,0 Nm)
	Vis (cale-support)	SM3×10B
	Cale-support	C12CC-07
	Ressort	SPR1
	Clé (bride)	WH40L
	Clé (cale-support)	WH20L

Plaquette



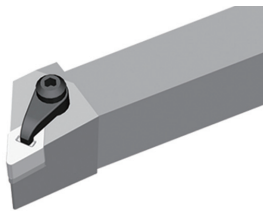
Semi-finition

A203

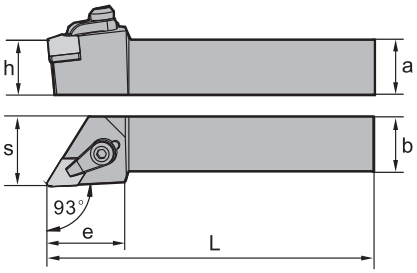
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

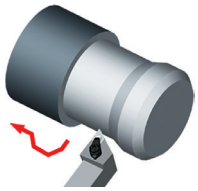
Porte-outil (extérieur) DN** J-Serrage

JDJNR/L Kr: 93°



Version à droite





Article	✲	Stock		Dimensions (mm)						Plaquettes
		R	L	a	b	L	h	s	e	
JDJNR/L2525M15		●	○	25	25	150	25	32	38	DNGX1507**
JDJNR/L3225P15		○	○	32	25	170	32	32	38	DNGX1507**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	DNGX1507**
	h	25-32
	Bride	C1RJ
	Vis (bride)	CM6×30B (7,0 Nm)
	Vis (cale-support)	SM3×10B
	Cale-support	D15CC-07
	Ressort	SPR1
	Clé (bride)	WH40L
	Clé (cale-support)	WH20L

Plaquette

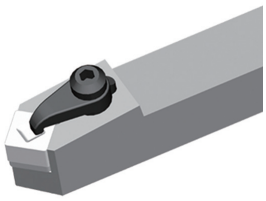


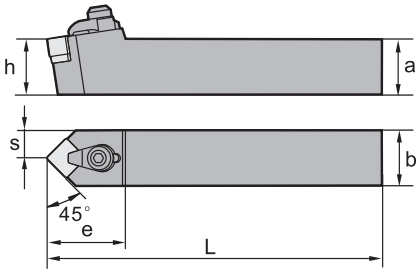
Semi-finition
A206

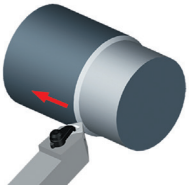
Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) SN** J-Serrage

JSDNN Kr: 45°







Article	✲	Stock	Dimensions (mm)						Plaquettes
			a	b	L	h	s	e	
JSDNN2525M12		○	25	25	150	25	12,5	40	SNGX1207**
JSDNN3225P12		○	32	25	170	32	12,5	40	SNGX1207**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	SNGX1207**
	h	**20-32**
	Bride	C1RJ
	Vis (bride)	CM6×30B (7,0 Nm)
	Vis (cale-support)	SM3×10B
	Cale-support	S12CC-07
	Ressort	SPR1
	Clé (bride)	WH40L
	Clé (cale-support)	WH20L

Plaquette



Semi-finition

A213

Codification A228 Choix nuances A42 Info. techniques A501 Paramètres A366

Notes

Tournage général

Code ISO – porte-outils de tournage extérieur – chariotage

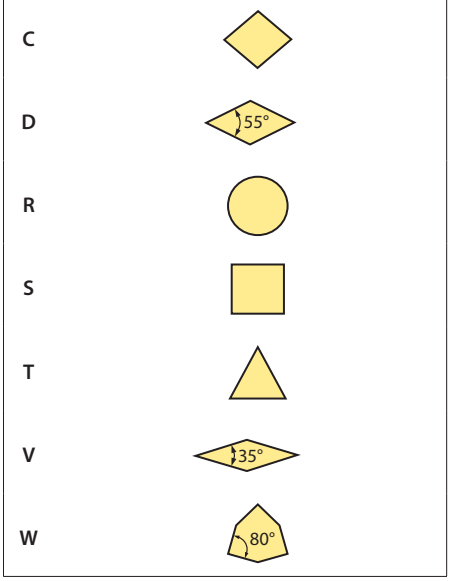
S	C	L	N	L	25	25	M	12	–	S	C
1	2	3	4	5	6	7	8	9		10	11

1 Système de serrage

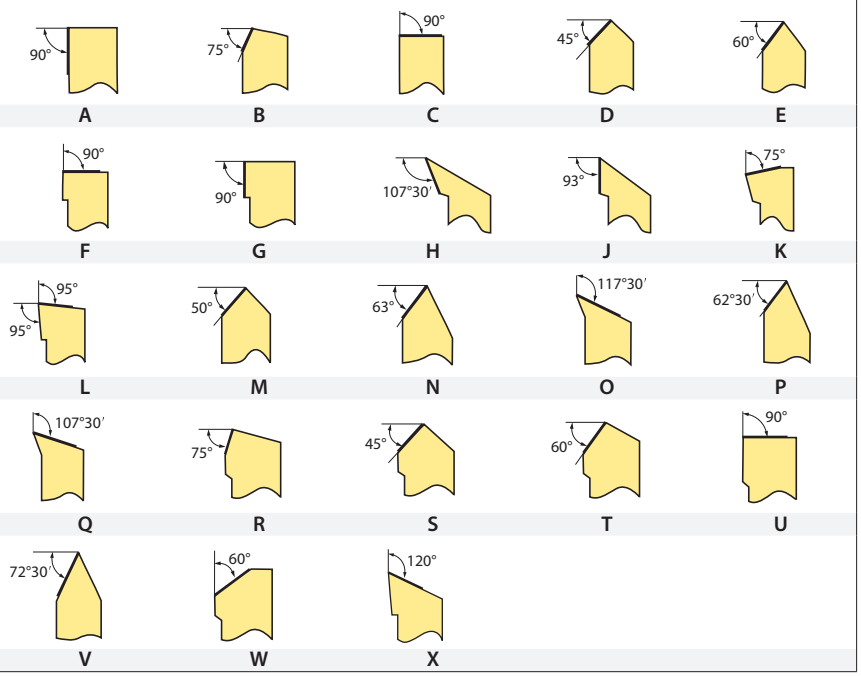
Code	Description
S	Système de serrage à vis



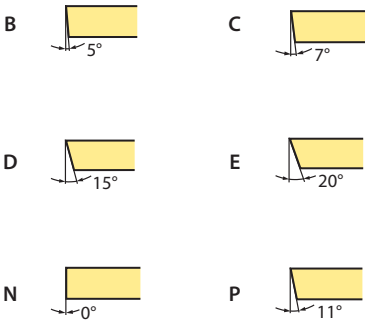
2 Forme de plaquette



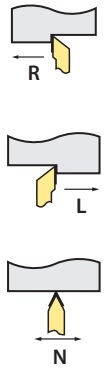
3 Forme de porte-outils et angle d'attaque



4 Angle de dépouille

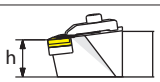


Sens de coupe



5

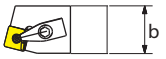
Hauteur du corps [mm]



Code	h
12	12
16	16
20	20
25	25
32	32
40	40
50	50

6

Largeur du corps [mm]



Code	b
12	12
16	16
20	20
25	25
32	32
40	40
50	50

7

Longueur porte-outils L [mm]



Code	L
H	100
K	125
M	150
P	170
Q	180
R	200
S	250
T	300

8

Longueur d'arête l [mm]

I.C [mm]	Forme de plaquette						
	C	D	R	S	T	V	W
5,56					**09**		
6,35	**06**	**07**			**11**		
9,525	**09**	**11**	**09**	**09**	**16**	**16**	**06**
12,7	**12**	**15**	**12**	**12**	**22**	**22**	**08**
15,875	**16**	**19**	**15**	**15**	**27**		
19,05	**19**		**19**	**19**	**33**		
25,4	**25**		**25**	**25**	**44**		
32			**32**				

9

Porte-outils de tournage long (Swissturning)

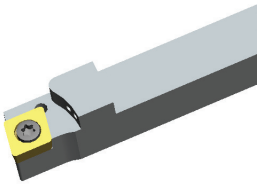
10

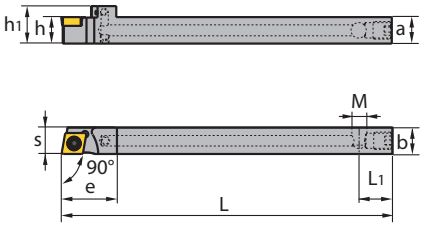
Avec arrosage interne

11

Porte-outil CC** S-Serrage

SCACR/L-SC Kr: 90°





Article	✻	Stock R	Stock L	a	b	L	h	h_1	s	L_1	e	M	kg	Plaquettes
SCACR/L1212M09-SC	✻	●	●	12	12	150	12	17	12	15	25	M8X1	0,14	CC**09T3**
SCACR/L1616H09-SC	✻	●	●	16	16	100	16	21	16	15	28	M8X1	0,21	CC**09T3**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	CC**09T3**
	h	12-16
	Vis	I60M3,5×8 (2,7 Nm)
	Clé	WT15IP

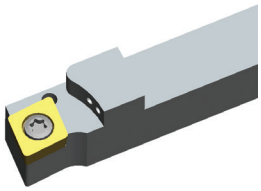
Plaquette

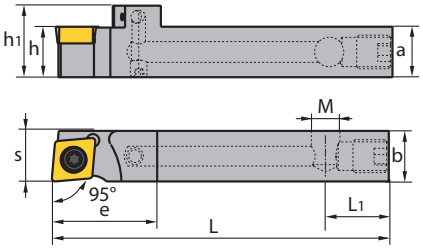
Finition	Semi-finition	Ébauche	Usinage aluminium	Usinage fonte grise	PCBN/PCD
A117	A119	A121	A122	A121	A180

Codification A304 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil CC** S-Serrage

SCLCR/L-SC Kr: 95°





Article	✲	Stock R	Stock L	a	b	L	h	h_1	s	L_1	e	M	kg	Plaquettes
SCLCR/L1010F06-S		●	●	10	10	80	10	15	10	15	10		0,06	CC**0602**
SCLCR/L1212F09-SC	✲	●	●	12	12	80	12	17	12	15	25	M8X1	0,07	CC**09T3**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	CC**0602**	CC**09T3**
	h	**10**	**12**
	Vis	I60M2,5×6,5 (1,0 Nm)	I60M3,5×8 (2,7 Nm)
	Clé	WT07IP	WT15IP

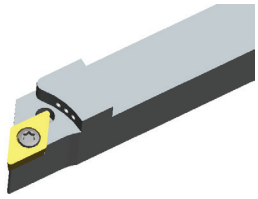
Plaquette

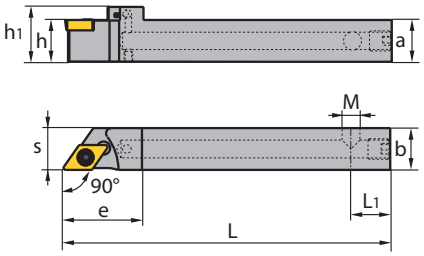
Finition	Semi-finition	Ébauche	Usinage aluminium	Usinage fonte grise	PCBN/PCD
A116	A119	A121	A122	A121	A180

Codification A304 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil DC** S-Serrage

SDACR/L-SC Kr: 90°





Article	✲	Stock R	Stock L	a	b	L	h	h_1	s	L_1	e	M	kg	Plaquettes
SDACR/L1212M07-SC	✲	●	●	12	12	150	12	17	12	15	25	M8X1	0,15	DC**0702**
SDACR/L1212H11-SC	✲	○		12	12	100	12	17	12	15	30	M8X1	0,1	DC**11T3**
SDACR/L1616K11-SC	✲	●	●	16	16	125	16	21	16	15	30	M8X1	0,21	DC**11T3**
SDACR/L1212M11-SC	✲	●	●	12	12	150	12	17	12	15	30	M8X1	0,14	DC**11T3**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	DC**0702**	DC**11T3**	DC**11T3**
	h	12	12	12-16
	Vis	I60M2,5×6,5 (1,0 Nm)	I60M3,5×8 (2,7 Nm)	I60M3,5×8 (2,7 Nm)
	Clé	WT07IP	WT15IP	WT15IP

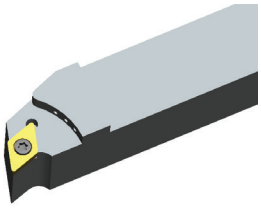
Plaquette

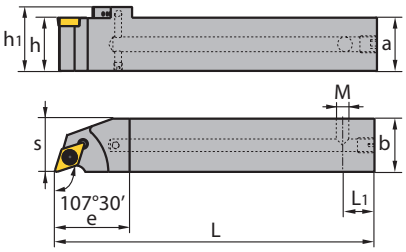
Finition	Semi-finition	Ébauche	Usinage aluminium	Usinage fonte grise	PCBN/PCD
A126	A127	A129	A129	A129	A184

Codification A304 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil DC** S-Serrage

SDHCR/L-SC Kr: 107°30'





Article	✲	Stock	Dimensions (mm)									kg	Plaquettes
			a	b	L	h	h_1	s	L_1	e	M		
SDHCR/L2020K11-SC	✲	○	20	20	125	20	25	20	15	30	M8X1	0,35	DC**11T3**
SDHCR/L2525M11-SC	✲	●	25	25	150	25	30	25	15	35	M8X1	0,66	DC**11T3**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**DC**11T3****
	h	**20-25**
	Vis	I60M3,5×8 (2,7 Nm)
	Clé	WT15IP

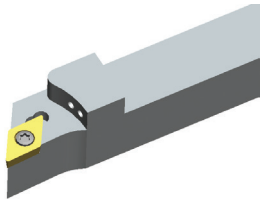
Plaquette

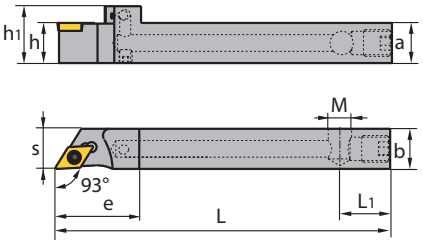
					
Finition	**Semi-finition**	**Ébauche**	**Usinage aluminium**	**Usinage fonte grise**	**PCBN/PCD**
A126	A127	A129	A129	A129	A184

Codification A304 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil DC** S-Serrage

SDJCR/L-SC Kr: 93°





Article	✻	Stock R	Stock L	a	b	L	h	h_1	s	L_1	e	M	kg	Plaquettes
SDJCR/L1212H07-SC	✻	●	●	12	12	100	12	17	12	15	25	M8X1	0,1	DC**0702**
SDJCR/L1212H11-SC	✻	●	●	12	12	100	12	17	12	15	30	M8X1	0,1	DC**11T3**
SDJCR/L1616K11-SC	✻	●	●	16	16	125	16	21	16	15	30	M8X1	0,21	DC**11T3**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	DC**0702**	DC**11T3**
	h	12	12-16
	Vis	I60M2,5×6,5 (1,0 Nm)	I60M3,5×8 (2,7 Nm)
	Clé	WT07IP	WT15IP

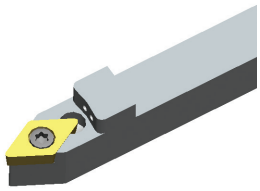
Plaquette

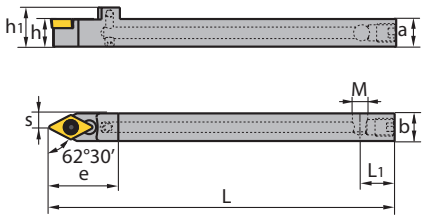
Finition	Semi-finition	Ébauche	Usinage aluminium	Usinage fonte grise	PCBN/PCD
A126	A127	A129	A129	A129	A184

Codification A304 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil DC** S-Serrage

SDNCN-SC Kr: 62°30'





Article	✲	Stock	Dimensions (mm)									kg	Plaquettes
			a	b	L	h	h_1	s	L_1	e	M		
SDNCN1212H11-SC	✲	○	12	12	100	12	17	6	15	30	M8X1	0,09	DC**11T3**
SDNCN1212M11-SC	✲	●	12	12	150	12	17	6	15	30	M8X1	0,1	DC**11T3**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**DC**11T3****
	h	**12**
	Vis	I60M3,5×8 (2,7 Nm)
	Clé	WT15IP

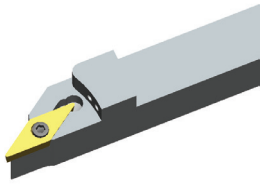
Plaquette

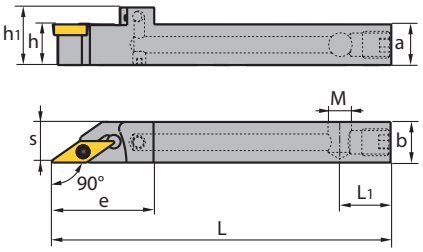
					
Finition	**Semi-finition**	**Ébauche**	**Usinage aluminium**	**Usinage fonte grise**	**PCBN/PCD**
A126	A127	A129	A129	A129	A184

Codification A304 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil VC** S-Serrage

SVACR/L-SC Kr: 90°





Article	✻	Stock R	Stock L	a	b	L	h	h_1	s	L_1	e	M	kg	Plaquettes
SVACR/L1212H11-SC	✻	●	●	12	12	100	12	17	12	15	30	M8X1	0,1	VC**1103**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	VC**1103**
	h	12
	Vis	I60M2,5×6,5 (1,0 Nm)
	Clé	WT07IP

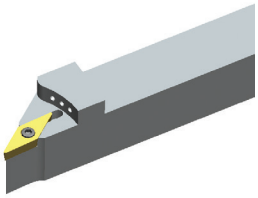
Plaquette

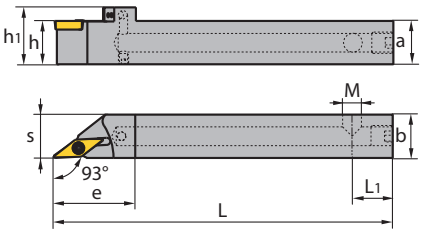
Finition	Usinage aluminium	PCBN/PCD
A156	A154	A193

Codification A304 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil VC** S-Serrage

SVJCR/L-SC Kr: 93°





Article	✲	Stock R	Stock L	a	b	L	h	h_1	s	L_1	e	M	kg	Plaquettes
SVJCR/L0808H11-S		●	●	8	8	100	8	13	8	15	22	M8X1	0,044	VC**1103**
SVJCR/L1212H11-SC	✲	●	●	12	12	100	12	17	12	15	30	M8X1	0,095	VC**1103**
SVJCR/L1616K11-SC	✲	●	●	16	16	125	16	21	16	15	30	M8X1	0,2	VC**1103**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**VC**1103****
	h	**8-16**
	Vis	l60M2,5×6,5 (1,0 Nm)
	Clé	WT07IP

Plaquette

		
Finition	**Usinage aluminium**	**PCBN/PCD**
A156	A154	A193

Codification A304 Choix nuances A42 Info. techniques A501 Paramètres A366

RW	P	L	F	N	L/R	19
1	2	3	4	5	6	7

(RW = Rail Way)

Porte-outils pour le secteur ferroviaire

1

Système de serrage

Code	Description	
P	Système de serrage à levier	
M	Serrage à bride et levier	
S	Système de serrage à vis	
C/J	Serrage par bride	
D	Serrage double	

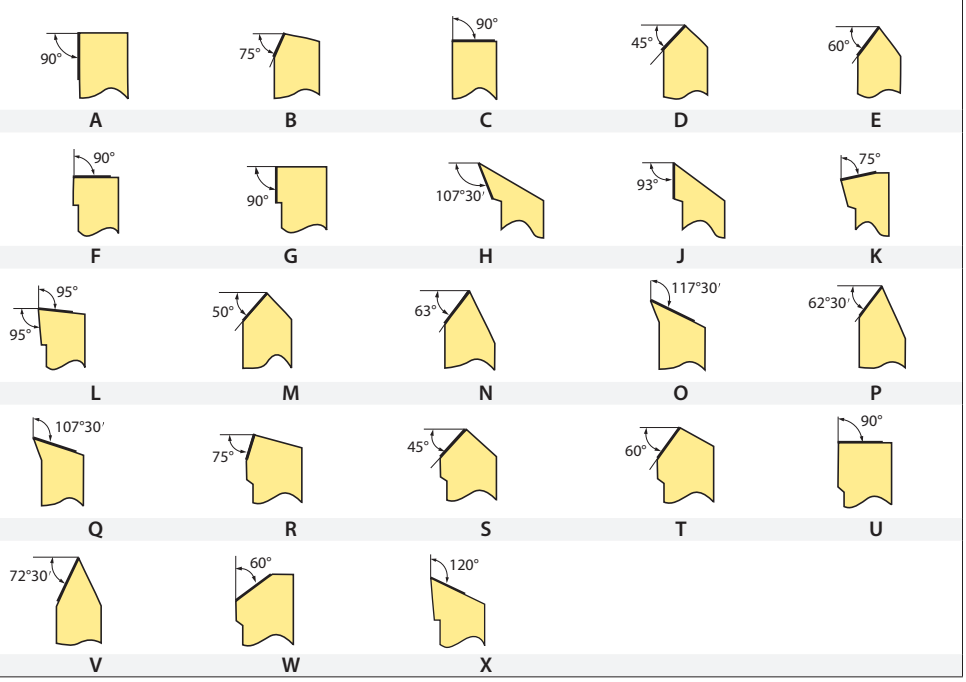
2

Forme de plaquette

C	
D	
R	
S	
T	
V	
L	

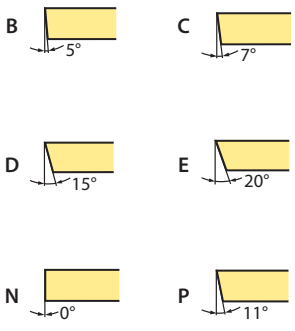
3

Forme de porte-outils et angle d'attaque

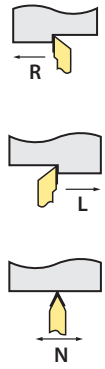


4

Angle de dépouille



5

Sens de coupe


6

Longueur d'arête l [mm]							
I.C [mm]	Forme de plaquette						
	C	D	R	S	T	V	W
5,56					**09**		
6,35	**06**	**07**			**11**		
9,525	**09**	**11**	**09**	**09**	**16**	**16**	**06**
12,7	**12**	**15**	**12**	**12**	**22**	**22**	**08**
15,875	**16**	**19**	**15**	**15**	**27**		
19,05	**19**		**19**	**19**	**33**		
25,4	**25**		**25**	**25**	**44**		
32			**32**				

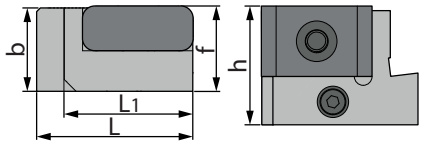
7

Porte-outil (extérieur) LN** P-Serrage

RW-PLANR/L Kr: 90°



Version à droite



Article	✻	Stock R	Stock L	Dimensions (mm) b	L	h	L_1	f	Plaquettes
RW-PLANR/L-19	✻	○	○	22,5	43	32	35	23	LNUX1919**
RW-PLANR/L-30	✻	○	○	22,5	43	32	35	23	LNUX3019**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	LNUX1919**	LNUX3019**
	h	**25-32**	**25-32**
	Levier	L5 RWL	L5 RWL
	Vis	LEM8×25 RWL (10,2 Nm)	LEM8×25 RWL (10,2 Nm)
	Clé	WH30L	WH30L

Plaquette



Usinage difficile

A115

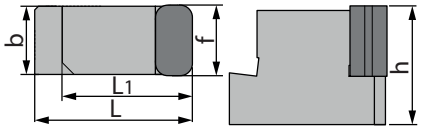
Codification A314 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) LN** P-Serrage

RW-PLFNR/L Kr: 90°



Version à droite



Article	✲	Stock		Dimensions (mm)					Plaquettes
		R	L	b	L	h	L_1	f	
RW-PLFNR/L-19	✲	○	○	18,6	43	32	35	19,1	LNUX1919**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**LNUX1919****
	h	**25-32**
	Levier	L5 RWL
	Vis	LEM8×25 RWL (10,2 Nm)
	Clé	WH30L

Plaquette



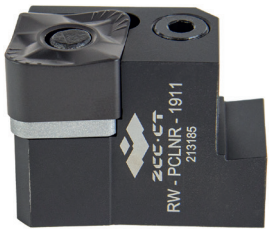
Usinage difficile

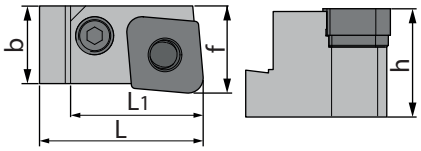
A115

Codification A314 Choix nuances A42 Info. techniques A501 Paramètres A366

Porte-outil (extérieur) CN** P-Serrage

RW-PCLNR/L Kr: 95°





Version à droite

Article	✻	Stock R	Stock L	Dimensions (mm) b	L	h	L_1	f	Plaquettes
RW-PCLNR/L-1907	✻	○	○	24,8	43	32	35	19,1	CNMM1907**
RW-PCLNR/L-1911	✻	○	○	24,8	43	32	35	19,1	CNMM1911**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	CNMM1907**	CNMM1911**
	h	**25-32**	**25-32**
	Levier	L5 RWC	L5 RWC
	Vis	LEM8×25 RWC (10,2 Nm)	LEM8×25 RWC (10,2 Nm)
	Goupille ca-le-supp.	SP5 RWC	SP5 RWC
	Cale-support	C19 RWC	C19 RWC
	Clé	WH30L	WH30L

Plaquette

	
Finition	**Ébauche**
A114	A114

Codification A314 Choix nuances A42 Info. techniques A501 Paramètres A366

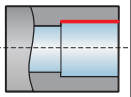
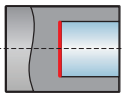
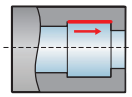
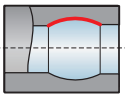
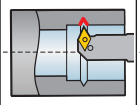
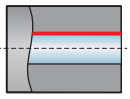
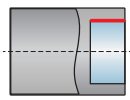
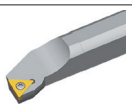
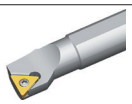
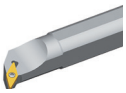
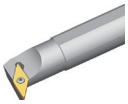
Notes

Barres d'alésage

	Porte-outils	Application					Pièce		Page
		Alésage	Dressage intérieur	Alésage en tirant	Copiage intérieur	Copiage intérieur	Stable	Instable	
P	PDSNR/L 62°30'	●		●	●	●	●		A326
	PCLNR/L 95°	●	●				●	●	A324
	PDUNR/L 93°	●			●	●	●	●	A327
	PSKNR/L 75°	●					●		A329
	PTFNR/L 91°	●					●		A330
	PWLNR/L 95°	●	●				●		A332
S	SCFCR/L 90°	●					●	●	A352
	SCLCR/L 95°	●	●				●		A352
	SCLPR/L 95°	●	●				●	●	A354
	SDQCR/L 107°30'	●			●	●	●	●	A357
	SDQPR/L 107°30'	●			●	●	●	●	A356
	SDUCR/L 93°	●			●	●	●	●	A359
	SDUPR/L 93°	●			●		●	●	A358
	SDZCR/L 95°			●			●		A338

● Recommandation

Barres d'alésage

	Porte-outils		Application					Pièce		Page
			Alésage	Dressage intérieur	Alésage en tirant	Copiage intérieur	Copiage intérieur	Stable	Instable	
										
S	SSKCR/L 75°		●					●		A339
	STFCR/L 91°		●							A361
	STUPR/L 93°		●							A360
	SVQBR/L 107°30'		●			●	●			A345
	SVXBR/L 93°				●			●		A347
	SVQCR/L 107°30'		●							A363
	SVUBR/L 93°		●			●	●			A346
	SVUCR/L 93°		●			●	●			A364
	SZLNR/L 95°		●	●				●		A365
Anti-vibratoire	SCLPR/L 95°		●	●						A348
	SDQPR/L 107°30'		●			●	●			A349
	SDUPR/L 93°		●							A350
	STUPR/L 93°		●							A351
	SVQCR/L 107°30'		●			●	●			A343
	SVUCR/L 93°		●			●	●			A344

● Recommandation

Tournage général Code ISO – barres d'alésage

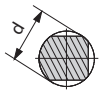
S	16	R	–	S	D	U	C	R	07	–	KR93
1	2	3		4	5	6	7	8	9		10

Type d'attachement

Code	Description
A	Attachement en acier (avec arrosage intérieur)
C	Attachement carbure monobloc
E	Attachement carbure (avec arrosage intérieur)
S	Attachement en acier
X	Application spéciale

1

Diamètre de attachement d [mm]



Code	d
16	16
20	20
25	25
32	32
40	40
50	50

2

Longueur L [mm]



Code	L
H	100
K	125
M	150
N	160
P	170
Q	180
R	200
S	250
T	300
U	350
V	400

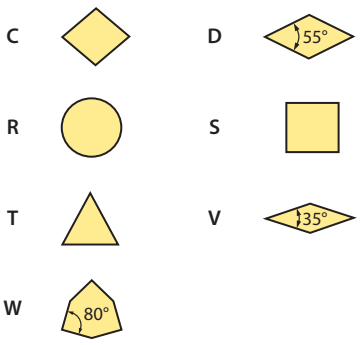
3

Système de serrage

Code	Description	
P	Système de serrage à levier	
S	Système de serrage à vis	

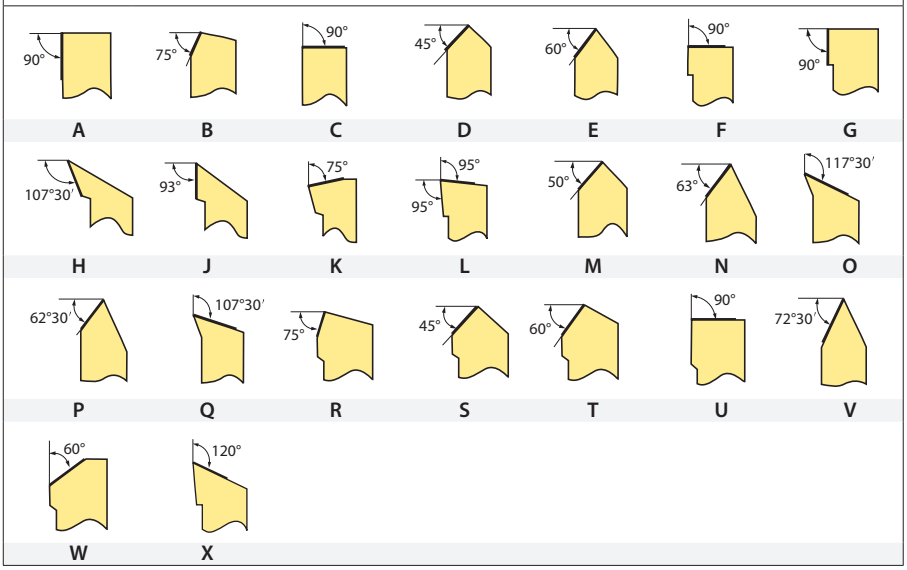
4

Forme de plaquette



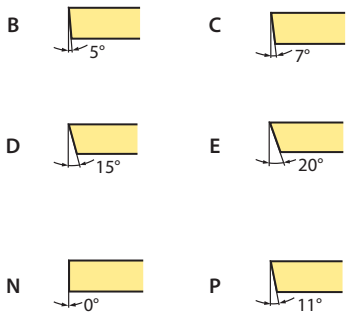
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Forme de porte-outils et angle d'attaque



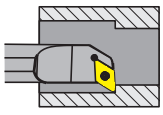
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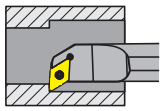
Angle de dépouille



7

Sens de coupe


L


R

8

Longueur d'arête l [mm]

l.C [mm]	Forme de plaquette						
	C	D	R	S	T	V	W
5,56					09		
6,35	06	07			11		
9,525	09	11	09	09	16	16	06
12,7	12	15	12	12	22	22	08
15,875	16	19	15	15	27		
19,05	19		19	19	33		
25,4	25		25	25	44		
32			32				

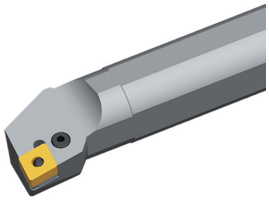
9

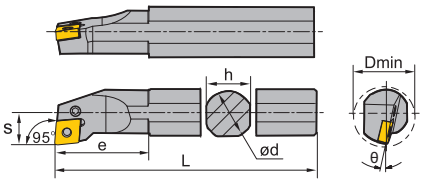
Angle d'attaque

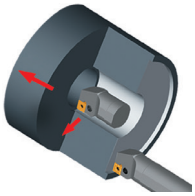
10

Barre d'alésage en acier CN** P-Serrage

PCLNR/L Kr: 95°







Version à droite

Article	✲	Stock R	Stock L	Dimensions (mm) ød	L	h	S	e	D_{min}	θ	Plaquettes
S16M-PCLNR/L09		●	●	16	150	15	11	28	20	-12	CN**0903**
S16R-PCLNR/L09		●	●	16	200	15	11	28	20	-12	CN**0903**
S20Q-PCLNR/L09		●	●	20	180	18	13	31	25	-11	CN**0903**
S20S-PCLNR/L09		●	●	20	250	18	13	31	25	-11	CN**0903**
S25Q-PCLNR/L09		○	○	25	180	23	17	35	32	-10	CN**0903**
S25T-PCLNR/L09		●	○	25	300	23	17	35	32	-10	CN**0903**
A16M-PCLNR/L09	✲	○		16	150	14	11		20	-12	CN**0903**
S25Q-PCLNR/L12		○	○	25	180	23	17	40	32	-12	CN**1204**
S25T-PCLNR/L12		●	●	25	300	23	17	40	32	-12	CN**1204**
S32R-PCLNR/L12		●	●	32	200	30	22	50	44	-10	CN**1204**
S32U-PCLNR/L12		●	●	32	350	30	22	50	44	-10	CN**1204**
S40S-PCLNR/L12		○	●	40	250	37	27	55	54	-10	CN**1204**
S40V-PCLNR/L12		●	●	40	400	37	27	55	54	-10	CN**1204**
S50S-PCLNR/L12		○	○	50	250	47	35	56	63	-10	CN**1204**
S50W-PCLNR/L12		●	●	50	450	47	35	56	63	-10	CN**1204**
A25R-PCLNR/L12	✲	●	●	25	200	24	17	40	32	-12	CN**1204**
A32S-PCLNR/L12	✲	●	●	32	250	31	22	50	44	-10	CN**1204**
S50S-PCLNR/L19		○	○	50	250	47	35	63	63	-10	CN**1906**
S50W-PCLNR/L19		●	○	50	450	47	35	63	63	-10	CN**1906**

● En stock ○ Sur demande

✲ Avec arrosage interne

Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage en acier CN**

Pièces détachées

	Plaquette	CN**0903**	CN**1204**	CN**1204**	CN**1906**
	ød	16-25	25	32-50	50
	Levier	L3C	L4A	L4A	L6
	Vis	LEM5×9B (4,0 Nm)			
	Vis				LEM10×27 (16,6 Nm)
	Vis		LEM6×13,4A (7,0 Nm)	LEM6×13,4A (7,0 Nm)	
	Goupille ca-le-supp.			SP4	SP6
	Cale-support				C19AP
	Cale-support			C12APB	
	Clé		WH25L	WH25L	WH40L
	Clé	WT09IP			

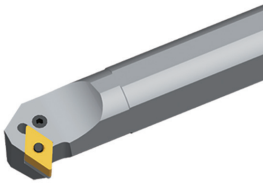
Plaquette

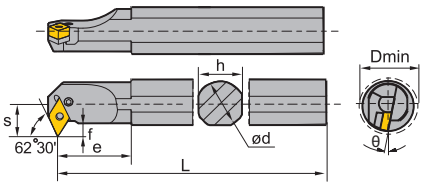
					
Wiper	**Finition**	**Semi-finition**	**Ébauche**	**Usinage fonte grise**	**PCBN/PCD**
A51	A52	A53	A57	A61	A177

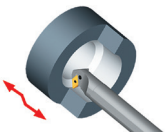
Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage en acier DN** P-Serrage

PDSNR/L Kr: 62°30'







Version à droite

Article	*	Stock R	Stock L	Dimensions (mm) ød	L	h	s	e	f	D_{min}	θ	Plaquettes
S32R-PDSNR/L15-3		○	○	32	200	30	22	45	8,5	40	-11	DN**1504**
S40V-PDSNR/L15-3		●		40	400	37	27	43	9,4	50	-11	DN**1504**
A32S-PDSNR/L15-3	*	○	○	32	250	31	22	45	8,5	40	-11	DN**1504**
S32R-PDSNR/L15		●	●	32	200	30	22	45	8,5	40	-11	DN**1506**
S32U-PDSNR/L15		●	●	32	350	30	22	45	8,5	40	-11	DN**1506**
S40S-PDSNR/L15		○	○	40	250	37	27	43	9,4	50	-11	DN**1506**
S40V-PDSNR/L15		○	○	40	400	37	27	43	9,4	50	-11	DN**1506**
A32S-PDSNR/L15	*	●	●	32	250	31	22	45	8,5	40	-11	DN**1506**

● En stock ○ Sur demande

* Avec arrosage interne

Pièces détachées

	Plaquette ød	DN**1504** 32-40	DN**1506** 32-40
	Levier	L4	L4B
	Vis	LEM8×21 (10,2 Nm)	LEM8×21 (10,2 Nm)
	Goupille ca-le-supp.	SP4	SP4
	Cale-support	D15AP	D15AP
	Clé	WH30L	WH30L

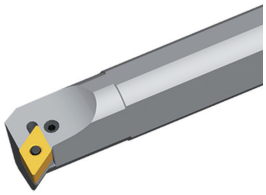
Plaquette

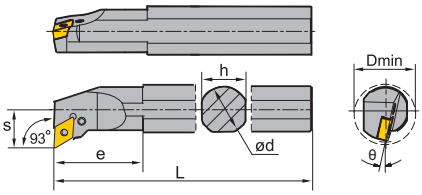
					
Wiper	**Finition**	**Semi-finition**	**Ébauche**	**Usinage fonte grise**	**PCBN/PCD**
A62	A63	A63	A68	A69	A178

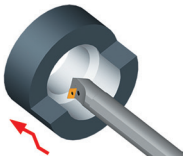
Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage en acier DN** P-Serrage

PDUNR/L Kr: 93°







Version à droite

Article	✲	Stock		Dimensions (mm)							Plaquettes
		R	L	ød	L	h	s	e	D_{min}	θ	
S20Q-PDUNR/L11		●	○	20	180	18	13	30	25	-16	DN**1104**
S20S-PDUNR/L11		●	●	20	250	18	13	30	25	-16	DN**1104**
S25Q-PDUNR/L11		●	●	25	180	23	17	35	32	-13	DN**1104**
S25T-PDUNR/L11		●	●	25	300	23	17	35	32	-13	DN**1104**
S32R-PDUNR/L11		○	○	32	200	30	22	40	40	-16	DN**1104**
S32U-PDUNR/L11		●	●	32	350	30	22	40	40	-16	DN**1104**
A25R-PDUNR/L11	✲	●		25	200	24	17	35	32	-13	DN**1104**
S32R-PDUNR/L15-3		○	○	32	200	30	22	50	40	-16	DN**1504**
S32U-PDUNR/L15-3		●	●	32	350	30	22	50	40	-16	DN**1504**
S40S-PDUNR/L15-3		○	○	40	250	37	27	50	50	-11	DN**1504**
S40V-PDUNR/L15-3		●	●	40	400	37	27	50	50	-11	DN**1504**
A32S-PDUNR/L15-3	✲	●	●	32	250	31	22	50	40	-16	DN**1504**
S32R-PDUNR/L15		○	○	32	200	30	22	50	40	-16	DN**1506**
S32U-PDUNR/L15		●	●	32	350	30	22	50	40	-16	DN**1506**
S40S-PDUNR/L15		○	○	40	250	37	27	50	50	-11	DN**1506**
S40V-PDUNR/L15		●	●	40	400	37	27	50	50	-11	DN**1506**
A32S-PDUNR/L15	✲	●	●	32	250	31	22	50	40	-16	DN**1506**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**DN**1104****	**DN**1104****	**DN**1504****	**DN**1506****
	ød	**20-25**	**32**	**32-40**	**32-40**
	Levier	L3D	L3	L4	L4B
	Vis	LEM5×12B (4,0 Nm)	LEM6×17 (7,0 Nm)		
	Vis			LEM8×21 (10,2 Nm)	LEM8×21 (10,2 Nm)
	Goupille cale-supp.		SP3	SP4	SP4
	Cale-support		D11AP	D15AP	D15AP
	Clé		WH25L	WH30L	WH30L
	Clé	WT09IP			

Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage en acier DN**

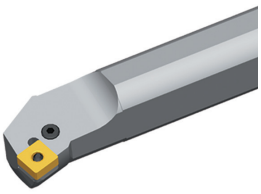
Plaquette

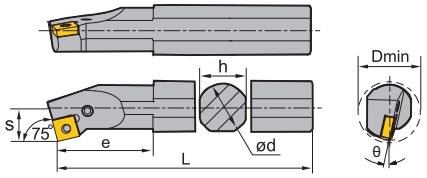
					
Wiper	**Finition**	**Semi-finition**	**Ébauche**	**Usinage fonte grise**	**PCBN/PCD**
A62	A63	A63	A68	A69	A178

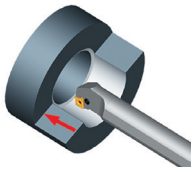
Codification > A322 Choix nuances > A42 Info. techniques > A501 Paramètres > A366

Barre d'alésage en acier SN** P-Serrage

PSKNR/L Kr: 75°







Version à droite

Article	✲	Stock R	Stock L	Dimensions (mm) ød	L	h	s	e	D_{min}	θ	Plaquettes
S25Q-PSKNR/L12		○	●	25	180	23	17	42	32	-12	SN**1204**
S25T-PSKNR/L12		●	○	25	300	23	17	42	32	-12	SN**1204**
S32R-PSKNR/L12		○	○	32	200	30	22	45	44	-10	SN**1204**
S32U-PSKNR/L12		●	●	32	350	30	22	45	44	-10	SN**1204**
S40S-PSKNR/L12		○	○	40	250	37	27	50	54	-10	SN**1204**
S40V-PSKNR/L12		●	○	40	400	37	27	50	54	-10	SN**1204**
A25R-PSKNR/L12	✲	●	●	25	200	24	17	42	32	-12	SN**1204**
A32S-PSKNR/L12	✲	●	●	32	250	31	22	50	44	-12	SN**1204**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	SN**1204**	SN**1204**
	ød	**25**	**32-40**
	Levier	L4A	L4
	Vis		LEM8×21 (10,2 Nm)
	Vis	LEM6×13,4A (7,0 Nm)	
	Goupille ca-le-supp.		SP4
	Cale-support		S12APB
	Clé	WH25L	WH30L

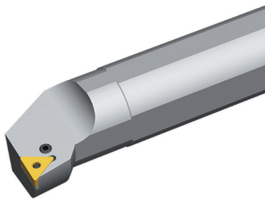
Plaquette

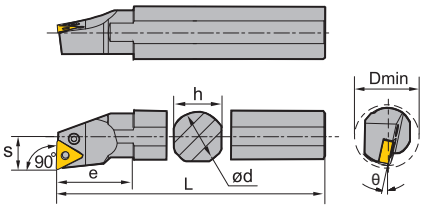
				
Finition	**Semi-finition**	**Ébauche**	**Usinage fonte grise**	**PCBN/PCD**
A73	A73	A78	A84	A162

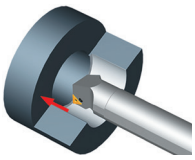
Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage en acier TN** P-Serrage

PTFNR/L Kr: 90°







Version à droite

Article	✻	Stock R	Stock L	Dimensions (mm) ød	L	h	s	e	D_{min}	θ	Plaquettes
S16M-PTFNR/L11		○	○	16	150	15	11	28	20	-14	TN**1103**
S16R-PTFNR/L11		●	●	16	200	15	11	28	20	-14	TN**1103**
S20Q-PTFNR/L11		●	●	20	180	18	13	31	25	-12	TN**1103**
S20S-PTFNR/L11		●	●	20	250	18	13	31	25	-12	TN**1103**
S25Q-PTFNR/L11		○	○	25	180	23	17	35	32	-10	TN**1103**
S25T-PTFNR/L11		○	○	25	300	23	17	35	32	-10	TN**1103**
S25Q-PTFNR/L16		○	○	25	180	23	17	42	32	-12	TN**1604**
S25T-PTFNR/L16		●	●	25	300	23	17	42	32	-12	TN**1604**
S32R-PTFNR/L16		○	○	32	200	30	22	50	44	-10	TN**1604**
S32U-PTFNR/L16		●	●	32	350	30	22	50	44	-10	TN**1604**
S40S-PTFNR/L16		○	○	40	250	37	27	55	54	-10	TN**1604**
S40V-PTFNR/L16		●	●	40	400	37	27	55	54	-10	TN**1604**
A25R-PTFNR/L16	✻	●	○	25	200	24	17	40	32	-12	TN**1604**
A32S-PTFNR/L16	✻	●	●	32	250	31	22	50	44	-10	TN**1604**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**TN**1103****	**TN**1604****	**TN**1604****
	ød	**16-25**	**25**	**32-40**
	Levier	L2	L3B	L3
	Vis	LEM5×9B (4,0 Nm)	LEM5×12B (4,0 Nm)	LEM6×17 (7,0 Nm)
	Goupille ca-le-supp.			SP3
	Cale-support			T16APB
	Clé		WH20L	WH25L
	Clé	WT09IP		

Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage en acier TN**

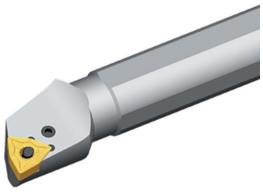
Plaquette

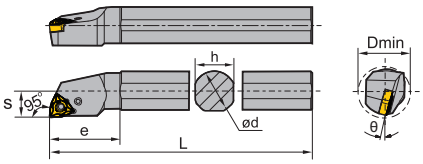
					
Wiper	**Finition**	**Semi-finition**	**Ébauche**	**Usinage fonte grise**	**PCBN/PCD**
A87	A88	A90	A92	A99	A163

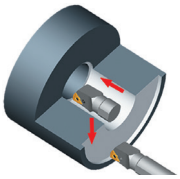
Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage en acier WN** P-Serrage

PWLNR/L Kr: 95°







Version à droite

Article	✻	Stock R	Stock L	Dimensions (mm) ød	L	h	s	e	D_{min}	θ	Plaquettes
			●	16	150	15	11	25	20	-13	WN**0604**
S16M-PWLNR/L06		●		16	150	15	11	25	20	-13	WN**0604**
S16R-PWLNR/L06		○	○	16	200	15	11	25	20	-13	WN**0604**
S20Q-PWLNR/L06		●	●	20	180	18	13	35	25	-13	WN**0604**
S20S-PWLNR/L06		●	○	20	250	18	13	35	25	-13	WN**0604**
S25Q-PWLNR/L06		○	○	25	180	23	17	35	32	-13	WN**0604**
S25T-PWLNR/L06		○		25	300	23	17	35	32	-13	WN**0604**
S20Q-PWLNR/L08		●	●	20	180	18	13	32	25	-13	WN**0804**
S20S-PWLNR/L08		●		20	250	18	13	32	25	-13	WN**0804**
S25Q-PWLNR/L08		●	○	25	180	23	17	45	32	-13	WN**0804**
S25T-PWLNR/L08		●	●	25	300	23	17	45	32	-13	WN**0804**
S32R-PWLNR/L08		●	●	32	200	30	22	50	40	-15	WN**0804**
S32U-PWLNR/L08		●	●	32	350	30	22	50	40	-15	WN**0804**
S50W-PWLNR/L08		○	○	50	450	47	35	50	63	-15	WN**0804**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**WN**0604****	**WN**0804****	**WN**0804****	**WN**0804****
	ød	**16-25**	**20-25**	**32**	**50**
	Levier	L3B	L4A	L4	L4
	Vis	LEM5×12B (4,0 Nm)			
	Vis			LEM8×21 (10,2 Nm)	LEM8×21 (10,2 Nm)
	Vis		LEM6×13,4A (7,0 Nm)		
	Goupille ca-le-supp.			SP4	SP4
	Cale-support			W08AP	W08AP
	Clé		WH25L	WH30L	WH30L
	Clé	WT09IP			

Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage en acier WN**

Plaquette

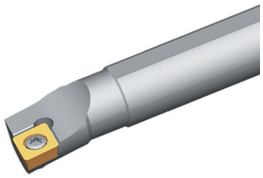
					
Wiper	**Finition**	**Semi-finition**	**Ébauche**	**Usinage fonte grise**	**PCBN/PCD**
A106	A107	A107	A109	A111	A165

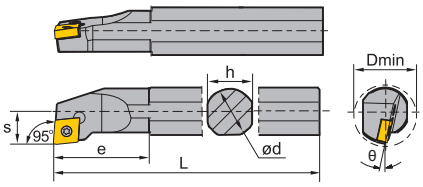
A Tournage
B Fraisage
C Perçage
D Informations techniques
E Index

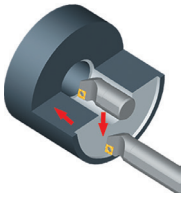
Codification > A322 Choix nuances > A42 Info. techniques > A501 Paramètres > A366

Barre d'alésage en acier CC** S-Serrage

SCLCR/L Kr: 95°







Version à droite

Article	✻	Stock R	Stock L	Dimensions (mm) ød	L	h	s	L_2	e	D_{min}	θ	Plaquettes
S08K-SCLCR/L06		●	●	8	125	7	5	14	14	10	-15	CC**0602**
S10K-SCLCR/L06		●	●	10	125	7	5	14	14	10	-15	CC**0602**
S10M-SCLCR/L06		●	●	10	150	9	6	14	14	12	-13	CC**0602**
S12M-SCLCR/L06		●	●	12	150	11	9	25	25	16	-10	CC**0602**
A08F-SCLCR/L06	✻	●	●	8	80	7,5	5	14	14	10	-15	CC**0602**
A10H-SCLCR/L06	✻	●	●	10	100	9,5	6	14	14	12	-13	CC**0602**
A12K-SCLCR/L06	✻	●	●	12	125	11,5	9	25	25	16	-10	CC**0602**
S12M-SCLCR/L09		●	●	12	150	11	9	25	25	16	-10	CC**09T3**
S16M-SCLCR/L09		●	○	16	150	15	11	32,5	32,5	20	-12	CC**09T3**
S16R-SCLCR/L09		●	●	16	200	15	11	32,5	32,5	20	-12	CC**09T3**
S20Q-SCLCR/L09		●	●	20	180	18	13	38	38	25	-8	CC**09T3**
S20S-SCLCR/L09		●	●	20	250	18	13	38	38	25	-8	CC**09T3**
S25Q-SCLCR/L09		●	○	25	180	23	17	45	45	32	-6	CC**09T3**
S25T-SCLCR/L09		●	●	25	300	23	17	45	45	32	-6	CC**09T3**
A12K-SCLCR/L09	✻	●	●	12	125	11,5	9	25	25	16	-10	CC**09T3**
A16M-SCLCR/L09	✻	●	●	16	150	15,5	11	32,5	32,5	20	-12	CC**09T3**
A20Q-SCLCR/L09	✻	●	●	20	180	19	13	38	38	25	-8	CC**09T3**
A25R-SCLCR/L09	✻	●	●	25	200	24	17	45	45	32	-6	CC**09T3**
S25Q-SCLCR/L12		●	○	25	180	23	17	45	45	32	-6	CC**1204**
S25T-SCLCR/L12		●	●	25	300	23	17	45	45	32	-6	CC**1204**
S32R-SCLCR/L12		●	●	32	200	30	22	50	50	40	-10	CC**1204**
S32U-SCLCR/L12		●	●	32	350	30	22	50	50	40	-10	CC**1204**
S40S-SCLCR/L12		○		40	250	37	27	60	60	50	-8	CC**1204**
S40V-SCLCR/L12		●	●	40	400	37	27	60	60	50	-8	CC**1204**
A25R-SCLCR/L12	✻	●	●	25	200	24	17	45	45	32	-6	CC**1204**
A32T-SCLCR/L12	✻	○		32	300	30	22			40	-10	CC**1204**
A32S-SCLCR/L12	✻	●	●	32	250	31	22	50	50	40	-10	CC**1204**

● En stock ○ Sur demande

✻ Avec arrosage interne

Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage en acier CC**

Pièces détachées

	Plaquette	CC**0602**	CC**09T3**	CC**09T3**	CC**1204**	CC**1204**
	ød	8-12	12-20	25	25	32-40
	Vis	I60M2,5×5,5 (1,0 Nm)	I60M3,5×8 (2,7 Nm)	I60M3,5×10 (2,7 Nm)		
	Vis				I60M4×11X (3,4 Nm)	I60M4×11X (3,4 Nm)
	Vis (cale-support)					SM6×10XA
	Cale-support					C12BS
	Clé (vis)	WT07IP	WT15IP	WT15IP	WT15IP	WT15IP
	Clé (cale-support)					WH40L

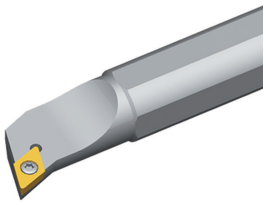
Plaquette

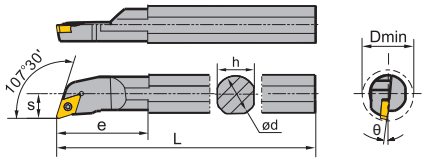
					
Finition	**Semi-finition**	**Ébauche**	**Usinage aluminium**	**Usinage fonte grise**	**PCBN/PCD**
A116	A119	A121	A122	A121	A180

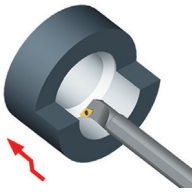
Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage en acier DC** S-Serrage

SDQCR/L Kr: 107°30'







Version à droite

Article	✻	Stock R	Stock L	Dimensions (mm) ød	L	h	s	L_2	e	D_{min}	θ	Plaquettes
S10M-SDQCR/L07		●	●	10	150	9	7	20	20	13	-8	DC**0702**
S12M-SDQCR/L07		●	●	12	150	11	9	22	22	16	-8	DC**0702**
S16M-SDQCR/L07		○	●	16	150	15	11	27	27	20	-6	DC**0702**
S16Q-SDQCR/L07		●	●	16	180	15	11	27	27	20	-6	DC**0702**
S16R-SDQCR/L07		●	●	16	200	15	11	27	27	20	-6	DC**0702**
A10H-SDQCR/L07	✻	●	●	10	100	9,5	7	20	20	13	-8	DC**0702**
A12K-SDQCR/L07	✻	●	●	12	125	11,5	9	22	22	16	-8	DC**0702**
S20Q-SDQCR/L11		●	○	20	180	18	13	32	32	25	-6	DC**11T3**
S20S-SDQCR/L11		●	●	20	250	18	13	32	32	25	-6	DC**11T3**
S25Q-SDQCR/L11		●	○	25	180	23	17	32	32	32	-6	DC**11T3**
S25T-SDQCR/L11		●	●	25	300	23	17	32	32	32	-6	DC**11T3**
A16M-SDQCR/L11	✻	●	●	16	150	15,5	11	27	27	20	-6	DC**11T3**
A20Q-SDQCR/L11	✻	●	●	20	180	19	13	32	32	25	-6	DC**11T3**
A25R-SDQCR/L11	✻	●	●	25	200	24	17	32	32	32	-6	DC**11T3**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	DC**0702**	DC**0702**	DC**11T3**	DC**11T3**	DC**11T3**
	ød	**10**	**12-16**	**16-20**	**20**	**25**
	Vis	I60M2,5×5,5 (1,0 Nm)	I60M2,5×6,5 (1,0 Nm)	I60M3,5×8 (2,7 Nm)	I60M3,5×8 (2,7 Nm)	I60M3,5×10 (2,7 Nm)
	Clé (vis)	WT07IP	WT07IP	WT15IP	WT15IP	WT15IP

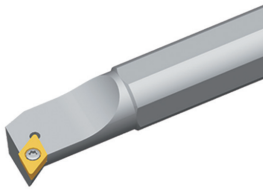
Plaquette

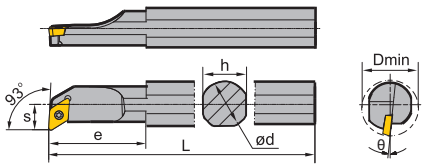
Finition	Semi-finition	Ébauche	Usinage aluminium	Usinage fonte grise	PCBN/PCD
A126	A127	A129	A129	A129	A184

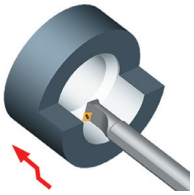
Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage en acier DC** S-Serrage

SDUCR/L Kr: 93°







Version à droite

Article	✻	Stock R	Stock L	Dimensions (mm) ød	L	h	s	L_2	e	D_{min}	θ	Plaquettes
S10M-SDUCR/L07		●	●	10	150	9	7	-	0	13	-8	DC**0702**
S12M-SDUCR/L07		●	●	12	150	11	9	22	22	16	-8	DC**0702**
S16M-SDUCR/L07		●	●	16	150	15	11	27	27	20	-6	DC**0702**
S16R-SDUCR/L07		●	●	16	200	15	11	27	27	20	-6	DC**0702**
A10H-SDUCR/L07	✻	●	●	10	100	9,5	7	-	0	13	-8	DC**0702**
A12K-SDUCR/L07	✻	●	●	12	125	11,5	9	22	22	16	-8	DC**0702**
A16M-SDUCR/L07	✻	●	●	16	150	15,5	11	27	27	20	-6	DC**0702**
S20Q-SDUCR/L11		●	●	20	180	18	13	40	40	25	-6	DC**11T3**
S20S-SDUCR/L11		●	●	20	250	18	13	40	40	25	-6	DC**11T3**
S25Q-SDUCR/L11		●	○	25	180	23	17	46	46	32	-6	DC**11T3**
S25T-SDUCR/L11		●	●	25	300	23	17	46	46	32	-6	DC**11T3**
A16R-SDUCR/L11	✻	○		16	200	15	14,5	27	27	23	-6	DC**11T3**
A20Q-SDUCR/L11	✻	●	●	20	180	19	13	40	40	25	-6	DC**11T3**
A25R-SDUCR/L11	✻	●	●	25	200	24	17	46	46	32	-6	DC**11T3**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	DC**0702**	DC**11T3**
	ød	**10-16**	**16-25**
	Vis	I60M2,5×5,5 (1,0 Nm)	I60M3,5×8 (2,7 Nm)
	Clé	WT07IP	WT15IP

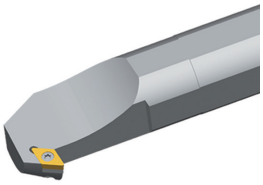
Plaquette

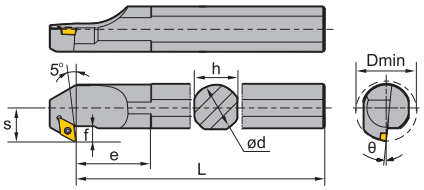
 Finition	 Semi-finition	 Ébauche	 Usinage aluminium	 Usinage fonte grise	 PCBN/PCD
A126	A127	A129	A129	A129	A184

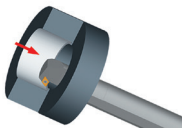
Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage en acier DC** S-Serrage

SDZCR/L Kr: 85°







Version à droite

Article	✻	Stock R	Stock L	Dimensions (mm) ød	L	h	s	e	f	D_{min}	θ	Plaquettes
S25Q-SDZCR/L11		●	●	25	180	23	17	30	6,9	32	-6	DC**11T3**
S25T-SDZCR/L11		●	●	25	300	23	17	30	6,9	32	-6	DC**11T3**
S32R-SDZCR/L11		○		32	200	30	22	39	8,4	40	-6	DC**11T3**
S32U-SDZCR/L11		●	●	32	350	30	22	39	8,4	40	-6	DC**11T3**
S40S-SDZCR/L11		○	●	40	250	37	27	47	9,4	50	-4	DC**11T3**
S40V-SDZCR/L11		●	●	40	400	37	27	47	9,4	50	-4	DC**11T3**
A25R-SDZCR/L11	✻	●	●	25	200	24	17	30	4,5	32	-6	DC**11T3**
A32S-SDZCR/L11	✻	●	●	32	250	31	22	39	6	40	-6	DC**11T3**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	DC**11T3**	DC**11T3**
	ød	**25**	**32-40**
	Vis	I60M3,5×10 (2,7 Nm)	I60M3,5×12 (2,7 Nm)
	Vis (cale-support)		SM5×8.65XA
	Cale-support		D11BS
	Clé (vis)	WT15IP	WT15IP
	Clé (cale-support)		WH35L

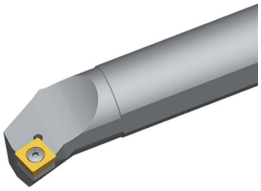
Plaquette

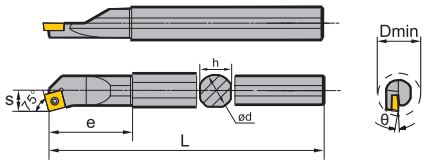
					
Finition	**Semi-finition**	**Ébauche**	**Usinage aluminium**	**Usinage fonte grise**	**PCBN/PCD**
A126	A127	A129	A129	A129	A184

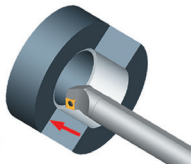
Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage en acier SC** S-Serrage

SSKCR/L Kr: 75°







Version à droite

Article	✻	Stock		Dimensions (mm)							Plaquettes
		R	L	ød	L	h	s	e	D_{min}	θ	
S12M-SSKCR/L09		●	●	12	150	11	9	26	16	-10	SC**09T3**
S16M-SSKCR/L09		○	○	16	150	15	11	32,5	20	-11	SC**09T3**
S16R-SSKCR/L09		○	○	16	200	15	11	32,5	20	-11	SC**09T3**
S20Q-SSKCR/L09		○	○	20	180	18	13	34,5	25	-6	SC**09T3**
S20S-SSKCR/L09		●	○	20	250	18	13	34,5	25	-6	SC**09T3**
A12K-SSKCR/L09	✻	●	○	12	125	11	9	26	16	-10	SC**09T3**
A16M-SSKCR/L09	✻	●	○	16	150	15	11	32,5	20	-11	SC**09T3**
A20Q-SSKCR/L09	✻	●	○	20	180	19	13	34,5	25	-6	SC**09T3**
S25Q-SSKCR/L12		○	○	25	180	23	17	36,3	32	-8	SC**1204**
S25T-SSKCR/L12		●	○	25	300	23	17	36,3	32	-8	SC**1204**
S32R-SSKCR/L12		○	○	32	200	30	22	43,5	40	-10	SC**1204**
S32U-SSKCR/L12		●		32	350	30	22	43,5	40	-10	SC**1204**
A25R-SSKCR/L12	✻	●	○	25	200	24	17	41,3	32	-8	SC**1204**
A32S-SSKCR/L12	✻	●		32	250	31	22	42,8	40	-10	SC**1204**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**SC**09T3****	**SC**1204****	**SC**1204****
	ød	**12-20**	**25**	**32**
	Vis	I60M3,5×8 (2,7 Nm)		
	Vis		I60M4×11X (3,4 Nm)	I60M4×11X (3,4 Nm)
	Vis (cale-support)			SM6×10XA
	Cale-support			S12BS
	Clé (vis)	WT15IP	WT15IP	WT15IP
	Clé (cale-support)			WH40L

Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

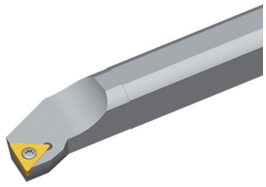
Barre d'alésage en acier SC**

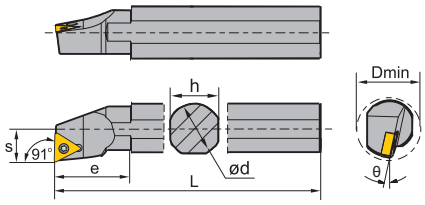
Plaquette			
			
Finition	**Semi-finition**	**Ébauche**	**Usinage aluminium**
A134	A135	A136	A136

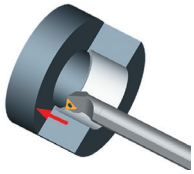
Codification > A322 Choix nuances > A42 Info. techniques > A501 Paramètres > A366

Barre d'alésage en acier TC** S-Serrage

STFCR/L Kr: 91°







Version à droite

Article	✲	Stock R	Stock L	Dimensions (mm) ød	L	h	s	e	D_{min}	θ	Plaquettes
S12M-STFCR/L11		●	●	12	150	11	9	30	16	-10	TC**1102**
S16M-STFCR/L11		○	●	16	150	15	11	35	20	-6	TC**1102**
S16R-STFCR/L11		●	●	16	200	15	11	35	20	-6	TC**1102**
S20Q-STFCR/L11		○	○	20	180	18	13	36	25	-3	TC**1102**
S20S-STFCR/L11		●	●	20	250	18	13	36	25	-3	TC**1102**
A12K-STFCR/L11	✲	●	●	12	125	11,5	9	26	16	-10	TC**1102**
A16M-STFCR/L11	✲	●	●	16	150	15,5	11	30	20	-6	TC**1102**
A20Q-STFCR/L11	✲	●	●	20	180	19	13	36	25	-3	TC**1102**
S25Q-STFCR/L16		●	○	25	180	23	17	49	32	-6	TC**16T3**
S25T-STFCR/L16		●	●	25	300	23	17	49	32	-6	TC**16T3**
S32R-STFCR/L16		●	●	32	200	30	22	50	40	-10	TC**16T3**
S32U-STFCR/L16		●	●	32	350	30	22	50	40	-10	TC**16T3**
S40S-STFCR/L16		○	○	40	250	37	27	60	50	-8	TC**16T3**
S40V-STFCR/L16		●	●	40	400	37	27	60	50	-8	TC**16T3**
A25R-STFCR/L16	✲	●	●	25	200	24	17	45	32	-6	TC**16T3**
A32S-STFCR/L16	✲	●	○	32	250	31	22	49	40	-10	TC**16T3**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**TC**1102****	**TC**16T3****	**TC**16T3****
	ød	**12-20**	**25**	**32-40**
	Vis	I60M2,5×6,5 (1,0 Nm)	I60M3,5×10 (2,7 Nm)	I60M3,5×12 (2,7 Nm)
	Vis (cale-support)			SM5×8.65XA
	Cale-support			T16BS
	Clé (vis)	WT07IP	WT15IP	WT15IP
	Clé (cale-support)			WH35L

Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage en acier TC**

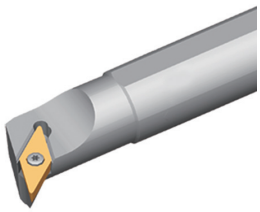
Plaquette

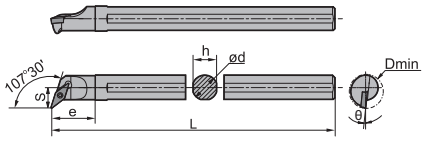
 Finition	 Semi-finition	 Ébauche	 Usinage aluminium	 Usinage fonte grise	 PCBN/PCD
A141	A142	A143	A145	A143	A187

Codification > A322 Choix nuances > A42 Info. techniques > A501 Paramètres > A366

Barre d'alésage en acier VC** S-Serrage

SVQCR/L Kr: 107°30'







Version à droite

Article	✲	Stock		Dimensions (mm)							Plaquettes
		R	L	ød	L	h	s	e	D_{min}	θ	
S16Q-SVQCR/L11		●	●	16	180	15	13	28	22	-6	VC**1103**
S20R-SVQCR/L11		●	○	20	200	18	15	32	26	-4	VC**1103**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**VC**1103****
	ød	**16-20**
	Vis	I60M2,5×6,5 (1,0 Nm)
	Clé (vis)	WT07IP

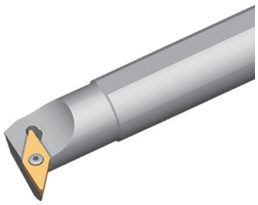
Plaquette

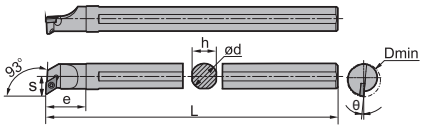
		
Finition	**Usinage aluminium**	**PCBN/PCD**
A156	A154	A193

Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage en acier VC** S-Serrage

SVUCR/L Kr: 93°







Version à droite

Article	✻	Stock		Dimensions (mm)								Plaquettes
		R	L	ød	L	h	s	L_2	e	D_{min}	θ	
S16Q-SVUCR/L11		●	○	16	180	15	15	25	25	24	-6	VC**1103**
S20R-SVUCR/L11		●	●	20	200	18	17	30	30	28	-4	VC**1103**
S40U-SVUCR/L16			○	40	350	37	27	56	56	50	-8	VC**1604**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	VC**1103**	VC**1604**
	ød	**16-20**	**40**
	Vis	I60M2,5×6,5 (1,0 Nm)	I60M3,5×12 (2,7 Nm)
	Vis (cale-support)		SM5×8,65XA (4,0 Nm)
	Cale-support		V16BSC
	Clé (vis)	WT07IP	WT15IP
	Clé (cale-support)		WH35L

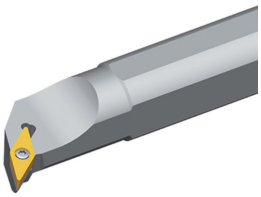
Plaquette

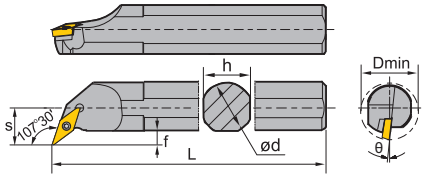
			
Finition	**Semi-finition**	**Usinage aluminium**	**PCBN/PCD**
A156	A156	A154	A193

Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage en acier VB** S-Serrage

SVQBR/L Kr: 107°30'







Version à droite

Article	✻	Stock R	Stock L	Dimensions (mm) ød	L	h	s	e	f	D_{min}	θ	Plaquettes
S32R-SVQBR/L16		●	●	32	200	30	22	56	8,4	40	-8	VB**1604**
S32U-SVQBR/L16		●	●	32	350	30	22	56	8,4	40	-8	VB**1604**
S40V-SVQBR/L16		●	●	40	400	37	27	64	9,4	50	-8	VB**1604**
A32S-SVQBR/L16	✻	○	○	32	250	31	22	56	8,4	40	-8	VB**1604**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**VB**1604****
	ød	**32-40**
	Vis	I60M3,5×12 (2,7 Nm)
	Vis (cale-support)	SM5×8.65XA
	Cale-support	V16BS
	Clé (vis)	WT15IP
	Clé (cale-support)	WH35L

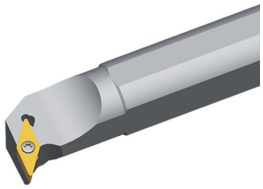
Plaquette

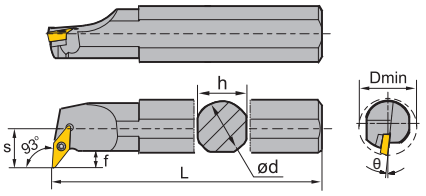
			
Finition	**Semi-finition**	**Ébauche**	**PCBN/PCD**
A148	A151	A152	A191

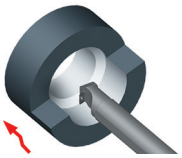
Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage en acier VB** S-Serrage

SVUBR/L Kr: 93°







Version à droite

Article	✻	Stock R	Stock L	Dimensions (mm) ød	L	h	s	e	f	D_{min}	θ	Plaquettes
S32R-SVUBR/L16		●	○	32	200	30	22	49	8,4	40	-8	VB**1604**
S32U-SVUBR/L16		●	●	32	350	30	22	49	8,4	40	-8	VB**1604**
S40S-SVUBR/L16		●	○	40	250	37	27	56,5	9,4	50	-8	VB**1604**
S40V-SVUBR/L16		●	●	40	400	37	27	56,5	9,4	50	-8	VB**1604**
A32S-SVUBR/L16	✻	●	●	32	250	31	22	49	8,4	40	-8	VB**1604**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**VB**1604****
	ød	**32-40**
	Vis	I60M3,5×12 (2,7 Nm)
	Vis (cale-support)	SM5×8.65XA
	Cale-support	V16BS
	Clé (vis)	WT15IP
	Clé (cale-support)	WH35L

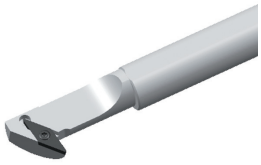
Plaquette

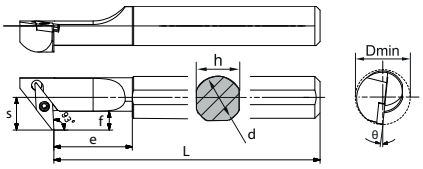
Finition	**Semi-finition**	**Ébauche**	**PCBN/PCD**
A148	A151	A152	A191

Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage en acier VB** S-Serrage

SVXBR/L Kr: 93°





Version à droite

Article	✲	Stock R	Stock L	Dimensions (mm) ød	L	h	s	e	f	D_{min}	θ	Plaquettes
S16P-SVXBR/L1102-KR93		○	○	16	170	15	12,5	30	72	21	-8	VB**1102**
S16P-SVXBR/L11-KR93		○	○	16	170	15	12,5	30	72	21	-8	VB**1103**
S20R-SVXBR/L11-KR93		○	○	20	187	20	13	22	5,7	25	-8	VB**1103**
S25S-SVXBR/L16-KR93		○	○	25	235	25	19	26	10,2	32	-8	VB**1604**
S32T-SVXBR/L16-KR93		○	○	32	280	32	22	80	11,7	40	-8	VB**1604**
S40M-SVXBR/L16-KR93		○	○	40	130	40	27	40	14,3	50	-8	VB**1604**
S40U-SVXBR/L16-KR93		○	○	40	330	40	27	90	14,3	50	-8	VB**1604**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	VB**1102**	VB**1103**	VB**1604**
	ød	**16-20**	**16-20**	**25-40**
	Vis	I60M2,5×6,5 (1,0 Nm)	I60M2,5×6,5 (1,0 Nm)	I60M3,5×12 (2,7 Nm)
	Vis (cale-support)			SM5×8,65XA (4,0 Nm)
	Cale-support			V16BS
	Clé (vis)			WT15IP
	Clé (cale-support)			WH35L
	Clé	WT07IP	WT07IP	WT15IP

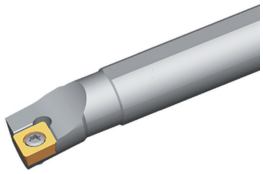
Plaquette

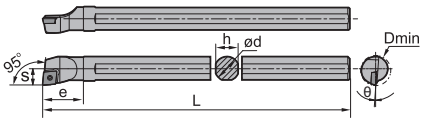
Finition	Semi-finition	Ébauche	PCBN/PCD
A148	A151	A152	A191

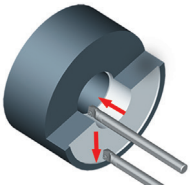
Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage en acier CP** S-Serrage

SCLPR/L Kr: 95°







Version à droite

Article	✻	Stock R	Stock L	Dimensions (mm) ød	L	h	s	e	D_{min}	θ	Plaquettes
S10K-SCLPR/L06		●	●	10	125	9	6	17	12	-7	CP**0602**
S12M-SCLPR/L06		●	●	12	150	11	8	20	16	-4	CP**0602**
S16Q-SCLPR/L09		●	●	16	180	15	10	29	20	-4	CP**09T3**
S20R-SCLPR/L09		○	○	20	200	18	13	35	25	-4	CP**09T3**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	CP**0602**	CP**09T3**
	ød	**10-12**	**20-25**
	Vis	I60M2,5×5,5 (1,0 Nm)	I60M3,5×8 (2,7 Nm)
	Clé (vis)	WT07IP	WT15IP

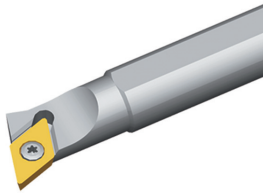
Plaquette

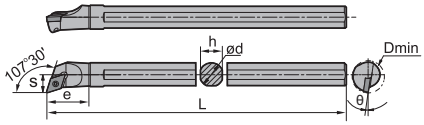
		
Finition	**Semi-finition**	**Usinage fonte grise**
A124	A124	A124

Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage en acier DP** S-Serrage

SDQPR/L Kr: 107°30'







Version à droite

Article	✻	Stock		Dimensions (mm)							Plaquettes
		R	L	ød	L	h	s	e	D_{min}	θ	
S10K-SDQPR/L07		●	●	10	125	9	7	20	13	-8	DP**0702**
S12M-SDQPR/L07		●	●	12	150	11	9	22	16	-8	DP**0702**
S16Q-SDQPR/L07		●	●	16	180	15	11	27	20	-6	DP**0702**
S16Q-SDQPR/L11		●	●	16	180	15	11	32	20	-6	DP**11T3**
S20R-SDQPR/L11		○	○	20	200	18	13	33	25	-6	DP**11T3**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**DP**0702****	**DP**0702****	**DP**11T3****
	ød	**10-12**	**16**	**16-20**
	Vis	I60M2,5×5,5 (1,0 Nm)	I60M2,5×6,5 (1,0 Nm)	I60M3,5×8 (2,7 Nm)
	Clé (vis)	WT07IP	WT07IP	WT15IP

Plaquette

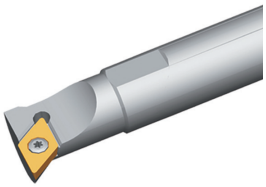


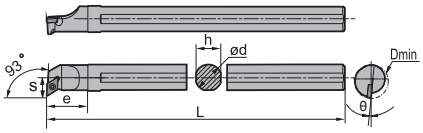
Finition
A131

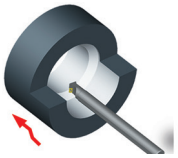
Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage en acier DP** S-Serrage

SDUPR/L Kr: 93°







Version à droite

Article	*	Stock R	Stock L	Dimensions (mm) ød	L	h	s	e	D_{min}	θ	Plaquettes
S10K-SDUPR/L07		●	●	10	125	9	9	18	15	-8	DP**0702**
S12M-SDUPR/L07		●	●	12	150	11	9	19	16	-8	DP**0702**
S16Q-SDUPR/L07		●	●	16	180	15	11	25	20	-6	DP**0702**

● En stock ○ Sur demande

* Avec arrosage interne

Pièces détachées

	Plaquette	DP**0702**	DP**0702**
	ød	**10-12**	**16**
	Vis	I60M2,5×5,5 (1,0 Nm)	I60M2,5×6,5 (1,0 Nm)
	Clé (vis)	WT07IP	WT07IP

Plaquette

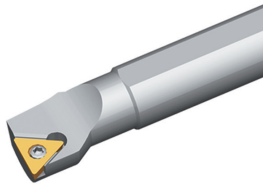


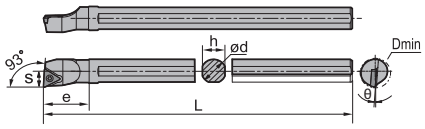
Finition
A131

Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage en acier TP** S-Serrage

STUPR/L Kr: 93°







Version à droite

Article	✲	Stock		Dimensions (mm)							Plaquettes
		R	L	ød	L	h	s	e	D_{min}	θ	
S10K-STUPR/L09		●	●	10	125	9	6	20	12	-6	TP**0902**
S12M-STUPR/L09		●	●	12	150	11	8	22	16	-4	TP**0902**
S12M-STUPR/L11		●	●	12	150	11	8	25	16	-4	TP**1103**
S16Q-STUPR/L11		●	●	16	180	15	10	27	20	-3	TP**1103**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**TP**0902****	**TP**1103****
	ød	**10-12**	**12-16**
	Vis	I60M2,2×5,5 (0,8 Nm)	I60M2,5×6,5 (1,0 Nm)
	Clé	WT07IP	WT07IP

Plaquette



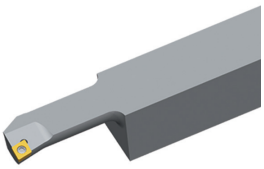
Finition

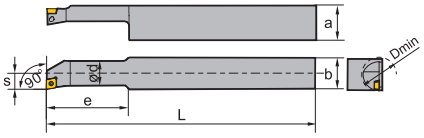
A147

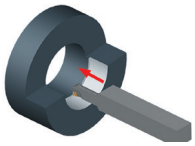
Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage en acier CC** S-Serrage

SCFCR/L Kr: 90°







Article	✻	Stock		Dimensions (mm)							Plaquettes
		R	L	ød	a	b	L	s	e	D_{min}	
S10M-SCFCR/L06S25		●	○	10	27	25	150	7	30	13	CC**0602**
S12P-SCFCR/L06S25		●		12	27	25	170	9	35	16	CC**0602**
S16Q-SCFCR/L09S25		●	○	16	27	25	180	11	40	20	CC**09T3**
S20R-SCFCR/L09S25		●		20	27	25	200	13	45	25	CC**09T3**
S25R-SCFCR/L12S25		●	●	25	27	25	200	17	50	32	CC**1204**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	CC**0602**	CC**09T3**	CC**1204**
	ød	**10-12**	**16-20**	**25**
	Vis	I60M2,5×5,5 (1,0 Nm)	I60M3,5×8 (2,7 Nm)	I60M4×12 (3,4 Nm)
	Clé	WT07IP	WT15IP	WT20IP

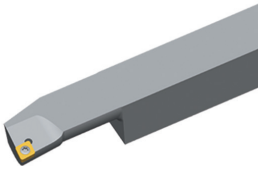
Plaquette

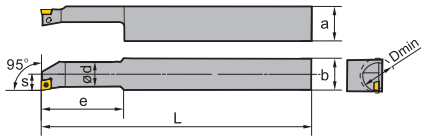
Finition	Semi-finition	Ébauche	Usinage aluminium	Usinage fonte grise	PCBN/PCD
A116	A119	A121	A122	A121	A180

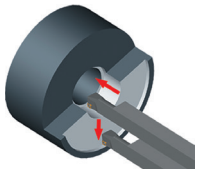
Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage en acier CC** S-Serrage

SCLCR Kr: 95°







Article	✲	Stock	Dimensions (mm)							Plaquettes
			ød	a	b	L	s	e	D_{min}	
S10M-SCLCR06S20		○	10	22	20	150	7	30	13	CC**0602**
S12P-SCLCR06S20		○	12	22	20	170	9	35	16	CC**0602**
S16Q-SCLCR09S20		●	16	22	20	180	11	40	20	CC**09T3**
S20R-SCLCR09S20		●	20	22	20	200	13	60	25	CC**09T3**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**CC**0602****	**CC**09T3****
	ød	**10-12**	**16-20**
	Vis	I60M2,5×5,5 (1,0 Nm)	I60M3,5×8 (2,7 Nm)
	Clé	WT07IP	WT15IP

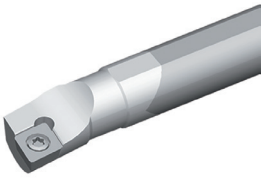
Plaquette

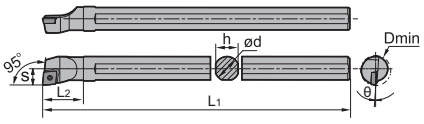
					
Finition	**Semi-finition**	**Ébauche**	**Usinage aluminium**	**Usinage fonte grise**	**PCBN/PCD**
A116	A119	A121	A122	A121	A180

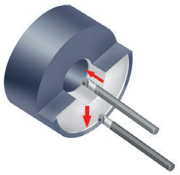
Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage carbure monobloc CP** S-Serrage

SCLPR/L Kr: 95°







Version à droite

Article	✻	Stock R	Stock L	ØD	ød	h	s	L_1	L_2	θ	Plaquettes
C10M-SCLPR/L06		●	●	12	10	9	6	150	17	7	CP**0602**
C12Q-SCLPR/L06		●	○	16	12	11	8	180	20	4	CP**0602**
C16R-SCLPR/L09		●	●	20	16	15	10	200	29	4	CP**09T3**
E16R-SCLPR/L09	✻	○	○	19	16	15,5	10	200	-	-2	CP**09T3**
C20S-SCLPR/L09		●	○	25	20	18	13	250	35	4	CP**09T3**
E20S-SCLPR/L09	✻	○		24	20	19,5	13	250	-	-2	CP**09T3**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	CP**0602**	CP**09T3**
	ød	**10-12**	**16-20**
	Vis	I60M2,5×5,5 (1,0 Nm)	I60M3,5×10 (2,7 Nm)
	Clé (vis)	WT07IP	WT15IP

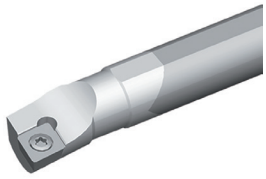
Plaquette

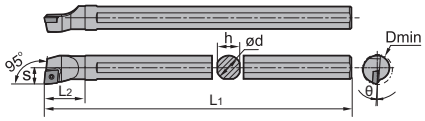
 Finition	 Semi-finition	 Usinage fonte grise
A124	A124	A124

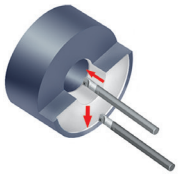
Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage carbure monobloc CC** S-Serrage

SCLCR/L Kr: 95°







Version à droite

Article	✲	Stock		Dimensions (mm)							Plaquettes
		R	L	ØD	ød	h	s	L_1	L_2	θ	
E08K-SCLCR/L06-09	✲	●	●	9	8	7,5	5	125	-	-12	CC**0602**
E08K-SCLCR/L06-10	✲	●	●	10	8	7,5	6	125	-	-12	CC**0602**
E10M-SCLCR/L06	✲	●	●	12	10	9,5	7	150	-	-10	CC**0602**
E12Q-SCLCR/L06	✲	●	●	15	12	11,5	9	180	-	-10	CC**0602**
E16R-SCLCR/L06	✲	●	●	18	16	15,5	10	200	-	-8	CC**0602**
E12Q-SCLCR/L09	✲	●	●	15	12	11,5	9	180	-	-9	CC**09T3**
E16R-SCLCR/L09	✲	●	●	18	16	15,5	10	200	-	-10	CC**09T3**
E20S-SCLCR/L09	✲	●	●	24	20	19,5	13	250	-	-8	CC**09T3**
E25T-SCLCR/L09	✲	●	●	31	25	24	17	300	-	-6	CC**09T3**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**CC**0602****	**CC**09T3****	**CC**09T3****
	ød	**8-16**	**12**	**16-25**
	Vis	I60M2,5×5,5 (1,0 Nm)	I60M3,5×8 (2,7 Nm)	I60M3,5×10 (2,7 Nm)
	Clé (vis)	WT07IP	WT15IP	WT15IP

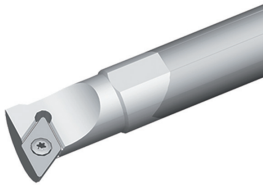
Plaquette

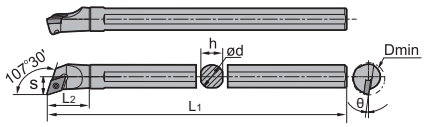
					
Finition	**Semi-finition**	**Ébauche**	**Usinage aluminium**	**Usinage fonte grise**	**PCBN/PCD**
A116	A119	A121	A122	A121	A180

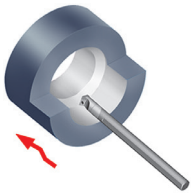
Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage carbure monobloc DP** S-Serrage

SDQPR/L Kr: 107°30'







Version à droite

Article	*	Stock R	Stock L	Dimensions (mm) ØD	ød	h	s	L_1	L_2	θ	Plaquettes
C10M-SDQPR/L07		●	●	13	10	9	7	150	20	8	DP**0702
C12Q-SDQPR/L07		○	●	16	12	11	9	180	22	8	DP**0702
C16R-SDQPR/L07		○	○	20	16	15	11	200	27	6	DP**0702
C16R-SDQPR/L11		○	○	20	16	15	11	200	32	6	DP**11T3**
C20S-SDQPR/L11		●	○	25	20	18	13	250	33	6	DP**11T3**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	DP**0702	DP**0702	DP**11T3**
	ød	10-12	16	16-20
	Vis	I60M2,5×5,5 (1,0 Nm)	I60M2,5×6,5 (1,0 Nm)	I60M3,5×8 (2,7 Nm)
	Clé (vis)	WT07IP	WT07IP	WT15IP

Plaquette

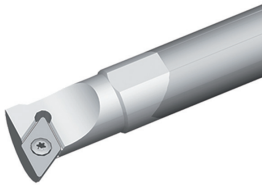


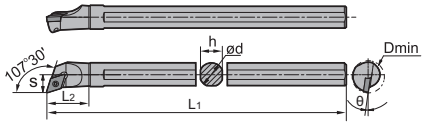
Finition
A131

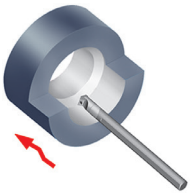
Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage carbure monobloc DC** S-Serrage

SDQCR/L Kr: 107°30'







Version à droite

Article	✻	Stock		Dimensions (mm)							Plaquettes
		R	L	ØD	ød	h	s	L_1	L_2	θ	
E08K-SDQCR/L07	✻	●	●	11	8	7,5	6,5	125	-	-12	DC**0702**
E10M-SDQCR/L07	✻	●	●	12	10	9,5	7	150	-	-10	DC**0702**
E12Q-SDQCR/L07	✻	●	●	15	12	11,5	9	180	-	-10	DC**0702**
E16R-SDQCR/L07	✻	●	○	18	16	15,5	10	200	27-	-6	DC**0702**
E20S-SDQCR/L07	✻	●	○	24	20	19,5	13	250	-33	-4	DC**0702**
E16R-SDQCR/L11	✻	●	●	18	16	15,5	10	200	-	-8	DC**11T3**
E20S-SDQCR/L11	✻	●	○	24	20	19,5	13	250	-	-8	DC**11T3**
E25T-SDQCR/L11	✻	●	○	31	25	24	17	300	-	-6	DC**11T3**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**DC**0702****	**DC**11T3****
	ød	**8-20**	**16-25**
	Vis	I60M2,5×5,5 (1,0 Nm)	I60M3,5×10 (2,7 Nm)
	Clé (vis)	WT07IP	WT15IP

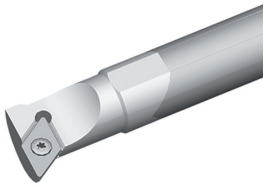
Plaquette

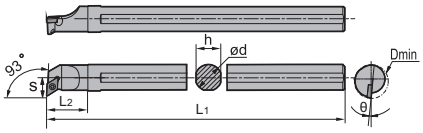
					
Finition	**Semi-finition**	**Ébauche**	**Usinage aluminium**	**Usinage fonte grise**	**PCBN/PCD**
A126	A127	A129	A129	A129	A184

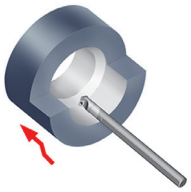
Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage carbure monobloc DP** S-Serrage

SDUPR/L Kr: 93°







Version à droite

Article	*	Stock R	Stock L	Dimensions (mm) ØD	ød	h	s	L_1	L_2	θ	Plaquettes
C10M-SDUPR/L07		●	●	15	10	9	9	150	18	8	DP**0702**
C12Q-SDUPR/L07		●	○	16	12	11	9	180	19	8	DP**0702**
C16R-SDUPR/L07		○	○	20	16	15	11	200	25	6	DP**0702**

● En stock ○ Sur demande

* Avec arrosage interne

Pièces détachées

	Plaquette	**DP**0702****
	ød	**15-20**
	Vis	I60M2,5×5,5 (1,0 Nm)
	Clé	WT07IP

Plaquette

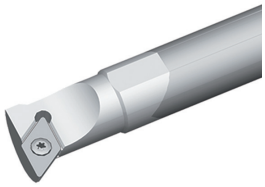


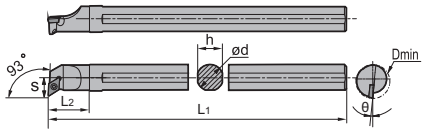
Finition
A131

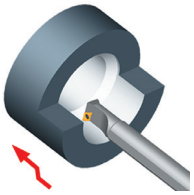
Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage carbure monobloc DC** S-Serrage

SDUCR/L Kr: 93°







Version à droite

Article	✲	Stock R	Stock L	Dimensions (mm) ØD	ød	h	s	L_1	L_2	θ	Plaquettes
E10M-SDUCR/L07	✲	●	○	12	10	9,5	7	150	-	-10	DC**0702**
E12Q-SDUCR/L07	✲	●	●	15	12	11,5	9	180	-	-10	DC**0702**
E16R-SDUCR/L07	✲	●	○	18	16	15,5	10	200	-	-6	DC**0702**
E20S-SDUCR/L07	✲	○	○	24	20	19,5	13	250	-	-4	DC**0702**
E16R-SDUCR/L11	✲	●	○	18	16	15,5	10	200	-	-8	DC**11T3**
E20S-SDUCR/L11	✲	●	●	24	20	19,5	13	250	-	-8	DC**11T3**
E25T-SDUCR/L11	✲	○	○	31	25	24	17	300	-	-6	DC**11T3**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**DC**0702****	**DC**11T3****
	ød	**10-20**	**16-25**
	Vis	I60M2,5×5,5 (1,0 Nm)	I60M3,5×10 (2,7 Nm)
	Clé (vis)	WT07IP	WT15IP

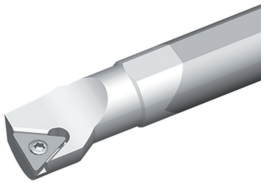
Plaquette

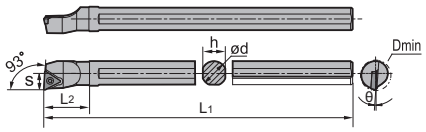
 Finition	 Semi-finition	 Ébauche	 Usinage aluminium	 Usinage fonte grise	 PCBN/PCD
A126	A127	A129	A129	A129	A184

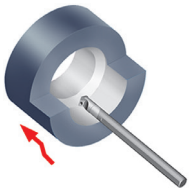
Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage carbure monobloc TP** S-Serrage

STUPR/L Kr: 93°







Version à droite

Article	*	Stock R	Stock L	Dimensions (mm) ØD	ød	h	s	L_1	L_2	θ	Plaquettes
C10M-STUPR/L09		○	○	12	10	9	6	150	20	6	TP**0902**
C12Q-STUPR/L09		●		16	12	11	8	180	22	4	TP**0902**
C12Q-STUPR/L11		●		16	12	11	8	180	25	4	TP**1103**
C16R-STUPR/L11		○	○	20	16	15	10	200	27	3	TP**1103

● En stock ○ Sur demande

* Avec arrosage interne

Pièces détachées

	Plaquette	TP**0902**	TP**1103**
	ød	**10-12**	**12-16**
	Vis	I60M2,2×5,5 (0,8 Nm)	I60M2,5×6,5 (1,0 Nm)
	Clé (vis)	WT07IP	WT07IP

Plaquette

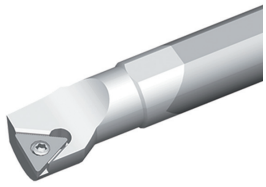


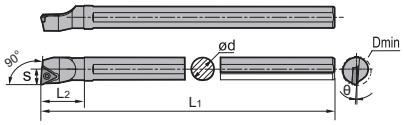
Finition
A147

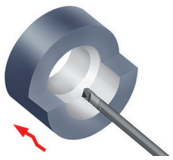
Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage carbure monobloc TC** S-Serrage

STFCR/L Kr: 90°







Version à droite

Article	✲	Stock		Dimensions (mm)							Plaquettes
		R	L	ØD	ød	h	s	L_1	L_2	θ	
E08K-STFCR/L09	✲	○	●	11	8	7,5	6	125	-	-12	TC**0902**
E10M-STFCR/L09	✲	○	○	12	10	9,5	7	150	-	-10	TC**0902**
E12Q-STFCR/L11	✲	○	○	15	12	11,5	9	180	-	-10	TC**1102**
E16R-STFCR/L11	✲	○	○	18	16	15,5	10	200	-	-8	TC**1102**
E20S-STFCR/L11	✲	○	○	24	20	19,5	13	250	-	-8	TC**1102**
E20S-STFCR/L16	✲	○	○	24	20	19,5	13	250	-	-8	TC**16T3**
E25T-STFCR/L16	✲	○	○	31	25	24	17	300	-	-6	TC**16T3**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**TC**0902****	**TC**1102****	**TC**16T3****
	ød	**8-10**	**12-20**	**20-25**
	Vis	I60M2,2×5,5 (0,8 Nm)	I60M2,5×5,5 (1,0 Nm)	I60M3,5×10 (2,7 Nm)
	Clé (vis)	WT07IP	WT07IP	WT15IP

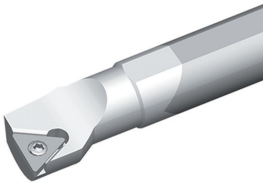
Plaquette

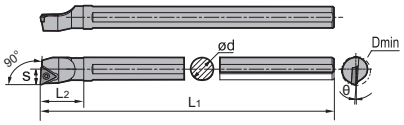
					
Finition	**Semi-finition**	**Ébauche**	**Usinage aluminium**	**Usinage fonte grise**	**PCBN/PCD**
A141	A142	A143	A145	A143	A187

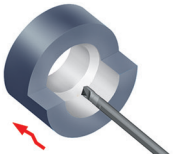
Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage carbure monobloc TC** S-Serrage

STFPR/L Kr: 90°







Version à droite

Article	✲	Stock R	Stock L	Dimensions (mm) ØD	ød	h	s	L_1	L_2	θ	Plaquettes
E10M-STFPR/L11	✲	○	○	12	10	9,5	6	150	-	-5	TP**1103**
E12Q-STFPR/L11	✲	○	○	15	12	11,5	8	180	-	-4	TP**1103**
E16R-STFPR/L11	✲	○	○	19	16	15,5	10	200	-	-2	TP**1103**
E20S-STFPR/L11	✲	○	○	24	20	19	13	250	-	-2	TP**1103**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**TP**1103****
	ød	**10-20**
	Vis	I60M3,0×7,0 (1,8 Nm)
	Clé (vis)	WT08IP

Plaquette

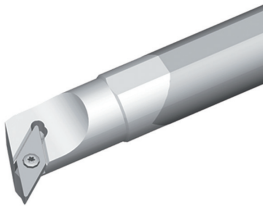


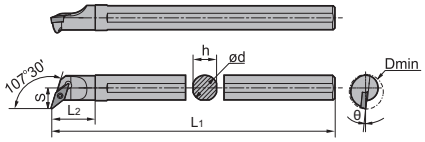
Finition
A147

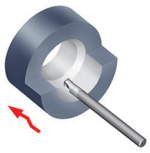
Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage carbure monobloc VC** S-Serrage

SVQCR/L Kr: 107°30'







Version à droite

Article	✲	Stock		Dimensions (mm)							Plaquettes
		R	L	ØD	ød	h	s	L_1	L_2	θ	
C16R-SVQCR/L11		○	○	22	16	15	13	200	28	-6	VC**1103**
C20S-SVQCR/L11		○	○	26	20	18	15	250	32	-4	VC**1103**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**VC**1103****
	ød	**16-20**
	Vis	I60M2,5×6,5 (1,0 Nm)
	Clé (vis)	WT07IP

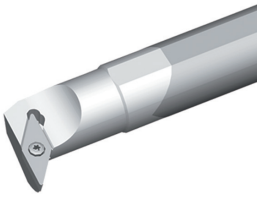
Plaquette

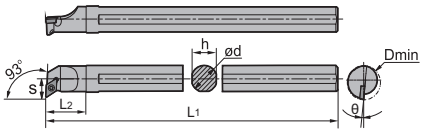
		
Finition	**Usinage aluminium**	**PCBN/PCD**
A156	A154	A193

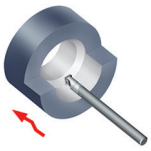
Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage carbure monobloc VC** S-Serrage

SVUCR/L Kr: 93°







Version à droite

Article	✲	Stock R	Stock L	Dimensions (mm) ØD	ød	h	s	L_1	L_2	θ	Plaquettes
C16R-SVUCR/L11			○	24	16	15	15	200	25	6	VC**1103**
E16R-SVUCR/L11	✲	○	○	22	16	15	13	200	-	-6,5	VC**1103**
C20S-SVUCR/L11		●	●	28	20	18	17	250	30	4	VC**1103**
E20S-SVUCR/L11	✲	○	○	27	20	18	13	250	-	-6,5	VC**1103**
E25T-SVUCR/L16	✲	○	○	35	25	23	20,5	300	-	-6,5	VC**1604**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**VC**1103****	**VC**1604****
	ød	**16-20**	**25**
	Vis	I60M2,5×6,5 (1,0 Nm)	I60M3,5×10 (2,7 Nm)
	Clé (vis)	WT07IP	WT15IP

Plaquette

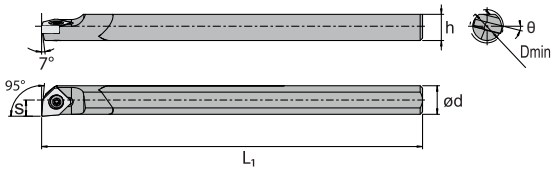
 **Finition**	 **Semi-finition**	 **Usinage aluminium**	 **PCBN/PCD**
A156	A156	A154	A193

Codification A322 Choix nuances A42 Info. techniques A501 Paramètres A366

Barre d'alésage carbure monobloc ZNEX S-Serrage

SZLNR Kr: 95°





Article	✻	Stock R	Stock L	Dimensions [mm] D_{min}	ød	h	s	L_1	L_2	θ	Plaquette
C06X-SZLNR04		●		7	6	5,5	3,4	80	-	-14	ZNEX0401**

● En stock ○ Sur demande

✻ Avec arrosage interne

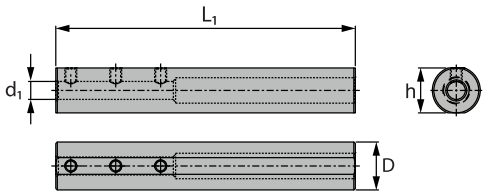
Pièces détachées

	Plaquettes	**ZNEX0401****
	ød	**6**
	Vis	I60M2x3,7 (0,5 Nm)
	Clé (Vis)	WT06IP

Porte-outil C06X**

SZLNR Kr: 95°





Article	Stock	Dimensions [mm] D	d_1	L_1	h
SHSZ1600.06.100	●	16	6	100	15

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Vis	M4x5SH
	Clé (Vis)	WH20L

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Tournage général Recommandations de données de coupe

Plaquette de tournage négative

Groupe matière		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min]								
						HC (CVD)								
						YBC103			YB6315			YBC152		
						Avance [mm]			Avance [mm]			Avance [mm]		
						0,1	0,2	0,6	0,1	0,2	0,6	0,1	0,2	0,6
P	Acier non allié	env. 0,15 % C	recuit	125	1	520	420	280	500	400	270	500	400	270
		env. 0,45 % C	recuit	190	2	440	360	250	420	340	230	420	340	230
		env. 0,45 % C	trempé et revenu	250	3	350	300	220	330	280	200	330	280	200
		env. 0,75 % C	recuit	270	4	340	290	210	320	270	190	320	270	190
		env. 0,75 % C	trempé et revenu	300	5	300	260	190	280	240	170	280	240	170
	Acier faiblement allié		recuit	180	6	420	320	200	400	300	180	400	300	180
			trempé et revenu	275	7	300	250	170	280	230	150	280	230	150
			trempé et revenu	300	8	280	240	170	260	220	150	260	220	150
			trempé et revenu	350	9	250	210	140	230	190	120	230	190	120
	Acier fortement allié et acier à outils fortement allié		recuit	200	10	380	310	210	360	290	190	360	290	190
			durci et revenu	325	11	210	180	150	190	160	130	190	160	130
M	Acier inoxydable	ferritique / martensitique	recuit	200	12									
		martensitique	trempé et revenu	240	13									
		austénitique	trempé	180	14									
		austénitique et ferritique		230	15									
K	Fonte grise	perlitique / ferritique		180	16									
		perlitique (martensitique)		260	17									
	Fonte avec graphite nodulaire	ferritique		160	18									
		perlitique		250	19									
	Fonte malléable	ferritique		130	20									
		perlitique		230	21									
N	Alliages corroyé d'aluminium	non durcissable		60	22									
		durcissable	trempé	100	23									
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24									
		≤ 12 % Si, durcissable	trempé	90	25									
		> 12 % Si, non durcissable		130	26									
	Cuivre et alliages de cuivre (Bronze/ moulage)	Alliages de décolletage, PB > 1 %		110	27									
		CuZn, CuSnZn		90	28									
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29									
S	Alliages réfractaires	Base Fe	recuit	200	30									
			trempé	280	31									
		à base de Ni ou Co	recuit	250	32									
			trempé	350	33									
			coulé	320	34									
	Alliages de titane	Titane pur		R_m 400	35									
		Alliages Alpha + Beta	trempé	R_m 1050	36									
H	Acier trempé		durci et revenu	55 HRC	37									
			durci et revenu	60 HRC	38									
	Fonte trempée		coulé	400	39									
	Fonte durcie		durci et revenu	55 HRC	40									
X	Matériaux non métalliques	Thermoplastiques			41									
		Duroplaste			42									
		Matière plastique renforcée de fibres de verre GFK			43									
		Matière plastique renforcée de fibres de carbone CFK			44									
		Graphite			45									
		Bois			46									

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Vous trouverez les exemples de matériaux pour les groupes matière à la page D11.

Vitesse de coupe v_c [m/min]																								
HC (CVD)																								
YBC203			YBC252			YBC352			YBM153			YBM253			YBD102			YB7315			YBD152		
Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]		
0,1	0,4	0,8	0,1	0,4	0,8	0,2	0,5	1,0	0,2	0,4	0,6	0,2	0,4	0,6	0,1	0,3	0,4	0,1	0,3	0,5	0,1	0,3	0,5
480	370	230	480	370	230	430	330	220															
400	310	190	400	310	190	350	270	180															
310	250	160	310	250	160	260	210	150															
300	240	150	300	240	150	250	200	140															
260	210	130	260	210	130	210	170	120															
380	290	170	380	290	170	320	240	150															
260	210	140	260	210	140	200	170	120															
240	200	140	240	200	140	180	160	120															
220	180	110	220	180	110	150	130	90															
310	250	170	310	250	170	220	180	130															
150	130	100	150	130	100	–	–	–															
									380	295	210	350	265	180									
									190	155	120	150	110	65									
									250	200	150	200	140	80									
									200	160	130	160	115	70									
															530	380	220	600	410	220	540	375	210
															240	200	150	330	240	150	280	210	140
															300	210	145	340	250	160	290	215	140
															220	150	105	260	190	120	210	155	100
															330	265	220	370	300	230	320	265	210
															230	155	100	280	200	120	230	165	100

HC carbure revêtu
HT carbure non revêtu, composante principale (TiC) ou (TiN), Cermet
HW carbure non revêtu, composante principale (WC)
BL nitrure de bore cristallin cubique avec une faible teneur en nitrure de bore
BH nitrure de bore cristallin cubique avec une haute teneur en nitrure de bore
CN céramique Si_3N_4
CM céramique mixte
HC_1 cermet revêtu
BC CBN revêtu
CC céramique revêtue
CR céramique, composante principale oxyde d'aluminium (Al_2O_3), renforcée
DP revêtement diamant

Tournage général Recommandations de données de coupe

Plaquette de tournage négative

Groupe matière		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min]								
						HC (CVD)			HC (PVD)					
						YBD152C			YBG101			YBG102		
						Avance [mm]			Avance [mm]			Avance [mm]		
						0,1	0,3	0,5	0,1	0,3	0,6	0,1	0,3	0,6
P	Acier non allié	env. 0,15 % C	recuit	125	1									
		env. 0,45 % C	recuit	190	2									
		env. 0,45 % C	trempé et revenu	250	3									
		env. 0,75 % C	recuit	270	4									
		env. 0,75 % C	trempé et revenu	300	5									
	Acier faiblement allié		recuit	180	6									
			trempé et revenu	275	7									
			trempé et revenu	300	8									
			trempé et revenu	350	9									
	Acier fortement allié et acier à outils fortement allié		recuit	200	10									
			durci et revenu	325	11									
M	Acier inoxydable	ferritique / martensitique	recuit	200	12							360	290	200
		martensitique	trempé et revenu	240	13							180	150	110
		austénitique	trempé	180	14							240	190	140
		austénitique et ferritique		230	15							190	150	110
K	Fonte grise	perlitique / ferritique		180	16	570	395	220						
		perlitique (martensitique)		260	17	310	230	150						
	Fonte avec graphite nodulaire	ferritique		160	18	310	230	150						
		perlitique		250	19	230	170	110						
	Fonte malléable	ferritique		130	20	340	280	220						
		perlitique		230	21	250	180	110						
N	Alliages corroyé d'aluminium	non durcissable		60	22				2000	1200	–	2000	1200	–
		durcissable	trempé	100	23				610	420	–	610	420	–
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24				550	300	–	550	300	–
		≤ 12 % Si, durcissable	trempé	90	25				360	190	–	360	190	–
		> 12 % Si, non durcissable		130	26				320	170	–	320	170	–
	Cuivre et alliages de cuivre (Bronze/moulage)	Alliages de décolletage, PB > 1 %		110	27				730	350	–	730	350	–
		CuZn, CuSnZn		90	28				370	330	–	370	330	–
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29				270	200	–	270	200	–
S	Alliages réfractaires	Base Fe	recuit	200	30							65	45	–
			trempé	280	31							60	40	–
		à base de Ni ou Co	recuit	250	32							60	40	–
			trempé	350	33							55	35	–
			coulé	320	34							55	35	–
	Alliages de titane	Titane pur		R_m 400	35							100	60	–
		Alliages Alpha + Beta	trempé	R_m 1050	36							80	40	–
H	Acier trempé		durci et revenu	55 HRC	37									
			durci et revenu	60 HRC	38									
	Fonte trempée		coulé	400	39									
	Fonte durcie		durci et revenu	55 HRC	40									
X	Matériaux non métalliques	Thermoplastiques			41									
		Duroplaste			42									
		Matière plastique renforcée de fibres de verre GFK			43									
		Matière plastique renforcée de fibres de carbone CFK			44									
		Graphite			45									
		Bois			46									

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Vous trouverez les exemples de matériaux pour les groupes matière à la page D11.

	Vitesse de coupe v_c [m/min]																							
	HC (PVD)															HC_1			HT					
	YBS103			YBG105			YB9320			YBG205			YPD201			YNG151C			YNG151			YNT251		
	Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]		
	0,1	0,3	0,6	0,1	0,3	0,6	0,1	0,3	0,6	0,1	0,3	0,6	0,1	0,3	0,6	0,1	0,2	0,4	0,1	0,2	0,4	0,1	0,2	0,4
																510	350	–	510	350	–	510	350	–
																430	270	–	430	270	–	430	270	–
																330	220	–	330	220	–	330	220	–
																320	200	–	320	200	–	320	200	–
																280	170	–	280	170	–	280	170	–
																400	240	–	400	240	–	400	240	–
																290	180	–	290	180	–	290	180	–
																240	170	–	240	170	–	240	170	–
																220	150	–	220	150	–	220	150	–
																340	220	–	340	220	–	340	220	–
																180	110	–	180	110	–	180	110	–
	360	290	200	360	290	200	360	290	200	320	250	160	360	290	200									
	180	150	110	180	150	110	190	155	110	170	150	110	190	155	110									
	240	190	140	240	190	140	250	210	150	230	190	140	250	210	150									
	190	150	110	190	150	110	200	165	120	180	150	110	200	165	120									
																430	365	280	430	365	280	430	365	280
																390	340	270	390	340	270	390	340	270
																360	300	220	360	300	220	360	300	220
																340	295	230	340	295	230	340	295	230
																310	260	190	310	260	190	310	260	190
																250	210	150	250	210	150	250	210	150
	80	65	45	65	45	–	55	35	–	55	–	–	–	65	45									
	75	60	40	60	40	–	50	30	–	50	–	–	–	60	40									
	70	60	40	60	40	–	50	30	–	50	–	–	–	60	40									
	65	55	35	55	35	–	45	25	–	45	–	–	–	55	35									
	65	55	35	55	35	–	45	25	–	45	–	–	–	55	35									
	110	100	60	100	60	–	80	60	–	70	–	–	–	100	60									
	90	80	40	80	40	–	60	40	–	50	–	–	–	80	40									

HC carbure revêtu
HT carbure non revêtu, composante principale (TiC) ou (TiN), Cermet
HW carbure non revêtu, composante principale (WC)
BL nitrure de bore cristallin cubique avec une faible teneur en nitrure de bore
BH nitrure de bore cristallin cubique avec une haute teneur en nitrure de bore
CN céramique Si_3N_4
CM céramique mixte
HC_1 cermet revêtu
BC CBN revêtu
CC céramique revêtue
CR céramique, composante principale oxyde d'aluminium (Al_2O_3), renforcée
DP revêtement diamant

Tournage général Recommandations de données de coupe

Plaquette de tournage négative

Groupe matière		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min]								
						HW						BL		
						YD101			YD201			YCB112		
						Avance [mm]			Avance [mm]			Avance [mm]		
						0,05	0,2	0,35	0,1	0,2	0,3	0,1	0,2	0,3
P	Acier non allié	env. 0,15 % C	recuit	125	1									
		env. 0,45 % C	recuit	190	2									
		env. 0,45 % C	trempé et revenu	250	3									
		env. 0,75 % C	recuit	270	4									
		env. 0,75 % C	trempé et revenu	300	5									
	Acier faiblement allié		recuit	180	6									
			trempé et revenu	275	7									
			trempé et revenu	300	8									
			trempé et revenu	350	9									
	Acier fortement allié et acier à outils fortement allié		recuit	200	10									
			durci et revenu	325	11									
M	Acier inoxydable	ferritique / martensitique	recuit	200	12									
		martensitique	trempé et revenu	240	13									
		austénitique	trempé	180	14									
		austénitique et ferritique		230	15									
K	Fonte grise	perlitique / ferritique		180	16									
		perlitique (martensitique)		260	17									
	Fonte avec graphite nodulaire	ferritique		160	18									
		perlitique		250	19									
	Fonte malléable	ferritique		130	20									
		perlitique		230	21									
N	Alliages corroyé d'aluminium	non durcissable		60	22	1750	1200	800	1750	1200	800			
		durcissable	trempé	100	23	510	380	250	510	380	250			
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24	460	320	175	460	320	175			
		≤ 12 % Si, durcissable	trempé	90	25	300	205	110	300	205	110			
		> 12 % Si, non durcissable		130	26	270	185	100	270	185	100			
	Cuivre et alliages de cuivre (Bronze/ moulage)	Alliages de décolletage, PB > 1 %		110	27	610	410	205	610	410	205			
		CuZn, CuSnZn		90	28	310	250	195	310	250	195			
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29	225	170	115	225	170	115			
S	Alliages réfractaires	Base Fe	recuit	200	30									
			trempé	280	31									
		à base de Ni ou Co	recuit	250	32							180	160	140
			trempé	350	33							160	140	120
			coulé	320	34							120	100	80
	Alliages de titane	Titane pur		R_m 400	35									
		Alliages Alpha + Beta	trempé	R_m 1050	36									
H	Acier trempé		durci et revenu	55 HRC	37							220	170	130
			durci et revenu	60 HRC	38							200	160	120
	Fonte trempée		coulé	400	39							200	150	100
	Fonte durcie		durci et revenu	55 HRC	40							200	150	100
X	Matériaux non métalliques	Thermoplastiques			41									
		Duroplaste			42									
		Matière plastique renforcée de fibres de verre GFK			43									
		Matière plastique renforcée de fibres de carbone CFK			44									
		Graphite			45									
		Bois			46									

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Vous trouverez les exemples de matériaux pour les groupes matière à la page D11.

	Vitesse de coupe v_c [m/min]																							
	BL									BC									BH			BL		
	YCB113			YCB121			YCB131			YCB113C			YCB121C			YCB131C			YCB215			YZB630		
	Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]		
	0,1	0,2	0,3	0,1	0,2	0,3	0,1	0,3	0,5	0,1	0,2	0,3	0,1	0,2	0,3	0,1	0,3	0,5	0,1	0,3	0,5	0,1	0,3	0,5
																			1500	980	400			
																			1250	800	320			
																			–	–	–			
																			300	200	100			
																			–	–	–			
																			300	200	100			
							160	140	120															
							140	120	100															
							120	100	80															
	240	180	140	220	170	130	160	120	100	240	180	140	220	170	130	160	120	100				220	170	130
	220	180	140	200	160	120	150	120	100	220	180	140	200	160	120	150	120	100				200	160	120
	250	150	100	200	150	100	180	120	100	250	150	100	200	150	100	180	120	100				200	150	100
	200	150	100	200	150	100	150	120	100	200	150	100	200	150	100	150	120	100				200	150	100

HC carbure revêtu
HT carbure non revêtu, composante principale (TiC) ou (TiN), Cermet
HW carbure non revêtu, composante principale (WC)
BL nitrure de bore cristallin cubique avec une faible teneur en nitrure de bore
BH nitrure de bore cristallin cubique avec une haute teneur en nitrure de bore
CN céramique Si_3N_4
CM céramique mixte
HC_1 cermet revêtu
BC CBN revêtu
CC céramique revêtue
CR céramique, composante principale oxyde d'aluminium (Al_2O_3), renforcée
DP revêtement diamant

Tournage général Recommandations de données de coupe

Plaquette de tournage négative

Groupe matière		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min]								
						BC			BH			CM		
						YZB630C			YZB233			CA1000		
						Avance [mm]			Avance [mm]			Avance [mm]		
						0,1	0,3	0,5	0,3	0,9	1,5	0,1	0,6	1,5
P	Acier non allié	env. 0,15 % C	recuit	125	1									
		env. 0,45 % C	recuit	190	2									
		env. 0,45 % C	trempé et revenu	250	3									
		env. 0,75 % C	recuit	270	4									
		env. 0,75 % C	trempé et revenu	300	5									
	Acier faiblement allié		recuit	180	6									
			trempé et revenu	275	7									
			trempé et revenu	300	8									
			trempé et revenu	350	9									
	Acier fortement allié et acier à outils fortement allié		recuit	200	10									
			durci et revenu	325	11									
M	Acier inoxydable	ferritique / martensitique	recuit	200	12									
		martensitique	trempé et revenu	240	13									
		austénitique	trempé	180	14									
		austénitique et ferritique		230	15									
K	Fonte grise	perlitique / ferritique		180	16				1500	950	400			
		perlitique (martensitique)		260	17				1250	780	320			
	Fonte avec graphite nodulaire	ferritique		160	18				–	–	–			
		perlitique		250	19				500	300	100			
	Fonte malléable	ferritique		130	20				–	–	–			
		perlitique		230	21				500	300	100			
N	Alliages corroyé d'aluminium	non durcissable		60	22									
		durcissable	trempé	100	23									
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24									
		≤ 12 % Si, durcissable	trempé	90	25									
		> 12 % Si, non durcissable		130	26									
	Cuivre et alliages de cuivre (Bronze/ moulage)	Alliages de décolletage, PB > 1 %		110	27									
		CuZn, CuSnZn		90	28									
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29									
S	Alliages réfractaires	Base Fe	recuit	200	30									
			trempé	280	31									
		à base de Ni ou Co	recuit	250	32									
			trempé	350	33									
			coulé	320	34									
	Alliages de titane	Titane pur		R_m 400	35									
		Alliages Alpha + Beta	trempé	R_m 1050	36									
H	Acier trempé		durci et revenu	55 HRC	37	220	170	130				180	150	120
			durci et revenu	60 HRC	38	200	160	120				140	120	80
	Fonte trempée		coulé	400	39	200	150	100				80	60	40
	Fonte durcie		durci et revenu	55 HRC	40	200	150	100				–	–	–
X	Matériaux non métalliques	Thermoplastiques			41									
		Duroplaste			42									
		Matière plastique renforcée de fibres de verre GFK			43									
		Matière plastique renforcée de fibres de carbone CFK			44									
		Graphite			45									
		Bois			46									

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Vous trouverez les exemples de matériaux pour les groupes matière à la page D11.

Vitesse de coupe v_c [m/min]																
CC			CN						CR							
CM1000			CN1000			CS1000			CW1400			CW1800				
Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]				
0,1	0,6	1,5	0,1	0,6	1,5	0,1	0,6	1,5	0,1	0,6	1,5	0,1	0,6	1,5		
			800	700	600											
			750	625	500											
			600	530	450											
			500	420	350											
			800	700	600											
			700	600	500											
						450	400	350	400	350	300	400	350	300		
						300	250	200	300	250	200	300	250	200		
						250	180	150	180	160	140	180	160	140		
200	160	140														
150	130	100														
–	–	–														
–	–	–														

HC carbure revêtu
HT carbure non revêtu, composante principale (TiC) ou (TiN), Cermet
HW carbure non revêtu, composante principale (WC)
BL nitrure de bore cristallin cubique avec une faible teneur en nitrure de bore
BH nitrure de bore cristallin cubique avec une haute teneur en nitrure de bore
CN céramique Si_3N_4
CM céramique mixte
HC_1 cermet revêtu
BC CBN revêtu
CC céramique revêtue
CR céramique, composante principale oxyde d'aluminium (Al_2O_3), renforcée
DP revêtement diamant

Tournage général Recommandations de données de coupe

Plaquette de tournage positive

Groupe matière		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min]								
						HC (CVD)								
						YBC103			YB6315			YBC152		
						Avance [mm]			Avance [mm]			Avance [mm]		
						0,1	0,2	0,4	0,1	0,2	0,4	0,1	0,2	0,4
P	Acier non allié	env. 0,15 % C	recuit	125	1	460	400	280	450	390	270	450	390	270
		env. 0,45 % C	recuit	190	2	390	340	240	380	330	230	380	330	230
		env. 0,45 % C	trempé et revenu	250	3	310	275	210	300	265	200	300	265	200
		env. 0,75 % C	recuit	270	4	300	265	200	290	255	190	290	255	190
		env. 0,75 % C	trempé et revenu	300	5	260	235	180	250	225	170	250	225	170
	Acier faiblement allié		recuit	180	6	370	310	190	360	300	180	360	300	180
			trempé et revenu	275	7	260	220	160	250	210	150	250	210	150
			trempé et revenu	300	8	240	210	160	230	200	150	230	200	150
			trempé et revenu	350	9	210	180	130	200	170	120	200	170	120
	Acier fortement allié et acier à outils fortement allié		recuit	200	10	330	285	200	320	275	190	320	275	190
			durci et revenu	325	11	170	160	140	160	150	130	160	150	130
M	Acier inoxydable	ferritique / martensitique	recuit	200	12									
		martensitique	trempé et revenu	240	13									
		austénitique	trempé	180	14									
		austénitique et ferritique		230	15									
K	Fonte grise	perlitique / ferritique		180	16									
		perlitique (martensitique)		260	17									
	Fonte avec graphite nodulaire	ferritique		160	18									
		perlitique		250	19									
	Fonte malléable	ferritique		130	20									
		perlitique		230	21									
N	Alliages corroyé d'aluminium	non durcissable		60	22									
		durcissable	trempé	100	23									
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24									
		≤ 12 % Si, durcissable	trempé	90	25									
		> 12 % Si, non durcissable		130	26									
	Cuivre et alliages de cuivre (Bronze/ moulage)	Alliages de décolletage, PB > 1 %		110	27									
		CuZn, CuSnZn		90	28									
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29									
S	Alliages réfractaires	Base Fe	recuit	200	30									
			trempé	280	31									
		à base de Ni ou Co	recuit	250	32									
			trempé	350	33									
			coulé	320	34									
	Alliages de titane	Titane pur		R_m 400	35									
		Alliages Alpha + Beta	trempé	R_m 1050	36									
H	Acier trempé		durci et revenu	55 HRC	37									
			durci et revenu	60 HRC	38									
	Fonte trempée		coulé	400	39									
	Fonte durcie		durci et revenu	55 HRC	40									
X	Matériaux non métalliques	Thermoplastiques			41									
		Duroplaste			42									
		Matière plastique renforcée de fibres de verre GFK			43									
		Matière plastique renforcée de fibres de carbone CFK			44									
		Graphite			45									
		Bois			46									

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Vous trouverez les exemples de matériaux pour les groupes matière à la page D11.

Vitesse de coupe v_c [m/min]																							
HC (CVD)																							
YBC203			YBC252			YBC352			YBM153			YBM253			YBD102			YB7315			YBD152		
Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]		
0,1	0,3	0,6	0,1	0,3	0,6	0,2	0,4	0,6	0,1	0,2	0,4	0,1	0,2	0,4	0,1	0,2	0,4	0,1	0,2	0,4	0,1	0,2	0,4
430	350	230	430	350	230	390	310	230															
360	295	190	360	295	190	315	250	190															
280	235	160	280	235	160	230	195	160															
270	225	150	270	225	150	220	185	150															
235	195	130	235	195	130	185	155	120															
340	270	170	340	270	170	290	225	150															
235	195	140	235	195	140	170	150	130															
220	180	140	220	180	140	150	140	130															
190	155	110	190	155	110	130	110	90															
280	230	170	280	230	170	180	160	140															
130	115	100	130	115	100	–	–	–															
									360	340	260	330	300	230									
									180	170	140	150	130	95									
									240	220	170	195	170	115									
									190	175	140	160	140	100									
															480	345	200	540	370	200	490	340	190
															220	180	135	300	220	135	250	190	130
															270	210	130	300	230	145	260	200	125
															200	150	95	230	180	110	190	140	90
															275	240	180	310	260	190	265	230	170
															190	145	85	230	170	100	190	140	90

HC carbure revêtu
HT carbure non revêtu, composante principale (TiC) ou (TiN), Cermet
HW carbure non revêtu, composante principale (WC)
BL nitrure de bore cristallin cubique avec une faible teneur en nitrure de bore
BH nitrure de bore cristallin cubique avec une haute teneur en nitrure de bore
CN céramique Si_3N_4
CM céramique mixte
HC_1 cermet revêtu
BC CBN revêtu
CC céramique revêtue
CR céramique, composante principale oxyde d'aluminium (Al_2O_3), renforcée
DP revêtement diamant

Tournage général Recommandations de données de coupe

Plaquette de tournage positive

Groupe matière		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min]								
						HC (CVD)			HC (PVD)					
						YBD152C			YBG101			YBG102		
						Avance [mm]			Avance [mm]			Avance [mm]		
						0,1	0,2	0,4	0,1	0,2	0,4	0,1	0,2	0,4
P	Acier non allié	env. 0,15 % C	recuit	125	1									
		env. 0,45 % C	recuit	190	2									
		env. 0,45 % C	trempé et revenu	250	3									
		env. 0,75 % C	recuit	270	4									
		env. 0,75 % C	trempé et revenu	300	5									
	Acier faiblement allié		recuit	180	6									
			trempé et revenu	275	7									
			trempé et revenu	300	8									
			trempé et revenu	350	9									
	Acier fortement allié et acier à outils fortement allié		recuit	200	10									
			durci et revenu	325	11									
M	Acier inoxydable	ferritique / martensitique	recuit	200	12							305	245	205
		martensitique	trempé et revenu	240	13							150	125	100
		austénitique	trempé	180	14							200	165	145
		austénitique et ferritique		230	15							160	130	115
K	Fonte grise	perlitique / ferritique		180	16	520	360	200						
		perlitique (martensitique)		260	17	280	210	135						
	Fonte avec graphite nodulaire	ferritique		160	18	280	220	135						
		perlitique		250	19	210	160	100						
	Fonte malléable	ferritique		130	20	280	245	180						
		perlitique		230	21	210	160	100						
N	Alliages corroyé d'aluminium	non durcissable		60	22				1800	880	–	1800	880	–
		durcissable	trempé	100	23				540	380	–	540	380	–
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24				500	270	–	500	270	–
		≤ 12 % Si, durcissable	trempé	90	25				320	170	–	320	170	–
		> 12 % Si, non durcissable		130	26				290	150	–	290	150	–
	Cuivre et alliages de cuivre (Bronze/moulage)	Alliages de décolletage, PB > 1 %		110	27				660	320	–	660	320	–
		CuZn, CuSnZn		90	28				330	300	–	330	300	–
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29				220	175	–	220	175	–
S	Alliages réfractaires	Base Fe	recuit	200	30							60	45	–
			trempé	280	31							55	40	–
		à base de Ni ou Co	recuit	250	32							55	40	–
			trempé	350	33							50	35	–
			coulé	320	34							50	35	–
	Alliages de titane	Titane pur		R_m 400	35							95	60	–
		Alliages Alpha + Beta	trempé	R_m 1050	36							75	40	–
H	Acier trempé		durci et revenu	55 HRC	37									
			durci et revenu	60 HRC	38									
	Fonte trempée		coulé	400	39									
	Fonte durcie		durci et revenu	55 HRC	40									
X	Matériaux non métalliques	Thermoplastiques			41									
		Duroplaste			42									
		Matière plastique renforcée de fibres de verre GFK			43									
		Matière plastique renforcée de fibres de carbone CFK			44									
		Graphite			45									
		Bois			46									

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Vous trouverez les exemples de matériaux pour les groupes matière à la page D11.

	Vitesse de coupe v_c [m/min]																							
	HC (PVD)															HC_1			HT					
	YBS103			YBG105			YB9320			YBG205			YPD201			YNG151C			YNG151			YNT251		
	Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]		
	0,1	0,2	0,4	0,1	0,2	0,4	0,1	0,2	0,4	0,1	0,2	0,4	0,1	0,3	0,6	0,1	0,2	0,4	0,1	0,2	0,4	0,1	0,2	0,4
																470	320	–	470	320	–	470	320	–
																400	250	–	400	250	–	400	250	–
																300	200	–	300	200	–	300	200	–
																290	180	–	290	180	–	290	180	–
																245	150	–	245	150	–	245	150	–
																370	220	–	370	220	–	370	220	–
																255	160	–	255	160	–	255	160	–
																200	140	–	200	140	–	200	140	–
																185	130	–	185	130	–	185	130	–
																285	180	–	285	180	–	285	180	–
																150	90	–	150	90	–	150	90	–
	305	245	205	305	245	205	305	245	206	270	205	165	360	290	200									
	150	125	100	150	125	100	160	130	110	145	125	100	190	155	110									
	200	165	145	200	165	145	210	180	155	195	165	145	250	210	150									
	160	130	115	160	130	115	170	140	120	155	130	115	200	165	120									
																390	330	255	390	330	255	390	330	255
																355	310	245	355	310	245	355	310	245
																330	270	200	330	270	200	330	270	200
																310	270	210	310	270	210	310	270	210
																260	220	160	260	220	160	260	220	160
																210	170	120	210	170	120	210	170	120
	70	50	–	60	45	–	50	35	–	50	–	–	–	50	35									
	60	45	–	55	40	–	45	30	–	45	–	–	–	45	30									
	60	45	–	55	40	–	45	30	–	45	–	–	–	45	30									
	66	40	–	50	35	–	40	–	–	40	–	–	–	40	–									
	66	40	–	50	35	–	40	–	–	40	–	–	–	40	–									
	100	65	–	95	60	–	75	60	–	70	–	–	–	75	60									
	75	50	–	75	40	–	55	40	–	45	–	–	–	55	40									

HC carbure revêtu
HT carbure non revêtu, composante principale (TiC) ou (TiN), Cermet
HW carbure non revêtu, composante principale (WC)
BL nitrure de bore cristallin cubique avec une faible teneur en nitrure de bore
BH nitrure de bore cristallin cubique avec une haute teneur en nitrure de bore
CN céramique Si_3N_4
CM céramique mixte
HC_1 cermet revêtu
BC CBN revêtu
CC céramique revêtue
CR céramique, composante principale oxyde d'aluminium (Al_2O_3), renforcée
DP revêtement diamant

Tournage général Recommandations de données de coupe

Plaquette de tournage positive

Groupe matière		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min]								
						HW						BL		
						YD101			YD201			YCB112		
						Avance [mm]			Avance [mm]			Avance [mm]		
						0,1	0,2	0,3	0,1	0,2	0,3	0,1	0,2	0,3
P	Acier non allié	env. 0,15 % C	recuit	125	1									
		env. 0,45 % C	recuit	190	2									
		env. 0,45 % C	trempé et revenu	250	3									
		env. 0,75 % C	recuit	270	4									
		env. 0,75 % C	trempé et revenu	300	5									
	Acier faiblement allié		recuit	180	6									
			trempé et revenu	275	7									
			trempé et revenu	300	8									
			trempé et revenu	350	9									
	Acier fortement allié et acier à outils fortement allié		recuit	200	10									
			durci et revenu	325	11									
M	Acier inoxydable	ferritique / martensitique	recuit	200	12									
		martensitique	trempé et revenu	240	13									
		austénitique	trempé	180	14									
		austénitique et ferritique		230	15									
K	Fonte grise	perlitique / ferritique		180	16									
		perlitique (martensitique)		260	17									
	Fonte avec graphite nodulaire	ferritique		160	18									
		perlitique		250	19									
	Fonte malléable	ferritique		130	20									
		perlitique		230	21									
N	Alliages corroyé d'aluminium	non durcissable		60	22	1550	1050	700	1550	1050	700			
		durcissable	trempé	100	23	450	320	200	450	320	200			
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24	400	270	150	400	270	150			
		≤ 12 % Si, durcissable	trempé	90	25	250	170	95	250	170	95			
		> 12 % Si, non durcissable		130	26	230	150	85	230	150	85			
	Cuivre et alliages de cuivre (Bronze/ moulage)	Alliages de décolletage, PB > 1 %		110	27	550	370	170	550	370	170			
		CuZn, CuSnZn		90	28	260	210	160	260	210	160			
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29	190	145	95	190	145	95			
S	Alliages réfractaires	Base Fe	recuit	200	30	55	30	–	55	30	–	–	–	–
			trempé	280	31	55	25	–	55	25	–	–	–	–
		à base de Ni ou Co	recuit	250	32	45	25	–	45	25	–	180	160	140
			trempé	350	33	35	20	–	35	20	–	160	140	120
			coulé	320	34	40	20	–	40	20	–	120	100	80
	Alliages de titane	Titane pur		R_m 400	35	60	40	–	60	40	–	–	–	–
		Alliages Alpha + Beta	trempé	R_m 1050	36	30	–	–	30	–	–	–	–	–
H	Acier trempé		durci et revenu	55 HRC	37							220	170	130
			durci et revenu	60 HRC	38							200	160	120
	Fonte trempée		coulé	400	39							200	150	100
	Fonte durcie		durci et revenu	55 HRC	40							200	150	100
X	Matériaux non métalliques	Thermoplastiques			41									
		Duroplaste			42									
		Matière plastique renforcée de fibres de verre GFK			43									
		Matière plastique renforcée de fibres de carbone CFK			44									
		Graphite			45									
		Bois			46									

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Vous trouverez les exemples de matériaux pour les groupes matière à la page D11.

	Vitesse de coupe v_c [m/min]																							
	BL									BC									BH			DP		
	YCB113			YCB121			YCB131			YCB113C			YCB121C			YCB131C			YCB215			YCD421		
	Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]			Avance [mm]					
	0,1	0,2	0,3	0,1	0,2	0,3	0,1	0,2	0,3	0,1	0,2	0,3	0,1	0,2	0,3	0,1	0,2	0,3	0,1	0,2	0,3	0,05	0,2	0,4
																			1500	980	400			
																			1250	800	320			
																			–	–	–			
																			300	200	100			
																			–	–	–			
																			300	200	100			
																						2500	2000	250
																						2500	2000	250
																						2500	2000	250
																						2500	2000	250
																						1000	800	100
																						650	530	70
																						650	530	70
																						400	330	40
							–	–	–															
							–	–	–															
							160	140	120															
							140	120	100															
							120	100	80															
							–	–	–															
							–	–	–															
	240	180	140	220	170	130	160	120	100	240	180	140	220	170	130	160	120	100						
	220	180	140	200	160	120	150	120	100	220	180	140	200	160	120	150	120	100						
	250	150	100	200	150	100	180	120	100	250	150	100	200	150	100	180	120	100						
	200	150	100	200	150	100	150	120	100	200	150	100	200	150	100	150	120	100						

HC carbure revêtu
HT carbure non revêtu, composante principale (TiC) ou (TiN), Cermet
HW carbure non revêtu, composante principale (WC)
BL nitrure de bore cristallin cubique avec une faible teneur en nitrure de bore
BH nitrure de bore cristallin cubique avec une haute teneur en nitrure de bore
CN céramique Si_3N_4
CM céramique mixte
HC_1 cermet revêtu
BC CBN revêtu
CC céramique revêtue
CR céramique, composante principale oxyde d'aluminium (Al_2O_3), renforcée
DP revêtement diamant

GORGES ET TRONÇONNAGE



Gorges et tronçonnage

Vue d'ensemble des produits	**A382-A383**
Vue d'ensemble de système	**A384-A385**
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Vue d'ensemble des brise-copeaux	**A388-A389**
Vue d'ensemble des brise-copeaux	**A390-A391**
Vue d'ensemble des nuances	**A392-A393**
Domaines d'application des nuances	**A394-A397**
Codification – plaquettes de coupe	**A398**
Plaquettes de coupe	**A399-A415**
Code système – plaquettes de coupe – série QC	**A416**
Plaquettes de coupe – série QC	**A417-A421**
Codification – Porte-outils	**A422-A424**
Porte-outils	**A425-A445**
Supports monoblocs de précision	**A446-A451**
Codification – Porte-outils – série QC	**A452**
Porte-outils – série QC	**A453-A455**
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Outils spéciaux	**A513**

A

Gorges et tronçonnage Vue d'ensemble des produits

Plaquettes de gorges et de tronçonnage

Réversible

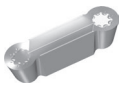






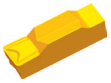
ZT*D-MM	ZT*D-MG	ZT**-EG	ZP*D-MG	ZP*D-MG-R/L	
2-8	2,5-6	1-6,5	2,5-6	2,35-2,85	Largeur
A399	A404	A407	A400	A401	Page

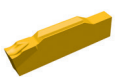
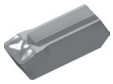


ZR*D-MG	ZR*D-EG	ZR*D-LH	ZILD-LC		
2,5-6	3-6	6-8	8		Largeur
A410	A411	A414	A415		Page

Non-réversible


ZT*S-MM	ZT*S-MG	ZP*S-MG	ZP*S-MG-R/L	ZIMF-NM	ZIGQ-NM	
2,5-6	5-6	2,5-6	2,5-3	3-6	3-6	Largeur
A406	A405	A402	A403	A412	A413	Page

Trois arêtes




QC**R/L	QC**R/L***R	
0,75-4,8	1-4	Largeur
A417	A420	Page

Porte-outils tournage extérieur



GQCR/L**

A453



QER/L**

A425



QE*SN**

A431



QE*SN-1**

A432



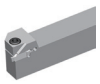
QE*SN30

A427



QE*SR/L

A430



QECDR/L

A428

Page



QFR/L**

A434



QFRR/LL**

A436



QF*DR/L

A439



QF*SRR/LL

A438



QFHSDR/L

A441



QX*DR/L

A429



QZS*

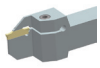
A433

Page



QER/L-DGC**

A446



QER/L-DGSC**

A448



QER/L-SC**

A449

Page

Barres d'alésage



Q*DR/L

A444



S*K-QCR/L**

A454

Page

Gorges et tronçonnage Vue d'ensemble de système

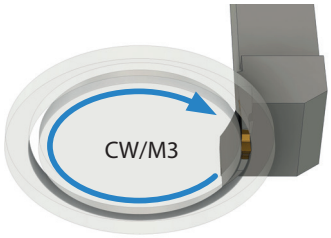
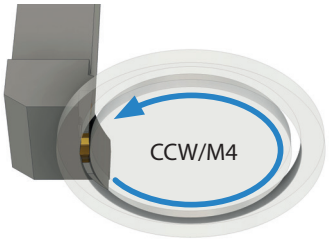
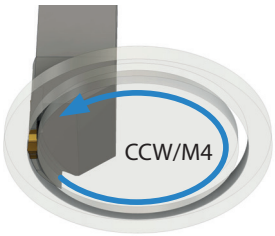
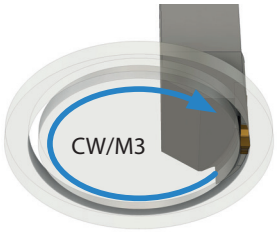
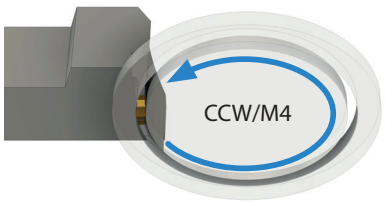
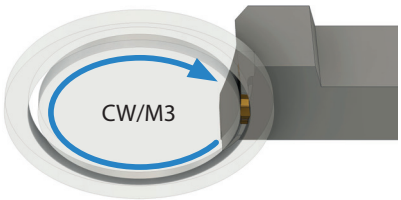
	Informations système	Largeur de l'arête de coupe S	Profondeur de coupe a_r max.	Gorges	Tronçonnage	Gorges radiales	Page
Système QE	• Système pour **le tournage de gorges radiales et le tronçonnage** • Porte-outil disponible pour l'usinage extérieur et intérieur • Disponible avec refroidissement ciblé et transmission directe du liquide de coupe via l'attachement • Plaquettes de coupe à une et deux arêtes • Plaquettes de coupe disponibles pour la réalisation précise de gorges	2,0–6,0 mm	jusqu'à 30,0 mm	✔	✔	✔	■ A425 ● A444
Système QE et QZ	• Système pour **le tronçonnage radial** • Combinaison entre porte-plaquette et bloc de serrage • Système avec serrage Autobloquant • Plaquettes de coupe à une arête • Utilisation flexible	2,5–6,0 mm	jusqu'à 60,0 mm	✔	✔	–	■ A431
Système QF	• Système pour **le tournage de gorges axiales** • Plage de première gorge de Ø 48–400 mm • Serrage par vis pour une stabilité renforcée • Plaquettes de coupe à deux arêtes • Porte-outil disponible en version neutre et à 90° • Structure de base droite pour M3 • Structure de base gauche pour M4	2,0–6,0 mm	jusqu'à 22,0 mm	✔	–	✔	■ A434
Système QX	• Système pour le **tournage de gorges extérieures** • Attachement avec angle de réglage de 45° • Serrage par vis pour une stabilité renforcée • Pour plaquettes de gorge à deux arêtes • Pour les opérations de tournage, notamment la réalisation de dégagements et de dépouilles. Convient également aux applications de copiage	3,0–6,0 mm	jusqu'à 4,0 mm	✔	–	✔	■ A429

■ Porte-outil de tournage extérieur
● Barres d'alésage

	Informations système	Largeur de l'arête de coupe S	Profondeur de coupe a_p max.	Gorges	Tronçonnage	Gorges radiales	Page
Système C*X-Q	• Système spécialement conçu pour **l'usinage de roues en aluminium** • Barre d'alésage avec angle de réglage de 15° • Serrage par vis pour une stabilité renforcée • Pour plaquettes de gorge à deux arêtes • Plage de première gorge à partir de Ø 160 mm • Brise-copeaux spéciaux pour l'usinage de l'aluminium	6,0–8,0 mm	jusqu'à 80,0 mm	–	–	✔	● A443
Système QE*S*N	• Système spécialement conçu pour **les matériaux difficiles à usiner** • Brise-copeaux spéciaux pour les matériaux difficiles à usiner • Serrage par vis pour une stabilité renforcée • Pour plaquettes de gorge à une arête	3,0–6,0 mm	jusqu'à 22,0 mm	✔	–	✔	■ A430
Système QC	• Système pour **le tournage de gorges précises** • Porte-outil disponible pour l'usinage extérieur et intérieur • Serrage tangentiel par vis pour une stabilité et une rigidité renforcées • 3 arêtes pour une rentabilité élevée • Plaquettes de gorge rectifiées pour des tolérances élevées • Précision de répétabilité élevée lors du changement de la plaquette de coupe • Plaquettes de gorge avec arête de coupe droite ou arrondie • Particularité usinage intérieur : Porte-outil à droite + insert d'exécution de gorge à gauche / porte-outil à gauche + insert d'exécution de gorge à droite	0,5–4,8 mm	jusqu'à 5,0 mm	✔	–	–	■ A453 ● A454

■ Porte-outil de tournage extérieur
● Barres d'alésage

Versions de porte-outil pour l'usinage axial

Porte-outils	Alignement des porte-outils
QFFD****L**-**H	
QFFD****R**-**H	
QFFD****LL**-**H	
QFFD****RR**-**H	
QFFD****L**-**L	
QFFD****R**-**L	

Notes

Gorges et tronçonnage Vue d'ensemble des brise-copeaux

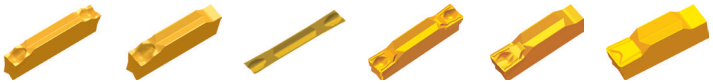
Gorge

MM P M K S




Brise-copeaux brut de frittage à arête de coupe droite pour l'usinage général de l'acier, de l'inox, de la fonte et des matériaux difficiles à usiner. Peut être utilisé pour le rainurage, le tournage et le tronçonnage.

MG P M K S

Brise-copeaux fritté pour l'usinage général de l'acier, de l'inox, de la fonte et des matériaux difficiles à usiner. Peut être utilisé pour le rainurage, le tournage et le tronçonnage.

MG P M K S




Brise-copeaux universel à profil arrondi, pour usinage général d'aciers, d'aciers inoxydables et de fonte. Utilisable pour les gorges et le copiage.

EG M P S



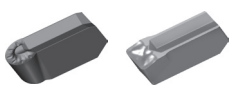

Brise-copeaux rectifié de précision, pour opérations de gorge et de tournage. Approprié pour l'usinage d'acier inoxydable. Tolérance E, pour une haute répétabilité.

EG M P S




Brise-copeaux rectifié de précision à profil arrondi, pour opérations de gorge et de tournage. Approprié pour l'usinage d'acier inoxydable. Tolérance E, pour une haute répétabilité.

NM S

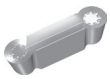



Brise-copeaux spécial, pour usinage de matériaux difficiles à usiner.

Gorge

LC **N**





Brise-copeaux rectifié, pour copiage et tournage de métaux non-ferreux.

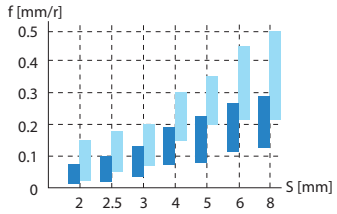
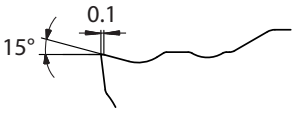
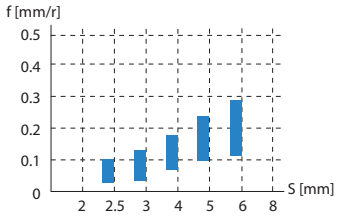
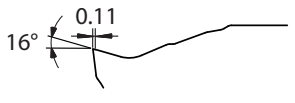
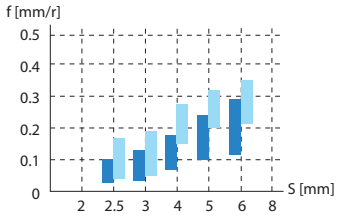
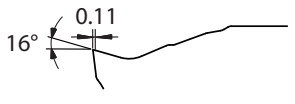
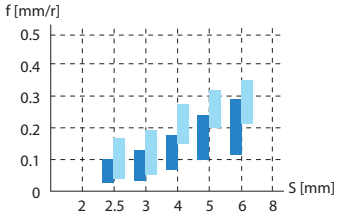
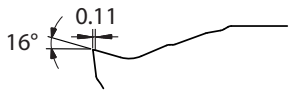
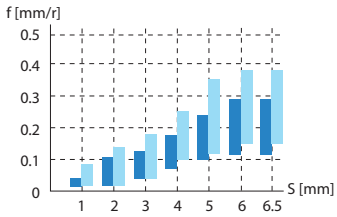
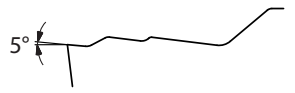
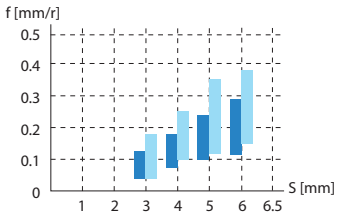
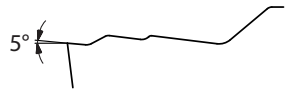
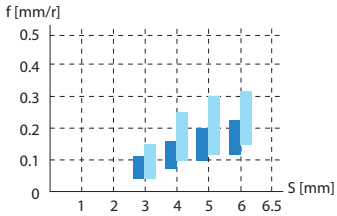
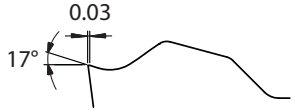
LH **N**





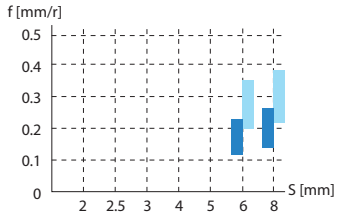
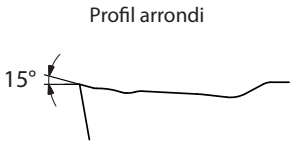
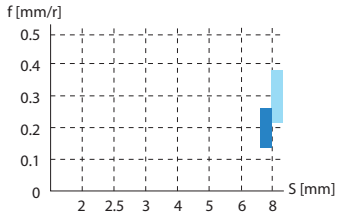
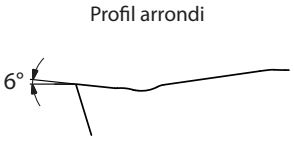
Brise-copeaux rectifié, pour copiage et tournage de métaux non-ferreux.

Gorges et tronçonnage Domaines d'application des brise-copeaux

Brise-copeau	Application	P	M	K	N	S	H	Avance	Profil de l'arête de coupe
ZT****-MM	Gorges et tronçonnage ✓	✓	✓	✓		✓			
	Gorges radiales ✓								
ZP****-MG	Gorges et tronçonnage ✓	✓	✓	✓		✓			
	Gorges radiales –								
ZT****-MG	Gorges et tronçonnage ✓	✓	✓	✓		✓			
	Gorges radiales ✓								
ZR****-MG	Gorges et tronçonnage ✓	✓	✓	✓		✓			Profil arrondi 
	Gorges radiales ✓								
ZT****-EG	Gorges et tronçonnage ✓	✓	✓	✓		✓			
	Gorges radiales ✓								
ZR****-EG	Gorges et tronçonnage ✓	✓	✓		✓	✓			Profil arrondi 
	Gorges radiales ✓								
ZI****-NM	Gorges et tronçonnage ✓		✓		✓	✓			Profil arrondi 
	Gorges radiales ✓								

✓ Très approprié ✓ Approprié

Gorges et tronçonnage
Gorges radiales

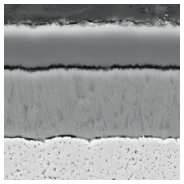
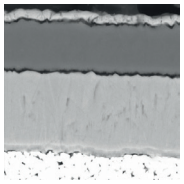
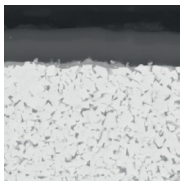
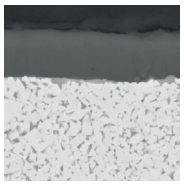
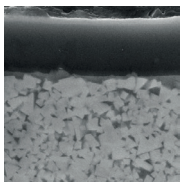
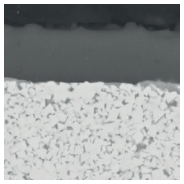
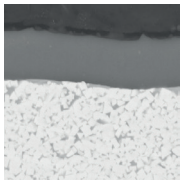
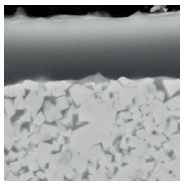
Brise-copeau	Application	P	M	K	N	S	H	Avance	Profil de l'arête de coupe
ZR****-LH	Gorges et tronçonnage ✔				✔	✔			
	Gorges radiales ✔								
ZI****-LC	Gorges et tronçonnage ✔				✔	✔			
	Gorges radiales ✔								

✔ Très approprié ✔ Approprié

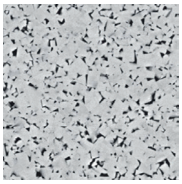
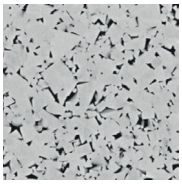
Gorges et tronçonnage

Gorges radiales

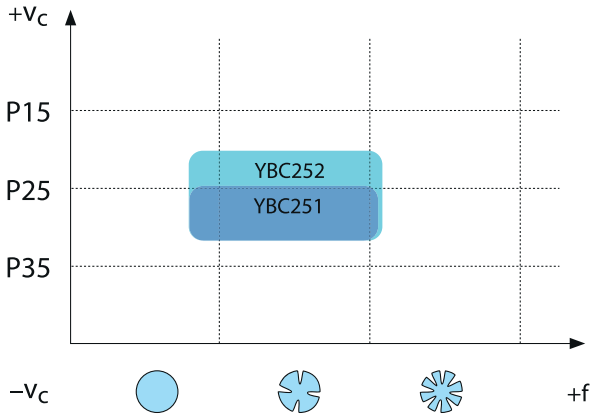
Gorges et tronçonnage

Nuance	ISO	Microstructure	Description de nuances
YBC252	P20 - P35		Nuance carbure revêtu CVD, substrat P20-P35 pour les opérations d'ébauche à semi-finition des aciers et aciers moulés. Résistance à l'usure et ténacité optimale pour un large champ d'applications.
YBC251	P20 - P35		Nuance carbure revêtu CVD P20-P35 pour les applications d'ébauche à semi-finition dans les aciers moulés à basse vitesse de coupe.
YBG105	S05 - S20		Nuance carbure revêtu PVD multicouches S05-S20 pour la semi-finition à la finition des superalliages, ainsi que les aciers inoxydables. Bonne résistance à l'usure et stabilité thermique pour un large champ d'applications.
YBG102	S05 - S15		Nuance carbure revêtu PVD S05-S15 pour la semi-finition à la finition des superalliages, aciers inoxydables, et aluminium. Bonne résistance à l'usure pour un large champ d'applications.
YB9320	P10 - P30 M10 - M25		Nuance de carbure P10–P30/M10–M25 avec revêtement PVD multicouche pour l'usinage de finition à semi-finition d'acier inoxydable, superalliages et acier (gorge/fraisage). Très bonne résistance à l'usure grâce à l'amélioration de l'adhérence du revêtement et résistance thermique dans un vaste domaine d'utilisation.
YBG205	P10 - P30 M20 - M40 S15-S25		Nuance de carbure P10–P30/M20–M40/S15–S25 avec revêtement PVD multicouche pour l'usinage de finition à semi-finition d'acier inoxydable, superalliages et acier (fraisage). Très bonne résistance à l'usure et thermique dans un vaste domaine d'utilisation.
YBG202	P10 - P30 M10 - M25		Nuance carbure revêtu PVD P10-P30/M10-M25 pour la semi-finition à la finition des aciers inoxydables et aciers (en fraisage). Bonne résistance à l'usure pour un large champ d'application.
YBG302	P15 - P30 M25 - M40		Nuance carbure revêtu PVD P15-P30/M25-M40 pour l'ébauche légère des aciers inoxydables et aciers (en fraisage). Bonne résistance à l'usure et ténacité.

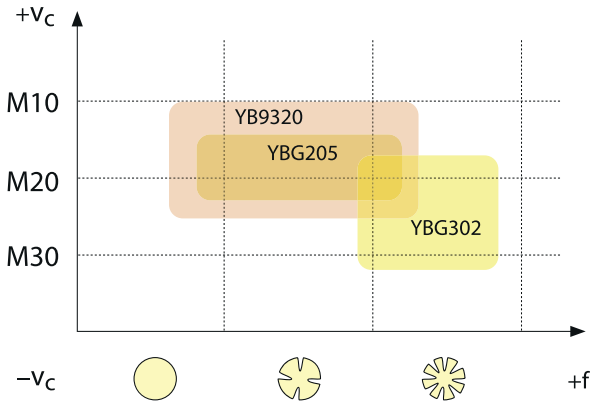
Gorges et tronçonnage

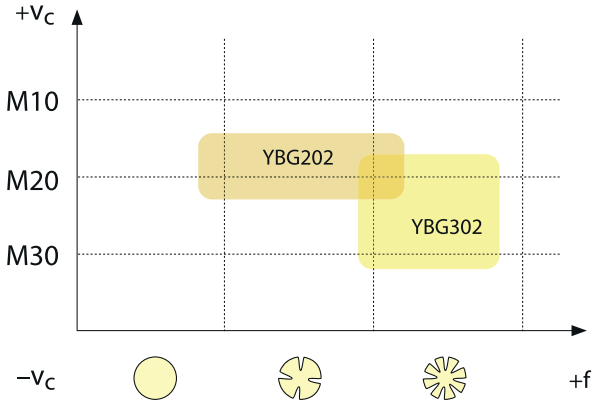
Nuance	ISO	Microstructure	Description de nuances
YD101	K05 - K20 N05 - N20		Nuance carbure non revêtu K05-K20/N05-N20 pour les opération de semi-finition à finition dans les aluminiums et autres matériaux.
YD201	K10 - K30 N10 - N30		Nuance carbure non revêtu K10-K30/N10-N30 pour les applications de semi-finition dans les aluminiums et autres matériaux.

Nuances de carbure avec revêtement CVD pour l'acier

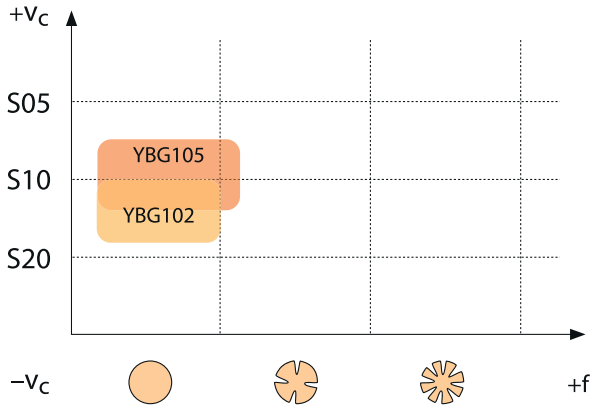


Nuances de carbure avec revêtement PVD pour l'acier inoxydable

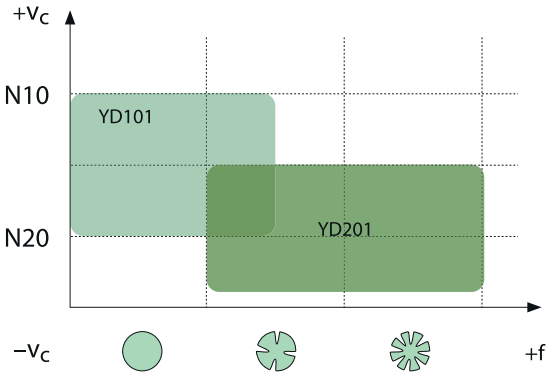




Nuances de carbure avec revêtement PVD pour les superalliages



Nuances de carbure pour les métaux non ferreux



Domaines d'application des nuances – gorges et tronçonnage

	ISO	HC[1] (CVD)	HC[1] (PVD)	HT	HC[2]	Ceramic	HW	CBN	PCD
P	P01								
	P10	YBC251 YBC252							
	P20								
	P30								
	P40								
M	M01								
	M10		YBG202 YBG205 YB9320 YBG302						
	M20								
	M30								
	M40								
K	K01								
	K10								
	K20								
	K30								
N	N01								
	N10						YD101 YD102		
	N20								
	N30								
S	S01								
	S10		YBG102 YBG105						
	S20								
	S30								
H	H01								
	H10								
	H20								
	H30								

P	Acier
M	Acier inoxydable
K	Fonte
N	Métaux non-ferreux
S	Réfractaires et superalliages
H	Matériaux durs

HC[1] Carbure revêtu
HT Cermet non revêtu
HC[2] Cermet revêtu
HW Carbure non revêtu

Notes

Gorges et tronçonnage Codification – plaquettes de coupe

ZP	G	D	04	04	–	M	G
1	2	3	4	5		6	7

Application

Code	Description
ZP	Tronçonnage
ZT	Gorges et tournage
ZR	Profilage

1

Largeur de plaquette [mm]

Largeur de gorge

Code	Description
B	2,0
E	2,5
F	3,0
G	4,0
H	5,0
K	6,0
L	8,0

2

Nombre d'arêtes

Code	Description
S	Simple
D	Double

3

Largeur de plaquette s [mm]



Code	S
02	2,0
025	2,5
03	3,0
04	4,0
05	5,0
06	6,0
08	8,0

4

Rayon de plaquette r [mm]



Code	r
02	0,2
03	0,3
04	0,4
08	0,8

5

Classe de tolérance [mm]

Code	Description
M	±0,13
E	±0,025

6

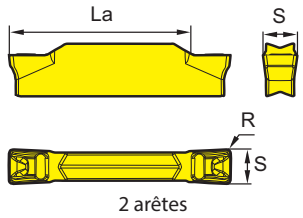
Brise-copeau

Code	Description
G	Brise-copeau polyvalent
F	Brise-copeau spécial
M	Arête rectiligne

7

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

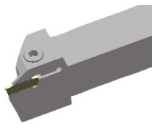
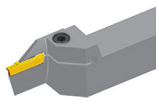
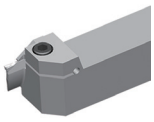
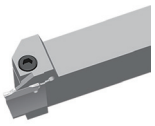
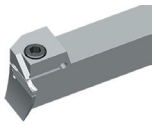
Plaquettes de tronçonnage et gorges

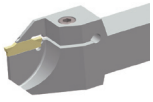
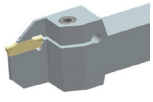
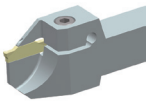
Plaquette de gorge (double arête) ZT**							HC¹ (CVD)						HC¹ (PVD)						HW	
 2 arêtes						P														
						M														
						K														
						N														
						S														
						H														
	ISO		R±0.1	La *max*	S	f	YBC252	YBC251					YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
	**ZTBD02002-MM**		0,2	13	2	0,02-0,07									●	●		○		
	ZTED02503-MM		0,3	17	2,5	0,03-0,1									●					
	ZTFD0303-MM		0,3	17	3	0,04-0,13									●					
	ZTGD0404-MM		0,4	22	4	0,06-0,18									●					
	ZTHD0504-MM		0,4	22	5	0,08-0,23									●					
	ZTKD0608-MM		0,8	22	6	0,12-0,27									●					
	ZTLD0808-MM		0,8	28	8	0,13-0,29	○								●	○				

● En stock ○ Sur demande

HC¹ Carbure revêtu
HW Carbure non revêtu

Support de serrage

QE*D*R/L	QF*D*R/L-H	QF*D*LL-H	QF*D*RR-H	QF*D*R/L-L	*-QBDR/L	C***-Q*DR/L
						
A425	A434	A436	A436	A439	A444	A444

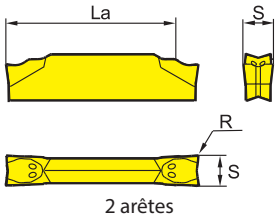
QE*D*R/L-DGC	QE*D*R/L-DGSC	QE*D*R/L-SC
		
A446	A448	A449

Codification A398 | Choix nuances A394 | Info. techniques A501 | Paramètres A456

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquettes de tronçonnage et gorges

Plaquette de gorge (double arête)



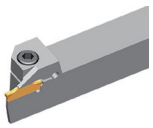
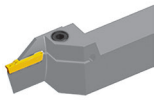
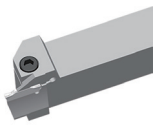
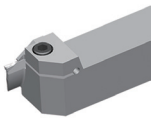
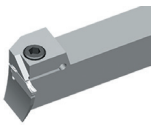
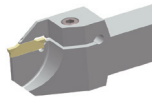
2 arêtes

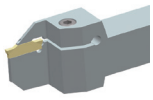
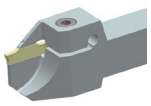
						HC¹ (CVD)				HC¹ (PVD)						HW	
					P												
					M												
					K												
					N											○	○
					S					○	○	○	○	○			
					H												
	ISO	R±0.1	La *max*	S±0.10	f	YBC252	YBC251			YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
	**ZPED02502-MG**	0,2	17	2,5	0,03-0,1		●					●		○	●		
	ZPFD0302-MG	0,2	17	3	0,04-0,13	●	●					●		○	●		
	ZPGD0402-MG	0,2	22	4	0,07-0,18		●					●			●		○
	ZPHD0503-MG	0,3	22	5	0,1-0,24									○	●		
	ZPKD0604-MG	0,4	22	6	0,12-0,29	○								○	●		

● En stock ○ Sur demande

HC¹ Carbure revêtu
HW Carbure non revêtu

Support de serrage

QE*D*R/L	QF*D*R/L-H	QF*D*RR-H	QF*D*LL-H	QF*D*R/L-L	C***-Q*DR/L	QE*D*R/L-DGC
						
A425	A434	A436	A436	A439	A444	A446

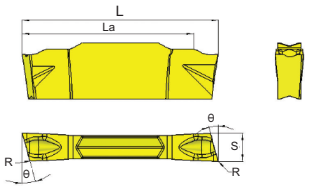
QE*D*R/L-DGSC	QE*D*R/L-SC
	
A448	A449

Codification A398 Choix nuances A394 Info. techniques A501 Paramètres A456

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquettes de tronçonnage et gorges

Plaquette de gorge (double arête) ZT**



Version à droite

	HC¹ (CVD)				HC¹ (PVD)						HW	
P	⊛	⊛				⊛	⊛	⊛	⊛			
M	⊛	⊛				⊛	⊛	⊛	⊛			
K												
N											●	⊛
S					●	●	⊛	⊛	⊛			
H												

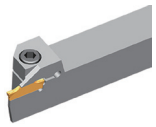
	ISO	La *max*	L	S	θ	R	f	YBC252	YBC251	YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
	**ZPED02502-MG-6L**	17	20	2,35	6°	0,2	0,03-0,08								●		
	ZPED02502-MG-6R	17	20	2,35	6°	0,2	0,03-0,08					●			●		
	ZPED02502-MG-15L	17	20	2,35	15°	0,2	0,03-0,05								○		
	ZPED02502-MG-15R	17	20	2,35	15°	0,2	0,03-0,05							○	○		
	ZPFD0302-MG-6L	17	20	2,85	6°	0,2	0,04-0,1					●		○	●		
	ZPFD0302-MG-6R	17	20	2,85	6°	0,2	0,04-0,1					●		○	○		
	ZPFD0302-MG-15L	17	20	2,85	15°	0,2	0,04-0,08							○	○		
	ZPFD0302-MG-15R	17	20	2,85	15°	0,3	0,04-0,08					●			○		

● En stock ○ Sur demande

HC¹ Carbure revêtu
HW Carbure non revêtu

Support de serrage

QE*D*R/L

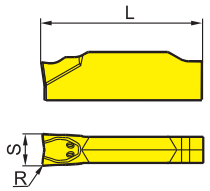


A425

Codification A398 Choix nuances A394 Info. techniques A501 Paramètres A456

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquettes de tronçonnage et gorges



1 arête

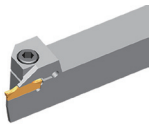
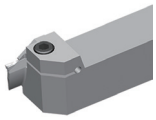
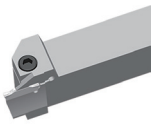
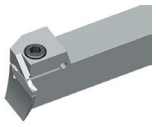
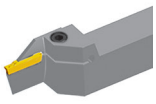
Plaquette de gorge (une arête)						HC[1] (CVD)				HC[1] (PVD)						HW	
					P												
					M												
					K												
					N												
					S												
					H												
ISO		R±0.1	S±0.10	f		YBC252	YBC251			YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
	ZPES02502-MG	0,2	2,5	0,03-0,1								○		○	●		
	ZPFS0302-MG	0,2	3	0,04-0,13		●						●			●		
	ZPGS0402-MG	0,2	4	0,07-0,18		○								○	●		○
	ZPGS0402-MG-25	0,2	4	0,07-0,18								●					
	ZPHS0503-MG	0,3	5	0,1-0,24										○	●		
	ZPHS0503-MG-25	0,3	5	0,1-0,24								●					
	ZPKS0604-MG	0,4	6	0,12-0,29										○	●		
	ZPKS0604-MG-25	0,4	6	0,12-0,29								●					

● En stock ○ Sur demande

Plaquettes avec une seule coupe destinées à être utilisées uniquement avec des lames de tronçonnage

HC[1] Carbure revêtu
HW Carbure non revêtu

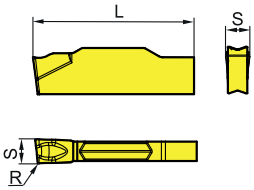
Support de serrage

QE*S*R/L	QZ**+QE**	QF*S*LL-H	QF*S*RR-H	QF*S*R/L-L	QF*S*R/L-H
					
A427	A432	A438	A438	A441	A442

Codification > A398 Choix nuances > A394 Info. techniques > A501 Paramètres > A456

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

Plaquettes de tronçonnage et gorges

Plaquette de gorge (une arête)							HC[1] (CVD)				HC[1] (PVD)						HW	
 1 arête						P												
						M												
						K												
						N												
						S												
						H												
	ISO	R±0.1	L	S±0.10	θ	f	YBC252	YBC251			YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
	**ZPES02502-MG-6L**	0,2	19,9	2,5	6°	0,03-0,08							●					
	ZPES02502-MG-6R	0,2	19,9	2,5	6°	0,03-0,08							●					
	ZPFS0302-MG-6L	0,2	19,9	3	6°	0,04-0,1							●					
	ZPFS0302-MG-6R	0,2	19,9	3	6°	0,04-0,1							●					

● En stock ○ Sur demande

Plaquettes avec une seule coupe destinées à être utilisées uniquement avec des lames de tronçonnage

HC[1] Carbure revêtu
HW Carbure non revêtu

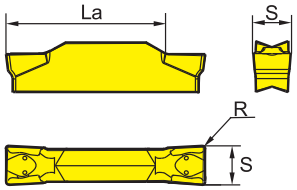
Support de serrage
QZ+QE****

A432

Codification A398 Choix nuances A394 Info. techniques A501 Paramètres A456

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquettes de tronçonnage et gorges



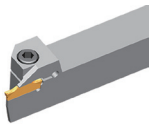
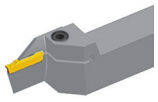
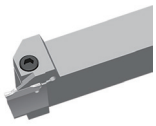
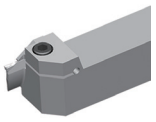
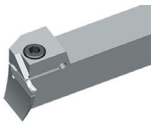
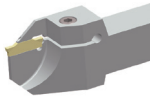
2 arêtes

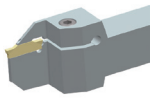
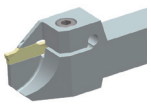
Plaquette de gorge (double arête)							HC¹ (CVD)						HC¹ (PVD)						HW	
						P														
						M														
						K														
						N														
						S														
						H														
ISO		R±0.1	La *max*	S±0.10	f		YBC252	YBC251					YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
	**ZTED02503-MG**		17	2,5	0,03-0,11												○	●		
	ZTFD0303-MG		17	3	0,04-0,14									○		●	●	●		
	ZTGD0402-MG		22	4	0,07-0,2															
	ZTGD0404-MG		22	4	0,07-0,2		●									●	○	●	●	
	ZTHD0504-MG		22	5	0,10-0,25											●	○	●		
	ZTKD0604-MG		22	6	0,13-0,30										○	●				
	ZTKD0608-MG		22	6	0,13-0,30									○	●		○	●		

● En stock ○ Sur demande

HC¹ Carbure revêtu
HW Carbure non revêtu

Support de serrage

QE*D*R/L	QF*D*R/L-H	QF*D*RR-H	QF*D*LL-H	QF*D*R/L-L	C***-Q*DR/L	QE*D*R/L-DGC
						
A425	A434	A436	A436	A439	A444	A446

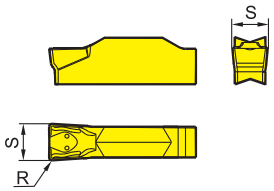
QE*D*R/L-DGSC	QE*D*R/L-SC
	
A448	A449

Codification A398 Choix nuances A394 Info. techniques A501 Paramètres A456

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquettes de tronçonnage et gorges

Plaquette de gorge (une arête)



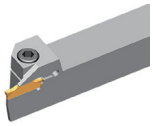
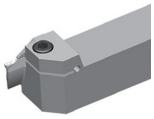
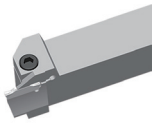
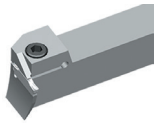
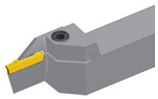
1 arête

					P	M	K	N	S	H	HC¹ (CVD)								HC¹ (PVD)								HW			
	ISO	R±0.1	S±0.10	f							YBC252	YBC251							YBG105	YBG102	YB9320	YBG205	YBG202	YBG302			YD101	YD201			
	**ZTHS0504-MG**	0,4	5	0,10-0,25																	○		○	●							
	**ZTKS0608-MG**	0,8	6	0,13-0,30																			○	●							

● En stock ○ Sur demande

HC¹ Carbure revêtu
HW Carbure non revêtu

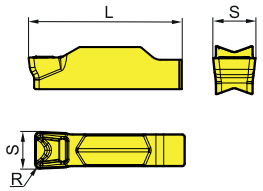
Support de serrage

QE*S*R/L	QZ**+QE**	QF*S*LL-H	QF*S*RR-H	QF*S*R/L-L	QF*S*R/L-H
					
A427	A431	A438	A438	A441	A442

Codification A398 Choix nuances A394 Info. techniques A501 Paramètres A456

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquettes de tronçonnage et gorges



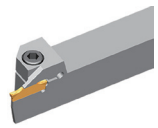
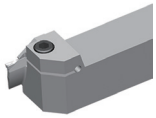
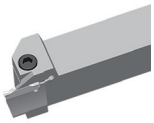
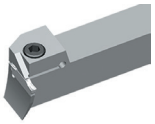
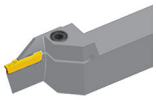
1 arête

Plaquette de gorge (une arête)							HC¹ (CVD)		HC¹ (PVD)					HW	
						P									
						M									
						K									
						N									
						S									
						H									
	ISO	R±0.1	L	S±0.10	f		YBC252	YBC251	YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
	**ZTES02503-MM**	0,3	19,9	2,5	0,03-0,1						●					
	ZTFS0303-MM	0,3	19,9	3	0,04-0,13						●					
	ZTGS0404-MM-25	0,4	24,6	4	0,06-0,18						●					
	ZTHS0504-MM-25	0,4	24,6	5	0,08-0,23						●					
	ZTKS0608-MM-25	0,8	24,6	6	0,12-0,27						●					

● En stock ○ Sur demande

HC¹ Carbure revêtu
HW Carbure non revêtu

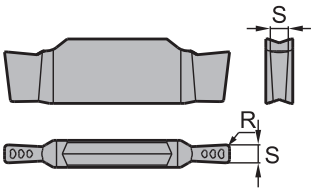
Support de serrage

QE*S*R/L	QZ**+QE**	QF*S*LL-H	QF*S*RR-H	QF*S*R/L-L	QF*S*R/L-H
					
A427	A432	A438	A438	A441	A442

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquettes de tronçonnage et gorges

Plaquette de gorge (double arête)



	HC¹ (CVD)				HC¹ (PVD)						HW	
P	⊛	⊛				⊛	⊛	⊛	⊛			
M						⊛	⊛	⊛	⊛			
K												
N											●	⊛
S					○	○	⊛	⊛	⊛			
H												

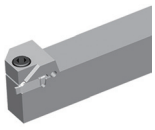
	ISO	La *max*	S±0.025	R±0.05	f	YBC252	YBC251	YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
	**ZTCD01002-EG**	2,6	1	0,2	0,02-0,04								○		
	ZTCD011502-EG	2,6	1,15	0,2	0,02-0,04								○		
	ZTCD01202-EG	2,6	1,2	0,2	0,02-0,04								○		
	ZTCD013802-EG	2,6	1,38	0,2	0,02-0,04								○		
	ZTCD01402-EG	2,6	1,4	0,2	0,02-0,04								○		
	ZTCD01500-EG	2,6	1,5	0	0,02-0,04								○		
	ZTCD01502-EG	2,6	1,5	0,2	0,02-0,04								○		
	ZTCD01503-EG	2,6	1,5	0,3	0,02-0,04							○			
	ZTCD015503-EG	2,6	1,55	0,3	0,02-0,04								○		
	ZTCD01602-EG	2,6	1,6	0,2	0,02-0,04								○		
	ZTCD01702-EG	3,4	1,7	0,2	0,02-0,08								○		
	ZTCD017503-EG	3,4	1,75	0,3	0,02-0,08								○		
	ZTCD017602-EG	3,4	1,76	0,2	0,02-0,08							○			
	ZTCD01802-EG	3,4	1,8	0,2	0,02-0,08								○		
	ZTCD018502-EG	3,4	1,85	0,2	0,02-0,08								○		
	ZTCD02000-EG	3,4	2	0	0,02-0,08								○		
	ZTCD02002-EG	3,4	2	0,2	0,02-0,08								●		
	ZTCD020503-EG	3,4	2,05	0,3	0,02-0,08								○		
	ZTCD021502-EG	3,4	2,15	0,2	0,02-0,08								○		
	ZTCD02302-EG	3,4	2,3	0,2	0,03-0,11								○		
	ZTCD02303-EG	3,4	2,3	0,3	0,03-0,11								○		
	ZTCD02402-EG	3,4	2,4	0,2	0,03-0,11								○		

● En stock ○ Sur demande

HC¹ Carbure revêtu
HW Carbure non revêtu

Support de serrage

QECD



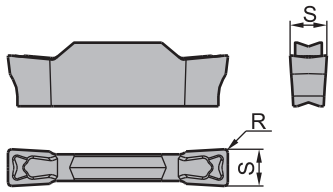
A428

Codification A398 Choix nuances A394 Info. techniques A501 Paramètres A456

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquettes de tronçonnage et gorges

Plaquette de gorge (double arête)



	ISO	La *max*	S±0.025	R±0.05	f	HC¹ (CVD) YBC252	HC¹ (CVD) YBC251	HC¹ (PVD) YBG105	HC¹ (PVD) YBG102	HC¹ (PVD) YB9320	HC¹ (PVD) YBG205	HC¹ (PVD) YBG202	HC¹ (PVD) YBG302	HW YD101	HW YD201
P						⊛	⊛			⊛	⊛	⊛	⊛		
M										⊛	⊛	⊛	⊛		
K															
N														●	⊛
S								●	●	⊛	⊛	⊛			
H															
	ZTED02502-EG	17	2,5	0,2	0,03-0,11								○		
	ZTED026502-EG	17	2,65	0,2	0,03-0,11								○		
	ZTED02702-EG	17	2,7	0,2	0,03-0,11								○		
	ZTED02703-EG	17	2,7	0,3	0,03-0,11								○		
	ZTED02802-EG	17	2,8	0,2	0,04-0,13								○		
	ZTED02803-EG	17	2,8	0,3	0,04-0,13								○		
	ZTED02804-EG	17	2,8	0,4	0,04-0,13								○		
	ZTED02903-EG	17	2,9	0,3	0,04-0,13								○		
	ZTFD03001-EG	17	3	0,1	0,04-0,13							○			
	ZTFD03002-EG	17	3	0,2	0,04-0,13								○		
	ZTFD03003-EG	17	3	0,3	0,04-0,13								○		
	ZTFD03203-EG	17	3,2	0,3	0,04-0,13								○		
	ZTFD0325024-EG	17	3,25	2,4	0,04-0,13								○		
	ZTFD03302-EG	17	3,3	0,2	0,04-0,13							○	○		
	ZTFD03303-EG	17	3,3	0,3	0,04-0,13								○		
	ZTFD03403-EG	17	3,4	0,3	0,04-0,13								○		
	ZTFD035-EG	17	3,5	0	0,04-0,13								○		
	ZTGD039602-EG	22	3,96	0,2	0,07-0,18								○		
	ZTGD04002-EG	22	4	0,2	0,07-0,18								○		
	ZTGD04003-EG	22	4	0,3	0,07-0,18								○		
	ZTGD04004-EG	22	4	0,4	0,07-0,18								○		
	ZTGD04008-EG	22	4	0,8	0,07-0,18							○			
	ZTGD04503-EG	22	4,5	0,3	0,07-0,18								○		
	ZTGD04505-EG	22	4,5	0,5	0,07-0,18								○		
	ZTGD04805-EG	22	4,8	0,5	0,1-0,24								○		
	ZTHD05003-EG	22	5	0,3	0,1-0,24								○		
	ZTHD05004-EG	22	5	0,4	0,1-0,24						○				
	ZTHD05008-EG	22	5	0,8	0,1-0,24							○			
	ZTHD05012-EG	22	5	0,12	0,1-0,24							○			
	ZTHD05202-EG	22	5,2	0,2	0,1-0,24								○		
	ZTHD052503-EG	22	5,25	0,3	0,1-0,24								○		
	ZTHD05508-EG	22	5,5	0,8	0,1-0,24								○		



● En stock ○ Sur demande

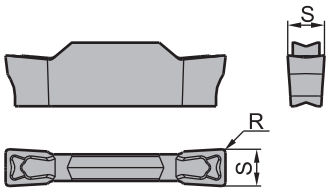
HC¹ Carbure revêtu
HW Carbure non revêtu

Codification > A398 Choix nuances > A394 Info. techniques > A501 Paramètres > A456

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquettes de tronçonnage et gorges

Plaquette de gorge (double arête)



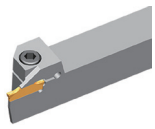
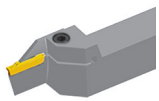
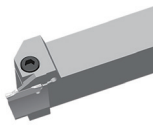
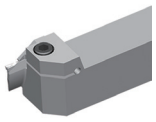
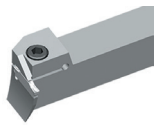
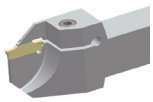
	HC¹ (CVD)						HC¹ (PVD)						HW	
P	⊛	⊛					⊛	⊛	⊛	⊛				
M							⊛	⊛	⊛	⊛				
K														
N													●	⊛
S							●	●	⊛	⊛	⊛			
H														

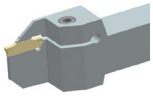
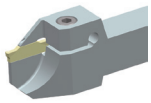
	ISO	La *max*	S±0.025	R±0.05	f	YBC252	YBC251	YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
	**ZTKD06004-EG**	22	6	0,4	0,12-0,29								○		
	ZTKD06504-EG	22	6,5	0,4	0,12-0,29								○		

● En stock ○ Sur demande

HC¹ Carbure revêtu
HW Carbure non revêtu

Support de serrage

QE*D*R/L	QF*D*R/L-H	QF*D*RR-H	QF*D*LL-H	QF*D*R/L-L	C***-Q*DR/L	QE*D*R/L-DGC
						
A425	A434	A436	A436	A439	A444	A446

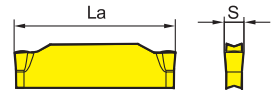
QE*D*R/L-DGSC	QE*D*R/L-SC
	
A448	A449

Codification A398 Choix nuances A394 Info. techniques A501 Paramètres A456

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquettes de tronçonnage et gorges

Plaquette de gorge (double arête)





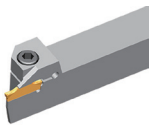
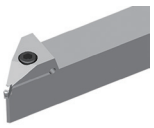
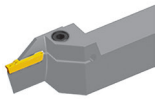
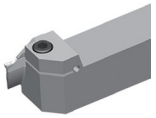
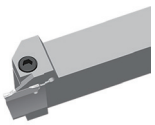
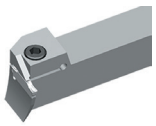
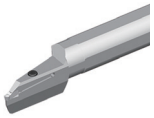
2 arêtes

	ISO	La *max*	S±0.10	f	YBC252	YBC251	YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
					HC¹ (CVD)		HC¹ (PVD)						HW	
P					⊛	⊛			⊛	⊛	⊛	⊛		
M									⊛	⊛	⊛	⊛		
K														
N													●	⊛
S							●	●	⊛	⊛	⊛			
H														
	**ZRED025-MG**	17,5	2,5	0,03-0,11							○	●		
	ZRFD03-MG	17	3	0,04-0,14					●			●		
	ZRGD04-MG	21	4	0,07-0,2		○				●	○	●		
	ZRHD05-MG	20	5	0,1-0,24							○	●		○
	ZRKD06-MG	19	6	0,12-0,29							○	●		

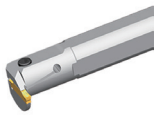
● En stock ○ Sur demande

HC¹ Carbure revêtu
HW Carbure non revêtu

Support de serrage

QE*D*R/L	QX*D*	QF*D*R/L-H	QF*D*LL-H	QF*D*RR-H	QF*D*R/L-L	C*X-Q*DR/L
						
A425	A429	A434	A436	A436	A439	A443

C***-Q*DR/L



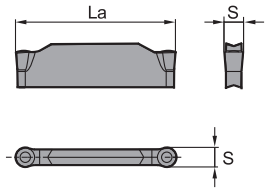
A444

Codification A398 Choix nuances A394 Info. techniques A501 Paramètres A456

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquettes de tronçonnage et gorges

Plaquette de gorge (double arête)



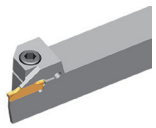
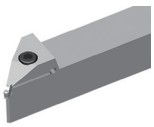
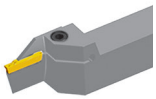
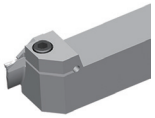
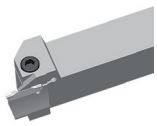
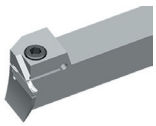
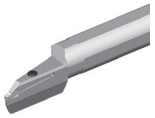
2 arêtes

		ISO	La *max*	S±0.025	f	YBC252	YBC251	YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
P						⊛	⊛			⊛	⊛	⊛	⊛		
M										⊛	⊛	⊛	⊛		
K															
N														●	⊛
S								●	●	⊛	⊛	⊛			
H															
		**ZRFD03-EG**	17	3	0,04-0,14					●			○		
		ZRGD04-EG	21	4	0,07-0,2					●					
		ZRHD05-EG	20	5	0,1-0,24					●			○		
		ZRKD06-EG	19	6	0,12-0,29					○					

● En stock ○ Sur demande

HC[1] Carbure revêtu
HW Carbure non revêtu

Support de serrage

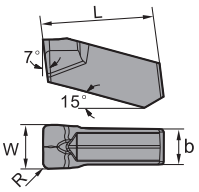
QE*D*R/L	**QX*D***	**QF*D*R/L-H**	**QF*D*LL-H**	**QF*D*RR-H**	**QF*D*R/L-L**	**C*X-Q*DR/L**
						
A425	A429	A434	A436	A436	A439	A443

C*-Q*DR/L**

A444

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquettes de tronçonnage et gorges



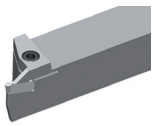
Plaquette de gorge (une arête)							HC¹ (CVD)						HC¹ (PVD)						HW	
						P														
						M														
						K														
						N													○	○
						S							○	○	○	○	○	○		
						H														
	ISO	R±0.1	W±0.05	b	L	f	YBC252	YBC251					YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
	**ZIMF304N-NM**	0,4	3	2,4	15,3	0,04-0,11							●							
	ZIMF406N-NM	0,6	4	3,2	15,3	0,07-0,16							●	○						
	ZIMF506N-NM	0,6	5	4	15,3	0,1-0,2							●	○						
	ZIMF608N-NM	0,8	6	4	15,3	0,12-0,23							●	○						

● En stock ○ Sur demande

HC¹ Carbure revêtu
HW Carbure non revêtu

Support de serrage

QE*S*R/L-N

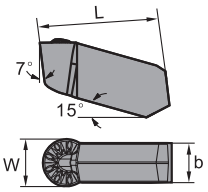


A430

Codification > A398 Choix nuances > A394 Info. techniques > A501 Paramètres > A456

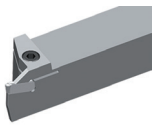
- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

Plaquettes de tronçonnage et gorges

Plaquette de gorge (une arête)							HC[1] (CVD)			HC[1] (PVD)						HW	
						P											
						M											
						K											
						N											
						S											
						H											
	ISO		W±0.05	b	L	f	YBC252	YBC251		YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
	**ZIGQ3N-NM**		3	2,4	15,3	0,04-0,11				●	○						
	ZIGQ4N-NM		4	3,2	15,3	0,07-0,16				●	○						
	ZIGQ5N-NM		5	4	15,3	0,1-0,2				●	○						
	ZIGQ6N-NM		6	5	15,3	0,13-0,24				●							

● En stock ○ Sur demande

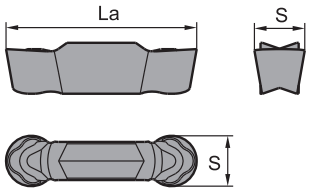
HC[1] Carbure revêtu
HW Carbure non revêtu

Support de serrage
QE*S*R/L-N

A430

Codification A398 Choix nuances A394 Info. techniques A501 Paramètres A456

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

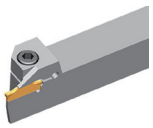
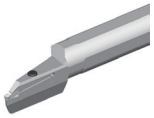
Plaquettes de tronçonnage et gorges

Plaquette de gorge (double arête)						HC[1] (CVD)				HC[1] (PVD)						HW	
					P	⊛	⊛				⊛	⊛	⊛	⊛			
					M						⊛	⊛	⊛	⊛			
					K												
					N											●	⊛
					S					●	●	⊛	⊛	⊛			
					H												
ISO		La *max*	S±0.025	f		YBC252	YBC251			YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
	**ZRKD06-LH**	19	6	0,12-0,23												○	
	ZRLD08-LH	22	8	0,14-0,26												○	

● En stock ○ Sur demande

HC[1] Carbure revêtu
HW Carbure non revêtu

Support de serrage

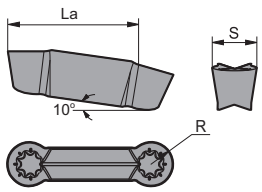
QE*D*R/L	C*X-Q*DR/L	C***-Q*DR/L
		
A425	A443	A444

Codification A398 Choix nuances A394 Info. techniques A501 Paramètres A456

● Bonnes conditions d'usinage
✲ Conditions d'usinage normales
✲ Conditions d'usinage défavorables

Plaquettes de tronçonnage et gorges

Plaquette de gorge (double arête)



		HC¹ (CVD)				HC¹ (PVD)						HW	
P		✲	✲				✲	✲	✲	✲			
M							✲	✲	✲	✲			
K													
N												●	✲
S						●	●	✲	✲	✲			
H													

	ISO	La *max*	S±0.025	f	YBC252	YBC251	YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
	**ZILD08-LC**	22	8	0,14-0,26									○	○

● En stock ○ Sur demande

HC¹ Carbure revêtu
HW Carbure non revêtu

Codification A398 Choix nuances A394 Info. techniques A501 Paramètres A456

Gorges et tronçonnage Codification – plaquettes de coupe – série QC

Plaquette tangentielle de gorge et tronçonnage avec arête droite

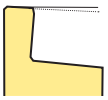
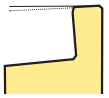
QC	22	R	300	–	R	03
1	2	3	4		5	6

1 – Gamme

2 – Longueur d'arête [mm]

Code	I.C
11	6,35
16	9,525
22	12,70

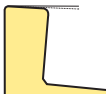
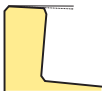
3 – Sens de coupe

Code	Description
R	 À droite
L	 À gauche

4 – Largeur de coupe [mm]

Code	Description
050	0,50
100	1,00
…	…
480	4,80

5 – Forme d'arête

Code	Description
R	 Rayon
C	 Chanfrein

6 – Rayon/chanfrein [mm]

Code	Description
005	0,05
02	0,2
03	0,3
04	0,4

Plaquette tangentielle de gorges et tronçonnage avec arête ronde

QC	22	R	300	–	R
1	2	3	4		5

1 – Gamme

2 – Longueur d'arête [mm]

Code	I.C
11	6,35
16	9,525
22	12,70

3 – Sens de coupe

Code	Description
R	 À droite
L	 À gauche

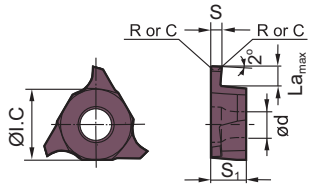
4 – Largeur de coupe [mm]

Code	Description
050	0,50
100	1,00
…	…
480	4,80

5 – Ronde

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquettes de tronçonnage et gorges



Version à droite

Plaquette de tournage/fraisage QC**		HC[1] (CVD)							HC[1] (PVD)						HW	
	P	◎	◎						◎	◎	◎	◎				
	M								◎	◎	◎	◎				
	K															
	N														○	◎
	S								○	○	◎	◎	◎			
	H															

	ISO	La *max*	S±0.025	R/C	ØI.C	S1	ød	f	YBC252	YBC251	YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
	QC11R120-R02	1,5	1,2	0,2	6,35	3,18	2,8	0,02-0,03						●				
	QC11L120-R02	1,5	1,2	0,2	6,35	3,18	2,8	0,02-0,03						●				
	QC11R125-R02	1,5	1,25	0,2	6,35	3,18	2,8	0,02-0,03						●				
	QC11L125-R02	1,5	1,25	0,2	6,35	3,18	2,8	0,02-0,03						●				
	QC11R145-R02	1,5	1,45	0,2	6,35	3,18	2,8	0,02-0,05						●				
	QC11L145-R02	1,5	1,45	0,2	6,35	3,18	2,8	0,02-0,05						●				
	QC11R150-R02	1,5	1,5	0,2	6,35	3,18	2,8	0,02-0,05						●				
	QC11L150-R02	1,5	1,5	0,2	6,35	3,18	2,8	0,02-0,05						●				
	QC11R200-R02	2	2	0,2	6,35	3,18	2,8	0,02-0,06						●				
	QC11L200-R02	2	2	0,2	6,35	3,18	2,8	0,02-0,06						●				
	QC11R225-R02	2	2,25	0,2	6,35	3,18	2,8	0,02-0,06						○				
	QC11L225-R02	2	2,25	0,2	6,35	3,18	2,8	0,02-0,06						○				
	QC16R075-R01	2	0,75	0,1	9,525	3,18	4,4	0,02-0,03						○				
	QC16L075-R01	2	0,75	0,1	9,525	3,18	4,4	0,02-0,03						○				
	QC16R080-R01	2	0,8	0,1	9,525	3,18	4,4	0,02-0,03						○				
	QC16R095-R01	2	0,95	0,1	9,525	3,18	4,4	0,02-0,03						○				
	**QC16L095-R01**	2	0,95	0,1	9,525	3,18	4,4	0,02-0,03						○				
	QC16L100-R01	2	1	0,1	9,525	3,18	4,4	0,02-0,03						○				
	QC16R110-R01	2	1,1	0,1	9,525	3,18	4,4	0,02-0,03						○				
	QC16L110-R01	2	1,1	0,1	9,525	3,18	4,4	0,02-0,03						●	○			
	QC16R115-R04	2	1,15	0,4	9,525	3,18	4,4	0,02-0,03						○				
	QC16R120-R01	2	1,2	0,1	9,525	3,18	4,4	0,02-0,03						○				
	QC16L120-R01	2	1,2	0,1	9,525	3,18	4,4	0,02-0,03						○				
	QC16R125-R02	2	1,25	0,2	9,525	3,18	4,4	0,02-0,03						○				
	QC16L125-R02	2	1,25	0,2	9,525	3,18	4,4	0,02-0,03						●				
	QC16R130-R02	2	1,3	0,2	9,525	3,18	4,4	0,02-0,06						○				
	QC16L130-R02	2	1,3	0,2	9,525	3,18	4,4	0,02-0,06						○				
	QC16R140-R02	2	1,4	0,2	9,525	3,18	4,4	0,02-0,06						○				
	QC16R145-R02	2	1,45	0,2	9,525	3,18	4,4	0,02-0,06						●				
	QC16L145-R02	2	1,45	0,2	9,525	3,18	4,4	0,02-0,06						●				
	QC16R150-R02	2	1,5	0,2	9,525	3,18	4,4	0,02-0,06						●				
	QC16L150-R02	2	1,5	0,2	9,525	3,18	4,4	0,02-0,06						○				
	QC16R160-R02	2	1,6	0,2	9,525	3,18	4,4	0,02-0,06						●				
	QC16L160-R02	2	1,6	0,2	9,525	3,18	4,4	0,02-0,06						●				

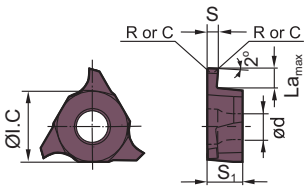
● En stock ○ Sur demande

HC[1] Carbure revêtu
HW Carbure non revêtu

Codification > A416 | Choix nuances > A394 | Info. techniques > A501 | Paramètres > A456

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquettes de tronçonnage et gorges



Version à droite

Plaquette de tournage/fraisage QC**		ISO	La *max*	S±0.025	R/C	ØI.C	S1	ød	f	HC¹ (CVD) YBC252	HC¹ (CVD) YBC251	HC¹ (PVD) YBG105	HC¹ (PVD) YBG102	HC¹ (PVD) YB9320	HC¹ (PVD) YBG205	HC¹ (PVD) YBG202	HC¹ (PVD) YBG302	HW YD101	HW YD201
P		QC16R165-R02	2	1,65	0,2	9,525	3,18	4,4	0,02-0,06						○				
M		QC16L165-R02	2	1,65	0,2	9,525	3,18	4,4	0,02-0,06						○				
K		QC16R170-R02	2	1,7	0,2	9,525	3,18	4,4	0,02-0,06						○				
N		QC16L170-R02	2	1,7	0,2	9,525	3,18	4,4	0,02-0,06						○				
S		QC16R175-R02	2	1,75	0,2	9,525	3,18	4,4	0,02-0,07						●				
H		QC16L175-R02	2	1,75	0,2	9,525	3,18	4,4	0,02-0,06						○				
		QC16R180-R02	2	1,8	0,2	9,525	3,18	4,4	0,02-0,07						○				
		QC16R185-R02	2,5	1,85	0,2	9,525	3,18	4,4	0,02-0,07						●				
		QC16L185-R02	2,5	1,85	0,2	9,525	3,18	4,4	0,02-0,07						○				
		QC16R200-R02	2,5	2	0,2	9,525	3,18	4,4	0,02-0,07						●				
		QC16L200-R02	2,5	2	0,2	9,525	3,18	4,4	0,02-0,07						●				
		QC16L210-R02	2,5	2,1	0,2	9,525	3,18	4,4	0,02-0,07						○				
		QC16L210-R05	2,5	2,1	0,5	9,525	3,18	4,4	0,02-0,07						○				
		QC16R220-R02	2,5	2,2	0,2	9,525	3,18	4,4	0,02-0,07						○				
		QC16L220-R02	2,5	2,2	0,2	9,525	3,18	4,4	0,02-0,07						○				
		QC16R250-R02	2,5	2,5	0,2	9,525	3,18	4,4	0,02-0,08						●	○			
		QC16L250-R02	2,5	2,5	0,2	9,525	3,18	4,4	0,02-0,08						●				
		QC16R300-R02	3	3	0,2	9,525	3,18	4,4	0,03-0,11						●				
		QC16L300-R02	3	3	0,2	9,525	3,18	4,4	0,03-0,11						●				
		QC22L100-R02	2	1	0,2	12,7	4,76	5,5	0,02-0,03						○				
		QC22R125-R02	2	1,25	0,2	12,7	4,76	5,5	0,02-0,03						●				
		QC22L125-R02	2	1,25	0,2	12,7	4,76	5,5	0,02-0,03						○				
		QC22R145-R02	2	1,45	0,2	12,7	4,76	5,5	0,02-0,06						○				
		QC22L145-R02	2	1,45	0,2	12,7	4,76	5,5	0,02-0,06						○				
		QC22R150-R02	3,5	1,5	0,2	12,7	4,76	5,5	0,02-0,06						○				
		QC22L150-R02	3,5	1,5	0,2	12,7	4,76	5,5	0,02-0,06						○				
		QC22R175-R02	3,5	1,75	0,2	12,7	4,76	5,5	0,02-0,06						●				
		QC22L175-R02	3,5	1,75	0,2	12,7	4,76	5,5	0,02-0,06						○				
		QC22R185-R02	3,5	1,85	0,2	12,7	4,76	5,5	0,02-0,07						●				
		QC22L185-R02	3,5	1,85	0,2	12,7	4,76	5,5	0,02-0,07						○				
		QC22R195-R02	3,5	1,95	0,2	12,7	4,76	5,5	0,02-0,07						○				
		QC22R200-R02	3,5	2	0,2	12,7	4,76	5,5	0,02-0,07						○				
		QC22L200-R02	3,5	2	0,2	12,7	4,76	5,5	0,02-0,07						○				
		QC22R225-R02	3,5	2,25	0,2	12,7	4,76	5,5	0,02-0,07						○				

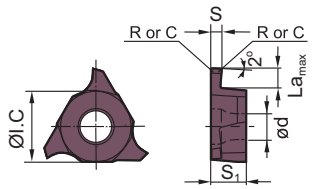
● En stock ○ Sur demande

HC¹ Carbure revêtu
HW Carbure non revêtu

Codification A416 Choix nuances A394 Info. techniques A501 Paramètres A456

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

Plaquettes de tronçonnage et gorges



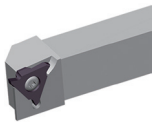
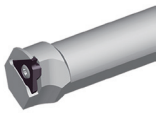
Version à droite

Plaquette de tournage/fraisage QC**		HC¹ (CVD)						HC¹ (PVD)						HW	
		P						P							
		M						M							
		K						K							
		N						N						N	
		S						S							
		H						H							
	ISO	La *max*	S±0.025	R/C	ØI.C	S1	ød	f	YBC252	YBC251	YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
	QC22R230-R02	3,5	2,3	0,2	12,7	4,76	5,5	0,02-0,07						●				
	QC22L230-R02	3,5	2,3	0,2	12,7	4,76	5,5	0,02-0,07						○				
	QC22R250-R03	4	2,5	0,3	12,7	4,76	5,5	0,02-0,08						●				
	QC22L250-R03	4	2,5	0,3	12,7	4,76	5,5	0,02-0,08						○				
	QC22R265-R03	4	2,65	0,3	12,7	4,76	5,5	0,02-0,08						●				
	QC22L265-R03	4	2,65	0,3	12,7	4,76	5,5	0,02-0,08						●				
	QC22R280-R03	4	2,8	0,3	12,7	4,76	5,5	0,02-0,08						●				
	QC22L280-R03	4	2,8	0,3	12,7	4,76	5,5	0,02-0,08						○				
	QC22R300-R03	4	3	0,3	12,7	4,76	5,5	0,03-0,11						○				
	QC22L300-R03	4	3	0,3	12,7	4,76	5,5	0,03-0,11						○				
	QC22R320-R03	4	3,2	0,3	12,7	4,76	5,5	0,03-0,11						○				
	**QC22L320-R03**	4	3,2	0,3	12,7	4,76	5,5	0,03-0,11						○				
	QC22R330-R03	4	3,3	0,3	12,7	4,76	5,5	0,03-0,11						○				
	QC22L330-R03	4	3,3	0,3	12,7	4,76	5,5	0,03-0,11						○				
	QC22R350-R03	5	3,5	0,3	12,7	4,76	5,5	0,05-0,13						○				
	QC22L350-R03	5	3,5	0,3	12,7	4,76	5,5	0,05-0,13						○				
	QC22R400-R04	5	4	0,4	12,7	4,76	5,5	0,05-0,14						○				
	QC22L400-R04	5	4	0,4	12,7	4,76	5,5	0,05-0,14						●				
	QC22R430-R04	5	4,3	0,4	12,7	4,76	5,5	0,05-0,14						○				
	QC22L430-R04	5	4,3	0,4	12,7	4,76	5,5	0,05-0,14						○	○			
	QC22R450-R04	5	4,5	0,4	12,7	4,76	5,5	0,06-0,18						○				
	QC22L450-R04	5	4,5	0,4	12,7	4,76	5,5	0,06-0,18						○				○
	QC22R480-R04	5	4,8	0,4	12,7	5,06	5,5	0,06-0,18						○				
	QC22L480-R04	5	4,8	0,4	12,7	5,06	5,5	0,08-0,2						○				

● En stock ○ Sur demande

HC¹ Carbure revêtu
HW Carbure non revêtu

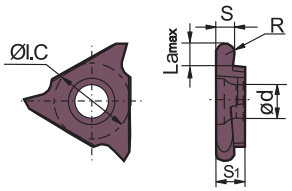
Support de serrage

GQCR/L	S***-QC**R/L
	
A453	A454

Codification A416 Choix nuances A394 Info. techniques A501 Paramètres A456

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquettes de tronçonnage et gorges



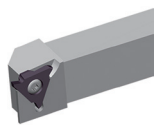
Version à droite

Plaquette de tournage/fraisage QC**									HC¹ (CVD)			HC¹ (PVD)						HW	
	ISO	La *max*	S±0.025	R/C	ØI.C	S1	ød	f	YBC252	YBC251		YBG105	YBG102	YB9320	YBG205	YBG202	YBG302	YD101	YD201
P									◉	◉				◉	◉	◉	◉		
M														◉	◉	◉	◉		
K																			
N																		●	◉
S												●	●	◉	◉	◉			
H																			
	QC16R100R	2	1	0,5	12,7	3,18	4,4	0,02-0,03							○				
	QC16R120R	2	1,2	0,6	12,7	3,18	4,4	0,02-0,03							○				
	QC16R150R	2	1,5	0,75	12,7	3,18	4,4	0,02-0,06							○				
	QC16R200R	2,5	2	1	12,7	3,18	4,4	0,02-0,07							●				
	QC16L200R	2,5	2	1	12,7	3,18	4,4	0,02-0,07							○				
	QC16R250R	2,5	2,5	1,25	12,7	3,18	4,4	0,02-0,08							○				
	QC16L280R	2,5	2,8	1,4	12,7	3,18	4,4	0,02-0,08							○				
	QC16R300R	2,5	3	1,5	12,7	3,18	4,4	0,03-0,11							●				
	QC16L300R	2,5	3	1,5	12,7	3,18	4,4	0,03-0,11							●				
	QC22R100R	2	1	0,5	12,7	4,76	5,5	0,02-0,03							●				
	QC22L100R	2	1	0,5	12,7	4,76	5,5	0,02-0,03							○	○			
	QC22R150R	3,5	1,5	0,75	12,7	4,76	5,5	0,02-0,06							●				
	QC22L150R	3,5	1,5	0,75	12,7	4,76	5,5	0,02-0,06							●	○			
	QC22R170R	3,5	1,7	0,85	12,7	4,76	5,5	0,02-0,06							○				
	QC22R200R	3,5	2	1	12,7	4,76	5,5	0,02-0,07							○				
	QC22L200R	3,5	2	1	12,7	4,76	5,5	0,02-0,07							○				
	QC22R250R	4	2,5	1,25	12,7	4,76	5,5	0,02-0,08							●				
	QC22L250R	4	2,5	1,25	12,7	4,76	5,5	0,02-0,08							●				
	QC22R300R	4	3	1,5	12,7	4,76	5,5	0,03-0,11							●				
	QC22L300R	4	3	1,5	12,7	4,76	5,5	0,03-0,11							●				
	QC22R320R	4	3,2	1,6	12,7	4,76	5,5	0,03-0,11							○				
	QC22R400R	5	4	2	12,7	4,76	5,5	0,05-0,14							●				
	QC22L400R	5	4	2	12,7	4,76	5,5	0,05-0,14							●				

● En stock ○ Sur demande

HC¹ Carbure revêtu
HW Carbure non revêtu

Support de serrage

GQCR/L	S***-QC**R/L
	
A453	A454

Codification A416 Choix nuances A394 Info. techniques A501 Paramètres A456

Notes

Porte-outils de gorges extérieur

Q	F	G	D	2525	R	22	(S)	C	–	(130)	(H)
1	2	3	4	5	6	7	8	9		10	11

1 Porte-outils pour gorges et tronçonnage

2 Application

Code	Description
E	Usinage extérieur
F	Usinage frontal

3 Largeur plaquette [mm]

Porte-outils/largeur d'arête

Code	Description
A	1,5
B	2,0
E	2,5
F	3,0
G	4,0
H	5,0
K	6,0
L	8,0

4 Nombre d'arêtes

Code	Description
S	Simple
D	Double

5 Section transversale de porte-outils [mm] x [mm]

6 Version

Code	Description
R	À droite
L	À gauche
N	Neutre

7 Profondeur de coupe max. [mm]

8 Extra

Code	Description
S	Porte-outils de tournage long
DG	DG Porte-lame renforcé, faibles profondeurs
DGS	DGS Porte-lame renforcé, grandes profondeurs

9 Arrosage interne

10 Diamètre min. de la pièce pour première gorge axiale [mm]

11 Orientation de la coupe

Code	Description
H	0°
L	90°

Barres d'alésage

C	32	S	–	Q	G	D	R	11	–	44
1	2	3		4	5	6	7	8		9

1 – Système de serrage

2 – Diamètre [mm]

3 – Longueur [mm]

Code	Description
Q	180
R	200
S	250
X	320

4 – Porte-outils pour gorges

5 – Largeur plaquette [mm]

Porte-outils/largeur d'arête

Code	Description
B	2.0
E	2.5
F	3.0
G	4.0
H	5.0
K	6.0
L	8.0

6 – Nombre d'arêtes

Code	Description
S	Simple
D	Double

7 – Version

Code	Description
R	À droite
L	À gauche
N	Neutre

8 – Profondeur de coupe max. [mm]

9 – Diamètre interne min. de la pièce [mm]

Gorges et tronçonnage Codification – porte-outils

Lame

Q	E	G	D	32	N	(–1)
1	2	3	4	5	6	7

1 Porte-outils pour gorges et tronçonnage

2 Application

Code	Description
E	Usinage extérieur

3 Largeur plaquette [mm]

Porte-outils/largeur d'arête

Code	Description
B	2,0
E	2,5
F	3,0
G	4,0
H	5,0
K	6,0
L	8,0

4 Nombre d'arêtes

Code	Description
S	Simple
D	Double

5 Hauteur de lame [mm]

6 Version

Code	Description
R	À droite
L	À gauche
N	Neutre

7 Hauteur de lame –1 mm

Bloc de serrage

QZ	S	32	32
1	2	3	4

1 Bloc de serrage

2 Nombre d'arêtes

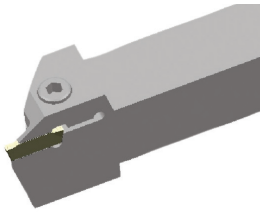
Code	Description
S	Simple
D	Double

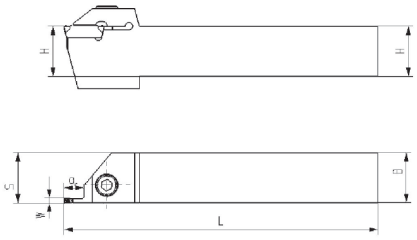
3 Hauteur de face d'attaque [mm]

4 Hauteur de plaquette [mm]

Porte-outil de gorge (extérieur)

QE**R/L





Article	✲	Stock		Dimensions (mm)					Plaquettes
		R	L	HxB	L	S	W	ar_{max}	
QEBD1616R/L04		○	○	16x16	150	16,17	2	4	Z*BD**
QEBD2020R/L07		○	○	20x20	150	20,17	2	7	Z*BD**
QEED1616R/L10		●	●	16x16	125	15	2,5	10	Z*ED**
QEED1616R/L17		●	●	16x16	125	15	2,5	17	Z*ED**
QEED2020R/L17		●	●	20x20	125	19	2,5	17	Z*ED**
QEED2020R/L10		●	●	20x20	150	10	2,5	10	Z*ED**
QEED2525R/L10		●	●	25x25	150	19	2,5	10	Z*ED**
QEED2525R/L17		●	●	25x25	150	19	2,5	17	Z*ED**
QEFD1616R/L10		●	●	16x16	125	14,8	3	10	Z*FD**
QEFD1616R/L17		●	●	16x16	125	14,8	3	17	Z*FD**
QEFD2020R/L10		●	●	20x20	125	18,8	3	10	Z*FD**
QEFD2020R/L17		●	●	20x20	125	18,8	3	17	Z*FD**
QEFD2525R/L10		●	●	25x25	150	23,8	3	10	Z*FD**
QEFD2525R/L17		●	●	25x25	150	23,8	3	17	Z*FD**
QEGD2020R/L13		●	●	20x20	140	18,5	4	13	Z*GD**
QEGD2020R/L22		●	●	20x20	140	18,5	4	22	Z*GD**
QEGD2525R/L13		●	●	25x25	150	23,5	4	13	Z*GD**
QEGD2525R/L22		●	●	25x25	150	23,5	4	22	Z*GD**
QEGD3232R/L13		●	●	32x32	170	30,5	4	13	Z*GD**
QEGD3232R/L22		●	●	32x32	170	30,5	4	22	Z*GD**
QEHD2525R/L13		●	●	25x25	150	23	5	13	Z*HD**
QEHD2525R/L22		●	●	25x25	150	23	5	22	Z*HD**
QEHD3232R/L13		●	●	32x32	170	30	5	13	Z*HD**
QEHD3232R/L22		●	●	32x32	170	30	5	22	Z*HD**
QEKD2525R/L13		●	●	25x25	150	22,6	6	13	Z*KD**
QEKD2525R/L22		●	●	25x25	150	22,6	6	22	Z*KD**
QEKD3232R/L13		●	●	32x32	170	29,6	6	13	Z*KD**
QEKD3232R/L22		●	●	32x32	170	29,6	6	22	Z*KD**

● En stock ○ Sur demande

✲ Avec arrosage interne

Codification A422 Choix nuances A394 Info. techniques A501 Paramètres A456

Porte-outil de gorge (extérieur)

Pièces détachées

	Plaquette	Z*BD**	Z*ED**	Z*ED**	Z*FD**	Z*FD**	Z*GD**	Z*HD**	Z*KD**
	H	16-20	16	20-32	16	20-32	20-32	20-32	20-32
	Vis	GB70-85-M5×16 (4,0 Nm)	GB70-85-M5×20 (4,0 Nm)	GB70-85-M6×20 (7,0 Nm)	GB70-85-M5×20 (4,0 Nm)	GB70-85-M6×20 (7,0 Nm)	GB70-85-M6×20 (7,0 Nm)	GB70-85-M6×20 (7,0 Nm)	GB70-85-M6×20 (7,0 Nm)
	Clé	WH40L	WH40L	WH50L	WH40L	WH50L	WH50L	WH50L	WH50L

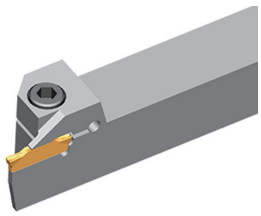
Plaquette

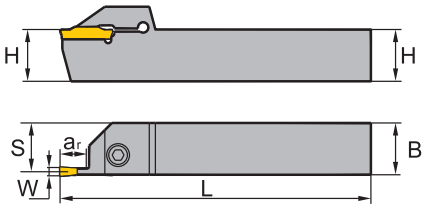
						
A399	A400	A401	A404	A407	A410	A411
						
A414						

Codification A422 Choix nuances A394 Info. techniques A501 Paramètres A456

Porte-outil de gorge (extérieur)

QE*SN30







Article	✲	Stock	Dimensions (mm)					Plaquettes
			HxB	L	S	W	ar_{max}	
QEHS2525N30		●	25x25	150	12,5	5	30	Z*HS**
QEHS3232N30		●	32x32	170	16	5	30	Z*HS**
QEKS2525N30		○	25x25	150	12,5	6	30	Z*KS**
QEKS3232N30		○	32x32	170	16	6	30	Z*KS**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**Z*HS****	**Z*KS****
	H	**25-32**	**25-32**
	Vis	GB70-85-M6×20 (7,0 Nm)	GB70-85-M6×20 (7,0 Nm)
	Clé	WH50L	WH50L

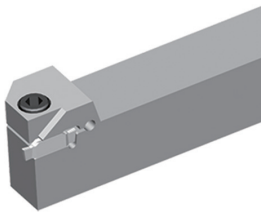
Plaquette

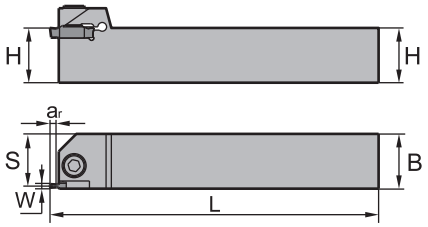
A402	A405	A406

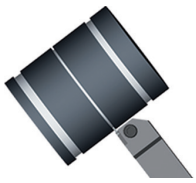
Codification A422 Choix nuances A394 Info. techniques A501 Paramètres A456

Porte-outil de gorge (extérieur)

QECDR/L







Version à droite

Article	✻	Stock R	Stock L	Dimensions (mm) HxB	L	S	W	ar_{max}	Plaquettes
QECD1616R/L025		○	○	16x16	125	14,75		2,5	Z*CD**
QECD2020R/L025		○	○	20x20	125	18,75		2,5	Z*CD**
QECD2525R/L025		○	○	25x25	150	23,75		2,5	Z*CD**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	Z*CD**	Z*CD**
	H	16	20-32
	Vis	GB70-85-M5×20 (4,0 Nm)	GB70-85-M6×20 (7,0 Nm)
	Clé	WH40L	WH50L

Plaquette

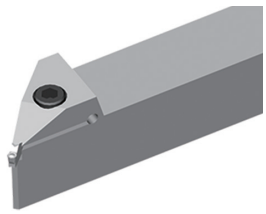


A407

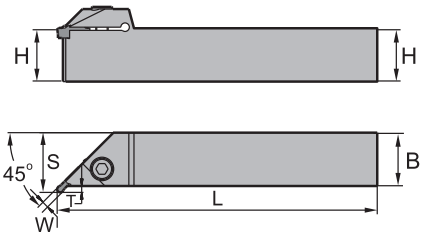
Codification A422 Choix nuances A394 Info. techniques A501 Paramètres A456

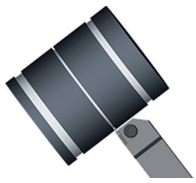
Porte-outil de gorge (extérieur)

QX*DR/L



Version à droite





Article	✻	Stock		Dimensions (mm)					Plaquettes
		R	L	HxB	L	S	W	ar_{max}	
QXFD2020R/L03-45		○	○	20x20	125	23	3	3	Z*FD**
QXFD2525R/L03-45		●	●	25x25	150	28	3	3	Z*FD**
QXFD3232R/L03-45		○	○	32x32	170	35	3	3	Z*FD**
QXGD2020R/L03-45		○	○	20x20	125	23	4	3	Z*GD**
QXGD2525R/L03-45		○	○	25x25	150	28	4	3	Z*GD**
QXGD3232R/L03-45		○	○	32x32	170	35	4	3	Z*GD**
QXHD2020R/L04-45		○	○	20x20	125	24	5	4	Z*HD**
QXHD2525R/L04-45		○	○	25x25	150	29	5	4	Z*HD**
QXHD3232R/L04-45		○	○	32x32	170	36	5	4	Z*HD**
QXKD2020R/L04-45		○	○	20x20	125	24	6	4	Z*KD**
QXKD2525R/L04-45		○	○	25x25	150	29	6	4	Z*KD**
QXKD3232R/L04-45		○	○	32x32	170	36	6	4	Z*KD**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**Z*FD****	**Z*GD****	**Z*HD****	**Z*KD****
	H	**20-32**	**20-32**	**20-32**	**20-32**
	Vis	GB70-85-M6×20 (7,0 Nm)	GB70-85-M6×20 (7,0 Nm)	GB70-85-M6×20 (7,0 Nm)	GB70-85-M6×20 (7,0 Nm)
	Clé	WH50L	WH50L	WH50L	WH50L

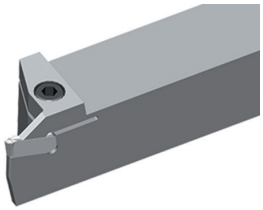
Plaquette

	
A410	A411

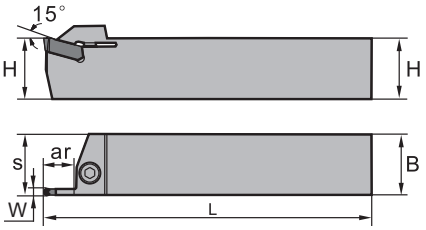
Codification A422 Choix nuances A394 Info. techniques A501 Paramètres A456

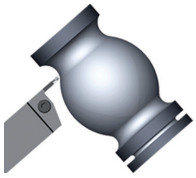
Porte-outil de gorge (extérieur)

QE*SR/L



Version à droite





Article	✻	Stock		Dimensions (mm)					Plaquettes
		R	L	HxB	L	S	W	ar_{max}	
QEFS2525R/L12-3N		○	○	25x25	150	25,3	3	12	ZI**
QEGS2525R/L12-4N		○	○	25x25	150	25,3	4	12	ZI**
QEHS2525R/L12-5N		○	○	25x25	150	25,4	5	12	ZI**
QEKS2525R/L12-6N		○	○	25x25	150	25,4	6	12	ZI**
QEFS3232R/L22-3N		○	○	32x32	170	32,3	3	22	ZI**
QEGS3232R/L22-4N		○	○	32x32	170	32,3	4	22	ZI**
QEHS3232R/L22-5N		○	○	32x32	170	32,4	5	22	ZI**
QEKS3232R/L22-6N		○		32x32	170	32,4	6	22	ZI**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	ZI**
	H	**25-32**
	Vis	GB70-85-M6×20 (7,0 Nm)
	Clé	WH50L

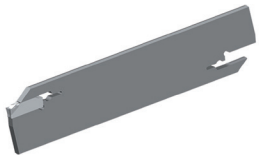
Plaquette

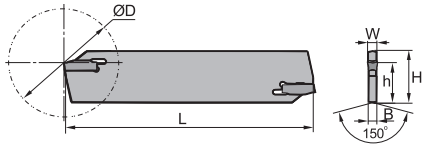
	
A412	A413

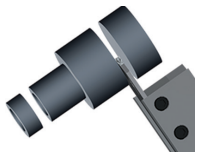
Codification A422 Choix nuances A394 Info. techniques A501 Paramètres A456

Lame de tronçonnage

QE*S**N







Article	✻	Stock	Dimensions (mm)						Plaquettes
			H	L	h	B	W	ØDmax	
QEES26N		●	26	110	19	2	2,5	60	ZPES**
QEES32N		●	32	150	24,6	2	2,5	100	ZPES**
QEFS26N		●	26	110	19	2,4	3	60	ZPFS**
QEFS32N		●	32	150	24,6	2,4	3	100	ZPFS**
QEGS26N		●	26	110	19	3,2	4	70	ZPGS**
QEGS32N		●	32	150	24,6	3,2	4	120	ZPGS**
QEHS26N		●	26	110	19	4	5	70	ZPHS**
QEHS32N		●	32	150	24,6	4	5	120	ZPHS**
QEKS26N		●	26	110	19	5	6	70	ZPKS**
QEKS32N		●	32	150	24,6	5	6	120	ZPKS**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**ZPES****	**ZPFS****	**ZPGS****	**ZPHS****	**ZPKS****
	H	**26-32**	**26-32**	**26-32**	**26-32**	**26-32**
	Clé	W50RL	W50RL	W50RL	W50RL	W50RL

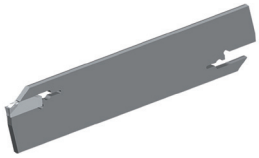
Plaquette

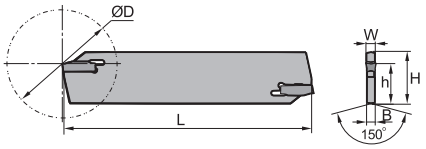
			
A402	A403	A405	A406

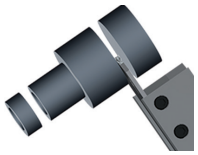
Codification A422 Choix nuances A394 Info. techniques A501 Paramètres A456

Lame de tronçonnage

QE*S**N-1







Article	✻	Stock	Dimensions (mm)						Plaquettes
			H	L	h	B	W	ØDmax	
QEES26N-1		●	26	110	19	2	2,5	60	ZPES**
QEES32N-1		●	32	150	24,6	2	2,5	100	ZPES**
QEFS26N-1		●	26	110	19	2,4	3	60	ZPFS**
QEFS32N-1		●	32	150	24,6	2,4	3	100	ZPFS**
QEGS26N-1		●	26	110	19	3,2	4	70	ZPGS**
QEGS32N-1		●	32	150	24,6	3,2	4	120	ZPGS**

● En stock ○ Sur demande

✻ Avec arrosage interne

Uniquement compatible avec les blocs de serrage des systèmes disponibles chez d'autres fabricants.

Pièces détachées

	Plaquette	**ZPES****	**ZPFS****	**ZPGS****
	H	**26-32**	**26-32**	**26-32**
	Clé	W50X	W50X	W50X

La clé W50X doit être commandée séparément.

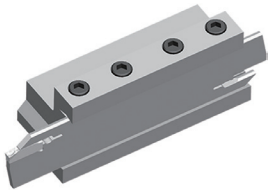
Plaquette

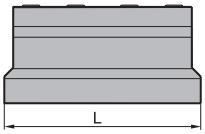
		
A402	A403	A406

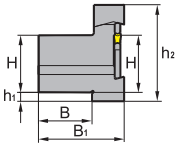
Codification A422 Choix nuances A394 Info. techniques A501 Paramètres A456

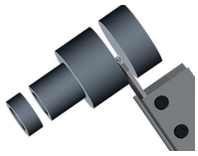
Porte-lame (extérieur)

QZS*









Article	✲	Stock	Dimensions (mm)						Plaquettes
			H	L	h_1	h_2	B	B1	
QZS2026		●	20	86	10	46,6	19	38	QE**26
QZS2526		●	25	86	5	46,6	23	42	QE**26
QZS3226		○	32	86	3	51,6	30	48	QE**26
QZS2032		●	20	110	13	50	19	38	QE**32
QZS2532		●	25	110	8	50	23	42	QE**32
QZS3232		●	32	110	5	54	30	48	QE**32

● En stock ○ Sur demande

✲ Avec arrosage interne

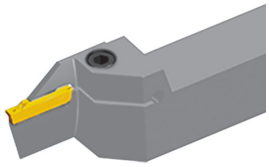
Pièces détachées

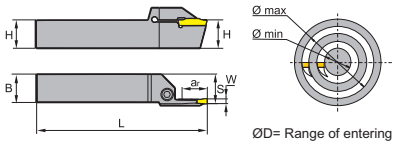
	Plaquette	**QE**26**	**QE**32**
	H	**20-32**	**20-32**
	Bride	QZC26	QZC32
	Vis	GB70-85-M6×20 (7,0 Nm)	GB70-85-M6×20 (7,0 Nm)
	Clé	W50RL	W50RL

Codification A422 Choix nuances A394 Info. techniques A501 Paramètres A456

Porte-outil de gorge (axial)

QF**R/L







Version à gauche

Article	*	Stock R	Stock L	Dimensions (mm) HxB	L	S	W	ar_{max}	ØD (min-max)	Plaquettes
QFFD2020R/L7-48H		○	○	20x20	150	21	3	7	48-66	Z*FD**
QFFD2020R/L7-60H		○	○	20x20	150	21	3	7	60-80	Z*FD**
QFFD2020R/L7-74H		○	○	20x20	150	21	3	7	74-110	Z*FD**
QFFD2020R/L7-100H		○	○	20x20	150	21	3	7	100-150	Z*FD**
QFFD2020R/L10-48H		○	○	20x20	150	21	3	10	48-66	Z*FD**
QFFD2020R/L10-60H		○	○	20x20	150	21	3	10	60-80	Z*FD**
QFFD2020R/L10-74H		○	○	20x20	150	21	3	10	74-110	Z*FD**
QFFD2020R/L10-100H		○	○	20x20	150	21	3	10	100-150	Z*FD**
QFFD2525R/L10-48H		●	●	25x25	150	26	3	10	48-66	Z*FD**
QFFD2525R/L10-60H		●	●	25x25	150	26	3	10	60-80	Z*FD**
QFFD2525R/L10-74H		●	●	25x25	150	26	3	10	74-110	Z*FD**
QFFD2525R/L10-100H		●	●	25x25	150	26	3	10	100-150	Z*FD**
QFFD2525R/L17-48H		●	●	25x25	150	26	3	17	48-66	Z*FD**
QFFD2525R/L17-60H		●	●	25x25	150	26	3	17	60-80	Z*FD**
QFFD2525R/L17-74H		●	●	25x25	150	26	3	17	74-110	Z*FD**
QFFD2525R/L17-100H		●	●	25x25	150	26	3	17	100-150	Z*FD**
QFGD2020R/L10-52H		○	○	20x20	150	21	4	10	52-72	Z*GD**
QFGD2020R/L10-64H		○	○	20x20	150	21	4	10	64-100	Z*GD**
QFGD2020R/L10-90H		○	○	20x20	150	21	4	10	90-140	Z*GD**
QFGD2020R/L10-130H		○	○	20x20	150	21	4	10	130-230	Z*GD**
QFGD2020R/L15-52H		○	○	20x20	150	21	4	15	52-72	Z*GD**
QFGD2020R/L15-64H		○	○	20x20	150	21	4	15	64-100	Z*GD**
QFGD2020R/L15-90H		○	○	20x20	150	21	4	15	90-140	Z*GD**
QFGD2020R/L15-130H		○	○	20x20	150	21	4	15	130-230	Z*GD**
QFGD2525R/L13-52H		●	●	25x25	150	26	4	13	52-72	Z*GD**
QFGD2525R/L13-64H		●	●	25x25	150	26	4	13	64-100	Z*GD**
QFGD2525R/L13-90H		●	●	25x25	150	26	4	13	90-140	Z*GD**
QFGD2525R/L13-130H		●	●	25x25	150	26	4	13	130-230	Z*GD**
QFGD2525R/L22-52H		●	●	25x25	150	26	4	22	52-72	Z*GD**
QFGD2525R/L22-64H		●	●	25x25	150	26	4	22	64-100	Z*GD**
QFGD2525R/L22-90H		●	●	25x25	150	26	4	22	90-140	Z*GD**
QFGD2525R/L22-130H		●	●	25x25	150	26	4	22	130-230	Z*GD**
QFHD2525R/L13-58H		●	●	25x25	150	26	5	13	58-96	Z*HD**
QFHD2525R/L13-86H		●	●	25x25	150	26	5	13	86-140	Z*HD**
QFHD2525R/L13-130H		●	●	25x25	150	26	5	13	130-200	Z*HD**
QFHD2525R/L13-185H		●	●	25x25	150	26	5	13	185-400	Z*HD**

Codification A422 | Choix nuances A394 | Info. techniques A501 | Paramètres A456

Article	✻	Stock		Dimensions (mm)						Plaquettes
		R	L	HxB	L	S	W	ar_{max}	ØD (min-max)	
QFHD2523R/L16-44H		○		25x23	150		5	16	44-52	Z*HD**
QFHD2525R/L22-58H		●	●	25x25	150	26	5	22	58-96	Z*HD**
QFHD2525R/L22-86H		●	●	25x25	150	26	5	22	86-140	Z*HD**
QFHD2525R/L22-130H		●	●	25x25	150	26	5	22	130-200	Z*HD**
QFHD2525R/L22-185H		●	●	25x25	150	26	5	22	185-400	Z*HD**
QFKD2525R/L13-60H		●	●	25x25	150	26	6	13	60-100	Z*KD**
QFKD2525R/L13-88H		○	●	25x25	150	26	6	13	88-180	Z*KD**
QFKD2525R/L13-160H		●	●	25x25	150	26	6	13	160-400	Z*KD**
QFKD2525R/L20-45H			○	25x25	150		6	20	45-90	Z*KD**
QFKD2525R/L22-60H		●	●	25x25	150	26	6	22	60-100	Z*KD**
QFKD2525R/L22-88H		●	●	25x25	150	26	6	22	88-180	Z*KD**
QFKD2525R/L22-160H		●	●	25x25	150	26	6	22	160-400	Z*KD**
QFKD2525R/L30-88H		●		25x25	150		6	30	88-180	Z*KD**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**Z*FD****	**Z*GD****	**Z*HD****	**Z*KD****
	H	**20-25**	**20-25**	**20-25**	**20-25**
	Vis	GB70-85-M6×20 (7,0 Nm)	GB70-85-M6×20 (7,0 Nm)	GB70-85-M6×20 (7,0 Nm)	GB70-85-M6×20 (7,0 Nm)
	Clé	W50RL	W50RL	W50RL	W50RL

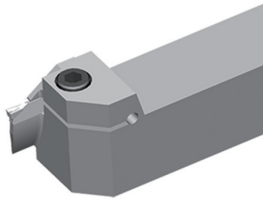
Plaquette

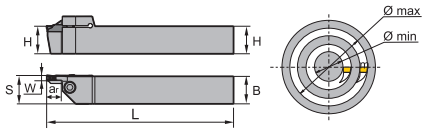
					
A399	A400	A404	A407	A410	A411

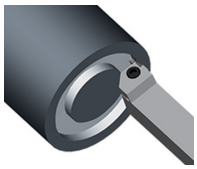
Codification A422 Choix nuances A394 Info. techniques A501 Paramètres A456

Porte-outil de gorge (axial)

QF**RR/LL







Version LL

Article	*	Stock R	Stock L	Dimensions (mm) HxB	L	S	W	ar_{max}	ØD (min-max)	Plaquettes
QFFD2020LL10-48H			○	20x20	150	21	3	10	48-66	Z*FD**
QFFD2020RR10-48H		○		20x20	150	21	3	10	48-66	Z*FD**
QFFD2020RR10-60H		○		20x20	150	21	3	10	60-80	Z*FD**
QFFD2020RR10-74H		○		20x20	150	21	3	10	74-110	Z*FD**
QFFD2525LL10-48H			●	25x25	150	26	3	10	48-66	Z*FD**
QFFD2525RR10-48H		○		25x25	150	26	3	10	48-66	Z*FD**
QFFD2525LL10-60H			○	25x25	150	26	3	10	60-80	Z*FD**
QFFD2525RR10-60H		○		25x25	150	26	3	10	60-80	Z*FD**
QFFD2525LL10-74H			○	25x25	150	26	3	10	74-110	Z*FD**
QFFD2525RR10-74H		○		25x25	150	26	3	10	74-110	Z*FD**
QFFD2525LL10-100H			○	25x25	150	26	3	10	100-150	Z*FD**
QFFD2525RR10-100H		○		25x25	150	26	3	10	100-150	Z*FD**
QFFD2525LL17-48H			●	25x25	150	26	3	17	48-66	Z*FD**
QFFD2525RR17-48H		○		25x25	150	26	3	17	48-66	Z*FD**
QFFD2525LL17-60H			○	25x25	150	26	3	17	60-80	Z*FD**
QFFD2525RR17-60H		○		25x25	150	26	3	17	60-80	Z*FD**
QFFD2525LL17-74H			○	25x25	150	26	3	17	74-110	Z*FD**
QFFD2525RR17-74H		○		25x25	150	26	3	17	74-110	Z*FD**
QFFD2525LL17-100H			○	25x25	150	26	3	17	100-150	Z*FD**
QFFD2525RR17-100H		○		25x25	150	26	3	17	100-150	Z*FD**
QFGD2020LL10-52H			○	20x20	150	21	4	10	52-72	Z*GD**
QFGD2020RR10-52H		○		20x20	150	21	4	10	52-72	Z*GD**
QFGD2020LL15-52H			○	20x20	150	26	4	15	52-72	Z*GD**
QFGD2020RR15-52H		○		20x20	150	26	4	15	52-72	Z*GD**
QFGD2020LL15-90H			○	20x20	150	26	4	15	90-140	Z*GD**
QFGD2020RR15-90H		○		20x20	150	26	4	15	90-140	Z*GD**
QFGD2020RR15-130H		○		20x20	150	26	4	15	130-230	Z*GD**
QFGD2525RR13-52H		●		25x25	150	21	4	13	52-72	Z*GD**
QFGD2525LL13-64H			●	25x25	150	21	4	13	64-100	Z*GD**
QFGD2525RR13-64H		○		25x25	150	21	4	13	64-100	Z*GD**
QFGD2525LL13-130H			●	25x25	150	26	4	13	130-230	Z*GD**
QFGD2525RR13-130H		○		25x25	150	21	4	13	130-230	Z*GD**
QFGD2525LL22-52H			○	25x25	150	26	4	22	52-72	Z*GD**
QFGD2525RR22-52H		○		25x25	150	26	4	22	52-72	Z*GD**
QFGD2525LL22-64H			○	25x25	150	26	4	22	64-100	Z*GD**

Codification A422 | Choix nuances A394 | Info. techniques A501 | Paramètres A456

Article	✲	Stock		Dimensions (mm)						Plaquettes
		R	L	HxB	L	S	W	ar_{max}	ØD (min-max)	
QFGD2525RR22-64H		○		25x25	150	26	4	22	64-100	Z*GD**
QFGD2525LL22-90H			○	25x25	150	26	4	22	90-140	Z*GD**
QFGD2525RR22-90H		○		25x25	150	26	4	22	90-140	Z*GD**
QFGD2525LL22-130H			○	25x25	150	26	4	22	130-230	Z*GD**
QFGD2525RR22-130H		●		25x25	150	26	4	22	130-230	Z*GD**
QFHD2525LL13-130H			○	25x25	150	26	5	13	130-200	Z*HD**
QFHD2525RR13-130H		○		25x25	150	26	5	13	130-200	Z*HD**
QFHD2525RR13-185H		○		25x25	150	26	5	13	185-400	Z*HD**
QFHD2525LL22-58H			●	25x25	150	26	5	22	58-96	Z*HD**
QFHD2525RR22-58H		●		25x25	150	26	5	22	58-96	Z*HD**
QFHD2525RR22-86H		○		25x25	150	26	5	22	86-140	Z*HD**
QFHD2525LL22-130H			○	25x25	150	26	5	22	130-200	Z*HD**
QFHD2525RR22-130H		●		25x25	150	26	5	22	130-200	Z*HD**
QFHD2525LL22-185H			○	25x25	150	26	5	22	185-400	Z*HD**
QFHD2525RR22-185H		○		25x25	150	26	5	22	185-400	Z*HD**
QFKD2525RR13-60H		○		25x25	150	26	6	13	60-100	Z*KD**
QFKD2525RR13-88H		○		25x25	150	26	6	13	88-180	Z*KD**
QFKD2525RR15-50H		○		25x25	150		6	15	50-100	Z*KD**
QFKD2525RR22-60H		○		25x25	150	26	6	22	60-100	Z*KD**
QFKD2525LL22-88H			○	25x25	150	26	6	22	88-180	Z*KD**
QFKD2525RR22-88H		○		25x25	150	26	6	22	88-180	Z*KD**
QFKD2525LL22-160H			●	25x25	150	26	6	22	160-400	Z*KD**
QFKD2525RR22-160H		○		25x25	150	26	6	22	160-400	Z*KD**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**Z*FD****	**Z*GD****	**Z*HD****	**Z*KD****
	H	**20-25**	**20-25**	**20-25**	**20-25**
	Vis	GB70-85-M6×20 (7,0 Nm)	GB70-85-M6×20 (7,0 Nm)	GB70-85-M6×20 (7,0 Nm)	GB70-85-M6×20 (7,0 Nm)
	Clé	W50RL	W50RL	W50RL	W50RL

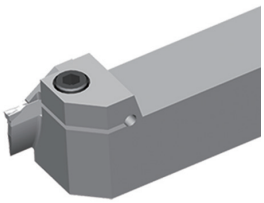
Plaquette

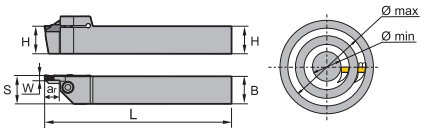
					
A399	A400	A404	A407	A410	A411

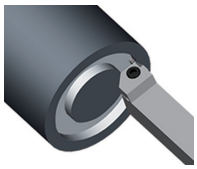
Codification A422 Choix nuances A394 Info. techniques A501 Paramètres A456

Porte-outil de gorge (axial)

QF*SRR/LL







Version LL

Article	✻	Stock R	Stock L	Dimensions (mm) HxB	L	S	W	ar_{max}	ØD (min-max)	Plaquettes
QFHS2525LL30-185H			●	25x25	150	26	5	30	185-400	Z*HS**
QFHS2525RR30-185H		○		25x25	150	26	5	30	185-400	Z*HS**
QFKS2525RR30-160H		○		25x25	150	26	6	30	160-400	Z*KS**
QFKS2525LL30-160H			○	25x25	150	26	6	30	160-400	ZT*S**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	Z*HS**	Z*KS**	ZT*S**
	H	25	25	25
	Vis	GB70-85-M6×20 (7,0 Nm)	GB70-85-M6×20 (7,0 Nm)	GB70-85-M6×20 (7,0 Nm)
	Clé	W50RL	W50RL	W50RL

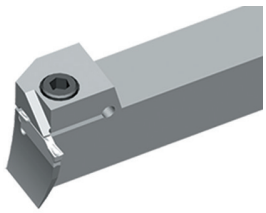
Plaquette

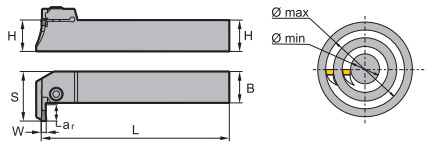
		
A402	A405	A406

Codification A422 Choix nuances A394 Info. techniques A501 Paramètres A456

Porte-outil de gorge (axial)

QF*DR/L







Version à droite

Article	✻	Stock		Dimensions (mm)						Plaquettes
		R	L	HxB	L	S	W	ar_{max}	ØD (min-max)	
QFFD2020R/L10-48L		○	○	20x20	150	31,5	3	10	48-66	Z*FD**
QFGD2020R/L10-52L		○	○	20x20	150	31,5	4	10	52-72	Z*GD**
QFFD2020R/L10-74L		●	○	20x20	150	31,5	3	10	74-110	Z*FD**
QFGD2020R/L10-90L		●	○	20x20	150	31,5	4	10	90-140	Z*GD**
QFFD2020R/L10-100L		○	○	20x20	150	31,5	3	10	100-150	Z*FD**
QFGD2020R/L15-52L		○	○	20x20	150	36,5	4	15	52-72	Z*GD**
QFFD2525R/L10-48L		●	●	25x25	150	36,5	3	10	48-66	Z*FD**
QFFD2525R/L10-60L		●	○	25x25	150	36,5	3	10	60-80	Z*FD**
QFFD2525R/L10-74L		○	○	25x25	150	36,5	3	10	74-110	Z*FD**
QFFD2525R/L10-100L		○	○	25x25	150	36,5	3	10	100-150	Z*FD**
QFGD2525R/L13-52L		○	○	25x25	150	39,5	4	13	52-72	Z*GD**
QFKD2525R/L13-60L		○	○	25x25	150	39,5	6	13	60-100	Z*KD**
QFGD2525R/L13-64L		○	●	25x25	150	39,5	4	13	64-100	Z*GD**
QFGD2525R/L13-90L		○	○	25x25	150	39,5	4	13	90-140	Z*GD**
QFGD2525R/L13-130L		○	○	25x25	150	39,5	4	13	130-230	Z*GD**
QFFD2525R/L17-48L		○	○	25x25	150	43,5	3	17	48-66	Z*FD**
QFFD2525R/L17-60L		○	○	25x25	150	43,5	3	17	60-80	Z*FD**
QFFD2525R/L17-74L		○	○	25x25	150	43,5	3	17	74-110	Z*FD**
QFFD2525R/L17-100L		●	○	25x25	150	43,5	3	17	100-150	Z*FD**
QFGD2525R/L22-52L		○	○	25x25	150	48,5	4	22	52-72	Z*GD**
QFKD2525R/L22-60L		○	●	25x25	150	48,5	6	22	60-100	Z*KD**
QFGD2525R/L22-64L		○	○	25x25	150	48,5	4	22	64-100	Z*GD**
QFKD2525R/L22-88L		○	●	25x25	150	48,5	6	22	88-180	Z*KD**
QFGD2525R/L22-90L		○	○	25x25	150	48,5	4	22	90-140	Z*GD**
QFGD2525R/L22-130L		●	○	25x25	150	48,5	4	22	130-230	Z*GD**
QFFD2020R/L7-74L		○		20x20	150	28,5	3	7	74-110	Z*FD**
QFFD2020R/L10-60L		●		20x20	150	31,5	3	10	60-80	Z*FD**
QFGD2020R/L10-130L		●		20x20	150	31,5	4	10	130-230	Z*GD**
QFGD2020R/L15-64L		○		20x20	150	36,5	4	15	64-100	Z*GD**
QFGD2020R/L15-90L		○		20x20	150	36,5	4	15	90-140	Z*GD**
QFGD2020R/L15-130L		○		20x20	150	36,5	4	15	130-230	Z*GD**
QFHD2525R/L13-58L		○		25x25	150	39,5	5	13	58-96	Z*HD**
QFHD2525R/L13-86L		●		25x25	150	39,5	5	13	86-140	Z*HD**
QFHD2525R/L13-130L		○	○	25x25	150	39,5	5	13	130-200	Z*HD**
QFHD2525R/L13-185L		○		25x25	150	39,5	5	13	185-400	Z*HD**
QFHD2525R/L22-58L		○	○	25x25	150	48,5	5	22	58-96	Z*HD**

Codification A422 | Choix nuances A394 | Info. techniques A501 | Paramètres A456

Gorges et tronçonnage Porte-outils

Article	✻	Stock		Dimensions (mm)						Plaquettes
		R	L	HxB	L	S	W	ar_{max}	ØD (min-max)	
QFHD2525R/L22-86L		○	○	25x25	150	48,5	5	22	86-140	Z*HD**
QFHD2525R/L22-130L		○	○	25x25	150	48,5	5	22	130-200	Z*HD**
QFHD2525R/L22-185L		○	○	25x25	150	48,5	5	22	185-400	Z*HD**
QFKD2525R/L13-88L			○	25x25	150	39,5	6	13	88-180	Z*KD**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**Z*FD****	**Z*GD****	**Z*HD****	**Z*KD****
	H	**20-25**	**20-25**	**20-25**	**20-25**
	Vis	GB70-85-M6×20 (7,0 Nm)	GB70-85-M6×20 (7,0 Nm)	GB70-85-M6×20 (7,0 Nm)	GB70-85-M6×20 (7,0 Nm)
	Clé	W50RL	W50RL	W50RL	W50RL

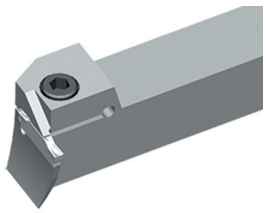
Plaquette

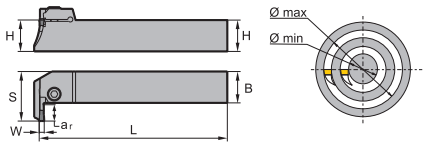
					
A399	A400	A404	A407	A410	A411

Codification A422 Choix nuances A394 Info. techniques A501 Paramètres A456

Porte-outil de gorge (axial)

QFHSDR/L







Version à droite

Article	✲	Stock		Dimensions (mm)						Plaquettes
		R	L	HxB	L	S	W	ar_{max}	ØD (min-max)	
QFHS2525R/L30-185L		○	○	25x25	150	56,5	5	30	185-400	Z*HS**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**Z*HS****
	H	**25**
	Vis	GB70-85-M6×20 (7,0 Nm)
	Clé	W50RL

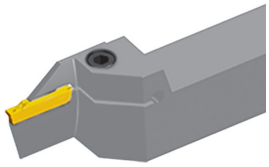
Plaquette

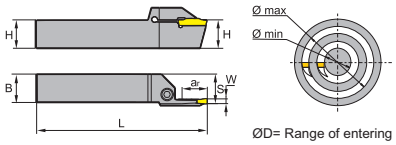
		
A402	A405	A406

Codification A422 Choix nuances A394 Info. techniques A501 Paramètres A456

Porte-outil de gorge (axial)

QF**R/L







Version à gauche

Article	✻	Stock R	Stock L	Dimensions (mm) HxB	L	S	W	ar_{max}	ØD (min-max)	Plaquettes
QFHS2525R/L30-185H		●	●	25x25	150	26	5	30	185-400	Z*HS**
QFKS2525R/L30-160H		●	●	25x25	150	26	6	30	160-400	Z*KS**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	Z*HS**	Z*KS**
	H	**25**	**25**
	Vis	GB70-85-M6×20 (7,0 Nm)	GB70-85-M6×20 (7,0 Nm)
	Clé	W50RL	W50RL

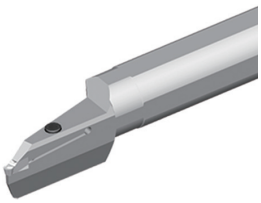
Plaquette

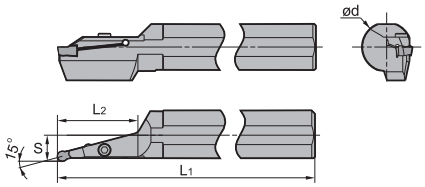
		
A402	A405	A406

Codification A422 Choix nuances A394 Info. techniques A501 Paramètres A456

Porte-outil de gorge (extérieur)

Q*DR/L







Version à droite

Article	✻	Stock		Dimensions (mm)					Plaquettes
		R	L	ØD	ød	S	L_1	L_2	
C40X-QKDR/L60-15A		○	○	160	40	20	320	60	Z*KD**
C40X-QKDR/L75-15A		●	○	160	40	20	320	75	Z*KD**
C40X-QLDR/L65-15A		○	○	160	40	21	320	65	Z*LD**
C40X-QLDR/L80-15A		○	○	160	40	21	320	80	Z*LD**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**Z*KD****	**Z*LD****
	Ød	**32-40**	**32-40**
	Vis	GB70-85-M6×20 (7,0 Nm)	GB70-85-M6×20 (7,0 Nm)
	Clé	WH50L	WH50L

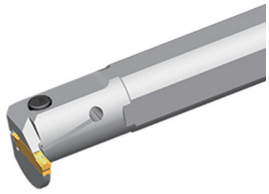
Plaquette

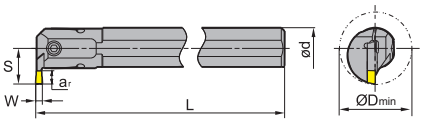
		
A410	A411	A414

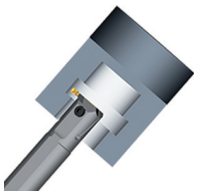
Codification A422 Choix nuances A394 Info. techniques A501 Paramètres A456

Porte-outil de gorge (intérieur)

Q*DR/L







Article	✻	Stock R	Stock L	Dimensions (mm) ØDmin	ød	L	S	W	ar_{max}	Plaquettes
C16M-QBDR/L04-20		●	○	20	16	150		2	4	Z*BD**
C20Q-QEDR/L05-27		●	●	27	20	180		2,5	5	Z*ED**
C25R-QEDR/L07-33		●	●	33	25	200		2,5	7	Z*ED**
C32S-QEDR/L09-42		●	●	42	32	250		2,5	9	Z*ED**
C20Q-QFDR/L05-27		●	●	27	20	0		3	5	Z*FD**
C25R-QFDR/L07-33		●	●	33	25	200		3	7	Z*FD**
C32S-QFDR/L09-42		●	●	42	32	250		3	9	Z*FD**
C25R-QGDR/L08-35		●	●	35	25	200		4	8	Z*GD**
C32S-QGDR/L11-44		●	●	44	32	250		4	11	Z*GD**
C40T-QGDR/L13-54		●	●	5	40	300		4	13	Z*GD**
C25R-QHDR/L08-35		●	●	35	25	200		5	8	Z*HD**
C32S-QHDR/L11-44		●	●	44	32	250		5	11	Z*HD**
C40T-QHDR/L13-54		●	●	54	40	300		5	13	Z*HD**
C25R-QKDR/L08-35		○	●	35	25	200		6	8	Z*KD**
C32S-QKDR/L11-44		●	●	44	32	250		6	11	Z*KD**
C40T-QKDR/L13-54		●	●	54	40	300		6	13	Z*KD**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	Z*BD**	Z*ED**	Z*ED**	Z*ED**	Z*FD**	Z*FD**	Z*FD**	Z*GD**	Z*GD**	Z*HD**	Z*HD**	Z*KD**	Z*KD**
	Ød	16	20	25	32-40	20	25	32-40	25	32-40	25	32-40	25	32-40
	Vis	GB70-85-M5×10 (4,0 Nm)	GB70-85-M4×12 (2,6 Nm)	GB70-85-M5×16 (4,0 Nm)	GB70-85-M6×20 (7,0 Nm)	GB70-85-M4×12 (2,6 Nm)	GB70-85-M5×16 (4,0 Nm)	GB70-85-M6×20 (7,0 Nm)	GB70-85-M5×16 (4,0 Nm)	GB70-85-M6×20 (7,0 Nm)	GB70-85-M5×16 (4,0 Nm)	GB70-85-M6×20 (7,0 Nm)	GB70-85-M5×16 (4,0 Nm)	GB70-85-M6×20 (7,0 Nm)
	Clé	WH40L	WH30L	WH40L	WH50L	WH30L	WH40L	WH50L	WH40L	WH50L	WH40L	WH50L	WH40L	WH50L

Codification A422 Choix nuances A394 Info. techniques A501 Paramètres A456

Porte-outil de gorge (intérieur)

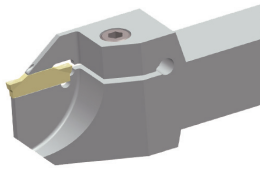
Plaquette						
						
A399	A400	A404	A407	A410	A411	A414

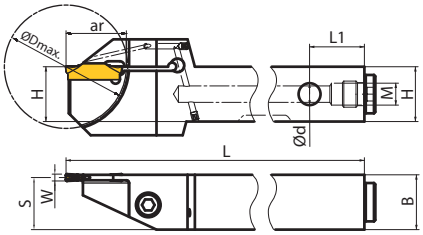
A Tournage
B Fraisage
C Perçage
D Informations techniques
E Index

Codification > A422 Choix nuances > A394 Info. techniques > A501 Paramètres > A456

Porte-outil de gorge (extérieur)

QE**R/L-DGC





Article	✻	Stock R	Stock L	Dimensions (mm) HxB	ød	L	S	L_1	W	ar_{max}	ØDmax	M	Plaquettes
QEBD1616R/L20-DGC	✻	○	○	16x16	G1/8	96	15	20	2	20	40	G1/8	Z*BD**
QEBD1616R/L30-DGC	✻	●	●	16x16	G1/8	105	15	20	2	30	60	G1/8	Z*BD**
QEBD2020R/L20-DGC	✻	○	○	20x20	G1/8	111	19	20	2	20	40	G1/8	Z*BD**
QEBD2020R/L30-DGC	✻	●	●	20x20	G1/8	120	19	20	2	30	60	G1/8	Z*BD**
QEBD2525R/L20-DGC	✻	○	○	25x25	G1/8	126	24	20	2	20	40	G1/8	Z*BD**
QEBD2525R/L30-DGC	✻	●	●	25x25	G1/8	135	24	20	2	30	60	G1/8	Z*BD**
QEED1616R/L20-DGC	✻	○	○	16x16	G1/8	96	14,75	20	2,5	20	40	G1/8	Z*ED**
QEED1616R/L30-DGC	✻	●	●	16x16	G1/8	105	14,75	20	2,5	30	60	G1/8	Z*ED**
QEED2020R/L20-DGC	✻	○	○	20x20	G1/8	111	18,75	20	2,5	20	40	G1/8	Z*ED**
QEED2020R/L30-DGC	✻	●	○	20x20	G1/8	120	18,75	20	2,5	30	60	G1/8	Z*ED**
QEED2525R/L20-DGC	✻	○	○	25x25	G1/8	126	23,75	20	2,5	20	40	G1/8	Z*ED**
QEED2525R/L30-DGC	✻	○	○	25x25	G1/8	135	23,75	20	2,5	30	60	G1/8	Z*ED**
QEFD1616R/L20-DGC	✻	○	○	16x16	G1/8	96	14,5	20	3	20	40	G1/8	Z*FD**
QEFD1616R/L30-DGC	✻	●	●	16x16	G1/8	105	14,5	20	3	30	60	G1/8	Z*FD**
QEFD2020R/L20-DGC	✻	○	○	20x20	G1/8	111	18,5	20	3	20	40	G1/8	Z*FD**
QEFD2020R/L30-DGC	✻	●	●	20x20	G1/8	120	18,5	20	3	30	60	G1/8	Z*FD**
QEFD2525R/L20-DGC	✻	○	○	25x25	G1/8	126	23,5	20	3	20	40	G1/8	Z*FD**
QEFD2525R/L30-DGC	✻	○	○	25x25	G1/8	135	23,5	20	3	30	60	G1/8	Z*FD**
QEGD1616R/L20-DGC	✻	○	○	16x16	G1/8	96	14	20	4	20	40	G1/8	Z*GD**
QEGD1616R/L30-DGC	✻	●	●	16x16	G1/8	105	14	20	4	30	60	G1/8	Z*GD**
QEGD2020R/L20-DGC	✻	○	○	20x20	G1/8	111	18	20	4	20	40	G1/8	Z*GD**
QEGD2020R/L30-DGC	✻	○	○	20x20	G1/8	120	18	20	4	30	60	G1/8	Z*GD**
QEGD2525R/L20-DGC	✻	○	○	25x25	G1/8	126	23	20	4	20	40	G1/8	Z*GD**
QEGD2525R/L30-DGC	✻	○	○	25x25	G1/8	135	23	20	4	30	60	G1/8	Z*GD**

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	Z*BD**	Z*ED**	Z*FD**	Z*GD**
	H	16-25	16-25	16-25	20-25
	Bouchon fileté	PT1/8x4	PT1/8x4	PT1/8x4	PT1/8x4
	Vis	GB70-85-M5×20 (4,0 Nm)	GB70-85-M5×20 (4,0 Nm)	GB70-85-M5×20 (4,0 Nm)	GB70-85-M5×20 (4,0 Nm)
	Clé	WH40L	WH40L	WH40L	WH40L
	Clé	WH50L	WH50L	WH50L	WH50L

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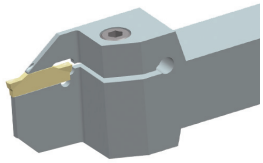
Porte-outil de gorge (extérieur)

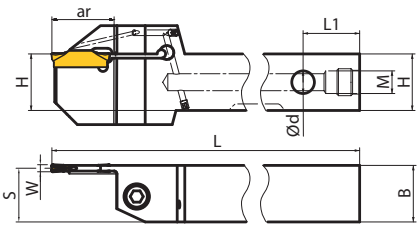
Plaquette			
			
A399	A400	A404	A407

Codification A422 Choix nuances A394 Info. techniques A501 Paramètres A456

Porte-outil de gorge (extérieur)

QE**R/L-DGSC





Article	✲	Stock		Dimensions (mm)								Plaquettes
		R	L	HxB	ød	L	S	L_1	W	ar_{max}	M	
QEED1616R/L30-DGSC	✲	●	●	16x16	G1/8	105	14,75	20	2,5	30	G1/8	Z*ED**
QEED2020R/L30-DGSC	✲	●	○	20x20	G1/8	120	18,75	20	2,5	30	G1/8	Z*ED**
QEED2525R/L30-DGSC	✲	○	○	25x25	G1/8	135	23,75	20	2,5	30	G1/8	Z*ED**
QEFD1616R/L30-DGSC	✲	●	●	16x16	G1/8	105	14,5	20	3	30	G1/8	Z*FD**
QEFD2020R/L30-DGSC	✲	○	○	20x20	G1/8	120	18,5	20	3	30	G1/8	Z*FD**
QEFD2525R/L30-DGSC	✲	○	○	25x25	G1/8	135	23,5	20	3	30	G1/8	Z*FD**
QEGD1616R/L30-DGSC	✲	○	○	16x16	G1/8	105	14	20	4	30	G1/8	Z*GD**
QEGD2020R/L30-DGSC	✲	○	○	20x20	G1/8	120	18	20	4	30	G1/8	Z*GD**
QEGD2525R/L30-DGSC	✲	○	○	25x25	G1/8	135	23	20	4	30	G1/8	Z*GD**
QEHD2525R/L30-DGSC	✲	○	○	25x25	G1/8	135	22,5	20	5	30	G1/8	Z*HD**
QEKD2525R/L30-DGSC	✲	○	○	25x25	G1/8	135	22	20	6	30	G1/8	Z*KD**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**Z*ED****	**Z*FD****	**Z*GD****	**Z*HD****	**Z*KD****
	H	**16-25**	**16-25**	**20-25**	**20-25**	**20-25**
	Bouchon fileté	PT1/8x4	PT1/8x4	PT1/8x4	PT1/8x4	PT1/8x4
	Vis	GB70-85-M5×20 (4,0 Nm)	GB70-85-M5×20 (4,0 Nm)	GB70-85-M5×20 (4,0 Nm)	GB70-85-M6×20 (7,0 Nm)	GB70-85-M6×20 (7,0 Nm)
	Clé	WH40L	WH40L	WH40L	WH50L	WH50L
	Clé	WH50L	WH50L	WH50L	WH50L	WH50L

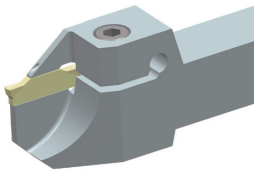
Plaquette

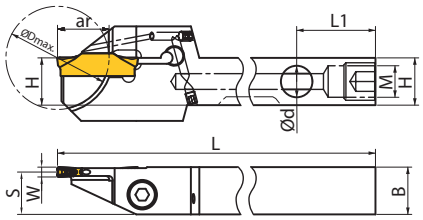
			
A399	A400	A404	A407

Codification A422 Choix nuances A394 Info. techniques A501 Paramètres A456

Porte-outil de gorge (extérieur)

QE**R/L-SC





Article	✲	Stock R	Stock L	Dimensions (mm) HxB	ød	L	S	L_1	W	ar_{max}	ØDmax	M	Plaquettes
QEAD1010R/L10-SC	✲	○	○	10x10	G1/16	125	9	20	1,5	10	20	G1/16	Z*AD**
QEAD1212R/L13-SC	✲	○	○	12x12	G1/8	125	12	20	1,5	13	26	G1/8	Z*AD**
QEAD1616R/L13-SC	✲	○	○	16x16	G1/8	125	15	20	1,5	13	26	G1/8	Z*AD**
QEAD2020R/L13-SC	✲	○	○	20x20	G1/8	125	19	20	1,5	13	26	G1/8	Z*AD**
QEBD1010R/L10-SC	✲	○	○	10x10	G1/16	110	9	20	2	10	20	G1/16	Z*BD**
QEBD1212R/L13-SC	✲	●	●	12x12	G1/8	110	11	20	2	13	26	G1/8	Z*BD**
QEBD1616R/L13-SC	✲	●	●	16x16	G1/8	110	15	20	2	13	26	G1/8	Z*BD**
QEBD2020R/L13-SC	✲	○	○	20x20	G1/8	110	19	20	2	13	26	G1/8	Z*BD**
QEED1010R/L10-SC	✲	○	○	10x10	G1/16	110	8,75	20	2,5	10	20	G1/16	Z*ED**
QEED1212R/L13-SC	✲	●	●	12x12	G1/8	110	10,75	20	2,5	13	26	G1/8	Z*ED**
QEED1616R/L17-SC	✲	●	●	16x16	G1/8	110	14,75	20	2,5	17	34	G1/8	Z*ED**
QEED2020R/L17-SC	✲	●	●	20x20	G1/8	110	18,75	20	2,5	17	34	G1/8	Z*ED**
QEFD1212R/L13-SC	✲	●	●	12x12	G1/8	110	10,5	20	3	13	26	G1/8	Z*FD**
QEFD1616R/L17-SC	✲	●	●	16x16	G1/8	110	14,5	20	3	17	34	G1/8	Z*FD**
QEFD2020R/L22-SC	✲	●	●	20x20	G1/8	110	18,5	20	3	22	44	G1/8	Z*FD**

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	Z*AD**	Z*AD**	Z*AD**	Z*AD**	Z*BD**	Z*BD**	Z*BD**	Z*ED**	Z*ED**	Z*ED**	Z*FD**	Z*FD**
	H	10	12	16	20	10	12	16-20	10	12	16-20	12	16-20
	Bouchon fileté	PT1/16x6	PT1/8x4	PT1/8x4	PT1/8x4	PT1/16x6	PT1/8x4	PT1/8x4	PT1/16x6	PT1/8x4	PT1/8x4	PT1/8x4	PT1/8x4
	Vis	GB70-85-M4×12 (2,6 Nm)	GB70-85-M4×12 (2,6 Nm)	GB70-85-M4×14	GB70-85-M4×18	GB70-85-M4×12 (2,6 Nm)	GB70-85-M4×12 (2,6 Nm)	GB70-85-M6×20 (7,0 Nm)	GB70-85-M4×12 (2,6 Nm)	GB70-85-M4×12 (2,6 Nm)	GB70-85-M6×20 (7,0 Nm)	GB70-85-M4×12 (2,6 Nm)	GB70-85-M5×20 (4,0 Nm)
	Clé	WH30L	WH30L	WH30L	WH30L	WH30L	WH30L	WH40L	WH30L	WH30L	WH40L	WH30L	WH40L
	Clé	WH40L	WH50L	WH50L	WH50L	WH40L	WH50L	WH50L	WH40L	WH50L	WH50L	WH50L	WH50L

Codification A422 Choix nuances A394 Info. techniques A501 Paramètres A456

Porte-outil de gorge (extérieur)

Plaquette			
			
A399	A400	A404	A407

Codification A422 Choix nuances A394 Info. techniques A501 Paramètres A456

Accessoires

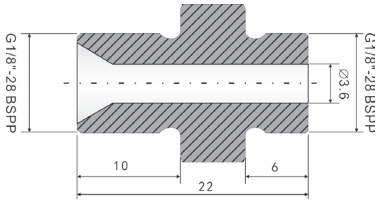
Flexible de lubrification



Article	Dimensions [mm]			Stock
	L	Th1	Th2	
HOSE G1/8-7/16/200BS	200	G1/8"-28 BSPP	G1/8"-28 BSPP	○
HOSE G1/8-7/16/300BS	300	G1/8"-28 BSPP	G1/8"-28 BSPP	○
HOSE G1/8-7/16/200BB	200	G1/8"-28 BSPP	G1/8"-28 BSPP	○
HOSE G1/8-7/16/300BB	300	G1/8"-28 BSPP	G1/8"-28 BSPP	○

● En stock ○ Sur demande

Raccord de lubrification



Article	Stock
NIPPLE G1/8- G1/8	○

● En stock ○ Sur demande

Porte-outil de tournage extérieur – série QC

GQC	R	20	20	K	22	–	15
1	2	3	4	5	6		7

Gamme — 1

Version — 2

Code	Description
R	À droite
L	À gauche

Hauteur [mm] — 3

Code	Description
16	16
20	20
25	25

Largeur [mm] — 4

Code	Description
16	16
20	20
25	25

Longueur [mm] — 5

Code	Description
K	125
M	150

Longueur d'arête [mm] — 6

Code	I.C
11	6,35
16	9,252
22	12,70

Plage de largeurs de gorge [mm] — 7

Code	Taille de plaquettes	
15	0,5≤S<1,8 (QC16***)	1,0≤S<2,3 (QC22***)
25	1,8≤S<3,0 (QC16***)	2,3≤S<3,3 (QC22***)
35	–	3,3≤S≤4,8 (QC22***)

Barres d'alésage – série QC

S	20	K	–	QC	16	15	R	25
1	2	3		4	5	6	7	8

Type d'attachement — 1

Code	Matériau
S	Attachement en acier
C	Attachement en carbure
A	Attachement en carbure monobloc (IK)

Diamètre [mm] — 2

Code	Description
16	16
20	20
25	25

Longueur [mm] — 3

Code	Description
H	100
K	125
M	150

Gamme — 4

Longueur d'arête [mm] — 5

Code	I.C
11	6,35
16	9,252
22	12,70

Plage de largeurs de gorge [mm] — 6

Code	Taille de plaquettes		
15	0,5≤S<1,8 (QC11***)	0,5≤S<1,8 (QC16***)	1,0≤S<2,3 (QC22***)
25	1,8≤S<3,0 (QC11***)	1,8≤S<3,0 (QC16***)	2,3≤S<3,3 (QC22***)
35	–	–	3,3≤S≤4,8 (QC22***)

Sens de coupe — 7

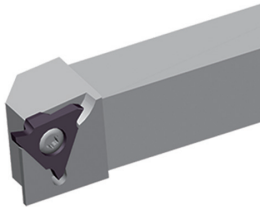
Code	Description
R	À droite
L	À gauche

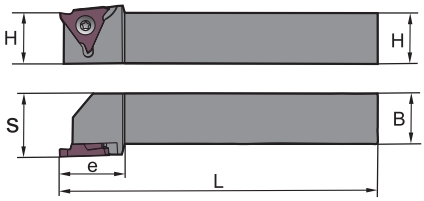
Diamètre mini de coupe [mm] — 8

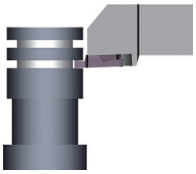
Code	Ø	Code	Ø
16	16	25	25
20	20	35	35

Gorge (extérieur)

GQC**R/L







Version à droite

Article	✻	Stock		Dimensions (mm)						Plaquettes
		R	L	H	L	S	e	B	Largeur	
GQCR/L1616K16-15		●	●	16	125	21	25,5	16	0.5-1.80	QC16R/L 050-180
GQCR/L2020K16-15		○	●	20	125	25	25,5	20	0.5-1.80	QC16R/L 050-180
GQCR/L2525M16-15		○	●	25	150	30	25,5	25	0.5-1.80	QC16R/L 050-180
GQCR/L1616K16-25		●	●	16	125	21	25,5	16	1.8-3.0	QC16R/L 180-300
GQCR/L2020K16-25		○	●	20	125	25	25,5	20	1.8-3.0	QC16R/L 180-300
GQCR/L2525M16-25		○	●	25	150	30	25,5	25	1.8-3.0	QC16R/L 180-300
GQCR/L2020K22-15		○	●	20	125	25	25,5	20	1.0-2.3	QC22R/L 100-230
GQCR/L2525M22-15		○	●	25	150	30	25,5	25	1.0-2.3	QC22R/L 100-230
GQCR/L2020K22-25		○	●	20	125	25	25,5	20	2.3-3.3	QC22R/L 230-330
GQCR/L2525M22-25		○	●	25	150	30	25,5	25	2.3-3.3	QC22R/L 230-330
GQCR/L2020K22-35		●	●	20	125	25	25,5	20	3.3-4.8	QC22R/L 330-480
GQCR/L2525M22-35		●	●	25	150	30	25,5	25	3.3-4.8	QC22R/L 330-480

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	QC16R/L 050-180	QC16R/L 180-300	QC22R/L 100-230	QC22R/L 230-330	QC22R/L 330-480
	H	**16-32**	**16-32**	**16-32**	**16-32**	**16-32**
	Vis	I60M3,5×10 (2,7 Nm)	I60M3,5×10 (2,7 Nm)	I60M5×13 (6,7 Nm)	I60M5×13 (6,7 Nm)	I60M5×13 (6,7 Nm)
	Clé (cale-support)	WT15IP	WT15IP	WT20IP	WT20IP	WT20IP

Plaquette



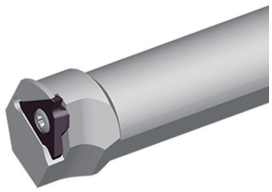
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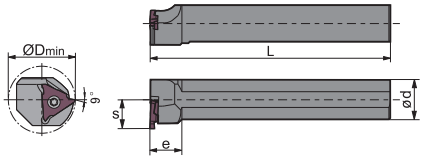
A417

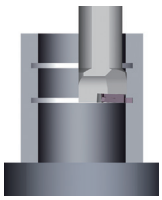
Codification A452 Choix nuances A394 Info. techniques A501 Paramètres A456

S_QCR/L

S*K-QC**R/L







Version à droite

Article	✲	Stock R	Stock L	Dimensions (mm) ØDmin	ød	L	S	e	Largeur	Plaquettes
S16H-QC1115R/L20		●	●	21	16	100	11,5	12	0.5-1.80	QC11R/L 050-180
S20K-QC1115R/L16		●	●	16	20	125	11,1	40	0.5-1.80	QC11R/L 050-180
S16H-QC1125R/L20		●	●	21	16	100	11,5	12	1.8-3.0	QC11R/L 180-300
S20K-QC1125R/L16		○	○	16	20	125	11,1	40	1.8-3.0	QC11R/L 180-300
S20M-QC1615R/L25		○	●	26	20	150	12,5	15	0.5-1.80	QC16R/L 050-180
S20M-QC1625R/L25		●	●	26	20	150	12,5	15	1.8-3.0	QC16R/L 180-300
S25M-QC2215R/L35		●	●	35	25	150	18,2	15	1.0-2.3	QC22R/L 100-230
S25M-QC2225R/L35		●	●	35	25	150	18,2	20	2.3-3.3	QC22R/L 230-330
S25M-QC2235R/L35		○	●	35	25	150	18,2	20	3.3-4.8	QC22R/L 330-480

● En stock ○ Sur demande

✲ Avec arrosage interne

Porte-outils à droite pour plaquette de gorge à gauche
Porte-outils à gauche pour plaquette de gorge à droite

Pièces détachées

	Plaquette	QC11R/L 050-180	QC11R/L 180-300	QC16R/L 050-180	QC16R/L 180-300	QC22R/L 100-230	QC22R/L 230-330	QC22R/L 330-480
	ød	**16-20**	**16-20**	**20**	**20**	**25**	**25**	**25**
	Vis	I60M2,5×6,5 (1,0 Nm)	I60M2,5×6,5 (1,0 Nm)	I60M3,5×10 (2,7 Nm)	I60M3,5×10 (2,7 Nm)	I60M5×13 (6,7 Nm)	I60M5×13 (6,7 Nm)	I60M5×13 (6,7 Nm)
	Clé (cale-support)	WT07IP	WT07IP	WT15IP	WT15IP	WT20IP	WT20IP	WT20IP

Plaquette



Semi-finition

A417

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Notes

Gorges et tronçonnage Recommandations de données de coupe

Plaquettes de tronçonnage et gorges

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min]			
						HC (CVD)	HC (PVD)		
						YBC252	YBG102	YBG105	
P	Acier non allié	env. 0,15 % C	recuit	125	1	190			
		env. 0,45 % C	recuit	190	2	175			
		env. 0,45 % C	trempé et revenu	250	3	145			
		env. 0,75 % C	recuit	270	4	140			
		env. 0,75 % C	trempé et revenu	300	5	135			
	Acier faiblement allié		recuit	180	6	170			
			trempé et revenu	275	7	125			
			trempé et revenu	300	8	115			
			trempé et revenu	350	9	105			
	Acier fortement allié et acier à outils fortement allié		recuit	200	10	125			
			durci et revenu	325	11	95			
M	Acier inoxydable	ferritique / martensitique	recuit	200	12	165	165	170	
		martensitique	trempé et revenu	240	13	135	135	140	
		austénitique	trempé	180	14	155	155	160	
		austénitique et ferritique		230	15	135	135	140	
K	Fonte grise	perlitique / ferritique		180	16	240			
		perlitique (martensitique)		260	17	185			
	Fonte avec graphite nodulaire	ferritique		160	18	220			
		perlitique		250	19	165			
	Fonte malléable	ferritique		130	20	175			
		perlitique		230	21	165			
N	Alliages corroyé d'aluminium	non durcissable		60	22				
		durcissable	trempé	100	23				
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24				
		≤ 12 % Si, durcissable	trempé	90	25				
		> 12 % Si, non durcissable		130	26				
	Cuivre et alliages de cuivre (bronze/moulage)	Alliages de décolletage, PB > 1 %		110	27				
		CuZn, CuSnZn		90	28				
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29				
S	Alliages réfractaires	Base Fe	recuit	200	30		95	100	
			trempé	280	31		50	50	
		à base de Ni ou Co	recuit	250	32		80	80	
			trempé	350	33		70	70	
			coulé	320	34		70	70	
	Alliages de titane	Titane pur		R_m 400	35		145	150	
		Alliages Alpha + Beta	trempé	R_m 1050	36		50	50	
H	Acier trempé		durci et revenu	55 HRC	37				
			durci et revenu	60 HRC	38				
	Fonte trempée		coulé	400	39				
	Fonte durcie		durci et revenu	55 HRC	40				
X	Matériaux non métalliques	Thermoplastiques			41				
		Duroplaste			42				
		Matière plastique renforcée de fibres de verre GFK			43				
		Matière plastique renforcée de fibres de carbone CFK			44				
		Graphite			45				
		Bois			46				

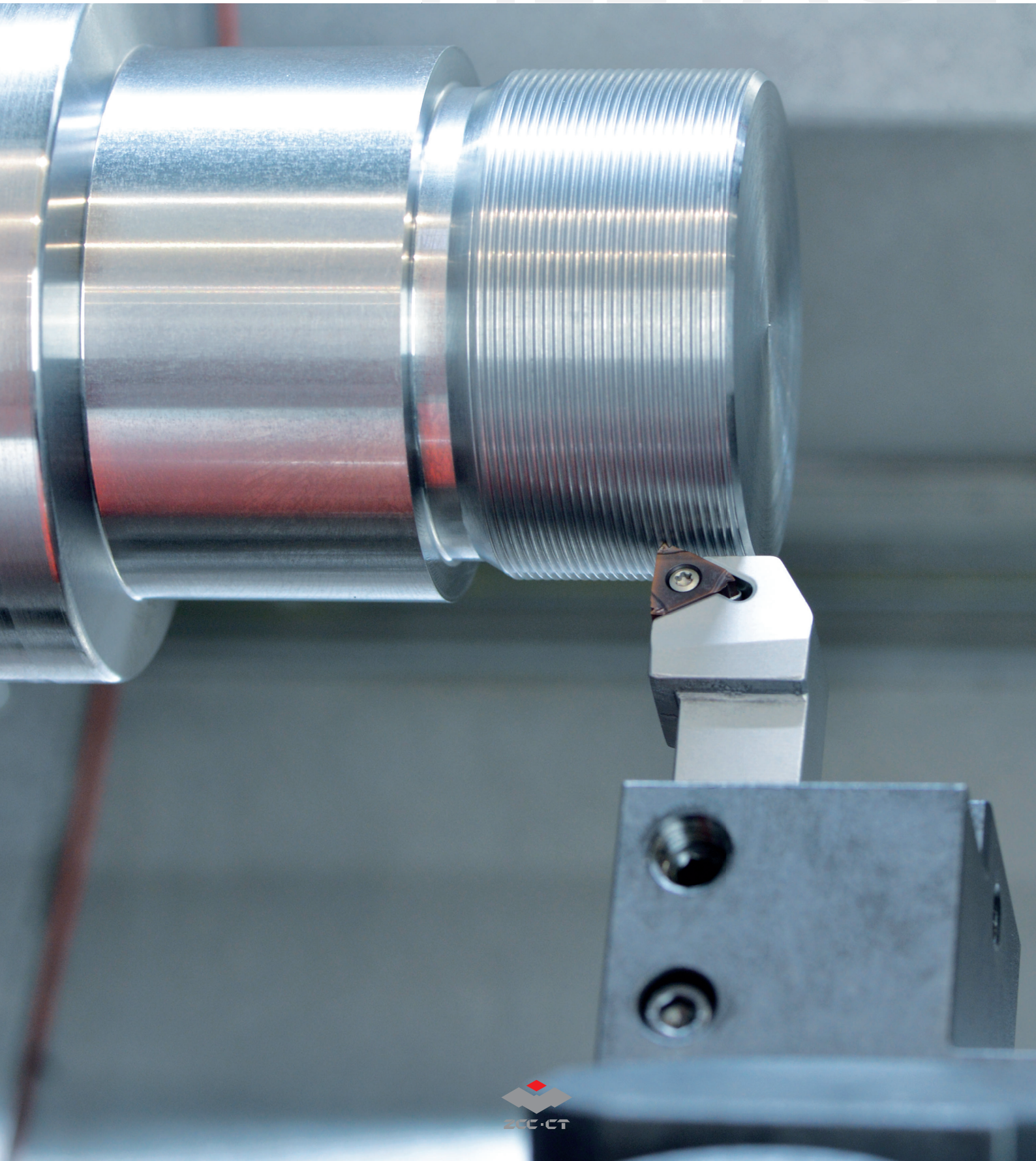
Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Vous trouverez les exemples de matériaux pour les groupes enlèvement de copeaux à la page D11.

	Vitesse de coupe v_c [m/min]						
	HC (PVD)				HW		
	YB9320	YBG202	YBG205	YBG302	YD101	YD201	
	190	190	190	185			
	175	175	175	170			
	145	145	145	140			
	140	140	140	135			
	135	135	135	130			
	170	170	170	165			
	125	125	125	125			
	115	115	115	115			
	105	105	105	105			
	125	125	125	125			
	95	95	95	95			
	165	165	165	160			
	135	135	135	130			
	155	155	155	150			
	135	135	135	130			
	240	240	240	235			
	185	185	185	180			
	220	220	220	215			
	165	165	165	160			
	175	175	175	170			
	165	165	165	160			
					800	760	
					600	570	
					320	305	
					240	230	
					160	155	
					160	155	
					600	570	
					200	190	
	95	95	95	95	70	65	
	50	50	50	50	35	35	
	80	80	80	75	60	60	
	70	70	70	65	50	50	
	70	70	70	65	50	50	
	145	145	145	140	105	100	
	50	50	50	50	35	35	

HC carbure revêtu
HW carbure non revêtu

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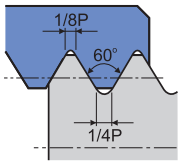
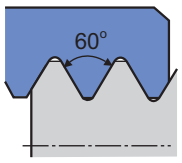
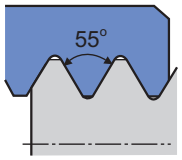
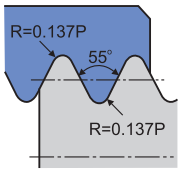
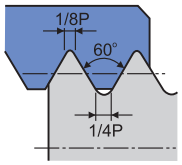
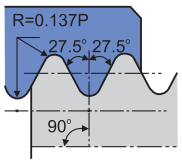
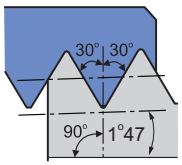
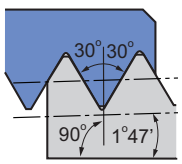
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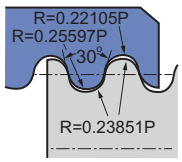
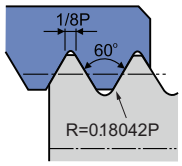
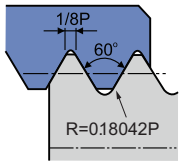
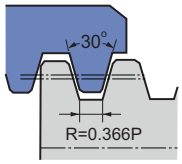
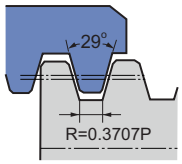
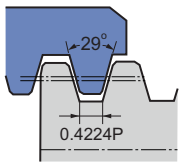
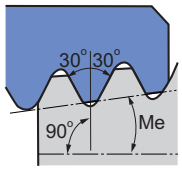
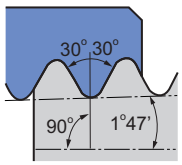


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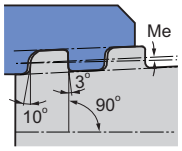
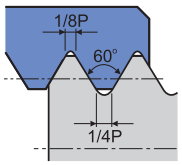
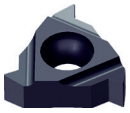
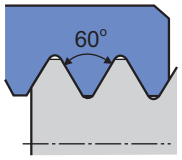
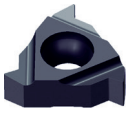
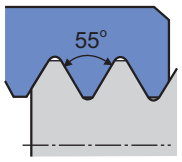
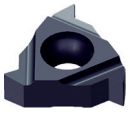
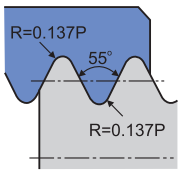
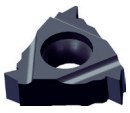
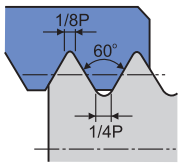
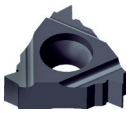
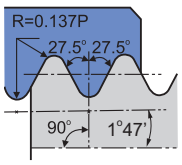
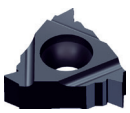
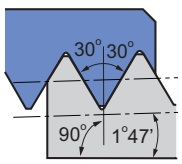
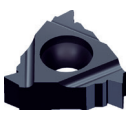
Vue d'ensemble de système	**A460-A463**
Vue d'ensemble des nuances	**A464**
Domaines d'application des nuances	**A465**
Codification – plaquettes de coupe	**A466**
Plaquettes de coupe	**A467-A491**
Codification – Porte-outils	**A492**
Porte-outils	**A493-A499**
Recommandations de données de coupe	**A500**
Résolution de problèmes	**A504**
Informations techniques	**A511-A512**
Outils spéciaux	**A513**

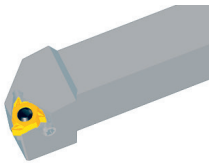
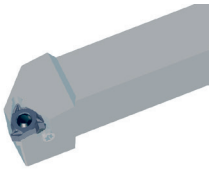
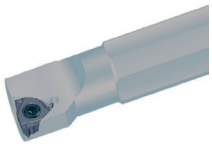
Filetage Vue d'ensemble de système

Types de filetage	Profil	Profil de coupe	Plaquette	Filetage intérieur Pas [mm] (TPI)	Filetage extérieur Pas [mm] (TPI)	Page
Filetage métrique ISO 60°, profil plein	**GM**			0,5-6,0	0,5-6,0	A467
60°, profil partiel	**60°**			0,5-5,0 (5-48)	0,5-5,0 (5-48)	A469
55°, profil partiel	**55°**			0,5-5,0 (5-48)	0,5-5,0 (5-48)	A470
Whitworth	**W**			(8-16)	(8-16)	A471
Filetage américain UN 60°, profil plein	**UN**			(8-20)	(8-20)	A472
Filetage conique BSPT	**BSPT**			(11-28)	11-28	A473
Filetage de robinetterie NPT	**NPT**			(8-27)	(8-27)	A474
Filetage de robinetterie NPTF 60°	**NPTF**			(8-27)	(8-27)	A475

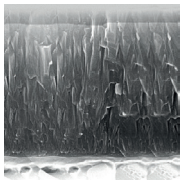
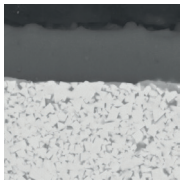
Types de filetage	Profil	Profil de coupe	Plaquette	Filetage intérieur Pas [mm] (TPI)	Filetage extérieur Pas [mm] (TPI)	Page
Filetage rond R 30°	**R**			(6-10)	(6-10)	A476
Filetage MJ pour industrie aéronautique et aérospatiale	**MJ**			---	1,5-2,0	A477
Filetage unifié UNJ	**UNJ**			---	(8-32)	A478
Filetage trapézoïdal ISO TR 30° métrique	**Tr**			1,5-3,0	1,5-3,0	A479
Filetage trapézoïdal américain 29° ACME	**AC**			(8-16)	(8-16)	A480
Filetage trapézoïdal plat américain STUB-ACME	**STAC**			(8-16)	(8-16)	A481
Filetage API 60°	**AP**			4-5	4-5	A482
Filetage rond API	**RD**			8-10	8-10	A483

Filetage Vue d'ensemble de système

Types de filetage	Profil	Profil de coupe	Plaquette	Filetage intérieur Pas [mm] (TPI)	Filetage extérieur Pas [mm] (TPI)	Page
Filetage américain API	**BUT**			(5)	(5)	A484
Filetage métrique ISO 60°, profil plein (type mince)	**GM**			0,5-3,0	0,5-3,0	A485
60°, profil partiel (type mince)	**60°**			0,5-3,0 (8-48)	0,5-3,0 (8-48)	A486
55°, profil partiel (type mince)	**55°**			0,5-3,0 (8-48)	0,5-3,0 (8-48)	A487
Whitworth (type mince)	**W**			(8-16)	(8-16)	A488
Filetage américain UN 60°, profil plein (type mince)	**UN**			(8-24)	(8-20)	A489
Filetage conique de robinetterie BSPT (type mince)	**BSPT**			(11-28)	(11-28)	A490
Filetage de robinetterie NPT (type mince)	**NPT**			(8-27)	(8-27)	A491

Version	Porte-outil	Dimensions (mm)	Page
Porte-outil pour filetage extérieur		16×16×100 20×20×125 25×25×150 32×25×170 32×32×170 40×40×250	A493
Porte-outil pour filetage intérieur		16×125×12 16×150×16 16×150×20 20×150×25 20×180×25 25×150×32 32×200×40 32×250×40 40×300×50 50×350×63	A495
Porte-outil pour filetage extérieur (type mince)		16×16×100 32×25×170 20×20×125 32×32×170 25×25×150	A497
Porte-outil pour filetage intérieur (type mince)		16×150×20 32×200×40 20×180×25 32×250×40 25×150×32	A498

Filetage

Nuance	ISO	Microstructure	Description de nuances
YBG201	P10 - P30 M10 - M30		Nuance carbure revêtu PVD P10-P30/M10-M30 pour la semi-finition à la finition des aciers et aciers inoxydables. Bonne résistance à l'usure pour un large champ d'applications.
YBG205	P10 - P30 M20 - M40 S15-S25		Nuance de carbure P10–P30/M20–M40/S15–S25 avec revêtement PVD multicouche pour l'usinage de finition à semi-finition d'acier inoxydable, superalliages et acier (fraisage). Très bonne résistance à l'usure et thermique dans un vaste domaine d'utilisation.

Domaines d'application des nuances – filetage

	ISO	HC[1] (CVD)	HC[1] (PVD)	HT	HC[2]	Ceramic	HW	CBN	PCD
P	P01								
	P10		YBG205 YBG201						
	P20								
	P30								
	P40								
M	M01								
	M10		YBG205 YBG201						
	M20								
	M30								
	M40								
K	K01								
	K10								
	K20								
	K30								
N	N01								
	N10								
	N20								
	N30								
S	S01								
	S10		YBG205 YBG201						
	S20								
	S30								
H	H01								
	H10								
	H20								
	H30								

P	Acier
M	Acier inoxydable
K	Fonte
N	Métaux non-ferreux
S	Réfractaires et superalliages
H	Matériaux durs

HC[1] Carbure revêtu
HT Cermet non revêtu
HC[2] Cermet revêtu
HW Carbure non revêtu

Filetage Codification – plaquettes de coupe

R	T	22.	01	W	–	3.50	GM	(P)	(B)
1	2	3	4	5		6	7	8	9

Version

Code	Description
R	À droite
L	À gauche

1

Forme de plaquette

T  Z Spécial

2

Longueur d'arête [mm]

Code	I.C
11	6,35
16	9,252
22	12,70

3

Dents par arête

Code	Description
01	1
02	2

4

Type d'usinage

Code	Description
W	Filetage extérieur
N	Filetage intérieur

5

Pas

Code	Plage de pas (profil partiel)	
A	0,5 – 1,5 mm	48 – 16 (TPI)
AG	0,5 – 3,0 mm	48 – 8 (TPI)
G	1,75 – 3,0 mm	14 – 8 (TPI)
N	3,5 – 5,0 mm	7 – 5 (TPI)

Plage de pas [mm] (profil complet)

0,50	0,75	1,00	1,25	1,50
1,75	2,00	2,50	3,00	3,50
4,00	4,50	5,00	5,50	6,00

Plage de pas [TPI] (profil complet)

4	5	6	8
10	11	11,5	12
14	16	18	19
20	24	27	28

6

Profil de filetage

Code	Description
GM	Filetage métrique ISO 60°
60	Profil partiel 60°
55	Profil partiel 55°
W	Whitworth
UN	Filetage américain UN 60°
BSPT	Filetage gaz conique
NPT	Filetage gaz
NPTF	Filetage américain étanche à sec
R	Filetage rond 30°
MJ	Filetage américain industrie aéronautique
UNJ	Filetage unifié UNJ
TR	Filetage trapézoïdal ISO métrique
AC	Filetage trapézoïdal américain
STAC	Filetage trapézoïdal américain, plat
AP	Filetage API 60°
RD	Filetage rond API
BUT	Filetage américain en dents de scie

7

Brise-copeau

8

Epaisseur plaquette [mm]

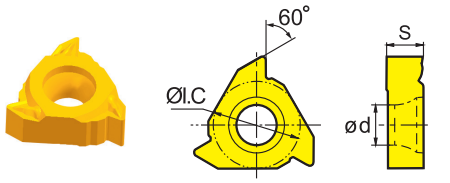
Code	Description
B	Version fine

9

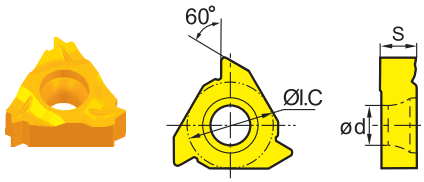
R/LT**N/W	I.C	S	d
11	6,35	3,18	2,8
16	9,525	3,97	4,4
22	12,7	5,56	5,5

Plaquettes de filetage

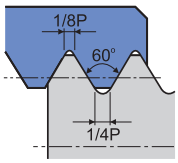
Filetage métrique ISO 60°, profil plein



Version à droite extérieure
Version à gauche intérieure



Version à droite intérieure
Version à gauche extérieure



ISO 965-1980 DIN 13
GB·T 197-2003 Tolérance : 6G·6H

ISO	Pas (mm)	Usinage extérieur	HC[1] (PVD)		Usinage intérieur	HC[1] (PVD)	
			YBG201	YBG205		YBG201	YBG205
11	0,50	-			**RT11.01N-0.50GM**	○	
11		-			**LT11.01N-0.50GM**	○	
11	0,75	-			**RT11.01N-0.75GM**	●	
11		-			**LT11.01N-0.75GM**	○	
11	1,00	-			**RT11.01N-1.00GM**	○	●
11		-			**LT11.01N-1.00GM**	●	
11	1,25	-			**RT11.01N-1.25GM**	●	
11		-			**LT11.01N-1.25GM**	●	
11	1,50	-			**RT11.01N-1.50GM**	○	●
11		-			**LT11.01N-1.50GM**	●	
11	1,75	-			**RT11.01N-1.75GM**	○	
11		-			**LT11.01N-1.75GM**	●	
11	2,00	-			**RT11.01N-2.00GM**	○	●
11		-			**LT11.01N-2.00GM**	●	
16	0,50	-			**RT16.01N-0.50GM**	○	
16		-			**LT16.01N-0.50GM**	○	
16	0,75	-			**RT16.01N-0.75GM**	○	
16		-			**LT16.01N-0.75GM**	○	
16	1,00	**RT16.01W-1.00GM**	○	●	**RT16.01N-1.00GM**	○	
16		**LT16.01W-1.00GM**	●		**LT16.01N-1.00GM**	●	
16	1,25	**RT16.01W-1.25GM**	○	●	**RT16.01N-1.25GM**	○	
16		**LT16.01W-1.25GM**	●		**LT16.01N-1.25GM**	●	
16	1,50	**RT16.01W-1.50GM**	○	●	**RT16.01N-1.50GM**	●	
16		**LT16.01W-1.50GM**	●		**LT16.01N-1.50GM**	●	
16	1,75	**RT16.01W-1.75GM**	●		**RT16.01N-1.75GM**	○	
16		**LT16.01W-1.75GM**	●		**LT16.01N-1.75GM**	●	
16	2,00	**RT16.01W-2.00GM**	○	●	**RT16.01N-2.00GM**	○	●

● En stock ○ Sur demande

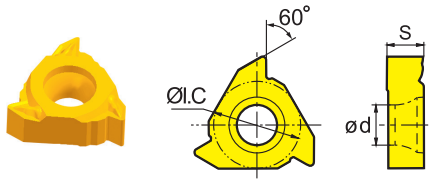
HC[1] Carbure revêtu

Codification A466 Choix nuances A465 Info. techniques A501 Paramètres A500

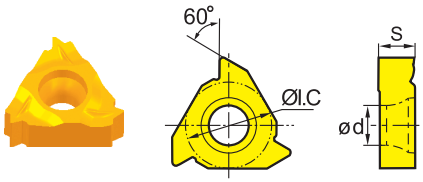
Plaquettes de filetage

R/LT**N/W	I.C	S	d
11	6,35	3,18	2,8
16	9,525	3,97	4,4
22	12,7	5,56	5,5

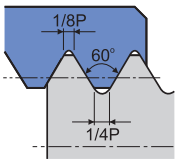
Filetage métrique ISO 60°, profil plein



Version à droite extérieure
Version à gauche intérieure



Version à droite intérieure
Version à gauche extérieure



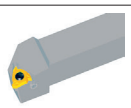
ISO 965-1980 DIN 13
GB·T 197-2003 Tolérance : 6G·6H

ISO	Pas (mm)	Usinage extérieur	HC[1] (PVD) YBG201	HC[1] (PVD) YBG205	Usinage intérieur	HC[1] (PVD) YBG201	HC[1] (PVD) YBG205
16	2,00	**LT16.01W-2.00GM**	●		**LT16.01N-2.00GM**	●	
16	2,50	**RT16.01W-2.50GM**	○	●	**RT16.01N-2.50GM**	○	●
16		**LT16.01W-2.50GM**	●		**LT16.01N-2.50GM**	●	
16	3,00	**RT16.01W-3.00GM**	○	●	**RT16.01N-3.00GM**	○	●
16		**LT16.01W-3.00GM**	●		**LT16.01N-3.00GM**	●	
22	3,50	**RT22.01W-3.50GM**	○		**RT22.01N-3.50GM**	○	●
22		**LT22.01W-3.50GM**	●		**LT22.01N-3.50GM**	●	
22	4,00	**RT22.01W-4.00GM**	○	●	**RT22.01N-4.00GM**	●	
22		**LT22.01W-4.00GM**	●		**LT22.01N-4.00GM**	●	
22	4,50	**RT22.01W-4.50GM**	○		**RT22.01N-4.50GM**	○	●
22		**LT22.01W-4.50GM**	○		**LT22.01N-4.50GM**	●	
22	5,00	**RT22.01W-5.00GM**	○		**RT22.01N-5.00GM**	○	
22		**LT22.01W-5.00GM**	●		**LT22.01N-5.00GM**	●	
22	5,50	**RT22.01W-5.50GM**	○		**RT22.01N-5.50GM**	○	
22		**LT22.01W-5.50GM**	○		**LT22.01N-5.50GM**	●	
22	6,00	**RT22.01W-6.00GM**	○	●	**RT22.01N-6.00GM**	○	●
22		**LT22.01W-6.00GM**	●		**LT22.01N-6.00GM**	●	

● En stock ○ Sur demande

HC[1] Carbure revêtu

Support de serrage

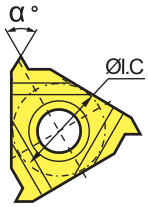
SWR/L	SNR/L
	
A493-A494	A495-A496

Codification A466 Choix nuances A465 Info. techniques A501 Paramètres A500

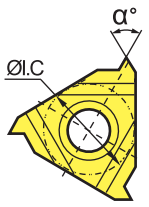
R/LT**N/W	I.C	S	d
16	9,525	3,97	4,4
22	12,7	5,56	5,5

Plaquettes de filetage

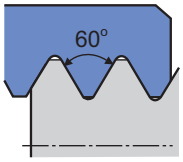
60°, profil partiel

Version à droite extérieure
Version à gauche intérieure

Version à droite intérieure
Version à gauche extérieure

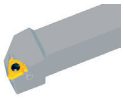


ISO	Pas (mm)	Usinage extérieur	HC[1] (PVD) YBG201	HC[1] (PVD) YBG205	Usinage intérieur	HC[1] (PVD) YBG201	HC[1] (PVD) YBG205
16	0,50 - 1,50	**RT16.01W-A60**	○	●	**RT16.01N-A60**	○	
16		**LT16.01W-A60**	●		**LT16.01N-A60**	●	
16	0,50 - 3,00	**RT16.01W-AG60**	○	●	**RT16.01N-AG60**	○	
16		**LT16.01W-AG60**	●		**LT16.01N-AG60**	●	●
16	1,75 - 3,00	**RT16.01W-G60**	○		**RT16.01N-G60**	○	
16		**LT16.01W-G60**	●		**LT16.01N-G60**	○	
16		**LT16.01W-G60P**	●		**LT16.01N-G60P**	○	
16		**RT16.01W-G60P***	○	○	**RT16.01N-G60P***	○	
22	3,50 - 5,00	**LT22.01W-N60P**	○		-		
22		**RT22.01W-N60P***	●		**RT22.01N-N60P***	●	
22		**LT22.01W-N60P***			**LT22.01N-N60P***	○	

● En stock ○ Sur demande
P* : plaquettes avec brise-copeaux

HC[1] Carbure revêtu

Support de serrage

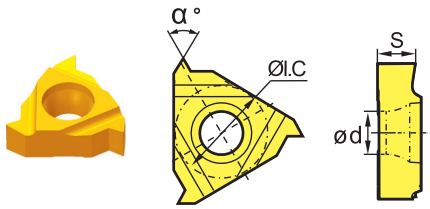
SWR/L	SNR/L
	
A493-A494	A495-A496

Codification A466 Choix nuances A465 Info. techniques A501 Paramètres A500

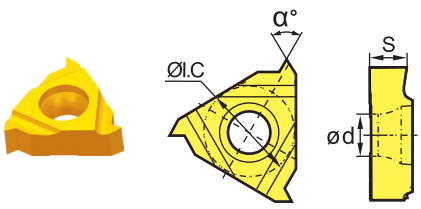
R/LT**N/W	I.C	S	d
16	9,525	3,97	4,4
22	12,7	5,56	5,5

Plaquettes de filetage

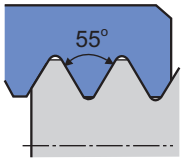
55°, profil partiel



Version à droite extérieure
Version à gauche intérieure



Version à droite intérieure
Version à gauche extérieure

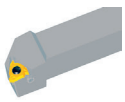


ISO	Pas (T.P.i)	Usinage extérieur	HC[1] (PVD) YBG201	HC[1] (PVD) YBG205	Usinage intérieur	HC[1] (PVD) YBG201	HC[1] (PVD) YBG205
16	0,50 - 1,50	**RT16.01W-A55**	○		**RT16.01N-A55**	○	
16		**LT16.01W-A55**	●		**LT16.01N-A55**	○	
16	0,50 - 3,00	**RT16.01W-AG55**	●		**RT16.01N-AG55**	○	●
16		**LT16.01W-AG55**	○		**LT16.01N-AG55**	●	
16	1,75 - 3,00	**RT16.01W-G55**	○		**RT16.01N-G55**	○	
16		**LT16.01W-G55**	●		**LT16.01N-G55**	○	
16		**LT16.01W-G55P**	●		**LT16.01N-G55P**	●	
16		**RT16.01W-G55P***	○		**RT16.01N-G55P***	○	
22	3,50 - 5,00	**RT22.01W-N55P**	○		**RT22.01N-N55P**	○	
22		-			**LT22.01N-N55**	○	

● En stock ○ Sur demande
P* : plaquettes avec brise-copeaux

HC[1] Carbure revêtu

Support de serrage

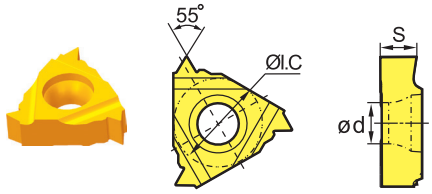
SWR/L	SNR/L
	
A493-A494	A495-A496

Codification A466 Choix nuances A465 Info. techniques A501 Paramètres A500

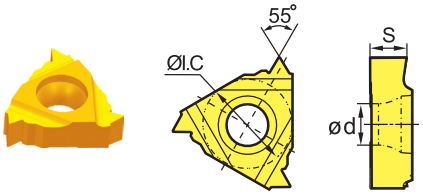
Plaquettes de filetage

R/LT**N/W	I.C	S	d
16	9,525	3,97	4,4

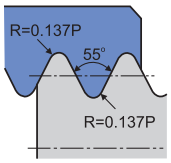
Whitworth



Version à droite extérieure
Version à gauche intérieure



Version à droite intérieure
Version à gauche extérieure



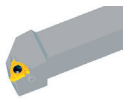
ISO 228·1:1982 DIN 259
B.S.84: 1956 Tolérance : classe moyenne 1

ISO	Pas (T.P.i)	Usinage extérieur	HC[1] (PVD)		Usinage intérieur	HC[1] (PVD)	
			YBG201	YBG205		YBG201	YBG205
16	8,00	**RT16.01W-8W**	○		**RT16.01N-8W**	○	
16		**LT16.01W-8W**	●		**LT16.01N-8W**	●	
16	9,00	-			**RT16.01N-9W**	○	
16		**LT16.01W-9W**	○		**LT16.01N-9W**	○	
16	10,00	**RT16.01W-10W**	○		**RT16.01N-10W**	○	
16		**LT16.01W-10W**	○		**LT16.01N-10W**	○	
16	11,00	**RT16.01W-11W**	○	●	**RT16.01N-11W**	○	●
16		**LT16.01W-11W**	●		**LT16.01N-11W**	○	
16	12,00	**RT16.01W-12W**	○		**RT16.01N-12W**	○	
16		**LT16.01W-12W**	○		**LT16.01N-12W**	○	
16	14,00	**RT16.01W-14W**	●		**RT16.01N-14W**	○	●
16		**LT16.01W-14W**	○		**LT16.01N-14W**	○	
16	16,00	**RT16.01W-16W**	○	●	**RT16.01N-16W**	○	●
16		**LT16.01W-16W**	○		**LT16.01N-16W**	○	

● En stock ○ Sur demande

HC[1] Carbure revêtu

Support de serrage

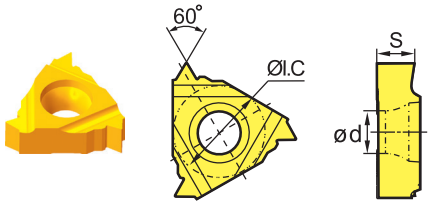
SWR/L	SNR/L
	
A493-A494	A495-A496

Codification A466 Choix nuances A465 Info. techniques A501 Paramètres A500

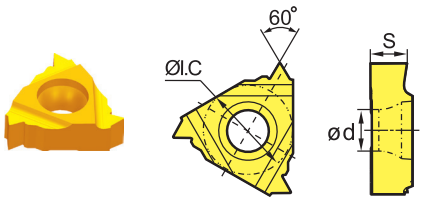
Plaquettes de filetage

R/LT**N/W	I.C	S	d
16	9,525	3,97	4,4

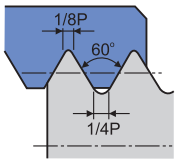
Filetage américain UN 60°, profil plein



Version à droite extérieure
Version à gauche intérieure



Version à droite intérieure
Version à gauche extérieure



AS;E B1.1-1989
Tolérance : 2A·2B

ISO	Pas (T.P.i)	Usinage extérieur	HC[1] (PVD) YBG201	HC[1] (PVD) YBG205	Usinage intérieur	HC[1] (PVD) YBG201	HC[1] (PVD) YBG205
16	8,00	**RT16.01W-8UN**	○		**RT16.01N-8UN**	○	
16		**LT16.01W-8UN**	○		**LT16.01N-8UN**	○	
16	10,00	**RT16.01W-10UN**	○		**RT16.01N-10UN**	○	
16		**LT16.01W-10UN**	○		**LT16.01N-10UN**	○	
16	12,00	**RT16.01W-12UN**	○		**RT16.01N-12UN**	○	
16		**LT16.01W-12UN**	○		**LT16.01N-12UN**	○	
16	14,00	**RT16.01W-14UN**	○		**RT16.01N-14UN**	○	
16		**LT16.01W-14UN**	○		**LT16.01N-14UN**	○	
16	16,00	**RT16.01W-16UN**	○		**RT16.01N-16UN**	○	
16		**LT16.01W-16UN**	○		**LT16.01N-16UN**	○	
16	18,00	**RT16.01W-18UN**	○		**RT16.01N-18UN**	○	
16		**LT16.01W-18UN**	○		**LT16.01N-18UN**	○	
16	20,00	**RT16.01W-20UN**	○		**RT16.01N-20UN**	○	
16		**LT16.01W-20UN**	○		**LT16.01N-20UN**	○	
16	24,00	-			**RT16.01N-24UN**	○	
16		-			**LT16.01N-24UN**	○	

● En stock ○ Sur demande

HC[1] Carbure revêtu

Support de serrage

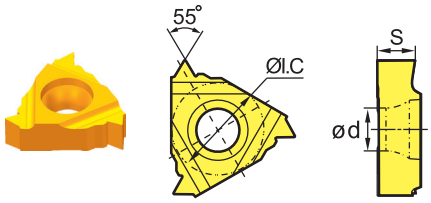
SWR/L	SNR/L
	
A493-A494	A495-A496

Codification A466 Choix nuances A465 Info. techniques A501 Paramètres A500

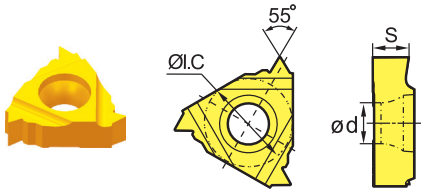
Plaquettes de filetage

R/LT**N/W	I.C	S	d
16	9,525	3,97	4,4

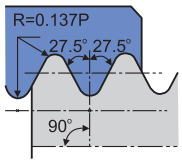
Filetage conique BSPT



Version à droite extérieure
Version à gauche intérieure



Version à droite intérieure
Version à gauche extérieure



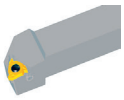
ISO 7·1: 1984 B.S.21:1985
Standard BSPT

ISO	Pas (T.P.i)	Usinage extérieur	HC[1] (PVD) YBG201	HC[1] (PVD) YBG205	Usinage intérieur	HC[1] (PVD) YBG201	HC[1] (PVD) YBG205
16	11,00	**RT16.01W-11BSPT**	○		**RT16.01N-11BSPT**	○	
16		**LT16.01W-11BSPT**	●		**LT16.01N-11BSPT**	○	
16	14,00	**RT16.01W-14BSPT**	○		**RT16.01N-14BSPT**	○	
16		**LT16.01W-14BSPT**	○		**LT16.01N-14BSPT**	○	
16	19,00	**RT16.01W-19BSPT**	○		**RT16.01N-19BSPT**	○	
16		**LT16.01W-19BSPT**	○		**LT16.01N-19BSPT**	○	
16	28,00	**RT16.01W-28BSPT**	○		**RT16.01N-28BSPT**		
16		**LT16.01W-28BSPT**	○		**LT16.01N-28BSPT**	○	

● En stock ○ Sur demande

HC[1] Carbure revêtu

Support de serrage

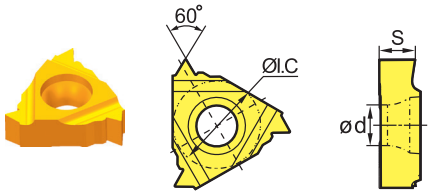
SWR/L	SNR/L
	
A493-A494	A495-A496

Codification A466 Choix nuances A465 Info. techniques A501 Paramètres A500

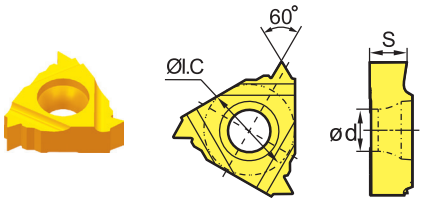
Plaquettes de filetage

R/LT**N/W	I.C	S	d
16	9,525	3,97	4,4

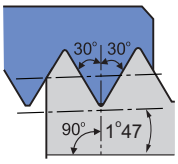
Filetage de robinetterie NPT



Version à droite extérieure
Version à gauche intérieure



Version à droite intérieure
Version à gauche extérieure



ASME B1.20.1-1983
Standard NPT

ISO	Pas (T.P.i)	Usinage extérieur	HC[1] (PVD) YBG201	HC[1] (PVD) YBG205	Usinage intérieur	HC[1] (PVD) YBG201	HC[1] (PVD) YBG205
16	8,00	**RT16.01W-8NPT**	○		**RT16.01N-8NPT**	○	
16		**LT16.01W-8NPT**	○		**LT16.01N-8NPT**	○	
16	11,50	**RT16.01W-11.5NPT**	○		**RT16.01N-11.5NPT**	○	
16		**LT16.01W-11.5NPT**	○		**LT16.01N-11.5NPT**	○	
16	14,00	**RT16.01W-14NPT**	○	○	**RT16.01N-14NPT**	○	
16		**LT16.01W-14NPT**	○		**LT16.01N-14NPT**	○	
16	18,00	**RT16.01W-18NPT**	○		**RT16.01N-18NPT**	○	
16		**LT16.01W-18NPT**	○		**LT16.01N-18NPT**	○	
16	27,00	**RT16.01W-27NPT**	○		**RT16.01N-27NPT**	○	
16		**LT16.01W-27NPT**	○		**LT16.01N-27NPT**	○	

● En stock ○ Sur demande

HC[1] Carbure revêtu

Support de serrage

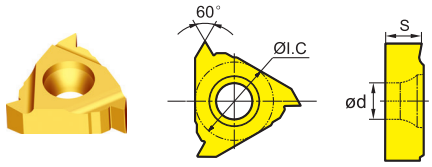
SWR/L	SNR/L
	
A493-A494	A495-A496

Codification A466 Choix nuances A465 Info. techniques A501 Paramètres A500

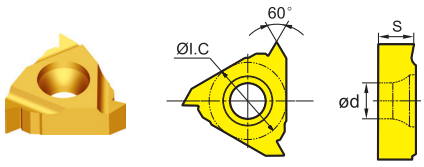
Plaquettes de filetage

R/LT**N/W	I.C	S	d
16	9,525	3,97	4,4

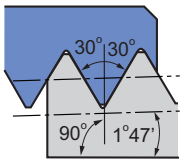
Filetage de robinetterie NPTF 60°



Version à droite extérieure
Version à gauche intérieure



Version à droite intérieure
Version à gauche extérieure



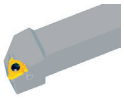
ASME B1.20.1-1983
Tolérance : 2

ISO	Pas (T.P.i)	Usinage extérieur	HC[1] (PVD)		Usinage intérieur	HC[1] (PVD)	
			YBG201	YBG205		YBG201	YBG205
16	8,00	-			**RT16.01N-8NPTF**	○	
16	11,50	**RT16.01W-11.5NPTF**	○		**RT16.01N-11.5NPTF**	○	
16	14,00	**RT16.01W-14NPTF**	○		**RT16.01N-14NPTF**	○	
16	18,00	**RT16.01W-18NPTF**	○		**RT16.01N-18NPTF**	○	
16	27,00	-			**RT16.01N-27NPTF**	○	

● En stock ○ Sur demande

HC[1] Carbure revêtu

Support de serrage

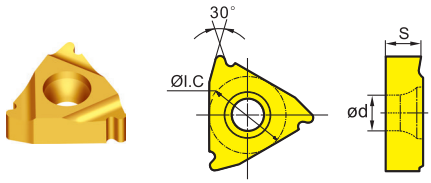
SWR/L	SNR/L
	
A493	A495

Codification A466 Choix nuances A465 Info. techniques A501 Paramètres A500

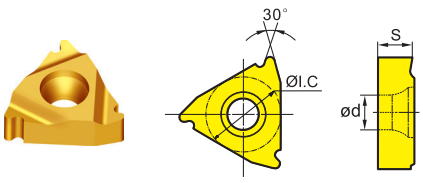
Plaquettes de filetage

R/LT**N/W	I.C	S	d
16	9,525	3,97	4,4

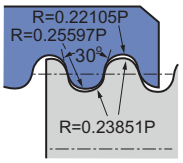
Filetage rond R 30°



Version à droite extérieure
Version à gauche intérieure



Version à droite intérieure
Version à gauche extérieure



DIN 405
Tolérance : 7

ISO	Pas (T.P.i)	Usinage extérieur	HC[1] (PVD)		Usinage intérieur	HC[1] (PVD)	
			YBG201	YBG205		YBG201	YBG205
16	6,00	**RT16.01W-6R**	○		**RT16.01N-6R**	○	○
16	8,00	**RT16.01W-8R**	○		**RT16.01N-8R**	○	○
16	10,00	**RT16.01W-10R**	○		**RT16.01N-10R**	○	○

● En stock ○ Sur demande

HC[1] Carbure revêtu

Support de serrage

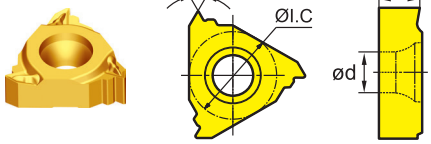
SWR/L	SNR/L
	
A493	A495

Codification A466 Choix nuances A465 Info. techniques A501 Paramètres A500

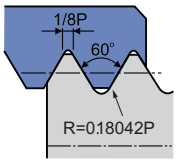
Plaquettes de filetage

R/LT**N/W	I.C	S	d
16	9,525	3,97	4,4

Filetage MJ pour industrie aéronautique et aérospatiale



Version à droite extérieure
Version à gauche intérieure



ISO 5855-1999
Tolérance : 4

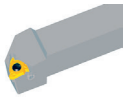
ISO	Pas (mm)	Usinage extérieur	HC[1] (PVD)		Usinage intérieur	HC[1] (PVD)	
			YBG201	YBG205		YBG201	YBG205
16	1,50	**RT16.01W-1.50MJ**	○		-		
16	2,00	**RT16.01W-2.00MJ**	○		-		

● En stock ○ Sur demande

HC[1] Carbure revêtu

Support de serrage

SWR/L



A493

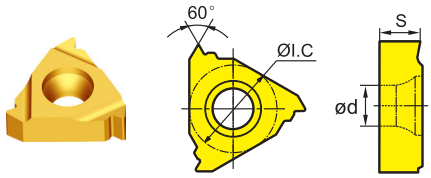
A Tournage
B Fraisage
C Perçage
D Informations techniques
E Index

Codification A466 Choix nuances A465 Info. techniques A501 Paramètres A500

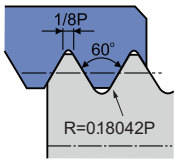
Plaquettes de filetage

R/LT**N/W	I.C	S	d
16	9,525	3,97	4,4

Filetage unifié UNJ



Version à droite extérieure
Version à gauche intérieure



ISO 3161-1999
Tolérance : 3A

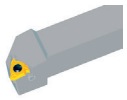
ISO	Pas (T.P.i)	Usinage extérieur	HC[1] (PVD)		Usinage intérieur	HC[1] (PVD)	
			YBG201	YBG205		YBG201	YBG205
16	10,00	**RT16.01W-10UNJ**	○		-		
16	12,00	**RT16.01W-12UNJ**	○		-		
16	14,00	**RT16.01W-14UNJ**	○		-		
16	18,00	**RT16.01W-18UNJ**	○		-		
16	20,00	**RT16.01W-20UNJ**	○		-		
16	24,00	**RT16.01W-24UNJ**	○		-		
16	28,00	**RT16.01W-28UNJ**	○		-		
16	32,00	**RT16.01W-32UNJ**	○		-		

● En stock ○ Sur demande

HC[1] Carbure revêtu

Support de serrage

SWR/L



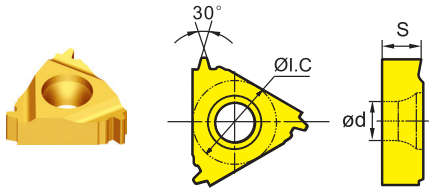
A493

Codification A466 Choix nuances A465 Info. techniques A501 Paramètres A500

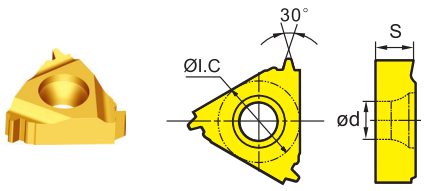
Plaquettes de filetage

R/LT**N/W	I.C	S	d
16	9,525	3,97	4,4

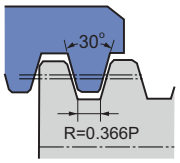
Filetage trapézoïdal ISO TR 30° métrique



Version à droite extérieure
Version à gauche intérieure



Version à droite intérieure
Version à gauche extérieure



ISO 2901-2904
Tolérance : 7

ISO	Pas (mm)	Usinage extérieur	HC[1] (PVD)		Usinage intérieur	HC[1] (PVD)	
			YBG201	YBG205		YBG201	YBG205
16	1,50	**RT16.01W-1.50TR**	○		**RT16.01N-1.50TR**	●	
16	2,00	**RT16.01W-2.00TR**	○	○	**RT16.01N-2.00TR**	○	○
16	3,00	**RT16.01W-3.00TR**	○	○	**RT16.01N-3.00TR**	○	●

● En stock ○ Sur demande

HC[1] Carbure revêtu

Support de serrage

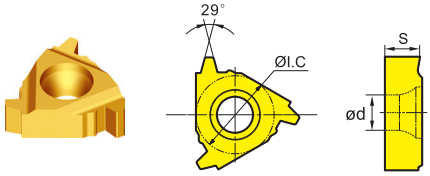
SWR/L	SNR/L
	
A493	A495

Codification A466 Choix nuances A465 Info. techniques A501 Paramètres A500

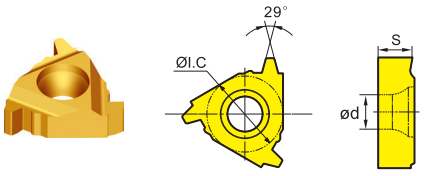
Plaquettes de filetage

R/LT**N/W	I.C	S	d
16	9,525	3,97	4,4

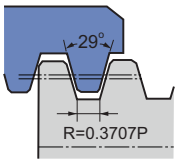
Filetage trapézoïdal américain 29° ACME



Version à droite extérieure
Version à gauche intérieure



Version à droite intérieure
Version à gauche extérieure



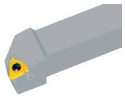
ANSI B1.5-1988
Tolérance : 2G

ISO	Pas (T.P.i)	Usinage extérieur	HC[1] (PVD)		Usinage intérieur	HC[1] (PVD)	
			YBG201	YBG205		YBG201	YBG205
16	8,00	**RT16.01W-8AC**	○		**RT16.01N-8AC**	○	
16	10,00	**RT16.01W-10AC**	○		**RT16.01N-10AC**	○	
16	12,00	**RT16.01W-12AC**	○		**RT16.01N-12AC**	○	
16	14,00	**RT16.01W-14AC**	○		**RT16.01N-14AC**	○	
16	16,00	**RT16.01W-16AC**	○		**RT16.01N-16AC**	○	

● En stock ○ Sur demande

HC[1] Carbure revêtu

Support de serrage

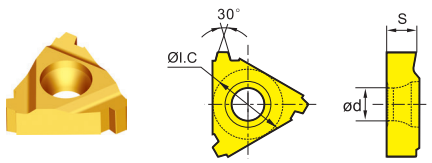
SWR/L	SNR/L
	
A493	A495

Codification A466 Choix nuances A465 Info. techniques A501 Paramètres A500

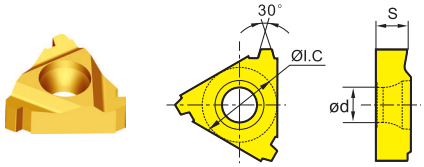
Plaquettes de filetage

R/LT**N/W	I.C	S	d
16	9,525	3,97	4,4

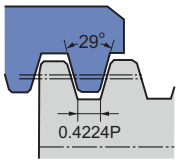
Filetage trapézoïdal plat américain STUB-ACME



Version à droite extérieure
Version à gauche intérieure



Version à droite intérieure
Version à gauche extérieure



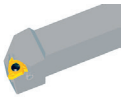
ANSI B1.8-1988
Tolérance : API standard

ISO	Pas (T.P.i)	Usinage extérieur	HC[1] (PVD)		Usinage intérieur	HC[1] (PVD)	
			YBG201	YBG205		YBG201	YBG205
16	8,00	**RT16.01W-8STAC**	○		**RT16.01N-8STAC**	○	
16	10,00	**RT16.01W-10STAC**	○		**RT16.01N-10STAC**	○	
16	12,00	**RT16.01W-12STAC**	○		**RT16.01N-12STAC**	○	
16	14,00	**RT16.01W-14STAC**	○		**RT16.01N-14STAC**	○	
16	16,00	**RT16.01W-16STAC**	○		**RT16.01N-16STAC**	○	

● En stock ○ Sur demande

HC[1] Carbure revêtu

Support de serrage

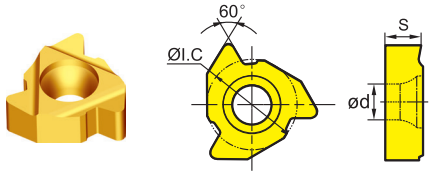
SWR/L	SNR/L
	
A493	A495

Codification A466 Choix nuances A465 Info. techniques A501 Paramètres A500

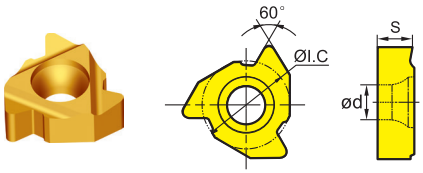
Plaquettes de filetage

R/LT**N/W	I.C	S	d
22	12,7	5,56	5,5

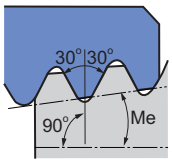
Filetage API 60°



Version à droite extérieure
Version à gauche intérieure



Version à droite intérieure
Version à gauche extérieure



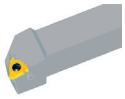
Me = cône, 2i.p.f-4°46', 3i.p.f-7°01'
API SPEC7:1990 Tolérance : API standard

ISO	Pas (T.P.i)	Usinage extérieur	HC[1] (PVD) YBG201	HC[1] (PVD) YBG205	Usinage intérieur	HC[1] (PVD) YBG201	HC[1] (PVD) YBG205
22	4,00	**RT22.01W-4AP382**	○		**RT22.01N-4AP382**	○	
22		**RT22.01W-4AP383**	○		**RT22.01N-4AP383**	○	
22		**RT22.01W-4AP502**	○		**RT22.01N-4AP502**	○	
22		**RT22.01W-4AP503**	○		**RT22.01N-4AP503**	○	
22	5,00	**RT22.01W-5AP403**	○		**RT22.01N-5AP403**	○	

● En stock ○ Sur demande

HC[1] Carbure revêtu

Support de serrage

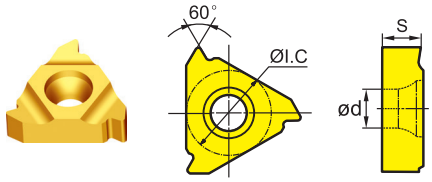
SWR/L	SNR/L
	
A493	A495

Codification A466 Choix nuances A465 Info. techniques A501 Paramètres A500

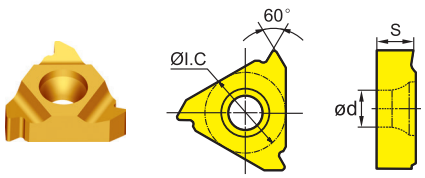
R/LT**N/W	I.C	S	d
16	9,525	3,97	4,4
22	12,7	5,56	5,5

Plaquettes de filetage

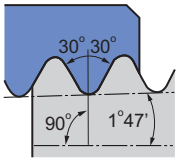
Filetage rond API



Version à droite extérieure
Version à gauche intérieure



Version à droite intérieure
Version à gauche extérieure



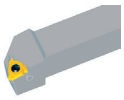
API spec.5B
Tolérance : API RD

ISO	Pas (T.P.i)	Usinage extérieur	HC[1] (PVD)		Usinage intérieur	HC[1] (PVD)	
			YBG201	YBG205		YBG201	YBG205
16	8,00	**RT16.01W-8RD**	○		**RT16.01N-8RD**	○	
16	10,00	**RT16.01W-10RD**	○		**RT16.01N-10RD**	○	
22	8,00	**RT22.01W-8RD**	○		**RT22.01N-8RD**	○	
22	10,00	**RT22.01W-10RD**	○		**RT22.01N-10RD**	○	

● En stock ○ Sur demande

HC[1] Carbure revêtu

Support de serrage

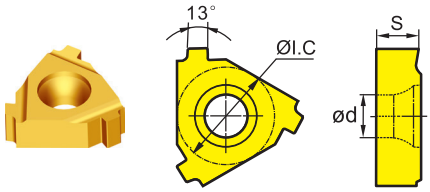
SWR/L	SNR/L
	
A493	A495

Codification A466 Choix nuances A465 Info. techniques A501 Paramètres A500

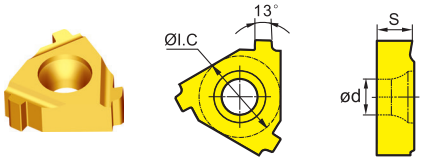
Plaquettes de filetage

R/LT**N/W	I.C	S	d
22	12,7	5,56	5,5

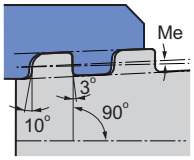
Filetage américain API



Version à droite extérieure
Version à gauche intérieure



Version à droite intérieure
Version à gauche extérieure



Me = cône 3/4i.p.f-1°47'-1°47' p. Ø 4 1/2-13 3/8"
1 i.p.f--2°23' pour Ø16" SEPC.5B.1979 Tol. : API Std.

ISO	Pas (T.P.i)	Usinage extérieur	HC[1] (PVD)		Usinage intérieur	HC[1] (PVD)	
			YBG201	YBG205		YBG201	YBG205
22	5,00	**RT22.01W-5BUT**	○		**RT22.01N-5BUT**	○	

● En stock ○ Sur demande

HC[1] Carbure revêtu

Support de serrage

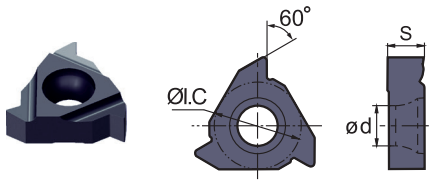
SWR/L	SNR/L
	
A493	A495

Codification A466 Choix nuances A465 Info. techniques A501 Paramètres A500

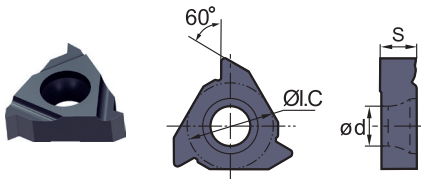
Plaquettes de filetage (type mince)

R/LT**N/W	I.C	S	d
16	9,525	3,52	4

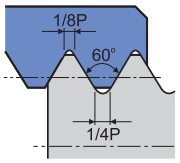
Filetage métrique ISO 60°, profil plein (type mince)



Version à droite extérieure
Version à gauche intérieure



Version à droite intérieure
Version à gauche extérieure

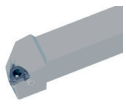


ISO 965-1980 DIN 13
GB·T 197-2003 Tolérance : 6G/6H

ISO	Pas (mm)	Usinage extérieur	HC[1] (PVD)		Usinage intérieur	HC[1] (PVD)	
			YBG202	YBG205		YBG202	YBG205
16	0,50	**RT16.01W-0.50GMB**	○	○	**RT16.01N-0.50GMB**	○	○
16	0,75	**RT16.01W-0.75GMB**	○	○	**RT16.01N-0.75GMB**	○	○
16	1,00	**RT16.01W-1.00GMB**	○	○	**RT16.01N-1.00GMB**	○	○
16		-			**RT16.01N-1.00GMPB**	○	
16	1,25	**RT16.01W-1.25GMB**	○	○	**RT16.01N-1.25GMB**	○	○
16	1,50	**RT16.01W-1.50GMB**	○	○	**RT16.01N-1.50GMB**	○	
16		**RT16.01W-1.50GMPB***	○	○	-		
16	1,75	**RT16.01W-1.75GMB**	○	○	**RT16.01N-1.75GMB**	○	○
16	2,00	**RT16.01W-2.00GMB**	○	○	**RT16.01N-2.00GMB**	○	○
16		-			**RT16.01N-2.00GMPB***	○	○
16	2,50	**RT16.01W-2.50GMB**	○	○	**RT16.01N-2.50GMB**	○	○
16	3,00	**RT16.01W-3.00GMB**	○	○	**RT16.01N-3.00GMB**	○	○
16		-			**RT16.01N-3.00GMPB***	○	

● En stock ○ Sur demande
HC[1] Carbure revêtu
PB* : plaquettes avec brise-copeaux

Support de serrage

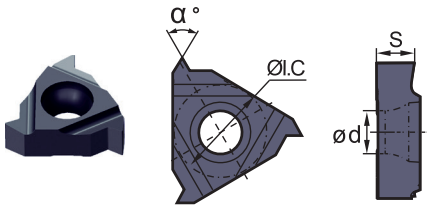
SWR	SNR
	
A497	A498

Codification A466 Choix nuances A465 Info. techniques A501 Paramètres A500

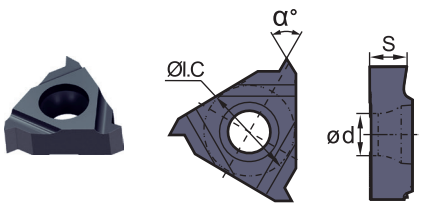
Plaquettes de filetage (type mince)

R/LT**N/W	I.C	S	d
16	9,525	3,52	4

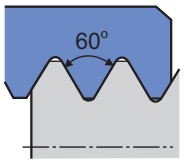
60°, profil partiel (type mince)



Version à droite extérieure
Version à gauche intérieure



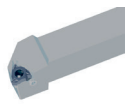
Version à droite intérieure
Version à gauche extérieure



ISO	Pas (mm)	Usinage extérieur	HC[1] (PVD)		Usinage intérieur	HC[1] (PVD)	
			YBG202	YBG205		YBG202	YBG205
16	0,50 - 1,50	**RT16.01W-A60B**	○		**RT16.01N-A60B**	○	
16	0,50 - 3,00	**RT16.01W-AG60B**	○		**RT16.01N-AG60B**	○	
16		**RT16.01W-AG60PB***	○		-		
16	1,75 - 3,00	**RT16.01W-G60B**	○		**RT16.01N-G60B**	○	

● En stock ○ Sur demande
HC[1] Carbure revêtu
PB* : plaquettes avec brise-copeaux

Support de serrage

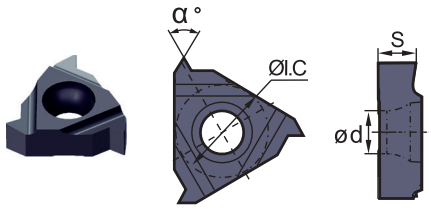
SWR	SNR
	
A497	A498

Codification A466 Choix nuances A465 Info. techniques A501 Paramètres A500

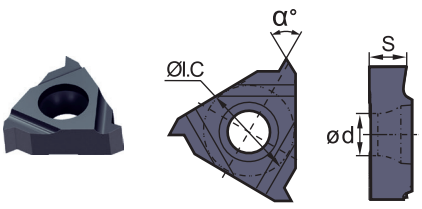
Plaquettes de filetage (type mince)

R/LT**N/W	I.C	S	d
16	9,525	3,52	4

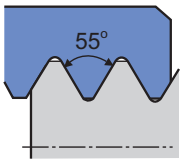
55°, profil partiel (type mince)



Version à droite extérieure
Version à gauche intérieure



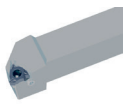
Version à droite intérieure
Version à gauche extérieure



ISO	Pas (T.P.i)	Usinage extérieur	HC[1] (PVD) YBG202	HC[1] (PVD) YBG205	Usinage intérieur	HC[1] (PVD) YBG202	HC[1] (PVD) YBG205
16	0,50 - 1,50	**RT16.01W-A55B**	○		**RT16.01N-A55B**	○	
16	0,50 - 3,00	**RT16.01W-AG55B**	○		**RT16.01N-AG55B**	○	
16		**RT16.01W-AG55PB**	○	○	-		
16	1,75 - 3,00	**RT16.01W-G55B**	○		**RT16.01N-G55B**	○	

● En stock ○ Sur demande
HC[1] Carbure revêtu
PB* : plaquettes avec brise-copeaux

Support de serrage

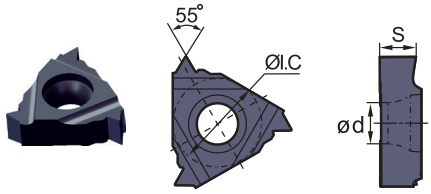
SWR	SNR
	
A497	A498

Codification A466 Choix nuances A465 Info. techniques A501 Paramètres A500

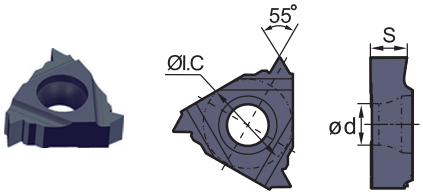
Plaquettes de filetage (type mince)

R/LT**N/W	I.C	S	d
16	9,525	3,52	4

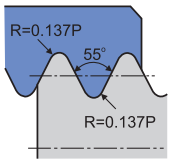
Whitworth (type mince)



Version à droite extérieure
Version à gauche intérieure



Version à droite intérieure
Version à gauche extérieure

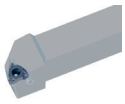


ISO 965-1980 DIN 13
GB·T 197-2003 Tolérance : classe moyenne A

ISO	Pas (T.P.i)	Usinage extérieur	HC[1] (PVD)		Usinage intérieur	HC[1] (PVD)	
			YBG202	YBG205		YBG202	YBG205
16	8,00	**RT16.01W-8WB**	○		**RT16.01N-8WB**	○	
16	9,00	**RT16.01W-9WB**	○		**RT16.01N-9WB**	○	
16	10,00	**RT16.01W-10WB**	○		**RT16.01N-10WB**	○	
16	11,00	**RT16.01W-11WB**	○	○	**RT16.01N-11WB**	○	
16		-			**RT16.01N-11WPB**	○	
16		-			**RT16.01N-11WPB***	○	
16	12,00	**RT16.01W-12WB**	○		**RT16.01N-12WB**	○	
16	14,00	**RT16.01W-14WB**	○		**RT16.01N-14WB**	○	
16		-			**RT16.01N-14WPB***	○	
16	16,00	**RT16.01W-16WB**	○		**RT16.01N-16WB**	○	○

● En stock ○ Sur demande
HC[1] Carbure revêtu
PB* : plaquettes avec brise-copeaux

Support de serrage

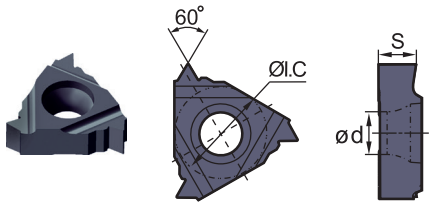
SWR	SNR
	
A497	A498

Codification A466 Choix nuances A465 Info. techniques A501 Paramètres A500

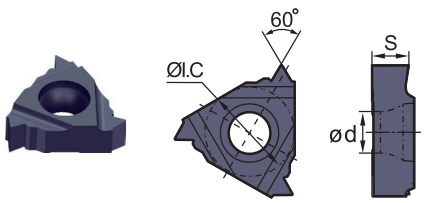
Plaquettes de filetage (type mince)

R/LT**N/W	I.C	S	d
16	9,525	3,52	4

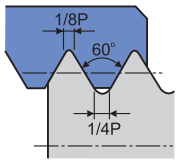
Filetage américain UN 60°, profil plein (type mince)



Version à droite extérieure
Version à gauche intérieure



Version à droite intérieure
Version à gauche extérieure



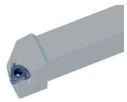
ASME B1.1-1989
Tolérance : 2A/2B

ISO	Pas (T.P.i)	Usinage extérieur	HC[1] (PVD)		Usinage intérieur	HC[1] (PVD)	
			YBG202	YBG205		YBG202	YBG205
16	8,00	**RT16.01W-8UNB**	○		**RT16.01N-8UNB**	○	
16	10,00	**RT16.01W-10UNB**	○		**RT16.01N-10UNB**	○	
16	12,00	**RT16.01W-12UNB**	○		**RT16.01N-12UNB**	○	
16	14,00	**RT16.01W-14UNB**	○		**RT16.01N-14UNB**	○	
16	16,00	**RT16.01W-16UNB**	○		**RT16.01N-16UNB**	○	
16	18,00	**RT16.01W-18UNB**	○		**RT16.01N-18UNB**	○	
16	20,00	**RT16.01W-20UNB**	○		**RT16.01N-20UNB**	○	
16	24,00	-			**RT16.01N-24UNB**	○	

● En stock ○ Sur demande

HC[1] Carbure revêtu

Support de serrage

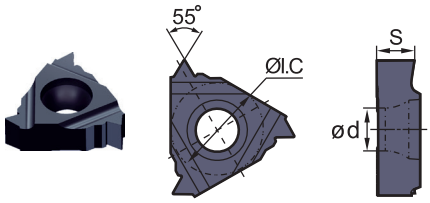
SWR	SNR
	
A497	A498

Codification A466 Choix nuances A465 Info. techniques A501 Paramètres A500

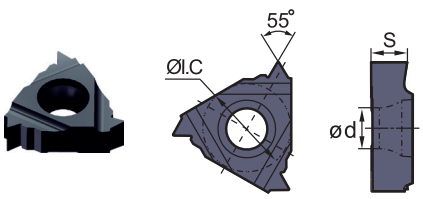
Plaquettes de filetage (type mince)

R/LT**N/W	I.C	S	d
16	9,525	3,52	4

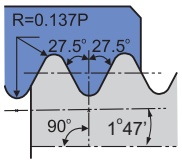
Filetage conique de robinetterie BSPT (type mince)



Version à droite extérieure
Version à gauche intérieure



Version à droite intérieure
Version à gauche extérieure

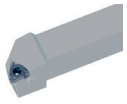


ASME B1.1-1989
Standard BSPT

ISO	Pas (T.P.i)	Usinage extérieur	HC[1] (PVD) YBG202	HC[1] (PVD) YBG205	Usinage intérieur	HC[1] (PVD) YBG202	HC[1] (PVD) YBG205
16	11,00	**RT16.01W-11BSPTB**	○	○	**RT16.01N-11BSPTB**	○	○
16	14,00	**RT16.01W-14BSPTB**	○		**RT16.01N-14BSPTB**	○	
16		**RT16.01W-14BSPTPB***	○		**RT16.01N-14BSPTPB***	○	○
16	19,00	**RT16.01W-19BSPTB**	○		**RT16.01N-19BSPTB**	○	
16	28,00	**RT16.01W-28BSPTB**	○		**RT16.01N-28BSPTB**	○	

● En stock ○ Sur demande
HC[1] Carbure revêtu
PB* : plaquettes avec brise-copeaux

Support de serrage

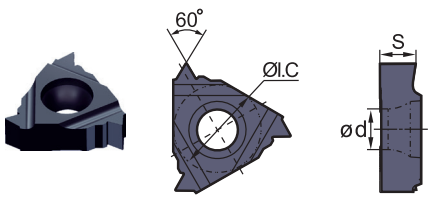
SWR	SNR
	
A497	A498

Codification A466 Choix nuances A465 Info. techniques A501 Paramètres A500

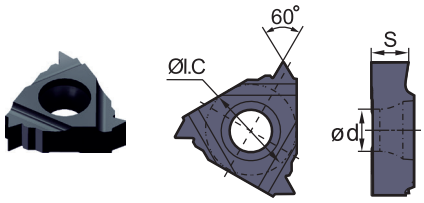
Plaquettes de filetage (type mince)

R/LT**N/W	I.C	S	d
16	9,525	3,52	4

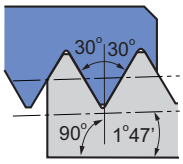
Filetage de robinetterie NPT (type mince)



Version à droite extérieure
Version à gauche intérieure



Version à droite intérieure
Version à gauche extérieure

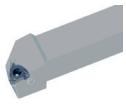


ASME B1.20.1-1983
Standard NPT

ISO	Pas (T.P.i)	Usinage extérieur	HC[1] (PVD)		Usinage intérieur	HC[1] (PVD)	
			YBG202	YBG205		YBG202	YBG205
16	8,00	**RT16.01W-8NPTB**	○		**RT16.01N-8NPTB**	○	
16	11,50	**RT16.01W-11.5NPTB**	○		**RT16.01N-11.5NPTB**	○	
16		-			**RT16.01N-11.5NPTPB***	○	
16	14,00	**RT16.01W-14NPTB**	○	○	**RT16.01N-14NPTB**	○	
16		-			**RT16.01N-14NPTPB***	○	○
16	18,00	**RT16.01W-18NPTB**	○		**RT16.01N-18NPTB**	○	
16	27,00	**RT16.01W-27NPTB**	○		**RT16.01N-27NPTB**	○	

● En stock ○ Sur demande
HC[1] Carbure revêtu
PB* : plaquettes avec brise-copeaux

Support de serrage

SWR	SNR
	
A497	A498

Codification A466 Choix nuances A465 Info. techniques A501 Paramètres A500

Filetage Codification – porte-outils

S	W	R	20	20	K	16	(B)
1	2	3	4	5	6	7	8

Système de serrage

Code	Description	
S	Système de serrage à vis	
C	Serrage par bride	

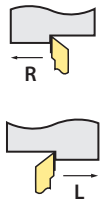
1

Type d'usinage

Code	Description
W	Porte-outils filetage extérieur
N	Porte-outils filetage intérieur

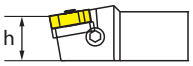
2

Sens de coupe



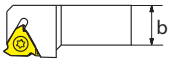
3

Hauteur du corps h [mm]



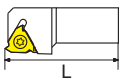
4

Largeur de corps b [mm]



5

Longueur de corps L [mm]



Code	L
H	100
K	125
M	150
P	170
Q	180
R	200
S	250
T	300

6

Longueur d'arête [mm]

Code	I.C.
11	6,35
16	9,525
22	12,7

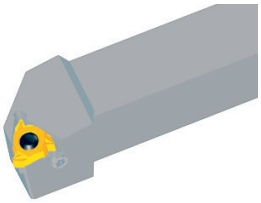
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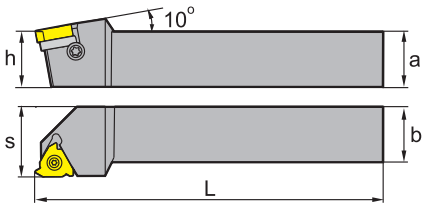
Porte-outils pour plaquettes de filetage (version B)

8

Porte-outils de filetage (extérieur)

SWR/L





Article	✻	Stock	Dimensions (mm)					Plaquettes
			a	b	L	h	s	
SWR1616H16		●	16	16	100	16	20	RT16.01W-****
SWR2020K16		●	20	20	125	20	25	RT16.01W-****
SWR2525M16		●	25	25	150	25	32	RT16.01W-****
SWR3225P16		●	32	25	170	32	32	RT16.01W-****
SWR3232P16		●	32	32	170	32	40	RT16.01W-****
SWR2525M22		●	25	25	150	25	32	RT22.01W-****
SWR3225P22		●	32	25	170	32	32	RT22.01W-****
SWR3232P22		●	32	32	170	32	40	RT22.01W-****
SWR4040S22		○	40	40	250	40	50	RT22.01W-****

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**RT16.01W-******	**RT22.01W-******
	h	**16-32**	**25-40**
	Vis	I60M3,5×12 (2,7 Nm)	I60M5×17 (6,7 Nm)
	Vis (cale-support)	SM4×8C	SM5×8.5C
	Cale-support	MT16-__M	MT22-__M
	Clé (vis)	WT15IP	WT20IP

Plaquette



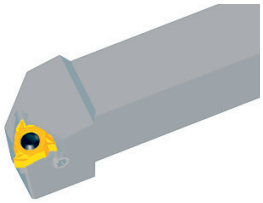
Semi-finition

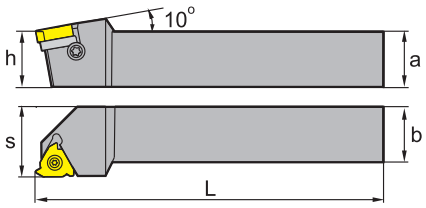
A467

Codification A492 Choix nuances A465 Info. techniques A501 Paramètres A500

Porte-outils de filetage (extérieur)

SWR/L





Article	✲	Stock	Dimensions (mm)					Plaquettes
			a	b	L	h	s	
SWL1616H16		●	16	16	100	16	20	LT16.01W-****
SWL2020K16		●	20	20	125	20	25	LT16.01W-****
SWL2525M16		●	25	25	150	25	32	LT16.01W-****
SWL3225P16		●	32	25	170	32	32	LT16.01W-****
SWL3232P16		○	32	32	170	32	40	LT16.01W-****
SWL2525M22		●	25	25	150	25	32	LT22.01W-****
SWL3225P22		○	32	25	170	32	32	LT22.01W-****
SWL3232P22		●	32	32	170	32	40	LT22.01W-****
SWL4040S22		○	40	40	250	40	50	LT22.01W-****

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**LT16.01W-******	**LT22.01W-******
	h	**16-32**	**25-40**
	Vis	I60M3,5×12 (2,7 Nm)	I60M5×17 (6,7 Nm)
	Vis (cale-support)	SM4×8C	SM5×8.5C
	Cale-support	MT16-__M	MT22-__M
	Clé (vis)	WT15IP	WT20IP

Plaquette



Semi-finition

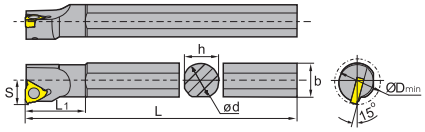
A467

Codification A492 | Choix nuances A465 | Info. techniques A501 | Paramètres A500

Porte-outil de filetage (intérieur)

SNR/L





Article	✻	Stock	Dimensions (mm)							Plaquettes
			ød	b	L	h	s	L_1	D_{min}	
SNR0016K11		●	16	16	125	15	10	20,9	12	RT11.01N-****
SNR0016M11		●	16	15,5	150	15	10,5	25,9	16	RT11.01N-****
SNR0016M16		●	16	15,5	150	15	12	27	20	RT16.01N-****
SNR0020M16		●	20	19	150	18	14	28,7	25	RT16.01N-****
SNR0020Q16		●	20	19	180	18	14	34	25	RT16.01N-****
SNR0025M16		●	25	24	150	23	17	28,8	32	RT16.01N-****
SNR0032R16		●	32	31	200	30	22	30,9	40	RT16.01N-****
SNR0032S16		●	32	31	250	30	22	30,9	40	RT16.01N-****
SNR0040T16		●	40	38,5	300	37	27	31,5	50	RT16.01N-****
SNR0050U16		○	50	49,5	350	49	35	40,2	63	RT16.01N-****
SNR0020Q22		●	20	21,5	180	18	15	35	25	RT22.01N-****
SNR0025R22		●	25	24	200	23	19	39	32	RT22.01N-****
SNR0032S22		●	32	31	250	30	22	36,4	40	RT22.01N-****
SNR0040T22		●	40	38,5	300	37	27	37,2	50	RT22.01N-****
SNR0050U22		●	50	48,5	350	47	35	42,6	63	RT22.01N-****

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**RT11.01N-******	**RT16.01N-******	**RT16.01N-******	**RT22.01N-******	**RT22.01N-******
	ød	**16**	**16**	**20-50**	**20**	**25-50**
	Vis	I60M2,5×6,5 (1,0 Nm)	I60M3,5×8 (2,7 Nm)	I60M3,5×12 (2,7 Nm)	I60M5×10 (6,7 Nm)	I60M5×17 (6,7 Nm)
	Vis (cale-support)			SM4×8C		SM5×8.5C
	Cale-support			MT16-__M		MT22-__M
	Clé (vis)	WT07IP	WT15IP	WT15IP	WT20IP	WT20IP

Plaquette

Semi-finition

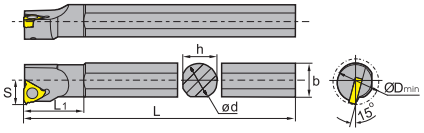
A467

Codification A492 Choix nuances A465 Info. techniques A501 Paramètres A500

Porte-outil de filetage (intérieur)

SNR/L





Article	✻	Stock	Dimensions (mm)							Plaquettes
			ød	b	L	h	s	L_1	D_{min}	
SNL0016K11		●	16	16	125	15	10	20,9	12	LT11.01N-****
SNL0016M11		●	16	15,5	150	15	10,5	25,9	16	LT11.01N-****
SNL0016M16		●	16	15,5	150	15	12	27	20	LT16.01N-****
SNL0020M16		○	20	19	150	18	14	28,7	25	LT16.01N-****
SNL0020Q16		●	20	19	180	18	14	34	25	LT16.01N-****
SNL0025M16		●	25	24	150	23	17	28,8	32	LT16.01N-****
SNL0032R16		●	32	31	200	30	22	30,9	40	LT16.01N-****
SNL0032S16		○	32	31	250	30	22	30,9	40	LT16.01N-****
SNL0040T16		●	40	38,5	300	37	27	31,5	50	LT16.01N-****
SNL0050U16		○	50	49,5	350	49	35	40,2	63	LT16.01N-****
SNL0020Q22		●	20	21,5	180	18	15	35	25	LT22.01N-****
SNL0025R22		○	25	24	200	23	19	39	32	LT22.01N-****
SNL0032S22		●	32	31	250	30	22	36,4	40	LT22.01N-****
SNL0040T22		●	40	38,5	300	37	27	37,2	50	LT22.01N-****
SNL0050U22		●	50	48,5	350	47	35	42,6	63	LT22.01N-****

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**LT11.01N-******	**LT16.01N-******	**LT16.01N-******	**LT22.01N-******	**LT22.01N-******
	ød	**16**	**16**	**20-50**	**20**	**25-50**
	Vis	I60M2,5×6,5 (1,0 Nm)	I60M3,5×8 (2,7 Nm)	I60M3,5×12 (2,7 Nm)	I60M5×10 (6,7 Nm)	I60M5×17 (6,7 Nm)
	Vis (cale-support)			SM4×8C		SM5×8.5C
	Cale-support			MT16-__M		MT16-__M
	Clé (vis)	WT07IP	WT15IP	WT15IP	WT20IP	WT20IP

Plaquette



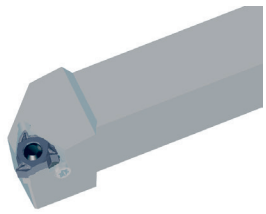
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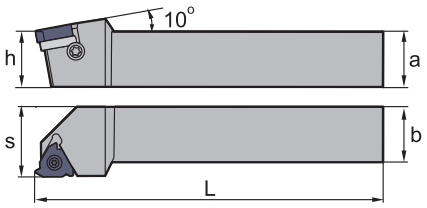
A467

Codification A492 Choix nuances A465 Info. techniques A501 Paramètres A500

Porte-outils de filetage (extérieur)

SWR-B Thin Type





Article	✲	Stock	Dimensions (mm)					Plaquettes
			a	b	L	h	s	
SWR1616H16B		●	16	16	100	16	20	RT16.01W-****B
SWR2020K16B		●	20	20	125	20	25	RT16.01W-****B
SWR2525M16B		●	25	25	150	25	32	RT16.01W-****B
SWR3225P16B		●	32	25	170	32	32	RT16.01W-****B
SWR3232P16B		●	32	32	170	32	40	RT16.01W-****B

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**RT16.01W-****B**
	h	**16-32**
	Vis	I60M3,5×12TT (2,7 Nm)
	Vis (cale-support)	SM4×8C
	Cale-support	MT16-__M
	Clé (vis)	WT15IP

Plaquette



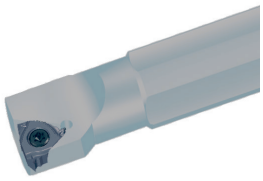
Semi-finition

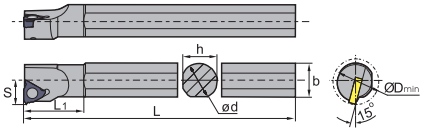
A486

Codification A492 Choix nuances A465 Info. techniques A501 Paramètres A500

Porte-outil de filetage (intérieur)

SNR-B Thin Type





Article	✻	Stock	Dimensions (mm)							Plaquettes
			ød	b	L	h	s	L_1	D_{min}	
SNR0016M16B		●	16	15,5	150	15	12	27	20	RT16.01N-****B
SNR0020Q16B		●	20	19	180	18	14	34	25	RT16.01N-****B
SNR0025M16B		●	25	24	150	23	17	28,8	32	RT16.01N-****B
SNR0032R16B		●	32	31	200	30	22	30,9	40	RT16.01N-****B
SNR0032S16B		●	32	31	250	30	22	30,9	40	RT16.01N-****B

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**RT16.01N-****B**	**RT16.01N-****B**
	ød	**16**	**20-32**
	Vis	I60M3,5×08TT (2,7 Nm)	
	Vis		I60M3,5×12TT (2,7 Nm)
	Vis (cale-support)		SM4×8C
	Cale-support		MT16-__M
	Clé (vis)	WT15IP	WT15IP

Codification A492 Choix nuances A465 Info. techniques A501 Paramètres A500

Notes

Plaquettes de filetage

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min] HC (PVD) YBG201	YBG205	
P	Acier non allié	env. 0,15 % C	recuit	125	1	190	190	
		env. 0,45 % C	recuit	190	2	175	175	
		env. 0,45 % C	trempé et revenu	250	3	145	145	
		env. 0,75 % C	recuit	270	4	140	140	
		env. 0,75 % C	trempé et revenu	300	5	135	135	
	Acier faiblement allié		recuit	180	6	170	170	
			trempé et revenu	275	7	125	125	
			trempé et revenu	300	8	115	115	
			trempé et revenu	350	9	105	105	
	Acier fortement allié et acier à outils fortement allié		recuit	200	10	125	125	
			durci et revenu	325	11	95	95	
M	Acier inoxydable	ferritique / martensitique	recuit	200	12	165	165	
		martensitique	trempé et revenu	240	13	135	135	
		austénitique	trempé	180	14	155	155	
		austénitique et ferritique		230	15	135	135	
K	Fonte grise	perlitique / ferritique		180	16	240	240	
		perlitique (martensitique)		260	17	185	185	
	Fonte avec graphite nodulaire	ferritique		160	18	220	220	
		perlitique		250	19	165	165	
	Fonte malléable	ferritique		130	20	175	175	
		perlitique		230	21	165	165	
N	Alliages corroyé d'aluminium	non durcissable		60	22	800	800	
		durcissable	trempé	100	23	600	600	
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24	320	320	
		≤ 12 % Si, durcissable	trempé	90	25	240	240	
		> 12 % Si, non durcissable		130	26	160	160	
	Cuivre et alliages de cuivre (bronze/moulage)	Alliages de décolletage, PB > 1 %		110	27	160	160	
		CuZn, CuSnZn		90	28	600	600	
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29	200	200	
S	Alliages réfractaires	Base Fe	recuit	200	30	95	95	
			trempé	280	31	50	50	
		à base de Ni ou Co	recuit	250	32	80	80	
			trempé	350	33	70	70	
			coulé	320	34	70	70	
	Alliages de titane	Titane pur		R_m 400	35	145	145	
		Alliages Alpha + Beta	trempé	R_m 1050	36	50	50	
H	Acier trempé		durci et revenu	55 HRC	37			
			durci et revenu	60 HRC	38			
	Fonte trempée		coulé	400	39			
	Fonte durcie		durci et revenu	55 HRC	40			
X	Matériaux non métalliques	Thermoplastiques			41			
		Duroplaste			42			
		Matière plastique renforcée de fibres de verre GFK			43			
		Matière plastique renforcée de fibres de carbone CFK			44			
		Graphite			45			
		Bois			46			

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Vous trouverez les exemples de matériaux pour les groupes enlèvement de copeaux à la page D11.

HC carbure revêtu

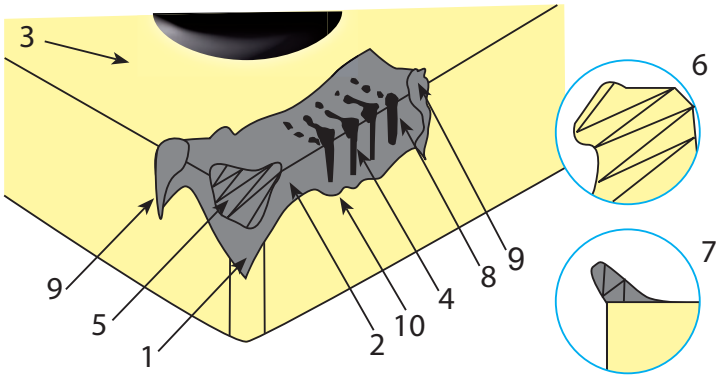
Informations techniques

Résolution de problèmes – Tournage	**A502-A504**
Informations techniques-Tournage	**A505-A512**
Outils spéciaux – tournage	**A513**

A

Résolution de problèmes – tournage général

Nr	Type d'usure	Conséquences	Cause	Recommandations
1+2	Usure de la face de dépouille	– Mauvais état de surface et mauvaise stabilité dimensionnelle – Augmentation de l'effort de coupe	– Nuance pas assez résistante – Vitesse de coupe trop élevée – Angle de dépouille trop petit – Avance trop faible	– Nuance avec résistance à l'usure plus élevée – Réduire la vitesse de coupe – Augmenter l'angle de dépouille – Réduire l'avance
3	Usure en cratère	– Mauvais état de surface et mauvais contrôle du copeau	– Nuance pas assez résistante – Vitesse de coupe trop élevée – Avance trop élevée	– Nuance avec résistance à l'usure plus élevée – Réduire la vitesse de coupe – Réduire l'avance
4	Ecaillage	– Durée de vie instable – Rupture soudaine de l'arête de coupe	– La nuance est trop dure – Avance trop élevée – Stabilité insuffisante de l'arête de coupe Stabilité insuffisante du porte-outil ou serrage insuffisant	– Nuance avec une ténacité supérieure – Réduire l'avance – Modifier le rayon de l'arête de coupe – Utiliser un porte-outils plus stable
5	Rupture	– Augmentation de l'effort de coupe – Mauvais état de surface et mauvaise stabilité dimensionnelle	– La nuance est trop dure – Avance trop élevée – Stabilité insuffisante de l'arête de coupe – Stabilité insuffisante du porte-outil ou serrage insuffisant	– Nuance avec une ténacité supérieure – Réduire l'avance – Modifier le rayon de l'arête de coupe – Utiliser un porte-outils plus stable
6	Déformation plastique	– Mauvaise stabilité dimensionnelle – Endommagement de l'arête de coupe	– Nuance pas assez résistante – Vitesse de coupe trop élevée – Profondeur de coupe et/ou avance trop élevée – Température trop élevée sur l'arête	– Nuance avec meilleure résistance thermique – Réduire la vitesse de coupe – Réduire la prof. de coupe et l'avance
7	Arête rapportée	– Augmentation de l'effort de coupe – Qualité en surface insuffisante	– Vitesse de coupe insuffisante – Arête de coupe pas assez tranchante – Nuance inadaptée	– Augmenter la vitesse de coupe – Augmenter l'angle d'enlèvement de copeaux – Sélectionner une nuance plus adaptée
8	Usure thermique	– Rupture liée à une interaction thermique, souvent en cas de coupe discontinue (fraisage)	– Variations de la température d'usinage – La nuance est trop dure	– Usinage à sec – Nuance avec une ténacité supérieure
9	Usure en entaille	– Formation de bavures – Augmentation de l'effort de coupe	– Endommagement lié aux copeaux (arête du copeau effilée) – Avance et vitesse de coupe trop haute	– Nuance avec meilleure résistance thermique – Augmenter l'angle de coupe afin d'obtenir une arête plus tranchante – Diminuer la vitesse de coupe
10	Écaillage (revêtement)	– Fréquent en cas d'usinage de matériaux durs ou en cas d'apparition de vibrations	– Éléments qui s'agglutinent sur l'arête de coupe et éclats – Mauvaise élimination des copeaux	– Augmenter l'angle de coupe afin d'obtenir une arête plus tranchante – Brise-copeau avec une coupe plus importante



Résolution de problèmes – PCBN et PCD

Type d'usure	Recommandations	
	Géométrie	Conditions de coupe
Usure en dépouille	– Arête de coupe plus tranchante pour réduire la force de coupe – Chanfrein négatif plus petit – Utiliser des plaquettes positives	– Réduire la vitesse de coupe – Augmenter l'avance pour réduire le temps de coupe
Usure en entaille	– Rayon plus grand	– Utiliser la « méthode de l'avance variable »
Usure en cratère/rupture due à l'usure en cratère	– Arête de coupe plus vive pour une force de coupe réduite	– Réduire la vitesse de coupe – Augmenter l'avance pour réduire le temps de coupe et accroître la distance entre l'arête de coupe et la poche de l'abrasion en forme de cratère
Éclats par l'intermédiaire des chocs ou des vibrations	– Angle de chanfrein négatif plus grand et/ou chanfrein tonnelée	– Augmenter l'avance afin de réduire le nombre de chocs
Eclats par délamination	– Arête de coupe plus vive pour une force de coupe réduite – Chanfrein négatif plus petit – Utiliser des plaquettes positives	– Augmenter l'avance afin de réduire le temps de contact outil / pièce
Fissures/rupture thermique	– Arête de coupe plus vive pour une force de coupe réduite – Chanfrein négatif plus petit – Utiliser des plaquettes positives	– Réduire la vitesse de coupe, l'avance et la profondeur de coupe – Usinage à sec
Eclats	– Chanfrein négatif plus grand	– Augmenter la vitesse de coupe afin de réduire la force de coupe

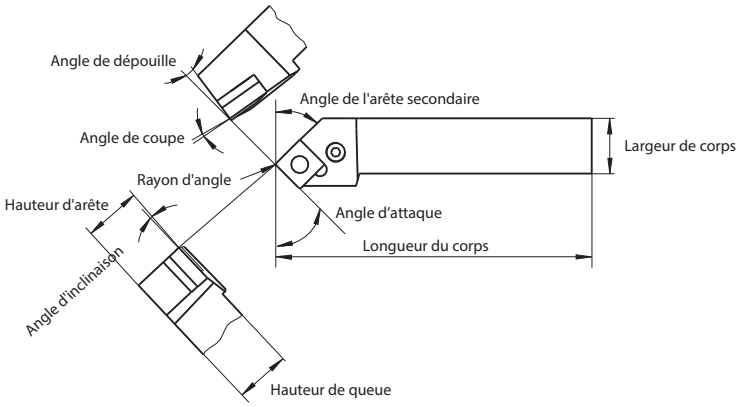
Pour une étude précise, veuillez nous envoyer les plaquettes usées. Dans le cas où le problème tient à une rupture, n'utilisez la plaquette qu'à 80–90 % de sa durée de vie ; en effet, une plaquette cassée ne peut être analysée.

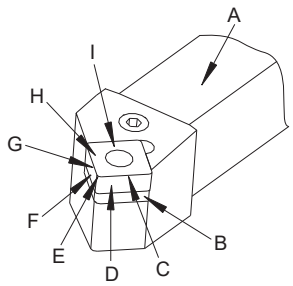
Résolution de problèmes – filetage au tour

Problème	Cause	Solution
Usure importante de la face de dépouille	– Vitesse de coupe trop élevée	– Réduire la vitesse de coupe
	– Profondeur de passe trop faible	– Réduire le nombre de passes
	– Plaquette positionnée au-dessus/dessous du centre de tournage	– Corriger la hauteur de la plaquette
Marques d'usure différentes sur le côté gauche et le côté droit	– Profondeur de passe latérale pas optimale	– Corriger la profondeur de passe latérale
	– L'angle d'inclinaison et l'angle principal ne sont pas ajustés de façon optimale	– Changer la cale-support afin d'obtenir l'angle approprié
Rupture	– Vitesse de coupe insuffisante	– Augmenter la vitesse de coupe
	– Effort de coupe trop élevé	– Augmenter le nombre de passes – Diminuer la taille des passes
	– Conditions instables	– Améliorer le serrage de la pièce et le porte-à-faux de l'outil afin d'empêcher les vibrations
	– Mauvais contrôle du copeau	– Augmenter la pression du réfrigérant pour une meilleure élimination des copeaux
Déformation plastique	– Vitesse de coupe et température trop élevées	– Diminuer la vitesse de coupe – Augmenter le nombre de passes – Diminuer la profondeur des passes
	– Mauvaise alimentation en réfrigérant	– Améliorer l'alimentation en réfrigérant
Mauvais état de surface du filet	– Vitesse de coupe insuffisante	– Augmenter la vitesse de coupe
	– La plaquette se trouve au-dessus du centre	– Corriger la hauteur de la plaquette
	– Mauvais contrôle du copeau	– Modifier la vitesse d'avance et/ou la profondeur de passe
Profil de filet incorrect	– Hauteur de plaquette incorrecte	– Modifier la hauteur de plaquette
	– Le porte-outils n'est pas à 90°	– Régler à nouveau le porte-outils
	– Erreur de pas de la machine	– Régler à nouveau la machine
Profil de filetage de profondeur insuffisante	– Hauteur de plaquette incorrecte	– Modifier la hauteur de plaquette
	– Biseau d'arête de coupe	– Remplacement de plaquette
	– Usure trop importante	– Remplacement de plaquette
Formation d'arêtes rapportées	– Température trop faible sur l'arête	– Augmenter la vitesse de coupe
	– Fréquent en cas d'usinage d'acier au carbone ou d'acier inoxydable	– Utiliser une nuance dotée d'une ténacité suffisante (revêtement PVD)
Vibrations	– Mauvais paramètres de coupe	– Augmenter la vitesse de coupe ou la réduire fortement
	– Hauteur de plaquette incorrecte	– Modifier la hauteur de plaquette
	– Serrage de la pièce insuffisant	– Améliorer le système de serrage et minimiser le porte-à-faux de l'outil

Tournage général

Géométrie de coupe





A Porte-outils
B Cale-support
C Arête principale
D Face de dépouille
E Rayon d'angle
G Arête secondaire
H Face plaquette
I Foret à plaquettes

Angle de coupe

Une augmentation de l'angle de coupe réduit les efforts de coupe, car les copeaux sont mieux dirigés. Ceci rend plus efficace le système d'usinage et réduit les efforts de coupe et les contraintes de température. Dans l'ensemble, l'usure des outils est réduite et les performances d'usinage sont améliorées. En même temps, cela implique un affaiblissement de l'arête de coupe, une augmentation des contraintes et un risque accru de ruptures.

Angle de coupe	Applications
Petit	Usinage de matériaux durs et cassants, ébauche, coupe interrompue
Grand	Usinage de matériaux malléables et résistants, usinage de précision

Angle de dépouille

Une augmentation de l'angle de dépouille entraîne une réduction du frottement entre la pièce et l'outil. Dans l'ensemble, les efforts de coupe sont plus faibles et l'on peut obtenir de meilleurs états de surface. Cependant, un angle de dépouille trop important affaiblit la stabilité de l'arête de coupe. En fonction de l'application, les angles de dépouille varient entre 3° et 12°.

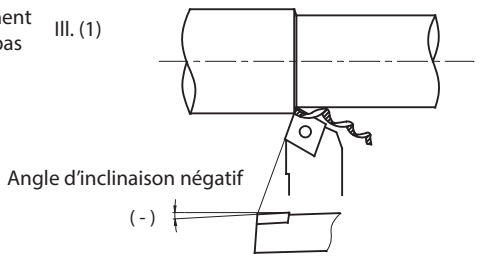
Angle de dépouille	Applications
Petit	Usinage de matériaux durs et cassants, ébauche avec arête de coupe stable
Grand	Usinage de matériaux sensibles à l'écrouissage, usinage de précision avec de faibles efforts de coupe

Angle d'inclinaison

L'attaque positive ou négative de l'arête de coupe a une influence considérable sur le sens d'écoulement des copeaux et sur la stabilité de l'arête ou du point de coupe. Celle-ci est plus élevée lorsque l'angle est négatif et protège ainsi l'outil des contraintes de choc, par ex. dans le cas d'applications d'ébauche ou d'usinages avec des coupes interrompues. Cependant, cela augmente également l'effort opposé, ce qui peut provoquer des vibrations. Un angle d'arête de coupe positif s'avère avantageux dans le cas de finitions, car les copeaux sont évacués à l'écart des surfaces déjà usinées.

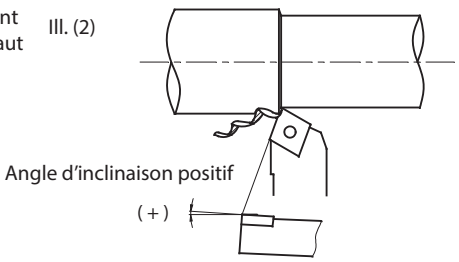
Comme le montre l'illustration (1), un angle d'arête de coupe négatif entraîne un écoulement des copeaux vers la surface déjà usinée de la pièce en raison de son point de coupe plus bas par rapport à la surface du porte-outils.

Ill. (1)



Comme le montre l'illustration (2), un angle d'arête de coupe positif entraîne un écoulement des copeaux vers la surface non usinée de la pièce en raison de son point de coupe plus haut par rapport à la surface du porte-outils.

Ill. (2)

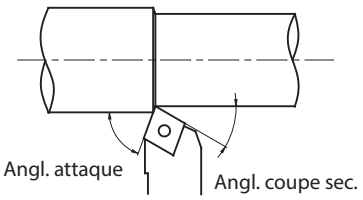


Tournage général

Angle d'attaque (arête principale)

Une diminution de l'angle d'attaque augmente la stabilité de l'arête. La partie de l'arête formant les copeaux s'en trouve augmentée, l'effort est mieux réparti sur l'arête, et la chaleur mieux évacuée. Un petit angle d'attaque entraîne un effet positif sur la durée de vie.
On utilise un grand angle d'attaque de 90° lors de l'usinage d'axes longs et fins, afin d'éviter que la pièce ne se déforme.

Angle d'attaque	Applications
Petit	Pour les matériaux présentant une résistance à la traction élevée, une dureté élevée ou une surface trempée
Grand	Pour les machines présentant une faible stabilité



Angle d'arête secondaire

La grandeur de l'angle d'arête secondaire influe sur l'état de surface de la pièce ainsi que sur la stabilité de l'arête de coupe. Si l'angle est trop petit, des vibrations peuvent se produire.
Par conséquent, dans le cas d'une ébauche, un petit angle doit être appliqué étant donné que l'arête présente une meilleure stabilité. Pour un usinage de précision avec un bon état de surface, il faut choisir l'angle le plus grand possible.

Rayon de plaquette

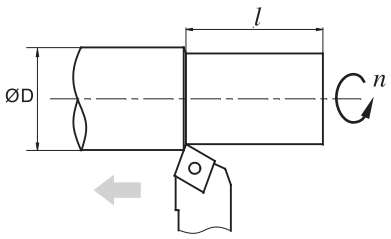
Le rayon de plaquette a une influence sur la stabilité de l'arête de coupe et l'état de surface, ainsi que sur les conditions de coupe.
Avec un rayon de plaquette plus grand, l'état de surface et la stabilité de l'arête de coupe sont améliorés. Les faces de dépouille et l'usure de la face d'attaque diminuent. L'augmentation du rayon augmente également l'effort de coupe. S'il est trop important, des vibrations peuvent se produire, ce qui a un effet négatif sur le contrôle du copeau.

Rayon	Applications
Petit	Usinage de finition avec de petites profondeurs de coupe Usinage d'axes longs et fins Faible serrage ou stabilité de la machine
Grand	Ébauche avec une stabilité élevée de l'arête de coupe Usinage avec coupe interrompue ou usinage de matières forgées Haute stabilité de la machine

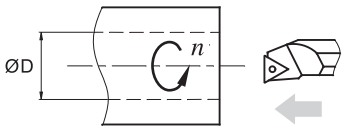
Tournage général

Vitesse de coupe V_c

$$V_C = \frac{\pi \times D \times n}{1000} \text{ [m/min]}$$



Tournage extérieur



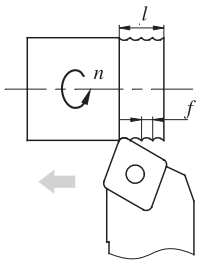
Tournage intérieur

V_c : Vitesse de coupe [m/min]
n : Vitesse de rotation [tr/min]
fn : Avance par tour [mm/tr]

Exemple : n = 250 tr/min, f = 0,2 mm, l = 150 mm
Résultat : [insérer les valeurs dans la formule V_C]

Vitesse d'avance F

$$f = \frac{l}{n} \text{ [mm/tr]}$$



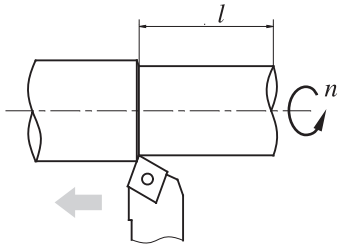
fn : Avance par tour [mm/tr]
l : Longueur de coupe par minute [mm]
n : Vitesse de rotation [tr/min]

Exemple : n = 500 tr/min, l = 100 mm/min
Résultat : [insérer les valeurs dans la formule f]

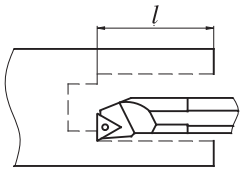
$$f = \frac{l}{n} = \frac{100}{500} = 0{,}2 \text{ mm}$$

Temps de coupe

$$T_C = \frac{l}{f \times n} \text{ [min]}$$



Tournage extérieur



Tournage intérieur

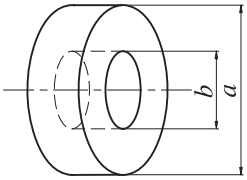
Tc : Temps de coupe [min]
l : Longueur de coupe par minute [mm]
fn : Avance par tour [mm/tr]
n : Vitesse de rotation [tr/min]

Exemple : n = 250 tr/min, f = 0,2 mm, l = 150 mm
Résultat : [insérer les valeurs dans la formule T_C]

Tournage général

Temps de coupe pour le dressage

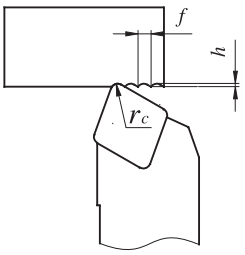
$$T_C = \frac{\pi \times (a^2 - b^2)}{4000 \times V_c \times f} \text{ [min]}$$



T_C : Temps de coupe [min]
V_C : Vitesse de coupe [m/min]
fn : Avance par tour [mm/tr]

Rugosité de surface théorique R

$$R = \frac{f^2}{8r_c} \times 1000 \text{ [µm]}$$



R : Rugosité de surface [µm]
fn : Avance par tour [mm/tr]
r_C : Rayon de la plaquette [mm]

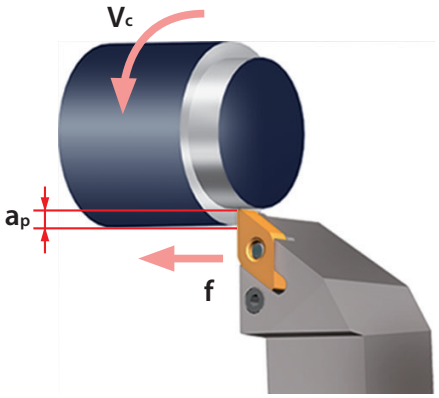
Exemple : f = 0,2 mm,
r_C = 0,4 mm

Tournage général

Influence des trois paramètres de coupe lors du tournage

Les exigences actuelles envers les outils d'usinage modernes sont en première ligne des cycles d'usinage courts, des durées de vie d'outil élevées et une grande précision d'usinage.

En fonction de la puissance de la machine, du matériau, de la forme et de la dureté de la pièce, le choix des outils, et notamment le choix judicieux des paramètres de coupe, constituent une condition essentielle en vue d'un usinage économique. C'est ce que nous appelons « l'influence des trois paramètres de coupe lors du tournage ».



1. Vitesse de coupe [V_C]

Une augmentation de l'angle de coupe réduit les efforts de coupe, car les copeaux sont moins déviés de leur sens d'écoulement. Ceci rend plus efficace le système d'usinage et réduit les efforts de coupe et les contraintes de température. Dans l'ensemble, l'usure des outils est réduite et les performances d'usinage sont améliorées. En même temps, cela implique pourtant un affaiblissement du burin d'usinage, une augmentation des contraintes sur l'arête de coupe et un risque accru de ruptures de l'arête de coupe.

Influence de la vitesse de coupe : la vitesse de coupe est l'une des variables les plus importantes de l'usinage, car elle influence notablement le temps de production. Le choix de la vitesse de coupe dépend essentiellement de la composition et de la résistance du matériau à usiner, la ténacité et la dureté du matériau de coupe utilisé, ainsi que la précision dimensionnelle et l'état de surface souhaités. En raison de l'augmentation parabolique de la température de l'arête de coupe avec l'augmentation de la vitesse, elle a une influence significative sur l'usure et donc sur la durée de vie de l'outil. La vitesse de coupe doit donc être choisie de manière à obtenir un rapport favorable entre les temps de travail et de coupe et les temps nécessaires à la réparation de l'outil (remplacement des plaquettes de coupe) et au ré-outillage de la machine d'usinage. Une augmentation de vitesse de coupe d'environ 20 % réduit la durée de vie de la moitié. Une augmentation de la vitesse de coupe de 50 % réduit la durée de vie à environ 1/5 de la durée de vie d'origine. Une vitesse d'avance inférieure provoque des vibrations et réduit la durée de vie.

2. Avance [f]

Dans l'usinage par tournage, on entend par avance le chemin parcouru par l'outil (ou le porte-outils) pour chaque rotation de la pièce. L'avance est exprimée en millimètres par tour [mm/tr].

Influence de l'avance : Lorsque l'avance est réduite, l'usure de la face de dépouille augmente simultanément et la durée de vie de l'outil est réduite. En cas d'une augmentation de l'avance, bien que la rentabilité de l'usinage augmente, la température de coupe et l'usure augmentent également.

3. Profondeur de coupe [ap]

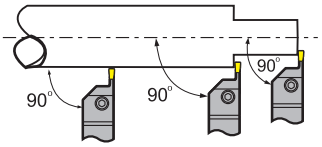
La profondeur de coupe correspond à la moitié de la différence du diamètre de la pièce brute par rapport au diamètre de la pièce finie. La profondeur de coupe est exprimée en millimètres [mm].

Influence de la profondeur de coupe : La modification de la profondeur de coupe n'a pas une grande influence sur la durée de vie. En cas d'usinage de matériaux avec des surfaces dures, la sélection d'une profondeur de coupe trop petite entraîne une perte de durée de vie. Pour l'usinage de surfaces non usinées ou de matériaux de fonte, la profondeur de coupe maximale doit être choisie en fonction des performances de la machine, de sorte que l'arête de coupe et le rayon d'angle forment une attaque plus profonde que la couche dure. Cela permettra d'éviter une usure excessive.

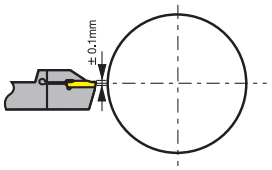
Gorges et tronçonnage

Réglage de la hauteur d'arête lors de l'usinage de gorges et tronçonnages

- Veuillez monter le porte-outil de sorte qu'il soit positionné à un angle de 90° par rapport à l'axe central de la pièce. Vous obtiendrez ainsi un meilleur état de surface, tout en réduisant le risque de vibrations.



- Veuillez monter le porte-outil de sorte que, lors de l'usinage de gorges et tronçonnages, notamment dans le cas de pièces de petit diamètre, le porte-outil soit situe dans la plage de tolérance de ± 0,1 mm par rapport a l'axe central. Vous obtiendrez ainsi une durée de vie accrue de la plaquette, tandis que les efforts de coupe et le risque de bavure seront réduits.

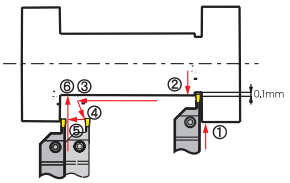


Tronçonnage

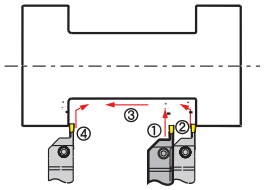
- Une réduction de l'avance de 30 % a l'approche du centre de la pièce permet de prolonger la durée de vie des plaquettes de tronçonnage et gorges.
- Choisir le porte-outil avec le plus petit porte-à-faux possible, afin d'éviter les vibrations et la déviation de l'outil.

Chariotage et copiage

- Séquence d'usinage 0,5 mm :
  1. Avance radiale sur la profondeur de coupe nécessaire (max. env. 0,75 × la largeur de la plaquette de coupe)
  2. Recul radial de 0,1 mm
  3. Chariotage par rapport à l'épaulement opposé
  4. Recul diagonal de 0,5 mm vers l'extérieur, avance axiale jusqu'au point de départ
  5. Avance radiale sur la profondeur de coupe nécessaire, etc.

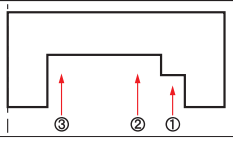


- Avance radiale sur la profondeur de coupe nécessaire (max. env. 0,75 × la largeur de la plaquette de coupe) Lors du tournage du fond de gorge ou du chanfrein, suivre les étapes de travail ci-contre. Ceci permet de réduire la déviation de l'outil et empêche les écaillages d'arête de coupe.

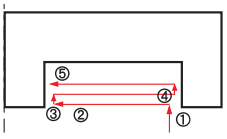


Gorges frontales

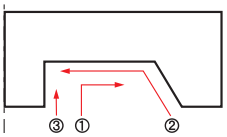
- Ébauche :
  usinage du plus grand diamètre vers l'axe. Lors du recul de l'outil, il est recommandé de le dévier légèrement.



- Tournage de rainures :
  profondeur d'usinage en cas d'avance axiale inférieure à 0,75 x S (largeur de la plaquette de coupe). Si la largeur de la gorge est supérieure à la profondeur, suivez les étapes de travail illustrées. Sinon, effectuer le rainurage du diamètre par étapes individuelles.

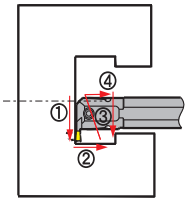


- Finition :
  pour la finition, il convient d'usiner d'abord le diamètre extérieur et le fond. Usinez ensuite le diamètre intérieur jusqu'à obtenir les dimensions voulues.



Usinage intérieur

- Séquence d'usinage conformément au schéma. Lors de l'usinage d'alésages borgnes, il faut procéder de l'intérieur vers l'extérieur en vue d'une meilleure évacuation des copeaux.



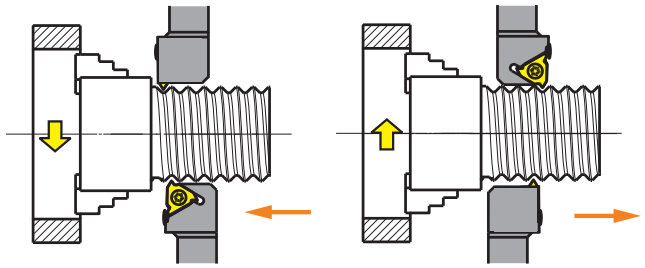
Filetage

Séquence d'usinage pour l'obtention de meilleurs résultats lors d'une opération de filetage

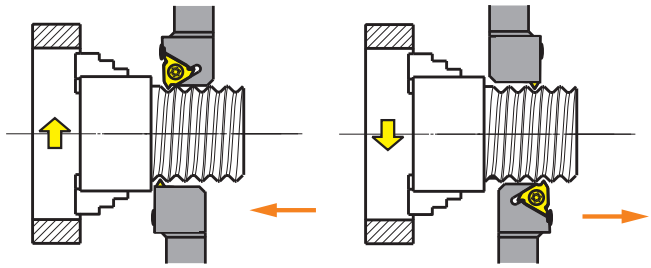
1. Choix de la méthode de filetage
2. Sélection de l'angle et de la cale-support
3. Sélection du porte-outils et des plaquettes
4. Sélection des paramètres de coupe
5. Sélection du sens de coupe

Méthode de filetage

Usinage extérieur

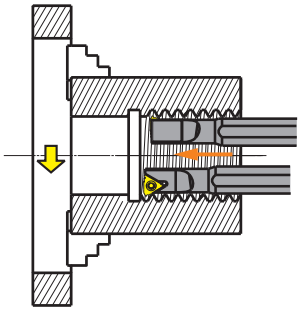


Version à droite

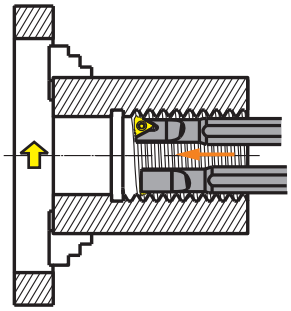


Version à gauche

Usinage intérieur



Version à droite



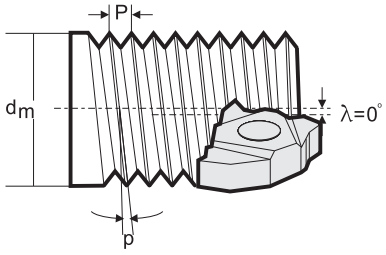
Version à gauche

Choix de l'angle et de la cale-support

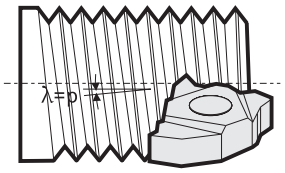
Sélection de l'angle

Les angles de dépouille de flanc du profil de filet dépendent de l'angle de pas du filetage. L'angle de pas du filetage doit coïncider autant que possible avec l'angle d'inclinaison de la plaquette de filetage afin d'obtenir un profil précis, d'éviter les irrégularités d'usure de la face de dépouille et de garantir une durée de vie plus élevée.

$$\lambda = \arctan \frac{p}{d_2 \times \pi}$$



Angle de pas (p)



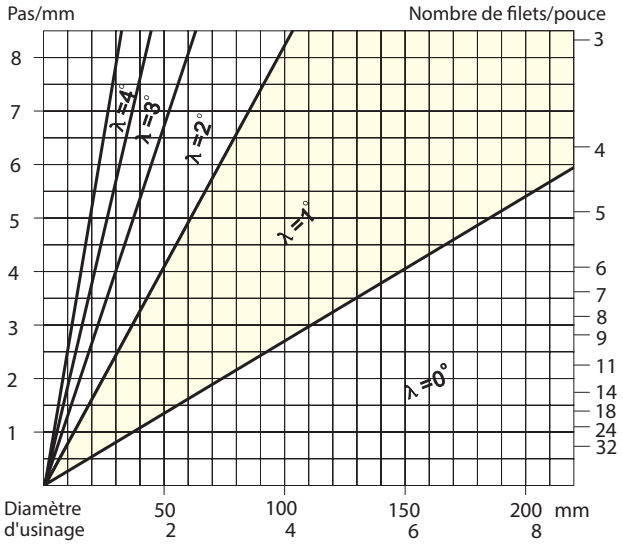
Angle d'inclinaison (λ)

p Pas
d_2 Diamètre sur flancs
λ Angle d'inclinaison

Sélection de la cale-support appropriée

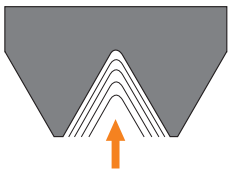
Zone de pas	Dimensions	Angle d'inc	Cale-support
0,5–0,3	16	0	MT16-00M
		1	MT16-01M
		2	MT16-02M
		3	MT16-03M
3,5–6,0	22	0	MT22-00M
		1	MT22-01M
		2	MT22-02M
		3	MT22-03M

La cale-support λ = 1° est livrée avec le porte-outils.



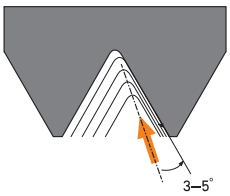
Types de profondeur de passe pour le filetage

Le nombre de passages et la profondeur de passe représentent un facteur décisif lors du filetage. Les données recommandées doivent être considérées comme des valeurs de départ. En cas d'usure accrue, voir page A447 (résolution de problèmes).



Profondeur de passe radiale

La profondeur de passe radiale exige une faible profondeur de coupe, une arête de coupe vive et une nuance résistante.



Pénétration par flanc modifiée

La profondeur de passe s'effectue avec un angle de 3°-5° par rapport au flanc du filetage. Convient aux matériaux formant de longs copeaux et au filetage intérieur. Bonne évacuation des copeaux.

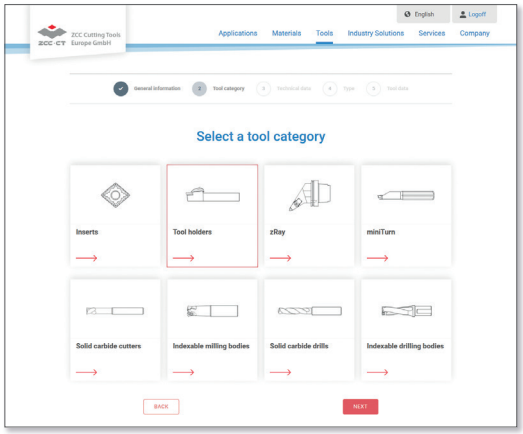


Profondeur de passe alternée

Profondeur de passe alternée le long des deux flancs. Une usure des flancs uniforme sur les deux arêtes de coupe. Usure des flancs uniforme sur les deux arêtes de coupe.

Accès direct à l'outil spécial personnalisé pour vos opérations de tournage

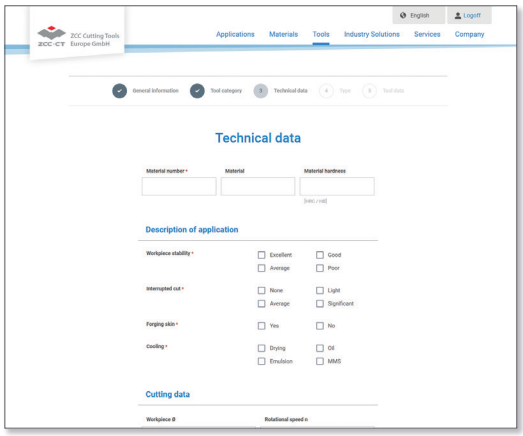
Avez-vous besoin d'outils optimisés et spécialement conçus afin d'améliorer certaines de vos opérations de tournage au niveau commercial, technique, processus ou logistique ? ZCC Cutting Tools Europe vous conseille et vous assiste pour la planification, la conception et la commande. Grâce à notre nouvel outil en ligne permettant de transmettre vos demandes d'outil spécial, vous obtenez rapidement une offre personnalisée (https://www.zccct-europe.com/fr/outils/outils-speciaux).



Page d'accueil « Outil en ligne pour les outils spéciaux » avec sélection de la catégorie d'outil

Sélection de la catégorie d'outil

En scannant le code QR figurant sur cette page, vous serez directement redirigé vers la page d'accueil de notre outil en ligne et vous pourrez commencer par sélectionner la catégorie d'outils souhaitée. C'est très simple.



Définition des paramètres d'outil pertinents

Définition des paramètres d'outil

Vous êtes guidé durant toute la durée du processus de demande. Vous avez également la possibilité d'ajouter des esquisses et des modèles 3D.

Pour obtenir votre outil personnalisé, adressez-vous à nous. ZCC Cutting Tools Europe GmbH.

Accéder directement au nouveau **formulaire d'outil spécial** sur notre site Internet.



PLAQUETTES DE FRAISAGE

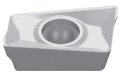
Plaquettes de fraisage

Vue d'ensemble des produits	**B2-B3**
Vue d'ensemble de système	**B4-B19**
Vue d'ensemble des brise-copeaux	**B20**
Vue d'ensemble des nuances	**B21-B23**
Domaines d'application des nuances	**B24-B25**
Codification – corps de fraise	**B26-B27**
Code ISO – plaquette	**B28-B29**
Codification – fraise disque	**B30**
Codification – Série QCH	**B31-B32**
Fraise à surfacer	**B33-B102**
Fraise à 90°	**B103-B132**
Fraise de forme	**B133-B150**
Fraise-disque	**B151-B162**
Fraise grande avance	**B163-B172**
Fraise à rainurer	**B173-B174**
Fraise de rainures en T	**B175-B176**
Fraise deux tailles	**B177-B182**
Fraise à chanfreiner	**B183-B194**
Série QCH	**B195-B217**
Plaquette de fraisage	**B218-B229**
Recommandations de données de coupe	**B230-B263**
Résolution de problèmes	**B528**
Informations techniques	**B529-B536**
Outils spéciaux	**B541**

B

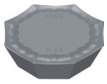
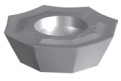
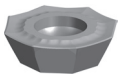
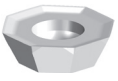
Plaquettes de fraisage Vue d'ensemble des produits

Plaquette de fraisage

								
ANGX-GM	**ANGX-LH**	**APKT-ALH**	**APKT-APF**	**APKT-APM**	**APKT-LH**	**APKT-NM**	**APKT-PF**	
11 15	11 15	11 16	11 16	07 11 16	11 16	11	11 16	Longueur d'arête
B124, B126, B128, B130, B132	B124, B126, B128, B130, B132	B104, B107, B111, B114, B116, B202, B213	B104, B107, B111, B114, B116, B202, B213	B104, B107, B111, B114, B116, B202, B213	B104, B107, B111, B114, B116, B202, B213	B104, B107, B111, B114, B116, B202, B213	B104, B107, B111, B114, B116, B202, B213	Pagina

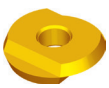
								
APKT-PM/PR	**APKT-XR**	**APMT**	**CNE-A/B**	**HNEX-DR**	**HNGX-HDR**	**HNGX-MR**	**LNCX**	
11 15 16	11	11 16	12	09	09	09	18	Longueur d'arête
B104, B107, B111, B114, B116, B202, B213	B104, B107, B111, B114, B116, B202, B213	B118	B174	B64	B218	B218	B220	Pagina

								
LNE32.534	**LNKT-GL**	**LNKT-GM**	**LNKT-ZR**	**MPHT-DM**	**ODHT-GH**	**ODHT-GL**	**ODHT-GM**	
	08 12 16	08 12 16	12 15 20 25	06 08 12	06	06	06	Longueur d'arête
B219	B120, B122	B120, B122	B66, B73, B80	B156, B158, B176	B47	B47	B47	Pagina

								
ODHT-LH	**ODMT-GM**	**OFKR-DF**	**OFKR-DM**	**OFKR-LH**	**OFKT-DF**	**OFKT-DM**	**OFKT-LH**	
06	06	07	07	07	05	05	05	Longueur d'arête
B47	B47	B45	B45	B45	B43	B43	B43	Pagina

								
ONHU-CM	**ONHU-GH**	**ONHU-GL**	**ONHU-GM**	**ONHU-PF**	**ONHU-PM**	**PNEG-CF**	**PNEG-CM**	
06 08	06	06	06 08	06 08	06 08	11	11	Longueur d'arête
B49, B51	B56	B56	B56	B49, B51	B49, B51	B59, B61	B59, B61	Pagina

								
PNEG-CR	**PNEG-PF**	**PNEG-PM**	**PNEG-PR**	**RCKT-DM**	**RCKT-DR**	**RCKT-ER**	**RCKT-NM**	
11	11	11	11	10 12 16 20	12 16 20	12 16 20	12 16 20	Longueur d'arête
B59, B61	B58, B61	B58, B61	B58, B61	B89, B92	B89, B92	B89, B92	B89, B92	Pagina

								
RDKT-MM	**RDKW**	**ROHX**	**SDMT**	**SDMT-DM**	**SDMT-NM**	**SDMT-PM**	**SEEN**	
10 12	07 08 10 12 16 20	12 16 20	09	06 09 12 15	09 12	06 09 12 15	12	Longueur d'arête
B95, B99, B205	B95, B99, B205	B137	B135	B164, B167, B198, B211	B164	B164, B167, B198, B211	B41	Pagina

Plaquette de fraisage

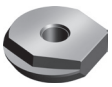
								
SEET-APF	**SEET-APM**	**SEET-APR**	**SEET-CF**	**SEET-CM**	**SEET-CR**	**SEET-DF**	**SEET-DM**	
09 12	09 12	09 12	12	12	12	12	12 18	Longueur d'arête
B77	B77	B77	B35, B37	B35, B37	B35, B37	B35, B37	B35, B37	Pagina

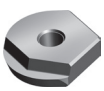
								
SEET-DR	**SEET-EF**	**SEET-EM**	**SEET-LH**	**SEET-PF**	**SEET-PM**	**SEET-PR**	**SEET-W**	
12	12	12	12	09 12	09 12	09 12	12	Longueur d'arête
B35, B37	B35, B37	B35, B37	B35, B37	B77	B77	B77	B34, B37	Pagina

								
SEKN	**SEKR**	**SNEG-E**	**SNEG-GM**	**SNEG-GR**	**SNEG-HGR**	**SNEG-W**	**SNKN**	
12 15	12	15	12 15	12 15 19	15	12	12 15	Longueur d'arête
B40	B41	B53	B53	B53	B53	B54	B221	Pagina

								
SPCN	**SPGN**	**SPKN**	**SPKR**	**SPKR-GM**	**SPKT**	**SPKW**	**SPMR**	
12 15	12	12 15	12	12 15	12	12	09 12	Longueur d'arête
B222	B225	B70	B71	B71	B68	B68	B223	Pagina

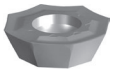
								
SPMT	**SPMT-HT**	**SPMT-KT**	**SPMT-PM**	**SPUN**	**TPKN**	**TPMR**	**TPUN**	
06 09 12	09 12	06	12	12 15	16 22	11 16 22	11 16 22	Longueur d'arête
B135, B184, B186, B188, B190, B192, B194	B224	B135, B224	B178, B180, B182	B225	B75, B226	B227	B227	Pagina

								
WPGT	**WPGT-PM**	**XEEC**	**XPHT-GM**	**XSEQ**	**ZDET**	**ZDET-PM**	**ZOHX-GF**	
05 06 08 09	05 06 08 09	12	16 20 25 30 32 40 50	12	08 11	13	12 16 20 25 30 32	Longueur d'arête
B169, B171, B200	B169, B171, B200	B87	B139, B141, B143, B145, B196	B152, B154	B134	B134	B147, B149, B209	Pagina

			
ZOHX-GM	**ZPNT**		
12 16 20 25 30 32	22		Longueur d'arête
B147, B149, B209	B134		Pagina

Plaquettes de fraisage Vue d'ensemble de système

Fraise à surfacer

Gamme	Corps de fraise	Plaquettes	Kr	Application						Caractéristiques	Page
				P	M	K	N	S	H		
FMA01		 SEET12T3 SEET18T6	45°	✔	✔	✔	✔	✔		• Plage de diamètres Ø50 – 315 mm • Pour acier, acier inoxydable, fonte, métaux non-ferreux et matériaux difficiles à usiner • Fraise, arête à coupe légère et géométrie positive • Plaquettes Wiper pour une qualité de surface optimale	B33
FMA02		 SEET12T3	45°	✔	✔	✔	✔	✔		• Plage de diamètres Ø50 – 125 mm • Pour acier, acier inoxydable, fonte, métaux non-ferreux et matériaux difficiles à usiner • Fraise, arête à coupe légère et géométrie positive • Pas large	B36
FMA03		 SEEN1203 SEKN1203 SEKR1203 SEKN1504 SEKR1504	45°	✔	✔	✔	✔			• Plage de diamètres Ø80 – 315 mm • Pour acier, acier inoxydable et fonte • Fraise, arête à coupe légère et géométrie positive • Serrage à coin	B39
FMA04		 OFKT05T3	45°	✔	✔	✔	✔			• Plage de diamètres Ø50 – 160 mm • Pour acier, acier inoxydable, fonte et métaux non-ferreux • Plaquettes de coupe à huit arêtes • Serrage par vis	B42
FMA04		 OFKR0704	45°	✔	✔	✔	✔			• Plage de diamètres Ø125 – 315 mm • Pour acier, acier inoxydable, fonte et métaux non-ferreux • Plaquettes de coupe à huit arêtes • Serrage par coin	B44
FMA04		 OD*T0605**	45°	✔	✔	✔	✔			• Plage de diamètres Ø50 – 160 mm • Pour acier, acier inoxydable, fonte et métaux non-ferreux • Plaquettes de coupe à huit arêtes • Serrage par vis	B46

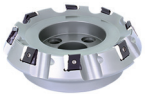
✔ Choix de base ✔ Alternative

Fraise à surfacer

Gamme	Corps de fraise	Plaquettes	Kr	Application						Caractéristiques	Page
				P	M	K	N	S	H		
FMA07		 ONHU0604 ONHU08T5	45°	✔		✔			✔	• Plage de diamètres Ø25 – 50 mm • Pour acier et fonte • Plaquettes de coupe à seize arêtes	B48
FMA07		 ONHU0604 ONHU08T5	45°	✔		✔			✔	• Plage de diamètres Ø40 – 315 mm • Pour acier et fonte • Plaquettes de coupe à seize arêtes	B50
FMA11		 SNEG1205 SNEG1506 SNEG1907	45°	✔	✔	✔		✔		• Plage de diamètres Ø63 – 315 mm • Pour acier, acier inoxydable et fonte • Plaquettes de coupe à huit arêtes • Plaquette de coupe réversible, extra épaisse pour usinages de grande profondeur et grande résistance à la rupture • Géométrie Wiper pour une qualité optimale d'état de surface • Pas normal et fin	B52
FMA12		 ON*U0604** ONHU08T6	45°	✔	✔	✔		✔		• Plage de diamètres Ø63 – 315 mm • Pour acier, acier inoxydable et fonte • Plaquettes de coupe à seize arêtes	B55
FMD02		 PNEG1105	67°	✔	✔	✔				• Plage de diamètres Ø50 – 315 mm • Pour acier, acier inoxydable et fonte • Plaquettes de coupe à dix arêtes • Serrage par coin ou par vis • Pas normal et fin	B57
FMD02		 PNEG1105	67°			✔				• Plage de diamètres Ø50 – 315 mm • Pour acier, acier inoxydable et fonte • Plaquettes de coupe à dix arêtes • Serrage par coin ou par vis • Pas normal et fin	B60

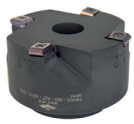
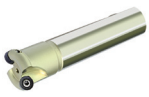
✔ Choix de base ✔ Alternative

Fraise à surfacer

Gamme	Corps de fraise	Plaquettes	Kr	Application						Caractéristiques	Page
				P	M	K	N	S	H		
FMD02		 HNEX0905	55°			✔				• Plage de diamètres Ø80 – 315 mm • Pour fonte • Serrage par coin • Plaquettes de coupe à douze arêtes	B63
FMD03		 LNKT2007-ZR LNKT2510-ZR	60°	✔		✔				• Plage de diamètres Ø100 – 400 mm • Pour acier et fonte • Plaquette de coupe tangentielle à quatre arêtes • Fraisage ébauche, grandes profondeurs de coupe • Serrage par vis	B65
FME02		 SPKT1204 SPKW1204	75°	✔	✔	✔				• Plage de diamètres Ø50 – 125 mm • Pour acier, fonte et acier inoxydable • Serrage par vis	B67
FME03		 SPKN1203 SPKR1203 SPEX1203 SPKN1504 SPKR1504 SPEX1504	75°	✔	✔	✔				• Plage de diamètres Ø80 – 400 mm • Pour acier, fonte et acier inoxydable • Serrage par coin	B69
FME04		 LNKT1506-ZR	75°	✔		✔				• Plage de diamètres Ø125 – 315 mm • Pour acier et fonte • Plaquette de coupe tangentielle à quatre arêtes • Fraisage ébauche, grandes profondeurs de coupe • Serrage par vis	B72
FMP01		 TPKN2204	90°	✔	✔	✔		✔		• Plage de diamètres Ø80 – 315 mm • Pour acier, acier inoxydable et fonte • Fraise, arête à coupe légère et géométrie positive • Serrage par coin	B74

✔ Choix de base ✔ Alternative

Fraise à surfacer

Gamme	Corps de fraise	Plaquettes	Kr	Application						Caractéristiques	Page
				P	M	K	N	S	H		
FMP02		 SEET09T3 SEET1203	90°	✔	✔	✔	✔	✔		• Plage de diamètres Ø50 – 315 mm • Pour acier, acier inoxydable, fonte et métaux non-ferreux • Serrage par vis	B76
FMP03		 LNKT120608-ZR LNKT1506EN-ZR LNKT2007DN-ZR LNKT2510-ZR	89°	✔		✔				• Plage de diamètres Ø50 – 315 mm • Pour acier et fonte • Plaquette de coupe tangentielle à quatre arêtes • Serrage par vis	B79
FMP12		 WNHU0604 WNHU0806	90°	✔		✔				• Plage de diamètres Ø50 – 315 mm • Pour acier et fonte • Plaquette de coupe tangentielle à quatre arêtes • Serrage par vis	B81
FMP12		 WNHU0604	90°	✔		✔				• Plage de diamètres Ø50 – 315 mm • Pour acier et fonte • Plaquette de coupe tangentielle à quatre arêtes • Serrage par vis	B83
FMWX		 XEEC1209		✔		✔				• Diameter range Ø50–125 mm • High feed finishing cutters for steel and cast materials • Inserts with four cutting edges • Reserve insert seats for increased safety • The milling body is only equipped with two opposing inserts	B86
FMR01		 RCKT10T3 RCKT1204 RCGX1204		✔	✔	✔	✔	✔		• Plage de diamètres Ø25 – 63 mm • Pour acier, acier inoxydable, fonte, métaux non-ferreux et matériaux difficiles à usiner • Serrage par vis	B88

✔ Choix de base ✔ Alternative

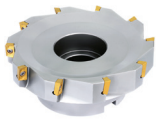
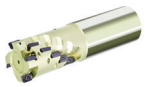
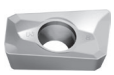
Plaquettes de fraisage Vue d'ensemble de système

Fraise à surfacer

Gamme	Corps de fraise	Plaquettes	Kr	Application						Caractéristiques	Page
				P	M	K	N	S	H		
FMR02		 RCGX1204 RCKT1204 RCMW1204 RCKT1606 RCKT2006		✔	✔	✔	✔	✔		• Plage de diamètres Ø50 – 250 mm • Pour acier, acier inoxydable, fonte, métaux non-ferreux et matériaux difficiles à usiner • Serrage par vis	B90
FMR03		 RD**0803 RD**10T3 RD**1204		✔	✔	✔			✔	• Plage de diamètres Ø15 – 50 mm • Pour acier, acier inoxydable et fonte • Serrage par vis • Fabrication de moules et matrices	B94
FMR03		 RDKW0702 RDKW1003		✔	✔	✔			✔	• Plage de diamètres Ø15 – 50 mm • Pour acier, acier inoxydable et fonte • Serrage par vis • Fabrication de moules et matrices	B96
FMR04		 RD**1204 RD**1605 RD**2006		✔	✔	✔			✔	• Plage de diamètres Ø50 – 200 mm • Pour acier, acier inoxydable et fonte • Serrage par vis • Fabrication de moules et matrices	B98
FMR04		 RDKW1003 RDKW12T3 RDKW1604		✔	✔	✔			✔	• Plage de diamètres Ø42 – 200 mm • Pour acier, acier inoxydable et fonte • Serrage par vis • Fabrication de moules et matrices	B100

✔ Choix de base ✔ Alternative

Fraise à 90°

Gamme	Corps de fraise	Plaquettes	Kr	Application						Caractéristiques	Page
				P	M	K	N	S	H		
EMP01		 APKT0702 APKT11T3 APKT1604	90°	✔	✔	✔	✔	✔		• Plage de diamètres Ø12 – 63 mm • Pour acier, acier inoxydable, fonte, métaux non-ferreux et matériaux difficiles à usiner • Attachement cylindrique • Pour le fraisage des épaulements, le rainurage et l'usinage en plongée • Géométrie positive et coupe douce • Plaquettes à deux arêtes	B103
EMP01		 APKT11T3 APKT0702 APKT1604	90°	✔	✔	✔	✔	✔		• Plage de diamètres Ø12 – 63 mm • Pour acier, acier inoxydable, fonte, métaux non-ferreux et matériaux difficiles à usiner • Attachement cylindrique • Pour le fraisage des épaulements, le rainurage et l'usinage en plongée • Géométrie positive et coupe douce • Plaquettes à deux arêtes	B106
EMP02		 APKT0702 APKT11T3 APKT1604	90°	✔	✔	✔	✔	✔		• Plage de diamètre Ø40 – 250 mm • Pour acier, acier inoxydable, fonte, métaux non-ferreux et matériaux difficiles à usiner • Pour le fraisage d'épaulements, de rainures et de gorges et le fraisage en plongée • Fraise à coupe douce avec géométrie positive importante • Plaquettes à deux arêtes	B109
EMP03		 APKT11T3	90°	✔	✔	✔	✔			• Plage de diamètre Ø50 – 100 mm • Pour acier, acier inoxydable, fonte, métaux non-ferreux et matériaux difficiles à usiner • Pour le fraisage d'épaulements, de rainures et de gorges et le fraisage en plongée • Fraise à coupe douce avec géométrie positive importante • Plaquettes à deux arêtes	B113
EMP04		 APKT11T3	90°	✔	✔	✔	✔			• Plage de diamètre Ø20 – 40 mm • Pour acier, acier inoxydable, fonte, métaux non-ferreux et matériaux difficiles à usiner • Pour le fraisage d'épaulements, de rainures et de gorges et le fraisage en plongée • Fraise à coupe douce avec géométrie positive importante • Plaquettes de coupe à deux arêtes	B115
EMP05		 APMT1135	90°	✔	✔	✔				• Plage de diamètre Ø25 – 40 mm • Pour acier, acier inoxydable et fonte • Attachement cylindrique Pour le fraisage d'épaulements, de rainures et de gorges et le fraisage en plongée • Fraise à coupe douce avec géométrie positive importante • Plaquettes de coupe à deux arêtes • Possibilité d'usinage dans l'axe Z	B117

✔ Choix de base ✔ Alternative

Plaquettes de fraisage Vue d'ensemble de système

Fraise à 90°

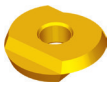
Gamme	Corps de fraise	Plaquettes	Kr	Application						Caractéristiques	Page
				P	M	K	N	S	H		
EMP09		 LNKT0804PNR LNKT1206PNR LNKT1607PNR	90°	✔	✔	✔				• Plage de diamètres Ø40 – 125 mm • Géométrie rectifiée sur plaquettes tangentielles robustes • Premier choix en cas de grandes profondeurs d'usinage et avances élevées • Coupe spécialement développée pour une tolérance serrée dans les épaulements à 90°.	B119
EMP09		 LNKT1206PNR	90°	✔	✔	✔				• Plage de diamètres Ø40 – 80 mm • Géométrie rectifiée sur plaquettes tangentielles robustes • Premier choix en cas de grandes profondeurs d'usinage et avances élevées • Coupe spécialement développée pour une tolérance serrée dans les épaulements à 90°.	B121
EMP13		 ANGX1105 ANGX1506	90°	✔	✔	✔	✔			• Plage de diamètres Ø40 – 250 mm • Pour acier, fonte et métaux non-ferreux • Plaquette de coupe réversible, extra épaisse pour usinages de grande profondeur et grande résistance à la rupture • Plaquettes de coupe à quatre arêtes	B123
EMP13		 ANGX1105 ANGX1506	90°	✔	✔	✔	✔			• Plage de diamètres Ø25 – 40 mm • Pour acier, fonte et métaux non-ferreux • Plaquette de coupe réversible, extra épaisse pour usinages de grande profondeur et grande résistance à la rupture • Plaquettes de coupe à quatre arêtes	B125
EMP13		 ANGX1105 ANGX1506	90°	✔	✔	✔	✔			• Plage de diamètres Ø25 – 40 mm • Pour acier, fonte et métaux non-ferreux • Plaquette de coupe réversible, extra épaisse pour usinages de grande profondeur et grande résistance à la rupture • Plaquettes de coupe à quatre arêtes	B127

✔ Choix de base ✔ Alternative

Fraise à 90°

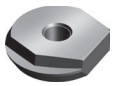
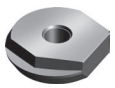
Gamme	Corps de fraise	Plaquettes	Kr	Application						Caractéristiques	Page
				P	M	K	N	S	H		
EMP13		 ANGX1105 ANGX1506	90°	✔	✔	✔	✔			• Plage de diamètres Ø50 – 80 mm • Pour acier, fonte et métaux non-ferreux • Plaquette de coupe réversible, extra épaisse pour usinages de grande profondeur et grande résistance à la rupture • Plaquettes de coupe à quatre arêtes	B129
EMP13		 ANGX1105 ANGX1506	90°	✔	✔	✔	✔			• Plage de diamètres Ø25 – 40 mm • Pour acier, fonte et métaux non-ferreux • Plaquette de coupe réversible, extra épaisse pour usinages de grande profondeur et grande résistance à la rupture • Plaquettes de coupe à quatre arêtes	B131

Fraise hémisphérique

BMR01		 ZDET08T2 & SPMT0603 ZDET1103 & SPMT0603 ZDET13T2 & SDMT0903 ZPNT2204 & SPMT1204		✔	✔	✔				• Plage de diamètres Ø20 – 63 mm • Pour acier, acier inoxydable et fonte • Particulièrement approprié pour l'ébauche de grands moules • Plaquettes de coupe à trois arêtes	B133
BMR02		 ROHX1203 ROHX1604 ROHX2005		✔	✔	✔				• Plage de diamètres Ø12 – 20 mm • Pour acier, acier inoxydable et fonte • Particulièrement approprié pour l'usinage de finition dans la fabrication de moules et matrices • Plaquette de coupe à deux arêtes	B136
BMR03		 XPHT16 XPHT20 XPHT25 XPHT30 XPHT32 XPHT40		✔	✔	✔				• Plage de diamètres Ø16 – 40 mm • Pour acier et fonte • Particulièrement approprié pour l'ébauche dans la fabrication de moules et matrices • Corps de l'outil présentant une rigidité élevée	B138

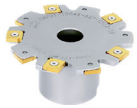
✔ Choix de base ✔ Alternative

Fraise hémisphérique

Gamme	Corps de fraise	Plaquettes	Kr	Application						Caractéristiques	Page
				P	M	K	N	S	H		
BMR03		 XPHT16 XPHT20 XPHT25 XPHT30 XPHT32 XPHT40 XPHT50		✔	✔	✔				• Plage de diamètres Ø16 – 40 mm • Pour acier et fonte • Particulièrement approprié pour l'ébauche dans la fabrication de moules et matrices • Corps de l'outil présentant une rigidité élevée	B140
BMR03		 XPHT20 XPHT25 XPHT30 XPHT32 XPHT40 XPHT50		✔	✔	✔				• Plage de diamètres Ø16 – 40 mm • Pour acier et fonte • Particulièrement approprié pour l'ébauche dans la fabrication de moules et matrices • Corps de l'outil présentant une rigidité élevée	B142
BMR03		 XPHT40 XPHT50		✔	✔	✔				• Plage de diamètres Ø16 – 40 mm • Pour acier et fonte • Particulièrement approprié pour l'ébauche dans la fabrication de moules et matrices • Corps de l'outil présentant une rigidité élevée	B144
BMR04		 ZOHX12 ZOHX16 ZOHX20 ZOHX25 ZOHX30 ZOHX32		✔	✔	✔				• Plage de diamètres Ø12 – 32 mm • Pour acier, acier inoxydable et fonte • Particulièrement approprié pour l'usinage de finition dans la fabrication de moules et matrices • Plaquette de coupe à deux arêtes	B146
BMR04		 ZOHX12 ZOHX16 ZOHX20 ZOHX25 ZOHX30 ZOHX32		✔	✔	✔				• Plage de diamètres Ø12 – 32 mm • Pour acier, acier inoxydable et fonte • Particulièrement approprié pour l'usinage de finition dans la fabrication de moules et matrices • Plaquette de coupe à deux arêtes	B148

✔ Choix de base ✔ Alternative

Fraise disque

Gamme	Corps de fraise	Plaquettes	Kr	Application						Caractéristiques	Page
				P	M	K	N	S	H		
SMP01		 XSEQ1202 XSEQ1203 XSEQ12T3 XSEQ1204 XSEQ12T4	90°	✔	✔	✔				• Plage de diamètres Ø100 – 250 mm • Pour acier, acier inoxydable et fonte • Montage sur mandrin • Largeurs de rainures 4, 5, 6, 7, 8 mm	B151
SMP01		 XSEQ1202 XSEQ1203 XSEQ12T3 XSEQ1204 XSEQ12T4	90°	✔	✔	✔				• Plage de diamètres Ø63 – 160 mm • Pour acier, acier inoxydable et fonte • Largeurs de rainures 4, 5, 6, 7, 8 mm	B153
SMP03		 MPHT0603 MPHT0803 MPHT1204	90°	✔	✔	✔				• Plage de diamètres Ø80 – 200 mm • Pour acier, acier inoxydable et fonte • Montage sur mandrin • Largeurs de rainures 8, 10, 12, 16, 18, 20 mm	B155
SMP03		 MPHT0603 MPHT0803 MPHT1204	90°	✔	✔	✔				• Plage de diamètres Ø80 – 200 mm • Pour acier, acier inoxydable et fonte • Largeurs de rainures 8, 10, 12, 16, 18, 20 mm	B157
SMP05		 QC16L QC22L	90°	✔	✔	✔				• Plage de diamètres Ø25 – 44 mm • Pour acier, acier inoxydable et fonte • Largeurs de rainures 1,1 – 4,8 mm	B159

✔ Choix de base ✔ Alternative

Plaquettes de fraisage Vue d'ensemble de système

Fraise grande avance

Gamme	Corps de fraise	Plaquettes	Kr	Application						Caractéristiques	Page
				P	M	K	N	S	H		
XMR01		 SDMT06T2 SDMT09T3 SDMT1204 SDMT1505	15°	✔	✔	✔				• Plage de diamètres Ø20 – 40 mm • Pour acier, acier inoxydable et fonte • Plaquette de coupe à quatre arêtes • Fraisage en plongée possible • Double système de serrage pour plaquettes de coupe	B163
XMR01		 SDMT06T2 SDMT09T3 SDMT1204 SDMT1505	15°	✔	✔	✔				• Plage de diamètres Ø40 – 125 mm • Pour acier, acier inoxydable et fonte • Plaquette de coupe à quatre arêtes • Fraisage en plongée possible • Double système de serrage pour plaquettes de coupe	B165
XMR01		 WPGT0503 WPGT0604	11°-22°	✔	✔	✔				• Plage de diamètres Ø20 – 40 mm • Pour acier, acier inoxydable et fonte • Plaquette de coupe à trois arêtes • Fraisage en plongée possible • Double système de serrage pour plaquettes de coupe	B168
XMR01		 WPGT0604 WPGT0806 WPGT0907	11°-22°	✔	✔	✔				• Plage de diamètres Ø42 – 160 mm • Pour acier, acier inoxydable et fonte • Plaquette de coupe à trois arêtes • Fraisage en plongée possible • Double système de serrage pour plaquettes de coupe	B170

Fraise à rainurer

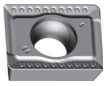
XMP01		 CNE12	90°	✔	✔	✔				• Plage de diamètres Ø80 – 400 mm • Pour acier, acier inoxydable et fonte • Également approprié pour surfaçage et épaulements	B173

✔ Choix de base ✔ Alternative

Fraise de rainures en T

Gamme	Corps de fraise	Plaquettes	Kr	Application						Caractéristiques	Page
				P	M	K	N	S	H		
TMP01		 MPHT0603 MPHT0803 MPHT1204	90°	✔	✔	✔				• Plage de diamètres Ø21 – 60 mm • Pour fonte • Largeurs de rainures 9, 11, 14, 18, 22, 28 mm	B175

Fraise d'ébauche

HMP01		 APKT1504 & SPMT1204	90°	✔	✔	✔				• Plage de diamètres Ø40 – 50 mm • Pour acier et fonte • Attachement Weldon	B177
HMP01		 APKT1504 & SPMT1204	90°	✔	✔	✔				• Plage de diamètres Ø50 – 80 mm • Pour acier et fonte • Avec attachement JT	B179
HMP01-EC		 APKT1504 & SPMT1204	90°	✔	✔	✔				• Plage de diamètres Ø50 – 80 mm • Pour acier et fonte • Avec attachement JT • Avec embout vissé	B181

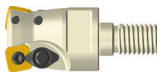
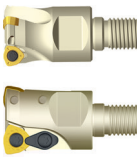
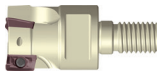
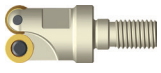
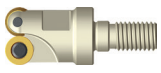
✔ Choix de base ✔ Alternative

Fraise à chanfreiner

Gamme	Corps de fraise	Plaquettes	Kr	Application						Caractéristiques	Page
				P	M	K	N	S	H		
CMZ01		 SPMT1204	30°	✓	✓	✓				• Plage de diamètres Ø12 – 32 mm • Pour acier, acier inoxydable et fonte • Fraise à chanfreiner 30°	B185
CMZ01		 SPMT1204	30°	✓	✓	✓				• Plage de diamètres Ø12 – 32 mm • Pour acier, acier inoxydable et fonte • Fraise à chanfreiner 30°	B183
CMA01		 SPMT1204	45°	✓	✓	✓				• Plage de diamètres Ø12 – 32 mm • Pour acier, acier inoxydable et fonte • Fraise à chanfreiner 45°	B187
CMA01		 SPMT1204	45°	✓	✓	✓				• Plage de diamètres Ø12 – 32 mm • Pour acier, acier inoxydable et fonte • Fraise à chanfreiner 45°	B189
CMD01		 SPMT1204	60°	✓	✓	✓				• Plage de diamètres Ø12 – 32 mm • Pour acier, acier inoxydable et fonte • Fraise à chanfreiner 60° • Attachement Weldon	B191
CMD01		 SPMT1204	60°	✓	✓	✓				• Plage de diamètres Ø12 – 32 mm • Pour acier, acier inoxydable et fonte • Fraise à chanfreiner 60° • Attachement Weldon	B193

✓ Choix de base ✓ Alternative

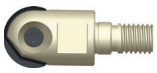
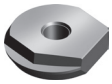
Série QCH

Gamme	Corps de fraise	Plaquettes	Kr	Application						Caractéristiques	Page
				P	M	K	N	S	H		
QCH-XPHT		 XPHT16 XPHT20 XPHT25 XPHT30 XPHT32		✔	✔	✔				• Plage de diamètres Ø16 – 32 mm • Pour acier et fonte • Particulièrement approprié pour l'ébauche dans la fabrication de moules et matrices	B195
QCH-SDMT		 SDMT06T2 SDMT09T3 SDMT1204	15°	✔	✔	✔				• Plage de diamètres Ø20 – 40 mm • Pour acier, acier inoxydable et fonte • Plaquette de coupe à quatre arêtes • Fraisage en plongée possible • Double système de serrage pour plaquettes de coupe	B197
QCH-WPGT		 WPGT0503 WPGT0604 WPGT0806	11°-22°	✔	✔	✔				• Plage de diamètres Ø16 – 42 mm • Pour acier, acier inoxydable et fonte • Plaquette de coupe à trois arêtes • Fraisage en plongée possible • Double système de serrage pour plaquettes de coupe	B199
QCH-APKT		 APKT11T3 APKT1604	90°	✔	✔	✔	✔	✔		• Plage de diamètre Ø16 – 40 mm • Pour acier, acier inoxydable, fonte, métaux non-ferreux et matériaux difficiles à usiner • Pour le fraisage d'épaulements, de rainures et de gorges et le fraisage en plongée • Fraise à coupe douce avec géométrie positive importante • Plaquettes de coupe à deux arêtes • Uniquement pour filetage M selon la norme DIN	B201
QCH-RD		 RDKW0702 RDKW10T3 RDKW1605		✔	✔	✔			✔	• Plage de diamètres Ø15 – 42 mm • Pour acier, acier inoxydable et fonte • Serrage par vis • Fabrication de moules et matrices • Pour deux épaisseurs de plaquette différentes	B204
QCH-RD		 RDKW0702 RDKW1003 RDKW12T3 RDKW1604		✔	✔	✔			✔	• Plage de diamètres Ø15 – 42 mm • Pour acier, acier inoxydable et fonte • Serrage par vis • Fabrication de moules et matrices • Pour deux épaisseurs de plaquette différentes	B206

✔ Choix de base ✔ Alternative

Plaquettes de fraisage Vue d'ensemble de système

Série QCH

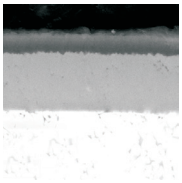
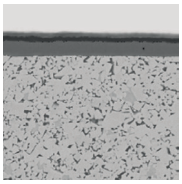
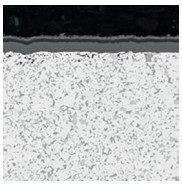
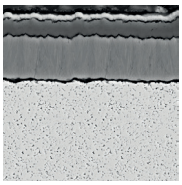
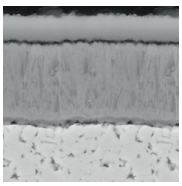
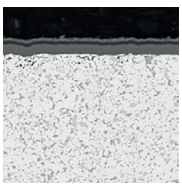
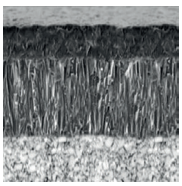
Gamme	Corps de fraise	Plaquettes	Kr	Application						Caractéristiques	Page
				P	M	K	N	S	H		
QCH-ZOHX		 ZOHX16 ZOHX20 ZOHX25 ZOHX30 ZOHX32		✓	✓	✓				• Plage de diamètres Ø16 – 32 mm • Pour acier, acier inoxydable et fonte • Particulièrement approprié pour la finition dans la fabrication de moules et matrices • Plaquette de coupe avec deux arêtes	B208
QCH-SDMT-Q		 SDMT09T3		✓	✓	✓				• Plage de diamètres Ø20 – 40 mm • Pour acier, acier inoxydable et fonte • Plaquette de coupe à quatre arêtes • Fraisage en plongée possible • Double système de serrage pour plaquettes de coupe • Uniquement pour l'accouplement Q selon les standards ZCC-CT	B210
QCH-APKT-Q		 APKT11T3	90°	✓	✓	✓				• Plage de diamètre Ø16 – 40 mm • Pour acier, acier inoxydable, fonte, métaux non-ferreux et matériaux difficiles à usiner • Pour le fraisage d'épaulements, de rainures et de gorges et le fraisage en plongée • Fraise à coupe douce avec géométrie positive importante • Plaquettes de coupe à deux arêtes • Uniquement pour l'accouplement Q selon les standards ZCC-CT	B212
QCH-SPGT-Q		 SPGT0502		✓	✓	✓				• Plage de diamètres Ø16 – 20 mm • Pour acier, acier inoxydable et fonte • Pour ébavurage et chanfreinage • Fraise à faibles efforts de coupe, avec grande arête de coupe positive • Plaquettes de coupe à deux arêtes • Uniquement pour l'accouplement Q selon les standards ZCC-CT	B214

Notes

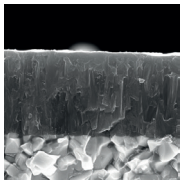
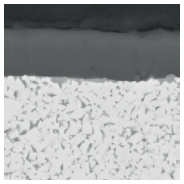
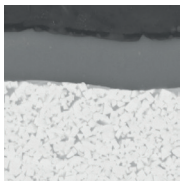
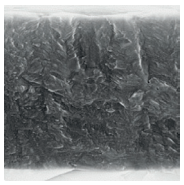
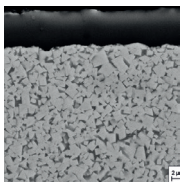
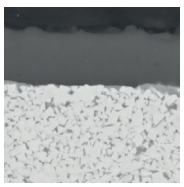
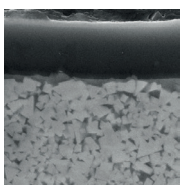
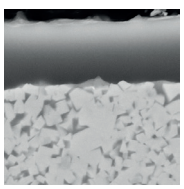
Vue d'ensemble des brise-copeaux

	Finition	Semi-finition	Ébauche
P	DF	DM	DR
	APF	APM	–
	PF	PM	PR
	GF	GM	GR
	GL	GM	GH
	–	HGR	–
	–	–	ZR
	–	XR	–
	–	MM	–
	MO-2	MO-1	MO-3
M	EF	EM	–
	APF	APM	–
	DF	DM	–
	PF	PM	PR
	GF	GM	GR
	GL	GM	GH
	–	HGR	–
	E	E	–
	–	–	ZR
	–	XR	–
	–	MM	–
K	CF	CM	CR
	DF	DM	DR
	EDFR	DER	DER
	PF	PM	PR
	GF	GM	GR
	GL	GM	GH
	–	–	ZR
	–	XR	–
	MO-2	MO-1	MO-3
S	EF	EM	–
	NM	NM	–
N	LH	LH	LH
	ALH	ALH	ALH

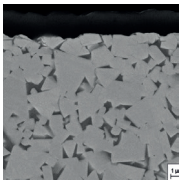
Carbure revêtu CVD

Nuance	ISO	Microstructure	Description de nuances
YBC302	P20 - P35		Nuance carbure revêtu CVD P20-P35 pour l'ébauche à la semi-finition des aciers à haute vitesse de coupe. Excellente résistance à l'usure et ténacité pour un large champ d'applications.
YBC301	P20 - P35		Nuance carbure revêtu CVD P20-P35 pour l'ébauche à la semi-finition des aciers à basse vitesse de coupe.
YBC401	P30 - P50 M30 - M40		Nuance carbure revêtu CVD P30-P50/M30-M40 pour l'ébauche des aciers à basse vitesse de coupe et conditions instables.
YBM251	P20 - P30 M15 - M35		Nuance carbure revêtu CVD P20-P30/M15-M35 pour l'ébauche à semi-finition des aciers inoxydables et aciers dans un large champ d'applications. Bonne résistance à l'usure et bonnes caractéristiques contre la déformation plastique à vitesse de coupe normale.
YBM253	M15 - M35		Nuance carbure revêtu CVD M15-M35 pour l'ébauche à semi-finition des aciers inoxydables dans un large champ d'applications. Haute résistance à l'usure et bonnes caractéristiques contre la déformation plastique à haute vitesse de coupe.
YBM351	P25 - P40 M20 - M40		Nuance carbure revêtu CVD P25-P40/M25-M40 pour l'ébauche des aciers inoxydables et aciers. Bonne résistance à l'usure et stabilité d'arête à vitesse de coupe normale.
YBD152	K10 - K25		Nuance carbure revêtu K10-K25. Optimisé pour la semi-finition et l'ébauche des fontes. Bonne résistance à l'usure et ténacité à haute vitesse.
YBD252	K20 - K35		Nuance carbure revêtu CVD K20-K35. Optimisé pour l'ébauche et la semi-finition des fontes et des aciers. Bonne résistance à l'usure et ténacité à haute vitesse de coupe.

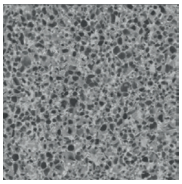
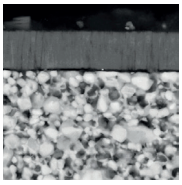
Carbure revêtu PVD

Nuance	ISO	Microstructure	Description de nuances
YBG101	N05 - N20		Nuance de carbure N05–N20 avec revêtement PVD pour l'usinage de finition à semi-finition des aluminiums. Combiné aux brise-copeaux en aluminium, le revêtement, appliqué uniquement à la surface de la face de coupe, réduit la formation d'arêtes rapportées et assure une coupe douce.
YBG102	S05 - S15		Nuance carbure revêtu PVD S05-S15 pour la semi-finition à la finition des superalliages, aciers inoxydables, et aluminium. Bonne résistance à l'usure pour un large champ d'applications.
YBG202	P10 - P30 M10-M25		Nuance carbure revêtu PVD M10-M25/P10-P30 pour la semi-finition à la finition des aciers inoxydables et aciers (en fraisage). Bonne résistance à l'usure pour un large champ d'application.
YBG212	P25 - P35 M25-M40		Nuance carbure revêtu PVD M25-M40/P25-P35 pour les aciers et les aciers inoxydables. Spécifiquement pour la plaquette centrale dans les opérations de perçage.
YBS203	S15 – S25		Nuance de tournage et de fraisage pour l'usinage de matériaux réfractaires. Un substrat spécial en carbure et la technologie de revêtement PVD dernière génération permettent d'atteindre une très bonne tenue à l'usure, une forte ténacité à la rupture et une stabilité thermique élevée.
YBG205	P10 - P30 M20 - M40 S15-S25		Nuance de carbure P10–P30/M20–M40/S15–S25 avec revêtement PVD multicouche pour l'usinage de finition à semi-finition d'acier inoxydable, superalliages et acier (fraisage). Très bonne résistance à l'usure et thermique dans un vaste domaine d'utilisation.
YB9320	P10 - P30 M10-M25		Nuance de carbure P10–P30/M10–M25 avec revêtement PVD multicouche pour l'usinage de finition à semi-finition d'acier inoxydable, superalliages et acier (gorge/fraisage). Très bonne résistance à l'usure grâce à l'amélioration de l'adhérence du revêtement et résistance thermique dans un vaste domaine d'utilisation.
YBG302	P15 - P30 M25 - M40		Nuance carbure revêtu PVD P15-P30/M25-M40 pour l'ébauche légère des aciers inoxydables et aciers (en fraisage). Bonne résistance à l'usure et ténacité.

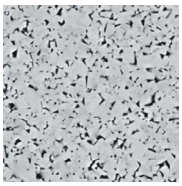
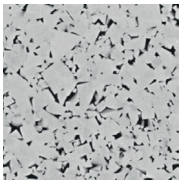
Carbure revêtu PVD

Nuance	ISO	Microstructure	Description de nuances
YBS303	S25 - S35		Nuance de fraisage pour l'usinage d'alliages titane. Un substrat en carbure résistant et la technologie de revêtement PVD dernière génération avec une résistance aux chocs supérieure et une stabilité thermique élevée.

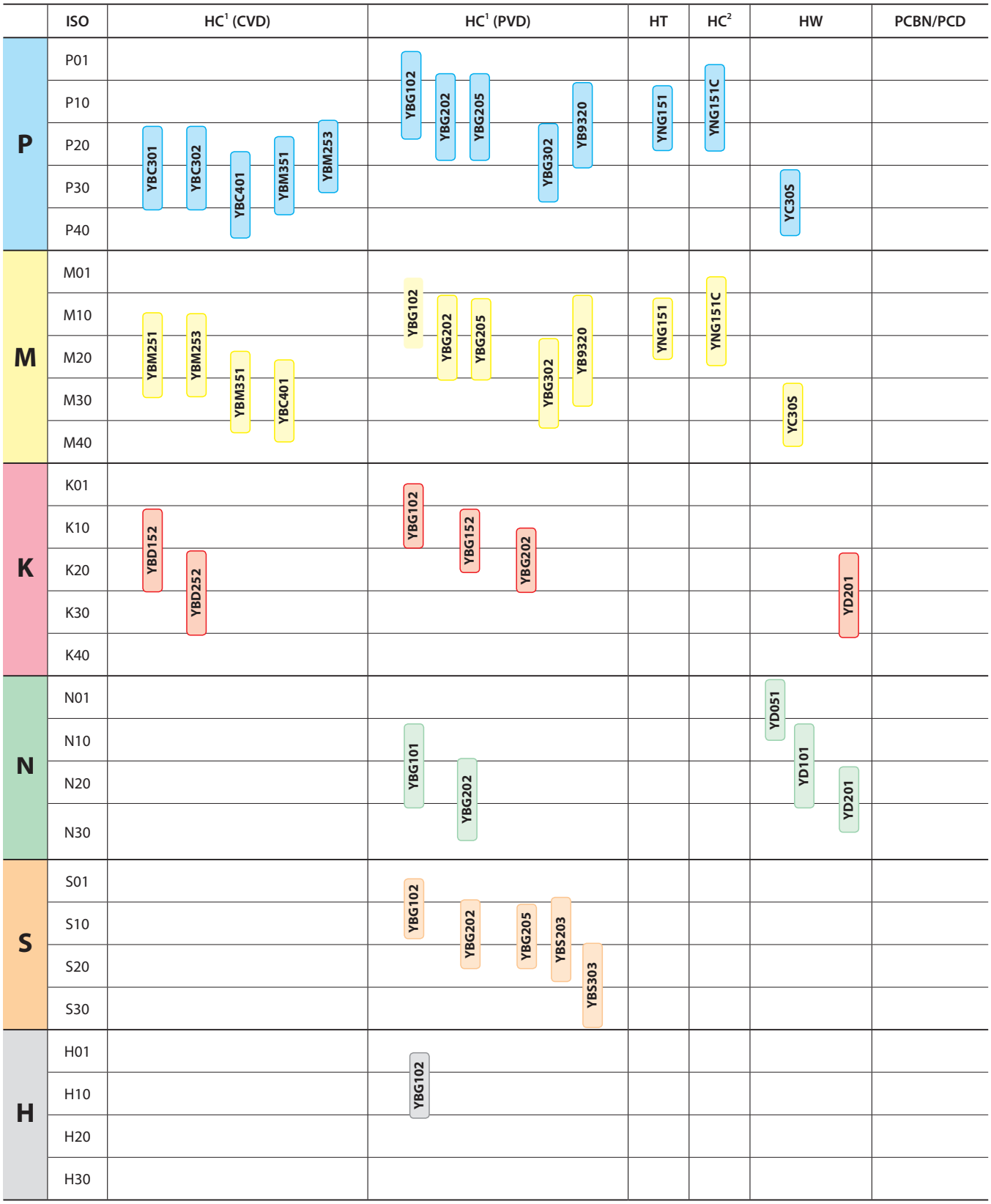
Cermet

Nuance	ISO	Microstructure	Description de nuances
YNG151	P05 - P15		Nuance cermet non revêtu P05-P15 pour les opérations de superfinition des aciers et aciers inoxydables. Bonne résistance contre la déformation plastique pour bon état de surface.
YNG151C	P05 - P15		Nuance cermet revêtu PVD P05-P15 pour les opérations de superfinition des aciers et aciers inoxydables. Bonne résistance à l'usure et bonnes caractéristiques contre la déformation plastique pour un bon état de surface.

Carbure non revêtu

Nuance	ISO	Microstructure	Description de nuances
YD101	N05 - N25 K05 - K20		Nuance carbure non revêtu N05-N20/K05-K20 pour les opération de semi-finition à finition dans les aluminiums et autres matériaux.
YD201	K10 - K30 N10 - N30		Nuance carbure non revêtu K10-K30/N10-N30 pour les applications de semi-finition dans les aluminiums et autres matériaux.

Domaines d'application des nuances – plaquettes de fraisage



P	Acier	N	Métaux non-ferreux
M	Acier inoxydable	S	Réfractaires et superalliages
K	Fonte	H	Matériaux durs

HC[1] Carbure revêtu
HT Cermet non revêtu
HC[2] Cermet revêtu
HW Carbure non revêtu

Notes

Plaquettes de fraisage

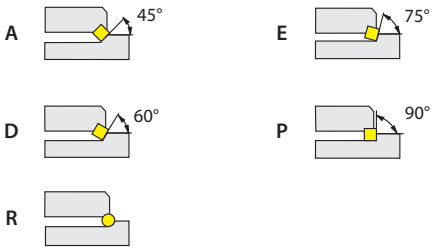
Codification – corps de fraise

FM	A	12	050	–	A22	O	–	N	06	–	04	(L)	(C)
1	2	3	4		5	6		7	8		9	10	11

Type de fraise	
Code	Description
BM	Fraise de forme
CM	Fraise à chanfreiner
EM	Fraise à 90°
FM	Fraise à surfacer
HM	Fraise deux tailles
SM	Fraise-disque
TM	Fraise de rainures en T
XM	Spécial

1

Angle d'attaque



2

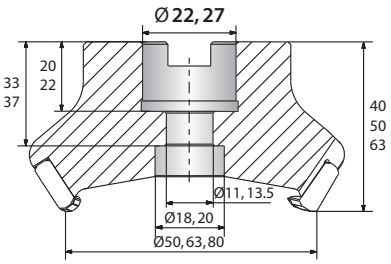
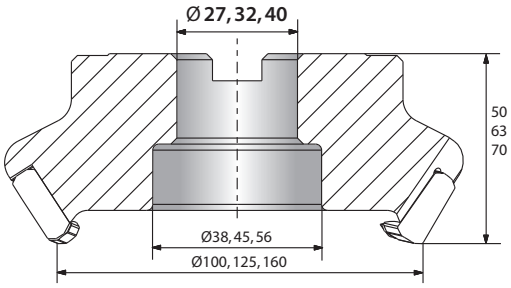
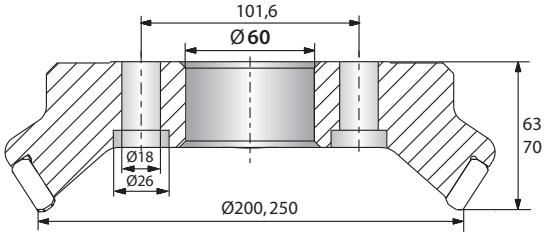
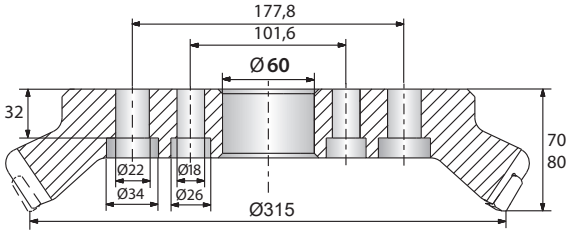
Numéro de série

3

Diamètre nominal [mm]	
Code	Description
025	25
050	50
160	160
315	315
...	

4

Version et taille des attachements

Code	Version	Code	Version
A	Diamètre nominal Ø50 – 80 mm 	**B**	Diamètre nominal Ø100 – 160 mm 
C	Diamètre nominal Ø200 – 250 mm 	**D**	Diamètre nominal Ø315 mm 
G	Attachement cylindrique	**XP**	Attachement Weldon
K	Montage sur mandrin		

5

Concernant la fixation, veuillez observer les indications du fabricant d'attachements.

Forme de plaquette			
A		C	
H		L	
M		O	
P		R	
S		T	
W		X	Spécial
Z	Spécial		

6

Angle de dépouille			
B	5°	C	7°
D	15°	E	20°
F	25°	N	0°
P	11°		

7

Longueur d'arête l [mm]	
Forme de plaquette	
	
A	C, M
	
H, O, P	L
	
R	S
	T
W	

8

Nombre de dents

9

Sens de coupe	
Code	Description
L	À gauche

10

Avec arrosage interne

11

Les outils avec accouplement B et arrosage interne nécessitent les pièces détachées suivantes :



Vis de serrage pour la lubrification interne



Disque pour lubrification



Pièces détachées (accouplement B arrosage interne)

		B27	B32	B40	B40
	Ø	**80**	**100**	**125**	**160**
	**Vis de serrage – lubrification**	LDB27C	LDB32C	LDB40C	LDB40C
	**Disque – Lubrification**	B27-002-CP	B32-002-CP	B40-002-CP	B40-003-CP

Ces pièces détachées sont fournies à l'achat d'un outil avec canal de lubrification interne et accouplement B.

Plaquettes de fraisage

Code ISO – plaquette de coupe

S	P	K	N	12	04	ED	T21K	R	–	DM
1	2	3	4	5	6	7	8	9		10

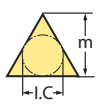
1 Forme de plaquette

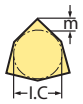
A		C	
H		L	
M		O	
P		R	
S		T	
W		X	Spécial
Z	Spécial		

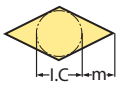
2 Angle de dépouille

B	 5°	C	 7°
D	 15°	E	 20°
F	 25°	N	 0°
P	 11°		

3 Classe de tolérance









Code	I.C [mm]	m [mm]	S [mm]
A	±0,025	±0,005	±0,025
C	±0,025	±0,013	±0,025
E	±0,025	±0,025	±0,025
F	±0,013	±0,005	±0,025
G	±0,025	±0,025	±0,130
H	±0,013	±0,013	±0,025
J	±0,05–0,13	±0,005	±0,025
K	±0,05–0,13	±0,013	±0,025
L	±0,05–0,13	±0,025	±0,025
M	±0,05–0,13	±0,08–0,18	±0,130
N	±0,05–0,13	±0,08–0,18	±0,025
U	±0,08–0,25	±0,13–0,38	±0,130

4 Caractéristiques de fixation (métrique)

Forme de plaquette

A		B	 > 65°
C	 > 65°	F	
G		H	 > 65°
J	 > 65°	M	
N		Q	 ≤ 65°
R		T	 ≤ 65°
U	 ≤ 65°	W	 ≤ 65°
X	Spécial		

5 Longueur d'arête l [mm]

Forme de plaquette

	
A	C, M
	
H, O, P	L
	
R	S
	
T	W

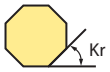
Epaisseur plaquette s [mm]



Code	S	Code	S
00	0,79	**05**	5,56
T0	0,99	**T5**	5,95
01	1,59	**06**	6,35
T1	1,98	**T6**	6,75
02	2,38	**07**	7,94
T2	2,58	**09**	9,52
03	3,18	**T9**	9,72
T3	3,97	**11**	11,11
04	4,76	**12**	12,70
T4	4,96		

6

Angle





Code	Kr	Code	αn
A	45°	**A**	3°
D	60°	**B**	5°
E	75°	**C**	7°
F	85°	**D**	15°
P	90°	**E**	20°
Z	Spécial	**F**	25°
		G	30°
		N	0°
		P	11°
		Z	Spécial

7

Préparation d'arête

Code	Version	Code	Angle	Code	Largeur [mm]	Code	Position
F		**0**	5°	**0**	0,10	**K**	
E		**1**	10°	**1**	0,15		
T		**2**	15°	**2**	0,20	**P**	
S		**3**	20°	**3**	0,25		
		4	25°	**4**	0,30	**W**	
		5	30°	**5**	0,35		
				6	0,40	**–**	
				7	0,45		

8

Sens de coupe

Code	Description
R	À droite
L	À gauche
N	Neutre

9

Vue d'ensemble des brise-copeaux (pages B20 et suivantes)

10

Plaquettes de fraisage Codification – fraise disque

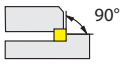
SM	P	03	–	160	×	16	–	K	40	–	M	P	12	–	12	L
1	2	3		4		5		6	7		8	9	10		11	12

Version

Code	Description
SM	Fraise-disque

1

Angle d'attaque

P 

2

Numéro de série

3

Diamètre nominal [mm]

4

Largeur de coupe [mm]

5

Type d'attachement

Code	Description	Code	Description
A	Type A	B	Type B
C	Type C	D	Type D
K	Avec clavette		

6

Diamètre de l'alésage d'attachement [mm]

7

Forme de plaquette

M 

S 

8

Angle de dépouille

N 

P 

9

Taille plaquette [mm]

10

Nombre de dents

11

Sens de coupe

Code	Description
R	À droite
L	À gauche

12

QCH – 35 – SDMT 09 – Q 18 – 03

1	2	3	4	5	6	7

Série

Code	Description
QCH	Système d'attachement

1

Diamètre nominal [mm]

Code	Description
16	16
20	20
25	25
35	35
...	

2

Forme plaquette

3

Longueur d'arête l [mm]

A 

R 

S 

4

Type de filetage

Code	Description
M	Métrique
Q	Filetage Q

5

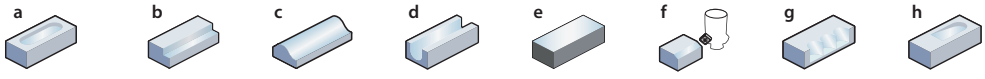
Taille de filetage [mm]

Code	Description
8	8
10	10
12	12
14	14
...	

6

Nombre de dents

7



a Fraisage de poches **b** Fraisage à 90° **c** Fraisage de forme **d** Rainurage **e** Surfaçage **f** Fraisage à chanfreiner **g** Fraisage en plongée **h** Fraisage circulaire/rampes

Plaquettes de fraisage Codification – attachement QCH

G	25	–	QCH	–	Q	12	–	250	C	–	(ZJ)	(115)
1	2		3		4	5		6	7		8	9

1 – Type de serrage

Code	Description
G	Cylindrique
XP	Weldon

2 – Diamètre de serrage [mm]

Code	Description
12	12
16	16
20	20
25	25
32	32

3 – Série

Code	Description
QCH	Système d'attachement

4 – Type de filetage

Code	Description
M	Métrique
Q	Filetage Q

5 – Taille de filetage [mm]

Code	Description
8	8
10	10
12	12
14	14
...	

6 – Longueur totale [mm]

Code	Description
85	85
150	150
200	200
...	

7 – Material

Code	Description
C	Carbure
S	Acier

8 – Attachement

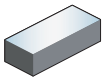
Code	Description
ZJ	Conique
–	Cylindrique détalonné

9 – Longueur du cône [mm]

Code	Description
90	90
115	115
...	

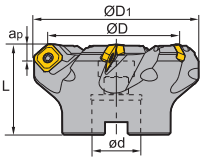
Fraise à surfacer

FMA01 Kr: 45°

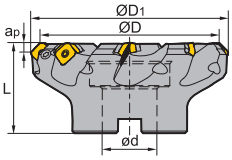




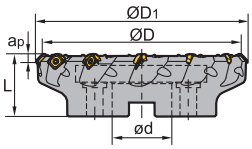
Pas réduit



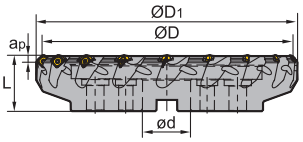
A



B



C



D

Article	✲	Stock R	Stock L	Dimensions (mm) ØD	ØD1	ød	L	ap max	Dents	Attachem.	kg	Plaquettes
FMA01-050-A22-SE12-04		●	○	50	61	22	40	6	4	A	0,3	SEET12T3
FMA01-050-A22-SE12-04C	✲	●	○	50	61	22	40	6	4	A	0,3	
FMA01-063-A22-SE12-05		●		63	74	22	40	6	5	A	0,5	
FMA01-063-A22-SE12-05C	✲	●	○	63	74	22	40	6	6	A	1,2	
FMA01-080-A27-SE12-06		●	●	80	91	27	50	6	6	A	1,2	
FMA01-080-A27-SE12-06C	✲	●	○	80	91	27	50	6	6	A	1,2	
FMA01-100-B32-SE12-07		●	○	100	107	32	50	6	7	B	1,2	
FMA01-100-B32-SE12-07C	✲	○	○	100	107	32	50	6	7	B	1,2	
FMA01-125-B40-SE12-08		●	●	125	136	40	63	6	8	B	2,6	
FMA01-125-B40-SE12-08C	✲	○		125	136	40	63	6	8	B	2,6	
FMA01-160-B40-SE12-10		●	●	160	170	40	63	6	10	B	4,3	
FMA01-160-B40-SE12-10C	✲	○		160	170	40	63	6	10	B	4,3	
FMA01-200-C60-SE12-12		●	○	200	210	60	63	6	12	C	7,6	
FMA01-250-C60-SE12-14		●	○	250	260	60	63	6	14	C	13,5	
FMA01-315-D60-SE12-18		●	○	315	325	60	70	6	18	D	20,8	
FMA01-100-B32-SE18-04		○	○	100	120	32	63	10	4	B	1,2	SEET18T6
FMA01-125-B40-SE18-05		○	○	125	145	40	63	10	5	B	2,6	
FMA01-160-C40-SE18-06		○	○	160	180	40	63	10	6	C	4,3	
FMA01-200-C60-SE18-08		●	○	200	220	60	63	10	8	C	7,6	
FMA01-250-C60-SE18-10		●		250	270	60	63	10	10	C	13,5	
FMA01-315-D60-SE18-12		○	○	315	335	60	80	10	12	D	20,8	

● En stock ○ Sur demande

✲ Avec arrosage interne

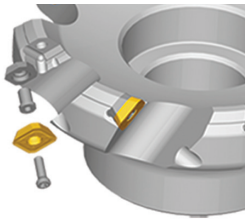
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquettes de fraisage

Fraise à surfacer

Pièces détachées

	Plaquette	SEET12T3	SEET12T3	SEET18T6
	ØD	50-100	125 - 315	100- 315
	Vis (plaquette)	I60M3,5×10 (2,7 Nm)	I60M3,5×12 (2,7 Nm)	I60M5×17 (6,7 Nm)
	Vis (cale-support)		SM5×7XA	SM8×9XA
	Cale-support		S13BS	S18BS
	Clé (cale-support)		WH35L	WH50L
	Clé (plaquette)	WT15IS	WT15IS	
	Clé (plaquette)			WT20IT

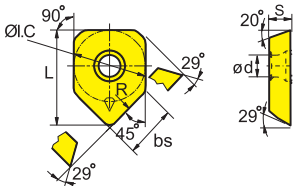


- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SEET	L	I.C	S	d
12 T3	17,82	13,4	3,97	4,1

Plaquette de fraisage

Plaquette de fraisage SE**



	HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
P	◉	◉	◉	◉	◉	◉		◉	◉	◉	◉	◉	◉	◉	◉	◉	◉		
M		◉	◉	◉	◉	◉			◉	◉	◉	◉	◉	◉	◉	◉	◉		
K						◉	◉	◉							◉				◉
N								◉											◉ ◉
S				◉		◉		◉	◉		◉	◉	◉	◉					
H																			

ISO	R	bs	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
SEET12T3-W		9,46							○							●					○	○		

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification > B26 | Choix nuances > B24 | Info. techniques > B527 | Paramètres > B230

Plaquette de fraisage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

SEET	L	I.C	S	d
12 T3	13,4	13,4	3,97	4,1
18 T6	18	18	6,1	5,5

Plaquette de fraisage SE**			HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW	
		P																				
		M																				
		K																				
		N																				
		S																				
		H																				
	ISO	bs	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	SEET12T3-CF	2,55							○			●												
	SEET12T3-CM	2,55							●			●												
	SEET12T3-CR	2,55							●	●		○												
	SEET12T3-DF	2,55	●	●			○	●					○					○			○	○		
	SEET12T3-DM	2,55	●	●	●	●	○	●					○				●	●						
	SEET18T6-DM	2,29	●			●																		
	SEET12T3-DR	2,55		●	●			●		○			○					○						
	SEET12T3-EF	2,55											○					●						
	SEET12T3-EM	2,55					○	●					○					●						
	SEET12T3-LH	2,55									○												●	●

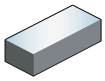
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

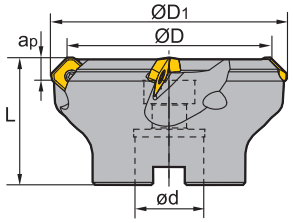
Fraise à surfacer

FMA02 Kr: 45°

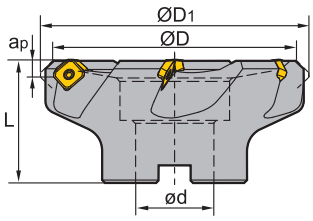




Pas normal et large



A



B

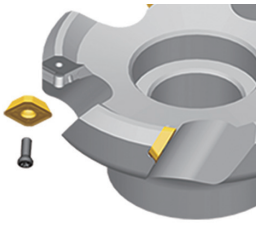
Article	✻	Stock	Dimensions (mm) ØD	ØD1	ød	L	ap max	Dents	Attachem.	kg	Plaquettes
FMA02-050-A22-SE12-03		●	50	61	22	40	6	3	A	0,4	SEET12T3
FMA02-063-A22-SE12-04		●	63	74	22	40	6	4	A	0,6	
FMA02-080-A27-SE12-04		●	80	91	27	50	6	4	A	1,3	
FMA02-100-B32-SE12-05		●	100	107	32	50	6	5	B	1,3	
FMA02-125-B40-SE12-06		○	125	131	40	63	6	6	B	2,6	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**SEET12T3**
	ØD	**50-125**
	Vis (plaquette)	I60M3,5×10 (2,7 Nm)
	Clé (plaquette)	WT15IS



Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

SEET	L	I.C	S	d
12 T3	17,82	13,4	3,97	4,1

Plaquette de fraisage

Plaquette de fraisage SE**				HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW		
			P																					
			M																					
			K																					
			N																					
			S																					
			H																					
ISO		R	bs	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	SEET12T3-W		9,46							○							●					○	○		

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

SEET	L	I.C	S	d
12 T3	13,4	13,4	3,97	4,1

Plaquette de fraisage

Plaquette de fraisage SE**			HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW		
		P																					
		M																					
		K																					
		N																					
		S																					
		H																					
ISO	bs	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
SEET12T3-CF	2,55							○			●												
SEET12T3-CM	2,55							●			●												
SEET12T3-CR	2,55							●	●		○												

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

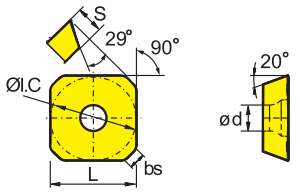
Plaquettes de fraisage

Fraise à surfacer

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

SEET	L	I.C	S	d
12 T3	13,4	13,4	3,97	4,1

Plaquette de fraisage



Plaquette de fraisage SE**			HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
		P																			
		M																			
		K																			
		N																			
		S																			
		H																			
ISO		bs	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	SEET12T3-DF	2,55	●	●			○	●					○					○			○	○		
	SEET12T3-DM	2,55	●	●	●	●	○	●					○				●	●						
	SEET12T3-DR	2,55		●	●			●		○			○					○						
	SEET12T3-EF	2,55											○					●						
	SEET12T3-EM	2,55					○	●					○					●						
	SEET12T3-LH	2,55									○												●	●

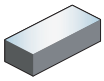
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

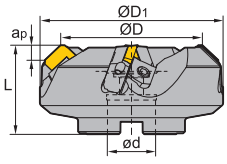
Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

Fraise à surfacer

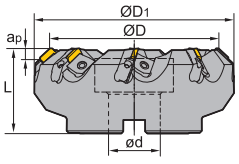
FMA03 Kr: 45°



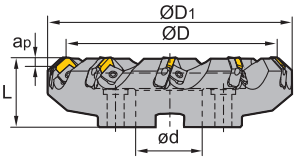




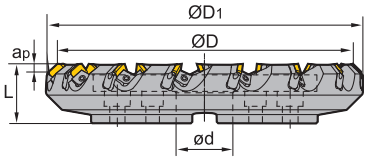
A



B



C



D

Article	✻	Stock R	Stock L	Dimensions (mm) ØD	ØD1	ød	L	ap max	Dents	Attachem.	kg	Plaquettes
FMA03-080-A27-SE12-04		○	○	80	103	27	50	5,5	4	A	1,8	SEEN1203 SEKN1203 SEKR1203
FMA03-100-B32-SE12-05		○	○	100	122	32	50	5,5	5	B	2,4	
FMA03-125-B40-SE12-06		○	○	125	147	40	63	5,5	6	B	4,4	
FMA03-160-B40-SE12-08		○	○	160	181	40	63	5,5	8	B	6,4	
FMA03-200-C60-SE12-10		○	○	200	221	60	63	5,5	10	C	8,5	
FMA03-250-C60-SE12-12		○	○	250	270	60	63	5,5	12	C	14,1	
FMA03-315-D60-SE12-15		○	○	315	353	60	63	5,5	15	D	22,2	
FMA03-080-A27-SE15-04		○		80	103	27	50	7,5	4	A	1,7	SEKN1504 SEKR1504
FMA03-100-B32-SE15-05		○		100	122	32	50	7,5	5	B	2,3	
FMA03-125-B40-SE15-06		○		125	147	40	63	7,5	6	B	4,2	
FMA03-160-B40-SE15-08		○		160	181	40	63	7,5	8	B	6,1	
FMA03-200-C60-SE15-10		○		200	221	60	63	7,5	10	C	8,3	
FMA03-250-C60-SE15-12		○		250	270	60	63	7,5	12	C	13,6	
FMA03-315-D60-SE15-15		○	○	315	353	60	63	7,5	15	D	21,8	

● En stock ○ Sur demande

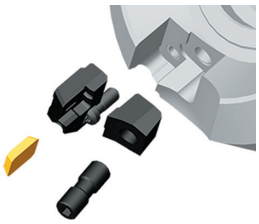
✻ Avec arrosage interne

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquettes de fraisage Fraise à surfacer

Pièces détachées

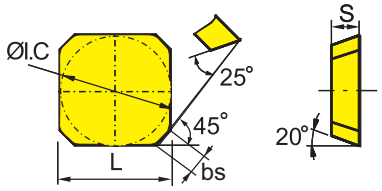
	Plaquette	SEEN1203 SEKN1203 SEKR1203	SEKN1504 SEKR1504
	ØD	80- 315	80- 315
	Vis de réglage	LOM5×15.1	LOM5×15.1
	Cassette (gauche)	LSE12L	LSE15L
	Cassette (droite)	LSE12R	LSE15R
	Vis (coin)	DM8×21X (10,2 Nm)	DM8×21X (10,2 Nm)
	Coin (gauche)	W01L	W01L
	Coin (droite)	W01R	W01R
	Clé (vis de réglage)	WT20T	WT20T
	Clé (coin)	WH40T	WH40T



● Bonnes conditions d'usinage
◐ Conditions d'usinage normales
◐ Conditions d'usinage défavorables

SEKN	L	I.C	S
12 03	12,7	12,7	3,18
15 04	15,875	15,875	4,76

Plaquette de fraisage



Plaquette de fraisage SE**			HC¹ (CVD)						HC¹ (PVD)								HT	HC²	HW	
		P	◐	◐	◐	◐	◐	◐		◐	◐		◐	◐	◐	●	◐	◐			
		M		◐	◐	◐	◐	◐		◐	◐		◐	◐	◐	◐	◐	◐			
		K						◐	◐	●							●				◐
		N									◐										◐ ◐
		S			◐		◐			● ◐			◐ ◐		◐						
		H																			
ISO		bs	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	SEKN1203AFN		1,8	○																				
	SEKN1203AFTN		1,8	●		●	●	○		○			○								●	●		○
	SEKN1504AFTN		1,6	●	○		●	●									●							
	SEKN1504AZ		1,6	○																				○

● En stock ○ Sur demande

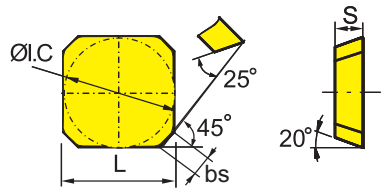
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

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Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

SEEN	L	I.C	S
12 03	12,7	12,7	3,18

Plaquette de fraisage

Plaquette de fraisage SE**		HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW	
	P																				
	M																				
	K																				
	N																				
	S																				
	H																				
ISO	bs	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
 **SEEN1203AFTN**	1,8																		●				

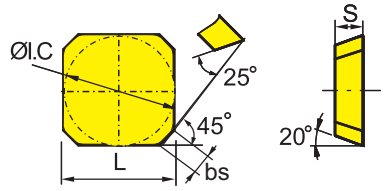
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

SEKR	L	I.C	S
12 03	12,7	12,7	3,18

Plaquette de fraisage

Plaquette de fraisage SE**		HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW	
	P																				
	M																				
	K																				
	N																				
	S																				
	H																				
ISO	bs	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
 **SEKR1203AFN**	1,8	●								○													

● En stock ○ Sur demande

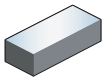
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

A Tournage
B Fraisage
C Perçage
D Informations techniques
E Index

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

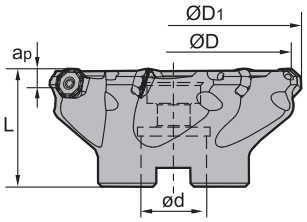
Fraise à surfacer

FMA04 Kr: 45°

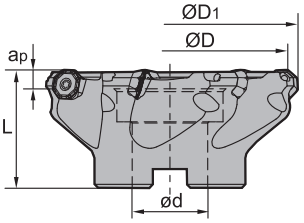




Serrage par vis



A



B

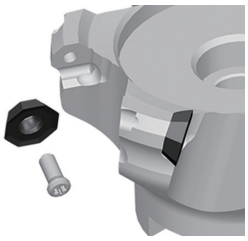
Article	✻	Stock R	Stock L	Dimensions (mm) ØD	ØD1	ød	L	ap max	Dents	Attachem.	kg	Plaquettes
FMA04-050-A22-OF05-04		●		50	56	22	40	3,5	4	A	0,3	OFKT05T3
FMA04-050-A22-OF05-05		●		50	56	22	40	3,5	5	A	0,4	
FMA04-050-A22-OF05-05C	✻	○		50	56	22	40	3,5	5	A	0,4	
FMA04-063-A22-OF05-05		●		63	69	22	40	3,5	5	A	0,5	
FMA04-063-A22-OF05-05C	✻	○		63	69	22	40	3,5	5	A	0,5	
FMA04-080-A27-OF05-06		●	○	80	86	27	50	3,5	6	A	0,8	
FMA04-080-A27-OF05-06C	✻	●		80	86	27	50	3,5	6	A	0,8	
FMA04-100-B32-OF05-07		●	○	100	106	32	50	3,5	7	B	1,2	
FMA04-100-B32-OF05-07C	✻	○		100	106	32	50	3,5	7	B	1,2	
FMA04-125-B40-OF05-08		●		125	130	40	63	3,5	8	B	2,7	
FMA04-125-B40-OF05-08C	✻	○		125	130	40	63	3,5	8	B	2,7	
FMA04-160-B40-OF05-10		●		160	165	40	63	3,5	10	B	5,1	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	OFKT05T3	OFKT05T3
	ØD	50-63	80-160
	Vis (plaquette)	I60M4×8,4 (3,4 Nm)	I60M4×10 (3,4 Nm)
	Clé (plaquette)	WT15IS	WT15IS

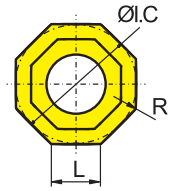
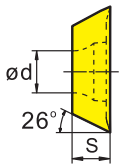


Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

OFKT	L	I.C	S	d
05 T3	5,26	12,7	3,97	4,4

Plaquette de fraisage OF**			HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
 		P																			
		M																			
		K																			
		N																			
		S																			
		H																			
ISO		R	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**OFKT05T3-DF**	0,5									●	○												
	**OFKT05T3-DM**	0,5					○		●		●	○						●						
	**OFKT05T3-LH**	0,5																					●	

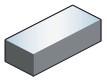
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

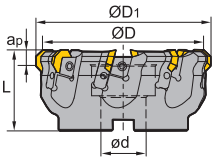
Fraise à surfacer

FMA04 Kr: 45°

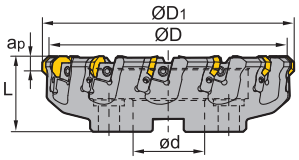




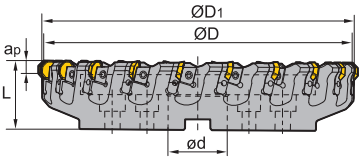
Serrage par coin



B



C



D

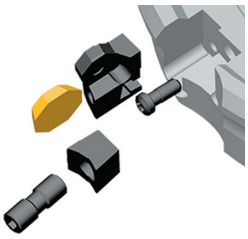
Article	✻	Stock R	Stock L	Dimensions (mm) ØD	ØD1	ød	L	ap max	Dents	Attachem.	kg	Plaquettes
FMA04-125-B40-OF07-08		○		125	136	40	63	5	8	B	3,9	
FMA04-160-B40-OF07-10		○		160	171	40	63	5	10	B	5,9	
FMA04-200-C60-OF07-12		○		200	211	60	63	5	12	C	7,6	OFKR0704
FMA04-250-C60-OF07-16		○		250	261	60	63	5	16	C	13,3	
FMA04-315-D60-OF07-20		○	○	315	321	60	63	5	20	D	20,3	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	OFKR0704
	ØD	125 - 315
	Vis de réglage	LOM5×15.1
	Cassette (gauche)	LOF07L
	Cassette (droite)	LOF07R
	Vis (coin)	DM8×21X (10,2 Nm)
	Coin (gauche)	W02L
	Coin (droite)	W02R
	Clé (vis de réglage)	WT20T
	Clé (coin)	WH40T

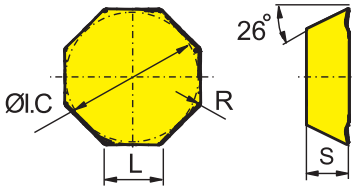


Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

OFKR	L	I.C	S
07 04	7,45	17,94	4,76

Plaquette de fraisage

Plaquette de fraisage OF**			HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW	
		P																				
		M																				
		K																				
		N																				
		S																				
		H																				
ISO		R	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**OFKR0704-DF**	0,8					○					○												
	**OFKR0704-DM**	0,8		○	○		○	○		○			○					○						
	OFKR0704W-DM	0,8		○						○						○								
	**OFKR0704-LH**	0,8																					○	

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

A Tournage
B Fraisage
C Perçage
D Informations techniques
E Index

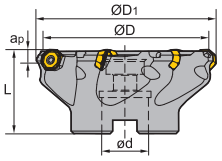
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise à surfacer

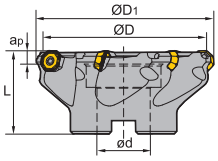
FMA04 Kr: 45°



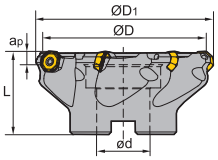
Serrage par vis



A



B



C

Article	✻	Stock	Dimensions (mm)					Dents	kg	Plaquettes
			ØD	$ØD_1$	ød	L	$a_{p\ max}$			
FMA04-050-A22-OD06-04C	✻	●	50	60	22	40	4	4	0,284	OD*T0605**
FMA04-063-A22-OD06-05C	✻	●	63	73	22	40	4	5	0,409	
FMA04-080-A27-OD06-06C	✻	●	80	90	27	50	4	6	1,017	
FMA04-100-A32-OD06-07C	✻	●	100	110	32	50	4	7	1,536	
FMA04-125-B40-OD06-08		○	125	135	40	63	4	8	2,931	
FMA04-160-C40-OD06-10		○	160	170	40	63	4	10	3,838	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

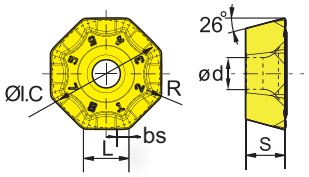
	Plaquette	**OD*T0605****
	ØD	**50-160**
	Vis (plaquette)	l60M5×13 (6,7 Nm)
	Clé (plaquette)	WT20IS

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquette de fraisage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

ODHT
06 05
06 05

Plaquette de fraisage OD**		HC[1] (CVD)							HC[1] (PVD)									HT	HC[2]	HW	
	P	○	○	○	○	○	○	○			○	○		○	○	○	○	○	○		
	M		○	○	○	○	○				○	○		○	○	○	○	○	○		
	K						○	○	○									○			○
	N								○											○	○
	S				○	○				○	○		○	○	○		○				
	H																				
ISO		YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**ODHT060508-GH**				●			●	●							●							
	**ODHT060508-GL**				○			○								●							
	**ODHT060508-GM**	●			●			●								●							
	**ODHT060508-LH**																					●	○
	**ODMT060512-GM**															○							

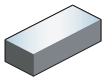
● En stock ○ Sur demande

HC[1] Carbure revêtu
HT Cermet non revêtu
HC[2] Cermet revêtu
HW Carbure non revêtu

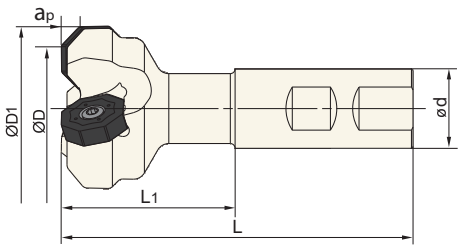
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise à surfacer

FMA07 Kr: 45°







Attachement Weldon

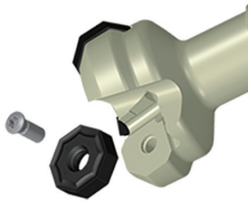
Article	✻	Stock	Dimensions (mm)						Dents	kg	Plaquettes
			ØD	$ØD_1$	ød	L_1	L	$a_{p\,max}$			
FMA07-025-XP20-ON06-02		○	25	37	20	45	95	4	2	0,2	ONHU0604
FMA07-025-XP20-ON06-02C	✻	○	25	37	20	45	95	4	2	0,2	
FMA07-032-XP25-ON06-02C	✻	○	32	44	25	55	111	4	2	0,4	
FMA07-040-XP25-ON06-03		○	40	52	25	50	106	4	3	0,4	
FMA07-032-XP25-ON08-02		○	32	47	25	55	111	5	2	0,4	ONHU08T5
FMA07-040-XP25-ON08-03		○	40	55	25	55	111	5	3	0,5	
FMA07-040-XP25-ON08-03C	✻	○	40	55	25	55	111	5	3	0,5	
FMA07-050-XP25-ON08-04		○	50	65	25	55	111	5	4	0,6	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**ONHU0604**	**ONHU08T5**
	ØD	**25-40**	**32-50**
	Vis (plaquette)	I60M4×10 (3,4 Nm)	I60M5×13 (6,7 Nm)
	Clé (plaquette)	WT15IS	
	Clé (plaquette)		WT20IT

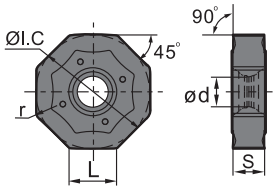


Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquette de fraisage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

ONHU	L	I.C	S	d
06 04	6,58	15,875	4,76	4,4
08 T5	8,39	20,2	5,77	5,3



Plaquette de fraisage ON**			HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW	
		P																				
		M																				
		K																				
		N																				
		S																				
		H																				
ISO		r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**ONHU060408-CM**								○															
	ONHU08T512-CM		○						○															
	**ONHU060408-PF**	0,8	○			○			●				○											
	ONHU08T508-PF	0,8	○			○			○				○				○							
	**ONHU060408-PM**	0,8	●			●		●	●							●								
	ONHU08T508-PM	0,8	○			○		○	○															

● En stock ○ Sur demande

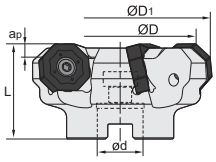
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

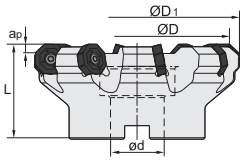
Fraise à surfacer

FMA07 Kr: 45°

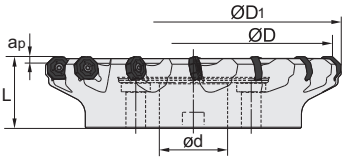




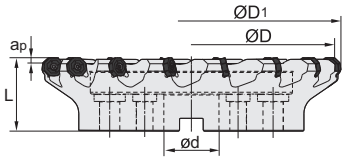
A



B



C



D

Article	✻	Stock R	Stock L	Dimensions (mm) ØD	ØD1	ød	L	ap max	Dents	Attachem.	kg	Plaquettes
FMA07-050-A22-ON06-05		○	○	50	62	22	40	4	5	A	0,3	ONHU0604
FMA07-050-A22-ON06-05C	✻	○		50	62	22	40	4	5	A	0,3	
FMA07-063-A22-ON06-06		○		63	75	22	40	4	6	A	0,5	
FMA07-063-A22-ON06-06C	✻	○		63	75	22	40	4	6	A	0,5	
FMA07-080-A27-ON06-07C	✻	○		80	92	27	50	4	7	A	1	
FMA07-080-B27-ON06-07		○		80	92	27	50	4	7	B	1	
FMA07-100-B32-ON06-08		○		100	112	32	63	4	8	B	1,9	
FMA07-100-B32-ON06-08C	✻	○		100	112	32	63	4	8	B	1,9	
FMA07-125-B40-ON06-09		○		125	137	40	63	4	9	B	3,5	
FMA07-125-B40-ON06-09C	✻	○		125	137	40	63	4	9	B	3,5	
FMA07-160-C40-ON06-11		○	○	160	172	40	63	4	11	C	4,3	
FMA07-200-C60-ON06-13		○		200	212	60	63	4	13	C	6,4	
FMA07-250-C60-ON06-15		○		250	262	60	63	4	15	C	13,4	
FMA07-315-D60-ON06-17		○		315	327	60	80	4	17	D	21,9	
FMA07-063-A22-ON08-05		○		63	78	22	40	5	5	A	0,5	ONHU08T5
FMA07-063-A22-ON08-05C	✻	○		63	78	22	40	5	5	A	0,5	
FMA07-080-A27-ON08-06C	✻	○		80	95	27	50	5	6	A	0,9	
FMA07-080-B27-ON08-06		○	○	80	95	27	50	5	6	B	0,9	
FMA07-100-B32-ON08-07		○		100	115	32	63	5	7	B	1,8	
FMA07-100-B32-ON08-07C	✻	○		100	115	32	63	5	8	B	3,1	
FMA07-125-B40-ON08-08		○	○	125	140	40	63	5	8	B	3,1	
FMA07-125-B40-ON08-08C	✻	○		125	140	40	63	5	8	B	3,1	
FMA07-160-C40-ON08-10		○	○	160	175	40	63	5	10	C	4,1	
FMA07-200-C60-ON08-12		○	○	200	215	60	63	5	12	C	6,1	
FMA07-250-C60-ON08-14		○	○	250	265	60	63	5	14	C	12	
FMA07-315-D60-ON08-16		○	○	315	330	60	80	5	16	D	21	

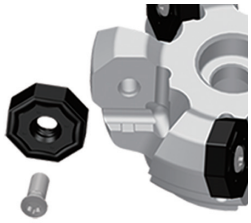
● En stock ○ Sur demande

✻ Avec arrosage interne

Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

Pièces détachées

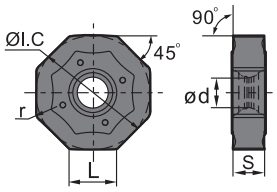
	Plaquette	ONHU0604	ONHU08T5
	ØD	50- 315	63- 315
	Vis (plaquette)	l60M4×10 (3,4 Nm)	l60M5×13 (6,7 Nm)
	Clé (plaquette)	WT15IS	
	Clé (plaquette)		WT20IT



Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

ONHU	L	l.C	S	d
06 04	6,58	15,875	4,76	4,4
08 T5	8,39	20,2	5,77	5,3



Plaquette de fraisage ON**			HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW	
		P																				
		M																				
		K																				
		N																				
		S																				
		H																				
	ISO	r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	ONHU060408-CM								○															
	ONHU08T512-CM		○						○															
	ONHU060408-PF	0,8	○			○			●				○											
	ONHU08T508-PF	0,8	○			○			○				○				○							
	ONHU060408-PM	0,8	●			●		●	●							●								
	ONHU08T508-PM	0,8	○			○		○	○															

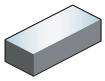
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

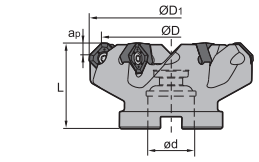
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise à surfacer

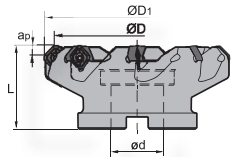
FMA11 Kr: 45°



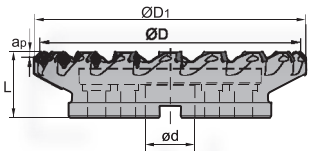




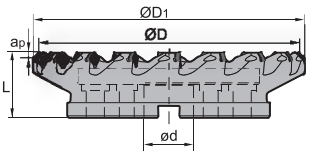
A



B



C



D

Article	✲	Stock	Dimensions (mm) ØD	ØD1	ød	L	ap max	Dents	Attachem.	kg	Plaquettes
FMA11-063-A22-SN12-05C	✲	●	63	74,47	22	40	5,5	5	A	0,55	SNEG1205
FMA11-063-A22-SN12-06C	✲	●	63	74,47	22	40	5,5	6	A	0,58	
FMA11-080-A27-SN12-06C	✲	●	80	91,47	27	50	5,5	6	A	1,14	
FMA11-100-B32-SN12-07		●	100	111,47	32	50	5,5	7	B	1,42	
FMA11-100-B32-SN12-07C	✲	○	100	111,47	32	50	5,5	7	B	1,42	
FMA11-100-B32-SN12-10C	✲	●	100	111,47	32	50	5,5	10	B	1,42	
FMA11-125-B40-SN12-08		●	125	136,47	40	63	5,5	8	B	2,86	
FMA11-125-B40-SN12-08C	✲	○	125	136,47	40	63	5,5	8	B	2,86	
FMA11-125-B40-SN12-12C	✲	●	125	136,47	40	63	5,5	12	B	2,86	
FMA11-160-C40-SN12-10		●	160	171,47	40	63	5,5	10	C	4,06	
FMA11-160-C40-SN12-15		●	160	171,47	40	63	5,5	15	C	4,06	
FMA11-200-C60-SN12-14		●	200	212,08	60	63	5,5	14	C	6,89	
FMA11-063-A22-SN15-05C	✲	●	63	77,4	22	40	7	5	A	0,56	SNEG1506
FMA11-080-A27-SN15-06C	✲	●	80	94,4	27	50	7	6	A	1,06	
FMA11-100-B32-SN15-07		●	100	114,4	32	50	7	7	B	1,47	
FMA11-100-B32-SN15-07C	✲	○	100	114,4	32	50	7	7	B	1,47	
FMA11-100-B32-SN15-09C	✲	●	100	114,4	32	50	7	9	B	1,47	
FMA11-125-B40-SN15-08		●	125	139,4	40	63	7	8	B	2,7	
FMA11-125-B40-SN15-08C	✲	○	125	139,4	40	63	7	8	B	2,7	
FMA11-125-B40-SN15-10C	✲	●	125	140,25	40	63	7	10	B	3,1	
FMA11-160-C40-SN15-10		●	160	174,4	40	63	7	10	C	3,92	
FMA11-160-C40-SN15-13		●	160	175,25	40	63	7	13	C	4,14	
FMA11-200-C60-SN15-12		●	200	214,4	60	63	7	12	C	5,46	
FMA11-250-C60-SN15-14		●	250	264,4	60	63	7	14	C	11,26	
FMA11-315-D60-SN15-18		○	315	329,4	60	80	7	18	D	20	
FMA11-125-B40-SN19-07		●	125	142,63	40	63	9	7	B	3	SNEG1907
FMA11-125-B40-SN19-07C	✲	●	125	142,63	40	63	9	7	B	3	
FMA11-160-C40-SN19-09		●	160	167,63	40	63	9	9	C	4,25	
FMA11-200-C60-SN19-11		●	200	217,63	60	63	9	11	C	6,18	

● En stock ○ Sur demande

✲ Avec arrosage interne

Codification > B26 | Choix nuances > B24 | Info. techniques > B527 | Paramètres > B230

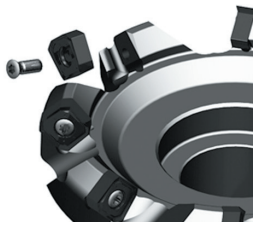
Article	✻	Stock	Dimensions (mm) ØD	ØD$_1$	ød	L	$a_{p\,max}$	Dents	Attachem.	kg	Plaquettes
FMA11-250-C60-SN19-13		●	250	267,63	60	63	9	13	C	11,55	SNEG1907
FMA11-315-D60-SN19-16		○	315	332,63	60	80	9	16	D	20,9	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette ØD	SNEG1205 63-200	SNEG1506 63-315	SNEG1907 125-315
	Vis (plaquette)	I60M3,5×10 (2,7 Nm)	I60M5×13 (6,7 Nm)	I43M6×16 (9,1 Nm)
	Clé (plaquette)	WT15IS		
	Clé (plaquette)		WT20IT	WT25IT

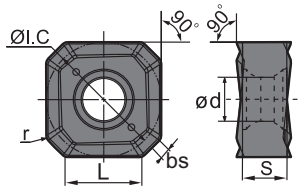


SNEG	L	I.C	S	d
12 05	7,6	12	4,76	4,6
15 06	9,4	15	5,6	5,5
19 07	12,1	19	7	7,2

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquette de fraisage

Plaquette négative SN**



	ISO	r	bs	HC^1 (CVD) YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	HC^1 (PVD) YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	HT YNG151	HC^2 YNG151C	HW YD101	YD201
P				●	●	●	●	●	●	●	●		●	●		●	●		●		●	●	●		
M					●	●	●	●	●					●		●	●		●	●	●		●		
K										●	●		●								●			●	
N												●												●	●
S							●		●				●	●		●	●	●		●					
H																									
	SNEG1506ANR-E	0,9	1,3														●								
	SNEG1205ANR-GM	0,8	1,05	●			●			●								●							
	SNEG1506ANR-GM	0,9	1,3	●			●			●							●								

● En stock ○ Sur demande

HC^1 Carbure revêtu
HT Cermet non revêtu
HC^2 Cermet revêtu
HW Carbure non revêtu

Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

Plaquettes de fraisage

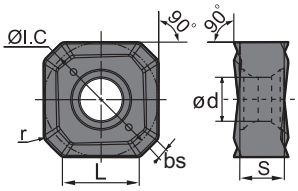
Fraise à surfacer

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SNEG	L	I.C	S	d
12 05	7,6	12	4,76	4,6
15 06	9,4	15	5,6	5,5
19 07	12,1	19	7	7,2

Plaquette négative SN**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P																			
	M																			
	K																			
	N																			
	S																			
	H																			



	ISO	r	bs	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**SNEG1205ANR-GR**	0,8	1,05	●			●			●						○				○					
	SNEG1506ANR-GR	0,9	1,3	●			●			●						○				○					
	SNEG1907ANR-GR	1	1,67	●			●			●	●														
	**SNEG1506ANR-HGR**																○								

● En stock ○ Sur demande

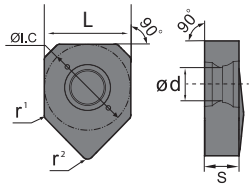
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SNEG	L	I.C	S	d
12 05	12	12	4,76	4,6

Plaquette négative SN**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P																			
	M																			
	K																			
	N																			
	S																			
	H																			



	ISO	r1	r2	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**SNEG1205ANR-W**	0,6	0,8														●								

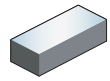
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

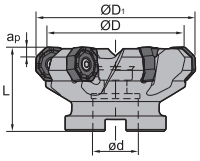
Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

Fraise à surfacer

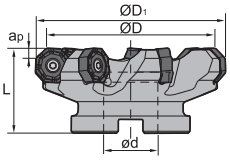
FMA12 Kr: 45°



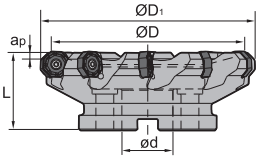




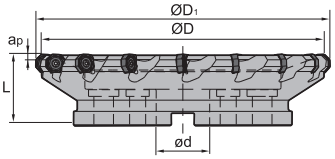
A



B



C



D

Article	✻	Stock	Dimensions (mm) ØD	ØD1	ød	L	ap max	Dents	Attachem.	kg	Plaquettes
FMA12-050-A22-ON06-04C	✻	●	50	59	22	40	4	4	A	0,309	ON*U0604**
FMA12-050-A22-ON06-05C	✻	●	50	59	22	40	4	5	A	0,352	
FMA12-063-A27-ON06-05C	✻	●	63	72	27	50	4	5	A	0,645	
FMA12-063-A27-ON06-07C	✻	●	63	72	27	50	4	7	A	0,695	
FMA12-080-A27-ON06-07C	✻	●	80	90	27	50	4	7	A	1,071	
FMA12-080-A27-ON06-09C	✻	●	80	90	27	50	4	9	A	1,098	
FMA12-100-A32-ON06-08C	✻	●	100	110	32	50	4	8	A	1,599	
FMA12-100-A32-ON06-11C	✻	●	100	110	32	50	4	11	A	1,616	
FMA12-125-B40-ON06-10		●	125	135	40	63	4	10	B	3,114	
FMA12-125-B40-ON06-14		●	125	135	40	63	4	14	B	3,151	
FMA12-160-C40-ON06-12		●	160	170	40	63	4	12	C	4,504	
FMA12-160-C40-ON06-18		●	160	170	40	63	4	18	C	4,568	
FMA12-063-A22-ON08-05		○	63	78	22	50	5	5	A	0,6	ONHU08T6
FMA12-080-A27-ON08-06		○	80	95	27	50	5	6	A	0,97	
FMA12-100-B32-ON08-07		○	100	115	32	50	5	7	B	1,28	
FMA12-100-B32-ON08-07C	✻	○	100	115	32	50	5	7	B	1,28	
FMA12-125-B40-ON08-08		○	125	140	40	63	5	8	B	2,59	
FMA12-125-B40-ON08-08C	✻	○	125	140	40	63	5	8	B	2,59	
FMA12-160-C40-ON08-10		○	160	175	40	63	5	10	C	4,1	
FMA12-200-C60-ON08-12		○	200	215	60	63	5	12	C	5,68	
FMA12-250-C60-ON08-14		○	250	265	60	63	5	14	C	11,9	
FMA12-315-D60-ON08-18		○	315	330	60	80	5	18	D	20,41	

● En stock ○ Sur demande

✻ Avec arrosage interne

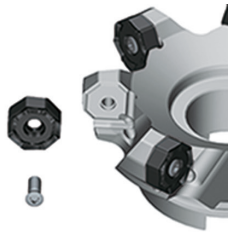
Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

Plaquettes de fraisage

Fraise à surfacer

Pièces détachées

	Plaquette	ON*U0604**	ONHU08T6
	ØD	50-160	63- 315
	Vis (plaquette)		I60M5×13 (6,7 Nm)
	Clé (plaquette)	WT15IS	
	Clé (plaquette)		WT20IT

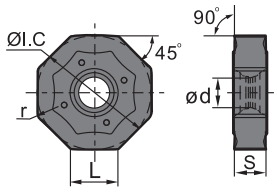


Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

ONHU	L	I.C	S	d
06 04	6,15	15,875	5,54	6
08 T6	6,38	20,2	6,3	5,3

Plaquette de fraisage ON**



			HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
			P																		
			M																		
			K																		
			N																		
			S																		
			H																		
ISO		r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	ONHU060408ANN-GH					●			●	●						●	●		○					
	ONMU060408-GH									●							●							
	ONHU060404ANN-GL					●			○							●	●		○					
	ONHU060408ANN-GM	0,8				●			●							●	●							
	ONHU08T624R-GM	2,4				○			○							○								
	ONMU060408-GM					○			○								●		●					

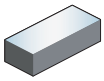
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

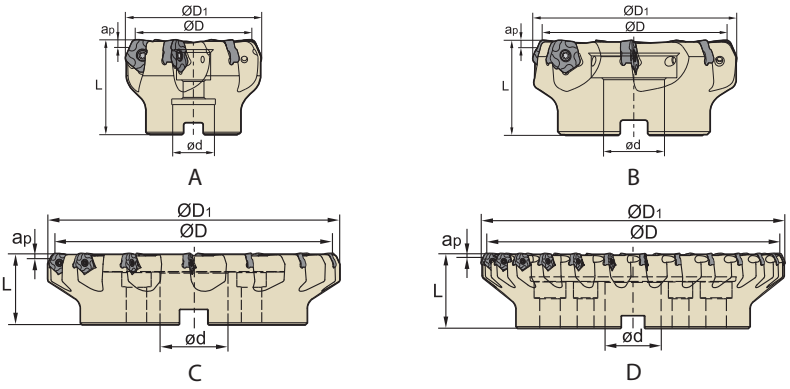
Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

Fraise à surfacer

FMD02 Kr: 67°







Article	✻	Stock R	Stock L	Dimensions (mm) ØD	ØD1	ød	L	ap max	Dents	Attachem.	kg	Plaquettes
FMD02-050-A22-PN11-04		●	○	50	60,1	22	50	5	4	A	0,6	
FMD02-050-A22-PN11-04C	✻	○		50	60,1	22	50	5	4	A	0,6	
FMD02-050-A22-PN11-05		●		50	60,1	22	50	5	5	A	0,6	
FMD02-050-A22-PN11-05C	✻	●		50	60,1	22	50	5	5	A	0,6	
FMD02-063-A22-PN11-05		●	○	63	73,1	22	50	5	5	A	0,8	
FMD02-063-A22-PN11-05C	✻	○		63	73,1	22	50	5	5	A	0,8	
FMD02-063-A22-PN11-06		●		63	73,1	22	50	5	6	A	0,9	
FMD02-063-A22-PN11-06C	✻	●		63	73,1	22	50	5	6	A	0,9	
FMD02-080-A27-PN11-06		●		80	90,1	27	50	5	6	A	1,1	
FMD02-080-A27-PN11-08		●		80	90,1	27	50	5	8	A	1,2	
FMD02-080-A27-PN11-08C	✻	●		80	90,1	27	50	5	8	A	1,2	
FMD02-100-B32-PN11-07		●		100	110,1	32	50	5	7	B	1,8	
FMD02-100-B32-PN11-07C	✻	○		100	110,1	32	50	5	7	B	1,8	
FMD02-100-B32-PN11-10		●		100	110,1	32	50	5	10	B	1,9	
FMD02-100-B32-PN11-10C	✻	○		100	110,1	32	50	5	10	B	1,9	PNEG1105
FMD02-125-B40-PN11-08		●	●	125	135,1	40	63	5	8	B	2,9	
FMD02-125-B40-PN11-08C	✻	○		125	135,1	40	63	5	8	B	2,9	
FMD02-125-B40-PN11-12		●	○	125	135,1	40	63	5	12	B	3,2	
FMD02-125-B40-PN11-12C	✻	○		125	135,1	40	63	5	12	B	3,2	
FMD02-160-B40-PN11-10		●	○	160	170,1	40	63	5	10	B	5,6	
FMD02-160-B40-PN11-14		●	○	160	170,1	40	63	5	14	B	6,4	
FMD02-200-C60-PN11-12		○	○	200	210,1	60	63	5	12	C	7,9	
FMD02-200-C60-PN11-16		●		200	210,1	60	63	5	16	C	8,5	
FMD02-200-C60-PN11-20		○		200	210,1	60	63	5	20	C	8,5	
FMD02-200-C60-PN11-24		●		200	210,1	60	63	5	24	C	8,6	
FMD02-250-C60-PN11-14		○		250	260,1	60	63	5	14	C	13,4	
FMD02-250-C60-PN11-18		●	○	250	260,1	60	63	5	18	C	18	
FMD02-250-C60-PN11-30		○		250	260,1	60	63	5	30	C	13,5	
FMD02-315-D60-PN11-26		○	○	315	325,1	60	80	5	26	D	24,5	

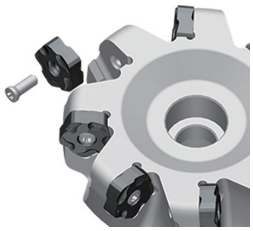
● En stock ○ Sur demande

✻ Avec arrosage interne

Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

Pièces détachées

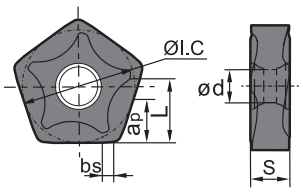
	Plaquette	PNEG1105
	ØD	50- 315
	Vis (plaquette)	l60M4x10 (3,4 Nm)
	Clé (plaquette)	WT15IS



- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

PNEG	L	I.C	S	d
11 05	7,5	15,875	5,56	4,64

Plaquette de fraisage



Plaquette de fraisage PN**				HC¹ (CVD)								HC¹ (PVD)									HT	HC²	HW	
				P																				
				M																				
				K																				
				N																				
				S																				
				H																				
	ISO		bs	a_p max	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**PNEG110512L-PF**		1,6	7,5	○																				
	PNEG110512R-PF		1,6	7,5	○			○																	
	**PNEG110512L-PM**		1,6	7,5	○			○																	
	PNEG110512R-PM				●			●			○														
	**PNEG110512L-PR**		1,6	7,5	○			●																	
	PNEG110512R-PR		1,6	7,5	○			●																	

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

PNEG	L	I.C	S	d
11 05	5,4	15,875	5,56	4,64

Plaquette de fraisage

Plaquette de fraisage PN**				HC[1] (CVD)							HC[1] (PVD)									HT	HC[2]	HW	
			P																				
			M																				
			K																				
			N																				
			S																				
			H																				
	ISO	bs	$a_{p\,max}$	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**PNEG110512L-CF**	1,6	5							○															
	PNEG110512R-CF	1,6	5							●															
	**PNEG110512L-CM**	1,6	5							○															
	PNEG110512R-CM	1,6	5							●															
	**PNEG110512L-CR**	1,6	5							○	○														
	PNEG110512R-CR	1,6	5							●	●														

● En stock ○ Sur demande

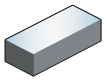
HC[1] Carbure revêtu
HT Cermet non revêtu
HC[2] Cermet revêtu
HW Carbure non revêtu

A Tournage
B Fraisage
C Perçage
D Informations techniques
E Index

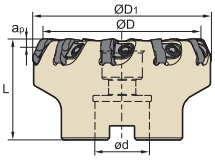
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise à surfacer

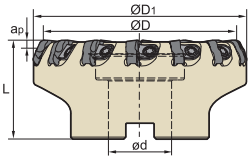
FMD02 Kr: 67°



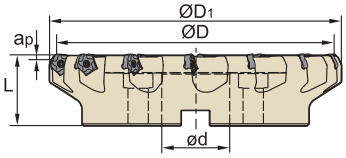




A



B



C

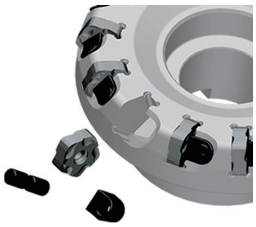
Article	*	Stock R	Stock L	ØD	$ØD_1$	ød	L	$a_{p\,max}$	Dents	Attachem.	kg	Plaquettes
FMD02-080-A27-PN11-10		●		80	90,1	27	50	5	10	A	1,3	PNEG1105
FMD02-100-B32-PN11-14		●	○	100	110,1	32	50	5	14	B	1,6	
FMD02-125-B40-PN11-18		●		125	135,1	40	63	5	18	B	3,2	
FMD02-160-B40-PN11-22		●		160	170,1	40	63	5	22	B	5,8	
FMD02-200-C60-PN11-28		○	○	200	210,1	60	63	5	28	C	8,5	

● En stock ○ Sur demande

* Avec arrosage interne

Pièces détachées

	Plaquette	**PNEG1105**
	ØD	**80-200**
	Vis (coin)	DM6×20A (7,0 Nm)
	Coin	W18N
	Clé (coin)	WT15IT



Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

PNEG	L	I.C	S	d
11 05	7,5	15,875	5,56	4,64

Plaquette de fraisage

Plaquette de fraisage PN**				HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW	
			P																				
			M																				
			K																				
			N																				
			S																				
			H																				
	ISO	bs	a_p max	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**PNEG110512L-PF**	1,6	7,5	○																					
	PNEG110512R-PF	1,6	7,5	○			○																		
	**PNEG110512L-PM**	1,6	7,5	○			○																		
	PNEG110512R-PM			●			●			○															
	**PNEG110512L-PR**	1,6	7,5	○			●																		
	PNEG110512R-PR	1,6	7,5	○			●																		

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

PNEG	L	I.C	S	d
11 05	5,4	15,875	5,56	4,64

Plaquette de fraisage

Plaquette de fraisage PN**				HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW	
			P																				
			M																				
			K																				
			N																				
			S																				
			H																				
	ISO	bs	$a_{p\ max}$	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**PNEG110512L-CF**	1,6	5							○															
	PNEG110512R-CF	1,6	5							●															

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

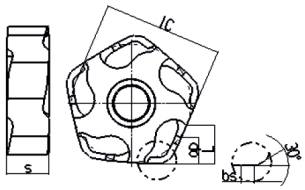
Plaquettes de fraisage

Fraise à surfacer

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

PNEG	L	I.C	S	d
11 05	5,4	15,875	5,56	4,64

Plaquette de fraisage

Plaquette de fraisage PN**				HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
			P																			
			M																			
			K																			
			N																			
			S																			
			H																			
ISO		bs	$a_{p\,max}$	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**PNEG110512L-CM**	1,6	5							○															
	PNEG110512R-CM	1,6	5							●															
	**PNEG110512L-CR**	1,6	5							○	○														
	PNEG110512R-CR	1,6	5							●	●														

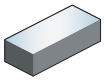
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

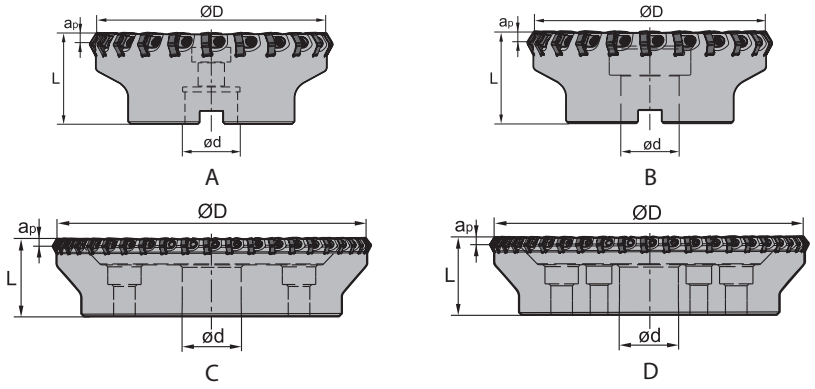
Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

Fraise à surfacer

FMD02 Kr: 55°







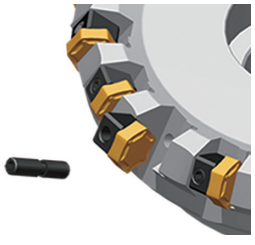
Article	✲	Stock R	Stock L	Dimensions (mm) ØD	Dimensions (mm) ød	Dimensions (mm) L	Dimensions (mm) $a_{p\ max}$	Dents	Attachem.	kg	Plaquettes
FMD02-080-A27-HN09-08		○		80	27	50	6	8	A	1,19	
FMD02-100-B32-HN09-10		○		100	32	50	6	10	B	1,77	
FMD02-125-B40-HN09-14		○		125	40	63	6	14	B	3,55	
FMD02-125-B40-HN09-18		○		125	40	63	6	18	B	3,7	
FMD02-160-B40-HN09-18		●		160	40	63	6	18	B	5,62	HNEX0905
FMD02-160-B40-HN09-22		○		160	40	63	6	22	B	5,6	
FMD02-200-C60-HN09-22		○		200	60	63	6	22	C	6,7	
FMD02-250-C60-HN09-28		○	○	250	60	63	6	28	C	13	
FMD02-315-D60-HN09-44		○		315	60	63	6	44	D	21,7	

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	HNEX0905
	ØD	80- 315
	Vis (coin)	DM6×20A (7,0 Nm)
	Coin	W18N
	Clé (coin)	WT15IT

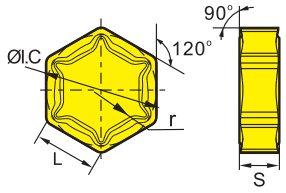


Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

HNEX	L	I.C	S
09 05	9,16	15,875	5,56

Plaquette de fraisage



Plaquette de fraisage HN**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P	●	●	●	●	●	●	●		●	●		●	●	●	●	●	●		
	M		●	●	●	●	●			●	●		●	●	●	●	●	●		
	K							●	●	○							●			●
	N								●											●
	S				●		●			●	●		●	●	●		●			
	H																			
ISO	r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
HNEX090512-DR	1,2							●	●														

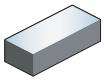
● En stock ○ Sur demande

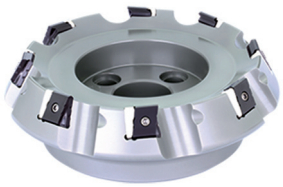
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

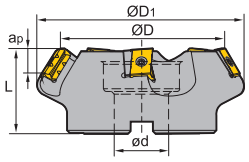
Codification > B26 Choix nuances > B24 Info. techniques > B527 Paramètres > B230

Fraise à surfacer

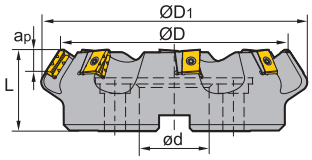
FMD03 Kr: 60°



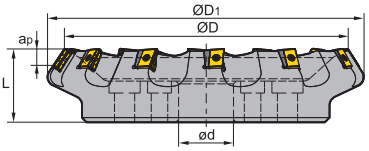




B



C



D

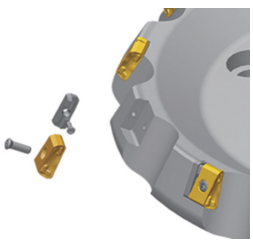
Article	✻	Stock R	Stock L	Dimensions (mm) ØD	ØD1	ød	L	ap max	Dents	Attachem.	kg	Plaquettes
FMD03-100-B32-LN20-05		○		100	129	32	63	12	5	B	3,02	
FMD03-125-B40-LN20-06		●		125	153	40	63	12	6	B	4,5	
FMD03-160-C40-LN20-08		●		160	187	40	63	12	8	C	6,9	
FMD03-160-C40-LN20-09		○		160	187	40	63	12	9	C	6,7	LNKT2007-ZR
FMD03-200-C60-LN20-10		●		200	227	60	70	12	10	C	10,5	
FMD03-250-C60-LN20-12		●		250	276	60	70	12	12	C	13,4	
FMD03-315-D60-LN20-15		○		315	339	60	80	12	15	D	26,2	
FMD03-125-B40-LN25-05		○		125	154	40	63	16	5	B	4,5	
FMD03-160-C40-LN25-06		●		160	189	40	63	16	6	C	6,9	
FMD03-200-C60-LN25-08		●		200	229	60	70	16	8	C	10,5	
FMD03-250-C60-LN25-10		●		250	278	60	70	16	10	C	16,7	LNKT2510-ZR
FMD03-315-D60-LN25-12		○	○	315	346	60	80	16	12	D	27,3	
FMD03-400-D60-LN25-16		○	○	400	427	60	80	16	16	D	47,1	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	LNKT2007-ZR	LNKT2510-ZR
	ØD	100- 315	125 -400
	Vis (plaquette)	I60M4×15 (3,4 Nm)	I60M5×17 (6,7 Nm)
	Vis (cale-support)	I60M3×7	I60M3.5×10.4
	Cale-support	LLN20R-ZR	LLN25R-ZR
	Clé (cale-support)	WT09IS	WT15IS
	Clé (plaquette)	WT15IS	
	Clé (plaquette)		WT20IT

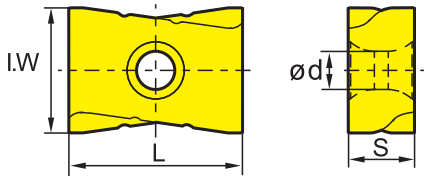


Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

LNKT	L	S	d
20 07	20	7,94	4,6
25 10	25	9,525	5,5

Plaquette de fraisage LN**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P																			
	M																			
	K																			
	N																			
	S																			
	H																			
ISO	I.W	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
 **LNKT2007DN-ZR**	17				●		●		○								●						
LNKT2510-ZR	18						●		●								●						

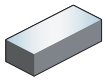
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

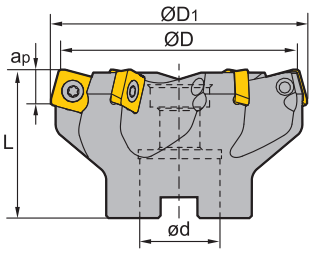
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise à surfacer

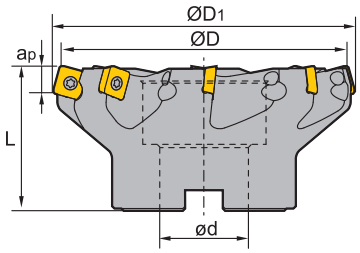
FME02 Kr: 75°







A



B

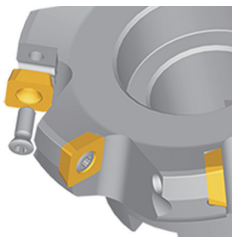
Article	✻	Stock	Dimensions (mm)					Dents	Attachem.	kg	Plaquettes
			ØD	$ØD_1$	ød	L	$a_{p\,max}$				
FME02-050-A22-SP12-04		●	50	54	22	40	6	4	A	0,3	SPKT1204 SPKW1204
FME02-063-A22-SP12-05		●	63	66	22	50	6	5	A	0,6	
FME02-080-A27-SP12-06		●	80	83	27	50	6	6	A	0,9	
FME02-100-B32-SP12-07		●	100	103	32	50	6	7	B	1,4	
FME02-125-B40-SP12-08		●	125	128	40	63	6	8	B	2,5	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**SPKT1204 SPKW1204**
	ØD	**50-125**
	Vis (plaquette)	I60M5×13,2 (6,7 Nm)
	Clé (plaquette)	WT20IS



Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

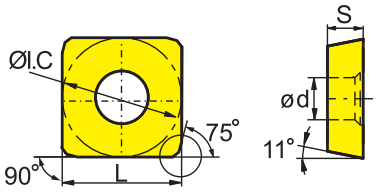
Plaquettes de fraisage

Fraise à surfacer

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SPKW	L	I.C	S	d
12 04	12,7	12,7	4,76	5,56

Plaquette de fraisage SP**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P																			
	M																			
	K																			
	N																			
	S																			
	H																			
ISO		YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	SPKW1204EDFR										○												
	SPKW1204EDSR										○												

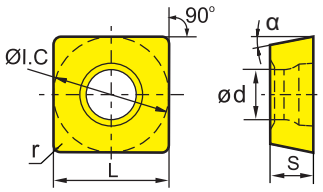
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SPKT	L	I.C	S	d
12 04	12,7	12,7	4,76	5,56

Plaquette de fraisage SP**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P																			
	M																			
	K																			
	N																			
	S																			
	H																			
ISO		YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	SPKT1204EDR										○												

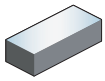
● En stock ○ Sur demande

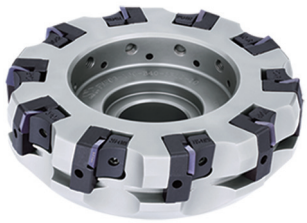
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

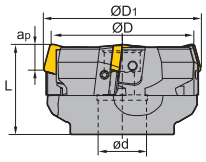
Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

Fraise à surfacer

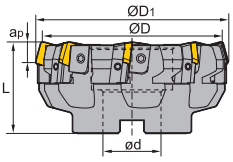
FME03 Kr: 75°



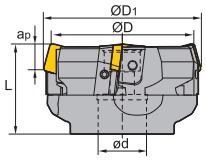




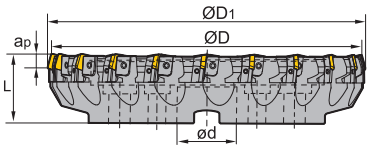
A



B



C



D

Article	✻	Stock R	Stock L	Dimensions (mm) ØD	ØD1	ød	L	ap max	Dents	Attachem.	kg	Plaquettes
FME03-080-A27-SP12-04		○		80	84	27	50	6	4	A	1,1	
FME03-100-B32-SP12-06		●		100	104	32	50	6	6	B	1,9	
FME03-125-B40-SP12-08		○	○	125	129	40	63	6	8	B	3,5	SPKN1203
FME03-160-B40-SP12-10		●	○	160	164	40	63	6	10	B	5,7	SPKR1203
FME03-200-C60-SP12-12		○	○	200	203	60	63	6	12	C	8,2	SPEX1203
FME03-250-C60-SP12-16		○	○	250	253	60	63	6	16	C	13,8	
FME03-315-D60-SP12-20		○		315	318	60	70	6	20	D	23,5	
FME03-080-A27-SP15-04		○	○	80	84	27	50	8	4	A	1	
FME03-100-B27-SP15-06		○		100	104	27	50	8	6	B	1,8	
FME03-125-B40-SP15-08		●	○	125	129	40	63	8	8	B	3,3	SPKN1504
FME03-160-B40-SP15-10		○	○	160	164	40	63	8	10	B	5,4	SPKR1504
FME03-200-C60-SP15-12		○	○	200	204	60	63	8	12	C	7,9	SPEX1504
FME03-250-C60-SP15-16		○	○	250	253	60	63	8	16	C	13,6	
FME03-315-D60-SP15-20		○	○	315	318	60	70	8	20	D	23,1	

● En stock ○ Sur demande

✻ Avec arrosage interne

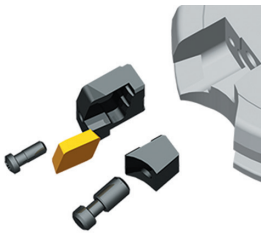
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquettes de fraisage

Fraise à surfacer

Pièces détachées

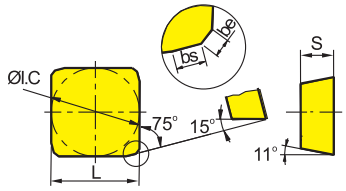
	Plaquette	SPKN1203 SPKR1203 SPEX1203	SPKN1203 SPKR1203 SPEX1203	SPKN1504 SPKR1504 SPEX1504
	ØD	80-100	125 - 315	80- 315
	Vis de réglage	LOM5×15.1	LOM5×15.1	LOM5×15.1
	Cassette (gauche)	LSP12L	LSP12L	LSP15L
	Cassette (droite)	LSP12R	LSP12R	LSP15R
	Vis (coin)	WM8×17	WM8×22	WM8×22
	Coin (gauche)	W04L	W04L	W04L
	Coin (droite)	W04R	W04R	W04R
	Clé (vis de réglage)	WT20T	WT20T	WT20T
	Clé (coin)	WT25T	WT25T	WT25T



● Bonnes conditions d'usinage
◐ Conditions d'usinage normales
◑ Conditions d'usinage défavorables

SPKN	L	I.C	S
12 03	12,7	12,7	3,18
15 04	15,875	15,875	4,76

Plaquette de fraisage



Plaquette de fraisage SP**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P	◐	◐	◑	◐	◐	◐	●		◐	◑		◐	◐	◑	●	●	●		
	M		◐	◑	◐	◐	◑			◐	◑		◐	◐	◑	●	●	●		
	K						◑	◑	●							●				◑
	N								◑											◑ ◑
	S			◑		◑			●	◐		◐	◐	◐		◑				
	H																			

ISO	be	bs	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
SPKN1203EDFL	1	1,4																					●	
SPKN1203EDFR	1	1,4		○								○											●	
SPKN1203EDSKL	1	1,4		●																				
SPKN1203EDSKR	1	1,4		●						○			○					●						
SPKN1203EDTKR	1	1,4						○										○						
SPKN1504EDFL	1	1,4																					○	
SPKN1504EDFR	1	1,4																					○	
SPKN1504EDS32PR	1	1,4		○										○										
SPKN1504EDSKL	1	1,4																○						
SPKN1504EDSKR	1	1,4		●						●			○					●						
SPKN1504EDTKR	1	1,4											○											

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

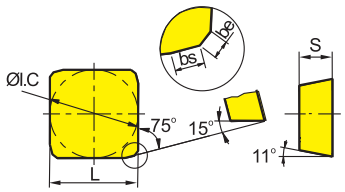
Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

Plaquette de fraisage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

SPKR	L	I.C	S
12 03	12,7	12,7	3,18
15 04	15,875	15,875	4,76

Plaquette de fraisage SP**



	HC[1] (CVD)							HC[1] (PVD)									HT	HC[2]	HW	
P																				
M																				
K																				
N																				
S																				
H																				

ISO	be	bs	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
SPKR1203EDL-GM	1	1,4					○																	
SPKR1203EDR-GM	1	1,4					●																	
SPKR1504EDR-GM	1	1,4				○							○											
SPKR1203EDR	1	1,4		○																				

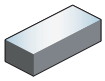
● En stock ○ Sur demande

HC[1] Carbure revêtu
HT Cermet non revêtu
HC[2] Cermet revêtu
HW Carbure non revêtu

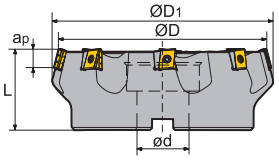
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise à surfacer

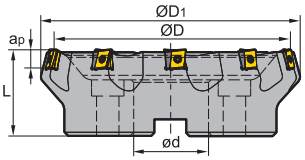
FME04 Kr: 75°



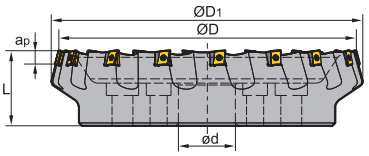




B



C



D

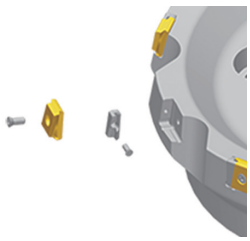
Article	✻	Stock	Dimensions (mm)					Dents	Attachem.	kg	Plaquettes
			ØD	$ØD_1$	ød	L	$a_{p\ max}$				
FME04-125-B40-LN15-06		●	125	137	40	63	10	6	B	3,8	LNKT1506-ZR
FME04-200-C60-LN15-10		●	200	208	60	70	10	10	C	9,6	
FME04-250-C60-LN15-12		○	250	257	60	70	10	12	C	13,4	
FME04-315-D60-LN15-16		○	315	328	60	80	10	16	D	25,2	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**LNKT1506-ZR**
	ØD	**125 - 315**
	Vis (plaquette)	I60M4×12 (3,4 Nm)
	Vis (cale-support)	I60M3×7
	Cale-support	LLN15-ZR
	Clé (cale-support)	WT09IS
	Clé (plaquette)	WT15IS

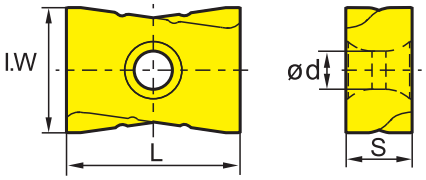


Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

LNKT	L	S	d
15 06	15,875	6,35	4,6

Plaquette de fraisage

Plaquette de fraisage LN**			HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW	
		**P**																				
		M																				
		K																				
		N																				
		S																				
		H																				
ISO		I.W	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**LNKT1506EN-ZR**	14		●			○	●	●	●								○						

● En stock ○ Sur demande

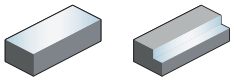
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

A Tournage
B Fraisage
C Perçage
D Informations techniques
E Index

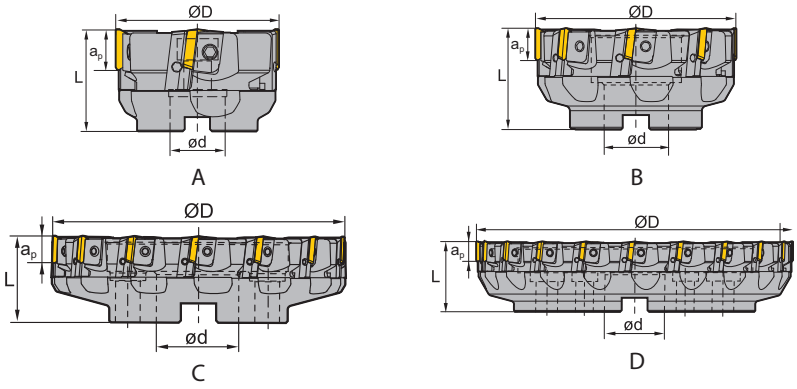
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise à surfacer

FMP01 Kr: 90°







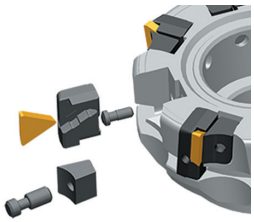
Article	*	Stock R	Stock L	Dimensions (mm) ØD	ød	L	$a_{p\,max}$	Dents	Attachem.	kg	Plaquettes
FMP01-080-A27-TP22-04		●		80	27	50	18	4	A	1,2	
FMP01-100-B32-TP22-06		●		100	32	50	18	6	B	1,7	
FMP01-125-B40-TP22-08		●	○	125	40	63	18	8	B	3,2	
FMP01-160-B40-TP22-10		●	○	160	40	63	18	10	B	5,1	TPKN2204
FMP01-200-C60-TP22-12		●	○	200	60	63	18	12	C	7,4	
FMP01-250-C60-TP22-16		○	○	250	60	63	18	16	C	12,3	
FMP01-315-D60-TP22-20		○	○	315	60	70	18	20	D	21,9	

● En stock ○ Sur demande

* Avec arrosage interne

Pièces détachées

	Plaquette	TPKN2204	TPKN2204
	ØD	80-100	125 - 315
	Vis de réglage	LOM5×15.1	LOM5×15.1
	Cassette (gauche)	LTP4L1	LTP4L
	Cassette (droite)	LTP4R1	LTP4R
	Vis (coin)	WM8×17	WM8×22
	Coin (gauche)	W04L	W04L
	Coin (droite)	W04R	W04R
	Clé (vis de réglage)	WT20T	WT20T
	Clé (coin)	WT25T	WT25T

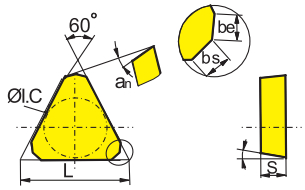


Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

TPKN	L	I.C	S
22 04	22	12,7	4,76

Plaquette de fraisage

Plaquette de fraisage TP**		HC[1] (CVD)							HC[1] (PVD)								HT	HC[2]	HW	
	P	○	○	○	○	○	○	○		○	○		○	○	○	○	○	○		
	M		○	○	○	○	○	○			○	○		○	○	○	○	○	○		
	K							○	○	○							○			○	
	N																			○	○
	S				○		○			○	○		○	○	○		○				
	H																				

	ISO	be	bs	an	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**TPKN2204PDFR**	1,4	0,7	11°										○												●
	TPKN2204PDS32PR	1,4	0,7	11°												○		○								
	TPKN2204PDSKL	1,4	0,7	11°		○																				
	TPKN2204PDSKR	1,4	0,7	11°		●	●			●		●			○			●		●						
	TPKN2204PDTKR	1,4	0,7	11°										●												

● En stock ○ Sur demande

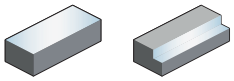
HC[1] Carbure revêtu
HT Cermet non revêtu
HC[2] Cermet revêtu
HW Carbure non revêtu

A Tournage
B Fraisage
C Perçage
D Informations techniques
E Index

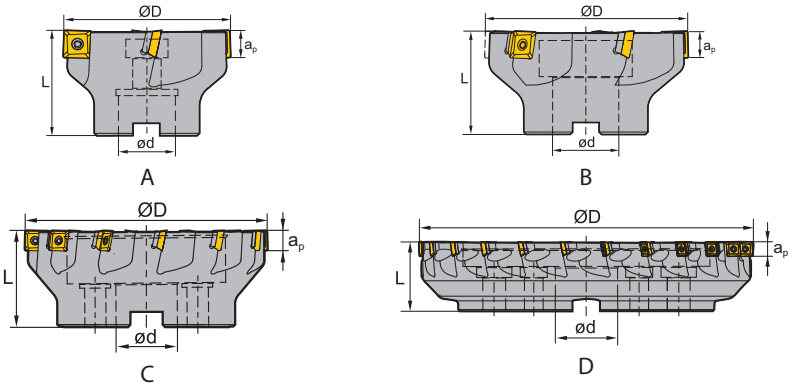
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise à surfacer

FMP02 Kr: 90°







Article	✻	Stock	Dimensions (mm) ØD	ød	L	$a_{p\ max}$	Dents	Attachem.	kg	Plaquettes
FMP02-050-A22-SE09-05		●	50	22	40	6,7	5	A	0,3	SEET09T3
FMP02-050-A22-SE09-05C	✻	●	50	22	40	6,7	5	A	0,3	
FMP02-063-A22-SE09-06		●	63	22	40	6,7	6	A	0,5	
FMP02-063-A22-SE09-06C	✻	●	63	22	40	6,7	6	A	0,5	
FMP02-080-A27-SE09-08		●	80	27	50	6,7	8	A	0,9	
FMP02-100-B32-SE09-08		○	100	32	50	6,7	8	B	1,7	
FMP02-100-B32-SE09-10		○	100	32	50	6,7	10	B	1,7	
FMP02-100-B32-SE09-10C	✻	○	100	32	50	6,7	10	B	1,7	
FMP02-125-B40-SE09-12		●	125	40	63	6,7	12	B	2,6	
FMP02-125-B40-SE09-12C	✻	○	125	40	63	6,7	12	B	2,6	
FMP02-050-A22-SE12-03		○	50	22	40	10,8	3	A	0,3	SEET1203
FMP02-050-A22-SE12-03C	✻	○	50	22	40	10,8	3	A	0,3	
FMP02-050-A22-SE12-04		●	50	22	40	10,8	4	A	0,3	
FMP02-050-A22-SE12-04C	✻	●	50	22	40	10,8	4	A	0,3	
FMP02-050-A22-SE12-05		●	50	22	40	10,8	5	A	0,2	
FMP02-050-A22-SE12-05C	✻	○	50	22	40	10,8	5	A	0,2	
FMP02-063-A22-SE12-04		○	63	22	40	10,8	4	A	0,4	
FMP02-063-A22-SE12-05		●	63	22	40	10,8	5	A	0,4	
FMP02-063-A22-SE12-05C	✻	●	63	22	40	10,8	5	A	0,4	
FMP02-063-A22-SE12-06		●	63	22	40	10,8	6	A	0,4	
FMP02-063-A22-SE12-06C	✻	○	63	22	40	10,8	6	A	0,4	
FMP02-080-A27-SE12-04		○	80	27	50	10,8	4	A	0,9	
FMP02-080-A27-SE12-06		●	80	27	50	10,8	6	A	0,8	
FMP02-080-A27-SE12-06C	✻	●	80	27	50	10,8	6	A	0,8	
FMP02-080-A27-SE12-08		●	80	27	50	10,8	8	A	0,8	
FMP02-080-A27-SE12-08C	✻	○	80	27	50	10,8	8	A	0,8	
FMP02-100-B32-SE12-05		●	100	32	50	10,8	5	B	1,2	
FMP02-100-B32-SE12-07		●	100	32	50	10,8	7	B	1,2	
FMP02-100-B32-SE12-10		●	100	32	50	10,8	10	B	1,2	

● En stock ○ Sur demande

✻ Avec arrosage interne

Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

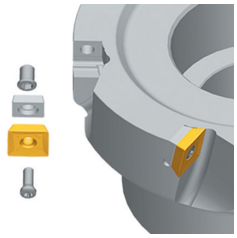
Article	✻	Stock	Dimensions (mm) ØD	ød	L	$a_{p\,max}$	Dents	Attachem.	kg	Plaquettes
FMP02-100-B32-SE12-10C	✻	○	100	32	50	10,8	10	B	1,2	SEET1203
FMP02-125-B40-SE12-06		○	125	40	63	10,8	6	B	3,1	
FMP02-125-B40-SE12-08		●	125	40	63	10,8	8	B	3	
FMP02-125-B40-SE12-08C	✻	○	125	40	63	10,8	8	B	3	
FMP02-125-B40-SE12-12		●	125	40	63	10,8	12	B	2,9	
FMP02-160-C40-SE12-08		●	160	40	63	10,8	8	C	4,1	
FMP02-160-C40-SE12-12		●	160	40	63	10,8	12	C	3,9	
FMP02-250-C60-SE12-12		○	250	60	63	10,8	12	C	11,1	
FMP02-250-C60-SE12-18		●	250	60	63	10,8	18	C	10,9	
FMP02-315-D60-SE12-24		○	315	60	63	10,8	24	D	21,6	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**SEET09T3**	**SEET1203**	**SEET1203**
	ØD	**50-125**	**50**	**63- 315**
	Vis (plaquette)	I60M3×7 (1,8 Nm)	I60M3,5×10 (2,7 Nm)	I60M3,5×12 (2,7 Nm)
	Vis (cale-support)			SM5×7XA
	Cale-support			S12BSX
	Clé (cale-support)			WH35L
	Clé (plaquette)	WT09IS	WT15IS	WT15IS



Plaquette de fraisage

● Bonnes conditions d'usinage
● Conditions d'usinage normales
● Conditions d'usinage défavorables

SEET	L	I.C	S	d
09 T3	9,525	9,525	4,01	3,3
12 03	13,308	13,308	4,04	4,1

Plaquette de fraisage SE**			HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW	
		P	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
		M																						
		K																						
		N																						
		S																						
		H																						
	ISO	r																						
	SEET09T308PER-APF	0,8						○									●							

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

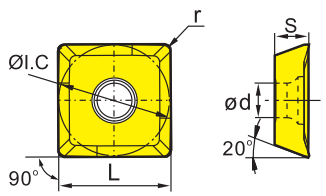
Plaquettes de fraisage

Fraise à surfacer

Plaquette de fraisage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

SEET	L	I.C	S	d
09 T3	9,525	9,525	4,01	3,3
12 03	13,308	13,308	4,04	4,1



Plaquette de fraisage SE**			HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
		P																			
		M																			
		K																			
		N																			
		S																			
		H																			
ISO	r		YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
SEET09T308PER-APM	0,8							○									●							
SEET09T308PER-APR	0,8							○									○							
SEET120308PER-APF	0,8							○			○						●							
SEET120308PER-APM	0,8							●			○						●							
SEET120308PER-APR	0,8							●			○						●							
SEET120308-LH	0,8									○	○												●	
SEET09T308PER-PF	0,8										○													
SEET120308PER-PF	0,8	○																						
SEET09T308PER-PM	0,8								○		○													
SEET120308PER-PM	0,8	○				○	○	○	○		○	○						○						
SEET09T308PER-PR	0,8								○									○						
SEET120308PER-PR	0,8	○						○	○	○	○	○						○						

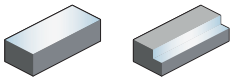
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

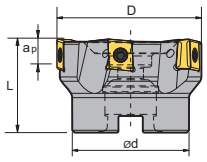
Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

Fraise à surfacer

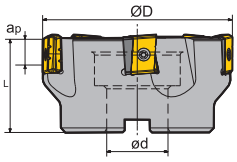
FMP03 Kr: 89°



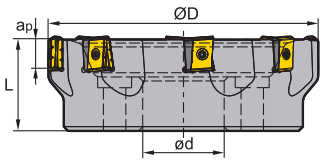




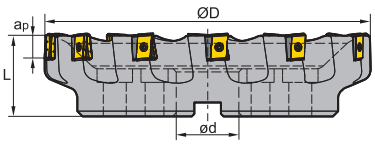
A



B



C



D

Article	✻	Stock R	Stock L	Dimensions (mm) ØD	ød	L	$a_{p\ max}$	Dents	Attachem.	kg	Plaquettes
FMP03-050-A22-LN12-04C	✻	●		50	22	40	7	4	A	0,3	LNKT120608-ZR
FMP03-050-A22-LN12-05C	✻	○		50	22	40	7	5	A	0,3	
FMP03-063-A22-LN12-05C	✻	●		63	22	40	7	5	A	0,5	
FMP03-063-A27-LN12-05C	✻	○		63	27	50	7	5	A	0,64	
FMP03-063-A22-LN12-06C	✻	○		63	22	40	7	6	A	0,5	
FMP03-063-A27-LN12-06C	✻	●		63	27	50	7	6	A	0,65	
FMP03-063-A27-LN12-07C	✻	○		63	27	50	7	7	A	0,64	
FMP03-080-A27-LN12-06C	✻	●		80	27	50	7	6	A	1	
FMP03-080-A27-LN12-07C	✻	○		80	27	50	7	7	A	1	
FMP03-100-B32-LN12-06		○		100	32	50	7	6	B	1,47	
FMP03-125-B40-LN15-06		●		125	40	63	12	6	B	3,2	LNKT1506EN-ZR
FMP03-160-C40-LN15-08		●		160	40	63	12	8	C	5,1	
FMP03-160-C40-LN15-09		○		160	40	63	12	9	C		
FMP03-200-C60-LN15-10		●		200	60	70	12	10	C	7,5	
FMP03-250-C60-LN15-12		○		250	60	70	12	12	C	12,2	
FMP03-250-C60-LN15-13		○		250	60	70	12	13	C		
FMP03-315-D60-LN15-16		○		315	60	80	12	16	D	23,7	
FMP03-125-B40-LN20-06		○		125	40	63	16	6	B	3,3	LNKT2007DN-ZR
FMP03-160-C40-LN20-08		●		160	40	63	16	8	C	5,3	
FMP03-200-C60-LN20-10		●		200	60	70	16	10	C	8,8	
FMP03-200-C60-LN20-11		○		200	60	70	16	11	C		
FMP03-250-C60-LN20-12		●		250	60	70	16	12	C	14	
FMP03-315-D60-LN20-15		○		315	60	80	16	15	D	23,9	
FMP03-125-B40-LN25-05		○		125	40	63	20	5	B	3,3	LNKT2510-ZR
FMP03-160-C40-LN25-06		○	○	160	40	63	20	6	C	5,1	
FMP03-200-C60-LN25-08		○		200	60	70	20	8	C	8,9	
FMP03-250-C60-LN25-10		●	○	250	60	70	20	10	C	12	
FMP03-315-D60-LN25-12		○	○	315	60	80	20	12	D	21,9	

● En stock ○ Sur demande

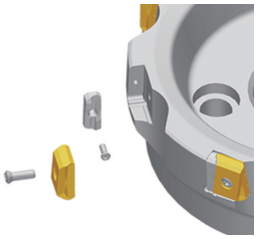
✻ Avec arrosage interne

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquettes de fraisage Fraise à surfacer

Pièces détachées

	Plaquette	LNKT120608-ZR	LNKT1506EN-ZR	LNKT2007DN-ZR	LNKT2510-ZR
	ØD	50-100	125 - 315	125 - 315	125 - 315
	Vis (plaquette)	I60M4×12 (3,4 Nm)	I60M4×12 (3,4 Nm)	I60M4×15 (3,4 Nm)	I60M5×17 (6,7 Nm)
	Vis (cale-support)		I60M3×7	I60M3×7	I60M3.5×10.4
	Cale-support		LLN15-ZR	LLN20R-ZR	LLN25R-ZR
	Clé (cale-support)		WT09IS	WT09IS	WT15IS
	Clé (plaquette)	WT15IS	WT15IS	WT15IS	
	Clé (plaquette)				WT20IT

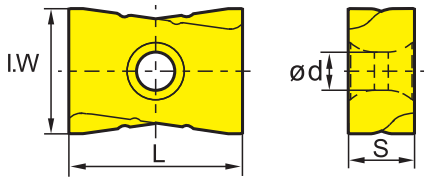


LNKT	L	S	d
12 06	12,7	6,65	4,4
15 06	15,875	6,35	4,6
20 07	20	7,94	4,6
25 10	25	9,525	5,5

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquette de fraisage

Plaquette de fraisage LN**



			HC¹ (CVD)							HC¹ (PVD)								HT		HC²		HW	
		P	●	●	●	●	●	●		●		●	●		●	●	●	●		●		●		
		M		●	●	●	●	●				●	●		●	●	●	●	●	●		●			
		K							●	●									●					●	
		N									●													●	●
		S			●		●			●	●			●	●	●		●							
		H																							
	ISO		I.W	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	LNKT120608-ZR		12	●			●											●							
	LNKT1506EN-ZR		14		●			○	●	●	●								○						
	LNKT2007DN-ZR		17				●		●		○								●						
	LNKT2510-ZR		18						●		●								●						

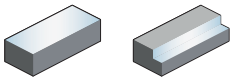
● En stock ○ Sur demande

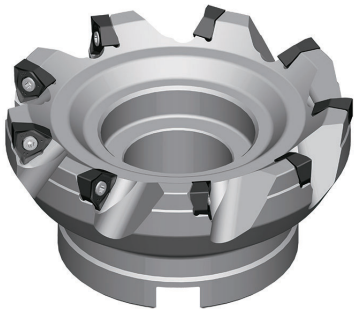
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

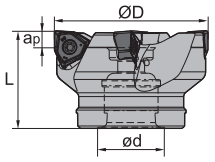
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise à surfacer

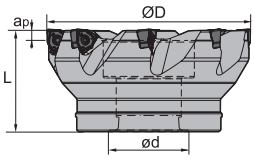
FMP12 Kr: 90°



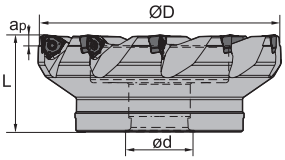




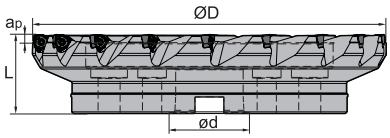
A



B



C



D

Article	✲	Stock	Dimensions (mm) ØD	ød	$a_{p\ max}$	Dents	Attachem.	kg	Plaquettes
FMP12-050-A22-WN06-05C	✲	○	50	22	5,7	5	A	0,55	
FMP12-063-A22-WN06-06C	✲	●	63	22	5,7	6	A	0,45	
FMP12-080-A27-WN06-07C	✲	●	80	27	5,7	7	A	1	
FMP12-100-B32-WN06-09		●	100	32	5,7	9	A	1,4	WNHU0604
FMP12-100-B32-WN06-09C	✲	●	100	32	5,7	9	A	1,4	
FMP12-125-B40-WN06-11C	✲	○	125	40	5,7	11	B	3,4	
FMP12-160-C40-WN06-14		○	160	40	5,7	14	C	5,4	
FMP12-063-A22-WN08-04C	✲	●	63	22	7,7	4	A	0,39	
FMP12-063-A22-WN08-05C	✲	●	63	22	7,7	5	A	0,45	
FMP12-080-A27-WN08-05C	✲	●	80	27	7,7	5	A	0,95	
FMP12-100-B32-WN08-06		●	100	32	7,7	6	B	1,32	
FMP12-100-B32-WN08-06C	✲	●	100	32	7,7	6	B	1,32	WNHU0806
FMP12-125-B40-WN08-08C	✲	○	125	40	7,7	8	B	3,3	
FMP12-160-C40-WN08-10		○	160	40	7,7	10	C	5,2	
FMP12-200-C60-WN08-12		○	200	60	7,7	12	C		
FMP12-250-C60-WN08-14		○	250	60	7,7	14	C		
FMP12-315-D60-WN08-18		○	315	60	7,7	18	D		

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

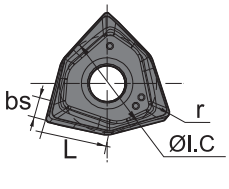
	Plaquette	**WNHU0604**	**WNHU0806**
	ØD	**50-315**	**50-315**
	Vis (plaquette)	I60M3×9 (1,8 Nm)	I60M4×10 (3,4 Nm)
	Clé (plaquette)	WT09IS	
	Clé (plaquette)		WT20IT

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

WNHU	L	I.C	S	d
06 04	5,73	9,525	4,704	3,5
08 06	7,76	12,7	6,32	4,4

Plaquette de fraisage

Plaquette négative WN**			HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
		P																			
		M																			
		K																			
		N																			
		S																			
		H																			
ISO		r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**WNHU060404PNR-GM**	0,4				○			○							○								
	WNHU060408PNR-GM	0,8				●			○	○						○								
	WNHU080608PNR-GM	0,8				●			●	●						●								
	WNHU080616PNR-GM	1,6				○			●	○														

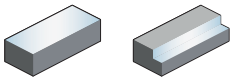
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

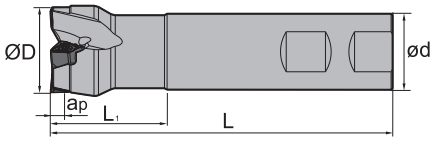
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise à surfacer

FMP12 Kr: 90°







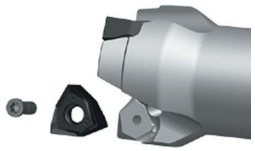
Article	✻	Stock	Dimensions (mm) ØD	ød	L_1	L	$a_{p\,max}$	Dents	Attachem.	kg	Plaquettes
FMP12-025-XP25-WN06-02C	✻	○	25	25	30	100	5,7	2	XP	0,38	WNHU0604
FMP12-032-XP25-WN06-03C	✻	○	32	25	40	120	5,7	3	XP	0,47	
FMP12-040-XP32-WN06-04C	✻	○	40	32	40	140	5,7	4	XP	0,85	
FMP12-050-XP40-WN06-05C	✻	○	50	40	40	169	5,7	5	XP	1,59	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**WNHU0604**
	ØD	**25-50**
	Vis (plaquette)	I60M3x9 (1,8 Nm)
	Clé (plaquette)	WT09IS

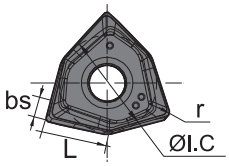


Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

WNHU	L	I.C	S	d
06 04	5,73	9,525	4,704	3,5

Plaquette de fraisage

Plaquette négative WN**			HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
		P																			
		M																			
		K																			
		N																			
		S																			
		H																			
ISO		r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**WNHU060404PNR-GM**	0,4				○			○	○						○								
	WNHU060408PNR-GM	0,8				●			○	○						○								

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

INFORMATIONS IMPORTANTES

Conseils d'utilisation pour la **série FMWX**

À prendre en compte : Le corps de fraise est équipé par série de deux plaquettes diamétralement opposées.

Choisissez le logement de plaquette **1.1** avec **1.2** *ou* le logement de plaquette **2.1** avec **2.2**.

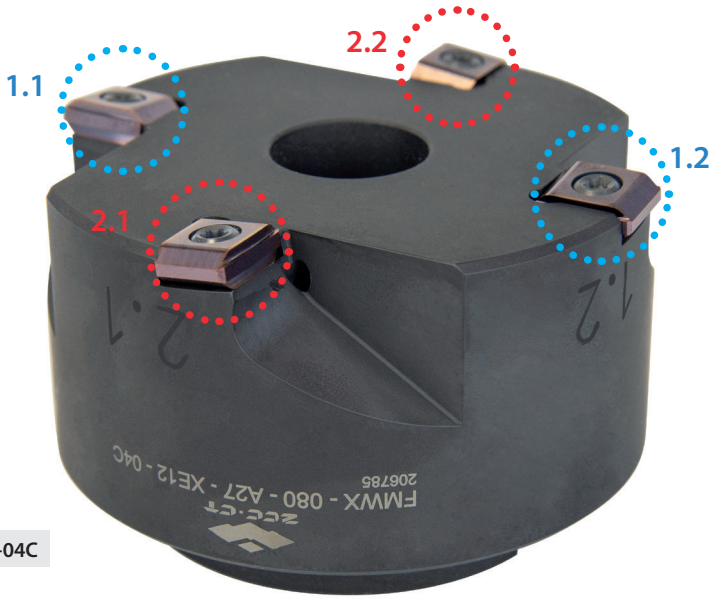


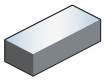
Fig.: **FMWX-063-A27-XE12-04C**

Données de coupe

Groupe ISO	Material	v_c (m/min)	F_n [mm/tr]	a_p [mm]
P	Acier	300–400	3,50–5,00	0,02–0,05
M	Acier inoxydable	280–300	3,50–5,00	0,02–0,05
K	Fonte	300–400	3,50–5,00	0,02–0,05

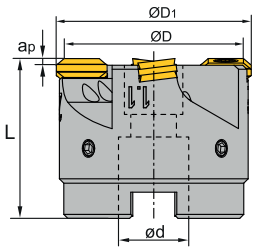
Fraise à surfacer

FMWX





Serrage par vis



Article	✻	Stock	Dimensions (mm) ØD1	ød	L	ap max	Dents	Attachem.	kg	Plaquettes
FMWX-050-A22-XE12-04C	✻	○	46	22	40	0,1	4		0,3	
FMWX-063-A27-XE12-04C	✻	○	59	27	40	0,1	4		0,5	
FMWX-080-A27-XE12-04C	✻	○	76	27	50	0,1	4		1	XEEC1209
FMWX-100-B32-XE12-06C	✻	○	96	32	50	0,1	6		1,9	
FMWX-125-B40-XE12-06C	✻	○	121	40	63	0,1	6		3,5	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

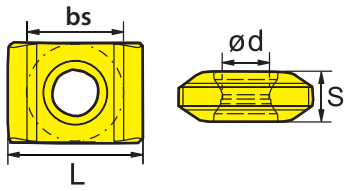
	Plaquette	**XEEC1209**
	ØD	**50-125**
	Vis (plaquette)	I60M4×10 (3,4 Nm)

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

XEEC
12 09

Plaquette de fraisage

Plaquette de fraisage XE**		HC[1] (CVD)							HC[1] (PVD)									HT		HC[2]		HW	
	P	●	●	●	●	●	●	●			●	●		●	●	●	●	●	●		●		
	M		●	●	●	●	●	●			●	●		●	●	●	●	●	●		●		
	K							●	●		●							●					●	
	N									●													●	●
	S				●		●				●	●		●	●	●		●						
	H																							
ISO		YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151		YNG151C		YD101	YD201
	**XEEC120904**							●																	

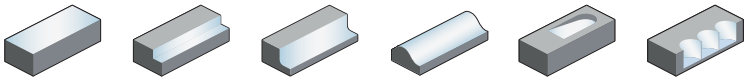
● En stock ○ Sur demande

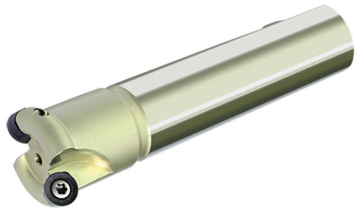
HC[1] Carbure revêtu
HT Cermet non revêtu
HC[2] Cermet revêtu
HW Carbure non revêtu

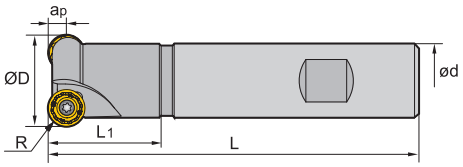
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise à surfacer

FMR01





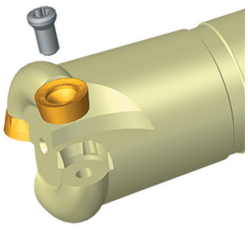


Article	✲	Stock	Dimensions (mm)						Dents	kg	Plaquettes
			R	ØD	ød	L_1	L	$a_{p\,max}$			
FMR01-025-XP20-RC10-02		○	5	25	20	30	100	5	2	0,2	RCKT10T3
FMR01-025-XP20-RC10-02C	✲	○	5	25	20	30	100	5	2	0,2	
FMR01-032-XP25-RC10-02		●	5	32	25	35	120	5	2	0,5	
FMR01-032-XP25-RC10-02C	✲	●	5	32	25	35	120	5	2	0,5	
FMR01-040-XP32-RC12-03		●	6	40	32	40	120	6	3	0,7	RCKT1204 RCGX1204
FMR01-040-XP32-RC12-03C	✲	●	6	40	32	40	120	6	3	0,7	
FMR01-050-XP32-RC12-03		●	6	50	32	40	120	6	3	0,8	

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

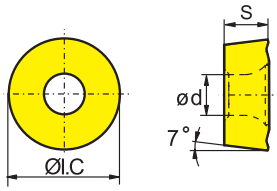
	Plaquette	**RCKT10T3**	**RCKT1204 RCGX1204**	
	ØD	**25-32**	**40-50**	
	Vis (plaquette)	I60M4×8,4 (3,4 Nm)	I60M3,5×10 (2,7 Nm)	
	Clé (plaquette)	WT15S	WT15S	

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

RCKT	I.C	S	d
10 T3	10	3,97	4,4
12 04	12	4,76	4

Plaquette de fraisage

Plaquette de fraisage RC**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P																			
	M																			
	K																			
	N																			
	S																			
	H																			
ISO		YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**RCKT10T3MO-DM**		○								○					●	○						
	RCKT1204MO-DM		○	○		○	●	○			○					●	○						
	**RCKT1204MO-DR**		○	○		○	●								●								
	**RCKT1204MO-ER**				●																		
	**RCKT1204MO-NM**												○										

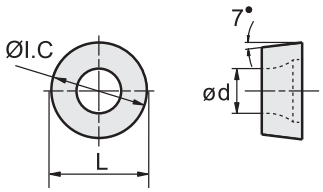
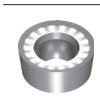
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

RCGX	I.C	S	d
12 04	12	4,76	4

Plaquette de fraisage

Plaquette positive RC**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P																			
	M																			
	K																			
	N																			
	S																			
	H																			
ISO		YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**RCGX1204MO-LH**																					●	

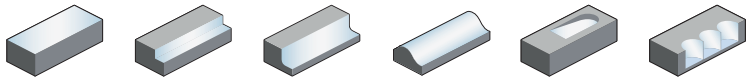
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

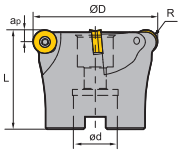
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise à surfacer

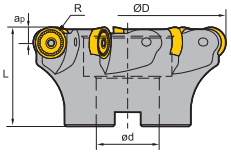
FMR02



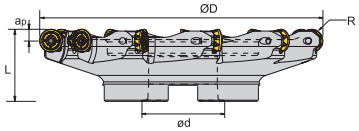




A



B



C

Article	✲	Stock	Dimensions (mm) R	ØD	ød	L	$a_{p\ max}$	Dents	Attachem.	kg	Plaquettes
FMR02-050-A22-RC12-05C	✲	●	6	50	22	40	6	5	A	0,7	RCGX1204 RCKT1204 RCMW1204
FMR02-050-A22-RC12-06C	✲	○	6	50	22	40	6	6	A	0,7	
FMR02-052-A22-RC12-05C	✲	●	6	52	22	40	6	5	A	0,7	
FMR02-063-A22-RC12-04		●	6	63	22	40	6	4	A	0,7	
FMR02-063-A22-RC12-05C	✲	●	6	63	22	40	6	5	A	0,7	
FMR02-063-A22-RC12-06		●	6	63	22	40	6	6	A	0,7	
FMR02-063-A22-RC12-06C	✲	●	6	63	22	40	6	6	A	0,7	
FMR02-080-A27-RC12-07C	✲	●	6	80	27	50	6	7	B	0,7	
FMR02-100-B32-RC12-08C	✲	●	6	100	32	50	6	8	B	0,89	
FMR02-063-A22-RC16-04		●	8	63	22	40	8	4	A	0,7	RCKT1606
FMR02-063-A22-RC16-04C	✲	○	8	63	22	40	8	4	A	0,7	
FMR02-063-A22-RC16-05C	✲	○	8	63	22	40	8	5	A	0,7	
FMR02-066-A27-RC16-05C(FB)	✲	●	8	66	27	50	8	5	A	0,5	
FMR02-080-B27-RC16-05		●	8	80	27	50	8	5	B	0,7	
FMR02-080-B27-RC16-07		●	8	80	27	50	8	7	B	0,7	
FMR02-100-B32-RC16-06		●	8	100	32	63	8	6	B	1,2	
FMR02-100-A32-RC16-06C	✲	○	8	100	32	63	8	6	B	1,2	
FMR02-125-B40-RC16-07		●	8	125	40	63	8	7	B	2,5	
FMR02-125-B40-RC16-07C	✲	○	8	125	40	63	8	7	B	2,5	
FMR02-160-B40-RC16-10(FB)		○	8	160	40	63	8	10	B	3,94	
FMR02-200-C60-RC16-12(FB)		●	8	200	60	63	8	12	C	5,4	
FMR02-080-A27-RC20-04		●	10	80	27	50	10	4	A	0,7	RCKT2006
FMR02-080-A27-RC20-04C(FB)	✲	●	10	80	27	50	10	4	A	0,7	
FMR02-100-B32-RC20-05		●	10	100	32	63	10	5	B	1,2	
FMR02-100-B32-RC20-06		●	10	100	32	63	10	6	B	1,2	
FMR02-100-B32-RC20-06C	✲	○	10	100	32	63	10	6	B	1,2	
FMR02-125-B32-RC20-05		○	10	125	32	63	10	5	B	1,2	
FMR02-125-B40-RC20-06		●	10	125	40	63	10	6	B	1,2	

● En stock ○ Sur demande

✲ Avec arrosage interne

Codification > B26 Choix nuances > B24 Info. techniques > B527 Paramètres > B230

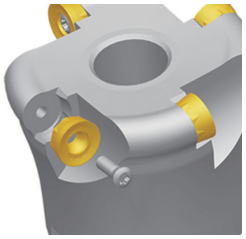
Article	✲	Stock	Dimensions (mm)					Dents	Attachem.	kg	Plaquettes
			R	ØD	ød	L	$a_{p\ max}$				
FMR02-125-B40-RC20-07		●	10	125	40	63	10	7	B	2,2	RCKT2006
FMR02-125-B40-RC20-07C	✲	○	10	125	40	63	10	7	B	2,2	
FMR02-160-B40-RC20-08		●	10	160	40	63	10	8	B	4,2	
FMR02-160-B40-RC20-08C	✲	○	10	160	40	63	10	8	B	4,2	
FMR02-250-C60-RC20-10		●	10	250	60	63	10	10	C	8,49	
FMR02-250-C60-RC20-11		○	10	250	60	63	10	11	C	8,37	

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**RCGX1204 RCKT1204 RCMW1204**	**RCKT1606**	**RCKT2006**
	ØD	**50-100**	**63-200**	**80-250**
	Vis (plaquette)	I60M3,5×10 (2,7 Nm)	I60M5×13 (6,7 Nm)	I43M6×16 (9,1 Nm)
	Clé (plaquette)	WT15IS		
	Clé (plaquette)		WT20IT	WT25IT



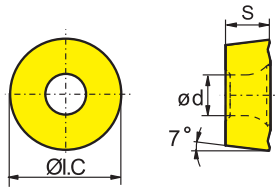
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquettes de fraisage

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

RCKT	I.C	S	d
12 04	12	4,76	4
16 06	16	6,35	5,56
20 06	20	6,35	6,55



Plaquette de fraisage RC**		HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW	
	P																				
	M																				
	K																				
	N																				
	S																				
	H																				
ISO		YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	RCKT1204MO-DM		○	○		○	●	○				○				●	○						
	RCKT1606MO-DM		○												●		●						
	RCKT2006MO-DM		○																				
	RCKT1204MO-DR		○	○		○	●								●								
	RCKT1606MO-DR	●	○	●			●		●							●							
	RCKT2006MO-DR	●	○	●			○		●			○					○						
	RCKT1204MO-ER				●																		
	RCKT1606MO-ER				●																		
	RCKT2006MO-ER				●																		
	RCKT1204MO-NM												○										
	RCKT1606MO-NM												○										

● En stock ○ Sur demande

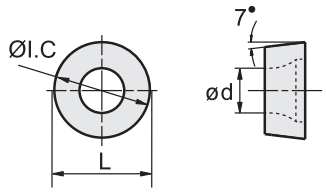
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

RCGX	I.C	S	d
12 04	12	4,76	4

Plaquette de fraisage

Plaquette positive RC**		HC[1] (CVD)							HC[1] (PVD)									HT	HC[2]	HW	
	**P**																				
	M																				
	K																				
	N																				
	S																				
	H																				
ISO		YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**RCGX1204MO-LH**																				●		

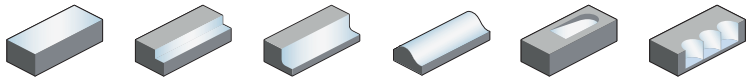
● En stock ○ Sur demande

HC[1] Carbure revêtu
HT Cermet non revêtu
HC[2] Cermet revêtu
HW Carbure non revêtu

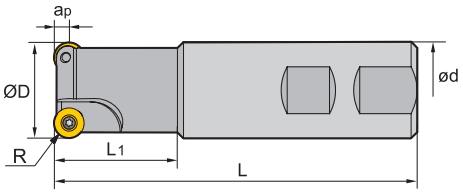
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise à surfacer

FMR03







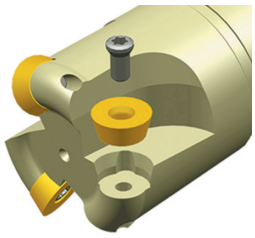
Article	✲	Stock	Dimensions (mm)						Dents	kg	Plaquettes
			R	ØD	ød	L_1	L	$a_{p\,max}$			
FMR03-016-XP16-RD08-02		○	4	16	16	25	100	4	2	0,1	
FMR03-025-XP25-RD08-02		●	4	25	25	30	100	4	2	0,3	RD**0803
FMR03-025-XP25-RD08-02C	✲	○	4	25	25	30	100	4	2	0,3	
FMR03-032-XP32-RD10-02		●	5	32	32	40	120	5	2	0,7	RD**10T3
FMR03-040-XP32-RD12-03		●	6	40	32	40	120	6	3	0,7	RD**1204
FMR03-050-XP32-RD12-04		●	6	50	32	40	120	6	4	0,8	

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	RD**0803	RD**10T3	RD**1204
	ØD	16-25	32	40-50
	Vis (plaquette)	I60M3×7 (1,8 Nm)	I60M4×10 (3,4 Nm)	I60M4×10 (3,4 Nm)
	Clé (plaquette)	WT09IP	WT15IP	WT15IP

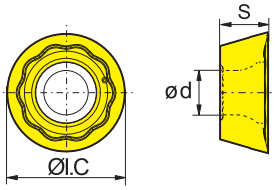


Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquette de fraisage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

RDKT
10 T3
12 04

Plaquette de fraisage RD**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P																			
	M																			
	K																			
	N																			
	S																			
	H																			
ISO		YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	RDKT10T3MO-MM																	○					
	RDKT1204MO-MM																	○					

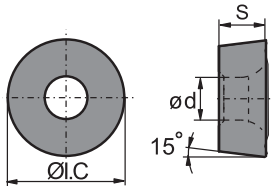
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Plaquette de fraisage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

RDKW	I.C	S	d
08 03	8	3,18	3,4
10 T3	10	3,97	4,4
12 04	12	4,76	4,4

Plaquette de fraisage RD**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P																			
	M																			
	K																			
	N																			
	S																			
	H																			
ISO		YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	RDKW0803MO						●			○													
	RDKW10T3MO	●	○				○			●	○						○						
	RDKW1204MO	●				○	●			●	○				●	●	○						

● En stock ○ Sur demande

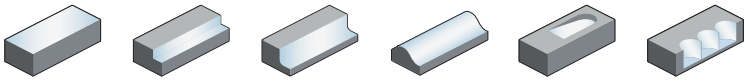
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

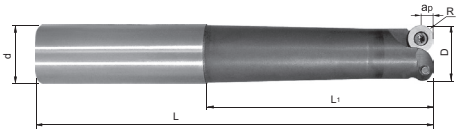
Plaquettes de fraisage Fraise à surfacer

Fraise à surfacer

FMR03





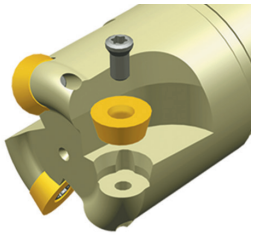


Article	✲	Stock	Dimensions (mm)						Dents	Plaquettes
			R	ØD	ød	L_1	L	$a_{p\,max}$		
FMR03-015-G16-XS-RD0702-02		●	3,5	15	16	40	88	3,5	2	
FMR03-015-G16-XS-RD0702-02C	✲	○	3,5	15	16	40	88	3,5	2	
FMR03-015-G16-S-RD0702-02		●	3,5	15	16	60	108	3,5	2	
FMR03-015-G16-S-RD0702-02C	✲	○	3,5	15	16	60	108	3,5	2	RDKW0702
FMR03-015-G20-M-RD0702-02		●	3,5	15	20	80	130	3,5	2	
FMR03-015-G20-M-RD0702-02C	✲	○	3,5	15	20	80	130	3,5	2	
FMR03-015-G25-XL-RD0702-02C	✲	○	3,5	15	25	120	176	3,5	2	
FMR03-020-G20-XS-RD1003-02C	✲	○	5	20	20	40	90	5	2	
FMR03-020-G20-S-RD1003-02C	✲	○	5	20	20	60	110	5	2	
FMR03-020-G25-M-RD1003-02C	✲	○	5	20	25	80	136	5	2	RDKW1003
FMR03-020-G25-L-RD1003-02C	✲	○	5	20	25	100	156	5	2	
FMR03-020-G25-XL-RD1003-02C	✲	○	5	20	25	120	176	5	2	

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

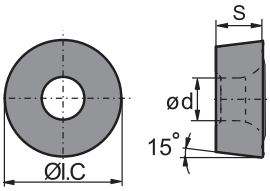
	Plaquette	**RDKW0702**	**RDKW1003**	
	ØD	**15**	**20**	
	Vis (plaquette)		l60M3,5×6,5TT (2,7 Nm)	
	Vis (plaquette)	l60M2,5×5,0 (1,0 Nm)		
	Clé (plaquette)		WT10IP	
	Clé (plaquette)	WT07P		

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquette de fraisage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

RDKW	I.C	S	d
07 02	7	2,38	2,7
10 03	10	3,18	3,9

Plaquette de fraisage RD**		HC[1] (CVD)							HC[1] (PVD)								HT	HC[2]	HW	
	P	●	●	●	●	●	●	●			●	●		●	●	●	●	●	●	
	M		●	●	●	●	●				●	●		●	●	●	●	●	●	
	K							●	●	●							●			●
	N								●										●	●
	S				●		●			●	●		●	●	●	●				
	H																			
ISO		YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	RDKW0702MO-1						●				○				●								
	RDKW0702MO-2										●												
	RDKW1003MO-1					○	●					○			●	●							
	RDKW1003MO-2										●												
	RDKW1003MO-3				●										●								

● En stock ○ Sur demande

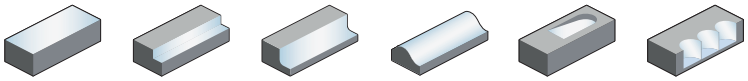
Vous trouverez des informations importantes sur la conception d'une arête de coupe à la page B102.

HC[1] Carbure revêtu
HT Cermet non revêtu
HC[2] Cermet revêtu
HW Carbure non revêtu

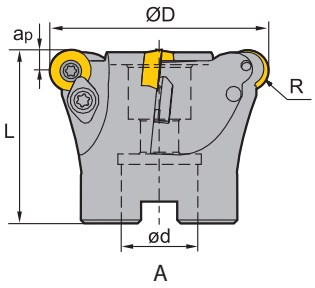
A Tournage
B Fraisage
C Perçage
D Informations techniques
E Index

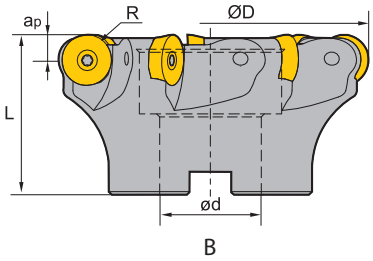
Fraise à surfacer

FMR04









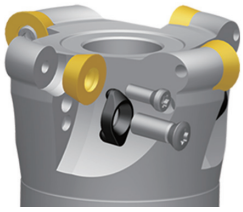
Article	✲	Stock	Dimensions (mm) R	ØD	ød	L	$a_{p\,max}$	Dents	Attachem.	kg	Plaquettes
FMR04-050-A22-RD12-03		●	6	50	22	40	6	3	A	0,3	RD**1204
FMR04-063-A22-RD12-04		●	6	63	22	50	6	4	A	0,5	
FMR04-080-B27-RD16-05		●	8	80	27	50	8	5	B	1,2	RD**1605
FMR04-100-B32-RD16-06		●	8	100	32	50	8	6	B	1	
FMR04-100-B32-RD20-06C	✲	○	10	100	32	50	8	6	B	1	RD**2006
FMR04-125-B40-RD20-06		○	10	125	40	63	10	6	B	1,9	
FMR04-125-B40-RD20-06C	✲	○	10	125	40	63	10	6	B	1,9	
FMR04-160-B40-RD20-07		○	10	160	40	63	10	7	B	3,7	

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	RD**1204	RD**1605	RD**2006
	ØD	50-63	80-100	100-160
	Bride	WD-204	WD-207	
	Vis (bride)	I60M4×10 (3,4 Nm)	I60M5×13 (6,7 Nm)	
	Vis (plaquette)	I60M3,5×10 (2,7 Nm)	I60M5×13 (6,7 Nm)	I43M6×16 (9,1 Nm)
	Clé (bride)	WT15IP		
	Clé (bride)		WT20IT	
	Clé (plaquette)	WT15IP		
	Clé (plaquette)		WT20IT	WT25IT

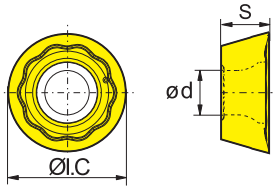


Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquette de fraisage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

RDKT
12 04

Plaquette de fraisage RD**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P																			
	M																			
	K																			
	N																			
	S																			
	H																			
ISO		YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**RDKT1204MO-MM**																	○					

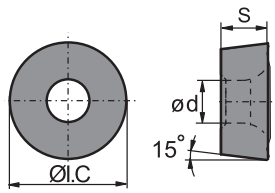
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

RDKW	I.C	S	d
12 04	12	4,76	4,4
16 05	16	5,56	5,5
20 06	20	6,35	6,5

Plaquette de fraisage

Plaquette de fraisage RD**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P																			
	M																			
	K																			
	N																			
	S																			
	H																			
ISO		YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**RDKW1204MO**	●				○	●			●	○				●	●	○						
	RDKW1605MO						○				○	○					○						
	RDKW2006MO		○				○		○														
	**RDKW2006MO-3**														●								

● En stock ○ Sur demande

Vous trouverez des informations importantes sur la conception d'une arête de coupe à la page B102.

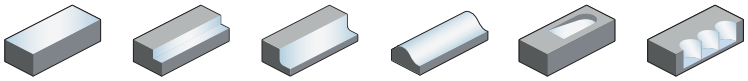
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

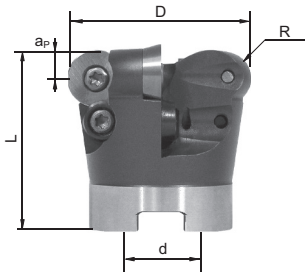
Plaquettes de fraisage Fraise à surfacer

Fraise à surfacer

FMR04







Article	✲	Stock	Dimensions (mm)					Dents	Plaquettes
			R	ØD	ød	L	$a_{p\,max}$		
FMR04-042-A16-RD1003-06		○	5	42	16	44	5	6	RDKW1003
FMR04-042-A16-RD1003-06C	✲	●	5	42	16	44	5	6	
FMR04-052-A22-RD1003-07		○	5	52	22	50	5	7	
FMR04-052-A22-RD1003-07C	✲	●	5	52	22	50	5	7	
FMR04-042-A16-RD12T3-05		○	6	42	16	42	6	5	RDKW12T3
FMR04-042-A16-RD12T3-05C	✲	●	6	42	16	42	6	5	
FMR04-052-A22-RD12T3-05		○	6	52	22	50	6	5	
FMR04-052-A22-RD12T3-05C	✲	●	6	52	22	50	6	5	
FMR04-066-A27-RD12T3-06		○	6	66	27	50	6	6	
FMR04-066-A27-RD12T3-06C	✲	●	6	66	27	50	6	6	
FMR04-080-A27-RD12T3-07		○	6	80	27	50	6	7	
FMR04-080-A27-RD12T3-07C	✲	●	6	80	27	50	6	7	
FMR04-052-A22-RD1604-04		○	8	52	22	50	8	4	RDKW1604
FMR04-052-A22-RD1604-04C	✲	●	8	52	22	50	8	4	
FMR04-066-A27-RD1604-05		○	8	66	27	50	8	5	
FMR04-066-A27-RD1604-05C	✲	●	8	66	27	50	8	5	
FMR04-080-A27-RD1604-06		○	8	80	27	52	8	6	
FMR04-080-A27-RD1604-06C	✲	●	8	80	27	52	8	6	
FMR04-100-B32-RD1604-07		○	8	100	32	52	8	7	
FMR04-100-B32-RD1604-07C	✲	●	8	100	32	52	8	7	
FMR04-125-B40-RD1604-08		○	8	125	40	52	8	8	
FMR04-160-B40-RD1604-09		○	8	160	40	52	8	9	
FMR04-160-B40-RD1604-09C	✲	●	8	160	40	52	8	9	

● En stock ○ Sur demande

✲ Avec arrosage interne

Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

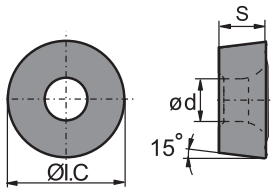
Pièces détachées

	Plaquette	RDKW1003	RDKW12T3	RDKW12T3	RDKW1604	RDKW1604
	ØD	42-52	42	52-80	52	66-160
	Bride					WX16N
	Bride			LOM3.5×7.1		
	Vis (bride)					I60M4,5×10 (5,0 Nm)
	Vis (plaquette)	I60M3,5×6,5TT (2,7 Nm)				
	Vis (plaquette)		I60M3,5×7,7 (2,7 Nm)	I60M3,5×7,7 (2,7 Nm)	I60M4,5×10 (5,0 Nm)	I60M4,5×10 (5,0 Nm)
	Clé (bride)			WT15P		
	Clé (bride)					WT20T
	Clé (plaquette)	WT10IP				
	Clé (plaquette)		WT15P	WT15P		
	Clé (plaquette)				WT20T	WT20T

RDKW	I.C	S	d
10 03	10	3,18	3,9
12 T3	12	3,97	3,9
16 04	16	4,76	5,2

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquette de fraisage



Plaquette de fraisage RD**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P																			
	M																			
	K																			
	N																			
	S																			
	H																			
ISO		YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	RDKW1003MO-1					○	●					○			●	●							
	RDKW1003MO-2										●												
	RDKW1003MO-3				●										●								
	RDKW12T3MO-1					○	●					○			●	●							
	RDKW12T3MO-2										●				○								
	RDKW12T3MO-3				●										●								
	RDKW1604MO-1						●					○			●	●	●						
	RDKW1604MO-2										○												
	RDKW1604MO-3	○			●				●		○				●		●						

● En stock ○ Sur demande

Vous trouverez des informations importantes sur la conception d'une arête de coupe à la page B102.

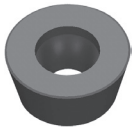
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

INFORMATIONS IMPORTANTES

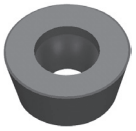
Profil de l'arête de coupe **RDKW**

RDKW*MO–1



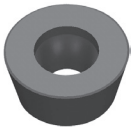
Usinage général

RDKW*MO–2

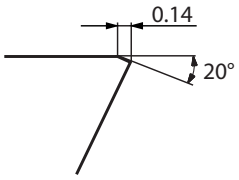


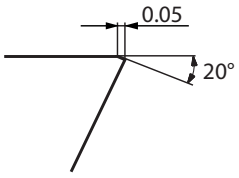
Géométrie de coupe douce
(Finition)

RDKW*MO–3



Ébauche





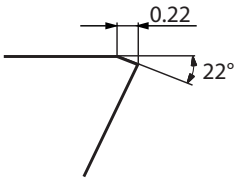
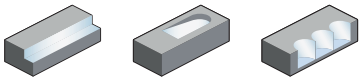




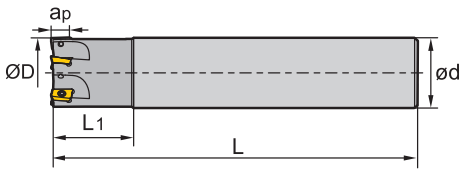
Fig.: **FMR04-052-B22-RD12T3-05C**

Fraise à 90°

EMP01 Kr: 90°







Attachement cylindrique

Article	✻	Stock	Dimensions (mm) ØD	ød	L_1	L	$a_{p\,max}$	Dents	kg	Plaquettes
EMP01-012-G12-AP07-02C	✻	●	12	12	25	75	6,4	2	0,31	
EMP01-014-G16-AP07-03C	✻	●	14	16	25	85	6,4	3	0,61	APKT0702
EMP01-016-G16-AP07-04C	✻	●	16	16	30	90	6,4	4	0,75	
EMP01-012-G16-AP11-01		●	12	16	25	85	10,5	1	0,1	
EMP01-016-G16-AP11-02		●	16	16	25	90	10,5	2	0,1	
EMP01-016-G16-AP11-02C	✻	○	16	16	25	90	10,5	2	0,1	
EMP01-020-G20-AP11-02		●	20	20	30	100	10,5	2	0,2	
EMP01-020-G20-AP11-02C	✻	●	20	20	30	100	10,5	2	0,2	
EMP01-020-G20-AP11-03		○	20	20	30	100	10,5	3	0,2	
EMP01-020-G20-AP11-03C	✻	●	20	20	30	100	10,5	3	0,2	APKT11T3
EMP01-025-G25-AP11-03		●	25	25	35	115	10,5	3	0,4	
EMP01-025-G25-AP11-03C	✻	○	25	25	35	115	10,5	3	0,4	
EMP01-025-G25-AP11-04		●	25	25	35	115	10,5	4	0,4	
EMP01-025-G25-AP11-04C	✻	●	25	25	35	115	10,5	4	0,4	
EMP01-032-G32-AP11-04		●	32	32	40	125	10,5	4	0,7	
EMP01-025-G25-AP16-02		●	25	25	35	115	15,5	2	0,4	
EMP01-025-G25-AP16-02C	✻	●	25	25	35	115	15,5	2	0,4	
EMP01-032-G32-AP16-03		●	32	32	40	125	15,5	3	0,7	
EMP01-032-G32-AP16-03C	✻	●	32	32	40	125	15,5	3	0,7	
EMP01-040-G32-AP16-03		●	40	32	42	130	15,5	3	0,7	APKT1604
EMP01-040-G32-AP16-03C	✻	●	40	32	42	130	15,5	3	0,7	
EMP01-040-G32-AP16-04C	✻	○	40	32	42	130	15,5	4	0,8	
EMP01-050-G32-AP16-05		●	50	32	45	135	15,5	5	1	
EMP01-063-G32-AP16-06		●	63	32	45	135	15,5	6	1,4	

● En stock ○ Sur demande

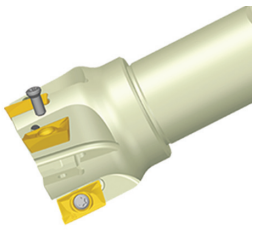
✻ Avec arrosage interne

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquettes de fraisage Fraise à 90°

Pièces détachées

	Plaquette	APKT0702	APKT11T3	APKT1604
	ØD	12-25	12-32	25-63
	Vis (plaquette)	I60M1,8×4 (0,5 Nm)		I60M4×8,4 (3,4 Nm)
	Vis (plaquette)		I60M2,5×6,5T (1,0 Nm)	
	Clé (plaquette)	WT05IP	WT08IP	
	Clé (plaquette)			WT15S

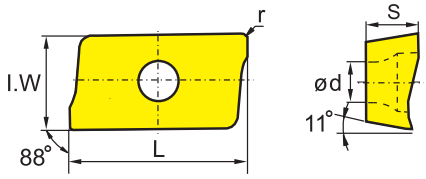


APKT	L	S	d
07 02	4,26	2,38	2
11 T3	12,24	3,6	2,8
16 04	17,877	5,76	4,4

Plaquette de fraisage

● Bonnes conditions d'usinage
❁ Conditions d'usinage normales
❁ Conditions d'usinage défavorables

Plaquette de fraisage AP**



	HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
P	❁	❁	❁	❁	❁	❁	❁		❁	❁		❁	❁	❁	●	●	●		
M		❁	❁	❁	❁	❁			❁	❁		❁	❁	❁	❁	●	●		
K						❁	❁	●							●				❁
N								❁											❁ ❁
S				❁		❁		●	❁		❁	❁	❁	❁					
H																			

	ISO	r	I.W	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	APKT11T304-ALH	0,4	6,5									●												●	●
	APKT11T308-ALH	0,8	6,5									●												●	●
	APKT160408-ALH	0,8	9,33									●												●	●
	APKT11T304-APF	0,4	6,5															●							
	APKT11T308-APF	0,8	6,5													○		●		○					
	APKT160408-APF	0,8	9,33													○		●	○	○					
	APKT070204-APM	0,4	6,91															●							
	APKT11T304-APM	0,4	6,5				●			●								●							
	APKT11T308-APM	0,8	6,5				●			●						○		●		○					
	APKT11T312-APM	1,2	6,5				●			●								●							
	APKT11T316-APM	1,6	6,5				●			●								●							
	APKT11T320-APM	2	6,5				●			●								●							
	APKT160408-APM	0,8	9,33				●			●	●					○		●		○					
	APKT160416-APM	1,6	9,33				●			●								●							
	APKT160420-APM	2	9,33				●			●								●							
	APKT160424-APM	2,4	9,33				●			●								●							
	APKT160430-APM	3	9,33				●											●							
	APKT11T304-LH	0,4	6,5																					○	○
	APKT11T308-LH	0,8	6,5																					○	●
	APKT160408-LH	0,8	9,33																					○	○

● En stock ○ Sur demande

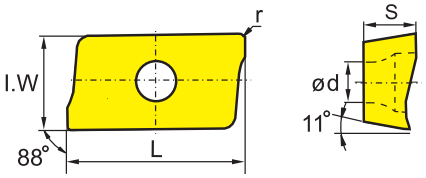
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

APKT	L	S	d
07 02	4,26	2,38	2
11 T3	12,24	3,6	2,8
16 04	17,877	5,76	4,4

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquette de fraisage



ISO		r	I.W	HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
				YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**APKT11T308-NM**															●				●					
	APKT11T312-NM															●				●					
	**APKT11T304-PF**	0,4	6,5		○			○					○	○					○						
	APKT11T308-PF	0,8	6,5											○											
	APKT11T316-PF	1,6	6,5											○											
	APKT160408-PF	0,8	9,33		○				○					○					○						
	APKT160430-PF	3	9,33	○																					
	**APKT11T304-PM**	0,4	6,5	○	○	○		○	○				○	○					○						
	APKT11T308-PM	0,8	6,5	○	○		○	○	●	○	○		○	○			○		○						
	APKT11T312-PM	1,2	6,5					○					○	○					○						
	APKT11T316-PM	1,6	6,5					○					○	○					○						
	APKT160408-PM	0,8	9,33	○	○	○	●		●	○	○		○	○			○		●						
	APKT160416-PM	1,6	9,33	○										○											
	**APKT11T304-PR**	0,4	6,5						○										○						
	APKT11T316-PR	1,6	6,5																○						
	**APKT11T3XR**									●								●							

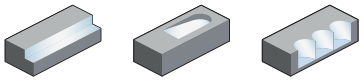
● En stock ○ Sur demande

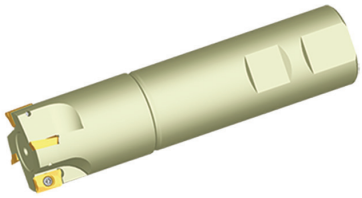
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

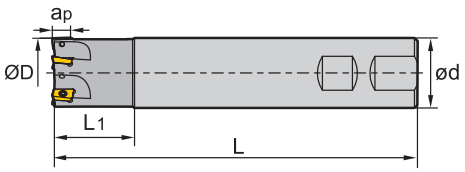
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise à 90°

EMP01 Kr: 90°







Attachement Weldon

Article	✻	Stock	Dimensions (mm) ØD	ød	L_1	L	$a_{p\ max}$	Dents	kg	Plaquettes
EMP01-020-XP20-AP07-05C	✻	●	20	20	30	100	6,4	5	0,31	APKT0702
EMP01-025-XP25-AP07-07C	✻	●	25	25	35	115	6,4	7	0,61	
EMP01-012-XP16-AP11-01		●	12	16	25	85	10,5	1	0,1	APKT11T3
EMP01-012-XP16-AP11-01C	✻	○	12	16	25	85	10,5	1	0,1	
EMP01-016-XP16-AP11-02		●	16	16	25	90	10,5	2	0,1	
EMP01-016-XP16-AP11-02C	✻	○	16	16	25	90	10,5	2	0,1	
EMP01-020-XP20-AP11-02		●	20	20	30	100	10,5	2	0,2	
EMP01-020-XP20-AP11-02C	✻	○	20	20	30	100	10,5	2	0,2	
EMP01-020-XP20-AP11-03		●	20	20	30	100	10,5	3	0,2	
EMP01-020-XP20-AP11-03C	✻	●	20	20	30	100	10,5	3	0,2	
EMP01-025-XP25-AP11-03		●	25	25	35	115	10,5	3	0,4	
EMP01-025-XP25-AP11-03C	✻	●	25	25	35	115	10,5	3	0,4	
EMP01-025-XP25-AP11-04		●	25	25	35	115	10,5	4	0,4	
EMP01-025-XP25-AP11-04C	✻	○	25	25	35	115	10,5	4	0,4	
EMP01-032-XP32-AP11-04		●	32	32	40	125	10,5	4	0,7	
EMP01-032-XP32-AP11-04C	✻	○	32	32	40	125	10,5	4	0,7	
EMP01-025-XP25-AP16-02		●	25	25	35	115	15,5	2	0,4	APKT1604
EMP01-025-XP25-AP16-02C	✻	○	25	25	35	115	15,5	2	0,4	
EMP01-032-XP32-AP16-03		●	32	32	40	125	15,5	3	0,7	
EMP01-032-XP32-AP16-03C	✻	○	32	32	40	125	15,5	3	0,7	
EMP01-040-XP32-AP16-04		●	40	32	42	130	15,5	4	0,8	
EMP01-040-XP32-AP16-04C	✻	○	40	32	42	130	15,5	4	0,8	
EMP01-050-XP32-AP16-05		●	50	32	45	135	15,5	5	1	
EMP01-063-XP32-AP16-06		○	63	32	45	135	15,5	6	1,4	

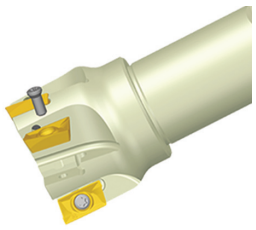
● En stock ○ Sur demande

✻ Avec arrosage interne

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Pièces détachées

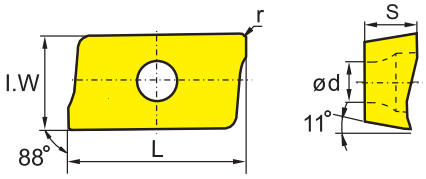
	Plaquette	APKT0702	APKT11T3	APKT1604
	ØD	12-25	12-32	25-63
	Vis (plaquette)	I60M1,8×4 (0,5 Nm)		I60M4×8,4 (3,4 Nm)
	Vis (plaquette)		I60M2,5×6,5T (1,0 Nm)	
	Clé (plaquette)	WT05IP	WT08IP	
	Clé (plaquette)			WT15S



APKT	L	S	d
07 02	4,26	2,38	2
11 T3	12,24	3,6	2,8
16 04	17,877	5,76	4,4

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquette de fraisage



Plaquette de fraisage AP**				HC¹ (CVD)							HC¹ (PVD)									HT		HC²		HW	
			P																						
			M																						
			K																						
			N																						
			S																						
			H																						
ISO		r	I.W	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	APKT11T304-ALH	0,4	6,5									●												●	●
	APKT11T308-ALH	0,8	6,5									●												●	●
	APKT160408-ALH	0,8	9,33									●												●	●
	APKT11T304-APF	0,4	6,5															●							
	APKT11T308-APF	0,8	6,5													○		●		○					
	APKT160408-APF	0,8	9,33													○		●	○	○					
	APKT070204-APM	0,4	6,91															●							
	APKT11T304-APM	0,4	6,5				●			●								●							
	APKT11T308-APM	0,8	6,5				●			●						○		●		○					
	APKT11T312-APM	1,2	6,5				●			●								●							
	APKT11T316-APM	1,6	6,5				●			●								●							
	APKT11T320-APM	2	6,5				●			●								●							
	APKT160408-APM	0,8	9,33				●			●	●					○		●		○					
	APKT160416-APM	1,6	9,33				●			●								●							
	APKT160420-APM	2	9,33				●			●								●							
	APKT160424-APM	2,4	9,33				●			●								●							
	APKT160430-APM	3	9,33				●											●							
	APKT11T304-LH	0,4	6,5																					○	○
	APKT11T308-LH	0,8	6,5																					○	●
	APKT160408-LH	0,8	9,33																					○	○

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

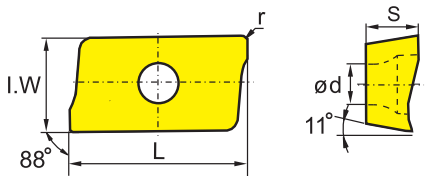
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquettes de fraisage Fraise à 90°

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

APKT	L	S	d
07 02	4,26	2,38	2
11 T3	12,24	3,6	2,8
16 04	17,877	5,76	4,4

Plaquette de fraisage



Plaquette de fraisage AP**		r	I.W	HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
ISO				YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	APKT11T308-NM															●				●					
	APKT11T312-NM															●				●					
	APKT11T304-PF	0,4	6,5		○			○					○	○					○						
	APKT11T308-PF	0,8	6,5											○											
	APKT11T316-PF	1,6	6,5											○											
	APKT160408-PF	0,8	9,33		○				○					○					○						
	APKT160430-PF	3	9,33	○																					
	APKT11T304-PM	0,4	6,5	○	○	○		○	○				○	○					○						
	APKT11T308-PM	0,8	6,5	○	○		○	○	●	○	○		○	○			○		○						
	APKT11T312-PM	1,2	6,5					○					○	○					○						
	APKT11T316-PM	1,6	6,5					○					○	○					○						
	APKT160408-PM	0,8	9,33	○	○	○	●		●	○	○		○	○			○		●						
	APKT160416-PM	1,6	9,33	○										○											
	APKT11T304-PR	0,4	6,5						○										○						
	APKT11T316-PR	1,6	6,5																○						
	APKT11T3XR										●							●							

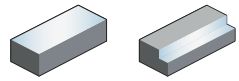
● En stock ○ Sur demande

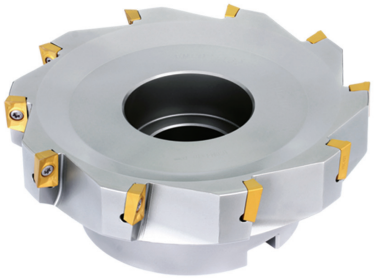
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

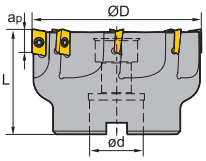
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise à 90°

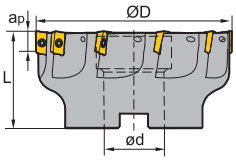
EMP02 Kr: 90°



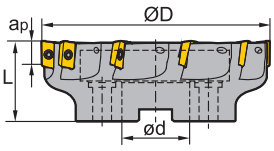




A



B



C

Article	✻	Stock	Dimensions (mm) ØD	ød	L	$a_{p\ max}$	Dents	Attachem.	kg	Plaquettes
EMP02-032-A16-AP07-08C	✻	●	32	16	35	6,4	8	A	0,34	
EMP02-040-A16-AP07-10C	✻	●	40	16	40	6,4	10	A	0,4	APKT0702
EMP02-050-A22-AP07-12C	✻	●	50	22	40	6,4	12	A	0,6	
EMP02-040-A16-AP11-04C	✻	●	40	16	40	11	4	A	0,237	
EMP02-040-A16-AP11-05C	✻	●	40	16	40	11	5	A	0,177	
EMP02-040-A16-AP11-06C	✻	●	40	16	40	11	6	A	0,234	
EMP02-050-A22-AP11-06		●	50	22	40	11	6	A	0,3	
EMP02-050-A22-AP11-06C	✻	●	50	22	40	11	6	A	0,3	
EMP02-050-A22-AP11-07C	✻	●	50	22	40	11	7	A	0,39	
EMP02-063-A22-AP11-08		●	63	22	40	11	8	A	0,6	
EMP02-063-A22-AP11-08C	✻	●	63	22	40	11	8	A	0,6	APKT11T3
EMP02-063-A22-AP11-09C	✻	●	63	22	40	11	9	A	0,54	
EMP02-080-A27-AP11-08		●	80	27	50	11	8	A	1,2	
EMP02-080-A27-AP11-08C	✻	●	80	27	50	11	8	A	1,2	
EMP02-080-A27-AP11-10C	✻	●	80	27	50	11	10	A	1,13	
EMP02-100-B32-AP11-10		●	100	32	50	11	10	B	1,7	
EMP02-100-B32-AP11-10C	✻	○	100	32	50	11	10	B	1,7	
EMP02-125-B40-AP11-10		○	125	40	63	11	10	B	3,42	
EMP02-040-A16-AP16-03		○	40	16	40	15,5	3	A	0,17	
EMP02-040-A16-AP16-04C	✻	●	40	16	40	15,5	4	A	0,17	
EMP02-050-A22-AP16-05		●	50	22	40	15,5	5	A	0,3	
EMP02-050-A22-AP16-05C	✻	●	50	22	40	15,5	5	A	0,3	
EMP02-063-A22-AP16-06		●	63	22	40	15,5	6	A	0,5	
EMP02-063-A22-AP16-06C	✻	●	63	22	40	15,5	6	A	0,5	APKT1604
EMP02-080-A27-AP16-06C	✻	○	80	27	50	15,5	6	A	1,08	
EMP02-080-A27-AP16-07		●	80	27	50	15,5	7	A	1,1	
EMP02-080-A27-AP16-07C	✻	●	80	27	50	15,5	7	A	1,1	
EMP02-100-B32-AP16-08		●	100	32	50	15,5	8	B	1,6	

● En stock ○ Sur demande

✻ Avec arrosage interne

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquettes de fraisage

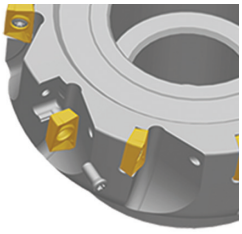
Article	✲	Stock	Dimensions (mm) ØD	ød	L	$a_{p\ max}$	Dents	Attachem.	kg	Plaquettes
EMP02-100-B32-AP16-08C	✲	●	100	32	50	15,5	8	B	1,6	
EMP02-125-B40-AP16-06C	✲	○	125	40	63	15,5	6	B	3,18	
EMP02-125-B40-AP16-10		○	125	40	63	15,5	10	B	3,2	
EMP02-125-B40-AP16-10C	✲	○	125	40	63	15,5	10	B	3,2	
EMP02-160-B40-AP16-07C	✲	○	160	40	63	15,5	7	B	4,3	APKT1604
EMP02-160-B40-AP16-10		○	160	40	63	15,5	10	B	6,3	
EMP02-160-B40-AP16-10C	✲	○	160	40	63	15,5	10	B	6,3	
EMP02-200-C60-AP16-12		○	200	60	63	15,5	12	C	8,1	
EMP02-250-C60-AP16-12		○	250	60	63	15,5	12	C	11,2	

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**APKT11T3**	**APKT1604**	**APKT1604**
	ØD	**40-125**	**40-160**	**160-250**
	Cassette			Locator-APKT16
	Vis (plaquette)		I60M4×10 (3,4 Nm)	I60M4×10 (3,4 Nm)
	Vis (plaquette)	I60M2,5×6,5T (1,0 Nm)		
	Clé (plaquette)	WT08IS	WT15IS	WT15IS

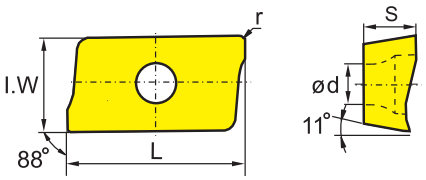


Codification > B26 Choix nuances > B24 Info. techniques > B527 Paramètres > B230

Plaquette de fraisage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

APKT	L	S	d
07 02	4,26	2,38	2
11 T3	12,24	3,6	2,8
16 04	17,877	5,76	4,4



Plaquette de fraisage AP**				HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW	
			P																				
			M																				
			K																				
			N																				
			S																				
			H																				
ISO		r	I.W	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	APKT11T304-ALH	0,4	6,5									●												●	●
	APKT11T308-ALH	0,8	6,5									●												●	●
	APKT160408-ALH	0,8	9,33									●												●	●
	APKT11T304-APF	0,4	6,5															●							
	APKT11T308-APF	0,8	6,5													○		●		○					
	APKT160408-APF	0,8	9,33													○		●	○	○					
	APKT070204-APM	0,4	6,91															●							
	APKT11T304-APM	0,4	6,5				●			●								●							
	APKT11T308-APM	0,8	6,5				●			●						○		●		○					
	APKT11T312-APM	1,2	6,5				●			●								●							
	APKT11T316-APM	1,6	6,5				●			●								●							
	APKT11T320-APM	2	6,5				●			●								●							
	APKT160408-APM	0,8	9,33				●			●	●					○		●		○					
	APKT160416-APM	1,6	9,33				●			●								●							
	APKT160420-APM	2	9,33				●			●								●							
	APKT160424-APM	2,4	9,33				●			●								●							
	APKT160430-APM	3	9,33				●											●							
	APKT11T304-LH	0,4	6,5																					○	○
	APKT11T308-LH	0,8	6,5																					○	●
	APKT160408-LH	0,8	9,33																					○	○
	APKT11T308-NM															●				●					
	APKT11T312-NM															●				●					
	APKT11T304-PF	0,4	6,5		○			○					○	○					○						
	APKT11T308-PF	0,8	6,5											○											
	APKT11T316-PF	1,6	6,5											○											
	APKT160408-PF	0,8	9,33		○				○					○					○						
	APKT160430-PF	3	9,33	○																					
	APKT11T304-PM	0,4	6,5	○	○	○		○	○				○	○					○						
	APKT11T308-PM	0,8	6,5	○	○		○	○	●	○	○		○	○			○		○						
	APKT11T312-PM	1,2	6,5					○					○	○					○						
	APKT11T316-PM	1,6	6,5					○					○	○					○						
	APKT160408-PM	0,8	9,33	○	○	○	●		●	○	○		○	○			○		●						
	APKT160416-PM	1,6	9,33	○										○											

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

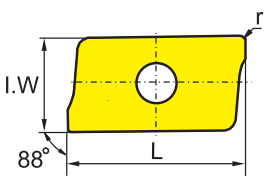
Plaquettes de fraisage Fraise à 90°

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

APKT	L	S	d
07 02	4,26	2,38	2
11 T3	12,24	3,6	2,8
16 04	17,877	5,76	4,4

Plaquette de fraisage AP**



	HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
P	◉	◉	◉	◉	◉	◉	◉		◉	◉		◉	◉	◉	◉	◉	◉		
M		◉	◉	◉	◉	◉			◉	◉		◉	◉	◉	◉	◉	◉		
K						◉	◉	◉							◉			◉	
N								◉										◉	◉
S			◉		◉			◉	◉		◉	◉	◉		◉				
H																			

	ISO	r	I.W	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**APKT11T304-PR**	0,4	6,5						○										○						
	APKT11T316-PR	1,6	6,5																○						
	**APKT11T3XR**										●							●							

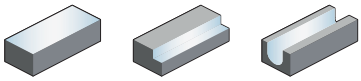
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

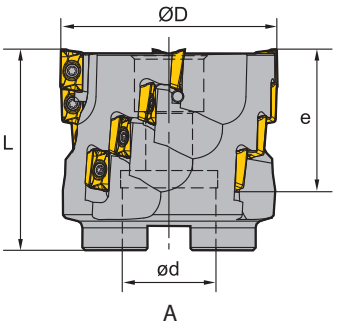
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

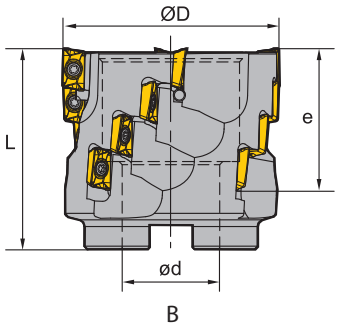
Fraise à 90°

EMP03 Kr: 90°









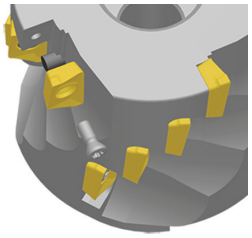
Article	✻	Stock	Dimensions (mm)				Dents	Attachem.	No. de plaquettes	kg	Plaquettes
			ØD	e	ød	L					
EMP03-050-A22-AP11-04		●	50	39	22	58	4	A	16	0,5	APKT11T3
EMP03-050-A22-AP11-04C	✻	○	50	39	22	58	4	A	16	0,5	
EMP03-063-A27-AP11-04		●	63	39	27	58	4	A	16	0,9	
EMP03-063-A27-AP11-04C	✻	○	63	39	27	58	4	A	16	0,9	
EMP03-080-B32-AP11-05		●	80	39	32	63	5	B	20	1,3	
EMP03-080-B32-AP11-05C	✻	○	80	39	32	63	5	B	20	1,3	
EMP03-100-B40-AP11-06		●	100	39	40	63	6	B	24	2	
EMP03-100-B40-AP11-06C	✻	○	100	39	40	63	6	B	24	2	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**APKT11T3**
	ØD	**50-100**
	Vis (plaquette)	l60M2,5×6,5T (1,0 Nm)
	Clé (plaquette)	WT08IS



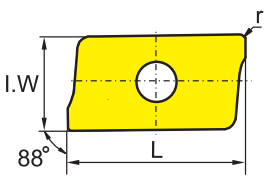
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquettes de fraisage Fraise à 90°

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

APKT	L	S	d
11 T3	12,24	3,6	2,8

Plaquette de fraisage



Plaquette de fraisage AP**				HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
				P																		
				M																		
				K																		
				N																		
				S																		
				H																		
	ISO		r	I.W	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	APKT11T304-ALH		0,4	6,5									●												●	●
	APKT11T308-ALH		0,8	6,5									●												●	●
	APKT11T304-APF		0,4	6,5															●							
	APKT11T308-APF		0,8	6,5													○		●		○					
	APKT11T304-APM		0,4	6,5				●			●								●							
	APKT11T308-APM		0,8	6,5				●			●						○		●		○					
	APKT11T312-APM		1,2	6,5				●			●								●							
	APKT11T316-APM		1,6	6,5				●			●								●							
	APKT11T320-APM		2	6,5				●			●								●							
	APKT11T304-LH		0,4	6,5																					○	○
	APKT11T308-LH		0,8	6,5																					○	●
	APKT11T308-NM																●				●					
	APKT11T312-NM																●				●					
	APKT11T304-PF		0,4	6,5		○			○					○	○					○						
	APKT11T308-PF		0,8	6,5											○											
	APKT11T316-PF		1,6	6,5											○											
	APKT11T304-PM		0,4	6,5	○	○	○		○	○				○	○					○						
	APKT11T308-PM		0,8	6,5	○	○		○	○	●	○	○		○	○			○		○						
	APKT11T312-PM		1,2	6,5					○					○	○					○						
	APKT11T316-PM		1,6	6,5					○					○	○					○						
	APKT11T304-PR		0,4	6,5						○										○						
	APKT11T316-PR		1,6	6,5																○						
	APKT11T3XR											●							●							

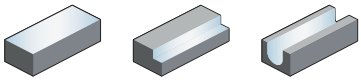
● En stock ○ Sur demande

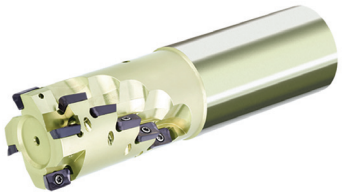
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

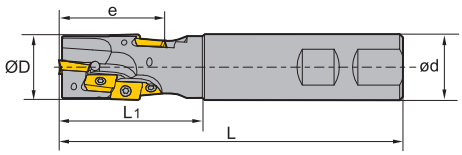
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise à 90°

EMP04 Kr: 90°







Attachement Weldon

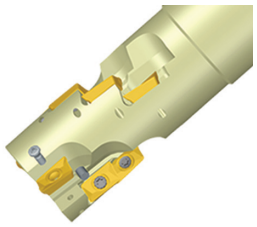
Article	✻	Stock	Dimensions (mm)					Dents	No. de plaquettes	kg	Plaquettes
			ØD	e	ød	L_1	L				
EMP04-020-XP20-AP11-01		●	20	29,4	20	45	120	1	3	0,3	APKT11T3
EMP04-025-XP25-AP11-02		●	25	38,9	25	55	130	2	8	0,4	
EMP04-032-XP32-AP11-02		●	32	48,5	32	65	140	2	10	0,7	
EMP04-040-XP40-AP11-02		●	40	58	40	75	150	2	14	1,3	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**APKT11T3**
	ØD	**20-40**
	Vis (plaquette)	l60M2,5×6,5T (1,0 Nm)
	Clé (plaquette)	WT08IS



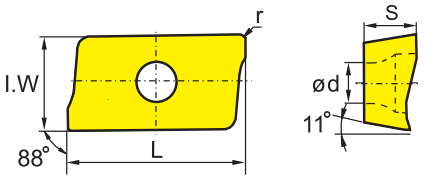
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquettes de fraisage Fraise à 90°

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

APKT	L	S	d
11 T3	12,24	3,6	2,8

Plaquette de fraisage



Plaquette de fraisage AP**				HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
				P																		
				M																		
				K																		
				N																		
				S																		
				H																		
	ISO		r	I.W	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	APKT11T304-ALH		0,4	6,5									●												●	●
	APKT11T308-ALH		0,8	6,5									●												●	●
	APKT11T304-APF		0,4	6,5															●							
	APKT11T308-APF		0,8	6,5													○		●		○					
	APKT11T304-APM		0,4	6,5				●			●								●							
	APKT11T308-APM		0,8	6,5				●			●						○		●		○					
	APKT11T312-APM		1,2	6,5				●			●								●							
	APKT11T316-APM		1,6	6,5				●			●								●							
	APKT11T320-APM		2	6,5				●			●								●							
	APKT11T304-LH		0,4	6,5																					○	○
	APKT11T308-LH		0,8	6,5																					○	●
	APKT11T308-NM																●				●					
	APKT11T312-NM																●				●					
	APKT11T304-PF		0,4	6,5		○			○					○	○					○						
	APKT11T308-PF		0,8	6,5											○											
	APKT11T316-PF		1,6	6,5											○											
	APKT11T304-PM		0,4	6,5	○	○	○		○	○				○	○					○						
	APKT11T308-PM		0,8	6,5	○	○		○	○	●	○	○		○	○			○		○						
	APKT11T312-PM		1,2	6,5					○					○	○					○						
	APKT11T316-PM		1,6	6,5					○					○	○					○						
	APKT11T304-PR		0,4	6,5						○										○						
	APKT11T316-PR		1,6	6,5																○						
	APKT11T3XR											●							●							

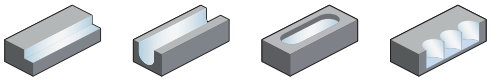
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

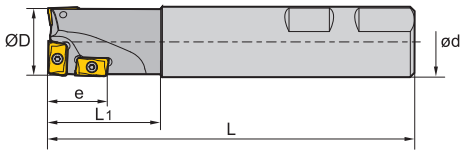
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise à 90°

EMP05 Kr: 90°







Attachement Weldon

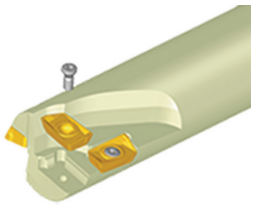
Article	✲	Stock	Dimensions (mm)					Dents	kg	Plaquettes
			ØD	e	ød	L_1	L			
EMP05-025-XP25-C	✲	●	25	20	25	40	130	3	0,5	APMT1135

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**APMT1135**
	ØD	**25**
	Vis (plaquette)	I60M2,5×6,5T (1,0 Nm)
	Clé (plaquette)	WT08IP



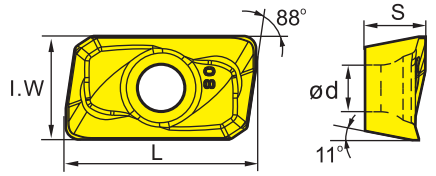
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquettes de fraisage Fraise à 90°

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

APMT	L	S	d
11 35	11,25	3,5	2,8

Plaquette de fraisage



Plaquette de fraisage AP**				HC¹ (CVD)							HC¹ (PVD)								HT		HC²		HW	
			P	◌	◌	❁	◌	◌	❁	◌		◌	❁		◌	◌	❁	◌				◌			
			M		◌	❁	◌	◌	❁			◌	❁		◌	◌	❁	◌				◌			
			K							❁	◌		●						●						❁	
			N									◌												◌	❁	
			S				❁		❁			●	◌		❁	◌	◌		❁							
			H																						
	ISO			r	I.W	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**APMT1135PDR**			0,8	6,2					○								●		○							

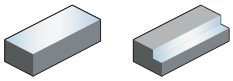
● En stock ○ Sur demande

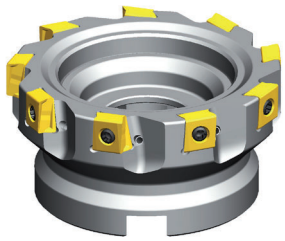
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

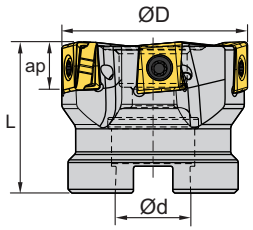
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise à 90°

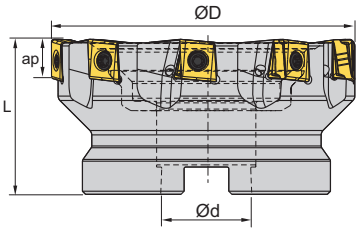
EMP09 Kr: 90°







A



B

Article	✻	Stock	Dimensions (mm) ØD	ød	L	$a_{p\,max}$	Dents	Attachem.	kg	Plaquettes
EMP09-040-A16-LN08-05C	✻	●	40	16	40	8	5	A		LNKT0804PNR
EMP09-050-A22-LN08-06C	✻	●	50	22	40	8	6	A		
EMP09-063-A22-LN08-08C	✻	●	63	22	40	8	8	A		
EMP09-080-A27-LN08-10C	✻	○	80	27	50	8	10	A		
EMP09-040-A16-LN12-04C	✻	●	40	16	40	11,5	4	A	0,19	LNKT1206PNR
EMP09-050-A22-LN12-05C	✻	●	50	22	40	11,5	5	A	0,33	
EMP09-063-A22-LN12-06C	✻	●	63	22	40	11,5	6	A	0,53	
EMP09-080-A27-LN12-07C	✻	●	80	27	50	11,5	7	A	1,18	
EMP09-100-B32-LN12-09C	✻	●	100	32	50	11,5	9	B	1,62	
EMP09-125-B40-LN12-11C	✻	●	125	40	63	11,5	11	B	3,25	
EMP09-080-A27-LN16-06C	✻	●	80	27	50	15	6	A		LNKT1607PNR
EMP09-100-B32-LN16-08C	✻	●	100	32	50	15	8	B		
EMP09-125-B40-LN16-10C	✻	●	125	40	63	15	10	B		
EMP09-160-B40-LN16-12C	✻	●	160	40	63	15	12	B		
EMP09-200-C60-LN16-16		○	200	60	70	15	16	C		
EMP09-250-C60-LN16-12		○	250	60	70	15	12	C		
EMP09-315-D60-LN16-16		○	315	60	80	15	16	D		

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

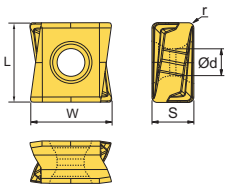
	Plaquette	**LNKT0804PNR**	**LNKT1206PNR**	**LNKT1607PNR**
	ØD	**40-80**	**40-125**	**80-360**
	Vis (bride)	I60M3×7 (1,8 Nm)	I60M4×12 (3,4 Nm)	
	Vis (plaquette)			I60M5×17 (6,7 Nm)
	Clé	WT10IS	WT15IS	
	Clé (plaquette)			WT20IS

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

LNKT	L	S
08 04	8,75	4,45
12 06	12,7	6,75
16 07	16,05	7,35



Plaquette de fraisage LN**		HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW	
	P	◉	◉	◉	◉	◉	◉	◉		◉	◉		◉	◉	◉	◉	●	●	●		
	M		◉	◉	◉	◉	◉			◉	◉		◉	◉	◉	◉	○	○	○		
	K						◉	◉	●								●			◉	
	N								◉											◉	◉
	S			◉		◉			○	◉		◉	◉	◉		◉					
	H																				
ISO		W	r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**LNKT080404PNR-GL**	8,5	0,4								●							●		●					
	LNKT120608PNR-GL	13	0,8								●							●		●					
	LNKT160708PNR-GL	15	0,8								●							●		●					
	**LNKT080404PNR-GM**	8,5	0,4				●											●							
	LNKT120608PNR-GM	13	0,8				●				●							●							
	LNKT160708PNR-GM	15	0,8				●			○								●							

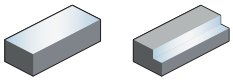
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

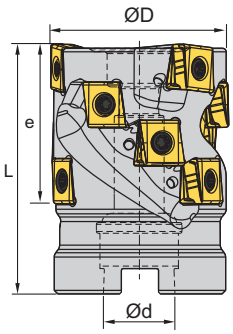
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise à 90°

EMP09 Kr: 90°







Article	✻	Stock	Dimensions (mm)				No. de goujures	Dents	Attachem.	kg	Plaquettes
			ØD	e	ød	L					
EMP09-040x43-A16-LN12-02C	✻	○	40	43	16	70	2	8	A	0,4	LNKT1206PNR
EMP09-050x43-A22-LN12-03C	✻	●	50	43	22	70	3	12	A	0,64	
EMP09-063x53-A27-LN12-04C	✻	●	63	53	27	80	4	20	A	1,31	
EMP09-080x53-A27-LN12-05C	✻	○	80	53	27	80	5	25	A	2,33	
EMP09-080x53-A32-LN12-05C	✻	○	80	54,6	32	80	5	25	A	2,33	
EMP09-080x74-A32-LN12-05C	✻	○	80	74	32	100	5	35	A		

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**LNKT1206PNR**
	ØD	**40-80**
	Vis (bride)	I60M4x12 (3,4 Nm)
	Clé	WT15IS

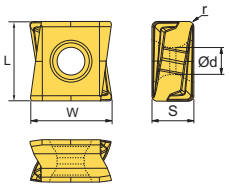
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquettes de fraisage Fraise à 90°

Plaquette de fraisage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

LNKT	L	S
12 06	12,7	6,75



Plaquette de fraisage LN**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P	○	○	◉	○	○	◉	○		◉	◉		◉	◉	◉	○	○	○		
	M		◉	◉	○	○	◉			◉	◉		◉	◉	◉	◉	○	○		
	K						◉	◉	○							○				◉
	N								◉											◉ ◉
	S			◉		◉			○	◉		◉	◉	◉		◉				
	H																			

ISO		W	r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**LNKT120608PNR-GL**	13	0,8								●							●		●					
	**LNKT120608PNR-GM**	13	0,8				●				●							●							

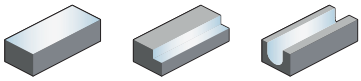
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

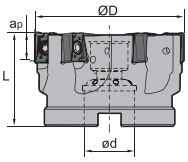
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise à 90°

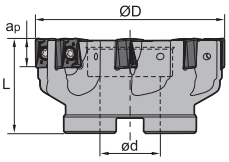
EMP13 Kr: 90°



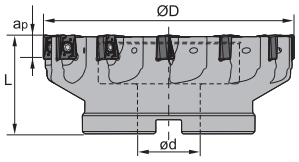




A



B



C

Article	✻	Stock	Dimensions (mm)				Dents	Attachem.	kg	Plaquettes
			ØD	ød	L	$a_{p\ max}$				
EMP13-040-A16-AN11-04C	✻	○	40	16	40	11,2	4	A	0,45	
EMP13-050-A22-AN11-06C	✻	●	50	22	40	11,2	6	A	0,3	
EMP13-063-A22-AN11-06	✻	○	63	22	40	11,2	6	A	0,49	
EMP13-063-A22-AN11-07C	✻	●	63	22	40	11,2	7	A	0,49	
EMP13-080-A27-AN11-07	✻	○	80	27	50	11,2	7	A	1,18	
EMP13-080-A27-AN11-09C	✻	●	80	27	50	11,2	9	A	1,18	ANGX1105
EMP13-100-B32-AN11-12		●	100	32	50	11,2	12	B	1,46	
EMP13-100-B32-AN11-12C	✻	○	100	32	50	11,2	12	B	1,46	
EMP13-125-B40-AN11-14		●	125	40	63	11,2	14	B	2,92	
EMP13-125-B40-AN11-14C	✻	○	125	40	63	11,2	14	B	2,92	
EMP13-160-C40-AN11-16		●	160	40	63	11,2	16	C	4,3	
EMP13-050-A22-AN15-04C	✻	●	50	22	40	14,5	4	A	0,26	
EMP13-060-A22-AN15-05C	✻	○	60	22	40	14,5	5	A	0,53	
EMP13-063-A22-AN15-05C	✻	●	63	22	40	14,5	5	A	0,53	
EMP13-080-A27-AN15-06C	✻	●	80	27	50	14,5	6	A	1,23	
EMP13-100-B32-AN15-08		●	100	32	50	14,5	8	B	1,52	
EMP13-100-B32-AN15-08C	✻	○	100	32	50	14,5	8	B	1,52	ANGX1506
EMP13-125-B40-AN15-10		●	125	40	63	14,5	10	B	3,05	
EMP13-125-B40-AN15-10C	✻	○	125	40	63	14,5	10	B	3,05	
EMP13-160-C40-AN15-12		●	160	40	63	14,5	12	C	4,46	
EMP13-200-C60-AN15-16		○	200	60	63	14,5	16	C	6,26	

● En stock ○ Sur demande

✻ Avec arrosage interne

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquettes de fraisage Fraise à 90°

Pièces détachées

	Plaquette	ANGX1105	ANGX1506
	ØD	40-160	50-200
	Vis (bride)		I60M4×12 (3,4 Nm)
	Vis (plaquette)	I60M3×9 (1,8 Nm)	I60M4×12 (3,4 Nm)
	Clé		WT15IS
	Clé (plaquette)	WT09IS	WT15IS

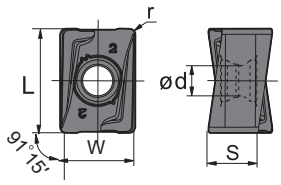


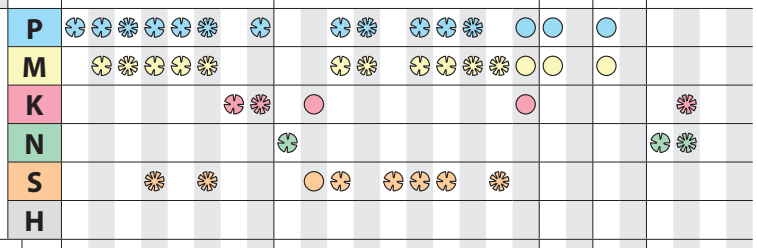
Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

ANGX	L	S	d
11 05	11,85	5,7	3,5
15 06	15,43	7,3	4,4

Plaquette de fraisage AN**





ISO	W	r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
ANGX110504PNR-GM	8,4	0,4				●			●							●	●							
ANGX110508PNR-GM	8,4	0,8	●			●			●	●						●	●							
ANGX110520PNR-GM	8,4	2				●				●						●								
ANGX150608PNR-GM	11	0,8	○			●			●	●						●	●							
ANGX150616PNR-GM	11	1,6				●			●							●								
ANGX150620PNR-GM	11	2							●	●						●								
ANGX110504PNR-LH	8,4	0,4																					●	
ANGX150608PNR-LH	11	0,8																					●	

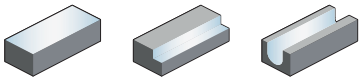
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

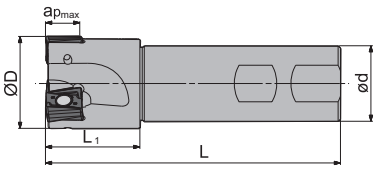
Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

Fraise à 90°

EMP13 Kr: 90°







Attachement Weldon

Article	✲	Stock	Dimensions (mm) ØD	ød	L_1	L	$a_{p\,max}$	Dents	kg	Plaquettes
EMP13-025-XP25-AN11-02C	✲	●	25	25	32	100	11,2	2	0,31	ANGX1105
EMP13-032-XP32-AN11-03C	✲	●	32	32	40	115	11,2	3	0,61	
EMP13-040-XP32-AN11-04C	✲	●	40	32	40	125	11,2	4	0,75	
EMP13-032-XP32-AN15-02C	✲	●	32	32	40	125	11,2	2	0,66	ANGX1506
EMP13-040-XP32-AN15-03C	✲	●	40	32	40	125	11,2	3	0,76	

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**ANGX1105**	**ANGX1506**
	ØD	**25-40**	**25-40**
	Vis (plaquette)	I60M3×9 (1,8 Nm)	I60M4×12 (3,4 Nm)
	Clé (plaquette)	WT09IS	WT15IS



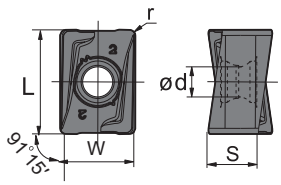
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquettes de fraisage Fraise à 90°

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

ANGX	L	S	d
11 05	11,85	5,7	3,5
15 06	15,43	7,3	4,4



Plaquette de fraisage AN**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P																			
	M																			
	K																			
	N																			
	S																			
	H																			

	ISO	W	r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**ANGX110504PNR-GM**	8,4	0,4				●			●							●	●							
	ANGX110508PNR-GM	8,4	0,8	●			●			●	●						●	●							
	ANGX110520PNR-GM	8,4	2				●				●						●								
	ANGX150608PNR-GM	11	0,8	○			●			●	●						●	●							
	ANGX150616PNR-GM	11	1,6				●			●							●								
	ANGX150620PNR-GM	11	2							●	●						●								
	**ANGX110504PNR-LH**	8,4	0,4																					●	
	ANGX150608PNR-LH	11	0,8																					●	

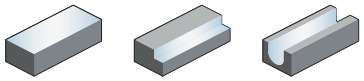
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

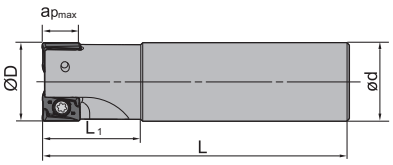
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise à 90°

EMP13 Kr: 90°







Attachement cylindrique

Article	✲	Stock	Dimensions (mm)						Dents	kg	Plaquettes
			ØD	e	ød	L_1	L	$a_{p\,max}$			
EMP13-025-G25-AN11-02C	✲	●	25	11,2	25	32	100	11,2	2	0,31	ANGX1105
EMP13-032-G32-AN11-03C	✲	●	32	11,2	32	40	115	11,2	3	0,61	
EMP13-040-G32-AN11-04C	✲	●	40	11,2	32	40	125	11,2	4	0,75	
EMP13-032-G32-AN15-02C	✲	●	32	14,5	32	40	125	14,5	2	0,66	ANGX1506
EMP13-040-G32-AN15-03C	✲	●	40	14,5	32	40	125	14,5	3	0,76	

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**ANGX1105**	**ANGX1506**	
	ØD	**25-40**	**25-40**	
	Vis (plaquette)	I60M3×9 (1,8 Nm)	I60M4×12 (3,4 Nm)	
	Clé (plaquette)	WT09IS	WT15IS	

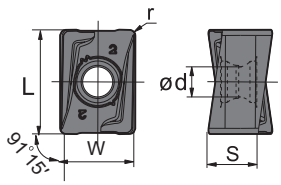
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquettes de fraisage Fraise à 90°

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

ANGX	L	S	d
11 05	11,85	5,7	3,5
15 06	15,43	7,3	4,4



ISO	W	r	HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
			YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
ANGX110504PNR-GM	8,4	0,4				●			●							●	●							
ANGX110508PNR-GM	8,4	0,8	●			●			●	●						●	●							
ANGX110520PNR-GM	8,4	2				●				●						●								
ANGX150608PNR-GM	11	0,8	○			●			●	●						●	●							
ANGX150616PNR-GM	11	1,6				●			●							●								
ANGX150620PNR-GM	11	2							●	●						●								
ANGX110504PNR-LH	8,4	0,4																					●	
ANGX150608PNR-LH	11	0,8																					●	

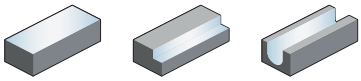
● En stock ○ Sur demande

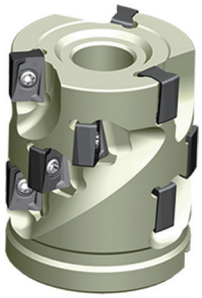
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

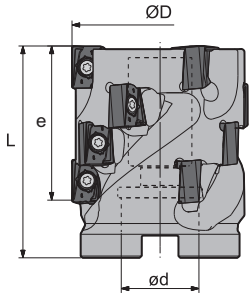
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise à 90°

EMP13 Kr: 90°







Article	✻	Stock	Dimensions (mm)				Dents	No. de plaquettes	kg	Plaquettes
			ØD	e	ød	L				
EMP13-050x43-A22-AN11-03		●	50	43	22	60	3	12	0,52	ANGX1105
EMP13-063x64-A27-AN11-04		○	63	64	27	80	4	24	1,15	
EMP13-063x53-A27-AN15-03		○	63	53	27	75	3	12	1,14	ANGX1506
EMP13-080x53-A32-AN15-04		●	80	53	32	75	4	16	1,82	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**ANGX1105**	**ANGX1506**	
	ØD	**50-63**	**63-80**	
	Vis (plaquette)	I60M3×9 (1,8 Nm)	I60M4×12 (3,4 Nm)	
	Clé (plaquette)	WT09IS	WT15IS	

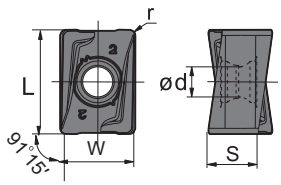
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquettes de fraisage Fraise à 90°

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

ANGX	L	S	d
11 05	11,85	5,7	3,5
15 06	15,43	7,3	4,4



Plaquette de fraisage AN**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P																			
	M																			
	K																			
	N																			
	S																			
	H																			
ISO		W	r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**ANGX110504PNR-GM**	8,4	0,4				●			●							●	●							
	ANGX110508PNR-GM	8,4	0,8	●			●			●	●						●	●							
	ANGX110520PNR-GM	8,4	2				●				●						●								
	ANGX150608PNR-GM	11	0,8	○			●			●	●						●	●							
	ANGX150616PNR-GM	11	1,6				●			●							●								
	ANGX150620PNR-GM	11	2							●	●						●								
	**ANGX110504PNR-LH**	8,4	0,4																					●	
	ANGX150608PNR-LH	11	0,8																					●	

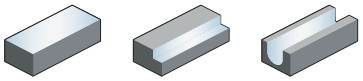
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

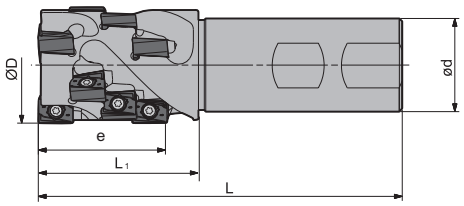
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise à 90°

EMP13 Kr: 90°







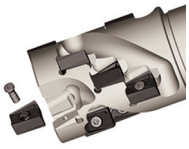
Attachement Weldon

Article	✻	Stock	Dimensions (mm)					Dents	No. de plaquettes	kg	Plaquettes
			ØD	e	ød	L_1	L				
EMP13-032x43-XP32-AN11-02		○	32	43	32	48	115	2	8	0,61	ANGX1105
EMP13-040x43-XP32-AN11-03		○	40	43	32	55	125	3	12	0,79	
EMP13-040x40-XP32-AN15-02		○	40	40	32	55	115	2	6	0,79	ANGX1506
EMP13-050x53-XP40-AN15-02		○	50	53	40	70	145	2	8	1,53	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	ANGX1105	ANGX1506	
	ØD	32-40	40-50	
	Vis (plaquette)	I60M3×9 (1,8 Nm)	I60M4×12 (3,4 Nm)	
	Clé (plaquette)	WT09IS	WT15IS	

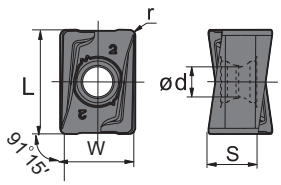
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquettes de fraisage Fraise à 90°

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

ANGX	L	S	d
11 05	11,85	5,7	3,5
15 06	15,43	7,3	4,4



Plaquette de fraisage AN**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
P																				
M																				
K																				
N																				
S																				
H																				
ISO		W	r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	ANGX110504PNR-GM	8,4	0,4				●			●							●	●							
	ANGX110508PNR-GM	8,4	0,8	●			●			●	●						●	●							
	ANGX110520PNR-GM	8,4	2				●				●						●								
	ANGX150608PNR-GM	11	0,8	○			●			●	●						●	●							
	ANGX150616PNR-GM	11	1,6				●			●							●								
	ANGX150620PNR-GM	11	2							●	●						●								
	ANGX110504PNR-LH	8,4	0,4																					●	
	ANGX150608PNR-LH	11	0,8																					●	

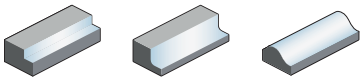
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

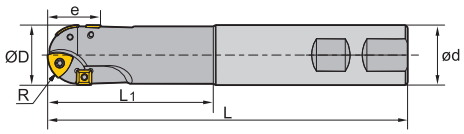
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise de forme

BMR01







Attachement Weldon

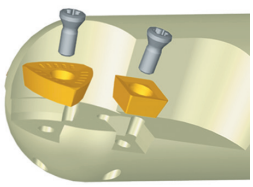
Article	✻	Stock	Dimensions (mm)						Dents		kg	Plaquettes
			R	ØD	e	ød	L_1	L	ZDET	SPMT		
BMR01-020-XP20-S		○	10	20	20	20	50	125	2	2	0,3	ZDET08T2 & SPMT0603
BMR01-020-XP20-M		○	10	20	20	20	75	150	2	2	0,3	
BMR01-020-XP20-L		○	10	20	20	20	100	200	2	2	0,4	
BMR01-025-XP25-S		○	12,5	25	23	25	70	150	2	2	0,5	ZDET1103 & SPMT0603
BMR01-025-XP25-M		○	12,5	25	23	25	95	175	2	2	0,6	
BMR01-025-XP25-L		○	12,5	25	23	25	100	200	2	2	0,7	
BMR01-032-XP32-S		○	16	32	31	32	85	175	2	2	0,9	ZDET13T2 & SDMT0903
BMR01-032-XP32-M		○	16	32	31	32	100	200	2	2	1,1	
BMR01-032-XP32-L		○	16	32	31	32	150	250	2	2	1,4	
BMR01-040-XP40-S		○	20	40	41	40	85	175	3	2	1,4	ZPNT2204 & SPMT1204
BMR01-040-XP40-M		○	20	40	41	40	100	200	3	2	1,7	
BMR01-040-XP40-L		○	20	40	41	40	150	250	3	2	2,1	
BMR01-050-XP40-S		○	25	50	45	40	100	200	3	2	1,8	
BMR01-050-XP40-M		○	25	50	45	40	100	300	3	2	2,8	
BMR01-063-XP40-S		○	31,5	63	52	40	100	200	4	2	3	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	ZDET08T2 & SPMT0603	ZDET1103 & SPMT0603	ZDET13T2 & SDMT0903	ZPNT2204 & SPMT1204
	ØD	20	25	32	40-63
	Vis (plaquette)	I43M2,5×5,7 (1,0 Nm)	I43M2,5×5,7 (1,0 Nm)	I43M4×8 (3,4 Nm)	I43M5×11 (6,7 Nm)
	Clé (plaquette)	WT07IP	WT07IP		
	Clé (plaquette)			WT15IS	WT20IS

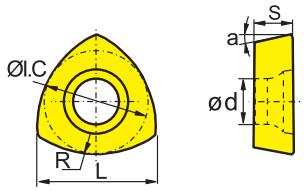


Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

ZDET	L	I.C	S	d
08 T2	8,4	6,75	2,78	2,8
11 03	10,6	8,5	3,18	2,8
13 T3	13,2	10,5	3,97	4,4
22 04	16,1	12,7	4,76	5,56

Plaquette de fraisage



Plaquette de fraisage ZD**			HC[1] (CVD)							HC[1] (PVD)								HT	HC[2]	HW	
		P																			
		M																			
		K																			
		N																			
		S																			
		H																			
ISO		R	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**ZDET13T3CYR16-PM**	16					○					○												
	**ZDET08T2CYR10**	10					○																	
	ZDET1103CYR12.5	12,5					○																	
	**ZPNT2204CY(R20)**	20					○																	
	ZPNT2204CY(R25)	25					●																	
	ZPNT2204CY(R31)	31,5					○																	

● En stock ○ Sur demande

HC[1] Carbure revêtu
HT Cermet non revêtu
HC[2] Cermet revêtu
HW Carbure non revêtu

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquette de fraisage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

SPMT	L	I.C	S	d
06 03	6,35	6,35	3,18	2,8
12 04	12,7	12,7	4,76	5,5

Plaquette de fraisage SP**			HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW	
		P																				
		M																				
		K																				
		N																				
		S																				
		H																				
ISO		r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	SPMT060304-KT			○																				
	SPMT060304	0,4					●											○						
	SPMT120408	0,8	○	●	○		●	○										○						

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Plaquette de fraisage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

SDMT	L	I.C	S	d
09 03	9,525	9,525	3,18	4,4

Plaquette de fraisage SD**			HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW	
		P																				
		M																				
		K																				
		N																				
		S																				
		H																				
ISO		r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	SDMT090308	0,8					●																	

● En stock ○ Sur demande

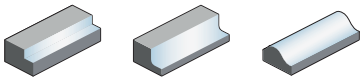
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

A Tournage
B Fraisage
C Perçage
D Informations techniques
E Index

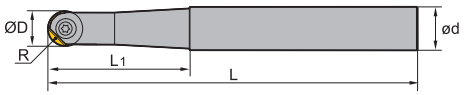
Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

Fraise de forme

BMR02







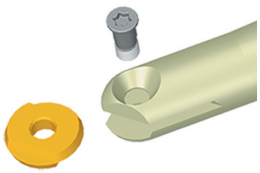
Article	✻	Stock	Dimensions (mm)					kg	Plaquettes
			R	ØD	ød	L_1	L		
BMR02-012-G16-S		●	6	12	16	40	110	0,1	ROHX1203
BMR02-012-G16-M		●	6	12	16	50	130	0,2	
BMR02-012-G16-L		●	6	12	16	50	160	0,2	
BMR02-016-G20-S		●	8	16	20	45	140	0,3	ROHX1604
BMR02-016-G20-M		●	8	16	20	65	170	0,3	
BMR02-016-G20-L		●	8	16	20	65	200	0,4	
BMR02-020-G25-S		●	10	20	25	60	160	0,5	ROHX2005
BMR02-020-G25-M		●	10	20	25	80	200	0,6	
BMR02-020-G25-L		●	10	20	25	80	240	0,8	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**ROHX1203**	**ROHX1604**	**ROHX2005**
	ØD	**12**	**16**	**20**
	Vis (plaquette)	I70M4×10TT (3,4 Nm)	I70M5×12TT (6,7 Nm)	I70M5×16TT (6,7 Nm)
	Clé (plaquette)	WT15IS	WT20IS	WT20IS

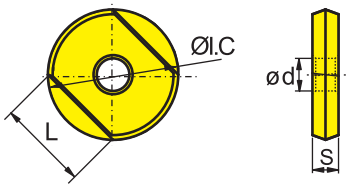


Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquette de fraisage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

ROHX	L	I.C	S	d
12 03	8,5	12	3	4
16 04	11,3	16	4	5
20 05	14,1	20	5	5



Plaquette positive RO**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P	●	●	●	●	●	●	●			●	●		●	●	●	●	●	●		
	M		●	●	●	●	●	●			●	●		●	●	●	●	●	●		
	K						●	●		●								●			●
	N								●												●
	S				●		●			●	●		●	●	●		●				
	H																				
	ISO	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**ROHX1203**									○	○							●					
	ROHX2005										○							●					
	ROHX1604										○							●					

● En stock ○ Sur demande

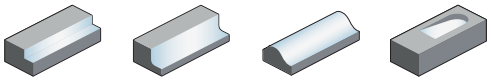
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

A Tournage
B Fraisage
C Perçage
D Informations techniques
E Index

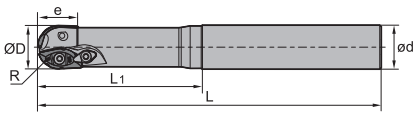
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise de forme

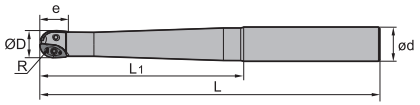
BMR03







A



B

Attachement cylindrique

Article	✻	Stock	Dimensions (mm) R	ØD	e	ød	L_1	L	Dents	Attachem.	kg	Plaquettes
BMR03-016-G20-S		●	8	16	16	20	70	150	2	B	0,3	XPHT16
BMR03-016-G20-M		●	8	16	16	20	80	180	2	B	0,4	
BMR03-020-G25-S		●	10	20	20	25	80	180	2	B	0,5	XPHT20
BMR03-020-G25-M		●	10	20	20	25	100	200	2	B	0,6	
BMR03-020-G25-L		●	10	20	20	25	150	250	2	B	0,7	
BMR03-020-G25-XL		○	10	20	20	25	110	300	2	B	1	
BMR03-025-G25-S		●	12,5	25	25	25	80	180	2	B	0,6	XPHT25
BMR03-025-G25-M		●	12,5	25	25	25	100	200	2	B	0,7	
BMR03-025-G25-L		○	12,5	25	25	25	110	250	2	B	0,8	
BMR03-025-G25-XL		○	12,5	25	25	25	120	300	2	B	1	
BMR03-030-G32-S		○	15	30	30	32	120	200	2	A	1	XPHT30
BMR03-030-G32-M		●	15	30	30	32	150	250	2	A	1,3	
BMR03-030-G32-L		○	15	30	30	32	200	300	2	A	1,6	
BMR03-032-G32-S		●	16	32	32	32	120	200	2	A	1,1	XPHT32
BMR03-032-G32-M		●	16	32	32	32	150	250	2	A	1,4	
BMR03-032-G32-L		●	16	32	32	32	200	300	2	A	1,6	
BMR03-032-G32-XL		○	16	32	32	32	200	350	2	A	2	
BMR03-040-G40-S		○	20	40	40	40	120	200	2	A	1,6	XPHT40
BMR03-040-G40-M		○	20	40	40	40	150	250	2	A	2	
BMR03-040-G40-L		●	20	40	40	40	200	300	2	A	2,5	

● En stock ○ Sur demande

✻ Avec arrosage interne

Codification > B26 Choix nuances > B24 Info. techniques > B527 Paramètres > B230

Pièces détachées

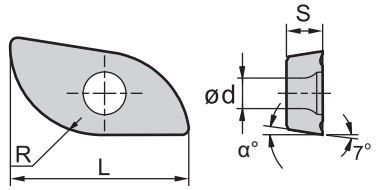
	Plaquette	XPHT16	XPHT20	XPHT25	XPHT30	XPHT32	XPHT40
	ØD	16	20	25	30	32	40
	Bride						CBH5R1
	Bride				WD-208	WD-208	
	Vis (bride)				I60M5×13 (6,7 Nm)	I60M5×13 (6,7 Nm)	I43M6×16 (9,1 Nm)
	Vis (plaquette)	I60M2,5×6,5 (1,0 Nm)		I60M4×10 (3,4 Nm)	I60M5×13 (6,7 Nm)	I60M5×13 (6,7 Nm)	I43M6×16 (9,1 Nm)
	Vis (plaquette)		I60M3,5×08TT (2,7 Nm)				
	Clé (bride)				WT20IT	WT20IT	WT25IT
	Clé (plaquette)		WT10IP				
	Clé (plaquette)				WT20IT	WT20IT	WT25IT
	Clé (plaquette)	WT07P					
	Clé (plaquette)			WT15S			



XPHT	L	S	d
16	16	3,18	3,1
20	20	3,97	4
25	25	4,76	4,7
30	30	6,35	5,8
32	32	6,35	5,8
40	40	7,94	6,8

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquette de fraisage



Plaquette de fraisage XP**				HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW	
			P																				
			M																				
			K																				
			N																				
			S																				
			H																				
ISO		R	α	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	XPHT16R0803-GM	8	9																●						
	XPHT20R10T3-GM	10	9																●						
	XPHT25R1204-GM	12,5	9																●						
	XPHT30R1506-GM	15	11																●						
	XPHT32R1606-GM	16	9																●						
	XPHT40R2007-GM	20	9																●						

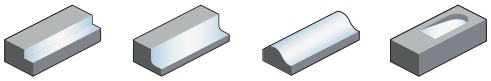
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

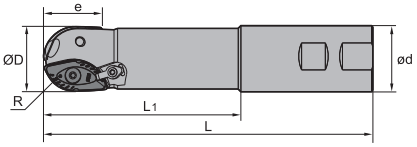
Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

Fraise de forme

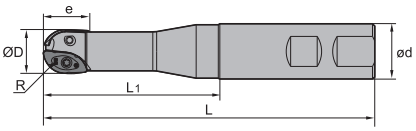
BMR03







A



B

Attachement Weldon

Article	✻	Stock	Dimensions (mm) R	ØD	e	ød	L_1	L	Dents	Attachem.	kg	Plaquettes
BMR03-016-XP20-M		●	8	16	16	20	60	111	2	B	0,2	XPHT16
BMR03-020-XP25-M		●	10	20	20	25	70	127	2	B	0,3	XPHT20
BMR03-020-XP25-L		●	10	20	20	25	80	150	2	B	0,4	
BMR03-025-XP25-M		●	12,5	25	25	25	80	137	2	B	0,4	XPHT25
BMR03-025-XP25-L		●	12,5	25	25	25	100	200	2	B	0,6	
BMR03-030-XP32-M		●	15	30	30	32	100	161	2	A	0,8	XPHT30
BMR03-030-XP32-L		●	15	30	30	32	150	250	2	A	1,3	
BMR03-032-XP32-M		●	16	32	32	32	100	161	2	A	0,8	XPHT32
BMR03-032-XP32-L		○	16	32	32	32	120	250	2	A	1,3	
BMR03-040-XP40-M		○	20	40	40	40	100	175	2	A	1,3	XPHT40
BMR03-040-XP40-L		●	20	40	40	40	120	250	2	A	2	
BMR03-050-XP50-M		○	25	50	50	50	100	200	2	A	2,5	XPHT50
BMR03-050-XP50-L		○	25	50	50	50	150	250	2	A	3,1	

● En stock ○ Sur demande

✻ Avec arrosage interne

Codification > B26 Choix nuances > B24 Info. techniques > B527 Paramètres > B230

Pièces détachées

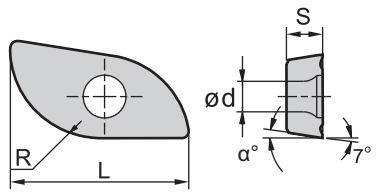
	Plaquette	XPHT16	XPHT20	XPHT25	XPHT30	XPHT32	XPHT40	XPHT50
	ØD	16	20	25	30	32	40	50
	Bride						CBH5R1	CBH5R1
	Bride				WD-208	WD-208		
	Vis (bride)				I60M5×13 (6,7 Nm)	I60M5×13 (6,7 Nm)	I43M6×16 (9,1 Nm)	I43M6×16 (9,1 Nm)
	Vis (plaquette)	I60M2,5×6,5 (1,0 Nm)		I60M4×10 (3,4 Nm)	I60M5×13 (6,7 Nm)	I60M5×13 (6,7 Nm)	I43M6×16 (9,1 Nm)	I43M8×21 (16,2 Nm)
	Vis (plaquette)		I60M3,5×08TT (2,7 Nm)					
	Clé (bride)				WT20IT	WT20IT	WT25IT	WT25IT
	Clé (plaquette)		WT10IP					
	Clé (plaquette)				WT20IT	WT20IT	WT25IT	WT30IT
	Clé (plaquette)	WT07P						
	Clé (plaquette)			WT15S				



XPHT	L	S	d
16	16	3,18	3,1
20	20	3,97	4
25	25	4,76	4,7
30	30	6,35	5,8
32	32	6,35	5,8
40	40	7,94	6,8
50	50	7,94	9,2

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquette de fraisage



Plaquette de fraisage XP**				HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW	
			P																				
			M																				
			K																				
			N																				
			S																				
			H																				
	ISO	R	α	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	XPHT16R0803-GM	8	9																●						
	XPHT20R10T3-GM	10	9																●						
	XPHT25R1204-GM	12,5	9																●						
	XPHT30R1506-GM	15	11																●						
	XPHT32R1606-GM	16	9																●						
	XPHT40R2007-GM	20	9																●						
	XPHT50R2507-GM	25	9																●						

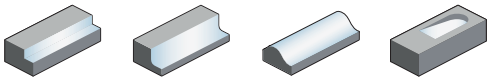
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

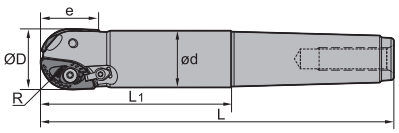
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise de forme

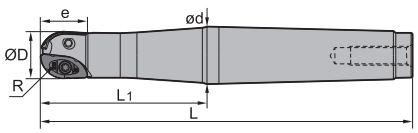
BMR03







A



B

Attachement cône morse

Article	✻	Stock	Dimensions (mm) R	ØD	e	ød	L_1	L	Dents	Attachem.	kg	Plaquettes
BMR03-020-MT3-M		○	10	20	20	18,7	70	156	2	B	0,4	XPHT20
BMR03-020-MT3-L		○	10	20	20	18,7	100	186	2	B	0,4	
BMR03-025-MT3-M		○	12,5	25	25	23,5	70	156	2	B	0,4	XPHT25
BMR03-025-MT3-L		○	12,5	25	25	23,5	100	186	2	B	0,4	
BMR03-030-MT4-M		○	15	30	30	28,2	70	189	2	A	0,8	XPHT30
BMR03-030-MT4-L		○	15	30	30	28,2	120	229	2	A	1	
BMR03-032-MT4-M		○	16	32	32	29,2	70	179	2	A	0,9	XPHT32
BMR03-032-MT4-L		●	16	32	32	29,2	100	209	2	A	0,9	
BMR03-040-MT5-L		○	20	40	40	36,9	90	226	2	A	1,8	XPHT40
BMR03-050-MT5-M		●	25	50	50	46,8	100	236	2	A	2,2	XPHT50
BMR03-050-MT5-L		○	25	50	50	46,8	150	286	2	A	2,9	

● En stock ○ Sur demande

✻ Avec arrosage interne

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Pièces détachées

	Plaquette	XPHT20	XPHT25	XPHT30	XPHT32	XPHT40	XPHT50
	ØD	20	25	30	32	40	50
	Bride					CBH5R1	CBH5R1
	Bride			WD-208	WD-208		
	Vis (bride)			I60M5×13 (6,7 Nm)	I60M5×13 (6,7 Nm)	I43M6×16 (9,1 Nm)	I43M6×16 (9,1 Nm)
	Vis (plaquette)		I60M4×10 (3,4 Nm)	I60M5×13 (6,7 Nm)	I60M5×13 (6,7 Nm)	I43M6×16 (9,1 Nm)	I43M8×21 (16,2 Nm)
	Vis (plaquette)	I60M3,5×08TT (2,7 Nm)					
	Clé (bride)			WT20IT	WT20IT	WT25IT	WT25IT
	Clé (plaquette)	WT10IP					
	Clé (plaquette)			WT20IT	WT20IT	WT25IT	WT30IT
	Clé (plaquette)		WT15S				

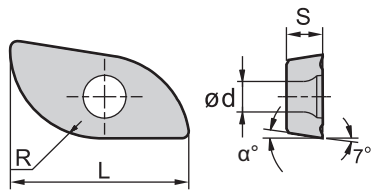


XPHT	L	S	d
20	20	3,97	4
25	25	4,76	4,7
30	30	6,35	5,8
32	32	6,35	5,8
40	40	7,94	6,8
50	50	7,94	9,2

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquette de fraisage

Plaquette de fraisage XP**



	ISO	R	α	HC¹ (CVD)							HC¹ (PVD)									HT		HC²		HW	
P																									
M																									
K																									
N																									
S																									
H																									
				YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201		
	XPHT20R10T3-GM	10	9																●						
	XPHT25R1204-GM	12,5	9																●						
	XPHT30R1506-GM	15	11																●						
	XPHT32R1606-GM	16	9																●						
	XPHT40R2007-GM	20	9																●						
	XPHT50R2507-GM	25	9																●						

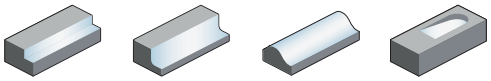
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

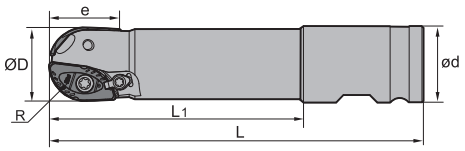
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise de forme

BMR03







Attachement combiné

Article	✻	Stock	Dimensions (mm)						Dents	kg	Plaquettes
			R	ØD	e	ød	L_1	L			
BMR03-040-XPX-M		○	20	40	40	50,8	170	250	2	1,3	XPHT40
BMR03-040-XPX-L		○	20	40	40	50,8	220	300	2	3,1	
BMR03-040-XPX-XL		○	20	40	40	50,8	270	350	2	3,5	
BMR03-050-XPX-M		○	25	50	50	50,8	170	250	2	3,1	XPHT50
BMR03-050-XPX-L		○	25	50	50	50,8	200	300	2	3,8	
BMR03-050-XPX-XL		○	25	50	50	50,8	270	350	2	4,4	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	XPHT40	XPHT50
	ØD	40	50
	Bride	CBH5R1	CBH5R1
	Vis (bride)	I43M6×16 (9,1 Nm)	I43M6×16 (9,1 Nm)
	Vis (plaquette)	I43M6×16 (9,1 Nm)	I43M8×21 (16,2 Nm)
	Clé (bride)	WT25IT	WT25IT
	Clé (plaquette)	WT25IT	WT30IT

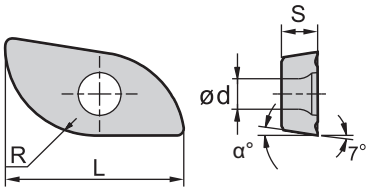


Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

XPHT	L	S	d
40	40	7,94	6,8
50	50	7,94	9,2

Plaquette de fraisage



Plaquette de fraisage XP**				HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW	
			P																				
			M																				
			K																				
			N																				
			S																				
			H																				
ISO		R	α	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**XPHT40R2007-GM**	20	9																●						
	XPHT50R2507-GM	25	9																●						

● En stock ○ Sur demande

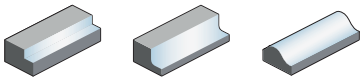
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

A Tournage
B Fraisage
C Perçage
D Informations techniques
E Index

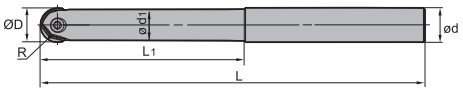
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise de forme

BMR04







Attachement cylindrique

Article	✻	Stock	Dimensions (mm)						kg	Plaquettes
			R	ØD	ød	Ød1	L_1	L		
BMR04-012-G12-M		●	6	12	12	11	35	125	0,1	ZOHX12
BMR04-012-G12-L		●	6	12	12	11	45	150	0,1	
BMR04-016-G16-M		●	8	16	16	14	40	150	0,2	ZOHX16
BMR04-016-G16-L		●	8	16	16	14	55	180	0,3	
BMR04-020-G20-M		●	10	20	20	18	65	180	0,4	ZOHX20
BMR04-020-G20-L		●	10	20	20	18	100	250	0,6	
BMR04-025-G25-M		●	12,5	25	25	23	70	200	0,7	ZOHX25
BMR04-025-G25-L		●	12,5	25	25	23	100	250	0,9	
BMR04-030-G32-M		●	15	30	32	27	80	250	1,2	ZOHX30
BMR04-030-G32-L		●	15	30	32	27	110	300	1,5	
BMR04-032-G32-M		●	16	32	32	29	80	250	1,4	ZOHX32
BMR04-032-G32-L		●	16	32	32	29	110	300	1,7	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

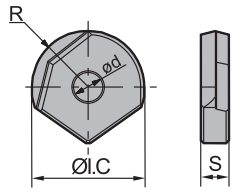
	Plaquette	**ZOHX12**	**ZOHX16**	**ZOHX20**	**ZOHX25**	**ZOHX30**	**ZOHX32**	
	ØD	**12**	**16**	**20**	**25**	**30**	**32**	
	Vis (plaquette)	I70M4×10TT (3,4 Nm)	I70M5×12TT (6,7 Nm)	I70M5×16TT (6,7 Nm)	I70M6×20TT (9,1 Nm)	I70M8×25TT (16,2 Nm)	I70M8×25TT (16,2 Nm)	
	Clé (plaquette)	WT15IP	WT20IP	WT20IP	WT20IP			
	Clé (plaquette)					WT30IT	WT30IT	

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

ZOHX	I.C	S	d
12	12	1,5	4
16	16	4	5
20	20	5	5
25	25	6	6
30	30	7	8
32	32	7	8

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

Plaquette de fraisage

Plaquette de fraisage ZO**			HC[1] (CVD)							HC[1] (PVD)									HT	HC[2]	HW	
		**P**																				
		M																				
		K																				
		N																				
		S																				
		H																				
ISO		R	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**ZOHX1203-GF**	6																		●				
	ZOHX1604-GF	8																		●				
	ZOHX2005-GF	10																		●				
	ZOHX2506-GF	12,5																		○				
	ZOHX3007-GF	15																		●				
	ZOHX3207-GF	16																		●				
	**ZOHX1203-GM**	6																		●				
	ZOHX1604-GM	8																		●				
	ZOHX2005-GM	10																		●				
	ZOHX2506-GM	12,5																		○				
	ZOHX3007-GM	15																		●				
	ZOHX3207-GM	16																		●				

● En stock ○ Sur demande

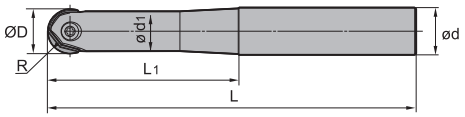
HC[1] Carbure revêtu
HT Cermet non revêtu
HC[2] Cermet revêtu
HW Carbure non revêtu

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise de forme

BMR04





Attachement cylindrique

Article	✻	Stock	Dimensions (mm)						kg	Plaquettes
			R	ØD	ød	Ød1	L_1	L		
BMR04-012-G16-M		●	6	12	16	11	50	125	0,2	ZOHX12
BMR04-012-G16-L		●	6	12	16	11	70	150	0,2	
BMR04-016-G20-M		●	8	16	20	14	60	150	0,3	ZOHX16
BMR04-016-G20-L		●	8	16	20	14	80	180	0,3	
BMR04-020-G25-M		●	10	20	25	18	75	180	0,6	ZOHX20
BMR04-020-G25-L		●	10	20	25	18	95	200	0,6	
BMR04-025-G32-M		●	12,5	25	32	23	90	200	1	ZOHX25
BMR04-025-G32-L		●	12,5	25	32	23	110	250	1,3	
BMR04-030-G40-M		●	15	30	40	27	110	250	2	ZOHX30
BMR04-032-G40-L		●	16	32	40	29	125	300	2,4	ZOHX32

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

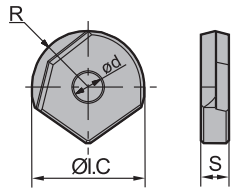
	Plaquette	ZOHX12	ZOHX16	ZOHX20	ZOHX25	ZOHX30	ZOHX32	
	ØD	12	16	20	25	30	32	
	Vis (plaquette)	I70M4×10TT (3,4 Nm)	I70M5×12TT (6,7 Nm)	I70M5×16TT (6,7 Nm)	I70M6×20TT (9,1 Nm)	I70M8×25TT (16,2 Nm)	I70M8×25TT (16,2 Nm)	
	Clé (plaquette)	WT15IP	WT20IP	WT20IP	WT20IP			
	Clé (plaquette)					WT30IT	WT30IT	

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

ZOHX	I.C	S	d
12	12	1,5	4
16	16	4	5
20	20	5	5
25	25	6	6
30	30	7	8
32	32	7	8

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquette de fraisage

Plaquette de fraisage ZO**			HC[1] (CVD)							HC[1] (PVD)									HT	HC[2]	HW	
		P																				
		M																				
		K																				
		N																				
		S																				
		H																				
ISO		R	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**ZOHX1203-GF**	6																		●				
	ZOHX1604-GF	8																		●				
	ZOHX2005-GF	10																		●				
	ZOHX2506-GF	12,5																		○				
	ZOHX3007-GF	15																		●				
	ZOHX3207-GF	16																		●				
	**ZOHX1203-GM**	6																		●				
	ZOHX1604-GM	8																		●				
	ZOHX2005-GM	10																		●				
	ZOHX2506-GM	12,5																		○				
	ZOHX3007-GM	15																		●				
	ZOHX3207-GM	16																		●				

● En stock ○ Sur demande

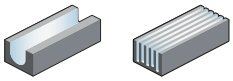
HC[1] Carbure revêtu
HT Cermet non revêtu
HC[2] Cermet revêtu
HW Carbure non revêtu

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

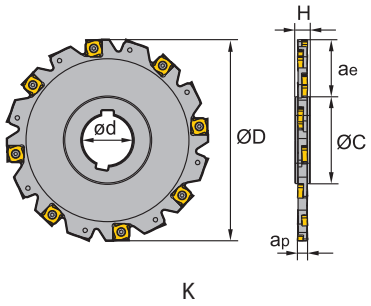
Notes

Fraise-disque

SMP01 Kr: 90°







K

Article	✻	Stock	Dimensions (mm)						Attachem.	kg	Plaquettes
			ØD	ød	Øc	H	a_p	$a_{e\ max}$			
SMP01-100x4-K27-SN12-10		○	100	27	45	12	4	25	K	0,2	
SMP01-125x4-K40-SN12-12		○	125	40	56	12	4	32	K	0,3	XSEQ1202
SMP01-160x4-K40-SN12-16		●	160	40	67	12	4	44	K	0,5	
SMP01-100x5-K27-SN12-10		○	100	27	45	12	5	25	K	0,2	
SMP01-125x5-K40-SN12-12		○	125	40	56	12	5	32	K	0,3	XSEQ1203
SMP01-160x5-K40-SN12-16		○	160	40	67	12	5	44	K	0,6	
SMP01-100x7-K27-SN12-10		○	100	27	45	12	7	25	K	0,3	
SMP01-125x7-K40-SN12-12		○	125	40	56	12	7	32	K	0,4	
SMP01-160x7-K40-SN12-16		○	160	40	67	12	7	44	K	0,8	XSEQ1204
SMP01-200x7-K50-SN12-18		○	200	50	71	12	7	62	K	1,2	
SMP01-250x7-K50-SN12-24		○	250	50	71	12	7	87	K	1,9	
SMP01-100x6-K27-SN12-10		○	100	27	45	12	6	25	K	0,3	
SMP01-125x6-K40-SN12-12		○	125	40	56	12	6	32	K	0,4	
SMP01-160x6-K40-SN12-16		○	160	40	67	12	6	44	K	0,7	XSEQ12T3
SMP01-200x6-K50-SN12-18		○	200	50	71	12	6	62	K	1,1	
SMP01-250x6-K50-SN12-24		○	250	50	71	12	6	87	K	1,7	
SMP01-315x6-K50-SN12-32		○	315	50	72	11,15	6	119,6	K	2,9	
SMP01-100x8-K27-SN12-10		○	100	27	45	12	8	25	K	0,3	
SMP01-125x8-K40-SN12-12		○	125	40	56	12	8	32	K	0,5	
SMP01-160x8-K40-SN12-16		○	160	40	67	12	8	44	K	0,9	XSEQ12T4
SMP01-200x8-K50-SN12-18		○	200	50	71	12	8	62	K	1,4	
SMP01-250x8-K50-SN12-24		○	250	50	71	12	8	87	K	2,2	

● En stock ○ Sur demande

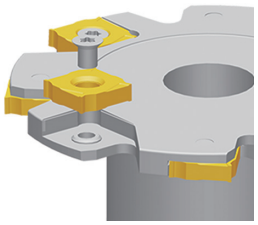
✻ Avec arrosage interne

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquettes de fraisage Fraise-disque

Pièces détachées

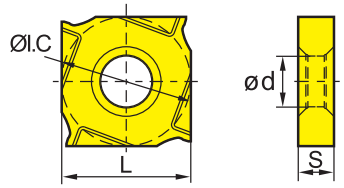
	Plaquette	XSEQ1202	XSEQ1203	XSEQ1204	XSEQ12T3	XSEQ12T4
	ØD	63-160	63-160	63-250	63-360	63-250
	Vis (plaquette)	I91M4×3,2X (3,4 Nm)	I91M4×3,2X (3,4 Nm)	I91M4×6,1X (3,4 Nm)	I91M4×5,1X (3,4 Nm)	I91M4×7,1X (3,4 Nm)
	Clé (plaquette)	WT08IP	WT08IP	WT08IP	WT08IP	WT08IP



XSEQ	L	I.C	S	d
12 02	12,7	12,7	2,3	5
12 03	12,7	12,7	3	5
12 T3	12,7	12,7	3,5	5
12 04	12,7	12,7	4	5
12 T4	12,7	12,7	4,5	5

Plaquette de fraisage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquette de fraisage XS**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P																			
	M																			
	K																			
	N																			
	S																			
	H																			
ISO		YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	XSEQ1202																○						
	XSEQ1203	○			●												●						
	XSEQ1204																●						
	XSEQ12T3		●														●					○	
	XSEQ12T4																●						

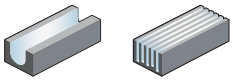
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

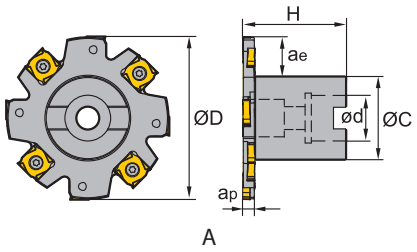
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

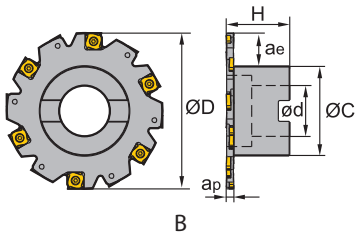
Fraise-disque

SMP01 Kr: 90°









Article	✻	Stock	Dimensions (mm)						Dents	Attachem.	kg	Plaquettes
			ØD	ød	Øc	H	a_p	$a_{e\,max}$				
SMP01-063x4-A22-SN12-06		○	63	22	32	40	4	14	6	A	0,2	
SMP01-080x4-A22-SN12-08		○	80	22	40	40	4	18	8	A	0,4	XSEQ1202
SMP01-100x4-A27-SN12-10		○	100	27	48	50	4	23	10	A	0,6	
SMP01-063x5-A22-SN12-06		○	63	22	32	40	5	14	6	A	0,2	
SMP01-080x5-A22-SN12-08		○	80	22	40	40	5	18	8	A	0,4	XSEQ1203
SMP01-100x5-A27-SN12-10		○	100	27	48	50	5	23	10	A	0,7	
SMP01-063x7-A22-SN12-06		○	63	22	32	40	7	14	6	A	0,2	
SMP01-080x7-A22-SN12-08		○	80	22	40	40	7	18	8	A	0,5	
SMP01-100x7-A27-SN12-10		○	100	27	48	50	7	23	10	A	0,7	XSEQ1204
SMP01-125x7-B40-SN12-12		○	125	40	72	50	7	23	12	B	1,1	
SMP01-160x7-B40-SN12-16		○	160	40	70	60	7	41	16	B	1,4	
SMP01-063x6-A22-SN12-06		○	63	22	32	40	6	14	6	A	0,2	
SMP01-080x6-A22-SN12-08		○	80	22	40	40	6	18	8	A	0,5	
SMP01-100x6-A27-SN12-10		○	100	27	48	50	6	23	10	A	0,7	XSEQ12T3
SMP01-125x6-B40-SN12-12		○	125	40	72	50	6	23	12	B	1	
SMP01-160x6-B40-SN12-16		○	160	40	70	60	6	41	16	B	1,3	
SMP01-063x8-A22-SN12-06		○	63	22	32	40	8	14	6	A	0,2	
SMP01-080x8-A22-SN12-08		○	80	22	40	40	8	18	8	A	0,5	
SMP01-100x8-A27-SN12-10		○	100	27	48	50	8	23	10	A	0,8	XSEQ12T4
SMP01-125x8-B40-SN12-12		○	125	40	72	50	8	23	12	B	1,1	
SMP01-160x8-B40-SN12-16		○	160	40	70	60	8	41	16	B	1,5	

● En stock ○ Sur demande

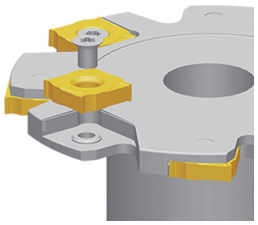
✻ Avec arrosage interne

Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

Plaquettes de fraisage Fraise-disque

Pièces détachées

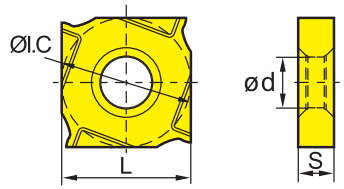
	Plaquette	XSEQ1202	XSEQ1203	XSEQ1204	XSEQ12T3	XSEQ12T4
	ØD	63-160	63-160	63-250	63-250	63-250
	Vis (plaquette)	I91M4×3,2X (3,4 Nm)	I91M4×3,2X (3,4 Nm)	I91M4×6,1X (3,4 Nm)	I91M4×5,1X (3,4 Nm)	I91M4×7,1X (3,4 Nm)
	Clé (plaquette)	WT08IP	WT08IP	WT08IP	WT08IP	WT08IP



XSEQ	L	I.C	S	d
12 02	12,7	12,7	2,3	5
12 03	12,7	12,7	3	5
12 T3	12,7	12,7	3,5	5
12 04	12,7	12,7	4	5
12 T4	12,7	12,7	4,5	5

Plaquette de fraisage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquette de fraisage XS**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P																			
	M																			
	K																			
	N																			
	S																			
	H																			
ISO		YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	XSEQ1202																○						
	XSEQ1203	○			●												●						
	XSEQ1204																●						
	XSEQ12T3		●														●					○	
	XSEQ12T4																●						

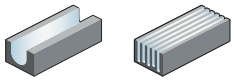
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

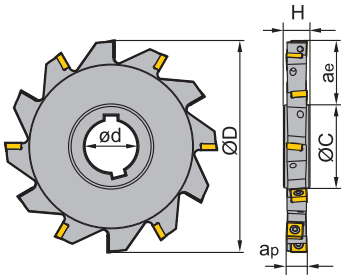
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise-disque

SMP03 Kr: 90°







K

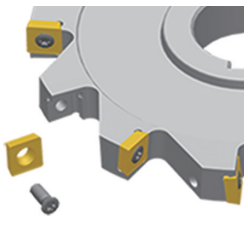
Article	✻	Stock	Dimensions (mm)						Dents	Attachem.	kg	Plaquettes
			ØD	ød	Øc	H	a_p	$a_{e\,max}$				
SMP03-080x8-K27-MP06-10		○	80	27	44	12	8	17,6	10	K	0,2	MPHT0603
SMP03-100x8-K32-MP06-14		○	100	32	49	12	8	25,1	14	K	0,3	
SMP03-100x10-K32-MP06-14		○	100	32	49	14	10	25,1	14	K	0,4	
SMP03-125x10-K40-MP06-16		○	125	40	57	14	10	33,6	16	K	0,6	
SMP03-125x12-K40-MP08-12		○	125	40	58,3	16	12	32,6	12	K	0,7	MPHT0803
SMP03-160x12-K40-MP08-14		○	160	40	64,3	16	12	31,5	14	K	1,3	
SMP03-160x16-K40-MP12-12		○	160	40	64,6	20	16	47,6	12	K	1,6	MPHT1204
SMP03-160x18-K40-MP12-12		○	160	40	65,3	24	18	47,3	12	K	1,9	
SMP03-160x20-K40-MP12-12		○	160	40	65,3	26	20	47,3	12	K	2,1	
SMP03-200x16-K50-MP12-14		○	200	50	74,6	20	16	62,6	14	K	2,5	
SMP03-200x18-K50-MP12-14		○	200	50	75,3	24	18	62,3	14	K	2,9	
SMP03-200x20-K50-MP12-14		○	200	50	75,3	26	20	62,3	14	K	3,3	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**MPHT0603**	**MPHT0803**	**MPHT1204**
	ØD	**80-125**	**125 -160**	**160-200**
	Vis (plaquette)	I60M2,5×6,5 (1,0 Nm)	I60M3×7 (1,8 Nm)	I60M5×13 (6,7 Nm)
	Clé (plaquette)	WT07IP	WT09IP	
	Clé (plaquette)			WT20IS

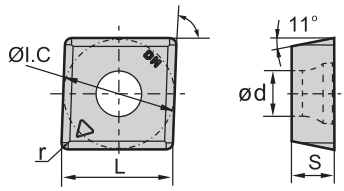


Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

MPHT	L	I.C	S	d
06 03	6,35	6,35	3,18	2,8
08 03	8,3	8,3	3,18	3,4
12 04	12,7	12,7	4,76	5,56



Plaquette de fraisage MP**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
P		●	●	●	●	●	●		●		●	●		●	●	●	●	●		
M			●	●	●	●	●				●	●		●	●	●	●	●		
K								●	●	●							●			●
N									●											●
S				●		●				●	●		●	●	●	●				
H																				
ISO	r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
MPHT060304-DM	0,4	●				●											●						
MPHT080305-DM	0,5	●				○											●						
MPHT120408-DM	0,8	●				○		●									●						

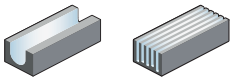
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

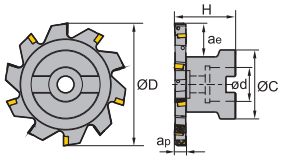
Codification > B26 Choix nuances > B24 Info. techniques > B527 Paramètres > B230

Fraise-disque

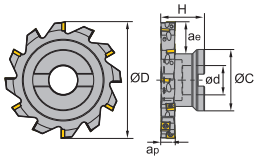
SMP03 Kr: 90°



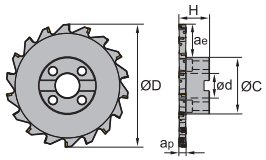




A



B



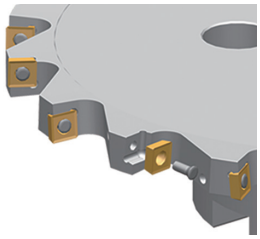
C

Article	✻	Stock	Dimensions (mm)						Dents	Attachem.	kg	Plaquettes
			ØD	ød	Øc	H	a_p	$a_{e\,max}$				
SMP03-080x8-A22-MP06-10		○	80	22	45	40	8	21	10	A	0,4	MPHT0603
SMP03-100x8-B27-MP06-14		○	100	27	55	40	8	24,5	14	B	0,6	
SMP03-100x10-B27-MP06-14		●	100	27	55	40	10	24,5	14	B	0,7	
SMP03-125x10-B32-MP06-16		○	125	32	65	45	10	33,3	16	B	1,1	
SMP03-125x12-B32-MP08-12		○	125	32	65	45	12	33	12	B	1,4	MPHT0803
SMP03-160x12-B40-MP08-14		○	160	40	80	50	12	44	14	B	1,9	
SMP03-200x12-C40-MP08-18		○	200	40	92	50	12	52	18	C	3,2	
SMP03-125x16-B32-MP12-10		○	125	32	65	50	16	33	10	B	2,3	MPHT1204
SMP03-160x16-B40-MP12-12		○	160	40	80	60	16	45	12	B	2,3	
SMP03-160x18-B40-MP12-12		○	160	40	80	60	18	45	12	B	2,4	
SMP03-200x16-C40-MP12-14		○	200	40	92	50	16	52	14	C	3,6	
SMP03-200x18-C40-MP12-14		○	200	40	92	50	18	52	14	C	3,9	
SMP03-200x20-C40-MP12-14		○	200	40	92	50	20	52	14	C	4,2	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

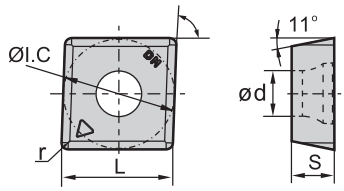
	Plaquette	**MPHT0603**	**MPHT0803**	**MPHT1204**	
	ØD	**80-125**	**125 -200**	**125 -200**	
	Vis (plaquette)	I60M2,5×6,5 (1,0 Nm)	I60M3×7 (1,8 Nm)	I60M5×13 (6,7 Nm)	
	Clé (plaquette)	WT07IP	WT09IP		
	Clé (plaquette)			WT20IS	

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

MPHT	L	I.C	S	d
06 03	6,35	6,35	3,18	2,8
08 03	8,3	8,3	3,18	3,4
12 04	12,7	12,7	4,76	5,56



Plaquette de fraisage MP**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
P		●	●	●	●	●	●		●		●	●		●	●	●	●	●		
M			●	●	●	●	●				●	●		●	●	●	●	○	○	
K							●	●		●							●			●
N									●											●
S				●		●				○	●		●	●	●		●			
H																				
ISO	r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	MPHT060304-DM	0,4	●				●										●						
	MPHT080305-DM	0,5	●				○										●						
	MPHT120408-DM	0,8	●				○		●								●						

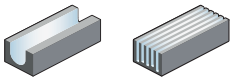
● En stock ○ Sur demande

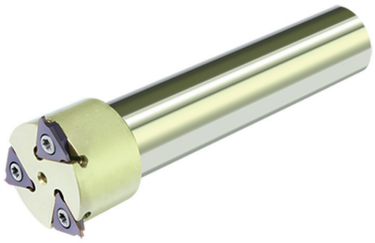
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

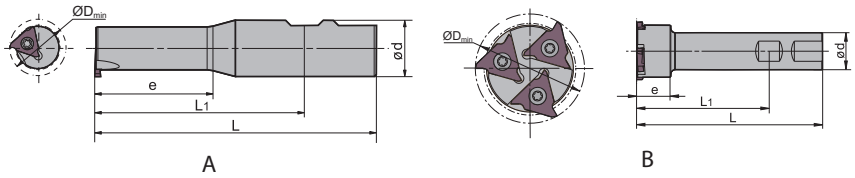
Codification > B26 Choix nuances > B24 Info. techniques > B527 Paramètres > B230

Fraise-disque

SMP05 Kr: 90°





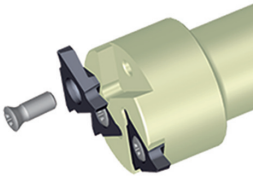


Article	✻	Stock	Dimensions (mm)					Dents	Attachem.	Plaquettes
			e	ØDmin	ød	L_1	L			
SMP05-025x3.0-XP25-QC16-01		●	40	25	25	89	125	1	A	QC16L
SMP05-039x3.0-XP25-QC16-03		●	23	39	25	89	125	3	B	
SMP05-044x4.8-XP25-QC22-03		●	23	44	25	89	125	3	B	QC22L

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**QC16L**	**QC16L**	**QC22L**	
	ØD	**25**	**39**	**44**	
	Vis (plaquette)	I60M3,5×10 (2,7 Nm)	I60M3,5×10 (2,7 Nm)	I60M5×13 (6,7 Nm)	
	Clé (plaquette)	WT15IP	WT15IP	WT20IP	

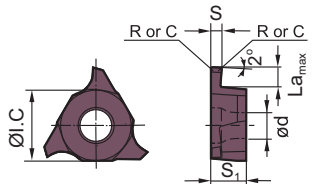
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

QC16	I.C	d
16	9,525	4,4
22	12,7	5,5

Plaquette de tournage/fraisage QC**



	HC¹ (CVD)								HC¹ (PVD)									HT		HC²		HW	
P	●	●	◉	●	●	●		●			◉	◉		●	●	●	●	●	●	●			
M		◉	◉	●	●	●					◉	◉		●	●	●	◉	●	●	●			
K							◉	◉		●								●				◉	
N									◉													◉	◉
S				◉		◉				●	●		◉	◉	●		◉						
H																							

ISO		S±0.025	La_{max}	R/C	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	QC16L075-R01	0,75	2	0.1														○								
	QC16L095-R01	0,95	2	0.1														○								
	QC16L100-R01	1	2	0.1														○								
	QC16L110-R01	1,1	2	0.1											○			●								
	QC16L120-R01	1,2	2	0.1														○								
	QC16L125-R02	1,25	2	0.2														●								
	QC16L130-R02	1,3	2	0.2														○								
	QC16L145-R02	1,45	2	0.2														●								
	QC16L150-R02	1,5	2	0.2														○								
	QC16L160-R02	1,6	2	0.2														●								
	QC16L165-R02	1,65	2	0.2														○								
	QC16L170-R02	1,7	2	0.2														○								
	QC16L175-R02	1,75	2	0.2														○								
	QC16L185-R02	1,85	2,5	0.2														○								
	QC16L200-R02	2	2,5	0.2														●								
	QC16L210-R02	2,1	2,5	0.2														○								
	QC16L210-R05	2,1	2,5	0.5														○								
	QC16L220-R02	2,2	2,5	0.2														○								
	QC16L250-R02	2,5	2,5	0.2														●								
	QC16L300-R02	3	3	0.2														●								

● En stock ○ Sur demande

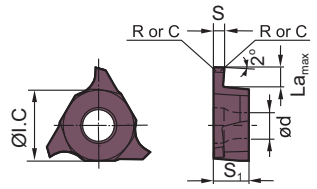
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

QC16	I.C	d
16	9,525	4,4
22	12,7	5,5



Plaquette de tournage/fraisage QC**					HC¹ (CVD)								HC¹ (PVD)										HT		HC²		HW	
				P																								
				M																								
				K																								
				N																								
				S																								
				H																								
	ISO	S±0.025	La_{max}	R/C	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201		
	QC22L100-R02	1	2	0.2														○										
	QC22L125-R02	1,25	2	0.2														○										
	QC22L145-R02	1,45	2	0.2														○										
	QC22L150-R02	1,5	3,5	0.2														○										
	QC22L175-R02	1,75	3,5	0.2														○										
	QC22L185-R02	1,85	3,5	0.2														○										
	QC22L200-R02	2	3,5	0.2														○										
	QC22L230-R02	2,3	3,5	0.2														○										
	**QC22L250-R03**	2,5	4	0.3														○										
	QC22L265-R03	2,65	4	0.3														●										
	QC22L280-R03	2,8	4	0.3														○										
	QC22L300-R03	3	4	0.3														○										
	QC22L320-R03	3,2	4	0.3														○										
	QC22L330-R03	3,3	4	0.3														○										
	QC22L350-R03	3,5	5	0.3														○										
	QC22L400-R04	4	5	0.4														●										
	QC22L430-R04	4,3	5	0.4											○			○										
	QC22L450-R04	4,5	5	0.4														○								○		
	QC22L480-R04	4,8	5	0.4														○										

● En stock ○ Sur demande

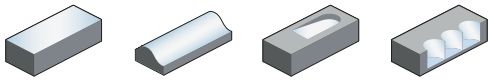
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

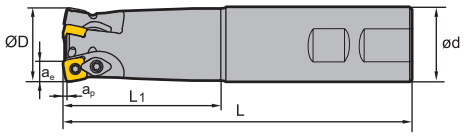
Notes

Fraise grande avance

XMR01 Kr: 15°







Plaquette de type S, attachement Weldon

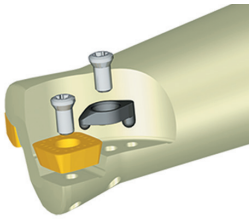
Article	✲	Stock	Dimensions (mm) ØD	ød	a_p	ae	L_1	L	Dents	kg	Plaquettes
XMR01-020-XP20-SD06-04C	✲	○	20	20	0,8	5,8	50	130	4	0,24	SDMT06T2
XMR01-025-XP25-SD06-03C	✲	○	25	25	0,8	5,8	60	140	3	0,46	
XMR01-025-XP25-SD06-05C	✲	○	25	25	0,8	5,8	60	140	5	0,44	
XMR01-032-XP32-SD06-06C	✲	○	32	32	0,8	5,8	70	150	6		
XMR01-025-XP25-SD09-02		○	25	25	1,4	8,8	60	140	2	0,5	SDMT09T3
XMR01-032-XP32-SD09-03C	✲	○	32	32	1,4	8,8	70	150	3	0,8	
XMR01-035-XP32-SD09-03		○	35	32	1,4	8,8	70	150	3	0,8	
XMR01-040-XP40-SD12-03		○	40	40	1,8	11,7	70	150	3	1,3	SDMT1204
XMR01-040-XP40-SD12-03C	✲	○	40	40	1,8	11,7	70	150	3	1,2	
XMR01-040-XP40-SD15-02		○	40	40	2,2	14	70	200	2	1,6	SDMT1505

● En stock ○ Sur demande

✲ Avec arrosage interne

Pièces détachées

	Plaquette	**SDMT06T2**	**SDMT09T3**	**SDMT1204**	**SDMT1505**
	ØD	**20-63**	**25-63**	**32-100**	**40-160**
	Bride		WD-204	WD-204	WD-208
	Vis (bride)		I60M4×8,4 (3,4 Nm)	I60M4×8,4 (3,4 Nm)	I60M5×13 (6,7 Nm)
	Vis (plaquette)	I60M2,2×5,5 (0,8 Nm)		I60M4×8,4 (3,4 Nm)	I60M5×13 (6,7 Nm)
	Vis (plaquette)		I60M3,5×08TT (2,7 Nm)		
	Clé (bride)		WT15IP	WT15IP	WT20IP
	Clé (plaquette)	WT07IP	WT10IP	WT15IP	WT20IP



Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

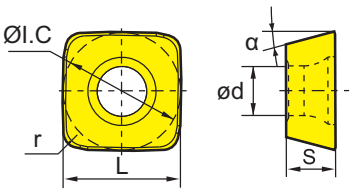
Plaquettes de fraisage

Fraise grande avance

SDMT	L	I.C	S	d
06 T2	6,35	6,35	2,58	5,5
09 T3	9,525	9,525	3,97	4
12 04	12,7	12,7	4,76	4,4
15 05	15,875	15,875	5,56	5,5

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquette de fraisage

Plaquette de fraisage SD**				HC¹ (CVD)								HC¹ (PVD)								HT	HC²	HW	
			P																				
			M																				
			K																				
			N																				
			S																				
			H																				
ISO		r	α	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	SDMT06T208-DM	0,8	15						○					○		○				○					
	SDMT09T312-DM	1,2	15	●					●		○			○	○				●						
	SDMT120412-DM	1,2	15	●					●		●			○	○										
	SDMT150520-DM	2	15											○											
	SDMT09T312-NM						●								○	●				●					
	SDMT120412-NM						●								○	●		●		●					
	SDMT06T208-PM	0,8	15	●			●									○	●			○					
	SDMT09T312-PM	1,2	15				●				○			○			●								
	SDMT120412-PM	1,2	15				●							○			●								
	SDMT150520-PM	2	15				○										○								

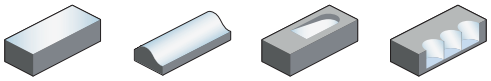
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

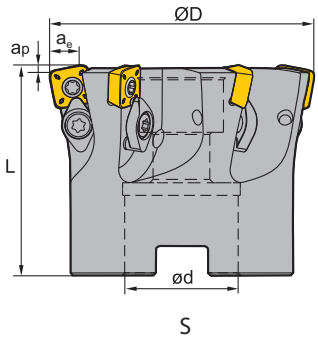
Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

Fraise grande avance

XMR01 Kr: 15°







Article	✻	Stock	Dimensions (mm) ØD	ød	a_p	ae	L	Dents	Attachem.	kg	Plaquettes
XMR01-040-A16-SD06-07C	✻	○	40	16	0,8	5,8	40	7	A	0,178	
XMR01-050-A22-SD06-07C	✻	○	50	22	0,8	5,8	40	7	A	0,36	
XMR01-050-A22-SD06-08C	✻	○	50	22	0,8	5,8	40	8	A	0,36	SDMT06T2
XMR01-063-A22-SD06-10C	✻	○	63	22	0,8	5,8	40	10	A	0,53	
XMR01-063-A27-SD06-10C	✻	○	63	27	0,8	5,8	50	10	A	0,57	
XMR01-040-A16-SD09-04		○	40	16	1,4	8,8	40	4	A	0,182	
XMR01-040-A16-SD09-04C	✻	○	40	16	1,4	8,8	40	4	A	0,182	
XMR01-040-A16-SD09-05		○	40	16	1,4	8,8	40	5	A	0,181	
XMR01-050-A22-SD09-04C	✻	●	50	22	1,4	8,8	40	4	A	0,3	
XMR01-050-A22-SD09-05C	✻	○	50	22	1,4	8,8	40	5	A	0,3	SDMT09T3
XMR01-063-A22-SD09-06C	✻	●	63	22	1,4	8,8	40	6	A	0,5	
XMR01-063-A27-SD09-06C	✻	○	63	27	1,4	8,8	50	6	A	0,6	
XMR01-063-A22-SD09-07C	✻	●	63	22	1,4	8,8	40	7	A	0,44	
XMR01-063-A27-SD09-07C	✻	○	63	27	1,4	8,8	50	7	A		
XMR01-050-A22-SD12-03C	✻	○	50	22	1,8	11,7	40	3	A		
XMR01-050-A22-SD12-04C	✻	●	50	22	1,8	11,7	40	4	A		
XMR01-052-A22-SD12-04C	✻	○	52	22	1,8	11,7	40	4	A		
XMR01-052-A22-SD12-05C	✻	○	52	22	1,8	11,7	40	5	A		
XMR01-063-A22-SD12-05C	✻	●	63	22	1,8	11,7	40	5	A	0,5	
XMR01-063-A27-SD12-05C	✻	●	63	27	1,8	11,7	50	5	A	0,6	
XMR01-063-A22-SD12-06C	✻	●	63	22	1,8	11,7	50	6	A	0,55	
XMR01-066-A27-SD12-05C	✻	○	66	27	1,8	11,7	50	5	A	0,56	SDMT1204
XMR01-080-A27-SD12-05C	✻	●	80	27	1,8	11,7	63	5	A	0,9	
XMR01-080-A27-SD12-06C	✻	●	80	27	1,8	11,7	50	6	A	0,9	
XMR01-080-A27-SD12-07C	✻	●	80	27	1,8	11,7	50	7	A	0,93	
XMR01-080-A27-SD12-08C	✻	●	80	27	1,8	11,7	50	8	A	0,92	
XMR01-100-B32-SD12-06		●	100	32	1,8	11,7	50	6	B	1,8	
XMR01-100-B32-SD12-06C	✻	●	100	32	1,8	11,7	50	6	B	1,8	

● En stock ○ Sur demande

✻ Avec arrosage interne

Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

Plaquettes de fraisage

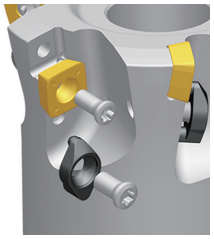
Article	✻	Stock	Dimensions (mm) ØD	ød	a_p	ae	L	Dents	Attachem.	kg	Plaquettes
XMR01-100-B32-SD12-07C	✻	●	100	32	1,8	11,7	50	7	B		SDMT1204
XMR01-125-B40-SD12-08C	✻	●	125	40	1,8	11,7	63	8	B		
XMR01-125-B40-SD12-09C	✻	●	125	40	1,8	11,7	63	9	B		
XMR01-063-A22-SD15-04C	✻	○	63	22	2,2	14	40	4	A		SDMT1505
XMR01-100-B32-SD15-07		○	100	32	2,2	14	50	7	B	1,2	
XMR01-125-B40-SD15-09		○	125	40	2,2	14	63	9	B	2,9	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**SDMT06T2**	**SDMT09T3**	**SDMT1204**	**SDMT1505**
	ØD	**20-63**	**25-63**	**32-160**	**40-160**
	Bride		WD-204	WD-204	WD-208
	Vis (bride)		I60M4×8,4 (3,4 Nm)	I60M4×8,4 (3,4 Nm)	I60M5×13 (6,7 Nm)
	Vis (plaquette)	I60M2,2×5,5 (0,8 Nm)		I60M4×8,4 (3,4 Nm)	I60M5×13 (6,7 Nm)
	Vis (plaquette)		I60M3,5×08TT (2,7 Nm)		
	Clé (bride)		WT15IP	WT15IP	WT20IP
	Clé (plaquette)	WT07IP	WT10IP	WT15IP	WT20IP

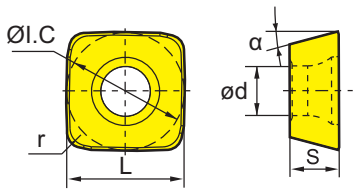


Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

SDMT	L	I.C	S	d
06 T2	6,35	6,35	2,58	5,5
09 T3	9,525	9,525	3,97	4
12 04	12,7	12,7	4,76	4,4
15 05	15,875	15,875	5,56	5,5

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquette de fraisage



Plaquette de fraisage SD**				HC¹ (CVD)							HC¹ (PVD)									HT		HC²		HW	
			P																						
			M																						
			K																						
			N																						
			S																						
			H																						
ISO		r	α	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	SDMT06T208-DM	0,8	15						○					○		○				○					
	SDMT09T312-DM	1,2	15	●					●		○			○	○				●						
	SDMT120412-DM	1,2	15	●					●		●			○	○										
	SDMT150520-DM	2	15											○											
	SDMT09T312-NM						●								○	●				●					
	SDMT120412-NM						●								○	●		●		●					
	SDMT06T208-PM	0,8	15	●			●									○	●			○					
	SDMT09T312-PM	1,2	15				●				○			○			●								
	SDMT120412-PM	1,2	15				●							○			●								
	SDMT150520-PM	2	15				○										○								

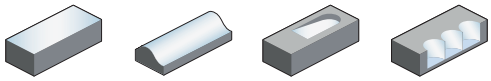
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

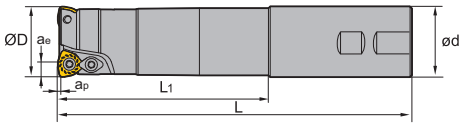
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise grande avance

XMR01 Kr: 11°-22°







Plaquette de type W, attachement Weldon

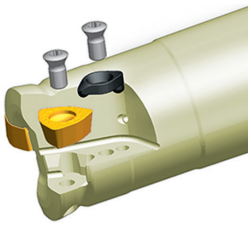
Article	✲	Stock	Dimensions (mm) ØD	ød	a_p	ae	L_1	L	Dents	kg	Plaquettes
XMR01-020-XP20-WP05-02C-M	✲	○	20	20	1,5	3,8	50	130	2	0,2	WPGT0503
XMR01-020-XP20-WP05-02-L		○	20	20	1,5	3,8	100	180	2	0,3	
XMR01-020-XP20-WP05-02-XL		○	20	20	1,5	3,8	130	250	2	0,8	
XMR01-025-XP25-WP06-02C-M	✲	○	25	25	1,5	4,35	60	140	2	0,4	WPGT0604
XMR01-025-XP25-WP06-02-L		○	25	25	1,5	4,35	120	200	2	0,6	
XMR01-025-XP25-WP06-02-XL		○	25	25	1,5	4,35	180	300	2	1	
XMR01-032-XP32-WP06-03C-M	✲	○	32	32	1,5	4,35	70	150	3	0,8	
XMR01-032-XP32-WP06-03-L		○	32	32	1,5	4,35	120	200	3	1	
XMR01-032-XP32-WP06-03-XL		○	32	32	1,5	4,35	180	300	3	1,6	
XMR01-040-XP32-WP06-03C-M	✲	○	40	32	1,5	4,35	50	150	3	0,9	
XMR01-040-XP32-WP06-03-XL		○	40	32	1,5	4,35	50	300	3	1,8	

● En stock ○ Sur demande

✲ Avec arrosage interne

Angle d'attaque variable (dans ce cas, l'angle d'attaque dépend de la taille de plaquette)
angle d'attaque : WPTG05 : 16° ; WPTG06 : 22° ; WPTG08 : 11° ; WPTG09 : 21°

Pièces détachées

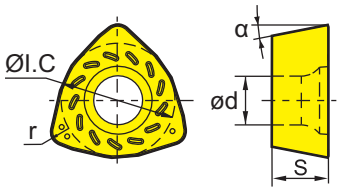
	Plaquette	WPGT0503	WPGT0604	
	ØD	20	25-40	
	Vis (plaquette)	I60M3,5×6,5 (2,7 Nm)	I60M4×8,4 (3,4 Nm)	
	Clé (plaquette)	WT10IP	WT15IP	

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquette de fraisage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

WPGT	I.C	S	d
05 03	7,94	3,5	4
06 04	9,525	4,2	4,4

Plaquette positive WP**			HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW	
		P																				
		M																				
		K																				
		N																				
		S																				
		H																				
ISO		r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**WPGT050315ZSR-PM**	1,5														●								
	WPGT060415ZSR-PM	1,5	●												●	●			●					
	**WPGT050315ZSR**	1,5	●					●						●										
	WPGT060415ZSR	1,5	●					●						●		●								

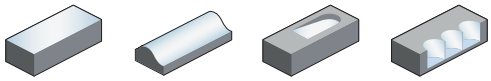
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

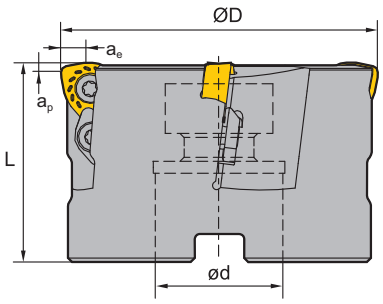
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise grande avance

XMR01 Kr: 11°-22°







Plaquette de type W, montage sur mandrin

Article	✻	Stock	Dimensions (mm) ØD	ød	a_p	ae	L	Dents	Attachem.	kg	Plaquettes
XMR01-050-A22-WP06-04		●	50	22	1,5	4,35	50	4	A	0,4	WPGT0604
XMR01-050-A22-WP06-04C	✻	●	50	22	1,5	4,35	50	4	A	0,4	
XMR01-050-A22-WP08-03		○	50	22	1,5	5,66	50	3	A	0,4	WPGT0806
XMR01-063-A27-WP08-04		●	63	27	1,5	5,66	50	4	A	0,7	
XMR01-063-A22-WP08-04C	✻	●	63	22	1,5	5,66	50	4	A	0,7	
XMR01-063-A27-WP08-04C	✻	○	63	27	1,5	5,66	50	4	A	0,7	
XMR01-080-A27-WP08-05C	✻	●	80	27	1,5	5,66	63	5	A	1,5	
XMR01-100-B32-WP08-06		●	100	32	1,5	5,66	63	6	B	2,2	
XMR01-125-B40-WP08-07		●	125	40	1,5	5,66	63	7	B	3,5	
XMR01-160-B40-WP08-08		○	160	40	1,5	5,66	63	8	B	6	
XMR01-063-A22-WP09-03C	✻	○	63	22	3	6,8	50	3	A	0,7	WPGT0907
XMR01-080-A27-WP09-04C	✻	○	80	27	3	6,8	63	4	A	1,4	
XMR01-100-B32-WP09-05		○	100	32	3	6,8	63	5	B	2,1	
XMR01-125-B40-WP09-06		○	125	40	3	6,8	63	6	B	3,7	
XMR01-160-B40-WP09-07		○	160	40	3	6,8	63	7	B	6,3	

● En stock ○ Sur demande

✻ Avec arrosage interne

Angle d'attaque variable (dans ce cas, l'angle d'attaque dépend de la taille de plaquette)
angle d'attaque : WPTG05 : 16° ; WPTG06 : 22° ; WPTG08 : 11° ; WPTG09 : 21°

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Pièces détachées

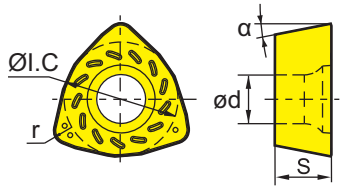
	Plaquette	WPGT0604	WPGT0806	WPGT0907
	ØD	50	50-160	3-160
	Bride		WD-208	WD-208
	Vis (bride)		I60M5×13 (6,7 Nm)	I60M5×13 (6,7 Nm)
	Vis (plaquette)	I60M4×8,4 (3,4 Nm)	I60M5×13 (6,7 Nm)	I60M5×13 (6,7 Nm)
	Clé (bride)		WT20IT	WT20IT
	Clé (plaquette)	WT15IS		
	Clé (plaquette)		WT20IT	WT20IT



- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

WPGT	I.C	S	d
06 04	9,525	4,2	4,4
08 06	12,85	6,35	5,5
09 07	15	7	5,5

Plaquette de fraisage



Plaquette positive WP**			HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW	
		P																				
		M																				
		K																				
		N																				
		S																				
		H																				
ISO		r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	WPGT060415ZSR-PM	1,5	●												●	●			●					
	WPGT080615ZSR-PM	1,5	●												●	●			●					
	WPGT090725ZSR-PM	2,5														●								
	WPGT060415ZSR	1,5	●					●						●		●								
	WPGT080615ZSR	1,5	●					●						●		●								
	WPGT090725ZSR	2,5						●						○		●								

● En stock ○ Sur demande

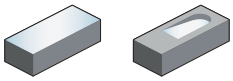
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

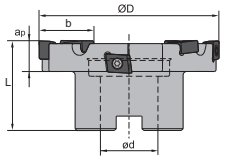
Notes

Fraise à rainurer

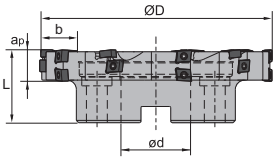
XMP01 Kr: 90°



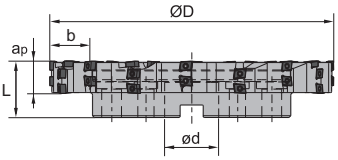




B



C



D

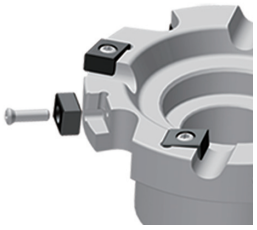
Article	✻	Stock	Dimensions (mm) ØD	ød	b	a_p	L	Dents	Attachem.	kg	Plaquettes
XMP01-080*18-B27-CNE1210-08		●	80	27	18	15	50	8	B	0,67	CNE12
XMP01-100*18-B32-CNE1210-08		●	100	32	18	20	50	8	B	0,99	
XMP01-125*27-B40-CNE1210-15		●	125	40	27	22,5	63	15	B	2,46	
XMP01-160*27-C40-CNE1210-18		●	160	40	27	25	63	18	C	3,7	
XMP01-200*27-C60-CNE1210-21		●	200	60	27	31,5	63	21	C	5,46	
XMP01-250*36-C60-CNE1210-32		●	250	40	36	56,5	63	32	C	9,79	
XMP01-315*36-D60-CNE1210-42		●	315	60	36	47,5	63	42	D	17,65	
XMP01-400*36-D60-CNE1210-52		●	400	60	36	36	63	52	D	27,36	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**CNE12**
	ØD	**80-400**
	Vis (plaquette)	I60M4×12 (3,4 Nm)
	Clé (plaquette)	WT15IP



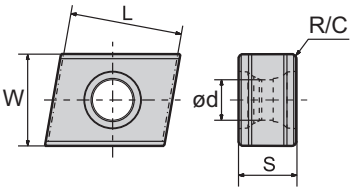
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquettes de fraisage Fraise à rainurer

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

CNE	L	S	d
12	12,8	6,35	4,4

Plaquette de fraisage



Plaquette de fraisage CN**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P	◉	◉	◉	◉	◉	◉	◉		◉	◉		◉	◉	◉	◉	◉	◉		
	M		◉	◉	◉	◉	◉			◉	◉		◉	◉	◉	◉	◉	◉		
	K						◉	◉	◉							◉				◉
	N								◉											◉
	S				◉		◉			◉	◉		◉	◉	◉		◉				
	H																				
ISO		R/C	W	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**CNE121006A**	0,4	10				●																		
	**CNE121006B**	0,6	10				○			●															

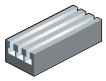
● En stock ○ Sur demande

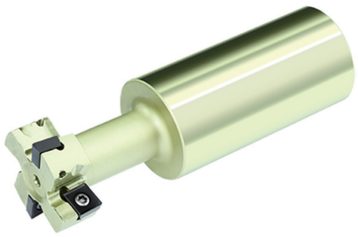
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

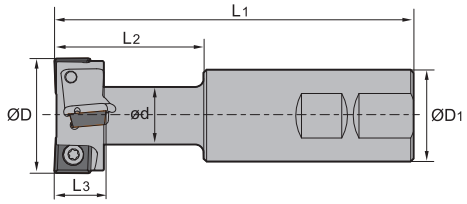
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise de rainures en T

TMP01 Kr: 90°







Attachement Weldon

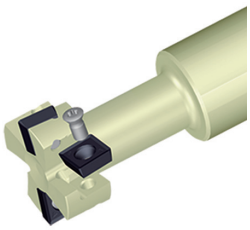
Article	✻	Stock	Dimensions (mm)						Dents	No. de plaquettes	pour rainures en T	Plaquettes
			ØD	$ØD_1$	ød	L_1	L_2	L_3				
TMP01-021-XP25-MP06-01		●	21	25	10	100	32	9	1	2	12	MPHT0603
TMP01-025-XP25-MP06-01		●	25	25	12	100	35	11	1	2	14	
TMP01-032-XP32-MP08-02		●	32	32	15	110	45	14	2	4	18	MPHT0803
TMP01-040-XP32-MP12-02C	✻	●	40	32	19	125	55	18	2	4	22	MPHT1204
TMP01-050-XP40-MP12-02C	✻	●	50	40	25	140	65	22	2	4	28	
TMP01-060-XP50-MP12-02		●	60	50	32	160	80	28	2	6	36	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	MPHT0603	MPHT0803	MPHT1204
	ØD	21-25	32	40-60
	Vis (plaquette)	I60M2,5×5,5 (1,0 Nm)	I60M3×7 (1,8 Nm)	I60M5×10 (6,7 Nm)
	Clé (plaquette)	WT07IP	WT09IP	
	Clé (plaquette)			WT20IT

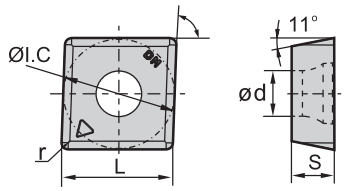


Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

MPHT	L	I.C	S	d
06 03	6,35	6,35	3,18	2,8
08 03	8,3	8,3	3,18	3,4
12 04	12,7	12,7	4,76	5,56



Plaquette de fraisage MP**			HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW	
		P																				
		M																				
		K																				
		N																				
		S																				
		H																				
ISO		r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**MPHT060304-DM**	0,4	●				●											●						
	MPHT080305-DM	0,5	●				○											●						
	MPHT120408-DM	0,8	●				○		●									●						

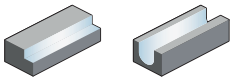
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

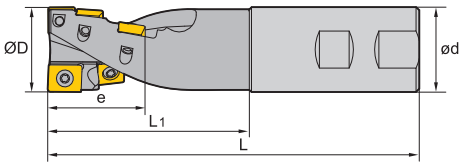
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise deux tailles

HMP01 Kr: 90°







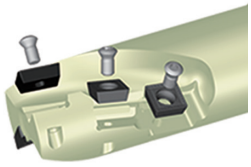
Attachement Weldon

Article	✻	Stock	Dimensions (mm)					No. de goujures	Dents		Type d'attachement	Plaquettes
			ØD	e	ød	L_1	L		APKT	SPMT		
HMP01-040x55-XP40-SP12-02		●	40	55	40	95	175	2	1	5	Weldon	APKT1504 & SPMT1204
HMP01-050x55-XP40-SP12-04		●	50	55	40	95	175	4	2	10	Weldon	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**APKT1504 & SPMT1204**	**APKT1504 & SPMT1204**	
	ØD	**40**	**50**	
	Vis (plaquette)	I60M5×10 (6,7 Nm)	I60M5×13 (6,7 Nm)	
	Clé (plaquette)	WT20T	WT20T	

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquettes de fraisage

Fraise deux tailles

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

APKT	L	S	d
15 04	16,33	4,76	5,4

Plaquette de fraisage AP**				HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
			P																			
			M																			
			K																			
			N																			
			S																			
			H																			
ISO	r	l.W		YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
APKT150412-PM	1,2	12,7					●												●						

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SPMT	L	l.C	S	d
12 04	12,7	12,7	4,76	5,5

Plaquette de fraisage SP**				HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
			P																			
			M																			
			K																			
			N																			
			S																			
			H																			
ISO	r			YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
SPMT120408-PM	0,8						●												●						

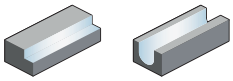
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

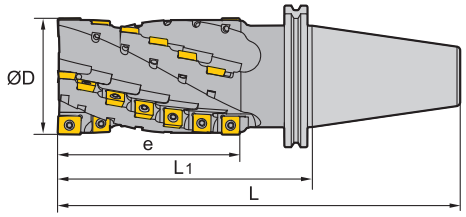
Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

Fraise deux tailles

HMP01 Kr: 90°







Article	✻	Stock	Dimensions (mm)				No. de goujures	Dents		Type d'attachement	Plaquettes
			ØD	e	L_1	L		APKT	SPMT		
HMP01-050x84-BT50-SP12-04		○	50	84	145	246,8	4	2	16	BT	APKT1504 & SPMT1204
HMP01-050x84-JT50-SP12-04		○	50	84	145	246,75	4	2	16	JT	
HMP01-063x74-BT50-SP12-04		○	63	74	135	236,8	4	2	14	BT	
HMP01-063x74-JT50-SP12-04		○	63	74	135	236,75	4	2	14	JT	
HMP01-063x104-BT50-SP12-04		○	63	104	165	266,8	4	2	20	BT	
HMP01-063x104-JT50-SP12-04		●	63	104	165	266,75	4	2	20	JT	
HMP01-063x134-BT50-SP12-04		○	63	134	195	296,8	4	2	26	BT	
HMP01-063x134-JT50-SP12-04		○	63	134	195	296,75	4	2	26	JT	
HMP01-080x104-BT50-SP12-04		○	80	104	165	266,8	4	2	20	BT	
HMP01-080x104-JT50-SP12-04		○	80	104	165	266,75	4	2	20	JT	
HMP01-080x144-BT50-SP12-04		○	80	144	205	306,8	4	2	28	BT	
HMP01-080x144-JT50-SP12-04		○	80	144	205	306,75	4	2	28	JT	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**APKT1504 & SPMT1204**
	ØD	**50-80**
	Vis (plaquette)	I60M5×10 (6,7 Nm)
	Clé (plaquette)	WT20IS



Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

Plaquettes de fraisage

Fraise deux tailles

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

APKT	L	S	d
15 04	16,33	4,76	5,4

Plaquette de fraisage AP**				HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
			P																			
			M																			
			K																			
			N																			
			S																			
			H																			
ISO	r	l.W		YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
APKT150412-PM	1,2	12,7					●												●						

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SPMT	L	I.C	S	d
12 04	12,7	12,7	4,76	5,5

Plaquette de fraisage SP**				HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
			P																			
			M																			
			K																			
			N																			
			S																			
			H																			
ISO	r			YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
SPMT120408-PM	0,8						●												●						

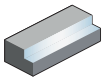
● En stock ○ Sur demande

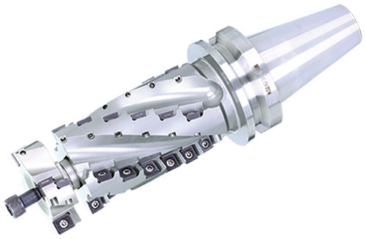
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

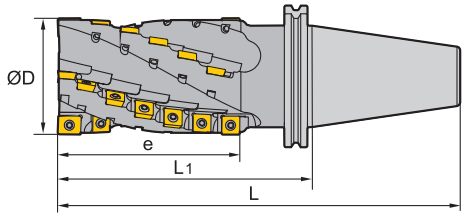
Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

Fraise deux tailles

HMP01 EC Kr: 90°







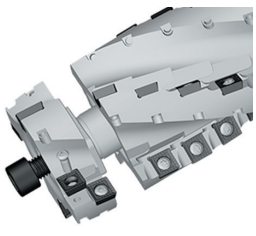
Article	✻	Stock	Dimensions (mm)				No. de goujures	Dents		Type d'attachement	Plaquettes
			ØD	e	L_1	L		APKT	SPMT		
HMP01-050x84EC-BT50-SP12-04		○	50	84	145	246,8	4	2	16	BT	APKT1504 & SPMT1204
HMP01-050x84EC-JT50-SP12-04		●	50	84	145	246,75	4	2	16	JT	
HMP01-063x74EC-BT50-SP12-04		○	63	74	135	236,8	4	2	14	BT	
HMP01-063x74EC-JT50-SP12-04		○	63	74	135	236,75	4	2	14	JT	
HMP01-063x104EC-BT50-SP12-04		○	63	104	165	266,8	4	2	20	BT	
HMP01-063x104EC-JT50-SP12-04		○	63	104	165	266,75	4	2	20	JT	
HMP01-063x134EC-BT50-SP12-04		○	63	134	195	296,8	4	2	26	BT	
HMP01-063x134EC-JT50-SP12-04		●	63	134	195	296,75	4	2	26	JT	
HMP01-080x104EC-BT50-SP12-04		○	80	104	165	266,8	4	2	20	BT	
HMP01-080x104EC-JT50-SP12-04		○	80	104	165	266,75	4	2	20	JT	
HMP01-080x144EC-BT50-SP12-04		○	80	144	205	306,8	4	2	28	BT	
HMP01-080x144EC-JT50-SP12-04		○	80	144	205	306,75	4	2	28	JT	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**APKT1504 & SPMT1204**	**APKT1504 & SPMT1204**	**APKT1504 & SPMT1204**
	ØD	**50**	**63**	**80**
	Tête interchangeable	050EC	063EC	080EC
	Vis (tête)	M10×50 (16,6 Nm)	M10×50 (16,6 Nm)	M12×55 (25,2 Nm)
	Vis (plaquette)	I60M5×13 (6,7 Nm)	I60M5×13 (6,7 Nm)	I60M5×13 (6,7 Nm)
	Clé (tête)	WH80L	WH80L	WH100L
	Clé (plaquette)	WT20IS	WT20IS	WT20IS



Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquettes de fraisage

Fraise deux tailles

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

APKT	L	S	d
15 04	16,33	4,76	5,4

Plaquette de fraisage AP**				HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
			P																			
			M																			
			K																			
			N																			
			S																			
			H																			
ISO	r	l.W		YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
APKT150412-PM	1,2	12,7					●												●						

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SPMT	L	I.C	S	d
12 04	12,7	12,7	4,76	5,5

Plaquette de fraisage SP**				HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
			P																			
			M																			
			K																			
			N																			
			S																			
			H																			
ISO	r			YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
SPMT120408-PM	0,8						●												●						

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

Fraise à chanfreiner

CMZ01 Kr: 30°





Attachement cylindrique

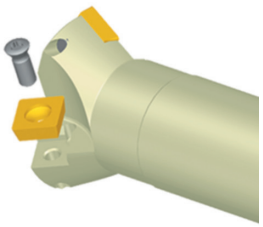
Article	✻	Stock	Dimensions (mm)				Dents	kg	Plaquettes
			ØD	ød	L_1	L			
CMZ01-012-G20-SP12-01		●	12	20	40	100	1	0,2	SPMT1204
CMZ01-025-G25-SP12-02		●	25	25	40	120	2	0,8	
CMZ01-032-G32-SP12-03		●	32	32	40	180	3	1,1	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**SPMT1204**
	ØD	**12-32**
	Vis (plaquette)	I43M5×11 (6,7 Nm)
	Clé (plaquette)	WT20IS

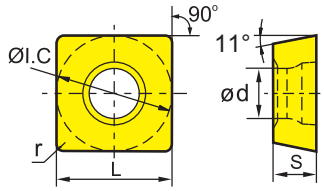


Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SPMT	L	I.C	S	d
12 04	12,7	12,7	4,76	5,5

Plaquette de fraisage

Plaquette de fraisage SP**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P	●	●	◉	●	●	◉	●			●	◉		●	●	◉	●	●	●		
	M		◉	◉	◉	◉	◉				◉	◉		◉	◉	◉	◉	●	●	◉		
	K							◉	◉	●								●			◉	
	N									◉											◉	◉
	S				◉		◉			●	◉			◉	◉	◉		◉				
	H																					
ISO	r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**SPMT120408-HT-1**	0,8											○										
	**SPMT120408**	0,8	○	●	○		●	○									○						

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise à chanfreiner

CMZ01 Kr: 30°







Attachement Weldon

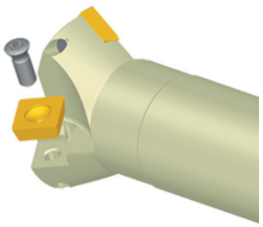
Article	✻	Stock	Dimensions (mm)				Dents	kg	Plaquettes
			ØD	ød	L_1	L			
CMZ01-025-XP25-SP12-02		●	25	25	40	120	2	0,6	SPMT1204
CMZ01-032-XP32-SP12-03		●	32	32	40	180	3	1	
CMZ01-012-XP20-SP12-01		●	12	20	40	100	1	0,2	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**SPMT1204**
	ØD	**12-32**
	Vis (plaquette)	I43M5×11 (6,7 Nm)
	Clé (plaquette)	WT20IS

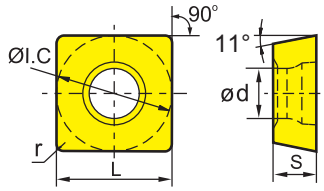


Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SPMT	L	I.C	S	d
12 04	12,7	12,7	4,76	5,5

Plaquette de fraisage

Plaquette de fraisage SP**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P	●	●	◉	●	●	◉	●			●	◉		●	●	◉	●	●	●		
	M		◉	◉	◉	◉	◉				◉	◉		◉	◉	◉	◉	●	●	◉		
	K							◉	◉	●								●			◉	
	N									◉											◉	◉
	S				◉		◉			●	◉			◉	◉	◉		◉				
	H																					
ISO		r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**SPMT120408-HT-1**	0,8												○										
	**SPMT120408**	0,8	○	●	○		●	○										○						

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise à chanfreiner

CMA01 Kr: 45°





Attachement cylindrique

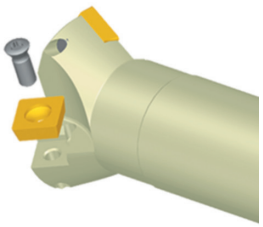
Article	✻	Stock	Dimensions (mm)				Dents	kg	Plaquettes
			ØD	ød	L_1	L			
CMA01-012-G20-SP12-01		●	12	20	40	100	1	0,2	SPMT1204
CMA01-025-G25-SP12-02		●	25	25	40	120	2	0,8	
CMA01-032-G32-SP12-03		●	32	32	40	180	3	1,1	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**SPMT1204**
	ØD	**12-32**
	Vis (plaquette)	I43M5×11 (6,7 Nm)
	Clé (plaquette)	WT20IS

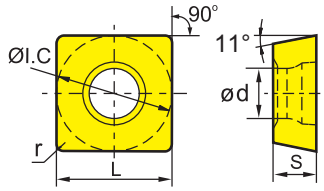


Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

SPMT	L	I.C	S	d
12 04	12,7	12,7	4,76	5,5

Plaquette de fraisage

Plaquette de fraisage SP**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P	●	●	●	●	●	●	●			●	●		●	●	●	●	●	●	
	M		●	●	●	●	●	●			●	●		●	●	●	●	●	●	
	K							●	●								●			●
	N								●											●
	S				●		●		●	●			●	●	●		●			
	H																			
ISO	r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**SPMT120408-HT-1**	0,8											○										
	**SPMT120408**	0,8	○	●	○		●	○									○						

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise à chanfreiner

CMA01 Kr: 45° 





Attachement Weldon

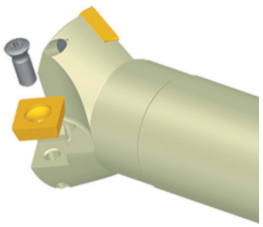
Article	✻	Stock	Dimensions (mm)				Dents	kg	Plaquettes
			ØD	ød	L_1	L			
CMA01-012-XP20-SP12-01		●	12	20	40	100	1	0,2	SPMT1204
CMA01-025-XP25-SP12-02		●	25	25	40	120	2	0,6	
CMA01-032-XP32-SP12-03		●	32	32	40	100	3	1	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**SPMT1204**
	ØD	**12-32**
	Vis (plaquette)	I43M5×11 (6,7 Nm)
	Clé (plaquette)	WT20IS



Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

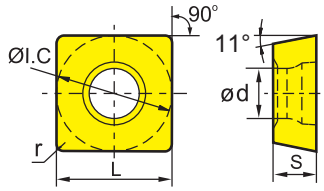
Plaquettes de fraisage

Fraise à chanfreiner

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SPMT	L	I.C	S	d
12 04	12,7	12,7	4,76	5,5

Plaquette de fraisage

Plaquette de fraisage SP**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P	●	●	●	●	●	●	●		●	●		●	●	●	●	●	●		
	M		●	●	●	●	●	●		●	●		●	●	●	●	●	●		
	K							●	●										●	
	N								●										●	
	S				●		●			●	●		●	●	●		●			
	H																			
ISO	r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**SPMT120408-HT-1**	0,8											○										
	**SPMT120408**	0,8	○	●	○		●	○									○						

● En stock ○ Sur demande

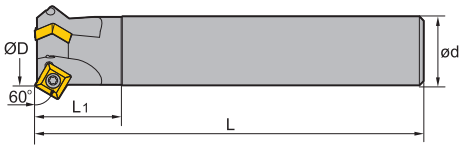
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

Fraise à chanfreiner

CMD01 Kr: 60°





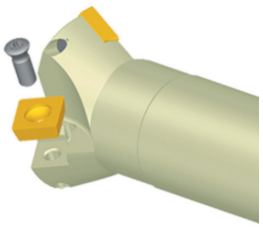
Attachement cylindrique

Article	✻	Stock	Dimensions (mm)				Dents	kg	Plaquettes
			ØD	ød	L_1	L			
CMD01-012-G20-SP12-01		●	12	20	40	100	1	0,2	SPMT1204
CMD01-025-G25-SP12-02		●	25	25	40	120	2	0,8	
CMD01-036-G32-SP12-03		●	36	32	40	180	3	1	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**SPMT1204**	
	ØD	**12-36**	
	Vis (plaquette)	I43M5×11 (6,7 Nm)	
	Clé (plaquette)	WT20IS	

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

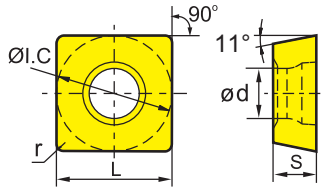
Plaquettes de fraisage

Fraise à chanfreiner

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

SPMT	L	I.C	S	d
12 04	12,7	12,7	4,76	5,5

Plaquette de fraisage

Plaquette de fraisage SP**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P																			
	M																			
	K																			
	N																			
	S																			
	H																			
ISO		r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**SPMT120408-HT-1**	0,8												○										
	**SPMT120408**	0,8	○	●	○		●	○										○						

● En stock ○ Sur demande

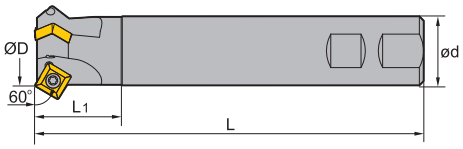
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

Fraise à chanfreiner

CMD01 Kr: 60°





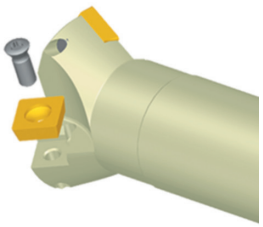
Attachement Weldon

Article	✻	Stock	Dimensions (mm)				Dents	kg	Plaquettes
			ØD	ød	L_1	L			
CMD01-012-XP20-SP12-01		●	12	20	40	100	1	0,2	SPMT1204
CMD01-025-XP25-SP12-02		●	25	25	40	120	2	0,6	
CMD01-036-XP32-SP12-03		●	36	32	40	180	3	1	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**SPMT1204**	
	ØD	**12-36**	
	Vis (plaquette)	I43M5×11 (6,7 Nm)	
	Clé (plaquette)	WT20IS	

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

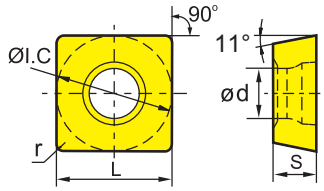
Plaquettes de fraisage

Fraise à chanfreiner

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

SPMT	L	I.C	S	d
12 04	12,7	12,7	4,76	5,5

Plaquette de fraisage

Plaquette de fraisage SP**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P	●	●	●	●	●	●	●			●	●		●	●	●	●	●	●	
	M		●	●	●	●	●	●			●	●		●	●	●	●	●	●	
	K							●	●								●			●
	N								●										●	●
	S				●		●			●	●		●	●	●		●			
	H																			
ISO	r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	SPMT120408-HT-1	0,8											○										
	SPMT120408	0,8	○	●	○		●	○									○						

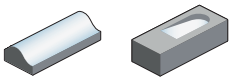
● En stock ○ Sur demande

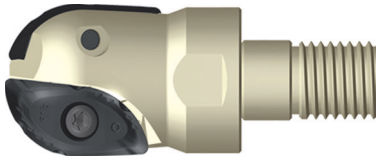
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

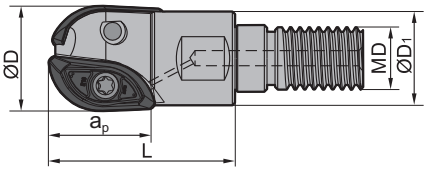
Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

Fraise de forme

QCH - XPHT







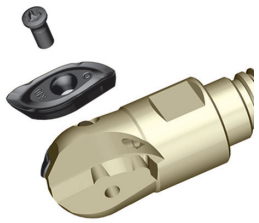
Article	✻	Stock	Dimensions (mm)					Dents	kg	Plaquettes
			ØD	$ØD_1$	a_p	L	MD			
QCH-16-XPHT16-M10		●	16	17	16	28	10	2	0,036	XPHT16
QCH-20-XPHT20-M12		○	20	19	20	30	12	2	0,051	XPHT20
QCH-25-XPHT25-M12		●	25	24	25	35	12	2	0,071	XPHT25
QCH-30-XPHT30-M16		●	30	29	30	45	16	2	0,14	XPHT30
QCH-32-XPHT32-M16		●	32	30	32	45	16	2	0,162	XPHT32

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	**XPHT16**	**XPHT20**	**XPHT25**	**XPHT30**	**XPHT32**
	ØD	**16**	**20**	**25**	**30**	**32**
	Vis (plaquette)	I60M2,5×6,5 (1,0 Nm)		I60M4×10 (3,4 Nm)	I60M5×13,2 (6,7 Nm)	I60M5×13,2 (6,7 Nm)
	Vis (plaquette)		I60M3,5×08TT (2,7 Nm)			
	Clé (plaquette)		WT10IP			
	Clé (plaquette)				WT20IT	WT20IT
	Clé (plaquette)	WT07P				
	Clé (plaquette)			WT15S		

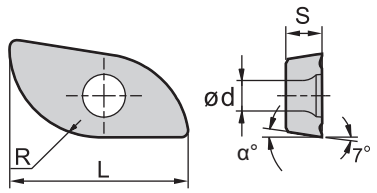


Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

XPHT	L	S	d
16	16	3,18	3,1
20	20	3,97	4
25	25	4,76	4,7
30	30	6,35	5,8
32	32	6,35	5,8

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquette de fraisage



Plaquette de fraisage XP**				HC¹ (CVD)								HC¹ (PVD)									HT		HC²		HW		
				P																							
				M																							
				K																							
				N																							
				S																							
				H																							
	ISO		R	α	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201			
	**XPHT16R0803-GM**		8	9																●								
	XPHT20R10T3-GM		10	9																●								
	XPHT25R1204-GM		12,5	9																●								
	XPHT30R1506-GM		15	11																●								
	XPHT32R1606-GM		16	9																●								

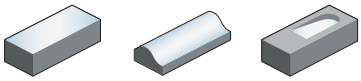
● En stock ○ Sur demande

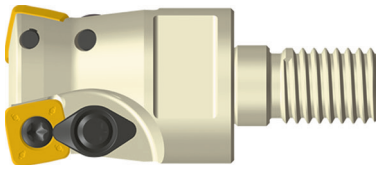
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

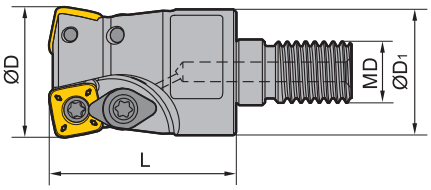
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Fraise grande avance

QCH - SDMT Kr: 15°







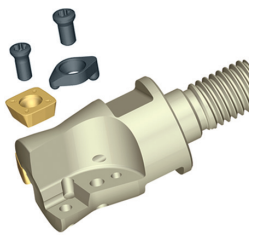
Article	✻	Stock	Dimensions (mm)				Dents	kg	Plaquettes
			ØD	ØD$_1$	L	MD			
QCH-20-SDMT06-M10-03		●	20	19	30	10	3	0,058	SDMT06T2
QCH-25-SDMT06-M12-04		●	25	24	35	12	4	0,097	
QCH-32-SDMT06-M16-05		○	32	30	45	16	5	0,183	
QCH-25-SDMT09-M12-02		○	25	24	35	12	2	0,088	SDMT09T3
QCH-30-SDMT09-M16-03		●	30	29	45	16	3	0,176	
QCH-35-SDMT09-M16-03		○	35	30	45	16	3	0,216	
QCH-32-SDMT12-M16-02		●	32	30	45	16	2	0,175	SDMT1204
QCH-35-SDMT12-M16-02		○	35	30	45	16	2	0,2	
QCH-40-SDMT12-M16-03		○	40	30	45	16	3	0,3	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	SDMT06T2	SDMT09T3	SDMT1204
	ØD	20-35	25-35	32-40
	Bride		WD-204	WD-204
	Vis (bride)			I60M4×8,4 (3,4 Nm)
	Vis (bride)		I60M3,5×08TT (2,7 Nm)	
	Vis (plaquette)	I60M2,2×5,5 (0,8 Nm)	I60M4×8,4 (3,4 Nm)	I60M4×8,4 (3,4 Nm)
	Clé (bride)		WT10IP	WT15IP
	Clé (plaquette)	WT07IP	WT15IP	WT15IP



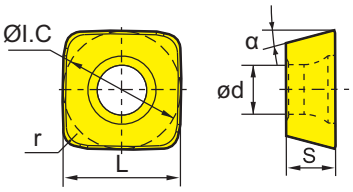
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquettes de fraisage Série QCH

Plaquette de fraisage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

SDMT	L	I.C	S	d
06 T2	6,35	6,35	2,58	5,5
09 T3	9,525	9,525	3,97	4
12 04	12,7	12,7	4,76	4,4



Plaquette de fraisage SD**				HC¹ (CVD)							HC¹ (PVD)									HT		HC²		HW	
				P																					
				M																					
				K																					
				N																					
				S																					
				H																					
ISO		r	α	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	SDMT06T208-DM	0,8	15						○					○		○				○					
	SDMT09T312-DM	1,2	15	●					●		○			○	○				●						
	SDMT120412-DM	1,2	15	●					●		●			○	○										
	SDMT09T312-NM						●								○	●				●					
	SDMT120412-NM						●								○	●		●		●					
	SDMT06T208-PM	0,8	15	●			●									○	●			○					
	SDMT09T312-PM	1,2	15				●				○			○			●								
	SDMT120412-PM	1,2	15				●							○			●								

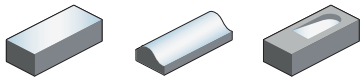
● En stock ○ Sur demande

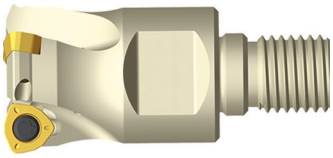
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

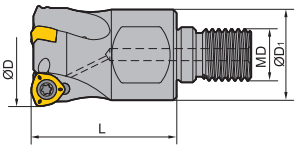
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

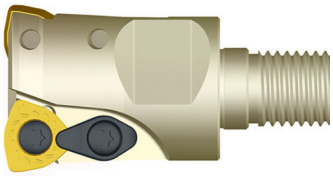
Fraise grande avance

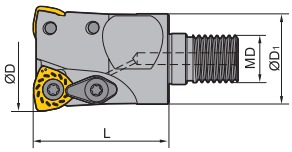
QCH - WPGT Kr: 11°-22°











Article	✻	Stock	Dimensions (mm)				Dents	kg	Plaquettes
			ØD	$ØD_1$	L	MD			
QCH-20-WPGT05-M10-02		○	20	18	30	10	2	0,056	WPGT0503
QCH-25-WPGT06-M12-02		○	25	21	35	12	2	0,097	WPGT0604
QCH-32-WPGT06-M16-03		●	32	29	43	16	3	0,185	
QCH-35-WPGT06-M16-03		●	35	30	45	16	3	0,201	
QCH-42-WPGT06-M16-04		○	42	29	43	16	4		
QCH-35-WPGT08-M16-02		●	35	30	45	16	2	0,196	WPGT0806

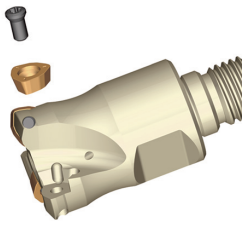
● En stock ○ Sur demande

✻ Avec arrosage interne

Angle d'attaque variable (dans ce cas, l'angle d'attaque dépend de la taille de plaquette)
angle d'attaque : WPTG05 : 16° ; WPTG06 : 22° ; WPTG08 : 11° ; WPTG09 : 21°

Pièces détachées

	Plaquette	**WPGT0503**	**WPGT0604**	**WPGT0806**
	ØD	**20**	**25-42**	**35**
	Bride			WD-208
	Vis (bride)			I60M5×13 (6,7 Nm)
	Vis (plaquette)		I60M4×8,4 (3,4 Nm)	I60M5×13 (6,7 Nm)
	Vis (plaquette)	I60M3,5×08TT (2,7 Nm)		
	Clé (bride)			WT20IT
	Clé (plaquette)			WT20IT
	Clé (plaquette)	WT10P	WT15P	



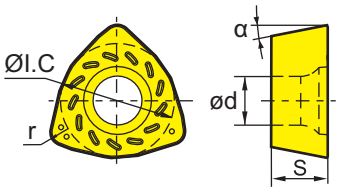
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquettes de fraisage Série QCH

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

WPGT	I.C	S	d
05 03	7,94	3,5	4
06 04	9,525	4,2	4,4
08 06	12,85	6,35	5,5



Plaquette positive WP**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
P		✱	✱	✱	✱	✱	✱	✱		✱	✱	✱	✱	✱	✱	●	●	●		
M			✱	✱	✱	✱	✱	✱			✱	✱	✱	✱	✱	✱	○	○	○		
K							✱	✱	●							●				✱	
N									✱											✱	✱
S				✱		✱			○	✱		✱	✱	✱		✱					
H																					
ISO	r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
WPGT050315ZSR-PM	1,5														●								
WPGT060415ZSR-PM	1,5	●												●	●			●					
WPGT080615ZSR-PM	1,5	●												●	●			●					
WPGT050315ZSR	1,5	●					●						●										
WPGT060415ZSR	1,5	●					●						●		●								
WPGT080615ZSR	1,5	●					●						●		●								

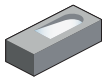
● En stock ○ Sur demande

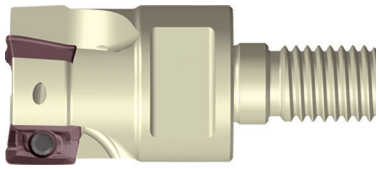
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

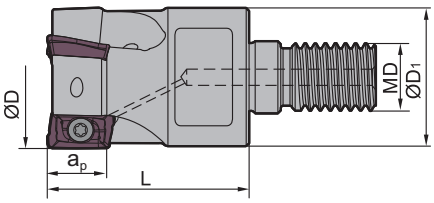
Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

Série QCH

QCH - APKT Kr: 90°





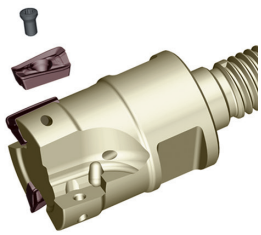


Article	✻	Stock	Dimensions (mm)					Dents	kg	Plaquettes
			ØD	ØD1	ap	L	MD			
QCH-16-APKT11-M8-02		●	16	12,5	10,5	25	8	2	0,028	
QCH-20-APKT11-M10-03		●	20	18	10,5	30	10	3	0,059	
QCH-25-APKT11-M12-04		●	25	21	10,5	35	12	4	0,104	APKT11T3
QCH-32-APKT11-M16-05		●	32	29	10,5	43	16	5		
QCH-40-APKT11-M16-06		●	40	29	10,5	43	16	6		
QCH-25-APKT16-M12-02		○	25	21	10,5	38	12	2	0,09	
QCH-32-APKT16-M16-03		●	32	29	10,5	46	16	3		APKT1604
QCH-40-APKT16-M16-04		○	40	29	10,5	46	16	4		

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	APKT11T3	APKT1604	
	ØD	16-40	25-40	
	Vis (plaquette)		I60M4×8,4 (3,4 Nm)	
	Vis (plaquette)	I60M2,5×6,5T (1,0 Nm)		
	Clé (plaquette)	WT08IP	WT15IP	

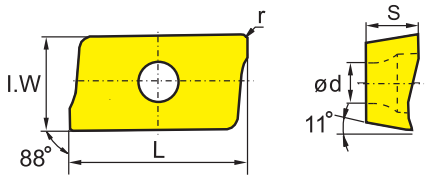
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquettes de fraisage Série QCH

Plaquette de fraisage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

APKT	L	S	d
11 T3	12,24	3,6	2,8
16 04	17,877	5,76	4,4



Plaquette de fraisage AP**				HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
				P																		
				M																		
				K																		
				N																		
				S																		
				H																		
	ISO	r	I.W	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	APKT11T304-ALH	0,4	6,5									●												●	●
	APKT11T308-ALH	0,8	6,5									●												●	●
	APKT160408-ALH	0,8	9,33									●												●	●
	APKT11T304-APF	0,4	6,5															●							
	APKT11T308-APF	0,8	6,5													○		●		○					
	APKT160408-APF	0,8	9,33													○		●	○	○					
	APKT11T304-APM	0,4	6,5				●			●								●							
	APKT11T308-APM	0,8	6,5				●			●						○		●		○					
	APKT11T312-APM	1,2	6,5				●			●								●							
	APKT11T316-APM	1,6	6,5				●			●								●							
	APKT11T320-APM	2	6,5				●			●								●							
	APKT160408-APM	0,8	9,33				●			●	●					○		●		○					
	APKT160416-APM	1,6	9,33				●			●								●							
	APKT160420-APM	2	9,33				●			●								●							
	APKT160424-APM	2,4	9,33				●			●								●							
	APKT160430-APM	3	9,33				●											●							
	APKT11T304-LH	0,4	6,5																					○	○
	APKT11T308-LH	0,8	6,5																					○	●
	APKT160408-LH	0,8	9,33																					○	○
	APKT11T308-NM															●				●					
	APKT11T312-NM															●				●					
	APKT11T304-PF	0,4	6,5		○			○					○	○					○						
	APKT11T308-PF	0,8	6,5											○											
	APKT11T316-PF	1,6	6,5											○											
	APKT160408-PF	0,8	9,33		○				○					○					○						
	APKT160430-PF	3	9,33	○																					
	APKT11T304-PM	0,4	6,5	○	○	○		○	○				○	○					○						
	APKT11T308-PM	0,8	6,5	○	○		○	○	●	○	○		○	○			○		○						
	APKT11T312-PM	1,2	6,5					○					○	○					○						
	APKT11T316-PM	1,6	6,5					○					○	○					○						
	APKT160408-PM	0,8	9,33	○	○	○	●		●	○	○		○	○			○		●						
	APKT160416-PM	1,6	9,33	○										○											

● En stock ○ Sur demande

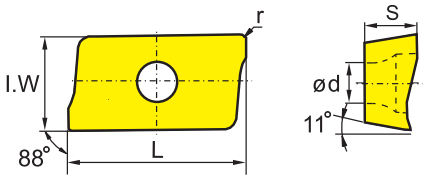
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification > B26 | Choix nuances > B24 | Info. techniques > B527 | Paramètres > B230

Plaquette de fraisage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

APKT	L	S	d
11 T3	12,24	3,6	2,8
16 04	17,877	5,76	4,4



Plaquette de fraisage AP**				HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW	
			P																				
			M																				
			K																				
			N																				
			S																				
			H																				
ISO		r	I.W	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**APKT11T304-PR**	0,4	6,5						○										○						
	APKT11T316-PR	1,6	6,5																○						
	**APKT11T3XR**										●							●							

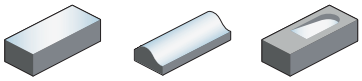
● En stock ○ Sur demande

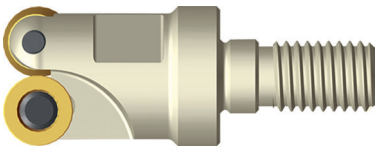
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

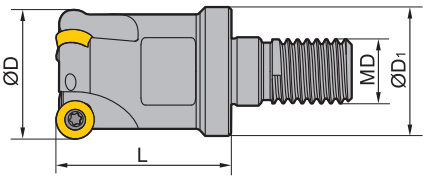
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Série QCH

QCH - RD







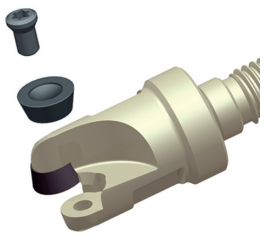
Article	✻	Stock	Dimensions (mm)				Dents	kg	Plaquettes
			ØD	$ØD_1$	L	MD			
QCH-16-RD07-M8-02		●	16	15	25	8	2	0,027	
QCH-20-RD07-M10-03		○	20	18	30	10	3	0,058	RDKW0702
QCH-25-RD07-M12-03		○	25	21	35	12	3	0,093	
QCH-20-RD10-M10-02		○	20	19	30	10	2	0,054	
QCH-25-RD10-M12-02		○	25	24	35	12	2	0,097	RDKW10T3
QCH-32-RD10-M16-03		○	32	30	45	16	3	0,183	
QCH-32-RD16-M16-02		○	32	30	45	16	2	0,156	RDKW1605

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

	Plaquette	RDKW0702	RDKW10T3	RDKW1605
	ØD	16-25	20-32	32
	Vis (plaquette)	I60M2,5×5,0 (1,0 Nm)	I60M4×8 (3,4 Nm)	I60M5×13 (6,7 Nm)
	Clé (plaquette)	WT08IP	WT15IP	
	Clé (plaquette)			WT20IT

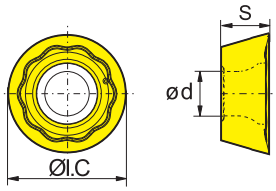


Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

RDKT
10 T3

Plaquette de fraisage

Plaquette de fraisage RD**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P																			
	M																			
	K																			
	N																			
	S																			
	H																			
ISO		YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**RDKT10T3MO-MM**																	○					

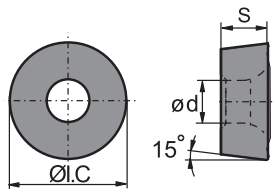
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

RDKW	I.C	S	d
07 02	7	2,38	2,7
10 T3	10	3,97	4,4
16 05	16	5,56	5,5

Plaquette de fraisage

Plaquette de fraisage RD**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P																			
	M																			
	K																			
	N																			
	S																			
	H																			
ISO		YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**RDKW10T3MO**	●	○				○			●	○						○						
	RDKW1605MO						○				○	○					○						
	**RDKW0702MO-1**						●				○				●								
	RDKW0702MO-2									●													

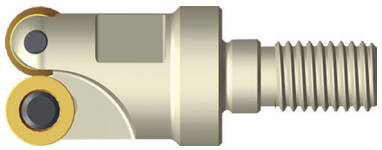
● En stock ○ Sur demande

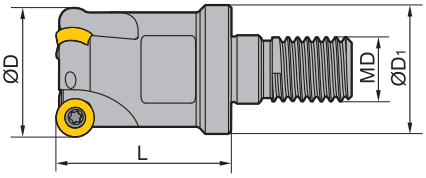
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Série QCH

QCH - RD





Article	✻	Stock	Dimensions (mm)				Dents	kg	Plaquettes
			ØD	ØD1	L	MD			
QCH-15-RDKW0702-M8-02		●	15	12,5	23	8	2		RDKW0702
QCH-15-RDKW0702-M8-03		●	15	12,5	23	8	3		
QCH-20-RDKW0702-M10-04		●	20	18	30	10	4		
QCH-25-RDKW0702-M12-05		●	25	21	35	12	5		
QCH-20-RDKW1003-M10-02		●	20	18	30	10	2		RDKW1003
QCH-25-RDKW1003-M12-02		●	25	21	35	12	2		
QCH-25-RDKW1003-M12-03		●	25	21	35	12	3		
QCH-30-RDKW1003-M16-04		●	30	29	43	16	4		
QCH-35-RDKW1003-M16-04		●	35	29	43	16	4		
QCH-42-RDKW1003-M16-05		●	42	29	43	16	5		
QCH-24-RDKW12T3-M12-02		●	24	21	35	12	2		RDKW12T3
QCH-35-RDKW12T3-M16-03		●	35	29	43	16	3		
QCH-42-RDKW12T3-M16-04		●	42	29	43	16	4		
QCH-32-RDKW1604-M16-02		●	32	29	43	16	2		RDKW1604

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

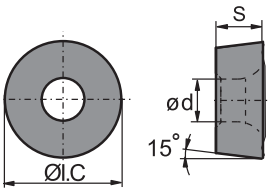
	Plaquette	RDKW0702	RDKW1003	RDKW12T3	RDKW1604
	ØD	15-25	20-42	24-42	32
	Bride				WX16N
	Vis (bride)				I60M4,5×10 (5,0 Nm)
	Vis (bride)			LOM3.5×7.1	
	Vis (plaquette)	I60M2,5×5,0 (1,0 Nm)	I60M3,5×7,7 (2,7 Nm)	I60M3,5×7,7 (2,7 Nm)	I60M4,5×10 (5,0 Nm)
	Clé (plaquette)	WT07P	WT15P	WT15P	
	Clé (plaquette)				WT20T

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

RDKW	I.C	S	d
07 02	7	2,38	2,7
10 03	10	3,18	3,9
12 T3	12	3,97	3,9
16 04	16	4,76	5,2

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquette de fraisage



Plaquette de fraisage RD**		HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW	
	P																				
	M																				
	K																				
	N																				
	S																				
	H																				
ISO		YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	RDKW0702MO-1						●				○				●								
	RDKW0702MO-2										●												
	RDKW1003MO-1					○	●					○			●	●							
	RDKW1003MO-2										●												
	RDKW1003MO-3				●										●								
	RDKW12T3MO-1					○	●					○			●	●							
	RDKW12T3MO-2										●				○								
	RDKW12T3MO-3				●										●								
	RDKW1604MO-1						●					○			●	●	●						
	RDKW1604MO-2										○												
	RDKW1604MO-3	○			●				●		○				●		●						

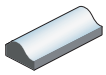
● En stock ○ Sur demande

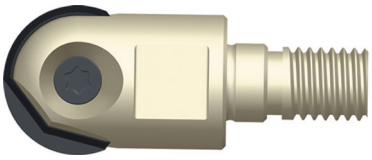
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

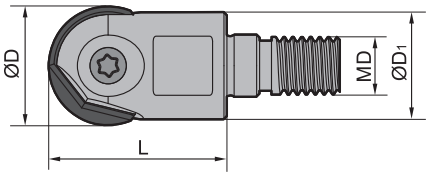
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Série QCH

QCH - ZOHX





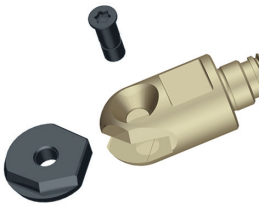


Article	✻	Stock	Dimensions (mm)				kg	Plaquettes
			ØD	ØD1	L	MD		
QCH-16-ZOHX16-M8		●	16	15	28	8	0,029	ZOHX16
QCH-20-ZOHX20-M10		●	20	19	30	10	0,048	ZOHX20
QCH-25-ZOHX25-M12		●	25	24	35	12	0,087	ZOHX25
QCH-30-ZOHX30-M16		●	30	29	45	16	0,17	ZOHX30
QCH-32-ZOHX32-M16		●	32	30	45	16	0,18	ZOHX32

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

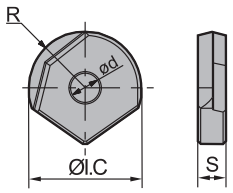
	Plaquette	**ZOHX16**	**ZOHX20**	**ZOHX25**	**ZOHX30**	**ZOHX32**	
	ØD	**16**	**20**	**25**	**30**	**32**	
	Vis (plaquette)	I70M5×12TT (6,7 Nm)	I70M5×16TT (6,7 Nm)	I70M6×20TT (9,1 Nm)	I70M8×25TT (16,2 Nm)	I70M8×25TT (16,2 Nm)	
	Clé (plaquette)	WT20IP	WT20IP	WT20IP			
	Clé (plaquette)				WT30IT	WT30IT	

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

ZOHX	I.C	S	d
16	16	4	5
20	20	5	5
25	25	6	6
30	30	7	8
32	32	7	8

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquette de fraisage



Plaquette de fraisage ZO**			HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW	
		P																				
		M																				
		K																				
		N																				
		S																				
		H																				
ISO		R	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**ZOHX1604-GF**	8																		●				
	ZOHX2005-GF	10																		●				
	ZOHX2506-GF	12,5																		○				
	ZOHX3007-GF	15																		●				
	ZOHX3207-GF	16																		●				
	**ZOHX1604-GM**	8																		●				
	ZOHX2005-GM	10																		●				
	ZOHX2506-GM	12,5																		○				
	ZOHX3007-GM	15																		●				
	ZOHX3207-GM	16																		●				

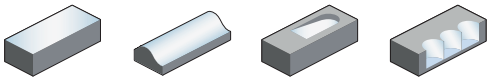
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

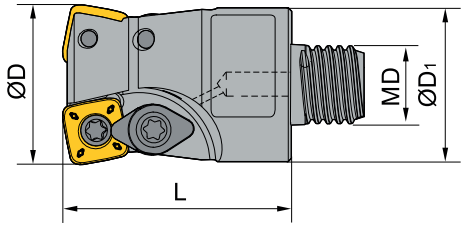
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Série QCH

QCH-SDMT-Q







Article	✻	Stock	Dimensions (mm)				Dents	kg	Plaquettes
			ØD	$ØD_1$	L	MD			
QCH-25-SDMT09-Q14-02	✻	○	25	24	35	14	2	0,088	SDMT09T3
QCH-35-SDMT09-Q18-03	✻	○	35	30	45	18	3	0,216	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

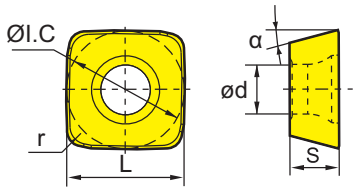
	Plaquette	**SDMT09T3**
	ØD	**25-35**
	Bride	WD-204
	Vis (bride)	I60M4×8,4 (3,4 Nm)
	Vis (plaquette)	I60M3,5×08TT (2,7 Nm)
	Clé (plaquette)	WT10IP

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

SDMT	L	I.C	S	d
09 T3	9,525	9,525	3,97	4

Plaquette de fraisage



Plaquette de fraisage SD**				HC¹ (CVD)							HC¹ (PVD)									HT		HC²		HW	
			P																						
			M																						
			K																						
			N																						
			S																						
			H																						
ISO		r	α	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**SDMT09T312-DM**	1,2	15	●					●		○			○	○				●						
	**SDMT09T312-NM**						●								○	●				●					
	**SDMT09T312-PM**	1,2	15				●				○			○			●								

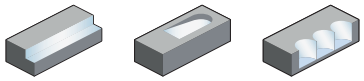
● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

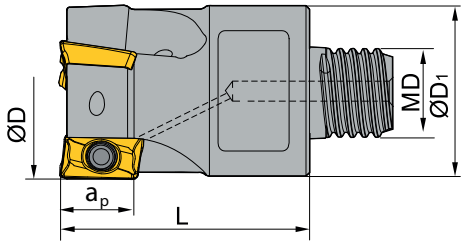
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Série QCH

QCH-APKT-Q Kr: 90°







Article	✻	Stock	Dimensions (mm) ØD	ØD1	ap	L	MD	Dents	kg	Plaquettes
QCH-16-APKT11-Q10-02	✻	●	16	15,2	10,5	28	10	2	0,028	
QCH-20-APKT11-Q12-02	✻	○	20	19	10,5	30	12	2	0,059	APKT11T3
QCH-25-APKT11-Q14-03	✻	●	25	24	10,5	35	14	3	0,104	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

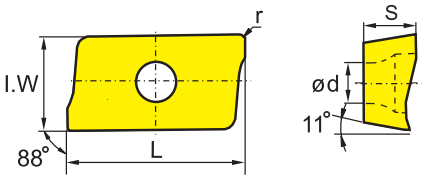
	Plaquette	APKT11T3
	ØD	16-25
	Vis (plaquette)	I60M2,5×5,5 (1,0 Nm)
	Clé (plaquette)	WT07IP

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquette de fraisage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

APKT	L	S	d
11 T3	12,24	3,6	2,8



	HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
P	○	○	○	○	○	○	○		○	○		○	○	○		○	○	○	
M		○	○	○	○	○				○	○		○	○	○	○	○	○	
K						○	○	○								○			○
N								○										○	○
S				○		○			○	○		○	○	○	○				
H																			

ISO	r	I.W	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
APKT11T304-ALH	0,4	6,5									●												●	●
APKT11T308-ALH	0,8	6,5									●												●	●
APKT11T304-APF	0,4	6,5															●							
APKT11T308-APF	0,8	6,5													○		●		○					
APKT11T304-APM	0,4	6,5				●			●								●							
APKT11T308-APM	0,8	6,5				●			●						○		●		○					
APKT11T312-APM	1,2	6,5				●			●								●							
APKT11T316-APM	1,6	6,5				●			●								●							
APKT11T320-APM	2	6,5				●			●								●							
APKT11T304-LH	0,4	6,5																					○	○
APKT11T308-LH	0,8	6,5																					○	●
APKT11T308-NM															●				●					
APKT11T312-NM															●				●					
APKT11T304-PF	0,4	6,5		○			○					○	○					○						
APKT11T308-PF	0,8	6,5											○											
APKT11T316-PF	1,6	6,5											○											
APKT11T304-PM	0,4	6,5	○	○	○		○	○				○	○					○						
APKT11T308-PM	0,8	6,5	○	○		○	○	●	○	○		○	○			○		○						
APKT11T312-PM	1,2	6,5					○					○	○					○						
APKT11T316-PM	1,6	6,5					○					○	○					○						
APKT11T304-PR	0,4	6,5						○										○						
APKT11T316-PR	1,6	6,5																○						
APKT11T3XR										●							●							

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

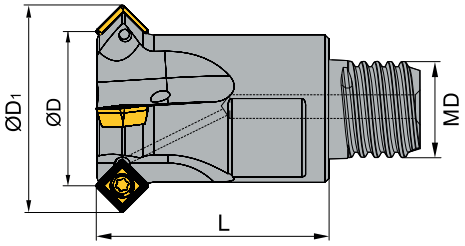
Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

Série QCH

QCH-SPGT-Q







Article	✻	Stock	Dimensions (mm)				Dents	kg	Plaquettes
			ØD	ØD1	L	MD			
QCH-16-SPGT05-Q10-45-03	✻	○	16	22,6	25	10	3	0,032	SPGT0502
QCH-20-SPGT05-Q12-45-04	✻	○	20	26,6	30	12	4	0,644	

● En stock ○ Sur demande

✻ Avec arrosage interne

Pièces détachées

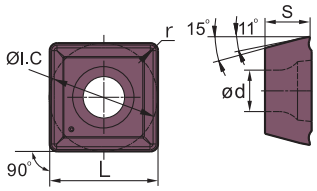
	Plaquette	SPGT0502
	ØD	16-20
	Vis (plaquette)	I60M2×4,3 (0,5 Nm)
	Clé (plaquette)	WT06IP

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

SPGT
05 02

Plaquette de fraisage

Plaquette de perçage SP**		HC[1] (CVD)							HC[1] (PVD)								HT	HC[2]	HW	
	P																			
	M																			
	K																			
	N																			
	S																			
	H																			
ISO		YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**SPGT050204-EM**												●		●								
	**SPGT050204-PM**												●		●								

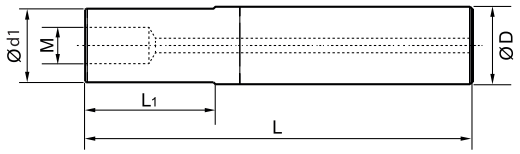
● En stock ○ Sur demande

HC[1] Carbure revêtu
HT Cermet non revêtu
HC[2] Cermet revêtu
HW Carbure non revêtu

Codification B26 | Choix nuances B24 | Info. techniques B527 | Paramètres B230

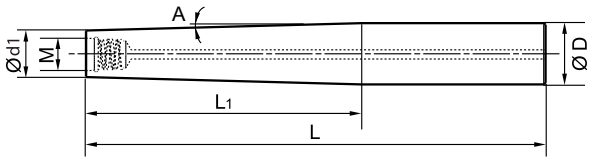
Attachement fraise à embout vissé

Corps carbure monobloc, détalonné, filetage Q



Article	Dimensions [mm]				Filetage (M)	Stock
	D	d1	L	L1		
G12-QCH-Q08-80C	12	11,5	80	30	Q8	●
G12-QCH-Q08-100C	12	11,5	100	50	Q8	●
G12-QCH-Q08-120C	12	11,5	120	70	Q8	●
G16-QCH-Q10-90C	16	15,2	90	40	Q10	●
G16-QCH-Q10-120C	16	15,2	120	70	Q10	●
G16-QCH-Q10-150C	16	15,2	150	100	Q10	●
G20-QCH-Q12-100C	20	19	100	40	Q12	●
G20-QCH-Q12-140C	20	19	140	80	Q12	●
G20-QCH-Q12-180C	20	19	180	120	Q12	●
G25-QCH-Q14-120C	25	24	120	50	Q14	●
G25-QCH-Q14-170C	25	24	170	100	Q14	●
G25-QCH-Q14-220C	25	24	220	150	Q14	●
G32-QCH-Q18-140C	32	30	140	70	Q18	●
G32-QCH-Q18-200C	32	30	200	130	Q18	●
G32-QCH-Q18-260C	32	30	260	190	Q18	●
G32-QCH-Q18-320C	32	30	320	250	Q18	●

Corps carbure monobloc, conique, filetage Q



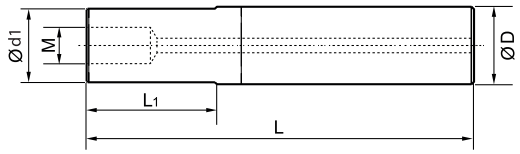
Article	Dimensions [mm]				Filetage (M)	Angle (A)	Stock
	D	d1	L	L1			
G16-QCH-Q08-140C-ZJ90	16	11,5	140	90	Q8	1,0	●
G20-QCH-Q10-200C-ZJ140	20	15,2	200	140	Q8	0,8	●
G25-QCH-Q12-250C-ZJ180	25	19	250	180	Q8	0,8	●
G32-QCH-Q14-270C-ZJ200	32	30	270	200	Q10	0,8	●

Pièces détachées

	Filetage	Q8 / Q10	Q12 / Q14	Q18
	Clé	QCH-10×13	QCH-16×20	QCH-26

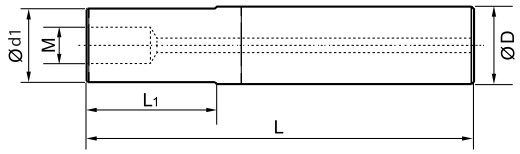
Attachement fraise à embout vissé

Corps acier, détalonné, filetage Q



Article	Dimensions [mm]				Filetage (M)	Stock
	D	d1	L	L1		
G12-QCH-Q08-65S	12	11,5	65	19	Q08	●
G16-QCH-Q10-100S	16	15,2	100	42	Q10	●
G20-QCH-Q12-110S	20	19	110	54	Q12	●

Corps carbure monobloc, détalonné, filetage métrique

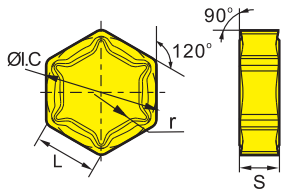


Article	Dimensions [mm]				Filetage (M)	Stock
	D	d1	L	L1		
G16-QCH-M8-90C-125	16	12,5	90	35	M8	○
G16-QCH-M8-110C-125	16	12,5	110	55	M8	○
G16-QCH-M8-130C-125	16	12,5	130	75	M8	○
G16-QCH-M8-90C	16	15	90	35	M8	○
G16-QCH-M8-110C	16	15	110	55	M8	○
G16-QCH-M8-130C	16	15	130	75	M8	○
G16-QCH-M8-170C	16	15	170	115	M8	○
G16-QCH-M8-200C	16	15	200	145	M8	○
G20-QCH-M10-87C	20	18,5	87	30	M10	○
G20-QCH-M10-107C	20	18,5	107	50	M10	○
G20-QCH-M10-127C	20	18,5	127	70	M10	○
G20-QCH-M10-167C	20	18,5	167	110	M10	○
G20-QCH-M10-197C	20	18,5	197	140	M10	○
G25-QCH-M12-128C	25	23	128	65	M12	○
G25-QCH-M12-148C	25	23	148	85	M12	○
G25-QCH-M12-168C	25	23	168	105	M12	○
G25-QCH-M12-198C	25	23	198	135	M12	○
G25-QCH-M12-228C	25	23	228	165	M12	○
G32-QCH-M16-161C	32	29	161	95	M16	○
G32-QCH-M16-211C	32	29	211	145	M16	○
G32-QCH-M16-281C	32	29	281	215	M16	○
G32-QCH-M16-311C	32	29	311	245	M16	○
G32-QCH-M16-361C	32	29	361	295	M16	○

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

HNGX	L	I.C	S
09 05	9,16	15,875	5,56

Plaquette de fraisage

Plaquette de fraisage HN**			HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW	
		P																				
		M																				
		K																				
		N																				
		S																				
		H																				
ISO		r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
HDR 	**HNGX090530-HDR**	3							○	○														
MR 	**HNGX090516-MR**	1,6							●															
	HNGX090520-MR	2							●															

● En stock ○ Sur demande

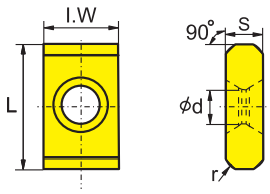
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

LNE3	L	I.W	S
2. 53	15,875	4,76	9,525

Plaquette de fraisage

Plaquette de fraisage LN**			HC¹ (CVD)							HC¹ (PVD)										HT	HC²	HW	
		P																					
		M																					
		K																					
		N																					
		S																					
		H																					
ISO		r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**LNE32.534**	1,6					○	○	○														

● En stock ○ Sur demande

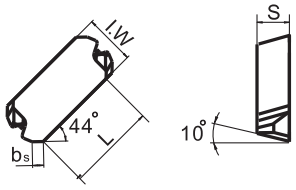
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

LNCX	I.W	L	S
18 06	10	24	6,4

Plaquette de fraisage

Plaquette de fraisage LN**			HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW	
		P	●	●	●	●	●	●		●	●	●	●	●	●	●	●		●	●		
		M		●	●	●	●	●			●	●		●	●	●	●	●		●			
		K							●	●	●							●				●	
		N																				●	●
		S				●		●			●	●		●	●	●		●					
		H																					
ISO		bs	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**LNCX1806AZT11L**	2,0								○														
	LNCX1806AZT11R	2,0								○														

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

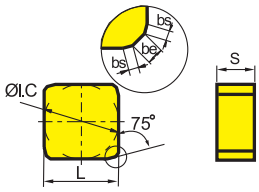
Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SNKN	L	I.C	S
12 04	12,7	12,7	4,76
15 04	15,875	15,875	4,76

Plaquette de fraisage SN**



	HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW	
P																				
M																				
K																				
N																				
S																				
H																				

ISO		bs	be	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**SNKN1204ENN**	1,5	0,9	●					●	●															
	SNKN1504ENN	1,5	0,9	○																					

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

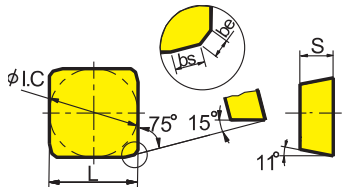
A Tournage
B Fraisage
C Perçage
D Informations techniques
E Index

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SPCN	L	I.C	S
12 03	12,7	12,7	1,4
15 04	15,875	15,875	1,4



Plaquette de fraisage SP**		HC¹ (CVD)								HC¹ (PVD)								HT	HC²	HW	
P		○	○	◉	○	○	◉		○			◉	◉		◉	○	◉	○	○	○		
M			◉	◉	○	○	◉					◉	◉		◉	○	◉	○	○	○		
K								◉	◉	○								○			◉	
N										◉											◉	◉
S					◉		◉			○	◉			◉	◉	◉		◉				
H																						

ISO		bs	be	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**SPCN1203EDSKR**	3,2	1,0	●																					
	SPCN1504EDSKR	4,8	1,0	●																					

● En stock ○ Sur demande

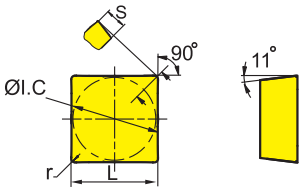
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquette de fraisage

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

SPMR	L	I.C	S
09 03	9,525	9,525	3,18
12 03	12,7	12,7	3,18

Plaquette de fraisage SP**			HC¹ (CVD)							HC¹ (PVD)										HT	HC²	HW	
		P																					
		M																					
		K																					
		N																					
		S																					
		H																					
ISO		r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**SPMR090304**	0,4					○																	
	SPMR090308	0,8					○																	
	SPMR120304	0,4					●																	
	SPMR120308	0,8					●	○																
	SPMR120312	1,2						○																

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

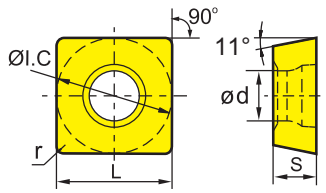
A Tournage
B Fraisage
C Perçage
D Informations techniques
E Index

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SPMT	L	I.C	S	d
06 03	6,35	6,35	3,18	2,8
09 T3	9,525	9,525	3,97	4,4
12 04	12,7	12,7	4,76	5,5



Plaquette de fraisage SP**			HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
		P																			
		M																			
		K																			
		N																			
		S																			
		H																			
ISO		r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
HT-1	**SPMT120408-HT-1**	0,8												○										
HT	**SPMT09T308-HT**	0,8					●		●			○												
KT	**SPMT060304-KT**	0,4		○																				

● En stock ○ Sur demande

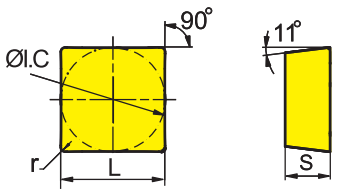
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification > B26 Choix nuances > B24 Info. techniques > B527 Paramètres > B230

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

SP**	L	I.C	S
12 03	12,7	12,7	3,18
15 04	15,875	15,875	4,76



Plaquette de fraisage SP**			HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW	
		P																				
		M																				
		K																				
		N																				
		S																				
		H																				
ISO		r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	SPGN120304	0,4											○											
	SPGN120308	0,8											○											
	SPUN120308	0,8					●	○																○
	SPUN120312	1,2					●																	
	SPUN150408	0,8																						○
	SPUN150412	1,2																						○

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

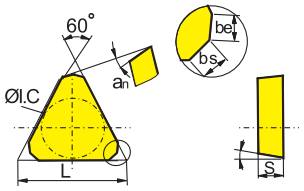
A Tournage
B Fraisage
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E Index

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

TPKN	L	I.C	S
16 03	16,5	9,525	3,18

Plaquette de fraisage

Plaquette de fraisage TP**		HC¹ (CVD)							HC¹ (PVD)								HT	HC²	HW	
	P	●	●	◉	●	●	◉		●		◉	◉		●	●	◉	●	●	●		
	M		◉	◉	●	●	◉				◉	◉		◉	◉	◉	◉	●	●		
	K							◉	◉	●							●			◉	
	N								◉											◉	◉
	S				◉		◉			●	◉		◉	◉	◉		◉				
	H																				

ISO		bs	be	an	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**TPKN1603PDTKR**	1,0	1,2	11																						○
	TPKN1603PPER	1,0	1,2	11		●																				
	TPKN1603PPFR	1,0	1,2	11																						○

● En stock ○ Sur demande

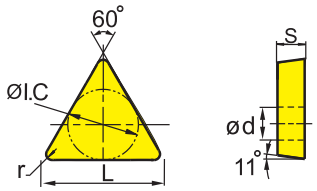
HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

TP**	L	I.C	S
11 03	11	6,35	3,18
16 03	16,5	9,525	3,18
22 04	22	12,7	4,76

Plaquette de fraisage

- Bonnes conditions d'usinage
- Conditions d'usinage normales
- Conditions d'usinage défavorables

Plaquette de fraisage TP**			HC¹ (CVD)							HC¹ (PVD)									HT	HC²	HW	
		**P**																				
		M																				
		K																				
		N																				
		S																				
		H																				
ISO		r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	**TPMR110304**	0,4					●																	
	TPMR110308	0,8					●																	
	TPMR160304	0,4					●																	
	TPMR160308	0,8					●	●	○															
	TPMR160312	1,2					○																	
	TPMR220412	1,2					●																	
	**TPUN110304**	0,4					●																	
	TPUN110308	0,8					●																	
	TPUN160304	0,4					●																	○
	TPUN160308	0,8					●	○								○								○
	TPUN160312	1,2					●																	
	TPUN220408	0,8					●																	
	TPUN220412	1,2						○																

● En stock ○ Sur demande

HC¹ Carbure revêtu
HT Cermet non revêtu
HC² Cermet revêtu
HW Carbure non revêtu

Codification B26 Choix nuances B24 Info. techniques B527 Paramètres B230

Notes

Notes

Guide des données de coupe recommandées – plaquettes de fraisage

Indexable milling – group 1 (FMA07/11/12, FMD02, EMP09/13)

1 2 3 4 5

Material group		Composition / structure / heat treatment		Brinell hardness HB	Machining group	Starting values for cutting speed v$_c$ [m/min] HC (CVD) YBC302 a_e / D 1/1 | 3/4	YBC302 a_e / D 1/5	YBC401 a_e / D 1/1 | 3/4	YBC401 a_e / D 1/5	YBD152 a_e / D 1/1 | 3/4	YBD152 a_e / D 1/5	YBD252 a_e / D 1/1 | 3/4	YBD252 a_e / D 1/5
P	Unalloyed steel	ca. 0,15 % C	annealed	125	1	260	300	225	260				
		ca. 0,45 % C	annealed	190	2	225	255	195	225				
		ca. 0,45 % C	tempered	250	3	210	240	180	210				
		ca. 0,75 % C	annealed	270	4	185	210	160	185				
		ca. 0,75 % C	tempered	300	5	170	195	150	170				
	Low-alloyed steel		annealed	180	6	225	255	195	225				
			tempered	275	7	185	210	160	185				
			tempered	300	8	170	195	150	170				
			tempered	350	9	145	165	125	145				
	High-alloyed steel and high-alloyed tool steel		annealed	200	10	130	150	115	130				
			hardened and tempered	325	11	95	105	80	95				
M	Stainless steel	ferritic/martensitic	annealed	200	12								
		martensitic	tempered	240	13								
		austenitic	quench hardened	180	14								
		austenitic-ferritic		230	15								
K	Grey cast iron	perlitic/ferritic		180	16					370	430	320	370
		perlitic (martensitic)		260	17					220	255	190	220
	Cast iron with spheroidal graphite	ferritic		160	18					255	295	220	255
		perlitic		250	19					170	200	145	170
	Malleable cast iron	ferritic		130	20					305	355	265	305
		perlitic		230	21					205	240	175	205
N	Aluminium wrought alloys	cannot be hardened		60	22								
		hardenable	hardened	100	23								
	Cast aluminium alloys	≤ 12 % Si, cannot be hardened		75	24								
		≤ 12 % Si, hardenable	hardened	90	25								
		> 12 % Si, cannot be hardened		130	26								
	Copper and copper alloys (bronze/brass)	machining steel, PB> 1%		110	27								
		CuZn, CuSnZn		90	28								
		CuSn, Pb-free copper, electrolytic copper		100	29								
S	Heat-resistant alloys	Fe-based alloys	annealed	200	30								
			hardened	280	31								
		Ni or Co bass	annealed	250	32								
			hardened	350	33								
			cast	320	34								
	Titanium alloys	pure titanium		R_m 400	35								
		α and β alloys	hardened	R_m 1050	36								
H	Hardened steel		hardened and tempered	55 HRC	37								
			hardened and tempered	60 HRC	38								
	Hard cast iron		cast	400	39								
	Hardened cast iron		hardened and tempered	55 HRC	40								
X	Non-metallic materials	Thermoplasts			41								
		Thermosetting plastics			42								
		Plastic, glass-fibre reinforced GFRP			43								
		Plastic, carbon fibre reinforced CFRP			44								
		Graphite			45								
		Wood			46								

Note: The given cutting values are guide values, which were determined under ideal conditions.
The values have to be adapted in individual cases.
Feed rate recommendations on page B248
For examples of material for cutting tool groups view page D22.

Recommend feed rate

Indexable milling – group1 (FMA07/11/12, FMD02, EMP09/13)

5

6

	Material group	Feed rate per cutting edge [mm]																	
		EMP09			EMP13			EMP13			FMA07			FMA07			FMA11		
		LNKT12			ANGX11			ANGX15			ONHU06			ONHU08			SNEG12		
		Application																	
		F	M	R	F	M	R	F	M	R	F	M	R	F	M	R	F	M	R
P	Unalloyed steel		0,25	0,50		0,23			0,25		0,19	0,23		0,19	0,23			0,20	0,23
P	Low-alloyed steel		0,23	0,47		0,22			0,23		0,17	0,22		0,17	0,22			0,19	0,21
P	High-alloyed steel and high-alloyed tool steel		0,22	0,44		0,20			0,22		0,16	0,20		0,16	0,20			0,18	0,20
M	Stainless steel		0,18	0,35														0,14	0,16
K	Grey cast iron		0,28	0,55		0,26			0,28		0,20	0,26		0,20	0,26			0,22	0,25
K	Cast iron with spheroidal graphite		0,25	0,50		0,23			0,25		0,19	0,23		0,19	0,23			0,20	0,23
K	Malleable cast iron		0,25	0,50		0,23			0,25		0,19	0,23		0,19	0,23			0,20	0,23
N	Aluminium wrought alloys					0,20			0,21										
N	Aluminium-Gusslegierungen					0,20			0,21										
N	Copper and copper alloys(bronze/brass)					0,18			0,19										
S	Heat-resistant alloys																		
S	Titanium alloys																		
H	Hardened steel																		
H	Hard cast iron																		
H	Hardened cast iron																		
X	Non-metallic materials																		

1 Sélectionnez la famille de produits ou les conditions de coupe adaptées.

2. Sélectionnez la nuance mise en œuvre.

3. Déterminez les engagements.

4. Sélectionnez le matériau mis en œuvre et la vitesse de coupe.

5. Allez à la page indiquée pour les avances recommandées.

6. Sélectionnez l'outil utilisé, le type d'usinage et le matériau mis en œuvre.

Plaquettes de fraisage – groupe 1 (FMA07/11/12, FMD02, FMP12, EMP09/13)

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min]							
						HC (CVD)							
						YBC302		YBC401		YBD152		YBD252	
						a_e / D		a_e / D		a_e / D		a_e / D	
						1/1 | 3/4	1/5	1/1 | 3/4	1/5	1/1 | 3/4	1/5	1/1 | 3/4	1/5
P	Acier non allié	env. 0,15 % C	recuit	125	1	260	300	225	260				
		env. 0,45 % C	recuit	190	2	225	255	195	225				
		env. 0,45 % C	trempé et revenu	250	3	210	240	180	210				
		env. 0,75 % C	recuit	270	4	185	210	160	185				
		env. 0,75 % C	trempé et revenu	300	5	170	195	150	170				
	Acier faiblement allié		recuit	180	6	225	255	195	225				
			trempé et revenu	275	7	185	210	160	185				
			trempé et revenu	300	8	170	195	150	170				
			trempé et revenu	350	9	145	165	125	145				
	Acier fortement allié et acier à outils fortement allié		recuit	200	10	130	150	115	130				
			durci et revenu	325	11	95	105	80	95				
M	Acier inoxydable	ferritique / martensitique	recuit	200	12								
		martensitique	trempé et revenu	240	13								
		austénitique	trempé	180	14								
		austénitique et ferritique		230	15								
K	Fonte grise	perlitique / ferritique		180	16					370	430	320	370
		perlitique (martensitique)		260	17					220	255	190	220
	Fonte avec graphite nodulaire	ferritique		160	18					255	295	220	255
		perlitique		250	19					170	200	145	170
	Fonte malléable	ferritique		130	20					305	355	265	305
		perlitique		230	21					205	240	175	205
N	Alliages corroyé d'aluminium	non durcissable		60	22								
		durcissable	trempé	100	23								
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24								
		≤ 12 % Si, durcissable	trempé	90	25								
		> 12 % Si, non durcissable		130	26								
	Cuivre et alliages de cuivre (bronze/moulage)	Alliages de décolletage, PB > 1 %		110	27								
		CuZn, CuSnZn		90	28								
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29								
S	Alliages réfractaires	Base Fe	recuit	200	30								
			trempé	280	31								
		à base de Ni ou Co	recuit	250	32								
			trempé	350	33								
			coulé	320	34								
	Alliages de titane	Titane pur		R_m 400	35								
		Alliages Alpha + Beta	trempé	R_m 1050	36								
H	Acier trempé		durci et revenu	55 HRC	37								
			durci et revenu	60 HRC	38								
	Fonte trempée		coulé	400	39								
	Fonte durcie		durci et revenu	55 HRC	40								
X	Matériaux non métalliques	Thermoplastiques			41								
		Duroplaste			42								
		Matière plastique renforcée de fibres de verre GFK			43								
		Matière plastique renforcée de fibres de carbone CFK			44								
		Graphite			45								
		Bois			46								

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Les avances recommandées figurent page B254.
Vous trouverez les exemples de matériaux pour les groupe matière à la page D11.

	Vitesse de coupe v_c [m/min]																
	HC (CVD)		HC (PVD)										HW				
	YBM253		YBG102		YB9320		YBG205		YBG252		YBG302		YD101		YD201		
	a_e / D		a_e / D		a_e / D		a_e / D		a_e / D		a_e / D		a_e / D		a_e / D		
	1/1 | 3/4	1/5	1/1 | 3/4	1/5	1/1 | 3/4	1/5	1/1 | 3/4	1/5	1/1 | 3/4	1/5	1/1 | 3/4	1/5	1/1 | 3/4	1/5	1/1 | 3/4	1/5	
	260	300	270	315	245	285	235	275	230	265	225	260					
	225	255	230	270	210	245	200	235	200	230	195	225					
	210	240	220	255	200	230	190	220	185	215	180	210					
	185	210	190	225	175	200	165	195	165	190	160	185					
	170	195	180	205	160	190	155	180	150	175	150	170					
	225	255	230	270	210	245	200	235	200	230	195	225					
	185	210	190	225	175	200	165	195	165	190	160	185					
	170	195	180	205	160	190	155	180	150	175	150	170					
	145	165	150	175	135	160	130	155	130	150	125	145					
	130	150	135	160	125	145	120	140	115	135	115	130					
	95	105	95	115	90	100	85	100	85	95	80	95					
	130	150	135	160	125	145	120	140	115	135	115	130					
	110	130	115	135	105	120	100	120	100	115	95	110					
	140	160	145	170	130	155	125	150	125	145	120	140					
	110	130	115	135	105	120	100	120	100	115	95	110					
			300	345	270	315	260	300	255	295	250	290					
			180	205	160	190	155	180	150	175	150	170					
			205	240	185	215	180	210	175	200	170	195					
			135	160	125	145	120	140	115	135	115	130					
			245	285	225	260	215	250	210	240	205	235					
			165	190	150	175	145	165	140	160	135	160					
													1505	1735	1450	1670	
													1225	1420	1180	1370	
													540	620	515	600	
													435	505	420	485	
													220	255	215	250	
													170	195	160	190	
													210	245	205	235	
													385	445	370	430	

HC Carbure revêtu
HT Carbure non revêtu, composante principale (TiC) ou (TiN), Cermet
HC_1 Cermet revêtu
HW Carbure non revêtu, composante principale (WC)

Plaquettes de fraisage – groupe 2 (FMA01/02/03/04, FME01/02, FMP01/02, EMP01/02/03/04)

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min]							
						HC (CVD)							
						YBC302		YBC401		YBD152		YBD252	
						a_e / D		a_e / D		a_e / D		a_e / D	
						1/1 | 3/4	1/5	1/1 | 3/4	1/5	1/1 | 3/4	1/5	1/1 | 3/4	1/5
P	Acier non allié	env. 0,15 % C	recuit	125	1	245	285	210	245				
		env. 0,45 % C	recuit	190	2	210	245	180	210				
		env. 0,45 % C	trempé et revenu	250	3	200	230	170	200				
		env. 0,75 % C	recuit	270	4	175	200	150	175				
		env. 0,75 % C	trempé et revenu	300	5	160	190	140	160				
	Acier faiblement allié		recuit	180	6	210	245	180	210				
			trempé et revenu	275	7	175	200	150	175				
			trempé et revenu	300	8	160	190	140	160				
			trempé et revenu	350	9	135	160	120	135				
	Acier fortement allié et acier à outils fortement allié		recuit	200	10	125	145	105	125				
			durci et revenu	325	11	90	100	75	90				
M	Acier inoxydable	ferritique / martensitique	recuit	200	12								
		martensitique	trempé et revenu	240	13								
		austénitique	trempé	180	14								
		austénitique et ferritique		230	15								
K	Fonte grise	perlitique / ferritique		180	16					315	365	270	315
		perlitique (martensitique)		260	17					185	215	160	190
	Fonte avec graphite nodulaire	ferritique		160	18					215	250	185	215
		perlitique		250	19					145	170	125	145
	Fonte malléable	ferritique		130	20					260	300	225	260
		perlitique		230	21					175	205	150	175
N	Alliages corroyé d'aluminium	non durcissable		60	22								
		durcissable	trempé	100	23								
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24								
		≤ 12 % Si, durcissable	trempé	90	25								
		> 12 % Si, non durcissable		130	26								
	Cuivre et alliages de cuivre (bronze/moulage)	Alliages de décolletage, PB > 1 %		110	27								
		CuZn, CuSnZn		90	28								
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29								
S	Alliages réfractaires	Base Fe	recuit	200	30								
			trempé	280	31								
		à base de Ni ou Co	recuit	250	32								
			trempé	350	33								
			coulé	320	34								
	Alliages de titane	Titane pur		R_m 400	35								
		Alliages Alpha + Beta	trempé	R_m 1050	36								
H	Acier trempé		durci et revenu	55 HRC	37								
			durci et revenu	60 HRC	38								
	Fonte trempée		coulé	400	39								
	Fonte durcie		durci et revenu	55 HRC	40								
X	Matériaux non métalliques	Thermoplastiques			41								
		Duroplaste			42								
		Matière plastique renforcée de fibres de verre GFK			43								
		Matière plastique renforcée de fibres de carbone CFK			44								
		Graphite			45								
		Bois			46								

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Les avances recommandées figurent page B254.
Vous trouverez les exemples de matériaux pour les groupe matière à la page D11.

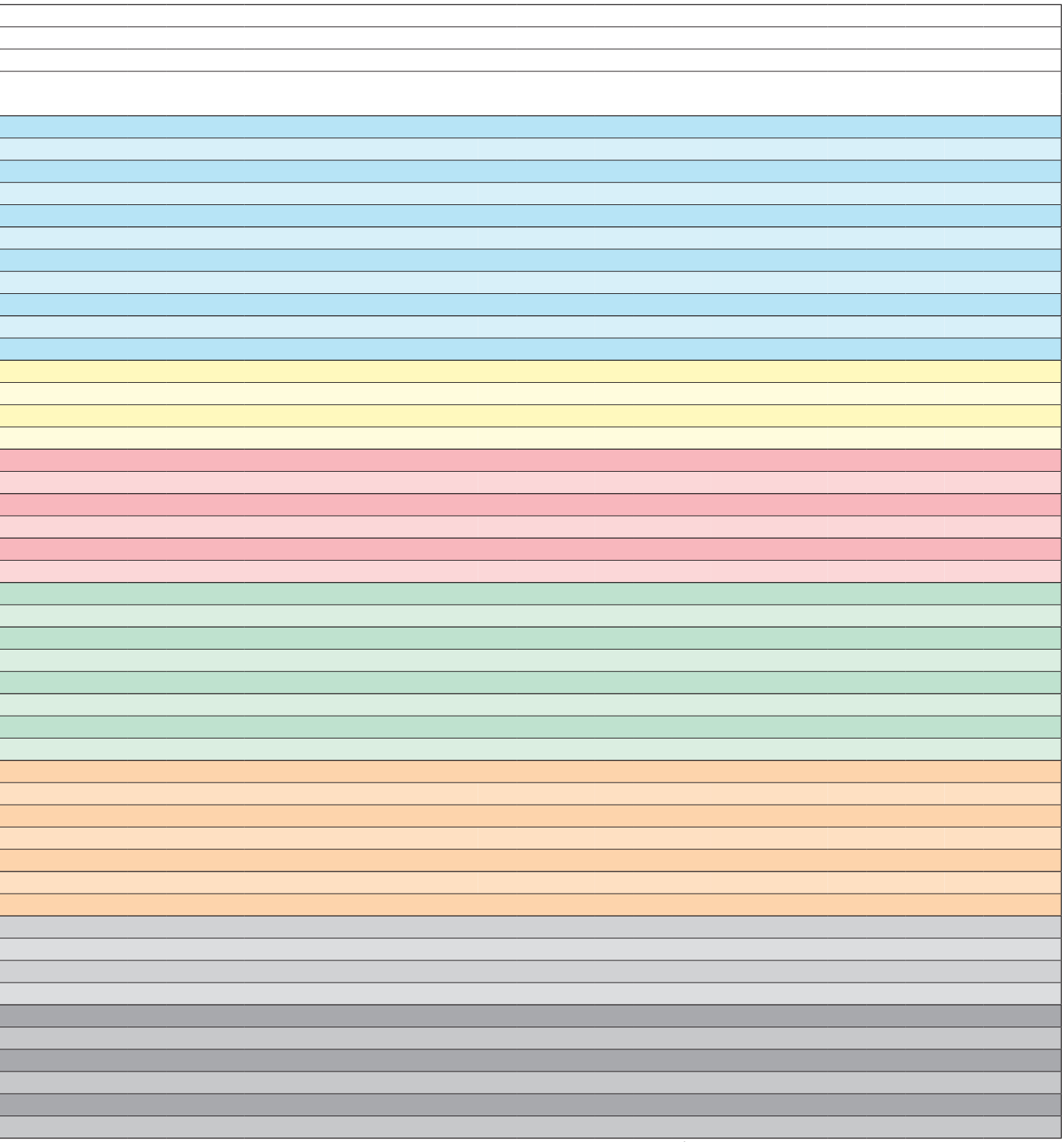
	Vitesse de coupe v_c [m/min]																					
	HC (CVD)		HC (PVD)														HW				HT	
	YBM253		YBG101		YBG102		YBG152		YB9320		YBG205		YBG252		YBG302		YD101		YD201		YNG151	
	a_e / D		a_e / D		a_e / D		a_e / D		a_e / D		a_e / D		a_e / D		a_e / D		a_e / D		a_e / D		a_e / D	
	1/1 | 3/4	1/5	1/1 | 3/4	1/5	1/1 | 3/4	1/5	1/1 | 3/4	1/5	1/1 | 3/4	1/5	1/1 | 3/4	1/5	1/1 | 3/4	1/5	1/1 | 3/4	1/5	1/1 | 3/4	1/5	1/1 | 3/4	1/5	1/1 | 3/4	1/5
	245	285			255	295	240	280	230	265	220	255	215	250	210	245					270	315
	210	245			220	255	205	240	200	230	190	220	185	215	180	210					235	270
	200	230			205	240	195	225	185	215	180	205	175	200	170	200					220	255
	175	200			180	210	170	200	165	190	155	180	155	175	150	175					195	220
	160	190			170	195	160	185	150	175	145	170	140	165	140	160					180	210
	210	245			220	255	205	240	200	230	190	220	185	215	180	210					235	270
	175	200			180	210	170	200	165	190	155	180	155	175	150	175					195	220
	160	190			170	195	160	185	150	175	145	170	140	165	140	160					180	210
	135	160			145	165	135	155	130	150	125	145	120	140	120	135					150	180
	125	145			130	150	120	140	115	135	110	130	110	125	105	125					140	160
	90	100			90	105	85	100	85	95	80	90	80	90	75	90					100	110
	125	145			130	150	120	140	115	135	110	130	110	125	105	125					135	160
	105	120			110	125	105	120	100	115	95	110	95	105	90	105					115	135
	130	155			140	160	130	150	125	145	120	140	115	135	115	130					145	170
	105	120			110	125	105	120	100	115	95	110	95	105	90	105					115	135
					285	330	265	305	255	295	245	285	240	280	235	275						
					170	195	160	185	150	175	145	170	140	165	140	160						
					195	225	180	210	175	200	165	195	165	190	160	185						
					130	150	120	140	115	135	110	130	110	125	105	125						
					230	270	220	255	210	240	200	230	195	225	190	225						
					155	180	145	170	140	160	135	155	130	150	130	150						
			1505	1735													1205	1390	1040	1200		
			1225	1420													980	1140	850	980		
			540	620													435	500	375	435		
			435	505													350	405	300	350		
			220	255													180	205	155	180		
			170	195													140	160	120	140		
			210	245													170	200	150	170		
			385	445													310	360	265	310		
					75	85	70	80	65	75	65	75	65	75	60	70						
					50	55	50	55	45	50	45	50	45	50	40	45						
					60	70	55	65	55	65	50	55	50	55	50	55						
					35	40	35	40	30	35	30	35	30	35	30	35						
					45	50	45	50	40	45	40	45	40	45	40	45						
					75	85	70	80	65	75	65	75	65	75	60	70						
					75	85	70	80	65	75	65	75	65	75	60	70						

HC Carbure revêtu
HT Carbure non revêtu, composante principale (TiC) ou (TiN), Cermet
HC_1 Cermet revêtu
HW Carbure non revêtu, composante principale (WC)

Plaquettes de fraisage – groupe 2 (FMA01/02/03/04, FME01/02, FMP01/02, EMP01/02/03/04)

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min]			
						HC_1			
						YNG151C			
						a_e / D			
						1/1 | 3/4	1/5		
P	Acier non allié	env. 0,15 % C	recuit	125	1	285	335		
		env. 0,45 % C	recuit	190	2	250	285		
		env. 0,45 % C	trempé et revenu	250	3	235	270		
		env. 0,75 % C	recuit	270	4	205	235		
		env. 0,75 % C	trempé et revenu	300	5	190	225		
	Acier faiblement allié		recuit	180	6	250	285		
			trempé et revenu	275	7	205	235		
			trempé et revenu	300	8	190	225		
			trempé et revenu	350	9	160	190		
	Acier fortement allié et acier à outils fortement allié		recuit	200	10	150	170		
			durci et revenu	325	11	105	120		
M	Acier inoxydable	ferritique / martensitique	recuit	200	12	145	170		
		martensitique	trempé et revenu	240	13	120	145		
		austénitique	trempé	180	14	155	180		
		austénitique et ferritique		230	15	120	145		
K	Fonte grise	perlitique / ferritique		180	16				
		perlitique (martensitique)		260	17				
	Fonte avec graphite nodulaire	ferritique		160	18				
		perlitique		250	19				
	Fonte malléable	ferritique		130	20				
		perlitique		230	21				
N	Alliages corroyé d'aluminium	non durcissable		60	22				
		durcissable	trempé	100	23				
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24				
		≤ 12 % Si, durcissable	trempé	90	25				
		> 12 % Si, non durcissable		130	26				
	Cuivre et alliages de cuivre (bronze/moulage)	Alliages de décolletage, PB > 1 %		110	27				
		CuZn, CuSnZn		90	28				
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29				
S	Alliages réfractaires	Base Fe	recuit	200	30				
			trempé	280	31				
		à base de Ni ou Co	recuit	250	32				
			trempé	350	33				
			coulé	320	34				
	Alliages de titane	Titane pur		R_m 400	35				
		Alliages Alpha + Beta	trempé	R_m 1050	36				
H	Acier trempé		durci et revenu	55 HRC	37				
			durci et revenu	60 HRC	38				
	Fonte trempée		coulé	400	39				
	Fonte durcie		durci et revenu	55 HRC	40				
X	Matériaux non métalliques	Thermoplastiques			41				
		Duroplaste			42				
		Matière plastique renforcée de fibres de verre GFK			43				
		Matière plastique renforcée de fibres de carbone CFK			44				
		Graphite			45				
		Bois			46				

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Les avances recommandées figurent page B254.
Vous trouverez les exemples de matériaux pour les groupe matière à la page D11.



HC Carbure revêtu
HT Carbure non revêtu, composante principale (TiC) ou (TiN), Cermet
HC_1 Cermet revêtu
HW Carbure non revêtu, composante principale (WC)

Plaquettes de fraisage – groupe 3 (FMR01/02/03/04)

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min] HC (CVD) YBC302 a_e / D 1/1 | 3/4	YBC302 a_e / D 1/5	YBC302 a_e / D 1/20	YBC401 a_e / D 1/1 | 3/4	YBC401 a_e / D 1/5	YBC401 a_e / D 1/20
P	Acier non allié	env. 0,15 % C	recuit	125	1	260	300	390	225	260	340
		env. 0,45 % C	recuit	190	2	225	255	335	195	225	295
		env. 0,45 % C	trempé et revenu	250	3	210	240	315	180	210	275
		env. 0,75 % C	recuit	270	4	185	210	275	160	185	245
		env. 0,75 % C	trempé et revenu	300	5	170	195	255	150	170	225
	Acier faiblement allié		recuit	180	6	225	255	335	195	225	295
			trempé et revenu	275	7	185	210	275	160	185	245
			trempé et revenu	300	8	170	195	255	150	170	225
			trempé et revenu	350	9	145	165	215	125	145	190
	Acier fortement allié et acier à outils fortement allié		recuit	200	10	130	150	195	115	130	170
			durci et revenu	325	11	95	105	140	80	95	125
M	Acier inoxydable	ferritique / martensitique	recuit	200	12						
		martensitique	trempé et revenu	240	13						
		austénitique	trempé	180	14						
		austénitique et ferritique		230	15						
K	Fonte grise	perlitique / ferritique		180	16						
		perlitique (martensitique)		260	17						
	Fonte avec graphite nodulaire	ferritique		160	18						
		perlitique		250	19						
	Fonte malléable	ferritique		130	20						
		perlitique		230	21						
N	Alliages corroyé d'aluminium	non durcissable		60	22						
		durcissable	trempé	100	23						
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24						
		≤ 12 % Si, durcissable	trempé	90	25						
		> 12 % Si, non durcissable		130	26						
	Cuivre et alliages de cuivre (bronze/moulage)	Alliages de décolletage, PB > 1 %		110	27						
		CuZn, CuSnZn		90	28						
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29						
S	Alliages réfractaires	Base Fe	recuit	200	30						
			trempé	280	31						
		à base de Ni ou Co	recuit	250	32						
			trempé	350	33						
			coulé	320	34						
	Alliages de titane	Titane pur		R_m 400	35						
		Alliages Alpha + Beta	trempé	R_m 1050	36						
H	Acier trempé		durci et revenu	55 HRC	37						
			durci et revenu	60 HRC	38						
	Fonte trempée		coulé	400	39						
	Fonte durcie		durci et revenu	55 HRC	40						
X	Matériaux non métalliques	Thermoplastiques			41						
		Duroplaste			42						
		Matière plastique renforcée de fibres de verre GFK			43						
		Matière plastique renforcée de fibres de carbone CFK			44						
		Graphite			45						
		Bois			46						

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Les avances recommandées figurent page B254.
Vous trouverez les exemples de matériaux pour les groupe matière à la page D11.

	Vitesse de coupe v_c [m/min]																				
	HC (CVD)									HC (PVD)											
	YBD152			YBD252			YBM253			YBG102			YBG152			YB9320			YBG205		
	a_e / D			a_e / D			a_e / D			a_e / D			a_e / D			a_e / D			a_e / D		
	1/1 | 3/4	1/5	1/20	1/1 | 3/4	1/5	1/20	1/1 | 3/4	1/5	1/20	1/1 | 3/4	1/5	1/20	1/1 | 3/4	1/5	1/20	1/1 | 3/4	1/5	1/20	1/1 | 3/4	1/5	1/20
							260	300	390	270	315	410	255	295	385	245	285	375	235	275	360
							225	255	335	230	270	355	220	255	335	210	245	320	200	235	310
							210	240	315	220	255	335	205	240	315	200	230	300	190	220	290
							185	210	275	190	225	295	180	210	275	175	200	260	165	195	255
							170	195	255	180	205	270	170	195	255	160	190	250	155	180	235
							225	255	335	230	270	355	220	255	335	210	245	320	200	235	310
							185	210	275	190	225	295	180	210	275	175	200	260	165	195	255
							170	195	255	180	205	270	170	195	255	160	190	250	155	180	235
							145	165	215	150	175	230	145	165	215	135	160	210	130	155	205
							130	150	195	135	160	210	130	150	195	125	145	190	120	140	185
							95	105	140	95	115	150	90	105	140	90	100	130	85	100	130
							130	150	195	135	160	205	130	150	195	125	145	190	120	140	180
							110	130	165	115	135	175	110	125	165	105	120	160	100	120	155
							140	160	210	145	170	220	140	160	205	130	155	200	125	150	195
							110	130	165	115	135	175	110	125	165	105	120	160	100	120	155
	345	400	520	300	345	450				300	345	450	285	330	430	270	315	410	260	300	390
	210	245	320	180	205	270				180	205	270	170	195	255	160	190	250	155	180	235
	240	280	365	205	240	315				205	240	315	195	225	295	185	215	280	180	210	275
	160	185	245	135	160	210				135	160	210	130	150	195	125	145	190	120	140	185
	285	330	430	245	285	375				245	285	375	230	270	355	225	260	340	215	250	325
	190	220	290	165	190	250				165	190	250	155	180	235	150	175	230	145	165	215

HC Carbure revêtu
HT Carbure non revêtu, composante principale (TiC) ou (TiN), Cermet
HC_1 Cermet revêtu
HW Carbure non revêtu, composante principale (WC)

Plaquettes de fraisage – groupe 3 (FMR01/02/03/04)

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min] HC (PVD) YBG212 a_e / D 1/1 | 3/4	1/5	1/20	YBG252 a_e / D 1/1 | 3/4	1/5	1/20
P	Acier non allié	env. 0,15 % C	recuit	125	1	240	280	365	230	265	345
		env. 0,45 % C	recuit	190	2	205	240	315	200	230	300
		env. 0,45 % C	trempé et revenu	250	3	195	225	295	185	215	280
		env. 0,75 % C	recuit	270	4	170	200	260	165	190	250
		env. 0,75 % C	trempé et revenu	300	5	160	185	245	150	175	230
	Acier faiblement allié		recuit	180	6	205	240	315	200	230	300
			trempé et revenu	275	7	170	200	260	165	190	250
			trempé et revenu	300	8	160	185	245	150	175	230
			trempé et revenu	350	9	135	155	205	130	150	195
	Acier fortement allié et acier à outils fortement allié		recuit	200	10	120	140	185	115	135	180
			durci et revenu	325	11	85	100	130	85	95	125
M	Acier inoxydable	ferritique / martensitique	recuit	200	12	120	140	185	115	135	175
		martensitique	trempé et revenu	240	13	105	120	155	100	115	145
		austénitique	trempé	180	14	130	150	195	125	145	185
		austénitique et ferritique		230	15	105	120	155	100	115	145
K	Fonte grise	perlitique / ferritique		180	16	265	305	400	255	295	385
		perlitique (martensitique)		260	17	160	185	245	150	175	230
	Fonte avec graphite nodulaire	ferritique		160	18	180	210	275	175	200	260
		perlitique		250	19	120	140	185	115	135	180
	Fonte malléable	ferritique		130	20	220	255	335	210	240	315
		perlitique		230	21	145	170	225	140	160	210
N	Alliages corroyé d'aluminium	non durcissable		60	22						
		durcissable	trempé	100	23						
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24						
		≤ 12 % Si, durcissable	trempé	90	25						
		> 12 % Si, non durcissable		130	26						
	Cuivre et alliages de cuivre (bronze/moulage)	Alliages de décolletage, PB > 1 %		110	27						
		CuZn, CuSnZn		90	28						
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29						
S	Alliages réfractaires	Base Fe	recuit	200	30						
			trempé	280	31						
		à base de Ni ou Co	recuit	250	32						
			trempé	350	33						
			coulé	320	34						
	Alliages de titane	Titane pur		R_m 400	35						
		Alliages Alpha + Beta	trempé	R_m 1050	36						
H	Acier trempé		durci et revenu	55 HRC	37						
			durci et revenu	60 HRC	38						
	Fonte trempée		coulé	400	39						
	Fonte durcie		durci et revenu	55 HRC	40						
X	Matériaux non métalliques	Thermoplastiques			41						
		Duroplaste			42						
		Matière plastique renforcée de fibres de verre GFK			43						
		Matière plastique renforcée de fibres de carbone CFK			44						
		Graphite			45						
		Bois			46						

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Les avances recommandées figurent page B254.
Vous trouverez les exemples de matériaux pour les groupe matière à la page D11.

	Vitesse de coupe v_c [m/min]							
	HC (PVD)			HW				
	YBG302			YD101		YD201		
	a_e / D			a_e / D		a_e / D		
	1/1 | 3/4	1/5	1/20	1/1 | 3/4	1/5	1/1 | 3/4	1/5	
	225	260	340					
	195	225	295					
	180	210	275					
	160	185	245					
	150	170	225					
	195	225	295					
	160	185	245					
	150	170	225					
	125	145	190					
	115	130	170					
	80	95	125					
	115	130	170					
	95	110	145					
	120	140	185					
	95	110	145					
	250	290	380					
	150	170	225					
	170	195	255					
	115	130	170					
	205	235	310					
	135	160	210					
				1505	1735	1450	1670	
				1225	1420	1180	1370	
				540	620	515	600	
				435	505	420	485	
				220	255	215	250	
				170	195	160	190	
				210	245	205	235	
				385	445	370	430	

HC Carbure revêtu
HT Carbure non revêtu, composante principale (TiC) ou (TiN), Cermet
HC_1 Cermet revêtu
HW Carbure non revêtu, composante principale (WC)

Plaquettes de fraisage – groupe 4 (BMR01/02/03/04, TMP01, CMZ01, CMA01, CMD01)

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min] HC (CVD) YBC302 a_e / D 1/1 | 3/4	YBC302 a_e / D 1/5	YBC302 a_e / D 1/20	YBC401 a_e / D 1/1 | 3/4	YBC401 a_e / D 1/5	YBC401 a_e / D 1/20
P	Acier non allié	env. 0,15 % C	recuit	125	1	235	275	360	200	230	300
		env. 0,45 % C	recuit	190	2	200	235	310	170	200	260
		env. 0,45 % C	trempé et revenu	250	3	190	220	290	160	185	245
		env. 0,75 % C	recuit	270	4	165	195	255	140	165	215
		env. 0,75 % C	trempé et revenu	300	5	155	180	235	130	150	195
	Acier faiblement allié		recuit	180	6	200	235	310	170	200	260
			trempé et revenu	275	7	165	195	255	140	165	215
			trempé et revenu	300	8	155	180	235	130	150	195
			trempé et revenu	350	9	130	155	205	110	130	170
	Acier fortement allié et acier à outils fortement allié		recuit	200	10	120	140	185	100	115	150
			durci et revenu	325	11	85	100	130	70	85	115
M	Acier inoxydable	ferritique / martensitique	recuit	200	12						
		martensitique	trempé et revenu	240	13						
		austénitique	trempé	180	14						
		austénitique et ferritique		230	15						
K	Fonte grise	perlitique / ferritique		180	16						
		perlitique (martensitique)		260	17						
	Fonte avec graphite nodulaire	ferritique		160	18						
		perlitique		250	19						
	Fonte malléable	ferritique		130	20						
		perlitique		230	21						
N	Alliages corroyé d'aluminium	non durcissable		60	22						
		durcissable	trempé	100	23						
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24						
		≤ 12 % Si, durcissable	trempé	90	25						
		> 12 % Si, non durcissable		130	26						
	Cuivre et alliages de cuivre (bronze/moulage)	Alliages de décolletage, PB > 1 %		110	27						
		CuZn, CuSnZn		90	28						
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29						
S	Alliages réfractaires	Base Fe	recuit	200	30						
			trempé	280	31						
		à base de Ni ou Co	recuit	250	32						
			trempé	350	33						
			coulé	320	34						
	Alliages de titane	Titane pur		R_m 400	35						
		Alliages Alpha + Beta	trempé	R_m 1050	36						
H	Acier trempé		durci et revenu	55 HRC	37						
			durci et revenu	60 HRC	38						
	Fonte trempée		coulé	400	39						
	Fonte durcie		durci et revenu	55 HRC	40						
X	Matériaux non métalliques	Thermoplastiques			41						
		Duroplaste			42						
		Matière plastique renforcée de fibres de verre GFK			43						
		Matière plastique renforcée de fibres de carbone CFK			44						
		Graphite			45						
		Bois			46						

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Les avances recommandées figurent page B254.
Vous trouverez les exemples de matériaux pour les groupe matière à la page D11.

	Vitesse de coupe v_c [m/min]																				
	HC (CVD)									HC (PVD)											
	YBD152			YBD252			YBM253			YBG102			YBG152			YB9320			YBG205		
	a_e / D			a_e / D			a_e / D			a_e / D			a_e / D			a_e / D			a_e / D		
	1/1 | 3/4	1/5	1/20	1/1 | 3/4	1/5	1/20	1/1 | 3/4	1/5	1/20	1/1 | 3/4	1/5	1/20	1/1 | 3/4	1/5	1/20	1/1 | 3/4	1/5	1/20	1/1 | 3/4	1/5	1/20
							235	275	360	245	285	375	230	265	345	220	255	335	210	245	320
							200	235	310	210	245	320	200	230	300	190	220	290	180	210	275
							190	220	290	200	230	300	185	215	280	180	205	270	170	200	260
							165	195	255	175	200	260	165	190	250	155	180	235	150	175	230
							155	180	235	160	190	250	150	175	230	145	170	225	140	160	210
							200	235	310	210	245	320	200	230	300	190	220	290	180	210	275
							165	195	255	175	200	260	165	190	250	155	180	235	150	175	230
							155	180	235	160	190	250	150	175	230	145	170	225	140	160	210
							130	155	205	135	160	210	130	150	195	125	145	190	120	135	180
							120	140	185	125	145	190	115	135	180	110	130	170	105	125	165
							85	100	130	90	100	130	85	95	125	80	90	120	75	90	120
							120	140	180	125	145	190	115	135	175	110	130	170	105	125	160
							100	120	155	105	120	160	100	115	145	95	110	145	90	105	135
							125	150	195	130	155	200	125	145	185	120	140	180	115	130	170
							100	120	155	105	120	160	100	115	145	95	110	145	90	105	135
	300	345	450	260	300	390				270	315	410	255	295	385	245	285	375	235	275	360
	180	210	275	155	180	235				160	190	250	150	175	230	145	170	225	140	160	210
	210	245	320	180	210	275				185	215	280	175	200	260	165	195	255	160	185	245
	140	165	215	120	140	185				125	145	190	115	135	180	110	130	170	105	125	165
	250	290	380	215	250	325				225	260	340	210	240	315	200	230	300	190	225	295
	170	200	260	145	165	215				150	175	230	140	160	210	135	155	205	130	150	195

HC Carbure revêtu
HT Carbure non revêtu, composante principale (TiC) ou (TiN), Cermet
HC_1 Cermet revêtu
HW Carbure non revêtu, composante principale (WC)

Plaquettes de fraisage – groupe 4 (BMR01/02/03/04, TMP01, CMZ01, CMA01, CMD01)

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min] HC (PVD) YBG212 a_e / D 1/1 | 3/4	1/5	1/20	YBG252 a_e / D 1/1 | 3/4	1/5	1/20
P	Acier non allié	env. 0,15 % C	recuit	125	1	215	250	325	205	240	315
		env. 0,45 % C	recuit	190	2	185	215	280	175	205	270
		env. 0,45 % C	trempé et revenu	250	3	175	200	260	165	195	255
		env. 0,75 % C	recuit	270	4	155	175	230	145	170	225
		env. 0,75 % C	trempé et revenu	300	5	140	165	215	135	160	210
	Acier faiblement allié		recuit	180	6	185	215	280	175	205	270
			trempé et revenu	275	7	155	175	230	145	170	225
			trempé et revenu	300	8	140	165	215	135	160	210
			trempé et revenu	350	9	120	140	185	115	135	180
	Acier fortement allié et acier à outils fortement allié		recuit	200	10	110	125	165	105	120	160
			durci et revenu	325	11	80	90	120	75	85	115
M	Acier inoxydable	ferritique / martensitique	recuit	200	12	110	125	165	105	120	160
		martensitique	trempé et revenu	240	13	95	105	140	90	105	135
		austénitique	trempé	180	14	115	135	175	110	130	170
		austénitique et ferritique		230	15	95	105	140	90	105	135
K	Fonte grise	perlitique / ferritique		180	16	240	280	365	230	265	345
		perlitique (martensitique)		260	17	140	165	215	135	160	210
	Fonte avec graphite nodulaire	ferritique		160	18	165	190	250	155	180	235
		perlitique		250	19	110	125	165	105	120	160
	Fonte malléable	ferritique		130	20	195	225	295	185	220	290
		perlitique		230	21	130	150	195	125	145	190
N	Alliages corroyé d'aluminium	non durcissable		60	22						
		durcissable	trempé	100	23						
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24						
		≤ 12 % Si, durcissable	trempé	90	25						
		> 12 % Si, non durcissable		130	26						
	Cuivre et alliages de cuivre (bronze/moulage)	Alliages de décolletage, PB > 1 %		110	27						
		CuZn, CuSnZn		90	28						
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29						
S	Alliages réfractaires	Base Fe	recuit	200	30						
			trempé	280	31						
		à base de Ni ou Co	recuit	250	32						
			trempé	350	33						
			coulé	320	34						
	Alliages de titane	Titane pur		R_m 400	35						
		Alliages Alpha + Beta	trempé	R_m 1050	36						
H	Acier trempé		durci et revenu	55 HRC	37						
			durci et revenu	60 HRC	38						
	Fonte trempée		coulé	400	39						
	Fonte durcie		durci et revenu	55 HRC	40						
X	Matériaux non métalliques	Thermoplastiques			41						
		Duroplaste			42						
		Matière plastique renforcée de fibres de verre GFK			43						
		Matière plastique renforcée de fibres de carbone CFK			44						
		Graphite			45						
		Bois			46						

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Les avances recommandées figurent page B254.
Vous trouverez les exemples de matériaux pour les groupe matière à la page D11.

	Vitesse de coupe v_c [m/min]			
	HC (PVD)			
	YBG302			
	a_e / D			
	1/1 | 3/4	1/5	1/20	
	200	230	300	
	170	200	260	
	160	185	245	
	140	165	215	
	130	150	195	
	170	200	260	
	140	165	215	
	130	150	195	
	110	130	170	
	100	115	150	
	70	85	115	
	100	115	150	
	85	100	130	
	110	125	160	
	85	100	130	
	220	255	335	
	130	150	195	
	150	175	230	
	100	115	150	
	180	210	275	
	120	140	185	

HC Carbure revêtu
HT Carbure non revêtu, composante principale (TiC) ou (TiN), Cermet
HC_1 Cermet revêtu
HW Carbure non revêtu, composante principale (WC)

Plaquettes de fraisage – groupe 5 (SMP01/03/05)

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min]			
						HC (CVD)		HC (PVD)	
						YBC302	YBM253	YBG101	YB9320
						a_e / D 1/4	a_e / D 1/4	a_e / D 1/4	a_e / D 1/4
P	Acier non allié	env. 0,15 % C	recuit	125	1	165	180	190	175
		env. 0,45 % C	recuit	190	2	145	155	165	150
		env. 0,45 % C	trempé et revenu	250	3	135	145	155	140
		env. 0,75 % C	recuit	270	4	120	130	135	125
		env. 0,75 % C	trempé et revenu	300	5	110	120	125	115
	Acier faiblement allié		recuit	180	6	145	155	165	150
			trempé et revenu	275	7	120	130	135	125
			trempé et revenu	300	8	110	120	125	115
			trempé et revenu	350	9	95	100	105	100
	Acier fortement allié et acier à outils fortement allié		recuit	200	10	85	90	95	90
			durci et revenu	325	11	60	65	70	65
M	Acier inoxydable	ferritique / martensitique	recuit	200	12		90	95	90
		martensitique	trempé et revenu	240	13		80	80	75
		austénitique	trempé	180	14		100	105	95
		austénitique et ferritique		230	15		80	80	75
K	Fonte grise	perlitique / ferritique		180	16			215	190
		perlitique (martensitique)		260	17			125	115
	Fonte avec graphite nodulaire	ferritique		160	18			145	135
		perlitique		250	19			95	90
	Fonte malléable	ferritique		130	20			175	160
		perlitique		230	21			115	105
N	Alliages corroyé d'aluminium	non durcissable		60	22				
		durcissable	trempé	100	23				
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24				
		≤ 12 % Si, durcissable	trempé	90	25				
		> 12 % Si, non durcissable		130	26				
	Cuivre et alliages de cuivre (bronze/moulage)	Alliages de décolletage, PB > 1 %		110	27				
		CuZn, CuSnZn		90	28				
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29				
S	Alliages réfractaires	Base Fe	recuit	200	30				
			trempé	280	31				
		à base de Ni ou Co	recuit	250	32				
			trempé	350	33				
			coulé	320	34				
	Alliages de titane	Titane pur		R_m 400	35				
		Alliages Alpha + Beta	trempé	R_m 1050	36				
H	Acier trempé		durci et revenu	55 HRC	37				
			durci et revenu	60 HRC	38				
	Fonte trempée		coulé	400	39				
	Fonte durcie		durci et revenu	55 HRC	40				
X	Matériaux non métalliques	Thermoplastiques			41				
		Duroplaste			42				
		Matière plastique renforcée de fibres de verre GFK			43				
		Matière plastique renforcée de fibres de carbone CFK			44				
		Graphite			45				
		Bois			46				

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Les avances recommandées figurent page B254.
Vous trouverez les exemples de matériaux pour les groupe matière à la page D11.

	Vitesse de coupe v_c [m/min]		
	HC (PVD)		
	YBG205	YBG302	
	a_e / D	a_e / D	
	1/4	1/4	
	170	160	
	145	140	
	140	130	
	120	115	
	115	105	
	145	140	
	120	115	
	115	105	
	95	90	
	85	80	
	60	60	
	85	80	
	75	70	
	95	85	
	75	70	
	185	175	
	115	105	
	130	120	
	85	80	
	155	145	
	105	100	

HC Carbure revêtu
HT Carbure non revêtu, composante principale (TiC) ou (TiN), Cermet
HC_1 Cermet revêtu
HW Carbure non revêtu, composante principale (WC)

Plaquettes de fraisage – groupe 6 (FMD03, FME04, FMP03, HMP01)

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min]							
						HC (CVD)							
						YBC302		YBC401		YBD152		YBD252	
						a_e / D		a_e / D		a_e / D		a_e / D	
						1/1 | 3/4	1/5	1/1 | 3/4	1/5	1/1 | 3/4	1/5	1/1 | 3/4	1/5
P	Acier non allié	env. 0,15 % C	recuit	125	1	200	230	170	200				
		env. 0,45 % C	recuit	190	2	170	200	145	170				
		env. 0,45 % C	trempé et revenu	250	3	160	185	140	160				
		env. 0,75 % C	recuit	270	4	140	165	120	140				
		env. 0,75 % C	trempé et revenu	300	5	130	150	115	130				
	Acier faiblement allié		recuit	180	6	170	200	145	170				
			trempé et revenu	275	7	140	165	120	140				
			trempé et revenu	300	8	130	150	115	130				
			trempé et revenu	350	9	110	130	95	110				
	Acier fortement allié et acier à outils fortement allié		recuit	200	10	100	115	85	100				
			durci et revenu	325	11	70	85	60	70				
M	Acier inoxydable	ferritique / martensitique	recuit	200	12								
		martensitique	trempé et revenu	240	13								
		austénitique	trempé	180	14								
		austénitique et ferritique		230	15								
K	Fonte grise	perlitique / ferritique		180	16					255	295	220	255
		perlitique (martensitique)		260	17					150	175	130	150
	Fonte avec graphite nodulaire	ferritique		160	18					175	205	150	175
		perlitique		250	19					115	135	100	115
	Fonte malléable	ferritique		130	20					210	245	180	210
		perlitique		230	21					140	165	120	140
N	Alliages corroyé d'aluminium	non durcissable		60	22								
		durcissable	trempé	100	23								
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24								
		≤ 12 % Si, durcissable	trempé	90	25								
		> 12 % Si, non durcissable		130	26								
	Cuivre et alliages de cuivre (bronze/moulage)	Alliages de décolletage, PB > 1 %		110	27								
		CuZn, CuSnZn		90	28								
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29								
S	Alliages réfractaires	Base Fe	recuit	200	30								
			trempé	280	31								
		à base de Ni ou Co	recuit	250	32								
			trempé	350	33								
			coulé	320	34								
	Alliages de titane	Titane pur		R_m 400	35								
		Alliages Alpha + Beta	trempé	R_m 1050	36								
H	Acier trempé		durci et revenu	55 HRC	37								
			durci et revenu	60 HRC	38								
	Fonte trempée		coulé	400	39								
	Fonte durcie		durci et revenu	55 HRC	40								
X	Matériaux non métalliques	Thermoplastiques			41								
		Duroplaste			42								
		Matière plastique renforcée de fibres de verre GFK			43								
		Matière plastique renforcée de fibres de carbone CFK			44								
		Graphite			45								
		Bois			46								

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Les avances recommandées figurent page B254.
Vous trouverez les exemples de matériaux pour les groupe matière à la page D11.

	Vitesse de coupe v_c [m/min]																
	HC (CVD)		HC (PVD)														
	YBM253		YBG102		YBG152		YB9320		YBG205		YBG212		YBG252		YBG302		
	a_e / D		a_e / D		a_e / D		a_e / D		a_e / D		a_e / D		a_e / D		a_e / D		
	1/1 | 3/4	1/5	1/1 | 3/4	1/5	1/1 | 3/4	1/5	1/1 | 3/4	1/5	1/1 | 3/4	1/5	1/1 | 3/4	1/5	1/1 | 3/4	1/5	1/1 | 3/4	1/5	
	200	230	205	240	195	225	190	220	185	215	185	215	180	210	175	205	
	170	200	175	205	170	195	165	190	160	185	160	185	155	180	150	175	
	160	185	165	195	160	180	155	180	150	175	150	175	145	170	140	165	
	140	165	145	170	140	160	135	155	130	155	130	155	130	150	125	145	
	130	150	135	160	130	150	125	145	125	140	125	140	120	140	115	135	
	170	200	175	205	170	195	165	190	160	185	160	185	155	180	150	175	
	140	165	145	170	140	160	135	155	130	155	130	155	130	150	125	145	
	130	150	135	160	130	150	125	145	125	140	125	140	120	140	115	135	
	110	130	115	135	110	125	105	125	105	120	105	120	100	120	100	115	
	100	115	105	120	100	115	95	110	95	110	95	110	90	105	90	105	
	70	85	75	85	70	80	70	80	65	80	65	80	65	75	65	75	
	100	115	105	120	100	115	95	110	95	110	95	110	90	105	90	105	
	85	100	90	105	85	95	80	95	80	95	80	95	80	90	75	90	
	110	125	110	130	105	120	105	120	100	115	100	115	100	115	95	110	
	85	100	90	105	85	95	80	95	80	95	80	95	80	90	75	90	
			230	265	215	250	210	245	205	240	205	240	200	230	195	225	
			135	160	130	150	125	145	125	140	125	140	120	140	115	135	
			155	180	150	170	145	165	140	165	140	165	135	160	135	155	
			105	120	100	115	95	110	95	110	95	110	90	105	90	105	
			185	220	180	205	175	200	170	195	170	195	165	190	160	185	
			125	145	120	135	115	135	115	130	115	130	110	130	105	125	

HC Carbure revêtu
HT Carbure non revêtu, composante principale (TiC) ou (TiN), Cermet
HC_1 Cermet revêtu
HW Carbure non revêtu, composante principale (WC)

Plaquettes de fraisage – groupe 7 (XMR01, XMP01)

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min] HC (CVD) YBC302 a_e / D 1/1 | 3/4	YBC302 a_e / D 1/5	YBC302 a_e / D 1/20	YBD152 a_e / D 1/1 | 3/4	YBD152 a_e / D 1/5	YBD152 a_e / D 1/20
P	Acier non allié	env. 0,15 % C	recuit	125	1	260	300	390			
		env. 0,45 % C	recuit	190	2	225	255	335			
		env. 0,45 % C	trempé et revenu	250	3	210	240	315			
		env. 0,75 % C	recuit	270	4	185	210	275			
		env. 0,75 % C	trempé et revenu	300	5	170	195	255			
	Acier faiblement allié		recuit	180	6	225	255	335			
			trempé et revenu	275	7	185	210	275			
			trempé et revenu	300	8	170	195	255			
			trempé et revenu	350	9	145	165	215			
	Acier fortement allié et acier à outils fortement allié		recuit	200	10	130	150	195			
			durci et revenu	325	11	95	105	140			
M	Acier inoxydable	ferritique / martensitique	recuit	200	12						
		martensitique	trempé et revenu	240	13						
		austénitique	trempé	180	14						
		austénitique et ferritique		230	15						
K	Fonte grise	perlitique / ferritique		180	16				335	390	510
		perlitique (martensitique)		260	17				200	230	300
	Fonte avec graphite nodulaire	ferritique		160	18				225	260	340
		perlitique		250	19				150	175	230
	Fonte malléable	ferritique		130	20				275	320	420
		perlitique		230	21				185	215	280
N	Alliages corroyé d'aluminium	non durcissable		60	22						
		durcissable	trempé	100	23						
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24						
		≤ 12 % Si, durcissable	trempé	90	25						
		> 12 % Si, non durcissable		130	26						
	Cuivre et alliages de cuivre (bronze/moulage)	Alliages de décolletage, PB > 1 %		110	27						
		CuZn, CuSnZn		90	28						
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29						
S	Alliages réfractaires	Base Fe	recuit	200	30						
			trempé	280	31						
		à base de Ni ou Co	recuit	250	32						
			trempé	350	33						
			coulé	320	34						
	Alliages de titane	Titane pur		R_m 400	35						
		Alliages Alpha + Beta	trempé	R_m 1050	36						
H	Acier trempé		durci et revenu	55 HRC	37						
			durci et revenu	60 HRC	38						
	Fonte trempée		coulé	400	39						
	Fonte durcie		durci et revenu	55 HRC	40						
X	Matériaux non métalliques	Thermoplastiques			41						
		Duroplaste			42						
		Matière plastique renforcée de fibres de verre GFK			43						
		Matière plastique renforcée de fibres de carbone CFK			44						
		Graphite			45						
		Bois			46						

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Les avances recommandées figurent page B254.
Vous trouverez les exemples de matériaux pour les groupe matière à la page D11.

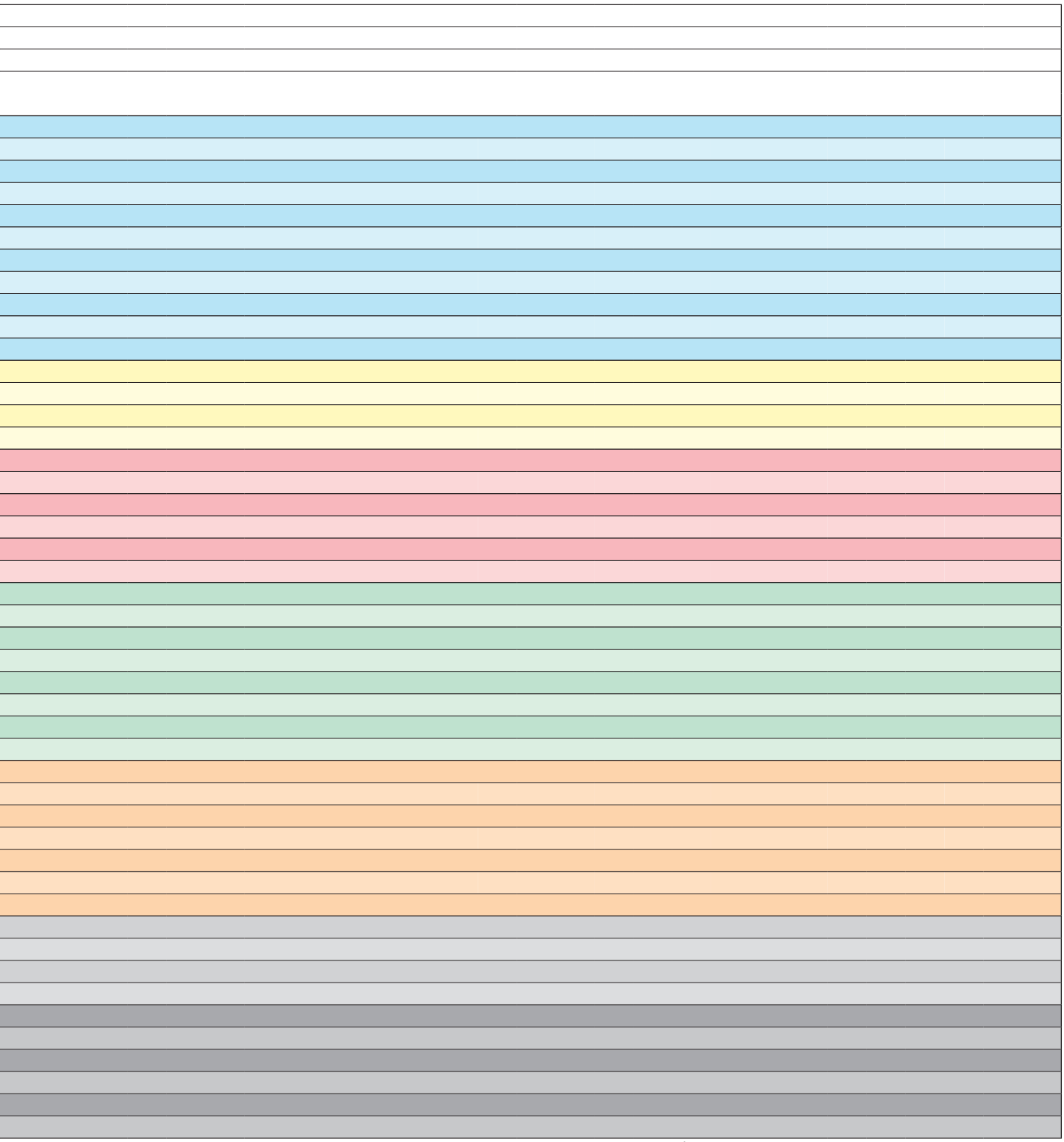
	Vitesse de coupe v_c [m/min]																				
	HC (CVD)						HC (PVD)														
	YBD252			YBM253			YBG102			YBG152			YB9320			YBG205			YBG212		
	a_e / D			a_e / D			a_e / D			a_e / D			a_e / D			a_e / D			a_e / D		
	1/1 | 3/4	1/5	1/20	1/1 | 3/4	1/5	1/20	1/1 | 3/4	1/5	1/20	1/1 | 3/4	1/5	1/20	1/1 | 3/4	1/5	1/20	1/1 | 3/4	1/5	1/20	1/1 | 3/4	1/5	1/20
				260	300	390	270	315	410	255	295	385	245	285	375	235	275	360	240	280	365
				225	255	335	230	270	355	220	255	335	210	245	320	200	235	310	205	240	315
				210	240	315	220	255	335	205	240	315	200	230	300	190	220	290	195	225	295
				185	210	275	190	225	295	180	210	275	175	200	260	165	195	255	170	200	260
				170	195	255	180	205	270	170	195	255	160	190	250	155	180	235	160	185	245
				225	255	335	230	270	355	220	255	335	210	245	320	200	235	310	205	240	315
				185	210	275	190	225	295	180	210	275	175	200	260	165	195	255	170	200	260
				170	195	255	180	205	270	170	195	255	160	190	250	155	180	235	160	185	245
				145	165	215	150	175	230	145	165	215	135	160	210	130	155	205	135	155	205
				130	150	195	135	160	210	130	150	195	125	145	190	120	140	185	120	140	185
				95	105	140	95	115	150	90	105	140	90	100	130	85	100	130	85	100	130
				130	150	195	135	160	205	130	150	195	125	145	190	120	140	180	120	140	185
				110	130	165	115	135	175	110	125	165	105	120	160	100	120	155	105	120	155
				140	160	210	145	170	220	140	160	205	130	155	200	125	150	195	130	150	195
				110	130	165	115	135	175	110	125	165	105	120	160	100	120	155	105	120	155
	290	335	440				300	345	450	285	330	430	270	315	410	260	300	390	265	305	400
	170	195	255				180	205	270	170	195	255	160	190	250	155	180	235	160	185	245
	195	225	295				205	240	315	195	225	295	185	215	280	180	210	275	180	210	275
	130	150	195				135	160	210	130	150	195	125	145	190	120	140	185	120	140	185
	235	270	355				245	285	375	230	270	355	225	260	340	215	250	325	220	255	335
	160	180	235				165	190	250	155	180	235	150	175	230	145	165	215	145	170	225

HC Carbure revêtu
HT Carbure non revêtu, composante principale (TiC) ou (TiN), Cermet
HC_1 Cermet revêtu
HW Carbure non revêtu, composante principale (WC)

Plaquettes de fraisage – groupe 7 (XMR01, XMP01)

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min] HC (PVD) YBG252 a_e / D 1/1 | 3/4	YBG252 a_e / D 1/5	YBG252 a_e / D 1/20	YBG302 a_e / D 1/1 | 3/4	YBG302 a_e / D 1/5	YBG302 a_e / D 1/20
P	Acier non allié	env. 0,15 % C	recuit	125	1	230	265	345	225	260	340
		env. 0,45 % C	recuit	190	2	200	230	300	195	225	295
		env. 0,45 % C	trempé et revenu	250	3	185	215	280	180	210	275
		env. 0,75 % C	recuit	270	4	165	190	250	160	185	245
		env. 0,75 % C	trempé et revenu	300	5	150	175	230	150	170	225
	Acier faiblement allié		recuit	180	6	200	230	300	195	225	295
			trempé et revenu	275	7	165	190	250	160	185	245
			trempé et revenu	300	8	150	175	230	150	170	225
			trempé et revenu	350	9	130	150	195	125	145	190
	Acier fortement allié et acier à outils fortement allié		recuit	200	10	115	135	180	115	130	170
			durci et revenu	325	11	85	95	125	80	95	125
M	Acier inoxydable	ferritique / martensitique	recuit	200	12	115	135	175	115	130	170
		martensitique	trempé et revenu	240	13	100	115	145	95	110	145
		austénitique	trempé	180	14	125	145	185	120	140	185
		austénitique et ferritique		230	15	100	115	145	95	110	145
K	Fonte grise	perlitique / ferritique		180	16	255	295	385	250	290	380
		perlitique (martensitique)		260	17	150	175	230	150	170	225
	Fonte avec graphite nodulaire	ferritique		160	18	175	200	260	170	195	255
		perlitique		250	19	115	135	180	115	130	170
	Fonte malléable	ferritique		130	20	210	240	315	205	235	310
		perlitique		230	21	140	160	210	135	160	210
N	Alliages corroyé d'aluminium	non durcissable		60	22						
		durcissable	trempé	100	23						
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24						
		≤ 12 % Si, durcissable	trempé	90	25						
		> 12 % Si, non durcissable		130	26						
	Cuivre et alliages de cuivre (bronze/moulage)	Alliages de décolletage, PB > 1 %		110	27						
		CuZn, CuSnZn		90	28						
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29						
S	Alliages réfractaires	Base Fe	recuit	200	30						
			trempé	280	31						
		à base de Ni ou Co	recuit	250	32						
			trempé	350	33						
			coulé	320	34						
	Alliages de titane	Titane pur		R_m 400	35						
		Alliages Alpha + Beta	trempé	R_m 1050	36						
H	Acier trempé		durci et revenu	55 HRC	37						
			durci et revenu	60 HRC	38						
	Fonte trempée		coulé	400	39						
	Fonte durcie		durci et revenu	55 HRC	40						
X	Matériaux non métalliques	Thermoplastiques			41						
		Duroplaste			42						
		Matière plastique renforcée de fibres de verre GFK			43						
		Matière plastique renforcée de fibres de carbone CFK			44						
		Graphite			45						
		Bois			46						

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Les avances recommandées figurent page B254.
Vous trouverez les exemples de matériaux pour les groupe matière à la page D11.



HC Carbure revêtu
HT Carbure non revêtu, composante principale (TiC) ou (TiN), Cermet
HC_1 Cermet revêtu
HW Carbure non revêtu, composante principale (WC)

Avance recommandée

Plaquettes de fraisage – groupe 1 (FMA07/11/12, FMD02, EMP09/13)

Groupe de matériaux		Avance à la dent (fz) [mm/dt]																	
		EMP09			EMP09			EMP13			EMP13			FMA07			FMA07		
		LNKT08/12			LNKT16			ANGX11			ANGX15			ONHU06			ONHU08		
		Type d'usinage																	
		F	M	R	F	M	R	F	M	R	F	M	R	F	M	R	F	M	R
P	Acier non allié		0,25	0,50		0,28	0,55		0,23			0,25		0,19	0,23		0,19	0,23	
P	Acier faiblement allié		0,23	0,47		0,26	0,51		0,22			0,23		0,17	0,22		0,17	0,22	
P	Acier fortement allié et acier à outils fortement allié		0,22	0,44		0,24	0,48		0,20			0,22		0,16	0,20		0,16	0,20	
M	Acier inoxydable		0,18	0,35		0,19	0,39		0,16			0,18							
K	Fonte grise		0,28	0,55		0,30	0,61		0,26			0,28		0,20	0,26		0,20	0,26	
K	Fonte avec graphite nodulaire		0,25	0,50		0,28	0,55		0,23			0,25		0,19	0,23		0,19	0,23	
K	Fonte malléable		0,25	0,50		0,28	0,55		0,23			0,25		0,19	0,23		0,19	0,23	
N	Alliages corroyé d'aluminium								0,20			0,21							
N	Alliages de fonte d'aluminium								0,20			0,21							
N	Cuivre et alliages de cuivre (Bronze/moulage)								0,18			0,19							
S	Alliages réfractaires																		
S	Alliages de titane																		
H	Acier trempé																		
H	Fonte trempée																		
H	Fonte durcie																		
X	Matériaux non métalliques																		

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.

Plaquettes de fraisage – groupe 1 (FMA07/11/12, FMD02, EMP09/13)

Groupe de matériaux		Avance à la dent (fz) [mm/dt]																	
		FMP12																	
		WNHU08																	
		Type d'usinage																	
		F	M	R															
P	Acier non allié		0,25																
P	Acier faiblement allié		0,23																
P	Acier fortement allié et acier à outils fortement allié		0,22																
M	Acier inoxydable		0,18																
K	Fonte grise		0,28																
K	Fonte avec graphite nodulaire		0,25																
K	Fonte malléable		0,25																
N	Alliages corroyé d'aluminium																		
N	Alliages de fonte d'aluminium																		
N	Cuivre et alliages de cuivre (Bronze/moulage)																		
S	Alliages réfractaires																		
S	Alliages de titane																		
H	Acier trempé																		
H	Fonte trempée																		
H	Fonte durcie																		
X	Matériaux non métalliques																		

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.

	Avance à la dent (fz) [mm/dt]																							
	FMA11			FMA11			FMA11			FMA12			FMA12			FMD02			FMD02			FMP12		
	SNEG12			SNEG15			SNEG19			ONHU06			ONHU08			PNEG11			HNEX09			WNHU06		
	Type d'usinage																							
	F	M	R	F	M	R	F	M	R	F	M	R	F	M	R	F	M	R	F	M	R	F	M	R
		0,20	0,23		0,22	0,25			0,29	0,19	0,23			0,23		0,15	0,20	0,30					0,23	
		0,19	0,21		0,20	0,24			0,27	0,17	0,22			0,22		0,14	0,19	0,28					0,22	
		0,18	0,20		0,19	0,22			0,26	0,16	0,20			0,20		0,13	0,18	0,26					0,20	
		0,14	0,16		0,15	0,18			0,20					0,16									0,16	
		0,22	0,25		0,24	0,28			0,32	0,20	0,26			0,26		0,17	0,22	0,33	0,17	0,22	0,33		0,26	
		0,20	0,23		0,22	0,25			0,29	0,19	0,23			0,23		0,15	0,20	0,30	0,15	0,20	0,30		0,23	
		0,20	0,23		0,22	0,25			0,29	0,19	0,23			0,23		0,15	0,20	0,30	0,15	0,20	0,30		0,23	

F Finition
M Semi-finition
R Ébauche

F Finition
M Semi-finition
R Ébauche

Avance recommandée

Plaquettes de fraisage – groupe 2 (FMA01/02/03/04, FME01/02, FMP01/02, EMP01/02/03/04)

Groupe de matériaux		Avance à la dent (fz) [mm/dt]																	
		FMA01 | FMA02			FMA03			FMA03			FMA04			FMA04			FMA04		
		SEET12			SEKN12			SEKN15			OFKT05			OFKR07			ODHT06		
		Type d'usinage																	
		F	M	R	F	M	R	F	M	R	F	M	R	F	M	R	F	M	R
P	Acier non allié	0,15	0,20	0,25		0,18			0,20		0,20	0,25		0,20	0,25		0,20	0,25	
P	Acier faiblement allié	0,14	0,19	0,23		0,17			0,19		0,19	0,23		0,19	0,23		0,19	0,23	
P	Acier fortement allié et acier à outils fortement allié	0,13	0,18	0,22		0,16			0,18		0,18	0,22		0,18	0,22		0,18	0,22	
M	Acier inoxydable	0,11	0,14	0,18		0,13			0,14		0,14	0,18		0,14	0,18		0,14	0,18	
K	Fonte grise	0,17	0,22	0,28		0,20			0,22		0,22	0,28		0,22	0,28		0,22	0,28	
K	Fonte avec graphite nodulaire	0,15	0,20	0,25		0,18			0,20		0,20	0,25		0,20	0,25		0,20	0,25	
K	Fonte malléable	0,15	0,20	0,25		0,18			0,20		0,20	0,25		0,20	0,25		0,20	0,25	
N	Alliages corroyé d'aluminium	0,13	0,17	0,21							0,17	0,21		0,17	0,21		0,17	0,21	
N	Alliages de fonte d'aluminium	0,13	0,17	0,21							0,17	0,21		0,17	0,21		0,17	0,21	
N	Cuivre et alliages de cuivre (Bronze/moulage)	0,11	0,15	0,19							0,15	0,19		0,15	0,19		0,15	0,19	
S	Alliages réfractaires	0,11	0,14	0,18							0,14	0,18		0,14	0,18		0,14	0,18	
S	Alliages de titane	0,11	0,14	0,18							0,14	0,18		0,14	0,18		0,14	0,18	
H	Acier trempé																		
H	Fonte trempée																		
H	Fonte durcie																		
X	Matériaux non métalliques																		

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.

Plaquettes de fraisage – groupe 3 (FMR01/02/03/04) Fraisage à surfacer

Groupe de matériaux		Avance à la dent (fz) [mm/dt]																	
		FMR01			FMR01			FMR02			FMR02			FMR02			FMR03		
		RCKT10			RC*12			RC*12			RCKT16			RCKT20			RDKW07		
		Type d'usinage																	
		F	M	R	F	M	R	F	M	R	F	M	R	F	M	R	F	M	R
P	Acier non allié		0,20	0,25		0,20	0,25		0,20	0,25		0,23	0,29		0,26	0,33		0,17	
P	Acier faiblement allié		0,19	0,23		0,19	0,23		0,19	0,23		0,21	0,27		0,25	0,31		0,16	
P	Acier fortement allié et acier à outils fortement allié		0,18	0,22		0,18	0,22		0,18	0,22		0,20	0,25		0,23	0,29		0,15	
M	Acier inoxydable		0,14	0,18		0,14	0,18		0,14	0,18		0,16	0,20		0,19	0,23		0,12	
K	Fonte grise		0,22	0,28		0,22	0,28		0,22	0,28		0,25	0,32		0,29	0,36		0,19	
K	Fonte avec graphite nodulaire		0,20	0,25		0,20	0,25		0,20	0,25		0,23	0,29		0,26	0,33		0,17	
K	Fonte malléable		0,20	0,25		0,20	0,25		0,20	0,25		0,23	0,29		0,26	0,33		0,17	
N	Alliages corroyé d'aluminium					0,17	0,21		0,17	0,21									
N	Alliages de fonte d'aluminium					0,17	0,21		0,17	0,21									
N	Cuivre et alliages de cuivre (Bronze/moulage)					0,15	0,19		0,15	0,19									
S	Alliages réfractaires																		
S	Alliages de titane																		
H	Acier trempé																		
H	Fonte trempée																		
H	Fonte durcie																		
X	Matériaux non métalliques																		

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.

	Avance à la dent (fz) [mm/dt]																							
	FME02			FME03			FME03			FMP01			FMP02			EMP01 | EMP02			EMP01 | EMP02			EMP03 | EMP04		
	SPK*12			SPK*12			SPK*15			TPKN22			SEET12			APKT11			APKT16			APKT11		
	Type d'usinage																							
	F	M	R	F	M	R	F	M	R	F	M	R	F	M	R	F	M	R	F	M	R	F	M	R
		0,20			0,19			0,20			0,20		0,15	0,20	0,25	0,10	0,15	0,20	0,12	0,17	0,23	0,10	0,20	0,25
		0,19			0,17			0,19			0,19		0,14	0,19	0,23	0,09	0,14	0,19	0,11	0,16	0,21	0,09	0,19	0,23
		0,18			0,16			0,18			0,18		0,13	0,18	0,22	0,09	0,13	0,18	0,10	0,15	0,20	0,09	0,18	0,22
		0,14			0,13			0,14			0,14		0,11	0,14	0,18	0,07	0,11	0,14	0,08	0,12	0,16	0,07	0,14	0,18
		0,22			0,20			0,22			0,22		0,17	0,22	0,28	0,11	0,17	0,22	0,13	0,19	0,25	0,11	0,22	0,28
		0,20			0,19			0,20			0,20		0,15	0,20	0,25	0,10	0,15	0,20	0,12	0,17	0,23	0,10	0,20	0,25
		0,20			0,19			0,20			0,20		0,15	0,20	0,25	0,10	0,15	0,20	0,12	0,17	0,23	0,10	0,20	0,25
													0,13	0,17	0,21	0,09	0,13	0,17	0,10	0,15	0,20	0,09	0,17	0,21
													0,13	0,17	0,21	0,09	0,13	0,17	0,10	0,15	0,20	0,09	0,17	0,21
													0,11	0,15	0,19	0,08	0,11	0,15	0,09	0,13	0,18	0,08	0,15	0,19

F Finition
M Semi-finition
R Ébauche

	Avance à la dent (fz) [mm/dt]															
	FMR03			FMR03			FMR04			FMR04			FMR04			
	RDKW08			RD*10			RD*12			RDKW16			RDKW20			
	Type d'usinage															
	F	M	R	F	M	R	F	M	R	F	M	R	F	M	R	
		0,17			0,20		0,15	0,20	0,25	0,17	0,23	0,29	0,2	0,26	0,33	
		0,16			0,19		0,14	0,19	0,23	0,16	0,21	0,27	0,19	0,25	0,31	
		0,15			0,18		0,13	0,18	0,22	0,15	0,20	0,25	0,18	0,23	0,29	
		0,12			0,14		0,11	0,14	0,18	0,12	0,16	0,20	0,14	0,19	0,23	
		0,19			0,22		0,17	0,22	0,28	0,19	0,25	0,32	0,22	0,29	0,36	
		0,17			0,20		0,15	0,20	0,25	0,17	0,23	0,29	0,20	0,26	0,33	
		0,17			0,20		0,15	0,20	0,25	0,17	0,23	0,29	0,20	0,26	0,33	
					0,17		0,13	0,17	0,21							
					0,17		0,13	0,17	0,21							
					0,15		0,11	0,15	0,19							

F Finition
M Semi-finition
R Ébauche

Avance recommandée

Plaquettes de fraisage – groupe 3 (FMR01/02/03/04) Fraisage circulaire

Groupe de matériaux		Avance à la dent (fz) [mm/dt]							
		FMR01	FMR01	FMR02	FMR02		FMR02		FMR03
		RCKT10	RC*12	RC*12	RCKT16		RCKT20		RDKW07
		Diamètre de l'outil [mm]							
		25-32	40-50	50-100	63-125	160-200	80-125	160-250	15
P	Acier non allié	0,12	0,16	0,18	0,24	0,32	0,26	0,35	0,07
P	Acier faiblement allié	0,11	0,14	0,16	0,21	0,28	0,23	0,31	0,06
P	Acier fortement allié et acier à outils fortement allié	0,10	0,13	0,14	0,19	0,26	0,21	0,28	0,06
M	Acier inoxydable	0,07	0,09	0,10	0,14	0,18	0,15	0,20	0,04
K	Fonte grise	0,11	0,14	0,16	0,22	0,29	0,23	0,32	0,06
K	Fonte avec graphite nodulaire	0,10	0,13	0,14	0,19	0,26	0,21	0,28	0,06
K	Fonte malléable	0,10	0,13	0,14	0,19	0,26	0,21	0,28	0,06
N	Alliages corroyé d'aluminium								
N	Alliages de fonte d'aluminium								
N	Cuivre et alliages de cuivre (Bronze/moulage)								
S	Alliages réfractaires								
S	Alliages de titane								
H	Acier trempé								
H	Fonte trempée								
H	Fonte durcie								
X	Matériaux non métalliques								

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.

Plaquettes de fraisage – groupe 4 (BMR01/02/03/04, TMP01, CMZ01, CMA01, CMD01)

Groupe de matériaux		Avance à la dent (fz) [mm/dt]								
		BMR01	BMR01	BMR01	BMR01	BMR02	BMR02	BMR02	BMR03	BMR03
		ZD*08 / SP*06	ZD*11 / SP*06	ZD*13 / SP*09	ZP*22 / SP*12	ROHX12	ROHX16	ROHX20	-	-
		Diamètre de l'outil [mm]								
		20	25	32	40-63	12	16	20	16	20
P	Acier non allié	0,14	0,21	0,26	0,32	0,10	0,13	0,14	0,13	0,14
P	Acier faiblement allié	0,10	0,15	0,18	0,22	0,07	0,09	0,10	0,09	0,10
P	Acier fortement allié et acier à outils fortement allié	0,09	0,14	0,17	0,21	0,07	0,08	0,09	0,08	0,09
M	Acier inoxydable	0,08	0,12	0,14	0,18	0,06	0,07	0,08	0,07	0,08
K	Fonte grise	0,18	0,27	0,34	0,42	0,13	0,17	0,18	0,17	0,18
K	Fonte avec graphite nodulaire	0,13	0,20	0,25	0,30	0,10	0,12	0,13	0,12	0,13
K	Fonte malléable	0,14	0,21	0,26	0,32	0,10	0,13	0,14	0,13	0,14
N	Alliages corroyé d'aluminium									
N	Alliages de fonte d'aluminium									
N	Cuivre et alliages de cuivre (Bronze/moulage)									
S	Alliages réfractaires									
S	Alliages de titane									
H	Acier trempé									
H	Fonte trempée									
H	Fonte durcie									
X	Matériaux non métalliques									

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.

	Avance à la dent (fz) [mm/dt]					
	FMR03	FMR03	FMR04	FMR04	FMR04	
	RDKW08	RD*10	RD*12	RDKW16	RDKW20	
	Diamètre de l'outil [mm]					
	16-25	32	50-63	80-100	125-160	
	0,07	0,12	0,17	0,24	0,30	
	0,06	0,11	0,15	0,21	0,26	
	0,06	0,10	0,14	0,19	0,24	
	0,04	0,07	0,10	0,14	0,17	
	0,06	0,11	0,15	0,22	0,27	
	0,06	0,10	0,14	0,19	0,24	
	0,06	0,10	0,14	0,19	0,24	
		0,10	0,11			
		0,10	0,11			
		0,10	0,11			

	Avance à la dent (fz) [mm/dt]											
	BMR03	BMR03	BMR03	BMR04	BMR04	BMR04	BMR04	BMR04	CMZ01	CMA01	CMD01	
	-	-	-	ZOHX12	ZOHX16	ZOHX20	ZOHX25	ZOHX30	SPMT12	SPMT12	SPMT12	
	Diamètre de l'outil [mm]											
	25	30-32	40-50	12	16	20	25	30	12-32	12-32	12-36	
	0,21	0,26	0,30	0,10	0,13	0,14	0,16	0,17	0,23	0,23	0,23	
	0,15	0,18	0,21	0,07	0,09	0,10	0,11	0,12	0,16	0,16	0,16	
	0,14	0,17	0,20	0,07	0,08	0,09	0,10	0,11	0,15	0,15	0,15	
	0,12	0,14	0,17	0,06	0,07	0,08	0,09	0,09	0,13	0,13	0,13	
	0,27	0,34	0,39	0,13	0,17	0,18	0,21	0,22	0,30	0,30	0,30	
	0,20	0,25	0,29	0,10	0,12	0,13	0,15	0,16	0,22	0,22	0,22	
	0,21	0,26	0,30	0,10	0,13	0,14	0,16	0,17	0,23	0,23	0,23	

Avance recommandée

Plaquettes de fraisage – groupe 5 (SMP01/03/05)

Groupe de matériaux		Avance à la dent (fz) [mm/dt]								
		SMP01	SMP01	SMP01	SMP01	SMP01	SMP03	SMP03	SMP03	SMP05
		XSEQ1202	XSEQ1203	XSEQ12T3	XSEQ1204	XSEQ12T4	MPHT06	MPHT08	MPHT12	QC16
		Diamètre de l'outil [mm]								
		63-100	63-100	63-160	63-160	63-160	80-125	125-200	120-200	25-39
P	Acier non allié	0,12	0,12	0,13	0,13	0,14	0,14	0,15	0,16	0,08
P	Acier faiblement allié	0,11	0,11	0,12	0,12	0,13	0,13	0,14	0,15	0,08
P	Acier fortement allié et acier à outils fortement allié	0,10	0,10	0,11	0,11	0,12	0,12	0,13	0,14	0,07
M	Acier inoxydable	0,10	0,10	0,11	0,11	0,12	0,12	0,13	0,14	0,07
K	Fonte grise	0,11	0,11	0,12	0,12	0,13	0,13	0,14	0,15	0,08
K	Fonte avec graphite nodulaire	0,11	0,11	0,12	0,12	0,13	0,13	0,14	0,15	0,07
K	Fonte malléable	0,11	0,11	0,12	0,12	0,13	0,13	0,14	0,15	0,07
N	Alliages corroyé d'aluminium									
N	Alliages de fonte d'aluminium									
N	Cuivre et alliages de cuivre (Bronze/moulage)									
S	Alliages réfractaires									
S	Alliages de titane									
H	Acier trempé									
H	Fonte trempée									
H	Fonte durcie									
X	Matériaux non métalliques									

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.

Plaquettes de fraisage – groupe 6 (FMD03, FME04, FMP03, HMP01)

Groupe de matériaux		Avance à la dent (fz) [mm/dt]																	
		FMD03			FMD03			FME04			FMP03			FMP03			FMP03		
		LNKT20			LNKT25			LNKT15			LNKT12			LNKT15			LNKT20		
		Type d'usinage																	
		F	M	R	F	M	R	F	M	R	F	M	R	F	M	R	F	M	R
P	Acier non allié			0,50			0,50			0,45			0,45			0,45			0,50
P	Acier faiblement allié			0,47			0,47			0,42			0,42			0,42			0,47
P	Acier fortement allié et acier à outils fortement allié			0,44			0,44			0,40			0,40			0,40			0,44
M	Acier inoxydable			0,45			0,45			0,40			0,40			0,40			0,45
K	Fonte grise			0,55			0,55			0,50			0,50			0,50			0,55
K	Fonte avec graphite nodulaire			0,50			0,50			0,45			0,45			0,45			0,50
K	Fonte malléable			0,50			0,50			0,45			0,45			0,45			0,50
N	Alliages corroyé d'aluminium																		
N	Alliages de fonte d'aluminium																		
N	Cuivre et alliages de cuivre (Bronze/moulage)																		
S	Alliages réfractaires																		
S	Alliages de titane																		
H	Acier trempé																		
H	Fonte trempée																		
H	Fonte durcie																		
X	Matériaux non métalliques																		

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.

	Avance à la dent (fz) [mm/dt]	
	SMP05	
	QC22	
	Diamètre de l'outil [mm]	
	44	
	0,08	
	0,08	
	0,07	
	0,07	
	0,08	
	0,07	
	0,07	

	Avance à la dent (fz) [mm/dt]						
	FMP03			HMP01			
	LNKT25			SPMT-APKT			
	Type d'usinage						
	F	M	R	F	M	R	
			0,55		0,25		
			0,51		0,23		
			0,48		0,22		
			0,47		0,15		
			0,61		0,28		
			0,55		0,25		
			0,55		0,25		

F Finition
M Semi-finition
R Ébauche

Avance recommandée

Plaquettes de fraisage – groupe 7 (XMR01, XMP01, QCH)

Groupe de matériaux		Avance à la dent (fz) [mm/dt]								
		XMR01 Fraisage à surfacer			XMR01 Fraisage en plongée			XMR01 Fraisage circulaire		
		SDMT/WPGT			SDMT/WPGT			SDMT/WPGT		
		Diamètre de l'outil [mm]								
		20-25	30-50	63-160	20-25	30-50	63-160	20-25	30-50	63-160
P	Acier non allié	1,00	1,20	2,00	0,20	0,25	0,30	0,80	0,96	1,40
P	Acier faiblement allié	0,93	1,12	1,86	0,19	0,23	0,28	0,74	0,89	1,30
P	Acier fortement allié et acier à outils fortement allié	0,70	0,84	1,40	0,18	0,22	0,26	0,70	0,84	1,23
M	Acier inoxydable	0,50	0,60	1,00	0,14	0,18	0,21	0,56	0,67	0,98
K	Fonte grise	0,90	1,08	1,80	0,22	0,28	0,33	0,88	1,06	1,54
K	Fonte avec graphite nodulaire	0,90	1,08	1,80	0,20	0,25	0,30	0,80	0,96	1,40
K	Fonte malléable	1,00	1,20	2,00	0,20	0,25	0,30	0,80	0,96	1,40
N	Alliages corroyé d'aluminium									
N	Alliages de fonte d'aluminium									
N	Cuivre et alliages de cuivre (Bronze/moulage)									
S	Alliages réfractaires									
S	Alliages de titane									
H	Acier trempé									
H	Fonte trempée									
H	Fonte durcie									
X	Matériaux non métalliques									

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.

	Avance à la dent (fz) [mm/dt]							
	XMP01	QCH	QCH	QCH	QCH	QCH	QCH	
	CNE	ZOHX	RD*	APKT	WPGT	SDMT	XPHT	
	Diamètre de l'outil [mm]							
	80-400	16-32	15-32	16-40	20-42	20-40	16-32	
	0,20	0,20	0,20	0,15	1,00	1,00	0,20	
	0,20	0,19	0,19	0,14	0,93	0,93	0,19	
	0,20	0,18	0,18	0,13	0,70	0,70	0,18	
	0,20	0,14	0,14	0,11	0,50	0,50	0,14	
	0,20	0,22	0,22	0,17	0,90	0,90	0,22	
	0,20	0,20	0,20	0,15	0,90	0,90	0,20	
	0,20	0,20	0,20	0,15	1,00	1,00	0,20	
				0,13				
				0,13				
				0,11				



FRAISES CARBURE MONOBLOC

B

Fraises carbure monobloc

Vue d'ensemble des produits	**B266-B275**
Vue d'ensemble des nuances	**B276-B277**
Codification – DIN ISO	**B278**
Codification – JIS	**B279**
Codification – Gamme QCH	**B280-B282**
Série GM	**B283-B338**
Série PM	**B339-B360**
Gamme PM Micro	**B361-B370**
Série EPM	**B371-B386**
Série VPM	**B387-B388**
Série HM	**B389-B410**
Série NM	**B411-B416**
Série AL	**B417-B428**
Série ALG/ALP	**B429-B438**
Série TM	**B439-B454**
Série HPC	**B455-B460**
Série UM	**B461-B470**
Série UMC	**B471-B472**
Série VSM	**B473-B476**
Fraise à ébavurer – série FM	**B477-B480**
Série QCH	**B481-B491**
Recommandations de données de coupe	**B492-B526**
Informations techniques	**B537-B540**
Outils spéciaux	**B541**

Fraises carbure monobloc Vue d'ensemble des produits

Fraisage haute performance

Produits	Foret carbure monobloc	Dents	Ø	Application						Version	Page
				P	M	K	N	S	H		
PM-2E		2	1,0-20,0	✓	✓	✓			✓	Fraise	B339
PM-2EL		2	3,0-20,0	✓	✓	✓			✓	Fraise	B340
PM-4E-G		4	1,0-20,0	✓	✓	✓			✓	Fraise	B341
PM-4EL-G		4	3,0-20,0	✓	✓	✓			✓	Fraise	B342
PM-4EX-G		4	3,0-20,0	✓	✓	✓			✓	Fraise	B343
PM-4E		4	1,0-20,0	✓	✓	✓			✓	Fraise	B344
PM-4EL		4	3,0-20,0	✓	✓	✓			✓	Fraise	B345
PM-6E		6	6,0-20,0	✓	✓	✓			✓	Fraise	B346
PM-6EL		6	6,0-20,0	✓	✓	✓			✓	Fraise	B347
PM-2B		2	1,0-20,0	✓	✓	✓			✓	Fraise hémisphérique	B348
PM-2BL		2	2,0-20,0	✓	✓	✓			✓	Fraise hémisphérique	B349
PM-2BFP		2	1,0-20,0	✓	✓	✓			✓	Fraise hémisphérique	B350
PM-2BC		2	0,5-4,0	✓	✓	✓			✓	Fraise hémisphérique à dégagement conique	B351
PM-4B		4	3,0-20,0	✓	✓	✓			✓	Fraise hémisphérique	B354
PM-4BL		4	3,0-20,0	✓	✓	✓			✓	Fraise hémisphérique	B355
PM-2R		2	1,0-12,0	✓	✓	✓			✓	Fraise torique	B356
PM-4H		4	3,0-12,0	✓	✓	✓			✓	Fraise grande avance	B357
PM-4HL		4	4,0-12,0	✓	✓	✓			✓	Fraise grande avance	B358
PM-4R		4	3,0-12,0	✓	✓	✓			✓	Fraise torique	B359
PM-4RL		4	6,0-16,0	✓	✓	✓			✓	Fraise torique	B360
PM-2EP		2	0,5-5,0	✓	✓	✓			✓	Fraise	B362

✓ Choix de base ✓ Alternative

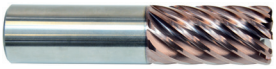
Fraisage haute performance

Produits	Foret carbure monobloc	Dents	Ø	Application						Version	Page
				P	M	K	N	S	H		
PM-2ES		2	0,3-3,0	✓	✓	✓			✓	Fraise	B361
PM-2BS		2	0,3-3,0	✓	✓	✓			✓	Fraise hémisphérique	B364
PM-2BP		2	0,5-5,0	✓	✓	✓			✓	Fraise hémisphérique	B365
PM-2RP		2	0,5-5,0	✓	✓	✓			✓	Fraise torique	B367
EPM-2E		2	3,0-20,0	✓	✓	✓			✓	Fraise	B371
EPM-2E-W		2	3,0-20,0	✓	✓	✓			✓	Fraise	B372
EPM-2EL		2	3,0-20,0	✓	✓	✓			✓	Fraise	B373
EPM-2EL-W		2	3,0-20,0	✓	✓	✓			✓	Fraise	B374
EPM-4E		4	3,0-20,0	✓	✓	✓			✓	Fraise	B375
EPM-4E-W		4	3,0-20,0	✓	✓	✓			✓	Fraise	B376
EPM-4EL		4	3,0-20,0	✓	✓	✓			✓	Fraise	B377
EPM-4EL-W		4	3,0-20,0	✓	✓	✓			✓	Fraise	B378
EPM-2B		2	3,0-20,0	✓	✓	✓			✓	Fraise hémisphérique	B379
EPM-2B-W		2	3,0-20,0	✓	✓	✓			✓	Fraise hémisphérique	B380
EPM-2BL		2	3,0-20,0	✓	✓	✓			✓	Fraise hémisphérique	B381
EPM-2BL-W		2	3,0-20,0	✓	✓	✓			✓	Fraise hémisphérique	B382
EPM-4B		4	3,0-20,0	✓	✓	✓			✓	Fraise hémisphérique	B383
EPM-4B-W		4	3,0-20,0	✓	✓	✓			✓	Fraise hémisphérique	B384
EPM-4BL		4	3,0-20,0	✓	✓	✓			✓	Fraise hémisphérique	B385
EPM-4BL-W		4	3,0-20,0	✓	✓	✓			✓	Fraise hémisphérique	B386
VPM-4E		4	3,0-20,0	✓	✓	✓			✓	Fraise	B387

✓ Choix de base ✓ Alternative

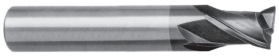
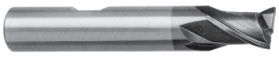
Fraises carbure monobloc Vue d'ensemble des produits

Fraisage haute performance

Produits	Foret carbure monobloc	Dents	Ø	Application						Version	Page
				P	M	K	N	S	H		
TM-4B		2	6,0-20,0		✔			✔		Fraise hémisphérique	B439
TM-4BL		2	6,0-20,0		✔			✔		Fraise hémisphérique	B440
TM-4BP		2	6,0-20,0		✔			✔		Fraise hémisphérique	B441
TM-5B		2	6,0-20,0		✔			✔		Fraise hémisphérique	B442
TM-5BL		2	6,0-20,0		✔			✔		Fraise hémisphérique	B443
TM-5BP		2	6,0-20,0		✔			✔		Fraise hémisphérique	B444
TM-4R		2	6,0-25,0		✔			✔		Fraise torique	B445
TM-4RP		2	8,0-25,0		✔			✔		Fraise torique	B447
TM-5R		2	6,0-10,0		✔			✔		Fraise torique	B449
TM-7R		2	12,0-21,0		✔			✔		Fraise torique	B450
TM-9R		2	25,0		✔			✔		Fraise torique	B451
TM-5RP		2	8,0-10,0		✔			✔		Fraise torique	B452
TM-7RP		2	12,0-20,0		✔			✔		Fraise torique	B453
TM-9RP		2	25,0		✔			✔		Fraise torique	B454

✔ Choix de base ✔ Alternative

Usinage général

5501R302GM		2	3,0-20,0	✔	✔	✔				Fraise	B283
5601R302GM		2	3,0-20,0	✔	✔	✔				Fraise	B284
5502R302GM		2	1,0-20,0	✔	✔	✔				Fraise	B285
5602R302GM		2	2,0-20,0	✔	✔	✔				Fraise	B286
GM-2E		2	1,0-20,0	✔	✔	✔				Fraise	B287
GM-2EL		2	3,0-20,0	✔	✔	✔				Fraise	B288

✔ Choix de base ✔ Alternative

Usinage général

Produits	Foret carbure monobloc	Dents	Ø	Application						Version	Page
				P	M	K	N	S	H		
GM-2EX		2	3,0-20,0	✔	✔	✔				Fraise	B289
GM-2EFP		2	6,0-16,0	✔	✔	✔				Fraise	B290
GM-2F		2	1,0-20,0	✔	✔	✔				Fraise	B291
GM-2FL		2	3,0-20,0	✔	✔	✔				Fraise	B292
GM-2EP		2	0,5-5,0	✔	✔	✔				Mini-fraise monobloc	B293
GM-2ES		2	0,3-3,0	✔	✔	✔				Mini-fraise monobloc	B295
GM-3E		3	1,0-20,0	✔	✔	✔				Fraise	B296
GM-3EL		3	3,0-20,0	✔	✔	✔				Fraise	B297
5501R303GM		3	3,0-20,0	✔	✔	✔				Fraise	B298
5601R303GM		3	3,0-20,0	✔	✔	✔				Fraise	B299
5502R303GM		3	3,0-20,0	✔	✔	✔				Fraise	B300
5602R303GM		3	3,0-20,0	✔	✔	✔				Fraise	B301
5502R453GM		3	3,0-20,0	✔	✔	✔				Fraise	B302
5602R453GM		3	3,0-20,0	✔	✔	✔				Fraise	B303
GM-4F-G		4	1,0-20,0	✔	✔	✔				Fraise	B304
GM-4EL-G		4	3,0-20,0	✔	✔	✔				Fraise	B305
GM-4FL-G		4	3,0-16,0	✔	✔	✔				Fraise	B306
GM-4EX-G		4	3,0-20,0	✔	✔	✔				Fraise	B307
GM-4E		4	1,0-20,0	✔	✔	✔				Fraise	B308
GM-4E-G		4	1,0-20,0	✔	✔	✔				Fraise	B309
GM-4EL		4	3,0-20,0	✔	✔	✔				Fraise	B310

✔ Choix de base ✔ Alternative

Fraises carbure monobloc Vue d'ensemble des produits

Usinage général

Produits	Foret carbure monobloc	Dents	Ø	Application						Version	Page
				P	M	K	N	S	H		
GM-4EFP		4	6,0-20,0	✓	✓	✓				Fraise	B311
5501R304GF		4	3,0-20,0	✓	✓	✓				Fraise	B312
5601R304GF		4	3,0-20,0	✓	✓	✓				Fraise	B313
5502R304GF		4	3,0-20,0	✓	✓	✓				Fraise	B314
5602R304GF		4	3,0-20,0	✓	✓	✓				Fraise	B315
5508R454GM		4	3,0-20,0	✓	✓	✓				Fraise	B316
5602R454GM		4	3,0-20,0	✓	✓	✓				Fraise	B317
5589R45MGFR		6-10	6,0-12,0	✓	✓	✓				Fraise	B318
GM-6E		6	6,0-20,0	✓	✓	✓				Fraise	B319
GM-6EL		6	6,0-20,0	✓	✓	✓				Fraise	B320
5565R302GF		2	3,0-20,0	✓	✓	✓				Fraise hémisphérique	B321
5665R202GM		2	3,0-20,0	✓	✓	✓				Fraise hémisphérique	B322
5566R302GF		2	3,0-12,0	✓	✓	✓				Fraise hémisphérique	B323
GM-2B		2	1,0-20,0	✓	✓	✓				Fraise hémisphérique	B324
GM-2BL		2	2,0-20,0	✓	✓	✓				Fraise hémisphérique	B325
GM-2BFP		2	1,0-20,0	✓	✓	✓				Fraise hémisphérique	B326
GM-2BS		2	0,3-3,0	✓	✓	✓				Mini-fraise hémisphérique	B327
GM-2BP		2	0,5-5,0	✓	✓	✓				Mini-fraise hémisphérique	B328
GM-4B		4	3,0-20,0	✓	✓	✓				Fraise hémisphérique	B330
GM-4BL		4	3,0-20,0	✓	✓	✓				Fraise hémisphérique	B331
GM-2R		2	1,0-12,0	✓	✓	✓				Fraise torique	B332

✓ Choix de base ✓ Alternative

Usinage général

Produits	Foret carbure monobloc	Dents	Ø	Application						Version	Page
				P	M	K	N	S	H		
GM-4R		4	3,0-12,0	✔	✔	✔				Fraise torique	B333
GM-4RL		4	6,0-16,0	✔	✔	✔				Fraise torique	B334
5602R303GR		3	6,0-8,0	✔	✔	✔				Fraise d'ébauche	B335
5602R304GR		4	10,0-20,0	✔	✔	✔				Fraise d'ébauche	B336
5602R305GR		5	25,0	✔	✔	✔				Fraise d'ébauche	B337
GM-4W		4	6,0-20,0	✔	✔	✔				Fraise d'ébauche	B338

✔ Choix de base ✔ Alternative

Usinage de matériaux durs

HM-2E		2	1,0-20,0						✔	Fraise	B389
HM-2EFP		2	6,0-20,0						✔	Fraise	B390
HM-2EP		2	0,5-5,0						✔	Mini-fraise monobloc	B391
HM-2ES		2	0,3-3,0						✔	Mini-fraise monobloc	B393
HM-4E		4	1,0-20,0						✔	Fraise	B394
HM-4EL		4	3,0-20,0						✔	Fraise	B395
HM-4EFP		4	6,0-20,0						✔	Fraise	B396
5502R55MHH		4-8	3,0-20,0						✔	Fraise	B397
HM-6E		6	6,0-20,0						✔	Fraise	B398
HM-6EL		6	6,0-20,0						✔	Fraise	B399
HM-2B		2	1,0-20,0						✔	Fraise hémisphérique	B400
HM-2BL		2	2,0-20,0						✔	Fraise hémisphérique	B401
HM-2BFP		2	1,0-20,0						✔	Fraise hémisphérique	B402
HM-2BS		2	0,3-3,0						✔	Mini-fraise hémisphérique	B403

✔ Choix de base ✔ Alternative

Fraises carbure monobloc Vue d'ensemble des produits

Usinage de matériaux durs

Produits	Foret carbure monobloc	Dents	Ø	Application						Version	Page
				P	M	K	N	S	H		
HM-2BP		2	0,5-5,0						✔	Mini-fraise hémisphérique	B404
HM-4B		4	3,0-20,0						✔	Fraise hémisphérique	B406
HM-4BL		4	3,0-20,0						✔	Fraise hémisphérique	B407
HM-4R		4	3,0-12,0						✔	Fraise torique	B408
HM-4RF		4	6,0-12,0						✔	Fraise torique	B409
HM-4RP		4	6,0-16,0						✔	Fraise torique	B410

✔ Choix de base ✔ Alternative

Cuivre et alliages de cuivre

5502R402NM		2	3,0-20,0				✔			Fraise	B411
NM-2E		2	1,0-12,0				✔			Fraise	B412
NM-2EP		2	0,5-5,0				✔			Mini-fraise monobloc	B413
NM-4E		4	3,0-12,0				✔			Fraise	B414
NM-2B		2	1,0-12,0				✔			Fraise hémisphérique	B415
NM-2BP		2	0,5-5,0				✔			Mini-fraise hémisphérique	B416

✔ Choix de base ✔ Alternative

Aluminium et alliages d'aluminium

AL-2E		2	1,0-20,0				✔			Fraise	B417
AL-2EL		2	3,0-20,0				✔			Fraise	B418
AL-3E		3	1,0-20,0				✔			Fraise	B419
AL-3EL		3	3,0-20,0				✔			Fraise	B420
AL-3W		3	6,0-20,0				✔			Fraise d'ébauche	B421
5565R302NH		2	3,0-16,0				✔			Fraise hémisphérique	B422
5566R302NH		2	3,0-16,0				✔			Fraise hémisphérique	B423

✔ Choix de base ✔ Alternative

Aluminium et alliages d'aluminium

Produits	Foret carbure monobloc	Dents	Ø	Application						Version	Page
				P	M	K	N	S	H		
AL-2B		2	2,0-12,0				✔			Fraise hémisphérique	B424
AL-2R-AIR		2	6,0-20,0				✔			Fraise torique haute performance	B425
AL-2RL-AIR		2	6,0-20,0				✔			Fraise torique haute performance	B426
AL-3R-AIR		3	12,0-20,0				✔			Fraise torique haute performance	B427
AL-3RL-AIR		3	12,0-20,0				✔			Fraise torique haute performance	B428
ALG-2E		2	1,0-20,0				✔			Fraise	B429
ALG-3E		3	1,0-20,0				✔			Fraise	B430
ALG-3E-W		3	3,0-20,0				✔			Fraise	B431
ALP-3E		3	1,0-20,0				✔			Fraise	B432
ALP-3E-W		3	3,0-20,0				✔			Fraise	B433
ALP-4E		4	3,0-20,0				✔			Fraise	B434
ALP-4E-W		4	3,0-20,0				✔			Fraise	B435
ALG-2R		2	6,0-25,0				✔			Fraise torique	B436
ALG-2R-W		2	6,0-25,0				✔			Fraise torique	B437

✔ Choix de base ✔ Alternative

HPC avec angle d'hélice variable

5501R38414GM		4	4,0-20,0	✔	✔	✔			✔	Fraise	B455
5502R38414GM		4	4,0-20,0	✔	✔	✔			✔	Fraise	B456
5601R38414GM		4	4,0-20,0	✔	✔	✔			✔	Fraise	B457
5602R38414GM		4	4,0-20,0	✔	✔	✔			✔	Fraise	B458
5502R38414GM-R		4	4,0-20,0	✔	✔	✔			✔	Fraise torique	B459
5602R38414GM-R		4	4,0-20,0	✔	✔	✔			✔	Fraise torique	B460

✔ Choix de base ✔ Alternative

Fraises carbure monobloc Vue d'ensemble des produits

HPC avec angle d'hélice variable

Produits	Foret carbure monobloc	Dents	Ø	Application						Version	Page
				P	M	K	N	S	H		
UM-4E		4	4,0-20,0	✓	✓	✓			✓	Fraise	B461
UM-4E-W		4	4,0-20,0	✓	✓	✓			✓	Fraise	B462
UM-4EL		4	4,0-20,0	✓	✓	✓			✓	Fraise	B463
UM-4EL-W		4	4,0-20,0	✓	✓	✓			✓	Fraise	B464
UM-4ELP-W		4	4,0-20,0	✓	✓	✓			✓	Fraise	B465
UM-4EFP		4	6,0-20,0	✓	✓	✓			✓	Fraise	B466
UM-4R		4	4,0-20,0	✓	✓	✓			✓	Fraise torique	B467
UM-4RL		4	6,0-16,0	✓	✓	✓			✓	Fraise torique	B468
UM-4RFP		4	6,0-16,0	✓	✓	✓			✓	Fraise torique	B469
UM-5EP-W		5	6,0-25,0	✓	✓	✓			✓	Fraise	B470
UMC-4E		4	6,0-20,0	✓	✓	✓			✓	Fraise	B471
UMC-4E-W		4	6,0-20,0	✓	✓	✓			✓	Fraise	B472
VSM-4E		4	4,0-20,0	✓	✓			✓		Fraise	B473
VSM-4E-C		4	10,0-20,0	✓	✓			✓		Fraise	B474
VSM-4R		4	4,0-20,0	✓	✓			✓		Fraise torique	B475

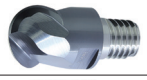
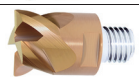
✓ Choix de base ✓ Alternative

Fraise à chanfreiner

5501/5601		3-4	0,2-0,7	✓	✓	✓	✓			Fraise à chanfreiner	B477
5501/5601		3-4	0,2-0,7	✓	✓	✓	✓			Fraise à chanfreiner	B478
5501/5601		3-4	0,2-0,7	✓	✓	✓	✓			Fraise à chanfreiner	B479
5601		4	5,2-10,0	✓	✓	✓	✓			Fraise à chanfreiner	B480

✓ Choix de base ✓ Alternative

Série QCH

Produits	Foret carbure monobloc	Dents	Ø	Application						Version	Page
				P	M	K	N	S	H		
PM-2B		2	12,0-32,0	✔	✔	✔			✔	Fraise hémisphérique	B481
PM-4B		4	12,0-32,0	✔	✔	✔			✔	Fraise hémisphérique	B482
PM-4E		4	12,0-32,0	✔	✔	✔			✔	Fraise	B483
PM-4R		4	12,0-32,0	✔	✔	✔			✔	Fraise torique	B484
HMX-2B		2	12,0-32,0						✔	Fraise hémisphérique	B486
HMX-4B		4	12,0-32,0						✔	Fraise hémisphérique	B487
HMX-4E		4	12,0-32,0						✔	Fraise	B488
HMX-4R		4	12,0-32,0						✔	Fraise torique	B489
VPM-4E		4	12,0-25,0	✔	✔	✔			✔	Fraise	B485

✔ Choix de base ✔ Alternative

Fraises carbure monobloc Vue d'ensemble des nuances

Carbure revêtu PVD

Nuance	Description de nuances
KMD401	Nuance carbure revêtu PVD pour les applications de fraisage haute performance des matériaux non ferreux, les matériaux organiques, les plastiques CFRP et GFRP. Le revêtement DLC a également une bonne protection à l'usure et une haute stabilité thermique.
KMG303	Nuance carbure revêtu PVD pour les applications générales de fraisage dans les aciers (jusqu'à 48HRC), pour les aciers inoxydables, et les fontes.
KMG405	Nuance carbure revêtu PVD pour les applications hautes performances de fraisage dans les aciers (jusqu'à 55HRC), les aciers inoxydables, les superalliages, et les fontes. Haute résistance à l'usure et ténacité sur un grand champ d'applications.
KMG406	Subtrat carbure revêtu PVD pour l'usinage haute performance. Application universelle pour l'acier jusqu'à 55 HRC ainsi que l'acier inoxydable.
KMG555	Nuance carbure revêtu PVD pour les applications de fraisage dur (jusqu'à 55HRC), très haute résistance à l'usure et ténacité pour une performance de coupe maximale.
KMG309	Nuance carbure revêtu PVD pour les matériaux non-ferreux. Haute résistance à l'usure même dans les matériaux abrasifs.

Carbure non revêtu

Nuance	Description de nuances
YK30F	Nuance carbure non revêtu K30 pour les aciers, aciers inoxydables, fontes, et non ferreux.

Carbure non revêtu

Nuance	Description de nuances
YK40F	Nuance carbure non revêtu K20-K30/N20-N30 pour les fontes et les matériaux non ferreux

Fraises carbure monobloc Codification – DIN ISO

5	5	0	1	R	30	2	GM	R05	0800
1	2	3	4	5	6	7	8	9	10

Version	
Code	Description
5	Fraises

1

Type d'attachement	
Code	Description
1	Attachement
5	DIN 6535 HA
6	Attachement Weldon DIN 6535 HB
7	Whistle-Notch DIN 6535 HE
9	Attachement cône morse

2

Type de fraise	
Code	Description
0	Fraise à 90°
6	Fraise hémisphérique
8	Fraise torique

3

Longueur outil	
Code	Description
1	DIN 6527 K
2	DIN 6527 L
5	Conformément à la norme intérieure ZCC-A
6	Conformément à la norme intérieure ZCC-B
8	DIN 6528
9	Conformément à la norme intérieure ZCC-D

4

Sens de rotation	
Code	Description
R	À droite
L	À gauche

5

Angle d'hélice	
Code	Description
20	20°
30	30°
3841	38°/41°
45	45°
55	55°
60	60°

6

Nombre de dents	
Code	Description
2	2
...	
M	Lorsque des diamètres différents ont un nombre d'arêtes différent

7

Application	
Code	Description
GM	Semi-finition/HPC
GF	Finition
HM	Usinage de matériaux durs
MHH	Usinage haute vitesse de matériaux durs
NH	Usinage haute performance de métaux non ferreux

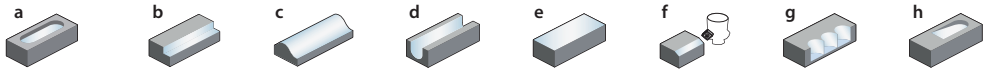
8

Rayon [mm]	
Code	Description
R03	0,3
R15	1,5
R30	3,0
...	

9

Diamètre [mm]	
Code	Description
0100	1,0
0800	8,0
2000	20,0
...	

10



a Fraisage de poches b Fraisage à 90° c Fraisage de forme d Rainurage e Fraisage à surfacer f Fraisage à chanfreiner
g Fraisage en plongée h Fraisage circulaire/rampes

GM – 2 E L P – D12 R0.5 – M08

1	2	3	4	5	6	7	8

Application	
Code	Description
GR	Usinage d'ébauche général
GM	Semi-finition
GF	Finition
PM	Usinage haute performance
EPM	«Ecoline» – Usinage haute performance
VPM	Applications de rainures pleines
HM	Usinage haute vitesse de matériaux durs
NM	Semi-finition de métaux non ferreux
AL	Usinage général de l'aluminium et des alliages d'aluminium
ALP	Usinage haute performance de l'aluminium et des alliages d'aluminium
ALG	Usinage général de l'aluminium et des alliages d'aluminium
UM	Usinage HSC/HPC
UMC	Usinage Grande Vitesse avec géométrie brise-copeau
VSM	Matériaux réfractaires et superalliages
TM	Usinage général de matériaux difficiles à usiner

1

Nombre d'arêtes

2

Version d'arête	
Code	Description
E	Fraises à 90° avec chanfrein de protection
F	Fraise de contournage avec arête de coupe vive
B	Fraise hémisphérique
R	Fraise torique
W	Fraise d'ébauche
H	Fraise grande avance

3

Longueur d'arête	
Code	Description
L	Long
X	Extra long
F	Court

4

Type	
Code	Description
S	Diamètre mini
P	Dégagement cylindrique
C	Dégagement conique

5

Diamètre [mm]	
Code	Description
D3.0	3,0
D20.0	20,0
...	

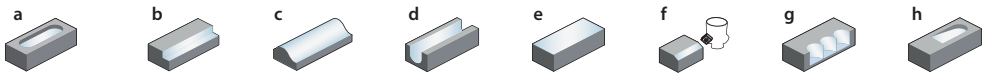
6

Rayon [mm]	
Code	Description
R0.5	0,5
R3.0	3,0
...	

7

Particularités	
Code	Description
G	Angle d'hélice 30°
M	Longueur de dégagement
S	Diamètre attachement réduit
AIR	Pour l'industrie aéronautique

8



a Fraisage de poches **b Fraisage à 90°** **c Fraisage de forme** **d Rainurage** **e Fraisage à surfacer** **f Fraisage à chanfreiner** **g Fraisage en plongée** **h Fraisage circulaire/rampes**

Fraises carbure monobloc Codification – série QCH

Q	08	–	PM	–	2	B	–	D12	R0.5
1	2		3		4	5		6	7

1 Type de filetage

2 Diamètre fileté [mm]

Code	Description
08	8,0
10	10,0
12	12,0
14	14,0
18	18,0

3 Application

Code	Description
PM	Usinage haute performance
HMX	Usinage haute vitesse de matériaux durs

4 Nombre d'arêtes

5 Version d'arête

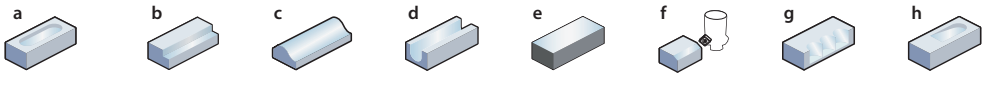
Code	Description
E	Fraise à 90° avec chanfrein
B	Fraise hémisphérique
R	Fraise torique

6 Diamètre [mm]

Code	Description
D3.0	3,0
D8.0	8,0
D20.0	20,0

7 Rayon [mm]

Code	Description
R0.5	0,5
R1.0	1,5
R3.0	3,0
...	



a Fraisage de poches **b** Fraisage à 90° **c** Fraisage de forme **d** Rainurage **e** Surfaçage **f** Fraisage à chanfreiner **g** Fraisage en plongée **h** Fraisage circulaire/rampes

G	25	–	QCH	–	Q	12	–	250	C	–	(ZJ)	(115)
1	2		3		4	5		6	7		8	9

Type de serrage	
Code	Description
G	Cylindrique
XP	Weldon

1

Diamètre de serrage [mm]	
Code	Description
12	12
16	16
20	20
25	25
32	32

2

Série	
Code	Description
QCH	Système d'attachement

3

Type de filetage	
Code	Description
M	Métrique
Q	Filetage Q

4

Taille de filetage [mm]	
Code	Description
8	8
10	10
12	12
14	14
...	

5

Longueur totale [mm]	
Code	Description
85	85
150	150
200	200
...	

6

Material	
Code	Description
C	Carbure
S	Acier

7

Attachement	
Code	Description
ZJ	Conique
–	Cylindrique détalonné

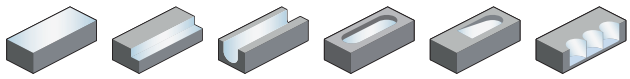
8

Longueur du cône [mm]	
Code	Description
90	90
115	115
...	

9

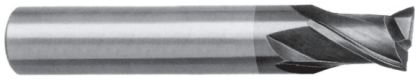
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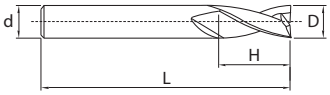
Fraise carbure monobloc — Semi-finition

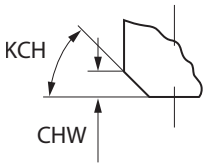


5501R302GM

– Type d'attachement : DIN 6535HA
– Coupe au centre
– Angle d'hélice 30°







Article	✻	Dimensions (mm)						Dents	Nuance	
		D	d (h6)	H	L	KCH	CHW		KMG303	YK30F
5501R302GM-0300		3	6	4	50	0	0	2	●	○
5501R302GM-0400		4	6	5	54	0	0	2	●	○
5501R302GM-0500		5	6	6	54	0	0	2	●	○
5501R302GM-0600		6	6	7	54	45	0,1	2	●	○
5501R302GM-0800		8	8	9	58	45	0,1	2	●	○
5501R302GM-1000		10	10	11	66	45	0,1	2	●	○
5501R302GM-1200		12	12	12	73	45	0,1	2	●	○
5501R302GM-1400		14	14	14	75	45	0,15	2	●	○
5501R302GM-1600		16	16	16	82	45	0,15	2	●	○
5501R302GM-1800		18	18	18	84	45	0,15	2	●	○
5501R302GM-2000		20	20	20	92	45	0,15	2	●	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			

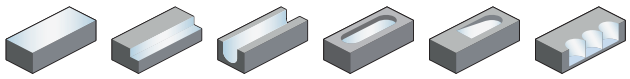
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série GM

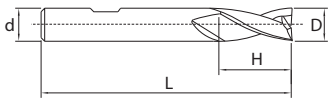
Fraise carbure monobloc **Semi-finition**

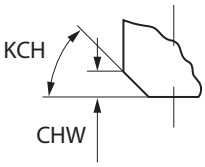
5601R302GM



– Type d'attachement : DIN 6535HB
– Coupe au centre
– Angle d'hélice 30°







Article	✻	Dimensions (mm)						Dents	Nuance
		D	d (h6)	H	L	KCH	CHW		KMG303
5601R302GM-0300		3	6	4	50	0	0	2	●
5601R302GM-0400		4	6	5	54	0	0	2	●
5601R302GM-0500		5	6	6	54	0	0	2	●
5601R302GM-0600		6	6	7	54	45	0,1	2	●
5601R302GM-0800		8	8	9	58	45	0,1	2	●
5601R302GM-1000		10	10	11	66	45	0,1	2	●
5601R302GM-1200		12	12	12	73	45	0,1	2	●
5601R302GM-1400		14	14	14	75	45	0,15	2	●
5601R302GM-1600		16	16	16	82	45	0,15	2	●
5601R302GM-1800		18	18	18	84	45	0,15	2	●
5601R302GM-2000		20	20	20	92	45	0,15	2	●

● En stock ○ Sur demande

✻ Avec arrosage interne

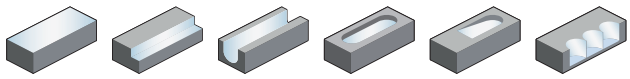
Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

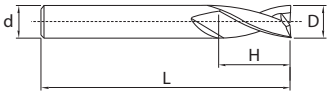
Fraise à grande longueur taillée — Semi-finition

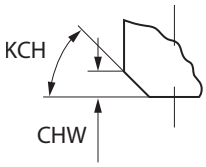


5502R302GM

– Type d'attachement : DIN 6535HA
– Coupe au centre
– Angle d'hélice 30°







Article	✻	Dimensions (mm)						Dents	Nuance	
		D	d (h6)	H	L	KCH	CHW		KMG303	YK30F
5502R302GM-0100		1	3	2	38	0	0	2	●	○
5502R302GM-0150		1,5	3	3	38	0	0	2	●	○
5502R302GM-0200		2	6	6	57	0	0	2	●	○
5502R302GM-0250		2,5	6	7	57	0	0	2	●	○
5502R302GM-0280		2,8	6	7	57	0	0	2	●	○
5502R302GM-0300		3	6	7	57	0	0	2	●	○
5502R302GM-0350		3,5	6	7	57	0	0	2	●	○
5502R302GM-0380		3,8	6	8	57	0	0	2	●	○
5502R302GM-0400		4	6	8	57	0	0	2	●	○
5502R302GM-0450		4,5	6	8	57	0	0	2	●	○
5502R302GM-0480		4,8	6	8	57	0	0	2	●	○
5502R302GM-0500		5	6	10	57	0	0	2	●	○
5502R302GM-0550		5,5	6	10	57	0	0	2	●	○
5502R302GM-0575		5,75	6	10	57	0	0	2	●	○
5502R302GM-0600		6	6	10	57	45	0,1	2	●	○
5502R302GM-0675		6,75	8	13	63	45	0,1	2	○	○
5502R302GM-0700		7	8	13	63	45	0,1	2	●	○
5502R302GM-0750		7,5	8	16	63	45	0,1	2	●	○
5502R302GM-0775		7,75	8	16	63	45	0,1	2	●	○
5502R302GM-0800		8	8	16	63	45	0,1	2	●	○
5502R302GM-0870		8,7	10	16	72	45	0,1	2	●	○
5502R302GM-0900		9	10	16	72	45	0,1	2	●	○
5502R302GM-0950		9,5	10	16	72	45	0,1	2	○	○
5502R302GM-1000		10	10	19	72	45	0,1	2	●	○
5502R302GM-1100		11	12	22	83	45	0,1	2	●	○
5502R302GM-1170		11,7	12	22	83	45	0,1	2	●	○
5502R302GM-1200		12	12	22	83	45	0,1	2	●	○
5502R302GM-1370		13,7	14	22	83	45	0,1	2	●	○
5502R302GM-1400		14	14	22	83	45	0,15	2	●	○
5502R302GM-1500		15	16	26	92	45	0,15	2	●	○
5502R302GM-1570		15,7	16	26	92	45	0,15	2	●	○
5502R302GM-1600		16	16	26	92	45	0,15	2	●	○
5502R302GM-1700		17	18	26	92	45	0,15	2	○	○
5502R302GM-1800		18	18	26	92	45	0,15	2	●	○
5502R302GM-2000		20	20	32	104	45	0,15	2	●	○

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			

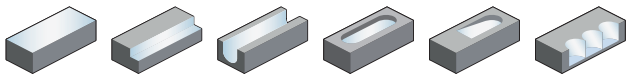
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

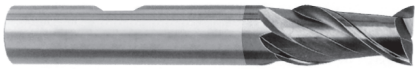
Fraises carbure monobloc Série GM

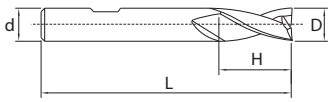
Fraise à grande longueur taillée **Semi-finition**

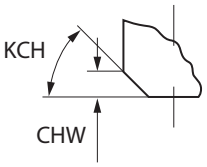
5602R302GM



– Type d'attachement : DIN 6535HB
– Coupe au centre
– Angle d'hélice 30°







Article	✻	Dimensions (mm)						Dents	Nuance
		D	d (h6)	H	L	KCH	CHW		KMG303
5602R302GM-0200		2	6	6	57	0	0	2	●
5602R302GM-0250		2,5	6	7	57	0	0	2	●
5602R302GM-0280		2,8	6	7	57	0	0	2	●
5602R302GM-0300		3	6	7	57	0	0	2	●
5602R302GM-0350		3,5	6	7	57	0	0	2	●
5602R302GM-0380		3,8	6	8	57	0	0	2	●
5602R302GM-0400		4	6	8	57	0	0	2	●
5602R302GM-0450		4,5	6	8	57	0	0	2	●
5602R302GM-0480		4,8	6	8	57	0	0	2	●
5602R302GM-0500		5	6	10	57	0	0	2	●
5602R302GM-0550		5,5	6	10	57	0	0	2	●
5602R302GM-0575		5,75	6	10	57	0	0	2	●
5602R302GM-0600		6	6	10	57	45	0,1	2	●
5602R302GM-0675		6,75	8	13	63	45	0,1	2	○
5602R302GM-0700		7	8	13	63	45	0,1	2	●
5602R302GM-0750		7,5	8	16	63	45	0,1	2	●
5602R302GM-0775		7,75	8	16	63	45	0,1	2	○
5602R302GM-0800		8	8	16	63	45	0,1	2	●
5602R302GM-0870		8,7	10	16	72	45	0,1	2	●
5602R302GM-0900		9	10	16	72	45	0,1	2	●
5602R302GM-1000		10	10	19	72	45	0,1	2	●
5602R302GM-1170		11,7	12	22	83	45	0,1	2	●
5602R302GM-1200		12	12	22	83	45	0,1	2	●
5602R302GM-1370		13,7	14	22	83	45	0,1	2	●
5602R302GM-1400		14	14	22	83	45	0,15	2	●
5602R302GM-1570		15,7	16	26	92	45	0,15	2	●
5602R302GM-1600		16	16	26	92	45	0,15	2	●
5602R302GM-1800		18	18	26	92	45	0,15	2	●
5602R302GM-2000		20	20	32	104	45	0,15	2	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

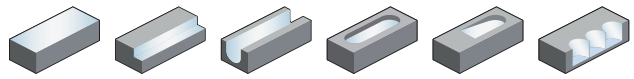
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

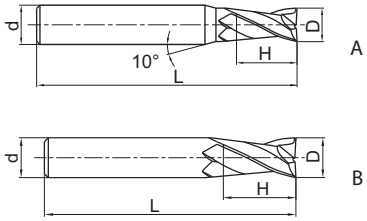
Fraise carbure monobloc — Semi-finition

GM-2E



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm) D	d (h6)	H	L	Dents	Géométrie	Nuance KMG303
GM-2E-D1.0S		1	4	3	50	2	A	●
GM-2E-D1.5S		1,5	4	4	50	2	A	●
GM-2E-D2.0S		2	4	6	50	2	A	●
GM-2E-D2.5S		2,5	4	8	50	2	A	●
GM-2E-D3.0S		3	4	8	50	2	A	●
GM-2E-D4.0S		4	4	11	50	2	B	●
GM-2E-D1.0		1	6	3	50	2	A	●
GM-2E-D1.5		1,5	6	4	50	2	A	●
GM-2E-D2.0		2	6	6	50	2	A	●
GM-2E-D2.5		2,5	6	8	50	2	A	●
GM-2E-D3.0		3	6	8	50	2	A	●
GM-2E-D3.5		3,5	6	10	50	2	A	●
GM-2E-D4.0		4	6	11	50	2	A	●
GM-2E-D4.5		4,5	6	11	50	2	A	●
GM-2E-D5.0		5	6	13	50	2	A	●
GM-2E-D5.5		5,5	6	16	50	2	A	●
GM-2E-D6.0		6	6	16	50	2	B	●
GM-2E-D7.0		7	8	20	60	2	A	●
GM-2E-D8.0		8	8	20	60	2	B	●
GM-2E-D9.0		9	10	22	75	2	A	●
GM-2E-D10.0		10	10	25	75	2	B	●
GM-2E-D11.0		11	12	26	75	2	A	●
GM-2E-D12.0		12	12	30	75	2	B	●
GM-2E-D14.0		14	14	32	75	2	B	●
GM-2E-D16.0		16	16	45	100	2	B	●
GM-2E-D18.0		18	18	45	100	2	B	●
GM-2E-D20.0		20	20	45	100	2	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			

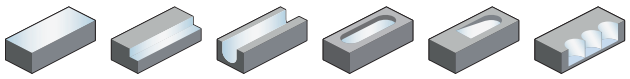
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraises carbure monobloc Série GM

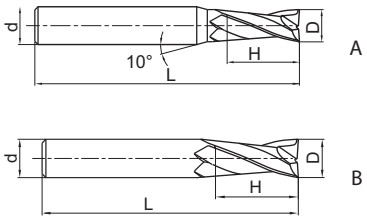
Fraise à grande longueur taillée **Semi-finition**

GM-2EL



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm) D	d (h6)	H	L	Dents	Géométrie	Nuance KMG303
GM-2EL-D3.0		3	6	12	75	2	A	●
GM-2EL-D4.0		4	6	15	75	2	A	●
GM-2EL-D5.0		5	6	20	75	2	A	●
GM-2EL-D6.0		6	6	20	75	2	B	●
GM-2EL-D8.0		8	8	25	100	2	B	●
GM-2EL-D10.0		10	10	30	100	2	B	●
GM-2EL-D12.0		12	12	35	100	2	B	●
GM-2EL-D14.0		14	14	40	100	2	B	●
GM-2EL-D16.0		16	16	50	150	2	B	●
GM-2EL-D20.0		20	20	55	150	2	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

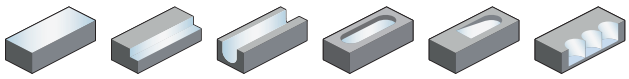
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

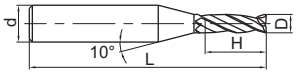
Fraise carbure monobloc, très grande longueur taillée — Semi-finition

GM-2EX

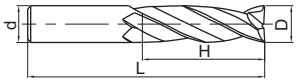


– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





A



B

Article	✻	Dimensions (mm)				Dents	Géométrie	Nuance
		D	d (h6)	H	L			KMG303
GM-2EX-D3.0		3	6	20	75	2	A	●
GM-2EX-D4.0		4	6	25	75	2	A	●
GM-2EX-D5.0		5	6	30	75	2	A	●
GM-2EX-D6.0		6	6	30	75	2	B	○
GM-2EX-D8.0		8	8	40	100	2	B	○
GM-2EX-D10.0		10	10	50	110	2	B	○
GM-2EX-D12.0		12	12	50	110	2	B	○
GM-2EX-D16.0		16	16	70	150	2	B	○
GM-2EX-D20.0		20	20	75	150	2	B	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			

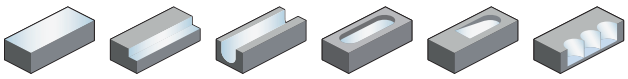
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraises carbure monobloc Série GM

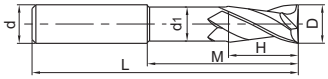
Fraise carbure monobloc, petite longueur taillée **Semi-finition**

GM-2EFP



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm)						Dents	Nuance
		D	d (h6)	d_1	H	M	L		KMG303
GM-2EFP-D6.0		6	6	5,8	9	30	75	2	○
GM-2EFP-D8.0		8	8	7,8	12	40	100	2	○
GM-2EFP-D10.0		10	10	9,6	15	50	100	2	○
GM-2EFP-D12.0		12	12	11,5	18	50	100	2	○
GM-2EFP-D16.0		16	16	15,5	24	50	150	2	○

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

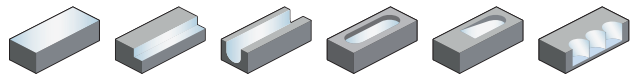
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

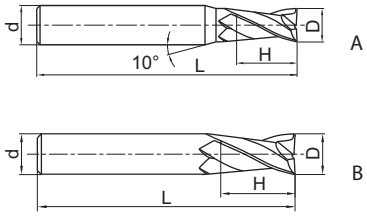
Fraise carbure monobloc — Semi-finition

GM-2F



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm) D	d (h6)	H	L	Dents	Géométrie	Nuance KMG303
GM-2F-D1.0		1	6	3	50	2	A	○
GM-2F-D1.5		1,5	6	4	50	2	A	○
GM-2F-D2.0		2	6	6	50	2	A	○
GM-2F-D2.5		2,5	6	8	50	2	A	○
GM-2F-D3.0		3	6	8	50	2	A	●
GM-2F-D3.5		3,5	6	10	50	2	A	○
GM-2F-D4.0		4	6	11	50	2	A	●
GM-2F-D4.5		4,5	6	11	50	2	A	●
GM-2F-D5.0		5	6	13	50	2	A	●
GM-2F-D5.5		5,5	6	16	50	2	A	○
GM-2F-D6.0		6	6	16	50	2	B	●
GM-2F-D7.0		7	8	20	60	2	A	●
GM-2F-D8.0		8	8	20	60	2	B	●
GM-2F-D9.0		9	10	22	75	2	A	○
GM-2F-D10.0		10	10	25	75	2	B	○
GM-2F-D11.0		11	12	26	75	2	A	○
GM-2F-D12.0		12	12	30	75	2	B	●
GM-2F-D14.0		14	14	32	75	2	B	○
GM-2F-D16.0		16	16	45	100	2	B	○
GM-2F-D18.0		18	18	45	100	2	B	○
GM-2F-D20.0		20	20	45	100	2	B	○

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

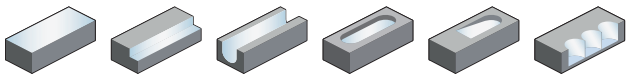
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

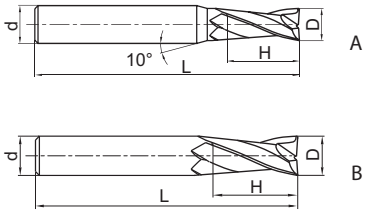
Fraise à grande longueur taillée **Semi-finition**

GM-2FL



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm)				Dents	Géométrie	Nuance
		D	d (h6)	H	L			KMG303
GM-2FL-D3.0		3	6	12	75	2	A	○
GM-2FL-D4.0		4	6	15	75	2	A	○
GM-2FL-D5.0		5	6	20	75	2	A	○
GM-2FL-D6.0		6	6	20	75	2	B	○
GM-2FL-D8.0		8	8	25	100	2	B	○
GM-2FL-D10.0		10	10	30	100	2	B	○
GM-2FL-D12.0		12	12	35	100	2	B	○
GM-2FL-D14.0		14	14	40	100	2	B	○
GM-2FL-D16.0		16	16	50	150	2	B	○
GM-2FL-D20.0		20	20	55	150	2	B	○

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

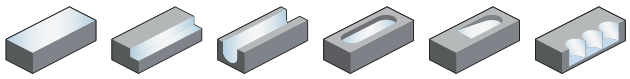
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

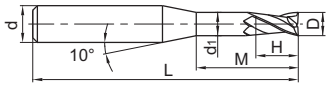
Fraise carbure monobloc — Semi-finition

GM-2EP



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm) D	d (h6)	d_1	H	M	L	Dents	Nuance KMG303
GM-2EP-D0.5-M04		0,5	4	0,45	0,7	4	50	2	●
GM-2EP-D0.5-M06		0,5	4	0,45	0,7	6	50	2	●
GM-2EP-D0.5-M08		0,5	4	0,45	0,7	8	50	2	●
GM-2EP-D0.8-M04		0,8	4	0,75	1,2	4	50	2	●
GM-2EP-D0.8-M06		0,8	4	0,75	1,2	6	50	2	●
GM-2EP-D0.8-M08		0,8	4	0,75	1,2	8	50	2	●
GM-2EP-D0.8-M10		0,8	4	0,75	1,2	10	50	2	●
GM-2EP-D1.0-M04		1	4	0,95	1,5	4	50	2	●
GM-2EP-D1.0-M06		1	4	0,95	1,5	6	50	2	●
GM-2EP-D1.0-M08		1	4	0,95	1,5	8	50	2	●
GM-2EP-D1.0-M10		1	4	0,95	1,5	10	50	2	●
GM-2EP-D1.0-M12		1	4	0,95	1,5	12	50	2	●
GM-2EP-D1.0-M14		1	4	0,95	1,5	14	50	2	●
GM-2EP-D1.2-M06		1,2	4	1,15	1,8	6	50	2	●
GM-2EP-D1.2-M08		1,2	4	1,15	1,8	8	50	2	●
GM-2EP-D1.2-M10		1,2	4	1,15	1,8	10	50	2	●
GM-2EP-D1.2-M12		1,2	4	1,15	1,8	12	50	2	○
GM-2EP-D1.5-M06		1,5	4	1,45	2,3	6	50	2	●
GM-2EP-D1.5-M08		1,5	4	1,45	2,3	8	50	2	●
GM-2EP-D1.5-M10		1,5	4	1,45	2,3	10	50	2	●
GM-2EP-D1.5-M12		1,5	4	1,45	2,3	12	50	2	●
GM-2EP-D1.5-M14		1,5	4	1,45	2,3	14	50	2	●
GM-2EP-D2.0-M06		2	4	1,95	3	6	50	2	●
GM-2EP-D2.0-M08		2	4	1,95	3	8	50	2	●
GM-2EP-D2.0-M10		2	4	1,95	3	10	50	2	●
GM-2EP-D2.0-M12		2	4	1,95	3	12	50	2	●
GM-2EP-D2.0-M14		2	4	1,95	3	14	50	2	●
GM-2EP-D2.0-M16		2	4	1,95	3	16	50	2	●
GM-2EP-D2.5-M08		2,5	4	2,4	3,7	8	50	2	●
GM-2EP-D2.5-M10		2,5	4	2,4	3,7	10	50	2	●
GM-2EP-D2.5-M12		2,5	4	2,4	3,7	12	50	2	●
GM-2EP-D2.5-M14		2,5	4	2,4	3,7	14	50	2	●
GM-2EP-D2.5-M16		2,5	4	2,4	3,7	16	60	2	●
GM-2EP-D2.5-M18		2,5	4	2,4	3,7	18	60	2	●
GM-2EP-D2.5-M20		2,5	4	2,4	3,7	20	60	2	●
GM-2EP-D3.0-M06		3	6	2,85	4,5	6	50	2	●
GM-2EP-D3.0-M08		3	6	2,85	4,5	8	50	2	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			

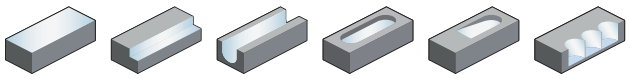
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série GM

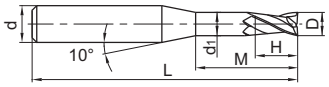
Fraise carbure monobloc Semi-finition

GM-2EP



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm) D	d (h6)	d_1	H	M	L	Dents	Nuance KMG303
GM-2EP-D3.0-M10		3	6	2,85	4,5	10	50	2	●
GM-2EP-D3.0-M12		3	6	2,85	4,5	12	50	2	●
GM-2EP-D3.0-M14		3	6	2,85	4,5	14	60	2	●
GM-2EP-D3.0-M16		3	6	2,85	4,5	16	60	2	●
GM-2EP-D3.0-M18		3	6	2,85	4,5	18	60	2	●
GM-2EP-D3.0-M20		3	6	2,85	4,5	20	60	2	●
GM-2EP-D4.0-M12		4	6	3,85	6	12	50	2	●
GM-2EP-D4.0-M14		4	6	3,85	6	14	60	2	●
GM-2EP-D4.0-M16		4	6	3,85	6	16	60	2	●
GM-2EP-D4.0-M20		4	6	3,85	6	20	60	2	●
GM-2EP-D4.0-M25		4	6	3,85	6	25	60	2	●
GM-2EP-D5.0-M16		5	6	4,85	7,5	16	60	2	●
GM-2EP-D5.0-M25		5	6	4,85	7,5	25	70	2	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

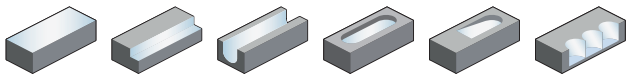
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

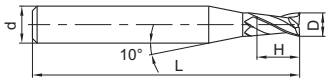
Fraise carbure monobloc — Semi-finition

GM-2ES



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm) D	d (h6)	H	L	Dents	Nuance KMG303
GM-2ES-D0.3		0,3	4	0,6	50	2	●
GM-2ES-D0.4		0,4	4	0,8	50	2	●
GM-2ES-D0.5		0,5	4	1	50	2	●
GM-2ES-D0.6		0,6	4	1,2	50	2	●
GM-2ES-D0.7		0,7	4	1,4	50	2	●
GM-2ES-D0.8		0,8	4	1,6	50	2	●
GM-2ES-D0.9		0,9	4	1,8	50	2	●
GM-2ES-D1.0		1	4	2	50	2	●
GM-2ES-D1.1		1,1	4	2	50	2	●
GM-2ES-D1.2		1,2	4	2,5	50	2	●
GM-2ES-D1.3		1,3	4	2,5	50	2	●
GM-2ES-D1.4		1,4	4	3	50	2	●
GM-2ES-D1.5		1,5	4	3	50	2	●
GM-2ES-D1.6		1,6	4	3,5	50	2	●
GM-2ES-D1.7		1,7	4	3,5	50	2	●
GM-2ES-D1.8		1,8	4	4	50	2	●
GM-2ES-D1.9		1,9	4	4	50	2	●
GM-2ES-D2.0		2	4	4	50	2	●
GM-2ES-D2.1		2,1	4	4	50	2	●
GM-2ES-D2.2		2,2	4	4,5	50	2	●
GM-2ES-D2.3		2,3	4	4,5	50	2	●
GM-2ES-D2.4		2,4	4	5	50	2	●
GM-2ES-D2.5		2,5	4	5	50	2	●
GM-2ES-D2.6		2,6	4	5	50	2	●
GM-2ES-D2.7		2,7	4	5,5	50	2	●
GM-2ES-D2.8		2,8	4	5,5	50	2	●
GM-2ES-D2.9		2,9	4	6	50	2	●
GM-2ES-D3.0		3	4	6	50	2	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			

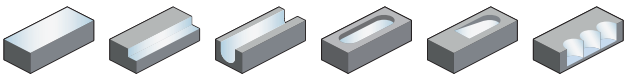
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

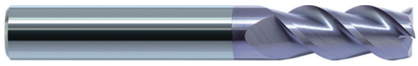
Fraises carbure monobloc Série GM

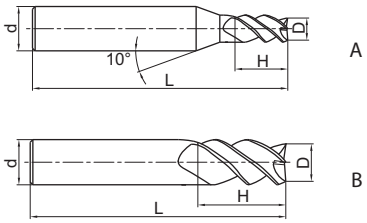
Fraise carbure monobloc Semi-finition

GM-3E



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 45°





Article	✲	Dimensions (mm) D	d (h6)	H	L	Dents	Géométrie	Nuance KMG303
GM-3E-D1.0S		1	4	3	50	3	A	○
GM-3E-D1.5S		1,5	4	4	50	3	A	○
GM-3E-D2.0S		2	4	6	50	3	A	○
GM-3E-D2.5S		2,5	4	8	50	3	A	○
GM-3E-D3.0S		3	4	8	50	3	A	○
GM-3E-D4.0S		4	4	11	50	3	B	○
GM-3E-D1.0		1	6	3	50	3	A	○
GM-3E-D1.5		1,5	6	4	50	3	A	○
GM-3E-D2.0		2	6	6	50	3	A	○
GM-3E-D2.5		2,5	6	8	50	3	A	○
GM-3E-D3.0		3	6	8	50	3	A	○
GM-3E-D3.5		3,5	6	10	50	3	A	○
GM-3E-D4.0		4	6	11	50	3	A	○
GM-3E-D4.5		4,5	6	11	50	3	A	○
GM-3E-D5.0		5	6	13	50	3	A	○
GM-3E-D5.5		5,5	6	16	50	3	A	○
GM-3E-D6.0		6	6	16	50	3	B	○
GM-3E-D7.0		7	8	20	60	3	A	○
GM-3E-D8.0		8	8	20	60	3	B	○
GM-3E-D9.0		9	10	22	75	3	A	○
GM-3E-D10.0		10	10	25	75	3	B	○
GM-3E-D11.0		11	12	26	75	3	A	○
GM-3E-D12.0		12	12	30	75	3	B	○
GM-3E-D14.0		14	14	32	75	3	B	○
GM-3E-D16.0		16	16	45	100	3	B	○
GM-3E-D18.0		18	18	45	100	3	B	○
GM-3E-D20.0		20	20	45	100	3	B	○

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

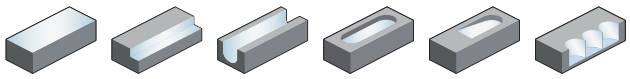
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

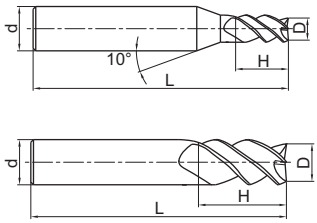
Fraise à grande longueur taillée — Semi-finition

GM-3EL



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 45°





Article	✻	Dimensions (mm) D	d (h6)	H	L	Dents	Géométrie	Nuance KMG303
GM-3EL-D3.0		3	6	12	75	3	A	●
GM-3EL-D4.0		4	6	15	75	3	A	●
GM-3EL-D5.0		5	6	20	75	3	A	●
GM-3EL-D6.0		6	6	20	75	3	B	●
GM-3EL-D8.0		8	8	25	100	3	B	●
GM-3EL-D10.0		10	10	30	100	3	B	●
GM-3EL-D12.0		12	12	35	100	3	B	●
GM-3EL-D14.0		14	14	40	100	3	B	●
GM-3EL-D16.0		16	16	50	150	3	B	●
GM-3EL-D20.0		20	20	55	150	3	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

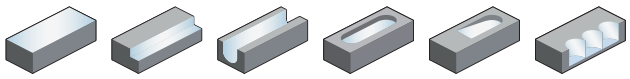
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

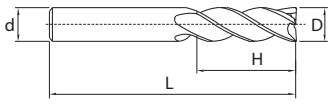
Fraise carbure monobloc **Semi-finition**

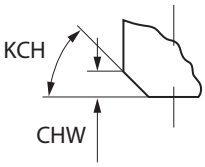
5501R303GM



– Type d'attachement : DIN 6535HA
– Coupe au centre
– Angle d'hélice 30°







Article	✻	Dimensions (mm)						Dents	Nuance	
		D	d (h6)	H	L	KCH	CHW		KMG303	YK30F
5501R303GM-0300		3	6	4	50	0	0	3	●	○
5501R303GM-0400		4	6	5	54	0	0	3	●	○
5501R303GM-0500		5	6	6	54	0	0	3	●	○
5501R303GM-0600		6	6	7	54	45	0,1	3	●	○
5501R303GM-0800		8	8	9	58	45	0,1	3	●	○
5501R303GM-1000		10	10	11	66	45	0,1	3	●	○
5501R303GM-1200		12	12	12	73	45	0,1	3	●	○
5501R303GM-1400		14	14	14	75	45	0,15	3	●	○
5501R303GM-1600		16	16	16	82	45	0,15	3	●	○
5501R303GM-1800		18	18	18	84	45	0,15	3	●	○
5501R303GM-2000		20	20	20	92	45	0,15	3	●	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

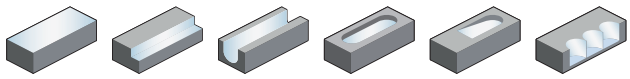
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

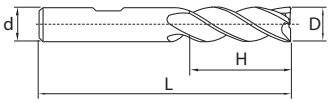
Fraise carbure monobloc — Semi-finition

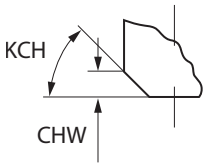
5601R303GM



– Type d'attachement : DIN 6535HB
– Coupe au centre
– Angle d'hélice 30°







Article	✻	Dimensions (mm)						Dents	Nuance
		D	d (h6)	H	L	KCH	CHW		KMG303
5601R303GM-0300		3	6	4	50	0	0	3	●
5601R303GM-0400		4	6	5	54	0	0	3	●
5601R303GM-0500		5	6	6	54	0	0	3	●
5601R303GM-0600		6	6	7	54	45	0,1	3	●
5601R303GM-0800		8	8	9	58	45	0,1	3	●
5601R303GM-1000		10	10	11	66	45	0,1	3	●
5601R303GM-1200		12	12	12	73	45	0,1	3	●
5601R303GM-1400		14	14	14	75	45	0,15	3	●
5601R303GM-1600		16	16	16	82	45	0,15	3	●
5601R303GM-1800		18	18	18	84	45	0,15	3	●
5601R303GM-2000		20	20	20	92	45	0,15	3	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			

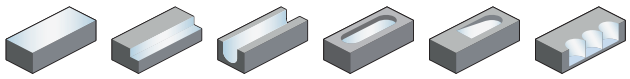
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série GM

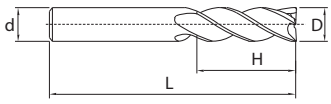
Fraise à grande longueur taillée **Semi-finition**

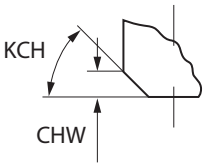
5502R303GM



– Type d'attachement : DIN 6535HA
– Coupe au centre
– Angle d'hélice 30°







Article	✲	Dimensions (mm)						Dents	Nuance	
		D	d (h6)	H	L	KCH	CHW		KMG303	YK30F
5502R303GM-0300		3	6	7	57	0	0	3	●	○
5502R303GM-0400		4	6	8	57	0	0	3	●	○
5502R303GM-0500		5	6	10	57	0	0	3	●	○
5502R303GM-0600		6	6	10	57	45	0,1	3	●	○
5502R303GM-0800		8	8	16	63	45	0,1	3	●	○
5502R303GM-1000		10	10	19	72	45	0,1	3	●	○
5502R303GM-1200		12	12	22	83	45	0,1	3	●	○
5502R303GM-1300		13	14	22	83	45	0,1	3	○	
5502R303GM-1400		14	14	22	83	45	0,15	3	●	○
5502R303GM-1600		16	16	26	92	45	0,15	3	●	○
5502R303GM-1800		18	18	26	92	45	0,15	3	●	○
5502R303GM-2000		20	20	32	104	45	0,15	3	●	○

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

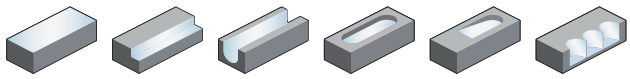
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

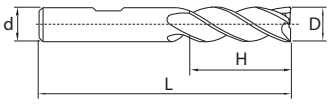
Fraise à grande longueur taillée — Semi-finition

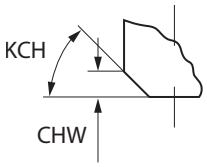
5602R303GM



– Type d'attachement : DIN 6535HB
– Coupe au centre
– Angle d'hélice 30°







Article	✻	Dimensions (mm)						Dents	Nuance
		D	d (h6)	H	L	KCH	CHW		KMG303
5602R303GM-0300		3	6	7	57	0	0	3	●
5602R303GM-0400		4	6	8	57	0	0	3	●
5602R303GM-0500		5	6	10	57	0	0	3	●
5602R303GM-0600		6	6	10	57	45	0,1	3	●
5602R303GM-0800		8	8	16	63	45	0,1	3	●
5602R303GM-1000		10	10	19	72	45	0,1	3	●
5602R303GM-1200		12	12	22	83	45	0,1	3	●
5602R303GM-1400		14	14	22	83	45	0,15	3	●
5602R303GM-1600		16	16	26	92	45	0,15	3	●
5602R303GM-1800		18	18	26	92	45	0,15	3	●
5602R303GM-2000		20	20	32	104	45	0,15	3	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			

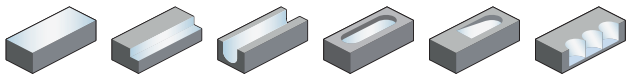
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série GM

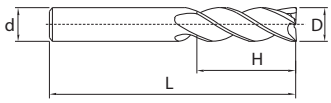
Fraise à grande longueur taillée **Semi-finition**

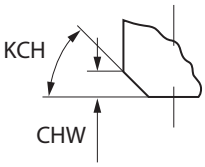
5502R453GM



– Type d'attachement : DIN 6535HA
– Coupe au centre
– Angle d'hélice 45°







Article	✻	Dimensions (mm)						Dents	Nuance
		D	d (h6)	H	L	KCH	CHW		KMG405
5502R453GM-0300		3	6	7	57	0	0	3	●
5502R453GM-0400		4	6	8	57	0	0	3	●
5502R453GM-0500		5	6	10	57	0	0	3	●
5502R453GM-0600		6	6	10	57	45	0,1	3	●
5502R453GM-0800		8	8	16	63	45	0,1	3	●
5502R453GM-1000		10	10	19	72	45	0,1	3	●
5502R453GM-1200		12	12	22	83	45	0,1	3	●
5502R453GM-1400		14	14	22	83	45	0,15	3	●
5502R453GM-1600		16	16	26	92	45	0,15	3	●
5502R453GM-1800		18	18	26	92	45	0,15	3	●
5502R453GM-2000		20	20	32	104	45	0,15	3	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

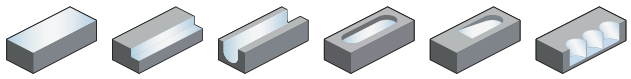
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

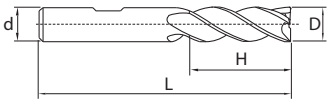
Fraise à grande longueur taillée — Semi-finition

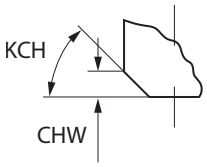
5602R453GM



– Type d'attachement : DIN 6535HB
– Coupe au centre
– Angle d'hélice 45°







Article	✻	Dimensions (mm)						Dents	Nuance	
		D	d (h6)	H	L	KCH	CHW		KMG303	KMG405
5602R453GM-0300		3	6	7	57	0	0	3	○	●
5602R453GM-0400		4	6	8	57	0	0	3	○	●
5602R453GM-0500		5	6	10	57	0	0	3	○	●
5602R453GM-0600		6	6	10	57	45	0,1	3	○	●
5602R453GM-0800		8	8	16	63	45	0,1	3	○	●
5602R453GM-1000		10	10	19	72	45	0,1	3	○	●
5602R453GM-1200		12	12	22	83	45	0,1	3	○	●
5602R453GM-1400		14	14	22	83	45	0,15	3	○	●
5602R453GM-1600		16	16	26	92	45	0,15	3	○	●
5602R453GM-1800		18	18	26	92	45	0,15	3	○	●
5602R453GM-2000		20	20	32	104	45	0,15	3	○	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			

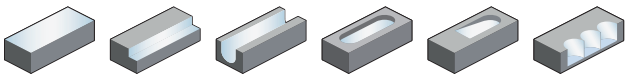
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraises carbure monobloc Série GM

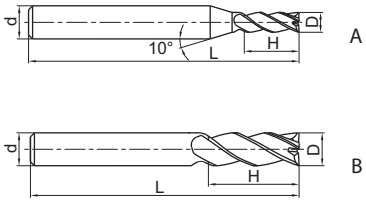
Fraise carbure monobloc **Semi-finition**

GM-4F-G



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





Article	✻	Dimensions (mm) D	d (h6)	H	L	Dents	Géométrie	Nuance KMG303
GM-4F-D2.0S-G		2	4	6	50	4	A	○
GM-4F-D2.5S-G		2,5	4	8	50	4	A	○
GM-4F-D4.0S-G		4	4	11	50	4	B	○
GM-4F-D1.0-G		1	6	3	50	4	A	○
GM-4F-D1.5-G		1,5	6	4	50	4	A	○
GM-4F-D2.0-G		2	6	6	50	4	A	○
GM-4F-D2.5-G		2,5	6	8	50	4	A	○
GM-4F-D3.0-G		3	6	8	50	4	A	○
GM-4F-D3.5-G		3,5	6	10	50	4	A	○
GM-4F-D4.0-G		4	6	11	50	4	A	○
GM-4F-D4.5-G		4,5	6	11	50	4	A	○
GM-4F-D5.0-G		5	6	13	50	4	A	○
GM-4F-D5.5-G		5,5	6	16	50	4	A	○
GM-4F-D6.0-G		6	6	16	50	4	B	○
GM-4F-D7.0-G		7	8	20	60	4	A	○
GM-4F-D8.0-G		8	8	20	60	4	B	○
GM-4F-D9.0-G		9	10	22	75	4	A	○
GM-4F-D10.0-G		10	10	25	75	4	B	○
GM-4F-D11.0-G		11	12	26	75	4	A	○
GM-4F-D12.0-G		12	12	30	75	4	B	○
GM-4F-D14.0-G		14	14	32	75	4	B	○
GM-4F-D16.0-G		16	16	45	100	4	B	○
GM-4F-D18.0-G		18	18	45	100	4	B	○
GM-4F-D20.0-G		20	20	45	100	4	B	○

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

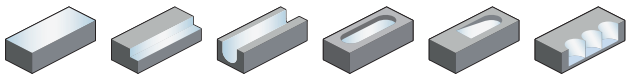
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

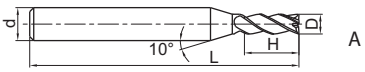
Fraise à grande longueur taillée — Semi-finition

GM-4EL-G

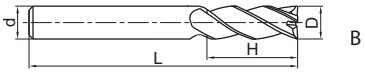


– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





A



B

Article	✻	Dimensions (mm)				Dents	Géométrie	Nuance
		D	d (h6)	H	L			KMG303
GM-4EL-D3.0-G		3	6	12	75	4	A	○
GM-4EL-D4.0-G		4	6	15	75	4	A	○
GM-4EL-D5.0-G		5	6	20	75	4	A	○
GM-4EL-D6.0-G		6	6	20	75	4	B	○
GM-4EL-D8.0-G		8	8	25	100	4	B	○
GM-4EL-D10.0-G		10	10	30	100	4	B	○
GM-4EL-D12.0-G		12	12	35	100	4	B	○
GM-4EL-D14.0-G		14	14	40	100	4	B	○
GM-4EL-D16.0-G		16	16	50	150	4	B	○
GM-4EL-D20.0-G		20	20	55	150	4	B	○

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

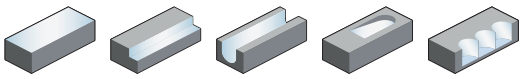
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

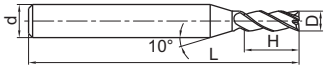
Fraise à grande longueur taillée — Semi-finition

GM-4FL-G

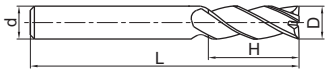


– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





A



B

Article	✲	Dimensions (mm)				Dents	Géométrie	Nuance
		D	d (h6)	H	L			KMG303
GM-4FL-D3.0-G		3	6	12	75	4	A	○
GM-4FL-D4.0-G		4	6	15	75	4	A	○
GM-4FL-D5.0-G		5	6	20	75	4	A	●
GM-4FL-D6.0-G		6	6	20	75	4	B	●
GM-4FL-D8.0-G		8	8	25	100	4	B	●
GM-4FL-D10.0-G		10	10	30	100	4	B	●
GM-4FL-D12.0-G		12	12	35	100	4	B	●
GM-4FL-D14.0-G		14	14	40	100	4	B	○
GM-4FL-D16.0-G		16	16	50	150	4	B	○

● En stock ○ Sur demande

✲ Avec arrosage interne

Domaine d'utilisation

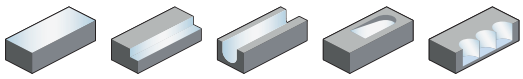
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

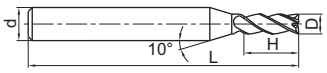
Fraise carbure monobloc, très grande longueur taillée — Semi-finition

GM-4EX-G

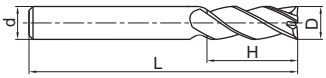


– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





A



B

Article	✻	Dimensions (mm) D	d (h6)	H	L	Dents	Géométrie	Nuance KMG303
GM-4EX-D3.0-G		3	6	20	75	4	A	●
GM-4EX-D4.0-G		4	6	25	75	4	A	●
GM-4EX-D5.0-G		5	6	30	75	4	A	●
GM-4EX-D6.0-G		6	6	30	75	4	B	●
GM-4EX-D8.0-G		8	8	40	100	4	B	●
GM-4EX-D10.0-G		10	10	50	110	4	B	●
GM-4EX-D12.0-G		12	12	50	110	4	B	●
GM-4EX-D16.0-G		16	16	70	150	4	B	●
GM-4EX-D20.0-G		20	20	75	150	4	B	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			

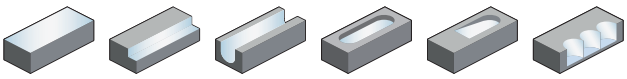
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série GM

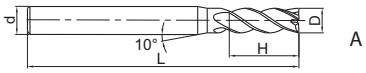
Fraise carbure monobloc Semi-finition

GM-4E

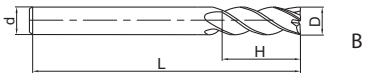


– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 45°





A



B

Article	✲	Dimensions (mm)				Dents	Géométrie	Nuance
		D	d (h6)	H	L			KMG303
GM-4E-D1.0S		1	4	3	50	4	A	●
GM-4E-D1.5S		1,5	4	4	50	4	A	●
GM-4E-D2.0S		2	4	6	50	4	A	●
GM-4E-D2.5S		2,5	4	8	50	4	A	●
GM-4E-D3.0S		3	4	8	50	4	A	●
GM-4E-D4.0S		4	4	11	50	4	B	●
GM-4E-D1.0		1	6	3	50	4	A	●
GM-4E-D1.5		1,5	6	4	50	4	A	●
GM-4E-D2.0		2	6	6	50	4	A	●
GM-4E-D2.5		2,5	6	8	50	4	A	●
GM-4E-D3.0		3	6	8	50	4	A	●
GM-4E-D3.5		3,5	6	10	50	4	A	●
GM-4E-D4.0		4	6	11	50	4	A	●
GM-4E-D4.5		4,5	6	11	50	4	A	●
GM-4E-D5.0		5	6	13	50	4	A	●
GM-4E-D5.5		5,5	6	16	50	4	A	●
GM-4E-D6.0		6	6	16	50	4	B	●
GM-4E-D7.0		7	8	20	60	4	A	●
GM-4E-D8.0		8	8	20	60	4	B	●
GM-4E-D9.0		9	10	22	75	4	A	●
GM-4E-D10.0		10	10	25	75	4	B	●
GM-4E-D11.0		11	12	26	75	4	A	●
GM-4E-D12.0		12	12	30	75	4	B	●
GM-4E-D14.0		14	14	32	75	4	B	●
GM-4E-D16.0		16	16	45	100	4	B	●
GM-4E-D18.0		18	18	45	100	4	B	●
GM-4E-D20.0		20	20	45	100	4	B	●

● En stock ○ Sur demande

✲ Avec arrosage interne

Domaine d'utilisation

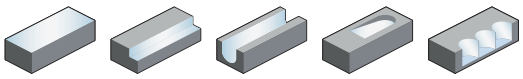
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

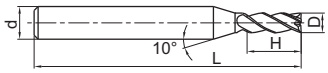
Fraise carbure monobloc — Semi-finition

GM-4E-G

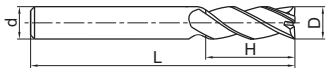


– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





A



B

Article	✻	Dimensions (mm)				Dents	Géométrie	Nuance
		D	d (h6)	H	L			KMG303
GM-4E-D1.0S-G		1	4	3	50	4	A	●
GM-4E-D1.5S-G		1,5	4	4	50	4	A	●
GM-4E-D2.0S-G		2	4	6	50	4	A	●
GM-4E-D2.5S-G		2,5	4	8	50	4	A	●
GM-4E-D3.0S-G		3	4	8	50	4	A	●
GM-4E-D4.0S-G		4	4	11	50	4	B	●
GM-4E-D1.0-G		1	6	3	50	4	A	●
GM-4E-D1.5-G		1,5	6	4	50	4	A	●
GM-4E-D2.0-G		2	6	6	50	4	A	●
GM-4E-D2.5-G		2,5	6	8	50	4	A	●
GM-4E-D3.0-G		3	6	8	50	4	A	●
GM-4E-D3.5-G		3,5	6	10	50	4	A	●
GM-4E-D4.0-G		4	6	11	50	4	A	●
GM-4E-D4.5-G		4,5	6	11	50	4	A	○
GM-4E-D5.0-G		5	6	13	50	4	A	●
GM-4E-D5.5-G		5,5	6	16	50	4	A	●
GM-4E-D6.0-G		6	6	16	50	4	B	●
GM-4E-D7.0-G		7	8	20	60	4	A	●
GM-4E-D8.0-G		8	8	20	60	4	B	●
GM-4E-D9.0-G		9	10	22	75	4	A	●
GM-4E-D10.0-G		10	10	25	75	4	B	●
GM-4E-D11.0-G		11	12	26	75	4	A	●
GM-4E-D12.0-G		12	12	30	75	4	B	●
GM-4E-D14.0-G		14	14	32	75	4	B	●
GM-4E-D16.0-G		16	16	45	100	4	B	●
GM-4E-D18.0-G		18	18	45	100	4	B	●
GM-4E-D20.0-G		20	20	45	100	4	B	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

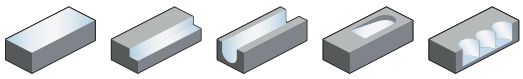
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

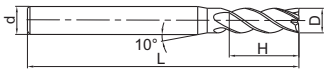
Fraise à grande longueur taillée **Semi-finition**

GM-4EL

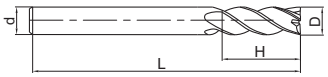


– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 45°





A



B

Article	✻	Dimensions (mm)				Dents	Géométrie	Nuance
		D	d (h6)	H	L			KMG303
GM-4EL-D3.0		3	6	12	75	4	A	●
GM-4EL-D4.0		4	6	15	75	4	A	●
GM-4EL-D5.0		5	6	20	75	4	A	●
GM-4EL-D6.0		6	6	20	75	4	B	●
GM-4EL-D8.0		8	8	25	100	4	B	●
GM-4EL-D10.0		10	10	30	100	4	B	●
GM-4EL-D12.0		12	12	35	100	4	B	●
GM-4EL-D14.0		14	14	40	100	4	B	●
GM-4EL-D16.0		16	16	50	150	4	B	●
GM-4EL-D20.0		20	20	55	150	4	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

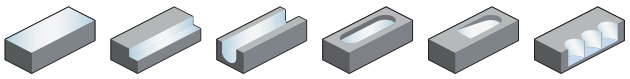
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

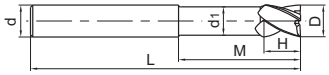
Fraise carbure monobloc, petite longueur taillée — Semi-finition

GM-4EFP



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 45°





Article	✻	Dimensions (mm)						Dents	Nuance
		D	d (h6)	d_1	H	M	L		KMG303
GM-4EFP-D6.0		6	6	5,8	9	30	75	4	○
GM-4EFP-D8.0		8	8	7,8	12	40	100	4	○
GM-4EFP-D10.0		10	10	9,6	15	50	100	4	○
GM-4EFP-D12.0		12	12	11,5	18	50	100	4	○
GM-4EFP-D16.0		16	16	15,5	24	50	150	4	○
GM-4EFP-D20.0		20	20	19,5	30	60	150	4	○

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			

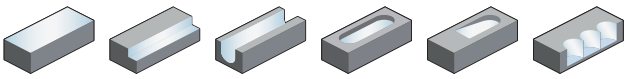
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série GM

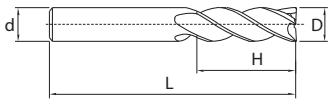
Fraise carbure monobloc Finition

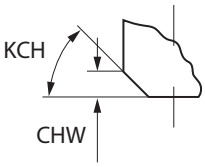
5501R304GF



– Type d'attachement : DIN 6535HA
– Coupe au centre
– Angle d'hélice 30°







Article	✻	Dimensions (mm)						Dents	Nuance	
		D	d (h6)	H	L	KCH	CHW		KMG303	YK30F
5501R304GF-0300		3	6	5	50	0	0	4	●	○
5501R304GF-0400		4	6	8	54	0	0	4	●	○
5501R304GF-0500		5	6	9	54	0	0	4	●	○
5501R304GF-0600		6	6	10	54	45	0,1	4	●	○
5501R304GF-0800		8	8	12	58	45	0,1	4	●	○
5501R304GF-1000		10	10	14	66	45	0,1	4	●	○
5501R304GF-1200		12	12	16	73	45	0,1	4	●	○
5501R304GF-1400		14	14	18	75	45	0,15	4	●	○
5501R304GF-1600		16	16	22	82	45	0,15	4	●	○
5501R304GF-1800		18	18	24	84	45	0,15	4	●	○
5501R304GF-2000		20	20	26	92	45	0,15	4	●	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

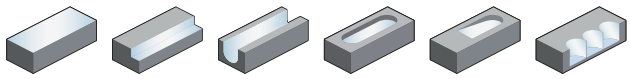
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

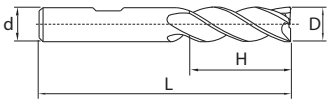
Fraise carbure monobloc **Finition**

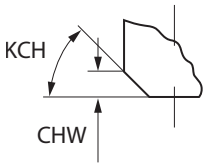
5601R304GF



– Type d'attachement : DIN 6535HB
– Coupe au centre
– Angle d'hélice 30°







Article	✻	Dimensions (mm)						Dents	Nuance
		D	d (h6)	H	L	KCH	CHW		KMG303
5601R304GF-0300		3	6	5	50	0	0	4	●
5601R304GF-0400		4	6	8	54	0	0	4	●
5601R304GF-0500		5	6	9	54	0	0	4	●
5601R304GF-0600		6	6	10	54	45	0,1	4	●
5601R304GF-0800		8	8	12	58	45	0,1	4	●
5601R304GF-1000		10	10	14	66	45	0,1	4	●
5601R304GF-1200		12	12	16	73	45	0,1	4	●
5601R304GF-1400		14	14	18	75	45	0,15	4	●
5601R304GF-1600		16	16	22	82	45	0,15	4	●
5601R304GF-1800		18	18	24	84	45	0,15	4	●
5601R304GF-2000		20	20	26	92	45	0,15	4	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			

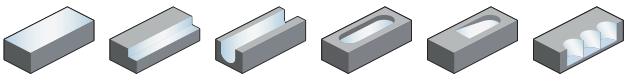
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraises carbure monobloc Série GM

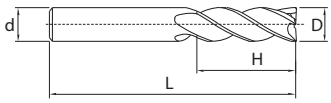
Fraise à grande longueur taillée — Finition

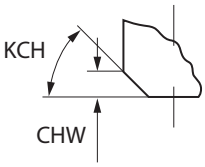
5502R304GF



– Type d'attachement : DIN 6535HA
– Coupe au centre
– Angle d'hélice 30°







Article	✻	Dimensions (mm) D	d (h6)	H	L	KCH	CHW	Dents	Nuance KMG303	YK30F
5502R304GF-0300		3	6	8	57	0	0	4	●	○
5502R304GF-0400		4	6	11	57	0	0	4	●	○
5502R304GF-0500		5	6	13	57	0	0	4	●	○
5502R304GF-0600		6	6	13	57	45	0,1	4	●	○
5502R304GF-0800		8	8	19	63	45	0,1	4	●	○
5502R304GF-1000		10	10	22	72	45	0,1	4	●	○
5502R304GF-1200		12	12	26	83	45	0,1	4	●	○
5502R304GF-1400		14	14	26	83	45	0,15	4	●	○
5502R304GF-1600		16	16	32	92	45	0,15	4	●	○
5502R304GF-1800		18	18	32	92	45	0,15	4	●	○
5502R304GF-2000		20	20	38	104	45	0,15	4	●	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

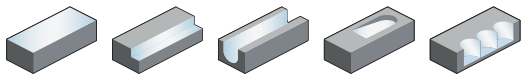
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

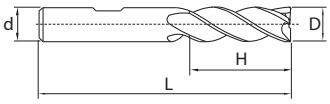
Fraise à grande longueur taillée — Finition

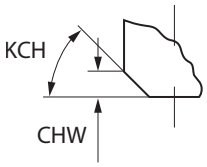
5602R304GF



– Type d'attachement : DIN 6535HB
– Coupe au centre
– Angle d'hélice 30°







Article	✻	Dimensions (mm)						Dents	Nuance	
		D	d (h6)	H	L	KCH	CHW		KMG303	YK30F
5602R304GF-0300		3	6	8	57	0	0	4	●	○
5602R304GF-0400		4	6	11	57	0	0	4	●	○
5602R304GF-0500		5	6	13	57	0	0	4	●	○
5602R304GF-0600		6	6	13	57	45	0,1	4	●	○
5602R304GF-0800		8	8	19	63	45	0,1	4	●	○
5602R304GF-1000		10	10	22	72	45	0,1	4	●	○
5602R304GF-1200		12	12	26	83	45	0,1	4	●	○
5602R304GF-1400		14	14	26	83	45	0,15	4	●	○
5602R304GF-1600		16	16	32	92	45	0,15	4	●	○
5602R304GF-1800		18	18	32	92	45	0,15	4	●	
5602R304GF-2000		20	20	38	104	45	0,15	4	●	

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			

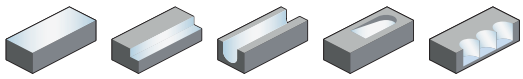
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série GM

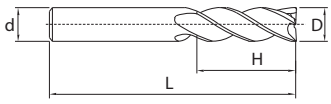
Fraise à grande longueur taillée **Semi-finition**

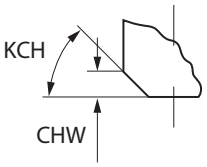
5508R454GM



– Type d'attachement : DIN 6535HA
– Coupe au centre
– Angle d'hélice 45°







Article	✲	Dimensions (mm)						Dents	Nuance	
		D	d (h6)	H	L	KCH	CHW		KMG303	YK30F
5508R454GM-0300		3	3	8	45	0	0	4	●	○
5508R454GM-0400		4	4	11	50	0	0	4	●	○
5508R454GM-0500		5	5	13	50	0	0	4	●	○
5508R454GM-0600		6	6	13	57	45	0,1	4	●	○
5508R454GM-0800		8	8	19	63	45	0,1	4	●	○
5508R454GM-1000		10	10	22	72	45	0,1	4	●	○
5508R454GM-1200		12	12	26	83	45	0,1	4	●	○
5508R454GM-1400		14	14	26	83	45	0,15	4	●	○
5508R454GM-1500		15	16	32	92	0	0	4	○	
5508R454GM-1600		16	16	32	92	45	0,15	4	●	○
5508R454GM-1800		18	18	32	92	45	0,15	4	●	○
5508R454GM-2000		20	20	38	104	45	0,15	4	●	○

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

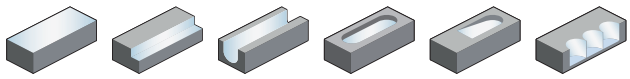
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

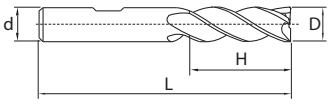
Fraise à grande longueur taillée — Semi-finition

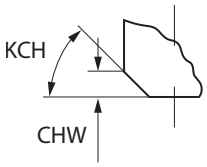
5602R454GM



– Type d'attachement : DIN 6535HB
– Coupe au centre
– Angle d'hélice 45°







Article	✻	Dimensions (mm)						Dents	Nuance
		D	d (h6)	H	L	KCH	CHW		KMG303
5602R454GM-0300		3	6	8	57	0	0	4	●
5602R454GM-0400		4	6	11	57	0	0	4	●
5602R454GM-0500		5	6	13	57	0	0	4	●
5602R454GM-0600		6	6	13	57	45	0,1	4	●
5602R454GM-0800		8	8	19	63	45	0,1	4	●
5602R454GM-1000		10	10	22	72	45	0,1	4	●
5602R454GM-1200		12	12	26	83	45	0,1	4	●
5602R454GM-1400		14	14	26	83	45	0,15	4	●
5602R454GM-1600		16	16	32	92	45	0,15	4	●
5602R454GM-1800		18	18	32	92	45	0,15	4	●
5602R454GM-2000		20	20	38	104	45	0,15	4	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

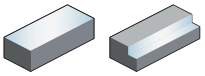
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

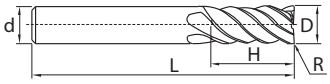
Fraise torique à grande longueur taillée — Finition

5589R45MGFR



– Type d'attachement : DIN 6535HA
– Angle d'hélice 45°





Article	✻	Dimensions (mm)					Dents	Nuance
		D	R	d (h6)	H	L		KMG405
5589R45MGFR02-0600		6	0,2	6	19	63	6	●
5589R45MGFR02-0800		8	0,2	8	28	72	6	●
5589R45MGFR02-1000		10	0,2	10	34	84	6	●
5589R45MGFR02-1200		12	0,2	12	40	97	6	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

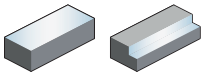
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

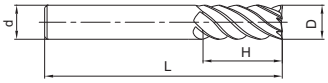
Fraise carbure monobloc — Semi-finition

GM-6E



– Attachement cylindrique, standard usine ZCC-CT
– Pas de coupe au centre
– Angle d'hélice 45°





Article	✻	Dimensions (mm) D	d (h6)	H	L	Dents	Nuance KMG303
GM-6E-D6.0		6	6	18	60	6	●
GM-6E-D8.0		8	8	20	60	6	●
GM-6E-D10.0		10	10	30	75	6	●
GM-6E-D12.0		12	12	32	75	6	●
GM-6E-D16.0		16	16	40	100	6	●
GM-6E-D20.0		20	20	45	100	6	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			

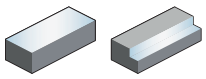
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série GM

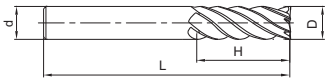
Fraise à grande longueur taillée **Semi-finition**

GM-6EL



– Attachement cylindrique, standard usine ZCC-CT
– Pas de coupe au centre
– Angle d'hélice 45°





Article	✻	Dimensions (mm) D	d (h6)	H	L	Dents	Nuance KMG303
GM-6EL-D6.0		6	6	24	75	6	●
GM-6EL-D8.0		8	8	32	75	6	●
GM-6EL-D10.0		10	10	40	100	6	●
GM-6EL-D12.0		12	12	45	100	6	●
GM-6EL-D16.0		16	16	64	150	6	●
GM-6EL-D20.0		20	20	75	150	6	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

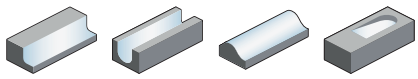
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

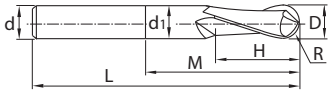
Fraise hémisphérique — Finition

5565R302GF



– Type d'attachement : DIN 6535HA
– Coupe au centre
– Angle d'hélice 30°





Article	✻	Dimensions (mm) D	R	d (h6)	d_1	H	M	L	Dents	Nuance KMG303
5565R302GF-0300		3	1,5	6	2,8	4	9	57	2	●
5565R302GF-0400		4	2	6	3,7	5	12	57	2	●
5565R302GF-0500		5	2,5	6	4,6	6	15	57	2	●
5565R302GF-0600		6	3	6	5,5	7	20	57	2	●
5565R302GF-0800		8	4	8	7,4	9	26	63	2	●
5565R302GF-1000		10	5	10	9,2	11	31	72	2	●
5565R302GF-1200		12	6	12	11	12	37	83	2	●
5565R302GF-1600		16	8	16	15	16	43	92	2	●
5565R302GF-2000		20	10	20	19	20	50	104	2	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			

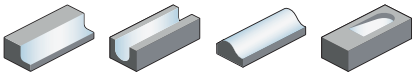
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série GM

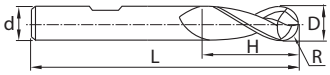
Fraise hémisphérique **Semi-finition**

5665R202GM



– Type d'attachement : DIN 6535HB
– Coupe au centre
– Angle d'hélice 20°





Article	✻	Dimensions (mm)						Dents	Nuance
		D	R	d (h6)	d_1	H	L		KMG303
5665R202GM-0300		3	1,5	6	2,8	4	57	2	●
5665R202GM-0400		4	2	6	3,7	5	57	2	●
5665R202GM-0500		5	2,5	6	4,6	6	57	2	●
5665R202GM-0600		6	3	6	5,5	7	57	2	●
5665R202GM-0800		8	4	8	7,4	9	63	2	●
5665R202GM-1000		10	5	10	9,2	11	72	2	●
5665R202GM-1200		12	6	12	11	12	83	2	●
5665R202GM-1600		16	8	16	15	16	92	2	●
5665R202GM-2000		20	10	20	19	20	104	2	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

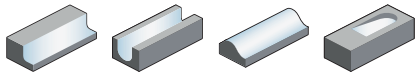
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

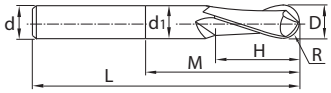
Fraise hémisphérique, attachement long — Finition

5566R302GF



– Type d'attachement : DIN 6535HA
– Coupe au centre
– Angle d'hélice 30°





Article	✻	Dimensions (mm)							Dents	Nuance
		D	R	d (h6)	d_1	H	M	L		KMG303
5566R302GF-0300		3	1,5	6	2,8	4	15	75	2	●
5566R302GF-0400		4	2	6	3,7	5	20	75	2	●
5566R302GF-0500		5	2,5	6	4,6	6	25	80	2	●
5566R302GF-0600		6	3	6	5,5	7	60	80	2	●
5566R302GF-0800		8	4	8	7,4	9	65	90	2	●
5566R302GF-1000		10	5	10	9,2	11	40	100	2	●
5566R302GF-1200		12	6	12	11	12	50	120	2	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			

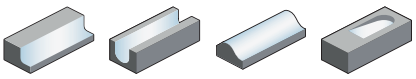
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série GM

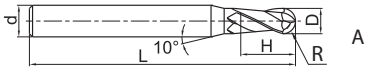
Fraise hémisphérique Semi-finition

GM-2B

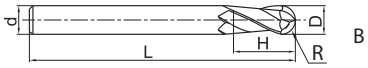


– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





A



B

Article	✻	Dimensions (mm) R	D	d (h6)	H	L	Dents	Géométrie	Nuance KMG303
GM-2B-R0.5S		0,5	1	4	2	50	2	A	●
GM-2B-R0.75S		0,75	1,5	4	3	50	2	A	●
GM-2B-R1.0S		1	2	4	4	50	2	A	●
GM-2B-R1.25S		1,25	2,5	4	5	50	2	A	●
GM-2B-R1.5S		1,5	3	4	6	50	2	A	●
GM-2B-R2.0S		2	4	4	8	50	2	B	●
GM-2B-R0.5		0,5	1	6	2	50	2	A	○
GM-2B-R0.75		0,75	1,5	6	3	50	2	A	○
GM-2B-R1.0		1	2	6	4	50	2	A	●
GM-2B-R1.25		1,25	2,5	6	5	50	2	A	○
GM-2B-R1.5		1,5	3	6	6	50	2	A	●
GM-2B-R1.75		1,75	3,5	6	8	50	2	A	○
GM-2B-R2.0		2	4	6	8	50	2	A	●
GM-2B-R2.5		2,5	5	6	10	50	2	A	●
GM-2B-R2.75		2,75	5,5	6	12	50	2	A	○
GM-2B-R3.0		3	6	6	12	50	2	B	●
GM-2B-R3.5		3,5	7	8	14	60	2	A	○
GM-2B-R4.0		4	8	8	16	60	2	B	●
GM-2B-R4.5		4,5	9	10	18	75	2	A	○
GM-2B-R5.0		5	10	10	20	75	2	B	●
GM-2B-R6.0		6	12	12	24	75	2	B	●
GM-2B-R7.0		7	14	14	28	75	2	B	●
GM-2B-R8.0		8	16	16	32	100	2	B	●
GM-2B-R10.0		10	20	20	40	100	2	B	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

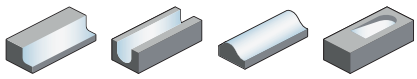
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

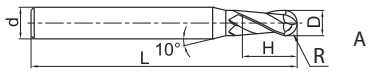
Fraise hémisphérique, attachement long — Semi-finition

GM-2BL

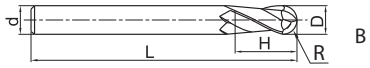


– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





A



B

Article	✻	Dimensions (mm) R	D	d (h6)	H	L	Dents	Géométrie	Nuance KMG303
GM-2BL-R1.0		1	2	6	4	75	2	A	●
GM-2BL-R1.25		1,25	2,5	6	5	75	2	A	●
GM-2BL-R1.5		1,5	3	6	6	75	2	A	●
GM-2BL-R1.75		1,75	3,5	6	8	75	2	A	●
GM-2BL-R2.0		2	4	6	8	75	2	A	●
GM-2BL-R2.5		2,5	5	6	10	75	2	A	●
GM-2BL-R2.75		2,75	5,5	6	12	75	2	A	●
GM-2BL-R3.0		3	6	6	12	75	2	B	●
GM-2BL-R3.5		3,5	7	8	14	75	2	A	●
GM-2BL-R4.0		4	8	8	16	100	2	B	●
GM-2BL-R4.5		4,5	9	10	18	100	2	A	●
GM-2BL-R5.0		5	10	10	20	100	2	B	●
GM-2BL-R6.0		6	12	12	24	100	2	B	●
GM-2BL-R7.0		7	14	14	28	100	2	B	●
GM-2BL-R8.0		8	16	16	32	150	2	B	●
GM-2BL-R10.0		10	20	20	40	150	2	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

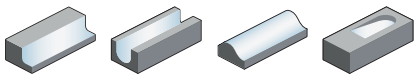
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

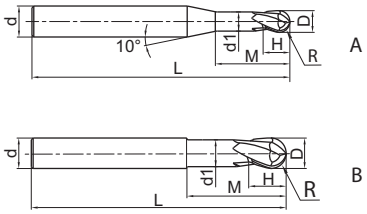
Fraise hémisphérique, petite longueur taillée — Semi-finition

GM-2BFP



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✲	Dimensions (mm) R	D	d (h6)	d_1	H	M	L	Dents	Géométrie	Nuance KMG303
GM-2BFP-R0.5		0,5	1	6	0,95	1	2,5	75	2	A	○
GM-2BFP-R0.75		0,75	1,5	6	1,45	1	3	75	2	A	○
GM-2BFP-R1.0		1	2	6	1,95	2	4	75	2	A	●
GM-2BFP-R1.5		1,5	3	6	2,85	3	6	75	2	A	○
GM-2BFP-R2.0		2	4	6	3,85	4	8	75	2	A	○
GM-2BFP-R2.5		2,5	5	6	4,85	5	10	75	2	A	○
GM-2BFP-R3.0		3	6	6	5,8	6	12	75	2	B	○
GM-2BFP-R4.0		4	8	8	7,8	8	16	100	2	B	○
GM-2BFP-R5.0		5	10	10	9,6	10	20	100	2	B	○
GM-2BFP-R6.0		6	12	12	11,5	12	24	100	2	B	○
GM-2BFP-R8.0		8	16	16	15,5	16	32	150	2	B	○
GM-2BFP-R10.0		10	20	20	19,5	20	40	150	2	B	○

● En stock ○ Sur demande

✲ Avec arrosage interne

Domaine d'utilisation

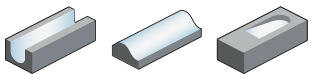
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

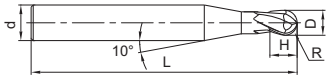
Fraise hémisphérique — Semi-finition

GM-2BS



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm)					Dents	Nuance
		R	D	d (h6)	H	L		KMG303
GM-2BS-R0.15		0,15	0,3	4	0,5	50	2	●
GM-2BS-R0.20		0,2	0,4	4	0,6	50	2	●
GM-2BS-R0.25		0,25	0,5	4	0,8	50	2	●
GM-2BS-R0.30		0,3	0,6	4	0,9	50	2	●
GM-2BS-R0.35		0,35	0,7	4	1	50	2	●
GM-2BS-R0.40		0,4	0,8	4	1,2	50	2	●
GM-2BS-R0.45		0,45	0,9	4	1,3	50	2	●
GM-2BS-R0.50		0,5	1	4	1,5	50	2	●
GM-2BS-R0.60		0,6	1,2	4	1,8	50	2	●
GM-2BS-R0.70		0,7	1,4	4	2	50	2	●
GM-2BS-R0.75		0,75	1,5	4	2,3	50	2	●
GM-2BS-R0.80		0,8	1,6	4	2,5	50	2	●
GM-2BS-R0.90		0,9	1,8	4	2,7	50	2	●
GM-2BS-R1.00		1	2	4	3	50	2	●
GM-2BS-R1.25		1,25	2,5	4	3,7	50	2	●
GM-2BS-R1.50		1,5	3	4	4,5	50	2	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			

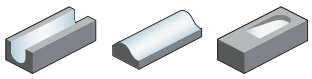
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série GM

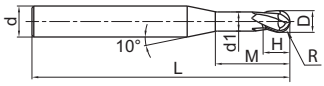
Fraise hémisphérique Semi-finition

GM-2BP



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm) R	D	d (h6)	d_1	H	M	L	Dents	Nuance KMG303
GM-2BP-R0.25-M04		0,25	0,5	4	0,45	0,7	4	50	2	●
GM-2BP-R0.25-M06		0,25	0,5	4	0,45	0,7	6	50	2	●
GM-2BP-R0.3-M04		0,3	0,6	4	0,55	0,9	4	50	2	●
GM-2BP-R0.3-M06		0,3	0,6	4	0,55	0,9	6	50	2	●
GM-2BP-R0.3-M08		0,3	0,6	4	0,55	0,9	8	50	2	●
GM-2BP-R0.4-M04		0,4	0,8	4	0,75	1,2	4	50	2	●
GM-2BP-R0.4-M06		0,4	0,8	4	0,75	1,2	6	50	2	●
GM-2BP-R0.4-M08		0,4	0,8	4	0,75	1,2	8	50	2	●
GM-2BP-R0.4-M10		0,4	0,8	4	0,75	1,2	10	50	2	●
GM-2BP-R0.5-M04		0,5	1	4	0,95	1,5	4	50	2	●
GM-2BP-R0.5-M06		0,5	1	4	0,95	1,5	6	50	2	●
GM-2BP-R0.5-M08		0,5	1	4	0,95	1,5	8	50	2	●
GM-2BP-R0.5-M10		0,5	1	4	0,95	1,5	10	50	2	●
GM-2BP-R0.5-M12		0,5	1	4	0,95	1,5	12	50	2	●
GM-2BP-R0.6-M06		0,6	1,2	4	1,15	1,8	6	50	2	●
GM-2BP-R0.6-M08		0,6	1,2	4	1,15	1,8	8	50	2	●
GM-2BP-R0.6-M12		0,6	1,2	4	1,15	1,8	12	50	2	●
GM-2BP-R0.6-M16		0,6	1,2	4	1,15	1,8	16	50	2	●
GM-2BP-R0.75-M08		0,75	1,5	4	1,45	2,3	8	50	2	●
GM-2BP-R0.75-M12		0,75	1,5	4	1,45	2,3	12	50	2	●
GM-2BP-R0.75-M16		0,75	1,5	4	1,45	2,3	16	50	2	●
GM-2BP-R1.0-M06		1	2	4	1,95	3	6	50	2	●
GM-2BP-R1.0-M08		1	2	4	1,95	3	8	50	2	●
GM-2BP-R1.0-M10		1	2	4	1,95	3	10	50	2	●
GM-2BP-R1.0-M12		1	2	4	1,95	3	12	50	2	●
GM-2BP-R1.0-M16		1	2	4	1,95	3	16	50	2	●
GM-2BP-R1.0-M20		1	2	4	1,95	3	20	50	2	●
GM-2BP-R1.25-M08		1,25	2,5	4	2,4	3,7	8	50	2	●
GM-2BP-R1.25-M12		1,25	2,5	4	2,4	3,7	12	50	2	●
GM-2BP-R1.25-M16		1,25	2,5	4	2,4	3,7	16	60	2	●
GM-2BP-R1.25-M20		1,25	2,5	4	2,4	3,7	20	60	2	●
GM-2BP-R1.5-M08		1,5	3	6	2,85	4,5	8	50	2	●
GM-2BP-R1.5-M10		1,5	3	6	2,85	4,5	10	50	2	●
GM-2BP-R1.5-M12		1,5	3	6	2,85	4,5	12	50	2	●
GM-2BP-R1.5-M16		1,5	3	6	2,85	4,5	16	60	2	●
GM-2BP-R1.5-M20		1,5	3	6	2,85	4,5	20	60	2	●
GM-2BP-R2.0-M10		2	4	6	3,85	6	10	60	2	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

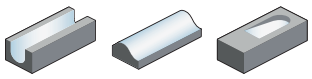
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

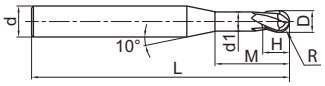
Fraise hémisphérique — Semi-finition

GM-2BP



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm) R	D	d (h6)	d_1	H	M	L	Dents	Nuance KMG303
GM-2BP-R2.0-M16		2	4	6	3,85	6	16	60	2	●
GM-2BP-R2.0-M20		2	4	6	3,85	6	20	60	2	●
GM-2BP-R2.0-M25		2	4	6	3,85	6	25	60	2	●
GM-2BP-R2.5-M16		2,5	5	6	4,85	7,5	16	60	2	●
GM-2BP-R2.5-M25		2,5	5	6	4,85	7,5	25	70	2	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			

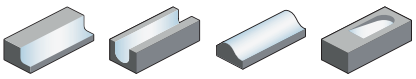
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraises carbure monobloc Série GM

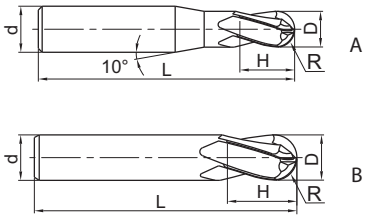
Fraise hémisphérique Semi-finition

GM-4B



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✲	Dimensions (mm)					Dents	Géométrie	Nuance
		R	D	d (h6)	H	L			KMG303
GM-4B-R1.5		1,5	3	6	6	50	4	A	●
GM-4B-R2.0		2	4	6	8	50	4	A	●
GM-4B-R2.5		2,5	5	6	10	50	4	A	●
GM-4B-R3.0		3	6	6	12	50	4	B	●
GM-4B-R4.0		4	8	8	16	60	4	B	●
GM-4B-R5.0		5	10	10	20	75	4	B	●
GM-4B-R6.0		6	12	12	24	75	4	B	●
GM-4B-R7.0		7	14	14	28	75	4	B	●
GM-4B-R8.0		8	16	16	32	100	4	B	●
GM-4B-R9.0		9	18	18	36	100	4	B	●
GM-4B-R10.0		10	20	20	40	100	4	B	●

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

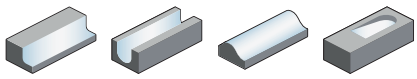
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

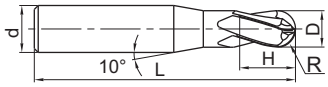
Fraise hémisphérique, attachement long — Semi-finition

GM-4BL

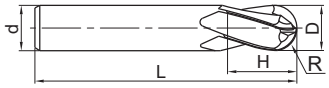


– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





A



B

Article	✻	Dimensions (mm) R	D	d (h6)	H	L	Dents	Géométrie	Nuance KMG303
GM-4BL-R1.5		1,5	3	6	6	75	4	A	○
GM-4BL-R2.0		2	4	6	8	75	4	A	○
GM-4BL-R2.5		2,5	5	6	10	75	4	A	○
GM-4BL-R3.0		3	6	6	12	75	4	B	○
GM-4BL-R4.0		4	8	8	16	100	4	B	○
GM-4BL-R5.0		5	10	10	20	100	4	B	○
GM-4BL-R6.0		6	12	12	24	100	4	B	○
GM-4BL-R7.0		7	14	14	28	100	4	B	○
GM-4BL-R8.0		8	16	16	32	150	4	B	○
GM-4BL-R10.0		10	20	20	40	150	4	B	○

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			

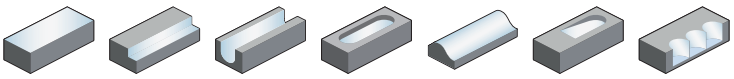
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série GM

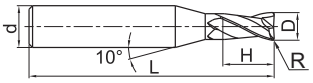
Fraise torique **Semi-finition**

GM-2R



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm) R	D	d (h6)	H	L	Dents	Nuance KMG303
GM-2R-D1.0R0.2		0,2	1	4	3	50	2	○
GM-2R-D1.5R0.2		0,2	1,5	4	4	50	2	○
GM-2R-D2.0R0.2		0,2	2	4	6	50	2	○
GM-2R-D2.0R0.5		0,5	2	4	6	50	2	○
GM-2R-D2.5R0.2		0,2	2,5	4	8	50	2	○
GM-2R-D2.5R0.5		0,5	2,5	4	8	50	2	○
GM-2R-D3.0R0.2		0,2	3	4	8	50	2	○
GM-2R-D3.0R0.3		0,3	3	4	8	50	2	○
GM-2R-D3.0R0.5		0,5	3	4	8	50	2	○
GM-2R-D4.0R0.2		0,2	4	4	11	50	2	○
GM-2R-D4.0R0.3		0,3	4	4	11	50	2	○
GM-2R-D4.0R0.5		0,5	4	4	11	50	2	○
GM-2R-D4.0R1.0		1	4	4	11	50	2	○
GM-2R-D5.0R0.3		0,3	5	6	13	50	2	○
GM-2R-D5.0R0.5		0,5	5	6	13	50	2	○
GM-2R-D5.0R1.0		1	5	6	13	50	2	○
GM-2R-D6.0R0.3		0,3	6	6	16	50	2	○
GM-2R-D6.0R0.5		0,5	6	6	16	50	2	○
GM-2R-D6.0R1.0		1	6	6	16	50	2	○
GM-2R-D8.0R0.3		0,3	8	8	20	60	2	○
GM-2R-D8.0R0.5		0,5	8	8	20	60	2	○
GM-2R-D8.0R1.0		1	8	8	20	60	2	○
GM-2R-D10.0R0.5		0,5	10	10	25	75	2	○
GM-2R-D10.0R1.0		1	10	10	25	75	2	○
GM-2R-D10.0R1.5		1,5	10	10	25	75	2	●
GM-2R-D10.0R2.0		2	10	10	25	75	2	○
GM-2R-D12.0R0.5		0,5	12	12	30	75	2	○
GM-2R-D12.0R1.0		1	12	12	30	75	2	○
GM-2R-D12.0R1.5		1,5	12	12	30	75	2	○
GM-2R-D12.0R2.0		2	12	12	30	75	2	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

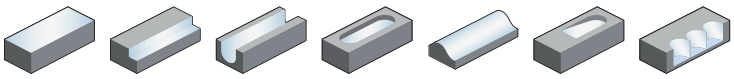
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

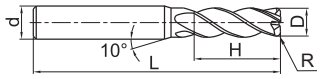
Fraise torique — Semi-finition

GM-4R

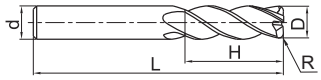


– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





A



B

Article	✻	Dimensions (mm) R	D	d (h6)	H	L	Dents	Géométrie	Nuance KMG303
GM-4R-D3.0R0.2		0,2	3	4	8	50	4	A	●
GM-4R-D4.0R0.3		0,3	4	4	10	50	4	B	○
GM-4R-D4.0R0.5		0,5	4	4	10	50	4	B	●
GM-4R-D5.0R0.5		0,5	5	6	13	50	4	A	●
GM-4R-D5.0R1.0		1	5	6	13	50	4	A	●
GM-4R-D6.0R0.5		0,5	6	6	16	50	4	B	●
GM-4R-D6.0R1.0		1	6	6	16	50	4	B	●
GM-4R-D8.0R0.5		0,5	8	8	20	60	4	B	●
GM-4R-D8.0R1.0		1	8	8	20	60	4	B	●
GM-4R-D10.0R0.5		0,5	10	10	25	75	4	B	●
GM-4R-D10.0R1.0		1	10	10	25	75	4	B	●
GM-4R-D10.0R2.0		2	10	10	25	75	4	B	●
GM-4R-D10.0R3.0		3	10	10	25	75	4	B	●
GM-4R-D12.0R0.5		0,5	12	12	30	75	4	B	●
GM-4R-D12.0R1.0		1	12	12	30	75	4	B	●
GM-4R-D12.0R2.0		2	12	12	30	75	4	B	●
GM-4R-D12.0R3.0		3	12	12	30	75	4	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

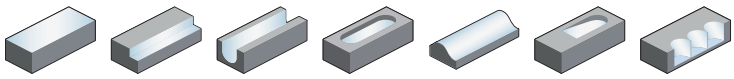
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

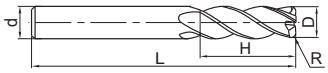
Fraise torique, attachement long **Semi-finition**

GM-4RL



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm) R	D	d (h6)	H	L	Dents	Nuance KMG303
GM-4RL-D6.0R0.5		0,5	6	6	16	75	4	●
GM-4RL-D6.0R1.0		1	6	6	16	75	4	●
GM-4RL-D8.0R0.5		0,5	8	8	20	100	4	●
GM-4RL-D8.0R1.0		1	8	8	20	100	4	●
GM-4RL-D10.0R0.5		0,5	10	10	25	100	4	●
GM-4RL-D10.0R1.0		1	10	10	25	100	4	●
GM-4RL-D10.0R2.0		2	10	10	25	100	4	●
GM-4RL-D12.0R0.5		0,5	12	12	30	100	4	○
GM-4RL-D12.0R1.0		1	12	12	30	100	4	●
GM-4RL-D12.0R2.0		2	12	12	30	100	4	●
GM-4RL-D16.0R1.0		1	16	16	45	150	4	●
GM-4RL-D16.0R2.0		2	16	16	45	150	4	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

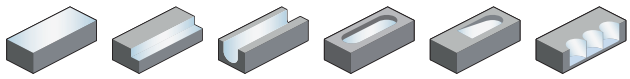
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

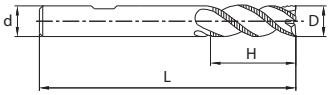
Fraise à grande longueur taillée — Usinage d'ébauche général

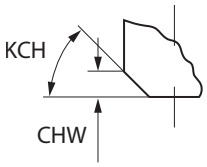
5602R303GR



– Type d'attachement : DIN 6535HB
– Coupe au centre
– Angle d'hélice 30°







Article	✻	Dimensions (mm)						Dents	Nuance
		D	d (h6)	H	L	KCH	CHW		KMG303
5602R303GR-0600		6	6	13	57	45	0,25	3	●
5602R303GR-0800		8	8	19	63	45	0,25	3	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			

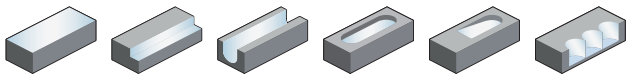
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série GM

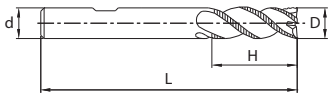
Fraise à grande longueur taillée — Usinage d'ébauche général

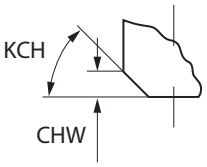
5602R304GR



– Type d'attachement : DIN 6535HB
– Coupe au centre
– Angle d'hélice 30°







Article	✻	Dimensions (mm)						Dents	Nuance
		D	d (h6)	H	L	KCH	CHW		KMG303
5602R304GR-1000		10	10	22	72	45	0,5	4	●
5602R304GR-1200		12	12	26	83	45	0,5	4	●
5602R304GR-1400		14	14	30	90	45	0,5	4	○
5602R304GR-1600		16	16	32	92	45	0,5	4	●
5602R304GR-2000		20	20	38	104	45	0,5	4	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

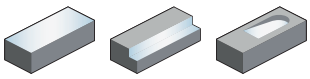
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

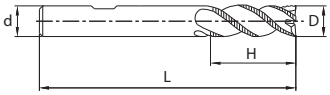
Fraise à grande longueur taillée — Usinage d'ébauche général

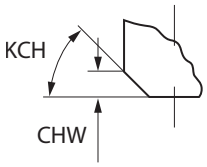
5602R305GR



– Type d'attachement : DIN 6535HB
– Coupe au centre
– Angle d'hélice 30°







Article	✻	Dimensions (mm)						Dents	Nuance
		D	d (h6)	H	L	KCH	CHW		KMG303
5602R305GR-2500		25	25	45	121	45	0,5	5	○

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			

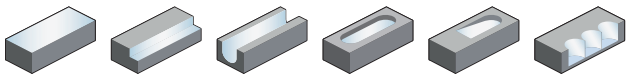
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série GM

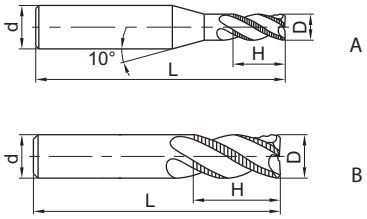
Fraise carbure monobloc, profil d'ébauche **Semi-finition**

GM-4W



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





Article	✻	Dimensions (mm) D	d (h6)	H	L	Dents	Géométrie	Nuance KMG405
GM-4W-D6.0		6	6	16	50	4	B	●
GM-4W-D7.0		7	8	20	60	4	A	●
GM-4W-D8.0		8	8	20	60	4	B	●
GM-4W-D9.0		9	10	22	75	4	A	●
GM-4W-D10.0		10	10	25	75	4	B	●
GM-4W-D11.0		11	12	26	75	4	A	●
GM-4W-D12.0		12	12	30	75	4	B	●
GM-4W-D16.0		16	16	45	100	4	B	●
GM-4W-D20.0		20	20	45	100	4	B	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

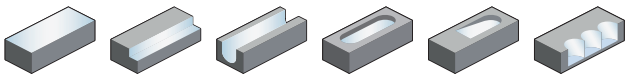
P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

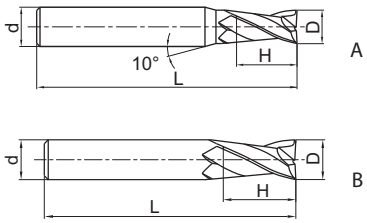
Fraise carbure monobloc — Usinage haute performance

PM-2E



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





Article	✻	Dimensions (mm) D	d (h6)	H	L	Dents	Géométrie	Nuance KMG405
PM-2E-D1.0S		1	4	3	50	2	A	●
PM-2E-D1.5S		1,5	4	4	50	2	A	●
PM-2E-D2.0S		2	4	6	50	2	A	●
PM-2E-D2.5S		2,5	4	8	50	2	A	●
PM-2E-D3.0S		3	4	8	50	2	A	●
PM-2E-D4.0S		4	4	11	50	2	B	●
PM-2E-D1.0		1	6	3	50	2	A	●
PM-2E-D1.5		1,5	6	4	50	2	A	●
PM-2E-D2.0		2	6	6	50	2	A	●
PM-2E-D2.5		2,5	6	8	50	2	A	●
PM-2E-D3.0		3	6	8	50	2	A	●
PM-2E-D3.5		3,5	6	10	50	2	A	●
PM-2E-D4.0		4	6	11	50	2	A	●
PM-2E-D4.5		4,5	6	11	50	2	A	●
PM-2E-D5.0		5	6	13	50	2	A	●
PM-2E-D5.5		5,5	6	16	50	2	A	●
PM-2E-D6.0		6	6	16	50	2	B	●
PM-2E-D7.0		7	8	20	60	2	A	●
PM-2E-D8.0		8	8	20	60	2	B	●
PM-2E-D9.0		9	10	22	75	2	A	●
PM-2E-D10.0		10	10	25	75	2	B	●
PM-2E-D11.0		11	12	26	75	2	A	○
PM-2E-D12.0		12	12	30	75	2	B	●
PM-2E-D14.0		14	14	32	75	2	B	●
PM-2E-D16.0		16	16	45	100	2	B	●
PM-2E-D18.0		18	18	45	100	2	B	○
PM-2E-D20.0		20	20	45	100	2	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

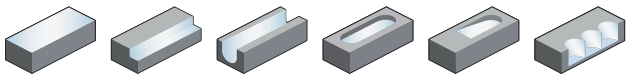
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série PM

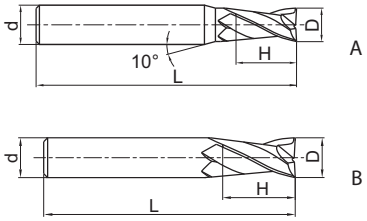
Fraise à grande longueur taillée — Usinage haute performance

PM-2EL



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





Article	✻	Dimensions (mm) D	d (h6)	H	L	Dents	Géométrie	Nuance KMG405
PM-2EL-D3.0		3	6	12	75	2	A	●
PM-2EL-D4.0		4	6	15	75	2	A	●
PM-2EL-D5.0		5	6	20	75	2	A	●
PM-2EL-D6.0		6	6	20	75	2	B	●
PM-2EL-D8.0		8	8	25	100	2	B	●
PM-2EL-D10.0		10	10	30	100	2	B	●
PM-2EL-D12.0		12	12	35	100	2	B	●
PM-2EL-D14.0		14	14	40	100	2	B	○
PM-2EL-D16.0		16	16	50	150	2	B	●
PM-2EL-D20.0		20	20	55	150	2	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

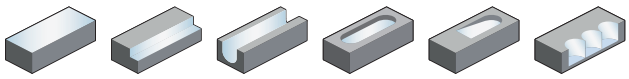
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

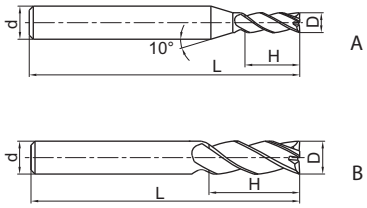
Fraise carbure monobloc — Usinage haute performance

PM-4E-G



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





Article	✻	Dimensions (mm) D	d (h6)	H	L	Dents	Géométrie	Nuance KMG405
PM-4E-D1.0S-G		1	4	3	50	4	A	●
PM-4E-D1.5S-G		1,5	4	4	50	4	A	●
PM-4E-D2.0S-G		2	4	6	50	4	A	●
PM-4E-D2.5S-G		2,5	4	8	50	4	A	●
PM-4E-D3.0S-G		3	4	8	50	4	A	●
PM-4E-D4.0S-G		4	4	11	50	4	B	●
PM-4E-D1.0-G		1	6	3	50	4	A	●
PM-4E-D1.5-G		1,5	6	4	50	4	A	●
PM-4E-D2.0-G		2	6	6	50	4	A	●
PM-4E-D2.5-G		2,5	6	8	50	4	A	●
PM-4E-D3.0-G		3	6	8	50	4	A	●
PM-4E-D3.5-G		3,5	6	10	50	4	A	●
PM-4E-D4.0-G		4	6	11	50	4	A	●
PM-4E-D4.5-G		4,5	6	11	50	4	A	●
PM-4E-D5.0-G		5	6	13	50	4	A	●
PM-4E-D5.5-G		5,5	6	16	50	4	A	●
PM-4E-D6.0-G		6	6	16	50	4	B	●
PM-4E-D7.0-G		7	8	20	60	4	A	●
PM-4E-D8.0-G		8	8	20	60	4	B	●
PM-4E-D9.0-G		9	10	22	75	4	A	●
PM-4E-D10.0-G		10	10	25	75	4	B	●
PM-4E-D11.0-G		11	12	26	75	4	A	●
PM-4E-D12.0-G		12	12	30	75	4	B	●
PM-4E-D14.0-G		14	14	32	75	4	B	●
PM-4E-D16.0-G		16	16	45	100	4	B	●
PM-4E-D18.0-G		18	18	45	100	4	B	●
PM-4E-D20.0-G		20	20	45	100	4	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

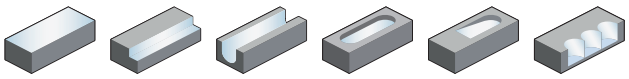
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

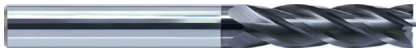
Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

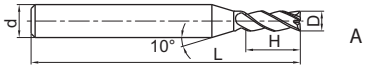
Fraise à grande longueur taillée — Usinage haute performance

PM-4EL-G

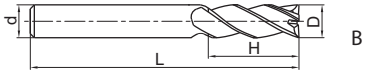


– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





A



B

Article	✻	Dimensions (mm)				Dents	Géométrie	Nuance
		D	d (h6)	H	L			KMG405
PM-4EL-D3.0-G		3	6	12	75	4	A	○
PM-4EL-D4.0-G		4	6	15	75	4	A	○
PM-4EL-D5.0-G		5	6	20	75	4	A	○
PM-4EL-D6.0-G		6	6	20	75	4	B	○
PM-4EL-D8.0-G		8	8	25	100	4	B	○
PM-4EL-D10.0-G		10	10	30	100	4	B	○
PM-4EL-D12.0-G		12	12	35	100	4	B	○
PM-4EL-D14.0-G		14	14	40	100	4	B	○
PM-4EL-D16.0-G		16	16	50	150	4	B	○
PM-4EL-D20.0-G		20	20	55	150	4	B	○

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

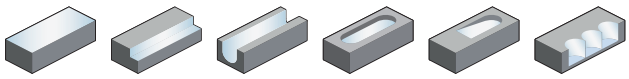
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

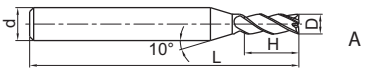
Fraise carbure monobloc, très grande longueur taillée — Usinage haute performance

PM-4EX-G

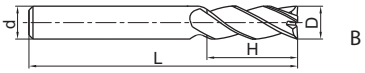


– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





A



B

Article	✻	Dimensions (mm) D	d (h6)	H	L	Dents	Géométrie	Nuance KMG405
PM-4EX-D3.0-G		3	6	20	75	4	A	●
PM-4EX-D4.0-G		4	6	25	75	4	A	●
PM-4EX-D5.0-G		5	6	30	75	4	A	●
PM-4EX-D6.0-G		6	6	30	75	4	B	●
PM-4EX-D8.0-G		8	8	40	100	4	B	●
PM-4EX-D10.0-G		10	10	50	110	4	B	●
PM-4EX-D12.0-G		12	12	50	110	4	B	●
PM-4EX-D16.0-G		16	16	70	150	4	B	●
PM-4EX-D20.0-G		20	20	75	150	4	B	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

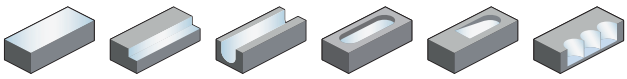
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

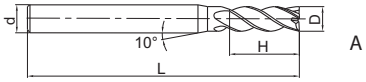
Fraise carbure monobloc — Usinage haute performance

PM-4E

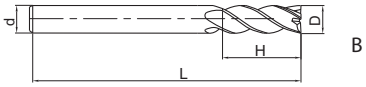


– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 45°





A



B

Article	✻	Dimensions (mm)				Dents	Géométrie	Nuance
		D	d (h6)	H	L			KMG405
PM-4E-D1.0S		1	4	3	50	4	A	●
PM-4E-D1.5S		1,5	4	4	50	4	A	●
PM-4E-D2.0S		2	4	6	50	4	A	●
PM-4E-D2.5S		2,5	4	8	50	4	A	●
PM-4E-D3.0S		3	4	8	50	4	A	●
PM-4E-D4.0S		4	4	11	50	4	B	●
PM-4E-D1.0		1	6	3	50	4	A	●
PM-4E-D1.5		1,5	6	4	50	4	A	●
PM-4E-D2.0		2	6	6	50	4	A	●
PM-4E-D2.5		2,5	6	8	50	4	A	●
PM-4E-D3.0		3	6	8	50	4	A	●
PM-4E-D3.5		3,5	6	10	50	4	A	●
PM-4E-D4.0		4	6	11	50	4	A	●
PM-4E-D4.5		4,5	6	11	50	4	A	●
PM-4E-D5.0		5	6	13	50	4	A	●
PM-4E-D5.5		5,5	6	16	50	4	A	●
PM-4E-D6.0		6	6	16	50	4	B	●
PM-4E-D7.0		7	8	20	60	4	A	●
PM-4E-D8.0		8	8	20	60	4	B	●
PM-4E-D9.0		9	10	22	75	4	A	●
PM-4E-D10.0		10	10	25	75	4	B	●
PM-4E-D11.0		11	12	26	75	4	A	●
PM-4E-D12.0		12	12	30	75	4	B	●
PM-4E-D14.0		14	14	32	75	4	B	●
PM-4E-D16.0		16	16	45	100	4	B	●
PM-4E-D18.0		18	18	45	100	4	B	●
PM-4E-D20.0		20	20	45	100	4	B	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

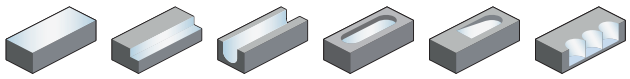
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

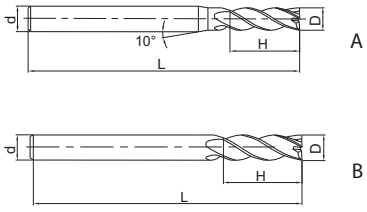
Fraise à grande longueur taillée — Usinage haute performance

PM-4EL



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 45°





Article	✻	Dimensions (mm)				Dents	Géométrie	Nuance
		D	d (h6)	H	L			KMG405
PM-4EL-D3.0		3	6	12	75	4	A	●
PM-4EL-D4.0		4	6	15	75	4	A	●
PM-4EL-D5.0		5	6	20	75	4	A	●
PM-4EL-D6.0		6	6	20	75	4	B	●
PM-4EL-D8.0		8	8	25	100	4	B	●
PM-4EL-D10.0		10	10	30	100	4	B	●
PM-4EL-D12.0		12	12	35	100	4	B	●
PM-4EL-D14.0		14	14	40	100	4	B	●
PM-4EL-D16.0		16	16	50	150	4	B	●
PM-4EL-D20.0		20	20	55	150	4	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

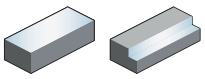
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

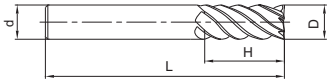
Fraise carbure monobloc — Usinage haute performance

PM-6E



– Attachement cylindrique, standard usine ZCC-CT
– Pas de coupe au centre
– Angle d'hélice 45°





Article	✻	Dimensions (mm) D	d (h6)	H	L	Dents	Nuance KMG405
PM-6E-D6.0		6	6	18	60	6	●
PM-6E-D8.0		8	8	20	60	6	●
PM-6E-D10.0		10	10	30	75	6	●
PM-6E-D12.0		12	12	32	75	6	●
PM-6E-D16.0		16	16	40	100	6	●
PM-6E-D20.0		20	20	45	100	6	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

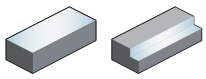
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

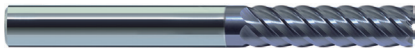
Codification B278 Paramètres B492 Commande d'outils spéciaux B541

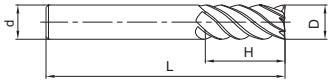
Fraise à grande longueur taillée — Usinage haute performance

PM-6EL



– Attachement cylindrique, standard usine ZCC-CT
– Pas de coupe au centre
– Angle d'hélice 45°





Article	✻	Dimensions (mm) D	d (h6)	H	L	Dents	Nuance KMG405
PM-6EL-D6.0		6	6	24	75	6	●
PM-6EL-D8.0		8	8	32	75	6	●
PM-6EL-D10.0		10	10	40	100	6	●
PM-6EL-D12.0		12	12	45	100	6	●
PM-6EL-D16.0		16	16	64	150	6	●
PM-6EL-D20.0		20	20	75	150	6	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

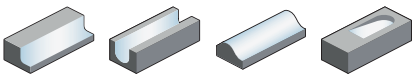
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série PM

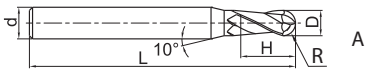
Fraise hémisphérique — Usinage haute performance

PM-2B

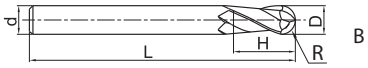


– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





A



B

Article	✻	Dimensions (mm) R	D	d (h6)	H	L	Dents	Géométrie	Nuance KMG405
PM-2B-R0.5S		0,5	1	4	2	50	2	A	●
PM-2B-R0.75S		0,75	1,5	4	3	50	2	A	●
PM-2B-R1.0S		1	2	4	4	50	2	A	●
PM-2B-R1.25S		1,25	2,5	4	5	50	2	A	●
PM-2B-R1.5S		1,5	3	4	6	50	2	A	●
PM-2B-R2.0S		2	4	4	8	50	2	B	●
PM-2B-R0.5		0,5	1	6	2	50	2	A	●
PM-2B-R0.75		0,75	1,5	6	3	50	2	A	●
PM-2B-R1.0		1	2	6	4	50	2	A	●
PM-2B-R1.25		1,25	2,5	6	5	50	2	A	●
PM-2B-R1.5		1,5	3	6	6	50	2	A	●
PM-2B-R1.75		1,75	3,5	6	8	50	2	A	●
PM-2B-R2.0		2	4	6	8	50	2	A	●
PM-2B-R2.5		2,5	5	6	10	50	2	A	●
PM-2B-R2.75		2,75	5,5	6	12	50	2	A	●
PM-2B-R3.0		3	6	6	12	50	2	B	●
PM-2B-R3.5		3,5	7	8	14	60	2	A	●
PM-2B-R4.0		4	8	8	16	60	2	B	●
PM-2B-R4.5		4,5	9	10	18	75	2	A	●
PM-2B-R5.0		5	10	10	20	75	2	B	●
PM-2B-R6.0		6	12	12	24	75	2	B	●
PM-2B-R7.0		7	14	14	28	75	2	B	●
PM-2B-R8.0		8	16	16	32	100	2	B	●
PM-2B-R10.0		10	20	20	40	100	2	B	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

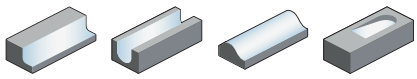
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraise hémisphérique, attachement long

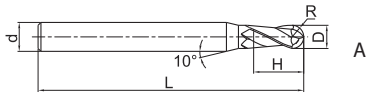
Usinage haute performance

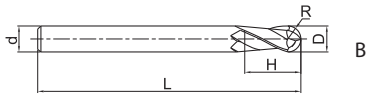
PM-2BL



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°







Article	✻	Dimensions (mm) R	D	d (h6)	H	L	Dents	Géométrie	Nuance KMG405
PM-2BL-R1.0		1	2	6	4	75	2	A	●
PM-2BL-R1.25		1,25	2,5	6	5	75	2	A	●
PM-2BL-R1.5		1,5	3	6	6	75	2	A	●
PM-2BL-R1.75		1,75	3,5	6	8	75	2	A	●
PM-2BL-R2.0		2	4	6	8	75	2	A	●
PM-2BL-R2.5		2,5	5	6	10	75	2	A	●
PM-2BL-R2.75		2,75	5,5	6	12	75	2	A	●
PM-2BL-R3.0		3	6	6	12	75	2	B	●
PM-2BL-R3.5		3,5	7	8	14	75	2	A	●
PM-2BL-R4.0		4	8	8	16	100	2	B	●
PM-2BL-R4.5		4,5	9	10	18	100	2	A	●
PM-2BL-R5.0		5	10	10	20	100	2	B	●
PM-2BL-R6.0		6	12	12	24	100	2	B	●
PM-2BL-R7.0		7	14	14	28	100	2	B	●
PM-2BL-R8.0		8	16	16	32	150	2	B	●
PM-2BL-R10.0		10	20	20	40	150	2	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

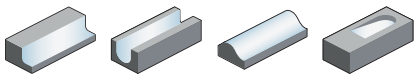
Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série PM

Fraise hémisphérique, petite longueur taillée

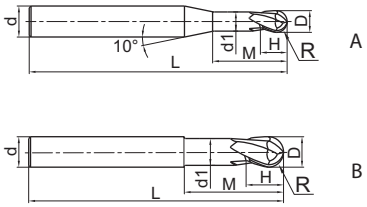
Usinage haute performance

PM-2BFP



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





Article	✲	Dimensions (mm) R	D	d (h6)	d_1	H	M	L	Dents	Géométrie	Nuance KMG405
PM-2BFP-R0.5		0,5	1	6	0,95	1	2,5	75	2	A	●
PM-2BFP-R0.75		0,75	1,5	6	1,45	1,5	3	75	2	A	●
PM-2BFP-R1.0		1	2	6	1,95	2	4	75	2	A	●
PM-2BFP-R1.5		1,5	3	6	2,85	3	6	75	2	A	●
PM-2BFP-R2.0		2	4	6	3,85	4	8	75	2	A	●
PM-2BFP-R2.5		2,5	5	6	4,85	5	10	75	2	A	●
PM-2BFP-R3.0		3	6	6	5,8	6	12	75	2	B	●
PM-2BFP-R4.0		4	8	8	7,8	8	16	100	2	B	●
PM-2BFP-R5.0		5	10	10	9,6	10	20	100	2	B	●
PM-2BFP-R6.0		6	12	12	11,5	12	24	100	2	B	●
PM-2BFP-R8.0		8	16	16	15,5	16	32	150	2	B	●
PM-2BFP-R10.0		10	20	20	19,5	20	40	150	2	B	●

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

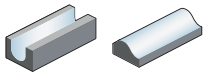
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraise hémisphérique à dégagement conique

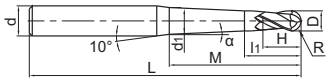
Usinage haute performance

PM-2BC



– Attachement cylindrique
– Coupe au centre
– Angle d'hélice 30°





Article	✻	Dimensions (mm)									Dents	Nuance
		R	D	d (h6)	d_1	M	H	L	α	l_1		KMG405
PM-2BC05-R0.25-M03		0,25	0,5	4	0,49	3	0,5	50	0,5	1,5	2	○
PM-2BC05-R0.25-M05		0,25	0,5	4	0,53	5	0,5	50	0,5	1,5	2	○
PM-2BC10-R0.25-M03		0,25	0,5	4	0,52	3	0,5	50	1	1,5	2	○
PM-2BC10-R0.25-M05		0,25	0,5	4	0,59	5	0,5	50	1	1,5	2	○
PM-2BC15-R0.25-M03		0,25	0,5	4	0,54	3	0,5	50	1,5	1,5	2	○
PM-2BC15-R0.25-M05		0,25	0,5	4	0,65	5	0,5	50	1,5	1,5	2	○
PM-2BC05-R0.30-M05		0,3	0,6	4	0,62	5	0,6	50	0,5	1,6	2	○
PM-2BC05-R0.30-M08		0,3	0,6	4	0,68	8	0,6	50	0,5	1,6	2	○
PM-2BC10-R0.30-M05		0,3	0,6	4	0,68	5	0,6	50	1	1,6	2	○
PM-2BC10-R0.30-M08		0,3	0,6	4	0,79	8	0,6	50	1	1,6	2	○
PM-2BC10-R0.30-M10		0,3	0,6	4	0,86	10	0,6	50	1	1,6	2	○
PM-2BC10-R0.30-M12		0,3	0,6	4	0,93	12	0,6	50	1	1,6	2	○
PM-2BC10-R0.30-M15		0,3	0,6	4	1,03	15	0,6	50	1	1,6	2	○
PM-2BC15-R0.30-M05		0,3	0,6	4	0,74	5	0,6	50	1,5	1,6	2	○
PM-2BC15-R0.30-M08		0,3	0,6	4	0,9	8	0,6	50	1,5	1,6	2	○
PM-2BC05-R0.40-M08		0,4	0,8	4	0,87	8	0,8	50	0,5	1,8	2	○
PM-2BC10-R0.40-M08		0,4	0,8	4	0,98	8	0,8	50	1	1,8	2	○
PM-2BC15-R0.40-M08		0,4	0,8	4	1,09	8	0,8	50	1,5	1,8	2	○
PM-2BC05-R0.40-M12		0,4	0,8	4	0,94	12	0,8	60	0,5	1,8	2	○
PM-2BC10-R0.40-M12		0,4	0,8	4	1,12	12	0,8	60	1	1,8	2	○
PM-2BC15-R0.40-M12		0,4	0,8	4	1,3	12	0,8	60	1,5	1,8	2	○
PM-2BC05-R0.50-M10		0,5	1	6	1,08	10	1	60	0,5	2,5	2	○
PM-2BC05-R0.50-M15		0,5	1	6	1,16	15	1	60	0,5	2,5	2	○
PM-2BC10-R0.50-M10		0,5	1	6	1,21	10	1	60	1	2,5	2	○
PM-2BC10-R0.50-M15		0,5	1	6	1,38	15	1	60	1	2,5	2	○
PM-2BC15-R0.50-M10		0,5	1	6	1,34	10	1	60	1,5	2,5	2	○
PM-2BC15-R0.50-M15		0,5	1	6	1,6	15	1	60	1,5	2,5	2	○
PM-2BC20-R0.50-M15		0,5	1	6	1,82	15	1	60	2	2,5	2	○
PM-2BC05-R0.50-M20		0,5	1	6	1,25	20	1	70	0,5	2,5	2	○
PM-2BC05-R0.50-M25		0,5	1	6	1,34	25	1	70	0,5	2,5	2	○
PM-2BC05-R0.50-M30		0,5	1	6	1,42	30	1	70	0,5	2,5	2	○
PM-2BC10-R0.50-M20		0,5	1	6	1,56	20	1	70	1	2,5	2	○
PM-2BC10-R0.50-M25		0,5	1	6	1,73	25	1	70	1	2,5	2	○
PM-2BC10-R0.50-M30		0,5	1	6	1,91	30	1	70	1	2,5	2	○
PM-2BC15-R0.50-M20		0,5	1	6	1,86	20	1	70	1,5	2,5	2	○
PM-2BC20-R0.50-M20		0,5	1	6	2,17	20	1	70	2	2,5	2	○
PM-2BC30-R0.50-M20		0,5	1	6	2,78	20	1	70	3	2,5	2	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

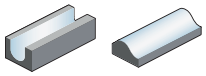
Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraises carbure monobloc Série PM

Fraise hémisphérique à dégagement conique

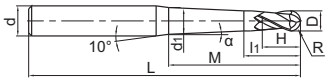
Usinage haute performance

PM-2BC



– Attachement cylindrique
– Coupe au centre
– Angle d'hélice 30°





Article	✻	Dimensions (mm)									Dents	Nuance
		R	D	d (h6)	d_1	M	H	L	α	l_1		KMG405
PM-2BC50-R0.50-M20		0,5	1	6	4,01	20	1	70	5	2,5	2	○
PM-2BC10-R0.50-M35		0,5	1	6	2,08	35	1	80	1	2,5	2	○
PM-2BC05-R0.60-M12		0,6	1,2	6	1,31	12	1,2	60	0,5	2,7	2	○
PM-2BC10-R0.60-M12		0,6	1,2	6	1,47	12	1,2	60	1	2,7	2	○
PM-2BC15-R0.60-M12		0,6	1,2	6	1,63	12	1,2	60	1,5	2,7	2	○
PM-2BC05-R0.60-M24		0,6	1,2	6	1,52	24	1,2	70	0,5	2,7	2	○
PM-2BC10-R0.60-M24		0,6	1,2	6	1,89	24	1,2	70	1	2,7	2	○
PM-2BC15-R0.60-M24		0,6	1,2	6	2,26	24	1,2	70	1,5	2,7	2	○
PM-2BC05-R0.75-M10		0,75	1,5	6	1,57	10	1,5	60	0,5	3	2	○
PM-2BC05-R0.75-M15		0,75	1,5	6	1,65	15	1,5	60	0,5	3	2	○
PM-2BC10-R0.75-M10		0,75	1,5	6	1,69	10	1,5	60	1	3	2	○
PM-2BC10-R0.75-M15		0,75	1,5	6	1,86	15	1,5	60	1	3	2	○
PM-2BC15-R0.75-M10		0,75	1,5	6	1,81	10	1,5	60	1,5	3	2	○
PM-2BC15-R0.75-M15		0,75	1,5	6	2,07	15	1,5	60	1,5	3	2	○
PM-2BC05-R0.75-M30		0,75	1,5	6	1,92	30	1,5	70	0,5	3	2	○
PM-2BC10-R0.75-M20		0,75	1,5	6	2,04	20	1,5	70	1	3	2	○
PM-2BC10-R0.75-M30		0,75	1,5	6	2,39	30	1,5	70	1	3	2	○
PM-2BC15-R0.75-M30		0,75	1,5	6	2,86	30	1,5	70	1,5	3	2	○
PM-2BC05-R1.0-M20		1	2	6	2,18	20	2	60	0,5	4	2	○
PM-2BC10-R1.0-M20		1	2	6	2,46	20	2	60	1	4	2	○
PM-2BC10-R1.0-M25		1	2	6	2,64	25	2	60	1	4	2	○
PM-2BC15-R1.0-M20		1	2	6	2,74	20	2	60	1,5	4	2	○
PM-2BC05-R1.0-M30		1	2	6	2,36	30	2	70	0,5	4	2	○
PM-2BC10-R1.0-M30		1	2	6	2,81	30	2	70	1	4	2	○
PM-2BC15-R1.0-M30		1	2	6	3,27	30	2	70	1,5	4	2	○
PM-2BC20-R1.0-M30		1	2	6	3,72	30	2	70	2	4	2	○
PM-2BC30-R1.0-M30		1	2	6	4,63	30	2	70	3	4	2	○
PM-2BC05-R1.0-M40		1	2	6	2,53	40	2	80	0,5	4	2	○
PM-2BC10-R1.0-M35		1	2	6	2,99	35	2	80	1	4	2	○
PM-2BC10-R1.0-M40		1	2	6	3,16	40	2	80	1	4	2	○
PM-2BC15-R1.0-M40		1	2	6	3,79	40	2	80	1,5	4	2	○
PM-2BC20-R1.0-M40		1	2	6	4,42	40	2	80	2	4	2	○
PM-2BC30-R1.0-M40		1	2	6	5,68	40	2	80	3	4	2	○
PM-2BC10-R1.0-M50		1	2	6	3,51	50	2	90	1	4	2	○
PM-2BC05-R1.5-M30		1,5	3	6	3,32	30	3	70	0,5	6	2	○
PM-2BC10-R1.5-M30		1,5	3	6	3,74	30	3	70	1	6	2	○
PM-2BC15-R1.5-M30		1,5	3	6	4,16	30	3	70	1,5	6	2	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

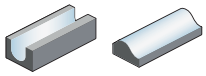
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraise hémisphérique à dégagement conique

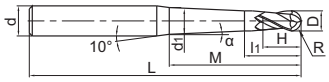
Usinage haute performance

PM-2BC



– Attachement cylindrique
– Coupe au centre
– Angle d'hélice 30°





Article	✻	Dimensions (mm)									Dents	Nuance
		R	D	d (h6)	d_1	M	H	L	α	l_1		KMG405
PM-2BC05-R1.5-M40		1,5	3	6	3,5	40	3	80	0,5	6	2	○
PM-2BC10-R1.5-M40		1,5	3	6	4,09	40	3	80	1	6	2	○
PM-2BC15-R1.5-M40		1,5	3	6	4,69	40	3	80	1,5	6	2	○
PM-2BC05-R1.5-M50		1,5	3	6	3,67	50	3	90	0,5	6	2	○
PM-2BC10-R1.5-M50		1,5	3	6	4,44	50	3	90	1	6	2	○
PM-2BC15-R1.5-M50		1,5	3	6	5,21	50	3	90	1,5	6	2	○
PM-2BC05-R2.0-M60		2	4	6	4,83	60	4	110	0,5	7	2	○
PM-2BC10-R2.0-M60		2	4	6	5,76	60	4	110	1	7	2	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

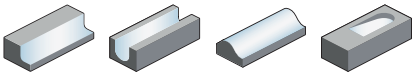
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

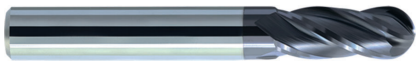
Fraises carbure monobloc Série PM

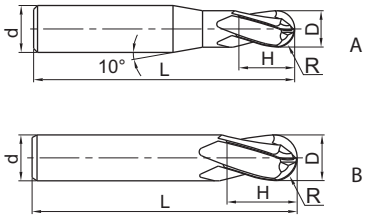
Fraise hémisphérique Usinage haute performance

PM-4B



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





Article	✲	Dimensions (mm) R	D	d (h6)	H	L	Dents	Géométrie	Nuance KMG405
PM-4B-R1.5		1,5	3	6	6	50	4	A	●
PM-4B-R2.0		2	4	6	8	50	4	A	●
PM-4B-R2.5		2,5	5	6	10	50	4	A	●
PM-4B-R3.0		3	6	6	12	50	4	B	●
PM-4B-R4.0		4	8	8	16	60	4	B	●
PM-4B-R5.0		5	10	10	20	75	4	B	●
PM-4B-R6.0		6	12	12	24	75	4	B	●
PM-4B-R7.0		7	14	14	28	75	4	B	●
PM-4B-R8.0		8	16	16	32	100	4	B	●
PM-4B-R9.0		9	18	18	36	100	4	B	●
PM-4B-R10.0		10	20	20	40	100	4	B	●

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

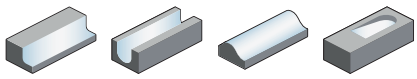
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraise hémisphérique, attachement long

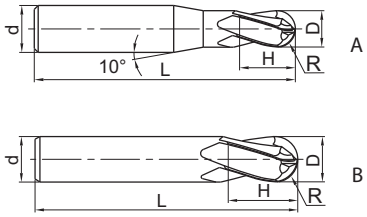
Usinage haute performance

PM-4BL



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





Article	✻	Dimensions (mm)					Dents	Géométrie	Nuance
		R	D	d (h6)	H	L			KMG405
PM-4BL-R1.5		1,5	3	6	6	75	4	A	●
PM-4BL-R2.0		2	4	6	8	75	4	A	●
PM-4BL-R2.5		2,5	5	6	10	75	4	A	●
PM-4BL-R3.0		3	6	6	12	75	4	B	●
PM-4BL-R4.0		4	8	8	16	100	4	B	●
PM-4BL-R5.0		5	10	10	20	100	4	B	●
PM-4BL-R6.0		6	12	12	24	100	4	B	●
PM-4BL-R7.0		7	14	14	28	100	4	B	●
PM-4BL-R8.0		8	16	16	32	150	4	B	●
PM-4BL-R9.0		9	18	18	36	150	4	B	●
PM-4BL-R10.0		10	20	20	40	150	4	B	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

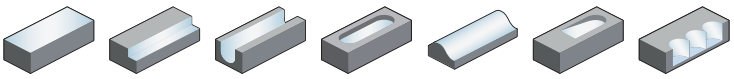
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraises carbure monobloc Série PM

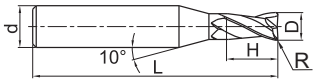
Fraise torique — Usinage haute performance

PM-2R

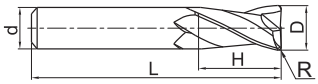


– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





A



B

Article	✻	Dimensions (mm) R	D	d (h6)	H	L	Dents	Géométrie	Nuance KMG405
PM-2R-D1.0R0.2		0,2	1	4	3	50	2	A	●
PM-2R-D1.5R0.2		0,2	1,5	4	4	50	2	A	●
PM-2R-D2.0R0.2		0,2	2	4	6	50	2	A	●
PM-2R-D2.0R0.5		0,5	2	4	6	50	2	A	●
PM-2R-D2.5R0.2		0,2	2,5	4	8	50	2	A	●
PM-2R-D2.5R0.5		0,5	2,5	4	8	50	2	A	●
PM-2R-D3.0R0.2		0,2	3	4	8	50	2	A	●
PM-2R-D3.0R0.3		0,3	3	4	8	50	2	A	○
PM-2R-D3.0R0.5		0,5	3	4	8	50	2	A	●
PM-2R-D4.0R0.2		0,2	4	4	11	50	2	B	●
PM-2R-D4.0R0.3		0,3	4	4	11	50	2	B	●
PM-2R-D4.0R0.5		0,5	4	4	11	50	2	B	●
PM-2R-D4.0R1.0		1	4	4	11	50	2	B	●
PM-2R-D5.0R0.3		0,3	5	6	13	50	2	A	○
PM-2R-D5.0R0.5		0,5	5	6	13	50	2	A	●
PM-2R-D5.0R1.0		1	5	6	13	50	2	A	●
PM-2R-D6.0R0.3		0,3	6	6	16	50	2	B	●
PM-2R-D6.0R0.5		0,5	6	6	16	50	2	B	●
PM-2R-D6.0R1.0		1	6	6	16	50	2	B	●
PM-2R-D8.0R0.3		0,3	8	8	20	60	2	B	○
PM-2R-D8.0R0.5		0,5	8	8	20	60	2	B	●
PM-2R-D8.0R1.0		1	8	8	20	60	2	B	●
PM-2R-D10.0R0.5		0,5	10	10	25	75	2	B	●
PM-2R-D10.0R1.0		1	10	10	25	75	2	B	●
PM-2R-D10.0R1.5		1,5	10	10	25	75	2	B	●
PM-2R-D10.0R2.0		2	10	10	25	75	2	B	●
PM-2R-D12.0R0.5		0,5	12	12	30	75	2	B	●
PM-2R-D12.0R1.0		1	12	12	30	75	2	B	●
PM-2R-D12.0R1.5		1,5	12	12	30	75	2	B	●
PM-2R-D12.0R2.0		2	12	12	30	75	2	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

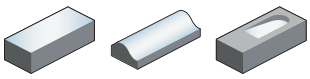
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

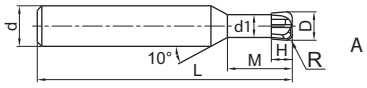
Fraise carbure monobloc — Usinage haute performance

PM-4H

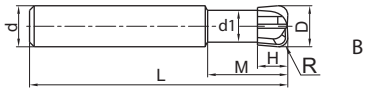


– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 0°





A



B

Article	✻	Dimensions (mm)							Dents	Géométrie	Nuance
		R	D	d (h6)	d_1	H	M	L			KMG405
PM-4H-D3.0R0.8		0,8	3	6	2,7	1,2	8	50	4	A	●
PM-4H-D4.0R1.0		1	4	6	3,6	1,6	10	50	4	A	●
PM-4H-D5.0R1.2		1,2	5	6	4,5	2	12,5	50	4	A	●
PM-4H-D6.0R1.0		1	6	6	5,4	2,5	12	50	4	B	●
PM-4H-D6.0R1.5		1,5	6	6	5,4	2,5	12	50	4	B	●
PM-4H-D6.0R2.0		2	6	6	5,4	2,5	12	50	4	B	●
PM-4H-D8.0R1.0		1	8	8	7	3,5	16	60	4	B	●
PM-4H-D8.0R2.0		2	8	8	7	3,5	16	60	4	B	●
PM-4H-D10.0R1.0		1	10	10	9	4	20	75	4	B	●
PM-4H-D10.0R2.0		2	10	10	9	4	20	75	4	B	●
PM-4H-D10.0R3.0		3	10	10	9	4	20	75	4	B	●
PM-4H-D12.0R2.0		2	12	12	11	5	24	75	4	B	●
PM-4H-D12.0R3.0		3	12	12	11	5	24	75	4	B	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

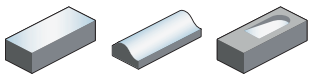
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraise carbure monobloc, attachement long

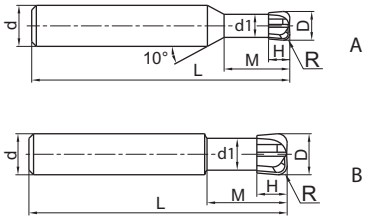
Usinage haute performance

PM-4HL



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 0°





Article	✻	Dimensions (mm)							Dents	Géométrie	Nuance
		R	D	d (h6)	d_1	H	M	L			KMG405
PM-4HL-D4.0R1.0		1	4	6	3,6	1,6	10	75	4	A	●
PM-4HL-D5.0R1.2		1,2	5	6	4,5	2	12,5	75	4	A	●
PM-4HL-D6.0R1.0		1	6	6	5,4	2,5	12	75	4	B	●
PM-4HL-D6.0R1.5		1,5	6	6	5,4	2,5	12	75	4	B	●
PM-4HL-D6.0R2.0		2	6	6	5,4	2,5	12	75	4	B	●
PM-4HL-D8.0R1.0		1	8	8	7	3,5	16	100	4	B	●
PM-4HL-D8.0R2.0		2	8	8	7	3,5	16	100	4	B	●
PM-4HL-D10.0R1.0		1	10	10	9	4	20	100	4	B	●
PM-4HL-D10.0R2.0		2	10	10	9	4	20	100	4	B	●
PM-4HL-D10.0R3.0		3	10	10	9	4	20	100	4	B	●
PM-4HL-D12.0R2.0		2	12	12	11	5	24	100	4	B	●
PM-4HL-D12.0R3.0		3	12	12	11	5	24	100	4	B	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

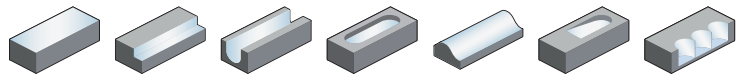
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraise torique

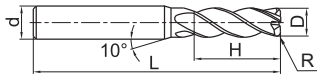
Usinage haute performance

PM-4R

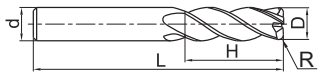


– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





A



B

Article	✻	Dimensions (mm)					Dents	Géométrie	Nuance
		R	D	d (h6)	H	L			KMG405
PM-4R-D3.0R0.2		0,2	3	6	8	50	4	A	●
PM-4R-D4.0R0.3		0,3	4	6	10	50	4	A	●
PM-4R-D4.0R0.5		0,5	4	6	10	50	4	A	●
PM-4R-D5.0R0.5		0,5	5	6	13	50	4	A	●
PM-4R-D5.0R1.0		1	5	6	13	50	4	A	●
PM-4R-D6.0R0.5		0,5	6	6	16	50	4	B	●
PM-4R-D6.0R1.0		1	6	6	16	50	4	B	●
PM-4R-D8.0R0.5		0,5	8	8	20	60	4	B	●
PM-4R-D8.0R1.0		1	8	8	20	60	4	B	●
PM-4R-D10.0R0.5		0,5	10	10	25	75	4	B	●
PM-4R-D10.0R1.0		1	10	10	25	75	4	B	●
PM-4R-D10.0R2.0		2	10	10	25	75	4	B	●
PM-4R-D10.0R3.0		3	10	10	25	75	4	B	●
PM-4R-D12.0R0.5		0,5	12	12	30	75	4	B	●
PM-4R-D12.0R1.0		1	12	12	30	75	4	B	●
PM-4R-D12.0R2.0		2	12	12	30	75	4	B	●
PM-4R-D12.0R3.0		3	12	12	30	75	4	B	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

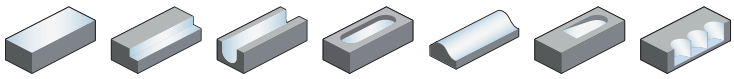
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

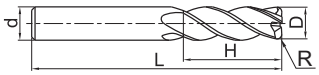
Fraise torique, attachement long — Usinage haute performance

PM-4RL



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





Article	✻	Dimensions (mm) R	D	d (h6)	H	L	Dents	Nuance KMG405
PM-4RL-D6.0R0.5		0,5	6	6	16	75	4	●
PM-4RL-D6.0R1.0		1	6	6	16	75	4	●
PM-4RL-D8.0R0.5		0,5	8	8	20	100	4	●
PM-4RL-D8.0R1.0		1	8	8	20	100	4	○
PM-4RL-D10.0R0.5		0,5	10	10	25	100	4	○
PM-4RL-D10.0R1.0		1	10	10	25	100	4	●
PM-4RL-D10.0R2.0		2	10	10	25	100	4	●
PM-4RL-D12.0R0.5		0,5	12	12	30	100	4	●
PM-4RL-D12.0R1.0		1	12	12	30	100	4	●
PM-4RL-D12.0R2.0		2	12	12	30	100	4	●
PM-4RL-D16.0R1.0		1	16	16	45	150	4	●
PM-4RL-D16.0R2.0		2	16	16	45	150	4	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

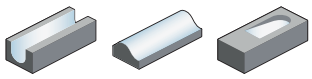
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

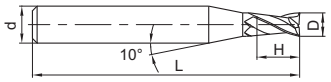
Fraise carbure monobloc — Usinage haute performance

PM-2ES



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm) D	d (h6)	H	L	Dents	Nuance KMG405
PM-2ES-D0.3		0,3	4	0,6	50	2	●
PM-2ES-D0.4		0,4	4	0,8	50	2	●
PM-2ES-D0.5		0,5	4	1	50	2	●
PM-2ES-D0.6		0,6	4	1,2	50	2	●
PM-2ES-D0.7		0,7	4	1,4	50	2	●
PM-2ES-D0.8		0,8	4	1,6	50	2	●
PM-2ES-D0.9		0,9	4	1,8	50	2	○
PM-2ES-D1.0		1	4	2	50	2	●
PM-2ES-D1.1		1,1	4	2	50	2	○
PM-2ES-D1.2		1,2	4	2,5	50	2	●
PM-2ES-D1.3		1,3	4	2,5	50	2	●
PM-2ES-D1.4		1,4	4	3	50	2	●
PM-2ES-D1.5		1,5	4	3	50	2	●
PM-2ES-D1.6		1,6	4	3,5	50	2	●
PM-2ES-D1.7		1,7	4	3,5	50	2	●
PM-2ES-D1.8		1,8	4	4	50	2	●
PM-2ES-D1.9		1,9	4	4	50	2	○
PM-2ES-D2.0		2	4	4	50	2	●
PM-2ES-D2.1		2,1	4	4	50	2	●
PM-2ES-D2.2		2,2	4	4,5	50	2	●
PM-2ES-D2.3		2,3	4	4,5	50	2	●
PM-2ES-D2.4		2,4	4	5	50	2	●
PM-2ES-D2.5		2,5	4	5	50	2	●
PM-2ES-D2.6		2,6	4	5	50	2	○
PM-2ES-D2.7		2,7	4	5,5	50	2	○
PM-2ES-D2.8		2,8	4	5,5	50	2	○
PM-2ES-D2.9		2,9	4	6	50	2	○
PM-2ES-D3.0		3	4	6	50	2	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

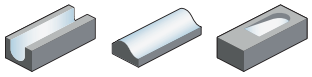
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Gamme PM Micro

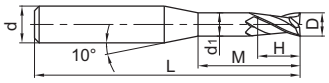
Fraise carbure monobloc Usinage haute performance

PM-2EP



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm) D	d (h6)	d_1	H	M	L	Dents	Nuance KMG405
PM-2EP-D0.5-M04		0,5	4	0,45	0,6	4	50	2	●
PM-2EP-D0.5-M06		0,5	4	0,45	0,7	6	50	2	●
PM-2EP-D0.5-M08		0,5	4	0,45	0,7	8	50	2	○
PM-2EP-D0.8-M04		0,8	4	0,75	1,2	4	50	2	●
PM-2EP-D0.8-M10		0,8	4	0,75	1,2	10	50	2	○
PM-2EP-D0.8-M06		0,8	4	0,75	1,2	6	50	2	○
PM-2EP-D0.8-M08		0,8	4	0,75	1,2	8	50	2	○
PM-2EP-D1.0-M06		1	4	0,95	1,5	6	50	2	●
PM-2EP-D1.0-M12		1	4	0,95	1,5	12	50	2	●
PM-2EP-D1.0-M10		1	4	0,95	1,5	10	50	2	●
PM-2EP-D1.0-M20		1	4	0,95	1,5	20	50	2	●
PM-2EP-D1.0-M14		1	4	0,95	1,5	14	50	2	●
PM-2EP-D1.0-M04		1	4	0,95	1,5	4	50	2	●
PM-2EP-D1.0-M08		1	4	0,95	1,5	8	50	2	●
PM-2EP-D1.0-M16		1	4	0,95	1,5	16	50	2	●
PM-2EP-D1.2-M10		1,2	4	1,15	1,8	10	50	2	○
PM-2EP-D1.2-M12		1,2	4	1,15	1,8	12	50	2	○
PM-2EP-D1.2-M06		1,2	4	1,15	1,8	6	50	2	●
PM-2EP-D1.2-M08		1,2	4	1,15	1,8	8	50	2	○
PM-2EP-D1.2-M16		1,2	4	1,15	1,8	16	50	2	○
PM-2EP-D1.5-M20		1,5	4	1,45	2,3	20	50	2	●
PM-2EP-D1.5-M12		1,5	4	1,45	2,3	12	50	2	●
PM-2EP-D1.5-M08		1,5	4	1,45	2,3	8	50	2	●
PM-2EP-D1.5-M18		1,5	4	1,45	2,3	18	50	2	●
PM-2EP-D1.5-M14		1,5	4	1,45	2,3	14	50	2	●
PM-2EP-D1.5-M10		1,5	4	1,45	2,3	10	50	2	●
PM-2EP-D1.5-M06		1,5	4	1,45	2,3	6	50	2	●
PM-2EP-D1.5-M16		1,5	4	1,45	2,3	16	50	2	●
PM-2EP-D2.0-M06		2	4	1,95	3	6	50	2	●
PM-2EP-D2.0-M14		2	4	1,95	3	14	50	2	●
PM-2EP-D2.0-M16		2	4	1,95	3	16	50	2	●
PM-2EP-D2.0-M12		2	4	1,95	3	12	50	2	●
PM-2EP-D2.0-M18		2	4	1,95	3	18	50	2	●
PM-2EP-D2.0-M08		2	4	1,95	3	8	50	2	●
PM-2EP-D2.0-M10		2	4	1,95	3	10	50	2	●
PM-2EP-D2.0-M20		2	4	1,95	3	20	50	2	●
PM-2EP-D2.5-M08		2,5	4	2,4	3,7	8	50	2	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

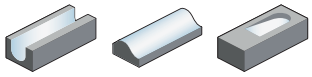
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

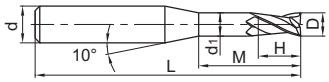
Fraise carbure monobloc — Usinage haute performance

PM-2EP



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm)						Dents	Nuance
		D	d (h6)	d_1	H	M	L		KMG405
PM-2EP-D2.5-M16		2,5	4	2,4	3,7	16	60	2	○
PM-2EP-D2.5-M20		2,5	4	2,4	3,7	20	60	2	○
PM-2EP-D2.5-M18		2,5	4	2,4	3,7	18	60	2	○
PM-2EP-D2.5-M14		2,5	4	2,4	3,7	14	50	2	○
PM-2EP-D2.5-M10		2,5	4	2,4	3,7	10	50	2	○
PM-2EP-D2.5-M12		2,5	4	2,4	3,7	12	50	2	○
PM-2EP-D3.0-M08		3	6	2,85	4,5	8	50	2	○
PM-2EP-D3.0-M18		3	6	2,85	4,5	18	60	2	○
PM-2EP-D3.0-M06		3	6	2,85	4,5	6	50	2	○
PM-2EP-D3.0-M12		3	6	2,85	4,5	12	50	2	●
PM-2EP-D3.0-M14		3	6	2,85	4,5	14	60	2	○
PM-2EP-D3.0-M16		3	6	2,85	4,5	16	60	2	●
PM-2EP-D3.0-M20		3	6	2,85	4,5	20	60	2	●
PM-2EP-D3.0-M10		3	6	2,85	4,5	10	50	2	●
PM-2EP-D4.0-M16		4	6	3,85	6	16	60	2	○
PM-2EP-D4.0-M12		4	6	3,85	6	12	50	2	●
PM-2EP-D4.0-M20		4	6	3,85	6	20	60	2	●
PM-2EP-D4.0-M25		4	6	3,85	6	25	60	2	●
PM-2EP-D4.0-M14		4	6	3,85	6	14	60	2	○
PM-2EP-D5.0-M20		5	6	4,85	7,5	20	70	2	●
PM-2EP-D5.0-M25		5	6	4,85	7,5	25	70	2	●
PM-2EP-D5.0-M12		5	6	4,85	7,5	12	60	2	●
PM-2EP-D5.0-M14		5	6	4,85	7,5	14	60	2	●
PM-2EP-D5.0-M16		5	6	4,85	7,5	16	60	2	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

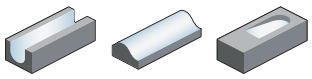
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Gamme PM Micro

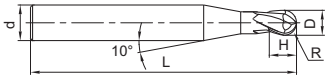
Fraise hémisphérique Usinage haute performance

PM-2BS



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm) R	D	d (h6)	H	L	Dents	Nuance KMG405
PM-2BS-R0.15		0,15	0,3	4	0,5	50	2	●
PM-2BS-R0.20		0,2	0,4	4	0,6	50	2	●
PM-2BS-R0.25		0,25	0,5	4	0,8	50	2	●
PM-2BS-R0.30		0,3	0,6	4	0,9	50	2	●
PM-2BS-R0.35		0,35	0,7	4	1	50	2	○
PM-2BS-R0.40		0,4	0,8	4	1,2	50	2	●
PM-2BS-R0.45		0,45	0,9	4	1,3	50	2	○
PM-2BS-R0.50		0,5	1	4	1,5	50	2	●
PM-2BS-R0.60		0,6	1,2	4	1,8	50	2	●
PM-2BS-R0.70		0,7	1,4	4	2	50	2	○
PM-2BS-R0.75		0,75	1,5	4	2,3	50	2	●
PM-2BS-R0.80		0,8	1,6	4	2,5	50	2	○
PM-2BS-R0.90		0,9	1,8	4	2,7	50	2	○
PM-2BS-R1.00		1	2	4	3	50	2	●
PM-2BS-R1.25		1,25	2,5	4	3,7	50	2	○
PM-2BS-R1.50		1,5	3	4	4,5	50	2	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

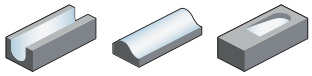
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

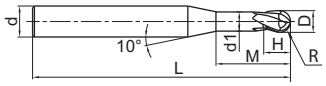
Fraise hémisphérique — Usinage haute performance

PM-2BP



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm) R	D	d (h6)	d_1	H	M	L	Dents	Nuance KMG405
PM-2BP-R0.25-M06		0,25	0,5	4	0,45	0,7	6	50	2	●
PM-2BP-R0.25-M04		0,25	0,5	4	0,45	0,7	4	50	2	●
PM-2BP-R0.3-M08		0,3	0,6	4	0,55	0,9	8	50	2	●
PM-2BP-R0.3-M04		0,3	0,6	4	0,55	0,9	4	50	2	●
PM-2BP-R0.3-M06		0,3	0,6	4	0,55	0,9	6	50	2	●
PM-2BP-R0.4-M06		0,4	0,8	4	0,75	1,2	6	50	2	●
PM-2BP-R0.4-M10		0,4	0,8	4	0,75	1,2	10	50	2	●
PM-2BP-R0.4-M04		0,4	0,8	4	0,75	1,2	4	50	2	●
PM-2BP-R0.4-M08		0,4	0,8	4	0,75	1,2	8	50	2	●
PM-2BP-R0.5-M04		0,5	1	4	0,95	1,5	4	50	2	●
PM-2BP-R0.5-M08		0,5	1	4	0,95	1,5	8	50	2	●
PM-2BP-R0.5-M10		0,5	1	4	0,95	1,5	10	50	2	●
PM-2BP-R0.5-M12		0,5	1	4	0,95	1,5	12	50	2	●
PM-2BP-R0.5-M15		0,5	1	4	0,95	1,5	15	50	2	○
PM-2BP-R0.5-M06		0,5	1	4	0,95	1,5	6	50	2	●
PM-2BP-R0.6-M06		0,6	1,2	4	1,15	1,8	6	50	2	●
PM-2BP-R0.6-M12		0,6	1,2	4	1,15	1,8	12	50	2	○
PM-2BP-R0.6-M16		0,6	1,2	4	1,15	1,8	16	50	2	○
PM-2BP-R0.6-M08		0,6	1,2	4	1,15	1,8	8	50	2	○
PM-2BP-R0.75-M12		0,75	1,5	4	1,45	2,3	12	50	2	●
PM-2BP-R0.75-M08		0,75	1,5	4	1,45	2,3	8	50	2	●
PM-2BP-R0.75-M16		0,75	1,5	4	1,45	2,3	16	50	2	●
PM-2BP-R0.75-M06		0,75	1,5	4	1,45	2,3	6	50	2	○
PM-2BP-R1.0-M12		1	2	4	1,95	3	12	50	2	●
PM-2BP-R1.0-M08		1	2	4	1,95	3	8	50	2	●
PM-2BP-R1.0-M16		1	2	4	1,95	3	16	50	2	●
PM-2BP-R1.0-M10		1	2	4	1,95	3	10	50	2	●
PM-2BP-R1.0-M06		1	2	4	1,95	3	6	50	2	●
PM-2BP-R1.0-M20		1	2	4	1,95	3	20	50	2	●
PM-2BP-R1.25-M20		1,25	2,5	4	2,4	3,7	20	60	2	○
PM-2BP-R1.25-M12		1,25	2,5	4	2,4	3,7	12	50	2	●
PM-2BP-R1.25-M16		1,25	2,5	4	2,4	3,7	16	60	2	○
PM-2BP-R1.25-M10		1,25	2,5	4	2,4	3,7	10	50	2	○
PM-2BP-R1.25-M08		1,25	2,5	4	2,4	3,7	8	50	2	○
PM-2BP-R1.5-M10		1,5	3	6	2,85	4,5	10	50	2	●
PM-2BP-R1.5-M20		1,5	3	6	2,85	4,5	20	60	2	●
PM-2BP-R1.5-M16		1,5	3	6	2,85	4,5	16	60	2	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

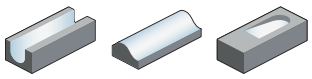
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

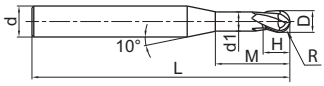
Fraise hémisphérique — Usinage haute performance

PM-2BP



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✲	Dimensions (mm) R	D	d (h6)	d_1	H	M	L	Dents	Nuance KMG405
PM-2BP-R1.5-M08		1,5	3	6	2,85	4,5	8	50	2	●
PM-2BP-R1.5-M12		1,5	3	6	2,85	4,5	12	50	2	●
PM-2BP-R2.0-M16		2	4	6	3,85	6	16	60	2	●
PM-2BP-R2.0-M20		2	4	6	3,85	6	20	60	2	●
PM-2BP-R2.0-M10		2	4	6	3,85	6	10	60	2	●
PM-2BP-R2.0-M25		2	4	6	3,85	6		60	2	○
PM-2BP-R2.5-M16		2,5	5	6	4,85	7,5	16	60	2	●
PM-2BP-R2.5-M25		2,5	5	6	4,85	7,5	25	70	2	●

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

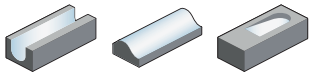
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

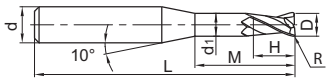
Fraise torique — Usinage haute performance

PM-2RP



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm)							Dents	Nuance
		R	D	d (h6)	d_1	H	M	L		KMG405
PM-2RP-D0.5-R0.05-M04		0,05	0,5	4	0,45	0,6	4	50	2	●
PM-2RP-D0.5-R0.1-M08		0,1	0,5	4	0,45	0,7	8	50	2	○
PM-2RP-D0.5-R0.1-M04		0,1	0,5	4	0,45	0,6	4	50	2	●
PM-2RP-D0.5-R0.1-M06		0,1	0,5	4	0,45	0,7	6	50	2	●
PM-2RP-D0.5-R0.05-M08		0,05	0,5	4	0,45	0,7	8	50	2	○
PM-2RP-D0.5-R0.05-M06		0,05	0,5	4	0,45	0,7	6	50	2	●
PM-2RP-D0.8-R0.1-M06		0,1	0,8	4	0,75	1,2	6	50	2	●
PM-2RP-D0.8-R0.2-M04		0,2	0,8	4	0,75	1,2	4	50	2	●
PM-2RP-D0.8-R0.2-M10		0,2	0,8	4	0,75	1,2	10	50	2	○
PM-2RP-D0.8-R0.1-M04		0,1	0,8	4	0,75	1,2	4	50	2	●
PM-2RP-D0.8-R0.2-M08		0,2	0,8	4	0,75	1,2	8	50	2	●
PM-2RP-D0.8-R0.1-M08		0,1	0,8	4	0,75	1,2	8	50	2	●
PM-2RP-D0.8-R0.1-M10		0,1	0,8	4	0,75	1,2	10	50	2	○
PM-2RP-D0.8-R0.2-M06		0,2	0,8	4	0,75	1,2	6	50	2	●
PM-2RP-D1.0-R0.3-M04		0,3	1	4	0,95	1,5	4	50	2	●
PM-2RP-D1.0-R0.2-M12		0,2	1	4	0,95	1,5	12	50	2	●
PM-2RP-D1.0-R0.1-M12		0,1	1	4	0,95	1,5	12	50	2	●
PM-2RP-D1.0-R0.1-M20		0,1	1	4	0,95	1,5	20	60	2	●
PM-2RP-D1.0-R0.2-M20		0,2	1	4	0,95	1,5	20	60	2	●
PM-2RP-D1.0-R0.3-M08		0,3	1	4	0,95	1,5	8	50	2	●
PM-2RP-D1.0-R0.1-M08		0,1	1	4	0,95	1,5	8	50	2	●
PM-2RP-D1.0-R0.1-M06		0,1	1	4	0,95	1,5	6	50	2	●
PM-2RP-D1.0-R0.1-M16		0,1	1	4	0,95	1,5	16	60	2	●
PM-2RP-D1.0-R0.2-M04		0,2	1	4	0,95	1,5	4	50	2	●
PM-2RP-D1.0-R0.2-M08		0,2	1	4	0,95	1,5	8	50	2	●
PM-2RP-D1.0-R0.3-M10		0,3	1	4	0,95	1,5	10	50	2	●
PM-2RP-D1.0-R0.2-M14		0,2	1	4	0,95	1,5	14	50	2	○
PM-2RP-D1.0-R0.1-M04		0,1	1	4	0,95	1,5	4	50	2	●
PM-2RP-D1.0-R0.3-M12		0,3	1	4	0,95	1,5	12	50	2	●
PM-2RP-D1.0-R0.2-M10		0,2	1	4	0,95	1,5	10	50	2	●
PM-2RP-D1.0-R0.3-M06		0,3	1	4	0,95	1,5	6	50	2	●
PM-2RP-D1.0-R0.2-M16		0,2	1	4	0,95	1,5	16	60	2	●
PM-2RP-D1.0-R0.2-M06		0,2	1	4	0,95	1,5	6	50	2	●
PM-2RP-D1.0-R0.1-M14		0,1	1	4	0,95	1,5	14	50	2	○
PM-2RP-D1.0-R0.1-M10		0,1	1	4	0,95	1,5	10	50	2	●
PM-2RP-D1.2-R0.2-M10		0,2	1,2	4	1,15	1,8	10	50	2	●
PM-2RP-D1.2-R0.2-M06		0,2	1,2	4	1,15	1,8	6	50	2	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

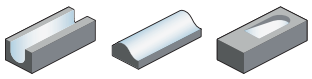
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Gamme PM Micro

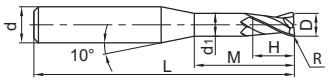
Fraise torique — Usinage haute performance

PM-2RP



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm) R	D	d (h6)	d_1	H	M	L	Dents	Nuance KMG405
PM-2RP-D1.2-R0.1-M06		0,1	1,2	4	1,15	1,8	6	50	2	●
PM-2RP-D1.2-R0.2-M16		0,2	1,2	4	1,5	1,8	16	60	2	○
PM-2RP-D1.2-R0.1-M10		0,1	1,2	4	1,15	1,8	10	50	2	●
PM-2RP-D1.2-R0.1-M12		0,1	1,2	4	1,15	1,8	12	50	2	●
PM-2RP-D1.2-R0.2-M12		0,2	1,2	4	1,15	1,8	12	50	2	●
PM-2RP-D1.2-R0.1-M16		0,1	1,2	4	1,5	1,8	16	60	2	○
PM-2RP-D1.2-R0.2-M08		0,2	1,2	4	1,15	1,8	8	50	2	●
PM-2RP-D1.2-R0.1-M08		0,1	1,2	4	1,15	1,8	8	50	2	●
PM-2RP-D1.5-R0.2-M18		0,2	1,5	4	1,45	2,3	18	50	2	○
PM-2RP-D1.5-R0.3-M12		0,3	1,5	4	1,45	2,3	12	50	2	●
PM-2RP-D1.5-R0.3-M14		0,3	1,5	4	1,45	2,3	14	50	2	○
PM-2RP-D1.5-R0.3-M08		0,3	1,5	4	1,45	2,3	8	50	2	●
PM-2RP-D1.5-R0.3-M10		0,3	1,5	4	1,45	2,3	10	50	2	●
PM-2RP-D1.5-R0.2-M10		0,2	1,5	4	1,45	2,3	10	50	2	●
PM-2RP-D1.5-R0.2-M08		0,2	1,5	4	1,45	2,3	8	50	2	●
PM-2RP-D1.5-R0.2-M20		0,2	1,5	4	1,45	2,3	20	50	2	○
PM-2RP-D1.5-R0.3-M18		0,3	1,5	4	1,45	2,3	18	50	2	○
PM-2RP-D1.5-R0.2-M16		0,2	1,5	4	1,45	2,3	16	50	2	●
PM-2RP-D1.5-R0.3-M20		0,3	1,5	4	1,45	2,3	20	50	2	○
PM-2RP-D1.5-R0.2-M14		0,2	1,5	4	1,45	2,3	14	50	2	○
PM-2RP-D1.5-R0.3-M06		0,3	1,5	4	1,45	2,3	6	50	2	●
PM-2RP-D1.5-R0.2-M06		0,2	1,5	4	1,45	2,3	6	50	2	●
PM-2RP-D1.5-R0.3-M16		0,3	1,5	4	1,45	2,3	16	50	2	●
PM-2RP-D1.5-R0.2-M12		0,2	1,5	4	1,45	2,3	12	50	2	●
PM-2RP-D2.0-R0.2-M08		0,2	2	4	1,95	3	8	50	2	●
PM-2RP-D2.0-R0.2-M16		0,2	2	4	1,95	3	16	50	2	●
PM-2RP-D2.0-R0.5-M06		0,5	2	4	1,95	3	6	50	2	●
PM-2RP-D2.0-R0.5-M18		0,5	2	4	1,96	3	18	50	2	○
PM-2RP-D2.0-R0.2-M20		0,2	2	4	1,97	3	20	50	2	●
PM-2RP-D2.0-R0.2-M14		0,2	2	4	1,95	3	14	50	2	○
PM-2RP-D2.0-R0.2-M18		0,2	2	4	1,96	3	18	50	2	○
PM-2RP-D2.0-R0.5-M20		0,5	2	4	1,97	3	20	50	2	●
PM-2RP-D2.0-R0.2-M06		0,2	2	4	1,95	3	6	50	2	●
PM-2RP-D2.0-R0.2-M12		0,2	2	4	1,95	3	12	50	2	●
PM-2RP-D2.0-R0.5-M16		0,5	2	4	1,95	3	16	50	2	●
PM-2RP-D2.0-R0.5-M14		0,5	2	4	1,95	3	14	50	2	○
PM-2RP-D2.0-R0.5-M08		0,5	2	4	1,95	3	8	50	2	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

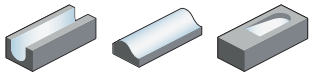
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

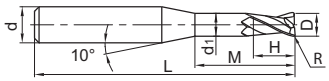
Fraise torique — Usinage haute performance

PM-2RP



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm)							Dents	Nuance
		R	D	d (h6)	d_1	H	M	L		KMG405
PM-2RP-D2.0-R0.5-M10		0,5	2	4	1,95	3	10	50	2	●
PM-2RP-D2.0-R0.5-M12		0,5	2	4	1,95	3	12	50	2	●
PM-2RP-D2.0-R0.2-M10		0,2	2	4	1,95	3	10	50	2	●
PM-2RP-D2.5-R0.5-M18		0,5	2,5	4	2,4	3,7	18	60	2	○
PM-2RP-D2.5-R0.5-M16		0,5	2,5	4	2,4	3,7	16	60	2	○
PM-2RP-D2.5-R0.5-M14		0,5	2,5	4	2,4	3,7	14	50	2	○
PM-2RP-D2.5-R0.2-M12		0,2	2,5	4	2,4	3,7	12	50	2	○
PM-2RP-D2.5-R0.2-M20		0,2	2,5	4	2,4	3,7	20	60	2	●
PM-2RP-D2.5-R0.2-M16		0,2	2,5	4	2,4	3,7	16	60	2	○
PM-2RP-D2.5-R0.2-M10		0,2	2,5	4	2,4	3,7	10	50	2	●
PM-2RP-D2.5-R0.2-M14		0,2	2,5	4	2,4	3,7	14	50	2	○
PM-2RP-D2.5-R0.5-M12		0,5	2,5	4	2,4	3,7	12	50	2	○
PM-2RP-D2.5-R0.5-M08		0,5	2,5	4	2,4	3,7	8	50	2	●
PM-2RP-D2.5-R0.5-M10		0,5	2,5	4	2,4	3,7	10	50	2	●
PM-2RP-D2.5-R0.5-M20		0,5	2,5	4	2,4	3,7	20	60	2	●
PM-2RP-D2.5-R0.2-M08		0,2	2,5	4	2,4	3,7	8	50	2	●
PM-2RP-D2.5-R0.2-M18		0,2	2,5	4	2,4	3,7	18	60	2	○
PM-2RP-D3.0-R0.5-M12		0,5	3	6	2,85	4,5	12	50	2	●
PM-2RP-D3.0-R0.5-M10		0,5	3	6	2,85	4,5	10	50	2	●
PM-2RP-D3.0-R0.5-M14		0,5	3	6	2,85	4,5	14	60	2	○
PM-2RP-D3.0-R0.2-M20		0,2	3	6	2,85	4,5	20	60	2	●
PM-2RP-D3.0-R0.2-M16		0,2	3	6	2,85	4,5	16	60	2	●
PM-2RP-D3.0-R0.5-M08		0,5	3	6	2,85	4,5	8	50	2	●
PM-2RP-D3.0-R0.2-M12		0,2	3	6	2,85	4,5	12	50	2	●
PM-2RP-D3.0-R0.5-M16		0,5	3	6	2,85	4,5	16	60	2	●
PM-2RP-D3.0-R0.2-M08		0,2	3	6	2,85	4,5	8	50	2	●
PM-2RP-D3.0-R0.2-M06		0,2	3	6	2,85	4,5	6	50	2	○
PM-2RP-D3.0-R0.5-M18		0,5	3	6	2,85	4,5	18	60	2	○
PM-2RP-D3.0-R0.2-M14		0,2	3	6	2,85	4,5	14	60	2	○
PM-2RP-D3.0-R0.5-M06		0,5	3	6	2,85	4,5	6	50	2	○
PM-2RP-D3.0-R0.2-M10		0,2	3	6	2,85	4,5	10	50	2	●
PM-2RP-D3.0-R0.5-M20		0,5	3	6	2,85	4,5	20	60	2	●
PM-2RP-D3.0-R0.2-M18		0,2	3	6	2,85	4,5	18	60	2	○
PM-2RP-D4.0-R0.5-M14		0,5	4	6	3,85	6	14	60	2	○
PM-2RP-D4.0-R0.5-M16		0,5	4	6	3,85	6	16	60	2	●
PM-2RP-D4.0-R0.2-M16		0,2	4	6	3,85	6	16	60	2	●
PM-2RP-D4.0-R0.5-M25		0,5	4	6	3,85	6	25	60	2	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

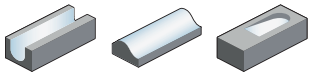
✔ Choix de base
✔ Alternative

Codification B278 — Paramètres B492 — Commande d'outils spéciaux B541

Fraises carbure monobloc Gamme PM Micro

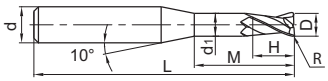
Fraise torique — Usinage haute performance

PM-2RP



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm)							Dents	Nuance
		R	D	d (h6)	d_1	H	M	L		KMG405
PM-2RP-D4.0-R0.2-M14		0,2	4	6	3,85	6	14	60	2	○
PM-2RP-D4.0-R0.2-M25		0,2	4	6	3,85	6	25	60	2	●
PM-2RP-D4.0-R0.2-M12		0,2	4	6	3,85	6	12	50	2	●
PM-2RP-D4.0-R0.5-M12		0,5	4	6	3,85	6	12	50	2	●
PM-2RP-D4.0-R0.2-M20		0,2	4	6	3,85	6	20	60	2	●
PM-2RP-D4.0-R0.5-M20		0,5	4	6	3,85	6	20	60	2	●
PM-2RP-D5.0-R0.5-M14		0,5	5	6	4,85	7,5	14	60	2	○
PM-2RP-D5.0-R1.0-M20		1	5	6	4,85	7,5	20	70	2	●
PM-2RP-D5.0-R1.0-M16		1	5	6	4,85	7,5	16	60	2	●
PM-2RP-D5.0-R1.0-M12		1	5	6	4,85	7,5	12	60	2	●
PM-2RP-D5.0-R1.0-M14		1	5	6	4,85	7,5	14	60	2	○
PM-2RP-D5.0-R0.5-M25		0,5	5	6	4,85	7,5	25	70	2	●
PM-2RP-D5.0-R1.0-M25		1	5	6	4,85	7,5	25	70	2	●
PM-2RP-D5.0-R0.5-M20		0,5	5	6	4,85	7,5	20	70	2	●
PM-2RP-D5.0-R0.5-M12		0,5	5	6	4,85	7,5	12	60	2	●
PM-2RP-D5.0-R0.5-M16		0,5	5	6	4,85	7,5	16	60	2	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

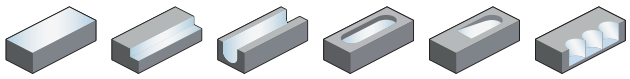
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

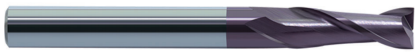
Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

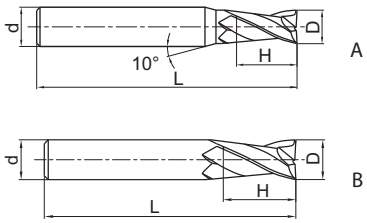
Fraise carbure monobloc — Usinage haute performance

EPM-2E



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





Article	✻	Dimensions (mm)				Dents	Géométrie	Nuance
		D	d (h6)	H	L			KMG406
EPM-2E-D3.0		3	6	8	50	2	A	●
EPM-2E-D4.0		4	6	11	50	2	A	●
EPM-2E-D5.0		5	6	13	50	2	A	●
EPM-2E-D6.0		6	6	16	50	2	B	●
EPM-2E-D8.0		8	8	20	60	2	B	●
EPM-2E-D10.0		10	10	25	75	2	B	●
EPM-2E-D12.0		12	12	30	75	2	B	●
EPM-2E-D14.0		14	14	32	75	2	B	●
EPM-2E-D16.0		16	16	45	100	2	B	●
EPM-2E-D18.0		18	18	45	100	2	B	●
EPM-2E-D20.0		20	20	45	100	2	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

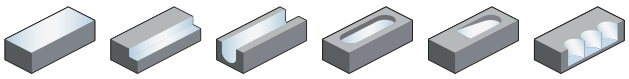
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série EPM

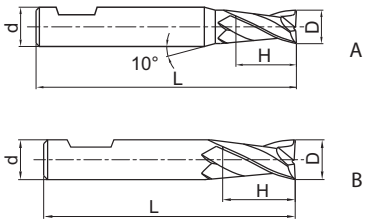
Fraise carbure monobloc — Usinage haute performance

EPM-2E-W



– Type d'attachement : DIN 6535HB
– Coupe au centre
– Angle d'hélice 30°





Article	✲	Dimensions (mm)				Dents	Géométrie	Nuance
		D	d (h6)	H	L			KMG406
EPM-2E-D3.0-W		3	6	4	50	2	A	●
EPM-2E-D4.0-W		4	6	5	54	2	A	●
EPM-2E-D5.0-W		5	6	6	54	2	A	●
EPM-2E-D6.0-W		6	6	7	54	2	B	●
EPM-2E-D8.0-W		8	8	9	58	2	B	●
EPM-2E-D10.0-W		10	10	11	66	2	B	●
EPM-2E-D12.0-W		12	12	12	73	2	B	●
EPM-2E-D14.0-W		14	14	14	75	2	B	●
EPM-2E-D16.0-W		16	16	16	82	2	B	●
EPM-2E-D18.0-W		18	18	18	84	2	B	●
EPM-2E-D20.0-W		20	20	20	92	2	B	●

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

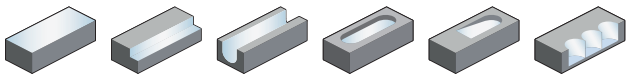
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

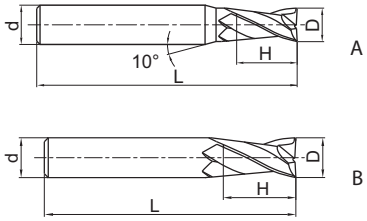
Fraise à grande longueur taillée — Usinage haute performance

EPM-2EL



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





Article	✻	Dimensions (mm)				Dents	Géométrie	Nuance
		D	d (h6)	H	L			KMG406
EPM-2EL-D3.0		3	6	12	75	2	A	●
EPM-2EL-D4.0		4	6	15	75	2	A	●
EPM-2EL-D5.0		5	6	20	75	2	A	●
EPM-2EL-D6.0		6	6	20	75	2	B	●
EPM-2EL-D8.0		8	8	25	100	2	B	●
EPM-2EL-D10.0		10	10	30	100	2	B	●
EPM-2EL-D12.0		12	12	35	100	2	B	●
EPM-2EL-D14.0		14	14	40	100	2	B	●
EPM-2EL-D16.0		16	16	50	150	2	B	●
EPM-2EL-D20.0		20	20	55	150	2	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

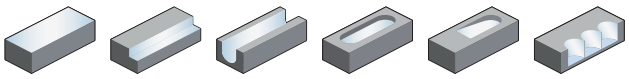
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série EPM

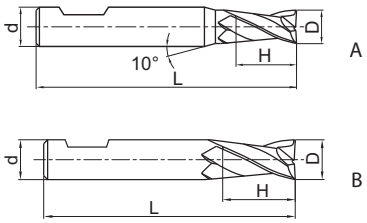
Fraise à grande longueur taillée — Usinage haute performance

EPM-2EL-W



– Type d'attachement : DIN 6535HB
– Coupe au centre
– Angle d'hélice 30°





Article	✲	Dimensions (mm) D	d (h6)	H	L	Dents	Géométrie	Nuance KMG406
EPM-2EL-D3.0-W		3	6	6	57	2	A	●
EPM-2EL-D4.0-W		4	6	8	57	2	A	●
EPM-2EL-D5.0-W		5	6	10	57	2	A	●
EPM-2EL-D6.0-W		6	6	10	57	2	B	●
EPM-2EL-D8.0-W		8	8	16	63	2	B	●
EPM-2EL-D10.0-W		10	10	19	72	2	B	●
EPM-2EL-D12.0-W		12	12	22	83	2	B	●
EPM-2EL-D14.0-W		14	14	22	83	2	B	●
EPM-2EL-D16.0-W		16	16	26	92	2	B	●
EPM-2EL-D18.0-W		18	18	26	92	2	B	●
EPM-2EL-D20.0-W		20	20	32	104	2	B	●

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

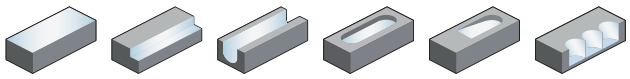
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

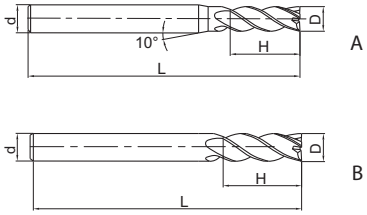
Fraise carbure monobloc — Usinage haute performance

EPM-4E



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 45°





Article	✻	Dimensions (mm) D	d (h6)	H	L	Dents	Géométrie	Nuance KMG406
EPM-4E-D3.0		3	6	8	50	4	A	●
EPM-4E-D4.0		4	6	11	50	4	A	●
EPM-4E-D5.0		5	6	13	50	4	A	●
EPM-4E-D6.0		6	6	16	50	4	B	●
EPM-4E-D8.0		8	8	20	60	4	B	●
EPM-4E-D10.0		10	10	25	75	4	B	●
EPM-4E-D12.0		12	12	30	75	4	B	●
EPM-4E-D14.0		14	14	32	75	4	B	●
EPM-4E-D16.0		16	16	45	100	4	B	●
EPM-4E-D18.0		18	18	45	100	4	B	●
EPM-4E-D20.0		20	20	45	100	4	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

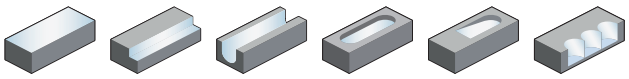
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série EPM

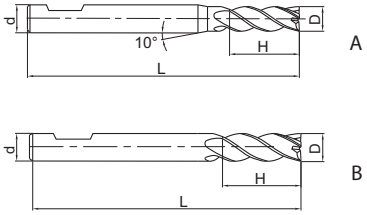
Fraise carbure monobloc — Usinage haute performance

EPM-4E-W



– Type d'attachement : DIN 6535HB
– Coupe au centre
– Angle d'hélice 45°





Article	✲	Dimensions (mm) D	d (h6)	H	L	Dents	Géométrie	Nuance KMG406
EPM-4E-D3.0-W		3	6	4	50	4	A	●
EPM-4E-D4.0-W		4	6	5	54	4	A	●
EPM-4E-D5.0-W		5	6	6	54	4	A	●
EPM-4E-D6.0-W		6	6	7	54	4	B	●
EPM-4E-D8.0-W		8	8	9	58	4	B	●
EPM-4E-D10.0-W		10	10	11	66	4	B	●
EPM-4E-D12.0-W		12	12	12	73	4	B	●
EPM-4E-D14.0-W		14	14	14	75	4	B	●
EPM-4E-D16.0-W		16	16	16	82	4	B	●
EPM-4E-D18.0-W		18	18	18	84	4	B	●
EPM-4E-D20.0-W		20	20	20	92	4	B	●

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

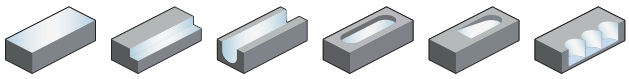
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

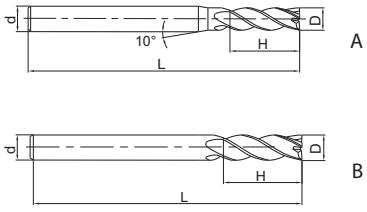
Fraise à grande longueur taillée — Usinage haute performance

EPM-4EL



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 45°





Article	✻	Dimensions (mm)				Dents	Géométrie	Nuance
		D	d (h6)	H	L			KMG406
EPM-4EL-D3.0		3	6	12	75	4	A	●
EPM-4EL-D4.0		4	6	15	75	4	A	●
EPM-4EL-D5.0		5	6	20	75	4	A	●
EPM-4EL-D6.0		6	6	20	75	4	B	●
EPM-4EL-D8.0		8	8	25	100	4	B	●
EPM-4EL-D10.0		10	10	30	100	4	B	●
EPM-4EL-D12.0		12	12	35	100	4	B	●
EPM-4EL-D14.0		14	14	40	100	4	B	●
EPM-4EL-D16.0		16	16	50	150	4	B	●
EPM-4EL-D20.0		20	20	55	150	4	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

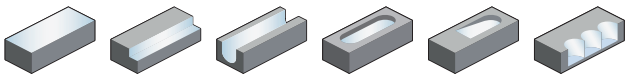
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

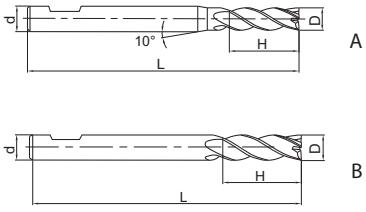
Fraise à grande longueur taillée — Usinage haute performance

EPM-4EL-W



– Type d'attachement : DIN 6535HB
– Coupe au centre
– Angle d'hélice 45°





Article	✻	Dimensions (mm) D	d (h6)	H	L	Dents	Géométrie	Nuance KMG406
EPM-4EL-D3.0-W		3	6	8	57	4	A	●
EPM-4EL-D4.0-W		4	6	11	57	4	A	●
EPM-4EL-D5.0-W		5	6	13	57	4	A	●
EPM-4EL-D6.0-W		6	6	13	57	4	B	●
EPM-4EL-D8.0-W		8	8	19	63	4	B	●
EPM-4EL-D10.0-W		10	10	22	72	4	B	●
EPM-4EL-D12.0-W		12	12	26	83	4	B	●
EPM-4EL-D14.0-W		14	14	26	83	4	B	●
EPM-4EL-D16.0-W		16	16	32	92	4	B	●
EPM-4EL-D18.0-W		18	18	32	92	4	B	●
EPM-4EL-D20.0-W		20	20	38	104	4	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

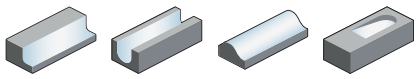
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

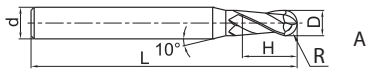
Fraise hémisphérique — Usinage haute performance

EPM-2B

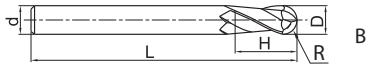


– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





A



B

Article	✻	Dimensions (mm) R	D	d (h6)	H	L	Dents	Géométrie	Nuance KMG406
EPM-2B-R1.5		1,5	3	6	6	50	2	A	●
EPM-2B-R2.0		2	4	6	8	50	2	A	●
EPM-2B-R2.5		2,5	5	6	10	50	2	A	●
EPM-2B-R3.0		3	6	6	12	50	2	B	●
EPM-2B-R4.0		4	8	8	16	60	2	B	●
EPM-2B-R5.0		5	10	10	20	75	2	B	●
EPM-2B-R6.0		6	12	12	24	75	2	B	●
EPM-2B-R7.0		7	14	14	28	75	2	B	●
EPM-2B-R8.0		8	16	16	32	100	2	B	●
EPM-2B-R10.0		10	20	20	40	100	2	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

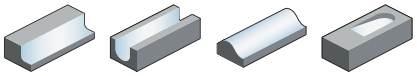
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série EPM

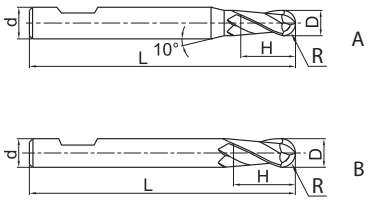
Fraise hémisphérique Usinage haute performance

EPM-2B-W



– Type d'attachement : DIN 6535HB
– Coupe au centre
– Angle d'hélice 30°





Article	✲	Dimensions (mm)					Dents	Géométrie	Nuance
		R	D	d (h6)	H	L			KMG406
EPM-2B-R1.5-W		1,5	3	6	4	50	2	A	●
EPM-2B-R2.0-W		2	4	6	5	54	2	A	●
EPM-2B-R2.5-W		2,5	5	6	6	54	2	A	●
EPM-2B-R3.0-W		3	6	6	7	54	2	B	●
EPM-2B-R4.0-W		4	8	8	9	58	2	B	●
EPM-2B-R5.0-W		5	10	10	11	66	2	B	●
EPM-2B-R6.0-W		6	12	12	12	73	2	B	●
EPM-2B-R8.0-W		8	16	16	16	83	2	B	●
EPM-2B-R10.0-W		10	20	20	20	92	2	B	●

● En stock ○ Sur demande

✲ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

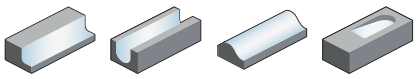
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraise hémisphérique, attachement long

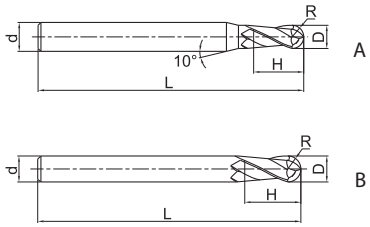
Usinage haute performance

EPM-2BL



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





Article	✻	Dimensions (mm)					Dents	Géométrie	Nuance
		R	D	d (h6)	H	L			KMG406
EPM-2BL-R1.5		1,5	3	6	6	75	2	A	●
EPM-2BL-R2.0		2	4	6	8	75	2	A	●
EPM-2BL-R2.5		2,5	5	6	10	75	2	A	●
EPM-2BL-R3.0		3	6	6	12	75	2	B	●
EPM-2BL-R4.0		4	8	8	16	100	2	B	●
EPM-2BL-R5.0		5	10	10	20	100	2	B	●
EPM-2BL-R6.0		6	12	12	24	100	2	B	●
EPM-2BL-R7.0		7	14	14	28	100	2	B	●
EPM-2BL-R8.0		8	16	16	32	150	2	B	●
EPM-2BL-R10.0		10	20	20	40	150	2	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

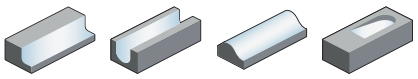
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraise hémisphérique, attachement long

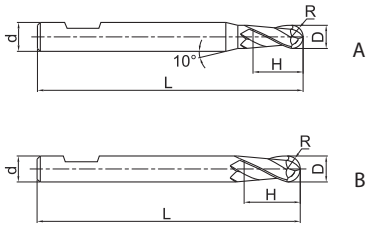
Usinage haute performance

EPM-2BL-W



– Type d'attachement : DIN 6535HB
– Coupe au centre
– Angle d'hélice 30°





Article	✲	Dimensions (mm)					Dents	Géométrie	Nuance
		R	D	d (h6)	H	L			KMG406
EPM-2BL-R1.5-W		1,5	3	6	4	57	2	A	●
EPM-2BL-R2.0-W		2	4	6	5	57	2	A	●
EPM-2BL-R2.5-W		2,5	5	6	6	57	2	A	●
EPM-2BL-R3.0-W		3	6	6	7	57	2	B	●
EPM-2BL-R4.0-W		4	8	8	9	63	2	B	●
EPM-2BL-R5.0-W		5	10	10	11	72	2	B	●
EPM-2BL-R6.0-W		6	12	12	12	83	2	B	●
EPM-2BL-R8.0-W		8	16	16	16	92	2	B	●
EPM-2BL-R10.0-W		10	20	20	20	104	2	B	●

● En stock ○ Sur demande

✲ Avec arrosage interne

Domaine d'utilisation

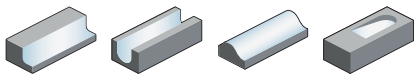
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

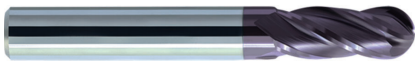
Codification B278 Paramètres B492 Commande d'outils spéciaux B541

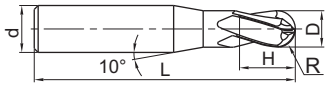
Fraise hémisphérique — Usinage haute performance

EPM-4B

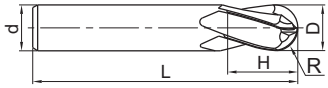


– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





A



B

Article	✻	Dimensions (mm) R	D	d (h6)	H	L	Dents	Géométrie	Nuance KMG406
EPM-4B-R1.5		1,5	3	6	6	50	4	A	●
EPM-4B-R2.0		2	4	6	8	50	4	A	●
EPM-4B-R2.5		2,5	5	6	10	50	4	A	●
EPM-4B-R3.0		3	6	6	12	50	4	B	●
EPM-4B-R4.0		4	8	8	16	60	4	B	●
EPM-4B-R5.0		5	10	10	20	75	4	B	●
EPM-4B-R6.0		6	12	12	24	75	4	B	●
EPM-4B-R7.0		7	14	14	28	75	4	B	●
EPM-4B-R8.0		8	16	16	32	100	4	B	●
EPM-4B-R9.0		9	18	18	36	100	4	B	●
EPM-4B-R10.0		10	20	20	40	100	4	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

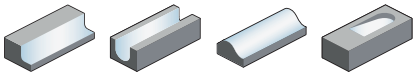
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

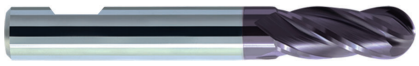
Fraises carbure monobloc Série EPM

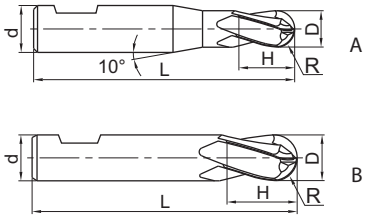
Fraise hémisphérique Usinage haute performance

EPM-4B-W



– Type d'attachement : DIN 6535HB
– Coupe au centre
– Angle d'hélice 30°





Article	✲	Dimensions (mm)					Dents	Géométrie	Nuance
		R	D	d (h6)	H	L			KMG406
EPM-4B-R1.5-W		1,5	3	6	4	50	4	A	●
EPM-4B-R2.0-W		2	4	6	5	54	4	A	●
EPM-4B-R2.5-W		2,5	5	6	6	54	4	A	●
EPM-4B-R3.0-W		3	6	6	7	54	4	B	●
EPM-4B-R4.0-W		4	8	8	9	58	4	B	●
EPM-4B-R5.0-W		5	10	10	11	66	4	B	●
EPM-4B-R6.0-W		6	12	12	12	73	4	B	●
EPM-4B-R7.0-W		7	14	14	14	75	4	B	●
EPM-4B-R8.0-W		8	16	16	16	83	4	B	●
EPM-4B-R9.0-W		9	18	18	18	84	4	B	●
EPM-4B-R10.0-W		10	20	20	20	92	4	B	●

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

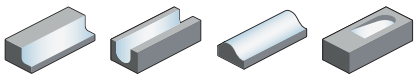
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraise hémisphérique, attachement long

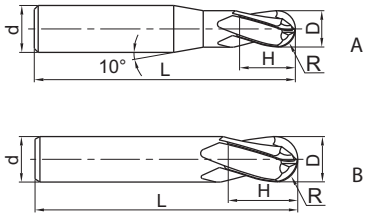
Usinage haute performance

EPM-4BL



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





Article	✻	Dimensions (mm) R	D	d (h6)	H	L	Dents	Géométrie	Nuance KMG406
EPM-4BL-R1.5		1,5	3	6	6	75	4	A	●
EPM-4BL-R2.0		2	4	6	8	75	4	A	●
EPM-4BL-R2.5		2,5	5	6	10	75	4	A	●
EPM-4BL-R3.0		3	6	6	12	75	4	B	●
EPM-4BL-R4.0		4	8	8	16	100	4	B	●
EPM-4BL-R5.0		5	10	10	20	100	4	B	●
EPM-4BL-R6.0		6	12	12	24	100	4	B	●
EPM-4BL-R7.0		7	14	14	28	100	4	B	●
EPM-4BL-R8.0		8	16	16	32	150	4	B	●
EPM-4BL-R10.0		10	20	20	40	150	4	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

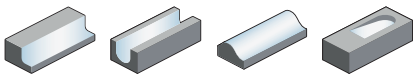
Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série EPM

Fraise hémisphérique, attachement long

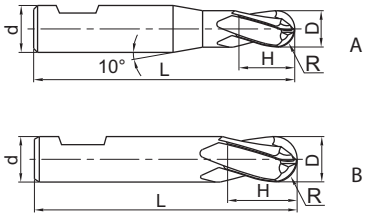
Usinage haute performance

EPM-4BL-W



– Type d'attachement : DIN 6535HB
– Coupe au centre
– Angle d'hélice 30°





Article	✲	Dimensions (mm)					Dents	Géométrie	Nuance
		R	D	d (h6)	H	L			KMG406
EPM-4BL-R1.5-W		1,5	3	6	4	57	4	A	●
EPM-4BL-R2.0-W		2	4	6	5	57	4	A	●
EPM-4BL-R2.5-W		2,5	5	6	6	57	4	A	●
EPM-4BL-R3.0-W		3	6	6	7	57	4	B	●
EPM-4BL-R4.0-W		4	8	8	9	63	4	B	●
EPM-4BL-R5.0-W		5	10	10	11	72	4	B	●
EPM-4BL-R6.0-W		6	12	12	12	83	4	B	●
EPM-4BL-R8.0-W		8	16	16	16	92	4	B	●
EPM-4BL-R10.0-W		10	20	20	20	104	4	B	●

● En stock ○ Sur demande

✲ Avec arrosage interne

Domaine d'utilisation

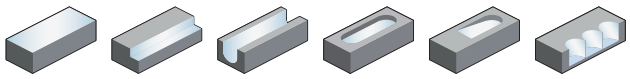
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

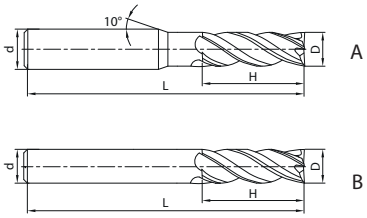
Usinage haute performance

VPM-4E



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 36°/38°





Article	✻	Dimensions (mm)				Dents	Géométrie	Nuance
		D	d (h6)	H	L			KMG406
VPM-4E-D3.0		3	6	8	50	4	A	●
VPM-4E-D4.0		4	6	11	50	4	A	●
VPM-4E-D5.0		5	6	13	50	4	A	●
VPM-4E-D6.0		6	6	16	50	4	B	●
VPM-4E-D7.0		7	8	20	60	4	A	●
VPM-4E-D8.0		8	8	20	60	4	B	●
VPM-4E-D9.0		9	10	22	75	4	A	●
VPM-4E-D10.0		10	10	25	75	4	B	●
VPM-4E-D11.0		11	12	26	75	4	A	●
VPM-4E-D12.0		12	12	30	75	4	B	●
VPM-4E-D14.0		14	14	32	75	4	B	●
VPM-4E-D16.0		16	16	45	100	4	B	●
VPM-4E-D18.0		18	18	45	100	4	B	●
VPM-4E-D20.0		20	20	45	100	4	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

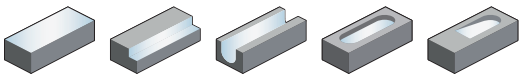
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Notes

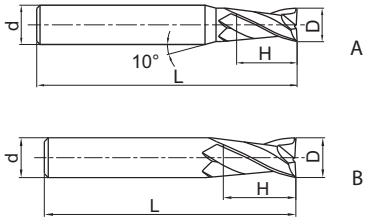
Fraise carbure monobloc — Usinage de matériaux durs

HM-2E



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm) D	d (h6)	H	L	Dents	Géométrie	Nuance KMG555
HM-2E-D1.0S		1	4	3	50	2	A	●
HM-2E-D1.5S		1,5	4	4	50	2	A	●
HM-2E-D2.0S		2	4	6	50	2	A	●
HM-2E-D2.5S		2,5	4	8	50	2	A	●
HM-2E-D3.0S		3	4	8	50	2	A	●
HM-2E-D4.0S		4	4	11	50	2	B	●
HM-2E-D1.0		1	6	3	50	2	A	●
HM-2E-D1.5		1,5	6	4	50	2	A	●
HM-2E-D2.0		2	6	6	50	2	A	●
HM-2E-D2.5		2,5	6	8	50	2	A	●
HM-2E-D3.0		3	6	8	50	2	A	●
HM-2E-D3.5		3,5	6	10	50	2	A	●
HM-2E-D4.0		4	6	11	50	2	A	●
HM-2E-D4.5		4,5	6	11	50	2	A	●
HM-2E-D5.0		5	6	13	50	2	A	●
HM-2E-D5.5		5,5	6	16	50	2	A	●
HM-2E-D6.0		6	6	16	50	2	B	●
HM-2E-D7.0		7	8	20	60	2	A	●
HM-2E-D8.0		8	8	20	60	2	B	●
HM-2E-D9.0		9	10	22	75	2	A	●
HM-2E-D10.0		10	10	25	75	2	B	●
HM-2E-D11.0		11	12	26	75	2	A	○
HM-2E-D12.0		12	12	30	75	2	B	●
HM-2E-D14.0		14	14	32	100	2	B	●
HM-2E-D16.0		16	16	45	100	2	B	●
HM-2E-D18.0		18	18	45	100	2	B	○
HM-2E-D20.0		20	20	45	100	2	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

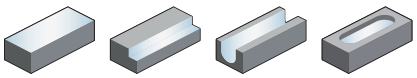
P	M	K	N	S	H
					✔

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

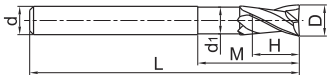
Fraise carbure monobloc, petite longueur taillée — Usinage de matériaux durs

HM-2EFP



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm)						Dents	Nuance
		D	d (h6)	d_1	H	M	L		KMG555
HM-2EFP-D6.0		6	6	5,8	9	30	75	2	○
HM-2EFP-D8.0		8	8	7,8	12	40	100	2	○
HM-2EFP-D10.0		10	10	9,6	15	50	100	2	○
HM-2EFP-D12.0		12	12	11,5	18	50	100	2	○
HM-2EFP-D16.0		16	16	15,5	24	50	150	2	○
HM-2EFP-D20.0		20	20	19,5	30	60	150	2	○

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

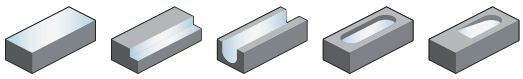
P	M	K	N	S	H
					✔

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

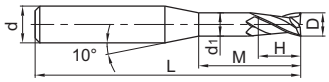
Fraise carbure monobloc — Usinage de matériaux durs

HM-2EP



– Attachement cylindrique
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm)						Dents	Nuance
		D	d (h6)	d_1	H	M	L		KMG555
HM-2EP-D0.5-M04		0,5	4	0,45	0,7	4	50	2	●
HM-2EP-D0.5-M06		0,5	4	0,45	0,7	6	50	2	●
HM-2EP-D0.5-M08		0,5	4	0,45	0,7	8	50	2	●
HM-2EP-D0.8-M04		0,8	4	0,75	1,2	4	50	2	●
HM-2EP-D0.8-M06		0,8	4	0,75	1,2	6	50	2	●
HM-2EP-D0.8-M08		0,8	4	0,75	1,2	8	50	2	●
HM-2EP-D0.8-M10		0,8	4	0,75	1,2	10	50	2	●
HM-2EP-D1.0-M04		1	4	0,95	1,5	4	50	2	●
HM-2EP-D1.0-M06		1	4	0,95	1,5	6	50	2	●
HM-2EP-D1.0-M08		1	4	0,95	1,5	8	50	2	●
HM-2EP-D1.0-M10		1	4	0,95	1,5	10	50	2	●
HM-2EP-D1.0-M12		1	4	0,95	1,5	12	50	2	●
HM-2EP-D1.0-M14		1	4	0,95	1,5	14	50	2	●
HM-2EP-D1.2-M06		1,2	4	1,15	1,8	6	50	2	●
HM-2EP-D1.2-M08		1,2	4	1,15	1,8	8	50	2	●
HM-2EP-D1.2-M10		1,2	4	1,15	1,8	10	50	2	●
HM-2EP-D1.2-M12		1,2	4	1,15	1,8	12	50	2	●
HM-2EP-D1.5-M06		1,5	4	1,45	2,3	6	50	2	●
HM-2EP-D1.5-M08		1,5	4	1,45	2,3	8	50	2	●
HM-2EP-D1.5-M10		1,5	4	1,45	2,3	10	50	2	●
HM-2EP-D1.5-M12		1,5	4	1,45	2,3	12	50	2	●
HM-2EP-D1.5-M14		1,5	4	1,45	2,3	14	50	2	●
HM-2EP-D2.0-M06		2	4	1,95	3	6	50	2	●
HM-2EP-D2.0-M08		2	4	1,95	3	8	50	2	●
HM-2EP-D2.0-M10		2	4	1,95	3	10	50	2	●
HM-2EP-D2.0-M12		2	4	1,95	3	12	50	2	●
HM-2EP-D2.0-M14		2	4	1,95	3	14	50	2	●
HM-2EP-D2.0-M16		2	4	1,95	3	16	50	2	●
HM-2EP-D2.5-M08		2,5	4	2,4	3,7	8	50	2	●
HM-2EP-D2.5-M10		2,5	4	2,4	3,7	10	50	2	●
HM-2EP-D2.5-M12		2,5	4	2,4	3,7	12	50	2	●
HM-2EP-D2.5-M14		2,5	4	2,4	3,7	14	50	2	●
HM-2EP-D2.5-M16		2,5	4	2,4	3,7	16	60	2	●
HM-2EP-D2.5-M18		2,5	4	2,4	3,7	18	60	2	●
HM-2EP-D2.5-M20		2,5	4	2,4	3,7	20	60	2	●
HM-2EP-D3.0-M06		3	6	2,85	4,5	6	50	2	●
HM-2EP-D3.0-M08		3	6	2,85	4,5	8	50	2	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

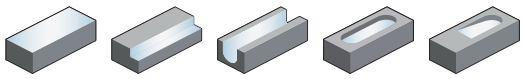
P	M	K	N	S	H
					✔

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

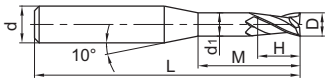
Fraise carbure monobloc — Usinage de matériaux durs

HM-2EP



– Attachement cylindrique
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm) D	d (h6)	d_1	H	M	L	Dents	Nuance KMG555
HM-2EP-D3.0-M10		3	6	2,85	4,5	10	50	2	●
HM-2EP-D3.0-M12		3	6	2,85	4,5	12	50	2	●
HM-2EP-D3.0-M14		3	6	2,85	4,5	14	60	2	●
HM-2EP-D3.0-M16		3	6	2,85	4,5	16	60	2	●
HM-2EP-D3.0-M18		3	6	2,85	4,5	18	60	2	●
HM-2EP-D3.0-M20		3	6	2,85	4,5	20	60	2	●
HM-2EP-D4.0-M12		4	6	3,85	6	12	60	2	●
HM-2EP-D4.0-M16		4	6	3,85	6	16	60	2	●
HM-2EP-D4.0-M20		4	6	3,85	6	20	60	2	●
HM-2EP-D4.0-M25		4	6	3,85	6	25	60	2	●
HM-2EP-D5.0-M16		5	6	4,85	7,5	16	60	2	●
HM-2EP-D5.0-M25		5	6	4,85	7,5	25	70	2	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

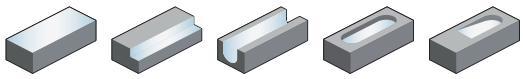
P	M	K	N	S	H
					✔

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

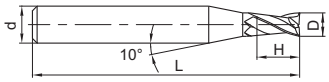
Fraise carbure monobloc — Usinage de matériaux durs

HM-2ES



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm) D	d (h6)	H	L	Dents	Nuance KMG555
HM-2ES-D0.3		0,3	4	0,6	50	2	●
HM-2ES-D0.4		0,4	4	0,8	50	2	●
HM-2ES-D0.5		0,5	4	1	50	2	●
HM-2ES-D0.6		0,6	4	1,2	50	2	●
HM-2ES-D0.7		0,7	4	1,4	50	2	●
HM-2ES-D0.8		0,8	4	1,6	50	2	●
HM-2ES-D0.9		0,9	4	1,8	50	2	●
HM-2ES-D1.0		1	4	2	50	2	●
HM-2ES-D1.1		1,1	4	2	50	2	●
HM-2ES-D1.2		1,2	4	2,5	50	2	●
HM-2ES-D1.3		1,3	4	2,5	50	2	●
HM-2ES-D1.4		1,4	4	3	50	2	●
HM-2ES-D1.5		1,5	4	3	50	2	●
HM-2ES-D1.6		1,6	4	3,5	50	2	●
HM-2ES-D1.7		1,7	4	3,5	50	2	●
HM-2ES-D1.8		1,8	4	4	50	2	●
HM-2ES-D1.9		1,9	4	4	50	2	●
HM-2ES-D2.0		2	4	4	50	2	●
HM-2ES-D2.1		2,1	4	4	50	2	●
HM-2ES-D2.2		2,2	4	4,5	50	2	●
HM-2ES-D2.3		2,3	4	4,5	50	2	●
HM-2ES-D2.4		2,4	4	5	50	2	●
HM-2ES-D2.5		2,5	4	5	50	2	●
HM-2ES-D2.6		2,6	4	5	50	2	●
HM-2ES-D2.7		2,7	4	5,5	50	2	●
HM-2ES-D2.8		2,8	4	5,5	50	2	●
HM-2ES-D2.9		2,9	4	6	50	2	●
HM-2ES-D3.0		3	4	6	50	2	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
					✔

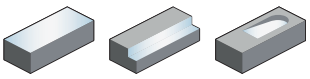
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

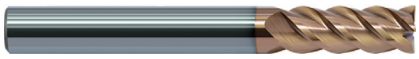
Fraises carbure monobloc Série HM

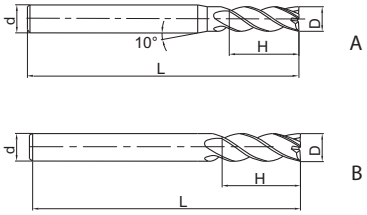
Fraise carbure monobloc — Usinage de matériaux durs

HM-4E



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 45°





Article	✲	Dimensions (mm) D	d (h6)	H	L	Dents	Géométrie	Nuance KMG555
HM-4E-D1.0S		1	4	3	50	4	A	●
HM-4E-D1.5S		1,5	4	4	50	4	A	●
HM-4E-D2.0S		2	4	6	50	4	A	●
HM-4E-D2.5S		2,5	4	8	50	4	A	●
HM-4E-D3.0S		3	4	8	50	4	A	●
HM-4E-D4.0S		4	4	11	50	4	B	●
HM-4E-D1.0		1	6	3	50	4	A	●
HM-4E-D1.5		1,5	6	4	50	4	A	●
HM-4E-D2.0		2	6	6	50	4	A	●
HM-4E-D2.5		2,5	6	8	50	4	A	●
HM-4E-D3.0		3	6	8	50	4	A	●
HM-4E-D3.5		3,5	6	10	50	4	A	●
HM-4E-D4.0		4	6	11	50	4	A	●
HM-4E-D4.5		4,5	6	11	50	4	A	●
HM-4E-D5.0		5	6	13	50	4	A	●
HM-4E-D5.5		5,5	6	16	50	4	A	●
HM-4E-D6.0		6	6	16	50	4	B	●
HM-4E-D7.0		7	8	20	60	4	A	●
HM-4E-D8.0		8	8	20	60	4	B	●
HM-4E-D9.0		9	10	22	75	4	A	●
HM-4E-D10.0		10	10	25	75	4	B	●
HM-4E-D11.0		11	12	26	75	4	A	●
HM-4E-D12.0		12	12	30	75	4	B	●
HM-4E-D14.0		14	14	32	75	4	B	●
HM-4E-D16.0		16	16	45	100	4	B	●
HM-4E-D18.0		18	18	45	100	4	B	●
HM-4E-D20.0		20	20	45	100	4	B	●

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
					✔

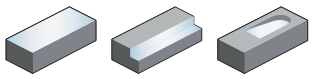
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraise carbure monobloc, attachement long

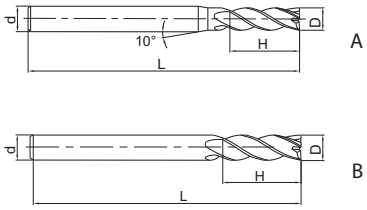
Usinage de matériaux durs

HM-4EL



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 45°





Article	✻	Dimensions (mm)				Dents	Géométrie	Nuance
		D	d (h6)	H	L			KMG555
HM-4EL-D3.0		3	6	12	75	4	A	●
HM-4EL-D4.0		4	6	15	75	4	A	●
HM-4EL-D5.0		5	6	20	75	4	A	●
HM-4EL-D6.0		6	6	20	75	4	B	●
HM-4EL-D8.0		8	8	25	100	4	B	●
HM-4EL-D10.0		10	10	30	100	4	B	●
HM-4EL-D12.0		12	12	35	100	4	B	●
HM-4EL-D14.0		14	14	40	100	4	B	●
HM-4EL-D16.0		16	16	50	150	4	B	●
HM-4EL-D20.0		20	20	55	150	4	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

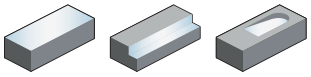
P	M	K	N	S	H
					✔

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

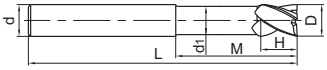
Fraise carbure monobloc, petite longueur taillée — Usinage de matériaux durs

HM-4EFP



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 45°





Article	✻	Dimensions (mm)						Dents	Nuance
		D	d (h6)	d_1	H	M	L		KMG555
HM-4EFP-D6.0		6	6	5,8	9	30	75	4	●
HM-4EFP-D8.0		8	8	7,8	12	40	100	4	●
HM-4EFP-D10.0		10	10	9,6	15	50	100	4	●
HM-4EFP-D12.0		12	12	11,5	18	50	100	4	●
HM-4EFP-D16.0		16	16	15,5	24	50	150	4	●
HM-4EFP-D20.0		20	20	19,5	30	60	150	4	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

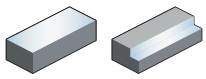
P	M	K	N	S	H
					✔

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

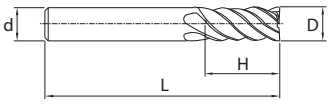
Fraise à grande longueur taillée — Usinage haute vitesse de matériaux durs

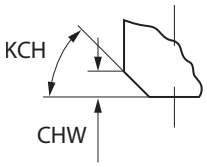
5502R55MHH



– Type d'attachement : DIN 6535HA
– Pas de coupe au centre
– Angle d'hélice 55°







Article	✻	Dimensions (mm)						Dents	Nuance	
		D	d (h6)	H	L	KCH	CHW		KMG405	KMG555
5502R55MHH-0300		3	6	8	57	0	0	4	●	●
5502R55MHH-0400		4	6	11	57	0	0	4	●	●
5502R55MHH-0500		5	6	13	57	0	0	5	●	●
5502R55MHH-0600		6	6	13	57	45	0,1	6	●	●
5502R55MHH-0800		8	8	19	63	45	0,1	6	●	●
5502R55MHH-1000		10	10	22	72	45	0,1	6	●	●
5502R55MHH-1200		12	12	26	83	45	0,1	6	●	●
5502R55MHH-1600		16	16	32	92	45	0,1	6	●	●
5502R55MHH-2000		20	20	38	104	45	0,1	8	●	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

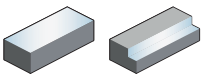
P	M	K	N	S	H
					✔

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

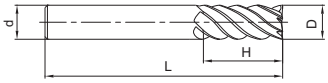
Fraise carbure monobloc — Usinage de matériaux durs

HM-6E



– Attachement cylindrique, standard usine ZCC-CT
– Pas de coupe au centre
– Angle d'hélice 45°





Article	✻	Dimensions (mm) D	d (h6)	H	L	Dents	Nuance KMG555
HM-6E-D6.0		6	6	18	60	6	○
HM-6E-D8.0		8	8	20	60	6	○
HM-6E-D10.0		10	10	30	75	6	○
HM-6E-D12.0		12	12	32	75	6	○
HM-6E-D16.0		16	16	40	100	6	○
HM-6E-D20.0		20	20	45	100	6	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
					✔

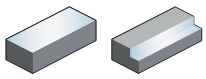
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraise carbure monobloc, attachement long

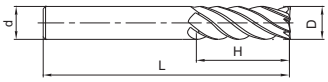
Usinage de matériaux durs

HM-6EL



– Attachement cylindrique, standard usine ZCC-CT
– Pas de coupe au centre
– Angle d'hélice 45°





Article	✻	Dimensions (mm)				Dents	Nuance
		D	d (h6)	H	L		KMG555
HM-6EL-D6.0		6	6	24	75	6	●
HM-6EL-D8.0		8	8	32	75	6	●
HM-6EL-D10.0		10	10	40	100	6	●
HM-6EL-D12.0		12	12	45	100	6	●
HM-6EL-D16.0		16	16	64	150	6	●
HM-6EL-D20.0		20	20	75	150	6	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
					✔

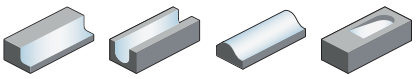
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraises carbure monobloc Série HM

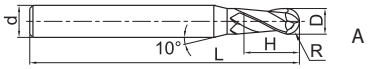
Fraise hémisphérique — Usinage de matériaux durs

HM-2B

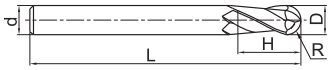


– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





A



B

Article	✲	Dimensions (mm) R	D	d (h6)	H	L	Dents	Géométrie	Nuance KMG555
HM-2B-R0.5S		0,5	1	4	2	50	2	A	●
HM-2B-R0.75S		0,75	1,5	4	3	50	2	A	●
HM-2B-R1.0S		1	2	4	4	50	2	A	●
HM-2B-R1.25S		1,25	2,5	4	5	50	2	A	●
HM-2B-R1.5S		1,5	3	4	6	50	2	A	●
HM-2B-R2.0S		2	4	4	8	50	2	B	●
HM-2B-R0.5		0,5	1	6	2	50	2	A	●
HM-2B-R0.75		0,75	1,5	6	3	50	2	A	●
HM-2B-R1.0		1	2	6	4	50	2	A	●
HM-2B-R1.25		1,25	2,5	6	5	50	2	A	●
HM-2B-R1.5		1,5	3	6	6	50	2	A	●
HM-2B-R1.75		1,75	3,5	6	8	50	2	A	●
HM-2B-R2.0		2	4	6	8	50	2	A	●
HM-2B-R2.5		2,5	5	6	10	50	2	A	●
HM-2B-R2.75		2,75	5,5	6	12	50	2	A	●
HM-2B-R3.0		3	6	6	12	50	2	B	●
HM-2B-R3.5		3,5	7	8	14	60	2	A	●
HM-2B-R4.0		4	8	8	16	60	2	B	●
HM-2B-R4.5		4,5	9	10	18	75	2	A	●
HM-2B-R5.0		5	10	10	20	75	2	B	●
HM-2B-R6.0		6	12	12	24	75	2	B	●
HM-2B-R7.0		7	14	14	28	75	2	B	●
HM-2B-R8.0		8	16	16	32	100	2	B	●
HM-2B-R10.0		10	20	20	40	100	2	B	●

● En stock ○ Sur demande

✲ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
					✔

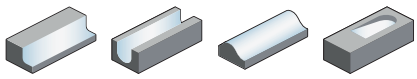
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraise hémisphérique, grande longueur taillée

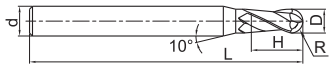
Usinage de matériaux durs

HM-2BL

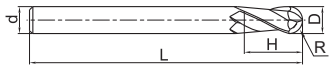


– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





A



B

Article	✻	Dimensions (mm) R	D	d (h6)	H	L	Dents	Géométrie	Nuance KMG555
HM-2BL-R1.0		1	2	6	4	75	2	A	●
HM-2BL-R1.25		1,25	2,5	6	6	75	2	A	●
HM-2BL-R1.5		1,5	3	6	6	75	2	A	●
HM-2BL-R1.75		1,75	3,5	6	8	75	2	A	●
HM-2BL-R2.0		2	4	6	8	75	2	A	●
HM-2BL-R2.5		2,5	5	6	10	75	2	A	●
HM-2BL-R2.75		2,75	5,5	6	12	75	2	A	●
HM-2BL-R3.0		3	6	6	12	75	2	B	●
HM-2BL-R3.5		3,5	7	8	14	75	2	A	●
HM-2BL-R4.0		4	8	8	16	100	2	B	●
HM-2BL-R4.5		4,5	9	10	18	100	2	A	●
HM-2BL-R5.0		5	10	10	20	100	2	B	●
HM-2BL-R6.0		6	12	12	24	100	2	B	●
HM-2BL-R7.0		7	14	14	28	100	2	B	●
HM-2BL-R8.0		8	16	16	32	150	2	B	●
HM-2BL-R10.0		10	20	20	40	150	2	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

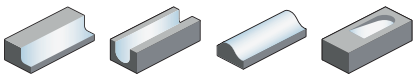
P	M	K	N	S	H
					✔

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

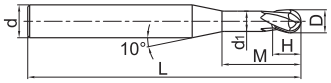
Fraise hémisphérique, petite longueur taillée — Usinage de matériaux durs

HM-2BFP

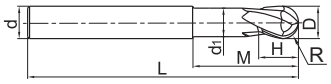


– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





A



B

Article	✲	Dimensions (mm)							Dents	Géométrie	Nuance
		R	D	d (h6)	d_1	H	M	L			KMG555
HM-2BFP-R0.5		0,5	1	6	0,95	1	2,5	75	2	A	●
HM-2BFP-R0.75		0,75	1,5	6	1,45	1,5	3	75	2	A	●
HM-2BFP-R1.0		1	2	6	1,95	2	4	75	2	A	●
HM-2BFP-R1.5		1,5	3	6	2,85	3	6	75	2	A	●
HM-2BFP-R2.0		2	4	6	3,85	4	8	75	2	A	●
HM-2BFP-R2.5		2,5	5	6	4,85	5	10	75	2	A	●
HM-2BFP-R3.0		3	6	6	5,8	6	12	75	2	B	●
HM-2BFP-R4.0		4	8	8	7,8	8	16	100	2	B	●
HM-2BFP-R5.0		5	10	10	9,6	10	20	100	2	B	●
HM-2BFP-R6.0		6	12	12	11,5	12	24	100	2	B	●
HM-2BFP-R8.0		8	16	16	15,5	16	32	150	2	B	●
HM-2BFP-R10.0		10	20	20	19,5	20	40	150	2	B	○

● En stock ○ Sur demande

✲ Avec arrosage interne

Domaine d'utilisation

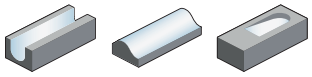
P	M	K	N	S	H
					✔

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

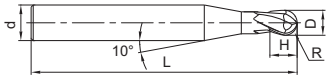
Fraise hémisphérique — Usinage de matériaux durs

HM-2BS



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm) R	D	d (h6)	H	L	Dents	Nuance KMG555
HM-2BS-R0.15		0,15	0,3	4	0,5	50	2	●
HM-2BS-R0.20		0,2	0,4	4	0,6	50	2	●
HM-2BS-R0.25		0,25	0,5	4	0,8	50	2	●
HM-2BS-R0.30		0,3	0,6	4	0,9	50	2	●
HM-2BS-R0.35		0,35	0,7	4	1	50	2	●
HM-2BS-R0.40		0,4	0,8	4	1,2	50	2	●
HM-2BS-R0.45		0,45	0,9	4	1,3	50	2	●
HM-2BS-R0.50		0,5	1	4	1,5	50	2	●
HM-2BS-R0.60		0,6	1,2	4	1,8	50	2	●
HM-2BS-R0.70		0,7	1,4	4	2	50	2	●
HM-2BS-R0.75		0,75	1,5	4	2,3	50	2	●
HM-2BS-R0.80		0,8	1,6	4	2,5	50	2	●
HM-2BS-R0.90		0,9	1,8	4	2,7	50	2	●
HM-2BS-R1.00		1	2	4	3	50	2	●
HM-2BS-R1.25		1,25	2,5	4	3,7	50	2	●
HM-2BS-R1.50		1,5	3	4	4,5	50	2	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
					✔

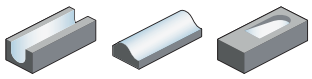
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série HM

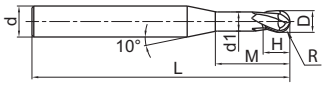
Fraise carbure monobloc — Usinage de matériaux durs

HM-2BP



– Attachement cylindrique
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm) R	D	d (h6)	d_1	H	M	L	Dents	Nuance KMG555
HM-2BP-R0.25-M04		0,25	0,5	4	0,45	0,7	4	50	2	●
HM-2BP-R0.25-M06		0,25	0,5	4	0,45	0,7	6	50	2	●
HM-2BP-R0.3-M04		0,3	0,6	4	0,55	0,9	4	50	2	●
HM-2BP-R0.3-M06		0,3	0,6	4	0,55	0,9	6	50	2	●
HM-2BP-R0.3-M08		0,3	0,6	4	0,55	0,9	8	50	2	●
HM-2BP-R0.4-M04		0,4	0,8	4	0,75	1,2	4	50	2	●
HM-2BP-R0.4-M06		0,4	0,8	4	0,75	1,2	6	50	2	●
HM-2BP-R0.4-M08		0,4	0,8	4	0,75	1,2	8	50	2	●
HM-2BP-R0.4-M10		0,4	0,8	4	0,75	1,2	10	50	2	●
HM-2BP-R0.5-M04		0,5	1	4	0,95	1,5	4	50	2	●
HM-2BP-R0.5-M06		0,5	1	4	0,95	1,5	6	50	2	●
HM-2BP-R0.5-M08		0,5	1	4	0,95	1,5	8	50	2	●
HM-2BP-R0.5-M10		0,5	1	4	0,95	1,5	10	50	2	●
HM-2BP-R0.5-M12		0,5	1	4	0,95	1,5	12	50	2	●
HM-2BP-R0.6-M06		0,6	1,2	4	1,15	1,8	6	50	2	●
HM-2BP-R0.6-M08		0,6	1,2	4	1,15	1,8	8	50	2	●
HM-2BP-R0.6-M12		0,6	1,2	4	1,15	1,8	12	50	2	●
HM-2BP-R0.6-M16		0,6	1,2	4	1,15	1,8	16	50	2	●
HM-2BP-R0.75-M08		0,75	1,5	4	1,45	2,3	8	50	2	●
HM-2BP-R0.75-M12		0,75	1,5	4	1,45	2,3	12	50	2	●
HM-2BP-R0.75-M16		0,75	1,5	4	1,45	2,3	16	50	2	●
HM-2BP-R1.0-M06		1	2	4	1,95	3	6	50	2	●
HM-2BP-R1.0-M08		1	2	4	1,95	3	8	50	2	●
HM-2BP-R1.0-M10		1	2	4	1,95	3	10	50	2	●
HM-2BP-R1.0-M12		1	2	4	1,95	3	12	50	2	●
HM-2BP-R1.0-M16		1	2	4	1,95	3	16	50	2	●
HM-2BP-R1.0-M20		1	2	4	1,95	3	20	50	2	●
HM-2BP-R1.25-M08		1,25	2,5	4	2,4	3,7	8	50	2	●
HM-2BP-R1.25-M12		1,25	2,5	4	2,4	3,7	12	50	2	●
HM-2BP-R1.25-M16		1,25	2,5	4	2,4	3,7	16	60	2	●
HM-2BP-R1.25-M20		1,25	2,5	4	2,4	3,7	20	60	2	●
HM-2BP-R1.5-M08		1,5	3	6	2,85	4,5	8	50	2	●
HM-2BP-R1.5-M10		1,5	3	6	2,85	4,5	10	50	2	●
HM-2BP-R1.5-M12		1,5	3	6	2,85	4,5	12	50	2	●
HM-2BP-R1.5-M16		1,5	3	6	2,85	4,5	16	60	2	●
HM-2BP-R1.5-M20		1,5	3	6	2,85	4,5	20	60	2	●
HM-2BP-R2.0-M10		2	4	6	3,85	6	10	60	2	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

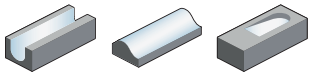
P	M	K	N	S	H
					✔

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

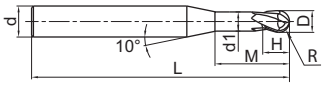
Fraise carbure monobloc — Usinage de matériaux durs

HM-2BP



– Attachement cylindrique
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm)							Dents	Nuance
		R	D	d (h6)	d_1	H	M	L		KMG555
HM-2BP-R2.0-M16		2	4	6	3,85	6	16	60	2	●
HM-2BP-R2.0-M20		2	4	6	3,85	6	20	60	2	●
HM-2BP-R2.0-M25		2	4	6	3,85	6	25	60	2	●
HM-2BP-R2.5-M16		2,5	5	6	4,85	7,5	16	60	2	●
HM-2BP-R2.5-M25		2,5	5	6	4,85	7,5	25	70	2	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
					✔

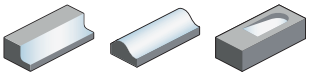
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série HM

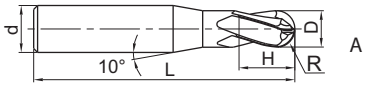
Fraise hémisphérique — Usinage de matériaux durs

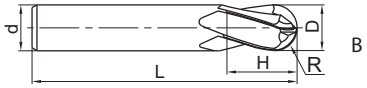
HM-4B



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°







Article	✲	Dimensions (mm) R	D	d (h6)	H	L	Dents	Géométrie	Nuance KMG555
HM-4B-R1.5		1,5	3	6	6	50	4	A	●
HM-4B-R2.0		2	4	6	8	50	4	A	●
HM-4B-R2.5		2,5	5	6	10	50	4	A	●
HM-4B-R3.0		3	6	6	12	50	4	B	●
HM-4B-R4.0		4	8	8	16	60	4	B	●
HM-4B-R5.0		5	10	10	20	75	4	B	●
HM-4B-R6.0		6	12	12	24	75	4	B	●
HM-4B-R7.0		7	14	14	28	75	4	B	●
HM-4B-R8.0		8	16	16	32	100	4	B	●
HM-4B-R9.0		9	18	18	36	100	4	B	●
HM-4B-R10.0		10	20	20	40	100	4	B	●

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
					✔

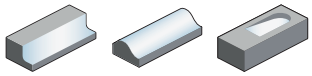
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraise hémisphérique, grande longueur taillée

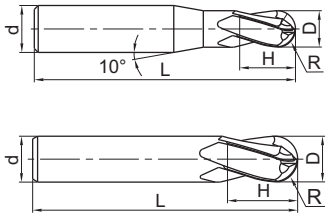
Usinage de matériaux durs

HM-4BL



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm)					Dents	Géométrie	Nuance
		R	D	d (h6)	H	L			KMG555
HM-4BL-R1.5		1,5	3	6	6	75	4	A	●
HM-4BL-R2.0		2	4	6	8	75	4	A	●
HM-4BL-R2.5		2,5	5	6	10	75	4	A	●
HM-4BL-R3.0		3	6	6	12	75	4	B	●
HM-4BL-R4.0		4	8	8	16	100	4	B	●
HM-4BL-R5.0		5	10	10	20	100	4	B	●
HM-4BL-R6.0		6	12	12	24	100	4	B	●
HM-4BL-R7.0		7	14	14	28	100	4	B	●
HM-4BL-R8.0		8	16	16	32	150	4	B	●
HM-4BL-R9.0		9	18	18	36	150	4	B	●
HM-4BL-R10.0		10	20	20	40	150	4	B	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
					✔

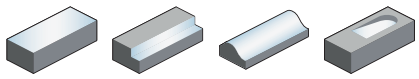
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraises carbure monobloc Série HM

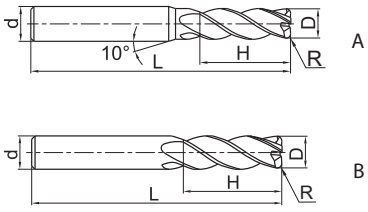
Fraise torique — Usinage de matériaux durs

HM-4R



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm) R	D	d (h6)	H	L	Dents	Géométrie	Nuance KMG555
HM-4R-D3.0R0.2		0,2	3	4	8	50	4	A	●
HM-4R-D4.0R0.3		0,3	4	4	10	50	4	B	●
HM-4R-D4.0R0.5		0,5	4	4	10	50	4	B	●
HM-4R-D5.0R0.5		0,5	5	6	13	50	4	A	●
HM-4R-D5.0R1.0		1	5	6	13	50	4	A	●
HM-4R-D6.0R0.5		0,5	6	6	16	50	4	B	●
HM-4R-D6.0R1.0		1	6	6	16	50	4	B	●
HM-4R-D8.0R0.5		0,5	8	8	20	60	4	B	●
HM-4R-D8.0R1.0		1	8	8	20	60	4	B	●
HM-4R-D10.0R0.5		0,5	10	10	25	75	4	B	●
HM-4R-D10.0R1.0		1	10	10	25	75	4	B	●
HM-4R-D10.0R2.0		2	10	10	25	75	4	B	●
HM-4R-D10.0R3.0		3	10	10	25	75	4	B	●
HM-4R-D12.0R0.5		0,5	12	12	30	75	4	B	●
HM-4R-D12.0R1.0		1	12	12	30	75	4	B	●
HM-4R-D12.0R2.0		2	12	12	30	75	4	B	●
HM-4R-D12.0R3.0		3	12	12	30	75	4	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

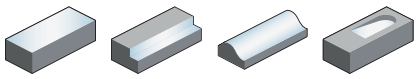
P	M	K	N	S	H
					✔

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

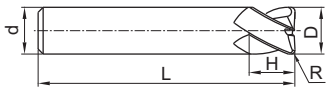
Fraise torique, petite longueur taillée — Usinage de matériaux durs

HM-4RF



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm)					Dents	Nuance
		R	D	d (h6)	H	L		KMG555
HM-4RF-D6.0R0.5		0,5	6	6	6	50	4	○
HM-4RF-D6.0R1.0		1	6	6	6	50	4	○
HM-4RF-D8.0R0.5		0,5	8	8	8	60	4	○
HM-4RF-D8.0R1.0		1	8	8	8	60	4	○
HM-4RF-D10.0R1.0		1	10	10	10	75	4	○
HM-4RF-D10.0R2.0		2	10	10	10	75	4	○
HM-4RF-D12.0R0.5		0,5	12	12	12	75	4	○
HM-4RF-D12.0R1.0		1	12	12	12	75	4	○
HM-4RF-D12.0R2.0		2	12	12	12	75	4	○

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

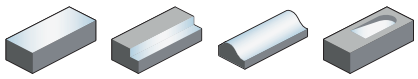
P	M	K	N	S	H
					✔

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

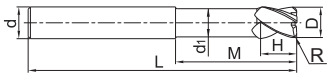
Fraise torique, attachement long — Usinage de matériaux durs

HM-4RP



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm) R	D	d (h6)	d_1	H	M	L	Dents	Nuance KMG555
HM-4RP-D6.0R0.5		0,5	6	6	5,8	6	18	75	4	○
HM-4RP-D6.0R1.0		1	6	6	5,8	6	18	75	4	○
HM-4RP-D8.0R0.5		0,5	8	8	7,8	8	24	100	4	○
HM-4RP-D8.0R1.0		1	8	8	7,8	8	24	100	4	○
HM-4RP-D10.0R0.5		0,5	10	10	9,6	10	30	100	4	○
HM-4RP-D10.0R1.0		1	10	10	9,6	10	30	100	4	○
HM-4RP-D10.0R2.0		2	10	10	9,6	10	30	100	4	○
HM-4RP-D12.0R0.5		0,5	12	12	11,5	12	36	100	4	○
HM-4RP-D12.0R1.0		1	12	12	11,5	12	36	100	4	○
HM-4RP-D12.0R2.0		2	12	12	11,5	12	36	100	4	○
HM-4RP-D16.0R1.0		1	16	16	15,5	16	40	150	4	●
HM-4RP-D16.0R2.0		2	16	16	15,5	16	40	150	4	○

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

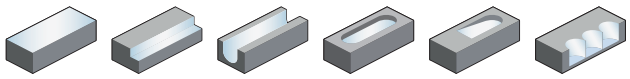
P	M	K	N	S	H
					✔

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

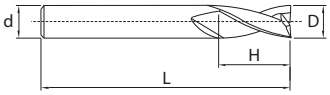
Fraise carbure monobloc — Semi-finition de métaux non ferreux

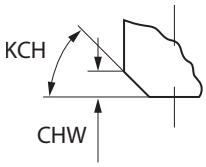
5502R402NM



– Type d'attachement : DIN 6535HA
– Coupe au centre
– Angle d'hélice 40°







Article	✻	Dimensions (mm)						Dents	Nuance
		D	d (h6)	H	L	KCH	CHW		YK30F
5502R402NM-0300		3	6	8	57	0	0	2	●
5502R402NM-0400		4	6	11	57	0	0	2	●
5502R402NM-0500		5	6	13	57	0	0	2	●
5502R402NM-0600		6	6	13	57	45	0,1	2	●
5502R402NM-0800		8	8	19	63	45	0,1	2	●
5502R402NM-1000		10	10	22	72	45	0,1	2	●
5502R402NM-1200		12	12	26	83	45	0,1	2	●
5502R402NM-1400		14	14	26	83	45	0,15	2	●
5502R402NM-1600		16	16	32	92	45	0,15	2	●
5502R402NM-1800		18	18	32	92	45	0,15	2	●
5502R402NM-2000		20	20	38	104	45	0,15	2	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
			✔		

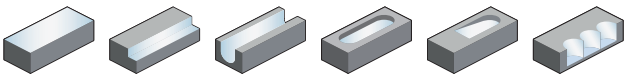
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraises carbure monobloc Série NM

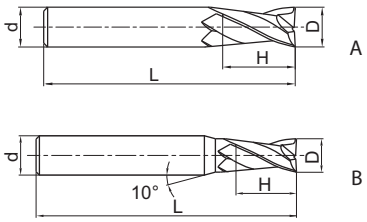
Fraise carbure monobloc — Semi-finition de métaux non ferreux

NM-2E



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✲	Dimensions (mm) D	d (h6)	H	L	Dents	Géométrie	Nuance KMG309
NM-2E-D1.0		1	4	3	50	2	A	●
NM-2E-D2.0		2	4	6	50	2	A	●
NM-2E-D3.0		3	6	8	50	2	A	●
NM-2E-D4.0		4	6	11	50	2	A	●
NM-2E-D5.0		5	6	13	50	2	A	●
NM-2E-D6.0		6	6	16	50	2	B	●
NM-2E-D8.0		8	8	20	60	2	B	●
NM-2E-D10.0		10	10	25	75	2	B	●
NM-2E-D12.0		12	12	30	75	2	B	●

● En stock ○ Sur demande

✲ Avec arrosage interne

Domaine d'utilisation

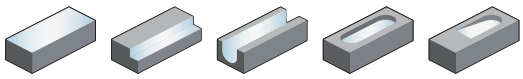
P	M	K	N	S	H
			✔		

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

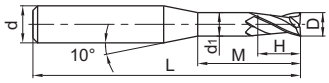
Fraise carbure monobloc — Semi-finition de métaux non ferreux

NM-2EP



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm)						Dents	Nuance
		D	d (h6)	d_1	H	M	L		KMG309
NM-2EP-D0.5-M06		0,5	4	0,45	0,7	6	50	2	●
NM-2EP-D0.5-M04		0,5	4	0,45	0,7	4	50	2	●
NM-2EP-D0.5-M08		0,5	4	0,45	0,7	8	50	2	●
NM-2EP-D0.8-M04		0,8	4	0,75	1,2	4	50	2	●
NM-2EP-D0.8-M06		0,8	4	0,75	1,2	6	50	2	●
NM-2EP-D0.8-M10		0,8	4	0,75	1,2	10	50	2	●
NM-2EP-D0.8-M08		0,8	4	0,75	1,2	8	50	2	●
NM-2EP-D1.0-M06		1	4	0,95	1,5	6	50	2	●
NM-2EP-D1.0-M14		1	4	0,95	1,5	14	50	2	●
NM-2EP-D1.0-M10		1	4	0,95	1,5	10	50	2	●
NM-2EP-D1.0-M08		1	4	0,95	1,5	8	50	2	●
NM-2EP-D1.0-M12		1	4	0,95	1,5	12	50	2	●
NM-2EP-D1.0-M04		1	4	0,95	1,5	4	50	2	●
NM-2EP-D1.5-M08		1,5	4	1,45	2,3	8	50	2	●
NM-2EP-D1.5-M16		1,5	4	1,45	2,3	16	50	2	●
NM-2EP-D2.0-M10		2	4	1,95	3	10	50	2	●
NM-2EP-D2.0-M14		2	4	1,95	3	14	50	2	●
NM-2EP-D2.0-M12		2	4	1,95	3	12	50	2	●
NM-2EP-D2.0-M16		2	4	1,95	3	16	50	2	●
NM-2EP-D2.0-M06		2	4	1,95	3	6	50	2	●
NM-2EP-D2.0-M08		2	4	1,95	3	8	50	2	●
NM-2EP-D2.5-M10		2,5	4	2,4	3,7	10	50	2	●
NM-2EP-D2.5-M20		2,5	4	2,4	3,7	20	60	2	●
NM-2EP-D3.0-M20		3	6	2,85	4,5	20	60	2	●
NM-2EP-D3.0-M10		3	6	2,85	4,5	10	50	2	●
NM-2EP-D4.0-M16		4	6	3,85	6	16	60	2	●
NM-2EP-D4.0-M25		4	6	3,85	6	25	60	2	●
NM-2EP-D5.0-M25		5	6	4,85	7,5	25	70	2	●
NM-2EP-D5.0-M16		5	6	4,85	7,5	16	60	2	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
			✔		

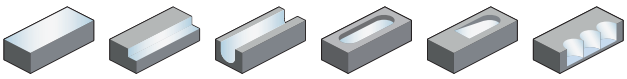
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraises carbure monobloc Série NM

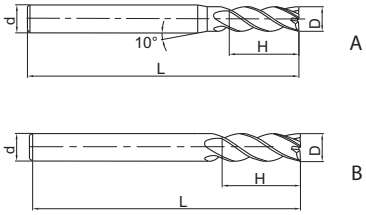
Fraise carbure monobloc — Semi-finition de métaux non ferreux

NM-4E



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm) D	d (h6)	H	L	Dents	Géométrie	Nuance KMG309
NM-4E-D3.0		3	6	8	50	4	A	●
NM-4E-D4.0		4	6	11	50	4	A	●
NM-4E-D5.0		5	6	13	50	4	A	●
NM-4E-D6.0		6	6	16	50	4	B	●
NM-4E-D8.0		8	8	20	60	4	B	●
NM-4E-D10.0		10	10	25	75	4	B	●
NM-4E-D12.0		12	12	30	75	4	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

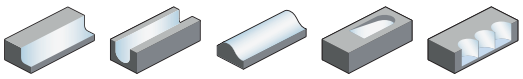
P	M	K	N	S	H
			✔		

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

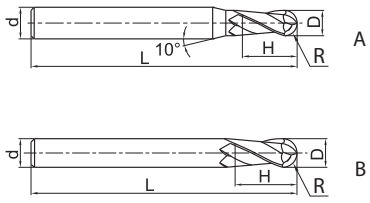
Fraise hémisphérique — Semi-finition de métaux non ferreux

NM-2B



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm) R	D	d (h6)	H	L	Dents	Géométrie	Nuance KMG309
NM-2B-R0.5		0,5	1	4	2	50	2	A	●
NM-2B-R0.75		0,75	1,5	4	3	50	2	A	●
NM-2B-R1.0		1	2	4	4	50	2	A	●
NM-2B-R1.25		1,25	2,5	4	5	50	2	A	●
NM-2B-R1.5		1,5	3	6	6	50	2	A	●
NM-2B-R1.75		1,75	3,5	6	8	50	2	A	●
NM-2B-R2.0		2	4	6	8	50	2	A	●
NM-2B-R2.5		2,5	5	6	10	50	2	A	●
NM-2B-R3.0		3	6	6	12	50	2	B	●
NM-2B-R4.0		4	8	8	16	60	2	B	●
NM-2B-R5.0		5	10	10	20	75	2	B	●
NM-2B-R6.0		6	12	12	24	75	2	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
			✔		

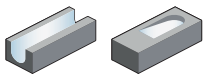
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraises carbure monobloc Série NM

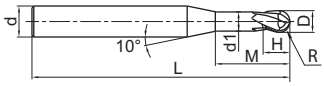
Fraise hémisphérique — Semi-finition de métaux non ferreux

NM-2BP



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm) R	D	d (h6)	d_1	H	M	L	Dents	Nuance KMG309
NM-2BP-R0.25-M04		0,25	0,5	4	0,45	0,7	4	50	2	●
NM-2BP-R0.25-M06		0,25	0,5	4	0,45	0,7	6	50	2	●
NM-2BP-R0.3-M04		0,3	0,6	4	0,55	0,9	4	50	2	●
NM-2BP-R0.3-M06		0,3	0,6	4	0,55	0,9	6	50	2	●
NM-2BP-R0.3-M08		0,3	0,6	4	0,55	0,9	8	50	2	●
NM-2BP-R0.4-M04		0,4	0,8	4	0,75	1,2	4	50	2	●
NM-2BP-R0.4-M06		0,4	0,8	4	0,75	1,2	6	50	2	●
NM-2BP-R0.4-M08		0,4	0,8	4	0,75	1,2	8	50	2	●
NM-2BP-R0.4-M10		0,4	0,8	4	0,75	1,2	10	50	2	●
NM-2BP-R0.5-M04		0,5	1	4	0,95	1,5	4	50	2	●
NM-2BP-R0.5-M06		0,5	1	4	0,95	1,5	6	50	2	●
NM-2BP-R0.5-M08		0,5	1	4	0,95	1,5	8	50	2	●
NM-2BP-R0.5-M10		0,5	1	4	0,95	1,5	10	50	2	●
NM-2BP-R0.5-M12		0,5	1	4	0,95	1,5	12	50	2	●
NM-2BP-R0.75-M08		0,75	1,5	4	1,45	2,3	8	50	2	●
NM-2BP-R0.75-M16		0,75	1,5	4	1,45	2,3	16	50	2	●
NM-2BP-R1.0-M06		1	2	4	1,95	3	6	50	2	●
NM-2BP-R1.0-M08		1	2	4	1,95	3	8	50	2	●
NM-2BP-R1.0-M10		1	2	4	1,95	3	10	50	2	●
NM-2BP-R1.0-M12		1	2	4	1,95	3	12	50	2	●
NM-2BP-R1.0-M16		1	2	4	1,95	3	16	50	2	●
NM-2BP-R1.0-M20		1	2	4	1,95	3	20	60	2	●
NM-2BP-R1.5-M10		1,5	3	6	2,85	4,5	10	50	2	●
NM-2BP-R1.5-M20		1,5	3	6	2,85	4,5	20	60	2	●
NM-2BP-R2.0-M10		2	4	6	3,85	6	10	60	2	●
NM-2BP-R2.0-M16		2	4	6	3,85	6	16	60	2	●
NM-2BP-R2.0-M20		2	4	6	3,85	6	20	60	2	●
NM-2BP-R2.0-M25		2	4	6	3,85	6	25	60	2	●
NM-2BP-R2.5-M16		2,5	5	6	4,85	7,5	16	60	2	●
NM-2BP-R2.5-M25		2,5	5	6	4,85	7,5	25	70	2	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

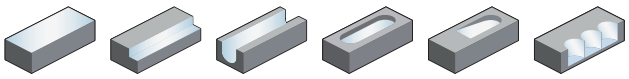
P	M	K	N	S	H
			✔		

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

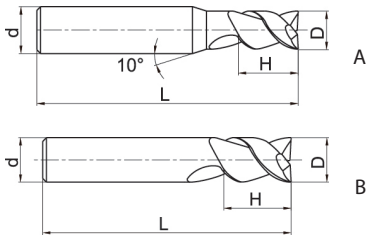
Fraise carbure monobloc — Usinage général d'Alu. et d'alliages d'Alu.

AL-2E



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 55°





Article	✻	Dimensions (mm) D	d (h6)	H	L	Dents	Géométrie	Nuance YK30F
AL-2E-D1.0		1	4	3	50	2	A	●
AL-2E-D1.5		1,5	4	4	50	2	A	●
AL-2E-D2.0		2	4	6	50	2	A	●
AL-2E-D2.5		2,5	4	7	50	2	A	●
AL-2E-D3.0		3	6	9	50	2	A	●
AL-2E-D4.0		4	6	12	50	2	A	●
AL-2E-D5.0		5	6	15	50	2	A	●
AL-2E-D6.0		6	6	18	60	2	B	●
AL-2E-D8.0		8	8	20	60	2	B	●
AL-2E-D10.0		10	10	30	75	2	B	●
AL-2E-D12.0		12	12	32	75	2	B	●
AL-2E-D16.0		16	16	45	100	2	B	●
AL-2E-D20.0		20	20	45	100	2	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

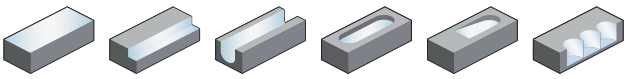
P	M	K	N	S	H
			✔		

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

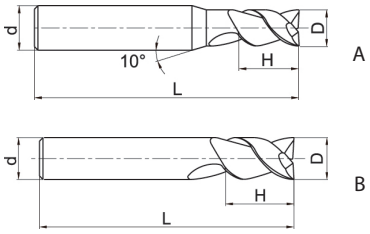
Fraise à grande longueur taillée — Usinage général d'Alu. et d'alliages d'Alu.

AL-2EL



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 55°





Article	✲	Dimensions (mm) D	d (h6)	H	L	Dents	Géométrie	Nuance YK30F
AL-2EL-D3.0		3	6	12	60	2	A	●
AL-2EL-D4.0		4	6	16	60	2	A	●
AL-2EL-D5.0		5	6	20	60	2	A	●
AL-2EL-D6.0		6	6	25	75	2	B	●
AL-2EL-D8.0		8	8	32	75	2	B	●
AL-2EL-D10.0		10	10	45	100	2	B	●
AL-2EL-D12.0		12	12	45	100	2	B	●
AL-2EL-D16.0		16	16	65	150	2	B	●
AL-2EL-D20.0		20	20	75	150	2	B	●

● En stock ○ Sur demande

✲ Avec arrosage interne

Domaine d'utilisation

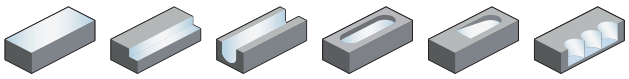
P	M	K	N	S	H
			✔		

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

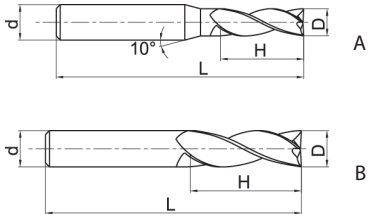
Fraise carbure monobloc — Usinage général d'Alu. et d'alliages d'Alu.

AL-3E



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 45°





Article	✻	Dimensions (mm)				Dents	Géométrie	Nuance
		D	d (h6)	H	L			YK30F
AL-3E-D1.0		1	4	3	50	3	A	●
AL-3E-D1.5		1,5	4	4	50	3	A	●
AL-3E-D2.0		2	4	6	50	3	A	●
AL-3E-D2.5		2,5	4	7	50	3	A	●
AL-3E-D3.0		3	6	9	50	3	A	●
AL-3E-D4.0		4	6	12	50	3	A	●
AL-3E-D5.0		5	6	15	50	3	A	●
AL-3E-D6.0		6	6	18	60	3	B	●
AL-3E-D8.0		8	8	20	60	3	B	●
AL-3E-D10.0		10	10	30	75	3	B	●
AL-3E-D12.0		12	12	32	75	3	B	●
AL-3E-D16.0		16	16	45	100	3	B	●
AL-3E-D20.0		20	20	45	100	3	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
			✔		

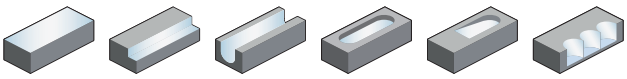
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraises carbure monobloc Série AL

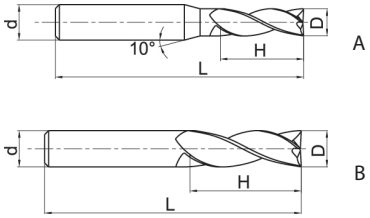
Fraise à grande longueur taillée — Usinage général d'Alu. et d'alliages d'Alu.

AL-3EL



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 45°





Article	✲	Dimensions (mm) D	d (h6)	H	L	Dents	Géométrie	Nuance YK30F
AL-3EL-D3.0		3	6	12	60	3	A	●
AL-3EL-D4.0		4	6	16	60	3	A	●
AL-3EL-D5.0		5	6	20	60	3	A	●
AL-3EL-D6.0		6	6	25	75	3	B	●
AL-3EL-D8.0		8	8	32	75	3	B	●
AL-3EL-D10.0		10	10	45	100	3	B	●
AL-3EL-D12.0		12	12	45	100	3	B	●
AL-3EL-D16.0		16	16	65	150	3	B	●
AL-3EL-D20.0		20	20	75	150	3	B	●

● En stock ○ Sur demande

✲ Avec arrosage interne

Domaine d'utilisation

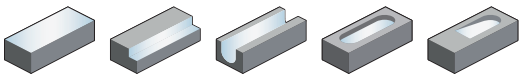
P	M	K	N	S	H
			✔		

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

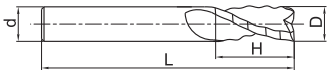
Fraise carbure monobloc, profil d'ébauche — Usinage général d'Alu. et d'alliages d'Alu.

AL-3W



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





Article	✻	Dimensions (mm)				Dents	Nuance
		D	d (h6)	H	L		YK30F
AL-3W-D6.0		6	6	16	50	3	●
AL-3W-D8.0		8	8	20	60	3	●
AL-3W-D10.0		10	10	25	75	3	●
AL-3W-D12.0		12	12	30	75	3	●
AL-3W-D16.0		16	16	45	100	3	●
AL-3W-D18.0		18	18	45	100	3	○
AL-3W-D20.0		20	20	45	100	3	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

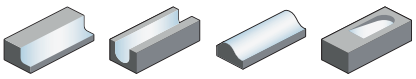
P	M	K	N	S	H
			✔		

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

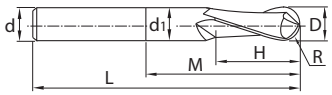
Fraise hémisphérique — Usinage haute performance de métaux non ferreux

5565R302NH



– Type d'attachement : DIN 6535HA
– Coupe au centre
– Angle d'hélice 30°





Article	✻	Dimensions (mm)							Dents	Nuance
		D	R	d (h6)	d_1	H	M	L		YK40F
5565R302NH-0300		3	1,5	6	2,8	6	9	57	2	●
5565R302NH-0400		4	2	6	3,7	8	12	57	2	●
5565R302NH-0500		5	2,5	6	4,6	10	15	57	2	●
5565R302NH-0600		6	3	6	5,5	12	20	57	2	●
5565R302NH-0800		8	4	8	7,4	16	26	63	2	●
5565R302NH-1000		10	5	10	9,2	20	31	72	2	●
5565R302NH-1200		12	6	12	11	24	37	83	2	●
5565R302NH-1600		16	8	16	15	32	43	92	2	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
			✔		

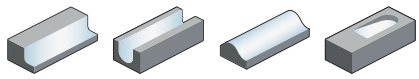
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraise sphérique, attachement long

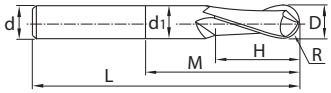
Usinage haute performance de métaux non ferreux

5566R302NH



– Type d'attachement : DIN 6535HA
– Coupe au centre
– Angle d'hélice 30°





Article	✻	Dimensions (mm)							Dents	Nuance
		D	R	d (h6)	d_1	H	M	L		YK40F
5566R302NH-0300		3	1,5	6	2,8	6	9	75	2	●
5566R302NH-0400		4	2	6	3,7	8	12	75	2	●
5566R302NH-0500		5	2,5	6	4,6	10	15	80	2	●
5566R302NH-0600		6	3	6	5,5	12	20	80	2	●
5566R302NH-0800		8	4	8	7,4	16	26	90	2	●
5566R302NH-1000		10	5	10	9,2	20	31	100	2	●
5566R302NH-1200		12	6	12	11	24	37	120	2	●
5566R302NH-1600		16	8	16	15	32	43	140	2	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
			✔		

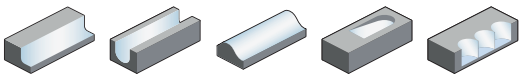
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraises carbure monobloc Série AL

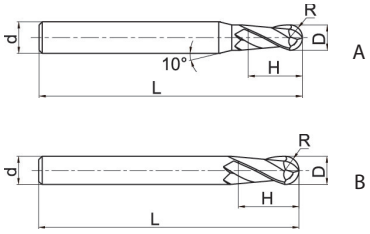
Fraise hémisphérique — Usinage général d'Alu. et d'alliages d'Alu.

AL-2B



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✲	Dimensions (mm) R	D	d (h6)	H	L	Dents	Géométrie	Nuance YK30F
AL-2B-R1.0		1	2	6	4	60	2	A	○
AL-2B-R1.5		1,5	3	6	6	60	2	A	○
AL-2B-R2.0		2	4	6	8	60	2	A	○
AL-2B-R2.5		2,5	5	6	10	60	2	A	○
AL-2B-R3.0		3	6	6	12	60	2	B	○
AL-2B-R4.0		4	8	8	16	75	2	B	○
AL-2B-R5.0		5	10	10	20	75	2	B	○
AL-2B-R6.0		6	12	12	24	75	2	B	○

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

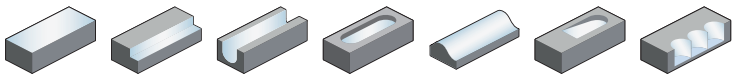
P	M	K	N	S	H
			✔		

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

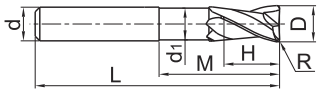
Fraise torique — Usinage général d'Alu. et d'alliages d'Alu.

AL-2R-AIR



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





Article	✻	Dimensions (mm)							Dents	Nuance
		R	D	d (h6)	d_1	H	M	L		YK40F
AL-2R-D6.0R1.0-AIR		1	6	6	5,5	7	20	57	2	●
AL-2R-D8.0R1.0-AIR		1	8	8	7,4	9	26	63	2	●
AL-2R-D10.0R1.0-AIR		1	10	10	9,2	11	31	72	2	○
AL-2R-D10.0R2.0-AIR		2	10	10	9,2	11	31	72	2	○
AL-2R-D12.0R1.0-AIR		1	12	12	11	12	37	83	2	●
AL-2R-D12.0R2.0-AIR		2	12	12	11	12	37	83	2	○
AL-2R-D12.0R3.0-AIR		3	12	12	11	12	37	83	2	○
AL-2R-D16.0R1.0-AIR		1	16	16	15	16	43	92	2	○
AL-2R-D16.0R2.0-AIR		2	16	16	15	16	43	92	2	○
AL-2R-D16.0R3.0-AIR		3	16	16	15	16	43	92	2	○
AL-2R-D16.0R4.0-AIR		4	16	16	15	16	43	92	2	○
AL-2R-D20.0R1.0-AIR		1	20	20	19	20	53	104	2	●
AL-2R-D20.0R2.0-AIR		2	20	20	19	20	53	104	2	○
AL-2R-D20.0R3.0-AIR		3	20	20	19	20	53	104	2	○
AL-2R-D20.0R4.0-AIR		4	20	20	19	20	53	104	2	○
AL-2R-D20.0R5.0-AIR		5	20	20	19	20	53	104	2	●
AL-2R-D20.0R6.0-AIR		6	20	20	19	20	53	104	2	○

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
			✔		

✔ Choix de base
✔ Alternative

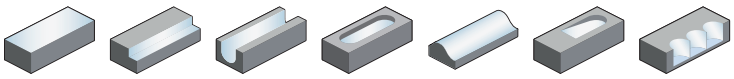
Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série AL

Fraise torique, attachement long

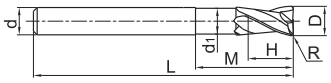
Usinage général d'Alu. et d'alliages d'Alu.

AL-2RL-AIR



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





Article	✻	Dimensions (mm)							Dents	Nuance
		R	D	d (h6)	d_1	H	M	L		YK40F
AL-2RL-D6.0R1.0-AIR		1	6	6	5,5	7	43	80	2	●
AL-2RL-D8.0R1.0-AIR		1	8	8	7,4	9	53	90	2	●
AL-2RL-D10.0R1.0-AIR		1	10	10	9,2	11	59	100	2	●
AL-2RL-D10.0R2.0-AIR		2	10	10	9,2	11	59	100	2	●
AL-2RL-D12.0R1.0-AIR		1	12	12	11	12	74	120	2	●
AL-2RL-D12.0R2.0-AIR		2	12	12	11	12	74	120	2	●
AL-2RL-D12.0R3.0-AIR		3	12	12	11	12	74	120	2	●
AL-2RL-D16.0R1.0-AIR		1	16	16	15	16	84	140	2	●
AL-2RL-D16.0R2.0-AIR		2	16	16	15	16	84	140	2	●
AL-2RL-D16.0R3.0-AIR		3	16	16	15	16	84	140	2	●
AL-2RL-D16.0R4.0-AIR		4	16	16	15	16	84	140	2	●
AL-2RL-D20.0R1.0-AIR		1	20	20	19	20	89	140	2	○
AL-2RL-D20.0R2.0-AIR		2	20	20	19	20	89	140	2	●
AL-2RL-D20.0R3.0-AIR		3	20	20	19	20	89	140	2	●
AL-2RL-D20.0R4.0-AIR		4	20	20	19	20	89	140	2	●
AL-2RL-D20.0R5.0-AIR		5	20	20	19	20	89	140	2	○
AL-2RL-D20.0R6.0-AIR		6	20	20	19	20	89	140	2	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

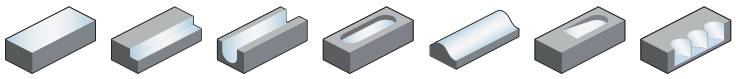
P	M	K	N	S	H
			✔		

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

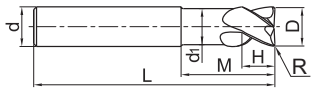
Fraise torique — Usinage général d'Alu. et d'alliages d'Alu.

AL-3R-AIR



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





Article	✻	Dimensions (mm)							Dents	Nuance
		R	D	d (h6)	d_1	H	M	L		YK40F
AL-3R-D12.0R1.0-AIR		1	12	12	11	12	37	83	3	●
AL-3R-D12.0R2.0-AIR		2	12	12	11	12	37	83	3	●
AL-3R-D12.0R3.0-AIR		3	12	12	11	12	37	83	3	●
AL-3R-D16.0R1.0-AIR		1	16	16	15	16	43	92	3	●
AL-3R-D16.0R2.0-AIR		2	16	16	15	16	43	92	3	●
AL-3R-D16.0R3.0-AIR		3	16	16	15	16	43	92	3	●
AL-3R-D16.0R4.0-AIR		4	16	16	15	16	43	92	3	●
AL-3R-D20.0R1.0-AIR		1	20	20	19	20	53	104	3	●
AL-3R-D20.0R2.0-AIR		2	20	20	19	20	53	104	3	○
AL-3R-D20.0R3.0-AIR		3	20	20	19	20	53	104	3	○
AL-3R-D20.0R4.0-AIR		4	20	20	19	20	53	104	3	○
AL-3R-D20.0R5.0-AIR		5	20	20	19	20	53	104	3	●
AL-3R-D20.0R6.0-AIR		6	20	20	19	20	53	104	3	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
			✔		

✔ Choix de base
✔ Alternative

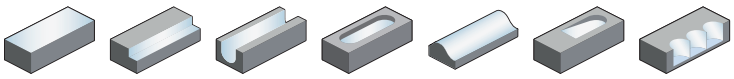
Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraises carbure monobloc Série AL

Fraise torique, attachement long

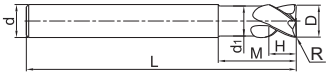
Usinage général d'Alu. et d'alliages d'Alu.

AL-3RL-AIR



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





Article	✻	Dimensions (mm)							Dents	Nuance
		R	D	d (h6)	d_1	H	M	L		YK40F
AL-3RL-D12.0R1.0-AIR		1	12	12	11	12	74	120	3	●
AL-3RL-D12.0R2.0-AIR		2	12	12	11	12	74	120	3	●
AL-3RL-D12.0R3.0-AIR		3	12	12	11	12	74	120	3	●
AL-3RL-D16.0R1.0-AIR		1	16	16	15	16	84	140	3	●
AL-3RL-D16.0R2.0-AIR		2	16	16	15	16	84	140	3	○
AL-3RL-D16.0R3.0-AIR		3	16	16	15	16	84	140	3	●
AL-3RL-D16.0R4.0-AIR		4	16	16	15	16	84	140	3	●
AL-3RL-D20.0R1.0-AIR		1	20	20	19	20	89	140	3	●
AL-3RL-D20.0R2.0-AIR		2	20	20	19	20	89	140	3	○
AL-3RL-D20.0R3.0-AIR		3	20	20	19	20	89	140	3	○
AL-3RL-D20.0R4.0-AIR		4	20	20	19	20	89	140	3	○
AL-3RL-D20.0R5.0-AIR		5	20	20	19	20	89	140	3	○
AL-3RL-D20.0R6.0-AIR		6	20	20	19	20	89	140	3	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

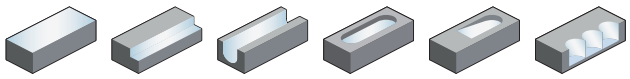
P	M	K	N	S	H
			✔		

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

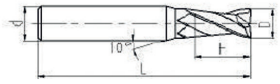
Fraise carbure monobloc — Usinage général d'Alu. et d'alliages d'Alu.

ALG-2E



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





A



B

Article	✻	Dimensions (mm)				Dents	Géométrie	Nuance
		D	d (h6)	H	L			YK40F
ALG-2E-D1.0		1	4	3	50	2	A	●
ALG-2E-D1.5		1,5	4	4	50	2	A	○
ALG-2E-D2.0		2	4	6	50	2	A	●
ALG-2E-D2.5		2,5	4	8	50	2	A	○
ALG-2E-D3.0S		3	4	8	50	2	A	●
ALG-2E-D3.5S		3,5	4	10	50	2	A	○
ALG-2E-D4.0S		4	4	11	50	2	B	○
ALG-2E-D3.0		3	6	8	50	2	A	●
ALG-2E-D3.5		3,5	6	10	50	2	A	○
ALG-2E-D4.0		4	6	11	50	2	A	●
ALG-2E-D4.5		4,5	6	11	50	2	A	○
ALG-2E-D5.0		5	6	13	50	2	A	●
ALG-2E-D5.5		5,5	6	16	50	2	A	○
ALG-2E-D6.0		6	6	16	50	2	B	●
ALG-2E-D7.0		7	8	20	60	2	A	○
ALG-2E-D8.0		8	8	20	60	2	B	●
ALG-2E-D9.0		9	10	22	75	2	A	○
ALG-2E-D10.0		10	10	25	75	2	B	●
ALG-2E-D11.0		11	12	26	75	2	A	○
ALG-2E-D12.0		12	12	30	75	2	B	●
ALG-2E-D14.0		14	14	32	75	2	B	●
ALG-2E-D16.0		16	16	45	100	2	B	●
ALG-2E-D18.0		18	18	45	100	2	B	○
ALG-2E-D20.0		20	20	45	100	2	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
			✔		

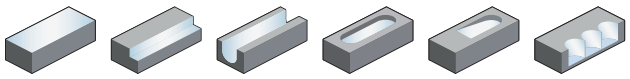
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraises carbure monobloc Série ALG/ALP

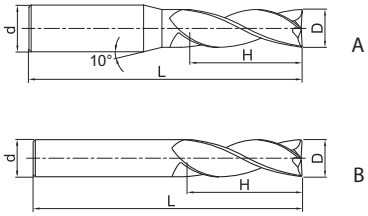
Fraise carbure monobloc — Usinage général d'Alu. et d'alliages d'Alu.

ALG-3E



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 45°





Article	✻	Dimensions (mm) D	d (h6)	H	L	Dents	Géométrie	Nuance KMD401	YK40F
ALG-3E-D1.0		1	4	3	50	3	A	○	●
ALG-3E-D1.5		1.5	4	4	50	3	A	○	●
ALG-3E-D2.0		2	4	6	50	3	A	○	●
ALG-3E-D2.5		2.5	4	8	50	3	A	○	○
ALG-3E-D3.0S		3	4	8	50	3	A	○	●
ALG-3E-D3.5S		3.5	4	10	50	3	A	○	○
ALG-3E-D4.0S		4	4	11	50	3	B	○	●
ALG-3E-D3.0		3	6	8	50	3	A	●	●
ALG-3E-D3.5		3.5	6	10	50	3	A	●	○
ALG-3E-D4.0		4	6	11	50	3	A	●	●
ALG-3E-D4.5		4.5	6	11	50	3	A	●	○
ALG-3E-D5.0		5	6	13	50	3	A	●	●
ALG-3E-D5.5		5.5	6	16	50	3	A	●	○
ALG-3E-D6.0		6	6	16	50	3	B	●	●
ALG-3E-D7.0		7	8	20	60	3	A	●	○
ALG-3E-D8.0		8	8	20	60	3	B	●	●
ALG-3E-D9.0		9	10	22	75	3	A	●	○
ALG-3E-D10.0		10	10	25	75	3	B	●	●
ALG-3E-D11.0		11	12	26	75	3	A	●	○
ALG-3E-D12.0		12	12	30	75	3	B	●	●
ALG-3E-D14.0		14	14	32	75	3	B	●	●
ALG-3E-D16.0		16	16	45	100	3	B	●	●
ALG-3E-D18.0		18	18	45	100	3	B	●	○
ALG-3E-D20.0		20	20	45	100	3	B	○	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
			✔		

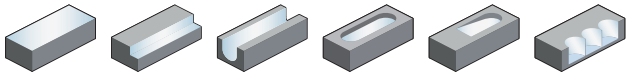
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraise carbure monobloc

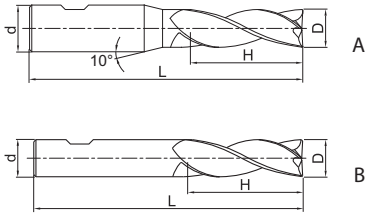
Usinage général d'Alu. et d'alliages d'Alu.

ALG-3E-W



– Attachement Weldon, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 45°





Article	✻	Dimensions (mm)				Dents	Géométrie	Nuance
		D	d (h6)	H	L			KMD401
ALG-3E-D3.0-W		3	6	8	50	3	A	●
ALG-3E-D3.5-W		3.5	6	10	50	3	A	●
ALG-3E-D4.0-W		4	6	11	50	3	A	●
ALG-3E-D4.5-W		4.5	6	11	50	3	A	●
ALG-3E-D5.0-W		5	6	13	50	3	A	●
ALG-3E-D5.5-W		5.5	6	16	50	3	A	●
ALG-3E-D6.0-W		6	6	16	50	3	B	●
ALG-3E-D7.0-W		7	8	20	60	3	A	●
ALG-3E-D8.0-W		8	8	20	60	3	B	●
ALG-3E-D9.0-W		9	10	22	75	3	A	●
ALG-3E-D10.0-W		10	10	25	75	3	B	●
ALG-3E-D11.0-W		11	12	26	75	3	A	●
ALG-3E-D12.0-W		12	12	30	75	3	B	●
ALG-3E-D14.0-W		14	14	32	75	3	B	●
ALG-3E-D16.0-W		16	16	45	100	3	B	●
ALG-3E-D18.0-W		18	18	45	100	3	B	●
ALG-3E-D20.0-W		20	20	45	100	3	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
			✔		

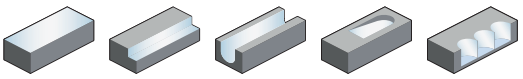
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraises carbure monobloc Série ALG/ALP

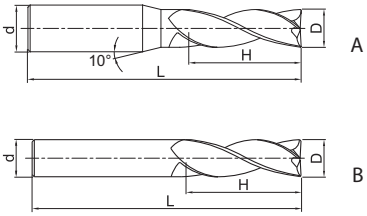
Fraise carbure monobloc — Usinage haute performance d'Aluminium et d'alliages d'Aluminium

ALP-3E



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✲	Dimensions (mm) D	d (h6)	H	L	Dents	Géométrie	Nuance KMD401	YK40F
ALP-3E-D1.0		1	4	3	50	3	A	○	○
ALP-3E-D1.5		1.5	4	4	50	3	A	○	●
ALP-3E-D2.0		2	4	6	50	3	A	○	●
ALP-3E-D2.5		2.5	4	8	50	3	A	○	○
ALP-3E-D3.0S		3	4	8	50	3	A	○	●
ALP-3E-D4.0S		4	4	11	50	3	B	○	●
ALP-3E-D3.0		3	6	8	50	3	A	●	●
ALP-3E-D4.0		4	6	11	50	3	A	●	●
ALP-3E-D4.5		4.5	6	11	50	3	A	●	○
ALP-3E-D5.0		5	6	13	50	3	A	●	●
ALP-3E-D5.5		5.5	6	16	50	3	A	●	○
ALP-3E-D6.0		6	6	16	50	3	B	●	●
ALP-3E-D7.0		7	8	20	60	3	B	●	○
ALP-3E-D8.0		8	8	20	60	3	B	●	●
ALP-3E-D9.0		9	10	22	75	3	B	●	○
ALP-3E-D10.0		10	10	25	75	3	B	●	●
ALP-3E-D11.0		11	12	26	75	3	B	●	●
ALP-3E-D12.0		12	12	30	75	3	B	●	●
ALP-3E-D14.0		14	14	32	75	3	B	●	●
ALP-3E-D16.0		16	16	45	100	3	B	●	●
ALP-3E-D20.0		20	20	45	100	3	B	●	○

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
			✔		

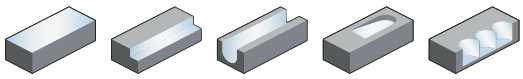
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraise carbure monobloc

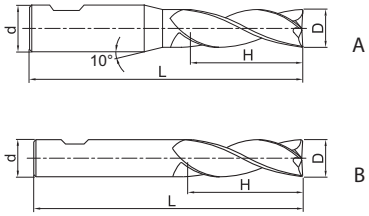
Usinage haute performance d'Aluminium et d'alliages d'Aluminium

ALP-3E-W



– Attachement Weldon, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm)				Dents	Géométrie	Nuance
		D	d (h6)	H	L			KMD401
ALP-3E-D3.0-W		3	6	8	50	3	A	●
ALP-3E-D4.0-W		4	6	11	50	3	A	●
ALP-3E-D4.5-W		4.5	6	11	50	3	A	●
ALP-3E-D5.0-W		5	6	13	50	3	A	●
ALP-3E-D5.5-W		5.5	6	16	50	3	A	●
ALP-3E-D6.0-W		6	6	16	50	3	B	●
ALP-3E-D7.0-W		7	8	20	60	3	B	●
ALP-3E-D8.0-W		8	8	20	60	3	B	●
ALP-3E-D9.0-W		9	10	22	75	3	B	●
ALP-3E-D10.0-W		10	10	25	75	3	B	●
ALP-3E-D11.0-W		11	12	26	75	3	B	●
ALP-3E-D12.0-W		12	12	30	75	3	B	●
ALP-3E-D14.0-W		14	14	32	75	3	B	●
ALP-3E-D16.0-W		16	16	45	100	3	B	●
ALP-3E-D20.0-W		20	20	45	100	3	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

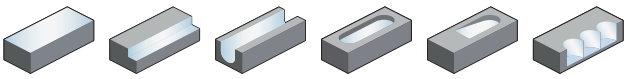
P	M	K	N	S	H
			✔		

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

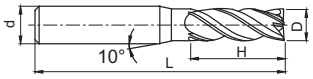
Fraise carbure monobloc — Usinage haute performance d'Aluminium et d'alliages d'Aluminium

ALP-4E

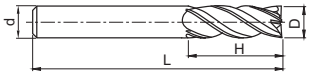


– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 38°





A



B

Article	✻	Dimensions (mm)				Dents	Géométrie	Nuance	
		D	d (h6)	H	L			KMD401	YK40F
ALP-4E-D3.0S		3	4	9	50	4	A	○	●
ALP-4E-D4.0S		4	4	11	50	4	B	○	●
ALP-4E-D3.0		3	6	9	50	4	A	●	●
ALP-4E-D4.0		4	6	11	50	4	A	●	●
ALP-4E-D5.0		5	6	13	50	4	A	●	●
ALP-4E-D6.0		6	6	16	50	4	B	●	●
ALP-4E-D8.0		8	8	20	60	4	B	●	●
ALP-4E-D10.0		10	10	25	75	4	B	●	●
ALP-4E-D12.0		12	12	30	75	4	B	●	●
ALP-4E-D16.0		16	16	45	100	4	B	●	●
ALP-4E-D18.0		18	18	45	100	4	B	●	○
ALP-4E-D20.0		20	20	45	100	4	B	●	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

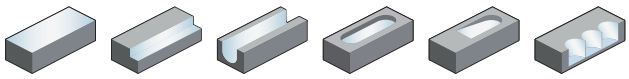
P	M	K	N	S	H
			✔		

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

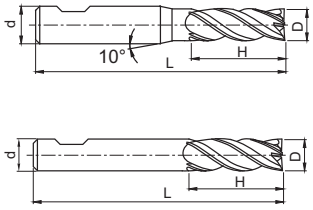
Fraise carbure monobloc — Usinage haute performance d'Aluminium et d'alliages d'Aluminium

ALP-4E-W



– Attachement Weldon, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 38°





Article	✻	Dimensions (mm) D	d (h6)	H	L	Dents	Géométrie	Nuance KMD401
ALP-4E-D3.0-W		3	6	9	50	4	A	●
ALP-4E-D4.0-W		4	6	11	50	4	A	●
ALP-4E-D5.0-W		5	6	13	50	4	A	●
ALP-4E-D6.0-W		6	6	16	50	4	B	●
ALP-4E-D8.0-W		8	8	20	60	4	B	●
ALP-4E-D10.0-W		10	10	25	75	4	B	●
ALP-4E-D12.0-W		12	12	30	75	4	B	●
ALP-4E-D16.0-W		16	16	45	100	4	B	●
ALP-4E-D18.0-W		18	18	45	100	4	B	●
ALP-4E-D20.0-W		20	20	45	100	4	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
			✔		

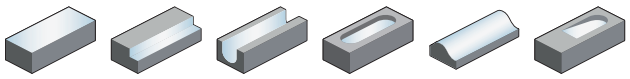
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraises carbure monobloc Série ALG/ALP

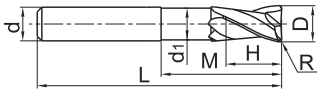
Fraise carbure monobloc — Usinage général d'Alu. et d'alliages d'Alu.

ALG-2R



– Attachement cylindrique
– Coupe au centre
– Angle d'hélice 30°





Article	✻	Dimensions (mm) R	D	d (h6)	d_1	H	M	L	Dents	Nuance KMD401	YK40F
ALG-2R-D6.0R0.3		0.3	6	6	5,7	8	16	75	2	●	●
ALG-2R-D6.0R0.5		0.5	6	6	5,7	8	16	75	2	●	●
ALG-2R-D6.0R1.0		1	6	6	5,7	8	16	75	2	●	●
ALG-2R-D8.0R0.3		0.3	8	8	7,4	10	20	75	2	●	●
ALG-2R-D8.0R0.5		0.5	8	8	7,4	10	20	75	2	●	●
ALG-2R-D8.0R1.0		1	8	8	7,4	10	20	75	2	●	●
ALG-2R-D10.0R0.5		0.5	10	10	9,4	12	35	100	2	●	●
ALG-2R-D10.0R1.0		1	10	10	9,4	12	35	100	2	●	●
ALG-2R-D10.0R1.6		1.6	10	10	9,4	12	35	100	2	●	●
ALG-2R-D10.0R2.5		2.5	10	10	9,4	12	35	100	2	●	●
ALG-2R-D12.0R0.5		0.5	12	12	11,4	15	35	100	2	●	●
ALG-2R-D12.0R1.0		1	12	12	11,4	15	35	100	2	●	●
ALG-2R-D12.0R1.6		1.6	12	12	11,4	15	35	100	2	●	●
ALG-2R-D12.0R2.5		2.5	12	12	11,4	15	35	100	2	●	●
ALG-2R-D12.0R3.2		3.2	12	12	11,4	15	35	100	2	●	●
ALG-2R-D12.0R4.0		4	12	12	11,4	15	35	100	2	●	●
ALG-2R-D16.0R1.0		1	16	16	15,4	15	45	125	2	●	●
ALG-2R-D16.0R1.6		1.6	16	16	15,4	15	45	125	2	●	●
ALG-2R-D16.0R2.5		2.5	16	16	15,4	15	45	125	2	●	●
ALG-2R-D16.0R3.2		3.2	16	16	15,4	15	45	125	2	●	●
ALG-2R-D16.0R4.0		4	16	16	15,4	15	45	125	2	●	●
ALG-2R-D16.0R6.3		6.3	16	16	15,4	15	45	125	2	○	○
ALG-2R-D20.0R1.0		1	20	20	18	20	50	125	2	●	●
ALG-2R-D20.0R1.6		1.6	20	20	18	20	50	125	2	●	●
ALG-2R-D20.0R2.5		2.5	20	20	18	20	50	125	2	●	●
ALG-2R-D20.0R3.2		3.2	20	20	18	20	50	125	2	●	●
ALG-2R-D20.0R4.0		4	20	20	18	20	50	125	2	●	●
ALG-2R-D20.0R6.3		6.3	20	20	18	20	50	125	2	○	○
ALG-2R-D25.0R6.3		6.3	25	25	23	25	75	150	2	○	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

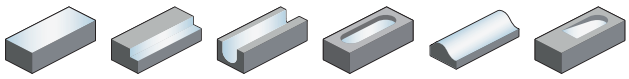
P	M	K	N	S	H
			✔		

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

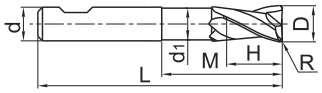
Fraise carbure monobloc — Usinage général d'Alu. et d'alliages d'Alu.

ALG-2R-W



– Attachement Weldon, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 30°





Article	✻	Dimensions (mm)							Dents	Nuance KMD401
		R	D	d (h6)	d_1	H	M	L		
ALG-2R-D6.0R0.3-W		0.3	6	6	5,7	8	16	75	2	●
ALG-2R-D6.0R0.5-W		0.5	6	6	5,7	8	16	75	2	●
ALG-2R-D6.0R1.0-W		1	6	6	5,7	8	16	75	2	●
ALG-2R-D8.0R0.3-W		0.3	8	8	7,4	10	20	75	2	●
ALG-2R-D8.0R0.5-W		0.5	8	8	7,4	10	20	75	2	●
ALG-2R-D8.0R1.0-W		1	8	8	7,4	10	20	75	2	●
ALG-2R-D10.0R0.5-W		0.5	10	10	9,4	12	35	100	2	●
ALG-2R-D10.0R1.0-W		1	10	10	9,4	12	35	100	2	●
ALG-2R-D10.0R1.6-W		1.6	10	10	9,4	12	35	100	2	●
ALG-2R-D10.0R2.5-W		2.5	10	10	9,4	12	35	100	2	●
ALG-2R-D12.0R0.5-W		0.5	12	12	11,4	15	35	100	2	●
ALG-2R-D12.0R1.0-W		1	12	12	11,4	15	35	100	2	●
ALG-2R-D12.0R1.6-W		1.6	12	12	11,4	15	35	100	2	●
ALG-2R-D12.0R2.5-W		2.5	12	12	11,4	15	35	100	2	●
ALG-2R-D12.0R3.2-W		3.2	12	12	11,4	15	35	100	2	●
ALG-2R-D12.0R4.0-W		4	12	12	11,4	15	35	100	2	●
ALG-2R-D16.0R1.0-W		1	16	16	15,4	15	45	125	2	●
ALG-2R-D16.0R1.6-W		1.6	16	16	15,4	15	45	125	2	●
ALG-2R-D16.0R2.5-W		2.5	16	16	15,4	15	45	125	2	●
ALG-2R-D16.0R3.2-W		3.2	16	16	15,4	15	45	125	2	●
ALG-2R-D16.0R4.0-W		4	16	16	15,4	15	45	125	2	●
ALG-2R-D16.0R6.3-W		6.3	16	16	15,4	15	45	125	2	○
ALG-2R-D20.0R1.0-W		1	20	20	18	20	50	125	2	●
ALG-2R-D20.0R1.6-W		1.6	20	20	18	20	50	125	2	●
ALG-2R-D20.0R2.5-W		2.5	20	20	18	20	50	125	2	●
ALG-2R-D20.0R3.2-W		3.2	20	20	18	20	50	125	2	●
ALG-2R-D20.0R4.0-W		4	20	20	18	20	50	125	2	●
ALG-2R-D20.0R6.3-W		6.3	20	20	18	20	50	125	2	○
ALG-2R-D25.0R6.3-W		6.3	25	25	23	25	75	150	2	○

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
			✔		

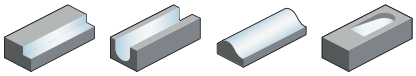
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Notes

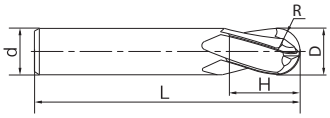
Fraise hémisphérique — Usinage haute performance

TM-4B



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 38°





Article	✻	Dimensions (mm)					Dents	Nuance
		R	D	d (h6)	H	L		KMS405
TM-4B-R3.0		3	6	6	9	50	4	●
TM-4B-R4.0		4	8	8	12	60	4	●
TM-4B-R5.0		5	10	10	15	75	4	●
TM-4B-R6.0		6	12	12	18	75	4	●
TM-4B-R8.0		8	16	16	24	85	4	●
TM-4B-R10.0		10	20	20	30	100	4	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
	✔			✔	

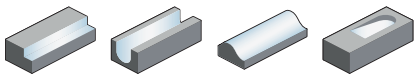
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série TM

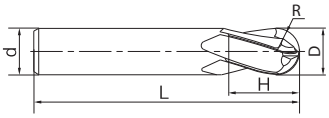
Fraise hémisphérique Usinage haute performance

TM-4BL



– Type d'attachement : DIN 6535HA
– Coupe au centre
– Angle d'hélice 38°





Article	✻	Dimensions (mm) R	D	d (h6)	H	L	Dents	Nuance KMS405
TM-4BL-R3.0		3	6	6	16	57	4	●
TM-4BL-R4.0		4	8	8	20	63	4	●
TM-4BL-R5.0		5	10	10	22	72	4	●
TM-4BL-R6.0		6	12	12	25	83	4	●
TM-4BL-R8.0		8	16	16	32	92	4	●
TM-4BL-R10.0		10	20	20	38	104	4	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

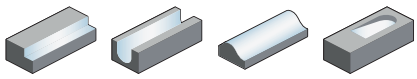
P	M	K	N	S	H
	✔			✔	

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

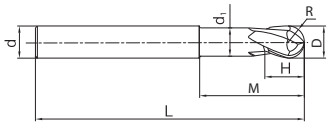
Fraise hémisphérique — Usinage haute performance

TM-4BP



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 38°





Article	✻	Dimensions (mm) R	D	d (h6)	d_1	H	M	L	Dents	Nuance KMS405
TM-4BP-R3.0		3	6	6	5,5	9	18	60	4	●
TM-4BP-R4.0		4	8	8	7,4	12	24	75	4	●
TM-4BP-R5.0		5	10	10	9,4	15	30	75	4	●
TM-4BP-R6.0		6	12	12	11,4	18	35	90	4	●
TM-4BP-R8.0		8	16	16	15,4	24	40	90	4	●
TM-4BP-R10.0		10	20	20	19,4	35	50	110	4	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
	✔			✔	

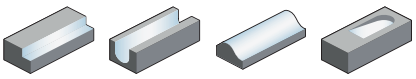
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série TM

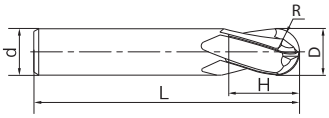
Fraise hémisphérique Usinage haute performance

TM-5B



– Attachement cylindrique, standard usine ZCC-CT
– Angle d'hélice 38°





Article	✲	Dimensions (mm) R	D	d (h6)	H	L	Dents	Nuance KMS405
TM-5B-R3.0		3	6	6	9	50	5	●
TM-5B-R4.0		4	8	8	12	60	5	●
TM-5B-R5.0		5	10	10	15	75	5	●
TM-5B-R6.0		6	12	12	18	75	5	●
TM-5B-R8.0		8	16	16	24	85	5	●
TM-5B-R10.0		10	20	20	35	100	5	●

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

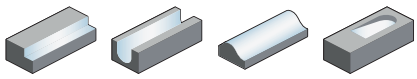
P	M	K	N	S	H
	✔			✔	

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

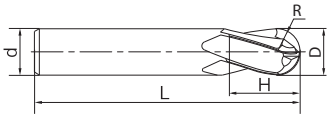
Fraise hémisphérique — Usinage haute performance

TM-5BL



– Type d'attachement : DIN 6535HA
– Angle d'hélice 38°





Article	✻	Dimensions (mm) R	D	d (h6)	H	L	Dents	Nuance KMS405
TM-5BL-R3.0		3	6	6	16	57	5	●
TM-5BL-R4.0		4	8	8	20	63	5	●
TM-5BL-R5.0		5	10	10	22	72	5	●
TM-5BL-R6.0		6	12	12	25	83	5	●
TM-5BL-R8.0		8	16	16	32	92	5	●
TM-5BL-R10.0		10	20	20	38	104	5	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
	✔			✔	

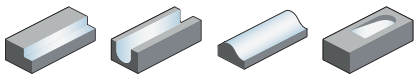
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

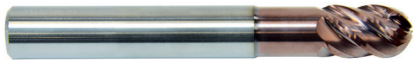
Fraises carbure monobloc Série TM

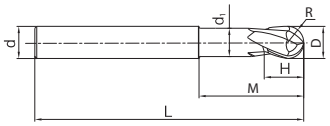
Fraise hémisphérique Usinage haute performance

TM-5BP



– Attachement cylindrique, standard usine ZCC-CT
– Angle d'hélice 38°





Article	✲	Dimensions (mm) R	D	d (h6)	d_1	H	M	L	Dents	Nuance KMS405
TM-5BP-R3.0		3	6	6	5,5	9	18	60	5	●
TM-5BP-R4.0		4	8	8	7,4	12	24	75	5	●
TM-5BP-R5.0		5	10	10	9,4	15	30	75	5	●
TM-5BP-R6.0		6	12	12	11,4	18	35	90	5	●
TM-5BP-R8.0		8	16	16	15,4	24	40	90	5	●
TM-5BP-R10.0		10	20	20	19,4	35	50	110	5	●

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

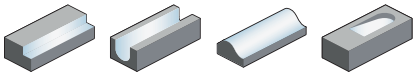
P	M	K	N	S	H
	✔			✔	

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

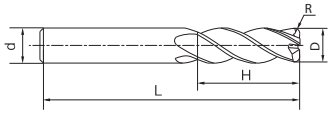
Fraise torique — Usinage haute performance

TM-4R



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 38°





Article	✻	Dimensions (mm) R	D	d (h6)	H	L	Dents	Nuance KMS405
TM-4R-D6R1.0		1	6	6	16	50	4	●
TM-4R-D6R0.3		0,3	6	6	16	50	4	●
TM-4R-D6R0.5		0,5	6	6	16	50	4	●
TM-4R-D6R 0.75		0,75	6	6	16	50	4	○
TM-4R-D8R0.3		0,3	8	8	20	60	4	●
TM-4R-D8R0.75		0,75	8	8	20	60	4	○
TM-4R-D8R0.5		0,5	8	8	20	60	4	●
TM-4R-D8R1.0		1	8	8	20	60	4	●
TM-4R-D10R1.5		1,5	10	10	25	75	4	●
TM-4R-D10R2.0		2	10	10	25	75	4	●
TM-4R-D10R3.0		3	10	10	25	75	4	●
TM-4R-D10R0.75		0,75	10	10	25	75	4	○
TM-4R-D10R1.0		1	10	10	25	75	4	●
TM-4R-D10R2.5		2,5	10	10	25	75	4	○
TM-4R-D10R1.25		1,25	10	10	25	75	4	○
TM-4R-D10R0.5		0,5	10	10	25	75	4	●
TM-4R-D10R1.6		1,6	10	10	25	75	4	●
TM-4R-D12R1.6		1,6	12	12	30	75	4	●
TM-4R-D12R3.2		3,2	12	12	30	75	4	●
TM-4R-D12R1.0		1	12	12	30	75	4	●
TM-4R-D12R4.0		4	12	12	30	75	4	●
TM-4R-D12R0.75		0,75	12	12	30	75	4	○
TM-4R-D12R2.5		2,5	12	12	30	75	4	●
TM-4R-D12R1.5		1,5	12	12	30	75	4	●
TM-4R-D12R3.0		3	12	12	30	75	4	●
TM-4R-D12R0.5		0,5	12	12	30	75	4	●
TM-4R-D12R1.25		1,25	12	12	30	75	4	○
TM-4R-D12R2.0		2	12	12	30	75	4	●
TM-4R-D16R3.0		3	16	16	35	90	4	●
TM-4R-D16R1.0		1	16	16	35	90	4	●
TM-4R-D16R2.0		2	16	16	35	90	4	●
TM-4R-D16R2.5		2,5	16	16	35	90	4	●
TM-4R-D16R5.0		5	16	16	35	90	4	●
TM-4R-D16R4.0		4	16	16	35	90	4	●
TM-4R-D16R1.5		1,5	16	16	35	90	4	●
TM-4R-D16R1.6		1,6	16	16	35	90	4	●
TM-4R-D16R6.3		6,3	16	16	35	90	4	○

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
	✔			✔	

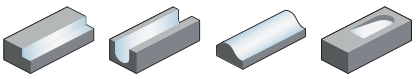
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraises carbure monobloc Série TM

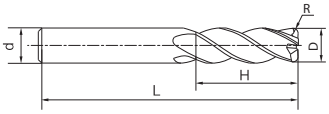
Fraise torique — Usinage haute performance

TM-4R



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 38°





Article	✻	Dimensions (mm) R	D	d (h6)	H	L	Dents	Nuance KMS405
TM-4R-D16R1.25		1,25	16	16	35	90	4	●
TM-4R-D16R3.2		3,2	16	16	35	90	4	●
TM-4R-D20R1.0		1	20	20	45	100	4	●
TM-4R-D20R1.6		1,6	20	20	45	100	4	●
TM-4R-D20R3.0		3	20	20	45	100	4	●
TM-4R-D20R4.0		4	20	20	45	100	4	●
TM-4R-D20R2.5		2,5	20	20	45	100	4	●
TM-4R-D20R2.0		2	20	20	45	100	4	●
TM-4R-D20R5.0		5	20	20	45	100	4	●
TM-4R-D20R1.5		1,5	20	20	45	100	4	●
TM-4R-D20R3.2		3,2	20	20	45	100	4	●
TM-4R-D20R6.3		6,3	20	20	45	100	4	●
TM-4R-D20R1.25		1,25	21	20	45	100	4	●
TM-4R-D25R1.5		1,5	25	25	50	110	4	●
TM-4R-D25R5.0		5	25	25	50	110	4	●
TM-4R-D25R2.5		2,5	25	25	50	110	4	○
TM-4R-D25R3.2		3,2	25	25	50	110	4	●
TM-4R-D25R6.3		6,3	25	25	50	110	4	●
TM-4R-D25R1.6		1,6	25	25	50	110	4	●
TM-4R-D25R1.0		1	25	25	50	110	4	●
TM-4R-D25R1.25		1,25	25	25	50	110	4	○
TM-4R-D25R4.0		4	25	25	50	110	4	●
TM-4R-D25R2.0		2	25	25	50	110	4	●
TM-4R-D25R3.0		3	25	25	50	110	4	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

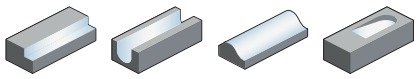
P	M	K	N	S	H
	✔			✔	

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

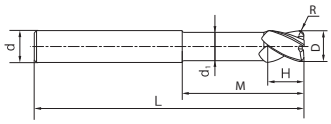
Fraise torique — Usinage haute performance

TM-4RP



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 38°





Article	✻	Dimensions (mm)							Dents	Nuance
		R	D	d (h6)	d_1	H	M	L		KMS405
TM-4RP-D8R0.75		0,75	8	8	7,4	16	25	75	4	○
TM-4RP-D8R0.3		0,3	8	8	7,4	16	25	75	4	●
TM-4RP-D8R0.5		0,5	8	8	7,4	16	25	75	4	●
TM-4RP-D8R1.0		1	8	8	7,4	16	25	75	4	●
TM-4RP-D10R0.5		0,5	10	10	9,4	20	32	75	4	●
TM-4RP-D10R1.6		1,6	10	10	9,4	20	32	75	4	●
TM-4RP-D10R1.25		1,25	10	10	9,4	20	32	75	4	●
TM-4RP-D10R2.5		2,5	10	10	9,4	20	32	75	4	○
TM-4RP-D10R3.0		3	10	10	9,4	20	32	75	4	●
TM-4RP-D10R0.75		0,75	10	10	9,4	20	32	75	4	○
TM-4RP-D10R2.0		2	10	10	9,4	20	32	75	4	●
TM-4RP-D10R1.5		1,5	10	10	9,4	20	32	75	4	●
TM-4RP-D10R1.0		1	10	10	9,4	20	32	75	4	●
TM-4RP-D12R1.6		1,6	12	12	11,4	24	40	90	4	●
TM-4RP-D12R1.25		1,25	12	12	11,4	24	40	90	4	●
TM-4RP-D12R1.0		1	12	12	11,4	24	40	90	4	●
TM-4RP-D12R2.0		2	12	12	11,4	24	40	90	4	●
TM-4RP-D12R3.0		3	12	12	11,4	24	40	90	4	●
TM-4RP-D12R2.5		2,5	12	12	11,4	24	40	90	4	○
TM-4RP-D12R3.2		3,2	12	12	11,4	24	40	90	4	●
TM-4RP-D12R0.5		0,5	12	12	11,4	24	40	90	4	●
TM-4RP-D12R4.0		4	12	12	11,4	24	40	90	4	●
TM-4RP-D12R1.5		1,5	12	12	11,4	24	40	90	4	●
TM-4RP-D12R0.75		0,75	12	12	11,4	24	40	90	4	○
TM-4RP-D16R1.5		1,5	16	16	15	32	50	100	4	●
TM-4RP-D16R2.5		2,5	16	16	15	32	50	100	4	○
TM-4RP-D16R1.25		1,25	16	16	15	32	50	100	4	●
TM-4RP-D16R2.0		2	16	16	15	32	50	100	4	●
TM-4RP-D16R3.2		3,2	16	16	15	32	50	100	4	●
TM-4RP-D16R4.0		4	16	16	15	32	50	100	4	●
TM-4RP-D16R3.0		3	16	16	14	32	50	100	4	●
TM-4RP-D16R1.0		1	16	16	15	32	50	100	4	●
TM-4RP-D16R6.3		6,3	16	16	15	32	50	100	4	○
TM-4RP-D16R1.6		1,6	16	16	15	32	50	100	4	●
TM-4RP-D16R5.0		5	16	16	15	32	50	100	4	●
TM-4RP-D20R1.0		1	20	20	19	35	60	110	4	●
TM-4RP-D20R3.0		3	20	20	19	35	60	110	4	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

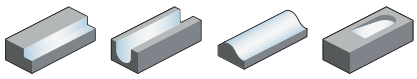
P	M	K	N	S	H
	✔			✔	

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

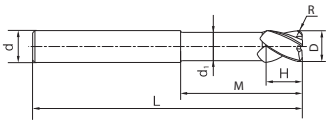
Fraise torique — Usinage haute performance

TM-4RP



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 38°





Article	✲	Dimensions (mm)							Dents	Nuance KMS405
		R	D	d (h6)	d_1	H	M	L		
TM-4RP-D20R5.0		5	20	20	19	35	60	110	4	●
TM-4RP-D20R1.6		1,6	20	20	19	35	60	110	4	●
TM-4RP-D20R6.3		6,3	20	20	19	35	60	110	4	●
TM-4RP-D20R3.2		3,2	20	20	19	35	60	110	4	●
TM-4RP-D20R4.0		4	20	20	19	35	60	110	4	●
TM-4RP-D20R2.5		2,5	20	20	19	35	60	110	4	○
TM-4RP-D20R1.25		1,25	20	20	19	35	60	110	4	●
TM-4RP-D20R2.0		2	20	20	19	35	60	110	4	●
TM-4RP-D20R1.5		1,5	20	20	19	35	60	110	4	●
TM-4RP-D25R1.25		1,25	25	25	24	45	75	150	4	○
TM-4RP-D25R6.3		6,3	25	25	24	45	75	150	4	●
TM-4RP-D25R2.5		2,5	25	25	24	45	75	150	4	●
TM-4RP-D25R5.0		5	25	25	24	45	75	150	4	●
TM-4RP-D25R2.0		2	25	25	24	45	75	150	4	●
TM-4RP-D25R1.5		1,5	25	25	24	45	75	150	4	●
TM-4RP-D25R1.6		1,6	25	25	24	45	75	150	4	●
TM-4RP-D25R3.0		3	25	25	24	45	75	150	4	●
TM-4RP-D25R1.0		1	25	25	24	45	75	150	4	●
TM-4RP-D25R4.0		4	25	25	24	45	75	150	4	●
TM-4RP-D25R3.2		3,2	25	25	24	45	75	150	4	●

● En stock ○ Sur demande

✲ Avec arrosage interne

Domaine d'utilisation

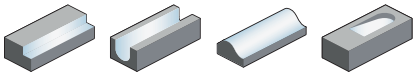
P	M	K	N	S	H
	✔			✔	

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

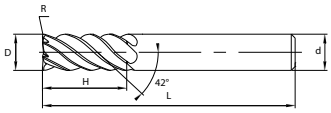
Fraise torique — Usinage haute performance

TM-5R



– Attachement cylindrique, standard usine ZCC-CT
– Angle d'hélice 42°





Article	✻	Dimensions (mm)					Dents	Nuance
		R	D	d (h6)	H	L		KMS405
TM-5R-D6R0.5		0,5	6	6	16	50	5	●
TM-5R-D6R0.3		0,3	6	6	16	50	5	●
TM-5R-D6R1.0		1	6	6	16	50	5	●
TM-5R-D6R0.75		0,75	6	6	16	50	5	○
TM-5R-D8R0.5		0,5	8	8	20	60	5	●
TM-5R-D8R1.0		1	8	8	20	60	5	●
TM-5R-D8R0.75		0,75	8	8	20	60	5	○
TM-5R-D8R0.3		0,3	8	8	20	60	5	●
TM-5R-D10R3.0		3	10	10	25	75	5	●
TM-5R-D10R1.0		1	10	10	25	75	5	●
TM-5R-D10R0.75		0,75	10	10	25	75	5	○
TM-5R-D10R2.5		2,5	10	10	25	75	5	○
TM-5R-D10R1.25		1,25	10	10	25	75	5	○
TM-5R-D10R0.5		0,5	10	10	25	75	5	●
TM-5R-D10R2.0		2	10	10	25	75	5	●
TM-5R-D10R1.5		1,5	10	10	25	75	5	●
TM-5R-D10R1.6		1,6	10	10	25	75	5	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
	✔			✔	

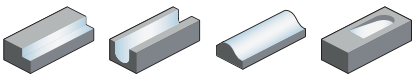
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série TM

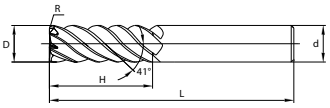
Fraise torique — Usinage haute performance

TM-7R



– Attachement cylindrique, standard usine ZCC-CT
– Angle d'hélice 41°





Article	✻	Dimensions (mm) R	D	d (h6)	H	L	Dents	Nuance KMS405
TM-7R-D12R1.5		1,5	12	12	30	75	7	●
TM-7R-D12R0.5		0,5	12	12	30	75	7	●
TM-7R-D12R0.75		0,75	12	12	30	75	7	○
TM-7R-D12R1.6		1,6	12	12	30	75	7	●
TM-7R-D12R1.25		1,25	12	12	30	75	7	○
TM-7R-D12R2.5		2,5	12	12	30	75	7	●
TM-7R-D12R3.2		3,2	12	12	30	75	7	●
TM-7R-D12R3.0		3	12	12	30	75	7	●
TM-7R-D12R2.0		2	12	12	30	75	7	●
TM-7R-D12R4.0		4	12	12	30	75	7	●
TM-7R-D12R1.0		1	12	12	30	75	7	●
TM-7R-D16R1.0		1	16	16	35	90	7	●
TM-7R-D16R5.0		5	16	16	35	90	7	●
TM-7R-D16R1.6		1,6	16	16	35	90	7	●
TM-7R-D16R2.5		2,5	16	16	35	90	7	●
TM-7R-D16R2.0		2	16	16	35	90	7	●
TM-7R-D16R4.0		4	16	16	35	90	7	●
TM-7R-D16R6.3		6,3	16	16	35	90	7	○
TM-7R-D16R1.5		1,5	16	16	35	90	7	●
TM-7R-D16R1.25		1,25	16	16	35	90	7	○
TM-7R-D16R3.0		3	16	16	35	90	7	●
TM-7R-D16R3.2		3,2	16	16	35	90	7	●
TM-7R-D20R1.0		1	20	20	45	100	7	●
TM-7R-D20R3.2		3,2	20	20	45	100	7	●
TM-7R-D20R1.6		1,6	20	20	45	100	7	●
TM-7R-D20R2.0		2	20	20	45	100	7	●
TM-7R-D20R1.5		1,5	20	20	45	100	7	●
TM-7R-D20R3.0		3	20	20	45	100	7	●
TM-7R-D20R6.3		6,3	20	20	45	100	7	●
TM-7R-D20R4.0		4	20	20	45	100	7	●
TM-7R-D20R5.0		5	20	20	45	100	7	●
TM-7R-D20R2.5		2,5	20	20	45	100	7	●
TM-7R-D20R1.25		1,25	21	20	45	100	7	○

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

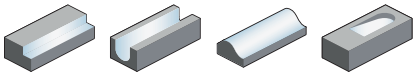
P	M	K	N	S	H
	✔			✔	

✔ Choix de base
✔ Alternative

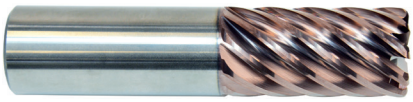
Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

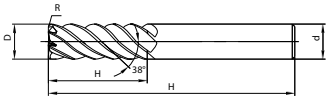
Fraise torique — Usinage haute performance

TM-9R



– Attachement cylindrique, standard usine ZCC-CT
– Angle d'hélice 38°





Article	✻	Dimensions (mm)					Dents	Nuance
		R	D	d (h6)	H	L		KMS405
TM-9R-D25R1.25		1,25	25	25	50	110	9	○
TM-9R-D25R3.2		3,2	25	25	50	110	9	●
TM-9R-D25R5.0		5	25	25	50	110	9	●
TM-9R-D25R2.5		2,5	25	25	50	110	9	○
TM-9R-D25R3.0		3	25	25	50	110	9	●
TM-9R-D25R4.0		4	25	25	50	110	9	●
TM-9R-D25R1.0		1	25	25	50	110	9	●
TM-9R-D25R1.5		1,5	25	25	50	110	9	●
TM-9R-D25R1.6		1,6	25	25	50	110	9	●
TM-9R-D25R6.3		6,3	25	25	50	110	9	●
TM-9R-D25R2.0		2	25	25	50	110	9	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
	✔			✔	

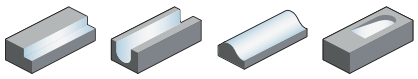
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série TM

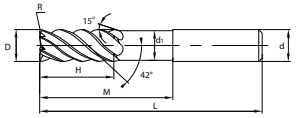
Fraise torique — Usinage haute performance

TM-5RP



– Attachement cylindrique, standard usine ZCC-CT
– Angle d'hélice 42°





Article	✲	Dimensions (mm) R	D	d (h6)	d_1	H	M	L	Dents	Nuance KMS405
TM-5RP-D8R0.75		0,75	8	8	7,4	16	25	75	5	○
TM-5RP-D8R1.0		1	8	8	7,4	16	25	75	5	●
TM-5RP-D8R0.3		0,3	8	8	7,4	16	25	75	5	●
TM-5RP-D8R0.5		0,5	8	8	7,4	16	25	75	5	●
TM-5RP-D10R1.0		1	10	10	9,4	20	32	75	5	●
TM-5RP-D10R1.5		1,5	10	10	9,4	20	32	75	5	●
TM-5RP-D10R0.75		0,75	10	10	9,4	20	32	75	5	○
TM-5RP-D10R3.0		3	10	10	9,4	20	32	75	5	●
TM-5RP-D10R1.25		1,25	10	10	9,4	20	32	75	5	○
TM-5RP-D10R0.5		0,5	10	10	9,4	20	32	75	5	●
TM-5RP-D10R2.0		2	10	10	9,4	20	32	75	5	●
TM-5RP-D10R2.5		2,5	10	10	9,4	20	32	75	5	●
TM-5RP-D10R1.6		1,6	10	10	9,4	20	32	75	5	●

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

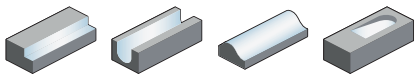
P	M	K	N	S	H
	✔			✔	

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

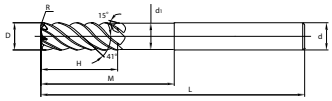
Fraise torique — Usinage haute performance

TM-7RP



– Attachement cylindrique, standard usine ZCC-CT
– Angle d'hélice 41°





Article	✻	Dimensions (mm) R	D	d (h6)	d_1	H	M	L	Dents	Nuance KMS405
TM-7RP-D12R1.0		1	12	12	11,4	24	40	90	7	●
TM-7RP-D12R1.25		1,25	12	12	11,4	24	40	90	7	○
TM-7RP-D12R0.75		0,75	12	12	11,4	24	40	90	7	○
TM-7RP-D12R0.5		0,5	12	12	11,4	24	40	90	7	●
TM-7RP-D12R3.2		3,2	12	12	11,4	24	40	90	7	●
TM-7RP-D12R3.0		3	12	12	11,4	24	40	90	7	●
TM-7RP-D12R1.5		1,5	12	12	11,4	24	40	90	7	●
TM-7RP-D12R4.0		4	12	12	11,4	24	40	90	7	●
TM-7RP-D12R2.0		2	12	12	11,4	24	40	90	7	●
TM-7RP-D12R1.6		1,6	12	12	11,4	24	40	90	7	●
TM-7RP-D12R2.5		2,5	12	12	11,4	24	40	90	7	●
TM-7RP-D16R2.0		2	16	16	15	32	50	100	7	●
TM-7RP-D16R1.25		1,25	16	16	15	32	50	100	7	○
TM-7RP-D16R4.0		4	16	16	15	32	50	100	7	●
TM-7RP-D16R1.0		1	16	16	15	32	50	100	7	●
TM-7RP-D16R6.3		6,3	16	16	15	32	50	100	7	○
TM-7RP-D16R3.2		3,2	16	16	15	32	50	100	7	●
TM-7RP-D16R3.0		3	16	16	15	32	50	100	7	●
TM-7RP-D16R1.6		1,6	16	16	15	32	50	100	7	●
TM-7RP-D16R5.0		5	16	16	15	32	50	100	7	●
TM-7RP-D16R1.5		1,5	16	16	15	32	50	100	7	●
TM-7RP-D16R2.5		2,5	16	16	15	32	50	100	7	●
TM-7RP-D20R1.6		1,6	20	20	19	35	60	110	7	●
TM-7RP-D20R1.5		1,5	20	20	19	35	60	110	7	●
TM-7RP-D20R3.2		3,2	20	20	19	35	60	110	7	●
TM-7RP-D20R3.0		3	20	20	19	35	60	110	7	●
TM-7RP-D20R6.3		6,3	20	20	19	35	60	110	7	●
TM-7RP-D20R5.0		5	20	20	19	35	60	110	7	●
TM-7RP-D20R2.0		2	20	20	19	35	60	110	7	●
TM-7RP-D20R2.5		2,5	20	20	19	35	60	110	7	●
TM-7RP-D20R1.0		1	20	20	19	35	60	110	7	●
TM-7RP-D20R4.0		4	20	20	19	35	60	110	7	●
TM-7RP-D20R1.25		1,25	20	20	19	35	60	110	7	○

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
	✔			✔	

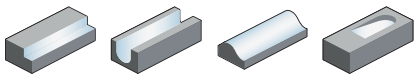
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraises carbure monobloc Série TM

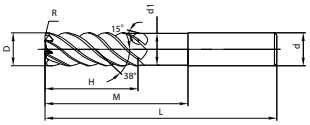
Fraise torique — Usinage haute performance

TM-9RP



– Attachement cylindrique, standard usine ZCC-CT
– Angle d'hélice 38°





Article	✻	Dimensions (mm)							Dents	Nuance KMS405
		R	D	d (h6)	d_1	H	M	L		
TM-9RP-D25R1.0		1	25	25	24	45	75	150	9	●
TM-9RP-D25R3.0		3	25	25	24	45	75	150	9	●
TM-9RP-D25R1.5		1,5	25	25	24	45	75	150	9	●
TM-9RP-D25R2.5		2,5	25	25	24	45	75	150	9	●
TM-9RP-D25R3.2		3,2	25	25	24	45	75	150	9	●
TM-9RP-D25R2.0		2	25	25	24	45	75	150	9	●
TM-9RP-D25R6.3		6,3	25	25	24	45	75	150	9	●
TM-9RP-D25R4.0		4	25	25	24	45	75	150	9	●
TM-9RP-D25R1.6		1,6	25	25	24	45	75	150	9	●
TM-9RP-D25R5.0		5	25	25	24	45	75	150	9	●
TM-9RP-D25R1.25		1,25	25	25	24	45	75	150	9	○

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

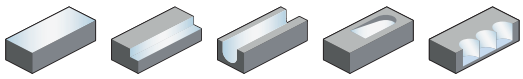
P	M	K	N	S	H
	✔			✔	

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

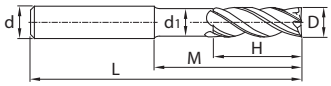
Fraise carbure monobloc — Usinage HSC/HPC

5501R38414GM



– Type d'attachement : DIN 6535HA
– Coupe au centre
– Angle d'hélice 38°/41°





Article	✻	Dimensions (mm)						Dents	Nuance
		D	d (h6)	d_1	H	M	L		KMG405
5501R38414GM-0400		4	6	3,7	8	16	54	4	●
5501R38414GM-0500		5	6	4,7	9	17	54	4	●
5501R38414GM-0600		6	6	5,7	10	18	54	4	●
5501R38414GM-0800		8	8	7,7	12	22	58	4	●
5501R38414GM-1000		10	10	9,5	14	26	66	4	●
5501R38414GM-1200		12	12	11,5	16	28	73	4	●
5501R38414GM-1400		14	14	13,5	18	30	75	4	●
5501R38414GM-1600		16	16	15,5	22	34	82	4	●
5501R38414GM-1800		18	18	17,5	24	36	84	4	●
5501R38414GM-2000		20	20	19,5	26	42	92	4	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

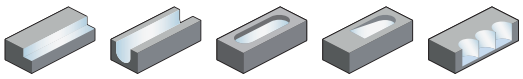
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série HPC

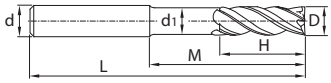
Fraise à grande longueur taillée Usinage HSC/HPC

5502R38414GM



– Type d'attachement : DIN 6535HA
– Coupe au centre
– Angle d'hélice 38°/41°





Article	✻	Dimensions (mm)						Dents	Nuance	
		D	d (h6)	d_1	H	M	L		KMG405	KMG406
5502R38414GM-0400		4	6	3,7	11	19	57	4	●	●
5502R38414GM-0500		5	6	4,7	13	21	57	4	●	●
5502R38414GM-0600		6	6	5,7	13	21	57	4	●	●
5502R38414GM-0800		8	8	7,7	19	27	63	4	●	●
5502R38414GM-1000		10	10	9,5	22	32	72	4	●	●
5502R38414GM-1200		12	12	11,5	26	38	83	4	●	●
5502R38414GM-1400		14	14	13,5	26	38	83	4	●	●
5502R38414GM-1600		16	16	15,5	32	44	92	4	●	●
5502R38414GM-1800		18	18	17,5	32	44	92	4	●	●
5502R38414GM-2000		20	20	19,5	38	54	104	4	●	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

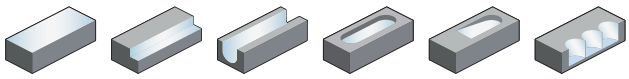
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

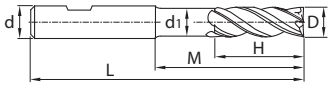
Fraise carbure monobloc — Usinage HSC/HPC

5601R38414GM



– Type d'attachement : DIN 6535HB
– Coupe au centre
– Angle d'hélice 38°/41°





Article	✻	Dimensions (mm) D	d (h6)	d_1	H	M	L	Dents	Nuance KMG405
5601R38414GM-0400		4	6	3,7	8	16	54	4	●
5601R38414GM-0500		5	6	4,7	9	17	54	4	●
5601R38414GM-0600		6	6	5,7	10	18	54	4	●
5601R38414GM-0800		8	8	7,7	12	22	58	4	●
5601R38414GM-1000		10	10	9,5	14	26	66	4	●
5601R38414GM-1200		12	12	11,5	16	28	73	4	●
5601R38414GM-1400		14	14	13,5	18	30	75	4	●
5601R38414GM-1600		16	16	15,5	22	34	82	4	●
5601R38414GM-1800		18	18	17,5	24	36	84	4	●
5601R38414GM-2000		20	20	19,5	26	42	92	4	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

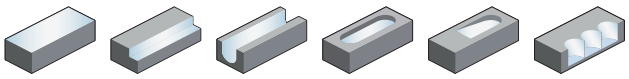
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série HPC

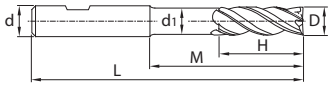
Fraise à grande longueur taillée Usinage HSC/HPC

5602R38414GM



– Type d'attachement : DIN 6535HB
– Coupe au centre
– Angle d'hélice 38°/41°





Article	✻	Dimensions (mm)						Dents	Nuance	
		D	d (h6)	d_1	H	M	L		KMG405	KMG406
5602R38414GM-0400		4	6	3,7	11	19	57	4	●	●
5602R38414GM-0500		5	6	4,7	13	21	57	4	●	●
5602R38414GM-0600		6	6	5,7	13	21	57	4	●	●
5602R38414GM-0800		8	8	7,7	19	27	63	4	●	●
5602R38414GM-1000		10	10	9,5	22	32	72	4	●	●
5602R38414GM-1200		12	12	11,5	26	38	83	4	●	●
5602R38414GM-1400		14	14	13,5	26	38	83	4	●	●
5602R38414GM-1600		16	16	15,5	32	44	92	4	●	●
5602R38414GM-1800		18	18	17,5	32	44	92	4	●	●
5602R38414GM-2000		20	20	19,5	38	54	104	4	●	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

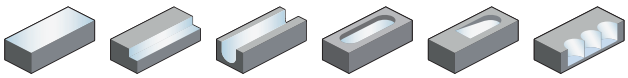
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

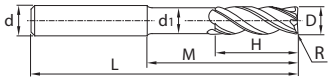
Fraise torique à grande longueur taillée — Usinage HSC/HPC

5502R38414GM-R



– Type d'attachement : DIN 6535HA
– Coupe au centre
– Angle d'hélice 38°/41°





Article	✻	Dimensions (mm)							Dents	Nuance
		D	R	d (h6)	d_1	H	M	L		KMG405
5502R38414GM-R02-0400		4	0,2	6	3,7	11	19	57	4	●
5502R38414GM-R05-0400		4	0,5	6	3,7	11	19	57	4	●
5502R38414GM-R02-0500		5	0,2	6	4,7	13	21	57	4	●
5502R38414GM-R05-0500		5	0,5	6	4,7	13	21	57	4	●
5502R38414GM-R02-0600		6	0,2	6	5,7	13	21	57	4	●
5502R38414GM-R05-0600		6	0,5	6	5,7	13	21	57	4	●
5502R38414GM-R10-0600		6	1	6	5,7	13	21	57	4	●
5502R38414GM-R02-0800		8	0,2	8	7,7	19	27	63	4	●
5502R38414GM-R05-0800		8	0,5	8	7,7	19	27	63	4	●
5502R38414GM-R10-0800		8	1	8	7,7	19	27	63	4	●
5502R38414GM-R15-0800		8	1,5	8	7,7	19	27	63	4	●
5502R38414GM-R20-0800		8	2	8	7,7	19	27	63	4	●
5502R38414GM-R02-1000		10	0,2	10	9,5	22	32	72	4	●
5502R38414GM-R05-1000		10	0,5	10	9,5	22	32	72	4	●
5502R38414GM-R10-1000		10	1	10	9,5	22	32	72	4	●
5502R38414GM-R15-1000		10	1,5	10	9,5	22	32	72	4	●
5502R38414GM-R20-1000		10	2	10	9,5	22	32	72	4	●
5502R38414GM-R05-1200		12	0,5	12	11,5	26	38	83	4	●
5502R38414GM-R10-1200		12	1	12	11,5	26	38	83	4	●
5502R38414GM-R15-1200		12	1,5	12	11,5	26	38	83	4	●
5502R38414GM-R20-1200		12	2	12	11,5	26	38	83	4	●
5502R38414GM-R10-1600		16	1	16	15,5	32	44	92	4	●
5502R38414GM-R15-1600		16	1,5	16	15,5	32	44	92	4	●
5502R38414GM-R20-1600		16	2	16	15,5	32	44	92	4	●
5502R38414GM-R30-1600		16	3	16	15,5	32	44	92	4	●
5502R38414GM-R10-2000		20	1	20	19,5	38	54	104	4	●
5502R38414GM-R15-2000		20	1,5	20	19,5	38	54	104	4	●
5502R38414GM-R20-2000		20	2	20	19,5	38	54	104	4	●
5502R38414GM-R30-2000		20	3	20	19,5	38	54	104	4	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

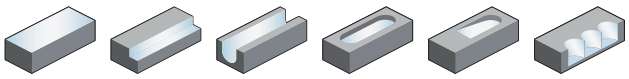
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série HPC

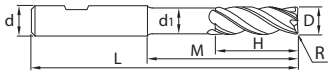
Fraise torique à grande longueur taillée Usinage HSC/HPC

5602R38414GM-R



– Type d'attachement : DIN 6535HB
– Coupe au centre
– Angle d'hélice 38°/41°





Article	✻	Dimensions (mm)							Dents	Nuance
		D	R	d (h6)	d_1	H	M	L		KMG405
5602R38414GM-R02-0400		4	0,2	6	3,7	11	19	57	4	●
5602R38414GM-R05-0400		4	0,5	6	3,7	11	19	57	4	●
5602R38414GM-R02-0500		5	0,2	6	4,7	13	21	57	4	●
5602R38414GM-R05-0500		5	0,5	6	4,7	13	21	57	4	●
5602R38414GM-R02-0600		6	0,2	6	5,7	13	21	57	4	●
5602R38414GM-R05-0600		6	0,5	6	5,7	13	21	57	4	●
5602R38414GM-R10-0600		6	1	6	5,7	13	21	57	4	●
5602R38414GM-R02-0800		8	0,2	8	7,7	19	27	63	4	●
5602R38414GM-R05-0800		8	0,5	8	7,7	19	27	63	4	●
5602R38414GM-R10-0800		8	1	8	7,7	19	27	63	4	●
5602R38414GM-R15-0800		8	1,5	8	7,7	19	27	63	4	●
5602R38414GM-R20-0800		8	2	8	7,7	19	27	63	4	●
5602R38414GM-R02-1000		10	0,2	10	9,5	22	32	72	4	●
5602R38414GM-R05-1000		10	0,5	10	9,5	22	32	72	4	●
5602R38414GM-R10-1000		10	1	10	9,5	22	32	72	4	●
5602R38414GM-R15-1000		10	1,5	10	9,5	22	32	72	4	●
5602R38414GM-R20-1000		10	2	10	9,5	22	32	72	4	●
5602R38414GM-R05-1200		12	0,5	12	11,5	26	38	83	4	●
5602R38414GM-R10-1200		12	1	12	11,5	26	38	83	4	●
5602R38414GM-R15-1200		12	1,5	12	11,5	26	38	83	4	●
5602R38414GM-R20-1200		12	2	12	11,5	26	38	83	4	●
5602R38414GM-R10-1600		16	1	16	15,5	32	44	92	4	●
5602R38414GM-R15-1600		16	1,5	16	15,5	32	44	92	4	●
5602R38414GM-R20-1600		16	2	16	15,5	32	44	92	4	●
5602R38414GM-R30-1600		16	3	16	15,5	32	44	92	4	●
5602R38414GM-R10-2000		20	1	20	19,5	38	54	104	4	●
5602R38414GM-R15-2000		20	1,5	20	19,5	38	54	104	4	●
5602R38414GM-R20-2000		20	2	20	19,5	38	54	104	4	●
5602R38414GM-R30-2000		20	3	20	19,5	38	54	104	4	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

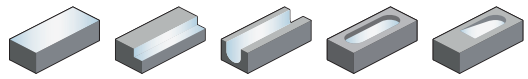
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraise carbure monobloc

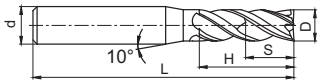
Usinage HSC/HPC

UM-4E

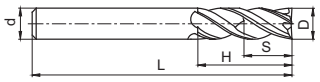


– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 38°/41°





A



B

Article	✻	Dimensions (mm)					Dents	Géométrie	Nuance	
		D	d (h6)	H	L	S			KMG405	YK40F
UM-4E-D4.0S		4	4	11	50	6	4	B	●	
UM-4E-D4.0		4	6	11	50	6	4	A	●	
UM-4E-D4.5		4,5	6	11	50	6,75	4	A	●	
UM-4E-D5.0		5	6	13	50	7,5	4	A	●	
UM-4E-D5.5		5,5	6	16	50	8,25	4	A	●	
UM-4E-D6.0		6	6	16	50	9	4	B	●	○
UM-4E-D7.0		7	8	20	60	10,5	4	A	●	
UM-4E-D8.0		8	8	20	60	12	4	B	●	○
UM-4E-D9.0		9	10	22	75	13,5	4	A	●	
UM-4E-D10.0		10	10	25	75	15	4	B	●	○
UM-4E-D11.0		11	12	26	75	16,5	4	A	●	
UM-4E-D12.0		12	12	30	75	18	4	B	●	○
UM-4E-D14.0		14	14	32	75	21	4	B	●	
UM-4E-D16.0		16	16	45	100	24	4	B	●	○
UM-4E-D18.0		18	18	45	100	27	4	B	●	
UM-4E-D20.0		20	20	45	100	30	4	B	●	

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

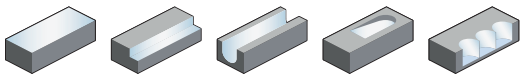
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraises carbure monobloc Série UM

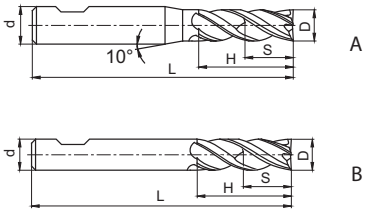
Fraise carbure monobloc Usinage HSC/HPC

UM-4E-W



– Attachement Weldon, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 38°/41°





Article	✻	Dimensions (mm)					Dents	Géométrie	Nuance	
		D	d (h6)	H	L	S			KMG405	YK40F
UM-4E-D4.0-W		4	6	11	50	6	4	A	●	
UM-4E-D4.5-W		4,5	6	11	50	6,75	4	A	●	
UM-4E-D5.0-W		5	6	13	50	7,5	4	A	●	
UM-4E-D5.5-W		5,5	6	16	50	8,25	4	A	●	
UM-4E-D6.0-W		6	6	16	50	9	4	B	●	○
UM-4E-D7.0-W		7	8	20	60	10,5	4	A	●	
UM-4E-D8.0-W		8	8	20	60	12	4	B	●	○
UM-4E-D9.0-W		9	10	22	75	13,5	4	A	●	
UM-4E-D10.0-W		10	10	25	75	15	4	B	●	○
UM-4E-D11.0-W		11	12	26	75	16,5	4	A	●	
UM-4E-D12.0-W		12	12	30	75	18	4	B	●	○
UM-4E-D14.0-W		14	14	32	75	21	4	B	●	
UM-4E-D16.0-W		16	16	45	100	24	4	B	●	○
UM-4E-D18.0-W		18	18	45	100	27	4	B	●	
UM-4E-D20.0-W		20	20	45	100	30	4	B	●	

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

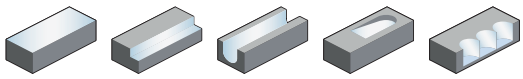
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

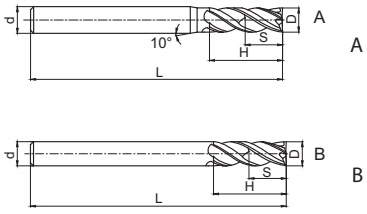
Fraise à grande longueur taillée — Usinage HSC/HPC

UM-4EL



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 38°/41°





Article	✻	Dimensions (mm) D	d (h6)	H	L	S	Dents	Géométrie	Nuance KMG405
UM-4EL-D4.0		4	6	15	75	6	4	A	●
UM-4EL-D5.0		5	6	20	75	7,5	4	A	●
UM-4EL-D6.0		6	6	20	75	9	4	B	●
UM-4EL-D8.0		8	8	25	100	12	4	B	●
UM-4EL-D10.0		10	10	30	100	15	4	B	●
UM-4EL-D12.0		12	12	35	100	18	4	B	●
UM-4EL-D14.0		14	14	40	100	21	4	B	●
UM-4EL-D16.0		16	16	50	150	24	4	B	●
UM-4EL-D20.0		20	20	55	150	30	4	B	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

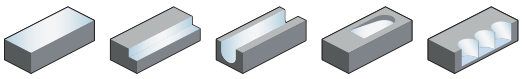
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

Fraises carbure monobloc Série UM

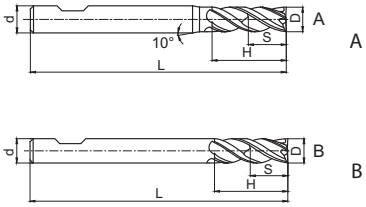
Fraise à grande longueur taillée Usinage HSC/HPC

UM-4EL-W



– Attachement Weldon, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 38°/41°





Article	✻	Dimensions (mm)					Dents	Géométrie	Nuance
		D	d (h6)	H	L	S			KMG405
UM-4EL-D4.0-W		4	6	15	75	6	4	A	●
UM-4EL-D5.0-W		5	6	20	75	7,5	4	A	●
UM-4EL-D6.0-W		6	6	20	75	9	4	B	●
UM-4EL-D8.0-W		8	8	25	100	12	4	B	●
UM-4EL-D10.0-W		10	10	30	100	15	4	B	●
UM-4EL-D12.0-W		12	12	35	100	18	4	B	●
UM-4EL-D14.0-W		14	14	40	100	21	4	B	●
UM-4EL-D16.0-W		16	16	50	150	24	4	B	●
UM-4EL-D20.0-W		20	20	55	150	30	4	B	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

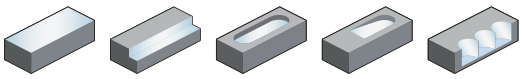
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

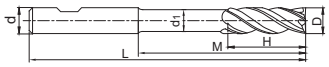
Fraise à queue cylindrique — Usinage HSC/HPC

UM-4ELP-W



– Attachement Weldon, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 38°/41°





Article	✻	Dimensions (mm)						Dents	Nuance
		D	d (h6)	d_1	H	M	L		KMG405
UM-4ELP-D4.0-W		4	6	3,8	15	36	75	4	●
UM-4ELP-D5.0-W		5	6	4,8	20	36	75	4	●
UM-4ELP-D6.0-W		6	6	5,7	20	36	75	4	●
UM-4ELP-D8.0-W		8	8	7,7	25	60	100	4	●
UM-4ELP-D10.0-W		10	10	9,5	30	55	100	4	●
UM-4ELP-D12.0-W		12	12	11,5	35	50	100	4	●
UM-4ELP-D14.0-W		14	14	13,5	40	50	100	4	●
UM-4ELP-D16.0-W		16	16	15,5	50	100	150	4	●
UM-4ELP-D20.0-W		20	20	19,5	55	98	150	4	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

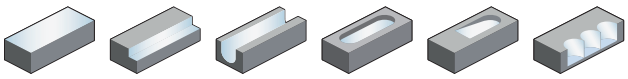
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

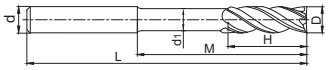
Fraise carbure monobloc, petite longueur taillée — Usinage HSC/HPC

UM-4EFP



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 38°/41°





Article	✻	Dimensions (mm)						Dents	Nuance
		D	d (h6)	d_1	H	M	L		KMG405
UM-4EFP-D6.0		6	6	5,8	9	30	75	4	●
UM-4EFP-D8.0		8	8	7,8	12	40	100	4	●
UM-4EFP-D10.0		10	10	9,6	15	50	100	4	●
UM-4EFP-D12.0		12	12	11,5	18	50	100	4	●
UM-4EFP-D16.0		16	16	15,5	24	50	150	4	●
UM-4EFP-D20.0		20	20	19,5	30	60	150	4	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

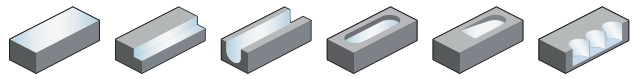
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

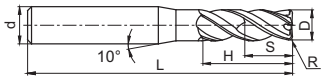
Fraise carbure monobloc — Usinage HSC/HPC

UM-4R



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 38°/41°





A



B

Article	✻	Dimensions (mm) R	D	d (h6)	H	L	S	Dents	Géométrie	Nuance KMG405
UM-4R-D4.0R0.3		0,3	4	6	10	50	6	4	A	●
UM-4R-D4.0R0.5		0,5	4	6	10	50	6	4	A	●
UM-4R-D5.0R0.5		0,5	5	6	13	50	7,5	4	A	●
UM-4R-D5.0R1.0		1	5	6	13	50	7,5	4	A	●
UM-4R-D6.0R0.5		0,5	6	6	16	50	9	4	B	●
UM-4R-D6.0R1.0		1	6	6	16	50	9	4	B	●
UM-4R-D8.0R0.5		0,5	8	8	20	60	12	4	B	●
UM-4R-D8.0R1.0		1	8	8	20	60	12	4	B	●
UM-4R-D10.0R0.5		0,5	10	10	25	75	15	4	B	●
UM-4R-D10.0R1.0		1	10	10	25	75	15	4	B	●
UM-4R-D10.0R2.0		2	10	10	25	75	15	4	B	●
UM-4R-D10.0R3.0		3	10	10	25	75	15	4	B	●
UM-4R-D12.0R0.5		0,5	12	12	30	75	18	4	B	●
UM-4R-D12.0R1.0		1	12	12	30	75	18	4	B	●
UM-4R-D12.0R2.0		2	12	12	30	75	18	4	B	●
UM-4R-D12.0R3.0		3	12	12	30	75	18	4	B	●
UM-4R-D16.0R0.5		0,5	16	16	45	100	24	4	B	●
UM-4R-D16.0R1.0		1	16	16	45	100	24	4	B	●
UM-4R-D16.0R2.0		2	16	16	45	100	24	4	B	●
UM-4R-D16.0R3.0		3	16	16	45	100	24	4	B	●
UM-4R-D20.0R1.0		1	20	20	45	100	30	4	B	●
UM-4R-D20.0R2.0		2	20	20	45	100	30	4	B	●
UM-4R-D20.0R3.0		3	20	20	45	100	30	4	B	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

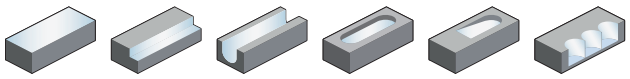
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

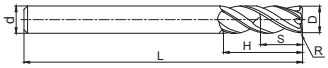
Fraise torique, attachement long — Usinage HSC/HPC

UM-4RL



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 38°/41°





Article	✻	Dimensions (mm)						Dents	Nuance
		R	D	d (h6)	H	L	S		KMG405
UM-4RL-D6.0R0.5		0,5	6	6	16	75	9	4	●
UM-4RL-D6.0R1.0		1	6	6	16	75	9	4	●
UM-4RL-D8.0R0.5		0,5	8	8	20	100	12	4	●
UM-4RL-D8.0R1.0		1	8	8	20	100	12	4	●
UM-4RL-D10.0R0.5		0,5	10	10	25	100	15	4	●
UM-4RL-D10.0R1.0		1	10	10	25	100	15	4	●
UM-4RL-D10.0R2.0		2	10	10	25	100	15	4	●
UM-4RL-D12.0R0.5		0,5	12	12	30	100	18	4	●
UM-4RL-D12.0R1.0		1	12	12	30	100	18	4	●
UM-4RL-D12.0R2.0		2	12	12	30	100	18	4	●
UM-4RL-D16.0R1.0		1	16	16	45	150	24	4	●
UM-4RL-D16.0R2.0		2	16	16	45	150	24	4	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

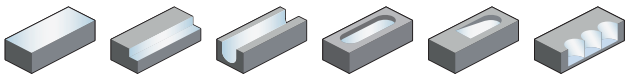
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

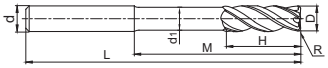
Fraise torique, petite longueur taillée — Usinage HSC/HPC

UM-4RFP



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 38°/41°





Article	✻	Dimensions (mm)							Dents	Nuance
		R	D	d (h6)	d_1	H	M	L		KMG405
UM-4RFP-D6.0R0.5		0,5	6	6	5,8	6	18	75	4	●
UM-4RFP-D6.0R1.0		1	6	6	5,8	6	18	75	4	●
UM-4RFP-D8.0R0.5		0,5	8	8	7,7	8	24	100	4	●
UM-4RFP-D8.0R1.0		1	8	8	7,7	8	24	100	4	●
UM-4RFP-D10.0R0.5		0,5	10	10	9,6	10	30	100	4	●
UM-4RFP-D10.0R1.0		1	10	10	9,6	10	30	100	4	●
UM-4RFP-D10.0R2.0		2	10	10	9,6	10	30	100	4	●
UM-4RFP-D12.0R0.5		0,5	12	12	11,5	12	36	100	4	●
UM-4RFP-D12.0R1.0		1	12	12	11,5	12	36	100	4	●
UM-4RFP-D12.0R2.0		2	12	12	11,5	12	36	100	4	●
UM-4RFP-D16.0R1.0		1	16	16	15,5	16	40	150	4	●
UM-4RFP-D16.0R2.0		2	16	16	15,5	16	40	150	4	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

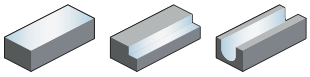
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série UM

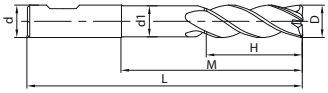
Fraise carbure monobloc Usinage HSC/HPC

UM-5EP-W



– Attachement Weldon, standard usine ZCC-CT
– Pas de coupe au centre
– Angle d'hélice 38°/39°/40°





Article	✻	Dimensions (mm)						Nuance
		D	d (h6)	d_1	H	M	L	KMG405
UM-5EP-D6.0-W		6	6	5,7	16	22	58	●
UM-5EP-D8.0-W		8	8	7,7	21	27	63	●
UM-5EP-D10.0-W		10	10	9,5	24	35	75	●
UM-5EP-D12.0-W		12	12	11,5	31	43	88	●
UM-5EP-D16.0-W		16	16	15,5	36	52	100	●
UM-5EP-D20.0-W		20	20	19,5	41	72	126	●
UM-5EP-D25.0-W		25	25	24	51	102	160	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

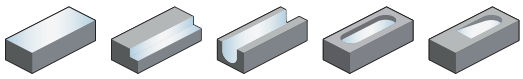
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

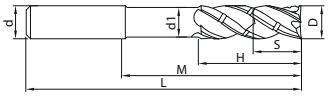
Fraise carbure monobloc — Usinage HSC/HPC

UMC-4E



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 38°/40°





Article	✻	Dimensions (mm)							Nuance
		D	d (h6)	d_1	H	M	L	S	KMG405
UMC-4E-D6.0		6	6	5,8	18	24	60	9	○
UMC-4E-D8.0		8	8	7,8	24	34	70	12	○
UMC-4E-D10.0		10	10	9,6	30	40	80	15	○
UMC-4E-D12.0		12	12	11,5	36	45	90	18	○
UMC-4E-D16.0		16	16	15,5	48	62	110	24	○
UMC-4E-D20.0		20	20	19,5	60	80	130	30	○

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

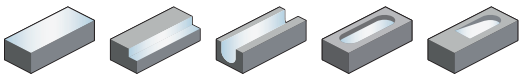
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

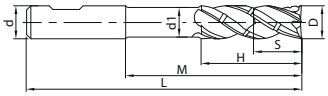
Fraise carbure monobloc Usinage HSC/HPC

UMC-4E-W



– Attachement Weldon, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 38°/40°





Article	✻	Dimensions (mm)							Nuance
		D	d (h6)	d_1	H	M	L	S	KMG405
UMC-4E-D6.0-W		6	6	5,8	18	24	60	9	○
UMC-4E-D8.0-W		8	8	7,8	24	34	70	12	○
UMC-4E-D10.0-W		10	10	9,6	30	40	80	15	○
UMC-4E-D12.0-W		12	12	11,5	36	45	90	18	○
UMC-4E-D16.0-W		16	16	15,5	48	62	110	24	○
UMC-4E-D20.0-W		20	20	19,5	60	80	130	30	○

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

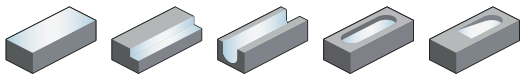
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraise carbure monobloc

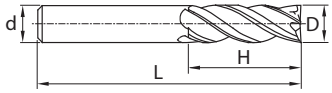
Usinage général de matériaux difficiles à usiner

VSM-4E



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 38°/41°





Article	✻	Dimensions (mm)				Dents	Nuance
		D	d (h6)	H	L		KMG405
VSM-4E-D4.0		4	6	11	50	4	●
VSM-4E-D5.0		5	6	13	50	4	●
VSM-4E-D6.0		6	6	16	50	4	●
VSM-4E-D8.0		8	8	20	60	4	●
VSM-4E-D10.0		10	10	25	75	4	●
VSM-4E-D12.0		12	12	30	75	4	●
VSM-4E-D16.0		16	16	45	100	4	●
VSM-4E-D20.0		20	20	45	100	4	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔			✔	

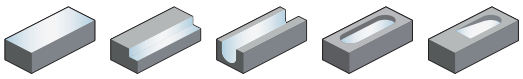
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série VSM

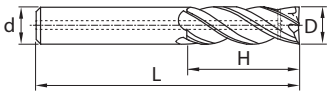
Fraise carbure monobloc — Usinage général de matériaux difficiles à usiner

VSM-4E-C



– Attachement cylindrique, standard usine ZCC-CT
– Sortie de lubrifiant radiale
– Coupe au centre
– Angle d'hélice 38°/41°





Article	✻	Dimensions (mm) D	d (h6)	H	L	Dents	Nuance KMG405
VSM-4E-C-D10.0	✻	10	10	25	75	4	○
VSM-4E-C-D12.0	✻	12	12	30	75	4	○
VSM-4E-C-D16.0	✻	16	16	45	100	4	○
VSM-4E-C-D20.0	✻	20	20	45	100	4	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔			✔	

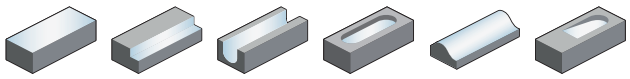
✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

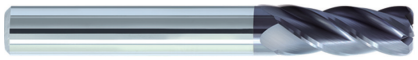
Fraise torique

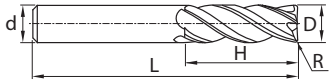
Usinage général de matériaux difficiles à usiner

VSM-4R



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 38°/41°





Article	✻	Dimensions (mm)					Dents	Nuance
		D	R	d (h6)	H	L		KMG405
VSM-4R-D4.0R0.2		4	0,2	6	11	50	4	●
VSM-4R-D4.0R0.5		4	0,5	6	11	50	4	●
VSM-4R-D5.0R0.2		5	0,2	6	13	50	4	●
VSM-4R-D5.0R0.5		5	0,5	6	13	50	4	●
VSM-4R-D6.0R0.2		6	0,2	6	16	50	4	●
VSM-4R-D6.0R0.5		6	0,5	6	16	50	4	●
VSM-4R-D6.0R1.0		6	1	6	16	50	4	●
VSM-4R-D6.0R1.5		6	1,5	6	16	50	4	●
VSM-4R-D8.0R0.5		8	0,5	8	20	63	4	●
VSM-4R-D8.0R0.8		8	0,8	8	20	63	4	●
VSM-4R-D8.0R1.0		8	1	8	20	63	4	●
VSM-4R-D8.0R1.5		8	1,5	8	20	63	4	●
VSM-4R-D8.0R2.0		8	2	8	20	63	4	●
VSM-4R-D10.0R0.5		10	0,5	10	25	75	4	●
VSM-4R-D10.0R0.8		10	0,8	10	25	75	4	●
VSM-4R-D10.0R1.0		10	1	10	25	75	4	●
VSM-4R-D10.0R1.5		10	1,5	10	25	75	4	●
VSM-4R-D10.0R2.0		10	2	10	25	75	4	●
VSM-4R-D12.0R0.5		12	0,5	12	30	75	4	●
VSM-4R-D12.0R0.8		12	0,8	12	30	75	4	●
VSM-4R-D12.0R1.0		12	1	12	30	75	4	●
VSM-4R-D12.0R1.5		12	1,5	12	30	75	4	●
VSM-4R-D12.0R2.0		12	2	12	30	75	4	●
VSM-4R-D12.0R2.5		12	2,5	12	30	75	4	●
VSM-4R-D12.0R3.0		12	3	12	30	75	4	●
VSM-4R-D12.0R4.0		12	4	12	30	75	4	●
VSM-4R-D16.0R0.5		16	0,5	16	45	100	4	●
VSM-4R-D16.0R0.8		16	0,8	16	45	100	4	●
VSM-4R-D16.0R1.0		16	1	16	45	100	4	●
VSM-4R-D16.0R1.5		16	1,5	16	45	100	4	●
VSM-4R-D16.0R2.0		16	2	16	45	100	4	●
VSM-4R-D16.0R2.5		16	2,5	16	45	100	4	●
VSM-4R-D16.0R3.0		16	3	16	45	100	4	●
VSM-4R-D16.0R4.0		16	4	16	45	100	4	●
VSM-4R-D20.0R0.5		20	0,5	20	45	100	4	●
VSM-4R-D20.0R1.0		20	1	20	45	100	4	●
VSM-4R-D20.0R1.5		20	1,5	20	45	100	4	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔			✔	

✔ Choix de base
✔ Alternative

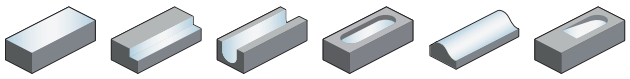
Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série VSM

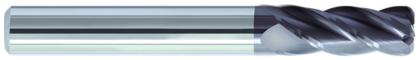
Fraise torique

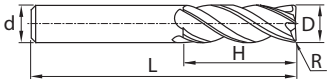
Usinage général de matériaux difficiles à usiner

VSM-4R



– Attachement cylindrique, standard usine ZCC-CT
– Coupe au centre
– Angle d'hélice 38°/41°





Article	✻	Dimensions (mm)					Dents	Nuance
		D	R	d (h6)	H	L		KMG405
VSM-4R-D20.0R2.0		20	2	20	45	100	4	●
VSM-4R-D20.0R2.5		20	2,5	20	45	100	4	●
VSM-4R-D20.0R3.0		20	3	20	45	100	4	●
VSM-4R-D20.0R4.0		20	4	20	45	100	4	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔			✔	

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

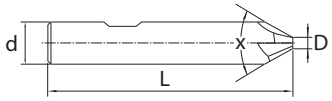
Fraise à chanfreiner 60° — Usinage général

5501/5601R60*FM



– Type d'attachement : DIN 6535HA
– Type d'attachement : DIN 6535HB
– Pas de coupe au centre
– Angle d'hélice 0°





Article	✻	Dimensions (mm)					Dents	Nuance
		d(h6)	L	D	Queue	X		KMG303
5501R603FM-0300		3	48	0,2	HA	60	3	●
5501R604FM-0400		4	48	0,2	HA	60	4	●
5601R604FM-0600		6	55	0,2	HB	60	4	●
5601R604FM-0800		8	58	0,5	HB	60	4	●
5601R604FM-1000		10	65	0,5	HB	60	4	●
5601R606FM-1000		10	65	0,7	HB	60	6	○
5601R604FM-1200		12	75	0,5	HB	60	4	●
5601R606FM-1200		12	75	0,7	HB	60	6	○
5601R604FM-1600		16	85	0,7	HB	60	4	●
5601R606FM-1600		16	85	0,7	HB	60	6	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔	✔		

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

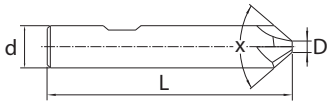
Fraise à chanfreiner 90° Usinage général

5501/5601R90*FM



– Type d'attachement : DIN 6535HA
– Type d'attachement : DIN 6535HB
– Pas de coupe au centre
– Angle d'hélice 0°





Article	✻	Dimensions (mm) d(h6)	L	D	Queue	X	Dents	Nuance KMG303
5501R903FM-0300		3	48	0,2	HA	90	3	●
5501R904FM-0400		4	48	0,2	HA	90	4	●
5601R904FM-0600		6	55	0,2	HB	90	4	●
5601R904FM-0800		8	58	0,5	HB	90	4	●
5601R904FM-1000		10	65	0,5	HB	90	4	●
5601R906FM-1000		10	65	0,7	HB	90	6	○
5601R904FM-1200		12	75	0,5	HB	90	4	●
5601R906FM-1200		12	75	0,7	HB	90	6	○
5501R904FM-1600		16	85	0,7	HA	90	4	○
5601R904FM-1600		16	85	0,7	HB	90	4	●
5601R906FM-1600		16	85	0,7	HB	90	6	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔	✔		

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

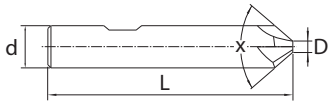
Fraise à chanfreiner — Usinage général

5501/5601R120*FM



– Type d'attachement : DIN 6535HA
– Type d'attachement : DIN 6535HB
– Pas de coupe au centre
– Angle d'hélice 0°





Article	✻	Dimensions (mm)					Dents	Nuance
		d(h6)	L	D	Queue	X		KMG406
5501R1203FM-0300		3	48	0,2	HA	120	3	○
5501R1204FM-0400		4	48	0,2	HA	120	4	○
5601R1204FM-0600		6	55	0,2	HB	120	4	○
5501R1204FM-0600		6	55	0,2	HA	120	4	○
5601R1204FM-0800		8	58	0,5	HB	120	4	○
5501R1204FM-0800		8	58	0,5	HA	120	4	○
5501R1204FM-1000		10	65	0,5	HA	120	4	○
5601R1204FM-1000		10	65	0,5	HB	120	4	○
5501R1206FM-1000		10	65	0,7	HA	120	6	○
5601R1206FM-1000		10	65	0,7	HB	120	6	○
5601R1204FM-1200		12	75	0,5	HB	120	4	○
5501R1204FM-1200		12	75	0,5	HA	120	4	○
5601R1206FM-1200		12	75	0,7	HB	120	6	○
5501R1206FM-1200		12	75	0,7	HA	120	6	○
5601R1206FM-1600		16	85	0,7	HB	120	6	○
5501R1206FM-1600		16	85	0,7	HA	120	6	○
5501R1204FM-1600		16	85	0,7	HA	120	4	○
5601R1204FM-1600		16	85	0,7	HB	120	4	○

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔	✔		

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc

Fraise à ébavurer – série FM

Fraise pour rayon concave

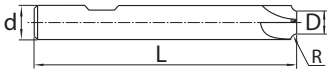
Usinage général

5601R90*FM-R



– Type d'attachement : DIN 6535HB
– Pas de coupe au centre
– Angle d'hélice 0°





Article	✻	Dimensions (mm)				Dents	Nuance
		d(h6)	L	D	R		KMG303
5601R904FM-R02-0600		6	60	5,6	0,2	4	●
5601R904FM-R03-0600		6	60	5,4	0,3	4	●
5601R904FM-R04-0600		6	60	5,2	0,4	4	●
5601R904FM-R05-0800		8	70	7	0,5	4	●
5601R904FM-R06-0800		8	70	6,8	0,6	4	●
5601R904FM-R075-0800		8	70	6,5	0,75	4	●
5601R904FM-R08-0800		8	70	6,4	0,8	4	●
5601R904FM-R10-0800		8	70	6	1	4	●
5601R904FM-R15-1000		10	75	7	1,5	4	●
5601R904FM-R20-1000		10	75	6	2	4	●
5601R904FM-R25-1200		12	75	7	2,5	4	●
5601R904FM-R30-1200		12	75	6	3	4	●
5601R904FM-R40-1600		16	80	8	4	4	●
5601R904FM-R50-2000		20	80	10	5	4	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

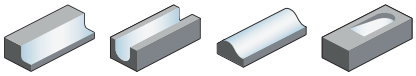
P	M	K	N	S	H
✔	✔	✔	✔		

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

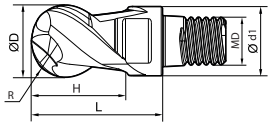
Fraise hémisphérique — Usinage haute performance

PM-2B



– Coupe au centre
– Angle d'hélice 30°





Article	✻	Dimensions (mm) R	D	d1	H	L	MD	Dents	Nuance KMG405
Q08-PM-2B-D12.0		6	12	11,5	7	17	8	2	●
Q10-PM-2B-D16.0		8	16	15,2	9	21,5	10	2	●
Q12-PM-2B-D20.0		10	20	19	11	25,5	12	2	●
Q14-PM-2B-D25.0		12,5	25	24	13,5	31,5	14	2	●
Q18-PM-2B-D32.0		16	32	30	17	36	18	2	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

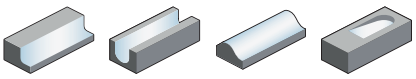
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

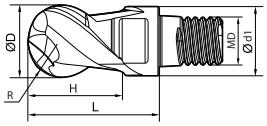
Fraise hémisphérique — Usinage haute performance

PM-4B



– Coupe au centre
– Angle d'hélice 30°





Article	✲	Dimensions (mm) R	D	d1	H	L	MD	Dents	Nuance KMG405
Q08-PM-4B-D12.0		6	12	11,5	7	17	8	4	●
Q10-PM-4B-D16.0		8	16	15,2	9	21,5	10	4	●
Q12-PM-4B-D20.0		10	20	19	11	25,5	12	4	●
Q14-PM-4B-D25.0		12,5	25	24	13,5	31,5	14	4	●
Q18-PM-4B-D32.0		16	32	30	17	36	18	4	●

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

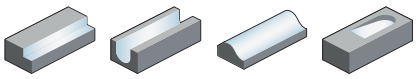
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

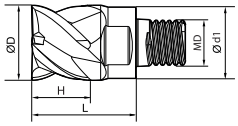
Fraise à 90° — Usinage haute performance

PM-4E



– Coupe au centre
– Angle d'hélice 45°





Article	✻	Dimensions (mm)					Dents	Nuance
		D	d1	H	L	MD		KMG405
Q08-PM-4E-D12.0		12	11,5	7	17	8	4	●
Q10-PM-4E-D16.0		16	15,2	9	21,5	10	4	●
Q12-PM-4E-D20.0		20	19	11	25,5	12	4	●
Q14-PM-4E-D25.0		25	24	13,5	31,5	14	4	●
Q18-PM-4E-D32.0		32	30	17	36	18	4	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

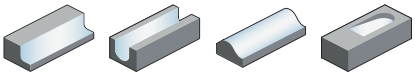
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série QCH

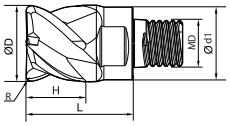
Fraise torique — Usinage haute performance

PM-4R



– Coupe au centre
– Angle d'hélice 30°





Article	✲	Dimensions (mm) R	D	d1	H	L	MD	Dents	Nuance KMG405
Q08-PM-4R-D12.0R1.0		1	12	11,5	7	17	8	4	●
Q08-PM-4R-D12.0R2.0		2	12	11,5	7	17	8	4	●
Q10-PM-4R-D16.0R1.0		1	16	15,2	9	21,5	10	4	●
Q10-PM-4R-D16.0R1.5		1,5	16	15,2	9	21,5	10	4	●
Q10-PM-4R-D16.0R2.0		2	16	15,2	9	21,5	10	4	●
Q12-PM-4R-D20.0R1.0		1	20	19	11	25,5	12	4	●
Q12-PM-4R-D20.0R2.0		2	20	19	11	25,5	12	4	●
Q14-PM-4R-D25.0R1.0		1	25	24	13,5	31,5	14	4	●
Q14-PM-4R-D25.0R2.0		2	25	24	13,5	31,5	14	4	●
Q14-PM-4R-D25.0R2.5		2,5	25	24	13,5	31,5	14	4	●
Q18-PM-4R-D32.0R1.0		1	32	30	17	36	18	4	●
Q18-PM-4R-D32.0R2.0		2	32	30	17	36	18	4	●
Q18-PM-4R-D32.0R3.0		3	32	30	17	36	18	4	●

● En stock ○ Sur demande

✲ Avec arrosage interne

Domaine d'utilisation

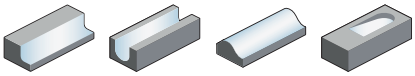
P	M	K	N	S	H
✔	✔	✔			✔

✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

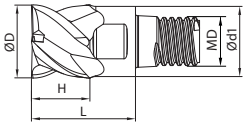
Fraise à 90° Usinage haute performance

VPM-4E



– Coupe au centre
– Angle d'hélice 38°





Article	✻	Dimensions (mm)					Dents	Nuance
		D	d1	H	L	MD		KMG406
Q08-VPM-4E-D12.0		12	11,5	7	17	8	4	●
Q10-VPM-4E-D16.0		16	15,2	9	21,5	10	4	●
Q12-VPM-4E-D20.0		20	19	11	25,5	12	4	●
Q14-VPM-4E-D25.0		25	24	13,5	31,5	14	4	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			✔

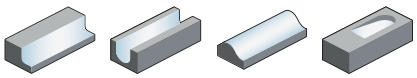
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

Fraises carbure monobloc Série QCH

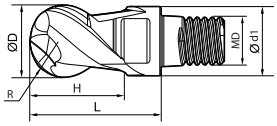
Fraise hémisphérique — Usinage de matériaux durs

HMX-2B



– Coupe au centre
– Angle d'hélice 35°





Article	✲	Dimensions (mm) R	D	d1	H	L	MD	Dents	Nuance KMG5515
Q08-HMX-2B-D12.0		6	12	11,5	7	17	8	2	●
Q10-HMX-2B-D16.0		8	16	15,2	9	21,5	10	2	●
Q12-HMX-2B-D20.0		10	20	19	11	25,5	12	2	●
Q14-HMX-2B-D25.0		12,5	25	24	13,5	31,5	14	2	●
Q18-HMX-2B-D32.0		16	32	30	17	36	18	2	●

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

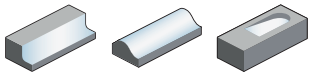
P	M	K	N	S	H
					✔

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

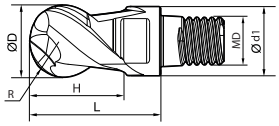
Fraise hémisphérique — Usinage de matériaux durs

HMX-4B



– Coupe au centre
– Angle d'hélice 35°





Article	✻	Dimensions (mm)						Dents	Nuance
		R	D	d1	H	L	MD		KMG5515
Q08-HMX-4B-D12.0		6	12	11,5	7	17	8	4	●
Q10-HMX-4B-D16.0		8	16	15,2	9	21,5	10	4	●
Q12-HMX-4B-D20.0		10	20	19	11	25,5	12	4	●
Q14-HMX-4B-D25.0		12,5	25	24	13,5	31,5	14	4	●
Q18-HMX-4B-D32.0		16	32	30	17	36	18	4	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

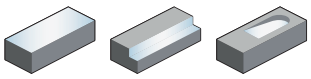
P	M	K	N	S	H
					✔

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

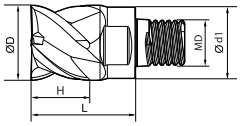
Fraise à 90° Usinage de matériaux durs

HMX-4E



– Coupe au centre
– Angle d'hélice 45°





Article	✲	Dimensions (mm) D	d1	H	L	MD	Dents	Nuance KMG5515
Q08-HMX-4E-D12.0		12	11,5	7	17	8	4	●
Q10-HMX-4E-D16.0		16	15,2	9	21,5	10	4	●
Q12-HMX-4E-D20.0		20	19	11	25,5	12	4	●
Q14-HMX-4E-D25.0		25	24	13,5	31,5	14	4	●
Q18-HMX-4E-D32.0		32	30	17	36	18	4	●

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
					✔

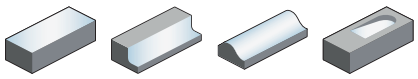
✔ Choix de base
✔ Alternative

Codification B278 Paramètres B492 Commande d'outils spéciaux B541

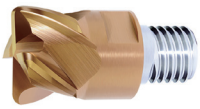
Fraise torique

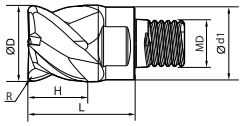
Usinage de matériaux durs

HMX-4R



– Coupe au centre
– Angle d'hélice 35°





Article	✲	Dimensions (mm)						Dents	Nuance
		R	D	d1	H	L	MD		KMG405
Q08-HMX-4R-D12.0R1.0		1	12	11,5	7	17	8	4	●
Q08-HMX-4R-D12.0R2.0		2	12	11,5	7	17	8	4	●
Q10-HMX-4R-D16.0R1.0		1	16	15,2	9	21,5	10	4	●
Q10-HMX-4R-D16.0R1.5		1,5	16	15,2	9	21,5	10	4	●
Q10-HMX-4R-D16.0R2.0		2	16	15,2	9	21,5	10	4	●
Q12-HMX-4R-D20.0R1.0		1	20	19	11	25,5	12	4	●
Q12-HMX-4R-D20.0R2.0		2	20	19	11	25,5	12	4	●
Q14-HMX-4R-D25.0R1.0		1	25	24	13,5	31,5	14	4	●
Q14-HMX-4R-D25.0R2.0		2	25	24	13,5	31,5	14	4	●
Q14-HMX-4R-D25.0R2.5		2,5	25	24	13,5	31,5	14	4	●
Q18-HMX-4R-D32.0R1.0		1	32	30	17	36	18	4	●
Q18-HMX-4R-D32.0R2.0		2	32	30	17	36	18	4	●
Q18-HMX-4R-D32.0R3.0		3	32	30	17	36	18	4	●

● En stock ○ Sur demande

✲ Avec arrosage interne

Domaine d'utilisation

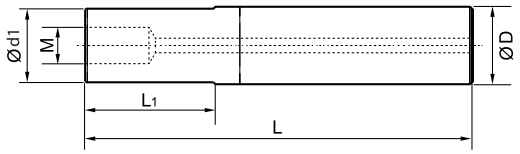
P	M	K	N	S	H
					✔

✔ Choix de base
✔ Alternative

Codification > B278 Paramètres > B492 Commande d'outils spéciaux > B541

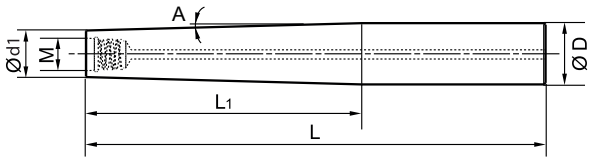
Attachement fraise à embout vissé

Corps carbure monobloc, détalonné, filetage Q



Article	Dimensions [mm]				Filetage (M)	Stock
	D	d1	L	L1		
G12-QCH-Q08-80C	12	11,5	80	30	Q8	●
G12-QCH-Q08-100C	12	11,5	100	50	Q8	●
G12-QCH-Q08-120C	12	11,5	120	70	Q8	●
G16-QCH-Q10-90C	16	15,2	90	40	Q10	●
G16-QCH-Q10-120C	16	15,2	120	70	Q10	●
G16-QCH-Q10-150C	16	15,2	150	100	Q10	●
G20-QCH-Q12-100C	20	19	100	40	Q12	●
G20-QCH-Q12-140C	20	19	140	80	Q12	●
G20-QCH-Q12-180C	20	19	180	120	Q12	●
G25-QCH-Q14-120C	25	24	120	50	Q14	●
G25-QCH-Q14-170C	25	24	170	100	Q14	●
G25-QCH-Q14-220C	25	24	220	150	Q14	●
G32-QCH-Q18-140C	32	30	140	70	Q18	●
G32-QCH-Q18-200C	32	30	200	130	Q18	●
G32-QCH-Q18-260C	32	30	260	190	Q18	●
G32-QCH-Q18-320C	32	30	320	250	Q18	●

Corps carbure monobloc, conique, filetage Q



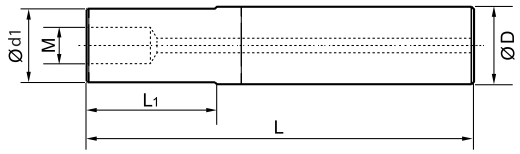
Article	Dimensions [mm]				Filetage (M)	Angle (A)	Stock
	D	d1	L	L1			
G16-QCH-Q08-140C-ZJ90	16	11,5	140	90	Q8	1,0	●
G20-QCH-Q10-200C-ZJ140	20	15,2	200	140	Q8	0,8	●
G25-QCH-Q12-250C-ZJ180	25	19	250	180	Q8	0,8	●
G32-QCH-Q14-270C-ZJ200	32	30	270	200	Q10	0,8	●

Pièces détachées

	Filetage	Q8 / Q10	Q12 / Q14	Q18
	Clé	QCH-10×13	QCH-16×20	QCH-26

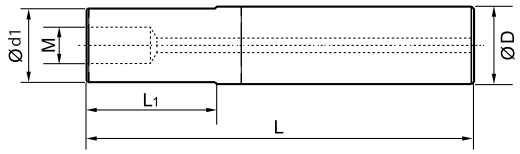
Attachement fraise à embout vissé

Corps acier, détalonné, filetage Q



Article	Dimensions [mm]				Filetage (M)	Stock
	D	d1	L	L1		
G12-QCH-Q08-65S	12	11,5	65	19	Q08	●
G16-QCH-Q10-100S	16	15,2	100	42	Q10	●
G20-QCH-Q12-110S	20	19	110	54	Q12	●

Corps carbure monobloc, détalonné, filetage métrique



Article	Dimensions [mm]				Filetage (M)	Stock
	D	d1	L	L1		
G16-QCH-M8-90C-125	16	12,5	90	35	M8	○
G16-QCH-M8-110C-125	16	12,5	110	55	M8	○
G16-QCH-M8-130C-125	16	12,5	130	75	M8	○
G16-QCH-M8-90C	16	15	90	35	M8	○
G16-QCH-M8-110C	16	15	110	55	M8	○
G16-QCH-M8-130C	16	15	130	75	M8	○
G16-QCH-M8-170C	16	15	170	115	M8	○
G16-QCH-M8-200C	16	15	200	145	M8	○
G20-QCH-M10-87C	20	18,5	87	30	M10	○
G20-QCH-M10-107C	20	18,5	107	50	M10	○
G20-QCH-M10-127C	20	18,5	127	70	M10	○
G20-QCH-M10-167C	20	18,5	167	110	M10	○
G20-QCH-M10-197C	20	18,5	197	140	M10	○
G25-QCH-M12-128C	25	23	128	65	M12	○
G25-QCH-M12-148C	25	23	148	85	M12	○
G25-QCH-M12-168C	25	23	168	105	M12	○
G25-QCH-M12-198C	25	23	198	135	M12	○
G25-QCH-M12-228C	25	23	228	165	M12	○
G32-QCH-M16-161C	32	29	161	95	M16	○
G32-QCH-M16-211C	32	29	211	145	M16	○
G32-QCH-M16-281C	32	29	281	215	M16	○
G32-QCH-M16-311C	32	29	311	245	M16	○
G32-QCH-M16-361C	32	29	361	295	M16	○

Guide des données de coupe recommandées – Fraisage carbure monobloc

End mill – GM series

1

2

3

4

Material group		Composition / structure / heat treatment		Brinell hardness HB	Machining group	Starting values for cutting speed v_c [m/min] 5501R302GM 5601R302GM 5502R302GM 5602R302GM – Slot milling Ø [mm]	$a_{p\,max}$	Shoulder milling Ø [mm]	$a_{e\,max}$	GM-2E GM-2EFP GM-2F – Slot milling Ø [mm]	$a_{p\,max}$	Shoulder milling Ø [mm]	$a_{e\,max}$
						0 < x < 3	0,1 x D	0 < x ≤ 20	< 0,5 x D	0 < x < 3	0,1 x D	0 < x ≤ 20	< 0,5 x D
						3 ≤ x ≤ 20	0,8 x D			3 ≤ x ≤ 20	0,8 x D		
						KMG303 a_e / D				KMG303 a_e / D			
						1/1	1/2	1/10	f-group	1/1	1/2	1/10	f-group
P	Unalloyed steel	ca. 0,15 % C	annealed	125	1	150	200	270	2	150	200	270	2
		ca. 0,45 % C	annealed	190	2	145	190	260	2	145	190	260	2
		ca. 0,45 % C	tempered	250	3	105	140	190	2	105	140	190	2
		ca. 0,75 % C	annealed	270	4	90	120	165	2	90	120	165	2
		ca. 0,75 % C	tempered	300	5	85	110	150	2	85	110	150	2
	Low-alloyed steel		annealed	180	6	115	150	205	2	115	150	205	2
			tempered	275	7	90	120	165	2	90	120	165	2
			tempered	300	8	85	110	150	2	85	110	150	2
			tempered	350	9	80	105	145	2	80	105	145	2
	High-alloyed steel and high-alloyed tool steel		annealed	200	10	105	140	190	2	105	140	190	2
			hardened and tempered	325	11	80	110	145	2	80	110	145	2
M	Stainless steel	ferritic/martensitic	annealed	200	12	50	65	90	2	50	65	90	2
		martensitic	tempered	240	13	45	60	80	2	45	60	80	2
		austenitic	quench hardened	180	14	55	70	95	2	55	70	95	2
		austenitic-ferritic		230	15	45	60	80	2	45	60	80	2
K	Grey cast iron	perlitic/ferritic		180	16	110	150	200	2	110	150	200	2
		perlitic (martensitic)		260	17	90	120	165	2	90	120	165	2
	Cast iron with spheroidal graphite	ferritic		160	18	135	180	245	2	135	180	245	2
		perlitic		250	19	105	140	190	2	105	140	190	2
	Malleable cast iron	ferritic		130	20	150	200	270	2	150	200	270	2
		perlitic		230	21	120	160	220	2	120	160	220	2
N	Aluminium wrought alloys	cannot be hardened		60	22								
		hardenable	hardened	100	23								
	Cast aluminium alloys	≤ 12 % Si, cannot be hardened		75	24								
		≤ 12 % Si, hardenable	hardened	90	25								
		> 12 % Si, cannot be hardened		130	26								
	Copper and copper alloys (bronze/brass)	machining steel, PB> 1%		110	27								
		CuZn, CuSnZn		90	28								
		CuSn, Pb-free copper, electrolytic copper		100	29								
S	Heat-resistant alloys	Fe-based alloys	annealed	200	30								
			hardened	280	31								
		Ni or Co bass	annealed	250	32								
			hardened	350	33								
			cast	320	34								
	Titanium alloys	pure titanium		R_m 400	35								
		α and β alloys	hardened	R_m 1050	36								
H	Hardened steel		hardened and tempered	55 HRC	37								
			hardened and tempered	60 HRC	38								
	Hard cast iron		cast	400	39								
	Hardened cast iron		hardened and tempered	55 HRC	40								
X	Non-metallic materials	Thermoplasts			41								
		Thermosetting plastics			42								
		Plastic, glass-fibre reinforced GFRP			43								
		Plastic, carbon fibre reinforced CFRP			44								
		Graphite			45								
		Wood			46								

Note: The given cutting values are guide values, which were determined under ideal conditons.
The values have to be adapted in individual cases.
Feed rate recommendations on page B460
For examples of material for cutting tool groups view page D22.

Recommend feed rate

Solid carbide milling group 2 – Square shoulder mills GM *series*

4	a_e / D	Feed rate per cutting edge (f_z) [mm]																	
		Ø0,5	Ø0,8	Ø 1	Ø 2	Ø 3	Ø 4	Ø 5	Ø 6	Ø 8	Ø 10	Ø 12	Ø 14	Ø 16	Ø 18	Ø 20			
P	1/1	0,01	0,02	0,02	0,02	0,02	0,02	0,03	0,03	0,04	0,06	0,07	0,07	0,08	0,08	0,09			
	1/2	0,01	0,03	0,03	0,03	0,03	0,03	0,04	0,04	0,05	0,08	0,09	0,09	0,10	0,10	0,12			
	1/10	0,02	0,04	0,04	0,04	0,04	0,04	0,06	0,06	0,08	0,12	0,14	0,14	0,16	0,16	0,18			
M	1/1	0,01	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,03	0,05	0,06	0,06	0,06	0,06	0,07			
	1/2	0,01	0,02	0,02	0,02	0,02	0,02	0,03	0,03	0,04	0,06	0,07	0,07	0,08	0,08	0,09			
	1/10	0,02	0,03	0,03	0,03	0,03	0,03	0,05	0,05	0,06	0,10	0,11	0,11	0,13	0,13	0,15			
K	1/1	0,01	0,02	0,02	0,02	0,02	0,02	0,03	0,03	0,04	0,06	0,07	0,07	0,08	0,08	0,09			
	1/2	0,01	0,03	0,03	0,03	0,03	0,03	0,04	0,04	0,05	0,08	0,09	0,09	0,10	0,10	0,12			
	1/10	0,02	0,04	0,04	0,04	0,04	0,04	0,06	0,06	0,08	0,12	0,14	0,14	0,16	0,16	0,18			

5

Note: The given cutting values are guide values, which were determined under ideal conditions.
The values have to be adapted in individual cases.

1. Sélectionnez la série de produits adaptée.
2. Déterminez le rapport de coupe.
3. Sélectionnez le matériau mis en œuvre et la vitesse de coupe.
4. Déterminez le groupe d'avance et consultez les recommandations à la page correspondante.
5. Sélectionnez le diamètre d'outil et le rapport de coupe.

Fraises carbure monobloc Recommandations de données de coupe

Fraises – série GM

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min]							
						5501R302GM 5601R302GM 5502R302GM 5602R302GM				GM-2E GM-2EFP GM-2F			
						Rainurage		Fraisage à 90°		Rainurage		Fraisage à 90°	
						Ø [mm]	$a_{p\ max}$	Ø [mm]	$a_{e\ max}$	Ø [mm]	$a_{p\ max}$	Ø [mm]	$a_{e\ max}$
						0 < x < 3	0,1 x D	0 < x ≤ 20	< 0,5 x D	0 < x < 3	0,1 x D	0 < x ≤ 20	< 0,5 x D
						3 ≤ x ≤ 20	0,8 x D			3 ≤ x ≤ 20	0,8 x D		
						KMG303				KMG303			
						a_e / D				a_e / D			
						1/1	1/2	1/10	Gr. f	1/1	1/2	1/10	Gr. f
P	Acier non allié	env. 0,15 % C	recuit	125	1	150	200	270	2	150	200	270	2
		env. 0,45 % C	recuit	190	2	145	190	260	2	145	190	260	2
		env. 0,45 % C	trempé et revenu	250	3	105	140	190	2	105	140	190	2
		env. 0,75 % C	recuit	270	4	90	120	165	2	90	120	165	2
		env. 0,75 % C	trempé et revenu	300	5	85	110	150	2	85	110	150	2
	Acier faiblement allié		recuit	180	6	115	150	205	2	115	150	205	2
			trempé et revenu	275	7	90	120	165	2	90	120	165	2
			trempé et revenu	300	8	85	110	150	2	85	110	150	2
			trempé et revenu	350	9	80	105	145	2	80	105	145	2
	Acier fortement allié et Acier à outils fortement allié		recuit	200	10	105	140	190	2	105	140	190	2
			durci et revenu	325	11	80	110	145	2	80	110	145	2
M	Acier inoxydable	ferritique / martensitique	recuit	200	12	50	65	90	2	50	65	90	2
		martensitique	trempé et revenu	240	13	45	60	80	2	45	60	80	2
		austénitique	trempé	180	14	55	70	95	2	55	70	95	2
		austénitique et ferritique		230	15	45	60	80	2	45	60	80	2
K	Fonte grise	perlitique / ferritique		180	16	110	150	200	2	110	150	200	2
		perlitique (martensitique)		260	17	90	120	165	2	90	120	165	2
	Fonte avec graphite nodulaire	ferritique		160	18	135	180	245	2	135	180	245	2
		perlitique		250	19	105	140	190	2	105	140	190	2
	Fonte malléable	ferritique		130	20	150	200	270	2	150	200	270	2
		perlitique		230	21	120	160	220	2	120	160	220	2
N	Alliages corroyé d'aluminium	non durcissable		60	22								
		durcissable	trempé	100	23								
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24								
		≤ 12 % Si, durcissable	trempé	90	25								
		> 12 % Si, non durcissable		130	26								
	Cuivre et alliages de cuivre (bronze/moulage)	Alliages de décolletage, PB > 1 %		110	27								
		CuZn, CuSnZn		90	28								
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29								
S	Alliages réfractaires	Base Fe	recuit	200	30								
			trempé	280	31								
		à base de Ni ou Co	recuit	250	32								
			trempé	350	33								
			coulé	320	34								
	Alliages de titane	Titane pur		R_m 400	35								
		Alliages Alpha + Beta	trempé	R_m 1050	36								
H	Acier trempé		durci et revenu	55 HRC	37								
			durci et revenu	60 HRC	38								
	Fonte trempée		coulé	400	39								
	Fonte durcie		durci et revenu	55 HRC	40								
X	Matériaux non métalliques	Thermoplastiques			41								
		Duroplaste			42								
		Matière plastique renforcée de fibres de verre GFK			43								
		Matière plastique renforcée de fibres de carbone CFK			44								
		Graphite			45								
		Bois			46								

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Les avances recommandées figurent page B522.
Vous trouverez les exemples de matériaux pour les groupes enlèvement de copeaux à la page D11.

	Vitesse de coupe v_c [m/min]																			
	GM-2EL GM-2EX GM-2FL				GM-2EP GM-2ES				GM-3E GM-4E GM-4E-G				GM-2EL GM-4EL-G				5501R303GM 5601R303GM 5502R303GM 5602R303GM			
	Rainurage		Fraisage à 90°		Rainurage		Fraisage à 90°		Rainurage		Fraisage à 90°		Rainurage		Fraisage à 90°		Rainurage		Fraisage à 90°	
	Ø [mm]	$a_{p\ max}$	Ø [mm]	$a_{e\ max}$	Ø [mm]	$a_{p\ max}$	Ø [mm]	$a_{e\ max}$	Ø [mm]	$a_{p\ max}$	Ø [mm]	$a_{e\ max}$	Ø [mm]	$a_{p\ max}$	Ø [mm]	$a_{e\ max}$	Ø [mm]	$a_{p\ max}$	Ø [mm]	$a_{e\ max}$
	0 < x < 3	0,1 x D	0 < x ≤ 20	< 0,5 x D	0 < x < 3	0,1 x D	0 < x ≤ 20	< 0,5 x D	0 < x < 3	0,1 x D	0 < x ≤ 20	< 0,5 x D	0 < x < 3	0,1 x D	0 < x ≤ 20	< 0,5 x D	0 < x < 3	0,1 x D	0 < x ≤ 20	< 0,5 x D
	3 ≤ x ≤ 20	0,8 x D			3 ≤ x ≤ 20	0,8 x D			3 ≤ x ≤ 20	0,8 x D			3 ≤ x ≤ 20	0,8 x D			3 ≤ x ≤ 20	0,8 x D		
	KMG303				KMG303				KMG303				KMG303				KMG303			
	a_e / D				a_e / D				a_e / D				a_e / D				a_e / D			
	1/1	1/2	1/10	Gr. f	1/1	1/2	1/10	Gr. f	1/1	1/2	1/10	Gr. f	1/1	1/2	1/10	Gr. f	1/1	1/2	1/10	Gr. f
	130	170	230	2	150	200	270	2	150	200	270	2	130	170	230	2	140	185	245	2
	125	165	220	2	145	190	260	2	145	190	260	2	125	165	220	2	135	180	235	2
	95	120	165	2	105	140	190	2	105	140	190	2	95	120	165	2	100	130	175	2
	80	105	140	2	90	120	165	2	90	120	165	2	80	105	140	2	85	115	150	2
	75	95	130	2	85	110	150	2	85	110	150	2	75	95	130	2	80	105	135	2
	100	130	175	2	115	150	205	2	115	150	205	2	100	130	175	2	105	140	185	2
	80	105	140	2	90	120	165	2	90	120	165	2	80	105	140	2	85	115	150	2
	75	95	130	2	85	110	150	2	85	110	150	2	75	95	130	2	80	105	135	2
	70	90	120	2	80	105	145	2	80	105	145	2	70	90	120	2	75	100	130	2
	95	120	165	2	105	140	190	2	105	140	190	2	95	120	165	2	100	130	175	2
	70	95	125	2	80	110	145	2	80	110	145	2	70	95	125	2	75	100	130	2
	45	55	75	2	50	65	90	2	50	65	90	2	45	55	75	2	45	60	80	2
	40	50	65	2	45	60	80	2	45	60	80	2	40	50	65	2	40	55	70	2
	45	60	80	2	55	70	95	2	55	70	95	2	45	60	80	2	50	65	85	2
	40	50	65	2	45	60	80	2	45	60	80	2	40	50	65	2	40	55	70	2
	95	125	170	2	110	150	200	2	110	150	200	2	95	125	170	2	105	140	180	2
	80	105	140	2	90	120	165	2	90	120	165	2	80	105	140	2	85	115	150	2
	120	155	210	2	135	180	245	2	135	180	245	2	120	155	210	2	130	170	225	2
	95	120	165	2	105	140	190	2	105	140	190	2	95	120	165	2	100	130	175	2
	130	170	230	2	150	200	270	2	150	200	270	2	130	170	230	2	140	185	245	2
	105	140	185	2	120	160	220	2	120	160	220	2	105	140	185	2	115	150	200	2

Fraises carbure monobloc Recommandations de données de coupe

Fraises – série GM

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min]							
						5501R304GF 5601R304GF 5502R304GF 5602R304GF				GM-4F-G GM-4EFP			
						Rainurage		Fraisage à 90°		Rainurage		Fraisage à 90°	
						Ø [mm]	$a_{p\ max}$	Ø [mm]	$a_{e\ max}$	Ø [mm]	$a_{p\ max}$	Ø [mm]	$a_{e\ max}$
						0 < x < 3	0,1 x D	0 < x ≤ 20	< 0,5 x D	0 < x < 3	0,1 x D	0 < x ≤ 20	< 0,5 x D
						3 ≤ x ≤ 20	0,8 x D			3 ≤ x ≤ 20	0,8 x D		
						KMG303				KMG303			
						a_e / D				a_e / D			
						1/1	1/2	1/10	Gr. f	1/1	1/2	1/10	Gr. f
P	Acier non allié	env. 0,15 % C	recuit	125	1	155	200	265	2	150	200	270	2
		env. 0,45 % C	recuit	190	2	150	190	255	2	145	190	260	2
		env. 0,45 % C	trempé et revenu	250	3	110	140	190	2	105	140	190	2
		env. 0,75 % C	recuit	270	4	95	120	160	2	90	120	165	2
		env. 0,75 % C	trempé et revenu	300	5	90	110	150	2	85	110	150	2
	Acier faiblement allié		recuit	180	6	120	150	200	2	115	150	205	2
			trempé et revenu	275	7	95	120	160	2	90	120	165	2
			trempé et revenu	300	8	90	110	150	2	85	110	150	2
			trempé et revenu	350	9	85	105	140	2	80	105	145	2
	Acier fortement allié et Acier à outils fortement allié		recuit	200	10	110	140	190	2	105	140	190	2
			durci et revenu	325	11	85	110	145	2	80	110	145	2
M	Acier inoxydable	ferritique / martensitique	recuit	200	12	50	65	85	2	50	65	90	2
		martensitique	trempé et revenu	240	13	45	60	75	2	45	60	80	2
		austénitique	trempé	180	14	55	70	95	2	55	70	95	2
		austénitique et ferritique		230	15	45	60	75	2	45	60	80	2
K	Fonte grise	perlitique / ferritique		180	16	115	150	195	2	110	150	200	2
		perlitique (martensitique)		260	17	95	120	160	2	90	120	165	2
	Fonte avec graphite nodulaire	ferritique		160	18	140	180	240	2	135	180	245	2
		perlitique		250	19	110	140	190	2	105	140	190	2
	Fonte malléable	ferritique		130	20	155	200	265	2	150	200	270	2
		perlitique		230	21	125	160	215	2	120	160	220	2
N	Alliages corroyé d'aluminium	non durcissable		60	22								
		durcissable	trempé	100	23								
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24								
		≤ 12 % Si, durcissable	trempé	90	25								
		> 12 % Si, non durcissable		130	26								
	Cuivre et alliages de cuivre (bronze/moulage)	Alliages de décolletage, PB > 1 %		110	27								
		CuZn, CuSnZn		90	28								
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29								
S	Alliages réfractaires	Base Fe	recuit	200	30								
			trempé	280	31								
		à base de Ni ou Co	recuit	250	32								
			trempé	350	33								
			coulé	320	34								
	Alliages de titane	Titane pur		R_m 400	35								
		Alliages Alpha + Beta	trempé	R_m 1050	36								
H	Acier trempé		durci et revenu	55 HRC	37								
			durci et revenu	60 HRC	38								
	Fonte trempée		coulé	400	39								
	Fonte durcie		durci et revenu	55 HRC	40								
X	Matériaux non métalliques	Thermoplastiques			41								
		Duroplaste			42								
		Matière plastique renforcée de fibres de verre GFK			43								
		Matière plastique renforcée de fibres de carbone CFK			44								
		Graphite			45								
		Bois			46								

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Les avances recommandées figurent page B522.
Vous trouverez les exemples de matériaux pour les groupes enlèvement de copeaux à la page D11.

	Vitesse de coupe v_c [m/min]																			
	GM-4FL-G GM-4EX-G				GM-6E				GM-6E 5589R45MGFR				5565R302GF 5565R302GM 5566R302GF				GM-2B GM-4B GM-2BS GM-2BP			
	Rainurage		Fraisage à 90°				Fraisage à 90°				Fraisage à 90°		Rainurage		Fraisage à 90°					
	Ø [mm]	$a_{p\ max}$	Ø [mm]	$a_{e\ max}$			Ø [mm]	$a_{e\ max}$			Ø [mm]	$a_{e\ max}$	Ø [mm]	$a_{p\ max}$	Ø [mm]	$a_{e\ max}$				
	0 < x < 3	0,1 x D	0 < x ≤ 20	< 0,5 x D			0 < x ≤ 20	< 0,5 x D			0 < x ≤ 20	< 0,5 x D	0 < x < 3	0,1 x D	0 < x ≤ 20	< 0,5 x D				
	3 ≤ x ≤ 20	0,8 x D											3 ≤ x ≤ 20	0,8 x D						
	KMG303				KMG303				KMG303				KMG303				KMG303			
	a_e / D				a_e / D				a_e / D				a_e / D				a_e / D			
	1/1	1/2	1/10	Gr. f	1/1	1/2	1/10	Gr. f	1/1	1/2	1/10	Gr. f	1/1	1/10	1/20	Gr. f	1/1	1/10	1/20	Gr. f
	130	170	230	2	–	–	270	2	–	–	230	2	–	250	280	5	–	250	280	5
	125	165	220	2	–	–	260	2	–	–	220	2	–	240	270	5	–	240	270	5
	95	120	165	2	–	–	190	2	–	–	165	2	–	175	200	5	–	175	200	5
	80	105	140	2	–	–	165	2	–	–	140	2	–	150	170	5	–	150	170	5
	75	95	130	2	–	–	150	2	–	–	130	2	–	140	155	5	–	140	155	5
	100	130	175	2	–	–	205	2	–	–	175	2	–	190	210	5	–	190	210	5
	80	105	140	2	–	–	165	2	–	–	140	2	–	150	170	5	–	150	170	5
	75	95	130	2	–	–	150	2	–	–	130	2	–	140	155	5	–	140	155	5
	70	90	120	2	–	–	145	2	–	–	120	2	–	130	150	5	–	130	150	5
	95	120	165	2	–	–	190	2	–	–	165	2	–	175	200	5	–	175	200	5
	70	95	125	2	–	–	145	2	–	–	125	2	–	135	150	5	–	135	150	5
	45	55	75	2	–	–	90	2	–	–	75	2	–	80	90	5	–	80	90	5
	40	50	65	2	–	–	80	2	–	–	65	2	–	70	80	5	–	70	80	5
	45	60	80	2	–	–	95	2	–	–	80	2	–	85	100	5	–	85	100	5
	40	50	65	2	–	–	80	2	–	–	65	2	–	70	80	5	–	70	80	5
	95	125	170	2	–	–	200	2	–	–	170	2	–	185	205	5	–	185	205	5
	80	105	140	2	–	–	165	2	–	–	140	2	–	150	170	5	–	150	170	5
	120	155	210	2	–	–	245	2	–	–	210	2	–	225	255	5	–	225	255	5
	95	120	165	2	–	–	190	2	–	–	165	2	–	175	200	5	–	175	200	5
	130	170	230	2	–	–	270	2	–	–	230	2	–	250	280	5	–	250	280	5
	105	140	185	2	–	–	220	2	–	–	185	2	–	200	225	5	–	200	225	5

Fraises carbure monobloc Recommandations de données de coupe

Fraises – série GM

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min]							
						GM-2BL GM-4BL GM-2BFP				GM-2R GM-4R			
										Rainurage		Fraisage à 90°	
										Ø [mm]	$a_{p\,max}$	Ø [mm]	$a_{e\,max}$
										0 < x < 3	0,1 x D	0 < x ≤ 20	< 0,5 x D
										3 ≤ x ≤ 20	0,8 x D		
						KMG303				KMG303			
						a_e / D				a_e / D			
						1/1	1/10	1/20	Gr. f	1/1	1/2	1/10	Gr. f
P	Acier non allié	env. 0,15 % C	recuit	125	1	–	220	250	5	160	215	275	2
		env. 0,45 % C	recuit	190	2	–	210	240	5	155	205	265	2
		env. 0,45 % C	trempé et revenu	250	3	–	155	175	5	115	155	195	2
		env. 0,75 % C	recuit	270	4	–	135	150	5	100	130	165	2
		env. 0,75 % C	trempé et revenu	300	5	–	125	140	5	90	120	155	2
	Acier faiblement allié		recuit	180	6	–	165	190	5	120	165	210	2
			trempé et revenu	275	7	–	135	150	5	100	130	165	2
			trempé et revenu	300	8	–	125	140	5	90	120	155	2
			trempé et revenu	350	9	–	115	130	5	85	115	145	2
	Acier fortement allié et Acier à outils fortement allié		recuit	200	10	–	155	175	5	115	155	195	2
			durci et revenu	325	11	–	120	135	5	85	115	150	2
M	Acier inoxydable	ferritique / martensitique	recuit	200	12	–	75	80	5	55	70	90	2
		martensitique	trempé et revenu	240	13	–	65	70	5	45	65	80	2
		austénitique	trempé	180	14	–	75	85	5	55	75	95	2
		austénitique et ferritique		230	15	–	65	70	5	45	65	80	2
K	Fonte grise	perlitique / ferritique		180	16	–	165	185	5	120	160	205	2
		perlitique (martensitique)		260	17	–	135	150	5	100	130	165	2
	Fonte avec graphite nodulaire	ferritique		160	18	–	200	225	5	145	195	250	2
		perlitique		250	19	–	155	175	5	115	155	195	2
	Fonte malléable	ferritique		130	20	–	220	250	5	160	215	275	2
		perlitique		230	21	–	180	200	5	130	175	220	2
N	Alliages corroyé d'aluminium	non durcissable		60	22								
		durcissable	trempé	100	23								
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24								
		≤ 12 % Si, durcissable	trempé	90	25								
		> 12 % Si, non durcissable		130	26								
	Cuivre et alliages de cuivre (bronze/moulage)	Alliages de décolletage, PB > 1 %		110	27								
		CuZn, CuSnZn		90	28								
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29								
S	Alliages réfractaires	Base Fe	recuit	200	30								
			trempé	280	31								
		à base de Ni ou Co	recuit	250	32								
			trempé	350	33								
			coulé	320	34								
	Alliages de titane	Titane pur		R_m 400	35								
		Alliages Alpha + Beta	trempé	R_m 1050	36								
H	Acier trempé		durci et revenu	55 HRC	37								
			durci et revenu	60 HRC	38								
	Fonte trempée		coulé	400	39								
	Fonte durcie		durci et revenu	55 HRC	40								
X	Matériaux non métalliques	Thermoplastiques			41								
		Duroplaste			42								
		Matière plastique renforcée de fibres de verre GFK			43								
		Matière plastique renforcée de fibres de carbone CFK			44								
		Graphite			45								
		Bois			46								

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Les avances recommandées figurent page B522.
Vous trouverez les exemples de matériaux pour les groupes enlèvement de copeaux à la page D11.

	Vitesse de coupe v_c [m/min]								
	GM-4RL				5602R303GR 5602R304GR 5602R305GR GM-4W				
	Rainurage		Fraisage à 90°		Rainurage		Fraisage à 90°		
	Ø [mm]	$a_{p\ max}$	Ø [mm]	$a_{e\ max}$	Ø [mm]	$a_{p\ max}$	Ø [mm]	$a_{e\ max}$	
	0 < x < 3	0,1 x D	0 < x ≤ 20	< 0,5 x D	0 < x < 3	0,1 x D	0 < x ≤ 20	< 0,5 x D	
	3 ≤ x ≤ 20	0,8 x D			3 ≤ x ≤ 20	0,8 x D			
	KMG303				KMG303				
	a_e / D				a_e / D				
	1/1	1/2	1/10	Gr. f	1/1	1/2	1/10	Gr. f	
	145	200	240	2	135	180	240	2	
	140	190	230	2	130	175	230	2	
	105	140	170	2	95	130	170	2	
	90	120	145	2	85	110	145	2	
	80	110	135	2	75	100	135	2	
	110	150	180	2	105	135	180	2	
	90	120	145	2	85	110	145	2	
	80	110	135	2	75	100	135	2	
	80	105	125	2	75	95	125	2	
	105	140	170	2	95	130	170	2	
	80	110	130	2	75	100	130	2	
	50	65	80	2	45	60	80	2	
	45	60	70	2	40	55	70	2	
	50	70	85	2	50	65	85	2	
	45	60	70	2	40	55	70	2	
	110	150	180	2	100	135	180	2	
	90	120	145	2	85	110	145	2	
	135	180	220	2	125	165	220	2	
	105	140	170	2	95	130	170	2	
	145	200	240	2	135	180	240	2	
	120	160	195	2	110	145	195	2	

Fraises carbure monobloc Recommandations de données de coupe

Fraises – série HM

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min]							
						HM-2E HM-2EP HM-2ES HM-4E				HM-2EFP HM-4EL HM-4EFP			
								Fraisage à 90°				Fraisage à 90°	
								Ø [mm]	$a_{e\,max}$			Ø [mm]	$a_{e\,max}$
								0 < x ≤ 20	0,05 x D			0 < x ≤ 20	0,05 x D
						KMG555				KMG555			
						a_e / D				a_e / D			
						1/1	1/2	1/10	Gr. f	1/1	1/2	1/10	Gr. f
P	Acier non allié	env. 0,15 % C	recuit	125	1								
		env. 0,45 % C	recuit	190	2								
		env. 0,45 % C	trempé et revenu	250	3								
		env. 0,75 % C	recuit	270	4								
		env. 0,75 % C	trempé et revenu	300	5								
	Acier faiblement allié		recuit	180	6								
			trempé et revenu	275	7								
			trempé et revenu	300	8								
			trempé et revenu	350	9								
	Acier fortement allié et Acier à outils fortement allié		recuit	200	10								
			durci et revenu	325	11								
M	Acier inoxydable	ferritique / martensitique	recuit	200	12								
		martensitique	trempé et revenu	240	13								
		austénitique	trempé	180	14								
		austénitique et ferritique		230	15								
K	Fonte grise	perlitique / ferritique		180	16								
		perlitique (martensitique)		260	17								
	Fonte avec graphite nodulaire	ferritique		160	18								
		perlitique		250	19								
	Fonte malléable	ferritique		130	20								
		perlitique		230	21								
N	Alliages corroyé d'aluminium	non durcissable		60	22								
		durcissable	trempé	100	23								
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24								
		≤ 12 % Si, durcissable	trempé	90	25								
		> 12 % Si, non durcissable		130	26								
	Cuivre et alliages de cuivre (bronze/moulage)	Alliages de décolletage, PB > 1 %		110	27								
		CuZn, CuSnZn		90	28								
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29								
S	Alliages réfractaires	Base Fe	recuit	200	30								
			trempé	280	31								
		à base de Ni ou Co	recuit	250	32								
			trempé	350	33								
			coulé	320	34								
	Alliages de titane	Titane pur		R_m 400	35								
		Alliages Alpha + Beta	trempé	R_m 1050	36								
H	Acier trempé		durci et revenu	55 HRC	37	55	100	125	3	50	95	115	3
			durci et revenu	60 HRC	38	55	95	120	3	50	95	110	3
	Fonte trempée		coulé	400	39	70	125	160	3	65	120	145	3
	Fonte durcie		durci et revenu	55 HRC	40	55	100	125	3	50	95	115	3
X	Matériaux non métalliques	Thermoplastiques			41								
		Duroplaste			42								
		Matière plastique renforcée de fibres de verre GFK			43								
		Matière plastique renforcée de fibres de carbone CFK			44								
		Graphite			45								
		Bois			46								

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Les avances recommandées figurent page B522.
Vous trouverez les exemples de matériaux pour les groupes enlèvement de copeaux à la page D11.

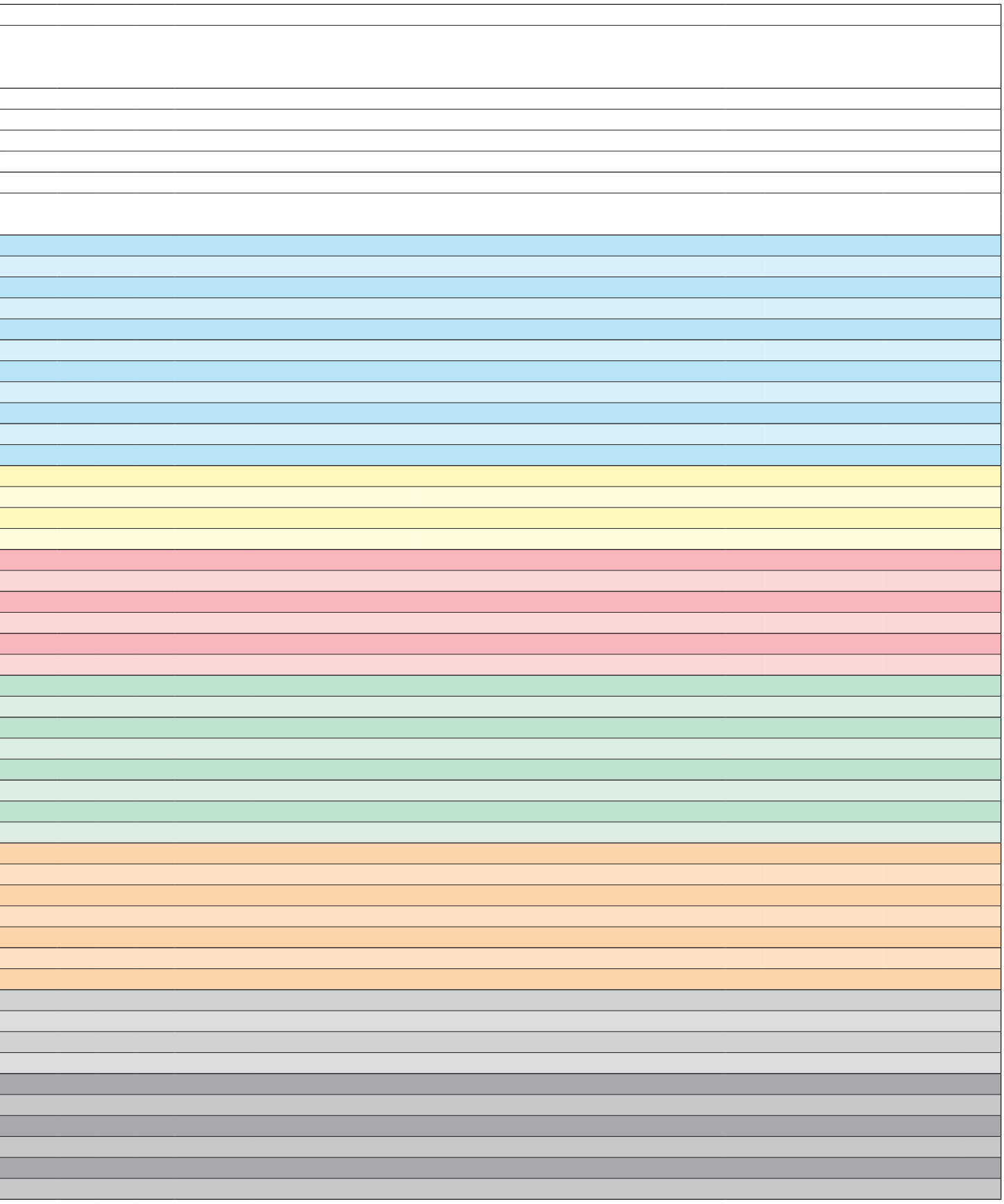
	Vitesse de coupe v_c [m/min]																			
	HM-6E				HM-6EL				HM-2B HM-2BP HM-2BS HM-4B				HM-2BL HM-4BL				HM-4R HM-4RP HM-4RF			
			Fraisage à 90°				Fraisage à 90°												Fraisage à 90°	
			Ø [mm]	$a_{e\ max}$			Ø [mm]	$a_{e\ max}$											Ø [mm]	$a_{e\ max}$
			$0 < x \leq 20$	$0{,}05 \times D$			$0 < x \leq 20$	$0{,}05 \times D$											$0 < x \leq 20$	$0{,}05 \times D$
	KMG555				KMG555				KMG555				KMG555				KMG555			
	a_e / D				a_e / D				a_e / D				a_e / D				a_e / D			
	1/1	1/2	1/10	Gr. f	1/1	1/2	1/10	Gr. f	1/1	1/10	1/20	Gr. f	1/1	1/10	1/20	Gr. f	1/1	1/2	1/10	Gr. f
	–	–	125	3	–	–	115	3	–	130	145	7	–	125	140	7	55	100	125	3
	–	–	120	3	–	–	110	3	–	80	90	7	–	80	90	7	55	95	120	3
	–	–	160	3	–	–	145	3	–	163	181	7	–	156	175	7	70	125	160	3
	–	–	125	3	–	–	115	3	–	109	145	7	–	105	140	7	55	100	125	3

Fraises carbure monobloc Recommandations de données de coupe

Fraises – série GM

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min]							
						5502R402NM NM-2E NM-4E NM-2EP				NM-2B NM-4BP			
						Rainurage		Fraisage à 90°					
						Ø [mm]	$a_{p\ max}$	Ø [mm]	$a_{e\ max}$				
						0<x<12	0,5xD	0<x≤20	<0,5xD				
						12≤x≤20	1,0xD						
						KMG309				KMG309			
						a_e / D				a_e / D			
						1/1	1/2	1/10	Gr. f	1/1	1/10	1/20	Gr. f
P	Acier non allié	env. 0,15 % C	recuit	125	1								
		env. 0,45 % C	recuit	190	2								
		env. 0,45 % C	trempé et revenu	250	3								
		env. 0,75 % C	recuit	270	4								
		env. 0,75 % C	trempé et revenu	300	5								
	Acier faiblement allié		recuit	180	6								
			trempé et revenu	275	7								
			trempé et revenu	300	8								
			trempé et revenu	350	9								
	Acier fortement allié et Acier à outils fortement allié		recuit	200	10								
			durci et revenu	325	11								
M	Acier inoxydable	ferritique / martensitique	recuit	200	12								
		martensitique	trempé et revenu	240	13								
		austénitique	trempé	180	14								
		austénitique et ferritique		230	15								
K	Fonte grise	perlitique / ferritique		180	16								
		perlitique (martensitique)		260	17								
	Fonte avec graphite nodulaire	ferritique		160	18								
		perlitique		250	19								
	Fonte malléable	ferritique		130	20								
		perlitique		230	21								
N	Alliages corroyé d'aluminium	non durcissable		60	22	920	1100	1200	4	–	1400	1550	4
		durcissable	trempé	100	23	555	660	720	4	–	840	930	4
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24	370	440	480	4	–	560	620	4
		≤ 12 % Si, durcissable	trempé	90	25	460	550	600	4	–	700	775	4
		> 12 % Si, non durcissable		130	26	140	165	180	4	–	210	235	4
	Cuivre et alliages de cuivre (bronze/moulage)	Alliages de décolletage, PB > 1 %		110	27	280	330	360	4	–	420	465	4
		CuZn, CuSnZn		90	28	325	385	420	4	–	490	545	4
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29	280	330	360	4	–	420	465	4
S	Alliages réfractaires	Base Fe	recuit	200	30								
			trempé	280	31								
		à base de Ni ou Co	recuit	250	32								
			trempé	350	33								
			coulé	320	34								
	Alliages de titane	Titane pur		R_m 400	35								
		Alliages Alpha + Beta	trempé	R_m 1050	36								
H	Acier trempé		durci et revenu	55 HRC	37								
			durci et revenu	60 HRC	38								
	Fonte trempée		coulé	400	39								
	Fonte durcie		durci et revenu	55 HRC	40								
X	Matériaux non métalliques	Thermoplastiques			41								
		Duroplaste			42								
		Matière plastique renforcée de fibres de verre GFK			43								
		Matière plastique renforcée de fibres de carbone CFK			44								
		Graphite			45								
		Bois			46								

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Les avances recommandées figurent page B522.
Vous trouverez les exemples de matériaux pour les groupes enlèvement de copeaux à la page D11.



Fraises carbure monobloc Recommandations de données de coupe

Fraises – série AL, série ALP/ALG

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min]							
						ALP-1EP				AL-1E, AL-2E, AL-3E (W), ALG-2E			
						Rainurage		Fraisage à 90°		Rainurage		Fraisage à 90°	
						Ø [mm]	$a_{p\,max}$	Ø [mm]	$a_{e\,max}$	Ø [mm]	$a_{p\,max}$	Ø [mm]	$a_{e\,max}$
						0<x<12	0,5xD	0<x≤20	<0,5xD	0<x<12	0,5xD	0<x≤20	<0,5xD
						12≤x≤20	1,0xD			12≤x≤20	1,0xD		
						YK40F / KMD401				YK30F / YK40F			
						a_e / D				a_e / D			
						1/1	1/2	1/10	Gr. f	1/1	1/2	1/10	Gr. f
P	Acier non allié	env. 0,15 % C	recuit	125	1								
		env. 0,45 % C	recuit	190	2								
		env. 0,45 % C	trempé et revenu	250	3								
		env. 0,75 % C	recuit	270	4								
		env. 0,75 % C	trempé et revenu	300	5								
	Acier faiblement allié		recuit	180	6								
			trempé et revenu	275	7								
			trempé et revenu	300	8								
			trempé et revenu	350	9								
	Acier fortement allié et Acier à outils fortement allié		recuit	200	10								
			durci et revenu	325	11								
M	Acier inoxydable	ferritique / martensitique	recuit	200	12								
		martensitique	trempé et revenu	240	13								
		austénitique	trempé	180	14								
		austénitique et ferritique		230	15								
K	Fonte grise	perlitique / ferritique		180	16								
		perlitique (martensitique)		260	17								
	Fonte avec graphite nodulaire	ferritique		160	18								
		perlitique		250	19								
	Fonte malléable	ferritique		130	20								
		perlitique		230	21								
N	Alliages corroyé d'aluminium	non durcissable		60	22	300	345	375	12	920	1100	1200	4
		durcissable	trempé	100	23	250	290	315	12	555	660	720	4
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24	250	280	315	12	370	440	480	4
		≤ 12 % Si, durcissable	trempé	90	25	210	240	265	12	460	550	600	4
		> 12 % Si, non durcissable		130	26	180	210	225	12	140	165	180	4
	Cuivre et alliages de cuivre (bronze/moulage)	Alliages de décolletage, PB > 1 %		110	27	280	320	350	12	280	330	360	4
		CuZn, CuSnZn		90	28	310	360	390	12	325	385	420	4
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29	280	320	350	12	280	330	360	4
S	Alliages réfractaires	Base Fe	recuit	200	30								
			trempé	280	31								
		à base de Ni ou Co	recuit	250	32								
			trempé	350	33								
			coulé	320	34								
	Alliages de titane	Titane pur		R_m 400	35								
		Alliages Alpha + Beta	trempé	R_m 1050	36								
H	Acier trempé		durci et revenu	55 HRC	37								
			durci et revenu	60 HRC	38								
	Fonte trempée		coulé	400	39								
	Fonte durcie		durci et revenu	55 HRC	40								
X	Matériaux non métalliques	Thermoplastiques			41								
		Duroplaste			42								
		Matière plastique renforcée de fibres de verre GFK			43								
		Matière plastique renforcée de fibres de carbone CFK			44								
		Graphite			45								
		Bois			46								

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Les avances recommandées figurent page B522.
Vous trouverez les exemples de matériaux pour les groupes enlèvement de copeaux à la page D11.

	Vitesse de coupe v_c [m/min]																			
	AL-2EL AL-3EL				ALG-3E ALP-3E ALP-4E				ALG-3E (W) ALP-3E (W) ALP-4E (W)				5566R302NH AL-2B				AL-2R-AIR AL-3R-AIR			
	Rainurage		Fraisage à 90°		Rainurage		Fraisage à 90°		Rainurage		Fraisage à 90°		Rainurage		Fraisage à 90°		Rainurage		Fraisage à 90°	
	Ø [mm]	$a_{p\,max}$	Ø [mm]	$a_{e\,max}$	Ø [mm]	$a_{p\,max}$	Ø [mm]	$a_{e\,max}$	Ø [mm]	$a_{p\,max}$	Ø [mm]	$a_{e\,max}$	Ø [mm]	$a_{p\,max}$	Ø [mm]	$a_{e\,max}$	Ø [mm]	$a_{p\,max}$	Ø [mm]	$a_{e\,max}$
	0<x<12	0,5xD	0<x≤20	<0,5xD	0<x<12	0,5xD	0<x≤20	<0,5xD	0<x<12	0,5xD	0<x≤20	<0,5xD	0<x<12	0,5xD	0<x≤20	<0,5xD	0<x<12	0,5xD	0<x≤20	<0,5xD
	12≤x≤20	1,0xD			12≤x≤20	1,0xD			12≤x≤20	1,0xD			12≤x≤20	1,0xD			12≤x≤20	1,0xD		
	YK30F				YK40F				KMD401				YK30F / YK40F				YK40F			
	a_e / D				ae / D				a_e / D				a_e / D				ae / D			
	1/1	1/2	1/10	Gr. f	1/1	1/2	1/10	Gr. f	1/1	1/10	1/20	Gr. f	1/1	1/2	1/10	Gr. f	1/1	1/2	1/10	Gr. f
	830	990	1080	4	920	1100	1200	4	1200	1430	1560	4	–	1400	1550	4	1150	1380	1500	8
	500	595	650	4	555	660	720	4	725	860	940	4	–	840	930	4	690	830	900	8
	335	400	435	4	370	440	480	4	485	575	625	4	–	560	620	4	460	555	600	8
	415	495	540	4	460	550	600	4	600	715	780	4	–	700	775	4	575	690	750	8
	125	150	165	4	140	165	180	4	185	215	235	4	–	210	235	4	175	210	225	8
	250	300	325	4	280	330	360	4	365	430	470	4	–	420	465	4	345	415	450	8
	295	350	380	4	325	385	420	4	425	505	550	4	–	490	545	4	405	485	525	8
	250	300	325	4	280	330	360	4	365	430	470	4	–	420	465	4	345	415	450	8

A

Tournage

B

Fraisage

C

Perçage

D

Informations techniques

E

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Fraises carbure monobloc Recommandations de données de coupe

Fraises – série AL, série ALP/ALG

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min]							
						ALG-2R (W)				AL-2RL-AIR AL-3RL-AIR			
						Rainurage		Fraisage à 90°		Rainurage		Fraisage à 90°	
						Ø [mm]	$a_{p\ max}$	Ø [mm]	$a_{e\ max}$	Ø [mm]	$a_{p\ max}$	Ø [mm]	$a_{e\ max}$
						0<x<12	0,5xD	0<x≤20	<0,5xD	0<x<12	0,5xD	0<x≤20	<0,5xD
						12≤x≤20	1,0xD			12≤x≤20	1,0xD		
						KMD401				YK40F			
						a_e / D				a_e / D			
						1/1	1/2	1/10	Gr. f	1/1	1/2	1/10	Gr. f
P	Acier non allié	env. 0,15 % C	recuit	125	1								
		env. 0,45 % C	recuit	190	2								
		env. 0,45 % C	trempé et revenu	250	3								
		env. 0,75 % C	recuit	270	4								
		env. 0,75 % C	trempé et revenu	300	5								
	Acier faiblement allié		recuit	180	6								
			trempé et revenu	275	7								
			trempé et revenu	300	8								
			trempé et revenu	350	9								
	Acier fortement allié et Acier à outils fortement allié		recuit	200	10								
			durci et revenu	325	11								
M	Acier inoxydable	ferritique / martensitique	recuit	200	12								
		martensitique	trempé et revenu	240	13								
		austénitique	trempé	180	14								
		austénitique et ferritique		230	15								
K	Fonte grise	perlitique / ferritique		180	16								
		perlitique (martensitique)		260	17								
	Fonte avec graphite nodulaire	ferritique		160	18								
		perlitique		250	19								
	Fonte malléable	ferritique		130	20								
		perlitique		230	21								
N	Alliages corroyé d'aluminium	non durcissable		60	22	1495	1795	1950	8	1035	1250	1350	8
		durcissable	trempé	100	23	900	1080	1170	8	625	750	810	8
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24	600	725	780	8	415	500	540	8
		≤ 12 % Si, durcissable	trempé	90	25	750	900	975	8	520	625	675	8
		> 12 % Si, non durcissable		130	26	230	275	295	8	160	190	205	8
	Cuivre et alliages de cuivre (bronze/moulage)	Alliages de décolletage, PB > 1 %		110	27	450	540	585	8	315	375	405	8
		CuZn, CuSnZn		90	28	530	635	685	8	365	440	475	8
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29	450	540	585	8	315	375	405	8
S	Alliages réfractaires	Base Fe	recuit	200	30								
			trempé	280	31								
		à base de Ni ou Co	recuit	250	32								
			trempé	350	33								
			coulé	320	34								
	Alliages de titane	Titane pur		R_m 400	35								
		Alliages Alpha + Beta	trempé	R_m 1050	36								
H	Acier trempé		durci et revenu	55 HRC	37								
			durci et revenu	60 HRC	38								
	Fonte trempée		coulé	400	39								
	Fonte durcie		durci et revenu	55 HRC	40								
X	Matériaux non métalliques	Thermoplastiques			41								
		Duroplaste			42								
		Matière plastique renforcée de fibres de verre GFK			43								
		Matière plastique renforcée de fibres de carbone CFK			44								
		Graphite			45								
		Bois			46								

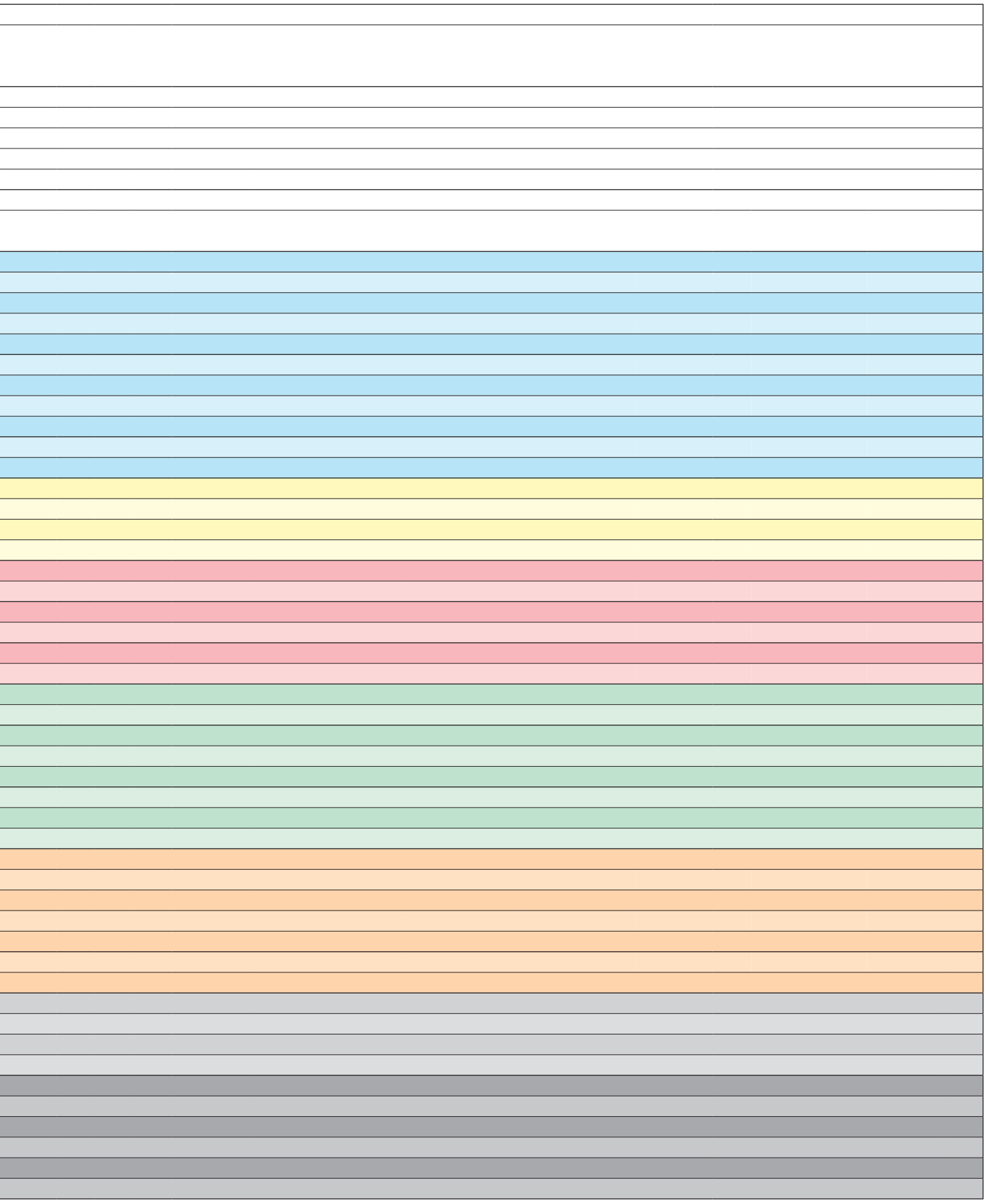
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Fraises carbure monobloc Recommandations de données de coupe

Fraises à queue – série TM

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min]							
						TM-4R / TM-4RP TM-5R / TM-5RP TM-7R / TM-7RP TM-9R / TM-9RP				TM-4B / TM-4BP TM-5B / TM-5BP			
						Rainurage		Fraisage à 90°					
						Ø [mm]	$a_{p\,max}$	Ø [mm]	$a_{e\,max}$				
						0 < x < 3	0,3 x D	0 < x < 3					
						3 ≤ x < 12	0,7 x D	3 ≤ x < 20	0,3 x D				
						12 ≤ x ≤ 20	1,5 x D						
						KMS405				KMS405			
						a_e / D				a_e / D			
						1/1	1/2	1/10	Gr. f	1/1	1/10	1/20	Gr. f
P	Acier non allié	env. 0,15 % C	recuit	125	1								
		env. 0,45 % C	recuit	190	2								
		env. 0,45 % C	trempé et revenu	250	3								
		env. 0,75 % C	recuit	270	4								
		env. 0,75 % C	trempé et revenu	300	5								
	Acier faiblement allié		recuit	180	6								
			trempé et revenu	275	7								
			trempé et revenu	300	8								
			trempé et revenu	350	9								
	Acier fortement allié et Acier à outils fortement allié		recuit	200	10								
			durci et revenu	325	11								
M	Acier inoxydable	ferritique / martensitique	recuit	200	12								
		martensitique	trempé et revenu	240	13								
		austénitique	trempé	180	14								
		austénitique et ferritique		230	15								
K	Fonte grise	perlitique / ferritique		180	16								
		perlitique (martensitique)		260	17								
	Fonte avec graphite nodulaire	ferritique		160	18								
		perlitique		250	19								
	Fonte malléable	ferritique		130	20								
		perlitique		230	21								
N	Alliages corroyé d'aluminium	non durcissable		60	22								
		durcissable	trempé	100	23								
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24								
		≤ 12 % Si, durcissable	trempé	90	25								
		> 12 % Si, non durcissable		130	26								
	Cuivre et alliages de cuivre (Bronze/ moulage)	Alliages de décolletage, PB > 1 %		110	27								
		CuZn, CuSnZn		90	28								
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29								
S	Alliages réfractaires	Base Fe	recuit	200	30	45	55	85	10	–	85	90	10
			trempé	280	31	25	30	45	10	–	45	50	10
		à base de Ni ou Co	recuit	250	32	45	55	85	10	–	85	90	10
			trempé	350	33	25	30	45	10	–	45	50	10
			coulé	320	34	25	30	45	10	–	45	50	10
	Alliages de titane	Titane pur		R_m 400	35	75	90	135	10	–	135	145	10
		Alliages Alpha + Beta	trempé	R_m 1050	36	45	55	85	10	–	85	90	10
H	Acier trempé		durci et revenu	55 HRC	37								
			durci et revenu	60 HRC	38								
	Fonte trempée		coulé	400	39								
	Fonte durcie		durci et revenu	55 HRC	40								
X	Matériaux non métalliques	Thermoplastiques			41								
		Duroplaste			42								
		Matière plastique renforcée de fibres de verre GFK			43								
		Matière plastique renforcée de fibres de carbone CFK			44								
		Graphite			45								
		Bois			46								

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Les avances recommandées figurent page B522.
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Fraises carbure monobloc Recommandations de données de coupe

Fraises – série PM

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min]							
						PM-2E PM-2ES / PM-2EP / PM-2RP PM-4E PM-4E-G				PM-4EL PM-4EL-G PM-4EX-G			
						Rainurage		Fraisage à 90°		Rainurage		Fraisage à 90°	
						Ø [mm]	$a_{p\ max}$	Ø [mm]	$a_{e\ max}$	Ø [mm]	$a_{p\ max}$	Ø [mm]	$a_{e\ max}$
						0 < x < 3	0,1 5 x D	0 < x ≤ 20	0,15 x D	0 < x < 3	0,1 5 x D	0 < x ≤ 20	0,15 x D
						3 ≤ x < 6	0,3 x D			3 ≤ x < 6	0,3 x D		
						6 ≤ x ≤ 20	0,5 x D			6 ≤ x ≤ 20	0,5 x D		
						KMG405				KMG405			
						a_e / D				a_e / D			
						1/1	1/2	1/10	Gr. f	1/1	1/2	1/10	Gr. f
P	Acier non allié	env. 0,15 % C	recuit	125	1	165	220	300	1	140	190	255	1
		env. 0,45 % C	recuit	190	2	160	210	285	1	135	185	245	1
		env. 0,45 % C	trempé et revenu	250	3	120	155	210	1	100	135	180	1
		env. 0,75 % C	recuit	270	4	100	135	180	1	85	115	155	1
		env. 0,75 % C	trempé et revenu	300	5	95	125	165	1	80	105	145	1
	Acier faiblement allié		recuit	180	6	125	165	225	1	110	145	195	1
			trempé et revenu	275	7	100	135	180	1	85	115	155	1
			trempé et revenu	300	8	95	125	165	1	80	105	145	1
			trempé et revenu	350	9	90	115	160	1	75	100	135	1
	Acier fortement allié et Acier à outils fortement allié		recuit	200	10	120	155	210	1	100	135	180	1
			durci et revenu	325	11	90	120	160	1	75	105	140	1
M	Acier inoxydable	ferritique / martensitique	recuit	200	12	55	75	100	1	45	65	85	1
		martensitique	trempé et revenu	240	13	50	65	85	1	40	55	75	1
		austénitique	trempé	180	14	60	75	105	1	50	65	90	1
		austénitique et ferritique		230	15	50	65	85	1	40	55	75	1
K	Fonte grise	perlitique / ferritique		180	16	125	165	220	1	105	140	190	1
		perlitique (martensitique)		260	17	100	135	180	1	85	115	155	1
	Fonte avec graphite nodulaire	ferritique		160	18	150	200	270	1	130	175	230	1
		perlitique		250	19	120	155	210	1	100	135	180	1
	Fonte malléable	ferritique		130	20	165	220	300	1	145	190	255	1
		perlitique		230	21	135	180	240	1	115	155	205	1
N	Alliages corroyé d'aluminium	non durcissable		60	22								
		durcissable	trempé	100	23								
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24								
		≤ 12 % Si, durcissable	trempé	90	25								
		> 12 % Si, non durcissable		130	26								
	Cuivre et alliages de cuivre (Bronze/ moulage)	Alliages de décolletage, PB > 1 %		110	27								
		CuZn, CuSnZn		90	28								
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29								
S	Alliages réfractaires	Base Fe	recuit	200	30								
			trempé	280	31								
		à base de Ni ou Co	recuit	250	32								
			trempé	350	33								
			coulé	320	34								
	Alliages de titane	Titane pur		R_m 400	35								
		Alliages Alpha + Beta	trempé	R_m 1050	36								
H	Acier trempé		durci et revenu	55 HRC	37	80	105	140	1	65	90	120	1
			durci et revenu	60 HRC	38	–	–	–	–	–	–	–	–
	Fonte trempée		coulé	400	39	105	140	185	1	85	120	160	1
	Fonte durcie		durci et revenu	55 HRC	40	–	–	–	–	–	–	–	–
X	Matériaux non métalliques	Thermoplastiques			41								
		Duroplaste			42								
		Matière plastique renforcée de fibres de verre GFK			43								
		Matière plastique renforcée de fibres de carbone CFK			44								
		Graphite			45								
		Bois			46								

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
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	Vitesse de coupe v_c [m/min]																			
	PM-6E				PM-6EL				PM-2B PM-2BS / PM-2BP PM-4B				PM-2BL PM-2BFP PM-4BL				PM-2BC			
			Fraisage à 90°				Fraisage à 90°													
			Ø [mm]	$a_{p\ max}$			Ø [mm]	$a_{p\ max}$												
			0 < x ≤ 20	0.15 x D			0 < x ≤ 20	0.15 x D												
	KMG405				KMG405				KMG405				KMG405				KMG405			
	a_e / D				a_e / D				a_e / D				a_e / D				a_e / D			
	1/1	1/2	1/10	Gr. f	1/1	1/2	1/10	Gr. f	1/1	1/10	1/20	Gr. f	1/1	1/10	1/20	Gr. f	1/1	1/10	1/20	Gr. f
	–	220	300	1	–	190	255	1	–	270	300	5	–	230	255	5	–	230	255	5
	–	210	285	1	–	185	245	1	–	260	285	5	–	220	245	5	–	220	245	5
	–	155	210	1	–	135	180	1	–	190	210	5	–	165	180	5	–	165	180	5
	–	135	180	1	–	115	155	1	–	165	180	5	–	140	155	5	–	140	155	5
	–	125	165	1	–	105	145	1	–	150	165	5	–	130	145	5	–	130	145	5
	–	165	225	1	–	145	195	1	–	205	225	5	–	175	195	5	–	175	195	5
	–	135	180	1	–	115	155	1	–	165	180	5	–	140	155	5	–	140	155	5
	–	125	165	1	–	105	145	1	–	150	165	5	–	130	145	5	–	130	145	5
	–	115	160	1	–	100	135	1	–	145	160	5	–	120	135	5	–	120	135	5
	–	155	210	1	–	135	180	1	–	190	210	5	–	165	180	5	–	165	180	5
	–	120	160	1	–	105	140	1	–	145	160	5	–	125	140	5	–	125	140	5
	–	75	100	1	–	65	85	1	–	90	100	5	–	75	85	5	–	75	85	5
	–	65	85	1	–	55	75	1	–	80	85	5	–	65	75	5	–	65	75	5
	–	75	105	1	–	65	90	1	–	95	105	5	–	80	90	5	–	80	90	5
	–	65	85	1	–	55	75	1	–	80	85	5	–	65	75	5	–	65	75	5
	–	165	220	1	–	140	190	1	–	200	220	5	–	170	190	5	–	170	190	5
	–	135	180	1	–	115	155	1	–	165	180	5	–	140	155	5	–	140	155	5
	–	200	270	1	–	175	230	1	–	245	270	5	–	210	230	5	–	210	230	5
	–	155	210	1	–	135	180	1	–	190	210	5	–	165	180	5	–	165	180	5
	–	220	300	1	–	190	255	1	–	270	300	5	–	230	255	5	–	230	255	5
	–	180	240	1	–	155	205	1	–	220	240	5	–	185	205	5	–	185	205	5
	–	105	140	1	–	90	120	1	–	125	140	5	–	110	120	5	–	110	120	5
	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	–	140	185	1	–	120	160	1	–	165	185	1	–	145	160	1	–	145	160	1
	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Fraises carbure monobloc Recommandations de données de coupe

Fraises – série PM, série VPM

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min]							
						PM-2R PM-4R				PM-4RL			
						Rainurage		Fraisage à 90°		Rainurage		Fraisage à 90°	
						Ø [mm]	$a_{p\,max}$	Ø [mm]	$a_{e\,max}$	Ø [mm]	$a_{p\,max}$	Ø [mm]	$a_{e\,max}$
						0 < x < 3	0,1 5x D	0 < x ≤ 20	0.15 x D	0 < x < 3	0,1 5x D	0 < x ≤ 20	0.15 x D
						3 ≤ x < 6	0,3 x D			3 ≤ x < 6	0,3 x D		
						6 ≤ x ≤ 20	0,5 x D			6 ≤ x ≤ 20	0,5 x D		
						KMG405				KMG405			
						a_e / D				a_e / D			
						1/1	1/2	1/10	Gr. f	1/1	1/2	1/10	Gr. f
P	Acier non allié	env. 0,15 % C	recuit	125	1	165	220	300	1	150	200	265	1
		env. 0,45 % C	recuit	190	2	160	210	285	1	145	190	255	1
		env. 0,45 % C	trempé et revenu	250	3	120	155	210	1	105	140	190	1
		env. 0,75 % C	recuit	270	4	100	135	180	1	90	120	160	1
		env. 0,75 % C	trempé et revenu	300	5	95	125	165	1	85	110	150	1
	Acier faiblement allié		recuit	180	6	125	165	225	1	115	150	200	1
			trempé et revenu	275	7	100	135	180	1	90	120	160	1
			trempé et revenu	300	8	95	125	165	1	85	110	150	1
			trempé et revenu	350	9	90	115	160	1	80	105	140	1
	Acier fortement allié et Acier à outils fortement allié		recuit	200	10	120	155	210	1	105	140	190	1
			durci et revenu	325	11	90	120	160	1	80	110	145	1
M	Acier inoxydable	ferritique / martensitique	recuit	200	12	55	75	100	1	50	65	85	1
		martensitique	trempé et revenu	240	13	50	65	85	1	45	60	75	1
		austénitique	trempé	180	14	60	75	105	1	55	70	95	1
		austénitique et ferritique		230	15	50	65	85	1	45	60	75	1
K	Fonte grise	perlitique / ferritique		180	16	125	165	220	1	110	150	195	1
		perlitique (martensitique)		260	17	100	135	180	1	90	120	160	1
	Fonte avec graphite nodulaire	ferritique		160	18	150	200	270	1	135	180	240	1
		perlitique		250	19	120	155	210	1	105	140	190	1
	Fonte malléable	ferritique		130	20	165	220	300	1	150	200	265	1
		perlitique		230	21	135	180	240	1	120	160	215	1
N	Alliages corroyé d'aluminium	non durcissable		60	22								
		durcissable	trempé	100	23								
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24								
		≤ 12 % Si, durcissable	trempé	90	25								
		> 12 % Si, non durcissable		130	26								
	Cuivre et alliages de cuivre (Bronze/ moulage)	Alliages de décolletage, PB > 1 %		110	27								
		CuZn, CuSnZn		90	28								
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29								
S	Alliages réfractaires	Base Fe	recuit	200	30								
			trempé	280	31								
		à base de Ni ou Co	recuit	250	32								
			trempé	350	33								
			coulé	320	34								
	Alliages de titane	Titane pur		R_m 400	35								
		Alliages Alpha + Beta	trempé	R_m 1050	36								
H	Acier trempé		durci et revenu	55 HRC	37	85	110	145	1	70	95	125	1
			durci et revenu	60 HRC	38	–	–	–	–	–	–	–	–
	Fonte trempée		coulé	400	39	115	145	190	1	95	125	165	1
	Fonte durcie		durci et revenu	55 HRC	40	–	–	–	–	–	–	–	–
X	Matériaux non métalliques	Thermoplastiques			41								
		Duroplaste			42								
		Matière plastique renforcée de fibres de verre GFK			43								
		Matière plastique renforcée de fibres de carbone CFK			44								
		Graphite			45								
		Bois			46								

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
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	Vitesse de coupe v_c [m/min]								
	PM-4H PM-4HL				VPM-4E				
			Fraisage à 90°						
			Ø [mm]	$a_{e\,max}$					
			0 < x ≤ 20	0.15 x D	0 < x < 3	0,5x D	0 < x < 3	0.15 x D	
					3 ≤ x < 12	1,5x D	3 ≤ x < 20	0,5 x D	
					12≤x≤20	2,0x D			
	KMG405				KMG406				
	a_e / D				a_e / D				
	1/1	1/2	1/10	Gr. f	1/1	1/2	1/10		
	–	210	270	6	230	280	350	9	
	–	200	260	6	220	270	340	9	
	–	150	190	6	160	190	250	9	
	–	130	165	6	140	160	210	9	
	–	120	150	6	130	150	200	9	
	–	160	205	6	180	215	270	9	
	–	130	165	6	130	170	220	9	
	–	120	150	6	125	150	190	9	
	–	110	145	6	120	150	190	9	
	–	150	190	6	160	190	250	9	
	–	115	145	6	115	140	190	9	
	–	70	90	6	70	90	110	9	
	–	60	80	6	60	80	100	9	
	–	75	95	6	75	90	120	9	
	–	60	80	6	65	80	100	9	
	–	155	200	6	160	200	260	9	
	–	130	165	6	140	170	220	9	
	–	190	245	6	215	250	330	9	
	–	150	190	6	160	200	250	9	
	–	210	270	6	230	280	360	9	
	–	170	220	6	180	230	290	9	
	–	100	125	1	100	120	150	9	
	–	–	–	–	–	–	–	–	
	–	130	165	1	110	150	180	9	
	–	–	–	–	–	–	–	–	

Fraises carbure monobloc Recommandations de données de coupe

Fraises à queue – série EPM

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min]							
						EPM-2E EPM-4E				EPM-2EL EPM-4EL			
						Rainurage		Fraisage à 90°		Rainurage		Fraisage à 90°	
						Ø [mm]	$a_{p\,max}$	Ø [mm]	$a_{e\,max}$	Ø [mm]	$a_{p\,max}$	Ø [mm]	$a_{e\,max}$
						0 < x < 3	0,1 5 x D	0 < x ≤ 20	0,15 x D	0 < x < 3	0,1 5 x D	0 < x ≤ 20	0,15 x D
						3 ≤ x < 6	0,3 x D			3 ≤ x < 6	0,3 x D		
						6 ≤ x ≤ 20	0,5 x D			6 ≤ x ≤ 20	0,5 x D		
						KMG406				KMG406			
						a_e / D				a_e / D			
						1/1	1/2	1/10	Gr. f	1/1	1/2	1/10	Gr. f
P	Acier non allié	env. 0,15 % C	recuit	125	1	165	220	300	1	140	190	255	1
		env. 0,45 % C	recuit	190	2	160	210	285	1	135	185	245	1
		env. 0,45 % C	trempé et revenu	250	3	120	155	210	1	100	135	180	1
		env. 0,75 % C	recuit	270	4	100	135	180	1	85	115	155	1
		env. 0,75 % C	trempé et revenu	300	5	95	125	165	1	80	105	145	1
	Acier faiblement allié		recuit	180	6	125	165	225	1	110	145	195	1
			trempé et revenu	275	7	100	135	180	1	85	115	155	1
			trempé et revenu	300	8	95	125	165	1	80	105	145	1
			trempé et revenu	350	9	90	115	160	1	75	100	135	1
	Acier fortement allié et Acier à outils fortement allié		recuit	200	10	120	155	210	1	100	135	180	1
			durci et revenu	325	11	90	120	160	1	75	105	140	1
M	Acier inoxydable	ferritique / martensitique	recuit	200	12	55	75	100	1	45	65	85	1
		martensitique	trempé et revenu	240	13	50	65	85	1	40	55	75	1
		austénitique	trempé	180	14	60	75	105	1	50	65	90	1
		austénitique et ferritique		230	15	50	65	85	1	40	55	75	1
K	Fonte grise	perlitique / ferritique		180	16	125	165	220	1	105	140	190	1
		perlitique (martensitique)		260	17	100	135	180	1	85	115	155	1
	Fonte avec graphite nodulaire	ferritique		160	18	150	200	270	1	130	175	230	1
		perlitique		250	19	120	155	210	1	100	135	180	1
	Fonte malléable	ferritique		130	20	165	220	300	1	145	190	255	1
		perlitique		230	21	135	180	240	1	115	155	205	1
N	Alliages corroyé d'aluminium	non durcissable		60	22								
		durcissable	trempé	100	23								
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24								
		≤ 12 % Si, durcissable	trempé	90	25								
		> 12 % Si, non durcissable		130	26								
	Cuivre et alliages de cuivre (Bronze/ moulage)	Alliages de décolletage, PB > 1 %		110	27								
		CuZn, CuSnZn		90	28								
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29								
S	Alliages réfractaires	Base Fe	recuit	200	30								
			trempé	280	31								
		à base de Ni ou Co	recuit	250	32								
			trempé	350	33								
			coulé	320	34								
	Alliages de titane	Titane pur		R_m 400	35								
		Alliages Alpha + Beta	trempé	R_m 1050	36								
H	Acier trempé		durci et revenu	55 HRC	37	80	105	140	1	65	90	120	1
			durci et revenu	60 HRC	38	–	–	–	–	–	–	–	–
	Fonte trempée		coulé	400	39	105	140	185	1	85	120	160	1
	Fonte durcie		durci et revenu	55 HRC	40								
X	Matériaux non métalliques	Thermoplastiques			41								
		Duroplaste			42								
		Matière plastique renforcée de fibres de verre GFK			43								
		Matière plastique renforcée de fibres de carbone CFK			44								
		Graphite			45								
		Bois			46								

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	Vitesse de coupe v_c [m/min]																			
	EPM-2B EPM-4B				EPM-2BL EPM-4BL															
	KMG406				KMG406															
	a_e / D				a_e / D															
	1/1	1/10	1/20	Gr. f	1/1	1/10	1/20	Gr. f												
	–	270	300	5	–	230	255	5												
	–	260	285	5	–	220	245	5												
	–	190	210	5	–	165	180	5												
	–	165	180	5	–	140	155	5												
	–	150	165	5	–	130	145	5												
	–	205	225	5	–	175	195	5												
	–	165	180	5	–	140	155	5												
	–	150	165	5	–	130	145	5												
	–	145	160	5	–	120	135	5												
	–	190	210	5	–	165	180	5												
	–	145	160	5	–	125	140	5												
	–	90	100	5	–	75	85	5												
	–	80	85	5	–	65	75	5												
	–	95	105	5	–	80	90	5												
	–	80	85	5	–	65	75	5												
	–	200	220	5	–	170	190	5												
	–	165	180	5	–	140	155	5												
	–	245	270	5	–	210	230	5												
	–	190	210	5	–	165	180	5												
	–	270	300	5	–	230	255	5												
	–	220	240	5	–	185	205	5												
	–	125	140	5	–	110	120	5												
	–	–	–	–	–	–	–	–												
	–	165	185	1	–	145	160	1												

Fraises carbure monobloc Recommandations de données de coupe

Fraises – série HPC, série UM/UMC, série VSM

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min]							
						5501R38414GM (-R) 5502R38414GM (-R) 5602R38414GM (-R)				5501R38414GM 5502R38414GM 5602R38414GM			
						Rainurage		Fraisage à 90°		Rainurage		Fraisage à 90°	
						Ø [mm]	$a_{p\ max}$	Ø [mm]	$a_{e\ max}$	Ø [mm]	$a_{p\ max}$	Ø [mm]	$a_{e\ max}$
						0 < x < 3	0,3x D	0 < x < 3	0.15 x D	0 < x < 3	0,3x D	0 < x < 3	0.15 x D
						3 ≤ x < 12	0,7 x D	3 ≤ x < 20	0,3 x D	3 ≤ x < 12	0,7 x D	3 ≤ x < 20	0,3 x D
						12≤x≤20	1,5xD			12≤x≤20	1,5xD		
						KMG405				KMG406			
						a_e / D				a_e / D			
						1/1	1/2	1/10	Gr. f	1/1	1/2	1/10	Gr. f
P	Acier non allié	env. 0,15 % C	recuit	125	1	250	300	380	9	230	280	350	9
		env. 0,45 % C	recuit	190	2	240	285	365	9	220	270	340	9
		env. 0,45 % C	trempé et revenu	250	3	175	210	270	9	160	190	250	9
		env. 0,75 % C	recuit	270	4	150	180	230	9	140	160	210	9
		env. 0,75 % C	trempé et revenu	300	5	140	165	210	9	130	150	200	9
	Acier faiblement allié		recuit	180	6	190	225	285	9	180	215	270	9
			trempé et revenu	275	7	150	180	230	9	130	170	220	9
			trempé et revenu	300	8	140	165	210	9	125	150	190	9
			trempé et revenu	350	9	130	160	200	9	120	150	190	9
	Acier fortement allié et Acier à outils fortement allié		recuit	200	10	175	210	270	9	160	190	250	9
			durci et revenu	325	11	135	160	205	9	115	140	190	9
M	Acier inoxydable	ferritique / martensitique	recuit	200	12	80	100	125	9	70	90	110	9
		martensitique	trempé et revenu	240	13	70	85	110	9	60	80	100	9
		austénitique	trempé	180	14	85	105	130	9	75	90	120	9
		austénitique et ferritique		230	15	70	85	110	9	65	80	100	9
K	Fonte grise	perlitique / ferritique		180	16	185	220	280	9	160	200	260	9
		perlitique (martensitique)		260	17	150	180	230	9	140	170	220	9
	Fonte avec graphite nodulaire	ferritique		160	18	225	270	345	9	215	250	330	9
		perlitique		250	19	175	210	270	9	160	200	250	9
	Fonte malléable	ferritique		130	20	250	300	380	9	230	280	360	9
		perlitique		230	21	200	240	305	9	180	230	290	9
N	Alliages corroyé d'aluminium	non durcissable		60	22								
		durcissable	trempé	100	23								
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24								
		≤ 12 % Si, durcissable	trempé	90	25								
		> 12 % Si, non durcissable		130	26								
	Cuivre et alliages de cuivre (Bronze/ moulage)	Alliages de décolletage, PB > 1 %		110	27								
		CuZn, CuSnZn		90	28								
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29								
S	Alliages réfractaires	Base Fe	recuit	200	30								
			trempé	280	31								
		à base de Ni ou Co	recuit	250	32								
			trempé	350	33								
			coulé	320	34								
	Alliages de titane	Titane pur		R_m 400	35								
		Alliages Alpha + Beta	trempé	R_m 1050	36								
H	Acier trempé		durci et revenu	55 HRC	37	115	140	175	9	100	120	150	9
			durci et revenu	60 HRC	38	–	–	–	–	–	–	–	–
	Fonte trempée		coulé	400	39	135	165	205	9	110	150	180	9
	Fonte durcie		durci et revenu	55 HRC	40	–	–	–	–	–	–	–	–
X	Matériaux non métalliques	Thermoplastiques			41								
		Duroplaste			42								
		Matière plastique renforcée de fibres de verre GFK			43								
		Matière plastique renforcée de fibres de carbone CFK			44								
		Graphite			45								
		Bois			46								

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Les avances recommandées figurent page B522.
Vous trouverez les exemples de matériaux pour les groupes enlèvement de copeaux à la page D11.

	Vitesse de coupe v_c [m/min]																			
	UM-4E UM-4E-W UM-4R UM-5EP				UM-4EL UM-4EL-W UM-4ELP UM-4EFP				UM-4RL UM-4RFP				UMC-4E UMC-4E-W				VSM-4E VSM-4R			
	Rainurage		Fraisage à 90°		Rainurage		Fraisage à 90°		Rainurage		Fraisage à 90°		Rainurage		Fraisage à 90°		Rainurage		Fraisage à 90°	
	Ø [mm]	$a_{p\ max}$	Ø [mm]	$a_{e\ max}$	Ø [mm]	$a_{p\ max}$	Ø [mm]	$a_{e\ max}$	Ø [mm]	$a_{p\ max}$	Ø [mm]	$a_{e\ max}$	Ø [mm]	$a_{p\ max}$	Ø [mm]	$a_{e\ max}$	Ø [mm]	$a_{p\ max}$	Ø [mm]	$a_{e\ max}$
	0 < x < 3	0,3xD	0 < x < 3	0.15xD	0 < x < 3	0,3xD	0 < x < 3	0.15xD	0 < x < 3	0,3xD	0 < x < 3	0.15xD	0 < x < 3	0,3xD	0 < x < 3	0.15xD	0 < x < 3	0,3xD	0 < x < 3	0.15xD
	3 ≤ x < 12	0,7xD	3 ≤ x < 20	0,3xD	3 ≤ x < 12	0,7xD	3 ≤ x < 20	0,3xD	3 ≤ x < 12	0,7xD	3 ≤ x < 20	0,3xD	3 ≤ x < 12	0,7xD	3 ≤ x < 20	0,3xD	3 ≤ x < 12	0,7xD	3 ≤ x < 20	0,3xD
	12≤x≤20	1,5xD			12≤x≤20	1,5xD			12≤x≤20	1,5xD			12≤x≤20	1,5xD			12≤x≤20	1,5xD		
	KMG405				KMG405				KMG405				KMG405				KMG405			
	a_e / D				a_e / D				a_e / D				a_e / D				a_e / D			
	1/1	1/2	1/10	Gr. f	1/1	1/2	1/10	Gr. f	1/1	1/2	1/10	Gr. f	1/1	1/2	1/10	Gr. f	1/1	1/2	1/10	
	250	300	380	9	150	180	230	9	150	180	230	9	–	–	300	9	145	180	250	10
	240	285	365	9	145	175	220	9	145	175	220	9	–	–	285	9	140	175	240	10
	175	210	270	9	105	130	165	9	105	130	165	9	–	–	210	9	105	130	175	10
	150	180	230	9	90	110	140	9	90	110	140	9	–	–	180	9	90	110	150	10
	140	165	210	9	85	100	130	9	85	100	130	9	–	–	165	9	80	100	140	10
	190	225	285	9	115	135	175	9	115	135	175	9	–	–	225	9	110	135	190	10
	150	180	230	9	90	110	140	9	90	110	140	9	–	–	180	9	90	110	150	10
	140	165	210	9	85	100	130	9	85	100	130	9	–	–	165	9	80	100	140	10
	130	160	200	9	80	95	120	9	80	95	120	9	–	–	160	9	80	95	130	10
	175	210	270	9	105	130	165	9	105	130	165	9	–	–	210	9	105	130	175	10
	135	160	205	9	80	100	125	9	80	100	125	9	–	–	160	9	80	100	135	10
	80	100	125	9	50	60	75	9	50	60	75	9	–	–	100	9	50	60	80	10
	70	85	110	9	45	55	65	9	45	55	65	9	–	–	85	9	45	55	70	10
	85	105	130	9	55	65	80	9	55	65	80	9	–	–	105	9	50	65	85	10
	70	85	110	9	45	55	65	9	45	55	65	9	–	–	85	9	45	55	70	10
	185	220	280	9	110	135	170	9	110	135	170	9	–	–	220	9				
	150	180	230	9	90	110	140	9	90	110	140	9	–	–	180	9				
	225	270	345	9	135	165	210	9	135	165	210	9	–	–	270	9				
	175	210	270	9	105	130	165	9	105	130	165	9	–	–	210	9				
	250	300	380	9	150	180	230	9	150	180	230	9	–	–	300	9				
	200	240	305	9	120	145	185	9	120	145	185	9	–	–	240	9				
																	45	55	85	10
																	25	30	45	10
																	45	55	85	10
																	25	30	45	10
																	25	30	45	10
																	75	90	135	10
																	45	55	85	10
	115	140	175	9	70	85	110	9	70	85	110	9								
	–	–	–	–	–	–	–	–	–	–	–	–								
	135	165	205	9	85	100	130	9	85	100	130	9								
	–	–	–	–	–	–	–	–	–	–	–	–								

Fraises carbure monobloc Recommandations de données de coupe

Fraise à chanfreiner – série FM

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min] 5501 / 5601 5501 / 5601 5601 KMG303 a_e / D 1/1	1/2	1/10	Gr. f
P	Acier non allié	env. 0,15 % C	recuit	125	1	–	–	230	11
		env. 0,45 % C	recuit	190	2	–	–	220	11
		env. 0,45 % C	trempé et revenu	250	3	–	–	165	11
		env. 0,75 % C	recuit	270	4	–	–	140	11
		env. 0,75 % C	trempé et revenu	300	5	–	–	130	11
	Acier faiblement allié		recuit	180	6	–	–	175	11
			trempé et revenu	275	7	–	–	140	11
			trempé et revenu	300	8	–	–	130	11
			trempé et revenu	350	9	–	–	120	11
	Acier fortement allié et Acier à outils fortement allié		recuit	200	10	–	–	165	11
			durci et revenu	325	11	–	–	125	11
M	Acier inoxydable	ferritique / martensitique	recuit	200	12	–	–	75	11
		martensitique	trempé et revenu	240	13	–	–	65	11
		austénitique	trempé	180	14	–	–	80	11
		austénitique et ferritique		230	15	–	–	65	11
K	Fonte grise	perlitique / ferritique		180	16	–	–	170	11
		perlitique (martensitique)		260	17	–	–	140	11
	Fonte avec graphite nodulaire	ferritique		160	18	–	–	210	11
		perlitique		250	19	–	–	165	11
	Fonte malléable	ferritique		130	20	–	–	230	11
		perlitique		230	21	–	–	185	11
N	Alliages corroyé d'aluminium	non durcissable		60	22	–	–	1200	11
		durcissable	trempé	100	23	–	–	720	11
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24	–	–	480	11
		≤ 12 % Si, durcissable	trempé	90	25	–	–	600	11
		> 12 % Si, non durcissable		130	26	–	–	180	11
	Cuivre et alliages de cuivre (bronze/moulage)	Alliages de décolletage, PB > 1 %		110	27	–	–	360	11
		CuZn, CuSnZn		90	28	–	–	420	11
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29	–	–	360	11
S	Alliages réfractaires	Base Fe	recuit	200	30				
			trempé	280	31				
		à base de Ni ou Co	recuit	250	32				
			trempé	350	33				
			coulé	320	34				
	Alliages de titane	Titane pur		R_m 400	35				
		Alliages Alpha + Beta	trempé	R_m 1050	36				
H	Acier trempé		durci et revenu	55 HRC	37				
			durci et revenu	60 HRC	38				
	Fonte trempée		coulé	400	39				
	Fonte durcie		durci et revenu	55 HRC	40				
X	Matériaux non métalliques	Thermoplastiques			41				
		Duroplaste			42				
		Matière plastique renforcée de fibres de verre GFK			43				
		Matière plastique renforcée de fibres de carbone CFK			44				
		Graphite			45				
		Bois			46				

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Les avances recommandées figurent page B522.
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Fraises carbure monobloc Recommandations de données de coupe

Fraises à queue – série QCH

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min]							
						Q**-PM-4E Q**-PM-4R Q**-VPM-4E				Q**PM-2B Q**PM-4B			
						Rainurage		Fraisage à 90°					
						Ø [mm]	$a_{p\,max}$	Ø [mm]	$a_{e\,max}$	Ø [mm]	$a_{p\,max}$	Ø [mm]	$a_{e\,max}$
						0 < x < 3	0,3 x D	0 < x < 20	0,15xD				
						3 ≤ x < 6	0,3 x D						
						6 ≤ x ≤ 20	0,5 x D						
						KMG405 a_e / D				KMG405 a_e / D			
P	Acier non allié	env. 0,15 % C	recuit	125	1	1/1	1/2	1/10	Gr. f	1/1	1/2	1/10	Gr. f
		env. 0,45 % C	recuit	190	2	165	220	300	1	–	270	300	5
		env. 0,45 % C	trempé et revenu	250	3	160	210	285	1	–	260	285	5
		env. 0,75 % C	recuit	270	4	120	155	210	1	–	190	210	5
		env. 0,75 % C	trempé et revenu	300	5	100	135	180	1	–	165	180	5
	Acier faiblement allié		recuit	180	6	95	125	165	1	–	150	165	5
			trempé et revenu	275	7	125	165	225	1	–	205	225	5
			trempé et revenu	300	8	100	135	180	1	–	165	180	5
			trempé et revenu	350	9	95	125	165	1	–	150	165	5
	Acier fortement allié et Acier à outils fortement allié		recuit	200	10	90	115	160	1	–	145	160	5
			durci et revenu	325	11	120	155	210	1	–	190	210	5
M	Acier inoxydable	ferritique / martensitique	recuit	200	12	90	120	160	1	–	145	160	5
		martensitique	trempé et revenu	240	13	55	75	100	1	–	90	100	5
		austénitique	trempé	180	14	50	65	85	1	–	80	85	5
		austénitique et ferritique		230	15	60	75	105	1	–	95	105	5
K	Fonte grise	perlitique / ferritique		180	16	50	65	85	1	–	80	85	5
		perlitique (martensitique)		260	17	125	165	220	1	–	200	220	5
	Fonte avec graphite nodulaire	ferritique		160	18	100	135	180	1	–	165	180	5
		perlitique		250	19	150	200	270	1	–	245	270	5
	Fonte malléable	ferritique		130	20	120	155	210	1	–	190	210	5
		perlitique		230	21	165	220	300	1	–	270	300	5
N	Alliages corroyé d'aluminium	non durcissable		60	22	135	180	240	1	–	220	240	5
		durcissable	trempé	100	23								
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24								
		≤ 12 % Si, durcissable	trempé	90	25								
		> 12 % Si, non durcissable		130	26								
	Cuivre et alliages de cuivre (bronze/moulage)	Alliages de décolletage, PB > 1 %		110	27								
		CuZn, CuSnZn		90	28								
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29								
S	Alliages réfractaires	Base Fe	recuit	200	30								
			trempé	280	31								
		à base de Ni ou Co	recuit	250	32								
			trempé	350	33								
			coulé	320	34								
	Alliages de titane	Titane pur		R_m 400	35								
		Alliages Alpha + Beta	trempé	R_m 1050	36								
H	Acier trempé		durci et revenu	55 HRC	37	–	–	–	–				
			durci et revenu	60 HRC	38	80	105	140	1				
	Fonte trempée		coulé	400	39	–	–	–	–				
	Fonte durcie		durci et revenu	55 HRC	40	105	140	185	1				
X	Matériaux non métalliques	Thermoplastiques			41								
		Duroplaste			42								
		Matière plastique renforcée de fibres de verre GFK			43								
		Matière plastique renforcée de fibres de carbone CFK			44								
		Graphite			45								
		Bois			46								

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Les avances recommandées figurent page B522.
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	Vitesse de coupe v_c [m/min]																			
	Q**-HMX-4E Q**-HMX-4R				Q**-HMX-2B Q**-HMX-4B															
			Fraisage à 90°																	
	Ø [mm]	$a_{p\ max}$	Ø [mm]	$a_{e\ max}$	Ø [mm]	$a_{p\ max}$	Ø [mm]	$a_{e\ max}$												
			0 < x ≤ 20	0.15 x D																
	KMG5515 a_e / D				KMG5515 a_e / D															
	1/1	1/2	1/10	Gr.f	1/1	1/2	1/10	Gr.f												
	–	–	–	–	–	–	–	–												
	55	100	125	3	–	130	145	7												
	55	95	120	3	–	80	90	7												
	70	125	160	3	–	163	181	7												
	55	100	125	3	–	109	145	7												

Fraises carbure monobloc Recommandations de données de coupe

Avance recommandée

Fraisage carbure monobloc, groupe 1 – Fraises à 90°, série PM, série QCH, série EPM

	a_e / D	Avance à la dent (f_z) [mm/dt]																			
		Ø0,5	Ø0,8	Ø 1	Ø 2	Ø 3	Ø 4	Ø 5	Ø 6	Ø 8	Ø 10	Ø 12	Ø 14	Ø 16	Ø 18	Ø 20					
P	1/1	0,01	0,02	0,02	0,02	0,02	0,02	0,03	0,03	0,05	0,07	0,08	0,08	0,09	0,09	0,10					
	1/2	0,01	0,03	0,03	0,03	0,03	0,03	0,04	0,04	0,06	0,09	0,10	0,10	0,12	0,12	0,13					
	1/10	0,02	0,05	0,05	0,05	0,05	0,05	0,07	0,07	0,09	0,14	0,16	0,16	0,18	0,18	0,20					
M	1/1	0,01	0,02	0,02	0,02	0,02	0,02	0,03	0,03	0,04	0,05	0,06	0,06	0,07	0,07	0,08					
	1/2	0,01	0,02	0,02	0,02	0,02	0,02	0,04	0,04	0,05	0,07	0,08	0,08	0,10	0,10	0,11					
	1/10	0,02	0,04	0,04	0,04	0,04	0,04	0,05	0,05	0,07	0,11	0,13	0,13	0,15	0,15	0,16					
K	1/1	0,01	0,02	0,02	0,02	0,02	0,02	0,03	0,03	0,05	0,07	0,08	0,08	0,09	0,09	0,10					
	1/2	0,01	0,03	0,03	0,03	0,03	0,03	0,04	0,04	0,06	0,09	0,10	0,10	0,12	0,12	0,13					
	1/10	0,02	0,05	0,05	0,05	0,05	0,05	0,07	0,07	0,09	0,14	0,16	0,16	0,18	0,18	0,20					
H	1/1	0,01	0,02	0,02	0,02	0,02	0,02	0,03	0,03	0,04	0,05	0,06	0,06	0,07	0,07	0,08					
	1/2	0,01	0,02	0,02	0,02	0,02	0,02	0,04	0,04	0,05	0,07	0,08	0,08	0,10	0,10	0,11					
	1/10	0,02	0,04	0,04	0,04	0,04	0,04	0,05	0,05	0,07	0,11	0,13	0,13	0,15	0,15	0,16					

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.

Fraisage carbure monobloc, groupe 2 – Fraises à 90°, série GM

	a_e / D	Avance à la dent (f_z) [mm/dt]																			
		Ø0,5	Ø0,8	Ø 1	Ø 2	Ø 3	Ø 4	Ø 5	Ø 6	Ø 8	Ø 10	Ø 12	Ø 14	Ø 16	Ø 18	Ø 20					
P	1/1	0,01	0,02	0,02	0,02	0,02	0,02	0,03	0,03	0,04	0,06	0,07	0,07	0,08	0,08	0,09					
	1/2	0,01	0,03	0,03	0,03	0,03	0,03	0,04	0,04	0,05	0,08	0,09	0,09	0,10	0,10	0,12					
	1/10	0,02	0,04	0,04	0,04	0,04	0,04	0,06	0,06	0,08	0,12	0,14	0,14	0,16	0,16	0,18					
M	1/1	0,01	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,03	0,05	0,06	0,06	0,06	0,06	0,07					
	1/2	0,01	0,02	0,02	0,02	0,02	0,02	0,03	0,03	0,04	0,06	0,07	0,07	0,08	0,08	0,09					
	1/10	0,02	0,03	0,03	0,03	0,03	0,03	0,05	0,05	0,06	0,10	0,11	0,11	0,13	0,13	0,15					
K	1/1	0,01	0,02	0,02	0,02	0,02	0,02	0,03	0,03	0,04	0,06	0,07	0,07	0,08	0,08	0,09					
	1/2	0,01	0,03	0,03	0,03	0,03	0,03	0,04	0,04	0,05	0,08	0,09	0,09	0,10	0,10	0,12					
	1/10	0,02	0,04	0,04	0,04	0,04	0,04	0,06	0,06	0,08	0,12	0,14	0,14	0,16	0,16	0,18					

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.

Fraises carbure monobloc, groupe 3 – Fraises à 90°, série HM, série QCH

	a_e / D	Avance à la dent (f_z) [mm/dt]																			
		Ø0,5	Ø0,8	Ø 1	Ø 2	Ø 3	Ø 4	Ø 5	Ø 6	Ø 8	Ø 10	Ø 12	Ø 14	Ø 16	Ø 18	Ø 20					
H	1/1	0,01	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,03	0,05	0,06	0,06	0,06	0,06	0,07					
	1/2	0,01	0,02	0,02	0,02	0,02	0,02	0,03	0,03	0,04	0,06	0,07	0,07	0,08	0,08	0,09					
	1/10	0,02	0,03	0,03	0,03	0,03	0,03	0,05	0,05	0,06	0,10	0,11	0,11	0,13	0,13	0,15					

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.

Fraises carbure monobloc, groupe 4 – Fraises à 90°, série AL, série NM

	a_e / D	Avance à la dent (f_z) [mm/dt]																			
		Ø0,5	Ø0,8	Ø 1	Ø 2	Ø 3	Ø 4	Ø 5	Ø 6	Ø 8	Ø 10	Ø 12	Ø 14	Ø 16	Ø 18	Ø 20					
N	1/1	0,02	0,03	0,03	0,03	0,03	0,03	0,05	0,05	0,06	0,09	0,11	0,11	0,12	0,12	0,14					
	3/4	0,02	0,04	0,04	0,04	0,04	0,04	0,06	0,06	0,08	0,12	0,14	0,14	0,16	0,16	0,18					
	1/10	0,03	0,06	0,06	0,06	0,06	0,06	0,09	0,09	0,12	0,19	0,22	0,22	0,25	0,25	0,28					
	1/20	0,04	0,08	0,08	0,08	0,08	0,08	0,12	0,12	0,16	0,23	0,27	0,27	0,31	0,31	0,35					

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.

Avance recommandée

Fraisage carbure monobloc, groupe 5 – Fraises hémisphériques, série GM, série QCH, série EPM

	a_e / D	Avance à la dent (f_z) [mm/dt]																		
		Ø0,5	Ø0,8	Ø 1	Ø 2	Ø 3	Ø 4	Ø 5	Ø 6	Ø 8	Ø 10	Ø 12	Ø 14	Ø 16	Ø 18	Ø 20				
P	1/1																			
	1/10	0,02	0,05	0,05	0,05	0,05	0,05	0,07	0,07	0,09	0,14	0,16	0,16	0,18	0,18	0,20				
	1/20	0,03	0,06	0,06	0,06	0,06	0,06	0,08	0,08	0,11	0,17	0,20	0,20	0,23	0,23	0,25				
M	1/1																			
	1/10	0,02	0,04	0,04	0,04	0,04	0,04	0,05	0,05	0,07	0,11	0,13	0,13	0,15	0,15	0,16				
	1/20	0,02	0,05	0,05	0,05	0,05	0,05	0,07	0,07	0,09	0,14	0,16	0,16	0,18	0,18	0,21				
K	1/1																			
	1/10	0,02	0,05	0,05	0,05	0,05	0,05	0,07	0,07	0,09	0,14	0,16	0,16	0,18	0,18	0,20				
	1/20	0,03	0,06	0,06	0,06	0,06	0,06	0,08	0,08	0,11	0,17	0,20	0,20	0,23	0,23	0,25				
H	1/1																			
	1/10	0,02	0,04	0,04	0,04	0,04	0,04	0,05	0,05	0,07	0,11	0,13	0,13	0,15	0,15	0,16				
	1/20	0,02	0,05	0,05	0,05	0,05	0,05	0,07	0,07	0,09	0,14	0,16	0,16	0,18	0,18	0,21				

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.

Fraisage carbure monobloc, groupe 6 – Fraises à 90°, série PM

	a_e / D	Avance à la dent (f_z) [mm/dt]																		
		Ø 3	Ø 4	Ø 5	Ø 6	Ø 8	Ø 10	Ø 12												
P	1/1																			
	1/10																			
	1/20	0,15	0,25	0,28	0,33	0,44	0,55	0,66												
M	1/1																			
	1/10																			
	1/20	0,12	0,22	0,25	0,30	0,41	0,52	0,63												
K	1/1																			
	1/10																			
	1/20	0,15	0,25	0,28	0,33	0,44	0,55	0,66												
H	1/1																			
	1/10																			
	1/20	0,12	0,22	0,25	0,30	0,41	0,52	0,63												

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.

Fraisage carbure monobloc, groupe 7 – Fraises hémisphériques, série HM, série QCH

	a_e / D	Avance à la dent (f_z) [mm/dt]																		
		Ø0,5	Ø0,8	Ø 1	Ø 2	Ø 3	Ø 4	Ø 5	Ø 6	Ø 8	Ø 10	Ø 12	Ø 14	Ø 16	Ø 18	Ø 20				
H	1/1																			
	1/2	0,02	0,04	0,04	0,04	0,04	0,04	0,05	0,05	0,07	0,11	0,13	0,13	0,15	0,15	0,16				
	1/10	0,02	0,05	0,05	0,05	0,05	0,05	0,07	0,07	0,09	0,14	0,16	0,16	0,18	0,18	0,21				

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.

Fraisage carbure monobloc, groupe 8 – Fraises grande avance, série AL, série ALP/ALG

	a_e / D	Avance à la dent (f_z) [mm/dt]																		
		Ø 6	Ø 8	Ø 10	Ø 12	Ø 14	Ø 16	Ø 18	Ø 20											
N	1/1	0,04	0,05	0,08	0,09	0,11	0,13	0,16	0,18											
	3/4	0,05	0,07	0,10	0,12	0,14	0,16	0,20	0,23											
	1/10	0,08	0,11	0,16	0,19	0,22	0,25	0,31	0,36											

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.

Avance recommandée

Fraisage carbure monobloc, groupe 9 – Fraises à 90°, série UM/UMC, série VPM usinage HSC/HPC

	a_e / D	Avance à la dent (f_z) [mm/dt]																			
		Ø 4	Ø 5	Ø 6	Ø 8	Ø 10	Ø 12	Ø 14	Ø 16	Ø 18	Ø 20										
P	1/1	0,06	0,06	0,06	0,07	0,07	0,07	0,07	0,08	0,08	0,08										
	1/2	0,08	0,08	0,08	0,09	0,09	0,09	0,09	0,10	0,10	0,10										
	1/10	0,14	0,14	0,16	0,18	0,22	0,25	0,27	0,3	0,32	0,36										
M	1/1	0,05	0,05	0,05	0,05	0,05	0,05	0,05	0,06	0,06	0,06										
	1/2	0,06	0,06	0,06	0,07	0,07	0,07	0,07	0,08	0,08	0,08										
	1/10	0,10	0,10	0,10	0,12	0,12	0,14	0,16	0,16	0,18	0,18										
K	1/1	0,06	0,06	0,06	0,07	0,07	0,07	0,07	0,08	0,08	0,08										
	1/2	0,08	0,08	0,08	0,09	0,09	0,09	0,09	0,10	0,10	0,10										
	1/10	0,14	0,14	0,16	0,18	0,22	0,25	0,27	0,3	0,32	0,36										
H	1/1	0,045	0,045	0,045	0,053	0,053	0,053	0,053	0,06	0,06	0,06										
	1/2	0,06	0,06	0,06	0,07	0,07	0,07	0,07	0,08	0,08	0,08										
	1/10	0,10	0,10	0,10	0,12	0,12	0,14	0,16	0,16	0,18	0,18										

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.

Fraisage carbure monobloc, groupe 10 – Fraises à 90°, série VSM, série TM

	a_e / D	Avance à la dent (f_z) [mm/dt]																			
		Ø 4	Ø 5	Ø 6	Ø 8	Ø 10	Ø 12	Ø 14	Ø 16	Ø 18	Ø 20										
P	1/1	0,03	0,04	0,05	0,05	0,05	0,05	0,06	0,06	0,07	0,08										
	1/2	0,04	0,06	0,07	0,07	0,07	0,07	0,08	0,09	0,10	0,11										
	1/10	0,05	0,08	0,09	0,09	0,09	0,09	0,11	0,12	0,14	0,15										
M	1/1	0,02	0,03	0,04	0,04	0,04	0,04	0,04	0,05	0,05	0,06										
	1/2	0,03	0,05	0,05	0,05	0,05	0,05	0,06	0,07	0,08	0,08										
	1/10	0,04	0,06	0,07	0,07	0,07	0,07	0,08	0,09	0,10	0,11										
S	1/1	0,02	0,03	0,04	0,04	0,04	0,04	0,04	0,05	0,05	0,06										
	1/2	0,03	0,05	0,05	0,05	0,05	0,05	0,06	0,07	0,08	0,08										
	1/10	0,04	0,06	0,07	0,07	0,07	0,07	0,08	0,09	0,10	0,11										

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.

Fraisage carbure monobloc, groupe 11 – Fraise à chanfreiner, série FM

	a_e / D	Avance à la dent (f_z) [mm/dt]																			
		Ø 3	Ø 4	Ø 5	Ø 6	Ø 8	Ø 10	Ø 12	Ø 14	Ø 16	Ø 18	Ø 20									
P	1/1																				
	1/2																				
	1/10	0,02	0,02	0,03	0,03	0,04	0,06	0,07	0,07	0,08	0,08	0,09									
M	1/1																				
	1/2																				
	1/10	0,02	0,02	0,02	0,02	0,03	0,05	0,06	0,06	0,06	0,06	0,07									
K	1/1																				
	1/2																				
	1/10	0,02	0,02	0,03	0,03	0,04	0,06	0,07	0,07	0,08	0,08	0,09									
N	1/1																				
	1/2																				
	1/10	0,03	0,03	0,05	0,05	0,06	0,09	0,11	0,11	0,12	0,12	0,14									

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.

Avance recommandée

Fraises carbure monobloc, groupe 12 – Fraises à une dent ALP-1EP

	a_e / D	Avance à la dent (f_z) [mm/dt]																			
		Ø 2	Ø 3	Ø 4	Ø 5	Ø 6	Ø 8	Ø 10													
N	1/1	0,03	0,05	0,07	0,09	0,11	0,14	0,18													
	1/2	0,04	0,07	0,10	0,13	0,15	0,20	0,25													
	1/10	0,06	0,11	0,15	0,19	0,23	0,29	0,38													

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.

Notes

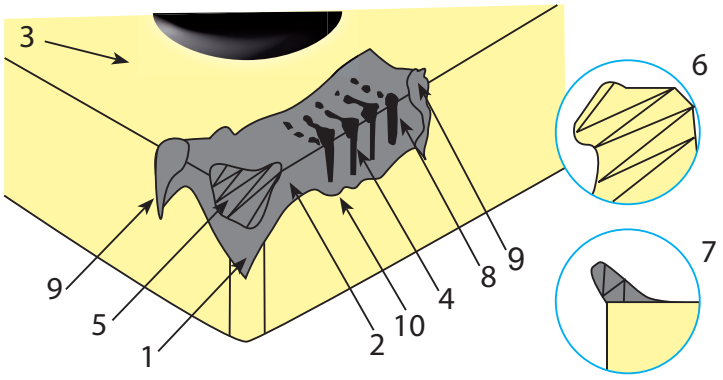
Informations techniques

Résolution de problèmes – fraisage	**B528**
Informations techniques – fraisage	**B529-B540**
Outils spéciaux – fraisage	**B541**

B

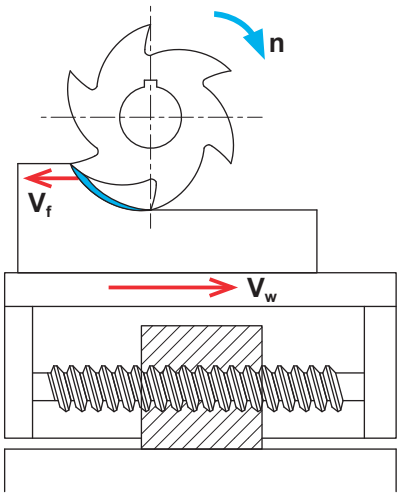
Résolution de problèmes – plaquettes de fraisage

Nr	Type d'usure	Conséquences	Cause	Recommendations
1+2	Usure de la face de dépouille	– Mauvais état de surface et mauvaise stabilité dimensionnelle – Augmentation de l'effort de coupe	– Nuance pas assez résistante – Vitesse de coupe trop élevée – Angle de dépouille trop petit – Avance trop faible	– Nuance avec résistance à l'usure plus élevée – Réduire la vitesse de coupe – Augmenter l'angle de dépouille – Réduire l'avance
3	Usure en cratère	– Mauvais état de surface et mauvais contrôle du copeau	– Nuance pas assez résistante – Vitesse de coupe trop élevée – Avance trop élevée	– Nuance avec résistance à l'usure plus élevée – Réduire la vitesse de coupe – Réduire l'avance
4	Ecaillage	– Durée de vie instable – Rupture soudaine de l'arête de coupe	– La nuance est trop dure – Avance trop élevée – Stabilité insuffisante de l'arête de coupe Stabilité insuffisante du porte-outil ou serrage insuffisant	– Nuance avec une ténacité supérieure – Réduire l'avance – Modifier le rayon de l'arête de coupe – Utiliser un porte-outils plus stable
5	Rupture	– Augmentation de l'effort de coupe – Mauvais état de surface et mauvaise stabilité dimensionnelle	– La nuance est trop dure – Avance trop élevée – Stabilité insuffisante de l'arête de coupe – Stabilité insuffisante du porte-outil ou serrage insuffisant	– Nuance avec une ténacité supérieure – Réduire l'avance – Modifier le rayon de l'arête de coupe – Utiliser un porte-outils plus stable
6	Déformation plastique	– Mauvaise stabilité dimensionnelle – Endommagement de l'arête de coupe	– Nuance pas assez résistante – Vitesse de coupe trop élevée – Profondeur de coupe et/ou avance trop élevée – Température trop élevée sur l'arête	– Nuance avec rés. à l'usure plus élevée – Réduire la vitesse de coupe – Réduire la prof. de coupe et l'avance – Nuance avec meilleure rés. thermique
7	Arête rapportée	– Augmentation de l'effort de coupe – Qualité en surface insuffisante	– Vitesse de coupe insuffisante – Arête de coupe pas assez tranchante – Nuance inadaptée	– Augmenter la vitesse de coupe – Augmenter l'angle d'enlèvement de copeaux – Sélectionner une nuance plus adaptée
8	Usure thermique	– Rupture liée à une interaction thermique, souvent en cas de coupe discontinue (fraisage)	– Variations de la température d'usinage – La nuance est trop dure	– Usinage à sec – Nuance avec une ténacité supérieure
9	Usure en entaille	– Formation de bavures – Augmentation de l'effort de coupe	– Endommagement lié aux copeaux (arête du copeau effilée) – Avance et vitesse de coupe trop haute	– Nuance avec meilleure rés. thermique – Augmenter l'angle de coupe afin d'obtenir une arête plus tranchante – Diminuer la vitesse de coupe
10	Écaillage (revêtement)	– Fréquent en cas d'usinage de matériaux durs ou en cas d'apparition de vibrations	– Éléments qui s'agglutinent sur l'arête de coupe et éclats – Mauvaise élimination des copeaux	– Augmenter l'angle de coupe afin d'obtenir une arête plus tranchante – Brise-copeau avec une coupe plus importante



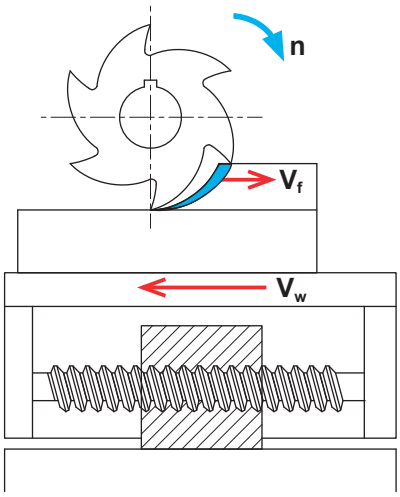
Plaquettes de fraisage

Différence entre fraisage en avalant et fraisage en opposition



Fraisage en opposition

Lors du fraisage en opposition, le sens de rotation de l'outil de fraisage et le sens de l'avance de la pièce sont opposés.



Fraisage en avalant.

Lors du fraisage en avalant, le sens de rotation de l'outil de fraisage et le sens de l'avance de la pièce sont orientés dans la même direction.

V_f Avance outil
V_w Avance pièce
n Sens de rotation

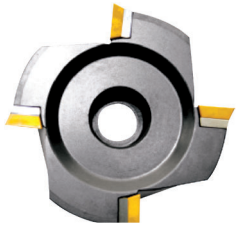
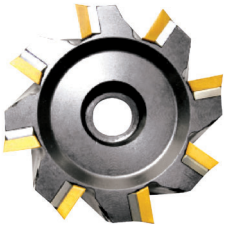
Avantages et inconvénients

Sens	Avantage	Inconvénient
Fraisage en opposition	– Risque éjection pièce – Fonctionnement plus silencieux	– Contrainte plus importante sur le matériau de coupe – Durées de vie moins élevées
Fraisage en avalant	– Durées de vie plus élevées – Moins de contrainte thermique	– Risque aspiration pièce

Plaquettes de fraisage

Pas de fraisage

Le pas de fraisage est la distance entre une arête de coupe et l'arête de coupe suivante.
Les pas sont classés : pas gros (différentiel), pas large, normal, et réduit.

Stabilité d'usinage		
L (faible)	M (moyen)	H (élevé)
Pas large	Pas normal	Pas réduit
		
Si la largeur de fraisage est égale au diamètre de la fraise et si la machine est de puissance et de stabilité suffisantes, un pas large est recommandé. Ceci permet une productivité élevée.	Sélection recommandée en vue du fraisage général et de l'usinage mixte.	Si la largeur de fraisage est plus petite que le diamètre de la fraise, un nombre d'arêtes de coupe plus important est intéressant pour une productivité élevée. Les fraises conviennent à tous les matériaux, en particulier ceux qui sont difficiles à usiner.

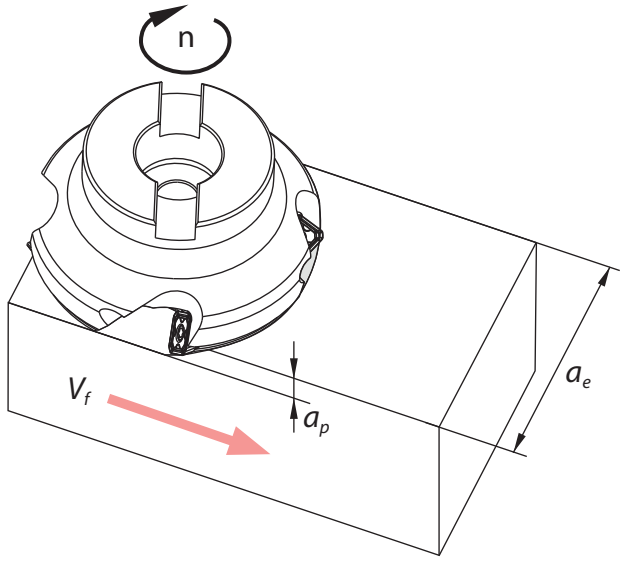
Angle d'attaque

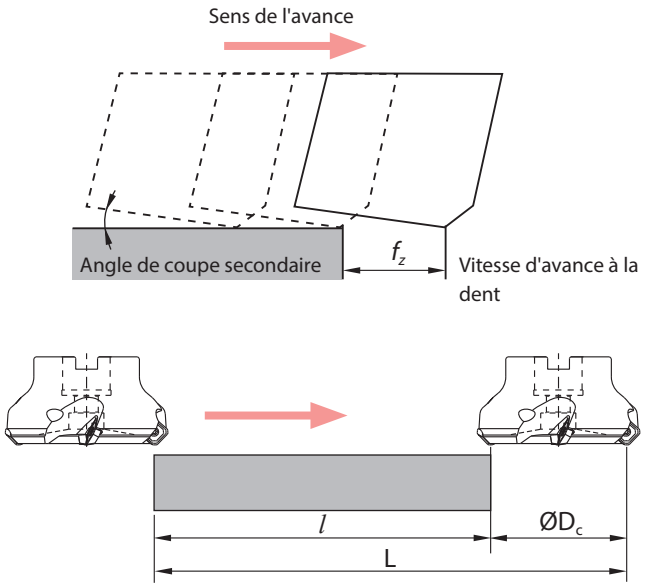
L'angle d'attaque d'une fraise a surfacer est lié a l'épaisseur du copeau. C'est l'angle entre l'arête principale de coupe et la surface de la pièce. L'épaisseur du copeau, l'effort de coupe et la durée de vie sont en particulier affectés par l'angle d'attaque. Sa réduction diminue l'épaisseur du copeau à un taux d'avance donné. Un angle d'attaque plus petit permet également un engagement moins brusque dans la pièce, ce qui entraîne la diminution de la pression radiale tout en ménageant l'arête de coupe. Les forces axiales plus élevées accroissent la pression sur la pièce. Ne convient pas pour l'usinage de composants à paroi mince.

Angle d'attaque	Vitesse d'avance à la dent	Épaisseur de coupe max.
90°	f_z	$h_{ex} = f_z \times sin_{kr}$
75°		$h_{ex} = 0{,}96 \times f_z$
60°		$h_{ex} = 0{,}86 \times f_z$
45°		$h_{ex} = 0{,}707 \times f_z$
Arrondi		$h_{ex} = \frac{\sqrt{iC^2 \times (iC - 2a_p)^2}}{iC} \times f_z$

Plaquettes de fraisage

Formules générales





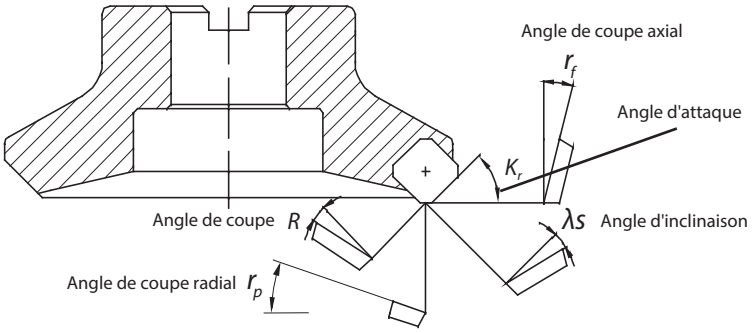
V_c : Vitesse de coupe [m/min]
D_c : Dimension nominale des outils de fraisage [mm]
n : Vitesse de rotation [tr/min]
z_n : Nombre de dents
Q : Volume d'enlèvement de copeaux [cm^3/min]

V_f : Avance du plateau de machine (feed speed) [mm/min]
f_z : Avance à la dent [mm/dt]
π : Ratio de circonférence ~3,14
T_c : Temps d'usinage [min]
f_n : Avance par tour [mm/tr]

Vitesse de coupe	$V_c = \frac{\pi \times D_c \times n}{1000}$ [m/min]
Vitesse de rotation	$n = \frac{1000 \times V_c}{\pi \times D_c}$ [rev/min]
Avance du plateau de machine	$V_f = f_z \times n \times z_n$ [mm/min]
Vitesse d'avance par dent	$f_z = \frac{V_f}{n \times Z_n}$ [mm/z]
Avance par tour	$f_n = \frac{V_f}{n}$ [mm/rev]
Temps d'usinage	$T_c = \frac{1000 \times V_c}{\pi \times D_c}$ [min]
Volume d'enlèvement de copeaux	$Q = \frac{a_p \times a_e \times V_f}{1000}$ [cm^3/min]

Plaquettes de fraisage

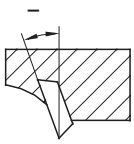
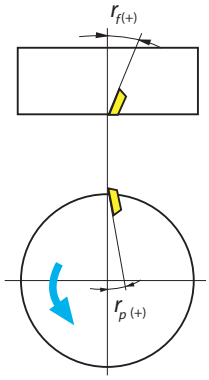
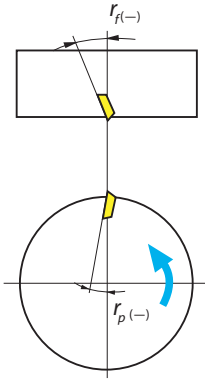
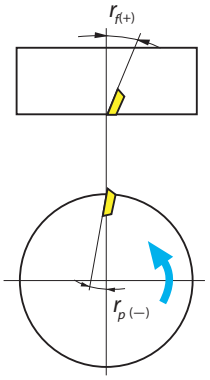
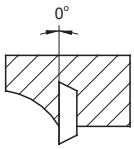
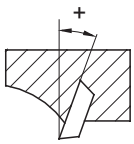
Fonction de chaque angle lors du surfaçage



Angle pour le dressage à la fraise

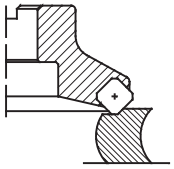
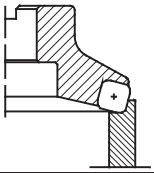
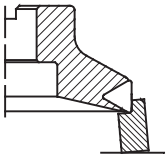
Angle	Fonction	Effet		
Angle de coupe axial r_f	Détermine le sens d'évacuation du copeau	Angle de coupe négatif : bonne évacuation du copeau		
Angle de coupe radial r_p	Définit le tranchant de coupe	Angle de coupe positif, bonne puissance de coupe		
Angle d'attaque K_r	Détermine l'épaisseur du copeau	K_r↑, épaisseur de coupe↑, K_r↓, épaisseur de coupe ↓;		
Angle de coupe R	Détermine la force d'évacuation du copeau	Mauvaise performance de coupe, arête de coupe résistante	(−)←0→(+)	Bonne performance de coupe, arête de coupe instable
Angle d'inclinaison λs	Détermine le sens d'évacuation du copeau	Mauvaise performance de coupe, arête de coupe résistante	(−)←0→(+)	Bonne performance de coupe, arête de coupe instable

Combinaison de différents angles de coupe

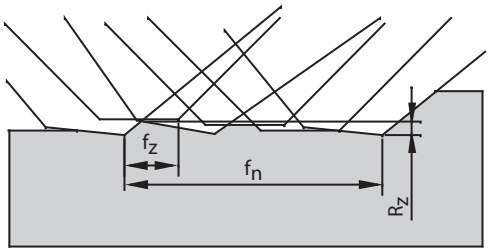
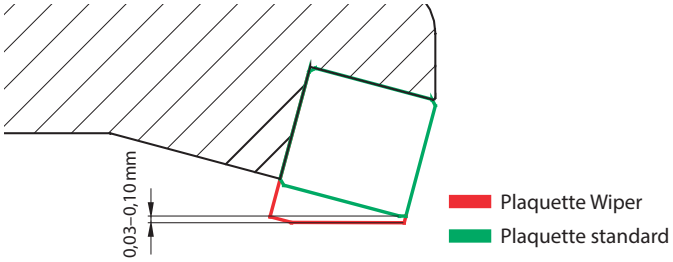
		Double positif	Double négatif	Positif/négatif
Angle de coupe négatif				
Angle neutre				
Angle de coupe positif				
Angle de coupe axial r_f		+	−	+
Angle de coupe radial r_p		+	−	−
Domaine d'application	P	√		√
	M	√		√
	K		√	√
	N	√		
	S	√		√

Plaquettes de fraisage

Performances de coupe selon différents angles d'attaque

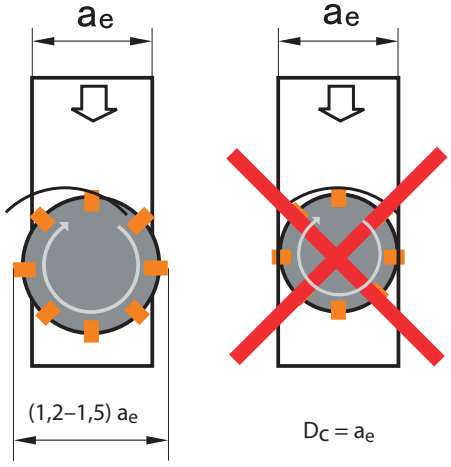
Angle d'attaque	Représentation	Explication
45°		La force axiale est très élevée. Ne convient pas pour l'usinage de composants à paroi mince, en raison du risque de déformation. Idéal pour le surfacage de l'acier, de la fonte et de l'acier inoxydable.
75°		La force axiale est normale. Pour le surfacage général.
90°		La force axiale est quasiment nulle. Pour l'usinage des pièces minces et fragiles.

Plaquettes de coupe avec Wiper

Utilisation de plaquettes standards	Utilisation de plaquettes Wiper (racleuses)
	
Etats de surface standards	Excellents états de surface

La plaquette Wiper doit dépasser d'environ 0.03-0.1 mm par rapport aux plaquettes standards dans le sens axial, afin d'obtenir un effet Wiper. Pour les diamètres standards, une plaquette Wiper suffit. Dans le cas de grands diamètres de fraisage ou des vitesses d'avance élevées, il est possible d'utiliser jusqu'à trois plaquettes Wiper.

Largeurs de coupe



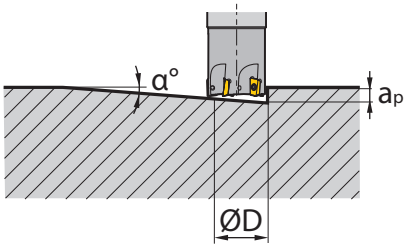
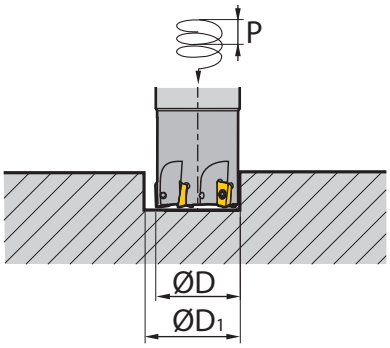
En règle générale, le diamètre de la fraise doit être compris entre (1,2-1,5) a_e.

Positionner la fraise de façon excentrée.

D_C : Diamètre d'outil
a_e : Profondeur de passe latérale

Plaquettes de fraisage

Fraisage en ramping et fraisage circulaire avec plaquette APKT

	Fraisage en plongée	Fraisage circulaire
		
	$L_m = \frac{a_p}{\tan_\alpha}$	$P = \tan_\alpha \times \pi \times D_1$
	α : Angle de plongée	α : Angle d'hélice

Plaquette	Diamètre ØD [mm]	Profondeur de coupe max. a_p [mm]	Angle de plongée max. α°	Diamètre min. $ØD_1$ [mm]	Diamètre max. [mm]
AP**11**	16	10	10	20	30
	20	10	5	28	38
	25	10	4	40	48
	32	10	3	56	60
	40	10	2	70	76

Réduire l'avance en cas de fraisage en plongée et de fraisage circulaire.
En cas d'opérations de perçage (axial), régler l'avance en dessous de 0,2 mm.
« Attention » – De longs copeaux peuvent se former durant le perçage.

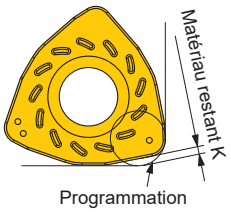
Plaquettes de fraisage

Fraisage en plongée et fraisage circulaire avec plaquette WPGT ou SDMT.

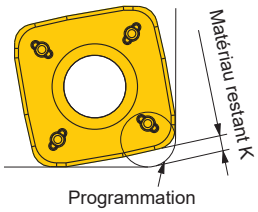
Rayon de programmation à titre indicatif

Plaquette amovible	R environ [mm]	Matériau restant K [mm]
WPGT050315ZSR	2	0,5
WPGT060415ZSR	2,5	0,7
WPGT080615ZSR	2,5	0,7
WPGT090725ZSR	4,5	1,2
SDMT06T208	1,6	0,5
SDMT09T312	2,5	0,87
SDMT120412	4,0	0,93
SDMT150620	4,0	1,38

WPGT

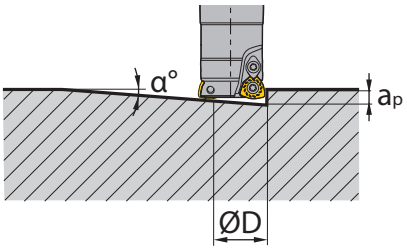


SDMT



Plaquette amovible WPGT

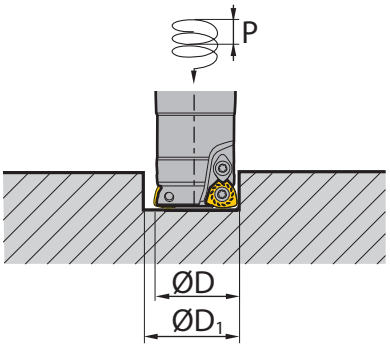
Fraisage en plongée



$$L_m = \frac{a_p}{\tan_\alpha}$$

α : Angle de plongée

Fraisage circulaire



$$P = \tan_\alpha \times \pi \times D_1$$

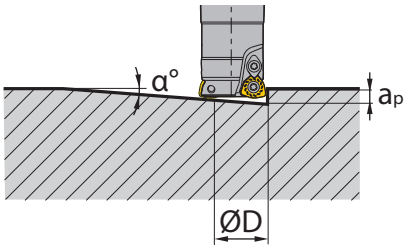
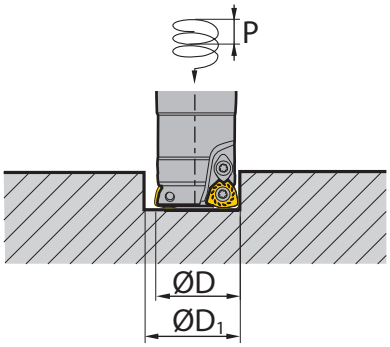
α : Angle d'hélice

Plaquette amovible	Diamètre ØD [mm]	Profondeur de coupe max. a_p [mm]	Angle de plongée max. α°	Diamètre min. $ØD_1$ [mm]	Diamètre max. [mm]
WP**05**	20	1,5	12	24	37
WP**06**	25	1,5	8,8	31	47
	32	1,5	5	45	61
	40	1,5	3,2	61	77
	50	1,5	2,8	81	97
WP**08**	40	1,5	9	52	77
	50	1,5	5,4	71	97
	63	1,5	4,3	97	123
	80	1,5	2,9	131	157
	100	1,5	2,1	171	197
	125	1,5	1,3	221	247
	160	1,5	1,1	291	317
WP**09**	50	3,0	7,2	70	96
	63	3,0	4,5	96	122
	80	3,0	2,8	130	156
	100	3,0	2,2	170	196
	125	3,0	1,6	220	246
	160	3,0	1,2	290	316

Réduire l'avance en cas de fraisage en plongée et de fraisage circulaire.
En cas d'opérations de perçage (axial), régler l'avance en dessous de 0,2 mm.
« Attention » – De longs copeaux peuvent se former durant le perçage.

Plaquettes de fraisage

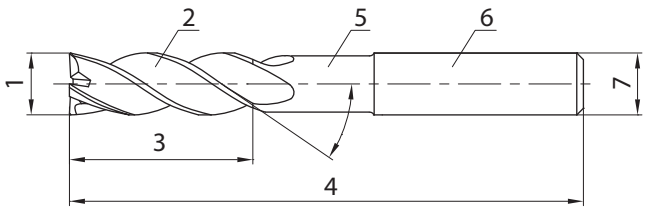
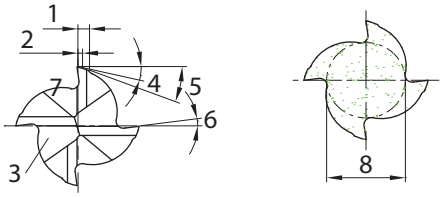
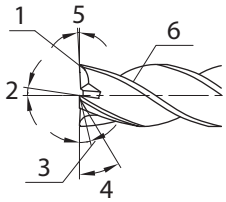
Plaquette amovible SDMT

		Fraisage en plongée		Fraisage circulaire	
					
		$L_m = \frac{a_p}{\tan_\alpha}$ α : Angle de plongée		$P = \tan_\alpha x \pi x D_1$ α : Angle d'hélice	
Plaquette	Diamètre ØD [mm]	Profondeur de coupe max. a_p [mm]	Angle de plongée max. α°	Diamètre min. $ØD_1$ [mm]	Diamètre max. [mm]
SD**06**	20	0,8	3,6	30	38
	25	0,8	2,8	40	48
	32	0,8	1,6	52	60
	40	0,8	1,1	70	78
	50	0,8	0,8	90	98
	63	0,8	0,7	114	122
SD**09**	25	1,4	6,5	34	48
	32	1,4	4,5	48	62
	35	1,4	3,6	54	68
	50	1,4	1,8	84	98
	63	1,4	1,3	110	124
SD**12**	32	1,8	10,4	44	60
	40	1,8	5,7	60	76
	50	1,8	3,5	80	96
	63	1,8	2,5	106	122
	80	1,8	1,6	140	156
	100	1,8	1,2	180	196
SD**15**	40	2,2	7,3	54	76
	80	2,2	1,4	134	156
	100	2,2	1,0	174	196
	125	2,2	0,9	234	246
	160	2,2	0,6	304	316

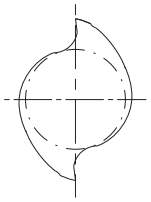
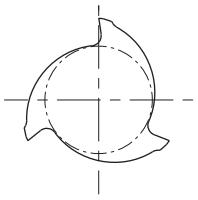
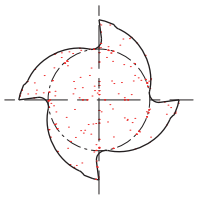
Réduire l'avance en cas de fraisage en ramping et de fraisage circulaire.
En cas d'opérations de perçage (axial), régler l'avance en dessous de 0,2 mm.
« Attention » – De longs copeaux peuvent se former durant le perçage.

Fraises carbure monobloc

Explication des terminologie

A		1. Diamètre de coupe 2. Dégagement pour copeaux 3. Longueur d'arête 4. Longueur totale 5. Col 6. Queue 7. Diamètre de queue
B		1. Largeur du chanfrein, arête principale 2. Largeur du chanfrein, diamètre 3. Goujure, frontale 4. Angle de dépouille radial primaire 5. Angle de dépouille radial secondaire 6. Angle de coupe radial 7. Arête principale axiale 8. Diamètre du noyau
C		1. Coin 2. Angle de coupe axial 3. Angle de dépouille primaire axial 4. Angle de dépouille secondaire axial 5. Angle d'inclinaison 6. Arête de coupe radiale

Dent, goujure : Avantages

Dents	2 arêtes	3 arêtes	4 arêtes
Vue en coupe			
Proportion d'arêtes	**54 %**	**56 %**	**60 %**
Avantages	- Grande goujure - Bonne élimination des copeaux	- Bonne élimination des copeaux - Bonne qualité de surface	- Bonne rigidité - Bonne qualité de surface
Application	- Rainurage - Fraisage à 90° - Alésage	- Rainurage - Fraisage à 90° - Finition	- Rainurage (plat) - Fraisage à 90° - Finition

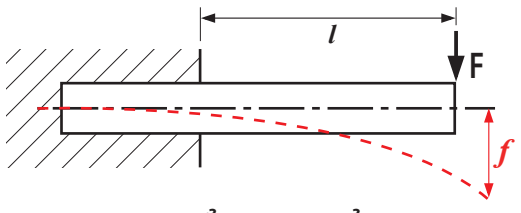
Longueur du porte-à-faux de l'arête et diamètre de l'arête

Plus le porte-à-faux de l'outil est court, plus la situation d'usinage est stable. Durant l'usinage, des déformations de l'outil et des vibrations peuvent apparaître.

Une augmentation du porte-à-faux de 100 % entraîne une multiplication par 8 du degré de flexion (déviation).

Lors de la réduction du porte-à-faux de 20 %, le degré de flexion (déviation) est réduit de 50 %.

Lors de l'augmentation du diamètre de l'outil de 20 %, le degré de flexion (déviation) est réduit de 50 %.

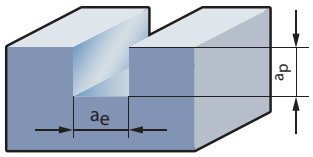


$$f = \frac{F \times l^3}{3 \times E \times l} = \frac{F \times l^3 \times 64}{3 \times E \times l}$$

Fraises carbure monobloc

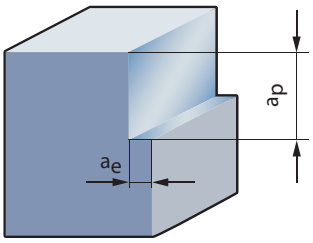
Stratégies d'usinage avec les fraises HPC/UM (HSC)

HPC = High Performance Cutting
Enlèvement de copeaux avec un taux significativement plus élevé grâce aux vitesses de coupe et d'avance plus hautes par rapport aux procédés conventionnels de coupe.



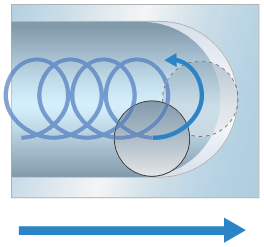
Rainurage plein

HSC (UM) = High Speed Cutting
Haute vitesse de coupe et avances élevées en combinaison avec des profondeurs de coupe faibles pour une épaisseur de copeau moindre par rapport a la coupe normale.



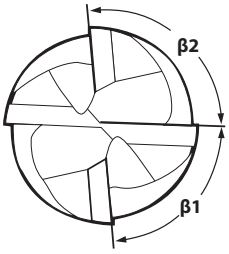
a_e <15 %
a_p = max

Contournage

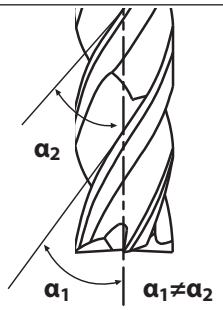


Fraisage trochoïdal

La fraise UM a été spécialement conçue pour l'usinage HSC.



β1≠β2

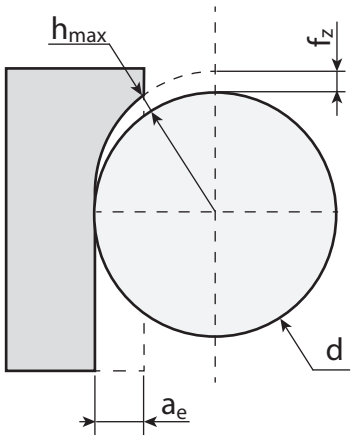


Cet outil permet de réaliser des débits copeaux maximum.
Cette fraise est utilisée de façon optimale sur des machines hautement dynamiques avec des courses d'outils optimisées.

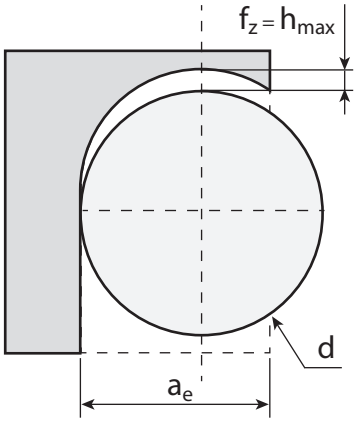
Fraises carbure monobloc

Stratégie HSC

La bonne stratégie est déterminante. Lors de la programmation, il faut impérativement veiller à respecter la profondeur de passe latérale. Celle-ci ne doit pas dépasser 15 % en général. Toute la longueur de l'arête peut être utilisée à la profondeur de passe.



$a_e < d/2 \quad h_{max} < f_z$

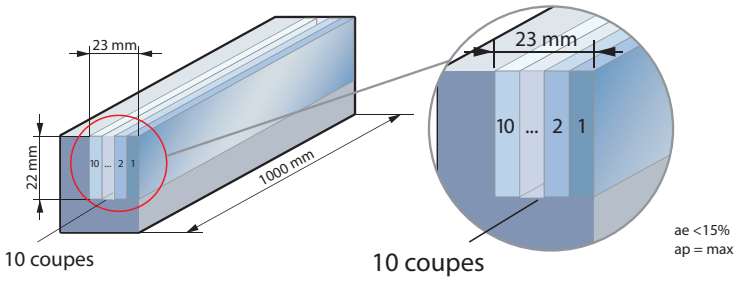


$a_e \geq d/2 \quad h_{max} = f_z$

$$h_{max} = 2f_z\sqrt{\frac{a_e}{d}\left(1-\frac{a_e}{d}\right)}$$

En cas de modification de la profondeur de passe latérale, les conditions de coupe doivent être ajustées en conséquence.
Pour les nuances d'acier usuelles, une épaisseur de copeau d'environ 0,15-0,2 mm est appliquée en tant que dimension déterminée par calcul.

Exemple

Outil	Usinage
	
UM-4E-D20.0-W KMG405	Stratégie HSC

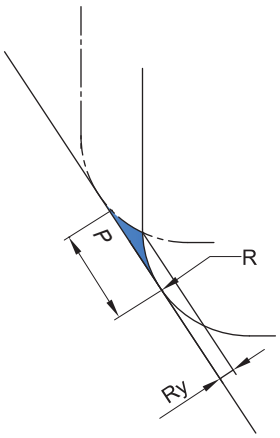
Matière
16MnCr5 (1.7131) ca. 700 N/mm³

Conditions de coupe	
V_c	550 m/min
n	8750 1/min
f_z	0,3 mm (**h_{max} = 0,19 mm**)
V_f	10500 mm/min
a_p	22 mm
a_e	2,3 mm

Résultat
Le débit copeau est de 530 cm3/min. Temps d'usinage, 58 s. L'épaisseur copeau maxi est de 0,19mm.

Fraises carbure monobloc

Valeurs d'avance pour le fraisage de forme avec des fraises hémisphérique et des fraises toriques



$$Ry = R \times \{1-\cos[\arcsin(fr/2R)]\}$$

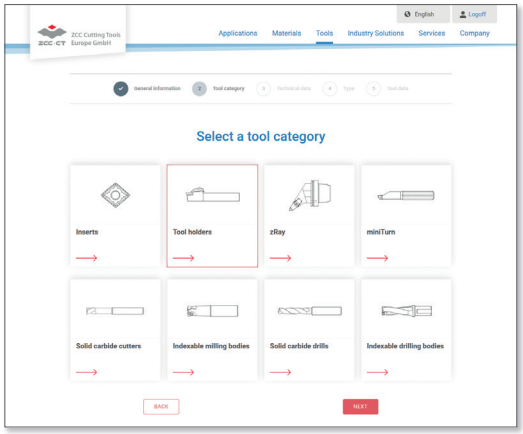
Ry : Valeurs théoriques de l'état de surface
P : Pas d'usinage
R : Rayon de la fraise hémisphérique ou torique

R \ Ry	Pas d'usinage P									
	0,1	0,2	0,3	0,4	0,5	0,6	0,7	0,8	0,9	1,0
0,5	0,003	0,010	0,023	0,042	0,067	0,100				
1,0	0,001	0,005	0,011	0,020	0,032	0,046	0,063	0,083	0,107	
1,5	0,001	0,003	0,008	0,013	0,021	0,030	0,041	0,054	0,069	0,086
2,0	0,001	0,003	0,006	0,010	0,015	0,023	0,031	0,040	0,051	0,064
2,5	0,001	0,002	0,005	0,008	0,013	0,018	0,025	0,032	0,041	0,051
3,0		0,001	0,004	0,007	0,010	0,015	0,020	0,027	0,034	0,042
4,0		0,001	0,003	0,005	0,008	0,011	0,015	0,020	0,025	0,031
5,0		0,001	0,002	0,004	0,006	0,009	0,012	0,016	0,020	0,025
6,0			0,002	0,003	0,005	0,008	0,010	0,013	0,017	0,021
8,0			0,001	0,003	0,004	0,006	0,008	0,010	0,013	0,016
10,0			0,001	0,002	0,003	0,005	0,006	0,008	0,010	0,013
12,5			0,001	0,002	0,003	0,004	0,005	0,006	0,008	0,010

R \ Ry	Avance P									
	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2,0
0,5										
1,0										
1,5	0,104									
2,0	0,077	0,092	0,109							
2,5	0,061	0,073	0,086	0,100						
3,0	0,051	0,061	0,071	0,083	0,095	0,109				
4,0	0,038	0,045	0,053	0,062	0,071	0,081	0,091	0,103		
5,0	0,030	0,036	0,042	0,049	0,057	0,064	0,073	0,082	0,091	0,101
6,0	0,025	0,030	0,035	0,041	0,047	0,054	0,061	0,068	0,076	0,084
8,0	0,019	0,023	0,026	0,031	0,035	0,040	0,045	0,051	0,057	0,063
10,0	0,015	0,018	0,021	0,025	0,028	0,032	0,036	0,041	0,045	0,050
12,5	0,012	0,014	0,017	0,020	0,023	0,026	0,029	0,032	0,036	0,040

Accès direct à l'outil spécial personnalisé pour vos opérations de fraisage

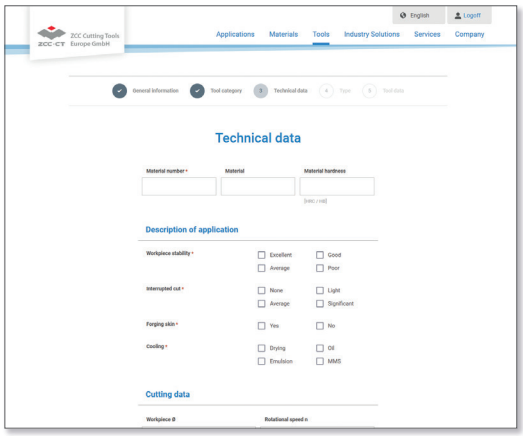
Avez-vous besoin d'outils optimisés et spécialement conçus afin d'améliorer certaines de vos opérations de tournage au niveau commercial, technique, processus ou logistique ? ZCC Cutting Tools Europe vous conseille et vous assiste pour la planification, la conception et la commande. Grâce à notre nouvel outil en ligne permettant de transmettre vos demandes d'outil spécial, vous obtenez rapidement une offre personnalisée (https://www.zccct-europe.com/fr/outils/outils-speciaux).



Page d'accueil « Outil en ligne pour les outils spéciaux » avec sélection de la catégorie d'outil

Sélection de la catégorie d'outil

En scannant le code QR figurant sur cette page, vous serez directement redirigé vers la page d'accueil de notre outil en ligne et vous pourrez commencer par sélectionner la catégorie d'outils souhaitée. C'est très simple.



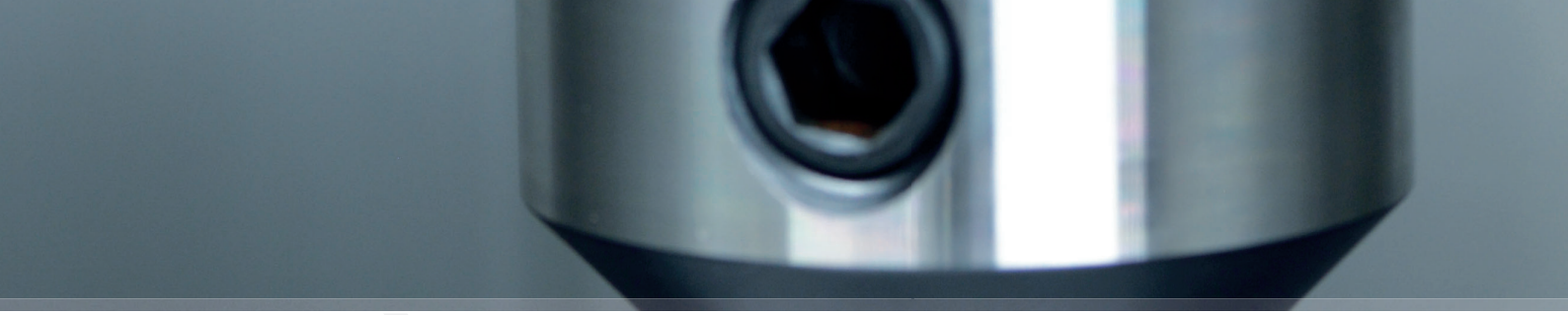
Définition des paramètres d'outil pertinents

Définition des paramètres d'outil

Vous êtes guidé durant toute la durée du processus de demande. Vous avez également la possibilité d'ajouter des esquisses et des modèles 3D.

Pour obtenir votre outil personnalisé, adressez-vous à nous. ZCC Cutting Tools Europe GmbH.

Accéder directement au nouveau **formulaire d'outil spécial** sur notre site Internet.



FORETS À PLAQUETTES

Forets à plaquettes

Vue d'ensemble des produits	**C2**
Vue d'ensemble des brise-copeaux	**C3-C4**
Vue d'ensemble des nuances	**C6-C7**
Domaines d'application des nuances	**C8**
Codification – corps de perçage	**C9**
Corps de perçage	**C10-C31**
Code ISO – plaquette de coupe	**C32**
Plaquettes de coupe	**C33-C35**
Recommandations de données de coupe	**C36-C37**
Outils spéciaux	**C214**

C

Forets à plaquettes Vue d'ensemble des produits

Foret à plaquettes







ZD03	ZTD02	ZTD03	ZTD04	ZTD05	
16-58	13-50	13-73	13-59,5	17-50	Diamètre
C30	C22	C24	C26	C28	Page






ZSD02	ZSD03	ZSD04	ZSD05	
12-63	12-63	12-63	12-63	Diamètre
C10	C13	C16	C19	Page

Plaquette de perçage










SPGT-EM	SPGT-PM	SPMX-EM	SPMX-LM	SPMX-XM	WCMX-53	WCMX-D	WCMX-PG	
05 06 07 09 11 14	05 06 07 09 11 14	04 05 06 07 09 11 14	04 05 06 07 09 11 14	04 05 06 07 09 11 14	03 04 05 06 08	06 08	03 04 05 06 08	Longueur d'arête
B215, C34	B215, C34	C33	C33	C33	C35	C35	C35	Page

Perçage

XM P M




Brise-copeaux non réversible pour la semi-finition. Géométrie polyvalente avec très bon contrôle des copeaux pour l'acier et la fonte.

LM P M




Brise-copeaux non réversible pour la semi-finition. Géométrie légèrement tranchante avec très bon contrôle des copeaux pour les aciers doux.

PM P M K




Semi-finition des aciers.

EM P M S




Semi-finition des aciers inoxydables.

PG P K




Ébauche d'aciers au carbone, alliages d'acier et de fonte.

D P M K




Ébauche à semi-finition de fontes et matériaux plus durs.

Forets à plaquettes Vue d'ensemble des brise-copeaux

Perçage

53	P	M	K	N



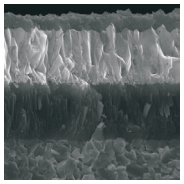


Semi-finition à finition des alliages d'aluminium, des aciers de construction, des aciers inoxydables et de la fonte grise.

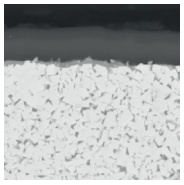
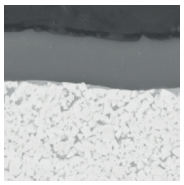
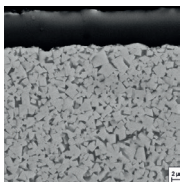
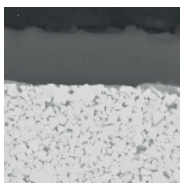
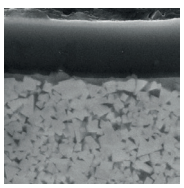
Notes

Forets à plaquettes Vue d'ensemble des nuances

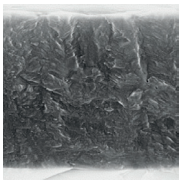
Carbure revêtu CVD

Nuance	ISO	Microstructure	Description de nuances
YB6338	P20 - P40 K20 - K40		Nuance carbure revêtu CVD sur substrat P20-P40/K20-K40 pour les applications à haute vitesse de coupe et avance dans les aciers et les fontes.
YBD252	K20 - K35		Nuance carbure revêtu CVD K20-K35. Optimisé pour l'ébauche et la semi-finition des fontes et des aciers. Bonne résistance à l'usure et ténacité à haute vitesse de coupe.

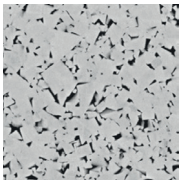
Carbure revêtu PVD

Nuance	ISO	Microstructure	Description de nuances
YBG105	S05 - S20		Nuance carbure revêtu PVD multicouches S05-S20 pour la semi-finition à la finition des superalliages, ainsi que les aciers inoxydables. Bonne résistance à l'usure et stabilité thermique pour un large champ d'applications.
YBG202	P10 - P30 M10 - M25		Nuance carbure revêtu PVD M10-M25/P10-P30 pour la semi-finition à la finition des aciers inoxydables et aciers (en fraisage). Bonne résistance à l'usure pour un large champ d'application.
YBS203	S15 – S25		Pour l'usinage de matériaux réfractaires. Un substrat spécial en carbure et la technologie de revêtement PVD dernière génération permettent d'atteindre une très bonne tenue à l'usure, une forte ténacité à la rupture et une stabilité thermique élevée.
YBG205	P10 - P30 M20 - M40 S15-S25		Nuance de carbure P10–P30/M20–M40/S15–S25 avec revêtement PVD multicouche pour l'usinage de finition à semi-finition d'acier inoxydable, superalliages et acier (fraisage). Très bonne résistance à l'usure et thermique dans un vaste domaine d'utilisation.
YB9320	P10 - P30 M10 - M25		Nuance de carbure P10–P30/M10–M25 avec revêtement PVD multicouche pour l'usinage de finition à semi-finition d'acier inoxydable, superalliages et acier (gorge/fraisage). Très bonne résistance à l'usure grâce à l'amélioration de l'adhérence du revêtement e

Carbure revêtu PVD

Nuance	ISO	Microstructure	Description de nuances
YBG212	P25 - P35 M25-M40		Nuance carbure revêtu PVD M25-M40/P25-P35 pour les aciers et les aciers inoxydables. Spécifiquement pour la plaquette centrale dans les opérations de perçage.

Carbure non revêtu

Nuance	ISO	Microstructure	Description de nuances
YD201	K10 - K30 N10 - N30		Nuance carbure non revêtu K10-K30/N10N30 pour les applications de semi-finition dans les aluminiums et autres matériaux.

Domaines d'application des nuances – forets à plaquettes

	ISO	HC[1] (CVD)	HC[1] (PVD)	HT	HW	PCBN & PCD
P	P01					
	P10	YBD252, YB6338	YBG202, YBG205, YBG212			
	P20					
	P30					
	P40					
M	M01					
	M10		YBG202, YB9320, YBG205, YBS203, YBG212			
	M20					
	M30					
	M40					
K	K01					
	K10	YBD252, YB6338	YBG202, YBG205, YBG212			
	K20					
	K30					
	K40					
N	N01					
	N10				YD201	
	N20					
	N30					
S	S01					
	S10		YBG202, YB9320, YBG205, YBS203, YBG212			
	S20					
	S30					
H	H01					
	H10					
	H20					
	H30					

P Acier
M Acier inoxydable
K Fonte
N Métaux non-ferreux
S Réfractaires et superalliages
H Matériaux durs

HC[1] Carbure revêtu
HT Cermet non revêtu
HW Carbure non revêtu

ZSD – 03 300 – XP – 32 S P 09 – 02

1	2	3	4	5	6	7	8	9

Version

Code	Description
ZSD	Forets à plaquettes (SPMX*)
ZTD	Forets à plaquettes (SPGT*)
ZD	Forets à plaquettes (WCMX*)

1

Rapport L / D

Code	Description
02	2 x D
03	3 x D
04	4 x D
05	5 x D

2

Diamètre [mm]

Code	Description
130	13
...	

3

Type d'attachement

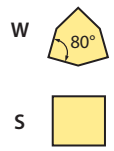
Code	Description
XP	Attachement Weldon

4

Taille d'accouplement [mm]

5

Forme de plaquette



6

Angle de dépouille

Code	Description
C	7°
P	11°

7

Longueur d'arête [mm]

Code	Forme de plaquette	
	W	S
03	3,8	
04	4,3	
05	5,4	5
06	6,5	6
08	8,7	7,94
09		9,8
11		11,5
12		12,7
14		14,3

8

Nombre de dents

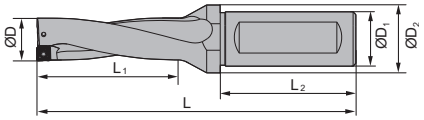
9

Foret à plaquettes

ZSD02







Article	✻	Stock	Dimensions (mm)							Plaquettes
			ØD	ØD1	ØD2	L1	L2	L	kg	
ZSD02-120-XP20-SP04-02	✻	•	12	20	25	27	50	94	0,162	SPMX040204**
ZSD02-125-XP20-SP04-02	✻	•	12,5	20	25	28	50	95	0,164	SPMX040204**
ZSD02-130-XP20-SP04-02	✻	•	13	20	25	29	50	96	0,167	SPMX040204**
ZSD02-135-XP20-SP04-02	✻	•	13,5	20	25	30	50	97	0,169	SPMX040204**
ZSD02-140-XP20-SP04-02	✻	•	14	20	25	31	50	98	0,172	SPMX040204**
ZSD02-145-XP20-SP04-02	✻	•	14,5	20	25	32	50	99	0,176	SPMX040204**
ZSD02-150-XP20-SP05-02	✻	•	15	20	25	33	50	100	0,179	SPMX050204**
ZSD02-155-XP20-SP05-02	✻	•	15,5	20	25	34	50	101	0,185	SPMX050204**
ZSD02-160-XP20-SP05-02	✻	•	16	20	25	35	50	102	0,189	SPMX050204**
ZSD02-165-XP20-SP05-02	✻	•	16,5	20	25	36	50	103	0,193	SPMX050204**
ZSD02-170-XP20-SP05-02	✻	•	17	20	25	37	50	104	0,201	SPMX050204**
ZSD02-175-XP20-SP05-02	✻	•	17,5	20	25	38	50	105	0,207	SPMX050204**
ZSD02-180-XP25-SP06-02	✻	•	18	25	32	39	56	113	0,304	SPMX060204**
ZSD02-185-XP25-SP06-02	✻	•	18,5	25	32	40	56	114	0,308	SPMX060204**
ZSD02-190-XP25-SP06-02	✻	•	19	25	32	41	56	115	0,313	SPMX060204**
ZSD02-195-XP25-SP06-02	✻	•	19,5	25	32	42	56	116	0,317	SPMX060204**
ZSD02-200-XP25-SP06-02	✻	•	20	25	32	43	56	117	0,323	SPMX060204**
ZSD02-205-XP25-SP06-02	✻	•	20,5	25	32	44	56	118	0,327	SPMX060204**
ZSD02-210-XP25-SP06-02	✻	•	21	25	32	45	56	119	0,33	SPMX060204**
ZSD02-215-XP25-SP06-02	✻	•	21,5	25	32	46	56	120	0,341	SPMX060204**
ZSD02-220-XP25-SP06-02	✻	•	22	25	32	47	56	121	0,346	SPMX060204**
ZSD02-225-XP25-SP07-02	✻	•	22,5	25	32	48	56	122	0,34	SPMX07T308**
ZSD02-230-XP25-SP07-02	✻	•	23	25	32	49	56	123	0,348	SPMX07T308**
ZSD02-235-XP25-SP07-02	✻	•	23,5	25	32	50	56	124	0,353	SPMX07T308**
ZSD02-240-XP25-SP07-02	✻	•	24	25	32	51	56	125	0,36	SPMX07T308**
ZSD02-245-XP25-SP07-02	✻	•	24,5	25	32	52	56	126	0,367	SPMX07T308**
ZSD02-250-XP25-SP07-02	✻	•	25	25	32	53	56	127	0,373	SPMX07T308**
ZSD02-255-XP25-SP07-02	✻	•	25,5	25	32	54	56	128	0,382	SPMX07T308**
ZSD02-260-XP25-SP07-02	✻	•	26	25	32	55	56	129	0,391	SPMX07T308**
ZSD02-265-XP25-SP07-02	✻	○	26,5	25	32	56	56	130	0,4	SPMX07T308**
ZSD02-270-XP25-SP07-02	✻	•	27	25	32	57	56	131	0,409	SPMX07T308**
ZSD02-275-XP25-SP07-02	✻	•	27,5	25	32	58	56	132	0,418	SPMX07T308**
ZSD02-280-XP32-SP09-02	✻	•	28	32	37	59	60	139	0,599	SPMX090408**

• En stock ○ Sur demande

✻ Arrosage intérieur

Codification > C9 Choix nuances > C8 Info. techniques > C201 Paramètres > C36

Article	✻	Stock	Dimensions (mm)							Plaquettes
			ØD	ØD1	ØD2	L1	L2	L	kg	
ZSD02-290-XP32-SP09-02	✻	•	29	32	37	60	60	141	0,619	SPMX090408**
ZSD02-300-XP32-SP09-02	✻	•	30	32	37	61	60	143	0,64	SPMX090408**
ZSD02-310-XP32-SP09-02	✻	•	31	32	37	65	60	145	0,663	SPMX090408**
ZSD02-320-XP32-SP09-02	✻	•	32	32	37	67	60	147	0,687	SPMX090408**
ZSD02-330-XP32-SP09-02	✻	•	33	32	37	69	60	149	0,713	SPMX090408**
ZSD02-340-XP40-SP11-02	✻	•	34	40	47	71	70	166	1,101	SPMX110408**
ZSD02-350-XP40-SP11-02	✻	•	35	40	47	73	70	168	1,136	SPMX110408**
ZSD02-360-XP40-SP11-02	✻	•	36	40	47	75	70	170	1,166	SPMX110408**
ZSD02-370-XP40-SP11-02	✻	•	37	40	47	77	70	172	1,202	SPMX110408**
ZSD02-380-XP40-SP11-02	✻	•	38	40	47	79	70	174	1,235	SPMX110408**
ZSD02-390-XP40-SP11-02	✻	•	39	40	47	81	70	176	1,271	SPMX110408**
ZSD02-400-XP40-SP11-02	✻	•	40	40	47	83	70	178	1,311	SPMX110408**
ZSD02-410-XP40-SP11-02	✻	•	41	40	47	85	70	180	1,347	SPMX110408**
ZSD02-420-XP40-SP11-02	✻	○	42	40	52	87	70	189	1,491	SPMX140512**
ZSD02-430-XP40-SP14-02	✻	○	43	40	52	89	70	191	1,496	SPMX140512**
ZSD02-440-XP40-SP14-02	✻	○	44	40	52	91	70	193	1,499	SPMX140512**
ZSD02-450-XP40-SP14-02	✻	○	45	40	52	93	70	195	1,535	SPMX140512**
ZSD02-460-XP40-SP14-02	✻	○	46	40	52	95	70	197	1,562	SPMX140512**
ZSD02-470-XP40-SP14-02	✻	○	47	40	52	97	70	199	1,644	SPMX140512**
ZSD02-480-XP40-SP14-02	✻	○	48	40	52	99	70	201	1,697	SPMX140512**
ZSD02-490-XP40-SP14-02	✻	○	49	40	52	102	70	203	1,757	SPMX140512**
ZSD02-500-XP40-SP14-02	✻	○	50	40	52	103	70	205	1,817	SPMX140512**
ZSD02-510-XP50-SP14-02	✻	○	51	50	57	105	80	217	2,46	SPMX140512**
ZSD02-520-XP50-SP14-02	✻	○	52	50	57	107	80	219	2,527	SPMX140512**
ZSD02-530-XP50-SP14-02	✻	○	53	50	57	109	80	221	2,594	SPMX140512**
ZSD02-540-XP50-SP09-04	✻	○	54	50	57	111	80	223	2,612	SPMX090408**
ZSD02-550-XP50-SP09-04	✻	○	55	50	57	113	80	225	2,673	SPMX090408**
ZSD02-560-XP50-SP09-04	✻	○	56	50	57	115	80	227	2,747	SPMX090408**
ZSD02-570-XP50-SP09-04	✻	○	57	50	57	117	80	229	2,816	SPMX090408**
ZSD02-580-XP50-SP09-04	✻	○	58	50	57	119	80	231	2,889	SPMX090408**
ZSD02-590-XP50-SP09-04	✻	○	59	50	57	121	80	233	2,967	SPMX090408**
ZSD02-600-XP50-SP09-04	✻	○	60	50	57	123	80	235	3,115	SPMX090408**
ZSD02-610-XP50-SP09-04	✻	○	61	50	57	125	80	237	3,195	SPMX090408**
ZSD02-620-XP50-SP09-04	✻	○	62	50	57	127	80	239	3,285	SPMX090408**
ZSD02-630-XP50-SP09-04	✻	○	63	50	57	129	80	241	3,368	SPMX090408**

• En stock ○ Sur demande

✻ Arrosage intérieur

Pièces détachées

	Plaquette	SPMX040204**	SPMX050204**	SPMX060204**	SPMX07T308**	SPMX090408**	SPMX110408**	SPMX140512**
	Vis	I60M1.8x4 (0,5Nm)	I60M2×4.3 (0,5Nm)	I60M2.2×5.5 (0,8Nm)	I60M2.5×6.5 (1,0Nm)	I60M3.5×8 (2,7Nm)	I60M4×10 (3,4Nm)	I60M5×13 (6,7Nm)
	Clé	WT05IP	WT06IP	WT07IP	WT07IP	WT15IP	WT15IP	WT20IP

Codification C9 Choix nuances C8 Info. techniques C201 Paramètres C36

Plaquette

C33

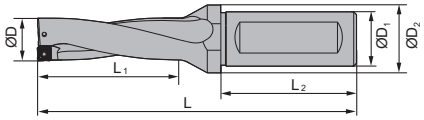
Codification > C9 Choix nuances > C8 Info. techniques > C201 Paramètres > C36

Foret à plaquettes

ZSD03







Article	✻	Stock	Dimensions (mm)							Plaquettes
			ØD	ØD1	ØD2	L1	L2	L	kg	
ZSD03-120-XP20-SP04-02	✻	•	12	20	25	39	50	105	0,165	SPMX040204**
ZSD03-125-XP20-SP04-02	✻	•	12,5	20	25	41	50	107	0,169	SPMX040204**
ZSD03-130-XP20-SP04-02	✻	•	13	20	25	42	50	108	0,171	SPMX040204**
ZSD03-135-XP20-SP04-02	✻	•	13,5	20	25	44	50	110	0,175	SPMX040204**
ZSD03-140-XP20-SP04-02	✻	•	14	20	25	45	50	111	0,178	SPMX040204**
ZSD03-145-XP20-SP04-02	✻	•	14,5	20	25	47	50	113	0,182	SPMX040204**
ZSD03-150-XP20-SP05-02	✻	•	15	20	25	48	50	114	0,189	SPMX050204**
ZSD03-155-XP20-SP05-02	✻	•	15,5	20	25	50	50	116	0,192	SPMX050204**
ZSD03-160-XP20-SP05-02	✻	•	16	20	25	51	50	117	0,201	SPMX050204**
ZSD03-165-XP20-SP05-02	✻	•	16,5	20	25	53	50	119	0,203	SPMX050204**
ZSD03-170-XP20-SP05-02	✻	•	17	20	25	54	50	120	0,205	SPMX050204**
ZSD03-175-XP20-SP05-02	✻	•	17,5	20	25	56	50	122	0,206	SPMX050204**
ZSD03-180-XP25-SP06-02	✻	•	18	25	32	57	56	131	0,319	SPMX060204**
ZSD03-185-XP25-SP06-02	✻	•	18,5	25	32	59	56	133	0,326	SPMX060204**
ZSD03-190-XP25-SP06-02	✻	•	19	25	32	60	56	134	0,332	SPMX060204**
ZSD03-195-XP25-SP06-02	✻	•	19,5	25	32	62	56	136	0,339	SPMX060204**
ZSD03-200-XP25-SP06-02	✻	•	20	25	32	63	56	137	0,344	SPMX060204**
ZSD03-205-XP25-SP06-02	✻	•	20,5	25	32	65	56	139	0,352	SPMX060204**
ZSD03-210-XP25-SP06-02	✻	•	21	25	32	66	56	140	0,368	SPMX060204**
ZSD03-215-XP25-SP06-02	✻	•	21,5	25	32	68	56	142	0,37	SPMX060204**
ZSD03-220-XP25-SP06-02	✻	•	22	25	32	69	56	143	0,375	SPMX060204**
ZSD03-225-XP25-SP07-02	✻	•	22,5	25	32	71	56	145	0,397	SPMX07T308**
ZSD03-230-XP25-SP07-02	✻	•	23	25	32	72	56	147	0,383	SPMX07T308**
ZSD03-235-XP25-SP07-02	✻	•	23,5	25	32	74	56	149	0,395	SPMX07T308**
ZSD03-240-XP25-SP07-02	✻	•	24	25	32	75	56	150	0,406	SPMX07T308**
ZSD03-245-XP25-SP07-02	✻	•	24,5	25	32	77	56	152	0,423	SPMX07T308**
ZSD03-250-XP25-SP07-02	✻	•	25	25	32	78	56	153	0,431	SPMX07T308**
ZSD03-255-XP25-SP07-02	✻	•	25,5	25	32	80	56	155	0,44	SPMX07T308**
ZSD03-260-XP25-SP07-02	✻	•	26	25	32	81	56	156	0,453	SPMX07T308**
ZSD03-265-XP25-SP07-02	✻	•	26,5	25	32	83	56	158	0,467	SPMX07T308**
ZSD03-270-XP25-SP07-02	✻	•	27	25	32	84	56	160	0,504	SPMX07T308**
ZSD03-275-XP25-SP07-02	✻	•	27,5	25	32	86	56	162	0,682	SPMX07T308**
ZSD03-280-XP32-SP09-02	✻	•	28	32	37	87	60	169	0,707	SPMX090408**

• En stock ○ Sur demande

✻ Arrosage intérieur

Codification > C9 | Choix nuances > C8 | Info. techniques > C201 | Paramètres > C36

Forets à plaquettes Corps de perçage

Article	✻	Stock	Dimensions (mm)							Plaquettes
			ØD	ØD1	ØD2	L1	L2	L	kg	
ZSD03-290-XP32-SP09-02	✻	•	29	32	37	90	60	172	0,739	SPMX090408**
ZSD03-300-XP32-SP09-02	✻	•	30	32	37	93	60	175	0,754	SPMX090408**
ZSD03-310-XP32-SP09-02	✻	•	31	32	37	96	60	178	0,771	SPMX090408**
ZSD03-320-XP32-SP09-02	✻	•	32	32	37	99	60	181	0,806	SPMX090408**
ZSD03-330-XP32-SP09-02	✻	•	33	32	37	102	60	184	0,847	SPMX090408**
ZSD03-340-XP40-SP11-02	✻	•	34	40	47	105	70	200	1,208	SPMX110408**
ZSD03-350-XP40-SP11-02	✻	•	35	40	47	108	70	203	1,248	SPMX110408**
ZSD03-360-XP40-SP11-02	✻	•	36	40	47	111	70	206	1,302	SPMX110408**
ZSD03-370-XP40-SP11-02	✻	•	37	40	47	114	70	209	1,341	SPMX110408**
ZSD03-380-XP40-SP11-02	✻	•	38	40	47	117	70	212	1,395	SPMX110408**
ZSD03-390-XP40-SP11-02	✻	•	39	40	47	120	70	215	1,447	SPMX110408**
ZSD03-400-XP40-SP11-02	✻	•	40	40	47	123	70	218	1,505	SPMX110408**
ZSD03-410-XP40-SP11-02	✻	•	41	40	47	126	70	221	1,549	SPMX110408**
ZSD03-420-XP40-SP11-02	✻	○	42	40	52	129	70	231	1,716	SPMX140512**
ZSD03-430-XP40-SP14-02	✻	•	43	40	52	132	70	234	1,656	SPMX140512**
ZSD03-440-XP40-SP14-02	✻	○	44	40	52	135	70	237	1,708	SPMX140512**
ZSD03-450-XP40-SP14-02	✻	○	45	40	52	138	70	240	1,776	SPMX140512**
ZSD03-460-XP40-SP14-02	✻	○	46	40	52	141	70	243	1,851	SPMX140512**
ZSD03-470-XP40-SP14-02	✻	○	47	40	52	144	70	245	1,924	SPMX140512**
ZSD03-480-XP40-SP14-02	✻	○	48	40	52	147	70	249	2,003	SPMX140512**
ZSD03-490-XP40-SP14-02	✻	○	49	40	52	150	70	252	2,094	SPMX140512**
ZSD03-500-XP40-SP14-02	✻	○	50	40	52	153	70	255	2,184	SPMX140512**
ZSD03-510-XP50-SP14-02	✻	○	51	50	57	156	80	268	2,882	SPMX140512**
ZSD03-520-XP50-SP14-02	✻	○	52	50	57	159	80	271	2,974	SPMX140512**
ZSD03-530-XP50-SP14-02	✻	○	53	50	57	162	80	274	3,071	SPMX140512**
ZSD03-540-XP50-SP09-04	✻	○	54	50	57	165	80	277	3,116	SPMX090408**
ZSD03-550-XP50-SP09-04	✻	○	55	50	57	168	80	280	3,208	SPMX090408**
ZSD03-560-XP50-SP09-04	✻	○	56	50	57	171	80	283	3,315	SPMX090408**
ZSD03-570-XP50-SP09-04	✻	○	57	50	57	174	80	286	3,499	SPMX090408**
ZSD03-580-XP50-SP09-04	✻	○	58	50	57	177	80	289	3,53	SPMX090408**
ZSD03-590-XP50-SP09-04	✻	○	59	50	57	180	80	292	3,649	SPMX090408**
ZSD03-600-XP50-SP09-04	✻	○	60	50	57	183	80	295	3,838	SPMX090408**
ZSD03-610-XP50-SP09-04	✻	○	61	50	57	186	80	298	3,961	SPMX090408**
ZSD03-620-XP50-SP09-04	✻	○	62	50	57	189	80	301	4,103	SPMX090408**
ZSD03-630-XP50-SP09-04	✻	○	63	50	57	192	80	304	4,238	SPMX090408**

• En stock ○ Sur demande

✻ Arrosage intérieur

Pièces détachées

	Plaquette	SPMX040204**	SPMX050204**	SPMX060204**	SPMX07T308**	SPMX090408**	SPMX110408**	SPMX140512**
	Vis	I60M1.8x4 (0,5Nm)	I60M2×4.3 (0,5Nm)	I60M2.2×5.5 (0,8Nm)	I60M2.5×6.5 (1,0Nm)	I60M3.5×8 (2,7Nm)	I60M4×10 (3,4Nm)	I60M5×13 (6,7Nm)
	Clé	WT05IP	WT06IP	WT07IP	WT07IP	WT15IP	WT15IP	WT20IP

Codification C9 Choix nuances C8 Info. techniques C201 Paramètres C36

Plaquette



C33

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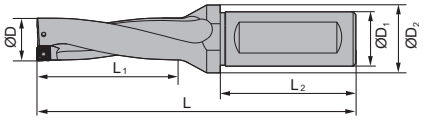
Forets à plaquettes Corps de perçage

Foret à plaquettes

ZSD04







Article	✻	Stock	Dimensions (mm)							Plaquettes
			ØD	ØD1	ØD2	L1	L2	L	kg	
ZSD04-120-XP20-SP04-02	✻	•	12	20	25	51	50	117	0,169	SPMX040204**
ZSD04-125-XP20-SP04-02	✻	•	12,5	20	25	53	50	119	0,173	SPMX040204**
ZSD04-130-XP20-SP04-02	✻	•	13	20	25	55	50	121	0,177	SPMX040204**
ZSD04-135-XP20-SP04-02	✻	•	13,5	20	25	57	50	123	0,181	SPMX040204**
ZSD04-140-XP20-SP04-02	✻	•	14	20	25	59	50	125	0,186	SPMX040204**
ZSD04-145-XP20-SP04-02	✻	•	14,5	20	25	61	50	127	0,191	SPMX040204**
ZSD04-150-XP20-SP05-02	✻	•	15	20	25	63	50	129	0,2	SPMX050204**
ZSD04-155-XP20-SP05-02	✻	•	15,5	20	25	65	50	131	0,203	SPMX050204**
ZSD04-160-XP20-SP05-02	✻	•	16	20	25	67	50	133	0,207	SPMX050204**
ZSD04-165-XP20-SP05-02	✻	•	16,5	20	25	69	50	135	0,214	SPMX050204**
ZSD04-170-XP20-SP05-02	✻	•	17	20	25	71	50	137	0,218	SPMX050204**
ZSD04-175-XP20-SP05-02	✻	•	17,5	20	25	73	50	139	0,222	SPMX050204**
ZSD04-180-XP25-SP06-02	✻	•	18	25	32	75	56	149	0,34	SPMX060204**
ZSD04-185-XP25-SP06-02	✻	•	18,5	25	32	77	56	151	0,341	SPMX060204**
ZSD04-190-XP25-SP06-02	✻	•	19	25	32	79	56	153	0,369	SPMX060204**
ZSD04-195-XP25-SP06-02	✻	•	19,5	25	32	81	56	155	0,382	SPMX060204**
ZSD04-200-XP25-SP06-02	✻	•	20	25	32	83	56	157	0,367	SPMX060204**
ZSD04-205-XP25-SP06-02	✻	•	20,5	25	32	85	56	159	0,37	SPMX060204**
ZSD04-210-XP25-SP06-02	✻	•	21	25	32	87	56	161	0,413	SPMX060204**
ZSD04-215-XP25-SP06-02	✻	•	21,5	25	32	89	56	163	0,426	SPMX060204**
ZSD04-220-XP25-SP06-02	✻	•	22	25	32	91	56	165	0,441	SPMX060204**
ZSD04-225-XP25-SP07-02	✻	•	22,5	25	32	93	56	167	0,407	SPMX07T308**
ZSD04-230-XP25-SP07-02	✻	•	23	25	32	95	56	170	0,421	SPMX07T308**
ZSD04-235-XP25-SP07-02	✻	•	23,5	25	32	97	56	172	0,483	SPMX07T308**
ZSD04-240-XP25-SP07-02	✻	•	24	25	32	99	56	174	0,502	SPMX07T308**
ZSD04-245-XP25-SP07-02	✻	•	24,5	25	32	101	56	176	0,517	SPMX07T308**
ZSD04-250-XP25-SP07-02	✻	•	25	25	32	103	56	178	0,52	SPMX07T308**
ZSD04-255-XP25-SP07-02	✻	•	25,5	25	32	105	56	181	0,5	SPMX07T308**
ZSD04-260-XP25-SP07-02	✻	•	26	25	32	107	56	182	0,512	SPMX07T308**
ZSD04-265-XP25-SP07-02	✻	•	26,5	25	32	109	56	184	0,52	SPMX07T308**
ZSD04-270-XP25-SP07-02	✻	•	27	25	32	111	56	187	0,617	SPMX07T308**
ZSD04-275-XP25-SP07-02	✻	•	27,5	25	32	113	56	190	0,642	SPMX07T308**
ZSD04-280-XP32-SP09-02	✻	○	28	32	37	115	60	199	0,748	SPMX090408**

• En stock ○ Sur demande

✻ Arrosage intérieur

Codification > C9 | Choix nuances > C8 | Info. techniques > C201 | Paramètres > C36

Article	✻	Stock	Dimensions (mm)							Plaquettes
			ØD	ØD1	ØD2	L1	L2	L	kg	
ZSD04-290-XP32-SP09-02	✻	•	29	32	37	119	60	203	0,793	SPMX090408**
ZSD04-300-XP32-SP09-02	✻	•	30	32	37	123	60	207	0,832	SPMX090408**
ZSD04-305-XP32-SP09-02	✻	•	30,5	32	37	125	60	209	0,854	SPMX090408**
ZSD04-310-XP32-SP09-02	✻	•	31	32	37	127	60	211	0,872	SPMX090408**
ZSD04-320-XP32-SP09-02	✻	•	32	32	37	131	60	215	0,922	SPMX090408**
ZSD04-330-XP32-SP09-02	✻	•	33	32	37	135	60	219	0,973	SPMX090408**
ZSD04-340-XP40-SP11-02	✻	•	34	40	47	139	70	234	1,326	SPMX110408**
ZSD04-350-XP40-SP11-02	✻	•	35	40	47	143	70	238	1,384	SPMX110408**
ZSD04-360-XP40-SP11-02	✻	•	36	40	47	147	70	242	1,445	SPMX110408**
ZSD04-370-XP40-SP11-02	✻	•	37	40	47	151	70	246	1,499	SPMX110408**
ZSD04-380-XP40-SP11-02	✻	•	38	40	47	155	70	250	1,563	SPMX110408**
ZSD04-390-XP40-SP11-02	✻	•	39	40	47	159	70	254	1,629	SPMX110408**
ZSD04-400-XP40-SP11-02	✻	•	40	40	47	163	70	258	1,697	SPMX110408**
ZSD04-405-XP40-SP11-02	✻	•	40,5	40	47	165	70	260	1,737	SPMX110408**
ZSD04-410-XP40-SP11-02	✻	•	41	40	47	167	70	262	1,775	SPMX110408**
ZSD04-420-XP40-SP11-02	✻	○	42	40	52	171	70	273	1,948	SPMX140512**
ZSD04-430-XP40-SP14-02	✻	○	43	40	52	175	70	277	1,952	SPMX140512**
ZSD04-440-XP40-SP14-02	✻	○	44	40	52	179	70	281	1,962	SPMX140512**
ZSD04-450-XP40-SP14-02	✻	○	45	40	52	183	70	285	2,06	SPMX140512**
ZSD04-460-XP40-SP14-02	✻	○	46	40	52	187	70	289	2,157	SPMX140512**
ZSD04-470-XP40-SP14-02	✻	•	47	40	52	191	70	293	2,256	SPMX140512**
ZSD04-480-XP40-SP14-02	✻	○	48	40	52	195	70	297	2,361	SPMX140512**
ZSD04-490-XP40-SP14-02	✻	○	49	40	52	199	70	301	2,489	SPMX140512**
ZSD04-500-XP40-SP14-02	✻	○	50	40	52	203	70	305	2,589	SPMX140512**
ZSD04-510-XP50-SP14-02	✻	○	51	50	57	207	80	319	3,292	SPMX140512**
ZSD04-520-XP50-SP14-02	✻	○	52	50	57	211	80	323	3,435	SPMX140512**
ZSD04-530-XP50-SP14-02	✻	○	53	50	57	215	80	327	3,574	SPMX140512**
ZSD04-540-XP50-SP09-04	✻	○	54	50	57	219	80	331	3,604	SPMX090408**
ZSD04-550-XP50-SP09-04	✻	○	55	50	57	223	80	335	3,731	SPMX090408**
ZSD04-560-XP50-SP09-04	✻	○	56	50	57	227	80	339	3,868	SPMX090408**
ZSD04-570-XP50-SP09-04	✻	○	57	50	57	231	80	343	4,01	SPMX090408**
ZSD04-580-XP50-SP09-04	✻	○	58	50	57	235	80	347	4,156	SPMX090408**
ZSD04-590-XP50-SP09-04	✻	○	59	50	57	239	80	351	4,312	SPMX090408**
ZSD04-600-XP50-SP09-04	✻	○	60	50	57	243	80	355	4,558	SPMX090408**
ZSD04-610-XP50-SP09-04	✻	○	61	50	57	247	80	359	4,72	SPMX090408**
ZSD04-620-XP50-SP09-04	✻	○	62	50	57	251	80	363	4,886	SPMX090408**
ZSD04-630-XP50-SP09-04	✻	○	63	50	57	255	80	367	5,068	SPMX090408**

• En stock ○ Sur demande

✻ Arrosage intérieur

Pièces détachées

	Plaquette	**SPMX040204****	**SPMX050204****	**SPMX060204****	**SPMX07T308****	**SPMX090408****	**SPMX110408****	**SPMX140512****
	Vis	I60M1.8x4 (0,5Nm)	I60M2×4.3 (0,5Nm)	I60M2.2×5.5 (0,8Nm)	I60M2.5×6.5 (1,0Nm)	I60M3.5×8 (2,7Nm)	I60M4×10 (3,4Nm)	I60M5×13 (6,7Nm)
	Clé	WT05IP	WT06IP	WT07IP	WT07IP	WT15IP	WT15IP	WT20IP

Codification C9 Choix nuances C8 Info. techniques C201 Paramètres C36

Plaquette

C33

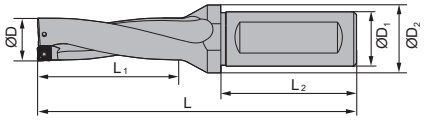
Codification > C9 Choix nuances > C8 Info. techniques > C201 Paramètres > C36

Foret à plaquettes

ZSD05







Article	✻	Stock	Dimensions (mm)							Plaquettes
			ØD	ØD1	ØD2	L1	L2	L	kg	
ZSD05-120-XP20-SP04-02	✻	•	12	20	25	63	50	129	0,173	SPMX040204**
ZSD05-125-XP20-SP04-02	✻	•	12,5	20	25	66	50	132	0,179	SPMX040204**
ZSD05-130-XP20-SP04-02	✻	•	13	20	25	68	50	134	0,183	SPMX040204**
ZSD05-135-XP20-SP04-02	✻	•	13,5	20	25	71	50	137	0,189	SPMX040204**
ZSD05-140-XP20-SP04-02	✻	•	14	20	25	73	50	139	0,194	SPMX040204**
ZSD05-145-XP20-SP04-02	✻	•	14,5	20	25	76	50	141	0,2	SPMX040204**
ZSD05-150-XP20-SP05-02	✻	•	15	20	25	78	50	144	0,206	SPMX050204**
ZSD05-155-XP20-SP05-02	✻	•	15,5	20	25	81	50	147	0,214	SPMX050204**
ZSD05-160-XP20-SP05-02	✻	•	16	20	25	83	50	149	0,219	SPMX050204**
ZSD05-165-XP20-SP05-02	✻	•	16,5	20	25	86	50	152	0,223	SPMX050204**
ZSD05-170-XP20-SP05-02	✻	•	17	20	25	88	50	154	0,23	SPMX050204**
ZSD05-175-XP20-SP05-02	✻	•	17,5	20	25	91	50	157	0,239	SPMX050204**
ZSD05-180-XP25-SP06-02	✻	•	18	25	32	93	56	167	0,355	SPMX060204**
ZSD05-185-XP25-SP06-02	✻	•	18,5	25	32	96	56	170	0,36	SPMX060204**
ZSD05-190-XP25-SP06-02	✻	•	19	25	32	98	56	172	0,369	SPMX060204**
ZSD05-195-XP25-SP06-02	✻	•	19,5	25	32	101	56	175	0,382	SPMX060204**
ZSD05-200-XP25-SP06-02	✻	•	20	25	32	103	56	177	0,39	SPMX060204**
ZSD05-205-XP25-SP06-02	✻	•	20,5	25	32	106	56	180	0,401	SPMX060204**
ZSD05-210-XP25-SP06-02	✻	•	21	25	32	108	56	182	0,413	SPMX060204**
ZSD05-215-XP25-SP06-02	✻	•	21,5	25	32	111	56	185	0,426	SPMX060204**
ZSD05-220-XP25-SP06-02	✻	•	22	25	32	113	56	187	0,441	SPMX060204**
ZSD05-225-XP25-SP07-02	✻	•	22,5	25	32	116	56	190	0,442	SPMX07T308**
ZSD05-230-XP25-SP07-02	✻	•	23	25	32	118	56	194	0,461	SPMX07T308**
ZSD05-235-XP25-SP07-02	✻	•	23,5	25	32	121	56	197	0,483	SPMX07T308**
ZSD05-240-XP25-SP07-02	✻	•	24	25	32	123	56	199	0,497	SPMX07T308**
ZSD05-245-XP25-SP07-02	✻	•	24,5	25	32	126	56	202	0,517	SPMX07T308**
ZSD05-250-XP25-SP07-02	✻	•	25	25	32	128	56	204	0,533	SPMX07T308**
ZSD05-255-XP25-SP07-02	✻	•	25,5	25	32	131	56	207	0,555	SPMX07T308**
ZSD05-260-XP25-SP07-02	✻	•	26	25	32	133	56	209	0,571	SPMX07T308**
ZSD05-265-XP25-SP07-02	✻	•	26,5	25	32	136	56	212	0,593	SPMX07T308**
ZSD05-270-XP25-SP07-02	✻	•	27	25	32	138	56	214	0,617	SPMX07T308**
ZSD05-275-XP25-SP07-02	✻	•	27,5	25	32	141	56	217	0,642	SPMX07T308**
ZSD05-280-XP32-SP09-02	✻	•	28	32	37	143	60	223	0,791	SPMX090408**

• En stock ○ Sur demande

✻ Arrosage intérieur

Codification C9 | Choix nuances C8 | Info. techniques C201 | Paramètres C36

Forets à plaquettes Corps de perçage

Article	✻	Stock	Dimensions (mm)							Plaquettes
			ØD	ØD1	ØD2	L1	L2	L	kg	
ZSD05-290-XP32-SP09-02	✻	•	29	32	37	148	60	228	0,837	SPMX090408**
ZSD05-300-XP32-SP09-02	✻	•	30	32	37	153	60	233	0,943	SPMX090408**
ZSD05-310-XP32-SP09-02	✻	•	31	32	37	158	60	238	0,943	SPMX090408**
ZSD05-320-XP32-SP09-02	✻	•	32	32	37	163	60	243	1,001	SPMX090408**
ZSD05-330-XP32-SP09-02	✻	•	33	32	37	168	60	249	1,067	SPMX090408**
ZSD05-340-XP40-SP11-02	✻	•	34	40	47	173	70	268	1,44	SPMX110408**
ZSD05-350-XP40-SP11-02	✻	•	35	40	47	178	70	273	1,505	SPMX110408**
ZSD05-360-XP40-SP11-02	✻	•	36	40	47	183	70	278	1,575	SPMX110408**
ZSD05-370-XP40-SP11-02	✻	•	37	40	47	188	70	283	1,723	SPMX110408**
ZSD05-380-XP40-SP11-02	✻	•	38	40	47	193	70	288	1,723	SPMX110408**
ZSD05-390-XP40-SP11-02	✻	•	39	40	47	198	70	293	1,808	SPMX110408**
ZSD05-400-XP40-SP11-02	✻	•	40	40	47	203	70	298	1,894	SPMX110408**
ZSD05-410-XP40-SP11-02	✻	•	41	40	47	208	70	303	1,991	SPMX110408**
ZSD05-420-XP40-SP11-02	✻	○	42	40	52	213	70	315	2,182	SPMX140512**
ZSD05-430-XP40-SP14-02	✻	•	43	40	52	218	70	320	2,11	SPMX140512**
ZSD05-440-XP40-SP14-02	✻	•	44	40	52	223	70	325	2,22	SPMX140512**
ZSD05-450-XP40-SP14-02	✻	•	45	40	52	228	70	330	2,331	SPMX140512**
ZSD05-460-XP40-SP14-02	✻	•	46	40	52	233	70	335	2,45	SPMX140512**
ZSD05-470-XP40-SP14-02	✻	○	47	40	52	238	70	340	2,582	SPMX140512**
ZSD05-480-XP40-SP14-02	✻	•	48	40	52	243	70	345	2,693	SPMX140512**
ZSD05-490-XP40-SP14-02	✻	•	19	40	52	248	70	350	2,823	SPMX140512**
ZSD05-500-XP40-SP14-02	✻	•	50	40	52	253	70	355	2,958	SPMX140512**
ZSD05-510-XP50-SP14-02	✻	○	51	50	57	258	80	370	3,7	SPMX140512**
ZSD05-520-XP50-SP14-02	✻	○	52	50	57	263	80	375	3,848	SPMX140512**
ZSD05-530-XP50-SP14-02	✻	○	53	50	57	268	80	380	3,998	SPMX140512**
ZSD05-540-XP50-SP09-04	✻	○	54	50	57	273	80	385	4,035	SPMX090408**
ZSD05-550-XP50-SP09-04	✻	○	55	50	57	278	80	390	4,203	SPMX090408**
ZSD05-560-XP50-SP09-04	✻	○	56	50	57	283	80	395	4,368	SPMX090408**
ZSD05-570-XP50-SP09-04	✻	○	57	50	57	288	80	400	4,671	SPMX090408**
ZSD05-580-XP50-SP09-04	✻	○	58	50	57	293	80	405	4,866	SPMX090408**
ZSD05-590-XP50-SP09-04	✻	○	59	50	57	298	80	410	5,047	SPMX090408**
ZSD05-600-XP50-SP09-04	✻	○	60	50	57	303	80	415	5,192	SPMX090408**
ZSD05-610-XP50-SP09-04	✻	○	61	50	57	308	80	420	5,4	SPMX090408**
ZSD05-620-XP50-SP09-04	✻	○	62	50	57	313	80	425	5,619	SPMX090408**
ZSD05-630-XP50-SP09-04	✻	○	63	50	57	318	80	430	5,834	SPMX090408**

• En stock ○ Sur demande

✻ Arrosage intérieur

Pièces détachées

	Plaquette	SPMX040204**	SPMX050204**	SPMX060204**	SPMX07T308**	SPMX090408**	SPMX110408**	SPMX140512**
	Vis	I60M1.8x4 (0,5Nm)	I60M2×4.3 (0,5Nm)	I60M2.2×5.5 (0,8Nm)	I60M2.5×6.5 (1,0Nm)	I60M3.5×8 (2,7Nm)	I60M4×10 (3,4Nm)	I60M5×13 (6,7Nm)
	Clé	WT05IP	WT06IP	WT07IP	WT07IP	WT15IP	WT15IP	WT20IP

Codification C9 Choix nuances C8 Info. techniques C201 Paramètres C36

Plaquette

C33

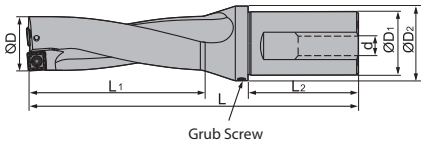
Codification > C9 Choix nuances > C8 Info. techniques > C201 Paramètres > C36

Foret à plaquettes

ZTD02







Article	✻	Stock	Dimensions (mm)								Plaquettes
			ØD	ØD1	ØD2	L1	L2	L	d	kg	
ZTD02-130-XP20-SP05-02	✻	•	13	20	25	31	50	98	M13×1	0,165	SPGT0502**
ZTD02-140-XP20-SP05-02	✻	•	14	20	25	33	50	100	M13×1	0,171	SPGT0502**
ZTD02-150-XP20-SP05-02	✻	•	15	20	25	35	50	102	M13×1	0,176	SPGT0502**
ZTD02-160-XP20-SP05-02	✻	•	16	20	25	37	50	104	M13×1	0,184	SPGT0502**
ZTD02-170-XP25-SP06-02	✻	•	17	25	32	39	56	117	M16×1,5	0,325	SPGT0602**
ZTD02-180-XP25-SP06-02	✻	•	18	25	32	41	56	119	M16×1,5	0,332	SPGT0602**
ZTD02-190-XP25-SP06-02	✻	•	19	25	32	43	56	121	M16×1,5	0,342	SPGT0602**
ZTD02-200-XP25-SP06-02	✻	•	20	25	32	45	56	123	M16×1,5	0,353	SPGT0602**
ZTD02-210-XP25-SP06-02	✻	•	21	25	32	47	56	125	M16×1,5	0,35	SPGT0602**
ZTD02-220-XP25-SP07-02	✻	•	22	25	32	49	56	127	M16×1,5	0,367	SPGT07T3**
ZTD02-230-XP25-SP07-02	✻	•	23	25	32	51	56	129	M16×1,5	0,38	SPGT07T3**
ZTD02-235-XP25-SP07-02	✻	○	23,5	25	32	52	56	130	M16x1,5	0,361	SPGT07T3**
ZTD02-240-XP25-SP07-02	✻	•	24	25	32	53	56	131	M16×1,5	0,443	SPGT07T3**
ZTD02-250-XP25-SP07-02	✻	•	25	25	32	55	56	133	M16×1,5	0,41	SPGT07T3**
ZTD02-260-XP25-SP07-02	✻	•	26	25	32	57	56	135	M16×1,5	0,454	SPGT07T3**
ZTD02-270-XP25-SP07-02	✻	•	27	25	32	59	56	137	M16×1,5	0,445	SPGT07T3**
ZTD02-280-XP32-SP09-02	✻	•	28	32	37	61	60	146	M22×2	0,661	SPGT0904**
ZTD02-290-XP32-SP09-02	✻	•	29	32	37	63	60	148	M22×2	0,682	SPGT0904**
ZTD02-300-XP32-SP09-02	✻	•	30	32	37	65	60	150	M22×2	0,702	SPGT0904**
ZTD02-310-XP32-SP09-02	✻	•	31	32	37	67	60	152	M22×2	0,759	SPGT0904**
ZTD02-320-XP32-SP09-02	✻	•	32	32	37	69	60	154	M22×2	0,742	SPGT0904**
ZTD02-330-XP32-SP09-02	✻	•	33	32	37	71	60	156	M22×2	0,774	SPGT0904**
ZTD02-340-XP40-SP11-02	✻	•	34	40	47	73	70	173	(BSPT)RC1/4	1,2	SPGT1104**
ZTD02-350-XP40-SP11-02	✻	•	35	40	47	75	70	175	(BSPT)RC1/4	1,23	SPGT1104**
ZTD02-360-XP40-SP11-02	✻	•	36	40	47	77	70	177	(BSPT)RC1/4	1,26	SPGT1104**
ZTD02-370-XP40-SP11-02	✻	•	37	40	47	79	70	179	(BSPT)RC1/4	1,29	SPGT1104**
ZTD02-380-XP40-SP11-02	✻	•	38	40	47	81	70	181	(BSPT)RC1/4	1,33	SPGT1104**
ZTD02-390-XP40-SP11-02	✻	•	39	40	47	83	70	183	(BSPT)RC1/4	1,39	SPGT1104**
ZTD02-400-XP40-SP11-02	✻	•	40	40	47	85	70	185	(BSPT)RC1/4	1,43	SPGT1104**
ZTD02-410-XP40-SP11-02	✻	•	41	40	47	87	70	187	(BSPT)RC1/4	1,44	SPGT1104**
ZTD02-420-XP40-SP14-02	✻	•	42	40	52	89	70	199	(BSPT)RC1/4	1,62	SPGT1405**
ZTD02-430-XP40-SP14-02	✻	•	43	40	52	91	70	201	(BSPT)RC1/4	1,67	SPGT1405**
ZTD02-440-XP40-SP14-02	✻	•	44	40	52	93	70	203	(BSPT)RC1/4	1,71	SPGT1405**

• En stock ○ Sur demande

✻ Arrosage intérieur

Codification > C9 Choix nuances > C8 Info. techniques > C201 Paramètres > C36

Article	✻	Stock	Dimensions (mm)								Plaquettes
			ØD	ØD1	ØD2	L1	L2	L	d	kg	
ZTD02-450-XP40-SP14-02	✻	•	45	40	52	95	70	205	(BSPT)RC1/4	1,76	SPGT1405**
ZTD02-460-XP40-SP14-02	✻	•	46	40	52	97	70	207	(BSPT)RC1/4	1,81	SPGT1405**
ZTD02-470-XP40-SP14-02	✻	•	47	40	52	99	70	209	(BSPT)RC1/4	1,87	SPGT1405**
ZTD02-480-XP40-SP14-02	✻	•	48	40	52	101	70	211	(BSPT)RC1/4	1,92	SPGT1405**
ZTD02-490-XP40-SP14-02	✻	•	49	40	52	103	70	213	(BSPT)RC1/4	1,98	SPGT1405**
ZTD02-500-XP40-SP14-02	✻	•	50	40	52	105	70	215	(BSPT)RC1/4	2,05	SPGT1405**

• En stock ○ Sur demande

✻ Arrosage intérieur

Pièces détachées

	Plaquette	SPGT0502**	SPGT0602**	SPGT07T3**	SPGT0904**	SPGT1104**	SPGT1405**
	Bouchon fileté					M6×6 (7,0Nm)	M8×8 (10,2Nm)
	Vis	I60M2×4.3 (0,5Nm)	I60M2.2×5.5 (0,8Nm)	I60M2.5×6.5 (1,0Nm)	I60M3.5×8 (2,7Nm)	I60M4×10 (3,4Nm)	I60M5×13 (6,7Nm)
	Clé	WT06IP	WT07IP	WT07IP	WT15IP	WT15IP	WT20IP

Plaquette



C34

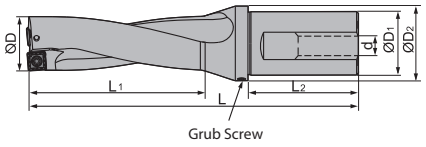
Codification C9 Choix nuances C8 Info. techniques C201 Paramètres C36

Foret à plaquettes

ZTD03







Article	✻	Stock	Dimensions (mm)								Plaquettes
			ØD	ØD1	ØD2	L1	L2	L	d	kg	
ZTD03-130-XP20-SP05-02	✻	•	13	20	25	44	50	111	M13×1	0,179	SPGT0502**
ZTD03-140-XP20-SP05-02	✻	•	14	20	25	47	50	114	M13×1	0,186	SPGT0502**
ZTD03-150-XP20-SP05-02	✻	•	15	20	25	50	50	117	M13×1	0,195	SPGT0502**
ZTD03-160-XP20-SP05-02	✻	•	16	20	25	53	50	120	M13×1	0,214	SPGT0502**
ZTD03-170-XP25-SP06-02	✻	•	17	25	32	56	56	134	M16×1,5	0,32	SPGT0602**
ZTD03-180-XP25-SP06-02	✻	•	18	25	32	59	56	137	M16×1,5	0,331	SPGT0602**
ZTD03-190-XP25-SP06-02	✻	•	19	25	32	62	56	140	M16×1,5	0,342	SPGT0602**
ZTD03-200-XP25-SP06-02	✻	•	20	25	32	65	56	143	M16×1,5	0,356	SPGT0602**
ZTD03-210-XP25-SP06-02	✻	•	21	25	32	68	56	146	M16×1,5	0,391	SPGT0602**
ZTD03-220-XP25-SP07-02	✻	•	22	25	32	71	56	149	M16×1,5	0,391	SPGT07T3**
ZTD03-230-XP25-SP07-02	✻	•	23	25	32	74	56	152	M16×1,5	0,442	SPGT07T3**
ZTD03-240-XP25-SP07-02	✻	•	24	25	32	77	56	155	M16×1,5	0,485	SPGT07T3**
ZTD03-250-XP25-SP07-02	✻	•	25	25	32	80	56	158	M16×1,5	0,492	SPGT07T3**
ZTD03-260-XP25-SP07-02	✻	•	26	25	32	83	56	161	M16×1,5	0,497	SPGT07T3**
ZTD03-270-XP25-SP07-02	✻	•	27	25	32	86	56	164	M16×1,5	0,521	SPGT07T3**
ZTD03-280-XP32-SP09-02	✻	•	28	32	37	89	60	174	M22×2	0,75	SPGT0904**
ZTD03-285-XP32-SP09-02	✻	○	28,5	32	37	91	60	171	M22x2	0,699	SPGT0904**
ZTD03-290-XP32-SP09-02	✻	•	29	32	37	92	60	177	M22×2	0,777	SPGT0904**
ZTD03-300-XP32-SP09-02	✻	•	30	32	37	95	60	180	M22×2	0,81	SPGT0904**
ZTD03-310-XP32-SP09-02	✻	•	31	32	37	98	60	183	M22×2	0,831	SPGT0904**
ZTD03-320-XP32-SP09-02	✻	•	32	32	37	101	60	186	M22×2	0,867	SPGT0904**
ZTD03-330-XP32-SP09-02	✻	•	33	32	37	104	60	189	M22×2	0,928	SPGT0904**
ZTD03-340-XP40-SP11-02	✻	•	34	40	47	107	70	207	(BSPT)RC1/4	1,33	SPGT1104**
ZTD03-350-XP40-SP11-02	✻	•	35	40	47	110	70	210	(BSPT)RC1/4	1,371	SPGT1104**
ZTD03-360-XP40-SP11-02	✻	•	36	40	47	113	70	213	(BSPT)RC1/4	1,414	SPGT1104**
ZTD03-370-XP40-SP11-02	✻	•	37	40	47	116	70	216	(BSPT)RC1/4	1,448	SPGT1104**
ZTD03-380-XP40-SP11-02	✻	•	38	40	47	119	70	219	(BSPT)RC1/4	1,498	SPGT1104**
ZTD03-390-XP40-SP11-02	✻	•	39	40	47	122	70	222	(BSPT)RC1/4	1,554	SPGT1104**
ZTD03-400-XP40-SP11-02	✻	•	40	40	47	125	70	225	(BSPT)RC1/4	1,667	SPGT1104**
ZTD03-410-XP40-SP11-02	✻	•	41	40	47	128	70	228	(BSPT)RC1/4	1,653	SPGT1104**
ZTD03-420-XP40-SP14-02	✻	•	42	40	52	131	70	241	(BSPT)RC1/4	1,903	SPGT1405**
ZTD03-430-XP40-SP14-02	✻	•	43	40	52	134	70	244	(BSPT)RC1/4	1,951	SPGT1405**
ZTD03-440-XP40-SP14-02	✻	•	44	40	52	137	70	247	(BSPT)RC1/4	2,039	SPGT1405**

• En stock ○ Sur demande

✻ Arrosage intérieur

Codification > C9 Choix nuances > C8 Info. techniques > C201 Paramètres > C36

Article	✻	Stock	Dimensions (mm)								Plaquettes
			ØD	ØD1	ØD2	L1	L2	L	d	kg	
ZTD03-450-XP40-SP14-02	✻	•	45	40	52	140	70	250	(BSPT)RC1/4	2,12	SPGT1405**
ZTD03-460-XP40-SP14-02	✻	•	46	40	52	143	70	253	(BSPT)RC1/4	2,186	SPGT1405**
ZTD03-470-XP40-SP14-02	✻	•	47	40	52	146	70	256	(BSPT)RC1/4	2,264	SPGT1405**
ZTD03-480-XP40-SP14-02	✻	•	48	40	52	149	70	259	(BSPT)RC1/4	2,341	SPGT1405**
ZTD03-490-XP40-SP14-02	✻	•	49	40	52	152	70	262	(BSPT)RC1/4	2,43	SPGT1405**
ZTD03-500-XP40-SP14-02	✻	•	50	40	52	155	70	265	(BSPT)RC1/4	2,52	SPGT1405**
ZTD03-508-XP40-SP14-02	✻	○	50,8	40	57	157	70	267	(BSPT)RC1/4	2,484	SPGT1405**
ZTD03-510-XP50-SP07-04	✻	○	51	50	62	158	80	278	(BSPT)RC1/4	3,128	SPGT07T3**
ZTD03-530-XP50-SP07-04	✻	○	53	50	62	164	80	284	(BSPT)RC1/4	3,426	SPGT07T3**
ZTD03-540-XP50-SP09-04	✻	○	54	50	57	167	80	287	(BSPT)RC1/4	3,292	SPGT0904**
ZTD03-550-XP50-SP09-04	✻	○	55	50	57	170	80	290	(BSPT)RC1/4	3,29	SPGT0904**
ZTD03-570-XP50-SP09-04	✻	○	57	50	67	176	80	296	(BSPT)RC1/4	3,853	SPGT0904**
ZTD03-580-XP50-SP09-04	✻	○	58	50	62	179	80	299	(BSPT)RC1/4	3,851	SPGT0904**
ZTD03-590-XP50-SP09-04	✻	○	59	50	62	182	80	302	(BSPT)RC1/4	3,814	SPGT0904**
ZTD03-600-XP50-SP09-04	✻	○	60	50	67	185	80	305	(BSPT)RC1/4	4,217	SPGT0904**
ZTD03-620-XP50-SP09-04	✻	○	62	50	67	191	80	311	(BSPT)RC1/4	4,454	SPGT0904**
ZTD03-630-XP50-SP09-04	✻	○	63	50	67	194	80	314	(BSPT)RC1/4	4,6	SPGT0904**
ZTD03-640-XP50-SP09-04	✻	○	64	50	67	197	80	317	(BSPT)RC1/4	4,574	SPGT0904**
ZTD03-650-XP50-SP09-04	✻	○	65	50	67	200	80	320	(BSPT)RC1/4	4,882	SPGT0904**
ZTD03-660-XP50-SP09-04	✻	○	66	50	67	203	80	323	(BSPT)RC1/4	5,024	SPGT0904**
ZTD03-670-XP50-SP11-04	✻	○	67	50	82	206	80	326	(BSPT)RC1/4	5,181	SPGT1104**
ZTD03-730-XP50-SP11-04	✻	○	73	50	85	224	80	344	(BSPT)RC1/4	6,71	SPGT1104**

• En stock ○ Sur demande

✻ Arrosage intérieur

Pièces détachées

	Plaquette	SPGT0502**	SPGT0602**	SPGT07T3**	SPGT0904**	SPGT1104**	SPGT1405**
	Bouchon fileté					M6×6 (7,0Nm)	M8×8 (10,2Nm)
	Vis	I60M2×4.3 (0,5Nm)	I60M2.2×5.5 (0,8Nm)	I60M2.5×6.5 (1,0Nm)	I60M3.5×8 (2,7Nm)	I60M4×10 (3,4Nm)	I60M5×13 (6,7Nm)
	Clé	WT06IP	WT07IP	WT07IP	WT15IP	WT15IP	WT20IP

Plaquette



C34

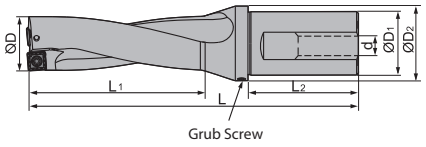
Codification C9 Choix nuances C8 Info. techniques C201 Paramètres C36

Foret à plaquettes

ZTD04







Article	✻	Stock	Dimensions (mm)								Plaquettes
			ØD	ØD1	ØD2	L1	L2	L	d	kg	
ZTD04-130-XP20-SP05-02	✻	○	13	20	25	57	50	124	M13×1	0,185	SPGT0502**
ZTD04-140-XP20-SP05-02	✻	○	14	20	25	61	50	128	M13×1	0,195	SPGT0502**
ZTD04-150-XP20-SP05-02	✻	○	15	20	25	65	50	132	M13×1	0,205	SPGT0502**
ZTD04-160-XP20-SP05-02	✻	○	16	20	25	69	50	136	M13×1	0,216	SPGT0502**
ZTD04-165-XP25-SP06-02	✻	○	16,5	25	32	71	56	137	M16x1,5	0,332	SPGT0602**
ZTD04-170-XP25-SP06-02	✻	○	17	25	32	73	56	151	M16×1,5	0,333	SPGT0602**
ZTD04-180-XP25-SP06-02	✻	○	18	25	32	77	56	155	M16×1,5	0,347	SPGT0602**
ZTD04-190-XP25-SP06-02	✻	○	19	25	32	81	56	159	M16×1,5	0,362	SPGT0602**
ZTD04-200-XP25-SP06-02	✻	○	20	25	32	85	56	163	M16×1,5	0,381	SPGT0602**
ZTD04-210-XP25-SP06-02	✻	○	21	25	32	89	56	167	M16×1,5	0,4	SPGT0602**
ZTD04-215-XP25-SP07-02	✻	○	21,5	25	32	91	56	165	M16x1,5	0,407	SPGT07T3**
ZTD04-220-XP25-SP07-02	✻	○	22	25	32	93	56	171	M16×1,5	0,391	SPGT07T3**
ZTD04-230-XP25-SP07-02	✻	○	23	25	32	97	56	175	M16×1,5	0,484	SPGT07T3**
ZTD04-240-XP25-SP07-02	✻	○	24	25	32	101	56	179	M16×1,5	0,513	SPGT07T3**
ZTD04-250-XP25-SP07-02	✻	○	25	25	32	105	56	183	M16×1,5	0,494	SPGT07T3**
ZTD04-260-XP25-SP07-02	✻	○	26	25	32	109	56	187	M16×1,5	0,535	SPGT07T3**
ZTD04-270-XP25-SP07-02	✻	○	27	25	32	113	56	191	M16×1,5	0,582	SPGT07T3**
ZTD04-275-XP25-SP07-02	✻	○	27,5	25	32	115	56	192	M16x1,5	0,571	SPGT07T3**
ZTD04-280-XP32-SP09-02	✻	○	28	32	37	117	60	202	M22×2	0,653	SPGT0904**
ZTD04-290-XP32-SP09-02	✻	○	29	32	37	121	60	206	M22×2	0,846	SPGT0904**
ZTD04-300-XP32-SP09-02	✻	○	30	32	37	125	60	210	M22×2	0,893	SPGT0904**
ZTD04-310-XP32-SP09-02	✻	○	31	32	37	129	60	214	M22×2	0,914	SPGT0904**
ZTD04-320-XP32-SP09-02	✻	○	32	32	37	133	60	218	M22×2	0,966	SPGT0904**
ZTD04-330-XP32-SP09-02	✻	○	33	32	37	137	60	222	M22×2	1,016	SPGT0904**
ZTD04-340-XP40-SP11-02	✻	○	34	40	47	141	70	241	(BSPT)RC1/4	1,46	SPGT1104**
ZTD04-350-XP40-SP11-02	✻	○	35	40	47	145	70	245	(BSPT)RC1/4	1,52	SPGT1104**
ZTD04-360-XP40-SP11-02	✻	○	36	40	47	149	70	249	(BSPT)RC1/4	1,579	SPGT1104**
ZTD04-370-XP40-SP11-02	✻	○	37	40	47	153	70	253	(BSPT)RC1/4	1,592	SPGT1104**
ZTD04-380-XP40-SP11-02	✻	○	38	40	47	157	70	257	(BSPT)RC1/4	1,801	SPGT1104**
ZTD04-390-XP40-SP11-02	✻	○	39	40	47	161	70	261	(BSPT)RC1/4	1,801	SPGT1104**
ZTD04-400-XP40-SP11-02	✻	○	40	40	47	165	70	265	(BSPT)RC1/4	1,874	SPGT1104**
ZTD04-410-XP40-SP11-02	✻	○	41	40	47	169	70	269	(BSPT)RC1/4	1,861	SPGT1104**
ZTD04-420-XP40-SP14-02	✻	○	42	40	52	173	70	283	(BSPT)RC1/4	2,168	SPGT1405**

• En stock ○ Sur demande

✻ Arrosage intérieur

Codification > C9 Choix nuances > C8 Info. techniques > C201 Paramètres > C36

Article	✻	Stock	Dimensions (mm)								Plaquettes
			ØD	ØD1	ØD2	L1	L2	L	d	kg	
ZTD04-430-XP40-SP14-02	✻	○	43	40	52	177	70	287	(BSPT)RC1/4	2,17	SPGT1405**
ZTD04-440-XP40-SP14-02	✻	○	44	40	52	181	70	291	(BSPT)RC1/4	2,31	SPGT1405**
ZTD04-450-XP40-SP14-02	✻	○	45	40	52	185	70	295	(BSPT)RC1/4	2,421	SPGT1405**
ZTD04-460-XP40-SP14-02	✻	○	46	40	52	189	70	299	(BSPT)RC1/4	2,507	SPGT1405**
ZTD04-470-XP40-SP14-02	✻	○	47	40	52	193	70	303	(BSPT)RC1/4	2,612	SPGT1405**
ZTD04-480-XP40-SP14-02	✻	○	48	40	52	197	70	307	(BSPT)RC1/4	2,66	SPGT1405**
ZTD04-490-XP40-SP14-02	✻	○	49	40	52	201	70	311	(BSPT)RC1/4	2,836	SPGT1405**
ZTD04-500-XP40-SP14-02	✻	○	50	40	52	205	70	315	(BSPT)RC1/4	2,954	SPGT1405**
ZTD04-520-XP50-SP07-04	✻	○	52	50	62	213	80	325	(BSPT)RC1/4	3,685	SPGT07T3**
ZTD04-530-XP50-SP07-04	✻	○	53	50	62	217	80	329	(BSPT)RC1/4	3,777	SPGT07T3**
ZTD04-540-XP50-SP09-04	✻	○	54	50	57	222	80	333	(BSPT)RC1/4	3,906	SPGT0904**
ZTD04-545-XP50-SP09-04	✻	○	54,5	50	68	221	80	335	(BSPT)RC1/4	4,167	SPGT0904**
ZTD04-595-XP50-SP09-04	✻	○	59,5	50	68	241	80	355	(BSPT)RC1/4	4,784	SPGT0904**

• En stock ○ Sur demande

✻ Arrosage intérieur

Pièces détachées

	Plaquette	SPGT0502**	SPGT0602**	SPGT07T3**	SPGT0904**	SPGT1104**	SPGT1405**
	Bouchon fileté					M6×6 (7,0Nm)	M8×8 (10,2Nm)
	Vis	I60M2×4.3 (0,5Nm)	I60M2.2×5.5 (0,8Nm)	I60M2.5×6.5 (1,0Nm)	I60M3.5×8 (2,7Nm)	I60M4×10 (3,4Nm)	I60M5×13 (6,7Nm)
	Clé	WT06IP	WT07IP	WT07IP	WT15IP	WT15IP	WT20IP

Plaquette



C34

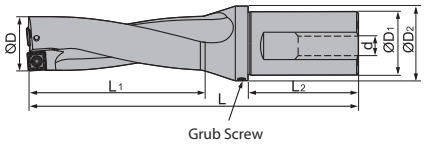
Codification C9 Choix nuances C8 Info. techniques C201 Paramètres C36

Foret à plaquettes

ZTD05







Article	✻	Stock	Dimensions (mm)								Plaquettes
			ØD	ØD1	ØD2	L1	L2	L	d	kg	
ZTD05-170-XP25-SP06-02	✻	○	17	25	32	90	56	168	M13×1	0,374	SPGT0602**
ZTD05-180-XP25-SP06-02	✻	○	18	25	32	95	56	173	M13×1	0,394	SPGT0602**
ZTD05-190-XP25-SP06-02	✻	○	19	25	32	100	56	178	M13×1	0,415	SPGT0602**
ZTD05-200-XP25-SP06-02	✻	○	20	25	32	105	56	183	M13×1	0,44	SPGT0602**
ZTD05-210-XP25-SP06-02	✻	○	21	25	32	110	56	188	M16×1,5	0,466	SPGT0602**
ZTD05-220-XP25-SP07-02	✻	○	22	25	32	115	56	193	M16×1,5	0,476	SPGT07T3**
ZTD05-230-XP25-SP07-02	✻	○	23	25	32	120	56	198	M16×1,5	0,507	SPGT07T3**
ZTD05-240-XP25-SP07-02	✻	○	24	25	32	125	56	203	M16×1,5	0,542	SPGT07T3**
ZTD05-250-XP25-SP07-02	✻	○	25	25	32	130	56	208	M16×1,5	0,561	SPGT07T3**
ZTD05-260-XP25-SP07-02	✻	○	26	25	32	135	56	213	M16×1,5	0,613	SPGT07T3**
ZTD05-270-XP25-SP07-02	✻	○	27	25	32	140	56	218	M16×1,5	0,665	SPGT07T3**
ZTD05-280-XP32-SP09-02	✻	○	28	32	37	145	60	230	M16×1,5	0,891	SPGT0904**
ZTD05-290-XP32-SP09-02	✻	○	29	32	37	150	60	235	M16×1,5	0,965	SPGT0904**
ZTD05-300-XP32-SP09-02	✻	○	30	32	37	155	60	240	M16×1,5	0,959	SPGT0904**
ZTD05-310-XP32-SP09-02	✻	○	31	32	37	160	60	245	M16×1,5	1,042	SPGT0904**
ZTD05-320-XP32-SP09-02	✻	○	32	32	37	165	60	250	M22×2	1,11	SPGT0904**
ZTD05-330-XP32-SP09-02	✻	○	33	32	37	170	60	255	M22×2	1,117	SPGT0904**
ZTD05-340-XP40-SP11-02	✻	○	34	40	47	175	70	275	M22×2	1,57	SPGT1104**
ZTD05-350-XP40-SP11-02	✻	○	35	40	47	180	70	280	M22×2	1,65	SPGT1104**
ZTD05-360-XP40-SP11-02	✻	○	36	40	47	185	70	285	M22×2	1,712	SPGT1104**
ZTD05-370-XP40-SP11-02	✻	○	37	40	47	190	70	290	M22×2	1,802	SPGT1104**
ZTD05-380-XP40-SP11-02	✻	○	38	40	47	195	70	295	(BSPT)RC1/4	1,873	SPGT1104**
ZTD05-390-XP40-SP11-02	✻	○	39	40	47	200	70	300	(BSPT)RC1/4	1,962	SPGT1104**
ZTD05-400-XP40-SP11-02	✻	○	40	40	47	205	70	305	(BSPT)RC1/4	2,068	SPGT1104**
ZTD05-410-XP40-SP11-02	✻	○	41	40	47	210	70	310	(BSPT)RC1/4	2,167	SPGT1104**
ZTD05-420-XP40-SP14-02	✻	○	42	40	52	215	70	325	(BSPT)RC1/4	2,39	SPGT1405**
ZTD05-430-XP40-SP14-02	✻	○	43	40	52	220	70	330	(BSPT)RC1/4	2,502	SPGT1405**
ZTD05-440-XP40-SP14-02	✻	○	44	40	52	225	70	335	(BSPT)RC1/4	2,612	SPGT1405**
ZTD05-450-XP40-SP14-02	✻	○	45	40	52	230	70	340	(BSPT)RC1/4	2,733	SPGT1405**
ZTD05-460-XP40-SP14-02	✻	○	46	40	52	235	70	345	(BSPT)RC1/4	2,854	SPGT1405**
ZTD05-470-XP40-SP14-02	✻	○	47	40	52	240	70	350	(BSPT)RC1/4	2,894	SPGT1405**
ZTD05-480-XP40-SP14-02	✻	○	48	40	52	245	70	355	(BSPT)RC1/4	3,109	SPGT1405**
ZTD05-490-XP40-SP14-02	✻	○	49	40	52	250	70	360	(BSPT)RC1/4	3,271	SPGT1405**
ZTD05-500-XP40-SP14-02	✻	○	50	40	52	255	70	365	(BSPT)RC1/4	3,425	SPGT1405**

• En stock ○ Sur demande

✻ Arrosage intérieur

Codification > C9 | Choix nuances > C8 | Info. techniques > C201 | Paramètres > C36

Pièces détachées

	Plaquette	SPGT0602**	SPGT07T3**	SPGT0904**	SPGT1104**	SPGT1405**
	Bouchon fileté				M6×6 (7,0Nm)	M8×8 (10,2Nm)
	Vis	I60M2.2×5.5 (0,8Nm)	I60M2.5×6.5 (1,0Nm)	I60M3.5×8 (2,7Nm)	I60M4×10 (3,4Nm)	I60M5×13 (6,7Nm)
	Clé	WT07IP	WT07IP	WT15IP	WT15IP	WT20IP

Plaquette



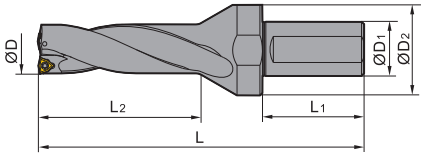
C34

Codification C9 Choix nuances C8 Info. techniques C201 Paramètres C36

Foret à plaquettes

ZD03





Article	✻	Stock	Dimensions (mm)							Plaquettes
			ØD	ØD1	ØD2	L1	L2	L	kg	
ZD03-160-XP25-WC03-02	✻	•	16	25	32	56	52	129	0,33	WCMX0302**
ZD03-170-XP25-WC03-02	✻	•	17	25	32	56	55	133	0,33	WCMX0302**
ZD03-180-XP25-WC03-02	✻	•	18	25	32	56	58	137	0,35	WCMX0302**
ZD03-190-XP25-WC03-02	✻	•	19	25	32	56	61	140	0,36	WCMX0302**
ZD03-200-XP25-WC03-02	✻	•	20	25	32	56	64	143	0,37	WCMX0302**
ZD03-210-XP25-WC04-02	✻	•	21	25	45	56	67	153	0,51	WCMX0402**
ZD03-220-XP25-WC04-02	✻	•	22	25	45	56	70	156	0,54	WCMX0402**
ZD03-230-XP25-WC04-02	✻	•	23	25	45	56	73	159	0,55	WCMX0402**
ZD03-240-XP25-WC04-02	✻	•	24	25	45	56	76	162	0,57	WCMX0402**
ZD03-250-XP25-WC04-02	✻	•	25	25	45	56	79	165	0,6	WCMX0402**
ZD03-260-XP32-WC05-02	✻	•	26	32	55	60	83	176	0,93	WCMX0503**
ZD03-270-XP32-WC05-02	✻	•	27	32	55	60	86	180	0,97	WCMX0503**
ZD03-280-XP32-WC05-02	✻	•	28	32	55	60	89	184	1,01	WCMX0503**
ZD03-290-XP32-WC05-02	✻	•	29	32	55	60	92	188	1,05	WCMX0503**
ZD03-300-XP32-WC05-02	✻	•	30	32	55	60	95	192	1,08	WCMX0503**
ZD03-310-XP40-WC06-02	✻	•	31	40	60	70	98	203	1,44	WCMX06T3**
ZD03-320-XP40-WC06-02	✻	•	32	40	60	70	101	206	1,48	WCMX06T3**
ZD03-330-XP40-WC06-02	✻	•	33	40	60	70	104	209	1,52	WCMX06T3**
ZD03-340-XP40-WC06-02	✻	•	34	40	60	70	107	212	1,55	WCMX06T3**
ZD03-350-XP40-WC06-02	✻	•	35	40	60	70	110	215	1,61	WCMX06T3**
ZD03-360-XP40-WC06-02	✻	•	36	40	60	70	113	218	1,66	WCMX06T3**
ZD03-370-XP40-WC06-02	✻	•	37	40	60	70	116	221	1,71	WCMX06T3**
ZD03-380-XP40-WC06-02	✻	•	38	40	60	70	119	225	1,76	WCMX06T3**
ZD03-390-XP40-WC06-02	✻	•	39	40	60	70	122	228	1,82	WCMX06T3**
ZD03-400-XP40-WC06-02	✻	•	40	40	60	70	125	231	1,93	WCMX06T3**
ZD03-410-XP40-WC06-02	✻	•	41	40	60	70	128	234	1,94	WCMX06T3**
ZD03-420-XP40-WC08-02	✻	•	42	40	60	70	131	239	2,18	WCMX0804**
ZD03-430-XP40-WC08-02	✻	•	43	40	60	70	134	242	2,245	WCMX0804**
ZD03-440-XP40-WC08-02	✻	•	44	40	60	70	137	245	2,34	WCMX0804**
ZD03-450-XP40-WC08-02	✻	•	45	40	60	70	140	248	2,34	WCMX0804**
ZD03-460-XP40-WC08-02	✻	•	46	40	60	70	143	251	2,49	WCMX0804**
ZD03-470-XP40-WC08-02	✻	•	47	40	60	70	146	253	2,88	WCMX0804**
ZD03-480-XP40-WC08-02	✻	•	48	40	70	70	149	255	2,55	WCMX0804**

• En stock ○ Sur demande

✻ Arrosage intérieur

Codification > C9 Choix nuances > C8 Info. techniques > C201 Paramètres > C36

Article	✻	Stock	Dimensions (mm)							Plaquettes
			ØD	ØD1	ØD2	L1	L2	L	kg	
ZD03-490-XP40-WC08-02	✻	○	49	40	70	70	152	257	2,619	WCMX0804**
ZD03-500-XP40-WC08-02	✻	•	50	40	70	70	155	259	2,62	WCMX0804**
ZD03-510-XP40-WC08-02	✻	○	51	40	70	70	158	261	2,62	WCMX0804**
ZD03-520-XP40-WC08-02	✻	○	52	40	70	70	70	263	2,808	WCMX0804**
ZD03-530-XP40-WC08-02	✻	○	53	40	70	70	164	265	2,906	WCMX0804**
ZD03-540-XP40-WC08-02	✻	•	54	40	70	70	167	267	2,983	WCMX0804**
ZD03-550-XP40-WC08-02	✻	○	55	40	70	70	170	269	3,126	WCMX0804**
ZD03-560-XP40-WC08-02	✻	○	56	40	70	70	173	271	3,157	WCMX0804**
ZD03-580-XP40-WC08-02	✻	•	58	40	70	70	179	275	3,501	WCMX0804**

• En stock ○ Sur demande

✻ Arrosage intérieur

Pièces détachées

	Plaquette	WCMX0302**	WCMX0402**	WCMX0503**	WCMX06T3**	WCMX0804**
	Vis	I60M2.5×6.5 (1,0Nm)	I60M2.5×6.5T (1,0Nm)	I60M3×7 (1,8Nm)	I60M3×7 (1,8Nm)	I60M3.5×10.4 (2,7Nm)
	Clé	WT06IP	WT07IP	WT15IP	WT15IP	WT20IP

Plaquette



Semi-finition

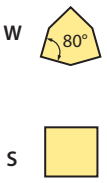
C35

Codification C9 Choix nuances C8 Info. techniques C201 Paramètres C36

Forets à plaquettes Code ISO – plaquette de coupe

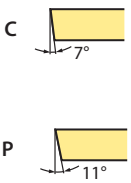
W	C	M	X	08	04	12	R	–	PG
1	2	3	4	5	6	7	8		9

Forme de plaquette



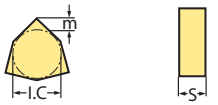
1

Angle de dépouille



2

Classe de tolérance



Code	I.C [mm]	m [mm]	S [mm]
G	±0,025	±0,025	±0,130
M	±0,05–0,13	±0,08–0,18	±0,130

3

Caractéristiques de fixation (métrique)

Forme de plaquette



T

X Spécial

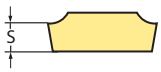
4

Longueur d'arête l [mm]

I.C [mm]	Forme de plaquette S	Forme de plaquette W
3,8		**03**
4,3		**04**
5,4		**05**
6,35	**06**	
6,5		**06**
8,0		**08**
8,7	**08**	
9,252	**09**	
12,7	**12**	

5

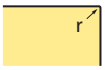
Epaisseur plaquette [mm]



Code	S	Code	S
00	0,79	**05**	5,56
T0	0,99	**T5**	5,95
01	1,59	**06**	6,35
T1	1,98	**T6**	6,75
02	2,38	**07**	7,94
T2	2,58	**09**	9,52
03	3,18	**T9**	9,72
T3	3,97	**11**	11,11
04	4,76	**12**	12,70
T4	4,96		

6

Rayon de plaquette [mm]



Code	r
04	0,4
08	0,8
12	1,2

7

Sens de rotation

Code	Description
R	À droite
L	À gauche

8

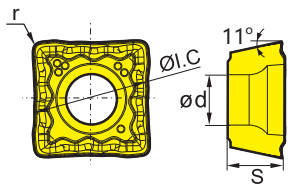
Vue d'ensemble des brise-copeaux (pages C3 et suivantes)

9

SPMX	L	I.C	S	d
04 02	4	4	2,38	2,2
05 02	5	5	2,38	2,2
06 02	6	6	2,38	2,5
07 T3	7,94	7,94	3,97	2,8
09 04	9,8	9,8	4,3	4,1
11 04	11,5	11,5	4,76	4,4
14 05	14,3	14,3	5,2	5,5

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquette de perçage

Plaquette de fraisage SP**			HC[1] (CVD)						HC[1] (PVD)						HW
		P													
		M													
		K													
		N													
		S													
		H													
ISO		r	YB6338	YBD252					YBG105	YBG202	YBS203	YBG205	YB9320	YBG212	YD201
EM	**SPMX040203-EM**	0,3	●										●		
	SPMX050204-EM	0,4	●										●		
	SPMX060204-EM	0,4	●										●		
	SPMX07T308-EM	0,8	●										●		
	SPMX090408-EM	0,8	●										●		
	SPMX110408-EM	0,8	●										●		
	SPMX140512-EM	1,2	●										●		
LM	**SPMX040203-LM**	0,3											○		
	SPMX050204-LM	0,4											○		
	SPMX060204-LM	0,4											○		
	SPMX07T308-LM	0,8											○		
	SPMX090408-LM	0,8											○		
	SPMX110408-LM	0,8											○		
	SPMX140512-LM	1,2											○		
XM	**SPMX040203-XM**	0,3											○		
	SPMX050204-XM	0,4											●		
	SPMX060204-XM	0,4										●	●		
	SPMX07T308-XM	0,8										●	●	○	
	SPMX090408-XM	0,8											●		
	SPMX110408-XM	0,8											●		
	SPMX140512-XM	1,2											●		

● En stock ○ Sur demande

HC[1] Carbure revêtu
HW Carbure non revêtu

Porte-outil

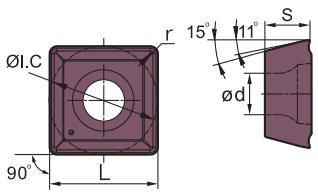
ZSD02	ZSD03	ZSD04	ZSD05
			
C10	C13	C16	C19

Codification C32 Choix nuances C8 Info. techniques C201 Paramètres C36

SPGT	L	I.C	S	d
05 02	5	5	2,38	2,2
06 02	6	6	2,38	2,6
07 T3	7,94	7,94	3,97	2,8
09 04	9,8	9,8	4,76	4,2
11 04	11,5	11,5	4,76	4,4
14 05	14,3	14,3	5,2	5,75

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquette de perçage

Plaquette de perçage SP**			HC[1] (CVD)		HC[1] (PVD)						HW
		P									
		M									
		K									
		N									
		S									
		H									
ISO		r	YB6338	YBD252	YBG105	YBG202	YBS203	YBG205	YB9320	YBG212	YD201
PM	**SPGT050204-PM**	0,4	●					●		●	
	SPGT060204-PM	0,4	●					●		●	
	SPGT07T308-PM	0,8	●					●		●	
	SPGT090408-PM	0,8	●					●		●	
	SPGT110408-PM	0,8	●					●		●	
	SPGT140512-PM	1,2	●					●		●	
EM	**SPGT050204-EM**	0,4						●		●	
	SPGT060204-EM	0,4						●		●	
	SPGT07T308-EM	0,8						●		●	
	SPGT090408-EM	0,8						●		●	
	SPGT110408-EM	0,8						●		●	
	SPGT140512-EM	1,2						●		●	

● En stock ○ Sur demande

HC[1] Carbure revêtu
HW Carbure non revêtu

Porte-outil

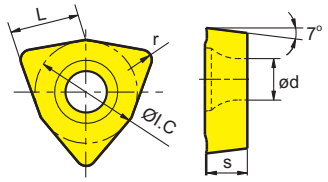
ZTD02	ZTD03	ZTD04	ZTD05
			
C22	C24	C26	C28

Codification C32 Choix nuances C8 Info. techniques C201 Paramètres C36

WCMX	L	I.C	S	d
03 02	3,8	5,56	2,38	2,8
04 02	4,3	6,35	2,38	3,1
05 03	5,4	7,94	3,18	3,2
06 T3	6,5	9,525	3,97	3,7
08 04	8,7	12,7	4,76	4,3

Bonnes conditions d'usinage
Conditions d'usinage normales
Conditions d'usinage défavorables

Plaquette de perçage

Plaquette de perçage WC**			HC[1] (CVD)						HC[1] (PVD)						HW
		P													
		M													
		K													
		N													
		S													
		H													
ISO		r	YB6338	YBD252					YBG105	YBG202	YBS203	YBG205	YB9320	YBG212	YD201
53 	**WCMX030208R-53**	0,8		●						○					
	WCMX040208R-53	0,8		●						○					
	WCMX050308R-53	0,8		●						○					
	WCMX06T308R-53	0,8		●						○					○
	WCMX080412R-53	1,2		●						○					
D 	**WCMX06T308-D**	0,8		○											
	WCMX080412-D	1,2		●											
PG 	**WCMX030208R-PG**	0,8								○					
	WCMX040208R-PG	0,8								○					
	WCMX050308R-PG	0,8		○						○		○			
	WCMX06T308R-PG	0,8								○					
	WCMX080412R-PG	1,2								○					

● En stock ○ Sur demande

HC[1] Carbure revêtu
HW Carbure non revêtu

Porte-outil
ZD03

C30

Codification C32 Choix nuances C8 Info. techniques C201 Paramètres C36

Forets à plaquettes

Groupe de matériaux		Composition/structure/traitement thermique		HB	Groupe matière	ZSD* SPMX04		ZSD* SPMX05/06		
						v_c [m/min]	f [mm]	v_c [m/min]	f [mm]	
P	Acier non allié	env. 0,15 % C	recuit	125	1	200-300	0,05-0,08	200-300	0,05-0,10	
		env. 0,45 % C	recuit	190	2	200-300	0,05-0,08	200-300	0,05-0,10	
		env. 0,45 % C	trempé et revenu	250	3	200-300	0,05-0,08	200-300	0,05-0,10	
		env. 0,75 % C	recuit	270	4	200-300	0,05-0,08	200-300	0,05-0,10	
		env. 0,75 % C	trempé et revenu	300	5	200-300	0,05-0,08	200-300	0,05-0,10	
	Acier faiblement allié		recuit	180	6	140-220	0,05-0,08	140-220	0,05-0,10	
			trempé et revenu	275	7	140-220	0,05-0,08	140-220	0,05-0,10	
			trempé et revenu	300	8	140-220	0,05-0,08	140-220	0,05-0,10	
			trempé et revenu	350	9	140-220	0,05-0,08	140-220	0,05-0,10	
	Acier fortement allié et acier à outils fortement allié		recuit	200	10	120-180	0,05-0,08	120-180	0,05-0,10	
			durci et revenu	325	11	120-180	0,05-0,08	120-180	0,05-0,10	
M	Acier inoxydable	ferritique / martensitique	recuit	200	12	110-230	0,05-0,08	110-230	0,05-0,10	
		martensitique	trempé et revenu	240	13	110-230	0,05-0,08	110-230	0,05-0,10	
		austénitique	trempé	180	14	110-230	0,05-0,08	110-230	0,05-0,10	
		austénitique et ferritique		230	15	110-230	0,05-0,08	110-230	0,05-0,10	
K	Fonte grise	perlitique / ferritique		180	16	170-240	0,05-0,08	170-240	0,05-0,10	
		perlitique (martensitique)		260	17	170-240	0,05-0,08	170-240	0,05-0,10	
	Fonte avec graphite nodulaire	ferritique		160	18	130-200	0,05-0,08	130-200	0,05-0,10	
		perlitique		250	19	130-200	0,05-0,08	130-200	0,05-0,10	
	Fonte malléable	ferritique		130	20	120-220	0,05-0,08	120-220	0,05-0,10	
		perlitique		230	21	120-220	0,05-0,08	120-220	0,05-0,10	
N	Alliages corroyé d'aluminium	non durcissable		60	22					
		durcissable	trempé	100	23					
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24					
		≤ 12 % Si, durcissable	trempé	90	25					
		> 12 % Si, non durcissable		130	26					
	Cuivre et alliages de cuivre (bronze/moulage)	Alliages de décolletage, PB > 1 %		110	27					
		CuZn, CuSnZn		90	28					
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29					
S	Alliages réfractaires	Base Fe	recuit	200	30					
			trempé	280	31					
		à base de Ni ou Co	recuit	250	32					
			trempé	350	33					
			coulé	320	34					
	Alliages de titane	Titane pur		R_m 400	35					
		Alliages Alpha + Beta	trempé	R_m 1050	36					
H	Acier trempé		durci et revenu	55 HRC	37					
			durci et revenu	60 HRC	38					
	Fonte trempée		coulé	400	39					
	Fonte durcie		durci et revenu	55 HRC	40					
X	Matériaux non métalliques	Thermoplastiques			41					
		Duroplaste			42					
		Matière plastique renforcée de fibres de verre GFK			43					
		Matière plastique renforcée de fibres de carbone CFK			44					
		Graphite			45					
		Bois			46					

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Pour les profondeurs de coupe 5xD, ces conditions de coupe doivent être adaptées à l'application correspondante.
Vous trouverez les exemples de matériaux pour les groupe matière de copeaux à la page D11.

	ZSD*		ZSD*		ZTD*		ZTD*		ZTD*		ZD03		ZD03		
	SPMX07/09		SPMX11/14		SPGT05/06		SPGT07/09		SPGT11/14		WCMX03-05		WCMX06-08		
	v_c [m/min]	f [mm]	v_c [m/min]	f [mm]	v_c [m/min]	f [mm]	v_c [m/min]	f [mm]	v_c [m/min]	f [mm]	v_c [m/min]	f [mm]	v_c [m/min]	f [mm]	
	200-300	0,06-0,14	200-300	0,08-0,17	200-300	0,05-0,08	200-300	0,06-0,11	200-300	0,08-0,14	200-300	0,05-0,08	200-300	0,06-0,11	
	200-300	0,06-0,14	200-300	0,08-0,17	200-300	0,05-0,08	200-300	0,06-0,11	200-300	0,08-0,14	200-300	0,05-0,08	200-300	0,06-0,11	
	200-300	0,06-0,14	200-300	0,08-0,17	200-300	0,05-0,08	200-300	0,06-0,11	200-300	0,08-0,14	200-300	0,05-0,08	200-300	0,06-0,11	
	200-300	0,06-0,14	200-300	0,08-0,17	200-300	0,05-0,08	200-300	0,06-0,11	200-300	0,08-0,14	200-300	0,05-0,08	200-300	0,06-0,11	
	200-300	0,06-0,14	200-300	0,08-0,17	200-300	0,05-0,08	200-300	0,06-0,11	200-300	0,08-0,14	200-300	0,05-0,08	200-300	0,06-0,11	
	140-220	0,06-0,14	140-220	0,09-0,19	140-220	0,05-0,08	140-220	0,07-0,12	140-220	0,09-0,16	140-220	0,05-0,08	140-220	0,07-0,12	
	140-220	0,06-0,14	140-220	0,09-0,19	140-220	0,05-0,08	140-220	0,07-0,12	140-220	0,09-0,16	140-220	0,05-0,08	140-220	0,07-0,12	
	140-220	0,06-0,14	140-220	0,09-0,19	140-220	0,05-0,08	140-220	0,07-0,12	140-220	0,09-0,16	140-220	0,05-0,08	140-220	0,07-0,12	
	140-220	0,06-0,14	140-220	0,09-0,19	140-220	0,05-0,08	140-220	0,07-0,12	140-220	0,09-0,16	140-220	0,05-0,08	140-220	0,07-0,12	
	120-180	0,06-0,14	120-180	0,09-0,19	120-180	0,05-0,08	120-180	0,07-0,12	120-180	0,09-0,16	120-180	0,05-0,08	120-180	0,07-0,12	
	120-180	0,06-0,14	120-180	0,09-0,19	120-180	0,05-0,08	120-180	0,07-0,12	120-180	0,09-0,16	120-180	0,05-0,08	120-180	0,07-0,12	
	110-230	0,06-0,14	110-230	0,08-0,17	110-230	0,05-0,08	110-230	0,06-0,11	110-230	0,08-0,14	110-230	0,05-0,08	110-230	0,06-0,11	
	110-230	0,06-0,14	110-230	0,08-0,17	110-230	0,05-0,08	110-230	0,06-0,11	110-230	0,08-0,14	110-230	0,05-0,08	110-230	0,06-0,11	
	110-230	0,06-0,14	110-230	0,08-0,17	110-230	0,05-0,08	110-230	0,06-0,11	110-230	0,08-0,14	110-230	0,05-0,08	110-230	0,06-0,11	
	110-230	0,06-0,14	110-230	0,08-0,17	110-230	0,05-0,08	110-230	0,06-0,11	110-230	0,08-0,14	110-230	0,05-0,08	110-230	0,06-0,11	
	170-240	0,08-0,16	170-240	0,12-0,24	170-240	0,05-0,08	170-240	0,08-0,14	170-240	0,12-0,21	170-240	0,05-0,08	170-240	0,08-0,14	
	170-240	0,08-0,16	170-240	0,12-0,24	170-240	0,05-0,08	170-240	0,08-0,14	170-240	0,12-0,21	170-240	0,05-0,08	170-240	0,08-0,14	
	130-200	0,08-0,16	130-200	0,12-0,24	130-200	0,05-0,08	130-200	0,08-0,14	130-200	0,12-0,21	130-200	0,05-0,08	130-200	0,08-0,14	
	130-200	0,08-0,16	130-200	0,12-0,24	130-200	0,05-0,08	130-200	0,08-0,14	130-200	0,12-0,21	130-200	0,05-0,08	130-200	0,08-0,14	
	120-220	0,08-0,16	120-220	0,12-0,24	120-220	0,05-0,08	120-220	0,08-0,14	120-220	0,12-0,21	120-220	0,05-0,08	120-220	0,08-0,14	
	120-220	0,08-0,16	120-220	0,12-0,24	120-220	0,05-0,08	120-220	0,08-0,14	120-220	0,12-0,21	120-220	0,05-0,08	120-220	0,08-0,14	

FORETS CARBURE MONOBLOC



Forets carbure monobloc

Vue d'ensemble des produits	**C40-C41**
Vue d'ensemble des nuances	**C42**
Codification – foret carbure monobloc	**C44-C45**
Série SU	**C47-C88**
Série SL/SP	**C89-C108**
Série DU	**C109-C116**
Série GD	**C117-C126**
Série SH	**C127-C128**
Série SC	**C129-C132**
Série PA	**C133-C136**
Série PC	**C137-C140**
Foret à centrer NC – série SC	**C141-C143**
Recommandations de données de coupe	**C144-C149**
Résolution de problèmes	**C202-C205**
Informations techniques	**C201-C207**
Outils spéciaux	**C150-C151**

C

Forets carbure monobloc Vue d'ensemble des produits

	Produits	Fraises carbure monobloc	L/D	✻	Ø	Application						Version	Page
						P	M	K	N	S	H		
SU	1534SU03		3xD		0,9-20	✓	✓	✓				Foret hélicoïdal	C48
	1534SU03C		3xD	✻	3-20	✓	✓	✓				Foret hélicoïdal	C48
	1634SU03C		3xD	✻	3-20	✓	✓	✓				Foret hélicoïdal	C72
	1734SU03C		3xD	✻	3-20	✓	✓	✓				Foret hélicoïdal	C80
	1536SU05		5xD		2-20	✓	✓	✓				Foret hélicoïdal	C59
	1536SU05C		5xD	✻	3-20	✓	✓	✓				Foret hélicoïdal	C59
	1636SU05C		5xD	✻	3-20	✓	✓	✓				Foret hélicoïdal	C76
	1736SU05C		5xD	✻	3-20	✓	✓	✓				Foret hélicoïdal	C84
	1538SU08C		8xD	✻	3-18	✓	✓	✓				Foret hélicoïdal	C69
	1557SU03		3xD		M4-M16	✓	✓	✓				Foret étagé	C88
SL SP	1588SL10C		10xD	✻	3-14	✓	✓	✓	✓	✓		Foret pour trous profonds	C89
	1588SL12C		12xD	✻	3-21	✓	✓	✓	✓	✓		Foret pour trous profonds	C92
	1588SL15C		15xD	✻	3-14	✓	✓	✓	✓	✓		Foret pour trous profonds	C96
	1588SL20C		20xD	✻	3-14	✓	✓	✓	✓	✓		Foret pour trous profonds	C99
	1588SL30C		30xD	✻	3-10	✓	✓	✓	✓	✓		Foret pour trous profonds	C102
	1534SP03C		3xD	✻	3,03-20,03	✓	✓	✓	✓	✓		Foret pilote	C104
UD	1534UD03C		3xD	✻	3-20	✓	✓			✓		Foret hélicoïdal	C110
	1536UD05C		5xD	✻	3-20	✓	✓			✓		Foret hélicoïdal	C113
GD	1534GD03C		3xD	✻	3-20	✓		✓				Foret hélicoïdal	C118
	1536GD05C		5xD	✻	3-20	✓		✓				Foret hélicoïdal	C121
	1636GD05C		5xD	✻	5-20	✓		✓				Foret hélicoïdal	C124
SH	1534SH03		3xD		3-16						✓	Foret hélicoïdal	C127
SC	1105SC03		3xD		2-16				✓			Foret hélicoïdal	C129
	1101SC05		5xD		2-16				✓			Foret hélicoïdal	C132
PA	1165PA03		3xD		3-20				✓			Foret à trois lèvres	C133
PC	1576PC05		5xD		4-20			✓				Foret à goujures droites	C137
	1576PC05C		5xD	✻	4-20			✓				Foret à goujures droites	C137

✓ Choix de base ✓ Alternative

✻ Avec arrosage interne SC*: Foret à centrer

	Produits	Fraises carbure monobloc	L/D	✻	Ø	Application						Version	Page
						P	M	K	N	S	H		
PC	1579PC15C		15xD	✻	5-14			✔				Foret à goujures droites	C139
SC*	1143SC90		-		5-20	✔	✔	✔	✔			Foret à centrer	C141
	1143SC120		-	✻	5-20	✔	✔	✔	✔			Foret à centrer	C142
	1143SC142			✻	5-20	✔	✔	✔	✔			Foret à centrer	C143

✔ Choix de base ✔ Alternative

✻ Avec arrosage interne SC*: Foret à centrer

Forets carbure monobloc Vue d'ensemble des nuances

Carbure revêtu PVD

Nuance	Description de nuances
KDG303	Nuance carbure revêtu PVD P10-P20/M10-M20/K10-K20 pour les aciers, les aciers inoxydables, les fontes. Bonne résistance à l'usure et tenacité pour un champ d'application large.
KDG304	Substrat en carbure revêtu PVD pour l'usinage de l'acier et des pièces moulées. Ténacité optimisée pour des vitesses d'avance élevées.
KDG305	Substrat carbure revêtu PVD pour l'usinage de l'acier inoxydable et des superalliages. Haute fiabilité d'usinage grâce à un comportement à l'usure maîtrisé.

Carbure non revêtu

Nuance	Description de nuances
YK20F	Nuance carbure non revêtu K20 pour les aciers, fontes, et non ferreux.
YK30F	Nuance carbure non revêtu K30 pour les aciers, aciers inoxydables, fontes, et non ferreux.

Notes

Forets carbure monobloc

Codification – foret carbure monobloc

1	5	3	6	SU	05	(C)	–	0850	(S)
1	2	3	4	5	6	7		8	9

Version	
Code	Description
1	Forets

1

Type d'attachement	
Code	Description
1	Attachement cylindrique
2	Carré DIN10
3	Attachement cylindrique DIN 1809
5	Attachement cylindrique DIN 6535 HA
6	Attachement Weldon DIN 6535 HB
7	Attachement Whistle-Notch DIN 6535 HE
9	Attachement cône morse

2

Type de foret	
Code	Description
0	Foret hélicoïdal
3	Foret hélicoïdal universel
4	Foret à centrer NC
5	Foret étagé
6	Foret à trois lèvres
7	Foret à goujures droites
8	Foret pour trous profonds

3

Longueur outil	
Code	Description
1	DIN 338
2	DIN 1897
3	QJ/ZZQ(TO)01.001.002
4	DIN 6537 K
5	DIN 6539
6	DIN 6537 L
7	Conforme au standard usine ZCC-C
8	Conforme au standard usine ZCC-D
9	Conforme au standard usine ZCC-E

4

Application	
Code	Description
UD	Foret hélicoïdal pour matériaux difficiles
GD	Foret hélicoïdal pour des vitesses d'avance élevées
SU	Foret hélicoïdal pour l'usinage général
SUK	Foret hélicoïdal pour fonte
SL	Foret hélicoïdal pour le perçage de trous profonds
SLK	Foret trous profonds pour fonte
SP	Foret pilote
SH	Foret hélicoïdal pour matériaux durs
SC	Foret hélicoïdal pour métaux non-ferreux et fonte
PA	Foret à trois lèvres pour métaux non-ferreux et fonte
PC	Foret à goujures droites pour métaux non-ferreux et fonte

5

Rapport L / D	
Forets	
Code	Description
03	3 x D
05	5 x D
08	8 x D
10	10 x D
12	12 x D
15	15 x D
20	20 x D
30	30 x D

6

Angle	
Foret à centrer NC	
Code	Description
90	90°
120	120°

Avec arrosage interne

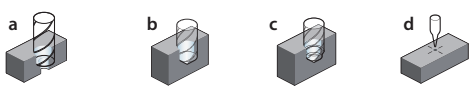
7

Diamètre de perçage [mm]	
Code	Description
0200	2,0
0850	8,5
1800	18,0
...	

8

Diamètre de attachement [mm]	
Code	Description
S	4,0

9



a Alésage **b** Perçage **c** Lamage **d** Centrage

Notes

INFORMATIONS IMPORTANTES

Conseils d'utilisation pour la **série SU**

Calculatrice

Groupe ISO	Matière	Vitesse de coupe v_c (m/min)	Facteur d'avance F_m
P	Acier faiblement allié	180	0,015
	Acier fortement allié	120	0,012
M	Aciers inoxydables	80	0,01
K	Fontes	250	0,018
	Fontes aciérées	180	0,015
S	HRSA	45	0,008
N	Aluminium	400	0,02

Formule :	Avance par tour (F_n)	$D \times F_m$
Exemple :	Diamètre de perçage (D)	10 mm
	Matière	Acier fortement allié

$$F_n = 10\ mm \times 0{,}012 = 0{,}12\ mm/tr$$



Fig.: **1536SU05C**

Forets carbure monobloc Série SU

Foret SU(K) 3xD | Usinage général | Ajouter K pour les applications fonte (SUK)

1534SU03/1534SU03C



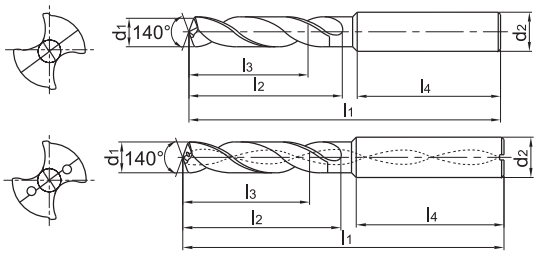
– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Arrosage intérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1534SU03-0090S		0,9	4	47	4,2	3,4	37,9	○
1534SU03-0100S		1	4	47	4,7	3,8	37,6	●
1534SU03-0105S		1,05	4	47	4,9	3,9	37,5	●
1534SU03-0110S		1,1	4	47	5,2	4,1	37,2	○
1534SU03-0115S		1,15	4	47	5,4	4,3	37,1	○
1534SU03-0120S		1,2	4	47	5,6	4,5	37	●
1534SU03-0125S		1,25	4	47	5,9	4,7	36,8	○
1534SU03-0130S		1,3	4	47	6,1	4,9	36,6	●
1534SU03-0135S		1,35	4	47	6,3	5,1	36,5	○
1534SU03-0140S		1,4	4	47	6,6	5,3	36,3	○
1534SU03-0145S		1,45	4	47	6,8	5,4	36,2	○
1534SU03-0147S		1,47	4	47	6,9	5,5	36,1	●
1534SU03-0150S		1,5	4	47	7,1	5,6	36	●
1534SU03-0155S		1,55	4	47	7,3	5,8	35,8	○
1534SU03-0160S		1,6	4	47	7,5	6	35,7	●
1534SU03-0165S		1,65	4	47	7,8	6,2	35,5	○
1534SU03-0170S		1,7	4	47	8	6,4	35,4	●
1534SU03-0175S		1,75	4	47	8,2	6,6	35,2	○
1534SU03-0180S		1,8	4	47	8,5	6,8	35	●
1534SU03-0185S		1,85	4	47	8,7	6,9	34,9	○
1534SU03-0190S		1,9	4	47	8,9	7,1	34,8	●
1534SU03-0195S		1,95	4	47	9,2	7,3	34,5	○
1534SU03-0200		2	6	62	20	14	36	●
1534SU03-0210		2,1	6	62	20	14	36	●
1534SU03-0220		2,2	6	62	20	14	36	●
1534SU03-0230		2,33	3	59	13,8	14	36	●
1534SU03-0240		2,4	6	62	20	14	36	●
1534SU03-0250		2,5	6	62	20	14	36	●
1534SU03-0260		2,6	6	62	20	14	36	●
1534SU03-0270		2,7	6	62	20	14	36	●
1534SU03-0280		2,8	6	62	20	14	36	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✻ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1534SU*	✔	✔	✔			
1534SUK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SU(K) 3xD | Usinage général | Ajouter K pour les applications fonte (SUK)

1534SU03/1534SU03C



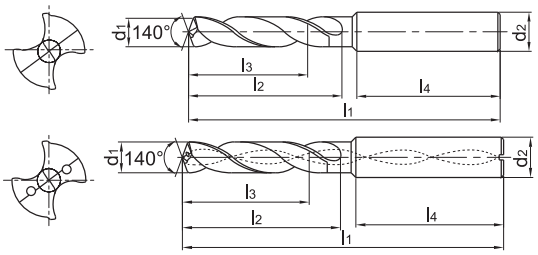
– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Arrosage intérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1534SU03-0290		2,9	6	62	20	14	36	●
1534SU03-0300		3	6	62	20	14	36	●
1534SU03C-0300	✻	3	6	62	20	14	36	●
1534SU03-0310		3,1	6	62	20	14	36	●
1534SU03C-0310	✻	3,1	6	62	20	14	36	●
1534SU03-0320		3,2	6	62	20	14	36	●
1534SU03C-0320	✻	3,2	6	62	20	14	36	●
1534SU03-0325		3,25	6	62	20	14	36	●
1534SU03C-0325	✻	3,25	6	62	20	14	36	●
1534SU03-0330		3,3	6	62	20	14	36	●
1534SU03C-0330	✻	3,3	6	62	20	14	36	●
1534SU03-0340		3,4	6	62	20	14	36	●
1534SU03C-0340	✻	3,4	6	62	20	14	36	●
1534SU03-0350		3,5	6	62	20	14	36	●
1534SU03C-0350	✻	3,5	6	62	20	14	36	●
1534SU03-0360		3,6	6	62	20	14	36	●
1534SU03C-0360	✻	3,6	6	62	20	14	36	●
1534SU03-0370		3,7	6	62	20	14	36	●
1534SU03C-0370	✻	3,7	6	62	20	14	36	●
1534SU03-0380		3,8	6	66	24	17	36	●
1534SU03C-0380	✻	3,8	6	66	24	17	36	●
1534SU03-0390		3,9	6	66	24	17	36	●
1534SU03C-0390	✻	3,9	6	66	24	17	36	●
1534SU03-0400		4	6	66	24	17	36	●
1534SU03C-0400	✻	4	6	66	24	17	36	●
1534SU03-0410		4,1	6	66	24	17	36	●
1534SU03C-0410	✻	4,1	6	66	24	17	36	●
1534SU03-0420		4,2	6	66	24	17	36	●
1534SU03C-0420	✻	4,2	6	66	24	17	36	●
1534SU03-0430		4,3	6	66	24	17	36	●
1534SU03C-0430	✻	4,3	6	66	24	17	36	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✻ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1534SU*	✔	✔	✔			
1534SUK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Forets carbure monobloc Série SU

Foret SU(K) 3xD | Usinage général | Ajouter K pour les applications fonte (SUK)

1534SU03/1534SU03C



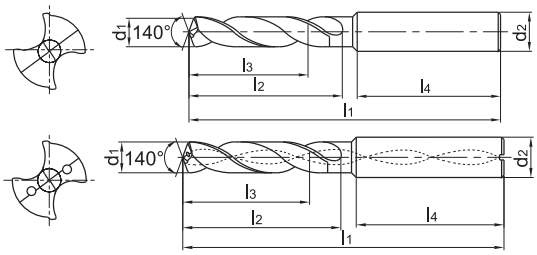
– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1534SU03-0440		4,4	6	66	24	17	36	●
1534SU03C-0440	✲	4,4	6	66	24	17	36	●
1534SU03-0450		4,5	6	66	24	17	36	●
1534SU03C-0450	✲	4,5	6	66	24	17	36	●
1534SU03-0460		4,6	6	66	24	17	36	●
1534SU03C-0460	✲	4,6	6	66	24	17	36	●
1534SU03-0465		4,65	6	66	24	17	36	●
1534SU03C-0465	✲	4,65	6	66	24	17	36	●
1534SU03-0470		4,7	6	66	24	17	36	●
1534SU03C-0470	✲	4,7	6	66	24	17	36	●
1534SU03-0480		4,8	6	66	28	20	36	●
1534SU03C-0480	✲	4,8	6	66	28	20	36	●
1534SU03-0490		4,9	6	66	28	20	36	●
1534SU03C-0490	✲	4,9	6	66	28	20	36	●
1534SU03-0500		5	6	66	28	20	36	●
1534SU03C-0500	✲	5	6	66	28	20	36	●
1534SU03-0510		5,1	6	66	28	20	36	●
1534SU03C-0510	✲	5,1	6	66	28	20	36	●
1534SU03-0520		5,2	6	66	28	20	36	●
1534SU03C-0520	✲	5,2	6	66	28	20	36	●
1534SU03-0530		5,3	6	66	28	20	36	●
1534SU03C-0530	✲	5,3	6	66	28	20	36	●
1534SU03-0540		5,4	6	66	28	20	36	●
1534SU03C-0540	✲	5,4	6	66	28	20	36	●
1534SU03-0550		5,5	6	66	28	20	36	●
1534SU03C-0550	✲	5,5	6	66	28	20	36	●
1534SU03-0555		5,55	6	66	28	20	36	●
1534SU03C-0555	✲	5,55	6	66	28	20	36	●
1534SU03-0560		5,6	6	66	28	20	36	●
1534SU03C-0560	✲	5,6	6	66	28	20	36	●
1534SU03-0570		5,7	6	66	28	20	36	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1534SU*	✔	✔	✔			
1534SUK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SU(K) 3xD | Usinage général | Ajouter K pour les applications fonte (SUK)

1534SU03/1534SU03C

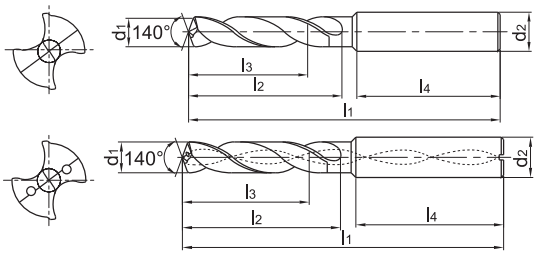
– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Arrosage intérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1534SU03C-0570	✻	5,7	6	66	28	20	36	●
1534SU03-0580		5,8	6	66	28	20	36	●
1534SU03C-0580	✻	5,8	6	66	28	20	36	●
1534SU03-0590		5,9	6	66	28	20	36	●
1534SU03C-0590	✻	5,9	6	66	28	20	36	●
1534SU03-0600		6	6	66	28	20	36	●
1534SU03C-0600	✻	6	6	66	28	20	36	●
1534SU03-0610		6,1	8	79	34	24	36	●
1534SU03C-0610	✻	6,1	8	79	34	24	36	●
1534SU03-0620		6,2	8	79	34	24	36	●
1534SU03C-0620	✻	6,2	8	79	34	24	36	●
1534SU03-0630		6,3	8	79	34	24	36	●
1534SU03C-0630	✻	6,3	8	79	34	24	36	●
1534SU03-0640		6,4	8	79	34	24	36	●
1534SU03C-0640	✻	6,4	8	79	34	24	36	●
1534SU03-0650		6,5	8	79	34	24	36	●
1534SU03C-0650	✻	6,5	8	79	34	24	36	●
1534SU03-0660		6,6	8	79	34	24	36	●
1534SU03C-0660	✻	6,6	8	79	34	24	36	●
1534SU03-0670		6,7	8	79	34	24	36	●
1534SU03C-0670	✻	6,7	8	79	34	24	36	●
1534SU03-0675		6,75	8	79	34	24	36	●
1534SU03C-0675	✻	6,75	8	79	34	24	36	●
1534SU03-0680		6,8	8	79	34	24	36	●
1534SU03C-0680	✻	6,8	8	79	34	24	36	●
1534SU03-0690		6,9	8	79	34	24	36	●
1534SU03C-0690	✻	6,9	8	79	34	24	36	●
1534SU03-0700		7	8	79	34	24	36	●
1534SU03C-0700	✻	7	8	79	34	24	36	●
1534SU03-0710		7,1	8	79	41	29	36	●
1534SU03C-0710	✻	7,1	8	79	41	29	36	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✻ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1534SU*	✔	✔	✔			
1534SUK*			✔			

✔ Choix de base
✔ Alternative

Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

Forets carbure monobloc Série SU

Foret SU(K) 3xD | Usinage général | Ajouter K pour les applications fonte (SUK)

1534SU03/1534SU03C



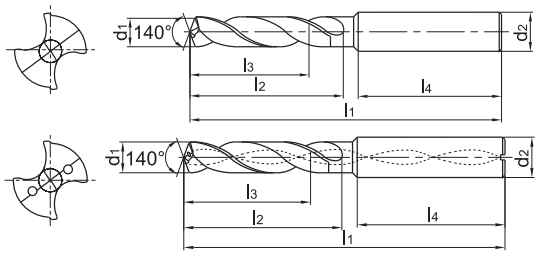
– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Arrosage intérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1534SU03-0720		7,2	8	79	41	29	36	●
1534SU03C-0720	✻	7,2	8	79	41	29	36	●
1534SU03-0730		7,3	8	79	41	29	36	●
1534SU03C-0730	✻	7,3	8	79	41	29	36	●
1534SU03-0740		7,4	8	79	41	29	36	●
1534SU03C-0740	✻	7,4	8	79	41	29	36	●
1534SU03-0745		7,45	8	79	41	29	36	○
1534SU03C-0745	✻	7,45	8	79	41	29	36	○
1534SU03-0750		7,5	8	79	41	29	36	●
1534SU03C-0750	✻	7,5	8	79	41	29	36	●
1534SU03-0760		7,6	8	79	41	29	36	●
1534SU03C-0760	✻	7,6	8	79	41	29	36	●
1534SU03-0770		7,7	8	79	41	29	36	●
1534SU03C-0770	✻	7,7	8	79	41	29	36	●
1534SU03-0780		7,8	8	79	41	29	36	●
1534SU03C-0780	✻	7,8	8	79	41	29	36	●
1534SU03-0790		7,9	8	79	41	29	36	●
1534SU03C-0790	✻	7,9	8	79	41	29	36	●
1534SU03-0800		8	8	79	41	29	36	●
1534SU03C-0800	✻	8	8	79	41	29	36	●
1534SU03-0810		8,1	10	89	47	35	40	●
1534SU03C-0810	✻	8,1	10	89	47	35	40	●
1534SU03-0820		8,2	10	89	47	35	40	●
1534SU03C-0820	✻	8,2	10	89	47	35	40	●
1534SU03-0830		8,3	10	89	47	35	40	●
1534SU03C-0830	✻	8,3	10	89	47	35	40	●
1534SU03-0840		8,4	10	89	47	35	40	●
1534SU03C-0840	✻	8,4	10	89	47	35	40	●
1534SU03-0850		8,5	10	89	47	35	40	●
1534SU03C-0850	✻	8,5	10	89	47	35	40	●
1534SU03-0860		8,6	10	89	47	35	40	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✻ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1534SU*	✔	✔	✔			
1534SUK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SU(K) 3xD | Usinage général | Ajouter K pour les applications fonte (SUK)

1534SU03/1534SU03C

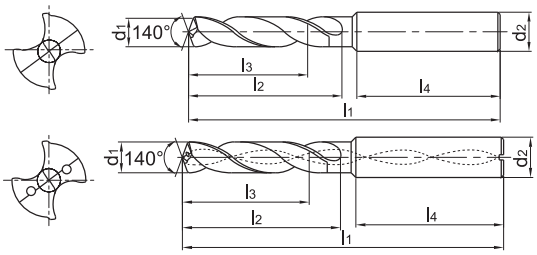
– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Arrosage intérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1534SU03C-0860	✻	8,6	10	89	47	35	40	●
1534SU03-0870		8,7	10	89	47	35	40	●
1534SU03C-0870	✻	8,7	10	89	47	35	40	●
1534SU03-0880		8,8	10	89	47	35	40	●
1534SU03C-0880	✻	8,8	10	89	47	35	40	●
1534SU03-0890		8,9	10	89	47	35	40	●
1534SU03C-0890	✻	8,9	10	89	47	35	40	●
1534SU03-0900		9	10	89	47	35	40	●
1534SU03C-0900	✻	9	10	89	47	35	40	●
1534SU03-0910		9,1	10	89	47	35	40	●
1534SU03C-0910	✻	9,1	10	89	47	35	40	●
1534SU03-0920		9,2	10	89	47	35	40	●
1534SU03C-0920	✻	9,2	10	89	47	35	40	●
1534SU03-0930		9,3	10	89	47	35	40	●
1534SU03C-0930	✻	9,3	10	89	47	35	40	●
1534SU03-0935		9,35	10	89	47	35	40	○
1534SU03C-0935	✻	9,35	10	89	47	35	40	○
1534SU03-0940		9,4	10	89	47	35	40	●
1534SU03C-0940	✻	9,4	10	89	47	35	40	●
1534SU03-0945		9,45	10	89	47	35	40	○
1534SU03C-0945	✻	9,45	10	89	47	35	40	○
1534SU03-0950		9,5	10	89	47	35	40	●
1534SU03C-0950	✻	9,5	10	89	47	35	40	●
1534SU03-0960		9,6	10	89	47	35	40	●
1534SU03C-0960	✻	9,6	10	89	47	35	40	●
1534SU03-0970		9,7	10	89	47	35	40	●
1534SU03C-0970	✻	9,7	10	89	47	35	40	●
1534SU03-0980		9,8	10	89	47	35	40	●
1534SU03C-0980	✻	9,8	10	89	47	35	40	●
1534SU03-0990		9,9	10	89	47	35	40	●
1534SU03C-0990	✻	9,9	10	89	47	35	40	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✻ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1534SU*	✔	✔	✔			
1534SUK*			✔			

✔ Choix de base
✔ Alternative

Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

Forets carbure monobloc Série SU

Foret SU(K) 3xD | Usinage général | Ajouter K pour les applications fonte (SUK)

1534SU03/1534SU03C

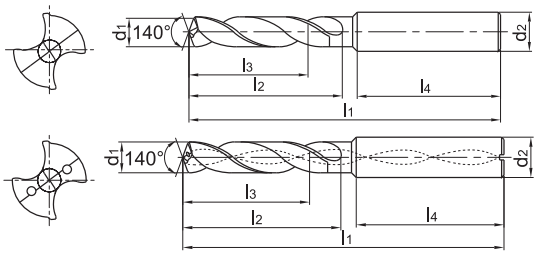
– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Arrosage intérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1534SU03-1000		10	10	89	47	35	40	●
1534SU03C-1000	✻	10	10	89	47	35	40	●
1534SU03-1010		10,1	12	102	55	40	45	●
1534SU03C-1010	✻	10,1	12	102	55	40	45	●
1534SU03-1020		10,2	12	102	55	40	45	●
1534SU03C-1020	✻	10,2	12	102	55	40	45	●
1534SU03-1025		10,25	12	102	55	40	45	●
1534SU03C-1025	✻	10,25	12	102	55	40	45	●
1534SU03-1030		10,3	12	102	55	40	45	●
1534SU03C-1030	✻	10,3	12	102	55	40	45	●
1534SU03-1040		10,4	12	102	55	40	45	●
1534SU03C-1040	✻	10,4	12	102	55	40	45	●
1534SU03-1050		10,5	12	102	55	40	45	●
1534SU03C-1050	✻	10,5	12	102	55	40	45	●
1534SU03-1060		10,6	12	102	55	40	45	●
1534SU03C-1060	✻	10,6	12	102	55	40	45	●
1534SU03-1070		10,7	12	102	55	40	45	●
1534SU03C-1070	✻	10,7	12	102	55	40	45	●
1534SU03-1080		10,8	12	102	55	40	45	●
1534SU03C-1080	✻	10,8	12	102	55	40	45	●
1534SU03-1090		10,9	12	102	55	40	45	●
1534SU03C-1090	✻	10,9	12	102	55	40	45	●
1534SU03-1100		11	12	102	55	40	45	●
1534SU03C-1100	✻	11	12	102	55	40	45	●
1534SU03-1110		11,1	12	102	55	40	45	●
1534SU03C-1110	✻	11,1	12	102	55	40	45	●
1534SU03-1120		11,2	12	102	55	40	45	●
1534SU03C-1120	✻	11,2	12	102	55	40	45	●
1534SU03-1125		11,25	12	102	55	40	45	○
1534SU03C-1125	✻	11,25	12	102	55	40	45	○
1534SU03-1130		11,3	12	102	55	40	45	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✻ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1534SU*	✔	✔	✔			
1534SUK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SU(K) 3xD | Usinage général | Ajouter K pour les applications fonte (SUK)

1534SU03/1534SU03C

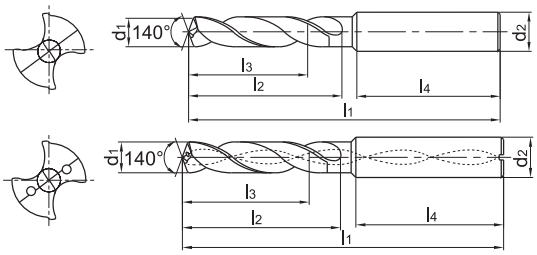
– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Arrosage intérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1534SU03C-1130	✻	11,3	12	102	55	40	45	●
1534SU03-1135		11,35	12	102	55	40	45	○
1534SU03C-1135	✻	11,35	12	102	55	40	45	○
1534SU03-1140		11,4	12	102	55	40	45	●
1534SU03C-1140	✻	11,4	12	102	55	40	45	●
1534SU03-1145		11,45	12	102	55	40	45	○
1534SU03C-1145	✻	11,45	12	102	55	40	45	○
1534SU03-1150		11,5	12	102	55	40	45	●
1534SU03C-1150	✻	11,5	12	102	55	40	45	●
1534SU03-1160		11,6	12	102	55	40	45	●
1534SU03C-1160	✻	11,6	12	102	55	40	45	●
1534SU03-1170		11,7	12	102	55	40	45	●
1534SU03C-1170	✻	11,7	12	102	55	40	45	●
1534SU03-1180		11,8	12	102	55	40	45	●
1534SU03C-1180	✻	11,8	12	102	55	40	45	●
1534SU03-1190		11,9	12	102	55	40	45	●
1534SU03C-1190	✻	11,9	12	102	55	40	45	●
1534SU03-1200		12	12	102	55	40	45	●
1534SU03C-1200	✻	12	12	102	55	40	45	●
1534SU03-1210		12,1	14	107	60	43	45	●
1534SU03C-1210	✻	12,1	14	107	60	43	45	●
1534SU03-1220		12,2	14	107	60	43	45	●
1534SU03C-1220	✻	12,2	14	107	60	43	45	●
1534SU03-1225		12,25	14	107	60	43	45	●
1534SU03C-1225	✻	12,25	14	107	60	43	45	●
1534SU03-1230		12,3	14	107	60	43	45	●
1534SU03C-1230	✻	12,3	14	107	60	43	45	●
1534SU03-1250		12,5	14	107	60	43	45	●
1534SU03C-1250	✻	12,5	14	107	60	43	45	●
1534SU03-1270		12,7	14	107	60	43	45	●
1534SU03C-1270	✻	12,7	14	107	60	43	45	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✻ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1534SU*	✔	✔	✔			
1534SUK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Forets carbure monobloc Série SU

Foret SU(K) 3xD | Usinage général | Ajouter K pour les applications fonte (SUK)

1534SU03/1534SU03C



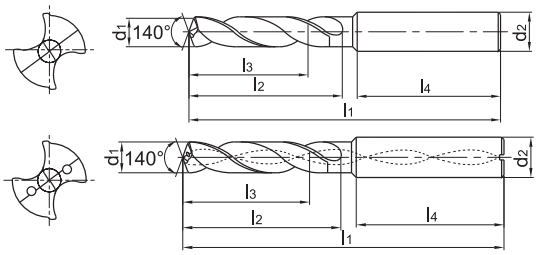
– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Arrosage intérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1534SU03-1275		12,75	14	107	60	43	45	●
1534SU03C-1275	✻	12,75	14	107	60	43	45	●
1534SU03-1280		12,8	14	107	60	43	45	●
1534SU03C-1280	✻	12,8	14	107	60	43	45	●
1534SU03-1300		13	14	107	60	43	45	●
1534SU03C-1300	✻	13	14	107	60	43	45	●
1534SU03-1310		13,1	14	107	60	43	45	●
1534SU03C-1310	✻	13,1	14	107	60	43	45	●
1534SU03C-1335	✻	13,35	14	107	60	43	45	●
1534SU03-1350		13,5	14	107	60	43	45	●
1534SU03C-1350	✻	13,5	14	107	60	43	45	●
1534SU03-1380		13,8	14	107	60	43	45	●
1534SU03C-1380	✻	13,8	14	107	60	43	45	●
1534SU03-1400		14	14	107	60	43	45	●
1534SU03C-1400	✻	14	14	107	60	43	45	●
1534SU03-1420		14,2	16	107	60	43	45	●
1534SU03C-1420	✻	14,2	16	107	60	43	45	●
1534SU03-1425		14,25	16	115	65	45	48	●
1534SU03C-1425	✻	14,25	16	115	65	45	48	●
1534SU03-1430		14,3	16	115	65	45	48	●
1534SU03C-1430	✻	14,3	16	115	65	45	48	●
1534SU03-1450		14,5	16	115	65	45	48	●
1534SU03C-1450	✻	14,5	16	115	65	45	48	●
1534SU03-1475		14,75	16	115	65	45	48	●
1534SU03C-1475	✻	14,75	16	115	65	45	48	●
1534SU03-1480		14,8	16	115	65	45	48	●
1534SU03C-1480	✻	14,8	16	115	65	45	48	●
1534SU03-1500		15	16	115	65	45	48	●
1534SU03C-1500	✻	15	16	115	65	45	48	●
1534SU03-1510		15,1	16	115	65	45	48	●
1534SU03C-1510	✻	15,1	16	115	65	45	48	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✻ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1534SU*	✔	✔	✔			
1534SUK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SU(K) 3xD | Usinage général | Ajouter K pour les applications fonte (SUK)

1534SU03/1534SU03C

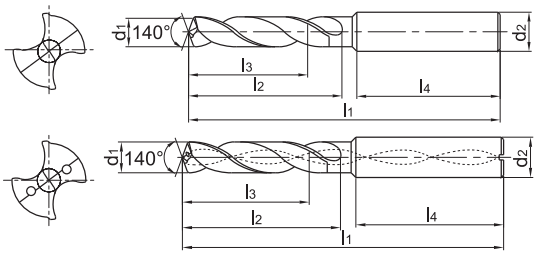
– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Arrosage intérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1534SU03-1530		15,3	16	115	65	45	48	●
1534SU03C-1535	✻	15,35	16	115	65	45	48	○
1534SU03-1550		15,5	16	115	65	45	48	●
1534SU03C-1550	✻	15,5	16	115	65	45	48	●
1534SU03-1580		15,8	16	115	65	45	48	●
1534SU03C-1580	✻	15,8	16	115	65	45	48	●
1534SU03-1600		16	16	115	65	45	48	●
1534SU03C-1600	✻	16	16	115	65	45	48	●
1534SU03-1610		16,1	18	123	73	51	48	●
1534SU03-1650		16,5	18	123	73	51	48	●
1534SU03C-1650	✻	16,5	18	123	73	51	48	●
1534SU03-1675		16,75	18	123	73	51	48	●
1534SU03C-1675	✻	16,75	18	123	73	51	48	●
1534SU03-1680		16,8	18	123	73	51	48	●
1534SU03C-1680	✻	16,8	18	123	73	51	48	●
1534SU03-1700		17	18	123	73	51	48	●
1534SU03C-1700	✻	17	18	123	73	51	48	●
1534SU03-1750		17,5	18	123	73	51	48	●
1534SU03C-1750	✻	17,5	18	123	73	51	48	●
1534SU03-1780		17,8	18	123	73	51	48	●
1534SU03C-1780	✻	17,8	18	123	73	51	48	●
1534SU03-1800		18	18	123	73	51	48	●
1534SU03C-1800	✻	18	18	123	73	51	48	●
1534SU03-1850		18,5	20	131	79	55	50	●
1534SU03C-1850	✻	18,5	20	131	79	55	50	●
1534SU03-1880		18,8	20	131	79	55	50	●
1534SU03C-1880	✻	18,8	20	131	79	55	50	●
1534SU03-1900		19	20	131	79	55	50	●
1534SU03C-1900	✻	19	20	131	79	55	50	●
1534SU03-1950		19,5	20	131	79	55	50	●
1534SU03C-1950	✻	19,5	20	131	79	55	50	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✻ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1534SU*	✔	✔	✔			
1534SUK*			✔			

✔ Choix de base
✔ Alternative

Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

Foret SU(K) 3xD | Usinage général | Ajouter K pour les applications fonte (SUK)

1534SU03/1534SU03C

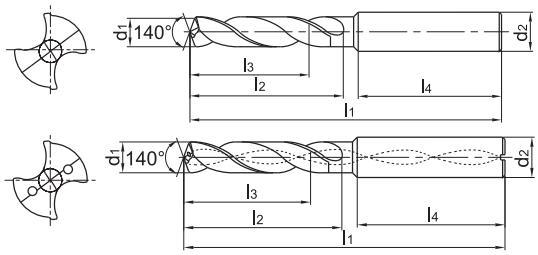
– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1534SU03-1980		19,8	20	131	79	55	50	●
1534SU03C-1980	✲	19,8	20	131	79	55	50	●
1534SU03-2000		20	20	131	79	55	50	●
1534SU03C-2000	✲	20	20	131	79	55	50	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1534SU*	✔	✔	✔			
1534SUK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SU(K) 5xD | Usinage général | Ajouter K pour les applications fonte (SUK)

1536SU05/1536SU05C



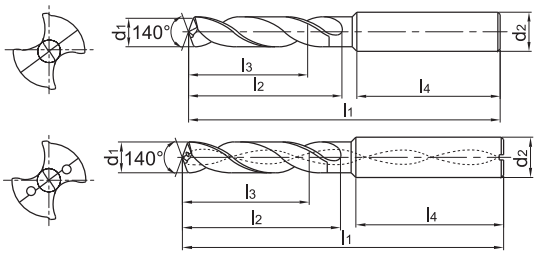
– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Arrosage intérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1536SU05-0200		2	6	66	28	23	36	●
1536SU05-0210		2,1	6	66	28	23	36	●
1536SU05-0220		2,2	6	66	28	23	36	●
1536SU05-0230		2,3	6	66	28	23	36	●
1536SU05-0240		2,4	6	66	28	23	36	●
1536SU05-0250		2,5	6	66	28	23	36	●
1536SU05-0260		2,6	6	66	28	23	36	●
1536SU05-0270		2,7	6	66	28	23	36	●
1536SU05-0280		2,8	6	66	28	23	36	●
1536SU05-0290		2,9	6	66	28	23	36	●
1536SU05-0300		3	6	66	28	23	36	●
1536SU05C-0300	✻	3	6	66	28	23	36	●
1536SU05-0310		3,1	6	66	28	23	36	●
1536SU05C-0310	✻	3,1	6	66	28	23	36	●
1536SU05-0320		3,2	6	66	28	23	36	●
1536SU05C-0320	✻	3,2	6	66	28	23	36	●
1536SU05-0325		3,25	6	66	28	23	36	●
1536SU05C-0325	✻	3,25	6	66	28	23	36	●
1536SU05-0330		3,3	6	66	28	23	36	●
1536SU05C-0330	✻	3,3	6	66	28	23	36	●
1536SU05-0340		3,4	6	66	28	23	36	●
1536SU05C-0340	✻	3,4	6	66	28	23	36	●
1536SU05-0350		3,5	6	66	28	23	36	●
1536SU05C-0350	✻	3,5	6	66	28	23	36	●
1536SU05-0360		3,6	6	66	28	23	36	●
1536SU05C-0360	✻	3,6	6	66	28	23	36	●
1536SU05-0370		3,7	6	66	28	23	36	●
1536SU05C-0370	✻	3,7	6	66	28	23	36	●
1536SU05-0380		3,8	6	74	36	29	36	●
1536SU05C-0380	✻	3,8	6	74	36	29	36	●
1536SU05-0390		3,9	6	74	36	29	36	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✻ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1536SU*	✔	✔	✔			
1536SUK*			✔			

✔ Choix de base
✔ Alternative

Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

Forets carbure monobloc Série SU

Foret SU(K) 5xD | Usinage général | Ajouter K pour les applications fonte (SUK)

1536SU05/1536SU05C

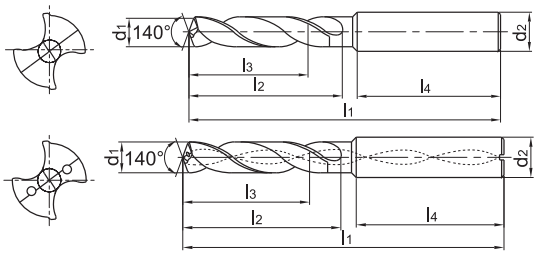
– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Arrosage intérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1536SU05C-0390	✻	3,9	6	74	36	29	36	●
1536SU05-0400		4	6	74	36	29	36	●
1536SU05C-0400	✻	4	6	74	36	29	36	●
1536SU05-0410		4,1	6	74	36	29	36	●
1536SU05C-0410	✻	4,1	6	74	36	29	36	●
1536SU05-0420		4,2	6	74	36	29	36	●
1536SU05C-0420	✻	4,2	6	74	36	29	36	●
1536SU05-0430		4,3	6	74	36	29	36	●
1536SU05C-0430	✻	4,3	6	74	36	29	36	●
1536SU05-0440		4,4	6	74	36	29	36	●
1536SU05C-0440	✻	4,4	6	74	36	29	36	●
1536SU05-0450		4,5	6	74	36	29	36	●
1536SU05C-0450	✻	4,5	6	74	36	29	36	●
1536SU05-0460		4,6	6	74	36	29	36	●
1536SU05C-0460	✻	4,6	6	74	36	29	36	●
1536SU05-0465		4,65	6	74	36	29	36	●
1536SU05C-0465	✻	4,65	6	74	36	29	36	●
1536SU05-0470		4,7	6	74	36	29	36	●
1536SU05C-0470	✻	4,7	6	74	36	29	36	●
1536SU05-0480		4,8	6	82	44	35	36	●
1536SU05C-0480	✻	4,8	6	82	44	35	36	●
1536SU05-0490		4,9	6	82	44	35	36	●
1536SU05C-0490	✻	4,9	6	82	44	35	36	●
1536SU05-0500		5	6	82	44	35	36	●
1536SU05C-0500	✻	5	6	82	44	35	36	●
1536SU05-0510		5,1	6	82	44	35	36	●
1536SU05C-0510	✻	5,1	6	82	44	35	36	●
1536SU05-0520		5,2	6	82	44	35	36	●
1536SU05C-0520	✻	5,2	6	82	44	35	36	●
1536SU05-0530		5,3	6	82	44	35	36	●
1536SU05C-0530	✻	5,3	6	82	44	35	36	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✻ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1536SU*	✔	✔	✔			
1536SUK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SU(K) 5xD | Usinage général | Ajouter K pour les applications fonte (SUK)

1536SU05/1536SU05C



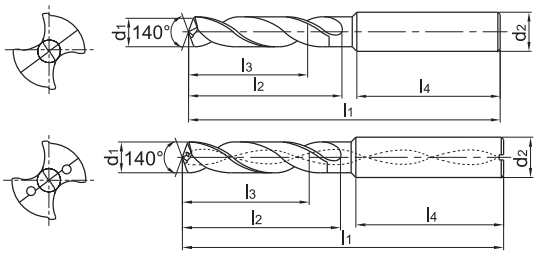
– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1536SU05-0540		5,4	6	82	44	35	36	●
1536SU05C-0540	✲	5,4	6	82	44	35	36	●
1536SU05-0550		5,5	6	82	44	35	36	●
1536SU05C-0550	✲	5,5	6	82	44	35	36	●
1536SU05-0555		5,55	6	82	44	35	36	●
1536SU05C-0555	✲	5,55	6	82	44	35	36	●
1536SU05-0560		5,6	6	82	44	35	36	●
1536SU05C-0560	✲	5,6	6	82	44	35	36	●
1536SU05-0570		5,7	6	82	44	35	36	●
1536SU05C-0570	✲	5,7	6	82	44	35	36	●
1536SU05-0580		5,8	6	82	44	35	36	●
1536SU05C-0580	✲	5,8	6	82	44	35	36	●
1536SU05-0590		5,9	6	82	44	35	36	●
1536SU05C-0590	✲	5,9	6	82	44	35	36	●
1536SU05-0600		6	6	82	44	35	36	●
1536SU05C-0600	✲	6	6	82	44	35	36	●
1536SU05-0610		6,1	8	91	53	43	36	●
1536SU05C-0610	✲	6,1	8	91	53	43	36	●
1536SU05-0620		6,2	8	91	53	43	36	●
1536SU05C-0620	✲	6,2	8	91	53	43	36	●
1536SU05-0630		6,3	8	91	53	43	36	●
1536SU05C-0630	✲	6,3	8	91	53	43	36	●
1536SU05-0640		6,4	8	91	53	43	36	●
1536SU05C-0640	✲	6,4	8	91	53	43	36	●
1536SU05-0650		6,5	8	91	53	43	36	●
1536SU05C-0650	✲	6,5	8	91	53	43	36	●
1536SU05-0660		6,6	8	91	53	43	36	●
1536SU05C-0660	✲	6,6	8	91	53	43	36	●
1536SU05-0670		6,7	8	91	53	43	36	●
1536SU05C-0670	✲	6,7	8	91	53	43	36	●
1536SU05-0675		6,75	8	91	53	43	36	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1536SU*	✔	✔	✔			
1536SUK*			✔			

✔ Choix de base
✔ Alternative

Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

Forets carbure monobloc Série SU

Foret SU(K) 5xD | Usinage général | Ajouter K pour les applications fonte (SUK)

1536SU05/1536SU05C

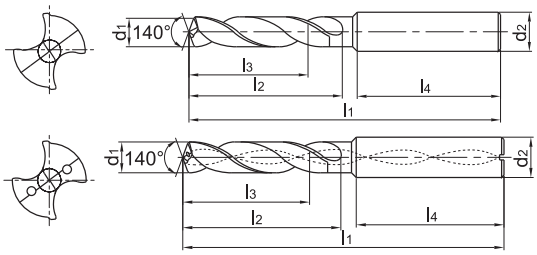
– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Arrosage intérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1536SU05C-0675	✻	6,75	8	91	53	43	36	●
1536SU05-0680		6,8	8	91	53	43	36	●
1536SU05C-0680	✻	6,8	8	91	53	43	36	●
1536SU05-0690		6,9	8	91	53	43	36	●
1536SU05C-0690	✻	6,9	8	91	53	43	36	●
1536SU05-0700		7	8	91	53	43	36	●
1536SU05C-0700	✻	7	8	91	53	43	36	●
1536SU05-0710		7,1	8	91	53	43	36	●
1536SU05C-0710	✻	7,1	8	91	53	43	36	●
1536SU05-0720		7,2	8	91	53	43	36	●
1536SU05C-0720	✻	7,2	8	91	53	43	36	●
1536SU05-0730		7,3	8	91	53	43	36	●
1536SU05C-0730	✻	7,3	8	91	53	43	36	●
1536SU05-0740		7,4	8	91	53	43	36	●
1536SU05C-0740	✻	7,4	8	91	53	43	36	●
1536SU05-0745		7,45	8	91	53	43	36	●
1536SU05C-0745	✻	7,45	8	91	53	43	36	●
1536SU05-0750		7,5	8	91	53	43	36	●
1536SU05C-0750	✻	7,5	8	91	53	43	36	●
1536SU05-0760		7,6	8	91	53	43	36	●
1536SU05C-0760	✻	7,6	8	91	53	43	36	●
1536SU05-0770		7,7	8	91	53	43	36	●
1536SU05C-0770	✻	7,7	8	91	53	43	36	●
1536SU05-0780		7,8	8	91	53	43	36	●
1536SU05C-0780	✻	7,8	8	91	53	43	36	●
1536SU05-0790		7,9	8	91	53	43	36	●
1536SU05C-0790	✻	7,9	8	91	53	43	36	●
1536SU05-0800		8	8	91	53	43	36	●
1536SU05C-0800	✻	8	8	91	53	43	36	●
1536SU05-0810		8,1	10	103	61	49	40	●
1536SU05C-0810	✻	8,1	10	103	61	49	40	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✻ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1536SU*	✔	✔	✔			
1536SUK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SU(K) 5xD | Usinage général | Ajouter K pour les applications fonte (SUK)

1536SU05/1536SU05C



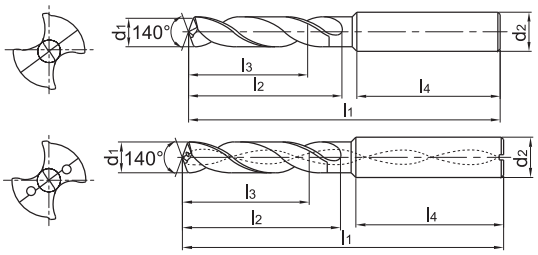
– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Arrosage intérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1536SU05-0820		8,2	10	103	61	49	40	●
1536SU05C-0820	✻	8,2	10	103	61	49	40	●
1536SU05-0830		8,3	10	103	61	49	40	●
1536SU05C-0830	✻	8,3	10	103	61	49	40	●
1536SU05-0840		8,4	10	103	61	49	40	●
1536SU05C-0840	✻	8,4	10	103	61	49	40	●
1536SU05-0850		8,5	10	103	61	49	40	●
1536SU05C-0850	✻	8,5	10	103	61	49	40	●
1536SU05-0860		8,6	10	103	61	49	40	●
1536SU05C-0860	✻	8,6	10	103	61	49	40	●
1536SU05-0870		8,7	10	103	61	49	40	●
1536SU05C-0870	✻	8,7	10	103	61	49	40	●
1536SU05-0880		8,8	10	103	61	49	40	●
1536SU05C-0880	✻	8,8	10	103	61	49	40	●
1536SU05-0890		8,9	10	103	61	49	40	●
1536SU05C-0890	✻	8,9	10	103	61	49	40	●
1536SU05-0900		9	10	103	61	49	40	●
1536SU05C-0900	✻	9	10	103	61	49	40	●
1536SU05-0910		9,1	10	103	61	49	40	●
1536SU05C-0910	✻	9,1	10	103	61	49	40	●
1536SU05-0920		9,2	10	103	61	49	40	●
1536SU05C-0920	✻	9,2	10	103	61	49	40	●
1536SU05-0930		9,3	10	103	61	49	40	●
1536SU05C-0930	✻	9,3	10	103	61	49	40	●
1536SU05-0935		9,35	10	103	61	49	40	●
1536SU05C-0935	✻	9,35	10	103	61	49	40	○
1536SU05-0940		9,4	10	103	61	49	40	●
1536SU05C-0940	✻	9,4	10	103	61	49	40	●
1536SU05-0945		9,45	10	103	61	49	40	●
1536SU05C-0945	✻	9,45	10	103	61	49	40	○
1536SU05-0950		9,5	10	103	61	49	40	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✻ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1536SU*	✔	✔	✔			
1536SUK*			✔			

✔ Choix de base
✔ Alternative

Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

Forets carbure monobloc Série SU

Foret SU(K) 5xD | Usinage général | Ajouter K pour les applications fonte (SUK)

1536SU05/1536SU05C

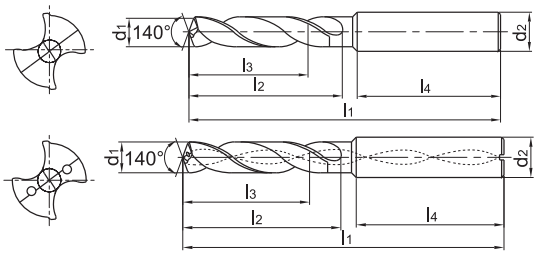
– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Arrosage intérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1536SU05C-0950	✻	9,5	10	103	61	49	40	●
1536SU05-0960		9,6	10	103	61	49	40	●
1536SU05C-0960	✻	9,6	10	103	61	49	40	●
1536SU05-0970		9,7	10	103	61	49	40	●
1536SU05C-0970	✻	9,7	10	103	61	49	40	●
1536SU05-0980		9,8	10	103	61	49	40	●
1536SU05C-0980	✻	9,8	10	103	61	49	40	●
1536SU05-0990		9,9	10	103	61	49	40	●
1536SU05C-0990	✻	9,9	10	103	61	49	40	●
1536SU05-1000		10	10	103	61	49	40	●
1536SU05C-1000	✻	10	10	103	61	49	40	●
1536SU05-1010		10,1	12	118	71	56	45	●
1536SU05C-1010	✻	10,1	12	118	71	56	45	●
1536SU05-1020		10,2	12	118	71	56	45	●
1536SU05C-1020	✻	10,2	12	118	71	56	45	●
1536SU05-1025		10,25	12	118	71	56	45	●
1536SU05C-1025	✻	10,25	12	118	71	56	45	●
1536SU05-1030		10,3	12	118	71	56	45	●
1536SU05C-1030	✻	10,3	12	118	71	56	45	●
1536SU05-1040		10,4	12	118	71	56	45	●
1536SU05C-1040	✻	10,4	12	118	71	56	45	●
1536SU05-1050		10,5	12	118	71	56	45	●
1536SU05C-1050	✻	10,5	12	118	71	56	45	●
1536SU05-1060		10,6	12	118	71	56	45	●
1536SU05C-1060	✻	10,6	12	118	71	56	45	●
1536SU05-1070		10,7	12	118	71	56	45	●
1536SU05C-1070	✻	10,7	12	118	71	56	45	●
1536SU05-1080		10,8	12	118	71	56	45	●
1536SU05C-1080	✻	10,8	12	118	71	56	45	●
1536SU05-1090		10,9	12	118	71	56	45	●
1536SU05C-1090	✻	10,9	12	118	71	56	45	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✻ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1536SU*	✔	✔	✔			
1536SUK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SU(K) 5xD | Usinage général | Ajouter K pour les applications fonte (SUK)

1536SU05/1536SU05C



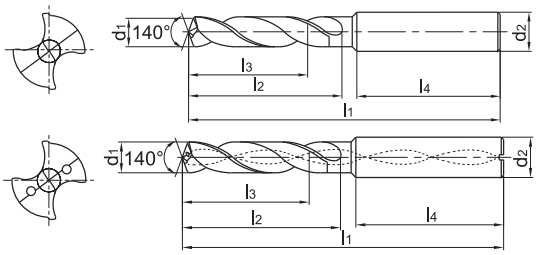
– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Arrosage intérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1536SU05-1100		11	12	118	71	56	45	●
1536SU05C-1100	✻	11	12	118	71	56	45	●
1536SU05-1110		11,1	12	118	71	56	45	●
1536SU05C-1110	✻	11,1	12	118	71	56	45	●
1536SU05-1120		11,2	12	118	71	56	45	●
1536SU05C-1120	✻	11,2	12	118	71	56	45	●
1536SU05-1125		11,25	12	118	71	56	45	●
1536SU05C-1125	✻	11,25	12	118	71	56	45	○
1536SU05-1130		11,3	12	118	71	56	45	●
1536SU05C-1130	✻	11,3	12	118	71	56	45	●
1536SU05-1135		11,35	12	118	71	56	45	●
1536SU05C-1135	✻	11,35	12	118	71	56	45	○
1536SU05-1140		11,4	12	118	71	56	45	●
1536SU05C-1140	✻	11,4	12	118	71	56	45	●
1536SU05-1145		11,45	12	118	71	56	45	○
1536SU05C-1145	✻	11,45	12	118	71	56	45	○
1536SU05-1150		11,5	12	118	71	56	45	●
1536SU05C-1150	✻	11,5	12	118	71	56	45	●
1536SU05-1160		11,6	12	118	71	56	45	●
1536SU05C-1160	✻	11,6	12	118	71	56	45	●
1536SU05-1170		11,7	12	118	71	56	45	●
1536SU05C-1170	✻	11,7	12	118	71	56	45	●
1536SU05-1180		11,8	12	118	71	56	45	●
1536SU05C-1180	✻	11,8	12	118	71	56	45	●
1536SU05-1190		11,9	12	118	71	56	45	●
1536SU05C-1190	✻	11,9	12	118	71	56	45	●
1536SU05-1200		12	12	118	71	56	45	●
1536SU05C-1200	✻	12	12	118	71	56	45	●
1536SU05-1210		12,1	14	124	77	60	45	●
1536SU05C-1210	✻	12,1	14	124	77	60	45	●
1536SU05-1220		12,2	14	124	77	60	45	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✻ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1536SU*	✔	✔	✔			
1536SUK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Forets carbure monobloc Série SU

Foret SU(K) 5xD | Usinage général | Ajouter K pour les applications fonte (SUK)

1536SU05/1536SU05C

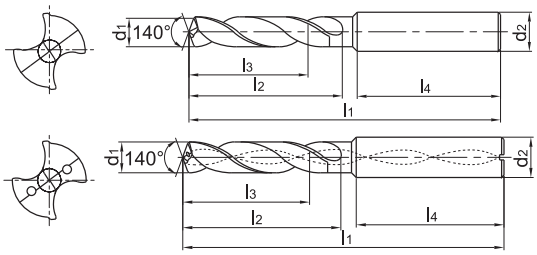
– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Arrosage intérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1536SU05C-1220	✻	12,2	14	124	77	60	45	●
1536SU05-1225		12,25	14	124	77	60	45	●
1536SU05C-1225	✻	12,25	14	124	77	60	45	●
1536SU05-1230		12,3	14	124	77	60	45	●
1536SU05C-1230	✻	12,3	14	124	77	60	45	●
1536SU05-1250		12,5	14	124	77	60	45	●
1536SU05C-1250	✻	12,5	14	124	77	60	45	●
1536SU05-1270		12,7	14	124	77	60	45	●
1536SU05C-1270	✻	12,7	14	124	77	60	45	●
1536SU05-1275		12,75	14	124	77	60	45	●
1536SU05C-1275	✻	12,75	14	124	77	60	45	●
1536SU05-1280		12,8	14	124	77	60	45	●
1536SU05C-1280	✻	12,8	14	124	77	60	45	●
1536SU05-1300		13	14	124	77	60	45	●
1536SU05C-1300	✻	13	14	124	77	60	45	●
1536SU05-1310		13,1	14	124	77	60	45	●
1536SU05C-1310	✻	13,1	14	124	77	60	45	●
1536SU05-1335		13,35	14	124	77	60	56	○
1536SU05C-1335	✻	13,35	14	124	77	60	56	○
1536SU05-1350		13,5	14	124	77	60	45	●
1536SU05C-1350	✻	13,5	14	124	77	60	45	●
1536SU05-1380		13,8	14	124	77	60	45	●
1536SU05C-1380	✻	13,8	14	124	77	60	45	●
1536SU05-1400		14	14	124	77	60	45	●
1536SU05C-1400	✻	14	14	124	77	60	45	●
1536SU05-1420		14,2	16	124	77	60	45	●
1536SU05C-1420	✻	14,2	16	124	77	60	45	●
1536SU05-1425		14,25	16	133	83	63	48	●
1536SU05C-1425	✻	14,25	16	133	83	63	48	●
1536SU05-1430		14,3	16	133	83	63	48	●
1536SU05C-1430	✻	14,3	16	133	83	63	48	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✻ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1536SU*	✔	✔	✔			
1536SUK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SU(K) 5xD | Usinage général | Ajouter K pour les applications fonte (SUK)

1536SU05/1536SU05C



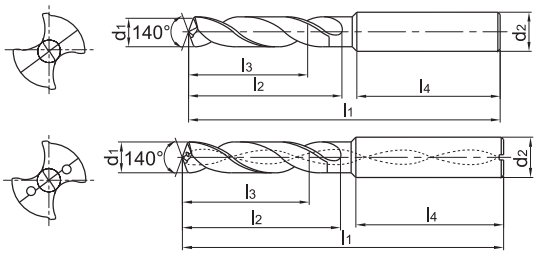
– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Arrosage intérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1536SU05-1450		14,5	16	133	83	63	48	●
1536SU05C-1450	✻	14,5	16	133	83	63	48	●
1536SU05-1475		14,75	16	133	83	63	48	●
1536SU05C-1475	✻	14,75	16	133	83	63	48	●
1536SU05-1480		14,8	16	133	83	63	48	●
1536SU05C-1480	✻	14,8	16	133	83	63	48	●
1536SU05-1500		15	16	133	83	63	48	●
1536SU05C-1500	✻	15	16	133	83	63	48	●
1536SU05-1510		15,1	16	133	83	63	48	●
1536SU05C-1510	✻	15,1	16	133	83	63	48	●
1536SU05C-1530	✻	15,3	16	133	83	63	48	●
1536SU05-1535		15,35	16	133	83	63	48	○
1536SU05C-1535	✻	15,35	16	133	83	63	48	○
1536SU05-1550		15,5	16	133	83	63	48	●
1536SU05C-1550	✻	15,5	16	133	83	63	48	●
1536SU05-1580		15,8	16	133	83	63	48	●
1536SU05C-1580	✻	15,8	16	133	83	63	48	●
1536SU05-1600		16	16	133	83	63	48	●
1536SU05C-1600	✻	16	16	133	83	63	48	●
1536SU05-1650		16,5	18	143	93	71	48	●
1536SU05C-1650	✻	16,5	18	143	93	71	48	●
1536SU05-1675		16,75	18	143	93	71	48	●
1536SU05C-1675	✻	16,75	18	143	93	71	48	●
1536SU05-1680		16,8	18	143	93	71	48	●
1536SU05C-1680	✻	16,8	18	143	93	71	48	●
1536SU05-1700		17	18	143	93	71	48	●
1536SU05C-1700	✻	17	18	143	93	71	48	●
1536SU05-1750		17,5	18	143	93	71	48	●
1536SU05C-1750	✻	17,5	18	143	93	71	48	●
1536SU05-1780		17,8	18	143	93	71	48	●
1536SU05C-1780	✻	17,8	18	143	93	71	48	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✻ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1536SU*	✔	✔	✔			
1536SUK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SU(K) 5xD | Usinage général | Ajouter K pour les applications fonte (SUK)

1536SU05/1536SU05C



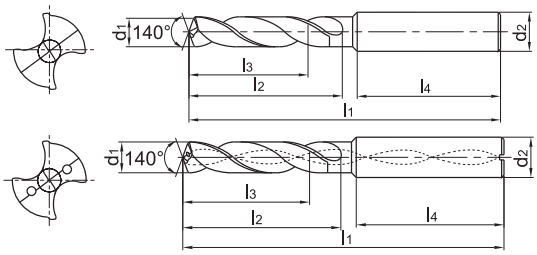
– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1536SU05-1800		18	18	143	93	71	48	●
1536SU05C-1800	✲	18	18	143	93	71	48	●
1536SU05-1850		18,5	20	153	101	77	50	●
1536SU05C-1850	✲	18,5	20	153	101	77	50	●
1536SU05-1880		18,8	20	153	101	77	50	●
1536SU05C-1880	✲	18,8	20	153	101	77	50	●
1536SU05-1900		19	20	153	101	77	50	●
1536SU05C-1900	✲	19	20	153	101	77	50	●
1536SU05-1950		19,5	20	153	101	77	50	●
1536SU05C-1950	✲	19,5	20	153	101	77	50	●
1536SU05-1980		19,8	20	153	101	77	50	●
1536SU05C-1980	✲	19,8	20	153	101	77	50	●
1536SU05-2000		20	20	153	101	77	50	●
1536SU05C-2000	✲	20	20	153	101	77	50	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1536SU*	✔	✔	✔			
1536SUK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SU(K) 5xD — Usinage général — Ajouter K pour les applications fonte (SUK)

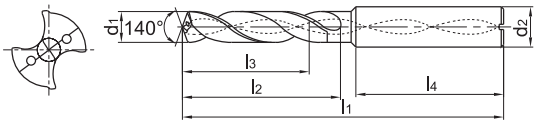
1538SU08C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1538SU08C-0300	✲	3	6	72	34	29	36	●
1538SU08C-0310	✲	3,1	6	72	34	29	36	●
1538SU08C-0320	✲	3,2	6	72	34	29	36	●
1538SU08C-0330	✲	3,3	6	72	34	29	36	●
1538SU08C-0340	✲	3,4	6	72	34	29	36	●
1538SU08C-0350	✲	3,5	6	72	34	29	36	●
1538SU08C-0360	✲	3,6	6	72	34	29	36	●
1538SU08C-0370	✲	3,7	6	72	34	29	36	●
1538SU08C-0380	✲	3,8	6	81	43	36	36	●
1538SU08C-0390	✲	3,9	6	81	43	36	36	●
1538SU08C-0400	✲	4	6	81	43	36	36	●
1538SU08C-0410	✲	4,1	6	81	43	36	36	●
1538SU08C-0420	✲	4,2	6	81	43	36	36	●
1538SU08C-0430	✲	4,3	6	81	43	36	36	●
1538SU08C-0440	✲	4,4	6	81	43	36	36	●
1538SU08C-0450	✲	4,5	6	81	43	36	36	●
1538SU08C-0460	✲	4,6	6	81	43	36	36	●
1538SU08C-0470	✲	4,7	6	81	43	36	36	●
1538SU08C-0480	✲	4,8	6	95	57	48	36	●
1538SU08C-0490	✲	4,9	6	95	57	48	36	●
1538SU08C-0500	✲	5	6	95	57	48	36	●
1538SU08C-0510	✲	5,1	6	95	57	48	36	●
1538SU08C-0520	✲	5,2	6	95	57	48	36	●
1538SU08C-0530	✲	5,3	6	95	57	48	36	●
1538SU08C-0540	✲	5,4	6	95	57	48	36	●
1538SU08C-0550	✲	5,5	6	95	57	48	36	●
1538SU08C-0560	✲	5,6	6	95	57	48	36	●
1538SU08C-0570	✲	5,7	6	95	57	48	36	●
1538SU08C-0580	✲	5,8	6	95	57	48	36	●
1538SU08C-0590	✲	5,9	6	95	57	48	36	●
1538SU08C-0600	✲	6	6	95	57	48	36	●
1538SU08C-0610	✲	6,1	8	114	76	66	36	●
1538SU08C-0620	✲	6,2	8	114	76	66	36	●
1538SU08C-0630	✲	6,3	8	114	76	66	36	●
1538SU08C-0640	✲	6,4	8	114	76	66	36	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1538SU*	✔	✔	✔			
1538SUK*			✔			

✔ Choix de base
✔ Alternative

Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

Forets carbure monobloc Série SU

Foret SU(K) 5xD | Usinage général | Ajouter K pour les applications fonte (SUK)

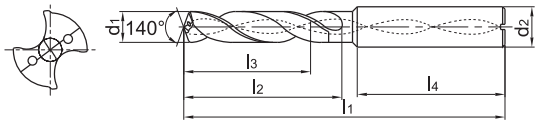
1538SU08C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1538SU08C-0650	✲	6,5	8	114	76	66	36	●
1538SU08C-0660	✲	6,6	8	114	76	66	36	●
1538SU08C-0670	✲	6,7	8	114	76	66	36	●
1538SU08C-0680	✲	6,8	8	114	76	66	36	●
1538SU08C-0690	✲	6,9	8	114	76	66	36	●
1538SU08C-0700	✲	7	8	116	76	66	36	●
1538SU08C-0710	✲	7,1	8	116	76	66	36	●
1538SU08C-0720	✲	7,2	8	116	76	66	36	●
1538SU08C-0730	✲	7,3	8	116	76	66	36	●
1538SU08C-0740	✲	7,4	8	116	76	66	36	●
1538SU08C-0750	✲	7,5	8	116	76	66	36	●
1538SU08C-0760	✲	7,6	8	116	76	66	36	●
1538SU08C-0770	✲	7,7	8	116	76	66	36	●
1538SU08C-0780	✲	7,8	8	116	76	66	36	●
1538SU08C-0790	✲	7,9	8	116	76	66	36	●
1538SU08C-0800	✲	8	8	116	76	66	36	●
1538SU08C-0810	✲	8,1	10	142	95	83	40	●
1538SU08C-0820	✲	8,2	10	142	95	83	40	●
1538SU08C-0830	✲	8,3	10	142	95	83	40	●
1538SU08C-0840	✲	8,4	10	142	95	83	40	●
1538SU08C-0850	✲	8,5	10	142	95	83	40	●
1538SU08C-0860	✲	8,6	10	142	95	83	40	●
1538SU08C-0870	✲	8,7	10	142	95	83	40	●
1538SU08C-0880	✲	8,8	10	142	95	83	40	●
1538SU08C-0890	✲	8,9	10	142	95	83	40	●
1538SU08C-0900	✲	9	10	142	95	83	40	●
1538SU08C-0910	✲	9,1	10	142	95	83	40	●
1538SU08C-0920	✲	9,2	10	142	95	83	40	●
1538SU08C-0930	✲	9,3	10	142	95	83	40	●
1538SU08C-0940	✲	9,4	10	142	95	83	40	●
1538SU08C-0950	✲	9,5	10	142	95	83	40	●
1538SU08C-0960	✲	9,6	10	142	95	83	40	●
1538SU08C-0970	✲	9,7	10	142	95	83	40	●
1538SU08C-0980	✲	9,8	10	142	95	83	40	●
1538SU08C-0990	✲	9,9	10	142	95	83	40	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1538SU*	✔	✔	✔			
1538SUK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SU(K) 5xD | Usinage général | Ajouter K pour les applications fonte (SUK)

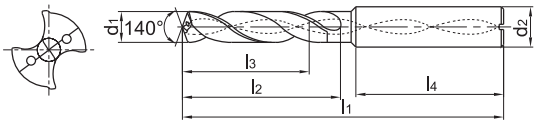
1538SU08C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1538SU08C-1000	✻	10	10	142	95	83	40	●
1538SU08C-1010	✻	10,1	12	162	114	99	45	●
1538SU08C-1020	✻	10,2	12	162	114	99	45	●
1538SU08C-1030	✻	10,3	12	162	114	99	45	●
1538SU08C-1040	✻	10,4	12	162	114	99	45	●
1538SU08C-1050	✻	10,5	12	162	114	99	45	●
1538SU08C-1060	✻	10,6	12	162	114	99	45	●
1538SU08C-1070	✻	10,7	12	162	114	99	45	●
1538SU08C-1080	✻	10,8	12	162	114	99	45	●
1538SU08C-1090	✻	10,9	12	162	114	99	45	●
1538SU08C-1100	✻	11	12	162	114	99	45	●
1538SU08C-1110	✻	11,1	12	162	114	99	45	●
1538SU08C-1120	✻	11,2	12	162	114	99	45	●
1538SU08C-1130	✻	11,3	12	162	114	99	45	●
1538SU08C-1140	✻	11,4	12	162	114	99	45	●
1538SU08C-1150	✻	11,5	12	162	114	99	45	●
1538SU08C-1160	✻	11,6	12	162	114	99	45	●
1538SU08C-1170	✻	11,7	12	162	114	99	45	●
1538SU08C-1180	✻	11,8	12	162	114	99	45	●
1538SU08C-1190	✻	11,9	12	162	114	99	45	●
1538SU08C-1200	✻	12	12	162	114	99	45	●
1538SU08C-1250	✻	12,5	14	178	133	116	45	●
1538SU08C-1270	✻	12,7	14	178	133	116	45	●
1538SU08C-1280	✻	12,8	14	178	133	116	45	●
1538SU08C-1300	✻	13	14	178	133	116	45	●
1538SU08C-1350	✻	13,5	14	178	133	116	45	●
1538SU08C-1400	✻	14	14	178	133	116	45	●
1538SU08C-1450	✻	14,5	16	204	152	132	48	●
1538SU08C-1480	✻	14,8	16	204	152	132	48	●
1538SU08C-1500	✻	15	16	204	152	132	48	●
1538SU08C-1550	✻	15,5	16	204	152	132	48	●
1538SU08C-1600	✻	16	16	204	152	132	48	●
1538SU08C-1650	✻	16,5	18	223	171	149	48	●
1538SU08C-1700	✻	17	18	223	171	149	48	●
1538SU08C-1750	✻	17,5	18	223	171	149	48	●
1538SU08C-1800	✻	18	18	223	171	149	48	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✻ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1538SU*	✔	✔	✔			
1538SUK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SU(K) 3xD | Usinage général | Ajouter K pour les applications fonte (SUK)

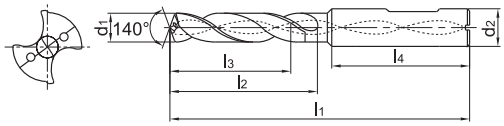
1634SU03C



– Type d'attachement : DIN 6535HB
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1634SU03C-0300	✲	3	6	62	20	14	36	●
1634SU03C-0310	✲	3,1	6	62	20	14	36	●
1634SU03C-0320	✲	3,2	6	62	20	14	36	●
1634SU03C-0325	✲	3,25	6	62	20	14	36	○
1634SU03C-0330	✲	3,3	6	62	20	14	36	●
1634SU03C-0340	✲	3,4	6	62	20	14	36	●
1634SU03C-0350	✲	3,5	6	62	20	14	36	●
1634SU03C-0360	✲	3,6	6	62	20	14	36	●
1634SU03C-0370	✲	3,7	6	62	20	14	36	●
1634SU03C-0380	✲	3,8	6	66	24	17	36	●
1634SU03C-0390	✲	3,9	6	66	24	17	36	●
1634SU03C-0400	✲	4	6	66	24	17	36	●
1634SU03C-0410	✲	4,1	6	66	24	17	36	●
1634SU03C-0420	✲	4,2	6	66	24	17	36	●
1634SU03C-0430	✲	4,3	6	66	24	17	36	●
1634SU03C-0440	✲	4,4	6	66	24	17	36	●
1634SU03C-0450	✲	4,5	6	66	24	17	36	●
1634SU03C-0460	✲	4,6	6	66	24	17	36	●
1634SU03C-0465	✲	4,65	6	66	24	17	36	○
1634SU03C-0470	✲	4,7	6	66	24	17	36	●
1634SU03C-0480	✲	4,8	6	66	28	20	36	●
1634SU03C-0490	✲	4,9	6	66	28	20	36	●
1634SU03C-0500	✲	5	6	66	28	20	36	●
1634SU03C-0510	✲	5,1	6	66	28	20	36	●
1634SU03C-0520	✲	5,2	6	66	28	20	36	●
1634SU03C-0530	✲	5,3	6	66	28	20	36	●
1634SU03C-0540	✲	5,4	6	66	28	20	36	●
1634SU03C-0550	✲	5,5	6	66	28	20	36	●
1634SU03C-0555	✲	5,55	6	66	28	20	36	●
1634SU03C-0560	✲	5,6	6	66	28	20	36	●
1634SU03C-0570	✲	5,7	6	66	28	20	36	●
1634SU03C-0580	✲	5,8	6	66	28	20	36	●
1634SU03C-0590	✲	5,9	6	66	28	20	36	●
1634SU03C-0600	✲	6	6	66	28	20	36	●
1634SU03C-0610	✲	6,1	8	79	34	24	36	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1634SU*	✔	✔	✔			
1634SUK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SU(K) 3xD | Usinage général | Ajouter K pour les applications fonte (SUK)

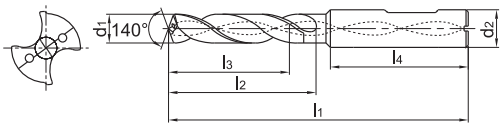
1634SU03C



– Type d'attachement : DIN 6535HB
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1634SU03C-0620	✲	6,2	8	79	34	24	36	●
1634SU03C-0630	✲	6,3	8	79	34	24	36	●
1634SU03C-0640	✲	6,4	8	79	34	24	36	●
1634SU03C-0650	✲	6,5	8	79	34	24	36	●
1634SU03C-0660	✲	6,6	8	79	34	24	36	●
1634SU03C-0670	✲	6,7	8	79	34	24	36	●
1634SU03C-0675	✲	6,75	8	79	34	24	36	○
1634SU03C-0680	✲	6,8	8	79	34	24	36	●
1634SU03C-0690	✲	6,9	8	79	34	24	36	●
1634SU03C-0700	✲	7	8	79	34	24	36	●
1634SU03C-0710	✲	7,1	8	79	41	29	36	●
1634SU03C-0720	✲	7,2	8	79	41	29	36	●
1634SU03C-0730	✲	7,3	8	79	41	29	36	●
1634SU03C-0740	✲	7,4	8	79	41	29	36	●
1634SU03C-0745	✲	7,45	8	79	41	29	36	○
1634SU03C-0750	✲	7,5	8	79	41	29	36	●
1634SU03C-0760	✲	7,6	8	79	41	29	36	●
1634SU03C-0770	✲	7,7	8	79	41	29	36	●
1634SU03C-0780	✲	7,8	8	79	41	29	36	●
1634SU03C-0790	✲	7,9	8	79	41	29	36	●
1634SU03C-0800	✲	8	8	79	41	29	36	●
1634SU03C-0810	✲	8,1	10	89	47	35	40	●
1634SU03C-0820	✲	8,2	10	89	47	35	40	●
1634SU03C-0830	✲	8,3	10	89	47	35	40	●
1634SU03C-0840	✲	8,4	10	89	47	35	40	●
1634SU03C-0850	✲	8,5	10	89	47	35	40	●
1634SU03C-0860	✲	8,6	10	89	47	35	40	●
1634SU03C-0870	✲	8,7	10	89	47	35	40	●
1634SU03C-0880	✲	8,8	10	89	47	35	40	●
1634SU03C-0890	✲	8,9	10	89	47	35	40	●
1634SU03C-0900	✲	9	10	89	47	35	40	●
1634SU03C-0910	✲	9,1	10	89	47	35	40	●
1634SU03C-0920	✲	9,2	10	89	47	35	40	●
1634SU03C-0930	✲	9,3	10	89	47	35	40	●
1634SU03C-0935	✲	9,35	10	89	47	35	40	○

● En stock ○ Sur demande

Tous les articles SUK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1634SU*	✔	✔	✔			
1634SUK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Forets carbure monobloc Série SU

Foret SU(K) 3xD | Usinage général | Ajouter K pour les applications fonte (SUK)

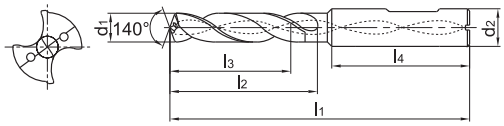
1634SU03C



– Type d'attachement : DIN 6535HB
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1634SU03C-0940	✲	9,4	10	89	47	35	40	●
1634SU03C-0945	✲	9,45	10	89	47	35	40	○
1634SU03C-0950	✲	9,5	10	89	47	35	40	●
1634SU03C-0960	✲	9,6	10	89	47	35	40	●
1634SU03C-0970	✲	9,7	10	89	47	35	40	●
1634SU03C-0980	✲	9,8	10	89	47	35	40	●
1634SU03C-0990	✲	9,9	10	89	47	35	40	●
1634SU03C-1000	✲	10	10	89	47	35	40	●
1634SU03C-1010	✲	10,1	12	102	55	40	45	●
1634SU03C-1020	✲	10,2	12	102	55	40	45	●
1634SU03C-1025	✲	10,25	12	102	55	40	45	○
1634SU03C-1030	✲	10,3	12	102	55	40	45	●
1634SU03C-1040	✲	10,4	12	102	55	40	45	●
1634SU03C-1050	✲	10,5	12	102	55	40	45	●
1634SU03C-1060	✲	10,6	12	102	55	40	45	●
1634SU03C-1070	✲	10,7	12	102	55	40	45	●
1634SU03C-1080	✲	10,8	12	102	55	40	45	●
1634SU03C-1090	✲	10,9	12	102	55	40	45	●
1634SU03C-1100	✲	11	12	102	55	40	45	●
1634SU03C-1110	✲	11,1	12	102	55	40	45	●
1634SU03C-1120	✲	11,2	12	102	55	40	45	●
1634SU03C-1125	✲	11,25	12	102	55	40	45	○
1634SU03C-1130	✲	11,3	12	102	55	40	45	●
1634SU03C-1135	✲	11,35	12	102	55	40	45	○
1634SU03C-1140	✲	11,4	12	102	55	40	45	●
1634SU03C-1145	✲	11,45	12	102	55	40	45	○
1634SU03C-1150	✲	11,5	12	102	55	40	45	●
1634SU03C-1160	✲	11,6	12	102	55	40	45	●
1634SU03C-1170	✲	11,7	12	102	55	40	45	●
1634SU03C-1180	✲	11,8	12	102	55	40	45	●
1634SU03C-1190	✲	11,9	12	102	55	40	45	●
1634SU03C-1200	✲	12	12	102	55	40	45	●
1634SU03C-1210	✲	12,1	14	107	60	43	45	●
1634SU03C-1220	✲	12,2	14	107	60	43	45	●
1634SU03C-1225	✲	12,25	14	107	60	43	45	○

● En stock ○ Sur demande

Tous les articles SUK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1634SU*	✔	✔	✔			
1634SUK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SU(K) 3xD | Usinage général | Ajouter K pour les applications fonte (SUK)

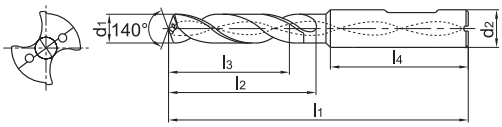
1634SU03C



– Type d'attachement : DIN 6535HB
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1634SU03C-1230	✻	12,3	14	107	60	43	45	●
1634SU03C-1250	✻	12,5	14	107	60	43	45	●
1634SU03C-1270	✻	12,7	14	107	60	43	45	●
1634SU03C-1275	✻	12,75	14	107	60	43	45	○
1634SU03C-1280	✻	12,8	14	107	60	43	45	●
1634SU03C-1300	✻	13	14	107	60	43	45	●
1634SU03C-1310	✻	13,1	14	107	60	43	45	●
1634SU03C-1335	✻	13,35	14	107	60	43	45	○
1634SU03C-1350	✻	13,5	14	107	60	43	45	●
1634SU03C-1380	✻	13,8	14	107	60	43	45	●
1634SU03C-1400	✻	14	14	107	60	43	45	●
1634SU03C-1420	✻	14,2	16	107	60	43	45	○
1634SU03C-1425	✻	14,25	16	115	65	45	48	○
1634SU03C-1430	✻	14,3	16	115	65	45	48	○
1634SU03C-1450	✻	14,5	16	115	65	45	48	●
1634SU03C-1475	✻	14,75	16	115	65	45	48	○
1634SU03C-1480	✻	14,8	16	115	65	45	48	●
1634SU03C-1500	✻	15	16	115	65	45	48	●
1634SU03C-1510	✻	15,1	16	115	65	45	48	○
1634SU03C-1535	✻	15,35	16	115	65	45	48	○
1634SU03C-1550	✻	15,5	16	115	65	45	48	○
1634SU03C-1580	✻	15,8	16	115	65	45	48	○
1634SU03C-1600	✻	16	16	115	65	45	48	●
1634SU03C-1650	✻	16,5	18	123	73	51	48	○
1634SU03C-1675	✻	16,75	18	123	73	51	48	○
1634SU03C-1680	✻	16,8	18	123	73	51	48	○
1634SU03C-1700	✻	17	18	123	73	51	48	●
1634SU03C-1750	✻	17,5	18	123	73	51	48	●
1634SU03C-1780	✻	17,8	18	123	73	51	48	○
1634SU03C-1800	✻	18	18	123	73	51	48	●
1634SU03C-1850	✻	18,5	20	131	79	55	50	○
1634SU03C-1880	✻	18,8	20	131	79	55	50	○
1634SU03C-1900	✻	19	20	131	79	55	50	○
1634SU03C-1950	✻	19,5	20	131	79	55	50	●
1634SU03C-1980	✻	19,8	20	131	79	55	50	○
1634SU03C-2000	✻	20	20	131	79	55	50	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✻ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1634SU*	✔	✔	✔			
1634SUK*			✔			

✔ Choix de base
✔ Alternative

Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

Forets carbure monobloc Série SU

Foret SU(K) 5xD | Usinage général | Ajouter K pour les applications fonte (SUK)

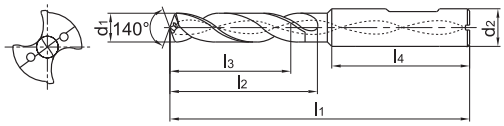
1636SU05C



– Type d'attachement : DIN 6535HB
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1636SU05C-0300	✲	3	6	62	20	14	36	●
1636SU05C-0310	✲	3,1	6	66	28	23	36	●
1636SU05C-0320	✲	3,2	6	66	28	23	36	●
1636SU05C-0325	✲	3,25	6	66	28	23	36	○
1636SU05C-0330	✲	3,3	6	66	28	23	36	●
1636SU05C-0340	✲	3,4	6	66	28	23	36	●
1636SU05C-0350	✲	3,5	6	66	28	23	36	●
1636SU05C-0360	✲	3,6	6	66	28	23	36	●
1636SU05C-0370	✲	3,7	6	66	28	23	36	●
1636SU05C-0380	✲	3,8	6	74	36	29	36	●
1636SU05C-0390	✲	3,9	6	74	36	29	36	●
1636SU05C-0400	✲	4	6	74	36	29	36	●
1636SU05C-0410	✲	4,1	6	74	36	29	36	●
1636SU05C-0420	✲	4,2	6	74	36	29	36	●
1636SU05C-0430	✲	4,3	6	74	36	29	36	●
1636SU05C-0440	✲	4,4	6	74	36	29	36	●
1636SU05C-0450	✲	4,5	6	74	36	29	36	●
1636SU05C-0460	✲	4,6	6	74	36	29	36	●
1636SU05C-0465	✲	4,65	6	74	36	29	36	●
1636SU05C-0470	✲	4,7	6	74	36	29	36	●
1636SU05C-0480	✲	4,8	6	82	44	35	36	●
1636SU05C-0490	✲	4,9	6	82	44	35	36	●
1636SU05C-0500	✲	5	6	82	44	35	36	●
1636SU05C-0510	✲	5,1	6	82	44	35	36	●
1636SU05C-0520	✲	5,2	6	82	44	35	36	●
1636SU05C-0530	✲	5,3	6	82	44	35	36	●
1636SU05C-0540	✲	5,4	6	82	44	35	36	●
1636SU05C-0550	✲	5,5	6	82	44	35	36	●
1636SU05C-0555	✲	5,55	6	82	44	35	36	●
1636SU05C-0560	✲	5,6	6	82	44	35	36	●
1636SU05C-0570	✲	5,7	6	82	44	35	36	●
1636SU05C-0580	✲	5,8	6	82	44	35	36	●
1636SU05C-0590	✲	5,9	6	82	44	35	36	●
1636SU05C-0600	✲	6	6	82	44	35	36	●
1636SU05C-0610	✲	6,1	8	91	53	43	36	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1636SU*	✔	✔	✔			
1636SUK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SU(K) 5xD | Usinage général | Ajouter K pour les applications fonte (SUK)

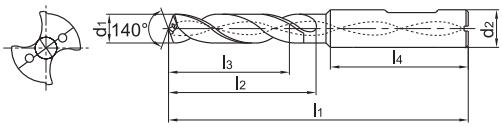
1636SU05C



– Type d'attachement : DIN 6535HB
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1636SU05C-0620	✲	6,2	8	91	53	43	36	●
1636SU05C-0630	✲	6,3	8	91	53	43	36	●
1636SU05C-0640	✲	6,4	8	91	53	43	36	●
1636SU05C-0650	✲	6,5	8	91	53	43	36	●
1636SU05C-0660	✲	6,6	8	91	53	43	36	●
1636SU05C-0670	✲	6,7	8	91	53	43	36	●
1636SU05C-0675	✲	6,75	8	91	53	43	36	●
1636SU05C-0680	✲	6,8	8	91	53	43	36	●
1636SU05C-0690	✲	6,9	8	91	53	43	36	●
1636SU05C-0700	✲	7	8	91	53	43	36	●
1636SU05C-0710	✲	7,1	8	91	53	43	36	●
1636SU05C-0720	✲	7,2	8	91	53	43	36	●
1636SU05C-0730	✲	7,3	8	91	53	43	36	●
1636SU05C-0740	✲	7,4	8	91	53	43	36	●
1636SU05C-0745	✲	7,45	8	91	53	43	36	●
1636SU05C-0750	✲	7,5	8	91	53	43	36	●
1636SU05C-0760	✲	7,6	8	91	53	43	36	●
1636SU05C-0770	✲	7,7	8	91	53	43	36	●
1636SU05C-0780	✲	7,8	8	91	53	43	36	●
1636SU05C-0790	✲	7,9	8	91	53	43	36	●
1636SU05C-0800	✲	8	8	91	53	43	36	●
1636SU05C-0810	✲	8,1	10	103	61	49	40	●
1636SU05C-0820	✲	8,2	10	103	61	49	40	●
1636SU05C-0830	✲	8,3	10	103	61	49	40	●
1636SU05C-0840	✲	8,4	10	103	61	49	40	●
1636SU05C-0850	✲	8,5	10	103	61	49	40	●
1636SU05C-0860	✲	8,6	10	103	61	49	40	●
1636SU05C-0870	✲	8,7	10	103	61	49	40	●
1636SU05C-0880	✲	8,8	10	103	61	49	40	●
1636SU05C-0890	✲	8,9	10	103	61	49	40	●
1636SU05C-0900	✲	9	10	103	61	49	40	●
1636SU05C-0910	✲	9,1	10	103	61	49	40	●
1636SU05C-0920	✲	9,2	10	103	61	49	40	●
1636SU05C-0930	✲	9,3	10	103	61	49	40	●
1636SU05C-0935	✲	9,35	10	103	61	49	40	○

● En stock ○ Sur demande

Tous les articles SUK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1636SU*	✔	✔	✔			
1636SUK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Forets carbure monobloc Série SU

Foret SU(K) 5xD | Usinage général | Ajouter K pour les applications fonte (SUK)

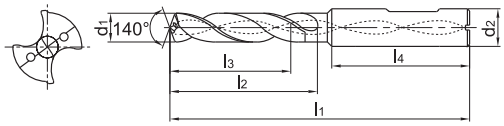
1636SU05C



– Type d'attachement : DIN 6535HB
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1636SU05C-0940	✲	9,4	10	103	61	49	40	●
1636SU05C-0945	✲	9,45	10	103	61	49	40	○
1636SU05C-0950	✲	9,5	10	103	61	49	40	●
1636SU05C-0960	✲	9,6	10	103	61	49	40	●
1636SU05C-0970	✲	9,7	10	103	61	49	40	●
1636SU05C-0980	✲	9,8	10	103	61	49	40	●
1636SU05C-0990	✲	9,9	10	103	61	49	40	●
1636SU05C-1000	✲	10	10	103	61	49	40	●
1636SU05C-1010	✲	10,1	12	118	71	56	45	●
1636SU05C-1020	✲	10,2	12	118	71	56	45	●
1636SU05C-1025	✲	10,25	12	118	71	56	45	●
1636SU05C-1030	✲	10,3	12	118	71	56	45	●
1636SU05C-1040	✲	10,4	12	118	71	56	45	●
1636SU05C-1050	✲	10,5	12	118	71	56	45	●
1636SU05C-1060	✲	10,6	12	118	71	56	45	●
1636SU05C-1070	✲	10,7	12	118	71	56	45	●
1636SU05C-1080	✲	10,8	12	118	71	56	45	●
1636SU05C-1090	✲	10,9	12	118	71	56	45	●
1636SU05C-1100	✲	11	12	118	71	56	45	●
1636SU05C-1110	✲	11,1	12	118	71	56	45	●
1636SU05C-1120	✲	11,2	12	118	71	56	45	●
1636SU05C-1125	✲	11,25	12	118	71	56	45	○
1636SU05C-1130	✲	11,3	12	118	71	56	45	●
1636SU05C-1135	✲	11,35	12	118	71	56	45	○
1636SU05C-1140	✲	11,4	12	118	71	56	45	●
1636SU05C-1145	✲	11,45	12	118	71	56	45	○
1636SU05C-1150	✲	11,5	12	118	71	56	45	●
1636SU05C-1160	✲	11,6	12	118	71	56	45	●
1636SU05C-1170	✲	11,7	12	118	71	56	45	●
1636SU05C-1180	✲	11,8	12	118	71	56	45	●
1636SU05C-1190	✲	11,9	12	118	71	56	45	●
1636SU05C-1200	✲	12	12	118	71	56	45	●
1636SU05C-1210	✲	12,1	14	124	77	60	45	●
1636SU05C-1220	✲	12,2	14	124	77	60	45	●
1636SU05C-1225	✲	12,25	14	124	77	60	45	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1636SU*	✔	✔	✔			
1636SUK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SU(K) 5xD | Usinage général | Ajouter K pour les applications fonte (SUK)

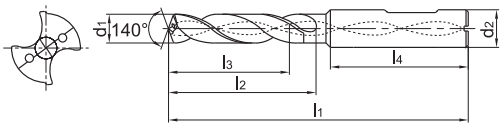
1636SU05C



– Type d'attachement : DIN 6535HB
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1636SU05C-1230	✻	12,3	14	124	77	60	45	●
1636SU05C-1250	✻	12,5	14	124	77	60	45	●
1636SU05C-1270	✻	12,7	14	124	77	60	45	●
1636SU05C-1275	✻	12,75	14	124	77	60	45	○
1636SU05C-1280	✻	12,8	14	124	77	60	45	●
1636SU05C-1300	✻	13	14	124	77	60	45	●
1636SU05C-1310	✻	13,1	14	124	77	60	45	●
1636SU05C-1335	✻	13,35	14	124	77	60	56	○
1636SU05C-1350	✻	13,5	14	124	77	60	45	●
1636SU05C-1380	✻	13,8	14	124	77	60	45	●
1636SU05C-1400	✻	14	14	124	77	60	45	●
1636SU05C-1420	✻	14,2	16	124	77	60	45	●
1636SU05C-1425	✻	14,25	16	133	83	63	48	●
1636SU05C-1430	✻	14,3	16	133	83	63	48	●
1636SU05C-1450	✻	14,5	16	133	83	63	48	●
1636SU05C-1475	✻	14,75	16	133	83	63	48	○
1636SU05C-1480	✻	14,8	16	133	83	63	48	●
1636SU05C-1500	✻	15	16	133	83	63	48	●
1636SU05C-1510	✻	15,1	16	133	83	63	48	●
1636SU05C-1535	✻	15,35	16	133	83	63	48	○
1636SU05C-1550	✻	15,5	16	133	83	63	48	●
1636SU05C-1580	✻	15,8	16	133	83	63	48	●
1636SU05C-1600	✻	16	16	133	83	63	48	●
1636SU05C-1650	✻	16,5	18	143	93	71	48	●
1636SU05C-1675	✻	16,75	18	143	93	71	48	○
1636SU05C-1680	✻	16,8	18	143	93	71	48	●
1636SU05C-1700	✻	17	18	143	93	71	48	●
1636SU05C-1750	✻	17,5	18	143	93	71	48	●
1636SU05C-1780	✻	17,8	18	143	93	71	48	●
1636SU05C-1800	✻	18	18	143	93	71	48	●
1636SU05C-1850	✻	18,5	20	153	101	77	50	●
1636SU05C-1880	✻	18,8	20	153	101	77	50	●
1636SU05C-1900	✻	19	20	153	101	77	50	●
1636SU05C-1950	✻	19,5	20	153	101	77	50	●
1636SU05C-1980	✻	19,8	20	153	101	77	50	●
1636SU05C-2000	✻	20	20	153	101	77	50	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✻ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1636SU*	✔	✔	✔			
1636SUK*			✔			

✔ Choix de base
✔ Alternative

Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

Foret SU(K) 3xD | Usinage général | Ajouter K pour les applications fonte (SUK)

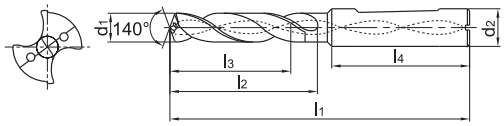
1734SU03C



– Type d'attachement : DIN 6535HE
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1734SU03C-0300	✲	3	6	66	28	23	36	●
1734SU03C-0310	✲	3,1	6	62	20	14	36	●
1734SU03C-0320	✲	3,2	6	62	20	14	36	●
1734SU03C-0325	✲	3,25	6	62	20	14	36	○
1734SU03C-0330	✲	3,3	6	62	20	14	36	●
1734SU03C-0340	✲	3,4	6	62	20	14	36	●
1734SU03C-0350	✲	3,5	6	62	20	14	36	●
1734SU03C-0360	✲	3,6	6	62	20	14	36	●
1734SU03C-0370	✲	3,7	6	62	20	14	36	●
1734SU03C-0380	✲	3,8	6	66	24	17	36	●
1734SU03C-0390	✲	3,9	6	66	24	17	36	●
1734SU03C-0400	✲	4	6	66	24	17	36	●
1734SU03C-0410	✲	4,1	6	66	24	17	36	●
1734SU03C-0420	✲	4,2	6	66	24	17	36	●
1734SU03C-0430	✲	4,3	6	66	24	17	36	●
1734SU03C-0440	✲	4,4	6	66	24	17	36	●
1734SU03C-0450	✲	4,5	6	66	24	17	36	●
1734SU03C-0460	✲	4,6	6	66	24	17	36	●
1734SU03C-0465	✲	4,65	6	66	24	17	36	○
1734SU03C-0470	✲	4,7	6	66	24	17	36	●
1734SU03C-0480	✲	4,8	6	66	28	20	36	●
1734SU03C-0490	✲	4,9	6	66	28	20	36	●
1734SU03C-0500	✲	5	6	66	28	20	36	●
1734SU03C-0510	✲	5,1	6	66	28	20	36	●
1734SU03C-0520	✲	5,2	6	66	28	20	36	●
1734SU03C-0530	✲	5,3	6	66	28	20	36	●
1734SU03C-0540	✲	5,4	6	66	28	20	36	●
1734SU03C-0550	✲	5,5	6	66	28	20	36	●
1734SU03C-0555	✲	5,55	6	66	28	20	36	●
1734SU03C-0560	✲	5,6	6	66	28	20	36	●
1734SU03C-0570	✲	5,7	6	66	28	20	36	●
1734SU03C-0580	✲	5,8	6	66	28	20	36	●
1734SU03C-0590	✲	5,9	6	66	28	20	36	●
1734SU03C-0600	✲	6	6	66	28	20	36	●
1734SU03C-0610	✲	6,1	8	79	34	24	36	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1734SU*	✔	✔	✔			
1734SUK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SU(K) 3xD | Usinage général | Ajouter K pour les applications fonte (SUK)

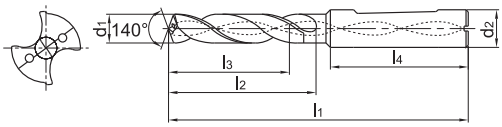
1734SU03C



– Type d'attachement : DIN 6535HE
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1734SU03C-0620	✲	6,2	8	79	34	24	36	●
1734SU03C-0630	✲	6,3	8	79	34	24	36	●
1734SU03C-0640	✲	6,4	8	79	34	24	36	●
1734SU03C-0650	✲	6,5	8	79	34	24	36	●
1734SU03C-0660	✲	6,6	8	79	34	24	36	●
1734SU03C-0670	✲	6,7	8	79	34	24	36	●
1734SU03C-0675	✲	6,75	8	79	34	24	36	●
1734SU03C-0680	✲	6,8	8	79	34	24	36	●
1734SU03C-0690	✲	6,9	8	79	34	24	36	●
1734SU03C-0700	✲	7	8	79	34	24	36	●
1734SU03C-0710	✲	7,1	8	79	41	29	36	●
1734SU03C-0720	✲	7,2	8	79	41	29	36	●
1734SU03C-0730	✲	7,3	8	79	41	29	36	●
1734SU03C-0740	✲	7,4	8	79	41	29	36	●
1734SU03C-0745	✲	7,45	8	79	41	29	36	○
1734SU03C-0750	✲	7,5	8	79	41	29	36	●
1734SU03C-0760	✲	7,6	8	79	41	29	36	●
1734SU03C-0770	✲	7,7	8	79	41	29	36	●
1734SU03C-0780	✲	7,8	8	79	41	29	36	●
1734SU03C-0790	✲	7,9	8	79	41	29	36	●
1734SU03C-0800	✲	8	8	79	41	29	36	●
1734SU03C-0810	✲	8,1	10	89	47	35	40	●
1734SU03C-0820	✲	8,2	10	89	47	35	40	●
1734SU03C-0830	✲	8,3	10	89	47	35	40	●
1734SU03C-0840	✲	8,4	10	89	47	35	40	●
1734SU03C-0850	✲	8,5	10	89	47	35	40	●
1734SU03C-0860	✲	8,6	10	89	47	35	40	●
1734SU03C-0870	✲	8,7	10	89	47	35	40	●
1734SU03C-0880	✲	8,8	10	89	47	35	40	●
1734SU03C-0890	✲	8,9	10	89	47	35	40	●
1734SU03C-0900	✲	9	10	89	47	35	40	●
1734SU03C-0910	✲	9,1	10	89	47	35	40	●
1734SU03C-0920	✲	9,2	10	89	47	35	40	●
1734SU03C-0930	✲	9,3	10	89	47	35	40	●
1734SU03C-0935	✲	9,35	10	89	47	35	40	○

● En stock ○ Sur demande

Tous les articles SUK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1734SU*	✔	✔	✔			
1734SUK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Forets carbure monobloc Série SU

Foret SU(K) 3xD | Usinage général | Ajouter K pour les applications fonte (SUK)

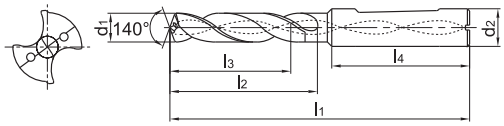
1734SU03C



– Type d'attachement : DIN 6535HE
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1734SU03C-0940	✲	9,4	10	89	47	35	40	●
1734SU03C-0945	✲	9,45	10	89	47	35	40	○
1734SU03C-0950	✲	9,5	10	89	47	35	40	●
1734SU03C-0960	✲	9,6	10	89	47	35	40	●
1734SU03C-0970	✲	9,7	10	89	47	35	40	●
1734SU03C-0980	✲	9,8	10	89	47	35	40	●
1734SU03C-0990	✲	9,9	10	89	47	35	40	●
1734SU03C-1000	✲	10	10	89	47	35	40	●
1734SU03C-1010	✲	10,1	12	102	55	40	45	●
1734SU03C-1020	✲	10,2	12	102	55	40	45	●
1734SU03C-1025	✲	10,25	12	102	55	40	45	●
1734SU03C-1030	✲	10,3	12	102	55	40	45	●
1734SU03C-1040	✲	10,4	12	102	55	40	45	●
1734SU03C-1050	✲	10,5	12	102	55	40	45	●
1734SU03C-1060	✲	10,6	12	102	55	40	45	●
1734SU03C-1070	✲	10,7	12	102	55	40	45	●
1734SU03C-1080	✲	10,8	12	102	55	40	45	●
1734SU03C-1090	✲	10,9	12	102	55	40	45	●
1734SU03C-1100	✲	11	12	102	55	40	45	●
1734SU03C-1110	✲	11,1	12	102	55	40	45	●
1734SU03C-1120	✲	11,2	12	102	55	40	45	●
1734SU03C-1125	✲	11,25	12	102	55	40	45	○
1734SU03C-1130	✲	11,3	12	102	55	40	45	●
1734SU03C-1135	✲	11,35	12	102	55	40	45	○
1734SU03C-1140	✲	11,4	12	102	55	40	45	●
1734SU03C-1145	✲	11,45	12	102	55	40	45	○
1734SU03C-1150	✲	11,5	12	102	55	40	45	●
1734SU03C-1160	✲	11,6	12	102	55	40	45	●
1734SU03C-1170	✲	11,7	12	102	55	40	45	●
1734SU03C-1180	✲	11,8	12	102	55	40	45	●
1734SU03C-1190	✲	11,9	12	102	55	40	45	●
1734SU03C-1200	✲	12	12	102	55	40	45	●
1734SU03C-1210	✲	12,1	14	107	60	43	45	●
1734SU03C-1220	✲	12,2	14	107	60	43	45	●
1734SU03C-1225	✲	12,25	14	107	60	43	45	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1734SU*	✔	✔	✔			
1734SUK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SU(K) 3xD — Usinage général — Ajouter K pour les applications fonte (SUK)

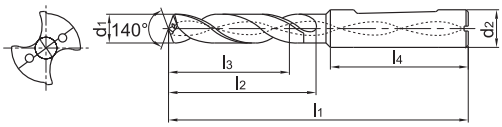
1734SU03C



– Type d'attachement : DIN 6535HE
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1734SU03C-1230	✻	12,3	14	107	60	43	45	●
1734SU03C-1250	✻	12,5	14	107	60	43	45	●
1734SU03C-1270	✻	12,7	14	107	60	43	45	●
1734SU03C-1275	✻	12,75	14	107	60	43	45	●
1734SU03C-1280	✻	12,8	14	107	60	43	45	●
1734SU03C-1300	✻	13	14	107	60	43	45	●
1734SU03C-1310	✻	13,1	14	107	60	43	45	●
1734SU03C-1335	✻	13,35	14	107	60	43	45	○
1734SU03C-1350	✻	13,5	14	107	60	43	45	●
1734SU03C-1380	✻	13,8	14	107	60	43	45	●
1734SU03C-1400	✻	14	14	107	60	43	45	●
1734SU03C-1420	✻	14,2	16	107	60	43	45	●
1734SU03C-1425	✻	14,25	16	115	65	45	48	●
1734SU03C-1430	✻	14,3	16	115	65	45	48	●
1734SU03C-1450	✻	14,5	16	115	65	45	48	●
1734SU03C-1475	✻	14,75	16	115	65	45	48	●
1734SU03C-1480	✻	14,8	16	115	65	45	48	●
1734SU03C-1500	✻	15	16	115	65	45	48	●
1734SU03C-1510	✻	15,1	16	115	65	45	48	●
1734SU03C-1535	✻	15,35	16	115	65	45	48	○
1734SU03C-1550	✻	15,5	16	115	65	45	48	●
1734SU03C-1580	✻	15,8	16	115	65	45	48	●
1734SU03C-1600	✻	16	16	115	65	45	48	●
1734SU03C-1650	✻	16,5	18	123	73	51	48	●
1734SU03C-1675	✻	16,75	18	123	73	51	48	●
1734SU03C-1680	✻	16,8	18	123	73	51	48	●
1734SU03C-1700	✻	17	18	123	73	51	48	●
1734SU03C-1750	✻	17,5	18	123	73	51	48	●
1734SU03C-1780	✻	17,8	18	123	73	51	48	●
1734SU03C-1800	✻	18	18	123	73	51	48	●
1734SU03C-1850	✻	18,5	20	131	79	55	50	●
1734SU03C-1880	✻	18,8	20	131	79	55	50	●
1734SU03C-1900	✻	19	20	131	79	55	50	●
1734SU03C-1950	✻	19,5	20	131	79	55	50	●
1734SU03C-1980	✻	19,8	20	131	79	55	50	●
1734SU03C-2000	✻	20	20	131	79	55	50	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✻ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1734SU*	✔	✔	✔			
1734SUK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SU(K) 5xD | Usinage général | Ajouter K pour les applications fonte (SUK)

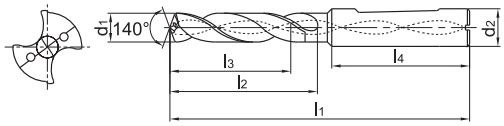
1736SU05C



– Type d'attachement : DIN 6535HE
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1736SU05C-0300	✲	3	6	66	28	23	36	●
1736SU05C-0310	✲	3,1	6	66	28	23	36	●
1736SU05C-0320	✲	3,2	6	66	28	23	36	●
1736SU05C-0325	✲	3,25	6	66	28	23	36	○
1736SU05C-0330	✲	3,3	6	66	28	23	36	●
1736SU05C-0340	✲	3,4	6	66	28	23	36	●
1736SU05C-0350	✲	3,5	6	66	28	23	36	●
1736SU05C-0360	✲	3,6	6	66	28	23	36	●
1736SU05C-0370	✲	3,7	6	66	28	23	36	●
1736SU05C-0380	✲	3,8	6	74	36	29	36	●
1736SU05C-0390	✲	3,9	6	74	36	29	36	●
1736SU05C-0400	✲	4	6	74	36	29	36	●
1736SU05C-0410	✲	4,1	6	74	36	29	36	●
1736SU05C-0420	✲	4,2	6	74	36	29	36	●
1736SU05C-0430	✲	4,3	6	74	36	29	36	●
1736SU05C-0440	✲	4,4	6	74	36	29	36	●
1736SU05C-0450	✲	4,5	6	74	36	29	36	●
1736SU05C-0460	✲	4,6	6	74	36	29	36	●
1736SU05C-0465	✲	4,65	6	74	36	29	36	○
1736SU05C-0470	✲	4,7	6	74	36	29	36	●
1736SU05C-0480	✲	4,8	6	82	44	35	36	●
1736SU05C-0490	✲	4,9	6	82	44	35	36	●
1736SU05C-0500	✲	5	6	82	44	35	36	●
1736SU05C-0510	✲	5,1	6	82	44	35	36	●
1736SU05C-0520	✲	5,2	6	82	44	35	36	●
1736SU05C-0530	✲	5,3	6	82	44	35	36	●
1736SU05C-0540	✲	5,4	6	82	44	35	36	●
1736SU05C-0550	✲	5,5	6	82	44	35	36	●
1736SU05C-0555	✲	5,55	6	82	44	35	36	●
1736SU05C-0560	✲	5,6	6	82	44	35	36	●
1736SU05C-0570	✲	5,7	6	82	44	35	36	●
1736SU05C-0580	✲	5,8	6	82	44	35	36	●
1736SU05C-0590	✲	5,9	6	82	44	35	36	●
1736SU05C-0600	✲	6	6	82	44	35	36	●
1736SU05C-0610	✲	6,1	8	91	53	43	36	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1736SU*	✔	✔	✔			
1736SUK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

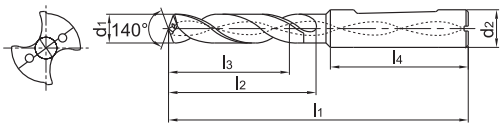
Foret SU(K) 5xD — Usinage général — Ajouter K pour les applications fonte (SUK)

1736SU05C

– Type d'attachement : DIN 6535HE
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1736SU05C-0620	✲	6,2	8	91	53	43	36	●
1736SU05C-0630	✲	6,3	8	91	53	43	36	●
1736SU05C-0640	✲	6,4	8	91	53	43	36	●
1736SU05C-0650	✲	6,5	8	91	53	43	36	●
1736SU05C-0660	✲	6,6	8	91	53	43	36	●
1736SU05C-0670	✲	6,7	8	91	53	43	36	●
1736SU05C-0675	✲	6,75	8	91	53	43	36	●
1736SU05C-0680	✲	6,8	8	91	53	43	36	●
1736SU05C-0690	✲	6,9	8	91	53	43	36	●
1736SU05C-0700	✲	7	8	91	53	43	36	●
1736SU05C-0710	✲	7,1	8	91	53	43	36	●
1736SU05C-0720	✲	7,2	8	91	53	43	36	●
1736SU05C-0730	✲	7,3	8	91	53	43	36	●
1736SU05C-0740	✲	7,4	8	91	53	43	36	●
1736SU05C-0745	✲	7,45	8	91	53	43	36	○
1736SU05C-0750	✲	7,5	8	91	53	43	36	●
1736SU05C-0760	✲	7,6	8	91	53	43	36	●
1736SU05C-0770	✲	7,7	8	91	53	43	36	●
1736SU05C-0780	✲	7,8	8	91	53	43	36	●
1736SU05C-0790	✲	7,9	8	91	53	43	36	●
1736SU05C-0800	✲	8	8	91	53	43	36	●
1736SU05C-0810	✲	8,1	10	103	61	49	40	●
1736SU05C-0820	✲	8,2	10	103	61	49	40	●
1736SU05C-0830	✲	8,3	10	103	61	49	40	●
1736SU05C-0840	✲	8,4	10	103	61	49	40	●
1736SU05C-0850	✲	8,5	10	103	61	49	40	●
1736SU05C-0860	✲	8,6	10	103	61	49	40	●
1736SU05C-0870	✲	8,7	10	103	61	49	40	●
1736SU05C-0880	✲	8,8	10	103	61	49	40	●
1736SU05C-0890	✲	8,9	10	103	61	49	40	●
1736SU05C-0900	✲	9	10	103	61	49	40	●
1736SU05C-0910	✲	9,1	10	103	61	49	40	●
1736SU05C-0920	✲	9,2	10	103	61	49	40	●
1736SU05C-0930	✲	9,3	10	103	61	49	40	●
1736SU05C-0935	✲	9,35	10	103	61	49	40	○

● En stock ○ Sur demande

Tous les articles SUK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1736SU*	✔	✔	✔			
1736SUK*			✔			

✔ Choix de base
✔ Alternative

Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

Forets carbure monobloc Série SU

Foret SU(K) 5xD | Usinage général | Ajouter K pour les applications fonte (SUK)

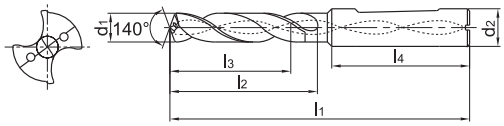
1736SU05C



– Type d'attachement : DIN 6535HE
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1736SU05C-0940	✲	9,4	10	103	61	49	40	●
1736SU05C-0945	✲	9,45	10	103	61	49	40	○
1736SU05C-0950	✲	9,5	10	103	61	49	40	●
1736SU05C-0960	✲	9,6	10	103	61	49	40	●
1736SU05C-0970	✲	9,7	10	103	61	49	40	●
1736SU05C-0980	✲	9,8	10	103	61	49	40	●
1736SU05C-0990	✲	9,9	10	103	61	49	40	●
1736SU05C-1000	✲	10	10	103	61	49	40	●
1736SU05C-1010	✲	10,1	12	118	71	56	45	●
1736SU05C-1020	✲	10,2	12	118	71	56	45	●
1736SU05C-1025	✲	10,25	12	118	71	56	45	●
1736SU05C-1030	✲	10,3	12	118	71	56	45	●
1736SU05C-1040	✲	10,4	12	118	71	56	45	●
1736SU05C-1050	✲	10,5	12	118	71	56	45	●
1736SU05C-1060	✲	10,6	12	118	71	56	45	●
1736SU05C-1070	✲	10,7	12	118	71	56	45	●
1736SU05C-1080	✲	10,8	12	118	71	56	45	●
1736SU05C-1090	✲	10,9	12	118	71	56	45	●
1736SU05C-1100	✲	11	12	118	71	56	45	●
1736SU05C-1110	✲	11,1	12	118	71	56	45	●
1736SU05C-1120	✲	11,2	12	118	71	56	45	●
1736SU05C-1125	✲	11,25	12	118	71	56	45	○
1736SU05C-1130	✲	11,3	12	118	71	56	45	●
1736SU05C-1135	✲	11,35	12	118	71	56	45	○
1736SU05C-1140	✲	11,4	12	118	71	56	45	●
1736SU05C-1145	✲	11,45	12	118	71	56	45	○
1736SU05C-1150	✲	11,5	12	118	71	56	45	●
1736SU05C-1160	✲	11,6	12	118	71	56	45	●
1736SU05C-1170	✲	11,7	12	118	71	56	45	●
1736SU05C-1180	✲	11,8	12	118	71	56	45	●
1736SU05C-1190	✲	11,9	12	118	71	56	45	●
1736SU05C-1200	✲	12	12	118	71	56	45	●
1736SU05C-1210	✲	12,1	14	124	77	60	45	●
1736SU05C-1220	✲	12,2	14	124	77	60	45	●
1736SU05C-1225	✲	12,25	14	124	77	60	45	○

● En stock ○ Sur demande

Tous les articles SUK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1736SU*	✔	✔	✔			
1736SUK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SU(K) 5xD — Usinage général — Ajouter K pour les applications fonte (SUK)

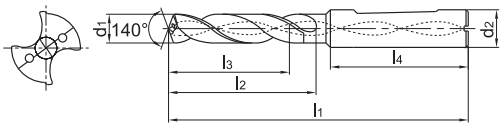
1736SU05C



– Type d'attachement : DIN 6535HE
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1736SU05C-1230	✻	12,3	14	124	77	60	45	●
1736SU05C-1250	✻	12,5	14	124	77	60	45	●
1736SU05C-1270	✻	12,7	14	124	77	60	45	●
1736SU05C-1275	✻	12,75	14	124	77	60	45	●
1736SU05C-1280	✻	12,8	14	124	77	60	45	●
1736SU05C-1300	✻	13	14	124	77	60	45	●
1736SU05C-1310	✻	13,1	14	124	77	60	45	●
1736SU05C-1335	✻	13,35	14	124	77	60	56	○
1736SU05C-1350	✻	13,5	14	124	77	60	45	●
1736SU05C-1380	✻	13,8	14	124	77	60	45	●
1736SU05C-1400	✻	14	14	124	77	60	45	●
1736SU05C-1420	✻	14,2	16	124	77	60	45	●
1736SU05C-1425	✻	14,25	16	133	83	63	48	●
1736SU05C-1430	✻	14,3	16	133	83	63	48	●
1736SU05C-1450	✻	14,5	16	133	83	63	48	●
1736SU05C-1475	✻	14,75	16	133	83	63	48	●
1736SU05C-1480	✻	14,8	16	133	83	63	48	●
1736SU05C-1500	✻	15	16	133	83	63	48	●
1736SU05C-1510	✻	15,1	16	133	83	63	48	●
1736SU05C-1535	✻	15,35	16	133	83	63	48	○
1736SU05C-1550	✻	15,5	16	133	83	63	48	●
1736SU05C-1580	✻	15,8	16	133	83	63	48	●
1736SU05C-1600	✻	16	16	133	83	63	48	●
1736SU05C-1650	✻	16,5	18	143	93	71	48	●
1736SU05C-1675	✻	16,75	18	143	93	71	48	●
1736SU05C-1680	✻	16,8	18	143	93	71	48	●
1736SU05C-1700	✻	17	18	143	93	71	48	●
1736SU05C-1750	✻	17,5	18	143	93	71	48	●
1736SU05C-1780	✻	17,8	18	143	93	71	48	●
1736SU05C-1800	✻	18	18	143	93	71	48	●
1736SU05C-1850	✻	18,5	20	153	101	77	50	●
1736SU05C-1880	✻	18,8	20	153	101	77	50	●
1736SU05C-1900	✻	19	20	153	101	77	50	●
1736SU05C-1950	✻	19,5	20	153	101	77	50	●
1736SU05C-1980	✻	19,8	20	153	101	77	50	●
1736SU05C-2000	✻	20	20	153	101	77	50	●

● En stock ○ Sur demande

Tous les articles SUK sur demande

✻ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1736SU*	✔	✔	✔			
1736SUK*			✔			

✔ Choix de base
✔ Alternative

Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

Foret SU 3xD — Usinage général

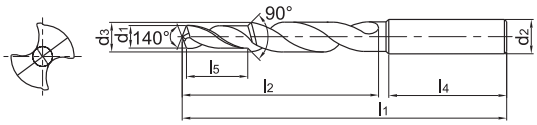
1557SU03



– Type d'attachement : DIN 6535HA



Arrosage extérieur



Article	✻	Dimensions (mm)							Nuance
		d_1 (m8)	d_2 (h6)	d_3 (m7)	l_1	l_2	l_4	l_5	KDG303
1557SU03-M4		3,3	6	4,5	66	28	36	11,4	●
1557SU03-M5		4,2	6	6	66	28	36	13,6	●
1557SU03-M6		5	8	7	79	41	36	16,5	●
1557SU03-M8		6,75	10	9,5	89	47	40	21	●
1557SU03-M8x1.0		7	10	9,8	89	47	40	21	○
1557SU03-M10		8,5	12	12	102	55	45	25,5	●
1557SU03-M10x1.0		9	12	12	102	55	45	25,5	○
1557SU03-M12		10,25	14	14	107	60	45	30	●
1557SU03-M14		12	16	16	115	65	48	34,5	●
1557SU03-M16		14	18	18	123	73	48	38,5	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SL(K) 10xD — Usinage général — Ajouter K pour les applications fonte (SLK)

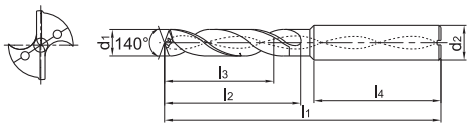
1588SL10C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1588SL10C-0300	✲	3	6	80	43	39	36	●
1588SL10C-0310	✲	3,1	6	80	43	39	36	○
1588SL10C-0320	✲	3,2	6	80	43	39	36	●
1588SL10C-0330	✲	3,3	6	80	43	39	36	●
1588SL10C-0340	✲	3,4	6	80	43	39	36	●
1588SL10C-0350	✲	3,5	6	80	43	39	36	●
1588SL10C-0360	✲	3,6	6	80	43	39	36	●
1588SL10C-0370	✲	3,7	6	80	43	39	36	●
1588SL10C-0380	✲	3,8	6	80	43	39	36	●
1588SL10C-0390	✲	3,9	6	80	43	39	36	●
1588SL10C-0400	✲	4	6	92	55	50	36	●
1588SL10C-0410	✲	4,1	6	92	55	50	36	●
1588SL10C-0420	✲	4,2	6	92	55	50	36	●
1588SL10C-0430	✲	4,3	6	92	55	50	36	●
1588SL10C-0440	✲	4,4	6	92	55	50	36	●
1588SL10C-0450	✲	4,5	6	92	55	50	36	●
1588SL10C-0460	✲	4,6	6	92	55	50	36	●
1588SL10C-0470	✲	4,7	6	92	55	50	36	●
1588SL10C-0480	✲	4,8	6	92	55	50	36	●
1588SL10C-0490	✲	4,9	6	92	55	50	36	●
1588SL10C-0500	✲	5	6	104	68	61	36	●
1588SL10C-0510	✲	5,1	6	104	68	61	36	●
1588SL10C-0520	✲	5,2	6	104	68	61	36	●
1588SL10C-0530	✲	5,3	6	104	68	61	36	●
1588SL10C-0540	✲	5,4	6	104	68	61	36	●
1588SL10C-0550	✲	5,5	6	104	68	61	36	●
1588SL10C-0560	✲	5,6	6	104	68	61	36	●
1588SL10C-0570	✲	5,7	6	104	68	61	36	●
1588SL10C-0580	✲	5,8	6	104	68	61	36	●
1588SL10C-0590	✲	5,9	6	104	68	61	36	●
1588SL10C-0600	✲	6	6	104	68	61	36	●
1588SL10C-0610	✲	6,1	8	117	80	71	36	●
1588SL10C-0620	✲	6,2	8	117	80	71	36	●
1588SL10C-0630	✲	6,3	8	117	80	71	36	●
1588SL10C-0640	✲	6,4	8	117	80	71	36	●

● En stock ○ Sur demande

Tous les articles SLK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1588SL*	✔	✔	✔	✔	✔	
1588SLK*			✔			

✔ Choix de base
✔ Alternative

Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

Forets carbure monobloc Série SL/SP

Foret SL(K) 10xD | Usinage général | Ajouter K pour les applications fonte (SLK)

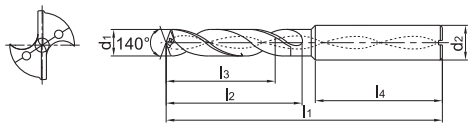
1588SL10C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1588SL10C-0650	✲	6,5	8	117	80	71	36	●
1588SL10C-0660	✲	6,6	8	117	80	71	36	●
1588SL10C-0670	✲	6,7	8	117	80	71	36	●
1588SL10C-0680	✲	6,8	8	117	80	71	36	●
1588SL10C-0690	✲	6,9	8	117	80	71	36	●
1588SL10C-0700	✲	7	8	117	80	71	36	●
1588SL10C-0710	✲	7,1	8	130	94	84	36	●
1588SL10C-0720	✲	7,2	8	130	94	84	36	●
1588SL10C-0730	✲	7,3	8	130	94	84	36	●
1588SL10C-0740	✲	7,4	8	130	94	84	36	●
1588SL10C-0750	✲	7,5	8	130	94	84	36	●
1588SL10C-0760	✲	7,6	8	130	94	84	36	●
1588SL10C-0770	✲	7,7	8	130	94	84	36	●
1588SL10C-0780	✲	7,8	8	130	94	84	36	●
1588SL10C-0790	✲	7,9	8	130	94	84	36	●
1588SL10C-0800	✲	8	8	130	94	84	36	●
1588SL10C-0810	✲	8,1	10	148	105	94	40	●
1588SL10C-0820	✲	8,2	10	148	105	94	40	●
1588SL10C-0830	✲	8,3	10	148	105	94	40	●
1588SL10C-0840	✲	8,4	10	148	105	94	40	●
1588SL10C-0850	✲	8,5	10	148	105	94	40	●
1588SL10C-0860	✲	8,6	10	148	105	94	40	●
1588SL10C-0870	✲	8,7	10	148	105	94	40	●
1588SL10C-0880	✲	8,8	10	148	105	94	40	●
1588SL10C-0890	✲	8,9	10	148	105	94	40	●
1588SL10C-0900	✲	9	10	148	105	94	40	●
1588SL10C-0910	✲	9,1	10	158	115	103	40	●
1588SL10C-0920	✲	9,2	10	158	115	103	40	●
1588SL10C-0930	✲	9,3	10	158	115	103	40	●
1588SL10C-0940	✲	9,4	10	158	115	103	40	●
1588SL10C-0950	✲	9,5	10	158	115	103	40	●
1588SL10C-0960	✲	9,6	10	158	115	103	40	●
1588SL10C-0970	✲	9,7	10	158	115	103	40	●
1588SL10C-0980	✲	9,8	10	158	115	103	40	●
1588SL10C-0990	✲	9,9	10	158	115	103	40	●

● En stock ○ Sur demande

Tous les articles SLK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1588SL*	✔	✔	✔	✔	✔	
1588SLK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SL(K) 10xD | Usinage général | Ajouter K pour les applications fonte (SLK)

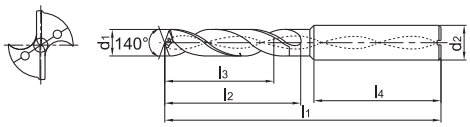
1588SL10C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1588SL10C-1000	✲	10	10	158	115	103	40	●
1588SL10C-1010	✲	10,1	12	183	135	121	45	●
1588SL10C-1020	✲	10,2	12	183	135	121	45	●
1588SL10C-1030	✲	10,3	12	183	135	121	45	●
1588SL10C-1040	✲	10,4	12	183	135	121	45	●
1588SL10C-1050	✲	10,5	12	183	135	121	45	●
1588SL10C-1060	✲	10,6	12	183	135	121	45	●
1588SL10C-1070	✲	10,7	12	183	135	121	45	●
1588SL10C-1080	✲	10,8	12	183	135	121	45	●
1588SL10C-1090	✲	10,9	12	183	135	121	45	●
1588SL10C-1100	✲	11	12	183	135	121	45	●
1588SL10C-1110	✲	11,1	12	183	135	121	45	●
1588SL10C-1120	✲	11,2	12	183	135	121	45	●
1588SL10C-1130	✲	11,3	12	183	135	121	45	●
1588SL10C-1140	✲	11,4	12	183	135	121	45	●
1588SL10C-1150	✲	11,5	12	183	135	121	45	●
1588SL10C-1160	✲	11,6	12	183	135	121	45	●
1588SL10C-1170	✲	11,7	12	183	135	121	45	●
1588SL10C-1180	✲	11,8	12	183	135	121	45	●
1588SL10C-1190	✲	11,9	12	183	135	121	45	●
1588SL10C-1200	✲	12	12	183	135	121	45	●
1588SL10C-1225	✲	12,25	14	209	160	144	45	●
1588SL10C-1250	✲	12,5	14	209	160	144	45	●
1588SL10C-1270	✲	12,7	14	209	160	144	45	●
1588SL10C-1275	✲	12,75	14	209	160	144	45	●
1588SL10C-1280	✲	12,8	14	209	160	144	45	●
1588SL10C-1300	✲	13	14	209	160	144	45	●
1588SL10C-1310	✲	13,1	14	209	160	144	45	●
1588SL10C-1350	✲	13,5	14	209	160	144	45	●
1588SL10C-1380	✲	13,8	14	209	160	144	45	●
1588SL10C-1400	✲	14	14	209	160	144	45	●

● En stock ○ Sur demande

Tous les articles SLK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1588SL*	✔	✔	✔	✔	✔	
1588SLK*			✔			

✔ Choix de base
✔ Alternative

Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

Forets carbure monobloc Série SL/SP

Foret SL(K) 12xD | Usinage général | Ajouter K pour les applications fonte (SLK)

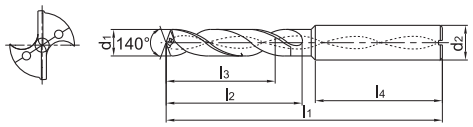
1588SL12C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1588SL12C-0300	✲	3	6	90	50	40	36	●
1588SL12C-0310	✲	3,1	6	90	50	40	36	●
1588SL12C-0320	✲	3,2	6	90	50	40	36	●
1588SL12C-0330	✲	3,3	6	90	50	40	36	●
1588SL12C-0340	✲	3,4	6	90	50	40	36	●
1588SL12C-0350	✲	3,5	6	90	50	40	36	●
1588SL12C-0360	✲	3,6	6	90	50	40	36	●
1588SL12C-0370	✲	3,7	6	90	50	46	36	●
1588SL12C-0380	✲	3,8	6	90	50	46	36	●
1588SL12C-0390	✲	3,9	6	90	50	46	36	●
1588SL12C-0400	✲	4	6	102	64	56	36	●
1588SL12C-0410	✲	4,1	6	102	64	56	36	●
1588SL12C-0420	✲	4,2	6	102	64	56	36	●
1588SL12C-0430	✲	4,3	6	102	64	56	36	●
1588SL12C-0440	✲	4,4	6	102	64	56	36	●
1588SL12C-0450	✲	4,5	6	102	64	56	36	●
1588SL12C-0460	✲	4,6	6	102	64	56	36	●
1588SL12C-0470	✲	4,7	6	102	64	56	36	●
1588SL12C-0480	✲	4,8	6	102	64	56	36	●
1588SL12C-0490	✲	4,9	6	102	64	56	36	●
1588SL12C-0500	✲	5	6	116	78	72	36	●
1588SL12C-0510	✲	5,1	6	116	78	72	36	●
1588SL12C-0520	✲	5,2	6	116	78	72	36	●
1588SL12C-0530	✲	5,3	6	116	78	72	36	○
1588SL12C-0540	✲	5,4	6	116	78	72	36	○
1588SL12C-0550	✲	5,5	6	116	78	72	36	●
1588SL12C-0560	✲	5,6	6	116	78	72	36	●
1588SL12C-0570	✲	5,7	6	116	78	72	36	●
1588SL12C-0580	✲	5,8	6	116	78	72	36	●
1588SL12C-0590	✲	5,9	6	116	78	72	36	●
1588SL12C-0600	✲	6	6	116	78	72	36	●
1588SL12C-0610	✲	6,1	8	131	93	84	36	●
1588SL12C-0620	✲	6,2	8	131	93	84	36	●
1588SL12C-0630	✲	6,3	8	131	93	84	36	●
1588SL12C-0640	✲	6,4	8	131	93	84	36	●

● En stock ○ Sur demande

Tous les articles SLK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1588SL*	✔	✔	✔	✔	✔	
1588SLK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SL(K) 12xD | Usinage général | Ajouter K pour les applications fonte (SLK)

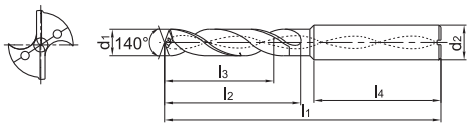
1588SL12C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1588SL12C-0650	✲	6,5	8	131	93	84	36	●
1588SL12C-0660	✲	6,6	8	131	93	84	36	●
1588SL12C-0670	✲	6,7	8	131	93	84	36	●
1588SL12C-0680	✲	6,8	8	131	93	84	36	●
1588SL12C-0690	✲	6,9	8	131	93	84	36	●
1588SL12C-0700	✲	7	8	131	93	84	36	●
1588SL12C-0710	✲	7,1	8	146	108	96	36	●
1588SL12C-0720	✲	7,2	8	146	108	96	36	●
1588SL12C-0730	✲	7,3	8	146	108	96	36	●
1588SL12C-0740	✲	7,4	8	146	108	96	36	●
1588SL12C-0750	✲	7,5	8	146	108	96	36	●
1588SL12C-0760	✲	7,6	8	146	108	96	36	○
1588SL12C-0770	✲	7,7	8	146	108	96	36	○
1588SL12C-0780	✲	7,8	8	146	108	96	36	●
1588SL12C-0790	✲	7,9	8	146	108	96	36	○
1588SL12C-0800	✲	8	8	146	108	96	36	●
1588SL12C-0810	✲	8,1	10	162	120	108	40	●
1588SL12C-0820	✲	8,2	10	162	120	108	40	●
1588SL12C-0830	✲	8,3	10	162	120	108	40	●
1588SL12C-0840	✲	8,4	10	162	120	108	40	●
1588SL12C-0850	✲	8,5	10	162	120	108	40	●
1588SL12C-0860	✲	8,6	10	162	120	108	40	●
1588SL12C-0870	✲	8,7	10	162	120	108	40	●
1588SL12C-0880	✲	8,8	10	162	120	108	40	●
1588SL12C-0890	✲	8,9	10	162	120	108	40	●
1588SL12C-0900	✲	9	10	162	120	108	40	●
1588SL12C-0910	✲	9,1	10	174	132	120	40	○
1588SL12C-0920	✲	9,2	10	174	132	120	40	●
1588SL12C-0930	✲	9,3	10	174	132	120	40	●
1588SL12C-0940	✲	9,4	10	174	132	120	40	●
1588SL12C-0950	✲	9,5	10	174	132	120	40	●
1588SL12C-0960	✲	9,6	10	174	132	120	40	○
1588SL12C-0970	✲	9,7	10	174	132	120	40	●
1588SL12C-0980	✲	9,8	10	174	132	120	40	●
1588SL12C-0990	✲	9,9	10	174	132	120	40	○

● En stock ○ Sur demande

Tous les articles SLK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1588SL*	✔	✔	✔	✔	✔	
1588SLK*			✔			

✔ Choix de base
✔ Alternative

Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

Foret SL(K) 12xD | Usinage général | Ajouter K pour les applications fonte (SLK)

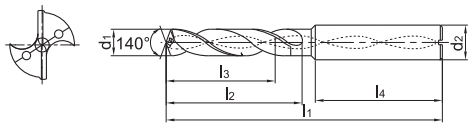
1588SL12C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1588SL12C-1000	✲	10	10	174	132	120	40	●
1588SL12C-1010	✲	10,1	12	204	156	144	45	●
1588SL12C-1020	✲	10,2	12	204	156	144	45	●
1588SL12C-1030	✲	10,3	12	204	156	144	45	●
1588SL12C-1040	✲	10,4	12	204	156	144	45	●
1588SL12C-1050	✲	10,5	12	204	156	144	45	●
1588SL12C-1060	✲	10,6	12	204	156	144	45	●
1588SL12C-1070	✲	10,7	12	204	156	144	45	○
1588SL12C-1080	✲	10,8	12	204	156	144	45	○
1588SL12C-1090	✲	10,9	12	204	156	144	45	○
1588SL12C-1100	✲	11	12	204	156	144	45	●
1588SL12C-1110	✲	11,1	12	204	156	144	45	●
1588SL12C-1120	✲	11,2	12	204	156	144	45	●
1588SL12C-1130	✲	11,3	12	204	156	144	45	○
1588SL12C-1140	✲	11,4	12	204	156	144	45	○
1588SL12C-1150	✲	11,5	12	204	156	144	45	●
1588SL12C-1160	✲	11,6	12	204	156	144	45	○
1588SL12C-1170	✲	11,7	12	204	156	144	45	●
1588SL12C-1180	✲	11,8	12	204	156	144	45	●
1588SL12C-1190	✲	11,9	12	204	156	144	45	○
1588SL12C-1200	✲	12	12	204	156	144	45	●
1588SL12C-1250	✲	12,5	14	230	182	168	45	○
1588SL12C-1270	✲	12,7	14	230	182	168	45	○
1588SL12C-1280	✲	12,8	14	230	182	168	45	○
1588SL12C-1300	✲	13	14	230	182	168	45	○
1588SL12C-1350	✲	13,5	14	230	182	168	45	○
1588SL12C-1400	✲	14	14	230	182	168	45	○
1588SL12C-1450	✲	14,5	16	260	208	194	48	○
1588SL12C-1500	✲	15	16	260	208	194	48	○
1588SL12C-1550	✲	15,5	16	260	208	194	48	○
1588SL12C-1600	✲	16	16	260	208	194	48	○
1588SL12C-1650	✲	16,5	18	286	234	218	48	○
1588SL12C-1700	✲	17	18	286	234	218	48	○
1588SL12C-1750	✲	17,5	18	286	234	218	48	○
1588SL12C-1800	✲	18	18	286	234	218	48	○

● En stock ○ Sur demande

Tous les articles SLK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1588SL*	✔	✔	✔	✔	✔	
1588SLK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SL(K) 12xD | Usinage général | Ajouter K pour les applications fonte (SLK)

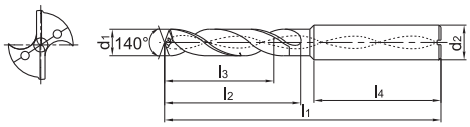
1588SL12C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1588SL12C-1850	✻	18,5	20	310	258	240	48	○
1588SL12C-1900	✻	19	20	310	258	240	48	○
1588SL12C-1950	✻	19,5	20	310	258	240	48	○
1588SL12C-2000	✻	20	20	310	258	240	48	○
1588SL12C-2050	✻	20,5	22	310	258	240	48	○
1588SL12C-2100	✻	21	22	310	258	240	48	○

● En stock ○ Sur demande

Tous les articles SLK sur demande

✻ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1588SL*	✔	✔	✔	✔	✔	
1588SLK*			✔			

✔ Choix de base
✔ Alternative

Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

SL(K)-Foret 15xD — Usinage général — Ajouter K pour les applications fonte (SLK)

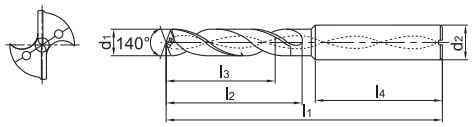
1588SL15C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1588SL15C-0300	✲	3	6	100	60	50	36	●
1588SL15C-0310	✲	3,1	6	105	65	55	36	●
1588SL15C-0320	✲	3,2	6	105	65	55	36	○
1588SL15C-0330	✲	3,3	6	105	65	55	36	●
1588SL15C-0335		3,35	6	105	65	55	36	○
1588SL15C-0340	✲	3,4	6	105	65	55	36	●
1588SL15C-0350	✲	3,5	6	105	65	55	36	●
1588SL15C-0360	✲	3,6	6	112	72	62	36	○
1588SL15C-0370	✲	3,7	6	112	72	68	36	●
1588SL15C-0380	✲	3,8	6	112	72	68	36	●
1588SL15C-0390	✲	3,9	6	112	72	68	36	○
1588SL15C-0400	✲	4	6	112	72	64	36	●
1588SL15C-0410	✲	4,1	6	120	80	72	36	○
1588SL15C-0420	✲	4,2	6	120	80	72	36	○
1588SL15C-0430	✲	4,3	6	120	80	72	36	○
1588SL15C-0440	✲	4,4	6	120	80	72	36	○
1588SL15C-0450	✲	4,5	6	120	80	72	36	●
1588SL15C-0460	✲	4,6	6	128	88	80	36	●
1588SL15C-0470	✲	4,7	6	128	88	80	36	○
1588SL15C-0480	✲	4,8	6	128	88	80	36	●
1588SL15C-0490	✲	4,9	6	128	88	80	36	●
1588SL15C-0500	✲	5	6	128	88	82	36	●
1588SL15C-0510	✲	5,1	6	136	96	90	36	●
1588SL15C-0520	✲	5,2	6	136	96	90	36	○
1588SL15C-0530	✲	5,3	6	136	96	90	36	●
1588SL15C-0540	✲	5,4	6	136	96	90	36	○
1588SL15C-0550	✲	5,5	6	136	96	90	36	○
1588SL15C-0560	✲	5,6	6	144	104	98	36	○
1588SL15C-0570	✲	5,7	6	144	104	98	36	○
1588SL15C-0580	✲	5,8	6	144	104	98	36	○
1588SL15C-0590	✲	5,9	6	144	104	98	36	○
1588SL15C-0600	✲	6	6	144	104	98	36	○
1588SL15C-0610	✲	6,1	8	152	112	103	36	●
1588SL15C-0620	✲	6,2	8	152	112	103	36	●
1588SL15C-0630	✲	6,3	8	152	112	103	36	○

● En stock ○ Sur demande

Tous les articles SLK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1588SL*	✔	✔	✔	✔	✔	
1588SLK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

SL(K)-Foret 15xD | Usinage général | Ajouter K pour les applications fonte (SLK)

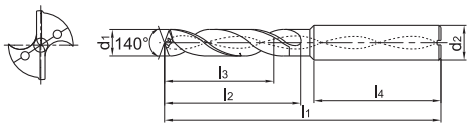
1588SL15C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1588SL15C-0640	✲	6,4	8	152	112	103	36	●
1588SL15C-0650	✲	6,5	8	152	112	103	36	●
1588SL15C-0660	✲	6,6	8	160	120	111	36	○
1588SL15C-0670	✲	6,7	8	160	120	111	36	●
1588SL15C-0680	✲	6,8	8	160	120	111	36	○
1588SL15C-0690	✲	6,9	8	160	120	111	36	○
1588SL15C-0700	✲	7	8	160	120	111	36	●
1588SL15C-0710	✲	7,1	8	170	130	118	36	○
1588SL15C-0720	✲	7,2	8	170	130	118	36	○
1588SL15C-0730	✲	7,3	8	170	130	118	36	○
1588SL15C-0740	✲	7,4	8	170	130	118	36	○
1588SL15C-0750	✲	7,5	8	170	130	118	36	○
1588SL15C-0760	✲	7,6	8	180	140	128	36	○
1588SL15C-0770	✲	7,7	8	180	140	128	36	○
1588SL15C-0780	✲	7,8	8	180	140	128	36	○
1588SL15C-0790	✲	7,9	8	180	140	128	36	○
1588SL15C-0800	✲	8	8	180	140	128	36	●
1588SL15C-0810	✲	8,1	10	194	150	138	40	○
1588SL15C-0820	✲	8,2	10	194	150	138	40	○
1588SL15C-0830	✲	8,3	10	194	150	138	40	○
1588SL15C-0840	✲	8,4	10	194	150	138	40	○
1588SL15C-0850	✲	8,5	10	194	150	138	40	●
1588SL15C-0860	✲	8,6	10	204	160	148	40	●
1588SL15C-0870	✲	8,7	10	204	160	148	40	○
1588SL15C-0880	✲	8,8	10	204	160	148	40	●
1588SL15C-0890	✲	8,9	10	204	160	148	40	○
1588SL15C-0900	✲	9	10	204	160	148	40	○
1588SL15C-0910	✲	9,1	10	216	172	160	40	○
1588SL15C-0920	✲	9,2	10	216	172	160	40	○
1588SL15C-0930	✲	9,3	10	216	172	160	40	○
1588SL15C-0940	✲	9,4	10	216	172	160	40	○
1588SL15C-0950	✲	9,5	10	216	172	160	40	○
1588SL15C-0960	✲	9,6	10	226	182	170	40	○
1588SL15C-0970	✲	9,7	10	226	182	170	40	○
1588SL15C-0980	✲	9,8	10	226	182	170	40	○

● En stock ○ Sur demande

Tous les articles SLK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1588SL*	✔	✔	✔	✔	✔	
1588SLK*			✔			

✔ Choix de base
✔ Alternative

Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

SL(K)-Foret 15xD Usinage général Ajouter K pour les applications fonte (SLK)

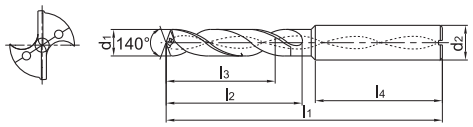
1588SL15C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1588SL15C-0990	✲	9,9	10	226	182	170	40	○
1588SL15C-1000	✲	10	10	226	182	170	40	●
1588SL15C-1010	✲	10,1	12	240	190	178	45	○
1588SL15C-1020	✲	10,2	12	240	190	178	45	○
1588SL15C-1030	✲	10,3	12	240	190	178	45	○
1588SL15C-1040	✲	10,4	12	240	190	178	45	○
1588SL15C-1050	✲	10,5	12	240	190	178	45	○
1588SL15C-1060	✲	10,6	12	248	198	186	45	○
1588SL15C-1070	✲	10,7	12	248	198	186	45	○
1588SL15C-1080	✲	10,8	12	248	198	186	45	○
1588SL15C-1090	✲	10,9	12	248	198	186	45	○
1588SL15C-1100	✲	11	12	248	198	186	45	●
1588SL15C-1110	✲	11,1	12	262	212	200	45	○
1588SL15C-1120	✲	11,2	12	262	212	200	45	○
1588SL15C-1130	✲	11,3	12	262	212	200	45	○
1588SL15C-1140	✲	11,4	12	262	212	200	45	○
1588SL15C-1150	✲	11,5	12	262	212	200	45	●
1588SL15C-1160	✲	11,6	12	272	222	210	45	○
1588SL15C-1170	✲	11,7	12	272	222	210	45	○
1588SL15C-1180	✲	11,8	12	272	222	210	45	○
1588SL15C-1190	✲	11,9	12	272	222	210	45	○
1588SL15C-1200	✲	12	12	272	222	210	45	●

● En stock ○ Sur demande

Tous les articles SLK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1588SL*	✔	✔	✔	✔	✔	
1588SLK*			✔			

✔ Choix de base
✔ Alternative

Codification C44 Instructions d'usinage C201 Paramètres C144 Commande d'outils spéciaux C150

Foret SL(K) 20xD — Usinage général — Ajouter K pour les applications fonte (SLK)

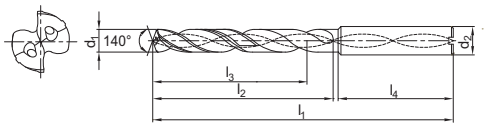
1588SL20C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1588SL20C-0300	✲	3	6	110	70	62	36	●
1588SL20C-0310	✲	3,1	6	123	83	72	36	●
1588SL20C-0320	✲	3,2	6	123	83	72	36	●
1588SL20C-0330	✲	3,3	6	123	83	72	36	●
1588SL20C-0340	✲	3,4	6	123	83	72	36	●
1588SL20C-0350	✲	3,5	6	123	83	72	36	●
1588SL20C-0360	✲	3,6	6	136	96	84	36	●
1588SL20C-0370	✲	3,7	6	136	96	84	36	●
1588SL20C-0380	✲	3,8	6	136	96	84	36	●
1588SL20C-0390	✲	3,9	6	136	96	84	36	●
1588SL20C-0400	✲	4	6	136	96	84	36	●
1588SL20C-0410	✲	4,1	6	148	108	96	36	●
1588SL20C-0420	✲	4,2	6	148	108	96	36	●
1588SL20C-0430	✲	4,3	6	148	108	96	36	○
1588SL20C-0440	✲	4,4	6	148	108	96	36	○
1588SL20C-0450	✲	4,5	6	148	108	96	36	●
1588SL20C-0460	✲	4,6	6	158	118	106	36	○
1588SL20C-0470	✲	4,7	6	158	118	106	36	○
1588SL20C-0480	✲	4,8	6	158	118	106	36	●
1588SL20C-0490	✲	4,9	6	158	118	106	36	○
1588SL20C-0500	✲	5	6	158	118	106	36	●
1588SL20C-0510	✲	5,1	6	168	128	116	36	○
1588SL20C-0520	✲	5,2	6	168	128	116	36	●
1588SL20C-0530	✲	5,3	6	168	128	116	36	●
1588SL20C-0540	✲	5,4	6	168	128	116	36	●
1588SL20C-0550	✲	5,5	6	168	128	116	36	●
1588SL20C-0560	✲	5,6	6	180	140	126	36	○
1588SL20C-0570	✲	5,7	6	180	140	126	36	○
1588SL20C-0580	✲	5,8	6	180	140	126	36	●
1588SL20C-0590	✲	5,9	6	180	140	126	36	○
1588SL20C-0600	✲	6	6	180	140	126	36	●
1588SL20C-0610	✲	6,1	8	192	150	132	36	○
1588SL20C-0620	✲	6,2	8	192	150	132	36	○
1588SL20C-0630	✲	6,3	8	192	150	132	36	●
1588SL20C-0640	✲	6,4	8	192	150	132	36	○

● En stock ○ Sur demande

Tous les articles SLK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1588SL*	✔	✔	✔	✔	✔	
1588SLK*			✔			

✔ Choix de base
✔ Alternative

Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

Forets carbure monobloc Série SL/SP

Foret SL(K) 20xD | Usinage général | Ajouter K pour les applications fonte (SLK)

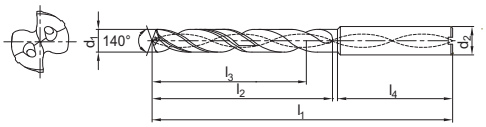
1588SL20C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1588SL20C-0650	✲	6,5	8	192	150	132	36	●
1588SL20C-0660	✲	6,6	8	202	162	144	36	○
1588SL20C-0670	✲	6,7	8	202	162	144	36	○
1588SL20C-0680	✲	6,8	8	202	162	144	36	●
1588SL20C-0690	✲	6,9	8	202	162	144	36	○
1588SL20C-0700	✲	7	8	202	162	144	36	●
1588SL20C-0710	✲	7,1	8	213	173	155	36	○
1588SL20C-0720	✲	7,2	8	213	173	155	36	○
1588SL20C-0730	✲	7,3	8	213	173	155	36	○
1588SL20C-0740	✲	7,4	8	213	173	155	36	○
1588SL20C-0750	✲	7,5	8	213	173	155	36	●
1588SL20C-0760	✲	7,6	8	223	183	165	36	○
1588SL20C-0770	✲	7,7	8	223	183	165	36	○
1588SL20C-0780	✲	7,8	8	223	183	165	36	○
1588SL20C-0790	✲	7,9	8	223	183	165	36	○
1588SL20C-0800	✲	8	8	223	183	165	36	●
1588SL20C-0810	✲	8,1	10	239	195	176	40	○
1588SL20C-0820	✲	8,2	10	239	195	176	40	○
1588SL20C-0830	✲	8,3	10	239	195	176	40	○
1588SL20C-0840	✲	8,4	10	239	195	176	40	○
1588SL20C-0850	✲	8,5	10	239	195	176	40	●
1588SL20C-0860	✲	8,6	10	249	205	186	40	○
1588SL20C-0870	✲	8,7	10	249	205	186	40	○
1588SL20C-0880	✲	8,8	10	249	205	186	40	○
1588SL20C-0890	✲	8,9	10	249	205	186	40	○
1588SL20C-0900	✲	9	10	249	205	186	40	○
1588SL20C-0910	✲	9,1	10	262	218	196	36	○
1588SL20C-0920	✲	9,2	10	262	218	196	36	○
1588SL20C-0930	✲	9,3	10	262	218	196	36	○
1588SL20C-0940	✲	9,4	10	262	218	196	36	○
1588SL20C-0950	✲	9,5	10	262	218	196	36	○
1588SL20C-0960	✲	9,6	10	272	228	206	40	○
1588SL20C-0970	✲	9,7	10	272	228	206	40	○
1588SL20C-0980	✲	9,8	10	272	228	206	40	○
1588SL20C-0990	✲	9,9	10	272	228	206	40	○

● En stock ○ Sur demande

Tous les articles SLK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1588SL*	✔	✔	✔	✔	✔	
1588SLK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SL(K) 20xD | Usinage général | Ajouter K pour les applications fonte (SLK)

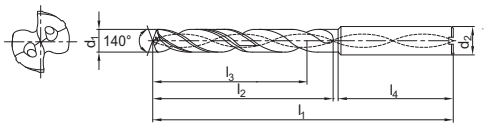
1588SL20C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1588SL20C-1000	✲	10	10	272	228	206	40	●
1588SL20C-1010	✲	10,1	12	292	242	220	45	○
1588SL20C-1020	✲	10,2	12	292	242	220	45	○
1588SL20C-1030	✲	10,3	12	292	242	220	45	○
1588SL20C-1040	✲	10,4	12	292	242	220	45	○
1588SL20C-1050	✲	10,5	12	292	242	220	45	○
1588SL20C-1060	✲	10,6	12	300	250	228	45	○
1588SL20C-1070	✲	10,7	12	300	250	228	45	○
1588SL20C-1080	✲	10,8	12	300	250	228	45	○
1588SL20C-1090	✲	10,9	12	300	250	228	45	○
1588SL20C-1100	✲	11	12	300	250	228	45	○
1588SL20C-1110	✲	11,1	12	315	265	240	45	○
1588SL20C-1120	✲	11,2	12	315	265	240	45	○
1588SL20C-1130	✲	11,3	12	315	265	240	45	○
1588SL20C-1140	✲	11,4	12	315	265	240	45	○
1588SL20C-1150	✲	11,5	12	315	265	240	45	○
1588SL20C-1160	✲	11,6	12	325	275	250	45	○
1588SL20C-1170	✲	11,7	12	325	275	250	45	○
1588SL20C-1180	✲	11,8	12	325	275	250	45	○
1588SL20C-1190	✲	11,9	12	325	275	250	45	○
1588SL20C-1200	✲	12	12	325	275	250	45	○
1588SL20C-1250	✲	12,5	14	325	275	250	45	○
1588SL20C-1300	✲	13	14	338	290	265	45	○
1588SL20C-1350	✲	13,5	14	338	290	265	45	○
1588SL20C-1400	✲	14	14	367	318	290	45	○

● En stock ○ Sur demande

Tous les articles SLK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1588SL*	✔	✔	✔	✔	✔	
1588SLK*			✔			

✔ Choix de base
✔ Alternative

Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

Forets carbure monobloc Série SL/SP

Foret SL(K) 30xD | Usinage général | Ajouter K pour les applications fonte (SLK)

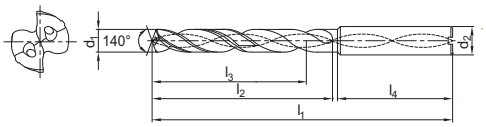
1588SL30C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1588SL30C-0300	✲	3	6	140	100	92	36	●
1588SL30C-0310	✲	3,1	6	160	120	108	36	○
1588SL30C-0320	✲	3,2	6	160	120	108	36	●
1588SL30C-0330	✲	3,3	6	160	120	108	36	○
1588SL30C-0340	✲	3,4	6	160	120	108	36	●
1588SL30C-0350	✲	3,5	6	160	120	108	36	●
1588SL30C-0360	✲	3,6	6	176	136	124	36	○
1588SL30C-0370	✲	3,7	6	176	136	124	36	○
1588SL30C-0380	✲	3,8	6	176	136	124	36	●
1588SL30C-0390	✲	3,9	6	176	136	124	36	●
1588SL30C-0400	✲	4	6	176	136	124	36	●
1588SL30C-0410	✲	4,1	6	192	152	140	36	○
1588SL30C-0420	✲	4,2	6	192	152	140	36	○
1588SL30C-0430	✲	4,3	6	192	152	140	36	○
1588SL30C-0440	✲	4,4	6	192	152	140	36	○
1588SL30C-0450	✲	4,5	6	192	152	140	36	●
1588SL30C-0460	✲	4,6	6	208	168	156	36	○
1588SL30C-0470	✲	4,7	6	208	168	156	36	○
1588SL30C-0480	✲	4,8	6	208	168	156	36	●
1588SL30C-0490	✲	4,9	6	208	168	156	36	●
1588SL30C-0500	✲	5	6	208	168	156	36	●
1588SL30C-0510	✲	5,1	6	228	188	170	36	○
1588SL30C-0520	✲	5,2	6	228	188	170	36	●
1588SL30C-0530	✲	5,3	6	228	188	170	36	○
1588SL30C-0540	✲	5,4	6	228	188	170	36	○
1588SL30C-0550	✲	5,5	6	228	188	170	36	●
1588SL30C-0560	✲	5,6	6	240	200	182	36	○
1588SL30C-0570	✲	5,7	6	240	200	182	36	○
1588SL30C-0580	✲	5,8	6	240	200	182	36	●
1588SL30C-0590	✲	5,9	6	240	200	182	36	○
1588SL30C-0600	✲	6	6	240	200	182	36	●
1588SL30C-0610	✲	6,1	8	260	220	202	36	○
1588SL30C-0620	✲	6,2	8	260	220	202	36	○
1588SL30C-0630	✲	6,3	8	260	220	202	36	●
1588SL30C-0640	✲	6,4	8	260	220	202	36	○

● En stock ○ Sur demande

Tous les articles SLK sur demande

✲ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1588SL*	✔	✔	✔	✔	✔	
1588SLK*			✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SL(K) 30xD — Usinage général — Ajouter K pour les applications fonte (SLK)

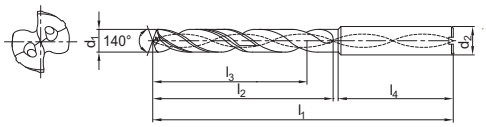
1588SL30C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1588SL30C-0650	✻	6,5	8	260	220	202	36	●
1588SL30C-0660	✻	6,6	8	272	232	214	36	○
1588SL30C-0670	✻	6,7	8	272	232	214	36	○
1588SL30C-0680	✻	6,8	8	272	232	214	36	●
1588SL30C-0690	✻	6,9	8	272	232	214	36	○
1588SL30C-0700	✻	7	8	272	232	214	36	●
1588SL30C-0710	✻	7,1	8	290	250	232	36	○
1588SL30C-0720	✻	7,2	8	290	250	232	36	○
1588SL30C-0730	✻	7,3	8	290	250	232	36	○
1588SL30C-0740	✻	7,4	8	290	250	232	36	○
1588SL30C-0750	✻	7,5	8	290	250	232	36	○
1588SL30C-0760	✻	7,6	8	305	265	246	36	○
1588SL30C-0770	✻	7,7	8	305	265	246	36	○
1588SL30C-0780	✻	7,8	8	305	265	246	36	○
1588SL30C-0790	✻	7,9	8	305	265	246	36	○
1588SL30C-0800	✻	8	8	305	265	246	36	●
1588SL30C-0810	✻	8,1	10	330	285	265	40	○
1588SL30C-0820	✻	8,2	10	330	285	265	40	○
1588SL30C-0830	✻	8,3	10	330	285	265	40	○
1588SL30C-0840	✻	8,4	10	330	285	265	40	○
1588SL30C-0850	✻	8,5	10	330	285	265	40	●
1588SL30C-0860	✻	8,6	10	340	295	275	40	○
1588SL30C-0870	✻	8,7	10	340	295	275	40	○
1588SL30C-0880	✻	8,8	10	340	295	275	40	○
1588SL30C-0890	✻	8,9	10	340	295	275	40	○
1588SL30C-0900	✻	9	10	340	295	275	40	○
1588SL30C-0910	✻	9,1	10	360	315	292	40	○
1588SL30C-0920	✻	9,2	10	360	315	292	40	○
1588SL30C-0930	✻	9,3	10	360	315	292	40	○
1588SL30C-0940	✻	9,4	10	360	315	292	40	○
1588SL30C-0950	✻	9,5	10	360	315	292	40	○
1588SL30C-0960	✻	9,6	10	372	328	305	40	○
1588SL30C-0970	✻	9,7	10	372	328	305	40	○
1588SL30C-0980	✻	9,8	10	372	328	305	40	○
1588SL30C-0990	✻	9,9	10	372	328	305	40	○
1588SL30C-1000	✻	10	10	372	328	305	40	○

● En stock ○ Sur demande

Tous les articles SLK sur demande

✻ Avec arrosage interne

Domaine d'utilisation

Version	P	M	K	N	S	H
1588SL*	✔	✔	✔	✔	✔	
1588SLK*			✔			

✔ Choix de base
✔ Alternative

Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

Forets carbure monobloc Série SL/SP

Foret SP 3xD — Usinage général

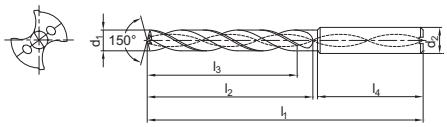
1534SP03C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (h7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1534SP03C-0303	✲	3,03	6	62	20	14	36	●
1534SP03C-0313	✲	3,13	6	62	20	14	36	○
1534SP03C-0323	✲	3,23	6	62	20	14	36	○
1534SP03C-0333	✲	3,33	6	62	20	14	36	●
1534SP03C-0343	✲	3,43	6	62	20	14	36	●
1534SP03C-0353	✲	3,53	6	62	20	14	36	●
1534SP03C-0363	✲	3,63	6	62	20	14	36	○
1534SP03C-0373	✲	3,73	6	62	20	14	36	○
1534SP03C-0383	✲	3,83	6	66	24	17	36	○
1534SP03C-0393	✲	3,93	6	66	24	17	36	○
1534SP03C-0403	✲	4,03	6	66	24	17	36	●
1534SP03C-0413	✲	4,13	6	66	24	17	36	○
1534SP03C-0423	✲	4,23	6	66	24	17	36	○
1534SP03C-0433	✲	4,33	6	66	24	17	36	○
1534SP03C-0443	✲	4,43	6	66	24	17	36	○
1534SP03C-0453	✲	4,53	6	66	24	17	36	●
1534SP03C-0463	✲	4,63	6	66	24	17	36	○
1534SP03C-0473	✲	4,73	6	66	24	17	36	○
1534SP03C-0483	✲	4,83	6	66	28	20	36	○
1534SP03C-0493	✲	4,93	6	66	28	20	36	○
1534SP03C-0503	✲	5,03	6	66	28	20	36	●
1534SP03C-0513	✲	5,13	6	66	28	20	36	○
1534SP03C-0523	✲	5,23	6	66	28	20	36	○
1534SP03C-0533	✲	5,33	6	66	28	20	36	○
1534SP03C-0543	✲	5,43	6	66	28	20	36	○
1534SP03C-0553	✲	5,53	6	66	28	20	36	●
1534SP03C-0563	✲	5,63	6	66	28	20	36	○
1534SP03C-0573	✲	5,73	6	66	28	20	36	○
1534SP03C-0583	✲	5,83	6	66	28	20	36	○
1534SP03C-0593	✲	5,93	6	66	28	20	36	○
1534SP03C-0603	✲	6,03	6	66	28	20	36	●
1534SP03C-0613	✲	6,13	8	79	34	24	36	○
1534SP03C-0623	✲	6,23	8	79	34	24	36	○
1534SP03C-0633	✲	6,33	8	79	34	24	36	○
1534SP03C-0643	✲	6,43	8	79	34	24	36	○
1534SP03C-0653	✲	6,53	8	79	34	24	36	●
1534SP03C-0663	✲	6,63	8	79	34	24	36	○

● En stock ○ Sur demande

Ø foret pilote = Ø foret final + 0,03 mm

✲ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔	✔	✔	

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SP 3xD — Usinage général

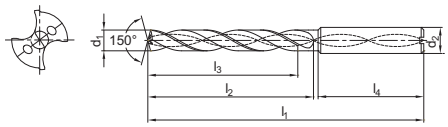
1534SP03C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (h7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1534SP03C-0673	✻	6,73	8	79	34	24	36	○
1534SP03C-0683	✻	6,83	8	79	34	24	36	○
1534SP03C-0693	✻	6,93	8	79	34	24	36	○
1534SP03C-0703	✻	7,03	8	79	34	24	36	●
1534SP03C-0713	✻	7,13	8	79	41	29	36	○
1534SP03C-0723	✻	7,23	8	79	41	29	36	○
1534SP03C-0733	✻	7,33	8	79	41	29	36	●
1534SP03C-0743	✻	7,43	8	79	41	29	36	○
1534SP03C-0753	✻	7,53	8	79	41	29	36	●
1534SP03C-0763	✻	7,63	8	79	41	29	36	○
1534SP03C-0773	✻	7,73	8	79	41	29	36	○
1534SP03C-0783	✻	7,83	8	79	41	29	36	○
1534SP03C-0793	✻	7,93	8	79	41	29	36	○
1534SP03C-0803	✻	8,03	8	79	41	29	36	●
1534SP03C-0813	✻	8,13	10	89	47	35	40	○
1534SP03C-0823	✻	8,23	10	89	47	35	40	○
1534SP03C-0833	✻	8,33	10	89	47	35	40	●
1534SP03C-0843	✻	8,43	10	89	47	35	40	○
1534SP03C-0853	✻	8,53	10	89	47	35	40	○
1534SP03C-0863	✻	8,63	10	89	47	35	40	○
1534SP03C-0873	✻	8,73	10	89	47	35	40	○
1534SP03C-0883	✻	8,83	10	89	47	35	40	●
1534SP03C-0893	✻	8,93	10	89	47	35	40	○
1534SP03C-0903	✻	9,03	10	89	47	35	40	●
1534SP03C-0913	✻	9,13	10	89	47	35	40	○
1534SP03C-0923	✻	9,23	10	89	47	35	40	○
1534SP03C-0933	✻	9,33	10	89	47	35	40	○
1534SP03C-0943	✻	9,43	10	89	47	35	40	○
1534SP03C-0953	✻	9,53	10	89	47	35	40	●
1534SP03C-0963	✻	9,63	10	89	47	35	40	○
1534SP03C-0973	✻	9,73	10	89	47	35	40	●
1534SP03C-0983	✻	9,83	10	89	47	35	40	●
1534SP03C-0993	✻	9,93	10	89	47	35	40	○
1534SP03C-1003	✻	10,03	10	89	47	35	40	●
1534SP03C-1013	✻	10,13	12	102	55	40	45	○
1534SP03C-1023	✻	10,23	12	102	55	40	45	○
1534SP03C-1033	✻	10,33	12	102	55	40	45	○

● En stock ○ Sur demande

Ø foret pilote = Ø foret final + 0,03 mm

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔	✔	✔	

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Forets carbure monobloc Série SL/SP

Foret SP 3xD — Usinage général

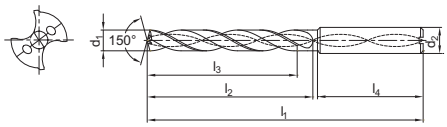
1534SP03C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (h7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1534SP03C-1043	✲	10,43	12	102	55	40	45	○
1534SP03C-1053	✲	10,53	12	102	55	40	45	●
1534SP03C-1063	✲	10,63	12	102	55	40	45	○
1534SP03C-1073	✲	10,73	12	102	55	40	45	○
1534SP03C-1083	✲	10,83	12	102	55	40	45	●
1534SP03C-1093	✲	10,93	12	102	55	40	45	○
1534SP03C-1103	✲	11,03	12	102	55	40	45	●
1534SP03C-1113	✲	11,13	12	102	55	40	45	○
1534SP03C-1123	✲	11,23	12	102	55	40	45	○
1534SP03C-1133	✲	11,33	12	102	55	40	45	○
1534SP03C-1143	✲	11,43	12	102	55	40	45	○
1534SP03C-1153	✲	11,53	12	102	55	40	45	●
1534SP03C-1163	✲	11,63	12	102	55	40	45	○
1534SP03C-1173	✲	11,73	12	102	55	40	45	○
1534SP03C-1183	✲	11,83	12	102	55	40	45	●
1534SP03C-1193	✲	11,93	12	102	55	40	45	○
1534SP03C-1203	✲	12,03	12	102	55	40	45	●
1534SP03C-1213	✲	12,13	14	107	60	43	45	○
1534SP03C-1223	✲	12,23	14	107	60	43	45	○
1534SP03C-1233	✲	12,33	14	107	60	43	45	○
1534SP03C-1243	✲	12,43	14	107	60	43	45	○
1534SP03C-1253	✲	12,53	14	107	60	43	45	●
1534SP03C-1263	✲	12,63	14	107	60	43	45	○
1534SP03C-1273	✲	12,73	14	107	60	43	45	○
1534SP03C-1283	✲	12,83	14	107	60	43	45	○
1534SP03C-1293	✲	12,93	14	107	60	43	45	○
1534SP03C-1303	✲	13,03	14	107	60	43	45	○
1534SP03C-1353	✲	13,53	14	107	60	43	45	○
1534SP03C-1403	✲	14,03	14	107	60	43	45	○
1534SP03C-1453	✲	14,53	16	115	65	45	48	○
1534SP03C-1503	✲	15,03	16	115	65	45	48	○
1534SP03C-1553	✲	15,53	16	115	65	45	48	○
1534SP03C-1603	✲	16,03	16	115	65	45	48	○
1534SP03C-1653	✲	16,53	18	123	73	51	48	○
1534SP03C-1703	✲	17,03	18	123	73	51	48	○
1534SP03C-1753	✲	17,53	18	123	73	51	48	○
1534SP03C-1803	✲	18,03	18	123	73	51	48	○

● En stock ○ Sur demande

Ø foret pilote = Ø foret final + 0,03 mm

✲ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔	✔	✔	

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SP 3xD — Usinage général

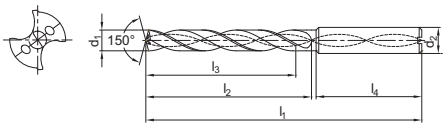
1534SP03C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (h7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1534SP03C-1853	✻	18,53	20	131	79	55	50	○
1534SP03C-1903	✻	19,03	20	131	79	55	50	○
1534SP03C-1953	✻	19,53	20	131	79	55	50	○
1534SP03C-2003	✻	20,03	20	131	79	55	50	○

● En stock ○ Sur demande

Ø foret pilote = Ø foret final + 0,03 mm

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔	✔	✔	

✔ Choix de base
✔ Alternative

A Tournage
B Fraisage
C Perçage
D Informations techniques
E Index

Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

Notes

INFORMATIONS IMPORTANTES

Conseils d'utilisation pour la **série UD**

Calculatrice

Groupe ISO	Matière	Vitesse de coupe v_c (m/min)	Facteur d'avance F_m
M	Aciers inoxydables	80	0,02
S	Alliages base Co/Ni	40	0,01
S	Alliages de titane	60	0,012

Formule :	Avance par tour (F_n)	$D \times F_m$
Exemple :	Diamètre de perçage (D)	10 mm
	Matière	Acier inoxydable

F_n = 10 mm × 0,02 = 0,2 mm/tr



Fig.: **1536UD05C**

Forets carbure monobloc Série UD

UD-Foret 3xD Acier, acier inoxydable, matériaux difficiles à usiner

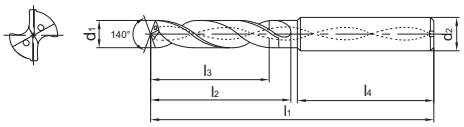
1534UD03C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG305
1534UD03C-0300	✲	3	6	62	20	14	36	●
1534UD03C-0310	✲	3,1	6	62	20	14	36	○
1534UD03C-0320	✲	3,2	6	62	20	14	36	○
1534UD03C-0330	✲	3,3	6	62	20	14	36	●
1534UD03C-0340	✲	3,4	6	62	20	14	36	○
1534UD03C-0350	✲	3,5	6	62	20	14	36	●
1534UD03C-0360	✲	3,6	6	62	20	14	36	○
1534UD03C-0370	✲	3,7	6	62	20	14	36	●
1534UD03C-0380	✲	3,8	6	66	24	17	36	○
1534UD03C-0390	✲	3,9	6	66	24	17	36	○
1534UD03C-0400	✲	4	6	66	24	17	36	●
1534UD03C-0410	✲	4,1	6	66	24	17	36	○
1534UD03C-0420	✲	4,2	6	66	24	17	36	●
1534UD03C-0430	✲	4,3	6	66	24	17	36	●
1534UD03C-0440	✲	4,4	6	66	24	17	36	○
1534UD03C-0450	✲	4,5	6	66	24	17	36	●
1534UD03C-0460	✲	4,6	6	66	24	17	36	○
1534UD03C-0465	✲	4,65	6	66	24	17	36	●
1534UD03C-0470	✲	4,7	6	66	24	17	36	○
1534UD03C-0480	✲	4,8	6	66	28	20	36	●
1534UD03C-0490	✲	4,9	6	66	28	20	36	○
1534UD03C-0500	✲	5	6	66	28	20	36	●
1534UD03C-0510	✲	5,1	6	66	28	20	36	○
1534UD03C-0520	✲	5,2	6	66	28	20	36	○
1534UD03C-0530	✲	5,3	6	66	28	20	36	○
1534UD03C-0540	✲	5,4	6	66	28	20	36	○
1534UD03C-0550	✲	5,5	6	66	28	20	36	●
1534UD03C-0560	✲	5,6	6	66	28	20	36	○
1534UD03C-0570	✲	5,7	6	66	28	20	36	●
1534UD03C-0580	✲	5,8	6	66	28	20	36	○
1534UD03C-0590	✲	5,9	6	66	28	20	36	●
1534UD03C-0600	✲	6	6	66	28	20	36	●
1534UD03C-0610	✲	6,1	8	79	34	24	36	○
1534UD03C-0620	✲	6,2	8	79	34	24	36	○
1534UD03C-0630	✲	6,3	8	79	34	24	36	○
1534UD03C-0640	✲	6,4	8	79	34	24	36	○
1534UD03C-0650	✲	6,5	8	79	34	24	36	●

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔			✔	

✔ Choix de base
✔ Alternative

Codification > C44 Instructions d'usinage > C201 Paramètres > C144 Commande d'outils spéciaux > C150

UD-Foret 3xD — Acier, acier inoxydable, matériaux difficiles à usiner

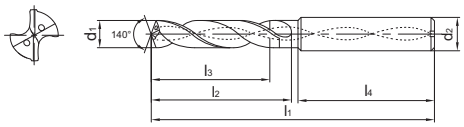
1534UD03C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG305
1534UD03C-0660	✻	6,6	8	79	34	24	36	○
1534UD03C-0670	✻	6,7	8	79	34	24	36	○
1534UD03C-0680	✻	6,8	8	79	34	24	36	●
1534UD03C-0690	✻	6,9	8	79	34	24	36	○
1534UD03C-0700	✻	7	8	79	34	24	36	●
1534UD03C-0710	✻	7,1	8	79	41	29	36	○
1534UD03C-0720	✻	7,2	8	79	41	29	36	○
1534UD03C-0730	✻	7,3	8	79	41	29	36	○
1534UD03C-0740	✻	7,4	8	79	41	29	36	●
1534UD03C-0750	✻	7,5	8	79	41	29	36	●
1534UD03C-0760	✻	7,6	8	79	41	29	36	○
1534UD03C-0770	✻	7,7	8	79	41	29	36	○
1534UD03C-0780	✻	7,8	8	79	41	29	36	○
1534UD03C-0790	✻	7,9	8	79	41	29	36	○
1534UD03C-0800	✻	8	8	79	41	29	36	●
1534UD03C-0810	✻	8,1	10	89	47	35	40	○
1534UD03C-0820	✻	8,2	10	89	47	35	40	○
1534UD03C-0830	✻	8,3	10	89	47	35	40	○
1534UD03C-0840	✻	8,4	10	89	47	35	40	○
1534UD03C-0850	✻	8,5	10	89	47	35	40	●
1534UD03C-0860	✻	8,6	10	89	47	35	40	○
1534UD03C-0870	✻	8,7	10	89	47	35	40	○
1534UD03C-0880	✻	8,8	10	89	47	35	40	●
1534UD03C-0890	✻	8,9	10	89	47	35	40	○
1534UD03C-0900	✻	9	10	89	47	35	40	●
1534UD03C-0910	✻	9,1	10	89	47	35	40	○
1534UD03C-0920	✻	9,2	10	89	47	35	40	○
1534UD03C-0930	✻	9,3	10	89	47	35	40	●
1534UD03C-0940	✻	9,4	10	89	47	35	40	○
1534UD03C-0950	✻	9,5	10	89	47	35	40	●
1534UD03C-0960	✻	9,6	10	89	47	35	40	○
1534UD03C-0970	✻	9,7	10	89	47	35	40	○
1534UD03C-0980	✻	9,8	10	89	47	35	40	○
1534UD03C-0990	✻	9,9	10	89	47	35	40	○
1534UD03C-1000	✻	10	10	89	47	35	40	●
1534UD03C-1020	✻	10,2	12	102	55	40	45	●
1534UD03C-1050	✻	10,5	12	102	55	40	45	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔			✔	

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Forets carbure monobloc Série UD

UD-Foret 3xD Acier, acier inoxydable, matériaux difficiles à usiner

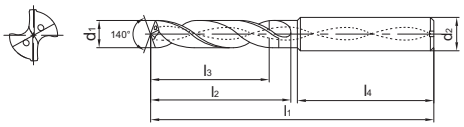
1534UD03C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG305
1534UD03C-1100	✲	11	12	102	55	40	45	●
1534UD03C-1150	✲	11,5	12	102	55	40	45	●
1534UD03C-1200	✲	12	12	102	55	40	45	●
1534UD03C-1250	✲	12,5	14	107	60	43	45	●
1534UD03C-1300	✲	13	14	107	60	43	45	●
1534UD03C-1350	✲	13,5	14	107	60	43	45	●
1534UD03C-1400	✲	14	14	107	60	43	45	●
1534UD03C-1450	✲	14,5	16	115	65	45	48	●
1534UD03C-1500	✲	15	16	115	65	45	48	●
1534UD03C-1550	✲	15,5	16	115	65	45	48	●
1534UD03C-1600	✲	16	16	115	65	45	48	●
1534UD03C-1650	✲	16,5	18	123	73	51	48	●
1534UD03C-1700	✲	17	18	123	73	51	48	●
1534UD03C-1750	✲	17,5	18	123	73	51	48	●
1534UD03C-1800	✲	18	18	123	73	51	48	●
1534UD03C-1850	✲	18,5	20	131	79	55	50	●
1534UD03C-1900	✲	19	20	131	79	55	50	●
1534UD03C-1950	✲	19,5	20	131	79	55	50	●
1534UD03C-2000	✲	20	20	131	79	55	50	●

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔			✔	

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

UD-Foret 5xD — Acier, acier inoxydable, matériaux difficiles à usiner

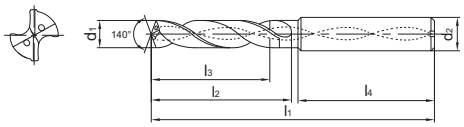
1536UD05C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG305
1536UD05C-0300	✻	3	6	66	28	23	36	●
1536UD05C-0310	✻	3,1	6	66	28	23	36	●
1536UD05C-0320	✻	3,2	6	66	28	23	36	○
1536UD05C-0330	✻	3,3	6	66	28	23	36	●
1536UD05C-0340	✻	3,4	6	66	28	23	36	●
1536UD05C-0350	✻	3,5	6	66	28	23	36	●
1536UD05C-0360	✻	3,6	6	66	28	23	36	○
1536UD05C-0370	✻	3,7	6	66	28	23	36	●
1536UD05C-0380	✻	3,8	6	74	36	29	36	●
1536UD05C-0390	✻	3,9	6	74	36	29	36	○
1536UD05C-0400	✻	4	6	74	36	29	36	●
1536UD05C-0410	✻	4,1	6	74	36	29	36	○
1536UD05C-0420	✻	4,2	6	74	36	29	36	●
1536UD05C-0430	✻	4,3	6	74	36	29	36	○
1536UD05C-0440	✻	4,4	6	74	36	29	36	○
1536UD05C-0450	✻	4,5	6	74	36	29	36	●
1536UD05C-0460	✻	4,6	6	74	36	29	36	○
1536UD05C-0465	✻	4,65	6	74	36	29	36	●
1536UD05C-0470	✻	4,7	6	74	36	29	36	○
1536UD05C-0480	✻	4,8	6	82	44	35	36	○
1536UD05C-0490	✻	4,9	6	82	44	35	36	○
1536UD05C-0500	✻	5	6	82	44	35	36	●
1536UD05C-0510	✻	5,1	6	82	44	35	36	●
1536UD05C-0520	✻	5,2	6	82	44	35	36	●
1536UD05C-0530	✻	5,3	6	82	44	35	36	○
1536UD05C-0540	✻	5,4	6	82	44	35	36	○
1536UD05C-0550	✻	5,5	6	82	44	35	36	●
1536UD05C-0560	✻	5,6	6	82	44	35	36	○
1536UD05C-0570	✻	5,7	6	82	44	35	36	○
1536UD05C-0580	✻	5,8	6	82	44	35	36	●
1536UD05C-0590	✻	5,9	6	82	44	35	36	○
1536UD05C-0600	✻	6	6	82	44	35	36	●
1536UD05C-0610	✻	6,1	8	91	53	43	36	○
1536UD05C-0620	✻	6,2	8	91	53	43	36	○
1536UD05C-0630	✻	6,3	8	91	53	43	36	○
1536UD05C-0640	✻	6,4	8	91	53	43	36	○
1536UD05C-0650	✻	6,5	8	91	53	43	36	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔			✔	

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Forets carbure monobloc Série UD

UD-Foret 5xD Acier, acier inoxydable, matériaux difficiles à usiner

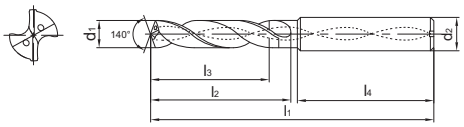
1536UD05C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG305
1536UD05C-0660	✲	6,6	8	91	53	43	36	○
1536UD05C-0670	✲	6,7	8	91	53	43	36	●
1536UD05C-0680	✲	6,8	8	91	53	43	36	●
1536UD05C-0690	✲	6,9	8	91	53	43	36	○
1536UD05C-0700	✲	7	8	91	53	43	36	●
1536UD05C-0710	✲	7,1	8	91	53	43	36	○
1536UD05C-0720	✲	7,2	8	91	53	43	36	○
1536UD05C-0730	✲	7,3	8	91	53	43	36	○
1536UD05C-0740	✲	7,4	8	91	53	43	36	●
1536UD05C-0750	✲	7,5	8	91	53	43	36	●
1536UD05C-0760	✲	7,6	8	91	53	43	36	○
1536UD05C-0770	✲	7,7	8	91	53	43	36	○
1536UD05C-0780	✲	7,8	8	91	53	43	36	○
1536UD05C-0790	✲	7,9	8	91	53	43	36	○
1536UD05C-0800	✲	8	8	91	53	43	36	●
1536UD05C-0810	✲	8,1	10	103	61	49	40	○
1536UD05C-0820	✲	8,2	10	103	61	49	40	○
1536UD05C-0830	✲	8,3	10	103	61	49	40	●
1536UD05C-0840	✲	8,4	10	103	61	49	40	●
1536UD05C-0850	✲	8,5	10	103	61	49	40	●
1536UD05C-0860	✲	8,6	10	103	61	49	40	○
1536UD05C-0870	✲	8,7	10	103	61	49	40	○
1536UD05C-0880	✲	8,8	10	103	61	49	40	○
1536UD05C-0890	✲	8,9	10	103	61	49	40	○
1536UD05C-0900	✲	9	10	103	61	49	40	●
1536UD05C-0910	✲	9,1	10	103	61	49	40	○
1536UD05C-0920	✲	9,2	10	103	61	49	40	○
1536UD05C-0930	✲	9,3	10	103	61	49	40	●
1536UD05C-0940	✲	9,4	10	103	61	49	40	○
1536UD05C-0950	✲	9,5	10	103	61	49	40	●
1536UD05C-0960	✲	9,6	10	103	61	49	40	○
1536UD05C-0970	✲	9,7	10	103	61	49	40	○
1536UD05C-0980	✲	9,8	10	103	61	49	40	○
1536UD05C-0990	✲	9,9	10	103	61	49	40	○
1536UD05C-1000	✲	10	10	103	61	49	40	●
1536UD05C-1020	✲	10,2	12	118	71	56	45	●
1536UD05C-1050	✲	10,5	12	118	71	56	45	●

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔			✔	

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

UD-Foret 5xD — Acier, acier inoxydable, matériaux difficiles à usiner

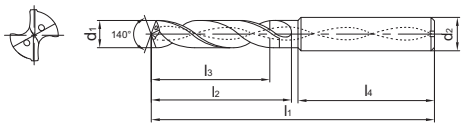
1536UD05C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG305
1536UD05C-1100	✻	11	12	118	71	56	45	●
1536UD05C-1150	✻	11,5	12	118	71	56	45	●
1536UD05C-1200	✻	12	12	118	71	56	45	●
1536UD05C-1250	✻	12,5	14	124	77	60	45	●
1536UD05C-1300	✻	13	14	124	77	60	45	●
1536UD05C-1350	✻	13,5	14	124	77	60	45	●
1536UD05C-1400	✻	14	14	124	77	60	45	●
1536UD05C-1450	✻	14,5	16	133	83	63	48	●
1536UD05C-1500	✻	15	16	133	83	63	48	●
1536UD05C-1550	✻	15,5	16	133	83	63	48	●
1536UD05C-1600	✻	16	16	133	83	63	48	●
1536UD05C-1650	✻	16,5	18	143	93	71	48	●
1536UD05C-1700	✻	17	18	143	93	71	48	●
1536UD05C-1750	✻	17,5	18	143	93	71	48	●
1536UD05C-1800	✻	18	18	143	93	71	48	●
1536UD05C-1850	✻	18,5	20	153	101	77	50	●
1536UD05C-1900	✻	19	20	153	101	77	50	●
1536UD05C-1950	✻	19,5	20	153	101	77	50	●
1536UD05C-2000	✻	20	20	153	101	77	50	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔			✔	

✔ Choix de base
✔ Alternative

Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

Notes

INFORMATIONS IMPORTANTES

Conseils d'utilisation pour la **série GD**

Calculatrice

Groupe ISO	Matière	Vitesse de coupe v_c (m/min)	Facteur d'avance* F_m
P	Acier faiblement allié	130	0,04
	Acier fortement allié	100	0,03
K	Fontes	160	0,04
	Fontes aciérées	130	0,03

Formule :	Avance par tour (F_n)	$D \times F_m$
Exemple :	Diamètre de perçage (D)	10 mm
	Matière	Acier fortement allié

F_n = 10 mm × 0,03 = 0,3 mm/tr

* Les vitesses d'avance spécifiées sont des valeurs maximales. Dans le cas de montages instables ou de machines moins puissantes, nous recommandons de réduire la vitesse d'avance d'environ 30% à partir d'un diamètre de perçage de Ø12 mm.



Fig.: **1536GD05C**

Forets carbure monobloc Série GD

GD-Foret 3xD Acier, fonte

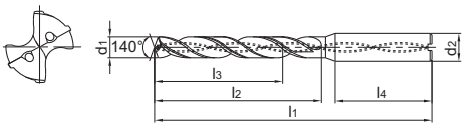
1534GD03C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG304
1534GD03C-0300	✲	3	6	62	20	14	36	●
1534GD03C-0310	✲	3,1	6	62	20	14	36	●
1534GD03C-0320	✲	3,2	6	62	20	14	36	●
1534GD03C-0330	✲	3,3	6	62	20	14	36	●
1534GD03C-0340	✲	3,4	6	62	20	14	36	●
1534GD03C-0350	✲	3,5	6	62	20	14	36	●
1534GD03C-0360	✲	3,6	6	62	20	14	36	●
1534GD03C-0370	✲	3,7	6	62	20	14	36	●
1534GD03C-0380	✲	3,8	6	66	24	17	36	●
1534GD03C-0390	✲	3,9	6	66	24	17	36	●
1534GD03C-0400	✲	4	6	66	24	17	36	●
1534GD03C-0410	✲	4,1	6	66	24	17	36	●
1534GD03C-0420	✲	4,2	6	66	24	17	36	●
1534GD03C-0430	✲	4,3	6	66	24	17	36	●
1534GD03C-0440	✲	4,4	6	66	24	17	36	●
1534GD03C-0450	✲	4,5	6	66	24	17	36	●
1534GD03C-0460	✲	4,6	6	66	24	17	36	●
1534GD03C-0465	✲	4,65	6	66	24	17	36	●
1534GD03C-0470	✲	4,7	6	66	24	17	36	●
1534GD03C-0480	✲	4,8	6	66	28	20	36	●
1534GD03C-0490	✲	4,9	6	66	28	20	36	●
1534GD03C-0500	✲	5	6	66	28	20	36	●
1534GD03C-0510	✲	5,1	6	66	28	20	36	●
1534GD03C-0520	✲	5,2	6	66	28	20	36	●
1534GD03C-0530	✲	5,3	6	66	28	20	36	●
1534GD03C-0540	✲	5,4	6	66	28	20	36	●
1534GD03C-0550	✲	5,5	6	66	28	20	36	●
1534GD03C-0560	✲	5,6	6	66	28	20	36	●
1534GD03C-0570	✲	5,7	6	66	28	20	36	●
1534GD03C-0580	✲	5,8	6	66	28	20	36	●
1534GD03C-0590	✲	5,9	6	66	28	20	36	●
1534GD03C-0600	✲	6	6	66	28	20	36	●
1534GD03C-0610	✲	6,1	8	79	34	24	36	●
1534GD03C-0620	✲	6,2	8	79	34	24	36	●
1534GD03C-0630	✲	6,3	8	79	34	24	36	●
1534GD03C-0640	✲	6,4	8	79	34	24	36	●
1534GD03C-0650	✲	6,5	8	79	34	24	36	●

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔		✔			

✔ Choix de base
✔ Alternative

Codification > C44 Instructions d'usinage > C201 Paramètres > C144 Commande d'outils spéciaux > C150

GD-Foret 3xD — Acier, fonte

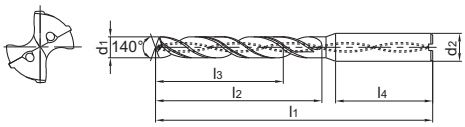
1534GD03C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG304
1534GD03C-0660	✻	6,6	8	79	34	24	36	●
1534GD03C-0670	✻	6,7	8	79	34	24	36	●
1534GD03C-0680	✻	6,8	8	79	34	24	36	●
1534GD03C-0690	✻	6,9	8	79	34	24	36	●
1534GD03C-0700	✻	7	8	79	34	24	36	●
1534GD03C-0710	✻	7,1	8	79	41	29	36	●
1534GD03C-0720	✻	7,2	8	79	41	29	36	●
1534GD03C-0730	✻	7,3	8	79	41	29	36	●
1534GD03C-0740	✻	7,4	8	79	41	29	36	●
1534GD03C-0750	✻	7,5	8	79	41	29	36	●
1534GD03C-0760	✻	7,6	8	79	41	29	36	●
1534GD03C-0770	✻	7,7	8	79	41	29	36	●
1534GD03C-0780	✻	7,8	8	79	41	29	36	●
1534GD03C-0790	✻	7,9	8	79	41	29	36	●
1534GD03C-0800	✻	8	8	79	41	29	36	●
1534GD03C-0810	✻	8,1	10	89	47	35	40	●
1534GD03C-0820	✻	8,2	10	89	47	35	40	●
1534GD03C-0830	✻	8,3	10	89	47	35	40	●
1534GD03C-0840	✻	8,4	10	89	47	35	40	●
1534GD03C-0850	✻	8,5	10	89	47	35	40	●
1534GD03C-0860	✻	8,6	10	89	47	35	40	●
1534GD03C-0870	✻	8,7	10	89	47	35	40	●
1534GD03C-0880	✻	8,8	10	89	47	35	40	●
1534GD03C-0890	✻	8,9	10	89	47	35	40	●
1534GD03C-0900	✻	9	10	89	47	35	40	●
1534GD03C-0910	✻	9,1	10	89	47	35	40	●
1534GD03C-0920	✻	9,2	10	89	47	35	40	●
1534GD03C-0930	✻	9,3	10	89	47	35	40	●
1534GD03C-0940	✻	9,4	10	89	47	35	40	●
1534GD03C-0950	✻	9,5	10	89	47	35	40	●
1534GD03C-0960	✻	9,6	10	89	47	35	40	●
1534GD03C-0970	✻	9,7	10	89	47	35	40	●
1534GD03C-0980	✻	9,8	10	89	47	35	40	●
1534GD03C-0990	✻	9,9	10	89	47	35	40	●
1534GD03C-1000	✻	10	10	89	47	35	40	●
1534GD03C-1020	✻	10,2	12	102	55	40	45	●
1534GD03C-1050	✻	10,5	12	102	55	40	45	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔		✔			

✔ Choix de base
✔ Alternative

Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

GD-Foret 3xD — Acier, fonte

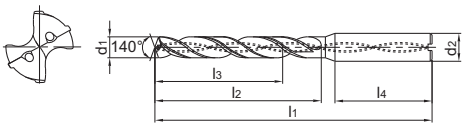
1534GD03C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG304
1534GD03C-1100	✲	11	12	102	55	40	45	●
1534GD03C-1140	✲	11,4	12	102	55	40	45	●
1534GD03C-1150	✲	11,5	12	102	55	40	45	●
1534GD03C-1200	✲	12	12	102	55	40	45	●
1534GD03C-1250	✲	12,5	14	107	60	43	45	●
1534GD03C-1300	✲	13	14	107	60	43	45	●
1534GD03C-1350	✲	13,5	14	107	60	43	45	●
1534GD03C-1400	✲	14	14	107	60	43	45	●
1534GD03C-1450	✲	14,5	16	115	65	45	48	●
1534GD03C-1500	✲	15	16	115	65	45	48	●
1534GD03C-1550	✲	15,5	16	115	65	45	48	●
1534GD03C-1600	✲	16	16	115	65	45	48	●
1534GD03C-1650	✲	16,5	18	123	73	51	48	●
1534GD03C-1700	✲	17	18	123	73	51	48	●
1534GD03C-1750	✲	17,5	18	123	73	51	48	●
1534GD03C-1800	✲	18	18	123	73	51	48	●
1534GD03C-1850	✲	18,5	20	131	79	55	50	●
1534GD03C-1900	✲	19	20	131	79	55	50	●
1534GD03C-1950	✲	19,5	20	131	79	55	50	●
1534GD03C-2000	✲	20	20	131	79	55	50	●

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔		✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

GD-Foret 5xD — Acier, fonte

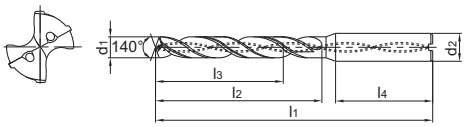
1536GD05C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG304
1536GD05C-0300	✻	3	6	66	28	23	36	●
1536GD05C-0310	✻	3,1	6	66	28	23	36	●
1536GD05C-0320	✻	3,2	6	66	28	23	36	●
1536GD05C-0330	✻	3,3	6	66	28	23	36	●
1536GD05C-0340	✻	3,4	6	66	28	23	36	●
1536GD05C-0350	✻	3,5	6	66	28	23	36	●
1536GD05C-0360	✻	3,6	6	66	28	23	36	●
1536GD05C-0370	✻	3,7	6	66	28	23	36	●
1536GD05C-0380	✻	3,8	6	74	36	29	36	●
1536GD05C-0390	✻	3,9	6	74	36	29	36	●
1536GD05C-0400	✻	4	6	74	36	29	36	●
1536GD05C-0410	✻	4,1	6	74	36	29	36	●
1536GD05C-0420	✻	4,2	6	74	36	29	36	●
1536GD05C-0430	✻	4,3	6	74	36	29	36	●
1536GD05C-0440	✻	4,4	6	74	36	29	36	●
1536GD05C-0450	✻	4,5	6	74	36	29	36	●
1536GD05C-0460	✻	4,6	6	74	36	29	36	●
1536GD05C-0465	✻	4,65	6	74	36	29	36	●
1536GD05C-0470	✻	4,7	6	74	36	29	36	●
1536GD05C-0480	✻	4,8	6	82	44	35	36	●
1536GD05C-0490	✻	4,9	6	82	44	35	36	●
1536GD05C-0500	✻	5	6	82	44	35	36	●
1536GD05C-0508	✻	5,08	6	82	44	35	36	○
1536GD05C-0510	✻	5,1	6	82	44	35	36	●
1536GD05C-0520	✻	5,2	6	82	44	35	36	●
1536GD05C-0530	✻	5,3	6	82	44	35	36	●
1536GD05C-0540	✻	5,4	6	82	44	35	36	●
1536GD05C-0550	✻	5,5	6	82	44	35	36	●
1536GD05C-0560	✻	5,6	6	82	44	35	36	●
1536GD05C-0570	✻	5,7	6	82	44	35	36	●
1536GD05C-0580	✻	5,8	6	82	44	35	36	●
1536GD05C-0590	✻	5,9	6	82	44	35	36	●
1536GD05C-0600	✻	6	6	82	44	35	36	●
1536GD05C-0610	✻	6,1	8	91	53	43	36	●
1536GD05C-0620	✻	6,2	8	91	53	43	36	●
1536GD05C-0630	✻	6,3	8	91	53	43	36	●
1536GD05C-0640	✻	6,4	8	91	53	43	36	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔		✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Forets carbure monobloc Série GD

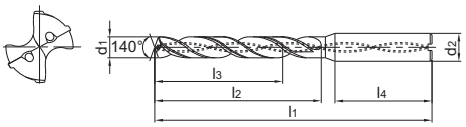
GD-Foret 5xD Acier, fonte

1536GD05C

– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG304
1536GD05C-0650	✲	6,5	8	91	53	43	36	●
1536GD05C-0660	✲	6,6	8	91	53	43	36	●
1536GD05C-0670	✲	6,7	8	91	53	43	36	●
1536GD05C-0680	✲	6,8	8	91	53	43	36	●
1536GD05C-0690	✲	6,9	8	91	53	43	36	●
1536GD05C-0700	✲	7	8	91	53	43	36	●
1536GD05C-0710	✲	7,1	8	91	53	43	36	●
1536GD05C-0720	✲	7,2	8	91	53	43	36	●
1536GD05C-0730	✲	7,3	8	91	53	43	36	●
1536GD05C-0740	✲	7,4	8	91	53	43	36	●
1536GD05C-0750	✲	7,5	8	91	53	43	36	●
1536GD05C-0760	✲	7,6	8	91	53	43	36	●
1536GD05C-0770	✲	7,7	8	91	53	43	36	●
1536GD05C-0780	✲	7,8	8	91	53	43	36	●
1536GD05C-0790	✲	7,9	8	91	53	43	36	●
1536GD05C-0800	✲	8	8	91	53	43	36	●
1536GD05C-0810	✲	8,1	10	103	61	49	40	●
1536GD05C-0820	✲	8,2	10	103	61	49	40	●
1536GD05C-0830	✲	8,3	10	103	61	49	40	●
1536GD05C-0840	✲	8,4	10	103	61	49	40	●
1536GD05C-0850	✲	8,5	10	103	61	49	40	●
1536GD05C-0860	✲	8,6	10	103	61	49	40	●
1536GD05C-0870	✲	8,7	10	103	61	49	40	●
1536GD05C-0880	✲	8,8	10	103	61	49	40	●
1536GD05C-0890	✲	8,9	10	103	61	49	40	●
1536GD05C-0900	✲	9	10	103	61	49	40	●
1536GD05C-0910	✲	9,1	10	103	61	49	40	●
1536GD05C-0920	✲	9,2	10	103	61	49	40	●
1536GD05C-0930	✲	9,3	10	103	61	49	40	●
1536GD05C-0940	✲	9,4	10	103	61	49	40	●
1536GD05C-0950	✲	9,5	10	103	61	49	40	●
1536GD05C-0960	✲	9,6	10	103	61	49	40	●
1536GD05C-0970	✲	9,7	10	103	61	49	40	●
1536GD05C-0980	✲	9,8	10	103	61	49	40	●
1536GD05C-0990	✲	9,9	10	103	61	49	40	●
1536GD05C-1000	✲	10	10	103	61	49	40	●
1536GD05C-1010	✲	10,1	12	118	71	56	45	●

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔		✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

GD-Foret 5xD — Acier, fonte

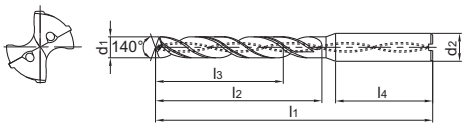
1536GD05C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG304
1536GD05C-1020	✻	10,2	12	118	71	56	45	●
1536GD05C-1030	✻	10,3	12	118	71	56	45	●
1536GD05C-1040	✻	10,4	12	118	71	56	45	●
1536GD05C-1050	✻	10,5	12	118	71	56	45	●
1536GD05C-1060	✻	10,6	12	118	71	56	45	●
1536GD05C-1070	✻	10,7	12	118	71	56	45	●
1536GD05C-1080	✻	10,8	12	118	71	56	45	●
1536GD05C-1090	✻	10,9	12	118	71	56	45	●
1536GD05C-1100	✻	11	12	118	71	56	45	●
1536GD05C-1130	✻	11,3	12	118	71	56	45	●
1536GD05C-1140	✻	11,4	12	118	71	56	45	●
1536GD05C-1150	✻	11,5	12	118	71	56	45	●
1536GD05C-1200	✻	12	12	118	71	56	45	●
1536GD05C-1250	✻	12,5	14	124	77	60	45	●
1536GD05C-1280	✻	12,8	14	124	77	60	45	●
1536GD05C-1300	✻	13	14	124	77	60	45	●
1536GD05C-1350	✻	13,5	14	124	77	60	45	●
1536GD05C-1380	✻	13,8	14	124	77	60	45	○
1536GD05C-1400	✻	14	14	124	77	60	45	●
1536GD05C-1450	✻	14,5	16	133	83	63	48	●
1536GD05C-1500	✻	15	16	133	83	63	48	●
1536GD05C-1510	✻	15,1	16	133	83	63	48	○
1536GD05C-1550	✻	15,5	16	133	83	63	48	●
1536GD05C-1600	✻	16	16	133	83	63	48	●
1536GD05C-1650	✻	16,5	18	143	93	71	48	●
1536GD05C-1700	✻	17	18	143	93	71	48	●
1536GD05C-1750	✻	17,5	18	143	93	71	48	●
1536GD05C-1800	✻	18	18	143	93	71	48	●
1536GD05C-1850	✻	18,5	20	153	101	77	50	●
1536GD05C-1900	✻	19	20	153	101	77	50	●
1536GD05C-1950	✻	19,5	20	153	101	77	50	●
1536GD05C-2000	✻	20	20	153	101	77	50	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔		✔			

✔ Choix de base
✔ Alternative

Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

Forets carbure monobloc Série GD

GD-Foret 5xD Acier, fonte

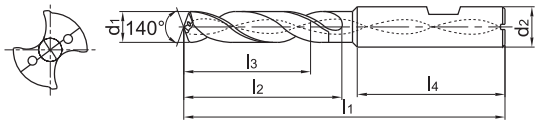
1636GD05C



– Type d'attachement : DIN 6535HB
– Sortie de lubrifiant centrale



Arrosage extérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG304
1636GD05C-0500	✲	5	6	82	44	35	36	●
1636GD05C-0550	✲	5,5	6	82	44	35	36	●
1636GD05C-0600	✲	6	6	82	44	35	36	●
1636GD05C-0650	✲	6,5	8	91	53	43	36	●
1636GD05C-0680	✲	6,8	8	91	53	43	36	●
1636GD05C-0700	✲	7	8	91	53	43	36	●
1636GD05C-0740	✲	7,4	8	91	53	43	36	●
1636GD05C-0750	✲	7,5	8	91	53	43	36	●
1636GD05C-0780	✲	7,8	8	91	53	43	36	●
1636GD05C-0800	✲	8	8	91	53	43	36	●
1636GD05C-0850	✲	8,5	10	103	61	49	40	●
1636GD05C-0880	✲	8,8	10	103	61	49	40	●
1636GD05C-0900	✲	9	10	103	61	49	40	●
1636GD05C-0930	✲	9,3	10	103	61	49	40	●
1636GD05C-0950	✲	9,5	10	103	61	49	40	●
1636GD05C-0980	✲	9,8	10	103	61	49	40	●
1636GD05C-1000	✲	10	10	103	61	49	40	●
1636GD05C-1020	✲	10,2	12	118	71	56	45	●
1636GD05C-1050	✲	10,5	12	118	71	56	45	●
1636GD05C-1080	✲	10,8	12	118	71	56	45	●
1636GD05C-1100	✲	11	12	118	71	56	45	●
1636GD05C-1150	✲	11,5	12	118	71	56	45	●
1636GD05C-1180	✲	11,8	12	118	71	56	45	●
1636GD05C-1200	✲	12	12	118	71	56	45	●
1636GD05C-1250	✲	12,5	14	124	77	60	45	●
1636GD05C-1280	✲	12,8	14	124	77	60	45	○
1636GD05C-1300	✲	13	14	124	77	60	45	●
1636GD05C-1350	✲	13,5	14	124	77	60	45	●
1636GD05C-1380	✲	13,8	14	124	77	60	45	●
1636GD05C-1400	✲	14	14	124	77	60	45	●
1636GD05C-1450	✲	14,5	16	133	83	63	48	●
1636GD05C-1480	✲	14,8	16	133	83	63	48	●
1636GD05C-1500	✲	15	16	133	83	63	48	●
1636GD05C-1550	✲	15,5	16	133	83	63	48	●
1636GD05C-1580	✲	15,8	16	133	83	63	48	●
1636GD05C-1600	✲	16	16	133	83	63	48	●
1636GD05C-1650	✲	16,5	18	143	93	71	48	●

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔		✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

GD-Foret 5xD — Acier, fonte

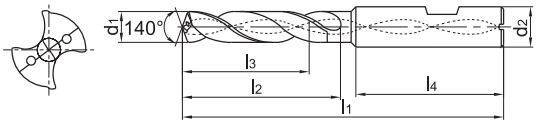
1636GD05C



– Type d'attachement : DIN 6535HB
– Sortie de lubrifiant centrale



Arrosage extérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG304
1636GD05C-1680	✻	16,8	18	143	93	71	48	○
1636GD05C-1700	✻	17	18	143	93	71	48	●
1636GD05C-1750	✻	17,5	18	143	93	71	48	●
1636GD05C-1780	✻	17,8	18	143	93	71	48	●
1636GD05C-1800	✻	18	18	143	93	71	48	●
1636GD05C-1850	✻	18,5	20	153	101	77	50	●
1636GD05C-1880	✻	18,8	20	153	101	77	50	○
1636GD05C-1900	✻	19	20	153	101	77	50	●
1636GD05C-1950	✻	19,5	20	153	101	77	50	●
1636GD05C-1980	✻	19,8	20	153	101	77	50	●
1636GD05C-2000	✻	20	20	153	101	77	50	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔		✔			

✔ Choix de base
✔ Alternative

A Tournage
B Fraisage
C Perçage
D Informations techniques
E Index

Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

Notes

SH-Foret 3xD Matériaux durs

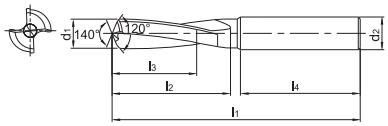
1534SH03



– Type d'attachement : DIN 6535HA



Arrosage extérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	KDG303
1534SH03-0300		3	6	62	20	14	36	○
1534SH03-0330		3,3	6	62	20	14	36	●
1534SH03-0400		4	6	66	24	17	36	○
1534SH03-0420		4,2	6	66	24	17	36	●
1534SH03-0500		5	6	66	28	20	36	○
1534SH03-0600		6	6	66	28	20	36	○
1534SH03-0675		6,75	8	79	34	24	36	○
1534SH03-0700		7	8	79	34	24	36	○
1534SH03-0800		8	8	79	41	29	36	○
1534SH03-0850		8,5	10	89	47	35	40	○
1534SH03-0900		9	10	89	47	35	40	○
1534SH03-1000		10	10	89	47	35	40	○
1534SH03-1025		10,25	12	102	55	40	45	○
1534SH03-1050		10,5	12	102	55	40	45	○
1534SH03-1200		12	12	102	55	40	45	○
1534SH03-1250		12,5	14	107	60	43	45	○
1534SH03-1400		14	14	107	60	43	45	○
1534SH03-1450		14,5	16	115	65	45	48	○
1534SH03-1600		16	16	115	65	45	48	○
1534SH03-2000		20	20	131	79	53	50	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
					✔

✔ Choix de base

✔ Alternative

Codification C44 Instructions d'usinage C201 Paramètres C144 Commande d'outils spéciaux C150

Notes

Foret SC 3xD — Métaux non-ferreux

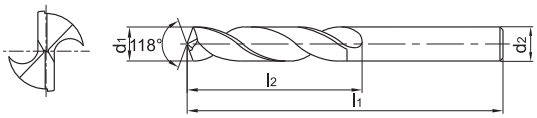
1105SC03



– Attachement cylindrique, standard usine ZCC-CT



Arrosage extérieur



Article	✻	Dimensions (mm)				Nuance
		d_1 (h8)	d_2 (h7)	l_1	l_2	YK20F
1105SC03-0200		2	2	38	12	○
1105SC03-0250		2,5	2,5	43	14	○
1105SC03-0280		2,8	2,8	46	16	○
1105SC03-0300		3	3	46	16	○
1105SC03-0310		3,1	3,1	49	18	○
1105SC03-0320		3,2	3,2	49	18	○
1105SC03-0330		3,3	3,3	49	18	○
1105SC03-0340		3,4	3,4	52	20	○
1105SC03-0350		3,5	3,5	52	20	○
1105SC03-0360		3,6	3,6	52	20	○
1105SC03-0370		3,7	3,7	52	20	○
1105SC03-0380		3,8	3,8	55	22	○
1105SC03-0390		3,9	3,9	55	22	○
1105SC03-0400		4	4	55	22	○
1105SC03-0410		4,1	4,1	55	22	○
1105SC03-0420		4,2	4,2	55	22	○
1105SC03-0430		4,3	4,3	58	24	○
1105SC03-0440		4,4	4,4	58	24	○
1105SC03-0450		4,5	4,5	58	24	○
1105SC03-0460		4,6	4,6	58	24	○
1105SC03-0470		4,7	4,7	58	24	○
1105SC03-0480		4,8	4,8	62	26	○
1105SC03-0490		4,9	4,9	62	26	○
1105SC03-0500		5	5	62	26	○
1105SC03-0510		5,1	5,1	62	26	○
1105SC03-0520		5,2	5,2	62	26	○
1105SC03-0530		5,3	5,3	62	26	○
1105SC03-0540		5,4	5,4	66	28	○
1105SC03-0550		5,5	5,5	66	28	○
1105SC03-0560		5,6	5,6	66	28	○
1105SC03-0570		5,7	5,7	66	28	○
1105SC03-0580		5,8	5,8	66	28	○
1105SC03-0590		5,9	5,9	66	28	○
1105SC03-0600		6	6	66	28	○
1105SC03-0610		6,1	6,1	70	31	○
1105SC03-0620		6,2	6,2	70	31	○
1105SC03-0630		6,3	6,3	70	31	○
1105SC03-0640		6,4	6,4	70	31	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
			✔		

✔ Choix de base

✔ Alternative

Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

Forets carbure monobloc Série SC

Foret SC 3xD — Métaux non-ferreux

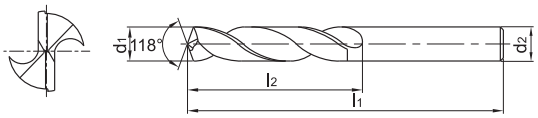
1105SC03



– Attachement cylindrique, standard usine ZCC-CT



Arrosage extérieur



Article	✻	Dimensions (mm)				Nuance
		d_1 (h8)	d_2 (h7)	l_1	l_2	YK20F
1105SC03-0650		6,5	6,5	70	31	○
1105SC03-0660		6,6	6,6	70	31	○
1105SC03-0670		6,7	6,7	70	31	○
1105SC03-0680		6,8	6,8	74	34	○
1105SC03-0690		6,9	6,9	74	34	○
1105SC03-0700		7	7	74	34	○
1105SC03-0710		7,1	7,1	74	34	○
1105SC03-0720		7,2	7,2	74	34	○
1105SC03-0730		7,3	7,3	74	34	○
1105SC03-0740		7,4	7,4	74	34	○
1105SC03-0750		7,5	7,5	74	34	○
1105SC03-0760		7,6	7,6	79	37	○
1105SC03-0770		7,7	7,7	79	37	○
1105SC03-0780		7,8	7,8	79	37	○
1105SC03-0790		7,9	7,9	79	37	○
1105SC03-0800		8	8	79	37	○
1105SC03-0810		8,1	8,1	79	37	○
1105SC03-0820		8,2	8,2	79	37	○
1105SC03-0830		8,3	8,3	79	37	○
1105SC03-0840		8,4	8,4	79	37	○
1105SC03-0850		8,5	8,5	79	37	○
1105SC03-0860		8,6	8,6	84	40	○
1105SC03-0870		8,7	8,7	84	40	○
1105SC03-0880		8,8	8,8	84	40	○
1105SC03-0890		8,9	8,9	84	40	○
1105SC03-0900		9	9	84	40	○
1105SC03-0910		9,1	9,1	84	40	○
1105SC03-0920		9,2	9,2	84	40	○
1105SC03-0930		9,3	9,3	84	40	○
1105SC03-0940		9,4	9,4	84	40	○
1105SC03-0950		9,5	9,5	84	40	○
1105SC03-0960		9,6	9,6	89	43	○
1105SC03-0970		9,7	9,7	89	43	○
1105SC03-0980		9,8	9,8	89	43	○
1105SC03-0990		9,9	9,9	89	43	○
1105SC03-1000		10	10	89	43	○
1105SC03-1010		10,1	10,1	89	43	○
1105SC03-1020		10,2	10,2	89	43	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
			✔		

✔ Choix de base

✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret SC 3xD — Métaux non-ferreux

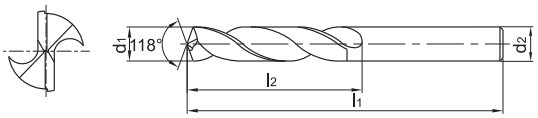
1105SC03



– Attachement cylindrique, standard usine ZCC-CT



Arrosage extérieur



Article	✻	Dimensions (mm)				Nuance
		d_1 (h8)	d_2 (h7)	l_1	l_2	YK20F
1105SC03-1040		10,4	10,4	89	43	○
1105SC03-1050		10,5	10,5	89	43	○
1105SC03-1070		10,7	10,7	95	47	○
1105SC03-1080		10,8	10,8	95	47	○
1105SC03-1100		11	11	95	47	○
1105SC03-1150		11,5	11,5	95	47	○
1105SC03-1200		12	12	102	51	○
1105SC03-1250		12,5	12,5	102	51	○
1105SC03-1280		12,8	12,8	102	51	○
1105SC03-1300		13	13	102	51	○
1105SC03-1310		13,1	13,1	102	51	○
1105SC03-1350		13,5	13,5	107	54	○
1105SC03-1400		14	14	107	54	○
1105SC03-1430		14,3	14,3	111	56	○
1105SC03-1450		14,5	14,5	111	56	○
1105SC03-1500		15	15	111	56	○
1105SC03-1600		16	16	115	58	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
			✔		

✔ Choix de base

✔ Alternative

Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

Forets carbure monobloc Série SC

Foret SC 5xD — Métaux non-ferreux

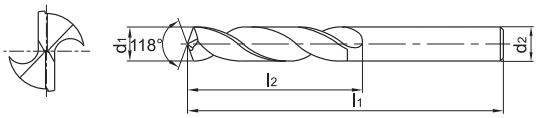
1101SC05



– Attachement cylindrique, standard usine ZCC-CT



Arrosage extérieur



Article	✻	Dimensions (mm)				Nuance
		d_1 (h8)	d_2 (h7)	l_1	l_2	YK20F
1101SC05-0200		2	2	49	24	○
1101SC05-0250		2,5	2,5	57	30	○
1101SC05-0280		2,8	2,8	61	33	○
1101SC05-0300		3	3	61	33	○
1101SC05-0350		3,5	3,5	70	39	○
1101SC05-0380		3,8	3,8	75	43	○
1101SC05-0400		4	4	75	43	○
1101SC05-0420		4,2	4,2	75	43	○
1101SC05-0450		4,5	4,5	80	47	○
1101SC05-0480		4,8	4,8	86	52	○
1101SC05-0500		5	5	86	52	○
1101SC05-0550		5,5	5,5	93	57	○
1101SC05-0580		5,8	5,8	93	57	○
1101SC05-0600		6	6	93	57	○
1101SC05-0650		6,5	6,5	101	63	○
1101SC05-0680		6,8	6,8	109	69	○
1101SC05-0700		7	7	109	69	○
1101SC05-0750		7,5	7,5	109	69	○
1101SC05-0780		7,8	7,8	117	75	○
1101SC05-0800		8	8	117	75	○
1101SC05-0850		8,5	8,5	117	75	○
1101SC05-0880		8,8	8,8	125	81	○
1101SC05-0900		9	9	125	81	○
1101SC05-0950		9,5	9,5	125	81	○
1101SC05-0980		9,8	9,8	133	87	○
1101SC05-1000		10	10	133	87	○
1101SC05-1050		10,5	10,5	133	87	○
1101SC05-1080		10,8	10,8	142	94	○
1101SC05-1100		11	11	142	94	○
1101SC05-1150		11,5	11,5	142	94	○
1101SC05-1200		12	12	151	101	○
1101SC05-1250		12,5	12,5	151	101	○
1101SC05-1300		13	13	151	101	○
1101SC05-1350		13,5	13,5	160	108	○
1101SC05-1400		14	14	160	108	○
1101SC05-1450		14,5	14,5	169	114	○
1101SC05-1500		15	15	169	114	○
1101SC05-1550		15,5	15,5	178	120	○
1101SC05-1600		16	16	178	120	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
			✔		

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret PA 3xD — Métaux non-ferreux

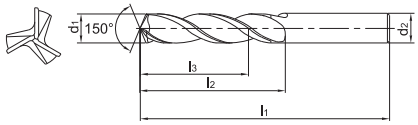
1165PA03



– Attachement cylindrique, standard usine ZCC-CT



Arrosage extérieur



Article	✻	Dimensions (mm)					Nuance	
		d_1 (h7)	d_2 (h7)	l_1	l_2	l_3	KDG303	YK30F
1165PA03-0300		3	3	46	16	12	●	●
1165PA03-0310		3,1	3,1	49	18	14	○	○
1165PA03-0320		3,2	3,2	49	18	14	○	●
1165PA03-0330		3,3	3,3	49	18	14	○	○
1165PA03-0340		3,4	3,4	52	20	15	○	●
1165PA03-0350		3,5	3,5	52	20	15	○	○
1165PA03-0360		3,6	3,6	52	20	15	○	○
1165PA03-0370		3,7	3,7	52	20	15	○	○
1165PA03-0380		3,8	3,8	55	22	17	○	○
1165PA03-0390		3,9	3,9	55	22	17	○	○
1165PA03-0400		4	4	55	22	17	○	○
1165PA03-0410		4,1	4,1	55	22	17	○	○
1165PA03-0420		4,2	4,2	55	22	17	○	○
1165PA03-0430		4,3	4,3	58	24	18	○	○
1165PA03-0440		4,4	4,4	58	24	18	○	○
1165PA03-0450		4,5	4,5	58	24	18	○	○
1165PA03-0460		4,6	4,6	58	24	18	○	○
1165PA03-0470		4,7	4,7	58	24	18	○	○
1165PA03-0480		4,8	4,8	62	26	20	○	○
1165PA03-0490		4,9	4,9	62	26	20	○	○
1165PA03-0500		5	5	62	26	20	○	○
1165PA03-0510		5,1	5,1	62	26	20	○	○
1165PA03-0520		5,2	5,2	62	26	20	○	○
1165PA03-0530		5,3	5,3	62	26	20	○	○
1165PA03-0540		5,4	5,4	66	28	21	○	○
1165PA03-0550		5,5	5,5	66	28	21	○	○
1165PA03-0560		5,6	5,6	66	28	21	○	○
1165PA03-0570		5,7	5,7	66	28	21	○	○
1165PA03-0580		5,8	5,8	66	28	21	○	○
1165PA03-0590		5,9	5,9	66	28	21	○	○
1165PA03-0600		6	6	66	28	21	○	○
1165PA03-0610		6,1	6,1	70	31	23	○	○
1165PA03-0620		6,2	6,2	70	31	23	○	○
1165PA03-0630		6,3	6,3	70	31	23	○	○
1165PA03-0640		6,4	6,4	70	31	23	○	○
1165PA03-0650		6,5	6,5	70	31	23	○	○
1165PA03-0660		6,6	6,6	70	31	23	○	●
1165PA03-0670		6,7	6,7	70	31	23	○	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
			✔		

✔ Choix de base

✔ Alternative

Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

Forets carbure monobloc Série PA

Foret PA 3xD — Métaux non-ferreux

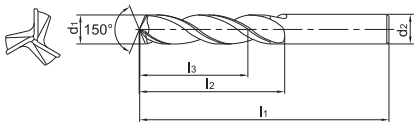
1165PA03



– Attachement cylindrique, standard usine ZCC-CT



Arrosage extérieur



Article	✻	Dimensions (mm)					Nuance	
		d_1 (h7)	d_2 (h7)	l_1	l_2	l_3	KDG303	YK30F
1165PA03-0680		6,8	6,8	74	34	25	○	○
1165PA03-0690		6,9	6,9	74	34	25	○	○
1165PA03-0700		7	7	74	34	25	○	○
1165PA03-0710		7,1	7,1	74	34	25	○	○
1165PA03-0720		7,2	7,2	74	34	25	○	○
1165PA03-0730		7,3	7,3	74	34	25	○	○
1165PA03-0740		7,4	7,4	74	34	25	○	○
1165PA03-0750		7,5	7,5	74	34	25	○	○
1165PA03-0760		7,6	7,6	79	37	27	○	○
1165PA03-0770		7,7	7,7	79	37	27	○	○
1165PA03-0780		7,8	7,8	79	37	27	○	○
1165PA03-0790		7,9	7,9	79	37	27	○	○
1165PA03-0800		8	8	79	37	27	○	○
1165PA03-0810		8,1	8,1	79	37	27	○	○
1165PA03-0820		8,2	8,2	79	37	27	○	○
1165PA03-0830		8,3	8,3	79	37	27	○	○
1165PA03-0840		8,4	8,4	79	37	27	○	○
1165PA03-0850		8,5	8,5	79	37	27	○	○
1165PA03-0860		8,6	8,6	84	40	29	○	●
1165PA03-0870		8,7	8,7	84	40	29	○	○
1165PA03-0880		8,8	8,8	84	40	29	○	○
1165PA03-0890		8,9	8,9	84	40	29	○	○
1165PA03-0900		9	9	84	40	29	○	○
1165PA03-0910		9,1	9,1	84	40	29	○	○
1165PA03-0920		9,2	9,2	84	40	29	○	○
1165PA03-0930		9,3	9,3	84	40	29	○	○
1165PA03-0940		9,4	9,4	84	40	29	○	○
1165PA03-0950		9,5	9,5	84	40	29	○	○
1165PA03-0960		9,6	9,6	89	43	31	○	○
1165PA03-0970		9,7	9,7	89	43	31	○	○
1165PA03-0980		9,8	9,8	89	43	31	○	○
1165PA03-0990		9,9	9,9	89	43	31	○	○
1165PA03-1000		10	10	89	43	31	○	○
1165PA03-1010		10,1	10,1	89	43	31	○	○
1165PA03-1020		10,2	10,2	89	43	31	○	○
1165PA03-1030		10,3	10,3	89	43	31	○	○
1165PA03-1050		10,5	10,5	89	43	31	○	○
1165PA03-1100		11	11	95	47	33	○	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
			✔		

✔ Choix de base

✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret PA 3xD — Métaux non-ferreux

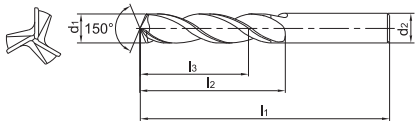
1165PA03



– Attachement cylindrique, standard usine ZCC-CT



Arrosage extérieur



Article	✻	Dimensions (mm)					Nuance	
		d_1 (h7)	d_2 (h7)	l_1	l_2	l_3	KDG303	YK30F
1165PA03-1120		11,2	11,2	95	47	33	○	○
1165PA03-1150		11,5	11,5	95	47	33	○	○
1165PA03-1180		11,8	11,8	95	47	33	○	○
1165PA03-1200		12	12	102	51	35	○	○
1165PA03-1210		12,1	12,1	102	51	35	○	○
1165PA03-1250		12,5	12,5	102	51	35	○	○
1165PA03-1300		13	13	102	51	35	○	○
1165PA03-1350		13,5	13,5	107	54	37	○	○
1165PA03-1400		14	14	107	54	37	○	○
1165PA03-1450		14,5	14,5	111	56	38	○	○
1165PA03-1500		15	15	111	56	38	○	○
1165PA03-1550		15,5	15,5	115	58	38	○	○
1165PA03-1600		16	16	115	58	38	○	○
1165PA03-1650		16,5	16,5	119	60	39	○	○
1165PA03-1700		17	17	119	60	39	○	○
1165PA03-1750		17,5	17,5	123	62	40	○	○
1165PA03-1800		18	18	123	62	40	○	○
1165PA03-1850		18,5	18,5	127	64	41	○	○
1165PA03-1900		19	19	127	64	41	○	○
1165PA03-1950		19,5	19,5	131	66	42	○	○
1165PA03-2000		20	20	131	66	42	○	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
			✔		

✔ Choix de base

✔ Alternative

Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

Notes

Foret PC 5xD — Fonte

1576PC05/1576PC05C



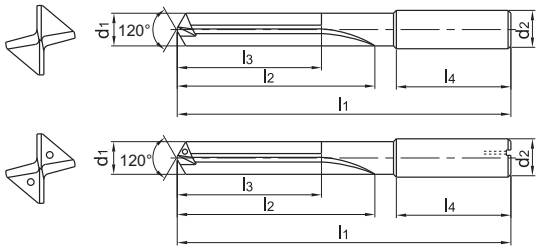
– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Arrosage intérieur



Article	✻	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	YK20F
1576PC05-0400		4	6	74	36	29	36	○
1576PC05C-0400	✻	4	6	74	36	29	36	●
1576PC05-0420		4,2	6	74	36	29	36	○
1576PC05C-0420	✻	4,2	6	74	36	29	36	●
1576PC05-0500		5	6	82	44	35	36	○
1576PC05C-0500	✻	5	6	82	44	35	36	●
1576PC05-0600		6	6	82	44	35	36	○
1576PC05C-0600	✻	6	6	82	44	35	36	●
1576PC05-0675		6,75	8	91	53	43	36	○
1576PC05C-0675	✻	6,75	8	91	53	43	36	●
1576PC05-0700		7	8	91	53	43	36	○
1576PC05C-0700	✻	7	8	91	53	43	36	●
1576PC05-0800		8	8	91	53	43	36	○
1576PC05C-0800	✻	8	8	91	53	43	36	●
1576PC05-0850		8,5	10	103	61	49	40	○
1576PC05C-0850	✻	8,5	10	103	61	49	40	●
1576PC05-0900		9	10	103	61	49	40	○
1576PC05C-0900	✻	9	10	103	61	49	40	●
1576PC05-1000		10	10	103	61	49	40	○
1576PC05C-1000	✻	10	10	103	61	49	40	●
1576PC05-1025		10,25	12	118	71	56	45	○
1576PC05C-1025	✻	10,25	12	118	71	56	45	●
1576PC05-1100		11	12	118	71	56	45	○
1576PC05C-1100	✻	11	12	118	71	56	45	●
1576PC05-1200		12	12	118	71	56	45	○
1576PC05C-1200	✻	12	12	118	71	56	45	●
1576PC05-1300		13	14	124	77	60	45	○
1576PC05C-1300	✻	13	14	124	77	60	45	●
1576PC05-1400		14	14	124	77	60	45	○
1576PC05C-1400	✻	14	14	124	77	60	45	●
1576PC05-1500		15	16	133	83	63	48	○
1576PC05C-1500	✻	15	16	133	83	63	48	○
1576PC05-1550		15,5	16	133	83	63	48	○

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
		✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret PC 5xD — Fonte

1576PC05/1576PC05C

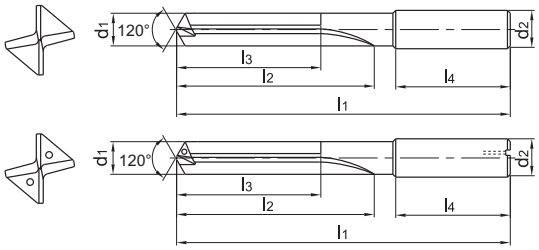
– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage extérieur



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	YK20F
1576PC05C-1550	✲	15,5	16	133	83	63	48	○
1576PC05-1600		16	16	133	83	63	48	○
1576PC05C-1600	✲	16	16	133	83	63	48	○
1576PC05-1700		17	18	143	93	71	48	○
1576PC05C-1700	✲	17	18	143	93	71	48	○
1576PC05-1750		17,5	18	143	93	71	48	○
1576PC05C-1750	✲	17,5	18	143	93	71	48	○
1576PC05-1800		18	18	143	93	71	48	○
1576PC05C-1800	✲	18	18	143	93	71	48	●
1576PC05-1950		19,5	20	153	101	77	50	○
1576PC05C-1950	✲	19,5	20	153	101	77	50	○
1576PC05-2000		20	20	153	101	77	50	○
1576PC05C-2000	✲	20	20	153	101	77	50	○

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
		✔			

✔ Choix de base
✔ Alternative

Codification > C44 | Instructions d'usinage > C201 | Paramètres > C144 | Commande d'outils spéciaux > C150

Foret PC 15xD — Fonte

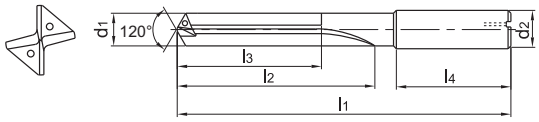
1579PC15C



– Type d'attachement : DIN 6535HA
– Sortie de lubrifiant centrale



Arrosage intérieur



Article	✲	Dimensions (mm)						Nuance
		d_1 (m7)	d_2 (h6)	l_1	l_2	l_3	l_4	YK20F
1579PC15C-0500	✲	5	6	145	105	96	36	○
1579PC15C-0600	✲	6	6	145	105	96	36	○
1579PC15C-0800	✲	8	8	180	137	127	36	○
1579PC15C-0900	✲	9	10	217	170	158	40	○
1579PC15C-1000	✲	10	10	217	170	158	40	○
1579PC15C-1100	✲	11	12	258	205	190	45	○
1579PC15C-1200	✲	12	12	258	205	190	45	○
1579PC15C-1400	✲	14	14	290	236	219	45	○

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
		✔			

✔ Choix de base
✔ Alternative

A Tournage
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D Informations techniques
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Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

Notes

Foret SC – foret à centrer NC 90° Usinage général

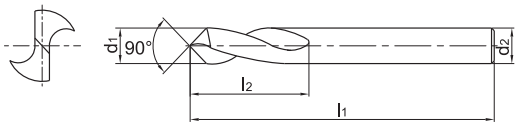
1143SC90



– Attachement cylindrique, standard usine ZCC-CT



Arrosage extérieur



Article	✻	Dimensions (mm)				Nuance	
		d_1 (h6)	d_2 (h6)	l_1	l_2	KDG303	YK30F
1143SC90-0500		5	5	62	10	●	
1143SC90-0600		6	6	66	15	●	
1143SC90-0800		8	8	79	17	●	
1143SC90-1000		10	10	89	20	●	
1143SC90-1200		12	12	102	25	●	
1143SC90-1400		14	14	107	30	●	
1143SC90-1600		16	16	115	35	●	
1143SC90-2000		20	20	131	40	●	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔	✔		

✔ Choix de base

✔ Alternative

A Tournage
B Fraisage
C Perçage
D Informations techniques
E Index

Codification C44 | Instructions d'usinage C201 | Paramètres C144 | Commande d'outils spéciaux C150

SC-Foret – foret à centrer NC 120° Usinage général

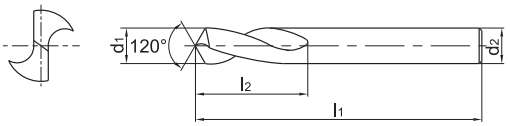
1143SC120



– Attachement cylindrique, standard usine ZCC-CT



Arrosage extérieur



Article	✻	Dimensions (mm)				Nuance
		d_1 (h6)	d_2 (h6)	l_1	l_2	KDG303
1143SC120-0400		4	4	62	10	○
1143SC120-0500		5	5	62	10	●
1143SC120-0600		6	6	66	15	●
1143SC120-0800		8	8	79	17	●
1143SC120-1000		10	10	89	20	●
1143SC120-1200		12	12	102	25	●
1143SC120-1400		14	14	107	30	●
1143SC120-1600		16	16	115	35	●
1143SC120-2000		20	20	131	42	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔	✔		

✔ Choix de base
✔ Alternative

Codification > C44 Instructions d'usinage > C201 Paramètres > C144 Commande d'outils spéciaux > C150

SC-Foret – foret à centrer NC 142° Usinage général

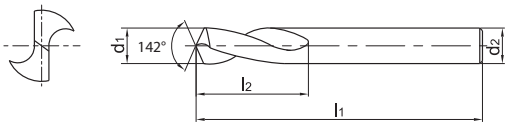
1143SC142



– Attachement cylindrique, standard usine ZCC-CT



Arrosage extérieur



Article	✻	Dimensions (mm)				Nuance
		d_1 (h6)	d_2 (h6)	l_1	l_2	KDG303
1143SC142-0500		5	5	62	10	●
1143SC142-0600		6	6	66	15	●
1143SC142-0800		8	8	79	17	●
1143SC142-1000		10	10	89	20	●
1143SC142-1200		12	12	102	25	●
1143SC142-1400		14	14	107	30	●
1143SC142-1600		16	16	115	35	●
1143SC142-2000		20	20	131	42	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔	✔	✔		

✔ Choix de base

✔ Alternative

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Codification C44 Instructions d'usinage C201 Paramètres C144 Commande d'outils spéciaux C150

Guide des données de coupe recommandées – Forets carbure monobloc

Solid carbide drills

Material group		Composition / structure / heat treatment		Brinell hardness HB	Machining group	Starting values for cutting speed v_c [m/min] SU Series 3-5xD KDG 303 Coolant			SU-Drill 8xD KDG 303 Coolant			SU Step Drill 3xD KDG 303 Coolant		
						internal	external	f-group	internal	external	f-group	internal	external	f-group
P	Unalloyed steel	ca. 0,15 % C	annealed	125	1	150	135	8	135	125	7	150	135	8
		ca. 0,45 % C	annealed	190	2	130	120	8	120	110	7	130	120	8
		ca. 0,45 % C	tempered	250	3	120	110	6	110	100	5	120	110	6
		ca. 0,75 % C	annealed	270	4	110	100	6	100	90	5	110	100	6
		ca. 0,75 % C	tempered	300	5	100	90	6	90	85	5	100	90	6
	Low-alloyed steel		annealed	180	6	130	120	8	120	110	7	130	120	8
			tempered	275	7	110	100	6	100	90	5	110	100	6
			tempered	300	8	100	90	6	90	85	5	100	90	6
			tempered	350	9	90	85	6	85	80	5	90	85	6
	High-alloyed steel and high-alloyed tool steel		annealed	200	10	120	110	8	110	100	7	120	110	8
			hardened and tempered	325	11	100	90	6	90	85	5	100	90	6
M	Stainless steel	ferritic/martensitic	annealed	200	12	80	75	5	75	70	5	80	75	5
		martensitic	tempered	240	13	55	50	5	50	45	5	55	50	5
		austenitic	quench hardened	180	14	60	55	5	55	50	5	60	55	5
		austenitic-ferritic		230	15	50	45	5	45	45	5	50	45	5
K	Grey cast iron	perlitic/ferritic		180	16	135	125	8	125	115	7	135	125	8
		perlitic (martensitic)		260	17	110	100	8	100	90	7	110	100	8
	Cast iron with spheroidal graphite	ferritic		160	18	120	110	8	110	100	7	120	110	8
		perlitic		250	19	80	75	8	75	70	7	80	75	8
	Malleable cast iron	ferritic		130	20	130	120	8	120	110	7	130	120	8
		perlitic		230	21	80	75	8	75	70	7	80	75	8
N	Aluminium wrought alloys	cannot be hardened		60	22									
		hardenable	hardened	100	23									
	Cast aluminium alloys	≤ 12% Si, cannot be hardened		75	24									
		≤ 12% Si, hardenable	hardened	90	25									
		> 12% Si, cannot be hardened		130	26									
	Copper and copper alloys (bronze/brass)	machining steel, PB> 1%		110	27									
		CuZn, CuSnZn		90	28									
		CuSn, Pb-free copper, electrolytic copper		100	29									
S	Heat-resistant alloys	Fe-based alloys	annealed	200	30									
			hardened	280	31									
		Ni or Co bass	annealed	250	32									
			hardened	350	33									
			cast	320	34									
	Titanium alloys	pure titanium		R_m 400	35									
		α and β alloys	hardened	R_m 1050	36									
H	Hardened steel		hardened and tempered	55 HRC	37									
			hardened and tempered	60 HRC	38									
	Hard cast iron		cast	400	39									
	Hardened cast iron		hardened and tempered	55 HRC	40									
X	Non-metallic materials	Thermoplasts			41									
		Thermosetting plastics			42									
		Plastic, glass-fibre reinforced GFRP			43									
		Plastic, carbon fibre reinforced CFRP			44									
		Graphite			45									
		Wood			46									

Note: The given cutting values are guide values, which were determined under ideal conditions.
The values have to be adapted in individual cases.
With hole depths of 5xD adjust the cutting data accordingly to the application.
f-group = feed rate recommendations on page C126.
For examples of material for cutting tool groups view page D22.

Recommend feed rate

Solid carbide drilling

4

5

f-group	Feed rate [mm]																			
	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8	Ø9	Ø10	Ø11	Ø12	Ø13	Ø14	Ø15	Ø16	Ø17	Ø18	Ø19	Ø20
1	0,01	0,02	0,03	0,04	0,04	0,05	0,05	0,06	0,06	0,06	0,07	0,07	0,08	0,08	0,09	0,09	0,09	0,09	0,10	0,10
2	0,01	0,02	0,03	0,04	0,05	0,06	0,06	0,06	0,07	0,07	0,08	0,09	0,09	0,09	0,10	0,10	0,10	0,11	0,11	0,11
3	0,01	0,02	0,04	0,05	0,06	0,06	0,07	0,07	0,08	0,09	0,09	0,10	0,10	0,11	0,11	0,12	0,12	0,12	0,13	0,13
4	0,02	0,03	0,04	0,06	0,06	0,07	0,08	0,09	0,09	0,10	0,11	0,11	0,12	0,12	0,13	0,13	0,14	0,14	0,15	0,15
5	0,02	0,03	0,05	0,06	0,07	0,09	0,09	0,10	0,11	0,11	0,12	0,13	0,14	0,14	0,15	0,15	0,16	0,16	0,17	0,17
6	0,02	0,04	0,06	0,07	0,09	0,10	0,11	0,11	0,12	0,13	0,14	0,15	0,16	0,17	0,17	0,18	0,18	0,19	0,19	0,20
7	0,02	0,04	0,06	0,09	0,10	0,11	0,12	0,13	0,14	0,15	0,16	0,17	0,18	0,19	0,20	0,20	0,21	0,22	0,22	0,23
8	0,03	0,05	0,07	0,10	0,11	0,13	0,14	0,15	0,16	0,17	0,18	0,20	0,21	0,22	0,23	0,23	0,24	0,25	0,26	0,26
9	0,03	0,06	0,08	0,11	0,13	0,15	0,16	0,17	0,18	0,20	0,21	0,23	0,24	0,25	0,26	0,27	0,28	0,29	0,29	0,30
10	0,04	0,07	0,10	0,13	0,15	0,17	0,19	0,20	0,21	0,23	0,24	0,26	0,27	0,29	0,30	0,31	0,32	0,33	0,34	0,35
11	0,04	0,07	0,11	0,15	0,17	0,20	0,21	0,23	0,24	0,26	0,28	0,30	0,32	0,33	0,35	0,36	0,37	0,38	0,39	0,40
12	0,05	0,09	0,13	0,17	0,20	0,23	0,25	0,26	0,28	0,30	0,32	0,35	0,36	0,38	0,40	0,41	0,42	0,44	0,45	0,46
13	0,05	0,10	0,15	0,20	0,23	0,26	0,28	0,30	0,32	0,35	0,37	0,40	0,42	0,44	0,46	0,47	0,49	0,50	0,52	0,53
14	0,06	0,11	0,17	0,23	0,26	0,30	0,33	0,35	0,37	0,40	0,43	0,46	0,48	0,50	0,53	0,54	0,56	0,58	0,59	0,61
15	0,07	0,13	0,20	0,26	0,30	0,35	0,37	0,40	0,43	0,46	0,49	0,53	0,55	0,58	0,61	0,62	0,64	0,66	0,68	0,70

Note: The given cutting values are guide values, which were determined under ideal conditions.
The values have to be adapted in individual cases.

1. Sélectionnez la famille de produits adaptée.
2. Déterminez les conditions d'usinage.
3. Sélectionnez le matériau mis en œuvre et la vitesse de coupe.
4. Déterminez le groupe d'avance et consultez les recommandations à la page correspondante.
5. Sélectionnez le diamètre d'outil et le rapport de coupe.

Forets carbure monobloc

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min]							
						Foret SL		Foret SL		Foret SP		Foret ST	
						12-15xD		20-30xD		3xD		3-5xD	
						KDG 303		KDG 303		KDG 303		KDG 303	
						Arrosage							
						Int.	Gr. f	Int.	Gr. f	Int.	Gr. f	Int.	Gr. f
P	Acier non allié	env. 0,15 % C	recuit	125	1	130	7	95	7	165	8	150	8
		env. 0,45 % C	recuit	190	2	110	7	80	7	145	8	130	8
		env. 0,45 % C	trempé et revenu	250	3	100	5	70	5	135	6	120	6
		env. 0,75 % C	recuit	270	4	85	5	60	5	125	6	110	6
		env. 0,75 % C	trempé et revenu	300	5	75	5	55	5	110	6	100	6
	Acier faiblement allié		recuit	180	6	110	7	80	7	145	8	130	8
			trempé et revenu	275	7	85	5	60	5	125	6	110	6
			trempé et revenu	300	8	75	5	55	5	110	6	100	6
			trempé et revenu	350	9	65	5	50	5	100	6	90	6
	Acier fortement allié et acier à outils fortement allié		recuit	200	10	100	7	70	7	135	8	120	8
			durci et revenu	325	11	75	5	55	5	110	6	100	6
M	Acier inoxydable	ferritique / martensitique	recuit	200	12	60	4	55	4	90	5	80	5
		martensitique	trempé et revenu	240	13	35	4	30	4	65	5	55	5
		austénitique	trempé	180	14	40	4	35	4	70	5	60	5
		austénitique et ferritique		230	15	35	4	35	4	55	5	50	5
K	Fonte grise	perlitique / ferritique		180	16	125	7	90	7	150	8		
		perlitique (martensitique)		260	17	100	7	70	7	125	8		
	Fonte avec graphite nodulaire	ferritique		160	18	110	7	80	7	135	8		
		perlitique		250	19	70	7	50	7	90	8		
	Fonte malléable	ferritique		130	20	120	7	85	7	145	8		
		perlitique		230	21	70	7	50	7	90	8		
N	Alliages corroyé d'aluminium	non durcissable		60	22	150	8	105	8	170	8		
		durcissable	trempé	100	23	150	8	105	8	170	8		
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24	150	8	105	8	170	8		
		≤ 12 % Si, durcissable	trempé	90	25	150	8	105	8	170	8		
		> 12 % Si, non durcissable		130	26	150	8	105	8	170	8		
	Cuivre et alliages de cuivre (Bronze/moulage)	Alliages de décolletage, PB > 1 %		110	27	150	8	105	8	170	8		
		CuZn, CuSnZn		90	28	150	8	105	8	170	8		
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29	150	8	105	8	170	8		
S	Alliages réfractaires	Base Fe	recuit	200	30	30	4	20	4	30	5	30	5
			trempé	280	31	35	4	25	4	35	5	35	5
		à base de Ni ou Co	recuit	250	32	35	4	25	4	35	5	35	5
			trempé	350	33	15	4	10	4	15	5	15	5
			coulé	320	34	15	4	10	4	15	5	15	5
	Alliages de titane	Titane pur		R_m 400	35	30	4	20	4	30	5	30	5
		Alliages Alpha + Beta	trempé	R_m 1050	36	30	4	20	4	30	5	30	5
H	Acier trempé		durci et revenu	55 HRC	37								
			durci et revenu	60 HRC	38								
	Fonte trempée		coulé	400	39								
	Fonte durcie		durci et revenu	55 HRC	40								
X	Matériaux non métalliques	Thermoplastiques			41								
		Duroplaste			42								
		Matière plastique renforcée de fibres de verre GFK			43								
		Plastique renforcé à fibre de carbone PRV			44								
		Graphite			45								
		Bois			46								

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Pour les profondeurs de coupe 5xD, ces conditions de coupe doivent être adaptées à l'application correspondante.
Groupe f = avances recommandées, voir à la page C148.
Vous trouverez les exemples de matériaux pour les groupes enlèvement de copeaux à la page D11.

	Vitesse de coupe v_c [m/min]																					
	Foret SH		Foret SC		Foret PA		Foret PC		Foret PC		Foret SC											
	3xD		3 -5xD		3xD		3-5xD		15xD		Foret de centrage											
	KDG 303		YK20F		YK 30F		YK20F		YK20F		KDG 303											
	Arrosage																					
	Ext.	Gr. f	Ext.	Gr. f	Ext.	Gr. f	Ext.	Gr. f	Int.	Gr. f	Ext.	Gr. f										
											135	8										
											120	8										
											110	6										
											100	6										
											90	6										
											120	8										
											100	6										
											90	6										
											85	6										
											110	8										
											90	6										
											75	5										
											50	5										
											55	5										
											45	5										
							120	8	100	7	120	8										
							100	8	80	7	100	8										
							100	8	80	7	100	8										
							80	8	65	7	80	8										
							120	8	100	7	120	8										
							90	8	75	7	90	8										
			180	9	180	9					180	9										
			180	9	180	9					180	9										
			130	9	130	9					130	9										
			130	9	130	9					130	9										
			120	9	120	9					120	9										
			130	9	130	9					130	9										
			130	9	130	9					130	9										
			130	9	130	9					130	9										
	25	2																				
	20	1																				
	50	3																				
	25	2																				

Avance recommandée

Forets carbure monobloc

Groupe f	Avance [mm]																			
	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8	Ø9	Ø10	Ø11	Ø12	Ø13	Ø14	Ø15	Ø16	Ø17	Ø18	Ø19	Ø20
1	0,01	0,02	0,03	0,04	0,04	0,05	0,05	0,06	0,06	0,06	0,07	0,07	0,08	0,08	0,09	0,09	0,09	0,09	0,10	0,10
2	0,01	0,02	0,03	0,04	0,05	0,06	0,06	0,06	0,07	0,07	0,08	0,09	0,09	0,09	0,10	0,10	0,10	0,11	0,11	0,11
3	0,01	0,02	0,04	0,05	0,06	0,06	0,07	0,07	0,08	0,09	0,09	0,10	0,10	0,11	0,11	0,12	0,12	0,12	0,13	0,13
4	0,02	0,03	0,04	0,06	0,06	0,07	0,08	0,09	0,09	0,10	0,11	0,11	0,12	0,12	0,13	0,13	0,14	0,14	0,15	0,15
5	0,02	0,03	0,05	0,06	0,07	0,09	0,09	0,10	0,11	0,11	0,12	0,13	0,14	0,14	0,15	0,15	0,16	0,16	0,17	0,17
6	0,02	0,04	0,06	0,07	0,09	0,10	0,11	0,11	0,12	0,13	0,14	0,15	0,16	0,17	0,17	0,18	0,18	0,19	0,19	0,20
7	0,02	0,04	0,06	0,09	0,10	0,11	0,12	0,13	0,14	0,15	0,16	0,17	0,18	0,19	0,20	0,20	0,21	0,22	0,22	0,23
8	0,03	0,05	0,07	0,10	0,11	0,13	0,14	0,15	0,16	0,17	0,18	0,20	0,21	0,22	0,23	0,23	0,24	0,25	0,26	0,26
9	0,03	0,06	0,08	0,11	0,13	0,15	0,16	0,17	0,18	0,20	0,21	0,23	0,24	0,25	0,26	0,27	0,28	0,29	0,29	0,30
10	0,04	0,07	0,10	0,13	0,15	0,17	0,19	0,20	0,21	0,23	0,24	0,26	0,27	0,29	0,30	0,31	0,32	0,33	0,34	0,35
11	0,04	0,07	0,11	0,15	0,17	0,20	0,21	0,23	0,24	0,26	0,28	0,30	0,32	0,33	0,35	0,36	0,37	0,38	0,39	0,40
12	0,05	0,09	0,13	0,17	0,20	0,23	0,25	0,26	0,28	0,30	0,32	0,35	0,36	0,38	0,40	0,41	0,42	0,44	0,45	0,46
13	0,05	0,10	0,15	0,20	0,23	0,26	0,28	0,30	0,32	0,35	0,37	0,40	0,42	0,44	0,46	0,47	0,49	0,50	0,52	0,53
14	0,06	0,11	0,17	0,23	0,26	0,30	0,33	0,35	0,37	0,40	0,43	0,46	0,48	0,50	0,53	0,54	0,56	0,58	0,59	0,61
15	0,07	0,13	0,20	0,26	0,30	0,35	0,37	0,40	0,43	0,46	0,49	0,53	0,55	0,58	0,61	0,62	0,64	0,66	0,68	0,70

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.

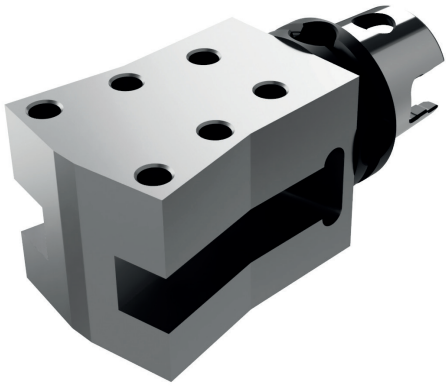
Notes

Outils spéciaux – Obtenez des outils optimisés

Les applications spéciales nécessitent des solutions spéciales et optimisées. Dans tous les segments industriels, les outils spéciaux peuvent présenter des avantages économiques, techniques ou procéduraux par rapport aux outils standard. Nous déterminons à vos côtés le potentiel exact au cas par cas et en prenant en compte vos contraintes propres. Ensuite, le service de développement de ZCC Cutting Tools Europe se charge de vous concevoir une solution personnalisée à notre siège européen à Düsseldorf pour vous garantir un usinage économique.

Pourquoi choisir les outils spéciaux de ZCC Cutting Tools ?

Nous nous chargeons de concevoir des solutions d'outil personnalisées pour les opérations d'usinage les plus diverses. Dans ce cadre, nous travaillons à vos côtés dès le début et développons des outils exclusifs parfaitement adaptés à vos besoins et à vos priorités. Nos solides compétences s'étendent du développement à la logistique en passant par la fabrication. Faites confiance à notre expertise pour la réussite de vos projets.



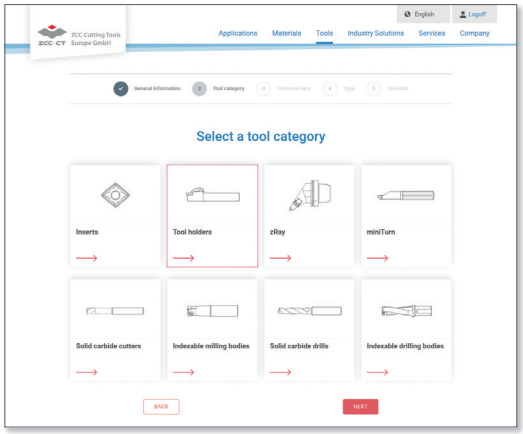
Exemple : porte-outil spécial



Exemple : foret étagé spécial en carbure monobloc

Votre outil spécial personnel en toute facilité

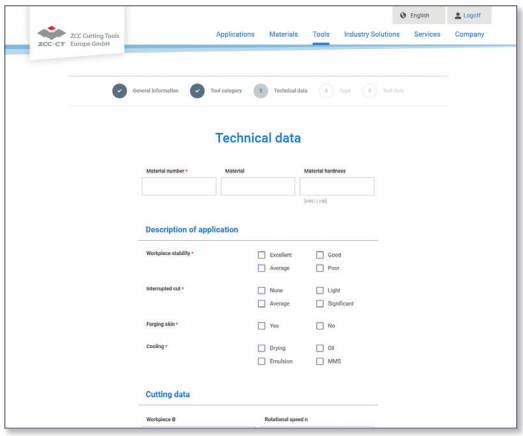
Avez-vous besoin d'outils optimisés et spécialement conçus afin d'améliorer certaines de vos applications au niveau commercial, technique ou logistique ? ZCC Cutting Tools vous conseille et vous assiste pour la planification, la conception et la commande. Grâce à notre nouvel outil en ligne permettant de transmettre vos demandes d'outil spécial, vous obtenez rapidement une offre personnalisée (www.zccct-europe.com).



Page d'accueil « Outil en ligne pour les outils spéciaux » avec sélection de la catégorie d'outil

Sélection de la catégorie d'outil

En scannant le code QR figurant sur cette page, vous serez directement redirigé vers la page d'accueil de notre outil en ligne et vous pourrez commencer par sélectionner la catégorie d'outils souhaitée. C'est très simple.



Définition des paramètres d'outil pertinents

Définition des paramètres d'outils

Vous êtes guidé durant toute la durée du processus de demande. Vous avez également la possibilité d'ajouter des esquisses et des modèles 3D.

Votre moyen rapide et direct d'obtenir des outils spéciaux de ZCC Cutting Tools Europe.

Accéder directement au nouveau **formulaire d'outil spécial** sur notre site Internet.

ALÉSOIRS CARBURE MONOBLOC



Alésoirs carbure monobloc

Vue d'ensemble des produits	**C154**
Vue d'ensemble des nuances	**C155**
Codification – alésoirs carbure monobloc	**C156**
Alésoirs carbure monobloc	**C157-C163**
Recommandations de données de coupe	**C164-C169**
Résolution de problèmes	**C206**
Informations techniques	**C210**
Outils spéciaux	**C170-C171**

C

Alésoirs carbure monobloc

Vue d'ensemble des produits

Produits	Alésoirs carbure monobloc	Ø	Application						Version	Page
			P	M	K	N	S	H		
3101H7		4-20			✔	✔			Hélice à droite	C157
3102H7		4-20			✔	✔			Goujure droite	C158
3112H7		4-20	✔		✔				Goujure droite avec sortie lubrifiant dans l'axe	C159
3103H7		4-20			✔	✔			Hélice à gauche	C163

✔ Choix de base ✔ Alternative

Carbure revêtu PVD

Nuance	Description de nuances
KRG102	Nuance carbure revêtu PVD pour un substrat P10-P20/K10-K20 pour les aciers et les fontes.

Carbure non revêtu

Nuance	Description de nuances
YK10F	Nuance carbure non revêtu N10/K10 pour la fonte et les matériaux non ferreux.

Alésoirs carbure monobloc

Codification – alésoirs carbure monobloc

3	1	0	1	H7	– 0850
1	2	3	4	5	6

Version	
Code	Description
3	Alésoir

1

Type d'attachement	
Code	Description
1	Attachement cylindrique
2	Attachement cylindrique DIN10
5	Attachement cylindrique DIN 6535 HA
9	Attachement cône morse

2

Lubrification	
Code	Description
0	Extérieur
1	Intérieur

3

Hélice	
Code	Description
1	Hélice à droite
2	Goujure droite
3	Hélice à gauche

4

Classe de tolérance	
Code	Description
H7	La classe de tolérance du trou alésé est H7 (GB/T1800-1804)

5

Diamètre [mm]	
Code	Description
0850	8,5
...	

6



a Alésage

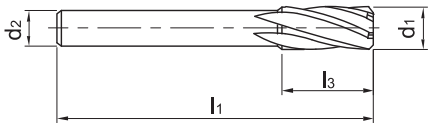
Alésoir, goujure à droite — Fonte, métaux non-ferreux

3101H7



– Attachement cylindrique, standard usine ZCC-CT





Article	✻	Dimensions (mm)				Dents	Nuance
		d_1	d_2 (h6)	l_1	l_3		YK10F
3101H7-0400		4	3,55	56	20	4	●
3101H7-0500		5	4	63	22	6	○
3101H7-0600		6	5	63	22	6	○
3101H7-0700		7	6,3	71	25	6	○
3101H7-0800		8	6,3	71	25	6	○
3101H7-0900		9	8	71	25	6	○
3101H7-1000		10	8	71	25	6	○
3101H7-1200		12	10	80	28	6	○
3101H7-1300		13	10	80	28	6	○
3101H7-1450		14,5	12,5	90	32	6	○
3101H7-1600		16	12,5	90	32	6	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
		✔	✔		

✔ Choix de base

✔ Alternative

Codification C156 Instructions d'usinage C201 Paramètres C164 Commande d'outils spéciaux C170

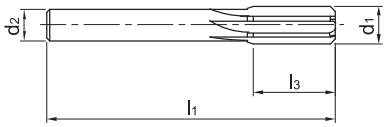
Alésoir, goujure droite — Fonte, métaux non-ferreux

3102H7



– Attachement cylindrique, standard usine ZCC-CT





Article	✻	Dimensions (mm)				Dents	Nuance
		d_1	d_2 (h6)	l_1	l_3		YK10F
3102H7-0400		4	3,55	56	20	4	○
3102H7-0500		5	4	63	22	6	○
3102H7-0600		6	5	63	22	6	○
3102H7-1000		10	8	71	25	6	○
3102H7-1050		10,5	8	71	25	6	○
3102H7-1100		11	10	80	28	6	○
3102H7-1300		13	10	80	28	6	○
3102H7-1400		14	12,5	90	32	6	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
		✔	✔		

✔ Choix de base

✔ Alternative

Codification > C156 Instructions d'usinage > C201 Paramètres > C164 Commande d'outils spéciaux > C170

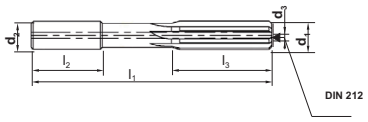
Alésoir, goujure droite — Acier, fonte

3112H7



– Attachement cylindrique, standard usine ZCC-CT
– Sortie de lubrifiant centrale





Article	✻	Dimensions (mm)						Dents	Nuance
		d_1	d_2 (h6)	d_3 (m7)	l_1	l_2	l_3		KRG102
3112H7-0295	✻	2,95	4	0,6	70	28	20	4	○
3112H7-0296	✻	2,96	4	0,6	70	28	20	4	○
3112H7-0297	✻	2,97	4	0,6	70	28	20	4	○
3112H7-0298	✻	2,98	4	0,6	70	28	20	4	○
3112H7-0299	✻	2,99	4	0,6	70	28	20	4	○
3112H7-0300	✻	3	3,5	0,6	70	28	20	4	●
3112H7-0301	✻	3,01	4	0,6	70	28	20	4	●
3112H7-0302	✻	3,02	4	0,6	70	28	20	4	●
3112H7-0303	✻	3,03	4	0,6	70	28	20	4	●
3112H7-0318	✻	3,18	4	0,6	70	28	20	4	○
3112H7-0348	✻	3,48	4	0,6	70	28	20	4	○
3112H7-0350	✻	3,5	4	0,6	70	28	20	4	○
3112H7-0395	✻	3,95	4	0,6	70	28	20	4	○
3112H7-0396	✻	3,96	4	0,6	70	28	20	4	○
3112H7-0397	✻	3,97	4	0,6	70	28	20	4	○
3112H7-0398	✻	3,98	4	0,6	70	28	20	4	○
3112H7-0399	✻	3,99	4	0,6	70	28	20	4	○
3112H7-0400	✻	4	4	0,6	70	28	20	6	●
3112H7-0401	✻	4,01	4	1	70	28	20	4	●
3112H7-0402	✻	4,02	4	1	70	28	20	4	●
3112H7-0403	✻	4,03	4	1	70	28	20	4	●
3112H7-0404	✻	4,04	4	1	70	28	20	4	○
3112H7-0405	✻	4,05	4	1	70	28	20	4	○
3112H7-0407	✻	4,07	4	1	70	28	20	4	○
3112H7-0408	✻	4,08	4	1	70	28	20	4	●
3112H7-0450	✻	4,5	5	1	70	28	20	4	○
3112H7-0452	✻	4,52	5	1	70	28	20	4	○
3112H7-0457	✻	4,57	5	1	70	28	20	4	○
3112H7-0495	✻	4,95	5	1	70	28	22	6	○
3112H7-0496	✻	4,96	5	1	70	28	22	6	○
3112H7-0497	✻	4,97	5	1	70	28	22	6	○
3112H7-0498	✻	4,98	5	1	70	28	22	6	○
3112H7-0499	✻	4,99	5	1	70	28	22	6	○
3112H7-0500	✻	5	5	1	70	28	22	6	●
3112H7-0501	✻	5,01	5	1	70	28	22	6	●
3112H7-0502	✻	5,02	5	1	70	28	22	6	●
3112H7-0503	✻	5,03	5	1	70	28	22	6	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔		✔			

✔ Choix de base
✔ Alternative

Codification > C156 Instructions d'usinage > C201 Paramètres > C164 Commande d'outils spéciaux > C170

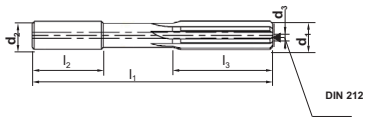
Alésoir, goujure droite — Acier, fonte

3112H7



– Attachement cylindrique, standard usine ZCC-CT
– Sortie de lubrifiant centrale





Article	✲	Dimensions (mm)						Dents	Nuance
		d_1	d_2 (h6)	d_3 (m7)	l_1	l_2	l_3		KRG102
3112H7-0504	✲	5,04	5	1	70	28	22	6	○
3112H7-0505	✲	5,05	5	1	70	28	22	6	○
3112H7-0550	✲	5,5	6	1	70	28	22	6	○
3112H7-0553	✲	5,53	6	1	70	28	22	6	○
3112H7-0561	✲	5,61	6	1	70	28	22	6	○
3112H7-0593	✲	5,93	6	1	70	28	22	6	○
3112H7-0595	✲	5,95	6	1	100	36	22	6	●
3112H7-0596	✲	5,96	6	1	100	36	22	6	●
3112H7-0597	✲	5,97	6	1	100	36	22	6	●
3112H7-0598	✲	5,98	6	1	100	36	22	6	●
3112H7-0599	✲	5,99	6	1	100	36	22	6	●
3112H7-0600	✲	6	6	1	100	36	22	6	●
3112H7-0601	✲	6,01	6	1,3	100	36	22	6	●
3112H7-0602	✲	6,02	6	1,3	100	36	22	6	●
3112H7-0603	✲	6,03	6	1,3	100	36	22	6	●
3112H7-0635	✲	6,35	8	1,3	100	36	22	6	○
3112H7-0650	✲	6,5	8	1,3	100	36	22	6	○
3112H7-0655	✲	6,55	8	1,3	100	36	22	6	○
3112H7-0693	✲	6,93	8	1,3	100	36	22	6	○
3112H7-0695	✲	6,95	8	1,3	110	42	25	6	○
3112H7-0696	✲	6,96	8	1,3	110	42	25	6	○
3112H7-0697	✲	6,97	8	1,3	110	42	25	6	○
3112H7-0698	✲	6,98	8	1,3	110	42	25	6	○
3112H7-0699	✲	6,99	8	1,3	110	42	25	6	○
3112H7-0700	✲	7	8	1,3	110	42	25	6	●
3112H7-0701	✲	7,01	8	1,3	110	42	25	6	●
3112H7-0702	✲	7,02	8	1,3	110	42	25	6	●
3112H7-0703	✲	7,03	8	1,3	110	42	25	6	●
3112H7-0750	✲	7,5	8	1,3	110	42	25	6	○
3112H7-0770	✲	7,7	8	1,3	110	42	25	6	○
3112H7-0793	✲	7,93	8	1,3	110	42	25	6	○
3112H7-0795	✲	7,95	8	1,3	110	42	25	6	○
3112H7-0796	✲	7,96	8	1,3	110	42	25	6	○
3112H7-0797	✲	7,97	8	1,3	110	42	25	6	○
3112H7-0798	✲	7,98	8	1,3	110	42	25	6	○
3112H7-0799	✲	7,99	8	1,3	110	42	25	6	○
3112H7-0800	✲	8	8	1,3	110	42	25	6	●

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔		✔			

✔ Choix de base
✔ Alternative

Codification > C156 Instructions d'usinage > C201 Paramètres > C164 Commande d'outils spéciaux > C170

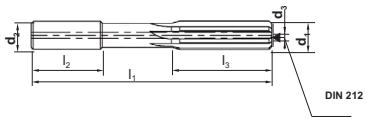
Alésoir, goujure droite — Acier, fonte

3112H7



– Attachement cylindrique, standard usine ZCC-CT
– Sortie de lubrifiant centrale





Article	✻	Dimensions (mm)						Dents	Nuance
		d_1	d_2 (h6)	d_3 (m7)	l_1	l_2	l_3		KRG102
3112H7-0801	✻	8,01	8	2	110	42	25	6	●
3112H7-0802	✻	8,02	8	2	110	42	25	6	●
3112H7-0803	✻	8,03	8	2	110	42	25	6	●
3112H7-0880	✻	8,8	10	2	110	42	25	6	○
3112H7-0885	✻	8,85	10	2	110	42	25	6	○
3112H7-0900	✻	9	10	2	110	42	25	6	●
3112H7-0901	✻	9,01	10	2	110	42	25	6	●
3112H7-0902	✻	9,02	10	2	110	42	25	6	○
3112H7-0903	✻	9,03	10	2	110	42	25	6	●
3112H7-0920	✻	9,2	10	2	110	42	25	6	○
3112H7-0930	✻	9,3	10	2	110	42	25	6	○
3112H7-0993	✻	9,93	10	2	110	42	25	6	○
3112H7-0995	✻	9,95	10	2	110	38	25	6	○
3112H7-0996	✻	9,96	10	2	110	38	25	6	○
3112H7-0997	✻	9,97	10	2	110	38	25	6	○
3112H7-0998	✻	9,98	10	2	110	38	25	6	○
3112H7-0999	✻	9,99	10	2	110	38	25	6	○
3112H7-1000	✻	10	10	2	110	38	25	6	●
3112H7-1001	✻	10,01	10	2	110	38	25	6	●
3112H7-1002	✻	10,02	10	2	110	38	25	6	●
3112H7-1003	✻	10,03	10	2	110	38	25	6	●
3112H7-1024	✻	10,24	10	2	110	38	24	6	○
3112H7-1100	✻	11	12	2	110	38	28	6	●
3112H7-1101	✻	11,01	10	2	110	38	24	6	●
3112H7-1102	✻	11,02	10	2	110	38	24	6	○
3112H7-1103	✻	11,03	10	2	110	38	24	6	●
3112H7-1155	✻	11,55	12	2	110	38	28	6	○
3112H7-1195	✻	11,95	12	2	110	38	28	6	○
3112H7-1196	✻	11,96	12	2	110	38	28	6	○
3112H7-1197	✻	11,97	12	2	110	38	28	6	○
3112H7-1198	✻	11,98	12	2	110	38	28	6	○
3112H7-1199	✻	11,99	12	2	110	38	28	6	○
3112H7-1200	✻	12	12	2	110	38	28	6	●
3112H7-1201	✻	12,01	12	2	110	38	28	6	●
3112H7-1202	✻	12,02	12	2	110	38	28	6	●
3112H7-1203	✻	12,03	12	2	110	38	28	6	●
3112H7-1300	✻	13	14	2	110	38	28	6	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔		✔			

✔ Choix de base
✔ Alternative

Codification > C156 Instructions d'usinage > C201 Paramètres > C164 Commande d'outils spéciaux > C170

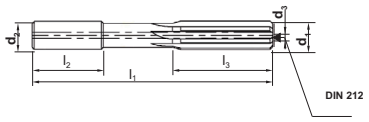
Alésoir, goujure droite — Acier, fonte

3112H7



– Attachement cylindrique, standard usine ZCC-CT
– Sortie de lubrifiant centrale





Article	✲	Dimensions (mm)						Dents	Nuance
		d_1	d_2 (h6)	d_3 (m7)	l_1	l_2	l_3		KRG102
3112H7-1301	✲	13,01	14	2	110	38	28	6	●
3112H7-1302	✲	13,02	14	2	110	38	28	6	●
3112H7-1303	✲	13,03	14	2	110	38	28	6	●
3112H7-1394	✲	13,94	14	2	110	38	28	6	○
3112H7-1400	✲	14	14	2	110	38	32	6	●
3112H7-1401	✲	14,01	14	2	110	38	28	6	●
3112H7-1402	✲	14,02	14	2	110	38	28	6	●
3112H7-1403	✲	14,03	14	2	110	38	28	6	●
3112H7-1500	✲	15	16	2	110	38	32	6	●
3112H7-1501	✲	15,01	16	2	110	38	28	6	●
3112H7-1502	✲	15,02	16	2	110	38	28	6	○
3112H7-1503	✲	15,03	16	2	110	38	28	6	●
3112H7-1565	✲	15,65	16	2	110	38	28	6	○
3112H7-1593	✲	15,93	16	2	110	38	28	6	○
3112H7-1595	✲	15,95	16	2	150	52	32	6	○
3112H7-1596	✲	15,96	16	2	150	52	32	6	○
3112H7-1597	✲	15,97	16	2	150	52	32	6	○
3112H7-1598	✲	15,98	16	2	150	52	32	6	○
3112H7-1599	✲	15,99	16	2	150	52	32	6	○
3112H7-1600	✲	16	16	2	150	52	32	6	●
3112H7-1601	✲	16,01	16	3	150	52	32	6	●
3112H7-1602	✲	16,02	16	3	150	52	32	6	○
3112H7-1603	✲	16,03	16	3	150	52	32	6	●
3112H7-1800	✲	18	18	3	150	52	36	6	●
3112H7-2000	✲	20	20	3	150	50	36	6	●

● En stock ○ Sur demande

✲ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔		✔			

✔ Choix de base
✔ Alternative

Codification > C156 Instructions d'usinage > C201 Paramètres > C164 Commande d'outils spéciaux > C170

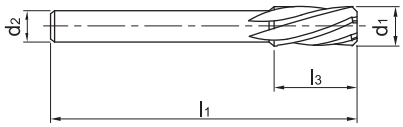
Alésoir, goujure à gauche — Fonte, métaux non-ferreux

3103H7



– Attachement cylindrique, standard usine ZCC-CT





Article	✻	Dimensions (mm)				Dents	Nuance
		d_1	d_2 (h6)	l_1	l_3		YK10F
3103H7-0400		4	3,55	56	20	4	○
3103H7-0500		5	4	63	22	6	○
3103H7-0600		6	5	63	22	6	○
3103H7-0800		8	6,3	71	25	6	○
3103H7-0950		9,5	8	71	25	6	○
3103H7-1000		10	8	71	25	6	○
3103H7-1150		11,5	10	80	28	6	○
3103H7-1200		12	10	80	28	6	○
3103H7-1600		16	12,5	90	32	6	○
3103H7-1800		18	16	100	36	6	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
		✔	✔		

✔ Choix de base

✔ Alternative

Codification C156 Instructions d'usinage C201 Paramètres C164 Commande d'outils spéciaux C170

Guide des données de coupe recommandées – Alésoirs carbure monobloc

Solid carbide reamers

Material group		Composition / structure / heat treatment		Brinell hardness HB	Machining group	Starting values for cutting speed v_c [m/min]							
						3101H7		3102H7		3112H7		3103H7	
						YK10F		YK10F		KRG102		YK10F	
						Coolant							
						external	f-group	external	f-group	internal	f-group	external	f-group
P	Unalloyed steel	ca. 0,15 % C	annealed	125	1					85	5		
		ca. 0,45 % C	annealed	190	2					75	5		
		ca. 0,45 % C	tempered	250	3					70	5		
		ca. 0,75 % C	annealed	270	4					60	5		
		ca. 0,75 % C	tempered	300	5					55	5		
	Low-alloyed steel		annealed	180	6					75	5		
			tempered	275	7					60	5		
			tempered	300	8					55	5		
			tempered	350	9					55	5		
	High-alloyed steel and high-alloyed tool steel		annealed	200	10					70	5		
			hardened and tempered	325	11					55	5		
M	Stainless steel	ferritic/martensitic	annealed	200	12								
		martensitic	tempered	240	13								
		austenitic	quench hardened	180	14								
		austenitic-ferritic		230	15								
K	Grey cast iron	perlitic/ferritic		180	16	23	5	23	5	75	5	23	5
		perlitic (martensitic)		260	17	19	5	19	5	60	5	19	5
	Cast iron with spheroidal graphite	ferritic		160	18	19	5	19	5	60	5	19	5
		perlitic		250	19	17	5	17	5	50	5	17	5
	Malleable cast iron	ferritic		130	20	23	5	23	5	75	5	23	5
		perlitic		230	21	14	5	14	5	55	5	14	5
N	Aluminium wrought alloys	cannot be hardened		60	22	45	6	45	6			45	6
		hardenable	hardened	100	23	40	6	40	6			40	6
	Cast aluminium alloys	≤ 12% Si, cannot be hardened		75	24	37	6	37	6			37	6
		≤ 12% Si, hardenable	hardened	90	25	35	6	35	6			35	6
		> 12% Si, cannot be hardened		130	26	32	6	32	6			32	6
	Copper and copper alloys (bronze/brass)	machining steel, PB> 1%		110	27	37	6	37	6			37	6
		CuZn, CuSnZn		90	28	34	6	34	6			34	6
		CuSn, Pb-free copper, electrolytic copper		100	29	37	6	37	6			37	6
S	Heat-resistant alloys	Fe-based alloys	annealed	200	30								
			hardened	280	31								
		Ni or Co bass	annealed	250	32								
			hardened	350	33								
			cast	320	34								
	Titanium alloys	pure titanium		R_m 400	35								
		α and β alloys	hardened	R_m 1050	36								
H	Hardened steel		hardened and tempered	55 HRC	37								
			hardened and tempered	60 HRC	38								
	Hard cast iron		cast	400	39								
	Hardened cast iron		hardened and tempered	55 HRC	40								
X	Non-metallic materials	Thermoplasts			41								
		Thermosetting plastics			42								
		Plastic, glass-fibre reinforced GFRP			43								
		Plastic, carbon fibre reinforced CFRP			44								
		Graphite			45								
		Wood			46								

Note: The given cutting values are guide values, which were determined under ideal conditions.
The values have to be adapted in individual cases.
With hole depths of 5xD adjust the cutting data accordingly to the application.
f-group = feed rate recommendations on page C140.
For examples of material for cutting tool groups view page D22.

Recommend feed rate

Solid carbide reamers

4

5

f-group	Feed rate [mm]																			
	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8	Ø9	Ø10	Ø11	Ø12	Ø13	Ø14	Ø15	Ø16	Ø17	Ø18	Ø19	Ø20
1	0,01	0,02	0,03	0,04	0,04	0,05	0,05	0,06	0,06	0,06	0,07	0,07	0,08	0,08	0,09	0,09	0,09	0,09	0,10	0,10
2	0,01	0,02	0,03	0,04	0,05	0,06	0,06	0,06	0,07	0,07	0,08	0,09	0,09	0,09	0,10	0,10	0,10	0,11	0,11	0,11
3	0,01	0,02	0,04	0,05	0,06	0,06	0,07	0,07	0,08	0,09	0,09	0,10	0,10	0,11	0,11	0,12	0,12	0,12	0,13	0,13
4	0,02	0,03	0,04	0,06	0,06	0,07	0,08	0,09	0,09	0,10	0,11	0,11	0,12	0,12	0,13	0,13	0,14	0,14	0,15	0,15
5	0,02	0,03	0,05	0,06	0,07	0,09	0,09	0,10	0,11	0,11	0,12	0,13	0,14	0,14	0,15	0,15	0,16	0,16	0,17	0,17
6	0,02	0,04	0,06	0,07	0,09	0,10	0,11	0,11	0,12	0,13	0,14	0,15	0,16	0,17	0,17	0,18	0,18	0,19	0,19	0,20
7	0,02	0,04	0,06	0,09	0,10	0,11	0,12	0,13	0,14	0,15	0,16	0,17	0,18	0,19	0,20	0,20	0,21	0,22	0,22	0,23
8	0,03	0,05	0,07	0,10	0,11	0,13	0,14	0,15	0,16	0,17	0,18	0,20	0,21	0,22	0,23	0,23	0,24	0,25	0,26	0,26
9	0,03	0,06	0,08	0,11	0,13	0,15	0,16	0,17	0,18	0,20	0,21	0,23	0,24	0,25	0,26	0,27	0,28	0,29	0,29	0,30
10	0,04	0,07	0,10	0,13	0,15	0,17	0,19	0,20	0,21	0,23	0,24	0,26	0,27	0,29	0,30	0,31	0,32	0,33	0,34	0,35
11	0,04	0,07	0,11	0,15	0,17	0,20	0,21	0,23	0,24	0,26	0,28	0,30	0,32	0,33	0,35	0,36	0,37	0,38	0,39	0,40
12	0,05	0,09	0,13	0,17	0,20	0,23	0,25	0,26	0,28	0,30	0,32	0,35	0,36	0,38	0,40	0,41	0,42	0,44	0,45	0,46
13	0,05	0,10	0,15	0,20	0,23	0,26	0,28	0,30	0,32	0,35	0,37	0,40	0,42	0,44	0,46	0,47	0,49	0,50	0,52	0,53
14	0,06	0,11	0,17	0,23	0,26	0,30	0,33	0,35	0,37	0,40	0,43	0,46	0,48	0,50	0,53	0,54	0,56	0,58	0,59	0,61
15	0,07	0,13	0,20	0,26	0,30	0,35	0,37	0,40	0,43	0,46	0,49	0,53	0,55	0,58	0,61	0,62	0,64	0,66	0,68	0,70

Note: The given cutting values are guide values, which were determined under ideal conditions.
The values have to be adapted in individual cases.

1 Sélectionnez la famille de produits adaptée.

2. Déterminez le rapport de coupe.

3. Sélectionnez le matériau mis en œuvre et la vitesse de coupe.

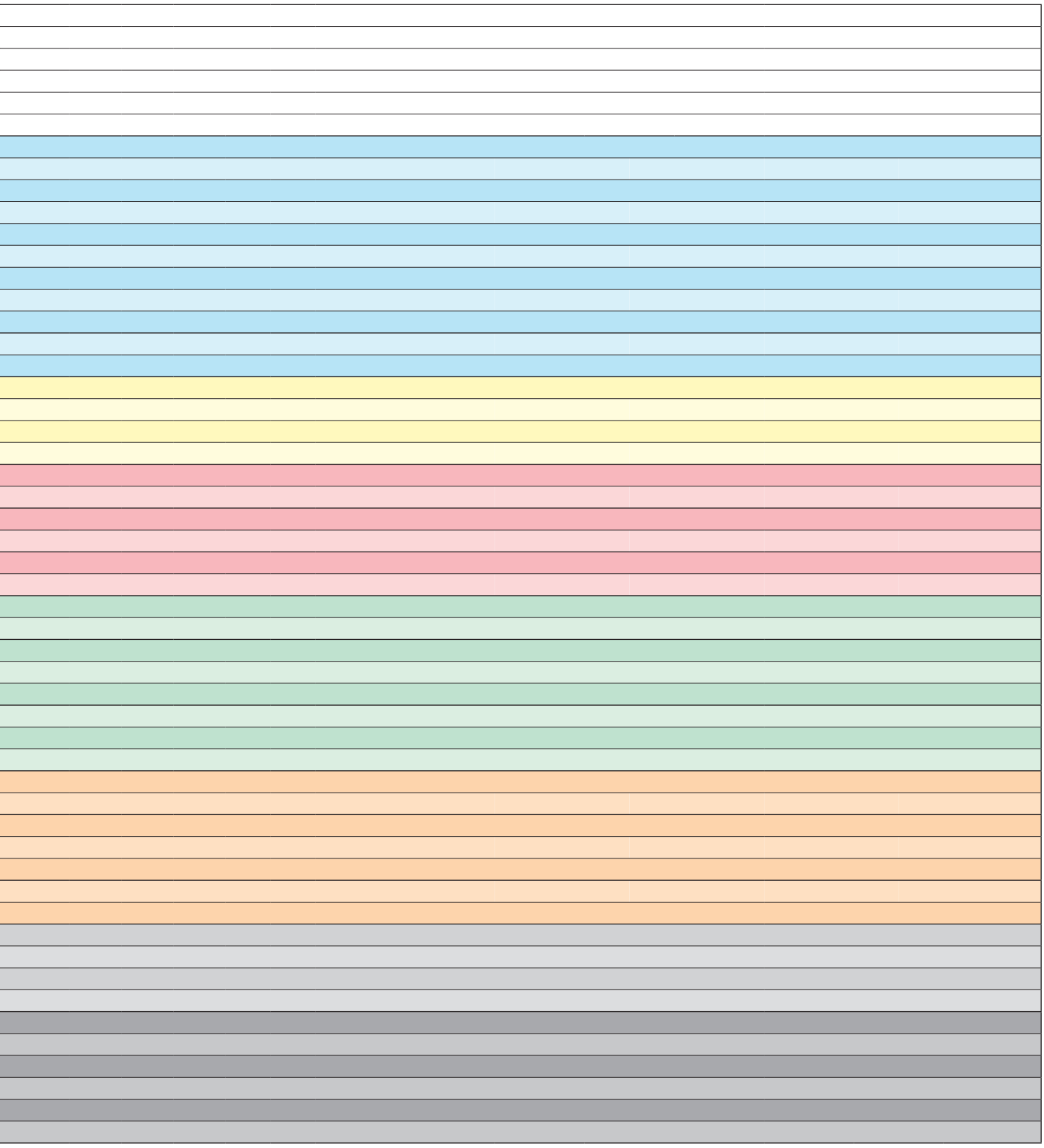
4. Déterminez le groupe d'avance et consultez les recommandations à la page correspondante.

5. Sélectionnez le diamètre d'outil et le rapport de coupe.

Alésoirs carbure monobloc

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min]							
						3101H7		3102H7		3112H7		3103H7	
						YK10F		YK10F		KRG102		YK10F	
						Amenée d'agent réfrigérant							
						Ext.	Groupe f	Ext.	Groupe f	Int.	Groupe f	Ext.	Groupe f
P	Acier non allié	env. 0,15 % C	recuit	125	1					85	5		
		env. 0,45 % C	recuit	190	2					75	5		
		env. 0,45 % C	trempé et revenu	250	3					70	5		
		env. 0,75 % C	recuit	270	4					60	5		
		env. 0,75 % C	trempé et revenu	300	5					55	5		
	Acier faiblement allié		recuit	180	6					75	5		
			trempé et revenu	275	7					60	5		
			trempé et revenu	300	8					55	5		
			trempé et revenu	350	9					55	5		
	Acier fortement allié et acier à outils fortement allié		recuit	200	10					70	5		
			durci et revenu	325	11					55	5		
M	Acier inoxydable	ferritique / martensitique	recuit	200	12								
		martensitique	trempé et revenu	240	13								
		austénitique	trempé	180	14								
		austénitique et ferritique		230	15								
K	Fonte grise	perlitique / ferritique		180	16	23	5	23	5	75	5	23	5
		perlitique (martensitique)		260	17	19	5	19	5	60	5	19	5
	Fonte avec graphite nodulaire	ferritique		160	18	19	5	19	5	60	5	19	5
		perlitique		250	19	17	5	17	5	50	5	17	5
	Fonte malléable	ferritique		130	20	23	5	23	5	75	5	23	5
		perlitique		230	21	14	5	14	5	55	5	14	5
N	Alliages corroyé d'aluminium	non durcissable		60	22	45	6	45	6			45	6
		durcissable	trempé	100	23	40	6	40	6			40	6
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24	37	6	37	6			37	6
		≤ 12 % Si, durcissable	trempé	90	25	35	6	35	6			35	6
		> 12 % Si, non durcissable		130	26	32	6	32	6			32	6
	Cuivre et alliages de cuivre (Bronze/moulage)	Alliages de décolletage, PB > 1 %		110	27	37	6	37	6			37	6
		CuZn, CuSnZn		90	28	34	6	34	6			34	6
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29	37	6	37	6			37	6
S	Alliages réfractaires	Base Fe	recuit	200	30								
			trempé	280	31								
		à base de Ni ou Co	recuit	250	32								
			trempé	350	33								
			coulé	320	34								
	Alliages de titane	Titane pur		R_m 400	35								
		Alliages Alpha + Beta	trempé	R_m 1050	36								
H	Acier trempé		durci et revenu	55 HRC	37								
			durci et revenu	60 HRC	38								
	Fonte trempée		coulé	400	39								
	Fonte durcie		durci et revenu	55 HRC	40								
X	Matériaux non métalliques	Thermoplastiques			41								
		Duroplaste			42								
		Matière plastique renforcée de fibres de verre GFK			43								
		Plastique renforcé à fibre de carbone PRV			44								
		Graphite			45								
		Bois			46								

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Pour les profondeurs de coupe 5xD, ces conditions de coupe doivent être adaptées à l'application correspondante.
Groupe f = avances recommandées, voir à la page C168.
Vous trouverez les exemples de matériaux pour les groupes enlèvement de copeaux à la page D11.



Avance recommandée

Alésoirs carbure monobloc

Groupe f	Avance [mm]																			
	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8	Ø9	Ø10	Ø11	Ø12	Ø13	Ø14	Ø15	Ø16	Ø17	Ø18	Ø19	Ø20
1	0,01	0,02	0,03	0,04	0,04	0,05	0,05	0,06	0,06	0,06	0,07	0,07	0,08	0,08	0,09	0,09	0,09	0,09	0,10	0,10
2	0,01	0,02	0,03	0,04	0,05	0,06	0,06	0,06	0,07	0,07	0,08	0,09	0,09	0,09	0,10	0,10	0,10	0,11	0,11	0,11
3	0,01	0,02	0,04	0,05	0,06	0,06	0,07	0,07	0,08	0,09	0,09	0,10	0,10	0,11	0,11	0,12	0,12	0,12	0,13	0,13
4	0,02	0,03	0,04	0,06	0,06	0,07	0,08	0,09	0,09	0,10	0,11	0,11	0,12	0,12	0,13	0,13	0,14	0,14	0,15	0,15
5	0,02	0,03	0,05	0,06	0,07	0,09	0,09	0,10	0,11	0,11	0,12	0,13	0,14	0,14	0,15	0,15	0,16	0,16	0,17	0,17
6	0,02	0,04	0,06	0,07	0,09	0,10	0,11	0,11	0,12	0,13	0,14	0,15	0,16	0,17	0,17	0,18	0,18	0,19	0,19	0,20
7	0,02	0,04	0,06	0,09	0,10	0,11	0,12	0,13	0,14	0,15	0,16	0,17	0,18	0,19	0,20	0,20	0,21	0,22	0,22	0,23
8	0,03	0,05	0,07	0,10	0,11	0,13	0,14	0,15	0,16	0,17	0,18	0,20	0,21	0,22	0,23	0,23	0,24	0,25	0,26	0,26
9	0,03	0,06	0,08	0,11	0,13	0,15	0,16	0,17	0,18	0,20	0,21	0,23	0,24	0,25	0,26	0,27	0,28	0,29	0,29	0,30
10	0,04	0,07	0,10	0,13	0,15	0,17	0,19	0,20	0,21	0,23	0,24	0,26	0,27	0,29	0,30	0,31	0,32	0,33	0,34	0,35
11	0,04	0,07	0,11	0,15	0,17	0,20	0,21	0,23	0,24	0,26	0,28	0,30	0,32	0,33	0,35	0,36	0,37	0,38	0,39	0,40
12	0,05	0,09	0,13	0,17	0,20	0,23	0,25	0,26	0,28	0,30	0,32	0,35	0,36	0,38	0,40	0,41	0,42	0,44	0,45	0,46
13	0,05	0,10	0,15	0,20	0,23	0,26	0,28	0,30	0,32	0,35	0,37	0,40	0,42	0,44	0,46	0,47	0,49	0,50	0,52	0,53
14	0,06	0,11	0,17	0,23	0,26	0,30	0,33	0,35	0,37	0,40	0,43	0,46	0,48	0,50	0,53	0,54	0,56	0,58	0,59	0,61
15	0,07	0,13	0,20	0,26	0,30	0,35	0,37	0,40	0,43	0,46	0,49	0,53	0,55	0,58	0,61	0,62	0,64	0,66	0,68	0,70

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.

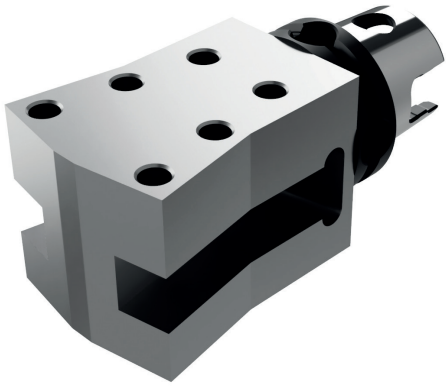
Notes

Outils spéciaux – Obtenez des outils optimisés

Les applications spéciales nécessitent des solutions spéciales et optimisées. Dans tous les segments industriels, les outils spéciaux peuvent présenter des avantages économiques, techniques ou procéduraux par rapport aux outils standard. Nous déterminons à vos côtés le potentiel exact au cas par cas et en prenant en compte vos contraintes propres. Ensuite, le service de développement de ZCC Cutting Tools Europe se charge de vous concevoir une solution personnalisée à notre siège européen à Düsseldorf pour vous garantir un usinage économique.

Pourquoi choisir les outils spéciaux de ZCC Cutting Tools ?

Nous nous chargeons de concevoir des solutions d'outil personnalisées pour les opérations d'usinage les plus diverses. Dans ce cadre, nous travaillons à vos côtés dès le début et développons des outils exclusifs parfaitement adaptés à vos besoins et à vos priorités. Nos solides compétences s'étendent du développement à la logistique en passant par la fabrication. Faites confiance à notre expertise pour la réussite de vos projets.



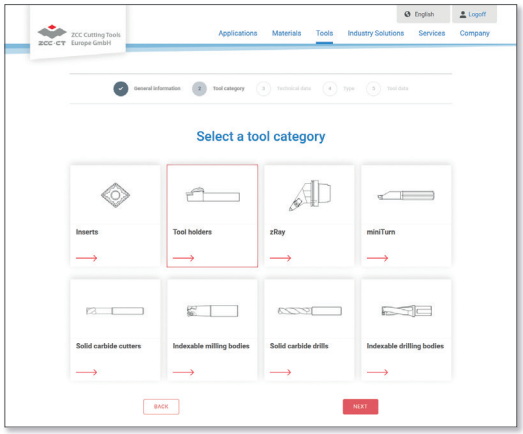
Exemple : porte-outil spécial



Exemple : foret étagé spécial en carbure monobloc

Votre outil spécial personnel en toute facilité

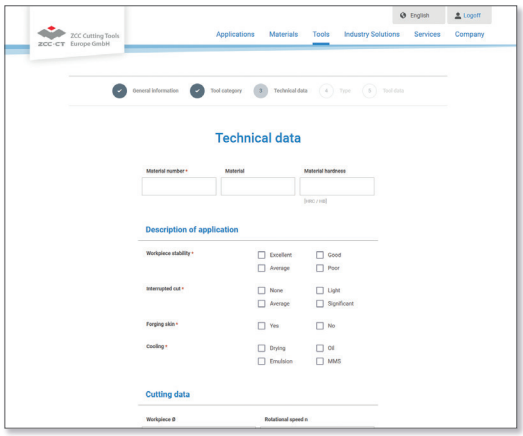
Avez-vous besoin d'outils optimisés et spécialement conçus afin d'améliorer certaines de vos applications au niveau commercial, technique ou logistique ? ZCC Cutting Tools vous conseille et vous assiste pour la planification, la conception et la commande. Grâce à notre nouvel outil en ligne permettant de transmettre vos demandes d'outil spécial, vous obtenez rapidement une offre personnalisée (www.zccct-europe.com).



Page d'accueil « Outil en ligne pour les outils spéciaux » avec sélection de la catégorie d'outil

Sélection de la catégorie d'outil

En scannant le code QR figurant sur cette page, vous serez directement redirigé vers la page d'accueil de notre outil en ligne et vous pourrez commencer par sélectionner la catégorie d'outils souhaitée. C'est très simple.



Définition des paramètres d'outil pertinents

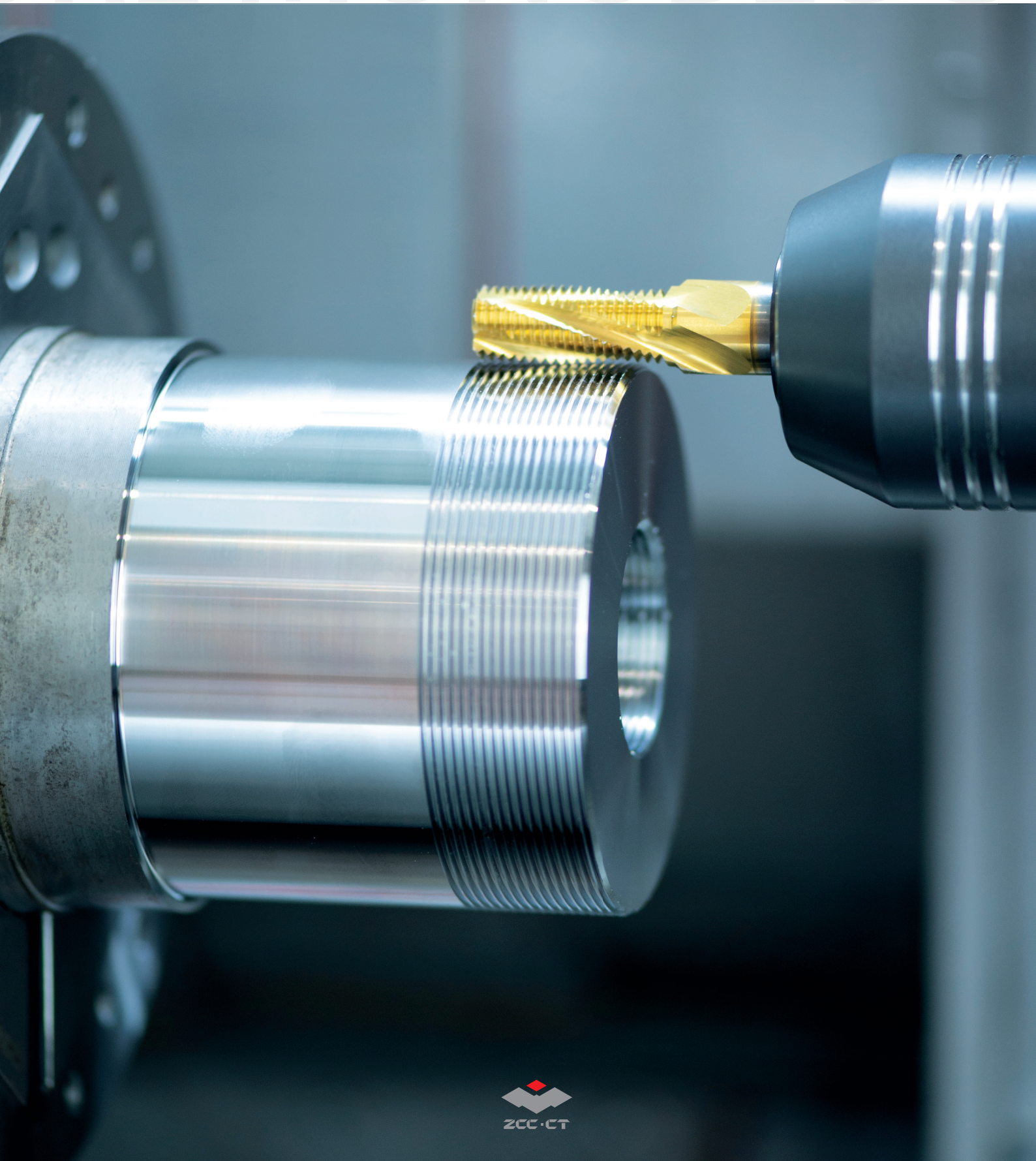
Définition des paramètres d'outils

Vous êtes guidé durant toute la durée du processus de demande. Vous avez également la possibilité d'ajouter des esquisses et des modèles 3D.

Votre moyen rapide et direct d'obtenir des outils spéciaux de ZCC Cutting Tools Europe.

Accéder directement au nouveau **formulaire d'outil spécial** sur notre site Internet.

OUTILS DE FILETAGE CARBURE MONOBLOC



Outils de filetage carbure monobloc

Vue d'ensemble des produits	**C174**
Vue d'ensemble des nuances	**C175**
Codification – Outils de filetage carbure monobloc	**C176**
Tarauds par déformation carbure monobloc	**C177-C182**
Tarauds coupants carbure monobloc	**C183-C190**
Fraises à fileter carbure monobloc	**C191**
Recommandations de données de coupe	**C192-C197**
Informations techniques	**C211-C213**
Outils spéciaux	**C198-C199**

C

Outils de filetage carbure monobloc

Vue d'ensemble des produits

Produits	Outils de filetage carbure mono-bloc	Ø	Application						Version	Page
			P	M	K	N	S	H		
4122A		M1-M2,5				✔			Taraud par déformation carbure monobloc	C177
4222A		M3-M16				✔			Taraud par déformation carbure monobloc	C178
4122M		M1-M2,5	✔	✔					Taraud par déformation carbure monobloc	C180
4222M		M3-M16	✔	✔					Taraud par déformation carbure monobloc	C181
4201C		M3-M16			✔				Taraud carbure monobloc, hélice à droite	C183
4202C		M3-M16			✔				Taraud carbure monobloc, hélice à droite	C185
4201A		M3-M16				✔			Taraud carbure monobloc, hélice à droite	C187
4202A		M3-M16				✔			Taraud carbure monobloc, hélice à droite	C189
4111		M3-M20	✔		✔	✔			Fraises à fileter carbure monobloc	C191

✔ Choix de base ✔ Alternative

Carbure revêtu PVD

Nuance	Description de nuances
KTG402	Nuance carbure revêtu PVD pour un substrat P20-P30/M20-M30 pour les aciers et les aciers inoxydables. Spécialement pour les outils de taraudage par déformation.
KTG4015	Nuance carbure revêtu PVD pour un substrat P20-P30/K20-K30 pour les aciers et les fontes. Spécialement pour les outils de taraudage par déformation.

Carbure non revêtu

Nuance	Description de nuances
YK40F	Nuance carbure non revêtu K20-K30/N20-N30 pour les fontes et les matériaux non ferreux

Outils de filetage carbure monobloc

4	2	0	1	A	(C)	(S)	– M5x0.8 –	6H
1	2	3	4	5	6	7	8	9

Version	
Code	Description
4	Outils de filetage

1

Type d'attachement	
Code	Description
1	Attachement cylindrique
2	Attachement cylindrique DIN10
5	Attachement cylindrique DIN 6535 HA
9	Attachement conique

2

Type d'outil	
Code	Description
0	Taraud
1	Fraise à fileter
2	Tarauds par déformation

3

Hélice à L	
Code	Description
1	Hélice droite
2	Goujure droite
3	Hélice gauche

4

Matériau	
Code	Description
A	Alliage d'aluminium
C	Fonte
M	Acier inoxydable
P	Acier
H	Matériaux traités

5

Lubrification	
Code	Description
C	Intérieur

6

Type	
Code	Description
S	Trou borgne

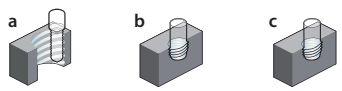
7

Exécution du filetage [mm]	
Code	Description
M5x0.8	Diamètre x Pas
...	

8

Classe de précision	
Code	Description
6H	Tolérance standard
6HX	Tolérance de fabrication plus stricte

9



a Filetage par fraisage **b** Taraudage **c** Taraudage par déformation

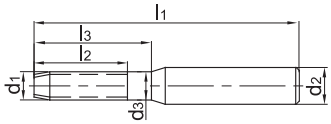
Tarauds par déformation — Métaux non-ferreux

4122A



– Attachement cylindrique, standard usine ZCC-CT





Article	✻	Dimensions (mm)								Dents	Diamètre de perçage	Nuance
			d_1	P	d_2	d_3	l_1	l_2	l_3		d	YK40F
4122AS-M1*0.25-6H		1,5P	M1	0,25	3	1	40	5	6	3	0,9	○
4122AS-M1.2*0.25-6H		1,5P	M1,2	0,25	3	1,2	40	5	6	3	1,1	○
4122A-M1.6*0.35-6H		3P	M1,6	0,35	3	1,1	40	5	11	3	1,47	●
4122AS-M1.6*0.35-6H		1,5P	M1,6	0,35	3	1,1	40	5	11	3	1,47	●
4122A-M2*0.4-6H		3P	M2	0,4	3	1,5	45	6	12	3	1,85	●
4122AS-M2*0.4-6H		1,5P	M2	0,4	3	1,5	45	6	12	3	1,85	●
4122A-M2.5*0.45-6H		3P	M2,5	0,45	3	1,9	50	6	14	3	2,33	○
4122AS-M2.5*0.45-6H		1,5P	M2,5	0,45	3	1,9	50	6	14	3	2,33	●

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
			✔		

✔ Choix de base

✔ Alternative

Codification C176 | Instructions d'usinage C201 | Paramètres C192 | Commande d'outils spéciaux C198

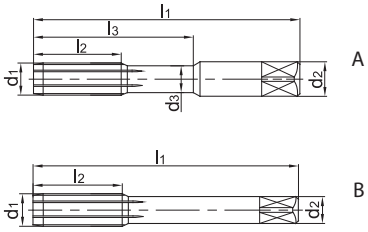
Tarauds par déformation — Métaux non-ferreux

4222A



– Type d'attachement : DIN 10
– Sortie de lubrifiant centrale





Article	*	Dimensions (mm)								Dents	Géométrie	Diamètre de perçage	Nuance
			d_1	P	d_2	d_3	l_1	l_2	l_3			d	YK40F
4222A-M3*0.5-6H		3P	M3	0,5	3,5	2,3	56	6	18	4	A	2,8	○
4222AS-M3*0.5-6H		1,5P	M3	0,5	3,5	2,3	56	6	18	4	A	2,8	●
4222A-M4*0.5-6H		3P	M4	0,5	4,5	3,1	63	8	21	4	A	3,8	○
4222AS-M4*0.5-6H		1,5P	M4	0,5	4,5	3,1	63	8	21	4	A	3,8	○
4222A-M4*0.7-6H		3P	M4	0,7	4,5	3,1	63	8	21	4	A	3,7	○
4222AS-M4*0.7-6H		1,5P	M4	0,7	4,5	3,1	63	8	21	4	A	3,7	○
4222A-M5*0.5-6H		3P	M5	0,5	6	4,3	70	10	25	4	A	4,8	○
4222AS-M5*0.5-6H		1,5P	M5	0,5	6	4,3	70	10	25	4	A	4,8	○
4222A-M5*0.8-6H		3P	M5	0,8	6	4	70	10	25	4	A	4,65	○
4222AS-M5*0.8-6H		1,5P	M5	0,8	6	4	70	10	25	4	A	4,65	○
4222A-M6*0.75-6H		3P	M6	0,75	6	5	80	12	30	4	A	5,7	○
4222AS-M6*0.75-6H		1,5P	M6	0,75	6	5	80	12	30	4	A	5,7	○
4222A-M6*1-6H		3P	M6	1	6	4,7	80	12	30	4	A	5,6	○
4222AS-M6*1-6H		1,5P	M6	1	6	4,7	80	12	30	4	A	5,6	○
4222A-M7*1.0-6H		3P	M7	1	7	5,7	80	14	30	4	A	6,6	○
4222AS-M7*1.0-6H		1,5P	M7	1	7	5,7	80	14	30	4	A	6,6	○
4222A-M8*1.0-6H		3P	M8	1	8	6,7	90	16	35	4	A	7,6	○
4222AS-M8*1-6H		1,5P	M8	1	8	6,7	90	16	35	4	A	7,6	○
4222A-M8*1.25-6H		3P	M8	1,25	8	6,4	90	16	35	4	A	7,45	○
4222AS-M8*1.25-6H		1,5P	M8	1,25	8	6,4	90	16	35	4	A	7,45	○
4222A-M10*1-6H		3P	M10	1	10	8,7	100	20	39	5	A	9,6	○
4222AS-M10*1-6H		1,5P	M10	1	10	8,7	100	20	39	5	A	9,6	○
4222A-M10*1.25-6H		3P	M10	1,25	10	8,4	100	20	39	5	A	9,45	○
4222AS-M10*1.25-6H		1,5P	M10	1,25	10	8,4	100	20	39	5	A	9,45	○
4222A-M10*1.5-6H		3P	M10	1,5	10	8,1	100	20	39	5	A	9,35	○
4222AC-M10*1.5-6H	*	3P	M10	1,5	10	8,1	100	20	39	5	A	9,35	○
4222AS-M10*1.5-6H		1,5P	M10	1,5	10	8,1	100	20	39	5	A	9,35	○
4222ACS-M10*1.5-6H	*	1,5P	M10	1,5	10	8,1	100	20	39	5	A	9,35	○
4222A-M12*1.25-6H		3P	M12	1,25	9		110	24		5	B	11,45	○
4222AS-M12*1.25-6H		1,5P	M12	1,25	9		110	24		5	B	11,45	○
4222A-M12*1.5-6H		3P	M12	1,5	9		110	24		5	B	11,35	○
4222AS-M12*1.5-6H		1,5P	M12	1,5	9		110	24		5	B	11,35	○
4222A-M12*1.75-6H		3P	M12	1,75	9		110	24		5	B	11,25	○

● En stock ○ Sur demande
* Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
			✔		

✔ Choix de base
✔ Alternative

Codification C176 | Instructions d'usinage C201 | Paramètres C192 | Commande d'outils spéciaux C198

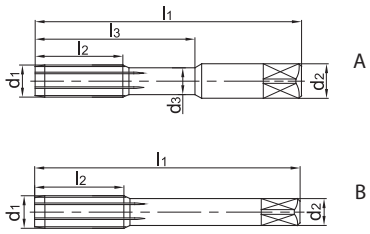
Tarauds par déformation — Métaux non-ferreux

4222A



– Type d'attachement : DIN 10
– Sortie de lubrifiant centrale





Article	✲	Dimensions (mm)								Dents	Géométrie	Diamètre de perçage	Nuance
			d_1	P	d_2	d_3	l_1	l_2	l_3			d	YK40F
4222AC-M12*1.75-6H	✲	3P	M12	1,75	9		110	24		5	B	11,25	○
4222AS-M12*1.75-6H		1,5P	M12	1,75	9		110	24		5	B	11,25	○
4222ACS-M12*1.75-6H	✲	1,5P	M12	1,75	9		110	24		5	B	11,25	○
4222A-M14*1.5-6H		3P	M14	1,5	11		110	26		6	B	13,35	○
4222AS-M14*1.5-6H		1,5P	M14	1,5	11		110	26		6	B	13,35	○
4222A-M14*2-6H		3P	M14	2	11		110	26		6	B	13,1	○
4222A-M16*1.5-6H		3P	M16	1,5	12		110	27		6	B	15,35	○
4222AS-M16*1.5-6H		1,5P	M16	1,5	12		110	27		6	B	15,35	○
4222A-M16*2-6H		3P	M16	2	12		110	27		6	B	15,1	○
4222AC-M16*2.0-6H	✲	3P	M16	2	12		110	27		6	B	15,1	○
4222AS-M16*2.0-6H		1,5P	M16	2	12		110	27		6	B	15,1	○
4222ACS-M16*2.0-6H	✲	1,5P	M16	2	12		110	27		6	B	15,1	○

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
			✔		

✔ Choix de base
✔ Alternative

Codification C176 | Instructions d'usinage C201 | Paramètres C192 | Commande d'outils spéciaux C198

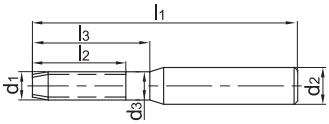
Tarauds par déformation — Acier, acier inoxydable

4122M



– Attachement cylindrique, standard usine ZCC-CT





Article	✻	Dimensions (mm)								Dents	Diamètre de perçage	Nuance	
			d_1	P	d_2	d_3	l_1	l_2	l_3		d	KTG402	YK40F
4122M-M1*0.25-6H		3P	M1	0,25	3		40	5	6	4	0,9	●	○
4122MS-M1*0.25-6H		2P	M1	0,25	3		40	5	6	4	0,9	●	○
4122M-M1.2*0.25-6H		3P	M1,2	0,25	3		40	5	6	4	1,1	○	○
4122MS-M1.2*0.25-6H		2P	M1,2	0,25	3		40	5	6	4	1,1	○	○
4122M-M1.6*0.35-6H		3P	M1,6	0,35	3	1,1	40	5	11	4	1,47	○	○
4122MS-M1.6*0.35-6H		2P	M1,6	0,35	3	1,1	40	5	11	4	1,47	○	○
4122M-M2*0.4-6H		3P	M2	0,4	3	1,5	45	6	12	4	1,85	●	○
4122MS-M2*0.4-6H		2P	M2	0,4	3	1,5	45	6	12	4	1,85	●	○
4122M-M2.5*0.45-6H		3P	M2,5	0,45	3	1,9	50	6	14	4	2,33	○	○
4122MS-M2.5*0.45-6H		2P	M2,5	0,45	3	1,9	50	6	14	4	2,33	●	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔				

✔ Choix de base
✔ Alternative

Codification C176 Instructions d'usinage C201 Paramètres C192 Commande d'outils spéciaux C198

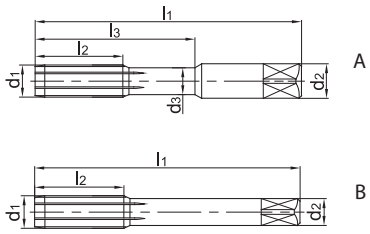
Tarauds par déformation — Acier, acier inoxydable

4222M



– Type d'attachement : DIN 10
– Sortie de lubrifiant centrale





Article	✻	Dimensions (mm)								Dents	Géométrie	Diamètre de perçage	Nuance	
			d_1	P	d_2	d_3	l_1	l_2	l_3			d	KTG402	YK40F
4222M-M3*0.5-6H		3P	M3	0,5	3,5	2,3	56	6	18	4	A	2,8	●	○
4222MS-M3*0.5-6H		2P	M3	0,5	3,5	2,3	56	6	18	4	A	2,8	○	○
4222M-M4*0.5-6H		3P	M4	0,5	4,5	3,1	63	8	21	4	A	3,8	●	○
4222MS-M4*0.5-6H		2P	M4	0,5	4,5	3,1	63	8	21	4	A	3,8	○	○
4222M-M4*0.7-6H		3P	M4	0,7	4,5	3,1	63	8	21	4	A	3,7	●	○
4222MS-M4*0.7-6H		2P	M4	0,7	4,5	3,1	63	8	21	4	A	3,7	●	○
4222M-M5*0.5-6H		3P	M5	0,5	6	4,3	70	10	25	4	A	4,8	●	○
4222MS-M5*0.5-6H		2P	M5	0,5	6	4,3	70	10	25	4	A	4,8	●	○
4222M-M5*0.8-6H		3P	M5	0,8	6	4	70	10	25	4	A	4,65	●	○
4222MS-M5*0.8-6H		2P	M5	0,8	6	4	70	10	25	4	A	4,65	●	○
4222M-M6*0.75-6H		3P	M6	0,75	6	5	80	12	30	4	A	5,7	●	○
4222MS-M6*0.75-6H		2P	M6	0,75	6	5	80	12	30	4	A	5,7	●	○
4222M-M6*1.0-6H		3P	M6	1	6	4,7	80	12	30	4	A	5,6	●	○
4222MS-M6*1.0-6H		2P	M6	1	6	4,7	80	12	30	4	A	5,6	●	○
4222M-M7*1.0-6H		3P	M7	1	7	5,7	80	14	30	4	A	6,6	○	○
4222MS-M7*1.0-6H		2P	M7	1	7	5,7	80	14	30	4	A	6,6	○	○
4222M-M8*1.0-6H		3P	M8	1	8	6,7	90	16	35	4	A	7,6	●	○
4222MS-M8*1.0-6H		2P	M8	1	8	6,7	90	16	35	4	A	7,6	○	○
4222M-M8*1.25-6H		3P	M8	1,25	8	6,4	90	16	35	4	A	7,45	●	○
4222MS-M8*1.25-6H		2P	M8	1,25	8	6,4	90	16	35	4	A	7,45	●	○
4222M-M10*1.0-6H		3P	M10	1	10	8,7	100	20	39	5	A	9,6	○	○
4222MS-M10*1.0-6H		2P	M10	1	10	8,7	100	20	39	5	A	9,6	○	○
4222M-M10*1.25-6H		3P	M10	1,25	10	8,4	100	20	39	5	A	9,45	○	○
4222MS-M10*1.25-6H		2P	M10	1,25	10	8,4	100	20	39	5	A	9,45	●	○
4222M-M10*1.5-6H		3P	M10	1,5	10	8,1	100	20	39	5	A	9,35	●	○
4222MC-M10*1.5-6H	✻	3P	M10	1,5	10	8,1	100	20	39	5	A	9,35	●	○
4222MS-M10*1.5-6H		2P	M10	1,5	10	8,1	100	20	39	5	A	9,35	●	○
4222MCS-M10*1.5-6H	✻	2P	M10	1,5	10	8,1	100	20	39	5	A	9,35	●	○
4222M-M12*1.25-6H		3P	M12	1,25	9		110	24		5	B	11,45	●	○
4222MS-M12*1.25-6H		2P	M12	1,25	9		110	24		5	B	11,45	●	○
4222M-M12*1.5-6H		3P	M12	1,5	9		110	24		5	B	11,35	○	○
4222MS-M12*1.5-6H		2P	M12	1,5	9		110	24		5	B	11,35	○	○
4222M-M12*1.75-6H		3P	M12	1,75	9		110	24		5	B	11,25	○	○

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔				

✔ Choix de base
✔ Alternative

Codification C176 | Instructions d'usinage C201 | Paramètres C192 | Commande d'outils spéciaux C198

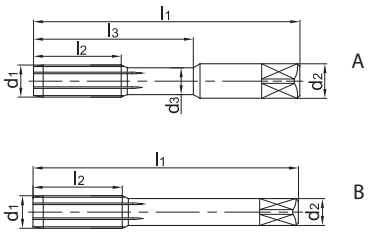
Tarauds par déformation — Acier, acier inoxydable

4222M



– Type d'attachement : DIN 10
– Sortie de lubrifiant centrale





Article	*	Dimensions (mm)								Dents	Géométrie	Diamètre de perçage	Nuance	
			d_1	P	d_2	d_3	l_1	l_2	l_3			d	KTG402	YK40F
4222MC-M12*1.75-6H	✻	3P	M12	1,75	9		110	24		5	B	11,25	○	○
4222MS-M12*1.75-6H		2P	M12	1,75	9		110	24		5	B	11,25	●	○
4222MCS-M12*1.75-6H	✻	2P	M12	1,75	9		110	24		5	B	11,25	○	○
4222M-M14*1.5-6H		3P	M14	1,5	11		110	26		6	B	13,35	●	○
4222MS-M14*1.5-6H		2P	M14	1,5	11		110	26		6	B	13,35	○	○
4222M-M14*2.0-6H		3P	M14	2	11		110	26		6	B	13,1	○	
4222MS-M14*2.0-6H		2P	M14	2	11		110	26		6	B	13,1	○	○
4222M-M16*1.5-6H		3P	M16	1,5	12		110	27		6	B	15,35	●	○
4222MS-M16*1.5-6H		2P	M16	1,5	12		110	27		6	B	15,35	○	○
4222M-M16*2.0-6H		3P	M16	2	12		110	27		6	B	15,1	○	○
4222MC-M16*2.0-6H	✻	3P	M16	2	12		110	27		6	B	15,1	○	○
4222MS-M16*2.0-6H		2P	M16	2	12		110	27		6	B	15,1	○	○
4222MCS-M16*2.0-6H	✻	2P	M16	2	12		110	27		6	B	15,1	●	○

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔	✔				

✔ Choix de base
✔ Alternative

Codification > C176 Instructions d'usinage > C201 Paramètres > C192 Commande d'outils spéciaux > C198

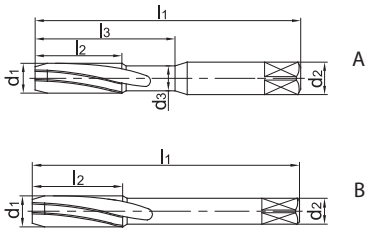
Taraud, goujure à droite **Fonte**

4201C



– Type d'attachement : DIN 10
– Sortie de lubrifiant centrale





Article	✻	Dimensions (mm)								Dents	Géométrie	Diamètre de perçage	Nuance
			d_1	P	d_2	d_3	l_1	l_2	l_3			d	YK40F
4201C-M3*0.5-6H		3P	M3	0,5	3,5	2,3	56	11	18	3	A	2,5	●
4201C-M3*0.5-6HX		3P	M3	0,5	3,5	2,3	56	11	18	3	A	2,5	●
4201CS-M3*0.5-6H		1,5P	M3	0,5	3,5	2,3	56	11	18	3	A	2,5	●
4201CS-M3*0.5-6HX		1,5P	M3	0,5	3,5	2,3	56	11	18	3	A	2,5	●
4201C-M4*0.7-6H		3P	M4	0,7	4,5	3,1	63	13	21	3	A	3,3	●
4201C-M4*0.7-6HX		3P	M4	0,7	4,5	3,1	63	13	21	3	A	3,3	●
4201CS-M4*0.7-6H		1,5P	M4	0,7	4,5	3,1	63	13	21	3	A	3,3	●
4201CS-M4*0.7-6HX		1,5P	M4	0,7	4,5	3,1	63	13	21	3	A	3,3	●
4201C-M5*0.8-6H		3P	M5	0,8	6	4	70	16	25	3	A	4,2	●
4201C-M5*0.8-6HX		3P	M5	0,8	6	4	70	16	25	3	A	4,2	●
4201CS-M5*0.8-6H		1,5P	M5	0,8	6	4	70	16	25	3	A	4,2	●
4201CS-M5*0.8-6HX		1,5P	M5	0,8	6	4	70	16	25	3	A	4,2	●
4201C-M6*0.75-6H		3P	M6	0,75	6	5	80	19	30	3	A	5,25	●
4201C-M6*0.75-6HX		3P	M6	0,75	6	5	80	19	30	3	A	5,25	●
4201CS-M6*0.75-6H		1,5P	M6	0,75	6	5	80	19	30	3	A	5,25	●
4201CS-M6*0.75-6HX		1,5P	M6	0,75	6	5	80	19	30	3	A	5,25	●
4201C-M6*1-6H		3P	M6	1	6	4,7	80	19	30	3	A	5	○
4201CC-M6*1-6H	✻	3P	M6	1	6	4,7	80	19	30	3	A	5	○
4201C-M6*1-6HX		3P	M6	1	6	4,7	80	19	30	3	A	5	○
4201CS-M6*1.0-6H		1,5P	M6	1	6	4,7	80	19	30	3	A	5	●
4201CCS-M6*1-6H	✻	1,5P	M6	1	6	4,7	80	19	30	3	A	5	●
4201CS-M6*1.0-6HX		1,5P	M6	1	6	4,7	80	19	30	3	A	5	●
4201C-M7*1-6H		3P	M7	1	7	5,7	80	19	30	3	A	6	○
4201CS-M7*1.0-6H		1,5P	M7	1	7	5,7	80	19	30	3	A	6	●
4201C-M8*1-6H		3P	M8	1	8	6,7	90	20	35	3	A	7	○
4201CS-M8*1.0-6H		1,5P	M8	1	8	6,7	90	20	35	3	A	7	●
4201C-M8*1.25-6H		3P	M8	1,25	8	6,4	90	22	35	3	A	6,75	●
4201CC-M8*1.25-6H	✻	3P	M8	1,25	8	6,4	90	22	35	3	A	6,75	●
4201C-M8*1.25-6HX		3P	M8	1,25	8	6,4	90	22	35	3	A	6,75	●
4201CS-M8*1.25-6H		1,5P	M8	1,25	8	6,4	90	22	35	3	A	6,75	○
4201CCS-M8*1.25-6H	✻	1,5P	M8	1,25	8	6,4	90	22	35	3	A	6,75	○
4201CS-M8*1.25-6HX		1,5P	M8	1,25	8	6,4	90	22	35	3	A	6,75	○
4201C-M10*1-6H		3P	M10	1	10	8,7	100	20	39	4	A	9	○

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
		✔			

✔ Choix de base
✔ Alternative

Codification C176 | Instructions d'usinage C201 | Paramètres C192 | Commande d'outils spéciaux C198

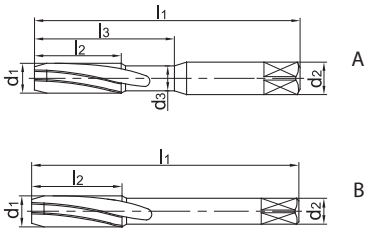
Taraud, goujure à droite — Fonte

4201C



– Type d'attachement : DIN 10
– Sortie de lubrifiant centrale





Article	✲	Dimensions (mm)								Dents	Géométrie	Diamètre de perçage	Nuance
			d_1	P	d_2	d_3	l_1	l_2	l_3			d	YK40F
4201CS-M10*1-6H		1,5P	M10	1	10	8,7	100	20	39	4	A	9	○
4201C-M10*1.25-6H		3P	M10	1,25	10	8,4	100	24	39	4	A	8,75	○
4201CS-M10*1.25-6H		1,5P	M10	1,25	10	8,4	100	24	39	4	A	8,75	○
4201C-M10*1.5-6H		3P	M10	1,5	10	8,1	100	24	39	4	A	8,5	○
4201CC-M10*1.5-6H	✲	3P	M10	1,5	10	8,1	100	24	39	4	A	8,5	○
4201C-M10*1.5-6HX		3P	M10	1,5	10	8,1	100	24	39	4	A	8,5	○
4201CS-M10*1.5-6H		1,5P	M10	1,5	10	8,1	100	24	39	4	A	8,5	○
4201CCS-M10*1.5-6H	✲	1,5P	M10	1,5	10	8,1	100	24	39	4	A	8,5	●
4201CS-M10*1.5-6HX		1,5P	M10	1,5	10	8,1	100	24	39	4	A	8,5	○
4201C-M12*1.25-6H		3P	M12	1,25	9		110	29		4	B	10,75	○
4201CS-M12*1.25-6H		1,5P	M12	1,25	9		110	29		4	B	10,75	○
4201C-M12*1.5-6H		3P	M12	1,5	9		110	29		4	B	10,5	○
4201CS-M12*1.5-6H		1,5P	M12	1,5	9		110	29		4	B	10,5	○
4201C-M12*1.75-6H		3P	M12	1,75	9		110	29		4	B	10,25	○
4201CC-M12*1.75-6H	✲	3P	M12	1,75	9		110	29		4	B	10,25	●
4201C-M12*1.75-6HX		3P	M12	1,75	9		110	29		4	B	10,25	○
4201CS-M12*1.75-6H		1,5P	M12	1,75	9		110	29		4	B	10,25	○
4201CCS-M12*1.75-6H	✲	1,5P	M12	1,75	9		110	29		4	B	10,25	○
4201CS-M12*1.75-6HX		1,5P	M12	1,75	9		110	29		4	B	10,25	○
4201C-M14*1.5-6H		3P	M14	1,5	11		110	30		4	B	12,5	○
4201CS-M14*1.5-6H		1,5P	M14	1,5	11		110	30		4	B	12,5	○
4201C-M14*2-6H		3P	M14	2	11		110	30		4	B	12	○
4201CS-M14*2-6H		1,5P	M14	2	11		110	30		4	B	12	○
4201C-M16*1.5-6H		3P	M16	1,5	12		110	32		4	B	14,5	○
4201CS-M16*1.5-6H		1,5P	M16	1,5	12		110	32		4	B	14,5	○
4201C-M16*2-6H		3P	M16	2	12		110	32		4	B	14	○
4201C-M16*2-6HX		3P	M16	2	12		110	32		4	B	14	○
4201CS-M16*2-6H		1,5P	M16	2	12		110	32		4	B	14	○
4201CS-M16*2.0-6HX		1,5P	M16	2	12		110	32		4	B	14	●

● En stock ○ Sur demande

✲ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
		✔			

✔ Choix de base
✔ Alternative

Codification > C176 | Instructions d'usinage > C201 | Paramètres > C192 | Commande d'outils spéciaux > C198

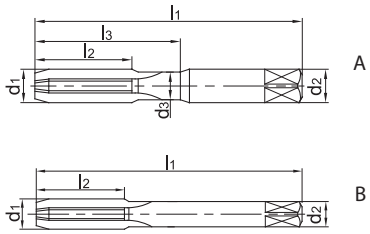
Taraud, goujure droite **Fonte**

4202C



– Type d'attachement : DIN 10
– Sortie de lubrifiant centrale





Article	✻	Dimensions (mm)								Dents	Géométrie	Diamètre de perçage	Nuance
			d_1	P	d_2	d_3	l_1	l_2	l_3			d	YK40F
4202C-M3*0.5-6H		3P	M3	0,5	3,5	2,3	56	11	18	3	A	2,5	○
4202C-M3*0.5-6HX		3P	M3	0,5	3,5	2,3	56	11	18	3	A	2,5	○
4202CS-M3*0.5-6H		1,5P	M3	0,5	3,5	2,3	56	11	18	3	A	2,5	○
4202CS-M3*0.5-6HX		1,5P	M3	0,5	3,5	2,3	56	11	18	3	A	2,5	○
4202C-M4*0.7-6H		3P	M4	0,7	4,5	3,1	63	13	21	3	A	3,3	●
4202C-M4*0.7-6HX		3P	M4	0,7	4,5	3,1	63	13	21	3	A	3,3	○
4202CS-M4*0.7-6H		1,5P	M4	0,7	4,5	3,1	63	13	21	3	A	3,3	○
4202CS-M4*0.7-6HX		1,5P	M4	0,7	4,5	3,1	63	13	21	3	A	3,3	○
4202C-M5*0.8-6H		3P	M5	0,8	6	4	70	16	25	3	A	4,2	○
4202C-M5*0.8-6HX		3P	M5	0,8	6	4	70	16	25	3	A	4,2	○
4202CS-M5*0.8-6H		1,5P	M5	0,8	6	4	70	16	25	3	A	4,2	○
4202CS-M5*0.8-6HX		1,5P	M5	0,8	6	4	70	16	25	3	A	4,2	○
4202C-M6*0.75-6H		3P	M6	0,75	6	5	80	19	30	3	A	5,25	○
4202C-M6*0.75-6HX		3P	M6	0,75	6	5	80	19	30	3	A	5,25	○
4202CS-M6*0.75-6H		1,5P	M6	0,75	6	5	80	19	30	3	A	5,25	○
4202CS-M6*0.75-6HX		1,5P	M6	0,75	6	5	80	19	30	3	A	5,25	○
4202C-M6*1.0-6H		3P	M6	1	6	4,7	80	19	30	3	A	5	○
4202CC-M6*1.0-6H	✻	3P	M6	1	6	4,7	80	19	30	3	A	5	○
4202C-M6*1.0-6HX		3P	M6	1	6	4,7	80	19	30	3	A	5	○
4202CS-M6*1.0-6H		1,5P	M6	1	6	4,7	80	19	30	3	A	5	○
4202CCS-M6*1.0-6H	✻	1,5P	M6	1	6	4,7	80	19	30	3	A	5	○
4202CS-M6*1.0-6HX		1,5P	M6	1	6	4,7	80	19	30	3	A	5	○
4202C-M7*1.0-6H		3P	M7	1	7	5,7	80	19	30	3	A	6	○
4202CS-M7*1.0-6H		1,5P	M7	1	7	5,7	80	19	30	3	A	6	○
4202C-M8*1-6H		3P	M8	1	8	6,7	90	20	35	3	A	7	○
4202CS-M8*1.0-6H		1,5P	M8	1	8	6,7	90	20	35	3	A	7	○
4202C-M8*1.25-6H		3P	M8	1,25	8	6,4	90	22	35	3	A	6,75	○
4202CC-M8*1.25-6H	✻	3P	M8	1,25	8	6,4	90	22	35	3	A	6,75	○
4202C-M8*1.25-6HX		3P	M8	1,25	8	6,4	90	22	35	3	A	6,75	○
4202CS-M8*1.25-6H		1,5P	M8	1,25	8	6,4	90	22	35	3	A	6,75	○
4202CCS-M8*1.25-6H	✻	1,5P	M8	1,25	8	6,4	90	22	35	3	A	6,75	○
4202CS-M8*1.25-6HX		1,5P	M8	1,25	8	6,4	90	22	35	3	A	6,75	○
4202C-M10*1.0-6H		3P	M10	1	10	8,7	100	20	39	4	A	9	○

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
		✔			

✔ Choix de base
✔ Alternative

Codification C176 | Instructions d'usinage C201 | Paramètres C192 | Commande d'outils spéciaux C198

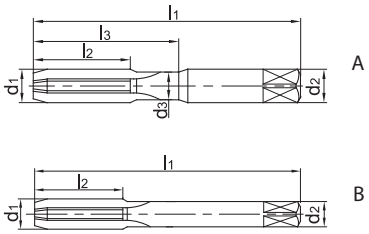
Taraud, goujure droite — Fonte

4202C



– Type d'attachement : DIN 10
– Sortie de lubrifiant centrale





Article	✲	Dimensions (mm)								Dents	Géométrie	Diamètre de perçage	Nuance
			d_1	P	d_2	d_3	l_1	l_2	l_3			d	YK40F
4202CS-M10*1.0-6H		1,5P	M10	1	10	8,7	100	20	39	4	A	9	○
4202C-M10*1.25-6H		3P	M10	1,25	10	8,4	100	24	39	4	A	8,75	○
4202CS-M10*1.25-6H		1,5P	M10	1,25	10	8,4	100	24	39	4	A	8,75	○
4202C-M10*1.5-6H		3P	M10	1,5	10	8,1	100	24	39	4	A	8,5	○
4202CC-M10*1.5-6H	✲	3P	M10	1,5	10	8,1	100	24	39	4	A	8,5	○
4202C-M10*1.5-6HX		3P	M10	1,5	10	8,1	100	24	39	4	A	8,5	○
4202CS-M10*1.5-6H		1,5P	M10	1,5	10	8,1	100	24	39	4	A	8,5	○
4202CCS-M10*1.5-6H	✲	1,5P	M10	1,5	10	8,1	100	24	39	4	A	8,5	○
4202CS-M10*1.5-6HX		1,5P	M10	1,5	10	8,1	100	24	39	4	A	8,5	○
4202C-M12*1.25-6H		3P	M12	1,25	9		110	29		4	B	10,75	○
4202CS-M12*1.25-6H		1,5P	M12	1,25	9		110	29		4	B	10,75	○
4202C-M12*1.5-6H		3P	M12	1,5	9		110	29		4	B	10,5	○
4202CS-M12*1.5-6H		1,5P	M12	1,5	9		110	29		4	B	10,5	○
4202C-M12*1.75-6H		3P	M12	1,75	9		110	29		4	B	10,25	○
4202CC-M12*1.75-6H	✲	3P	M12	1,75	9		110	29		4	B	10,25	○
4202C-M12*1.75-6HX		3P	M12	1,75	9		110	29		4	B	10,25	○
4202CS-M12*1.75-6H		1,5P	M12	1,75	9		110	29		4	B	10,25	○
4202CCS-M12*1.75-6H	✲	1,5P	M12	1,75	9		110	29		4	B	10,25	○
4202CS-M12*1.75-6HX		1,5P	M12	1,75	9		110	29		4	B	10,25	○
4202C-M14*1.5-6H		3P	M14	1,5	11		110	30		4	B	12,5	○
4202CS-M14*1.5-6H		1,5P	M14	1,5	11		110	30		4	B	12,5	○
4202C-M14*2.0-6H		3P	M14	2	11		110	30		4	B	12	○
4202CS-M14*2.0-6H		1,5P	M14	2	11		110	30		4	B	12	○
4202C-M16*1.5-6H		3P	M16	1,5	12		110	32		4	B	14,5	○
4202CS-M16*1.5-6H		1,5P	M16	1,5	12		110	32		4	B	14,5	○
4202C-M16*2-6H		3P	M16	2	12		110	32		4	B	14	○
4202C-M16*2-6HX		3P	M16	2	12		110	32		4	B	14	○
4202CS-M16*2-6H		1,5P	M16	2	12		110	32		4	B	14	○
4202CS-M16*2.0-6HX		1,5P	M16	2	12		110	32		4	B	14	○

● En stock ○ Sur demande

✲ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
		✔			

✔ Choix de base
✔ Alternative

Codification > C176 | Instructions d'usinage > C201 | Paramètres > C192 | Commande d'outils spéciaux > C198

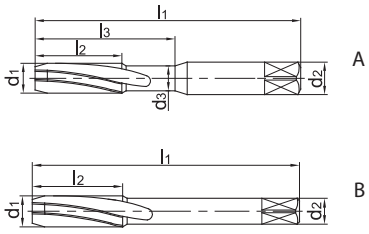
Taraud, goujure à droite — Métaux non-ferreux

4201A



– Type d'attachement : DIN 10
– Sortie de lubrifiant centrale





Article	✻	Dimensions (mm)								Dents	Géométrie	Diamètre de perçage	Nuance
			d_1	P	d_2	d_3	l_1	l_2	l_3			d	YK40F
4201A-M3*0.5-6H		3P	M3	0,5	3,5	2,3	56	11	18	3	A	2,5	●
4201A-M3*0.5-6HX		3P	M3	0,5	3,5	2,3	56	11	18	3	A	2,5	○
4201AS-M3*0.5-6H		1,5P	M3	0,5	3,5	2,3	56	11	18	3	A	2,5	●
4201AS-M3*0.5-6HX		1,5P	M3	0,5	3,5	2,3	56	11	18	3	A	2,5	○
4201A-M4*0.7-6H		3P	M4	0,7	4,5	3,1	63	13	21	3	A	3,3	●
4201A-M4*0.7-6HX		3P	M4	0,7	4,5	3,1	63	13	21	3	A	3,3	○
4201AS-M4*0.7-6H		1,5P	M4	0,7	4,5	3,1	63	13	21	3	A	3,3	●
4201AS-M4*0.7-6HX		1,5P	M4	0,7	4,5	3,1	63	13	21	3	A	3,3	○
4201A-M5*0.8-6H		3P	M5	0,8	6	4	70	16	25	3	A	4,2	○
4201A-M5*0.8-6HX		3P	M5	0,8	6	4	70	16	25	3	A	4,2	○
4201AS-M5*0.8-6H		1,5P	M5	0,8	6	4	70	16	25	3	A	4,2	●
4201AS-M5*0.8-6HX		1,5P	M5	0,8	6	4	70	16	25	3	A	4,2	○
4201A-M6*0.75-6H		3P	M6	0,75	6	5	80	19	30	3	A	5,25	○
4201A-M6*0.75-6HX		3P	M6	0,75	6	5	80	19	30	3	A	5,25	●
4201AS-M6*0.75-6H		1,5P	M6	0,75	6	5	80	19	30	3	A	5,25	●
4201AS-M6*0.75-6HX		1,5P	M6	0,75	6	5	80	19	30	3	A	5,25	○
4201A-M6*1-6H		3P	M6	1	6	4,7	80	19	30	3	A	5	○
4201AC-M6*1-6H	✻	3P	M6	1	6	4,7	80	19	30	3	A	5	○
4201A-M6*1-6HX		3P	M6	1	6	4,7	80	19	30	3	A	5	○
4201AS-M6*1-6H		1,5P	M6	1	6	4,7	80	19	30	3	A	5	●
4201ACS-M6*1-6H	✻	1,5P	M6	1	6	4,7	80	19	30	3	A	5	●
4201AS-M6*1-6HX		1,5P	M6	1	6	4,7	80	19	30	3	A	5	○
4201A-M7*1-6H		3P	M7	1	7	5,7	80	19	30	3	A	6	○
4201AS-M7*1-6H		1,5P	M7	1	7	5,7	80	19	30	3	A	6	○
4201A-M8*1-6H		3P	M8	1	8	6,7	90	20	35	3	A	7	○
4201AS-M8*1-6H		1,5P	M8	1	8	6,7	90	20	35	3	A	7	●
4201A-M8*1.25-6H		3P	M8	1,25	8	6,4	90	22	35	3	A	6,75	○
4201AC-M8*1.25-6H	✻	3P	M8	1,25	8	6,4	90	22	35	3	A	6,75	●
4201A-M8*1.25-6HX		3P	M8	1,25	8	6,4	90	22	35	3	A	6,75	○
4201AS-M8*1.25-6H		1,5P	M8	1,25	8	6,4	90	22	35	3	A	6,75	●
4201ACS-M8*1.25-6H	✻	1,5P	M8	1,25	8	6,4	90	22	35	3	A	6,75	●
4201AS-M8*1.25-6HX		1,5P	M8	1,25	8	6,4	90	22	35	3	A	6,75	○
4201A-M10*1-6H		3P	M10	1	10	8,7	100	20	39	4	A	9	●

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
			✔		

✔ Choix de base
✔ Alternative

Codification C176 | Instructions d'usinage C201 | Paramètres C192 | Commande d'outils spéciaux C198

Taraud, goujure à droite

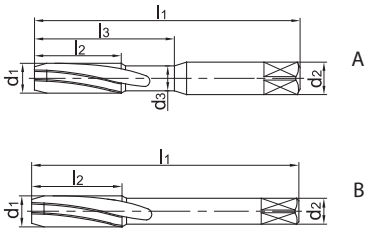
Métaux non-ferreux

4201A



– Type d'attachement : DIN 10
– Sortie de lubrifiant centrale





Article	✲	Dimensions (mm)								Dents	Géométrie	Diamètre de perçage	Nuance
			d_1	P	d_2	d_3	l_1	l_2	l_3			d	YK40F
4201AS-M10*1-6H		1,5P	M10	1	10	8,7	100	20	39	4	A	9	●
4201A-M10*1.25-6H		3P	M10	1,25	10	8,4	100	24	39	4	A	8,75	○
4201AS-M10*1.25-6H		1,5P	M10	1,25	10	8,4	100	24	39	4	A	8,75	○
4201A-M10*1.5-6H		3P	M10	1,5	10	8,1	100	24	39	4	A	8,5	○
4201AC-M10*1.5-6H	✲	3P	M10	1,5	10	8,1	100	24	39	4	A	8,5	●
4201A-M10*1.5-6HX		3P	M10	1,5	10	8,1	100	24	39	4	A	8,5	○
4201AS-M10*1.5-6H		1,5P	M10	1,5	10	8,1	100	24	39	4	A	8,5	●
4201ACS-M10*1.5-6H	✲	1,5P	M10	1,5	10	8,1	100	24	39	4	A	8,5	○
4201AS-M10*1.5-6HX		1,5P	M10	1,5	10	8,1	100	24	39	4	A	8,5	○
4201A-M12*1.25-6H		3P	M12	1,25	9		110	29		4	B	10,75	○
4201AS-M12*1.25-6H		1,5P	M12	1,25	9		110	29		4	B	10,75	○
4201A-M12*1.5-6H		3P	M12	1,5	9		110	29		4	B	10,5	○
4201AS-M12*1.5-6H		1,5P	M12	1,5	9		110	29		4	B	10,5	○
4201A-M12*1.75-6H		3P	M12	1,75	9		110	29		4	B	10,25	○
4201AC-M12*1.75-6H	✲	3P	M12	1,75	9		110	29		4	B	10,25	○
4201A-M12*1.75-6HX		3P	M12	1,75	9		110	29		4	B	10,25	○
4201AS-M12*1.75-6H		1,5P	M12	1,75	9		110	29		4	B	10,25	●
4201ACS-M12*1.75-6H	✲	1,5P	M12	1,75	9		110	29		4	B	10,25	○
4201AS-M12*1.75-6HX		1,5P	M12	1,75	9		110	29		4	B	10,25	○
4201A-M14*1.5-6H		3P	M14	1,5	11		110	30		4	B	12,5	○
4201AS-M14*1.5-6H		1,5P	M14	1,5	11		110	30		4	B	12,5	○
4201A-M14*2-6H		3P	M14	2	11		110	30		4	B	12	○
4201AS-M14*2-6H		1,5P	M14	2	11		110	30		4	B	12	○
4201A-M16*1.5-6H		3P	M16	1,5	12		110	32		4	B	14,5	○
4201AS-M16*1.5-6H		1,5P	M16	1,5	12		110	32		4	B	14,5	○
4201A-M16*2-6H		3P	M16	2	12		110	32		4	B	14	○
4201A-M16*2-6HX		3P	M16	2	12		110	32		4	B	14	○
4201AS-M16*2-6H		1,5P	M16	2	12		110	32		4	B	14	○
4201AS-M16*2-6HX		1,5P	M16	2	12		110	32		4	B	14	○

● En stock ○ Sur demande

✲ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
			✔		

✔ Choix de base
✔ Alternative

Codification C176 Instructions d'usinage C201 Paramètres C192 Commande d'outils spéciaux C198

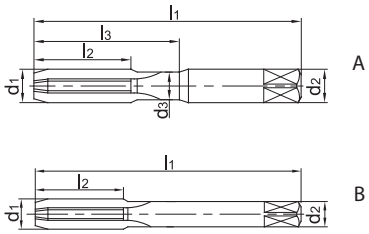
Taraud, goujure droite — Métaux non-ferreux

4202A



– Type d'attachement : DIN 10
– Sortie de lubrifiant centrale





Article	✻	Dimensions (mm)								Dents	Géométrie	Diamètre de perçage	Nuance
			d_1	P	d_2	d_3	l_1	l_2	l_3			d	YK40F
4202A-M3*0.5-6H		3P	M3	0,5	3,5	2,3	56	11	18	3	A	2,5	○
4202A-M3*0.5-6HX		3P	M3	0,5	3,5	2,3	56	11	18	3	A	2,5	○
4202AS-M3*0.5-6H		1,5P	M3	0,5	3,5	2,3	56	11	18	3	A	2,5	○
4202AS-M3*0.5-6HX		1,5P	M3	0,5	3,5	2,3	56	11	18	3	A	2,5	○
4202A-M4*0.7-6H		3P	M4	0,7	4,5	3,1	63	13	21	3	A	3,3	○
4202A-M4*0.7-6HX		3P	M4	0,7	4,5	3,1	63	13	21	3	A	3,3	○
4202AS-M4*0.7-6H		1,5P	M4	0,7	4,5	3,1	63	13	21	3	A	3,3	○
4202AS-M4*0.7-6HX		1,5P	M4	0,7	4,5	3,1	63	13	21	3	A	3,3	○
4202A-M5*0.8-6H		3P	M5	0,8	6	4	70	16	25	3	A	4,2	○
4202A-M5*0.8-6HX		3P	M5	0,8	6	4	70	16	25	3	A	4,2	○
4202AS-M5*0.8-6H		1,5P	M5	0,8	6	4	70	16	25	3	A	4,2	○
4202AS-M5*0.8-6HX		1,5P	M5	0,8	6	4	70	16	25	3	A	4,2	○
4202A-M6*0.75-6H		3P	M6	0,75	6	5	80	19	30	3	A	5,25	○
4202A-M6*0.75-6HX		3P	M6	0,75	6	5	80	19	30	3	A	5,25	○
4202AS-M6*0.75-6H		1,5P	M6	0,75	6	5	80	19	30	3	A	5,25	○
4202AS-M6*0.75-6HX		1,5P	M6	0,75	6	5	80	19	30	3	A	5,25	○
4202A-M6*1-6H		3P	M6	1	6	4,7	80	19	30	3	A	5	○
4202AC-M6*1.0-6H	✻	3P	M6	1	6	4,7	80	19	30	3	A	5	○
4202A-M6*1-6HX		3P	M6	1	6	4,7	80	19	30	3	A	5	○
4202AS-M6*1.0-6H		1,5P	M6	1	6	4,7	80	19	30	3	A	5	○
4202ACS-M6*1-6H	✻	1,5P	M6	1	6	4,7	80	19	30	3	A	5	○
4202AS-M6*1.0-6HX		1,5P	M6	1	6	4,7	80	19	30	3	A	5	○
4202A-M7*1-6H		3P	M7	1	7	5,7	80	19	30	3	A	6	○
4202AS-M7*1.0-6H		1,5P	M7	1	7	5,7	80	19	30	3	A	6	○
4202A-M8*1-6H		3P	M8	1	8	6,7	90	20	35	3	A	7	○
4202AS-M8*1.0-6H		1,5P	M8	1	8	6,7	90	20	35	3	A	7	○
4202A-M8*1.25-6H		3P	M8	1,25	8	6,4	90	22	35	3	A	6,75	○
4202AC-M8*1.25-6H	✻	3P	M8	1,25	8	6,4	90	22	35	3	A	6,75	○
4202A-M8*1.25-6HX		3P	M8	1,25	8	6,4	90	22	35	3	A	6,75	○
4202AS-M8*1.25-6H		1,5P	M8	1,25	8	6,4	90	22	35	3	A	6,75	○
4202ACS-M8*1.25-6H	✻	1,5P	M8	1,25	8	6,4	90	22	35	3	A	6,75	○
4202AS-M8*1.25-6HX		1,5P	M8	1,25	8	6,4	90	22	35	3	A	6,75	○
4202A-M10*1-6H		3P	M10	1	10	8,7	100	20	39	4	A	9	○

● En stock ○ Sur demande
✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
			✔		

✔ Choix de base
✔ Alternative

Codification C176 | Instructions d'usinage C201 | Paramètres C192 | Commande d'outils spéciaux C198

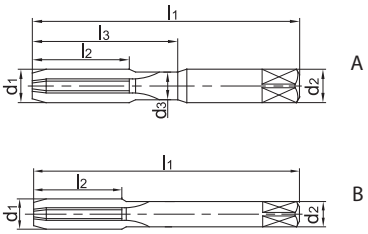
Taraud, goujure droite — Métaux non-ferreux

4202A



– Type d'attachement : DIN 10
– Sortie de lubrifiant centrale





Article	✲	Dimensions (mm)								Dents	Géométrie	Diamètre de perçage	Nuance
			d_1	P	d_2	d_3	l_1	l_2	l_3			d	YK40F
4202AS-M10*1.0-6H		1,5P	M10	1	10	8,7	100	20	39	4	A	9	○
4202A-M10*1.25-6H		3P	M10	1,25	10	8,4	100	24	39	4	A	8,75	○
4202AS-M10*1.25-6H		1,5P	M10	1,25	10	8,4	100	24	39	4	A	8,75	○
4202A-M10*1.5-6H		3P	M10	1,5	10	8,1	100	24	39	4	A	8,5	○
4202AC-M10*1.5-6H	✲	3P	M10	1,5	10	8,1	100	24	39	4	A	8,5	○
4202A-M10*1.5-6HX		3P	M10	1,5	10	8,1	100	24	39	4	A	8,5	○
4202AS-M10*1.5-6H		1,5P	M10	1,5	10	8,1	100	24	39	4	A	8,5	○
4202ACS-M10*1.5-6H	✲	1,5P	M10	1,5	10	8,1	100	24	39	4	A	8,5	○
4202AS-M10*1.5-6HX		1,5P	M10	1,5	10	8,1	100	24	39	4	A	8,5	○
4202A-M12*1.25-6H		3P	M12	1,25	9		110	29		4	B	10,75	○
4202AS-M12*1.25-6H		1,5P	M12	1,25	9		110	29		4	B	10,75	○
4202A-M12*1.5-6H		3P	M12	1,5	9		110	29		4	B	10,5	○
4202AS-M12*1.5-6H		1,5P	M12	1,5	9		110	29		4	B	10,5	○
4202A-M12*1.75-6H		3P	M12	1,75	9		110	29		4	B	10,25	○
4202AC-M12*1.75-6H	✲	3P	M12	1,75	9		110	29		4	B	10,25	○
4202A-M12*1.75-6HX		3P	M12	1,75	9		110	29		4	B	10,25	○
4202AS-M12*1.75-6H		1,5P	M12	1,75	9		110	29		4	B	10,25	●
4202ACS-M12*1.75-6H	✲	1,5P	M12	1,75	9		110	29		4	B	10,25	○
4202AS-M12*1.75-6HX		1,5P	M12	1,75	9		110	29		4	B	10,25	○
4202A-M14*1.5-6H		3P	M14	1,5	11		110	30		4	B	12,5	○
4202AS-M14*1.5-6H		1,5P	M14	1,5	11		110	30		4	B	12,5	○
4202A-M14*2-6H		3P	M14	2	11		110	30		4	B	12	○
4202AS-M14*2.0-6H		1,5P	M14	2	11		110	30		4	B	12	○
4202A-M16*1.5-6H		3P	M16	1,5	12		110	32		4	B	14,5	○
4202AS-M16*1.5-6H		1,5P	M16	1,5	12		110	32		4	B	14,5	○
4202A-M16*2-6H		3P	M16	2	12		110	32		4	B	14	○
4202A-M16*2-6HX		3P	M16	2	12		110	32		4	B	14	○
4202AS-M16*2.0-6H		1,5P	M16	2	12		110	32		4	B	14	○
4202AS-M16*2.0-6HX		1,5P	M16	2	12		110	32		4	B	14	○

● En stock ○ Sur demande
✲ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
			✔		

✔ Choix de base
✔ Alternative

Codification > C176 | Instructions d'usinage > C201 | Paramètres > C192 | Commande d'outils spéciaux > C198

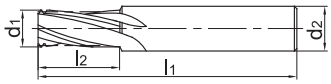
Fraise à fileter, revêtue — Acier, fonte, métaux non-ferreux

4111



– Attachement cylindrique, standard usine ZCC-CT





Article	✻	Dimensions (mm)						Dents	Diamètre de perçage	Nuance	
		D	d_1	P	d_2	l_1	l_2		d	KTG4015	YK40F
4111-M3*0.5		M3	2,35	0,5	4	50	6	3	2,5	●	●
4111-M4*0.7		M4	3,15	0,7	4	50	8	3	3,3	●	○
4111-M5*0.8		M5	4	0,8	6	50	10	3	4,2	●	○
4111-M5*0.5		M5	4,3	0,5	6	50	10	3	4,5	●	○
4111-M6*1		M6	4,75	1	6	60	12	4	5	●	●
4111-M6*0.75		M6	5	0,75	6	60	12	4	5,25	●	○
4111-M8*1.25		M8	6,45	1,25	8	60	16	4	6,75	●	●
4111-M8*1		M8	6,65	1	8	60	16	4	7	●	○
4111-M10*1.5		M10	8,1	1,5	10	75	20	4	8,5	●	○
4111-M10*1		M10	8,55	1	10	75	20	4	9	●	○
4111-M12*1.75		M12	9,75	1,75	12	75	24	4	10,25	●	○
4111-M12*1.25		M12	10,25	1,25	12	75	24	4	10,75	●	○
4111-M14*2		M14	11,4	2	14	75	28	4	12	●	○
4111-M14*1.5		M14	11,9	1,5	14	75	28	4	12,5	●	○
4111-M14*1		M14	12,35	1	14	75	20	4	13	●	○
4111-M16*2		M16	13,3	2	16	90	32	6	14	●	○
4111-M18*2.5		M18	14,75	2,5	18	90	36	6	15,5	●	○
4111-M18*1		M18	16,15	1	18	90	20	6	17	●	○
4111-M20*2.5		M20	16,65	2,5	18	100	40	6	17,5	●	○
4111-M20*2		M20	17,1	2	18	100	40	6	18	●	○

● En stock ○ Sur demande

✻ Avec arrosage interne

Domaine d'utilisation

P	M	K	N	S	H
✔		✔	✔		

✔ Choix de base

✔ Alternative

Codification C176 Instructions d'usinage C201 Paramètres C192 Commande d'outils spéciaux C198

Guide des données de coupe recommandées – Outils de filetage carbure monobloc

Solid carbide threading tools

Material group		Composition / structure / heat treatment		Brinell hardness HB	Machining group	Starting values for cutting speed v_c [m/min]							
						Thread former		Thread former				Thread former	
						4122A 4222A	4122M 4222M	4201C	4201A	4202C	4202A		
						YK40F	YK40F	YK40F	YK40F	YK40F	YK40F	KTG40115	
						Coolan:							
						external	external	external	external	external	external	external	f-group
P	Unalloyed steel	ca. 0,15 % C	annealed	125	1		20					100	1
		ca. 0,45 % C	annealed	190	2		20					90	1
		ca. 0,45 % C	tempered	250	3		20					80	1
		ca. 0,75 % C	annealed	270	4		20					70	1
		ca. 0,75 % C	tempered	300	5		20					70	1
	Low-alloyed steel		annealed	180	6		20					90	1
			tempered	275	7		20					70	1
			tempered	300	8		20					60	1
			tempered	350	9		20					55	1
	High-alloyed steel and high-alloyed tool steel		annealed	200	10		20					80	1
			hardened and tempered	325	11		20					50	1
M	Stainless steel	ferritic/martensitic	annealed	200	12		20						
		martensitic	tempered	240	13		20						
		austenitic	quench hardened	180	14		20						
		austenitic-ferritic		230	15		20						
K	Grey cast iron	perlitic/ferritic		180	16			20		20		80	1
		perlitic (martensitic)		260	17			20		20		60	1
	Cast iron with spheroidal graphite	ferritic		160	18			15		15		80	1
		perlitic		250	19			15		15		60	1
	Malleable cast iron	ferritic		130	20			20		20		60	1
		perlitic		230	21			20		20		80	1
N	Aluminium wrought alloys	cannot be hardened		60	22							180	1
		hardenable	hardened	100	23							150	1
	Cast aluminium alloys	≤ 12 % Si, cannot be hardened		75	24	30	30		30		30	150	1
		≤ 12 % Si, hardenable	hardened	90	25	25	25		25		25	150	1
		> 12 % Si, cannot be hardened		130	26							150	1
	Copper and copper alloys (bronze/brass)	machining steel, PB> 1%		110	27							150	1
		CuZn, CuSnZn		90	28							150	1
		CuSn, Pb-free copper, electrolytic copper		100	29							150	1
S	Heat-resistant alloys	Fe-based alloys	annealed	200	30								
			hardened	280	31								
		Ni or Co bass	annealed	250	32								
			hardened	350	33								
			cast	320	34								
	Titanium alloys	pure titanium		R_m 400	35								
		α and β alloys	hardened	R_m 1050	36								
H	Hardened steel		hardened and tempered	55 HRC	37								
			hardened and tempered	60 HRC	38								
	Hard cast iron		cast	400	39								
	Hardened cast iron		hardened and tempered	55 HRC	40								
X	Non-metallic materials	Thermoplasts			41								
		Thermosetting plastics			42								
		Plastic, glass-fibre reinforced GFRP			43								
		Plastic, carbon fibre reinforced CFRP			44								
		Graphite			45								
		Wood			46								

Note: The given cutting values are guide values, which were determined under ideal conditions.
The values have to be adapted in individual cases.
With hole depths of 5xD adjust the cutting data accordingly to the application.
f-group = feed rate recommendations on page C164.
For examples of material for cutting tool groups view page D22.

Recommend feed rate

Solid carbide threading tools

4

5

f-group	Feed rate [mm]																			
	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8	Ø9	Ø10	Ø11	Ø12	Ø13	Ø14	Ø15	Ø16	Ø17	Ø18	Ø19	Ø20
1	0,01	0,02	0,03	0,04	0,04	0,05	0,05	0,06	0,06	0,06	0,07	0,07	0,08	0,08	0,09	0,09	0,09	0,09	0,10	0,10
2	0,01	0,02	0,03	0,04	0,05	0,06	0,06	0,06	0,07	0,07	0,08	0,09	0,09	0,09	0,10	0,10	0,10	0,11	0,11	0,11
3	0,01	0,02	0,04	0,05	0,06	0,06	0,07	0,07	0,08	0,09	0,09	0,10	0,10	0,11	0,11	0,12	0,12	0,12	0,13	0,13
4	0,02	0,03	0,04	0,06	0,06	0,07	0,08	0,09	0,09	0,10	0,11	0,11	0,12	0,12	0,13	0,13	0,14	0,14	0,15	0,15
5	0,02	0,03	0,05	0,06	0,07	0,09	0,09	0,10	0,11	0,11	0,12	0,13	0,14	0,14	0,15	0,15	0,16	0,16	0,17	0,17
6	0,02	0,04	0,06	0,07	0,09	0,10	0,11	0,11	0,12	0,13	0,14	0,15	0,16	0,17	0,17	0,18	0,18	0,19	0,19	0,20
7	0,02	0,04	0,06	0,09	0,10	0,11	0,12	0,13	0,14	0,15	0,16	0,17	0,18	0,19	0,20	0,20	0,21	0,22	0,22	0,23
8	0,03	0,05	0,07	0,10	0,11	0,13	0,14	0,15	0,16	0,17	0,18	0,20	0,21	0,22	0,23	0,23	0,24	0,25	0,26	0,26
9	0,03	0,06	0,08	0,11	0,13	0,15	0,16	0,17	0,18	0,20	0,21	0,23	0,24	0,25	0,26	0,27	0,28	0,29	0,29	0,30
10	0,04	0,07	0,10	0,13	0,15	0,17	0,19	0,20	0,21	0,23	0,24	0,26	0,27	0,29	0,30	0,31	0,32	0,33	0,34	0,35
11	0,04	0,07	0,11	0,15	0,17	0,20	0,21	0,23	0,24	0,26	0,28	0,30	0,32	0,33	0,35	0,36	0,37	0,38	0,39	0,40
12	0,05	0,09	0,13	0,17	0,20	0,23	0,25	0,26	0,28	0,30	0,32	0,35	0,36	0,38	0,40	0,41	0,42	0,44	0,45	0,46
13	0,05	0,10	0,15	0,20	0,23	0,26	0,28	0,30	0,32	0,35	0,37	0,40	0,42	0,44	0,46	0,47	0,49	0,50	0,52	0,53
14	0,06	0,11	0,17	0,23	0,26	0,30	0,33	0,35	0,37	0,40	0,43	0,46	0,48	0,50	0,53	0,54	0,56	0,58	0,59	0,61
15	0,07	0,13	0,20	0,26	0,30	0,35	0,37	0,40	0,43	0,46	0,49	0,53	0,55	0,58	0,61	0,62	0,64	0,66	0,68	0,70

Note: The given cutting values are guide values, which were determined under ideal conditions.
The values have to be adapted in individual cases.

1 Sélectionnez la famille de produits adaptée.

2. Déterminez le rapport de coupe.

3. Sélectionnez le matériau mis en œuvre et la vitesse de coupe.

4. Déterminez le groupe d'avance et consultez les recommandations à la page correspondante.

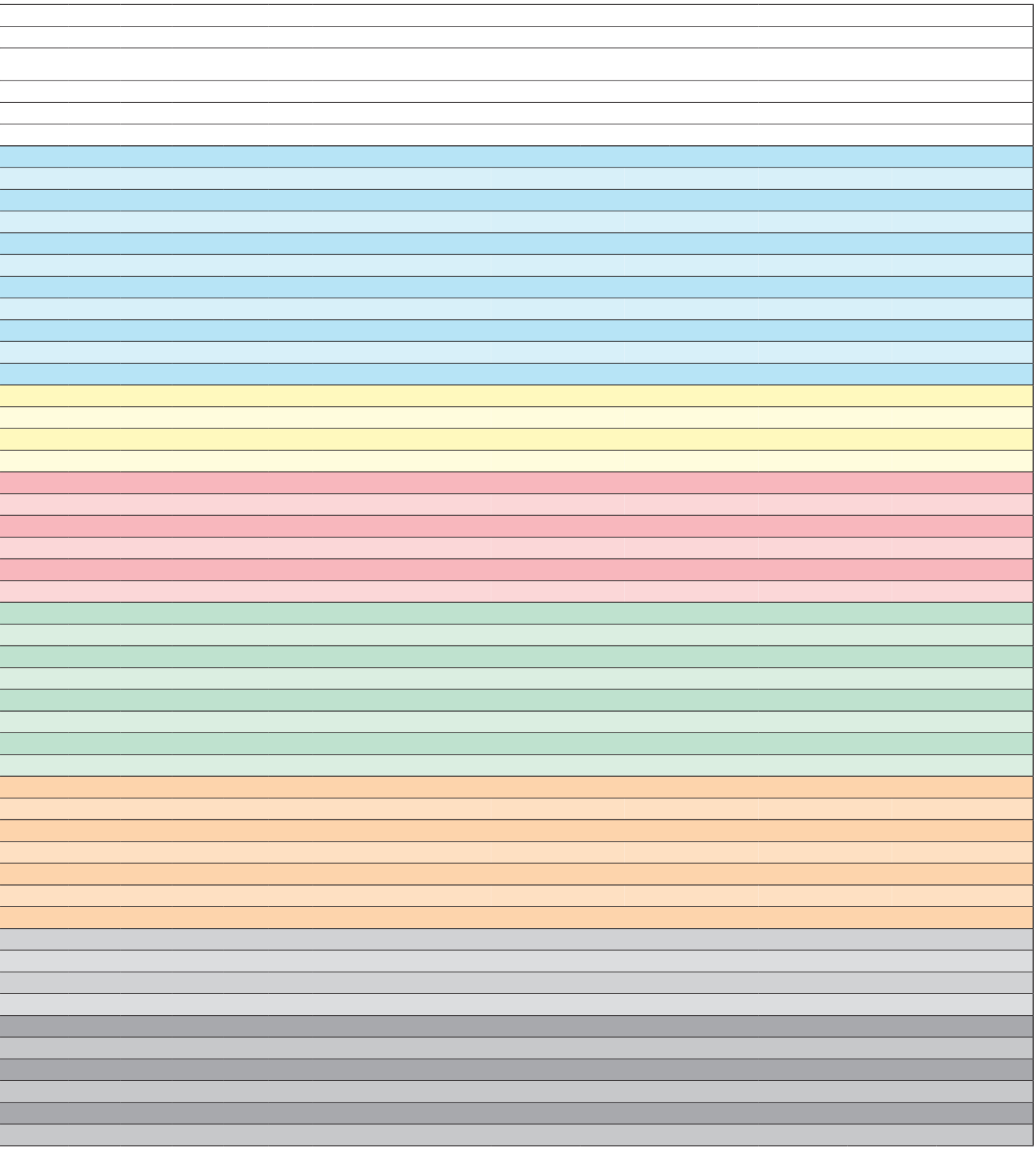
5. Sélectionnez le diamètre d'outil et le rapport de coupe.

Outils de filetage carbure monobloc

Groupe de matériaux		Composition/structure/traitement thermique		Dureté Brinell HB	Groupe matière	Vitesse de coupe v_c [m/min]							
						Par déformation		Taraud coupant				Fraise à fileter	
						4122A 4222A	4122M 4222M	4201C	4201A	4202C	4202A	4111	
						YK40F	YK40F	YK40F	YK40F	YK40F	YK40F	KTG4015	
						Lubrification							
						Extérieur	Extérieur	Extérieur	Extérieur	Extérieur	Extérieur	Extérieur	Gr. f
P	Acier non allié	env. 0,15 % C	recuit	125	1		20					100	1
		env. 0,45 % C	recuit	190	2		20					90	1
		env. 0,45 % C	trempé et revenu	250	3		20					80	1
		env. 0,75 % C	recuit	270	4		20					70	1
		env. 0,75 % C	trempé et revenu	300	5		20					70	1
	Acier faiblement allié		recuit	180	6		20					90	1
			trempé et revenu	275	7		20					70	1
			trempé et revenu	300	8		20					60	1
			trempé et revenu	350	9		20					55	1
	Acier fortement allié et acier à outils fortement allié		recuit	200	10		20					80	1
			durci et revenu	325	11		20					50	1
M	Acier inoxydable	ferritique / martensitique	recuit	200	12		20						
		martensitique	trempé et revenu	240	13		20						
		austénitique	trempé	180	14		20						
		austénitique et ferritique		230	15		20						
K	Fonte grise	perlitique / ferritique		180	16			20		20		80	1
		perlitique (martensitique)		260	17			20		20		60	1
	Fonte avec graphite nodulaire	ferritique		160	18			15		15		80	1
		perlitique		250	19			15		15		60	1
	Fonte malléable	ferritique		130	20			20		20		60	1
		perlitique		230	21			20		20		80	1
N	Alliages corroyé d'aluminium	non durcissable		60	22							180	1
		durcissable	trempé	100	23							150	1
	Alliage de fonte d'aluminium	≤ 12 % Si, non durcissable		75	24	30	30		30		30	150	1
		≤ 12 % Si, durcissable	trempé	90	25	25	25		25		25	150	1
		> 12 % Si, non durcissable		130	26							150	1
	Cuivre et alliages de cuivre (bronze/moulage)	Alliages de décolletage, PB > 1 %		110	27							150	1
		CuZn, CuSnZn		90	28							150	1
		CuSn, cuivre et cuivre électrolytique sans plomb		100	29							150	1
S	Alliages réfractaires	Base Fe	recuit	200	30								
			trempé	280	31								
		à base de Ni ou Co	recuit	250	32								
			trempé	350	33								
			coulé	320	34								
	Alliages de titane	Titane pur		R_m 400	35								
		Alliages Alpha + Beta	trempé	R_m 1050	36								
H	Acier trempé		durci et revenu	55 HRC	37								
			durci et revenu	60 HRC	38								
	Fonte trempée		coulé	400	39								
	Fonte durcie		durci et revenu	55 HRC	40								
X	Matériaux non métalliques	Thermoplastiques			41								
		Duroplaste			42								
		Matière plastique renforcée de fibres de verre GFK			43								
		Plastique renforcé à fibre de carbone PRV			44								
		Graphite			45								
		Bois			46								

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.
Pour les profondeurs de coupe 5xD, ces conditions de coupe doivent être adaptées à l'application correspondante.
Groupe f = avances recommandées, voir à la page C196.
Vous trouverez les exemples de matériaux pour les groupes enlèvement de copeaux à la page D11.

Outils de filetage carbure monobloc



Avance recommandée

Outils de filetage carbure monobloc

Groupe f	Avance [mm]																			
	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8	Ø9	Ø10	Ø11	Ø12	Ø13	Ø14	Ø15	Ø16	Ø17	Ø18	Ø19	Ø20
1	0,01	0,02	0,03	0,04	0,04	0,05	0,05	0,06	0,06	0,06	0,07	0,07	0,08	0,08	0,09	0,09	0,09	0,09	0,10	0,10
2	0,01	0,02	0,03	0,04	0,05	0,06	0,06	0,06	0,07	0,07	0,08	0,09	0,09	0,09	0,10	0,10	0,10	0,11	0,11	0,11
3	0,01	0,02	0,04	0,05	0,06	0,06	0,07	0,07	0,08	0,09	0,09	0,10	0,10	0,11	0,11	0,12	0,12	0,12	0,13	0,13
4	0,02	0,03	0,04	0,06	0,06	0,07	0,08	0,09	0,09	0,10	0,11	0,11	0,12	0,12	0,13	0,13	0,14	0,14	0,15	0,15
5	0,02	0,03	0,05	0,06	0,07	0,09	0,09	0,10	0,11	0,11	0,12	0,13	0,14	0,14	0,15	0,15	0,16	0,16	0,17	0,17
6	0,02	0,04	0,06	0,07	0,09	0,10	0,11	0,11	0,12	0,13	0,14	0,15	0,16	0,17	0,17	0,18	0,18	0,19	0,19	0,20
7	0,02	0,04	0,06	0,09	0,10	0,11	0,12	0,13	0,14	0,15	0,16	0,17	0,18	0,19	0,20	0,20	0,21	0,22	0,22	0,23
8	0,03	0,05	0,07	0,10	0,11	0,13	0,14	0,15	0,16	0,17	0,18	0,20	0,21	0,22	0,23	0,23	0,24	0,25	0,26	0,26
9	0,03	0,06	0,08	0,11	0,13	0,15	0,16	0,17	0,18	0,20	0,21	0,23	0,24	0,25	0,26	0,27	0,28	0,29	0,29	0,30
10	0,04	0,07	0,10	0,13	0,15	0,17	0,19	0,20	0,21	0,23	0,24	0,26	0,27	0,29	0,30	0,31	0,32	0,33	0,34	0,35
11	0,04	0,07	0,11	0,15	0,17	0,20	0,21	0,23	0,24	0,26	0,28	0,30	0,32	0,33	0,35	0,36	0,37	0,38	0,39	0,40
12	0,05	0,09	0,13	0,17	0,20	0,23	0,25	0,26	0,28	0,30	0,32	0,35	0,36	0,38	0,40	0,41	0,42	0,44	0,45	0,46
13	0,05	0,10	0,15	0,20	0,23	0,26	0,28	0,30	0,32	0,35	0,37	0,40	0,42	0,44	0,46	0,47	0,49	0,50	0,52	0,53
14	0,06	0,11	0,17	0,23	0,26	0,30	0,33	0,35	0,37	0,40	0,43	0,46	0,48	0,50	0,53	0,54	0,56	0,58	0,59	0,61
15	0,07	0,13	0,20	0,26	0,30	0,35	0,37	0,40	0,43	0,46	0,49	0,53	0,55	0,58	0,61	0,62	0,64	0,66	0,68	0,70

Remarques : Les conditions de coupe prescrites sont des valeurs de référence déterminées dans des conditions idéales.
Elles doivent être adaptées en fonction de l'application.

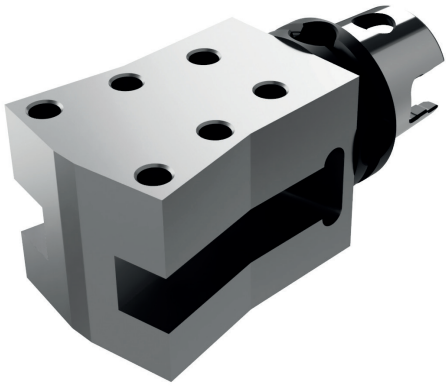
Notes

Outils spéciaux – Obtenez des outils optimisés

Les applications spéciales nécessitent des solutions spéciales et optimisées. Dans tous les segments industriels, les outils spéciaux peuvent présenter des avantages économiques, techniques ou procéduraux par rapport aux outils standard. Nous déterminons à vos côtés le potentiel exact au cas par cas et en prenant en compte vos contraintes propres. Ensuite, le service de développement de ZCC Cutting Tools Europe se charge de vous concevoir une solution personnalisée à notre siège européen à Düsseldorf pour vous garantir un usinage économique.

Pourquoi choisir les outils spéciaux de ZCC Cutting Tools ?

Nous nous chargeons de concevoir des solutions d'outil personnalisées pour les opérations d'usinage les plus diverses. Dans ce cadre, nous travaillons à vos côtés dès le début et développons des outils exclusifs parfaitement adaptés à vos besoins et à vos priorités. Nos solides compétences s'étendent du développement à la logistique en passant par la fabrication. Faites confiance à notre expertise pour la réussite de vos projets.



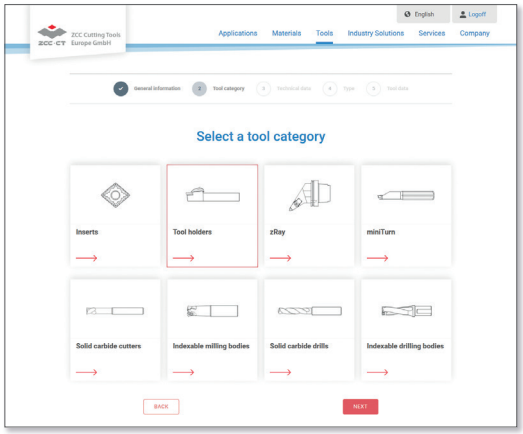
Exemple : porte-outil spécial



Exemple : foret étagé spécial en carbure monobloc

Votre outil spécial personnel en toute facilité

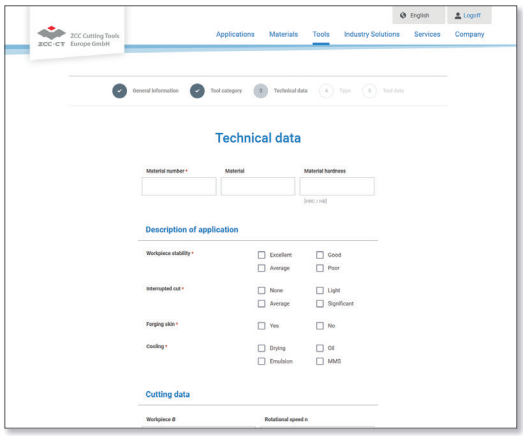
Avez-vous besoin d'outils optimisés et spécialement conçus afin d'améliorer certaines de vos applications au niveau commercial, technique ou logistique ? ZCC Cutting Tools vous conseille et vous assiste pour la planification, la conception et la commande. Grâce à notre nouvel outil en ligne permettant de transmettre vos demandes d'outil spécial, vous obtenez rapidement une offre personnalisée (www.zccct-europe.com).



Page d'accueil « Outil en ligne pour les outils spéciaux » avec sélection de la catégorie d'outil

Sélection de la catégorie d'outil

En scannant le code QR figurant sur cette page, vous serez directement redirigé vers la page d'accueil de notre outil en ligne et vous pourrez commencer par sélectionner la catégorie d'outils souhaitée. C'est très simple.



Définition des paramètres d'outil pertinents

Définition des paramètres d'outils

Vous êtes guidé durant toute la durée du processus de demande. Vous avez également la possibilité d'ajouter des esquisses et des modèles 3D.

Votre moyen rapide et direct d'obtenir des outils spéciaux de ZCC Cutting Tools Europe.

Accéder directement au nouveau **formulaire d'outil spécial** sur notre site Internet.

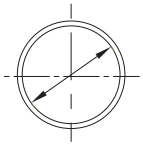
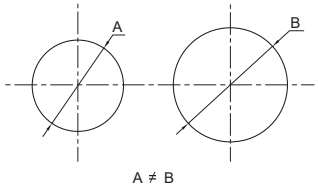
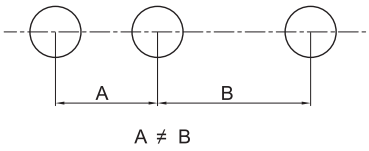
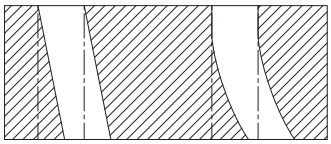
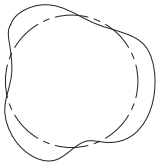
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Informations techniques

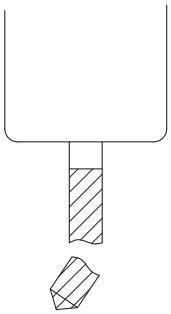
Résolution de problèmes – Perçage	**C202-C206**
Informations techniques – Perçage	**C207-C213**
Outils spéciaux – perçage	**C214**

C

Résolution de problèmes – forets carbure monobloc

Problème	Cause	Solution
Perçage trop grand 	– Serrage pièce ou outil insuffisant – Défaut important de concentricité – Arête transversale excentrée	– Utiliser un serrage de précision – Réduire le jeu de broche – Contrôler et ajuster le foret à l'état serré
	– Pas d'angle de pointe symétrique – Défaut important de concentricité – Arête transversale excentrée	– Affûter le foret – Contrôler l'affûtage
Dimensions de perçage irrégulières 	– Défaut de symétricité d'angle de pointe – Défaut important de concentricité – Arête transversale excentrée – Usure élevée	– Utiliser un serrage de précision – Réduire le jeu de broche – Contrôler et ajuster le foret à l'état serré
	– Serrage pièce ou outil insuffisant – Défaut important de concentricité – Arête transversale excentrée – Usure élevée	– Utiliser un serrage de précision – Réduire le jeu de broche – Contrôler et ajuster le foret à l'état serré
	– Avance trop élevée	– Réduire l'avance
	– Quantité insuffisante d'agent réfrigérant	– Augmenter la quantité d'agent réfrigérant ou modifier l'amenée d'agent réfrigérant
Mauvaise position du foret 	– Serrage insuffisant et mauvais positionnement de broche – Écart de concentricité important de la broche	– Améliorer le positionnement de la machine – Utiliser un serrage de précision – Calibrer la broche – Contrôler et ajuster le foret à l'état serré
	– Le sens de l'avance n'est pas à la verticale par rapport à la surface de la pièce	– Régler le sens de l'avance à la verticale par rapport à la surface de la pièce
	– Le centre de l'outil n'est pas en face du centre de la broche (tour)	– Orienter correctement le centre de l'outil
Mauvais déroulement du perçage 	– Usure élevée de l'outil	– Affûter
	– Mauvaise précision de perçage	– Améliorer le positionnement de perçage
	– Défaut de symétricité d'angle de pointe – Défaut important de concentricité – Arête transversale excentrée	– Affûter le foret – Contrôler l'affûtage
	– Stabilité insuffisante du foret	– Améliorer la stabilité du foret
	– Surface irrégulière de la pièce – Le centre de l'outil n'est pas en face du centre de la broche (tours)	– Avant le perçage, la pièce doit être orientée ou pré-usinée à l'horizontale
Perçage imprécis (circularité) 	– Défaut de symétricité d'angle de pointe – Défaut important de concentricité – Arête centrale excentrée – Usure élevée	– Affûter le foret – Contrôler l'affûtage
	– Serrage insuffisant (pièce, outil) – Écart de concentricité important de la broche	– Utiliser un serrage de précision – Calibrer la broche – Contrôler et ajuster la concentricité du foret à l'état serré
	– Angle de dépouille trop important	– Affûter le foret
	– Stabilité insuffisante du foret	– Améliorer la stabilité du foret

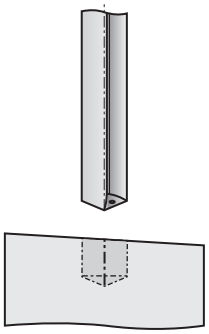
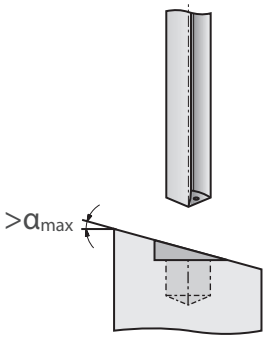
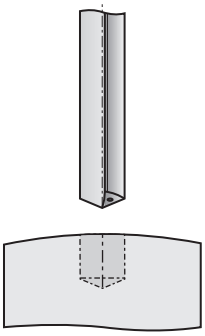
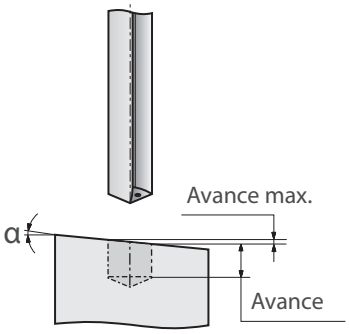
Résolution de problèmes – forets carbure monobloc

Problème	Cause	Solution
Mauvais état de surface	– Foret mal affûté	– Améliorer l'affûtage
	– Quantité d'agent réfrigérant insuffisante ou mode de refroidissement inapproprié	– Modifier la méthode d'amenée de l'agent réfrigérant – Augmenter la quantité d'agent réfrigérant
	– Serrage insuffisant – Défaut de concentricité hélicoïdale important	– Utiliser un serrage de précision – Calibrer la broche
	– Avance trop élevée	– Réduire l'avance
	– Usure importante de l'arête – Grande formation d'arêtes rapportées	– Affûter le foret – Utiliser un foret revêtu
	– Mauvaise élimination des copeaux	– Sélectionner un foret approprié (avec un rainure de serrage, angle d'hélice correspondant, etc.) – Ajuster la vitesse de coupe (réduire l'avance, etc.)
Mauvaise cylindricité 	– Défaut de symétricité d'angle de pointe – Défaut important de concentricité (forage) – Arête centrale excentrée – Grande usure d'arête – Avance trop faible	– Affûter le foret – Contrôler l'affûtage – Augmenter l'avance
Rupture du foret 	– Serrage insuffisant de l'outil et / ou de la pièce	– Améliorer la stabilité de l'outil et le serrage de l'outil ou de la pièce
	– Angle de dépouille trop petit	– Utiliser un foret avec un angle de dépouille plus important ou le réaffûter
	– Avance trop élevée	– Réduire l'avance
	– Usure élevée	– Affûter le foret
	– Bourrage de copeaux	– Sélectionner un foret approprié (avec un rainure de serrage, angle d'hélice correspondant, etc.) – Ajuster la vitesse de coupe – Réduire l'avance
	– Perçage sur surfaces inégales	– Améliorer la stabilité de l'outil et le serrage de la machine et de la pièce – Sélectionner un foret avec une arête centrale vive. – Réaliser un perçage pilote. – Aplanir la surface (p. ex. avec une fraise carbure monobloc) – Utilisation d'un canon de guidage ou d'une plaquette de guidage
Ebréchage du foret 	– Surface dure ou retassures	– Contrôler le matériau et sélectionner une nuance appropriée – Modifier les conditions de coupe (vitesse de coupe, avance ou méthode d'usinage)
	– Avance trop élevée	– Réduire l'avance
	– Quantité insuffisante de lubrification	– Améliorer / augmenter la lubrification.
Ebréchage de l'arête 	– Mauvais serrage – Défaut de concentricité hélicoïdale important	– Utiliser un dispositif de serrage de haute précision – Réorienter la broche
	– Vitesse de coupe et avance trop élevées	– Réduire la vitesse de coupe et l'avance
	– Angle de dépouille trop important	– Utiliser un foret avec un angle de dépouille inférieur ou le réaffûter

Résolution de problèmes – forets carbure monobloc

Problème	Cause	Solution
Usure irrégulière 	– Affûtage trop tardif	– Effectuer l'affûtage à temps
	– Pointe du foret excentrée	– Ajuster la position du forêt pour l'aligner sur le centre de la broche
	– Vitesse de coupe trop élevée	– Réduire la vitesse de coupe
	– Angle de coupe inapproprié	– Sélectionner le bon angle de coupe
	– Matériau de coupe inapproprié	– Sélectionner le matériau de coupe approprié
	– Refroidissement insuffisant	– Utiliser un refroidissement suffisant
Usure et éclats sur l'arête transversale	– Avance trop élevée	– Réduire l'avance
	– Angle de coupe inapproprié	– Sélectionner le bon angle de coupe
	– Matériau de coupe inapproprié	– Sélectionner le matériau de coupe approprié
	– Angle de dépouille trop faible	– Affûter le foret
Casse du chanfrein de guidage	– Canon de guidage trop grand	– Changer de canon de guidage
Arête rapportée sur le chanfrein de guidage	– Usure élevée et chaleur	– Affûter le foret
	– Refroidissement insuffisant	– Changer de mode de refroidissement
	– Lubrification inadaptée	– Changer de lubrification
	– Matériau difficile à usiner	– Choisir un foret avec dépouille plus faible
Vibrations importantes	– Angle de dépouille trop important	– Affûter le foret
	– Stabilité insuffisante du foret	– Améliorer la stabilité
Copeau emmêlé	– Copeaux longs – Évacuation insuffisante	– Optimiser les données de coupe – Éventuellement changer de foret ou réajuster la machine
Usure monolatérale	– Pointe du foret excentrée	– Ajuster la position du foret (not forêt) pour l'aligner au centre de la broche
	– Mauvais serrage	– Améliorer le serrage du foret – Contrôler la concentricité

Résolution de problèmes – gamme PC

Usinage	Recommandation
Perçage sur surface inclinée 	– Lors du perçage dans de très grandes surfaces inclinées, un pré-usinage est recommandé (surfaçage ou lamage). 
Perçage de surfaces bombées 	– Lors du perçage dans des surfaces inclinées ou bombées, réduire l'avance de façon appropriée. 

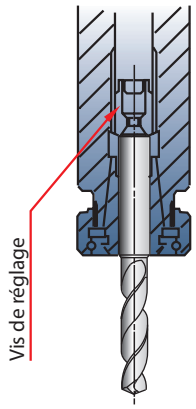
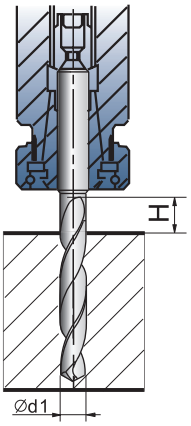
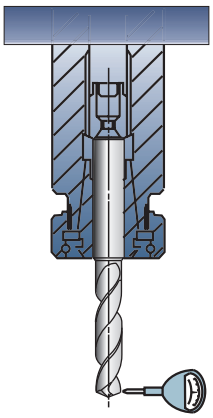
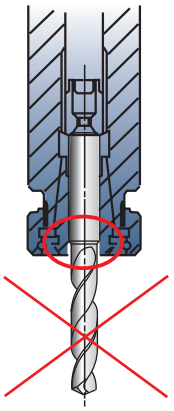
Angle	Avance max.
1°	80 %
2°	50 %
3°	30 %

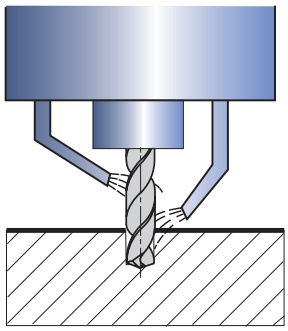
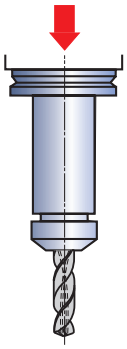
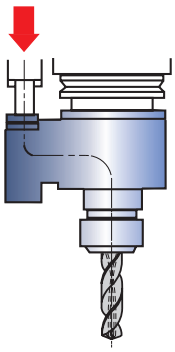
Résolution de problèmes – alésoirs carbure monobloc

Problème	Solutions
Perçage trop grand	– Réduire le diamètre de l'alésoir. – Contrôler la concentricité de l'alésoir et du perçage. – Vérifier la précision de concentricité de l'alésoir. – Vérifier l'absence de rayure ou de dommages sur la queue de l'alésoir. – Utiliser l'agent réfrigérant approprié. – Ajuster les conditions de coupe en conséquence.
Trou trop petit	– Augmenter le diamètre de l'alésoir. – Réduire la vitesse de coupe. – Réduire la sur épaisseur. – Affûter l'alésoir ou le remplacer. – Prévoir un refroidissement suffisant.
Circularité et rectitude imparfaites du trou	– S'assurer de la précision de concentricité du chanfrein de l'alésoir. – Réduire le porte-à-faux. – Vérifier la précision de concentricité de l'alésoir à l'état serré. – Ajuster la concentricité entre l'alésoir et le trou. – Vérifier la géométrie du foret.
Mauvais état de surface	– Réduire la vitesse de coupe. – S'assurer que les sur épaisseurs d'alésage sont appropriées. – Vérifier l'absence d'usure ou d'arête rapportée sur le chanfrein de l'alésoir. – S'assurer de la stabilité de la machine, du support et de l'alésoir. – Vérifier que l'alésoir approprié à l'utilisation correspondante a bien été choisi. – Vérifier la sur épaisseur de perçage.
Mauvaise précision du trou	– Retirer l'alésoir dans le sens de la coupe. – Réduire la vitesse de coupe. – Utiliser un alésoir avec un nombre d'arêtes plus important. – Vérifier le centrage et la concentricité. – Améliorer l'alimentation en agent réfrigérant. – Sélectionner l'agent réfrigérant optimal.
Rupture de l'alésoir et déformation thermique	– Le trou de guidage présente une qualité insuffisante. Vérifier l'axe du foret et l'axe du trou. – Sélectionner une sur épaisseur d'usinage moins importante. – S'assurer que la quantité d'agent réfrigérant est suffisante. – Ajuster la vitesse de coupe et les avances de façon appropriée. – Améliorer la stabilité de la machine, du support et de l'outil. – En cas d'usure trop importante de l'arête, remplacer l'outil ou l'affûter.
Dommages sur la queue de l'alésoir	– Vérifier l'absence de dommages sur la douille de serrage et le porte-plaquette.
Durée de vie courte	– Vérifier l'alimentation en agent réfrigérant. – Remplacer les alésoirs droits par des alésoirs à rainures hélicoïdales. – Vérifier les facteurs qui jouent un rôle sur la précision d'usinage.
Surface de perçage éraflée	– Rechercher la présence d'arêtes rapportées sur l'arête et corriger les conditions de coupe le cas échéant. – Améliorer le serrage de la pièce.
Zone d'entrée du trou trop importante	– Améliorer le serrage de la pièce. – Vérifier la concentricité de l'alésoir à l'état serré. – Le centre de l'outil ne coïncide pas avec celui du trou. Ajuster la concentricité.

Forets carbure monobloc

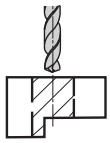
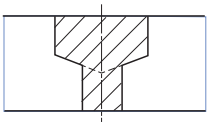
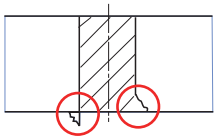
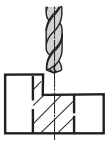
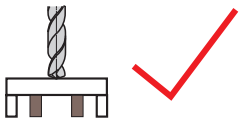
Remarques relatives à l'utilisation

Serrage correct du foret	Profondeur max. de perçage	Mesure du faux rond	Mauvais serrage du foret
			
Pinces de précision conseillées	H = 1,5 x d1	Faux rond <0,02 mm	Ne pas serrer sur l'arête de coupe

Alimentation externe en agent réfrigérant	Alimentation interne en agent réfrigérant	
		
Deux conduites de liquide de refroidissement sont idéales (sur la pointe et le foret, comme illustré)	Pression de lubrification env. 0,5–1 mPa (pour des diamètres < 5 mm, augmenter la pression de lubrification à 2–3 mPa) Débit : 1,5–4 l/min	

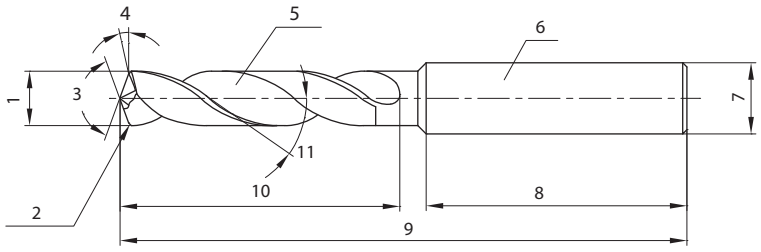
Manipulation des agents réfrigérants :

1. Les petites particules peuvent boucher les orifices pour l'agent réfrigérant. Veuillez donc toujours utiliser un filtre pour l'agent réfrigérant.
2. L'écoulement des copeaux est réduit lorsque l'agent réfrigérant est fortement encrassé. Nous recommandons de changer régulièrement l'agent réfrigérant. Veuillez vérifier que l'alimentation en agent réfrigérant s'effectue correctement.

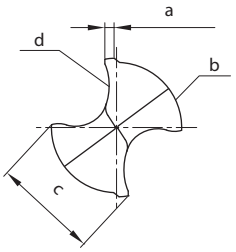
Usinage interrompu	Pièces fines	Perçage étagé	Formation de bavures ou d'éclats lors de la sortie du foret
 Réduisez l'avance à l'emplacement de l'interruption.		 – Percez d'abord le trou le plus grand et ensuite le plus petit. – Sur demande, nous proposons également des forets étagés capables de réaliser des perçages étagés au cours d'un seul processus.	 – Lors du retrait, réduisez l'avance d'environ la moitié. – Utilisez un foret avec un angle de pointe différent.
 Aplanissez à l'avance la surface avec une fraise.	 Si des pièces fines se cambrent, étayez-les.		

Forets carbure monobloc

Terminologie

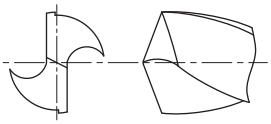
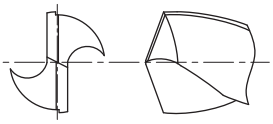
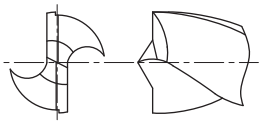


1. Diamètre de perçage
2. Chanfrein
3. Angle de pointe
4. Angle de dépouille
5. Goujure
6. Queue
7. Diamètre de queue
8. Longueur de queue
9. Longueur totale
10. Longueur utile
11. Angle d'hélice



a. Largeur du chanfrein
b. Dégagement du corps
c. Largeur du chanfrein primaire
d. Arête principale

Type d'affûtage

Affûtage	 (conique)	 (plate)	 (Pointe de centrage)
Caractéristiques	– Le flanc est conique et l'angle de dépouille augmente vers le centre du foret. – Forme habituelle pour les matériaux doux et durs.	– Flanc plat permettant un usinage facile. – Cette forme convient aux forets de petit diamètre.	– Cette forme a deux points angulaires afin d'obtenir un meilleur centrage et de réduire la formation de bavures. – Convient à l'usinage de cadres en acier et de tôle.

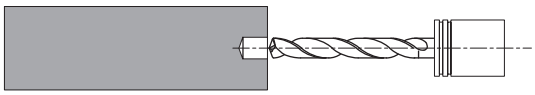
Forets carbure monobloc

Spécifications du foret et valeurs de coupe

Goujure à copeaux	Le logement des copeaux permet à ceux-ci d'être évacués hors de l'alésage durant l'usinage.
Angle d'hélice	L'angle d'hélice décrit le pas de la rainure hélicoïdale. Il est sélectionné en fonction du matériau à usiner. Matériaux durs petit ← Angle d'hélice → grand Matériaux tenaces
Longueur d'arête ou longueur hélicoïdale	La longueur d'arête doit tenir compte de la profondeur de perçage, de la longueur du canon de guidage et de la longueur totale de rectification. Plus l'angle d'hélice est grand, plus la stabilité du foret est réduite. Puisque la durée de vie en est fortement affectée, il doit être choisi le plus court possible. La longueur hélicoïdale minimale recommandée est égale à la profondeur de perçage plus 1,5 fois le diamètre.
Angle de pointe	Normalement, l'angle de pointe est de 140° ; pour des applications spéciales, un outil avec un angle différent devrait être utilisé. Matériau doux, facile à usiner petit ← Angle de pointe → grand Matériau durci et perçage haute performance
Diamètre de noyau	Le diamètre de noyau est un facteur important qui influence la stabilité et le contrôle du copeau. Faible force axiale, Faible stabilité, Pour matériaux faciles à usiner — petit ← Diamètre de noyau → grand — Force axiale élevée, Pour matériaux durs ou perçages transversaux
Largeur du chanfrein	La largeur du chanfrein influence le guidage et la friction du foret durant l'usinage. Faible frottement et mauvais guidage du foret — petit ← Largeur du chanfrein → grand — Frottement élevé et bon guidage du foret
Dépouille	Afin de réduire les frottements durant l'usinage, le diamètre du foret est légèrement réduit depuis l'arête jusqu'à la queue.
Dégagement de corps	Désigne la partie du foret derrière la largeur du chanfrein. Le dégagement de corps est nécessaire afin de réduire les frottements du foret durant l'usinage.

Perçage de trous profonds

1 Réalisation d'un trou pilote avec 1534SP03C*



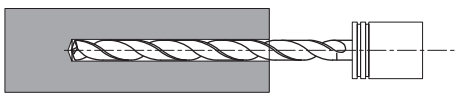
– L'angle de pointe du foret pilote doit être supérieur à celui du foret SL.
– Le diamètre du foret pilote doit être supérieur de 0,01–0,04 mm à celui du foret SL.
– La profondeur du trou pilote doit être égale à 1–3×D.

2 Insertion du foret SL dans le trou pilote



– Introduire le foret SL dans le trou pilote avec une faible vitesse de rotation. (V_C :20–30 m/min)
– S'arrêter 1–3 mm avant la fin du trou. (V_f = 0) et mettre l'arrosage
– Augmenter la vitesse de coupe jusqu'aux paramètres recommandes avant d'entamer l'avance

3 Réalisation du trou profond



– Percer avec la vitesse de coupe et l'avance appropriées
– Pour les perçages débouchant, réduire l'avance à 0,05 mm/tr.

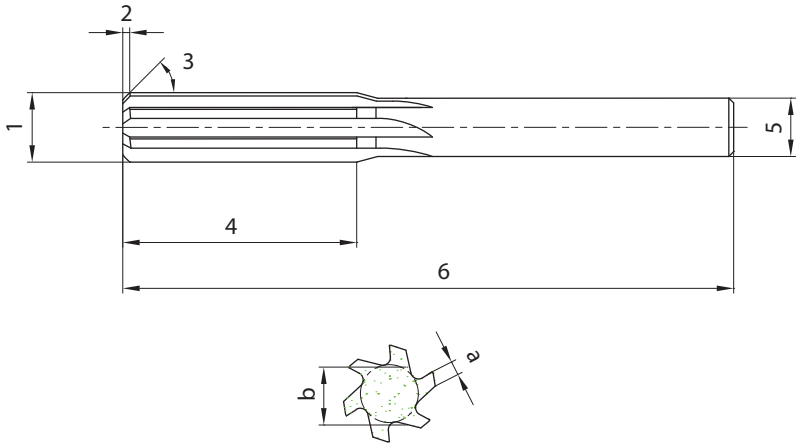
4 Retrait du foret



– Après avoir atteint la profondeur de perçage souhaitée, réduire la vitesse de coupe (V_C : 20–30 m/min) et sortir le foret avec une avance élevée (V_f : 2 000 mm/min)

Alésoirs carbure monobloc

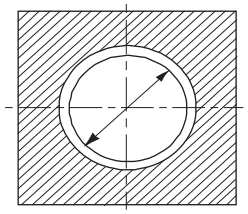
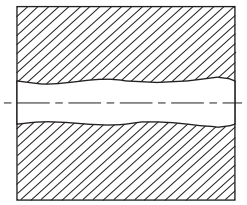
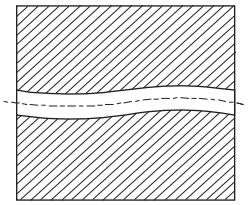
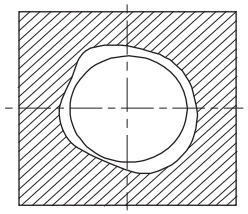
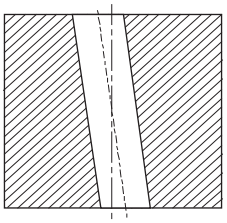
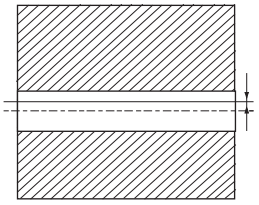
Terminologie



1. Diamètre nominal
2. Entrée
3. Angle d'attaque
4. Longueur d'arête
5. Diamètre de queue
6. Longueur totale

a. Témoin cylindrique
b. Diamètre du noyau

L'alésage correspond à la semi-finition ou à la finition d'un perçage présent au sein d'une tolérance étroite, avec une grande qualité de l'état de surface, une circularité et une cylindricité parfaites, etc.
Pour un perçage exact par alésage, il faut choisir l'alésoir et le diamètre d'alésoir appropriés. En outre, les tolérances de perçage, les matériaux et les conditions machine sont à considérer. La qualité de perçage varie fortement selon la concentricité de l'outil.

 Tolérance du diamètre/surépaisseur	 Cylindricité	 Rectitude
 Circularité	 Écart vertical	 Excentration

Tarauds par déformation carbure monobloc

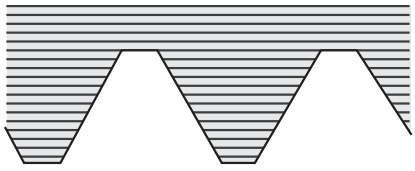
Qu'est-ce que le taraudage par déformation ?

Les fibres du matériau ne sont pas coupées, mais comprimées au fond du filet. C'est un usinage sans copeau.

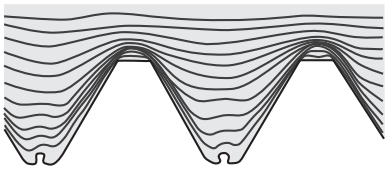
Avantages du taraudage par déformation :
- La déformation du filet est beaucoup plus précise.
- Les filetages offrent une résistance supérieure, y compris en traction.
- La surface des filetages est très lisse.
- Les vitesses de rotation et d'avance sont plus élevées que pour le filetage.
- L'allongement de la durée de vie des outils augmente la productivité.

Inconvénients du taraudage par déformation :
- Une fabrication plus précise du trou de noyau est requise.
- Impossible à utiliser comme outil manuel.
- Échauffement supérieur par rapport au filetage.
- Choix limité de matériaux.
- L'utilisation de séparateurs est souvent nécessaire.

Les tarauds par déformation doivent être utilisés dans des matériaux avec une bonne capacité de déformation à froid. Cela comprend l'acier, les matériaux inoxydables, les alliages d'aluminium, et tous les métaux légers avec une limite élastique apparente de l'ordre de 1200N/mm^2. De façon générale, les groupes de matière à copeaux longs.



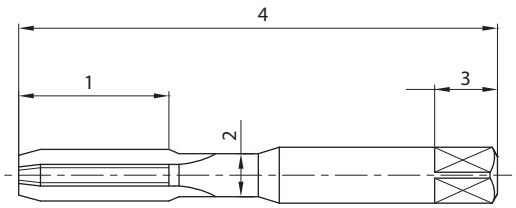
Fibrage lors du filetage

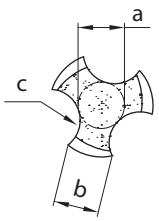


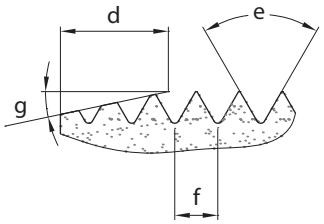
Fibrage lors du filetage par déformation

Tarauds coupants carbure monobloc

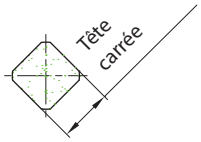
Explication des terminologie







Profils d'attaque et de filetage



1. Longueur de filetage
2. Diamètre du col
3. Longueur de la surface d'entraînement
4. Longueur totale

a. Diamètre du noyau
b. Épaisseur de coupe
c. Dégagement pour copeaux

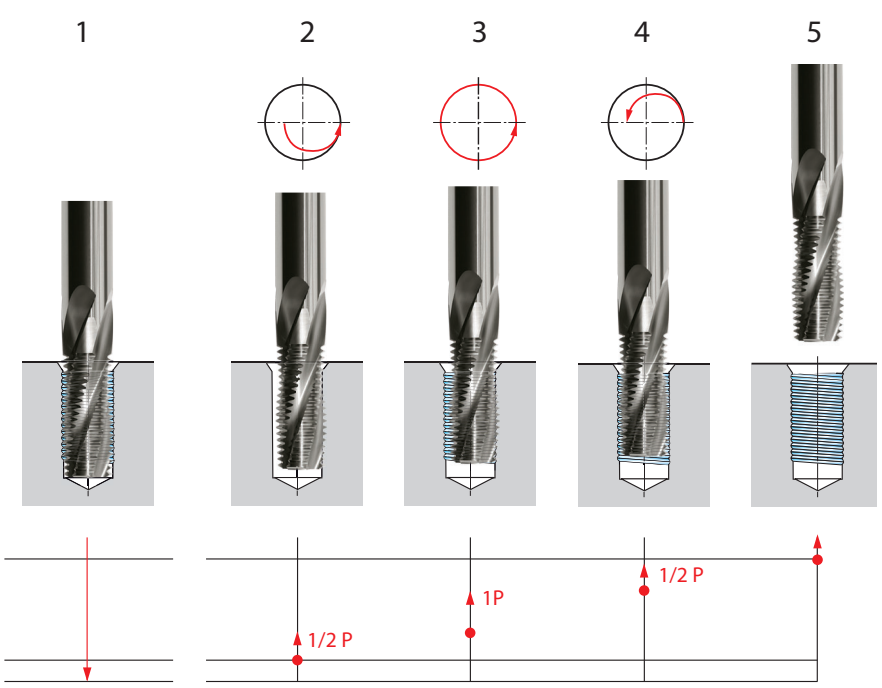
d. Longueur d'attaque
e. Angle de profil de filetage
f. Pas
g. Angle d'attaque

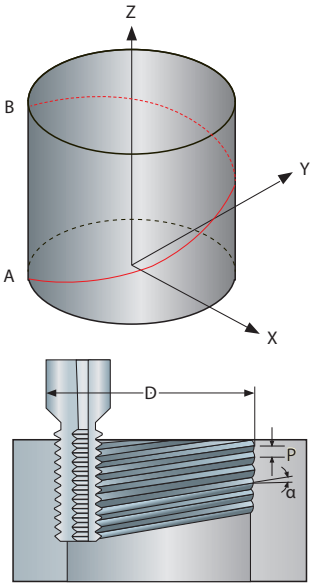
Dégagement pour copeaux et utilisation

Type de goujure pour l'évacuation copeau	Caractéristiques	Application
 Goujure hélicoïdale	- Dégagement pour copeaux en forme d'hélice - Pas de copeaux dans le trou - Bonne performance d'attaque - Centrage aisé	- Pour matériaux formant de longs copeaux - Adapté aux trous borgnes - Utilisation dans des trous avec goujures
 Goujure droite	- Dégagement pour copeaux à goujure droite - Arête stable - Affûtage aisé	- Pour l'usinage des matériaux durs - Pour les matériaux à copeaux courts - Pour les trous débouchants et borgnes - Pour les matériaux s'usinant facilement

Fraises à fileter carbure monobloc

Fraises à fileter à attachement cylindrique – Exemple d'usinage

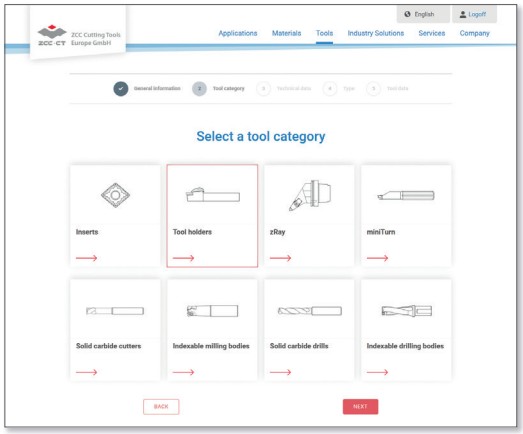




α Angle d'hélice
D Diamètre
p Pas

Accès direct à l'outil spécial personnalisé pour vos opérations de perçage

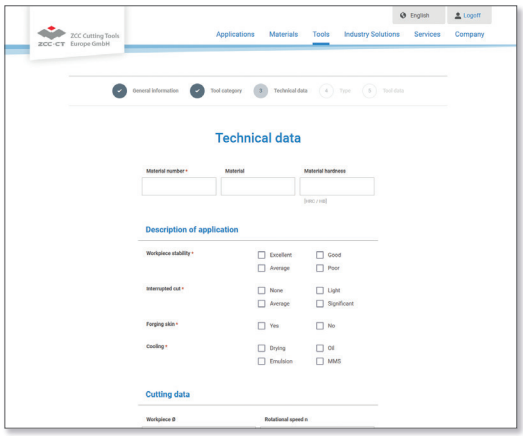
Avez-vous besoin d'outils optimisés et spécialement conçus afin d'améliorer certaines de vos opérations de perçage au niveau commercial, technique, processus ou logistique ? ZCC Cutting Tools Europe vous conseille et vous assiste pour la planification, la conception et la commande. Grâce à notre nouvel outil en ligne permettant de transmettre vos demandes d'outil spécial, vous obtenez rapidement une offre personnalisée (https://www.zccct-europe.com/fr/outils/outils-speciaux).



Page d'accueil « Outil en ligne pour les outils spéciaux » avec sélection de la catégorie d'outil

Sélection de la catégorie d'outil

En scannant le code QR figurant sur cette page, vous serez directement redirigé vers la page d'accueil de notre outil en ligne et vous pourrez commencer par sélectionner la catégorie d'outils souhaitée. C'est très simple.



Définition des paramètres d'outil pertinents

Définition des paramètres d'outil

Vous êtes guidé durant toute la durée du processus de demande. Vous avez également la possibilité d'ajouter des esquisses et des modèles 3D.

Pour obtenir votre outil personnalisé, adressez-vous à nous. ZCC Cutting Tools Europe GmbH.

Accéder directement au nouveau **formulaire d'outil spécial** sur notre site Internet.

Informations techniques

Tableau d'équivalence de matériaux	**D2-D8**
Tableau d'équivalence dureté et résistance à la traction	**D9-D10**
Nouveau chapitre	**D11**
Couples de serrage des vis	**D12**

D

Tableau d'équivalence de matériaux

ISO	Désignation standard en fonction des pays											
	China	USA	Germany		Great Britain		Sweden	France	Italy	Spain	Japan	Russia
	GB	AISI/SAE	W.-nr	DIN	BS	EN	SS	AFNOR	UNI	UNE	JIS	GOST
P	Acier allié											
	15	1015	1.0401	C15	080M15	–	1350	CC12	C15C16	F.111	–	
	20	1020	1.0402	C22	050A20	2C	1450	CC20	C20C21	F.112	–	20
	35	1035	1.0501	C35	060A35	–	1550	CC35	C35	F.113	–	35
	45	1045	1.0503	C45	080M40	–	1650	CC45	C45	F.114	–	45
	55	1055	1.0535	C55	070M55	–	1655	–	C55	–	–	55
	60	1060	1.0601	C60	080A62	43D	–	CC55	C60	–	–	60
	Y15	1213	1.7015	9SMn28	230M07	–	1912	S250	CF9SMn28	11SMn28	SUM22	15Ch
	–	12L13	1.0718	9SMnPb28	–	–	1914	S250Pb	CF9MnPb28	11SMnPb28	SUM22L	–
	–	–	1.0722	10SPb20	–	–	–	10PbF2	CF10Pb20	10SPb20	–	–
	–	1140	1.0726	35S20	212M36	8M	1957	35MF4	–	F210G	–	–
	Y13	1215	1.0736	9SMn36	240M07	1B	–	S300	CF9SMn36	12SMn35	–	–
	–	12L14	1.0737	9SMnPb36	–	–	1926	S300Pb	CF9SMnPb36	12SMnP35	–	–
	55Si2Mn	9255	1.0904	55Si9	250A53	45	2085	55S7	55Si8	56Si7	–	–
	–	9262	1.0961	60SiCr7	–	–	–	60SC7	60SiCr8	60SiCr8	–	–
	15	1015	1.1141	Ck15	080M15	32C	1370	XC12	C16	C15K	S15C	15
	40Mn	1039	1.1157	40Mn4	150M36	15	–	35M5	–	–	–	40G
	25	1025	1.1158	Ck25	–	–	–	–	–	–	S25C	25
	35Mn2	1335	1.1167	36Mn5	–	–	2120	40Mn5	–	36Mn5	SMn438(H)	35G2,35GL
	30Mn	1330	1.1170	28Mn6	150M28	14A	–	20M5	C28Mn	–	SCMn1	30G
	35Mn	1035	1.1183	Cf35	060A35	–	1572	XS38TS	C36	–	S35C	–
	Ck45	1045	1.1191	45	080M46	–	1672	XC42	C45	C45K	S45C	–
	55	1055	1.1203	Ck55	070M55	–	–	XC45	C50	C55K	S55C	55
	50	1050	1.1213	Cf53	060A52	–	1674	XC48TS	C53	–	S50C	–
	60Mn	1060	1.1221	Ck60	080A62	43D	1678	XC60	C60	–	S58C	60,60G
	–	1095	1.1274	Ck101	060A96	–	1870	–	–	–	SUP4	–
	–	–	1.3401	X120Mn12	Z120M12	–	–	X120M12	XG120Mn12	X120Mn12	SCMnH/1	110G13L
	Gr15;45Gr	52100	1.3505	100Cr6	534A99	31	2258	100C6	100Cr6	F.131	SUJ2	SchCh 15
	–	ASTM A204Gr.A	1.5415	15Mo3	1501-240	–	2912	15D3	16Mo3KW	16Mo3	–	–
	–	4520	1.5426	16Mo5	1503-245-420	–	–	–	16Mo5	16Mo5	–	–
	–	ASTM A350LF5	1.5622	14Ni6	–	–	–	16N6	14Ni6	15Ni6	–	–
	–	ASTM A353	1.5662	X8Ni9	1501-509;510	–	–	–	X10Ni9	XBNi09	–	–

Tableau d'équivalence de matériaux

ISO	Désignation standard en fonction des pays											
	China	USA	Germany		Great Britain		Sweden	France	Italy	Spain	Japan	Russia
	GB	AISI/SAE	W.-nr	DIN	BS	EN	SS	AFNOR	UNI	UNE	JIS	GOST
P	**Acier allié**											
	–	2515	1.5680	12Ni19	–	–	–	Z18N5	–	–	–	–
	–	3135	1.5710	36NiCr6	640A35	111A	–	35NC6	–	–	SNC236	–
	–	3415	1.5732	14NiCr10	–	–	–	14NC11	16NiCr11	15NiCr11	SNC415(H)	–
	–	3415 3310	1.5752	14NiCr14	655M13 655A12	36A	–	12NC15	–	–	SNC815(H)	–
	–	9840	1.6511	36CrNiMo4	816M40	110	–	40NCD3	38CrNiMo4(KB)	35CrNiMo4	–	40 ChN2MA
	–	8620	1.6523	21NiCrMo2	850M20	362	2503	20NCD2	20NiCrMo2	20NiCrMo2	SNCCM220(H)	–
	–	8740	1.6546	40NiCrMo2	311-Type7	–	–	–	40NiCrMo2(KB)	40NiCrMo2	SNC240	38ChGNM
	40CrNiMoA	4340	1.6582	34CrNiMo6	817M40	24	2541	35NCD6	35CrNiMo6(KB)	–	–	38Ch2N2MA
	–	–	1.6587	17CrNiMo6	820A16	–	–	18NCD6	–	14CrNiMo13	–	–
	15Cr	5015	1.7015	15Cr3	523M15	–	–	12C3	–	–	SCr415(H)	15Ch
	35Cr	5132	1.7033	34Cr4	530A32	18B	–	32C4	34Cr4(KB)	35Cr4	SCr430(H)	35Ch
	40Cr	5140	1.7035	41Cr4	530M40	18	–	42C4	41Cr4	42Cr4	SCr440(H)	40Ch
	40Cr	5140	1.7045	42Cr4	–	–	2245	–	–	42Cr4	SCr440	40Ch
	18CrMn	5115	1.7131	16MnCr15	(527M20)	–	2511	16MC5	16MnCr15	16MnCr15	–	18ChG
	20CrMn	5155	1.7176	55Cr3	527A60	48	–	55C3	–	–	SUP9(A)	50ChGA
	30CrMn	4130	1.7218	25CrMo4	1717CDS110	–	2225	25CD4	25CrMo4(KB)	55Cr3	SCM420; SCM430	30ChM
	35CrMo	4137;4135	1.7220	34CrMo4	708A37	19B	2234	35CD4	35CrMo4	34CrMo4	SCM432; SCRRM3	AS38ChGM
	40CrMoA	4140;4142	1.7223	41CrMo4	708M40	19A	2244	42CD4TS	41CrMo4	41CrMo4	SCM440	40 ChFA
	42CrMo 42CrMnMo	4140	1.7225	42CrMo4	708M40	19A	2244	42CD4	42CrMo4	42CrMo4	SCM440(H)	–
	–	–	1.7262	15CrMo5	–	–	2216	12CD4	–	12CrMo4	SCM415(H)	–
	–	ASTM A182 F11;F12	1.7335	13CrMo44	1501- 620Gr.27	–	–	15CD3.5; 15CD4.5	14CrMo44	14CrMo45	–	12ChM , 15ChM
	–	–	1.7361	32CrMo12	722M24	40B	2240	30CD12	32CrMo12	F.124.A	–	–
	–	ASTM A182 F.22	1.7380	10CrMo910	1501- 622Gr.31;45	–	2218	12CD9;10	12CrMo9,10	TU.H	–	–
	–	–	1.7715	14MoV63	1503-660-440	–	–	–	–	13MoCrV6	–	–
	50CrVA	6150	1.8159	50CrV4	735A50	47	2230	50CV4	50CrV4	51CrV4	SUP10	50ChGFA
	–	–	1.8509	41CrAlMo7	905M39	41B	2940	40CAD6,12	41CrAlMo7	41CrAlMo7	–	38ChMJuA
	–	–	1.8523	39CrMoV139	897M39	40C	–	–	36CrMoV12	–	–	–

Tableau d'équivalence de matériaux

ISO	Désignation standard en fonction des pays											
	China	USA	Germany		Great Britain		Sweden	France	Italy	Spain	Japan	Russia
	GB	AISI/ SAE	W.-nr	DIN	BS	EN	SS	AFNOR	UNI	UNE	JIS	GOST
P	Acier allié											
	T10	W.110	1.1545	C105W1	–	–	1880	Y1105	C98KU C100KU	F.515 F.516	–	U10A
	T12A	W.112	1.1663	C125W	–	–	–	Y2120	C120KU	(C120)	SK2	U13
	CrV;9SiCr	L3	1.2067	100Cr6	BL3	–	–	Y100C6	–	100Cr6	–	–
	Cr12	D3	1.2080	X210Cr12	BD3	–	–	Z200Cr12	X210Cr13KU X250Cr12KU	X210Cr12	SKD1	Ch12
	4Cr5MoVSi	H13	1.2344	X40CrMoV5 1	BH13	–	2242	Z40CDV5	X35CrMoV05KU X40CrMoV51KU	X40CrMoV5	SKD61	4Ch5MF1S
	Cr6WV	A2	1.2363	X100CrMoV5 1	BA2	–	2260	Z100CDV5	X100CrMoV51KU	X100CrMoV5	SKD12	–
	CrWMo	–	1.2419	105WCr6	–	–	2140	105WC13	10WCr6 107WCr5KU	105WCr5	SKS31 SKS2 SKS3	ChWG
	Cr12W	–	1.2436	X210CrW12	–	–	2312	–	X215CrW12 1KU	X210CrW12	SKD2	–
	5CrNiMo	S1	1.2542	45WCrV7	BS1	–	2710	–	45WCrV8KU	45WCrSi8	–	–
	3Cr2W8V	H21	1.2581	X30WCrV9 3 X30WCrV93KU	BH21	–	–	Z30WCV9	X28W09KU X30WCrV9 3KU	X30WCrV9	SKD5	3Ch2W8F
	Cr12MoV	–	1.2601	X165CrMoV 12	–	–	2310	–	X165CrMoW12KU	X160CrMoV12	SKD11	–
	5CrNiMo	L6	1.2713	55NiCrMoV6	–	–	–	55NCDV7	–	F.250.S	SKT4	5ChNM
	V	W210	1.2833	100V1	BW2	–	–	Y1105V	–	–	SKS43	–
	W6Mo5Cr4V2Co5	–	1.3243	S6-5-2-5	–	–	2723	Z85WDKCV	HS6–5–2–5	HS6-5-2-5	SKH55	R6M5K5
	W18Cr4VCo5	T4	1.3255	S18-1-2-5	BT4	–	–	Z80WKCV 10-05-04-01	X78WCo1805KU	HS18-1-1-5	SKH3	–
	W6Mo5Cr4V2	M2	1.3343	S6-5-2	BM2	–	2722	Z85WDCV 06-05-04-02	X82WMo0605KU	HS6-5-2	SKH9	R6M5
	–	M7	1.3348	S2-9-2	–	-Z-	2782	Z100WCWV 09-02-04-02	HS2-9-2	HS2-9-2	–	–
	W18Cr4V	T1	1.3355	S18-0-1	BT1	–	–	Z80WCV 18-04-01	X75W18KU	HS18-0-1	SKH2	–
	W6Mo5Cr4V3	M3	–	S6-5-3	–	–	–	–	–	–	SKH52	–
	–	M42	–	–	BM42	–	–	–	–	–	SKH59	–

Tableau d'équivalence de matériaux

ISO	Désignation standard en fonction des pays						Application principale
	China	USA	Germany	Japan	Daido Steel Co., Ltd (Japan)	Russia	
	GB	AISI/SAE	DIN	JIS	DAIDO	GOST	
P	**Acier à matrices**						
	–	P20 mod.		–	PX5N		Grande matrice de précision ultra-brillante pour la production en série. Pièces automobiles, caméras vidéo, électroménager, etc.
	–	–		–	NAK55		Matrice de précision ultra-brillante pour caméras vidéo, CD audio, contenants cosmétiques, caches transparents.
	–	–		–	NAK80		Matrice de précision ultra-brillante pour caméras vidéo, CD audio, contenants cosmétiques, caches transparents et revêtements.
	3Cr13	420 mod.		SUS420J2 mod.	S-STAR		Pour matrice ultra-fine, réfléchissante et résistante à la corrosion, pour les accessoires de caméras. CD, lentilles, bracelets de montre.
	Acier pour travail à froid						
	–	02	–	SKS93	YK30		Pour poinçon matrice, calibre de mesure, coupe-papier, outils
	9CrWMn	01 mod.	–	SKS3 mod.	GOA		Pour matrices de coupe, calibre de mesure, tarauds, outils de perforation, filières à froid
	Cr12MoV	D2	X165CrMoV12	SKD11	DC11		Pour matrices de coupe, matrices de presse de moulage à froid, filières à froid, cylindres de moulage.
	–	D2 mod.	–	SKD11 mod.	DC53		Pour matrices de coupe, matrices de presse de moulage à froid, filières à froid, cylindres de moulage.
	Acier pour travail à chaud						
	4Cr5MoSiV1	H13	X40CrMoV51	SKD61	DHA1		Matrice de pressage aluminium, pièces de raccord pour matrices de pressage, matrices de pressage à chaud, matrices d'extrudeuse à chaud, lames réfractaires, etc.
	–	–	–	–	DH21		Matrice de pressage aluminium pour une durée de vie élevée
	–	–	–	–	DH31-S		Matrice de pressage
	–	–	–	–	DH2F		Matrice de pressage, matrice plastique

Tableau d'équivalence de matériaux

ISO	Désignation standard en fonction des pays											
	China	USA	Germany		Great Britain		Sweden	France	Italy	Spain	Japan	Russia
	GB	AISI/ SAE	W.-nr	DIN	BS	EN	SS	AFNOR	UNI	UNE	JIS	GOST
M	**Acier inoxydable**											
	0Cr13; 1Cr12	403	1.4000	X6Cr13	403S17	–	2301	Z6C13	X6Cr13	F.3110	SUS403	08Ch13
	–	–	1.4001	X7Cr14	–	–	–	–	–	F.8401	–	–
	1Cr13	410	1.4006	X10Cr13	410S21	56A	2302	Z10C14	X12Cr13	F.3401	SUS410	12Ch13
	1Cr17	430	1.4016	X6Cr17	430S15	60	220	Z8C17	X8Cr17	F.3113	SUS430	12Ch17
	2Cr13	410	1.4021	X20Cr13	S62	56B; 56C	–	Z20C13	X20C13	F.3401	SUS410	20Ch13
	–	–	1.4027	G-X20Cr14	420C29	56B	–	Z20C13M	–	–	SCS2	20Ch13L
	4Cr13	–	1.4034	X46Cr13	420S45	56D	2304	Z40CM Z38C13M	X40Cr14	F.3405	SUS420J2	40Ch13
	1Cr17Ni2	431	1.4057	X20CrNi172	431S29	57	2321	Z15CNi6.02	X16CNi16	F.3427	SUS431	20Ch17N2
	Y1Cr17	430F	1.4104	X12CrMoS17	–	–	2383	Z10CF17	X10CrS17	F.3117	SUS430F	–
	1Cr17Mo	434	1.4113	X6CrMo171	434S17	–	2325	Z8CD17.01	X8CrMo17	–	SUS434	–
	–	–	1.4313	X5CrNi134	425C11	–	–	Z4CND13.4M	–	–	SCS5	–
	–	–	1.4408	G-X6CrNiMo1810	316C16	–	–	–	–	F.8414	SCS14	07Ch18N10G2S2M2L
	4Cr9Si2	HW3	1.4718	X45CrSi93	401S45	52	–	Z45CS9	X45CrSi8	F.322	SUH1	40Ch9S2
	0Cr13Al	405	1.4724	X10CrAl13	403S17	–	–	Z10C13	X10CrAl12	F.311	SUS405	10Ch13SJu
	Cr17	430	1.4742	X10CrAl18	430S15	60	–	Z10CAS18	X8Cr17	F.3113	SUS430	15Ch18SJu
	8Cr20Si2Ni	HNV6	1.4757	X80CrNiSi20	443S65	59	–	Z80CSN20.02	X80CrSiNi20	F.320V	SUH4	–
	2Cr25N	446	1.4762	X10CrAl24	–	–	2322	Z10CAS24	X16Cr26	–	SUH446	–
	Acier inoxydable, austénitique											
	0Cr18Ni9	304	1.4301	X5CrNi1810	304S15	58E	2332	Z6CN18.09	X5CrNi1810	F.3551; F.3541; F.3504	SUS304	08Ch18N10
	1Cr18Ni9MoZr	303	1.4305	X10CrNiS189	303S21	58M	2346	Z10CNF18.09	X10CrNiS18.09	F.3508	SUS303	–
	0Cr19Ni10	304L	1.4306	X2CrNi1911	304S12	–	2352	Z2CN18.10	X2CrNi18.11	F.3503	SCS19	03Ch18N11
	–	–	1.4308	G–X6CrNi189	304C15	–	–	Z6CN18.10M	–	–	SCS13	07Ch18N9L
	Cr17Ni7	301	1.4310	X12CrNi177	–	–	2331	Z12CN17.07	X12CrNi1707	F.3517	SUS301	–
	–	304LN	1.4311	X2CrNiN1810	304S62	–	2371	Z2CN18.10	–	–	SUS304LN	–
	0Cr19Ni9	304	1.4350	X5CrNi189	304S31	58E	–	Z6CN18.09	X5CrNi1810	–	SUS304	–
	0Cr17Ni11Mo2	316	1.4401	X5CrNiMo1712	316S16	Z6CND17.11	2347	1.4401	X5CrNiMo1712	F.3543	SUS316	–
	00Cr17Ni13Mo2	316LN	1.4429	X2CrNiMoN17133	–	–	2375	Z2CND17.13	–	–	SUS316LN	–
	0Cr27Ni12Mo3	316L	1.4435	X2CrNiMo18143	316S12	–	2353	Z2CDN17.13	X2CrNiMo1713	–	SCS16,	03Ch17N14M2
	00Cr19Ni13Mo3	317L	1.4438	X2CrNiMo17133	317S12	–	2367	Z2CND19.15	X2CrNiMo18.16	–	SUS317L	–
	–	329L	1.4460	X8CrNiMo275	–	–	2324	–	–	–	SUS329L; SCH11; SCS11	–
	1Cr18Ni9Ti	321	1.4541	X6CrNiTi1810	2337	321S12	58B	Z6CNT18.10	X6CrNiTi1811	F.3553	SUS321	12Ch18N10T
	1Cr18Ni11Nb	347	1.4550	X6CrNiNb1810	347S17	58F	2338	Z6CNNb18.1	X6CrNiTi1811	F.3552	SUS347	08Ch18N12B
	Cr18Ni12Mo2Ti	316Ti	1.4571	X6CrNiMoTi17122	320S17	58J	2350	Z6NDT17.12	X6CrNiMoTi17	F.3535	–	10Ch17N13M2T

Tableau d'équivalence de matériaux

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	GB	AISI/SAE	W.-nr	DIN	BS	EN	SS	AFNOR	UNI	UNE	JIS	GOST
M	**Acier inoxydable, austénitique**											
	–	–	1.4581	G–X5CrNiMoNb1810	318C7	–	–	Z4CNDNb1812M	XG8CrNiMo18	–	SCS22	–
	Cr17Ni12Mo3Nb	318	1.4583	X10CrNiMoNb1812	–	–	–	Z6CNDNb1713B	X6CrNiMoTiNb17	–	–	–
	1Cr23Ni13	309	1.4828	X15CrNiSi2012	309S24	–	–	Z15CNS20.1	–	–	SUH309	20Ch20N14S2
	0Cr25Ni20	310S	1.4845	X12CrNi2521	310S24	–	2361	Z12CN2520	X6CrNi2520	F.331	SUH310	20Ch23N18
	Cr15Ni36W3Ti	330	1.4864	X12NiCrSi3616	–	–	–	Z12CNS35.1	–	–	SUH330	–
	–	–	1.4865	G–X40NiCrSi3818	330C11	–	–	–	XG50NiCr3919	–	SCH15	–
	5Cr2Mn9Ni4N	EV8	1.4871	X53CrMnNiN219	349S54; 321S12	– 58B	–	Z52CMN21.0	X53CrMnNiN219	–	SUH35	55Ch20G9AN4
	1Cr18Ni9Ti	321	1.4878	X12CrNiTi189	321S320	58C	–	Z6CNT18.12	X6CrNiTi1811	F.3523	SU321	09Ch18N10T

ISO	Désignation standard en fonction des pays									
	China	USA	Germany	Great Britain	Sweden	France	Italy	Spain	Japan	Russia
K	**Fonte nodulaire**									
	QT400-18	60-40-18	GGG40	400/17	0717-02	FGS370-17	GS370-17	FGE38-17	FCD400	VC 42–12
	QT450-10	65-45-12	––	420/12	––	FGS400-12	GS400-12	FGE42-12	FCD450	–
	QT500-7	70-50-05	GGG50	500/7	0727-02	FGS500-7	GS500-7	FGE50-7	FCD500	VC 50–2
	QT600-3	80-60-03	GGG60	600/7	0732-03	FGS600-2	GS600-2	FGE60-2	FCD600	VC 60–2
	QT700-2	100-70-03	GGG70	700/2	0737-01	FGS700-2	GS700-2	FGE70-2	FCD700	VC 70–2
	QT800-2	120-90-02	GGG80	800/2	0864-03	FGS800-2	GS800-2	FGE80-2	FCD800	VC 80–2
	QT900-2	––	––	900/2	––	––	––	––	––	–
	Fonte grise									
	––	NO.60	GG40	––	0140	FGL400	––	––		Sc 40
	HT350	NO.50	GG35	350	0135	FGL350	G35	FG35	FC350	Sc 35
	HT300	NO.45	GG30	300	0130	FGL300	G30	FG30	FC300	Sc 30
	HT250	NO.35	GG25	250	0125	FGL250	G25	FG25	FC250	Sc 25
	HT200	NO.30	GG20	200	0120	FGL200	G20	FG20	FC200	Sc 20
	HT150	NO.20	GG15	150	0115	FGL150	G15	FG15	FC150	Sc 15
	HT100	––	––	100	0110	––	G10	––	FC100	–

ISO	Désignation standard en fonction des pays										
	China	USA	Germany		Great Britain		Sweden	France	Italy	Spain	Japan	Russia
	GB	AISI/SAE	W.-nr	DIN	BS	EN	SS	AFNOR	UNI	UNE	JIS	GOST
H	**Matériaux durs**											
	–	440A	1.4108	X100CrMo03	–	–	2258 08	–	–	–	C4BS	–
	–	610	1.4111	X100CrMoV15	–	–	2534 05	–	–		AC4A	–
	–	0-2	–	X65CrMo14	–	–	2541 06	–	–		AC4A	–

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	GB	AISI/SAE	W.-nr	DIN	BS	EN	SS	AFNOR	UNI	UNE	JIS	GOST
N	**Alliage d'aluminium**											
	–	SC64D	3.2373	G-AlSi9MgWA			4251	A-S7G			C4BS	–
	–	DG-AlSi12		G-ALMG5	LM5		4252	A-SU12			AC4A	
	–	356.1			LM25		4244				A5052	
	–	A413.0		GD-AlSi12			4247				A6061	
	–	A380.1		GD-AlSi8Cu3	LM24		4250				A7075	
	–	A413.1		G-AlSi12(Cu)	LM20		4260				ADC12	
	–	A413.2		G-AlSi12	LM6		4261					
	–	A360.2		G-AlSi10Mg(Cu)	LM9		4253					

ISO	Désignation standard en fonction des pays											
	China	USA	Germany		Great Britain		Sweden	France	Italy	Spain	Japan	Russia
	GB	AISI/SAE	W.-nr	DIN	BS	EN	SS	AFNOR	UNI	UNE	JIS	GOST
S	**Alliage de nickel**											
	–	5391	LW2 4670	S-NiCr13A16MoNb	mar-46	–	–	NC12AD	–	–		
	–	AMS 5397	LW2 4674	NiCo15Cr10MoAlTi	–	–	–	–	–	–		
	–	5660	LW2.4662	NiFe35Cr14MoTi	–	–	–	ZSNCDT42	–	–		
	–	5383	LW2.4668	NiCr19Fe19NbMo	HR8	–	–	NC19eNB	–	–		
	–	–	2.4631	NiCr20TiAk	Hr401.601	–	–	NC20TA	–	–		–
	–	AMS 5399	2.4973	NiCr19Co11MoTi	–	–	–	NC19KDT	–	–		–
	–	AMS 5544	LW2.4668	NiCr19Fe19NbMo	–	–	–	NC20K14	–	–		
	–	5390A	2.4603	–	–	–	–	NC22FeD	–	–		–
	–	5666	2.4856	NiCr22Mo9Nb	–	–	–	NC22FeDNB	–	–		–
	–	–	2.4630	NiCr20Ti	HR5.2034	–	–	NC20T	–	–		–
	–	4676	2.4375	NiCu30AL3Ti	3072-76	–	–	–	–	–		–
	Alliage de cobalt											
	–	5537C AMS		CoCr20W15Ni	–	–	–	KC20WN	–	–		
	–	5772	LW2.4964	CoCr20W14Ni				KC22WN				
	Alliages de titane											
	–	UNS R54520	3.7115.1	TiAl5Sn2.5	TA14/17	–	–	T-A5E	–	–		
	–							UNS R56400				
	–	–	3.7165.1	TiAl6V4	TA10-13/ TA28		–	UNS R56401	T-A6V	–	–	
	–			TiAl5V5Mo5Cr3								
	–	–	3.7185	TiAl4Mo4Sn4Si0.5	–	–	–	–	–	–		

Tableau d'équivalence dureté et résistance à la traction

Dureté				Résistance à la traction N/mm²
Dureté Rockwell		Dureté Vickers	Dureté Brinell	
HRC	HRA	HV	HB	
70.0	86.6	1037	—	—
69.5	86.3	1017	—	—
69.0	86.1	997	—	—
68.5	85.8	978	—	—
68.0	85.5	959	—	—
67.5	85.2	941	—	—
67.0	85.0	923	—	—
66.5	84.7	906	—	—
66.0	84.4	889	—	—
65.5	84.1	872	—	—
65.0	83.9	856	—	—
64.5	83.6	840	—	—
64.0	83.3	825	—	—
63.5	83.1	810	—	—
63.0	82.8	795	—	—
62.5	82.5	780	—	—
62.0	82.2	766	—	—
61.5	82.0	752	—	—
61.0	81.7	739	—	—
60.5	81.4	726	—	—
60.0	81.2	713	—	2555
59.5	80.9	700	—	2500
59.0	80.6	688	—	2450
58.5	80.3	676	—	2395
58.0	80.1	664	—	2345
57.5	79.8	653	—	2295
57.0	79.5	642	—	2250
56.5	79.3	631	—	2205
56.0	79.0	620	—	2160
55.5	78.7	609	—	2115
55.0	78.5	599	—	2075
54.5	78.2	589	—	2035
54.0	77.9	579	—	1995
53.5	77.7	570	—	1955
53.0	77.4	561	—	1920
52.5	77.1	551	—	1885
52.0	76.9	543	—	1850
51.5	76.6	534	—	1815

Dureté				Résistance à la traction N/mm²
Dureté Rockwell		Dureté Vickers	Dureté Brinell	
HRC	HRA	HV	HB	
51.0	76.3	525	501	1780
50.5	76.1	517	494	1750
50.0	75.8	509	488	1720
49.5	75.5	501	481	1690
49.0	75.3	493	474	1660
48.5	75.0	485	468	1630
48.0	74.7	478	461	1605
47.5	74.5	470	455	1575
47.0	74.2	463	449	1550
46.5	73.9	456	442	1525
46.0	73.7	449	436	1500
45.5	73.4	443	430	1475
45.0	73.2	436	424	1450
44.5	72.9	429	418	1430
44.0	72.6	423	413	1405
43.5	72.4	417	407	1385
43.0	72.1	411	401	1360
42.5	71.8	405	396	1340
42.0	71.6	399	391	1320
41.5	71.3	393	385	1300
41.0	71.1	388	380	1280
40.0	70.8	382	375	1260
40.0	70.5	377	370	1245
39.5	70.3	372	365	1225
39.0	70.0	367	360	1210
38.5	—	362	355	1190
38.0	—	357	350	1175
37.5	—	352	345	1160
37.0	—	347	341	1140
36.5	—	342	336	1125
36.0	—	338	332	1110
35.5	—	333	327	1095
35.0	—	329	323	1080
34.5	—	324	318	1065
34.0	—	320	314	1050
33.5	—	316	310	1035
33.0	—	312	306	1020
32.5	—	308	302	1010

Tableau d'équivalence dureté et résistance à la traction

Dureté				Résistance à la traction N/mm²	Dureté				Résistance à la traction N/mm²
Dureté Rockwell		Dureté Vickers	Dureté Brinell		Dureté Rockwell		Dureté Vickers	Dureté Brinell	
HRC	HRA	HV	HB		HRC	HRA	HV	HB	
32.0	—	304	298	995	24.0	—	249	245	820
31.5	—	300	294	980	23.5	—	246	242	810
31.0	—	296	291	970	23.0	—	243	240	800
30.5	—	292	287	960	22.5	—	240	237	790
30.0	—	289	283	950	22.0	—	237	234	785
29.5	—	285	280	935	21.5	—	234	232	775
29.0	—	281	276	920	21.0	—	231	229	765
28.5	—	278	273	910	20.5	—	229	227	760
28.0	—	274	269	900	20.0	—	226	225	750
27.5	—	271	266	890	19.5	—	223	222	745
27.0	—	268	263	880	19.0	—	221	220	735
26.5	—	264	260	870	18.5	—	218	218	730
26.0	—	261	257	860	18.0	—	216	216	725
25.5	—	258	254	850	17.5	—	214	214	715
25.0	—	255	251	835	17.0	—	211	211	710
24.5	—	252	248	830					

Remarque : les valeurs indiquées dans le tableau sont valables pour l'acier au carbone.

Exemples de matériaux pour les groupes matières

Nr. matière	Désignation	Groupe matière
1.0722	10SPb20	1
1.0715	9SMn28	1
1.0736	9SMn36	1
1.0718	9SMnPb28	1
1.0737	9SMnPb36	1
1.0401	C15	1
1.0402	C22	1
1.1141	Ck15	1
1.1170	28Mn6	2
1.0726	35S20	2 / 3
1.1167	36Mn5	2 / 3
1.1157	40Mn4	2 / 3
1.0501	C35	2 / 3
1.0503	C45	2 / 3
1.1191	Ck45	2 / 3
1.1183	Cf35	2 /3
1.1213	Cf53	2 /3
1.1545	C 105 W1	4 / 5
1.1663	C 125 W	4 / 5
1.0535	C55	4 / 5
1.0601	C60	4 / 5
1.1274	Ck101	4 / 5
1.1203	Ck55	4 / 5
1.1221	Ck60	4 / 5
1.5710	36NiCr6	5 / 9
1.5120	38MnSi 4	5 / 9
1.1545	C 105 W2	4 / 5
1.1663	C 125 W	4 / 5
1.0535	C65	4 / 5
1.0601	C70	4 / 5
1.1274	Ck101	4 / 5
1.1203	Ck55	4 / 5
1.1221	Ck60	4 / 5
1.5710	36NiCr7	5 / 9
1.5120	38MnSi 5	5 / 9
1.1545	C 105 W3	4 / 5
1.1663	C 125 W	4 / 5
1.0535	C75	4 / 5
1.0601	C80	4 / 5
1.1274	Ck101	4 / 5
1.1203	Ck55	4 / 5
1.1221	Ck60	4 / 5
1.5710	36NiCr8	5 / 9
1.5120	38MnSi 6	5 / 9
1.1545	C 105 W4	4 / 5
1.1663	C 125 W	4 / 5
1.0535	C85	4 / 5
1.0601	C90	4 / 5
1.1274	Ck101	4 / 5

Nr. matière	Désignation	Groupe matière
1.1203	Ck55	4 / 5
1.1221	Ck60	4 / 5
1.5710	36NiCr9	5 / 9
1.5120	38MnSi 7	5 / 9
1.1545	C 105 W5	4 / 5
1.1663	C 125 W	4 / 5
1.0535	C95	4 / 5
1.0601	C100	4 / 5
1.1274	Ck101	4 / 5
1.1203	Ck55	4 / 5
1.1221	Ck60	4 / 5
1.5710	36NiCr10	5 / 9
1.5120	38MnSi 8	5 / 9
1.5680	12Ni19	10 / 11
1.3255	S 18-1-2-5	10 / 11
1.3348	S 2-9-2	10 / 11
1.3343	S 6-5-2	10 / 11
1.3243	S 6-5-2-5	10 / 11
1.2363	X 100 CrMoV 5-1	10 / 11
1.2601	X165CrMoV12	10 / 11
1.2080	X210 Cr 12	10 / 11
1.2581	X30WCrV 9-3	10 / 11
1.2344	X40CrMoV 5-1	10 / 11
1.4718	X45CrSi9-3	10 / 11
1.3355	S 18–0–1	10 /11
1.4027	G–X20Cr14	12 / 13
1.4006	X12 Cr 13	12 / 13
1.4104	X12CrMoS 17	12 / 13
1.4057	X19CrNi 17-2	12 / 13
1.4034	X46Cr 13	12 / 13
1.4871	X53 CrMnNiN 21-9	12 / 13
1.4113	X6CrMo 17	12 / 13
1.4000	X6CR 13	12 / 13
1.4001	X7Cr14	12 / 13
1.4016	X6Cr17	12 / 13
1.4581	G–X5CrNiMoNb 18	14
1.4308	G–X6CrNi 18-9	14
1.4408	G–X6CrNiMo 18-10	14
1.4583	X6CrNiMoNb 18-12	14
1.4571	X6CrNiMoTi 17-12-2	14
1.4550	X6CrNiNb 18-10	14
1.4541	X14CrNiTi 18-10	14
1.4845	X12CrNi 25-21	14
1.4310	X10CrNi 18-8	14
1.4305	X10CrNiS 18-10	14
1.4878	X12CrNiTi 18-9	14
1.4317	X2CrNi 18-8	14
1.4436	X3CrNiMo 17-13-3	14
1.4440	X2CrNiMo 18-16	14

Nr. matière	Désignation	Groupe matière
1.4429	X2CrNiMoN 17-13-3	14
1.4311	X2CrNiN 18-10	14
1.4301	X5CrNi 18-10	14
1.4401	X5CrNiMo 17-12-2	14
0.6010	GG10	16
0.6015	GG15	16
0.6020	GG20	16
0.6025	GG25	16 / 17
0.6030	GG30	17
0.6035	GG35	17
0.6040	GG40	17
1.4829	X12NiCrSi 22-12	17
1.4828	X15CrNiSi20-12	17
0.7033	GGG35.3	18
0.7040	GGG40	18
0.7043	GGG40.3	18
0.8135	GTS-35	18
0.7050	GGG50	19
0.7060	GGG60	19
0.7070	GGG70	19
0.7660	GGGNiCr 20-2	19
0.7652	GGGNiMn 13-7	19
0.8155	GTS-55	21
0.8165	GTS-65	21
0.8170	GTS-70	21
0.8145	GTS-45	21
3.0205	Al99	22
3.3315	AlMg 1	22
3.1325	AlCuMg 1	23
3.2315	AlMgSi 1	23
3.2581	G-AlSi12	24
3.2163	G-AlSi9Cu3	24
3.2381	G-AlSi10Mg	25
2.0375	CuZn36Pb 3	27
2.1096	G-CuSn5ZnPb	27
2.0590	G-CuZn40Fe	27
2.0240	CuZn15	28
2.0060	E-Cu 57	29
1.4865	G-X40NiCrSi 38-18	30
1.4864	X12NiCrSi 36-16	30
2.4631	NiCr20TiAl	32
2.4856	NiCr22Mo9Nb	32
2.4375	NiCu30Al	33
2.4955	NiFe25Cr20NbTi	33
2.4764	CoCr20W15Ni	34
1.3401	G-X120Mn12	34
3.7165	TiAl6V4	36

Couples de serrage des vis

Filetage	M1,6	M1,8	M2	M2,2	M2,5	M3	M3,5	M4	M4,5	M5	M6	M7	M8	M10	M12
Couple de serrage [Nm]	0,2	0,3	0,4	0,7	0,8	1,5	2,3	3,4	5,0	6,7	11,4	19,2	27,0	55,8	85

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APKT-APF B104 B107 B111 B114 B116 B202 B213
APKT-APM B104 B107 B111 B114 B116 B202 B213
APKT-LH B104 B107 B111 B114 B116 B202 B213
APKT-NM B104 B107 B111 B114 B116 B202 B213
APKT-PF B104 B107 B111 B114 B116 B202 B213
APKT-PM B104 B107 B111 B114 B116 B202 B213
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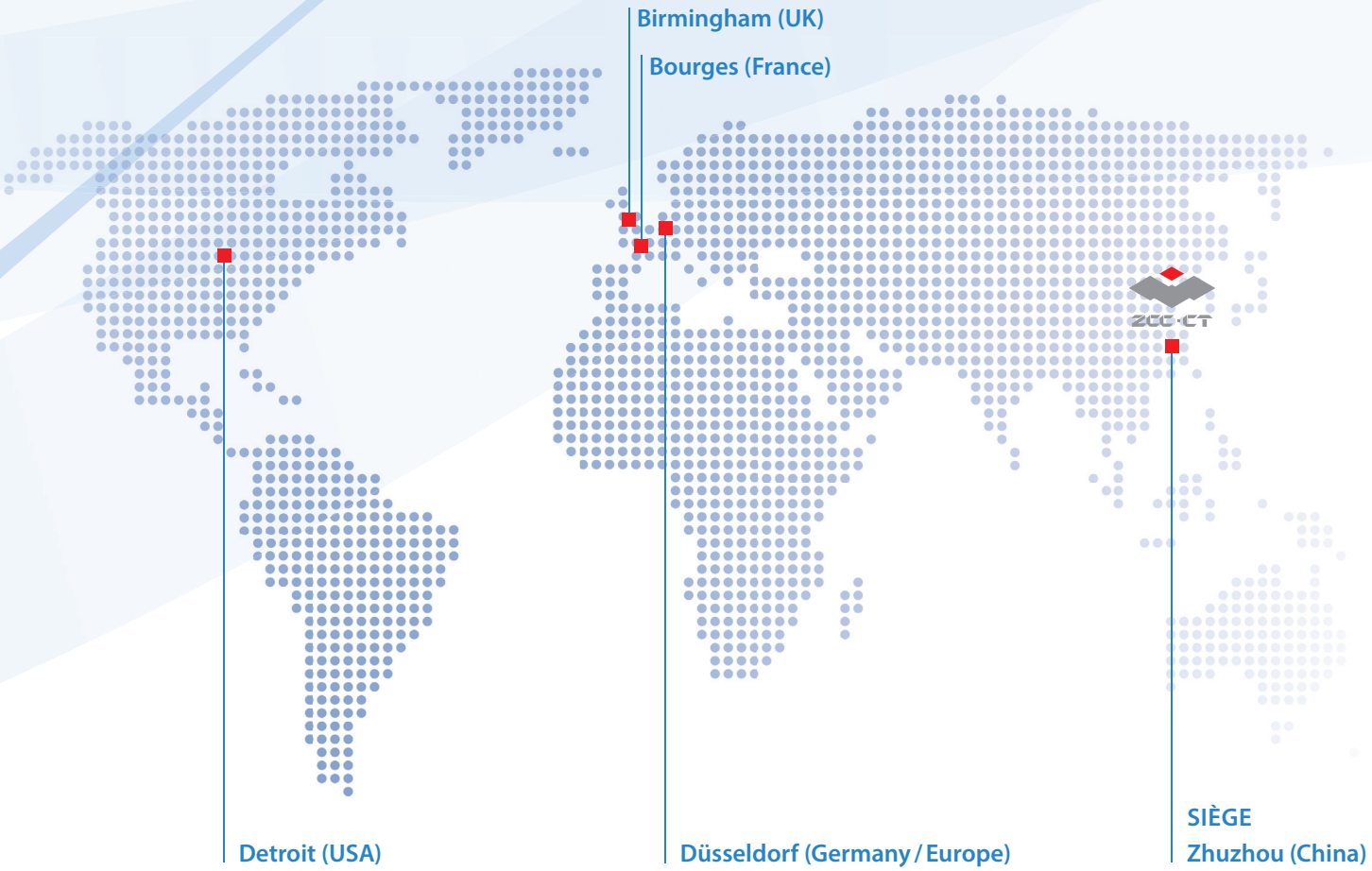
Affûtage d'outils en carbure monobloc



Affûtage de plaquettes

Nouveau parc industriel ZCC Cutting Tools, Zhuzhou, Chine




Birmingham (UK)
Bourges (France)
Detroit (USA)
Düsseldorf (Germany / Europe)
SIÈGE
Zhuzhou (China)


QUALITY MANAGEMENT SYSTEM CERTIFICATE
Certificate No. 00120Q33433R6L/4300
We hereby certify that
Zhuzhou Cemented Carbide Cutting Tools Co.,Ltd.
Huanghe Southern Road, Hi-Tech Development Zone, Zhuzhou City, Hunan Province, P.R.China
by reason of its
Quality Management System
has been awarded this certificate for compliance with the standard
GB/T 19001-2016 / ISO 9001:2015
The Quality Management System Applies in the following area:
Research, Design, Production and Service of Matching Technology for Cemented Carbide, Super Hard Material Indexable Inserts, Tips and Brazed Insert, Notched Toolholders, Solid Carbids Cutting Tools for Bore Machining and End Mills
Certified since: December 18, 2002 Valid from: June 3, 2020 Valid until: May 26, 2023
CHINA QUALITY CERTIFICATION CENTRE


ENVIRONMENTAL MANAGEMENT SYSTEM CERTIFICATE
Certificate No. 00121E32279R6L/4300
We hereby certify that
Zhuzhou Cemented Carbide Cutting Tools Co.,Ltd.
Registration Address: Huanghe Southern Road, Hi-Tech Development Zone, Zhuzhou City, Hunan Province, P.R.China
Production Address1: Huanghe Southern Road, Hi-Tech Development Zone, Zhuzhou City, Hunan Province, P.R.China
Production Address2: 399 Xinma Southern Roadand Hi-Tech Development Zone, Zhuzhou City, Hunan Province, P.R.China
by reason of its
Environmental Management System
has been awarded this certificate for compliance with the standard
GB/T 24001-2016 / ISO 14001:2015
The Environmental Management System Applies in the following area:
Research, Design, Production and Service of Matching Technology for Cemented Carbide, Super Hard Material Indexable Inserts, Tips and Brazed Insert, Matched Toolholders, Solid Carbids Cutting Tools for Bore Machining and End Mills and Related Management Activities
Certified since: May 30, 2003 Valid from: June 15, 2021 Valid until: June 25, 2024
CHINA QUALITY CERTIFICATION CENTRE


bsi.
Certificate of Registration
QUALITY MANAGEMENT SYSTEM - ISO 9001:2015
This is to certify that:
ZCC Cutting Tools Europe GmbH
Wanheimer Str. 57
Düsseldorf
40472
Germany
Holds Certificate No: FS 651501
and operates a Quality Management System which complies with the requirements of ISO 9001:2015 for the following scope:
Development, Construction, Distribution and Logistics for Metal Cutting Tools.
For and on behalf of BSI:
Dr. Tatiana Schmidlock-Baranova, Managing Director, BSI Group Deutschland GmbH
Original Registration Date: 2010-06-17
Latest Revision Date: 2022-06-08
Effective Date: 2022-06-18
Expiry Date: 2025-06-17
Page: 1 of 2
...making excellence a habit.

La société

Zhuzhou Cemented Carbide Cutting Tools Co., Ltd. (ZCC-CT), *dont le siège social se trouve à Zhuzhou dans la province du Hunan en Chine, est le plus grand fabricant chinois d'outils en carbure et une société-clé de China Tungsten High-Tech Material Co. Ltd (China Minmetals Corporation).*

Depuis sa création en 1953, *ZCC Cutting Tools Co., Ltd. est devenue l'un des plus grands fabricants du secteur, avec plus de 2 000 collaborateurs, grâce à l'utilisation des technologies les plus récentes et à son personnel hautement qualifié. Les technologies de production sont modernisées en permanence et les capacités de l'entreprise évoluent selon ses objectifs de croissance. En tant qu'entreprise de Minmetals Corporation, ZCC-CT couvre l'ensemble de la chaîne de valeur, depuis la fabrication d'outils modernes en carbure jusqu'aux produits finis, en passant par l'extraction de matières premières et toutes les étapes intermédiaires.*

Elle s'appuie sur des technologies de production modernes et européennes pour proposer des produits haut de gamme d'une qualité constante. La vaste gamme de produits se compose de plaquettes en carbure, en cermet, en CBN, en PCD et en céramique, d'outils en carbure ainsi que de porte-outils, de corps de fraise et de systèmes d'outils. Les produits sont fabriqués selon les diverses normes internationales en vigueur, notamment ISO, DIN, ANSI, JIS et BSI. ZCC-CT propose également des solutions personnalisées et des produits spéciaux en carbure répondant à des spécifications individuelles.

ZCC-CT accorde une importance toute particulière à la recherche et au développement. Elle a ainsi recours aux dispositifs les plus modernes et aux machines à la pointe de la technique mondiale, notamment en provenance d'Allemagne et de Suisse. Les investissements réalisés sont extrêmement importants. Grâce à des ingénieurs et des scientifiques parfaitement formés et à une équipe internationale compétente, ZCC Cutting Tools réalise les recherches qui lui permettent de développer et d'améliorer en permanence de nouveaux produits.

La société cherche constamment à atteindre des niveaux de qualité supérieure afin de pouvoir répondre aux exigences croissantes en matière de nouveauté et d'innovation produits et d'étendre les avantages dont chaque client peut bénéficier. Production et administration en Chine sont soumises aux normes ISO 9001:2008 tandis que la gestion de l'environnement relève de la norme ISO 14001:2004.

Depuis 2003 déjà, le siège de ZCC Cutting Tools Europe GmbH, *la plateforme européenne, ainsi que l'entrepôt central européen sont situés à Düsseldorf (Allemagne). Tous les pays européens et les marchés voisins sont gérés depuis cette plateforme.*

Le système de gestion de la qualité de ZCC Cutting Tools Europe GmbH dans le domaine de la distribution et de la logistique d'outils destinés au traitement des métaux est certifié selon la norme DIN EN ISO 9001:2008.

Membre actif de la VDMA depuis 2019, la société possède un site de production en Allemagne.

La succursale britannique est membre de la Manufacturing Technologies Association (MTA).

Afin de pouvoir proposer un service client au niveau d'exigence remarquable, ZCC Cutting Tools Europe GmbH augmente le nombre de ses collaborateurs au rythme de la croissance de l'entreprise, notamment dans les départements distribution, service commercial interne, service technique, technique de mise en application, recherche et développement, ainsi que logistique, marketing, IT, ressources humaines et comptabilité. Le système de gestion évolue en permanence selon la croissance de l'entreprise.

Le département de recherche et développement spécialement conçu pour répondre aux exigences des marchés européens et travaillant en étroite collaboration avec le département de recherche et de développement en Chine, ainsi que le centre d'essais et de démonstration qui a ouvert ses portes en 2019 à Düsseldorf pour tester et présenter des solutions innovantes, témoignent de l'importance accordée par ZCC Cutting Tools Europe GmbH aux services tournés vers le client et vers le marché. Le centre d'essais et de démonstration est également dédié à l'optimisation des processus client selon leurs exigences spécifiques.

Attachés commerciaux et partenaires de distribution en Europe accompagnent les clients ensemble sur site. Les techniciens d'application ZCC-CT sont aussi à votre disposition par téléphone, par e-mail ou physiquement dans votre environnement de production pour vous apporter leurs compétences, leur expérience et leur personnalité.

L'ensemble du service client et de nos équipes internes répond à vos demandes dans toute l'Europe grâce à des collaborateurs natifs et veille, en collaboration avec les équipes logistiques et via un système bien rodé, à ce que toutes les commandes vous parviennent le plus rapidement possible. Des succursales en France et en Grande-Bretagne assurent encore davantage de proximité avec les clients.

L'ensemble des collaborateurs de Cutting Tools Europe GmbH met ses compétences à votre service. Nous restons votre partenaire pour toutes les questions relatives à la fabrication et à l'usinage. Voici notre définition de « La plus-value grâce au partenariat. ».

Catalogue Principal

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ZCC Cutting Tools Europe GmbH

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