

INDEXABLE MILLING



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Milling inserts



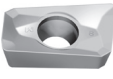
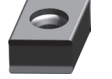




A

Turning

								
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	Edge length
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	Page






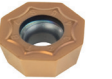
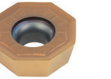
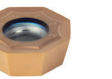
B

Milling

								
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	Edge length
B104, B107, B111, B114, B116, B202, B213	B104, B107, B111, B114, B116, B202, B213	B118	B174	B64	B218	B218	B220	Page





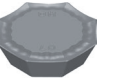
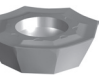
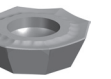

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




Drilling









								
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	Edge length
B219	B120, B122	B120, B122	B66, B73, B80	B156, B158, B176	B47	B47	B47	Page

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ODHT-LH	ODMT-GM	OFKR-DF	OFKR-DM	OFKR-LH	OFKT-DF	OFKT-DM	OFKT-LH	
06	06	07	07	07	05	05	05	Edge length
B47	B47	B45	B45	B45	B43	B43	B43	Page

								
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	Edge length
B49, B51	B56	B56	B56	B49, B51	B49, B51	B59, B61	B59, B61	Page






















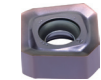
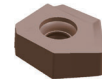






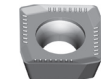













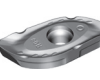



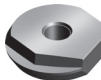
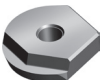

								
PNEG-CR	PNEG-PF	PNEG-PM	PNEG-PR	RCKT-DM	RCKT-DR	RCKT-ER	RCKT-NM	
11	11	11	11	10 12 16 20	12 16 20	12 16 20	12 16 20	Edge length
B59, B61	B58, B61	B58, B61	B58, B61	B89, B92	B89, B92	B89, B92	B89, B92	Page

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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	Edge length
B95, B99, B205	B95, B99, B205	B137	B135	B164, B167, B198, B211	B164	B164, B167, B198, B211	B41	Page

Milling inserts

									
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	Edge length	
B77	B77	B77	B35, B37	B35, B37	B35, B37	B35, B37	B35, B37	Page	
									
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	Edge length	
B35, B37	B35, B37	B35, B37	B35, B37	B77	B77	B77	B34, B37	Page	
									
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	Edge length	
B40	B41	B53	B53	B53	B53	B54	B221	Page	
									
SPCN	SPGN	SPKN	SPKR	SPKR-GM	SPKT	SPKW	SPMR		
12 15	12	12 15	12	12 15	12	12	09 12	Edge length	
B222	B225	B70	B71	B71	B68	B68	B223	Page	
									
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	Edge length	
B135, B184, B186, B188, B190, B192, B194	B224	B135, B224	B178, B180, B182	B225	B75, B226	B227	B227	Page	
									
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	Edge length	
B169, B171, B200	B169, B171, B200	B87	B139, B141, B143, B145, B196	B152, B154	B134	B134	B147, B149, B209	Page	
									
ZOHX-GM	ZPNT								
12 16 20 25 30 32	22							Edge length	
B147, B149, B209	B134							Page	

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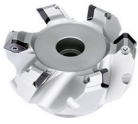






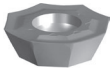




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Face milling

Series	Milling body	Inserts	Kr	Application						Features	Page
				P	M	K	N	S	H		
FMA01		 SEET12T3 SEET18T6	45°	✓	✓	✓	✓	✓		<ul style="list-style-type: none"> • Diameter range Ø50 – 315 mm • For steel, stainless steel, cast iron, non-ferrous metals and heatresistant alloys • Milling cutter with positive, soft cutting geometry • Wiper inserts for good surface quality 	B33
FMA02		 SEET12T3	45°	✓	✓	✓	✓	✓		<ul style="list-style-type: none"> • Diameter range Ø50 – 125 mm • For steel, stainless steel, cast iron, non-ferrous metals and heatresistant alloys • Milling cutter with positive, soft cutting geometry • Wide pitch 	B36
FMA03		 SEEN1203 SEKN1203 SEKR1203 SEKN1504 SEKR1504	45°	✓	✓	✓	✓			<ul style="list-style-type: none"> • Diameter range Ø80 – 315 mm • For steel, stainless steel and cast iron • Milling cutter with positive, soft cutting geometry • Wedge clamping 	B39
FMA04		 OFKT05T3	45°	✓	✓	✓	✓			<ul style="list-style-type: none"> • Diameter range Ø50 – 160 mm • For steel, stainless steel, cast iron and non-ferrous metals • Inserts with eight cutting edges • Screw clamping 	B42
FMA04		 OFKR0704	45°	✓	✓	✓	✓			<ul style="list-style-type: none"> • Diameter range Ø125 – 315 mm • For steel, stainless steel, cast iron and non-ferrous metals • Inserts with eight cutting edges • Wedge clamping 	B44
FMA04		 OD*T0605**	45°	✓	✓	✓	✓			<ul style="list-style-type: none"> • Diameter range Ø50 – 160 mm • For steel, stainless steel, cast iron and non-ferrous metals • Inserts with eight cutting edges • Screw clamping 	B46

✓ Very suitable ✓ Suitable

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Series	Milling body	Inserts	Kr	Application						Features	Page	
				P	M	K	N	S	H			
FMA07		 ONHU0604 ONHU08T5	45°	✓		✓				✓	<ul style="list-style-type: none"> • Diameter range Ø25 – 50 mm • For steel and cast iron • Inserts with 16 cutting edges 	B48
FMA07		 ONHU0604 ONHU08T5	45°	✓		✓				✓	<ul style="list-style-type: none"> • Diameter range Ø40 – 315 mm • For steel and cast iron • Inserts with 16 cutting edges 	B50
FMA11		 SNEG1205 SNEG1506 SNEG1907	45°	✓	✓	✓			✓		<ul style="list-style-type: none"> • Diameter range Ø63 – 315 mm • For steel, stainless steel and cast iron • Inserts with eight cutting edges • Double sided, thicker inserts for high stability and deeper cutting depths • Wiper geometry for good surface quality • Normal and fine pitch 	B52
FMA12		 ON*U0604** ONHU08T6	45°	✓	✓	✓			✓		<ul style="list-style-type: none"> • Diameter range Ø63 – 315 mm • For steel, stainless steel and cast iron • Inserts with 16 cutting edges 	B55
FMD02		 PNEG1105	67°	✓	✓	✓					<ul style="list-style-type: none"> • Diameter range Ø50 – 315 mm • For steel, stainless steel and cast iron • Inserts with ten cutting edges • Wedge clamping or screw clamping • Normal and fine pitch 	B57
FMD02		 PNEG1105	67°			✓					<ul style="list-style-type: none"> • Diameter range Ø50 – 315 mm • For steel, stainless steel and cast iron • Inserts with ten cutting edges • Wedge clamping or screw clamping • Normal and fine pitch 	B60

✓ Very suitable ✓ Suitable

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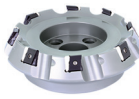









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Series	Milling body	Inserts	Kr	Application						Features	Page	
				P	M	K	N	S	H			
FMD02		 HNEX0905	55°			✓					<ul style="list-style-type: none"> • Diameter range Ø80 – 315 mm • For cast iron • Wedge clamping • Inserts with twelve cutting edges 	B63
FMD03		 LNKT2007-ZR LNKT2510-ZR	60°	✓		✓					<ul style="list-style-type: none"> • Diameter range Ø100 – 400 mm • For steel, stainless steel and cast iron • Tangential insert with four cutting edges • Heavy duty machining for high cutting depths • Screw clamping 	B65
FME02		 SPKT1204 SPKW1204	75°	✓	✓	✓					<ul style="list-style-type: none"> • Diameter range Ø50 – 125 mm • For steel and cast iron • Screw clamping 	B67
FME03		 SPKN1203 SPKR1203 SPEX1203 SPKN1504 SPKR1504 SPEX1504	75°	✓	✓	✓					<ul style="list-style-type: none"> • Diameter range Ø80 – 400 mm • For steel and cast iron • Wedge clamping 	B69
FME04		 LNKT1506-ZR	75°	✓		✓					<ul style="list-style-type: none"> • Diameter range Ø125 – 315 mm • For steel, stainless steel and cast iron • Tangential insert with four cutting edges • Heavy duty machining for high cutting depths • Screw clamping 	B72
FMP01		 TPKN2204	90°	✓	✓	✓			✓		<ul style="list-style-type: none"> • Diameter range Ø80 – 315 mm • For steel, stainless steel and cast iron • Milling cutter with positive, soft cutting geometry • Wedge clamping 	B74

✓ Very suitable ✓ Suitable

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Turning









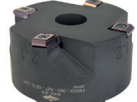

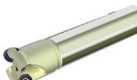

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Series	Milling body	Inserts	Kr	Application						Features	Page
				P	M	K	N	S	H		
FMP02		 SEET09T3 SEET1203	90°	✓	✓	✓	✓	✓		<ul style="list-style-type: none"> • Diameter range Ø50 – 315 mm • For steel, stainless steel, cast iron an non-ferrous metals • Screw clamping 	B76
FMP03		 LNKT120608-ZR LNKT1506EN-ZR LNKT2007DN-ZR LNKT2510-ZR	89°	✓		✓				<ul style="list-style-type: none"> • Diameter range Ø50 – 315 mm • For steel, stainless steel and cast iron • Tangential insert with four cutting edges • Screw clamping 	B79
FMP12		 WNHU0604 WNHU0806	90°	✓		✓				<ul style="list-style-type: none"> • Diameter range Ø50 – 315 mm • For steel, stainless steel and cast iron • Tangential insert with four cutting edges • Screw clamping 	B81
FMP12		 WNHU0604	90°	✓		✓				<ul style="list-style-type: none"> • Diameter range Ø50 – 315 mm • For steel, stainless steel and cast iron • Tangential insert with four cutting edges • Screw clamping 	B83
FMWX		 XEEC1209		✓		✓				<ul style="list-style-type: none"> • 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		✓	✓	✓	✓	✓		<ul style="list-style-type: none"> • Diameter range Ø25 – 63 mm • For steel, stainless steel, cast iron, non-ferrous metals and heatresistant alloys • Screw clamping 	B88

✓ Very suitable ✓ Suitable

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Series	Milling body	Inserts	Kr	Application						Features	Page
				P	M	K	N	S	H		
FMR02		 RCGX1204 RCKT1204 RCMW1204 RCKT1606 RCKT2006		✓	✓	✓	✓	✓		<ul style="list-style-type: none"> • Diameter range Ø50 – 250 mm • For steel, stainless steel, cast iron, non-ferrous metals and heatresistant alloys • Screw clamping 	B90
FMR03		 RD**0803 RD**10T3 RD**1204		✓	✓	✓			✓	<ul style="list-style-type: none"> • Diameter range Ø15 – 50 mm • For steel, stainless steel and cast iron • Screw clamping • Mould and die industry 	B94
FMR03		 RDKW0702 RDKW1003		✓	✓	✓			✓	<ul style="list-style-type: none"> • Diameter range Ø15 – 50 mm • For steel, stainless steel and cast iron • Screw clamping • Mould and die industry 	B96
FMR04		 RD**1204 RD**1605 RD**2006		✓	✓	✓			✓	<ul style="list-style-type: none"> • Diameter range Ø50 – 200 mm • For steel, stainless steel and cast iron • Screw clamping • Mould and die industry 	B98
FMR04		 RDKW1003 RDKW12T3 RDKW1604		✓	✓	✓			✓	<ul style="list-style-type: none"> • Diameter range Ø42 – 200 mm • For steel, stainless steel and cast iron • Screw clamping • Mould and die industry 	B100

✓ Very suitable ✓ Suitable

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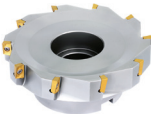



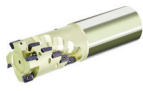


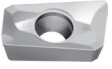
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Square shoulder milling

Series	Milling body	Inserts	Kr	Application						Features	Page
				P	M	K	N	S	H		
EMP01		 APKT0702 APKT11T3 APKT1604	90°	✓	✓	✓	✓	✓		<ul style="list-style-type: none"> • Diameter range Ø12 – 63 mm • For steel, stainless steel, cast iron, non-ferrous metals and heatresistant alloys • Weldon shank • For square shoulder milling, slot milling and ramping • Milling cutter with positive, soft cutting geometry • Inserts with two cutting edges 	B103
EMP01		 APKT11T3 APKT0702 APKT1604	90°	✓	✓	✓	✓	✓		<ul style="list-style-type: none"> • Diameter range Ø12 – 63 mm • For steel, stainless steel, cast iron, non-ferrous metals and heatresistant alloys • Weldon shank • For square shoulder milling, slot milling and ramping • Milling cutter with positive, soft cutting geometry • Inserts with two cutting edges 	B106
EMP02		 APKT0702 APKT11T3 APKT1604	90°	✓	✓	✓	✓	✓		<ul style="list-style-type: none"> • Diameter range Ø40–250 mm • For steel, stainless steel, cast iron, non-ferrous metals and heat-resistant alloys • For square-shoulder, slot and plunge milling • Milling cutter with positive, soft cutting geometry • INSERTs with two cutting edges 	B109
EMP03		 APKT11T3	90°	✓	✓	✓	✓			<ul style="list-style-type: none"> • Diameter range Ø50–100 mm • For steel, stainless steel, cast iron, non-ferrous metals and heat-resistant alloys • For square-shoulder, slot and plunge milling • Milling cutter with positive, soft cutting geometry • INSERTs with two cutting edges 	B113
EMP04		 APKT11T3	90°	✓	✓	✓	✓			<ul style="list-style-type: none"> • Diameter range Ø20–40 mm • For steel, stainless steel, cast iron, non-ferrous metals and heat-resistant alloys • For square-shoulder, slot and plunge milling • Milling cutter with positive, soft cutting geometry • INSERTs with two cutting edges 	B115
EMP05		 APMT1135	90°	✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø25–40 mm • For steel, stainless steel and cast iron • Straight shank • For square-shoulder, slot and plunge milling • Milling cutter with positive, soft cutting geometry • INSERTs with two cutting edges • Machining in z-direction possible 	B117

✓ Very suitable ✓ Suitable

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Square shoulder milling

Series	Milling body	Inserts	Kr	Application						Features	Page
				P	M	K	N	S	H		
EMP09		 LNKT0804PNR LNKT1206PNR LNKT1607PNR	90°	✓	✓	✓				<ul style="list-style-type: none"> Diameter range Ø40 – 125 mm Sharp cutting edge geometry combined with robust tangential inserts First choice for large cutting depths with high feed rates. Specially designed cutting edge with high precision control for high quality 90 degree square shoulder milling 	B119
EMP09		 LNKT1206PNR	90°	✓	✓	✓				<ul style="list-style-type: none"> Diameter range Ø40 – 80 mm Sharp cutting edge geometry combined with robust tangential inserts First choice for large cutting depths with high feed rates. Specially designed cutting edge with high precision control for high quality 90 degree square shoulder milling 	B121
EMP13		 ANGX1105 ANGX1506	90°	✓	✓	✓	✓			<ul style="list-style-type: none"> Diameter range Ø40 – 250 mm For steel, cast iron and non-ferrous metals Double sided, thicker inserts for high stability and deeper cutting depths Inserts with four cutting edges 	B123
EMP13		 ANGX1105 ANGX1506	90°	✓	✓	✓	✓			<ul style="list-style-type: none"> Diameter range Ø25 – 40 mm For steel, cast iron and non-ferrous metals Double sided, thicker inserts for high stability and deeper cutting depths Inserts with four cutting edges 	B125
EMP13		 ANGX1105 ANGX1506	90°	✓	✓	✓	✓			<ul style="list-style-type: none"> Diameter range Ø25 – 40 mm For steel, cast iron and non-ferrous metals Double sided, thicker inserts for high stability and deeper cutting depths Inserts with four cutting edges 	B127

✓ Very suitable ✓ Suitable

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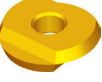


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Square shoulder milling

Series	Milling body	Inserts	Kr	Application						Features	Page
				P	M	K	N	S	H		
EMP13		 ANGX1105 ANGX1506	90°	✓	✓	✓	✓			<ul style="list-style-type: none"> • Diameter range Ø50 – 80 mm • For steel, cast iron and non-ferrous metals • Double sided, thicker inserts for high stability and deeper cutting depths • Inserts with four cutting edges 	B129
EMP13		 ANGX1105 ANGX1506	90°	✓	✓	✓	✓			<ul style="list-style-type: none"> • Diameter range Ø25 – 40 mm • For steel, cast iron and non-ferrous metals • Double sided, thicker inserts for high stability and deeper cutting depths • Inserts with four cutting edges 	B131

Profile milling

BMR01		 ZDET08T2 & SPMT0603 ZDET1103 & SPMT0603 ZDET13T2 & SDMT0903 ZPNT2204 & SPMT1204		✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø20 – 63 mm • For steel, stainless steel and cast iron • Very suitable for roughing of big moulds • Inserts with three cutting edges 	B133
BMR02		 ROHX1203 ROHX1604 ROHX2005		✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø12 – 20 mm • For steel, stainless steel and cast iron • Very suitable for finishing in mould and die industry • Inserts with two cutting edges 	B136
BMR03		 XPHT16 XPHT20 XPHT25 XPHT30 XPHT32 XPHT40		✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø16 – 40 mm • For steel and cast iron • Very suitable for roughing in mould and die industry • Tool with high stability 	B138

✓ Very suitable ✓ Suitable

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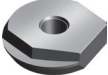


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Profile milling

Series	Milling body	Inserts	Kr	Application						Features	Page
				P	M	K	N	S	H		
BMR03		 XPHT16 XPHT20 XPHT25 XPHT30 XPHT32 XPHT40 XPHT50		✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø16 – 40 mm • For steel and cast iron • Very suitable for roughing in mould and die industry • Tool with high stability 	B140
BMR03		 XPHT20 XPHT25 XPHT30 XPHT32 XPHT40 XPHT50		✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø16 – 40 mm • For steel and cast iron • Very suitable for roughing in mould and die industry • Tool with high stability 	B142
BMR03		 XPHT40 XPHT50		✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø16 – 40 mm • For steel and cast iron • Very suitable for roughing in mould and die industry • Tool with high stability 	B144
BMR04		 ZOHX12 ZOHX16 ZOHX20 ZOHX25 ZOHX30 ZOHX32		✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø12 – 32 mm • For steel, stainless steel and cast iron • Very suitable for finishing in mould and die industry • Inserts with two cutting edges 	B146
BMR04		 ZOHX12 ZOHX16 ZOHX20 ZOHX25 ZOHX30 ZOHX32		✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø12 – 32 mm • For steel, stainless steel and cast iron • Very suitable for finishing in mould and die industry • Inserts with two cutting edges 	B148

✓ Very suitable ✓ Suitable

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Slot milling

Series	Milling body	Inserts	Kr	Application						Features	Page
				P	M	K	N	S	H		
SMP01		 XSEQ1202 XSEQ1203 XSEQ12T3 XSEQ1204 XSEQ12T4	90°	✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø100 – 250 mm • For steel, stainless steel and cast iron • Bore with keyway • Groove widths 4, 5, 6, 7, 8 mm 	B151
SMP01		 XSEQ1202 XSEQ1203 XSEQ12T3 XSEQ1204 XSEQ12T4	90°	✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø63 – 160 mm • For steel, stainless steel and cast iron • Groove widths 4, 5, 6, 7, 8 mm 	B153
SMP03		 MPHT0603 MPHT0803 MPHT1204	90°	✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø80 – 200 mm • For steel, stainless steel and cast iron • Bore with keyway • Groove widths 8, 10, 12, 16, 18, 20 mm 	B155
SMP03		 MPHT0603 MPHT0803 MPHT1204	90°	✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø80 – 200 mm • For steel, stainless steel and cast iron • Groove widths 8, 10, 12, 16, 18, 20 mm 	B157
SMP05		 QC16L QC22L	90°	✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø25 – 44 mm • For steel, stainless steel and cast iron • Groove widths range 1,1 – 4,8 mm 	B159

✓ Very suitable ✓ Suitable

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High-feed milling



Series	Milling body	Inserts	Kr	Application						Features	Page
				P	M	K	N	S	H		
XMR01		 SDMT06T2 SDMT09T3 SDMT1204 SDMT1505	15°	✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø20 – 40 mm • For steel, stainless steel and cast iron • Inserts with four cutting edges • Ramping possible • Double clamping system for inserts 	B163
XMR01		 SDMT06T2 SDMT09T3 SDMT1204 SDMT1505	15°	✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø40 – 125 mm • For steel, stainless steel and cast iron • Inserts with four cutting edges • Ramping possible • Double clamping system for inserts 	B165
XMR01		 WPGT0503 WPGT0604	11°- 22°	✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø20 – 40 mm • For steel, stainless steel and cast iron • Inserts with three cutting edges • Ramping possible • Double clamping system for inserts 	B168
XMR01		 WPGT0604 WPGT0806 WPGT0907	11°- 22°	✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø42 – 160 mm • For steel, stainless steel and cast iron • Inserts with three cutting edges • Ramping possible • Double clamping system for inserts 	B170

Bore milling


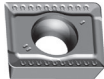




XMP01		 CNE12	90°	✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø80 – 400 mm • For steel, stainless steel and cast iron • Also for face and square shoulder milling 	B173
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✓ Very suitable ✓ Suitable

T-slot milling

Series	Milling body	Inserts	Kr	Application						Features	Page
				P	M	K	N	S	H		
TMP01		 MPHT0603 MPHT0803 MPHT1204	90°	✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø21 – 60 mm • For cast iron • Groove widths 9, 11, 14, 18, 22, 28 mm 	B175

Helical milling

HMP01		 APKT1504 & SPMT1204	90°	✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø40 – 50 mm • For steel and cast iron • Weldon shank 	B177
HMP01		 APKT1504 & SPMT1204	90°	✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø50 – 80 mm • For steel and cast iron • With JT coupling 	B179
HMP01-EC		 APKT1504 & SPMT1204	90°	✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø50 – 80 mm • For steel and cast iron • With JT coupling • With indexable head 	B181

✓ Very suitable ✓ Suitable

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Chamfer milling

Series	Milling body	Inserts	Kr	Application						Features	Page
				P	M	K	N	S	H		
CMZ01		 SPMT1204	30°	✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø12 – 32 mm • For steel, stainless steel and cast iron • Chamfer milling cutter 30° 	B185
CMZ01		 SPMT1204	30°	✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø12 – 32 mm • For steel, stainless steel and cast iron • Chamfer milling cutter 30° 	B183
CMA01		 SPMT1204	45°	✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø12 – 32 mm • For steel, stainless steel and cast iron • Chamfer milling cutter 45° • Weldon shank 	B187
CMA01		 SPMT1204	45°	✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø12 – 32 mm • For steel, stainless steel and cast iron • Chamfer milling cutter 45° • Weldon shank 	B189
CMD01		 SPMT1204	60°	✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø12 – 32 mm • For steel, stainless steel and cast iron • Chamfer milling cutter 60° • Weldon shank 	B191
CMD01		 SPMT1204	60°	✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø12 – 32 mm • For steel, stainless steel and cast iron • Chamfer milling cutter 60° • Weldon shank 	B193

✓ Very suitable ✓ Suitable

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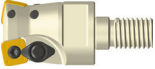

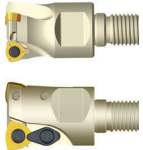

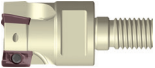

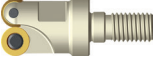

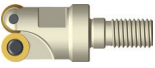

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Indexable heads - QCH series

Series	Milling body	Inserts	Kr	Application						Features	Page
				P	M	K	N	S	H		
QCH-XPHT		 XPHT16 XPHT20 XPHT25 XPHT30 XPHT32		✓	✓	✓				<ul style="list-style-type: none"> Diameter range Ø16 – 32 mm For steel and cast iron Very suitable for roughing in mould and die industry 	B195
QCH-SDMT		 SDMT06T2 SDMT09T3 SDMT1204	15°	✓	✓	✓				<ul style="list-style-type: none"> Diameter range Ø20 – 40 mm For steel, stainless steel and cast iron Inserts with four cutting edges Ramping possible Double clamping system for inserts 	B197
QCH-WPGT		 WPGT0503 WPGT0604 WPGT0806	11°- 22°	✓	✓	✓				<ul style="list-style-type: none"> Diameter range Ø16 – 42 mm For steel, stainless steel and cast iron Inserts with three cutting edges Ramping possible Double clamping system for inserts 	B199
QCH-APKT		 APKT11T3 APKT1604	90°	✓	✓	✓	✓	✓		<ul style="list-style-type: none"> Diameter range Ø16–40 mm For steel, stainless steel, cast iron, non-ferrous metals and heat-resistant alloys For square-shoulder, slot and plunge milling Milling cutter with positive, soft cutting geometry INSERTs with two cutting edges For metric ISO threads according to DIN standard only 	B201
QCH-RD		 RDKW0702 RDKW10T3 RDKW1605		✓	✓	✓			✓	<ul style="list-style-type: none"> Diameter range Ø15 – 42 mm For steel, stainless steel and cast iron Screw clamping Mould and die industry For two different thicknesses of inserts 	B204
QCH-RD		 RDKW0702 RDKW1003 RDKW12T3 RDKW1604		✓	✓	✓			✓	<ul style="list-style-type: none"> Diameter range Ø15 – 42 mm For steel, stainless steel and cast iron Screw clamping Mould and die industry For two different thicknesses of inserts 	B206

✓ Very suitable ✓ Suitable

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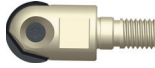
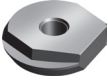






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QCH series

Series	Milling body	Inserts	Kr	Application						Features	Page
				P	M	K	N	S	H		
QCH-ZOHX		 ZOHX16 ZOHX20 ZOHX25 ZOHX30 ZOHX32		✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø16 – 32 mm • For steel, stainless steel and cast iron • Very suitable for finishing in mould and die industry • Inserts with two cutting edges 	B208
QCH-SDMT-Q		 SDMT09T3		✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø16–40 mm
 • For steel, stainless steel, cast iron, non-ferrous metals and heat-resistant alloys
 • For square-shoulder, slot and plunge milling
 • Milling cutter with positive, soft cutting geometry
 • Inserts with two cutting edges
 • Only for Q-thread according to ZCC-CT factory standard 	B210
QCH-APKT-Q		 APKT11T3	90°	✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø20 – 40 mm
 • For steel, stainless steel and cast iron
 • Inserts with four cutting edges
 • Ramping possible
 • Double clamping system for inserts
 • Only for Q-thread according to ZCC-CT factory standard 	B212
QCH-SPGT-Q		 SPGT0502		✓	✓	✓				<ul style="list-style-type: none"> • Diameter range Ø16 – 20 mm
 • For steel, stainless steel and cast iron
 • For deburring and chamfer milling
 • Soft cutting milling cutter with large, positive cutting edge geometry
 • Inserts with four cutting edges
 • Only for Q-thread according to ZCC-CT factory standard 	B214

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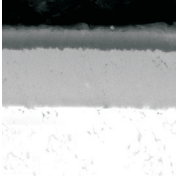
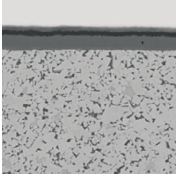
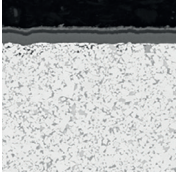
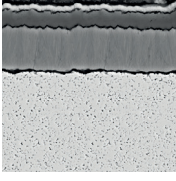
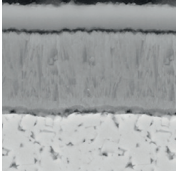
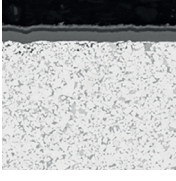
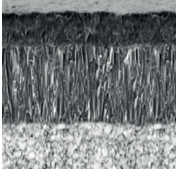

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	Finishing	Medium machining	Roughing			
A Turning	DF	DM	DR			
	APF	APM	-			
	PF	PM	PR			
	GF	GM	GR			
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	-	HGR	-			
	-	-	ZR			
	-	XR	-			
	-	MM	-			
B Milling	MO-2	MO-1	MO-3			
	P	EF	EM	-		
		APF	APM	-		
		DF	DM	-		
		PF	PM	PR		
		GF	GM	GR		
		GL	GM	GH		
		-	HGR	-		
		E	E	-		
-		-	ZR			
C Drilling	-	XR	-			
	-	MM	-			
	M	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			
D Technical Information	K	EF	EM	-		
		NM	NM	-		
		S	LH	LH	LH	
			ALH	ALH	ALH	
			N			

Coated cemented carbide CVD

Grade	ISO	Micro structure	Grade description
YBC302	P20 - P35		CVD coated P20-P35 carbide grade for medium operation to roughing of steel at higher cutting speed. Optimal performance of wear resistance and toughness for a wide application field.
YBC301	P20 - P35		CVD coated P20-P35 carbide grade for medium operation to roughing of steel at lower cutting speed.
YBC401	P30 - P50 M30 - M40		CVD coated P30-P50/M30-M40 carbide grade for roughing operation of steel at lower cutting speed and unstable condition.
YBM251	P20 - P30 M15 - M35		CVD coated P20-P30/M15-M35 carbide grade for medium to roughing operation in stainless steel and steel with wide application field. Good wear resistance and capability against plastic deformation at normal cutting speed.
YBM253	M15 - M35		CVD coated M15-M35 carbide grade for medium to roughing operation in stainless steel with wide application field. High wear resistance and capability against plastic deformation at higher cutting speed.
YBM351	P25 - P40 M20 - M40		CVD coated P25-P40/M25-M40 carbide grade for roughing operation in stainless steel and steel. Good wear resistance and edge stability at normal cutting speed.
YBD152	K10 - K25		CVD coated K10-K25 carbide substrate. Optimized for medium to roughing operation of cast iron. Good wear resistance and toughness at higher cutting speed.
YBD252	K20 - K35		CVD coated K20-K35 carbide substrate. Optimized for medium to roughing operation of cast iron and Steel. Good wear resistance and toughness at higher cutting speed.

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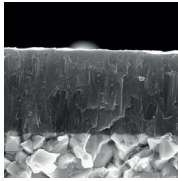
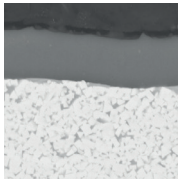
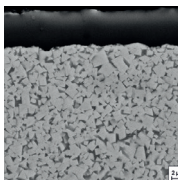
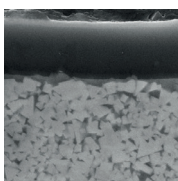
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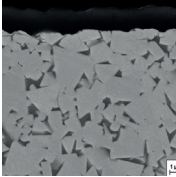
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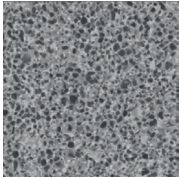
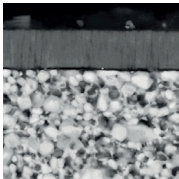
Coated cemented carbide PVD

Grade	ISO	Micro structure	Grade description
A Turning	YBG101	N05–N20	 <p>PVD coated N05–N20 carbide substrate for finishing to semi-finishing in aluminium materials. Coating only on the top face, in combination with the aluminium chip breakers, prevents built-up edges and gives a smooth cut.</p>
B Milling	YBG202	P10 - P30 M10-M25	 <p>PVD coated P10–P30/M10–M25 carbide substrate for finishing to medium application of stainless steel and steel (milling). Good wear resistance in a wide application field.</p>
D Technical Information	YBS203	S15 – S25	 <p>Turning and milling grades for processing heat-resistant materials. A special carbon substrate and the latest PVD coating technology enable a very good wear behaviour, high fracture toughness and high thermal stability.</p>
YBG302	P15 - P30 M25 - M40	 <p>PVD multilayer coated P10–P30/M10–M25 carbide substrate for finishing to medium machining of stainless steel, super alloys and steel (grooving/milling). Optimised coating stability for higher wear resistance and thermal stability in a wide range of applications.</p>	
			YBG302

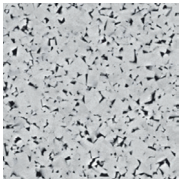
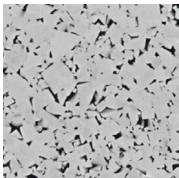
Coated cemented carbide PVD

Grade	ISO	Micro structure	Grade description
YBS303	S25 - S35		Milling grade for machining titanium alloys. A tough carbide substrate and the latest PVD coating technology with increased impact resistance and high thermal stability.

Cermet

Grade	ISO	Micro structure	Grade description
YNG151	P05 - P15		Uncoated P05-P15 cermet grade for fine finishing operation of steel and stainless steel. Good resistance against plastic deformation for good surface finishing.
YNG151C	P05 - P15		PVD coated P05-P15 cermet grade for fine finishing operation of steel and stainless steel. Good wear resistance and capability against plastic deformation for good surface roughness.

Uncoated cemented carbide

Grade	ISO	Micro structure	Grade description
YD101	N05 - N25 K05 - K20		Uncoated K05-K20/N05-N20 carbide substrate for fine to medium application in aluminum and other material.
YD201	K10 - K30 N10 - N30		Uncoated K10-K30/N10-N30 carbide substrate for medium application in aluminum and other material.

A

Turning

B

Milling

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Drilling

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Information**E**

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Application fields of grades – indexable milling

	ISO	HC ¹ (CVD)	HC ¹ (PVD)	HT	HC ²	HW	PCBN/PCD
P	P01		YBG102		YNG151C		
	P10		YBG202	YNG151			
	P20	YBC301	YBG205				
	P30	YBC401	YBG302			YC305	
	P40	YBM351	YB9320				
M	M01		YBG102		YNG151C		
	M10	YBM251	YBG202	YNG151			
	M20	YBM253	YBG205				
	M30	YBM351	YBG302			YC305	
	M40	YBC401	YB9320				
K	K01		YBG102				
	K10	YBD152	YBG152				
	K20	YBD252	YBG202			YD201	
	K30						
	K40						
N	N01					YD051	
	N10		YBG101			YD101	
	N20		YBG202				YD201
	N30						
S	S01		YBG102				
	S10		YBG202				
	S20		YBG205				
	S30		YBS203				
			YBS303				
H	H01		YBG102				
	H10						
	H20						
	H30						

P	Steel
M	Stainless steel
K	Cast iron

N	Non-ferrous metals
S	Heat-resistant alloys
H	Hardened materials

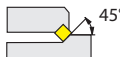
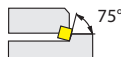
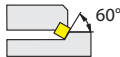
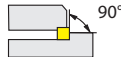

HC ¹	Coated carbide
HT	Uncoated cermet
HC ²	Coated carbide
HW	Uncoated carbide

FM A 12 050 – A22 O – N 06 – 04 (L) (C)

1 2 3 4 5 6 7 8 9 10 11

Type	
Code	Description
BM	Profile milling
CM	Chamfer milling
EM	Square shoulder milling
FM	Face milling
HM	Helical milling
SM	Slot milling
TM	T-slot milling
XM	Special

1

Entering angle	
A	
E	
D	
P	
R	

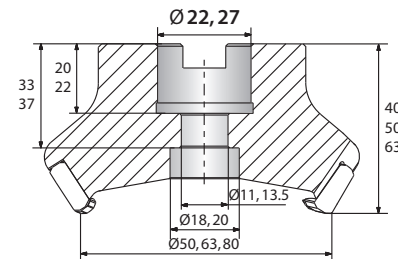
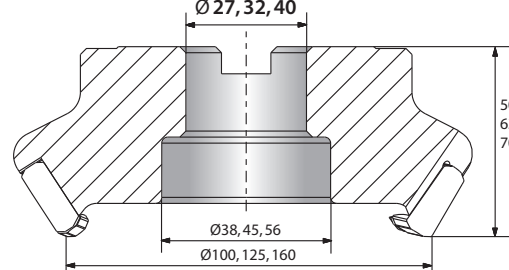
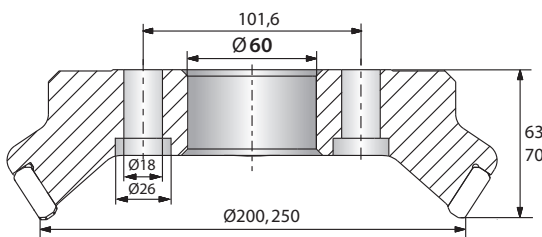
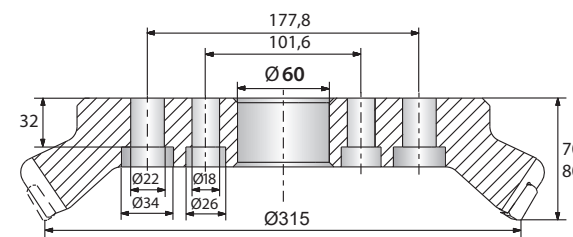
2

Serial number

3












Nominal diameter [mm]	
Code	Description
025	25
050	50
160	160
315	315
...	

4








Type and size of tool holders			
Code	Type	Code	Type
A	<p>Nominal diameter $\varnothing 50 - 80$ mm</p> 	B	<p>Nominal diameter $\varnothing 100 - 160$ mm</p> 
C	<p>Nominal diameter $\varnothing 200 - 250$ mm</p> 	D	<p>Nominal diameter $\varnothing 315$ mm</p> 
G	Straight shank	XP	Weldon shank
K	Bore with keyway		

5









With respect to mounting please adhere to the information provided by the tool holder manufacturer.

Insert shape	
A 	C 
H 	L 
M 	O 
P 	R 
S 	T 
W 	X Special
Z Special	

6

Clearance angle	
B 	C 
D 	E 
F 	N 
P 	

7

Cutting edge length l [mm]	
Insert shape	
	
A	C, M
	
H, O, P	L
	
R	S
	
T	W

8

Number of teeth

9

Cutting direction	
Code	Description
L	Left

10

With inner cooling

11



Tools with B coupling and inner coolant supply require the following spare parts:





Coolant clamp screw



Coolant shower plate



Spare parts (B coupling with inner coolant supply)

		B27	B32	B40	B40
	Ø	80	100	125	160
	Coolant clamp screw	LDB27C	LDB32C	LDB40C	LDB40C
	Coolant shower plate	B27-002-CP	B32-002-CP	B40-002-CP	B40-003-CP

When purchasing tools with inner coolant supply and B coupling these spare parts are included in delivery.

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Turning

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S P K N 12 04 ED T21K R – DM

1 2 3 4 5 6 7 8 9 10

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Insert shape	
A	C
H	L
M	O
P	R
S	T
W	X Special
Z Special	

Clearance angle	
B	C
D	E
F	N
P	

Tolerance class			
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

1

2

3

Fastening features (metric)	
Insert shape	
A	B
C	F
G	H
J	M
N	Q
R	T
U	W
X Special	

Cutting edge length l [mm]	
Insert shape	
A	C, M
H, O, P	L
R	S
T	W

4

5

Insert thickness 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	an
A	45°	A	3°
D	60°	B	5°
E	75°	C	7°
F	85°	D	15°
P	90°	E	20°
Z	Special	F	25°
		G	30°
		N	0°
		P	11°
		Z	Special

7

Chamfer							
Code	Type	Code	Angle	Code	Width [mm]	Code	Position
F		0	5°	0	0,10	K	
E		1	10°	1	0,15	P	
T		2	15°	2	0,20	W	
S		3	20°	3	0,25	-	
		4	25°	4	0,30		
		5	30°	5	0,35		
				6	0,40		
				7	0,45		

8

Cutting direction	
Code	Description
R	Right
L	Left
N	Right and left

9

Chip breaker overview
(on page B20)

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A

Turning

B

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C

Drilling

D

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SM P 03 – 160 × 16 – K 40 – M P 12 – 12 L

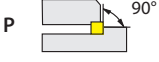
1 2 3 4 5 6 7 8 9 10 11 12

A

Turning

Type	
Code	Description
SM	Slot milling cutter

1

Entering angle


2

B

Milling

Serial number

3

Nominal diameter [mm]

4

Cutting width [mm]

5

C

Drilling

Tool holder type			
Code	Description	Code	Description
A	A type	B	B type
C	C type	D	D type
K	With feather key		



6

Diameter of mounting hole [mm]



7

D

Technical Information

Insert shape	
M 	S 

8

Clearance angle	
N 	P 

9

Insert size [mm]

10

Number of teeth

11

Cutting direction	
Code	Description
R	Right
L	Left

12

E

Index

QCH – 35 – SDMT 09 – Q 18 – 03

1 2 3 4 5 6 7

Series [mm]	
Code	Description
QCH	Indexable head system




Nominal diameter [mm]	
Code	Description
16	16
20	20
25	25
35	35
...	

Insert shape

1

2

3

Cutting edge length l [mm]	
A	
R	
S	

Thread type	
Code	Description
M	Metric
Q	Q thread

Thread size [mm]	
Code	Description
8	8
10	10
12	12
14	14
...	









4

5

6

Number of teeth

7

- a 
 - b 
 - c 
 - d 
 - e 
 - f 
 - g 
 - h 
- a Groove milling b Square shoulder milling c Profile milling d Slot milling e Face milling f Chamfer milling g Plunge milling
h Circular milling/Ramping

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B Milling

C Drilling

D Technical Information

E Index

A
G 25 – QCH – Q 12 – 250 C – (ZJ) (115)
1
2
3
4
5
6
7
8
9

Turning

Clamping form	
Code	Description
G	Cylindrical
XP	Weldon

Clamping diameter [mm]	
Code	Description
12	12
16	16
20	20
25	25
32	32

Series [mm]	
Code	Description
QCH	Indexable head system

1
2
3
B

Milling

Thread type	
Code	Description
M	Metric
Q	Q thread

Thread size [mm]	
Code	Description
8	8
10	10
12	12
14	14
...	

Total length [mm]	
Code	Description
85	85
150	150
200	200
...	

4
5
6
C

Drilling

Material	
Code	Description
C	Solid carbide
S	Steel

Shank	
Code	Description
ZJ	Conical
-	Cylindrically stepped

Taper length [mm]	
Code	Description
90	90
115	115
...	

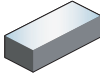
7
8
9
D

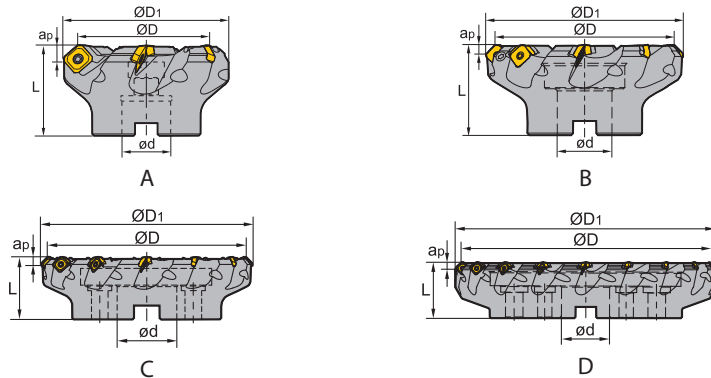
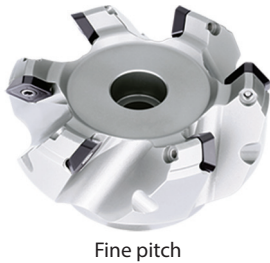
Technical Information

E

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Face milling

FMA01 Kr: 45° 



Article	*	Stock		Dimensions [mm]					Teeth	Coupling	kg	Inserts
		R	L	ØD	ØD ₁	ød	L	a _{p max}				
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			

● Ex stock ○ On demand

* With internal cooling

System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230



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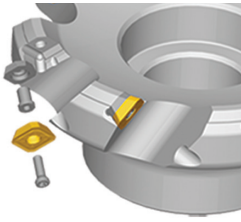
D

Technical Information

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Spare parts				
Insert	SEET12T3	SEET12T3	SEET18T6	
ØD	50-100	125 - 315	100- 315	
	Screw (insert)	I60M3.5×10 (2.7 Nm)	I60M3.5×12 (2.7 Nm)	I60M5×17 (6.7 Nm)
	Screw (shim)		SM5×7XA	SM8×9XA
	Shim		S13BS	S18BS
	Wrench (shim)		WH35L	WH50L
	Wrench (insert)	WT15IS	WT15IS	
	Wrench (insert)			WT20IT



Milling inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

SEET	L	I.C	S	d
12 T3	17.82	13.4	3.97	4.1

SE** milling insert			HC ¹ (CVD)						HC ¹ (PVD)						HT	HC ²	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
		9.46																						

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

System code > B26

Grade selection > B24

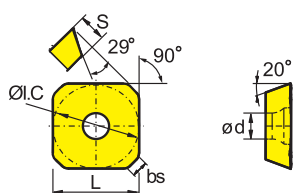
Technical info > B527

Cutting data > B230

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

SEET	L	I.C	S	d
12 T3	13.4	13.4	3.97	4.1
18 T6	18	18	6.1	5.5

Milling inserts



SE** milling insert			HC ¹ (CVD)						HC ¹ (PVD)						HT	HC ²	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									○													● ●	

● Ex stock ○ On demand

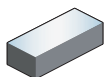
HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

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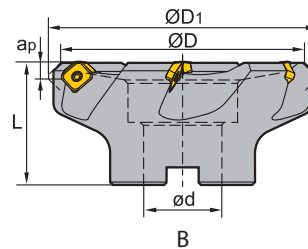
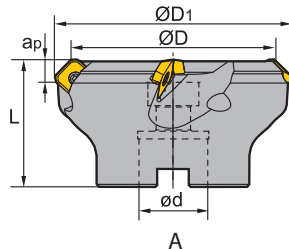


Face milling

FMA02 Kr: 45°



Coarse and differential pitch

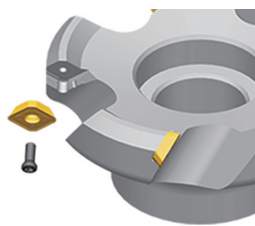


Article	*	Stock	Dimensions [mm]					Teeth	Coupling	kg	Inserts
			ØD	ØD ₁	ød	L	a _{p max}				
FMA02-050-A22-SE12-03		●	50	61	22	40	6	3	A	0.4	SEET12T3
FMA02-063-A22-SE12-04		●	63	74	22	40	6	4	A	0.6	
FMA02-080-A27-SE12-04		●	80	91	27	50	6	4	A	1.3	
FMA02-100-B32-SE12-05		●	100	107	32	50	6	5	B	1.3	
FMA02-125-B40-SE12-06		○	125	131	40	63	6	6	B	2.6	

● Ex stock ○ On demand

* With internal cooling

Spare parts		
	Insert	SEET12T3
	ØD	50-125
	Screw (insert)	I60M3.5×10 (2.7Nm)
	Wrench (insert)	WT15IS



System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230

Milling inserts

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

SEET	L	I.C	S	d
12 T3	17.82	13.4	3.97	4.1

SE** milling insert			HC ¹ (CVD)						HC ¹ (PVD)					HT	HC ²	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							○							●					○	○		

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Milling inserts

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

SEET	L	I.C	S	d
12 T3	13.4	13.4	3.97	4.1

SE** milling insert			HC ¹ (CVD)						HC ¹ (PVD)					HT	HC ²	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							●	●			○											

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

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- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

SEET	L	I.C	S	d
12 T3	13.4	13.4	3.97	4.1

Milling inserts

SE** milling insert			HC ¹ (CVD)						HC ¹ (PVD)						HT	HC ²	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											○											●	●

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

System code > B26

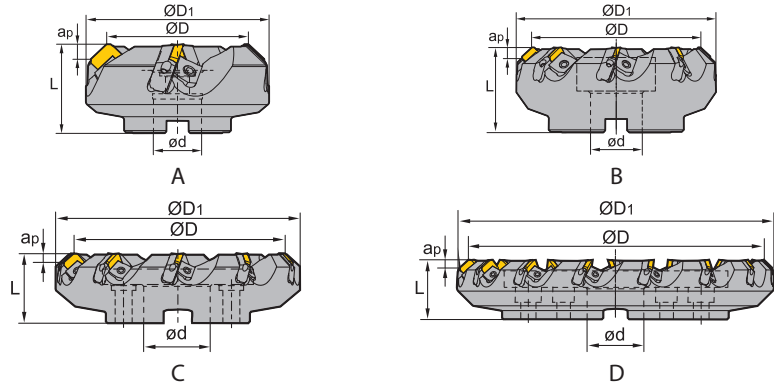
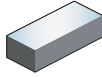
Grade selection > B24

Technical info > B527

Cutting data > B230

Face milling

FMA03 Kr: 45°



Article	*	Stock		Dimensions [mm]					Teeth	Coupling	kg	Inserts
		R	L	ØD	ØD ₁	ød	L	a _{p max}				
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	SEKN1504 SEKR1504
FMA03-080-A27-SE15-04		○		80	103	27	50	7.5	4	A	1.7	
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	

● Ex stock ○ On demand

* With internal cooling

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Spare parts		SEEN1203 SEKN1203 SEKR1203	SEKN1504 SEKR1504
	Insert		
	ØD	80- 315	80- 315
	Adjustable screw	LOM5×15.1	LOM5×15.1
	Cassette (left)	LSE12L	LSE15L
	Cassette (right)	LSE12R	LSE15R
	Screw (wedge)	DM8×21X (10.2 Nm)	DM8×21X (10.2 Nm)
	Wedge (left)	W01L	W01L
	Wedge (right)	W01R	W01R
	Wrench (locator)	WT20T	WT20T
	Wrench (wedge)	WH40T	WH40T



Milling inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

SEKN	L	I.C	S
12 03	12.7	12.7	3.18
15 04	15.875	15.875	4.76

SE** milling insert	P	HC ¹ (CVD)						HC ¹ (PVD)				HT	HC ²	HW										
		YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201	
ISO	bs	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201	
	1.8	○																						
	1.8	●	●	●	○	○					○									●	●		○	
	1.6	●	○	●	●											●								
	1.6	○																					○	

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

SEEN	L	I.C	S
12 03	12.7	12.7	3.18

Milling inserts

SE** milling insert		HC ¹ (CVD)						HC ¹ (PVD)					HT	HC ²	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																		●				

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

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Milling inserts

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

SEKR	L	I.C	S
12 03	12.7	12.7	3.18

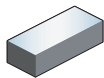
SE** milling insert		HC ¹ (CVD)						HC ¹ (PVD)					HT	HC ²	HW									
	P	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗										
	M	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗										
	K								⊗	⊗	⊗	⊗	⊗	⊗										
	N								⊗	⊗	⊗	⊗	⊗	⊗										
	S								⊗	⊗	⊗	⊗	⊗	⊗										
	H																							
ISO	bs	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201	
	SEKR1203AFN	1.8	●									○												

● Ex stock ○ On demand

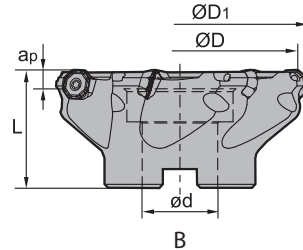
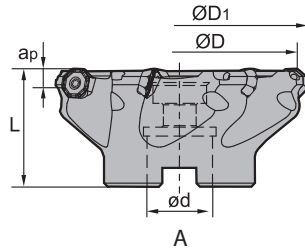
HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Face milling

FMA04 Kr: 45°



Screw Clamping

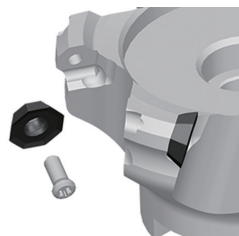


Article	*	Stock		Dimensions [mm]					Teeth	Coupling	kg	Inserts
		R	L	ØD	ØD ₁	ød	L	a _{p max}				
FMA04-050-A22-OF05-04	●			50	56	22	40	3.5	4	A	0.3	OFKT05T3
FMA04-050-A22-OF05-05	●			50	56	22	40	3.5	5	A	0.4	
FMA04-050-A22-OF05-05C	* ○			50	56	22	40	3.5	5	A	0.4	
FMA04-063-A22-OF05-05	●			63	69	22	40	3.5	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	

● Ex stock ○ On demand

* With internal cooling

Spare parts			
	Insert	OFKT05T3	OFKT05T3
	ØD	50-63	80-160
	Screw (insert)	I60M4×8.4 (3.4 Nm)	I60M4×10 (3.4 Nm)
	Wrench (insert)	WT15IS	WT15IS



System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

OFKT	L	I.C	S	d
05 T3	5.26	12.7	3.97	4.4

Milling inserts

OF** milling insert			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	
	OFKT05T3-DF	0.5								●	○													
	OFKT05T3-DM	0.5				○	●			●	○				●									
	OFKT05T3-LH	0.5																					●	

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

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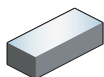
Technical info > B527

Cutting data > B230

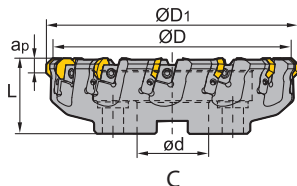


Face milling

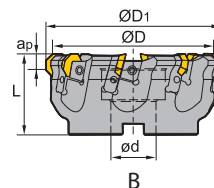
FMA04 Kr: 45°



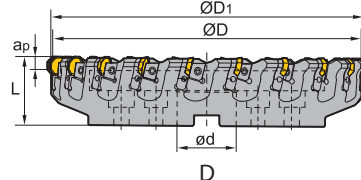
Wedge



C



B



D

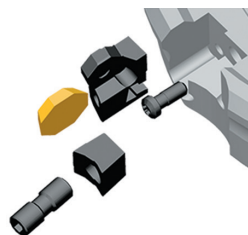
Article	*	Stock		Dimensions [mm]					Teeth	Coupling	kg	Inserts
		R	L	ØD	ØD ₁	ød	L	a _{p max}				
FMA04-125-B40-OF07-08	○			125	136	40	63	5	8	B	3.9	OFKR0704
FMA04-160-B40-OF07-10	○			160	171	40	63	5	10	B	5.9	
FMA04-200-C60-OF07-12	○			200	211	60	63	5	12	C	7.6	
FMA04-250-C60-OF07-16	○			250	261	60	63	5	16	C	13.3	
FMA04-315-D60-OF07-20	○	○		315	321	60	63	5	20	D	20.3	

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	OFKR0704
	ØD	125 - 315
	Adjustable screw	LOM5×15.1
	Cassette (left)	LOF07L
	Cassette (right)	LOF07R
	Screw (wedge)	DM8×21X (10.2 Nm)
	Wedge (left)	W02L
	Wedge (right)	W02R
	Wrench (locator)	WT20T
	Wrench (wedge)	WH40T



System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

OFKR	L	I.C	S
07 04	7.45	17.94	4.76

Milling inserts

OF** milling insert			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
	OFKR0704-DF	0.8				○							○											
	OFKR0704-DM	0.8		○	○		○	○	○				○						○					
	OFKR0704W-DM	0.8		○					○							○								
	OFKR0704-LH	0.8																						○

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

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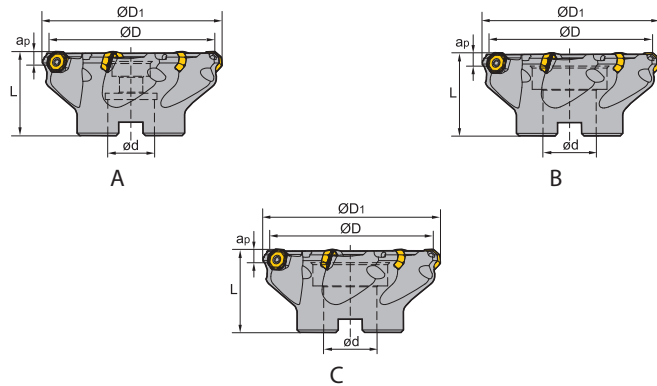



Face milling

FMA04 Kr: 45°



Screw Clamping





Article	*	Stock	Dimensions [mm]					Teeth	kg	Inserts
			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	

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	OD*T0605**
	ØD	50-160
	Screw (insert)	I60M5x13 (6.7 Nm)
	Wrench (insert)	WT20IS




System code > B26

Grade selection > B24






Technical info > B527

Cutting data > B230

Milling inserts

-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions

ODHT
06 05
06 05

OD**milling insert		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														○								

● Ex stock ○ On demand

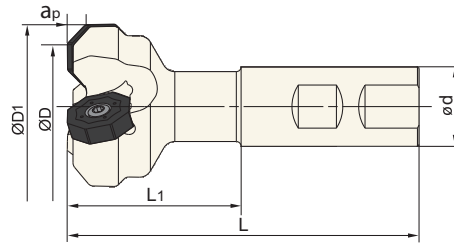
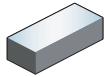
HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

A Turning
B Milling
C Drilling
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Face milling

FMA07 Kr: 45°



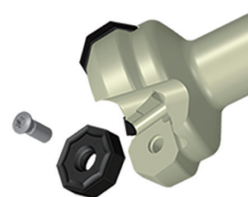
Weldon shank

Article	*	Stock	Dimensions [mm]						Teeth	kg	Inserts
			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	ONHU08T5
FMA07-032-XP25-ON08-02		○	32	47	25	55	111	5	2	0.4	
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	

● Ex stock ○ On demand

* With internal cooling

Spare parts			
	Insert	ONHU0604	ONHU08T5
		ØD	25-40
	Screw (insert)	I60M4×10 (3.4 Nm)	I60M5×13 (6.7 Nm)
	Wrench (insert)	WT15IS	
	Wrench (insert)		WT20IT



Milling inserts

- Ideal machining conditions
- ● Normal machining conditions
- ● Unfavourable machining conditions

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

ON**milling insert			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
	ONHU060408-CM						○																
	ONHU08T512-CM		○				○																
	ONHU060408-PF	0.8	○	○		●				○					○								
	ONHU08T508-PF	0.8	○	○		○				○													
	ONHU060408-PM	0.8	●	●	●	●								●									
	ONHU08T508-PM	0.8	○	○	○	○																	

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230



A
Turning

B
Milling

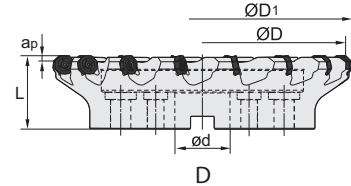
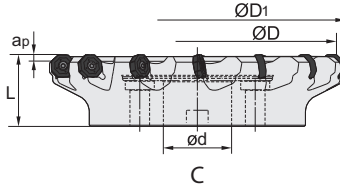
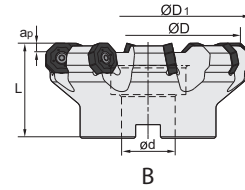
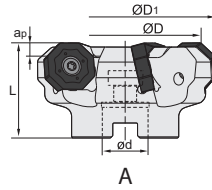
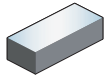
C
Drilling

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Face milling

FMA07 Kr: 45°



Article	*	Stock		Dimensions [mm]					Teeth	Coupling	kg	Inserts	
		R	L	ØD	ØD ₁	ød	L	a _{p max}					
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		

● Ex stock ○ On demand





* With internal cooling

System code > B26




Grade selection > B24

Technical info > B527

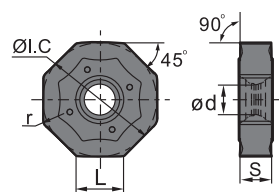



Cutting data > B230

Spare parts			
Insert	ONHU0604	ONHU08T5	
ØD	50- 315	63- 315	
 Screw (insert)	I60M4×10 (3.4 Nm)	I60M5×13 (6.7 Nm)	
 Wrench (insert)	WT15IS		
 Wrench (insert)		WT20IT	

Milling inserts

-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions

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

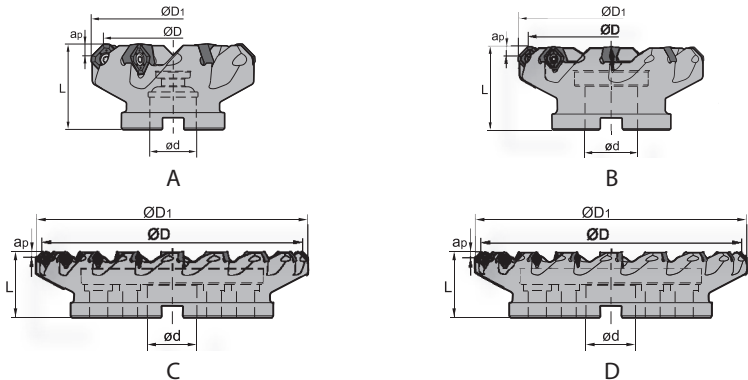
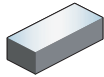
ON**milling insert		HC ¹ (CVD)							HC ¹ (PVD)					HT	HC ²	HW								
		P	M	K	N	S	H																	
ISO		r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	ONHU060408-CM																							
	ONHU08T512-CM		○					○																
	ONHU060408-PF	0.8	○	○		●					○						○							
	ONHU08T508-PF	0.8	○	○		○																		
	ONHU060408-PM	0.8	●	●		●	●								●									
	ONHU08T508-PM	0.8	○	○		○	○																	

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Face milling

FMA11 Kr: 45°



Article	*	Stock	Dimensions [mm]					Teeth	Coupling	kg	Inserts
			ØD	ØD ₁	ød	L	a _{p max}				
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	

● Ex stock ○ On demand

* With internal cooling

System code > B26

Grade selection > B24




Technical info > B527


Cutting data > B230

Article	* Stock	Dimensions [mm]					Teeth	Coupling	kg	Inserts
		ØD	ØD ₁	ød	L	a _{p max}				
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	




● Ex stock ○ On demand

* With internal cooling

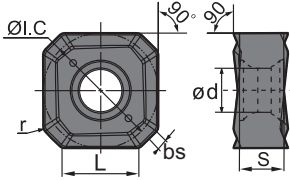


Spare parts				
	Insert	SNEG1205	SNEG1506	SNEG1907
	ØD	63-200	63-315	125-315
	Screw (insert)	I60M3.5x10 (2.7 Nm)	I60M5x13 (6.7 Nm)	I43M6x16 (9.1 Nm)
	Wrench (insert)	WT15IS		
	Wrench (insert)		WT20IT	WT25IT



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

-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions

Milling inserts

SN** negative insert				HC ¹ (CVD)				HC ¹ (PVD)				HT	HC ²	HW									
		P	M	K	N	S	H																
		YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YBG920	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	ISO	r	bs																				
	SNEG1506ANR-E	0.9	1.3											●									
	SNEG1205ANR-GM	0.8	1.05	●	●	●									●								
	SNEG1506ANR-GM	0.9	1.3	●	●	●								●									

● Ex stock ○ On demand

- HC¹ Coated carbide
- HT Uncoated cermet
- HC² Coated cermet
- HW Uncoated carbide

System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230

A

Turning

B

Milling

C

Drilling

D

Technical Information

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- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

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

Milling inserts

SN** negative insert			HC ¹ (CVD)						HC ¹ (PVD)					HT	HC ²	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														○										

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

SNEG	L	I.C	S	d
12 05	12	12	4.76	4.6

Milling inserts

SN** negative insert			HC ¹ (CVD)						HC ¹ (PVD)					HT	HC ²	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													●								

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

System code > B26

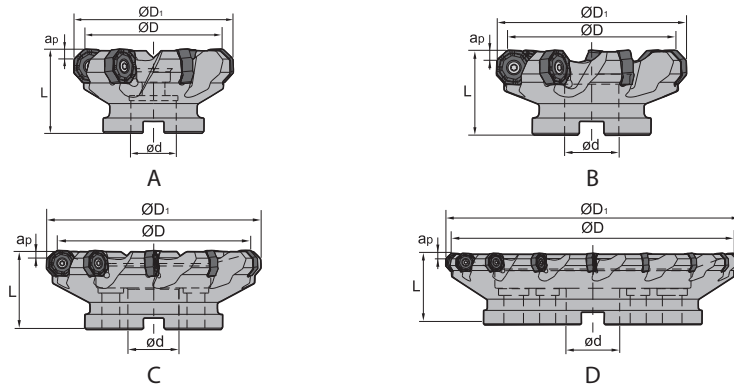
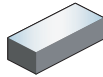
Grade selection > B24

Technical info > B527

Cutting data > B230

Face milling

FMA12 Kr: 45°



Article	*	Stock	Dimensions [mm]					Teeth	Coupling	kg	Inserts
			ØD	ØD ₁	ød	L	a _{p max}				
FMA12-050-A22-ON06-04C	*	●	50	59	22	40	4	A	0.309	ON*U0604**	
FMA12-050-A22-ON06-05C	*	●	50	59	22	40	4	A	0.352		
FMA12-063-A27-ON06-05C	*	●	63	72	27	50	4	A	0.645		
FMA12-063-A27-ON06-07C	*	●	63	72	27	50	4	A	0.695		
FMA12-080-A27-ON06-07C	*	●	80	90	27	50	4	A	1.071		
FMA12-080-A27-ON06-09C	*	●	80	90	27	50	4	A	1.098		
FMA12-100-A32-ON06-08C	*	●	100	110	32	50	4	A	1.599		
FMA12-100-A32-ON06-11C	*	●	100	110	32	50	4	A	1.616		
FMA12-125-B40-ON06-10		●	125	135	40	63	4	B	3.114		
FMA12-125-B40-ON06-14		●	125	135	40	63	4	B	3.151		
FMA12-160-C40-ON06-12		●	160	170	40	63	4	C	4.504		
FMA12-160-C40-ON06-18		●	160	170	40	63	4	C	4.568		
FMA12-063-A22-ON08-05		○	63	78	22	50	5	A	0.6		ONHU08T6
FMA12-080-A27-ON08-06		○	80	95	27	50	5	A	0.97		
FMA12-100-B32-ON08-07		○	100	115	32	50	5	B	1.28		
FMA12-100-B32-ON08-07C	*	○	100	115	32	50	5	B	1.28		
FMA12-125-B40-ON08-08		○	125	140	40	63	5	B	2.59		
FMA12-125-B40-ON08-08C	*	○	125	140	40	63	5	B	2.59		
FMA12-160-C40-ON08-10		○	160	175	40	63	5	C	4.1		
FMA12-200-C60-ON08-12		○	200	215	60	63	5	C	5.68		
FMA12-250-C60-ON08-14		○	250	265	60	63	5	C	11.9		
FMA12-315-D60-ON08-18		○	315	330	60	80	5	D	20.41		

● Ex stock ○ On demand

* With internal cooling

System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230



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A

Turning

Spare parts		ON*U0604**	ONHU08T6
Insert	ØD	50-160	63-315
	Screw (insert)		I60M5x13 (6.7Nm)
	Wrench (insert)	WT15IS	
	Wrench (insert)		WT20IT



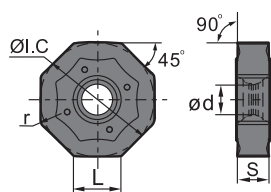



B

Milling

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

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

Milling inserts

ON**milling insert			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
	ONHU060408ANN-GH				●			●	●						●	●		○						
	ONMU060408-GH								●								●							
	ONHU060404ANN-GL				●				○						●	●		○						
	ONHU060408ANN-GM	0,8			●			●							●	●								
	ONHU08T624R-GM	2,4			○			○								○								
	ONMU060408-GM				○			○									●	●						

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

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Drilling

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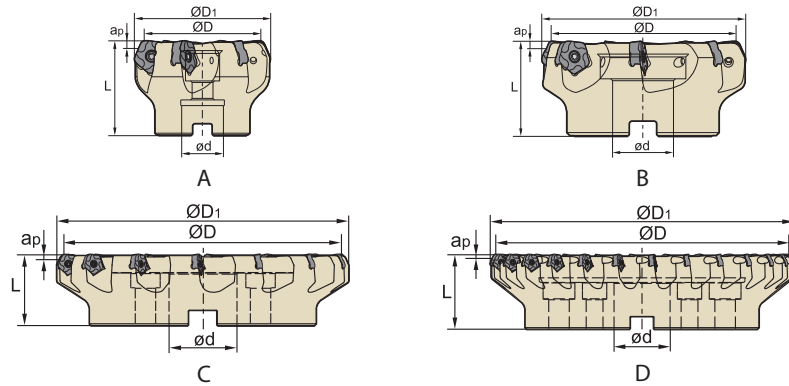
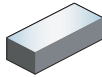
Grade selection > B24


Technical info > B527

Cutting data > B230

Face milling

FMD02 Kr: 67°



Article	*	Stock		Dimensions [mm]					Teeth	Coupling	kg	Inserts
		R	L	ØD	ØD ₁	ød	L	a _{p max}				
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	
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	

PNEG1105

● Ex stock ○ On demand

*With internal cooling

System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230



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Turning

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Milling

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Drilling

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Technical Information

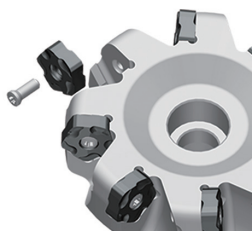
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A

Turning

Spare parts		
Insert	PNEG1105	
ØD	50-315	
	Screw (insert)	I60M4x10 (3.4Nm)
	Wrench (insert)	WT15IS



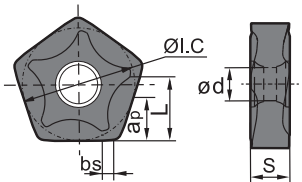
B

Milling

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

PNEG	L	I.C	S	d
11 05	7.5	15.875	5.56	4.64

Milling inserts

PN** milling insert		HC ¹ (CVD)							HC ¹ (PVD)					HT	HC ²	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
ISO	bs	a _p max																											
	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	○	●																								

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

C

Drilling

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Cutting data > B230

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

PNEG	L	I.C	S	d
11 05	5.4	15.875	5.56	4.64

Milling inserts

PN** milling insert		HC ¹ (CVD)							HC ¹ (PVD)					HT	HC ²	HW										
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																							

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

A

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Grade selection > B24

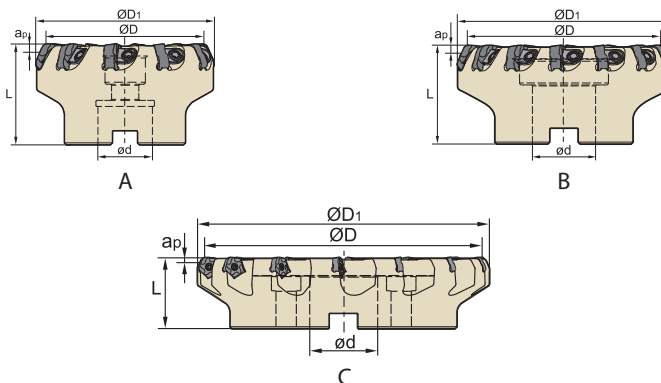
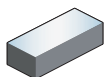
Technical info > B527

Cutting data > B230



Face milling

FMD02 Kr: 67°

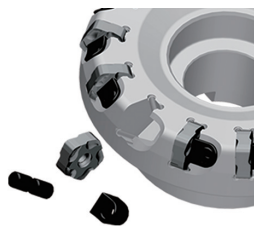


Article	*	Stock		Dimensions [mm]					Teeth	Coupling	kg	Inserts
		R	L	ØD	ØD ₁	ød	L	a _{p max}				
FMD02-080-A27-PN11-10	●			80	90.1	27	50	5	10	A	1.3	PNEG1105
FMD02-100-B32-PN11-14	●	○		100	110.1	32	50	5	14	B	1.6	
FMD02-125-B40-PN11-18	●			125	135.1	40	63	5	18	B	3.2	
FMD02-160-B40-PN11-22	●			160	170.1	40	63	5	22	B	5.8	
FMD02-200-C60-PN11-28	○	○		200	210.1	60	63	5	28	C	8.5	

● Ex stock ○ On demand

* With internal cooling

Spare parts		
	Insert ØD	PNEG1105 80-200
	Screw (wedge)	DM6x20A (7.0Nm)
	Wedge	W18N
	Wrench (wedge)	WT15IT



- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

PNEG	L	I.C	S	d
11 05	7.5	15.875	5.56	4.64

Milling inserts

PN** milling insert				HC ¹ (CVD)						HC ¹ (PVD)					HT	HC ²	HW								
		P		⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗									
		M		⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗										
		K																							
		N																							
		S																							
		H																							
ISO		bs	ap 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	○		●																			

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

PNEG	L	I.C	S	d
11 05	5.4	15.875	5.56	4.64

Milling inserts

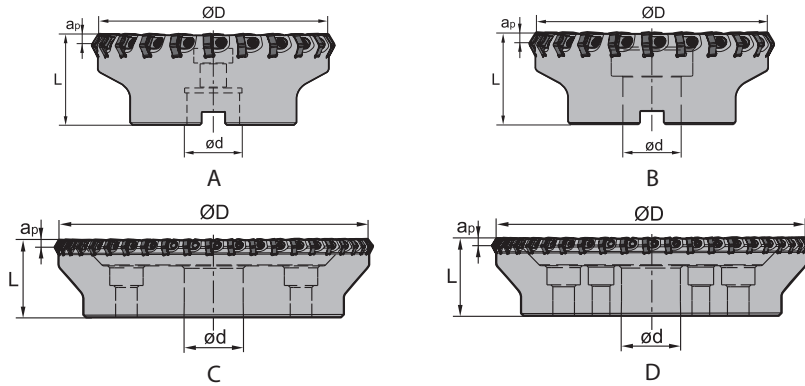
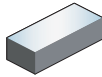
PN** milling insert				HC ¹ (CVD)						HC ¹ (PVD)					HT	HC ²	HW								
		P		⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗									
		M		⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗									
		K																							
		N																							
		S																							
		H																							
ISO		bs	ap max	YBC302	YBC301	YBC401	YBM253	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							●															

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Face milling

FMD02 Kr: 55°



Article	*	Stock		Dimensions [mm]				Teeth	Coupling	kg	Inserts
		R	L	ØD	ød	L	ap max				
FMD02-080-A27-HN09-08		○		80	27	50	6	8	A	1.19	HNEX0905
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	
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	

● Ex stock ○ On demand

* With internal cooling

Spare parts			
Insert	HNEX0905		
ØD	80- 315		
Screw (wedge)	DM6×20A (7.0Nm)		
Wedge	W18N		
Wrench (wedge)	WT15IT		

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Grade selection > B24

Technical info > B527

Cutting data > B230



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- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

HNEX	L	I.C	S
09 05	9.16	15.875	5.56

Milling inserts

HN** milling insert		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
	HNEX090512-DR	1.2						●	●															

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

System code > B26

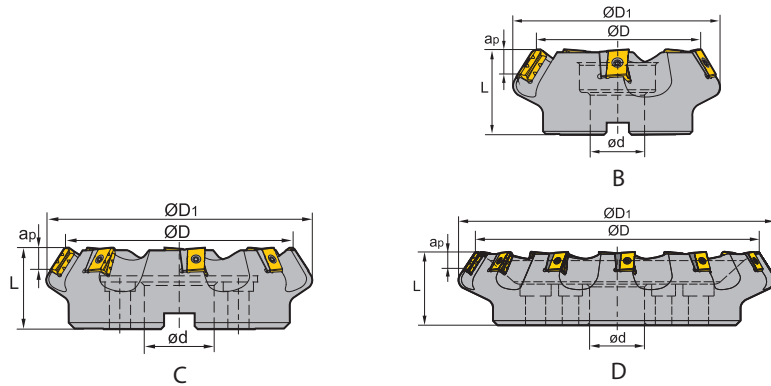
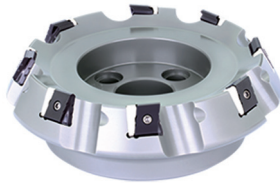
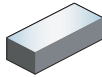
Grade selection > B24

Technical info > B527

Cutting data > B230

Face milling

FMD03 Kr: 60°

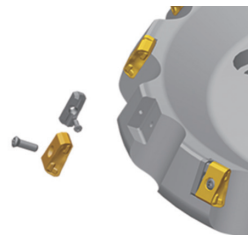


Article	*	Stock		Dimensions [mm]					Teeth	Coupling	kg	Inserts	
		R	L	ØD	ØD ₁	ød	L	a _{p max}					
FMD03-100-B32-LN20-05	○			100	129	32	63	12	5	B	3.02	LNKT2007-ZR	
FMD03-125-B40-LN20-06	●			125	153	40	63	12	6	B	4.5		
FMD03-160-C40-LN20-08	●			160	187	40	63	12	8	C	6.9		
FMD03-160-C40-LN20-09	○			160	187	40	63	12	9	C	6.7		
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		LNKT2510-ZR
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		
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		

● Ex stock ○ On demand

* With internal cooling

Spare parts			
	Insert	LNKT2007-ZR	LNKT2510-ZR
	ØD	100- 315	125 -400
	Screw (insert)	I60M4×15 (3.4 Nm)	I60M5×17 (6.7 Nm)
	Screw (shim)	I60M3×7	I60M3.5×10.4
	Shim	LLN20R-ZR	LLN25R-ZR
	Wrench (shim)	WT09IS	WT15IS
	Wrench (insert)	WT15IS	
	Wrench (insert)		WT20IT



System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230

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Technical Information

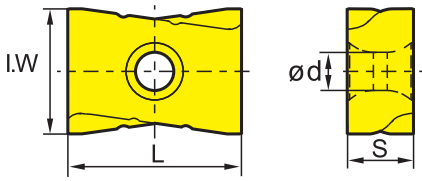

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- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

LNKT	L	S	d
20 07	20	7.94	4.6
25 10	25	9.525	5.5

Milling inserts

LN** milling insert		HC ¹ (CVD)						HC ¹ (PVD)						HT	HC ²	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					●	●									●							

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

System code > B26

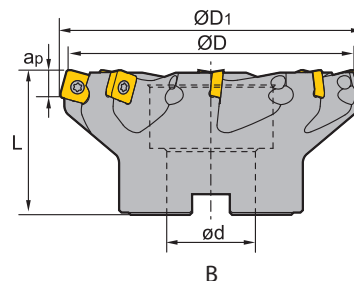
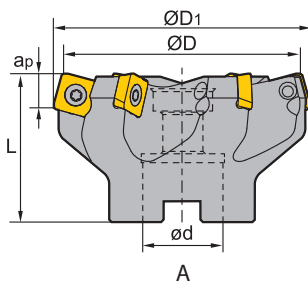
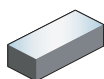
Grade selection > B24


Technical info > B527

Cutting data > B230

Face milling

FME02 Kr: 75°

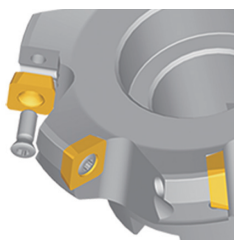




Article	*	Stock	Dimensions [mm]					Teeth	Coupling	kg	Inserts
			ØD	ØD ₁	ød	L	a _{p max}				
FME02-050-A22-SP12-04	●		50	54	22	40	6	4	A	0.3	 SPKT1204 SPKW1204
FME02-063-A22-SP12-05	●		63	66	22	50	6	5	A	0.6	
FME02-080-A27-SP12-06	●		80	83	27	50	6	6	A	0.9	
FME02-100-B32-SP12-07	●		100	103	32	50	6	7	B	1.4	
FME02-125-B40-SP12-08	●		125	128	40	63	6	8	B	2.5	

● Ex stock ○ On demand

* With internal cooling

Spare parts

Insert		SPKT1204 SPKW1204	
ØD		50-125	
	Screw (insert)	I60M5x13.2 (6.7 Nm)	
	Wrench (insert)	WT20IS	

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- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

SPKW	L	I.C	S	d
12 04	12.7	12.7	4.76	5.56

Milling inserts

SP** milling insert		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	
	SPKW1204EDFR																							
	SPKW1204EDSR																							

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

SPKT	L	I.C	S	d
12 04	12.7	12.7	4.76	5.56

Milling inserts

SP** milling insert		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
	SPKT1204EDR																						

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

System code > B26

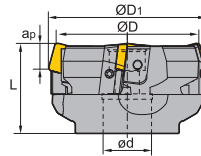
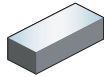
Grade selection > B24

Technical info > B527

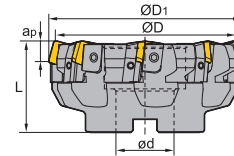
Cutting data > B230

Face milling

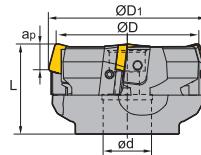
FME03 Kr: 75°



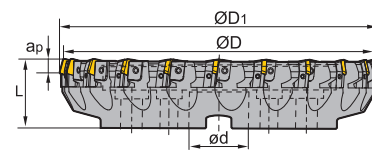
A



B



C



D

Article	*	Stock		Dimensions [mm]					Teeth	Coupling	kg	Inserts	
		R	L	$\varnothing D$	$\varnothing D_1$	$\varnothing d$	L	$a_{p\ max}$					
FME03-080-A27-SP12-04		○		80	84	27	50	6	4	A	1.1	SPKN1203 SPKR1203 SPEX1203	
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		
FME03-160-B40-SP12-10		●	○	160	164	40	63	6	10	B	5.7		
FME03-200-C60-SP12-12		○	○	200	203	60	63	6	12	C	8.2		
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		SPKN1504 SPKR1504 SPEX1504
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		
FME03-160-B40-SP15-10		○	○	160	164	40	63	8	10	B	5.4		
FME03-200-C60-SP15-12		○	○	200	204	60	63	8	12	C	7.9		
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		

● Ex stock ○ On demand

* With internal cooling

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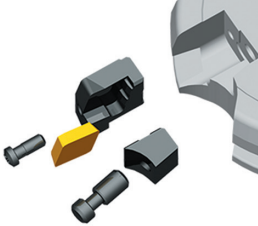
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Spare parts		SPKN1203 SPKR1203 SPEX1203	SPKN1203 SPKR1203 SPEX1203	SPKN1504 SPKR1504 SPEX1504
Insert		80-100	125 - 315	80- 315
ØD		80-100	125 - 315	80- 315
	Adjustable screw	LOM5×15.1	LOM5×15.1	LOM5×15.1
	Cassette (left)	LSP12L	LSP12L	LSP15L
	Cassette (right)	LSP12R	LSP12R	LSP15R
	Screw (wedge)	WM8×17	WM8×22	WM8×22
	Wedge (left)	W04L	W04L	W04L
	Wedge (right)	W04R	W04R	W04R
	Wrench (locator)	WT20T	WT20T	WT20T
	Wrench (wedge)	WT25T	WT25T	WT25T



Milling inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

SPKN	L	I.C	S
12 03	12.7	12.7	3.18
15 04	15.875	15.875	4.76

SP** milling insert		HC ¹ (CVD)						HC ¹ (PVD)				HT	HC ²	HW													
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																									

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

System code > B26

Grade selection > B24

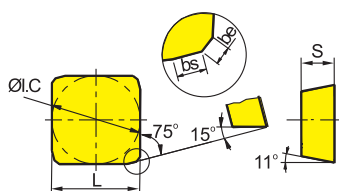
Technical info > B527

Cutting data > B230

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

SPKR	L	I.C	S
12 03	12.7	12.7	3.18
15 04	15.875	15.875	4.76

Milling inserts



SP** milling insert		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	○																					

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

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System code > B26

Grade selection > B24

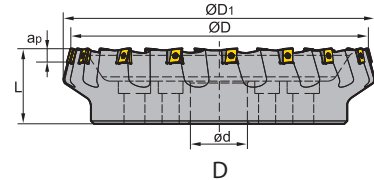
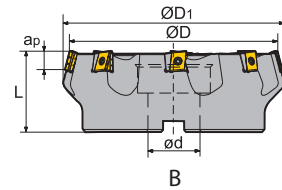
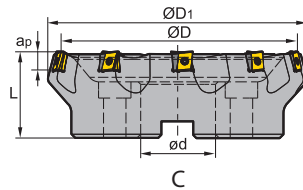
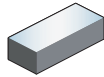
Technical info > B527

Cutting data > B230



Face milling

FME04 Kr: 75°



Article	*	Stock	Dimensions [mm]					Teeth	Coupling	kg	Inserts
			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	

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	LNKT1506-ZR	
	ØD	125 - 315	
	Screw (insert)	I60M4x12 (3.4Nm)	
	Screw (shim)	I60M3x7	
	Shim	LLN15-ZR	
	Wrench (shim)	WT09IS	
	Wrench (insert)	WT15IS	

System code > B26

Grade selection > B24

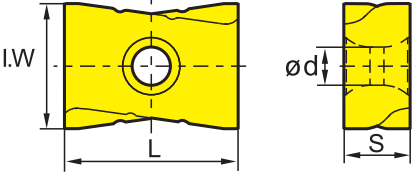

Technical info > B527

Cutting data > B230

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

LNKT	L	S	d
15 06	15.875	6.35	4.6

Milling inserts

LN** milling insert		HC ¹ (CVD)						HC ¹ (PVD)					HT	HC ²	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	●		○	●	●	●									○							

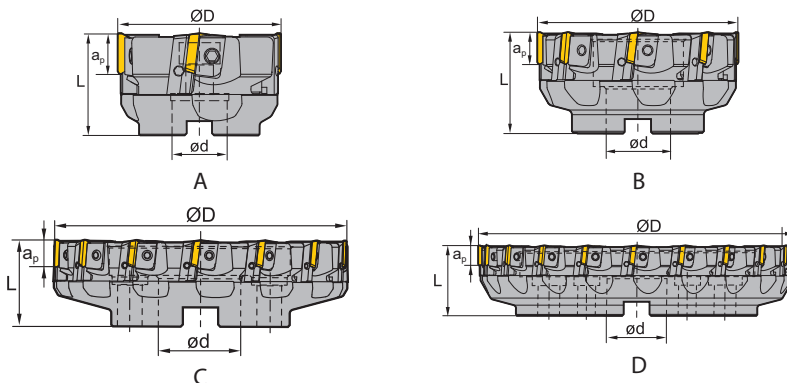
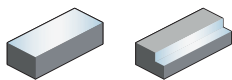
● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide



Face milling

FMP01 Kr: 90°



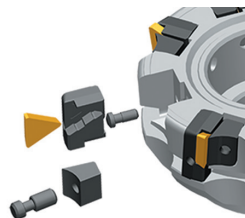
Article	*	Stock		Dimensions [mm]				Teeth	Coupling	kg	Inserts
		R	L	ØD	ød	L	a _{p max}				
FMP01-080-A27-TP22-04	●			80	27	50	18	4	A	1.2	TPKN2204
FMP01-100-B32-TP22-06	●			100	32	50	18	6	B	1.7	
FMP01-125-B40-TP22-08	●	○		125	40	63	18	8	B	3.2	
FMP01-160-B40-TP22-10	●	○		160	40	63	18	10	B	5.1	
FMP01-200-C60-TP22-12	●	○		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	

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert ØD	TPKN2204	TPKN2204
		80-100	125 - 315
	Adjustable screw	LOM5×15.1	LOM5×15.1
	Cassette (left)	LTP4L1	LTP4L
	Cassette (right)	LTP4R1	LTP4R
	Screw (wedge)	WM8×17	WM8×22
	Wedge (left)	W04L	W04L
	Wedge (right)	W04R	W04R
	Wrench (locator)	WT20T	WT20T
	Wrench (wedge)	WT25T	WT25T



System code > B26

Grade selection > B24


Technical info > B527

Cutting data > B230

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

TPKN	L	I.C	S
22 04	22	12.7	4.76

Milling inserts

TP** milling insert				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°											●														

● Ex stock ○ On demand

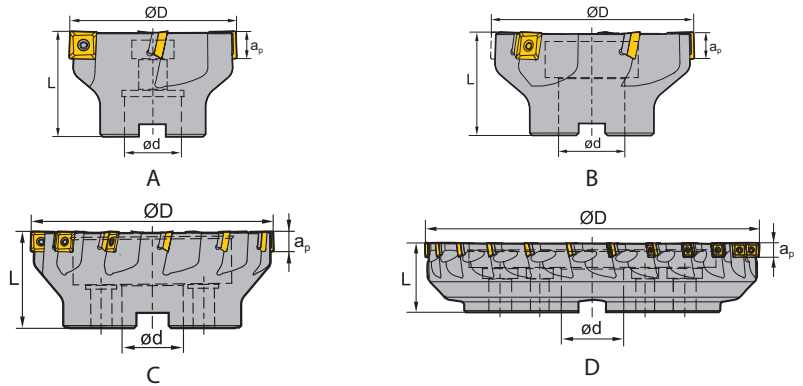
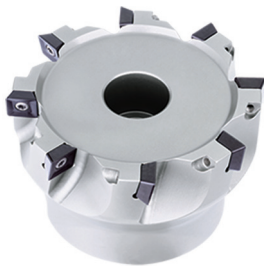
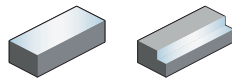
HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

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Face milling

FMP02 Kr: 90°



Article	*	Stock	Dimensions [mm]				Teeth	Coupling	kg	Inserts
			ØD	ød	L	a _{p max}				
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	

● Ex stock ○ On demand


* With internal cooling

System code > B26

Grade selection > B24

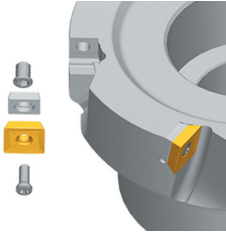





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Cutting data > B230




Article	*	Stock	Dimensions [mm]				Teeth	Coupling	kg	Inserts 
			ØD	ød	L	a _p max				
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	

● Ex stock ○ On demand

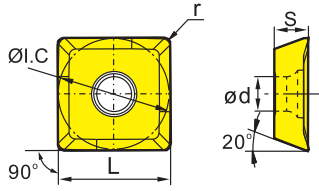












* With internal cooling

Spare parts					
Insert	SEET09T3	SEET1203	SEET1203	SEET1203	
ØD	50-125	50	63-315		
 Screw (insert)	I60M3×7 (1.8 Nm)	I60M3.5×10 (2.7 Nm)	I60M3.5×12 (2.7 Nm)		
 Screw (shim)			SM5×7XA		
 Shim			S12BSX		
 Wrench (shim)			WH35L		
 Wrench (insert)	WT09IS	WT15IS	WT15IS		

Milling inserts

-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions

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

SE** milling insert	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
	SEET09T308PER-APF	0.8				○									●								

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

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- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

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

Milling inserts

SE** milling insert		HC ¹ (CVD)						HC ¹ (PVD)					HT	HC ²	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	
	ISO	r																												
	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																												

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

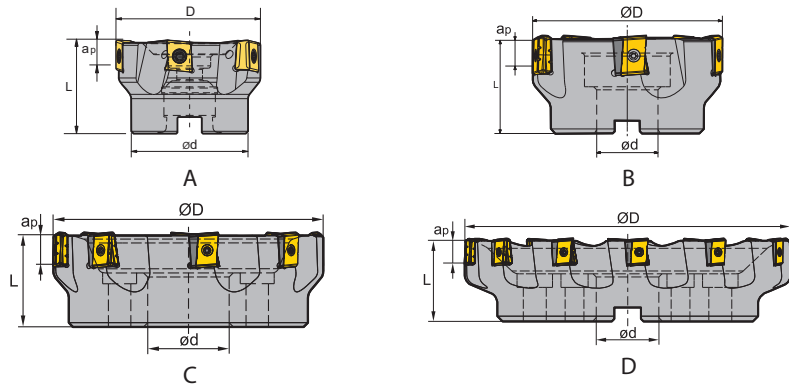
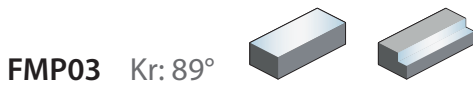
System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230

Face milling



Article	*	Stock		Dimensions [mm]				Teeth	Coupling	kg	Inserts	
		R	L	ØD	ød	L	ap max					
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		LNKT1506EN-ZR
FMP03-125-B40-LN15-06		●		125	40	63	12	6	B	3.2		
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		

● Ex stock ○ On demand

* With internal cooling

System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230



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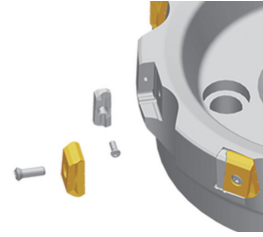
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Spare parts

Insert	LNKT120608-ZR	LNKT1506EN-ZR	LNKT2007DN-ZR	LNKT2510-ZR
ØD	50-100	125 - 315	125 - 315	125 - 315
Screw (insert)	I60M4×12 (3.4 Nm)	I60M4×12 (3.4 Nm)	I60M4×15 (3.4 Nm)	I60M5×17 (6.7 Nm)
Screw (shim)		I60M3×7	I60M3×7	I60M3.5×10.4
Shim		LLN15-ZR	LLN20R-ZR	LLN25R-ZR
Wrench (shim)		WT09IS	WT09IS	WT15IS
Wrench (insert)	WT15IS	WT15IS	WT15IS	
Wrench (insert)				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

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

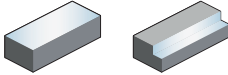
Milling inserts

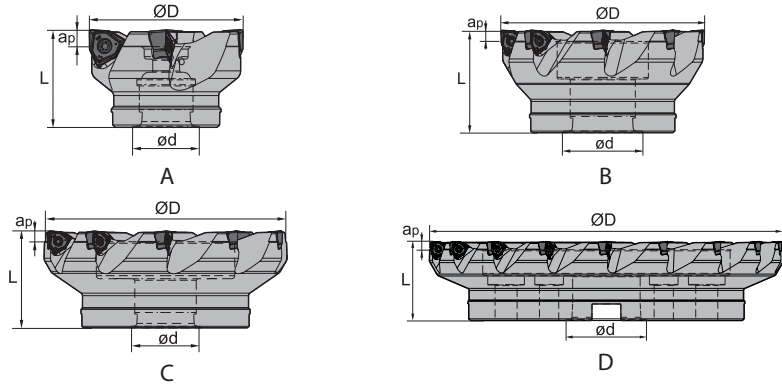
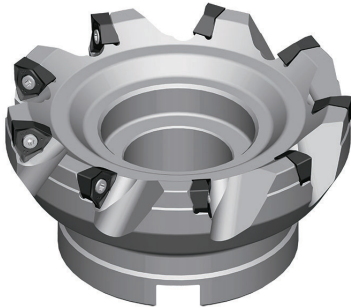
LN** milling insert	HC ¹ (CVD)						HC ¹ (PVD)				HT	HC ²	HW
	P	M	K	N	S	H							
ISO	I.W	YBC302 YBC301 YBC401	YBM253 YBM251 YBM351	YBD152 YBD252	YBG101 YBG102	YBG202 YBG212 YBS203 YBG205 YB9320 YBG302 YBS303 YBG252	YNG151	YNG151C	YD101 YD201				
	LNKT120608-ZR	12	●	●					●				
	LNKT1506EN-ZR	14	●	○	●	●			○				
	LNKT2007DN-ZR	17		●	●	○			●				
	LNKT2510-ZR	18			●	●			●				

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

Face milling




FMP12 Kr: 90° 



Article	*	Stock	Dimensions [mm]			Teeth	Coupling	kg	Inserts
			ØD	ød	ap _{max}				
FMP12-050-A22-WN06-05C	*	○	50	22	5.7	5	A	0.55	WNHU0604
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	
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	WNHU0806
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	
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		

● Ex stock ○ On demand

* With internal cooling

Spare parts			
	Insert	WNHU0604	WNHU0806
	Screw (insert)	50-315 I60M3×9 (1.8 Nm)	50-315 I60M4×10 (3.4 Nm)
	Wrench (insert)	WT09IS	
	Wrench (insert)		WT20IT

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Cutting data > B230



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- ⊗ Unfavourable machining conditions

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

Milling inserts

WN** negative insert		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	
	WNHU060404PNR-GM	0.4				○										○									
	WNHU060408PNR-GM	0.8				●			○	○						○									
	WNHU080608PNR-GM	0.8				●		●	●							●									
	WNHU080616PNR-GM	1.6				○			●	○															

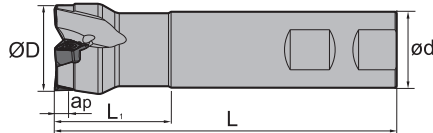
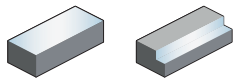
● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide



Face milling

FMP12 Kr: 90°



Article	*	Stock	Dimensions [mm]					Teeth	Coupling	kg	Inserts
			ØD	ød	L ₁	L	a _{p max}				
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	

● Ex stock ○ On demand

* With internal cooling

Spare parts

Insert		WNHU0604	
ØD		25-50	
	Screw (insert)	I60M3x9 (1.8Nm)	
	Wrench (insert)	WT09IS	

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WNHU	L	I.C	S	d
06 04	5.73	9.525	4.704	3.5

Milling inserts

WN** negative insert		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
	WNHU060404PNR-GM	0.4				○																		
	WNHU060408PNR-GM	0.8				●			○	○						○								

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide



IMPORTANT INFORMATION

Notes on using the FMWX series

Please note the following: The milling body is only equipped with two opposing inserts.

Select insert seat **1.1** in combination with **1.2** or insert seat **2.1** in combination with **2.2**.

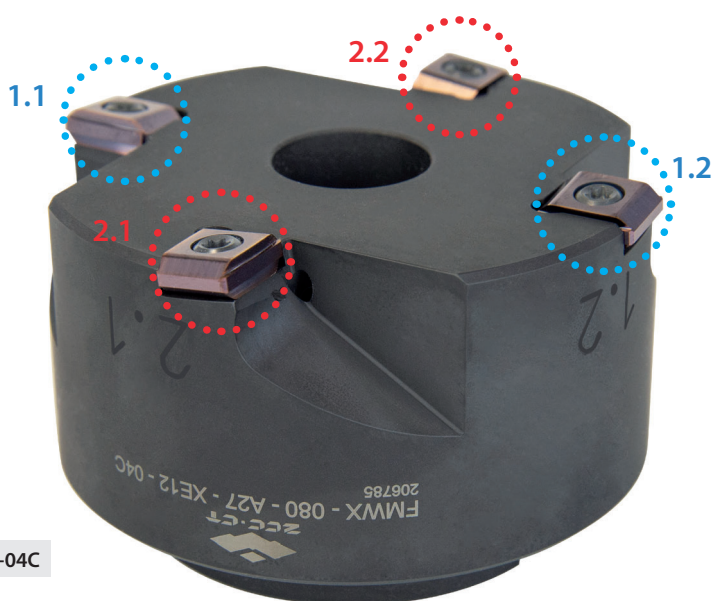


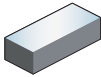
Fig.: FMWX-063-A27-XE12-04C

Cutting data

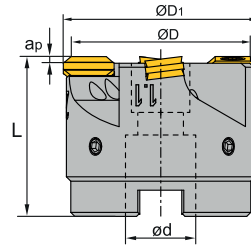
ISO group	Material	v_c (m/min)	F_n [mm/rev]	a_p [mm]
P	Low-alloy steel	300–400	3,50–5,00	0,02–0,05
M	Stainless steels	280–300	3,50–5,00	0,02–0,05
K	Cast steel	300–400	3,50–5,00	0,02–0,05

Face milling

FMWX




Screw Clamping



Article	*	Stock	Dimensions [mm]				Teeth	Coupling	kg	Inserts
			$\varnothing D_1$	$\varnothing d$	L	$a_{p \max}$				
FMWX-050-A22-XE12-04C	*	○	46	22	40	0.1	4	A	0.3	XEEC1209
FMWX-063-A27-XE12-04C	*	○	59	27	40	0.1	4	A	0.5	
FMWX-080-A27-XE12-04C	*	○	76	27	50	0.1	4	A	1	
FMWX-100-B32-XE12-06C	*	○	96	32	50	0.1	6	B	1.9	
FMWX-125-B40-XE12-06C	*	○	121	40	63	0.1	6	B	3.5	

● Ex stock ○ On demand

* With internal cooling




Spare parts		
	Insert	XEEC1209
	$\varnothing D$	50-125
	Screw (insert)	I60M4x10 (3.4Nm)

System code > B26

Grade selection > B24

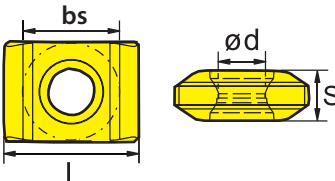

Technical info > B527

Cutting data > B230

-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions

XEEC
12 09

Milling inserts

XE** positive insert		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						●																	

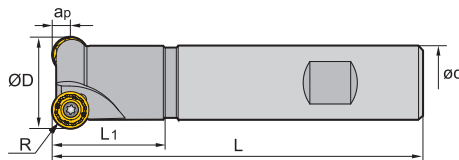
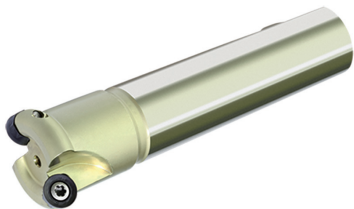
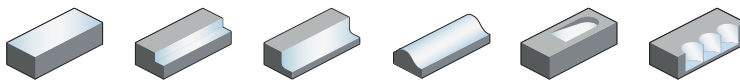
● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide



Face milling

FMR01



Article	*	Stock	Dimensions [mm]						Teeth	kg	Inserts
			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	

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	RCKT10T3	RCKT1204 RCGX1204	
		ØD	25-32	
Screw (insert)		I60M4×8.4 (3.4 Nm)	I60M3.5×10 (2.7 Nm)	
Wrench (insert)		WT15S	WT15S	

System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

RCKT	I.C	S	d
10 T3	10	3.97	4.4
12 04	12	4.76	4

Milling inserts

RC** milling insert		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
	RCKT10T3MO-DM	○										○			●	○							
	RCKT1204MO-DM	○	○		○	●	○					○			●	○							
	RCKT1204MO-DR		○	○		○	●								●								
	RCKT1204MO-ER					●																	
	RCKT1204MO-NM											○											

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Milling inserts

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

RCGX	I.C	S	d
12 04	12	4.76	4

RC** positive insert		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																						●

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

System code > B26

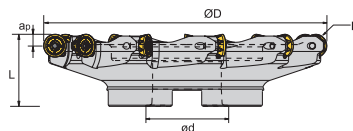
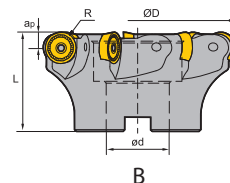
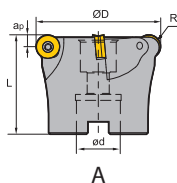
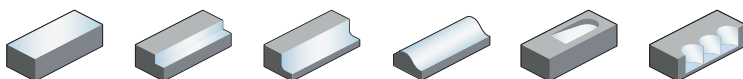
Grade selection > B24

Technical info > B527

Cutting data > B230

Face milling

FMR02



C

Article	*	Stock	Dimensions [mm]					Teeth	Coupling	kg	Inserts
			R	ØD	ød	L	ap _{max}				
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	RCKT1606
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	
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	RCKT2006
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	RCKT2006
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	
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	RCKT2006
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	

● Ex stock ○ On demand

* With internal cooling



System code > B26

Grade selection > B24

Technical info > B527

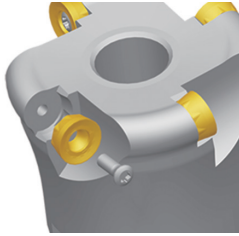



Cutting data > B230

Indexable milling

Article	*	Stock	Dimensions [mm]					Teeth	Coupling		Inserts 
			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	

● Ex stock ○ On demand

* With internal cooling

Spare parts					
	Insert	RCGX1204 RCKT1204 RCMW1204	RCKT1606	RCKT2006	
	ØD	50-100	63-200	80-250	
	Screw (insert)	I60M3.5×10 (2.7 Nm)	I60M5×13 (6.7 Nm)	I43M6×16 (9.1 Nm)	
	Wrench (insert)	WT15IS			
	Wrench (insert)		WT20IT	WT25IT	

A

Turning

B

Milling

C

Drilling

D

Technical
Information

E

Index

System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230

A

Turning

B

Milling

C

Drilling

D

Technical Information

E

Index

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

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




Milling inserts

RC** milling insert		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
	RCKT1204MO-DM	○	○		○	●	○				○				●	○							
	RCKT1606MO-DM		○												●		●						
	RCKT2006MO-DM		○																				
	RCKT1204MO-DR		○	○		○	●								●								
	RCKT1606MO-DR		●	○	●		●	●								●							
	RCKT2006MO-DR		●	○	●		○	●			○					○							
	RCKT1204MO-ER				●																		
	RCKT1606MO-ER				●																		
	RCKT2006MO-ER				●																		
	RCKT1204MO-NM														○								
	RCKT1606MO-NM														○								

● Ex stock ○ On demand

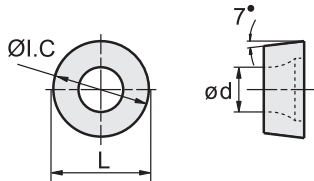

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide



-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions

RCGX	I.C	S	d
12 04	12	4.76	4

Milling inserts

RC** positive insert		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																							●

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

A
Turning

B
Milling

C
Drilling

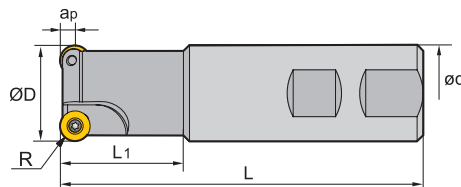
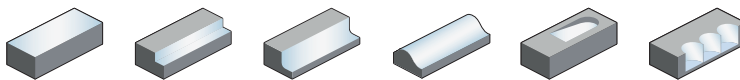
D
Technical Information

E
Index



Face milling

FMR03

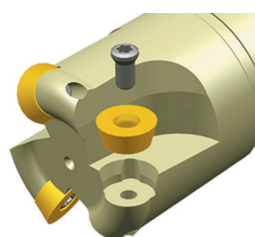


Article	*	Stock	Dimensions [mm]						Teeth	kg	Inserts
			R	ØD	ød	L ₁	L	a _{p max}			
FMR03-016-XP16-RD08-02		○	4	16	16	25	100	4	2	0.1	
FMR03-025-XP25-RD08-02		●	4	25	25	30	100	4	2	0.3	RD**0803
FMR03-025-XP25-RD08-02C	*	○	4	25	25	30	100	4	2	0.3	
FMR03-032-XP32-RD10-02		●	5	32	32	40	120	5	2	0.7	RD**10T3
FMR03-040-XP32-RD12-03		●	6	40	32	40	120	6	3	0.7	
FMR03-050-XP32-RD12-04		●	6	50	32	40	120	6	4	0.8	RD**1204

● Ex stock ○ On demand

* With internal cooling

Spare parts

Insert	ØD	RD**0803	RD**10T3	RD**1204	
		16-25	32	40-50	
Screw (insert)		I60M3×7 (1.8 Nm)	I60M4×10 (3.4 Nm)	I60M4×10 (3.4 Nm)	
Wrench (insert)		WT09IP	WT15IP	WT15IP	




System code > B26

Grade selection > B24

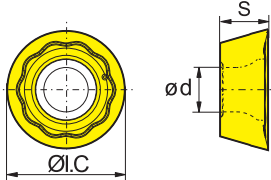

Technical info > B527

Cutting data > B230

Milling inserts

-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions




RDKT
10 T3
12 04

RD** milling insert		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	
	RDKT10T3MO-MM																							
	RDKT1204MO-MM																							

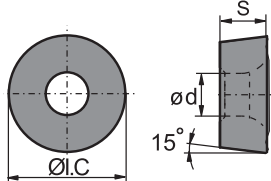

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Milling inserts

-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions

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

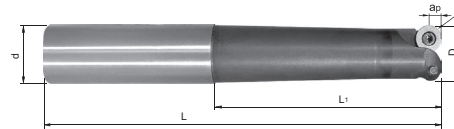
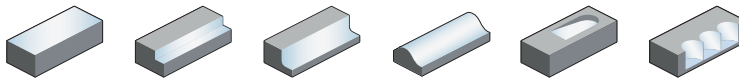
RD** milling insert		HC ¹ (CVD)						HC ¹ (PVD)					HT	HC ²	HW									
	P																							
	M																							
	K																							
	N																							
	S																							
	H																							
ISO		YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201	
	RDKW0803MO						●																	
	RDKW10T3MO	●	○							●	○							○						
	RDKW1204MO	●				○	●			●	○				●	●	○							

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Face milling

FMR03



Article	*	Stock	Dimensions [mm]						Teeth	Inserts
			R	ØD	ød	L ₁	L	a _{p max}		
FMR03-015-G16-XS-RD0702-02		●	3.5	15	16	40	88	3.5	2	RDkW0702
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	
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	RDkW1003
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	
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	

● Ex stock ○ On demand

* With internal cooling

Spare parts				
	Insert	RDkW0702	RDkW1003	
	ØD	15	20	
	Screw (insert)		I60M3.5x6.5TT (2.7Nm)	
	Screw (insert)	I60M2.5x5.0 (1.0Nm)		
	Wrench (insert)		WT10IP	
	Wrench (insert)	WT07P		

System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230

Milling inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

RDkW	I.C	S	d
07 02	7	2.38	2.7
10 03	10	3.18	3.9

RD** milling insert		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				●										●									

● Ex stock ○ On demand

Important information on the cutting edge design can be found on page B102.

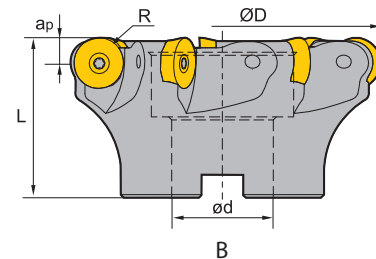
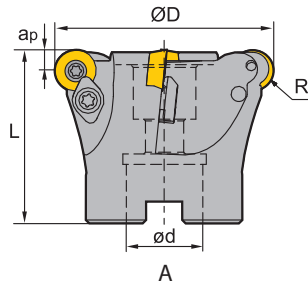
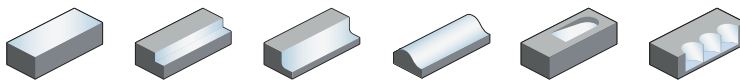
HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

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Face milling

FMR04



Article	*	Stock	Dimensions [mm]					Teeth	Coupling	kg	Inserts
			R	ØD	ød	L	a _{p max}				
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	

● Ex stock ○ On demand

* With internal cooling

Spare parts		RD**1204	RD**1605	RD**2006
	Insert	50-63	80-100	100-160
	Clamp	WD-204	WD-207	
	Screw (clamp)	I60M4×10 (3.4 Nm)	I60M5×13 (6.7 Nm)	
	Screw (insert)	I60M3.5×10 (2.7 Nm)	I60M5×13 (6.7 Nm)	I43M6×16 (9.1 Nm)
	Wrench (clamp)	WT15IP		
	Wrench (clamp)		WT20IT	
	Wrench (insert)	WT15IP		
	Wrench (insert)		WT20IT	WT25IT



System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230

RDKT
12 04

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

Milling inserts

RD** milling insert		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	
	RDKT1204MO-MM																							

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

A
Turning

B
Milling

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

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

Milling inserts

RD** milling insert		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	
	RDKW1204MO	●				○	●				●	○			●	●	○							
	RDKW1605MO											○	○				○							
	RDKW2006MO							○																
	RDKW2006MO-3														●									

● Ex stock ○ On demand

Important information on the cutting edge design can be found on page B102.

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

C
Drilling

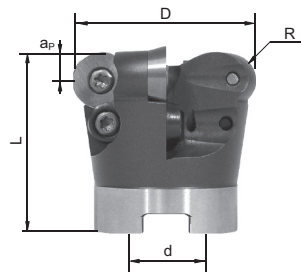
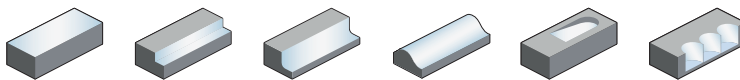
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Face milling

FMR04



Article	*	Stock	Dimensions [mm]					Teeth	Inserts
			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	RDKW12T3
FMR04-042-A16-RD12T3-05		○	6	42	16	42	6	5	
FMR04-042-A16-RD12T3-05C	*	●	6	42	16	42	6	5	
FMR04-052-A22-RD12T3-05		○	6	52	22	50	6	5	RDKW12T3
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	RDKW1604
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	

● Ex stock ○ On demand

* With internal cooling

System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230

Spare parts						
Insert	RDKW1003	RDKW12T3	RDKW12T3	RDKW1604	RDKW1604	
ØD	42-52	42	52-80	52	66-160	
	Clamp					WX16N
	Clamp		LOM3.5x7.1			
	Screw (clamp)					I60M4.5x10 (5.0 Nm)
	Screw (insert)	I60M3.5x6.5TT (2.7 Nm)				
	Screw (insert)		I60M3.5x7.7 (2.7 Nm)	I60M3.5x7.7 (2.7 Nm)	I60M4.5x10 (5.0 Nm)	I60M4.5x10 (5.0 Nm)
	Wrench (clamp)			WT15P		
	Wrench (clamp)					WT20T
	Wrench (insert)	WT10IP				
	Wrench (insert)		WT15P	WT15P		
	Wrench (insert)				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

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

Milling inserts

RD** milling insert	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	
	RDKW1003MO-1				○	●					○			●	●								
	RDKW1003MO-2								●														
	RDKW1003MO-3			●										●									
	RDKW12T3MO-1				○	●					○			●	●								
	RDKW12T3MO-2								●					○									
	RDKW12T3MO-3			●										●									
	RDKW1604MO-1					●					○			●	●	●							
	RDKW1604MO-2									○													
	RDKW1604MO-3	○		●				●		○				●		●							

● Ex stock ○ On demand

Important information on the cutting edge design can be found on page B102.

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

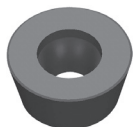


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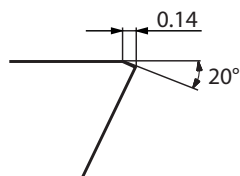
IMPORTANT INFORMATION

Cutting edge design RDKW

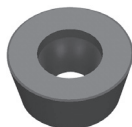
RDKW*MO-1



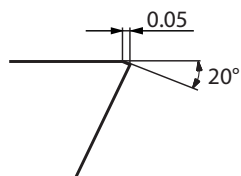
General machining



RDKW*MO-2



Soft cutting geometry
(Finishing)



RDKW*MO-3



Roughing

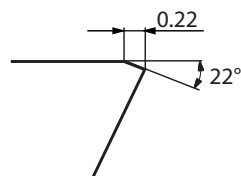
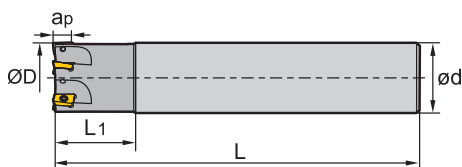
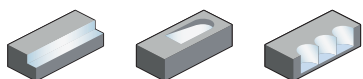


Fig.: FMR04-052-B22-RD12T3-05C

Square shoulder milling

EMP01 Kr: 90°



Straight shank

Article	*	Stock	Dimensions [mm]					Teeth	kg	Inserts
			$\varnothing D$	$\varnothing d$	L_1	L	$a_{p \max}$			
EMP01-012-G12-AP07-02C	*	●	12	12	25	75	6.4	2	0.31	APKT0702
EMP01-014-G16-AP07-03C	*	●	14	16	25	85	6.4	3	0.61	
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	APKT11T3
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	
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	APKT1604
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	
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	

● Ex stock ○ On demand

* With internal cooling

System code > B26

Grade selection > B24

Technical info > B527

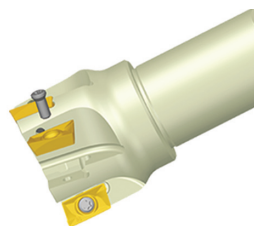
Cutting data > B230



A

Turning

Spare parts		APKT0702	APKT11T3	APKT1604
Insert	ØD	12-25	12-32	25-63
	Screw (insert)	I60M1.8×4 (0.5 Nm)		I60M4×8.4 (3.4 Nm)
	Screw (insert)		I60M2.5×6.5T (1.0 Nm)	
	Wrench (insert)	WT05IP	WT08IP	
	Wrench (insert)			WT15S



B

Milling

Milling inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

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

C

Drilling

AP** milling insert		HC ¹ (CVD)						HC ¹ (PVD)				HT	HC ²	HW												
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																						○	○

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

D

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System code > B26

Grade selection > B24

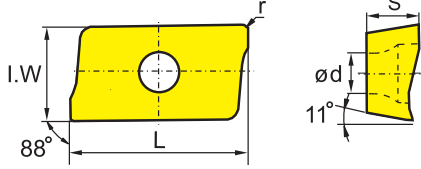





Technical info > B527

Cutting data > B230

Milling inserts

-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions

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

AP** milling insert			HC ¹ (CVD)						HC ¹ (PVD)					HT	HC ²	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	
	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																										

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

A

Turning

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Technical Information

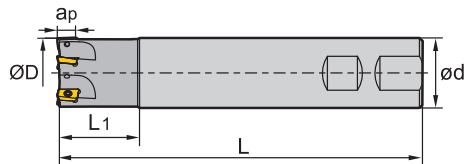
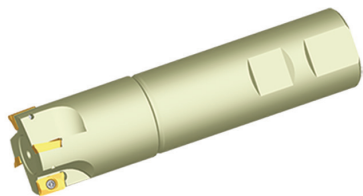
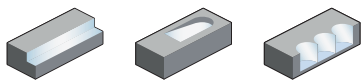
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Square shoulder milling

EMP01 Kr: 90°



Weldon shank

Article	*	Stock	Dimensions [mm]					Teeth	kg	Inserts
			ØD	ød	L ₁	L	a _{p max}			
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	APKT1604
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	
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	APKT1604
EMP01-063-XP32-AP16-06		○	63	32	45	135	15.5	6	1.4	

● Ex stock ○ On demand

* With internal cooling


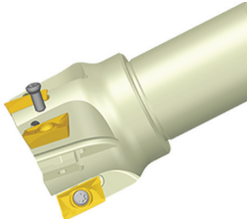



System code > B26

Grade selection > B24




Technical info > B527

Cutting data > B230

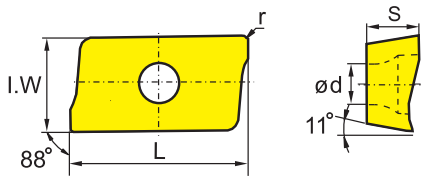




Spare parts

	Insert	APKT0702	APKT11T3	APKT1604	
	ØD	12-25	12-32	25-63	
	Screw (insert)	I60M1.8x4 (0.5 Nm)		I60M4x8.4 (3.4 Nm)	
	Screw (insert)		I60M2.5x6.5T (1.0Nm)		
	Wrench (insert)	WT05IP	WT08IP		
	Wrench (insert)			WT15S	

Milling inserts

-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions

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

AP** milling insert				HC ¹ (CVD)						HC ¹ (PVD)					HT	HC ²	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														●							○	○	

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230



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- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

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

Milling inserts

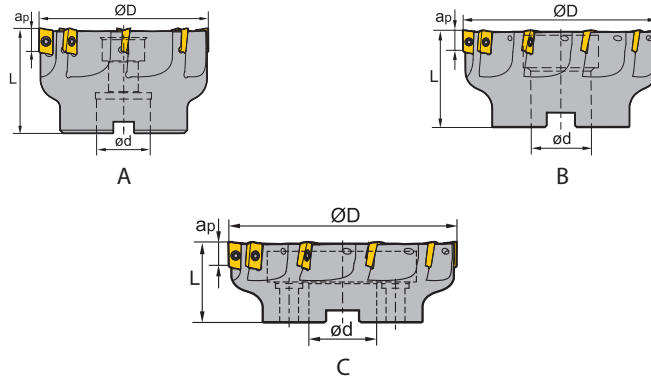
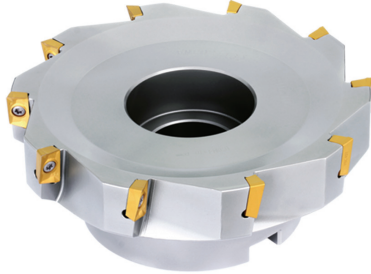
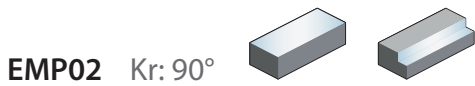
AP** milling insert				HC ¹ (CVD)						HC ¹ (PVD)						HT	HC ²	HW										
				P	M	K	N	S	H																			
ISO				r	I.W	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201	
	APKT11T308-NM																											
	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												●								●							

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide



Square shoulder milling



Article	*	Stock	Dimensions [mm]				Teeth	Coupling	kg	Inserts
			ØD	ød	L	a _p max				
EMP02-032-A16-AP07-08C	*	●	32	16	35	6.4	8	A	0.34	APKT0702
EMP02-040-A16-AP07-10C	*	●	40	16	40	6.4	10	A	0.4	
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	APKT1604
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	
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	

● Ex stock ○ On demand



* With internal cooling

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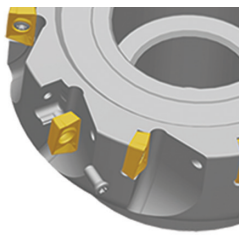



Article	*	Stock	Dimensions [mm]				Teeth	Coupling		Inserts 
			ØD	ød	L	a _{p max}				
EMP02-100-B32-AP16-08C	*	●	100	32	50	15.5	8	B	1.6	APKT1604
EMP02-125-B40-AP16-06C	*	○	125	40	63	15.5	6	B	3.18	
EMP02-125-B40-AP16-10		○	125	40	63	15.5	10	B	3.2	
EMP02-125-B40-AP16-10C	*	○	125	40	63	15.5	10	B	3.2	
EMP02-160-B40-AP16-07C	*	○	160	40	63	15.5	7	B	4.3	
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	

● Ex stock ○ On demand

* With internal cooling

B

Milling

Spare parts					
	Insert	APKT11T3	APKT1604	APKT1604	
	ØD	40-125	40-160	160-250	
	Cassette			Locator-APKT16	
	Screw (insert)		I60M4×10 (3.4 Nm)	I60M4×10 (3.4 Nm)	
	Screw (insert)	I60M2.5×6.5T (1.0Nm)			
	Wrench (insert)	WT08IS	WT15IS	WT15IS	

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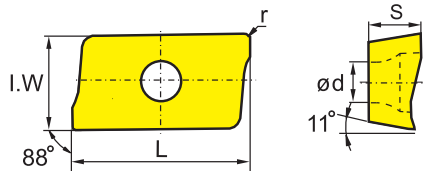
Technical info > B527








Cutting data > 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

-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions

Milling inserts



AP** milling insert			HC ¹ (CVD)						HC ¹ (PVD)					HT	HC ²	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	YBG320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201	
	0.4	6.5									●													●	●
	0.8	6.5									●													●	●
	0.8	9.33									●													●	●
	0.4	6.5														●									
	0.8	6.5												○		●		○							
	0.8	9.33												○		●	○	○							
	0.4	6.91														●									
	0.4	6.5			●		●									●									
	0.8	6.5			●		●							○		●		○							
	1.2	6.5			●		●									●									
	1.6	6.5			●		●									●									
	2	6.5			●		●									●									
	0.8	9.33			●		●	●						○		●		○							
	1.6	9.33			●		●									●									
	2	9.33			●		●									●									
	2.4	9.33			●		●									●									
	3	9.33			●											●									
	0.4	6.5																						○	○
	0.8	6.5																						○	●
	0.8	9.33																						○	○
															●		●								
															●		●								
	0.4	6.5	○		○						○	○						○							
	0.8	6.5										○													
	1.6	6.5										○													
	0.8	9.33	○			○						○						○							
	3	9.33	○																						
	0.4	6.5	○	○	○		○	○			○	○						○							
	0.8	6.5	○	○	○	○	○	●	○	○	○	○				○		○							
	1.2	6.5				○					○	○						○							
	1.6	6.5				○					○	○						○							
	0.8	9.33	○	○	○	●		●	○	○	○	○				○		●							
	1.6	9.33	○									○													

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide



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11 T3	12.24	3.6	2.8
16 04	17.877	5.76	4.4

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

Milling inserts

AP** milling insert				HC ¹ (CVD)						HC ¹ (PVD)						HT	HC ²	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																											

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

System code > B26

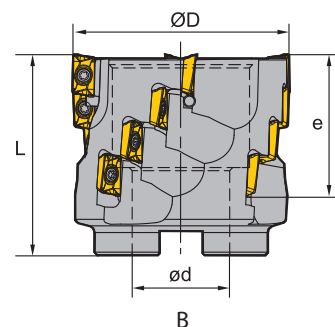
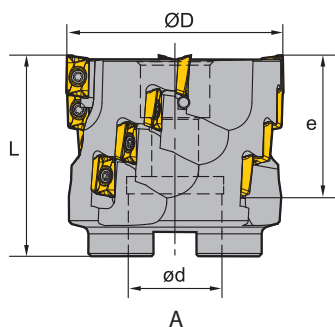
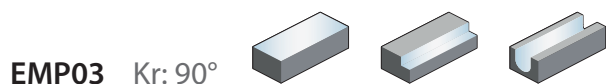
Grade selection > B24


Technical info > B527

Cutting data > B230



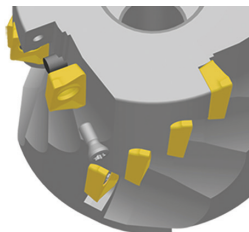


Square shoulder milling



Article	*	Stock	Dimensions [mm]				Teeth	Coupling	No. of inserts	kg	Inserts
			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	

● Ex stock ○ On demand

* With internal cooling

Spare parts			
	Insert ØD	APKT11T3 50-100	
	Screw (insert)	I60M2.5x6.5T (1.0Nm)	
	Wrench (insert)	WT08IS	

System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230

Indexable milling Square shoulder milling

A

Turning

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

APKT	L	S	d
11 T3	12.24	3.6	2.8

Milling inserts

AP** milling insert		HC ¹ (CVD)						HC ¹ (PVD)					HT	HC ²	HW	
	P	●	●	●	●	●	●	●	●	●	●	●	●	●		
	M	●	●	●	●	●	●	●	●	●	●	●	●	●		
	K							●								●
	N							●							●	●
	S			●	●			●	●	●	●	●				
	H															

B

Milling

	ISO	r	I.W	Milling insert grades																				
				YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101
	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									●						●								

C

Drilling

D

Technical Information

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● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

System code > B26

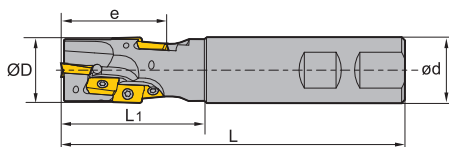
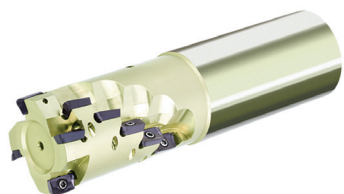
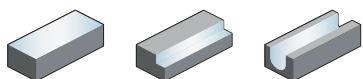
Grade selection > B24

Technical info > B527


Cutting data > B230

Square shoulder milling

EMP04 Kr: 90°



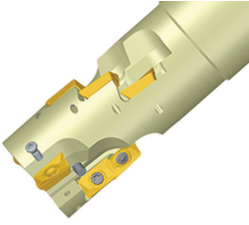


Weldon shank

Article	* Stock	Dimensions [mm]					Teeth	No. of inserts	kg	Inserts
		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	

● Ex stock ○ On demand

* With internal cooling

Spare parts

Insert		APKT11T3	
ØD		20-40	
	Screw (insert)	I60M2.5x6.5T (1.0Nm)	
	Wrench (insert)	WT08IS	

System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230

Indexable milling Square shoulder milling

A

Turning

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

APKT	L	S	d
11 T3	12.24	3.6	2.8

Milling inserts

AP** milling insert		HC ¹ (CVD)						HC ¹ (PVD)					HT	HC ²	HW		
		P	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	●	●	●
		M	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	●	●	●
		K							⊗	⊗	⊗	⊗	⊗	⊗			⊗
		N							⊗	⊗	⊗	⊗	⊗	⊗			⊗
		S							⊗	⊗	⊗	⊗	⊗	⊗			
		H															

B

Milling

C

Drilling

D

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ISO	r	I.W	Machining Conditions																					
			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									●						●								

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

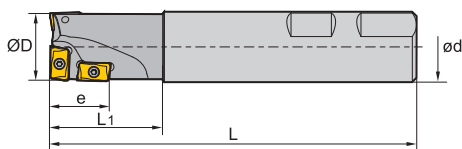
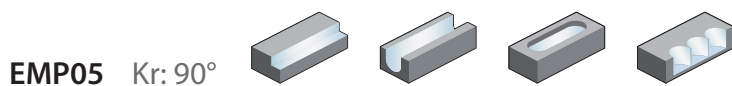
System code > B26

Grade selection > B24


Technical info > B527

Cutting data > B230

Square shoulder milling





Weldon shank

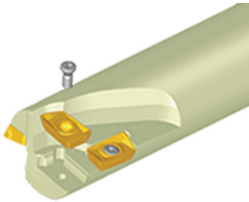
Article	*	Stock	Dimensions [mm]					Teeth	kg	Inserts 
			ØD	e	ød	L ₁	L			
EMP05-025-XP25-C	*	●	25	20	25	40	130	3	0.5	APMT1135

● Ex stock ○ On demand

* With internal cooling

Spare parts

Insert		APMT1135
ØD		25
	Screw (insert)	I60M2.5x6.5T (1.0Nm)
	Wrench (insert)	WT08IP



System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230

A

Turning

B

Milling

C

Drilling

D

Technical Information

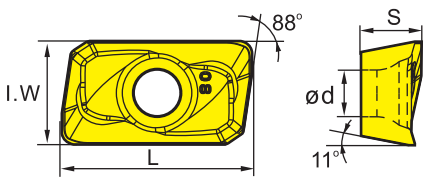

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- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

APMT	L	S	d
11 35	11.25	3.5	2.8

Milling inserts

AN** milling insert			HC ¹ (CVD)						HC ¹ (PVD)					HT	HC ²	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
	0.8	6.2				○										●		○						

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

System code > B26

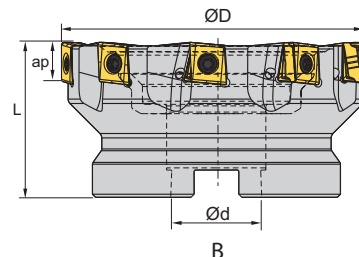
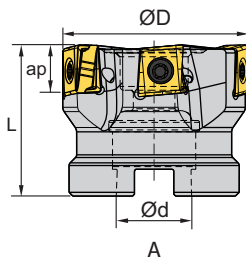
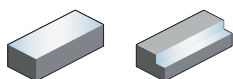
Grade selection > B24

Technical info > B527

Cutting data > B230

Square shoulder milling

EMP09 Kr: 90°



Article	*	Stock	Dimensions [mm]				Teeth	Coupling	kg	Inserts
			ØD	ød	L	a _p max				
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	LNKT1206PNR	
EMP09-040-A16-LN12-04C	*	●	40	16	40	11.5	4	A		0.19
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	LNKT1206PNR
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	LNKT1607PNR
EMP09-080-A27-LN16-06C	*	●	80	27	50	15	6	A		
EMP09-100-B32-LN16-08C	*	●	100	32	50	15	8	B		
EMP09-125-B40-LN16-10C	*	●	125	40	63	15	10	B		LNKT1607PNR
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		

● Ex stock ○ On demand

* With internal cooling

Spare parts				
	Insert	LNKT0804PNR	LNKT1206PNR	LNKT1607PNR
	ØD	40-80	40-125	80-360
	Screw (clamp)	I60M3×7 (1.8 Nm)	I60M4×12 (3.4 Nm)	
	Screw (insert)			I60M5×17 (6.7 Nm)
	Wrench	WT10IS	WT15IS	
	Wrench (insert)			WT20IS

System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230



A

Turning

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Milling

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Drilling

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LNKT	L	S
08 04	8.75	4.45
12 06	12.7	6.75
16 07	16.05	7.35

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

Milling inserts

LN** milling insert			HC ¹ (CVD)						HC ¹ (PVD)						HT	HC ²	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				●		○									●							

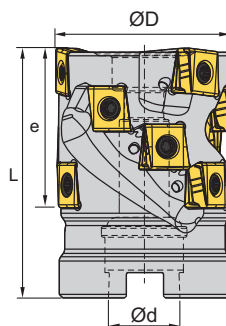
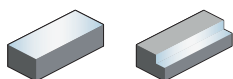
● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide



Square shoulder milling

EMP09 Kr: 90°



Article	*	Stock	Dimensions [mm]				Teeth row	Teeth	Coupling	kg	Inserts
			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		

● Ex stock ○ On demand

* With internal cooling

Spare parts		
	Insert	LNKT1206PNR
	ØD	40-80
	Screw (clamp)	I60M4x12 (3.4Nm)
	Wrench	WT15IS

A

Turning

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

LNKT	L	S
12 06	12.7	6.75

Milling inserts

LN** milling insert		HC ¹ (CVD)						HC ¹ (PVD)						HT	HC ²	HW
	P	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	M	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	K															●
	N															●
	S															
	H															

B

Milling

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				●			●								●							

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

C

Drilling

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System code > B26

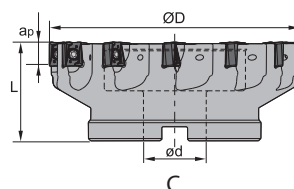
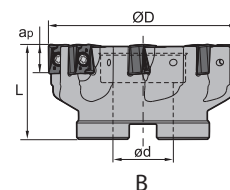
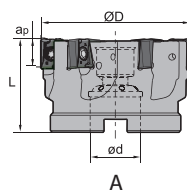
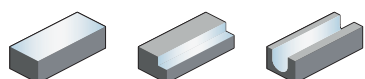
Grade selection > B24

Technical info > B527

Cutting data > B230

Square shoulder milling

EMP13 Kr: 90°



Article	*	Stock	Dimensions [mm]				Teeth	Coupling	kg	Inserts	
			ØD	ød	L	a _p max					
EMP13-040-A16-AN11-04C	*	○	40	16	40	11.2	4	A	0.45	ANGX1105	
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		
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		ANGX1506
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		
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		

● Ex stock ○ On demand

* With internal cooling

System code > B26

Grade selection > B24

Technical info > B527


Cutting data > B230



A

Turning

Spare parts		ANGX1105	ANGX1506
Insert		40-160	50-200
ØD			
	Screw (clamp)		I60M4×12 (3.4Nm)
	Screw (insert)	I60M3×9 (1.8 Nm)	I60M4×12 (3.4 Nm)
	Wrench		WT15IS
	Wrench (insert)	WT09IS	WT15IS



B

Milling

Milling inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

ANGX	L	S	d
11 05	11.85	5.7	3.5
15 06	15.43	7.3	4.4

C

Drilling

AN** milling insert		HC ¹ (CVD)						HC ¹ (PVD)						HT	HC ²	HW									
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																						●

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

D

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System code > B26

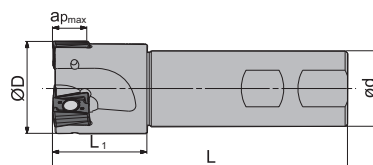
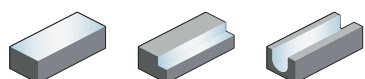
Grade selection > B24

Technical info > B527

Cutting data > B230

Square shoulder milling

EMP13 Kr: 90°



Weldon shank

Article	*	Stock	Dimensions [mm]					Teeth	kg	Inserts
			ØD	ød	L ₁	L	a _{p max}			
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	

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert ØD	ANGX1105	ANGX1506	
		25-40	25-40	
Screw (insert)		I60M3×9 (1.8 Nm)	I60M4×12 (3.4 Nm)	
Wrench (insert)		WT09IS	WT15IS	

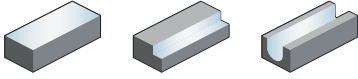
System code > B26

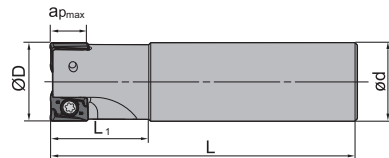
Grade selection > B24

Technical info > B527


Cutting data > B230

Square shoulder milling

EMP13 Kr: 90° 






Straight shank

Article	*	Stock	Dimensions [mm]						Teeth	kg	Inserts
			$\varnothing D$	e	$\varnothing d$	L_1	L	a_{pmax}			
EMP13-025-G25-AN11-02C	*	●	25	11.2	25	32	100	11.2	2	0.31	
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	

● Ex stock ○ On demand

* With internal cooling

Spare parts

Insert		ANGX1105	ANGX1506	
$\varnothing D$		25-40	25-40	
	Screw (insert)	I60M3x9 (1.8 Nm)	I60M4x12 (3.4 Nm)	
	Wrench (insert)	WT09IS	WT15IS	

System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230

Indexable milling Square shoulder milling

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- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

ANGX	L	S	d
11 05	11.85	5.7	3.5
15 06	15.43	7.3	4.4

Milling inserts

AN** milling insert		HC ¹ (CVD)						HC ¹ (PVD)						HT	HC ²	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																						●

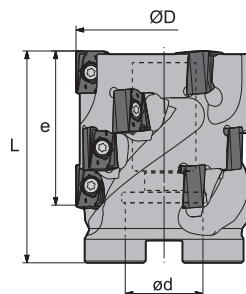
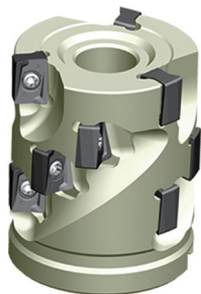
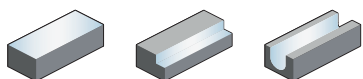
● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide



Square shoulder milling

EMP13 Kr: 90°



Article	*	Stock	Dimensions [mm]				Teeth	No. of inserts	kg	Inserts
			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	

● Ex stock ○ On demand

* With internal cooling

Spare parts			
	Insert ØD	ANGX1105 50-63	ANGX1506 63-80
	Screw (insert)	I60M3x9 (1.8 Nm)	I60M4x12 (3.4 Nm)
	Wrench (insert)	WT09IS	WT15IS



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Indexable milling Square shoulder milling

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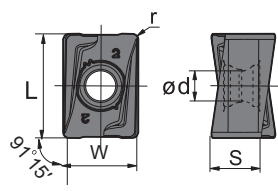



























































































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-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions

ANGX	L	S	d
11 05	11.85	5.7	3.5
15 06	15.43	7.3	4.4

Milling inserts

AN** milling insert		HC ¹ (CVD)						HC ¹ (PVD)						HT	HC ²	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																					●

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

System code > B26

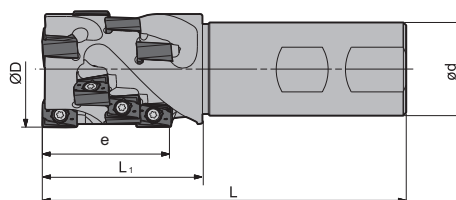
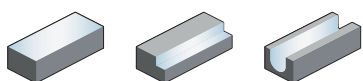
Grade selection > B24

Technical info > B527

Cutting data > B230

Square shoulder milling

EMP13 Kr: 90°



Weldon shank

Article	* Stock	Dimensions [mm]					Teeth	No. of inserts	kg	Inserts
		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	

● Ex stock ○ On demand

* With internal cooling

Spare parts

Insert		ANGX1105	ANGX1506	
ØD		32-40	40-50	
	Screw (insert)	I60M3x9 (1.8 Nm)	I60M4x12 (3.4 Nm)	
	Wrench (insert)	WT09IS	WT15IS	

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Technical info > B527

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Indexable milling Square shoulder milling

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- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

ANGX	L	S	d
11 05	11.85	5.7	3.5
15 06	15.43	7.3	4.4

Milling inserts

AN** milling insert		HC ¹ (CVD)						HC ¹ (PVD)						HT	HC ²	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																						●

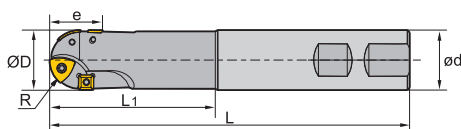
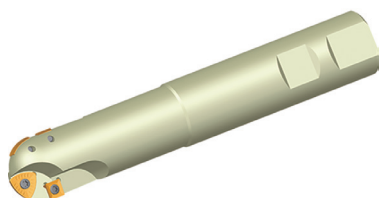
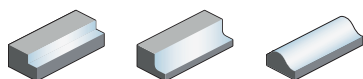
● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide



Profile milling

BMR01



Weldon shank

Article	* Stock	Dimensions [mm]							Teeth		kg	Inserts
		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		

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert ØD	ZDET08T2 & SPMT0603 20	ZDET1103 & SPMT0603 25	ZDET13T2 & SDMT0903 32	ZPNT2204 & SPMT1204 40-63	
	Screw (insert)	I43M2.5x5.7 (1.0 Nm)	I43M2.5x5.7 (1.0 Nm)	I43M4x8 (3.4 Nm)	I43M5x11 (6.7 Nm)	
	Wrench (insert)	WT07IP	WT07IP			
	Wrench (insert)			WT15IS	WT20IS	

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Grade selection > B24

Technical info > B527

Cutting data > B230



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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

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

Milling inserts

ZD** milling insert			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				○																			

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230

Milling inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

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

SP** milling insert		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
	SPMT060304-KT		○																					
	SPMT060304	0.4				●												○						
	SPMT120408	0.8	○	○	○	●	○											○						

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Milling inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

SDMT	L	I.C	S	d
09 03	9.525	9.525	3.18	4.4

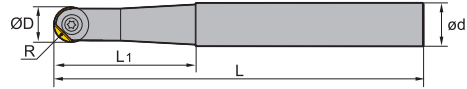
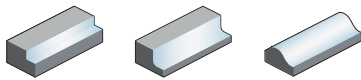
SD** milling insert		HC ¹ (CVD)						HC ¹ (PVD)					HT	HC ²	HW									
	P	●	●	●	●	●	●	●	●	●	●	●	●	●										
	M	●	●	●	●	●	●	●	●	●	●	●	●	●										
	K							●								●								
	N							●							●	●								
	S		●		●			●	●	●	●	●	●											
	H																							
ISO		r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	SDMT090308	0.8				●																		

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Profile milling

BMR02



Article	*	Stock	Dimensions [mm]					kg	Inserts
			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	

● Ex stock ○ On demand

* With internal cooling

Spare parts		ROHX1203	ROHX1604	ROHX2005	
Insert	ØD	12	16	20	
Screw (insert)		I70M4×10TT (3.4 Nm)	I70M5×12TT (6.7 Nm)	I70M5×16TT (6.7 Nm)	
Wrench (insert)		WT15IS	WT20IS	WT20IS	




System code > B26

Grade selection > B24

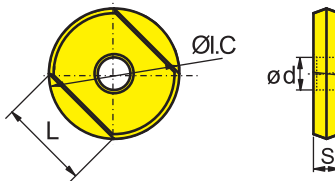

Technical info > B527

Cutting data > B230

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

-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions

Milling inserts

RO** positive insert		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	
	ROHX1604																							
	ROHX1203										○	○							●					
	ROHX2005										○								●					

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

A
Turning

B
Milling

C
Drilling

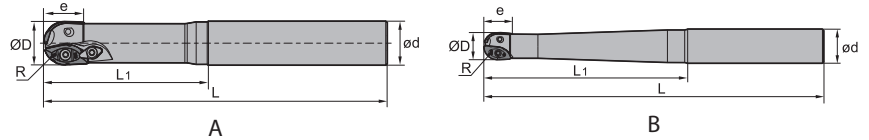
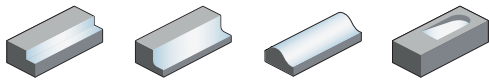
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Profile milling

BMR03



Straight shank

Article	* Stock	Dimensions [mm]							Teeth	Coupling	kg	Inserts
		R	ØD	e	ød	L ₁	L					
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	XPHT25	
BMR03-025-G25-S	●	12.5	25	25	25	80	180	2	B	0.6		
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	XPHT30	
BMR03-030-G32-S	○	15	30	30	32	120	200	2	A	1		
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	XPHT32	
BMR03-032-G32-S	●	16	32	32	32	120	200	2	A	1.1		
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	XPHT40	
BMR03-040-G40-S	○	20	40	40	40	120	200	2	A	1.6		
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		

● Ex stock ○ On demand

* With internal cooling

System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230

Spare parts							
Insert	XPHT16	XPHT20	XPHT25	XPHT30	XPHT32	XPHT40	
ØD	16	20	25	30	32	40	
	Clamp						CBH5R1
	Clamp				WD-208	WD-208	
	Screw (clamp)				I60M5×13 (6.7 Nm)	I60M5×13 (6.7 Nm)	I43M6×16 (9.1 Nm)
	Screw (insert)	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)
	Screw (insert)		I60M3.5×08TT (2.7 Nm)				
	Wrench (clamp)				WT20IT	WT20IT	WT25IT
	Wrench (insert)		WT10IP				
	Wrench (insert)				WT20IT	WT20IT	WT25IT
	Wrench (insert)	WT07P					
	Wrench (insert)			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

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

Milling inserts

XP** milling insert		HC ¹ (CVD)						HC ¹ (PVD)						HT	HC ²	HW										
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	
	P																									
	M																									
	K																									
	N																									
	S																									
	H																									
	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																							

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

A

Turning

B

Milling

C

Drilling

D

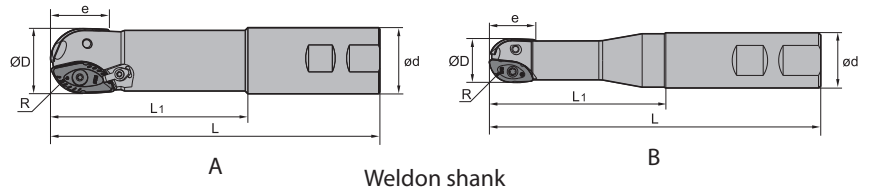
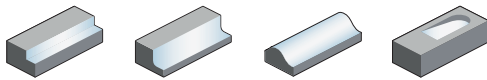
Technical Information

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Profile milling

BMR03



Article	* Stock	Dimensions [mm]							Teeth	Coupling	kg	Inserts
		R	ØD	e	ød	L ₁	L					
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	XPHT25	
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	XPHT30	
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	XPHT32	
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	XPHT40	
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	XPHT50	
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		

● Ex stock ○ On demand

* With internal cooling

System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230

Spare parts

Insert	XPHT16	XPHT20	XPHT25	XPHT30	XPHT32	XPHT40	XPHT50	
ØD	16	20	25	30	32	40	50	
Clamp						CBH5R1	CBH5R1	
Clamp				WD-208	WD-208			
Screw (clamp)				I60M5×13 (6.7 Nm)	I60M5×13 (6.7 Nm)	I43M6×16 (9.1 Nm)	I43M6×16 (9.1 Nm)	
Screw (insert)	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)	
Screw (insert)		I60M3.5×08TT (2.7 Nm)						
Wrench (clamp)				WT20IT	WT20IT	WT25IT	WT25IT	
Wrench (insert)		WT10IP						
Wrench (insert)				WT20IT	WT20IT	WT25IT	WT30IT	
Wrench (insert)	WT07P							
Wrench (insert)			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

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

Milling inserts

XP** milling insert		Material																								
		HC ¹ (CVD)			HC ¹ (PVD)		HT	HC ²	HW																	
		P	M	K	N	S	H																			
	ISO	R	α	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBG203	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																							

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230



A

Turning

B

Milling

C

Drilling

D

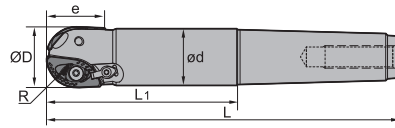
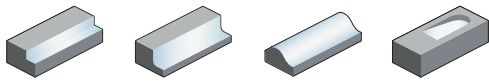
Technical Information

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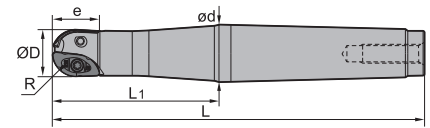
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Profile milling

BMR03



A



B

Morse taper shank

Article	* Stock	Dimensions [mm]						Teeth	Coupling	kg	Inserts
		R	ØD	e	ød	L ₁	L				
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	
BMR03-050-MT5-L	○	25	50	50	46.8	150	286	2	A	2.9	XPHT50

● Ex stock ○ On demand

* With internal cooling

System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230

Spare parts							
Insert	XPHT20	XPHT25	XPHT30	XPHT32	XPHT40	XPHT50	
ØD	20	25	30	32	40	50	
	Clamp					CBH5R1	CBH5R1
	Clamp			WD-208	WD-208		
	Screw (clamp)			I60M5×13 (6.7 Nm)	I60M5×13 (6.7 Nm)	I43M6×16 (9.1 Nm)	I43M6×16 (9.1 Nm)
	Screw (insert)		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)
	Screw (insert)	I60M3.5×08TT (2.7 Nm)					
	Wrench (clamp)			WT20IT	WT20IT	WT25IT	WT25IT
	Wrench (insert)	WT10IP					
	Wrench (insert)			WT20IT	WT20IT	WT25IT	WT30IT
	Wrench (insert)		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

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

Milling inserts

XP** milling insert				HC ¹ (CVD)				HC ¹ (PVD)				HT	HC ²	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
	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																						

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

System code > B26

Grade selection > B24

Technical info > B527

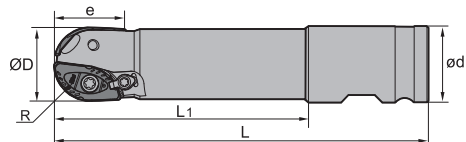
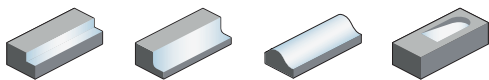
Cutting data > B230



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 B Milling
 C Drilling
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Profile milling

BMR03



Compound shank

Article	* Stock	Dimensions [mm]							Teeth	kg	Inserts
		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		

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert ØD	XPHT40	XPHT50
		40	50
	Clamp	CBH5R1	CBH5R1
	Screw (clamp)	I43M6×16 (9.1 Nm)	I43M6×16 (9.1 Nm)
	Screw (insert)	I43M6×16 (9.1 Nm)	I43M8×21 (16.2 Nm)
	Wrench (clamp)	WT25IT	WT25IT
	Wrench (insert)	WT25IT	WT30IT



System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230

- Ideal machining conditions
- ● Normal machining conditions
- ● Unfavourable machining conditions

XPHT	L	S	d
40	40	7.94	6.8
50	50	7.94	9.2

Milling inserts

XP** milling insert		HC ¹ (CVD)						HC ¹ (PVD)					HT	HC ²	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																	●					

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

A

Turning

B

Milling

C

Drilling

D

Technical Information

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System code > B26

Grade selection > B24

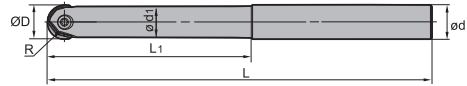
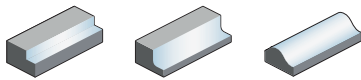
Technical info > B527

Cutting data > B230



Profile milling

BMR04



Straight shank

Article	*	Stock	Dimensions [mm]						kg	Inserts
			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	

● Ex stock ○ On demand

* With internal cooling

Spare parts		ZOHX12	ZOHX16	ZOHX20	ZOHX25	ZOHX30	ZOHX32
Insert	ØD	12	16	20	25	30	32
Screw (insert)		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)
Wrench (insert)		WT15IP	WT20IP	WT20IP	WT20IP		
Wrench (insert)						WT30IT	WT30IT



System code > B26

Grade selection > B24

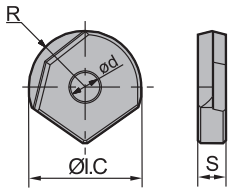


Technical info > B527

Cutting data > 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

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

Milling inserts

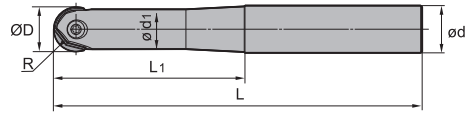
ZO** milling insert		HC ¹ (CVD)								HC ¹ (PVD)					HT	HC ²	HW						
	P	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗							
	M	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗							
	K									⊗	⊗	⊗	⊗	⊗	⊗	⊗							
	N									⊗	⊗	⊗	⊗	⊗	⊗	⊗							
	S									⊗	⊗	⊗	⊗	⊗	⊗	⊗							
	H																						
ISO	R	YBC302	YBC301	YBC401	YBM253	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																●					

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Profile milling

BMR04



Straight shank

Article	*	Stock	Dimensions [mm]						kg	Inserts
			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	

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	ZOHX12	ZOHX16	ZOHX20	ZOHX25	ZOHX30	ZOHX32
		ØD 12	16	20	25	30	32
Screw (insert)		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)
Wrench (insert)		WT15IP	WT20IP	WT20IP	WT20IP		
Wrench (insert)						WT30IT	WT30IT



System code > B26

Grade selection > B24



Technical info > B527

Cutting data > 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

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

Milling inserts

ZO** milling insert		HC ¹ (CVD)								HC ¹ (PVD)					HT	HC ²	HW						
ISO		R	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	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																					

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

A

Turning

B

Milling

C

Drilling

D

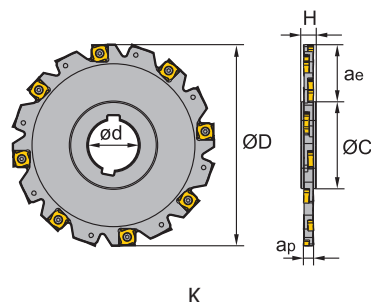
Technical Information

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Slot milling



Article	*	Stock	Dimensions [mm]						Coupling	kg	Inserts
			ØD	ød	Øc	H	ap	ae max			
SMP01-100x4-K27-SN12-10		○	100	27	45	12	4	25	K	0.2	XSEQ1202
SMP01-125x4-K40-SN12-12		○	125	40	56	12	4	32	K	0.3	
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	XSEQ1203
SMP01-125x5-K40-SN12-12		○	125	40	56	12	5	32	K	0.3	
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	XSEQ1204
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	
SMP01-200x7-K50-SN12-18		○	200	50	71	12	7	62	K	1.2	XSEQ1204
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	XSEQ12T3
SMP01-160x6-K40-SN12-16		○	160	40	67	12	6	44	K	0.7	
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	XSEQ12T3
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	XSEQ12T4
SMP01-160x8-K40-SN12-16		○	160	40	67	12	8	44	K	0.9	
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	XSEQ12T4

● Ex stock ○ On demand

* With internal cooling

System code > B26

Grade selection > B24

Technical info > B527


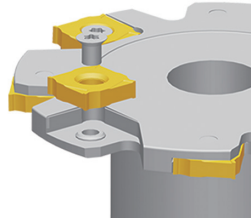

Cutting data > B230



Indexable milling Slot milling

A

Turning

Spare parts						
Insert	XSEQ1202	XSEQ1203	XSEQ1204	XSEQ12T3	XSEQ12T4	
ØD	63-160	63-160	63-250	63-360	63-250	
 Screw (insert)	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)	
 Wrench (insert)	WT08IP	WT08IP	WT08IP	WT08IP	WT08IP	

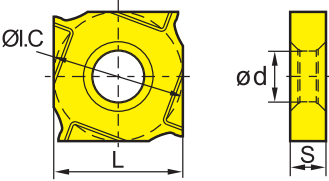

B

Milling

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

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

Milling inserts

XS** milling insert	HC ¹ (CVD)						HC ¹ (PVD)				HT	HC ²	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	
	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	
ISO																													
	XSEQ1202																												
	XSEQ1203	○	●																										
	XSEQ1204																												
	XSEQ12T3		●																										○
	XSEQ12T4																												

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

C

Drilling

D

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System code > B26

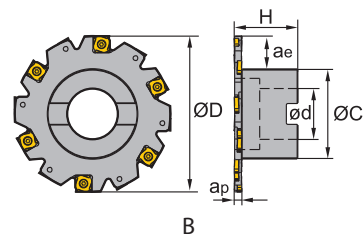
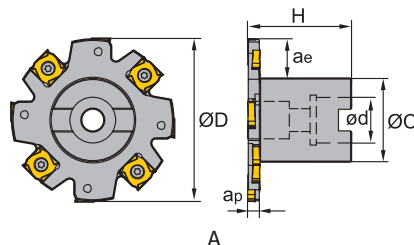
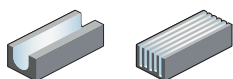
Grade selection > B24

Technical info > B527

Cutting data > B230

Slot milling

SMP01 Kr: 90°



Article	* Stock	Dimensions [mm]							Teeth	Coupling	kg	Inserts
		ØD	ød	Øc	H	ap	ae,max					
SMP01-063x4-A22-SN12-06	○	63	22	32	40	4	14	6	A	0.2	XSEQ1202	
SMP01-080x4-A22-SN12-08	○	80	22	40	40	4	18	8	A	0.4		
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	XSEQ1203	
SMP01-080x5-A22-SN12-08	○	80	22	40	40	5	18	8	A	0.4		
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	XSEQ1204	
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		
SMP01-125x7-B40-SN12-12	○	125	40	72	50	7	23	12	B	1.1	XSEQ1204	
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	XSEQ12T3	
SMP01-100x6-A27-SN12-10	○	100	27	48	50	6	23	10	A	0.7		
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	XSEQ12T4	
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		

● Ex stock ○ On demand

* With internal cooling

System code > B26

Grade selection > B24

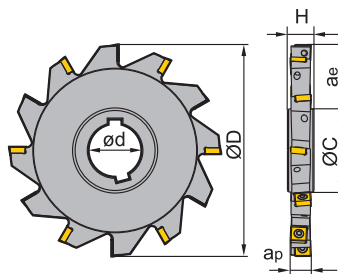
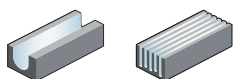
Technical info > B527

Cutting data > B230



Slot milling

SMP03 Kr: 90°



K

Article	* Stock	Dimensions [mm]							Teeth	Coupling	kg	Inserts
		ØD	ød	Øc	H	ap	ae,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	MPHT0803	
SMP03-125x12-K40-MP08-12	○	125	40	58.3	16	12	32.6	12	K	0.7		
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		

● Ex stock ○ On demand

* With internal cooling

Spare parts					
	Insert	MPHT0603	MPHT0803	MPHT1204	
	ØD	80-125	125-160	160-200	
	Screw (insert)	I60M2.5x6.5 (1.0 Nm)	I60M3x7 (1.8 Nm)	I60M5x13 (6.7 Nm)	
	Wrench (insert)	WT07IP	WT09IP		
	Wrench (insert)			WT20IS	

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Turning

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D

Technical Information

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- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

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

Milling inserts

MP** milling insert		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	
	MPHT060304-DM	0.4	●			●												●							
	MPHT080305-DM	0.5	●			○													●						
	MPHT120408-DM	0.8	●			○		●											●						

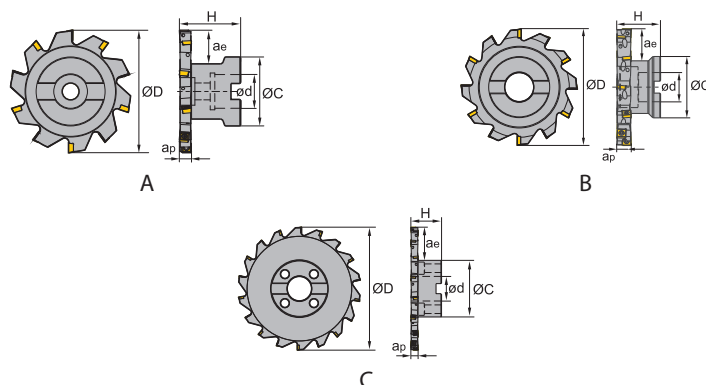
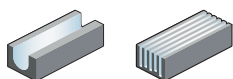
● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide



Slot milling

SMP03 Kr: 90°

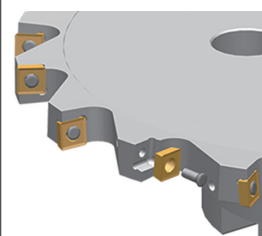





Article	* Stock	Dimensions [mm]							Teeth	Coupling	kg	Inserts
		ØD	ød	Øc	H	ap	ae,max					
SMP03-080x8-A22-MP06-10	○	80	22	45	40	8	21	10	A	0.4	MPHT0603	
SMP03-100x8-B27-MP06-14	○	100	27	55	40	8	24.5	14	B	0.6		
SMP03-100x10-B27-MP06-14	●	100	27	55	40	10	24.5	14	B	0.7		
SMP03-125x10-B32-MP06-16	○	125	32	65	45	10	33.3	16	B	1.1	MPHT0803	
SMP03-125x12-B32-MP08-12	○	125	32	65	45	12	33	12	B	1.4		
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	MPHT1204	
SMP03-125x16-B32-MP12-10	○	125	32	65	50	16	33	10	B	2.3		
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	MPHT1204	
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		

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert ØD	MPHT0603 80-125	MPHT0803 125-200	MPHT1204 125-200	
	Screw (insert)	I60M2.5x6.5 (1.0 Nm)	I60M3x7 (1.8 Nm)	I60M5x13 (6.7 Nm)	
	Wrench (insert)	WT07IP	WT09IP		
	Wrench (insert)			WT20IS	

System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230



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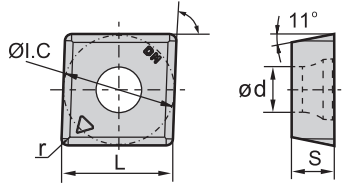

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-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions

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

Milling inserts

MP** milling insert		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	
	MPHT060304-DM	0.4																						
	MPHT080305-DM	0.5																						
	MPHT120408-DM	0.8																						

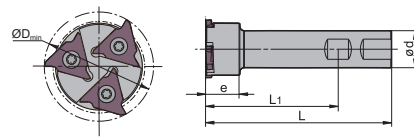
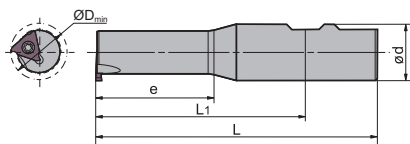
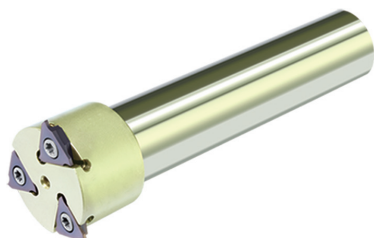
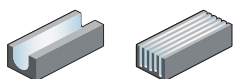
● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide




Slot milling

SMP05 Kr: 90°



A

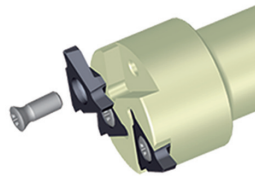


B

Article	*	Stock	Dimensions [mm]					Teeth	Coupling	Inserts
			e	ØDmin	ød	L ₁	L			
SMP05-025x3.0-XP25-QC16-01		●	40	25	25	89	125	1	A	
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	

● Ex stock ○ On demand

* With internal cooling

Spare parts

Insert		QC16L	QC16L	QC22L	
ØD		25	39	44	
	Screw (insert)	I60M3.5×10 (2.7 Nm)	I60M3.5×10 (2.7 Nm)	I60M5×13 (6.7 Nm)	
	Wrench (insert)	WT15IP	WT15IP	WT20IP	

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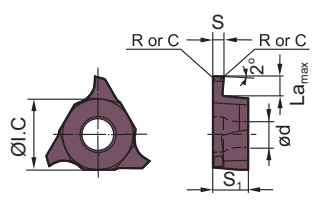



















































































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Indexable milling Slot milling

Milling inserts

-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions

QC16	I.C	d
16	9.525	4.4
22	12.7	5.5

QC** turning/milling insert				HC ¹ (CVD)						HC ¹ (PVD)						HT	HC ²	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														●									

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide




System code > B26

Grade selection > B24

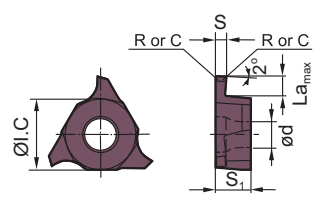
Technical info > B527

Cutting data > B230

Milling inserts

-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions

QC16	I.C	d
16	9.525	4.4
22	12.7	5.5

QC** turning/milling insert				HC ¹ (CVD)						HC ¹ (PVD)						HT	HC ²	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															○							

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

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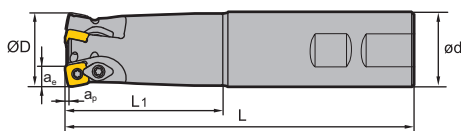
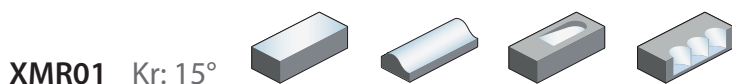
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Notes section containing horizontal dotted lines for writing.

High feed milling



S type insert, Weldon shank

Article	*	Stock	Dimensions [mm]						Teeth	kg	Inserts
			ØD	ød	ap	ae	L ₁	L			
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		SDMT09T3
XMR01-025-XP25-SD09-02		○	25	25	1.4	8.8	60	140	2	0.5	
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	SDMT1204
XMR01-040-XP40-SD12-03		○	40	40	1.8	11.7	70	150	3	1.3	
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

● Ex stock ○ On demand

* With internal cooling

Spare parts		SDMT06T2	SDMT09T3	SDMT1204	SDMT1505
Insert	ØD	20-63	25-63	32-100	40-160
	Clamp		WD-204	WD-204	WD-208
	Screw (clamp)		I60M4×8.4 (3.4 Nm)	I60M4×8.4 (3.4 Nm)	I60M5×13 (6.7 Nm)
	Screw (insert)	I60M2.2×5.5 (0.8 Nm)		I60M4×8.4 (3.4 Nm)	I60M5×13 (6.7 Nm)
	Screw (insert)		I60M3.5×08TT (2.7 Nm)		
	Wrench (clamp)		WT15IP	WT15IP	WT20IP
	Wrench (insert)	WT07IP	WT10IP	WT15IP	WT20IP

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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

-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions

Milling inserts

SD** milling insert			HC ¹ (CVD)						HC ¹ (PVD)					HT	HC ²	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																○								

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

System code > B26

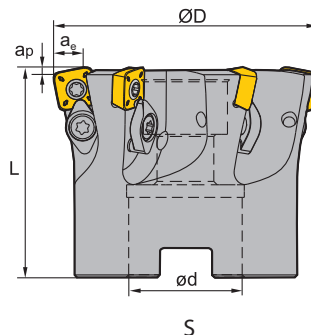
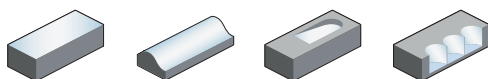
Grade selection > B24

Technical info > B527

Cutting data > B230

High feed milling

XMR01 Kr: 15°



Article	*	Stock	Dimensions [mm]					Teeth	Coupling	kg	Inserts
			ØD	ød	ap	ae	L				
XMR01-040-A16-SD06-07C	*	○	40	16	0.8	5.8	40	7	A	0.178	SDMT06T2
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	
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	SDMT09T3
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	SDMT1204
XMR01-050-A22-SD09-05C	*	○	50	22	1.4	8.8	40	5	A	0.3	
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	SDMT1204
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		SDMT1204
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	SDMT1204
XMR01-066-A27-SD12-05C	*	○	66	27	1.8	11.7	50	5	A	0.56	
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	SDMT1204
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	SDMT1204
XMR01-100-B32-SD12-06C	*	●	100	32	1.8	11.7	50	6	B	1.8	

● Ex stock ○ On demand

* With internal cooling

System code > B26

Grade selection > B24

Technical info > B527

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Article	*	Stock	Dimensions [mm]					Teeth	Coupling		Inserts
			ØD	ød	a _p	ae	L				
XMR01-100-B32-SD12-07C	*	●	100	32	1.8	11.7	50	7	B		
XMR01-125-B40-SD12-08C	*	●	125	40	1.8	11.7	63	8	B		SDMT1204
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		
XMR01-100-B32-SD15-07		○	100	32	2.2	14	50	7	B	1.2	SDMT1505
XMR01-125-B40-SD15-09		○	125	40	2.2	14	63	9	B	2.9	

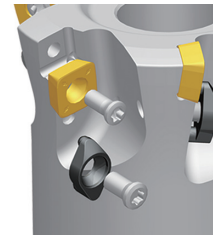
● Ex stock ○ On demand

* With internal cooling

B

Milling

Spare parts					
	Insert	SDMT06T2	SDMT09T3	SDMT1204	SDMT1505
	ØD	20-63	25-63	32-160	40-160
	Clamp		WD-204	WD-204	WD-208
	Screw (clamp)		I60M4×8.4 (3.4 Nm)	I60M4×8.4 (3.4 Nm)	I60M5×13 (6.7 Nm)
	Screw (insert)	I60M2.2×5.5 (0.8 Nm)		I60M4×8.4 (3.4 Nm)	I60M5×13 (6.7 Nm)
	Screw (insert)		I60M3.5×08TT (2.7 Nm)		
	Wrench (clamp)		WT15IP	WT15IP	WT20IP
	Wrench (insert)	WT07IP	WT10IP	WT15IP	WT20IP



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System code > B26

Grade selection > B24




Technical info > B527

Cutting data > 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

-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions

Milling inserts

SD** milling insert				HC ¹ (CVD)						HC ¹ (PVD)					HT	HC ²	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				○										○								

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

A

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Technical Information

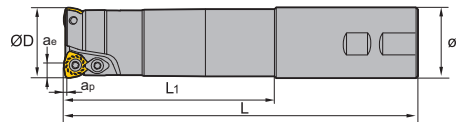
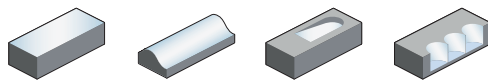
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High feed milling

XMR01 Kr: 11°-22°



W type insert, Weldon shank

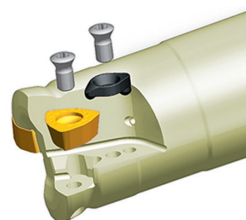
Article	*	Stock	Dimensions [mm]						Teeth	kg	Inserts
			ØD	ød	ap	ae	L ₁	L			
XMR01-020-XP20-WP05-02C-M	*	○	20	20	1.5	3.8	50	130	2	0.2	WPGT0503
XMR01-020-XP20-WP05-02-L		○	20	20	1.5	3.8	100	180	2	0.3	
XMR01-020-XP20-WP05-02-XL		○	20	20	1.5	3.8	130	250	2	0.8	
XMR01-025-XP25-WP06-02C-M	*	○	25	25	1.5	4.35	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	WPGT0604
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	WPGT0604
XMR01-040-XP32-WP06-03-XL		○	40	32	1.5	4.35	50	300	3	1.8	




● Ex stock ○ On demand

* With internal cooling

Variable lead angle (lead angle is hier dependent on size of inserts)
lead angle: WPGT05: 16°; WPGT06: 22°; WPGT08: 11°; WPGT09: 21°

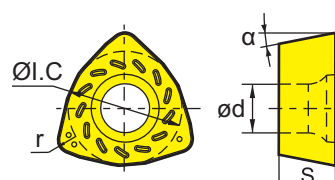


Spare parts			
	Insert	WPGT0503	WPGT0604
	ØD	20	25-40
	Screw (insert)	I60M3.5x6.5 (2.7 Nm)	I60M4x8.4 (3.4 Nm)
	Wrench (insert)	WT10IP	WT15IP



-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions

WPGT	I.C	S	d
05 03	7.94	3.5	4
06 04	9.525	4.2	4.4

Milling inserts

WP** positive insert			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
	WPGT050315ZSR-PM	1.5																						
	WPGT060415ZSR-PM	1.5																						
	WPGT050315ZSR	1.5																						
	WPGT060415ZSR	1.5																						

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

A

Turning

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Milling

C

Drilling

D

Technical Information

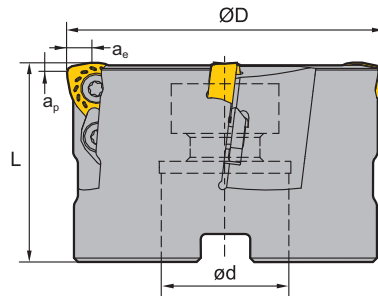
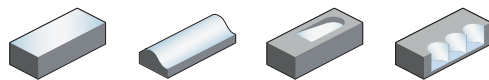
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High feed milling

XMR01 Kr: 11°-22°



W type insert, Arbor mounting

Article	*	Stock	Dimensions [mm]					Teeth	Coupling	kg	Inserts
			ØD	ød	ap	ae	L				
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	WPGT0907
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	
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	WPGT0907
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	

● Ex stock ○ On demand

* With internal cooling

Variable lead angle (lead angle ist hier dependent on size of inserts)
lead angle: WPGT05: 16°; WPGT06: 22°; WPGT08: 11°; WPGT09: 21°

System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230

Spare parts

	Insert ØD	WPGT0604	WPGT0806	WPGT0907	
		50	50-160	3-160	
	Clamp		WD-208	WD-208	
	Screw (clamp)		I60M5×13 (6.7 Nm)	I60M5×13 (6.7 Nm)	
	Screw (insert)	I60M4×8.4 (3.4 Nm)	I60M5×13 (6.7 Nm)	I60M5×13 (6.7 Nm)	
	Wrench (clamp)		WT20IT	WT20IT	
	Wrench (insert)	WT15IS			
	Wrench (insert)		WT20IT	WT20IT	

Milling inserts

- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

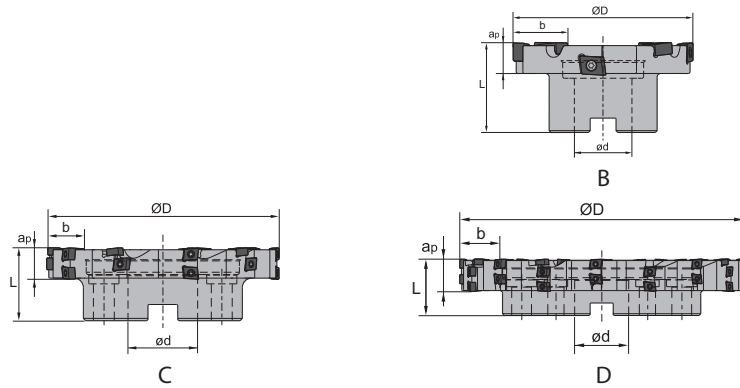
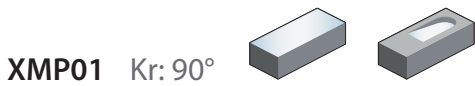
WPGT	I.C	S	d
06 04	9.525	4.2	4.4
08 06	12.85	6.35	5.5
09 07	15	7	5.5


WP** positive insert		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	
	WPGT060415ZSR-PM	1.5	●											●	●			●							
	WPGT080615ZSR-PM	1.5	●											●	●			●							
	WPGT090725ZSR-PM	2.5													●										
	WPGT060415ZSR	1.5	●			●						●	●												
	WPGT080615ZSR	1.5	●			●						●	●												
	WPGT090725ZSR	2.5				●						○	●												

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide



Bore milling

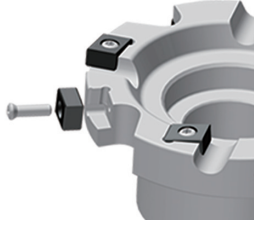


Article	* Stock	Dimensions [mm]					Teeth	Coupling	kg	Inserts 
		ØD	ød	b	ap	L				
XMP01-080*18-B27-CNE1210-08	●	80	27	18	15	50	8	B	0.67	CNE12
XMP01-100*18-B32-CNE1210-08	●	100	32	18	20	50	8	B	0.99	
XMP01-125*27-B40-CNE1210-15	●	125	40	27	22.5	63	15	B	2.46	
XMP01-160*27-C40-CNE1210-18	●	160	40	27	25	63	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	

● Ex stock ○ On demand

* With internal cooling

Spare parts		
	Insert ØD	CNE12 80-400
	Screw (insert)	I60M4x12 (3.4Nm)
	Wrench (insert)	WT15IP



A

Turning

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

CNE	L	S	d
12	12.8	6.35	4.4

Milling inserts

CN** milling insert		HC ¹ (CVD)						HC ¹ (PVD)						HT	HC ²	HW
	P	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	
	M	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	
	K															⊗
	N															⊗
	S															
	H															

B

Milling

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				○			●															

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

C

Drilling

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System code > B26

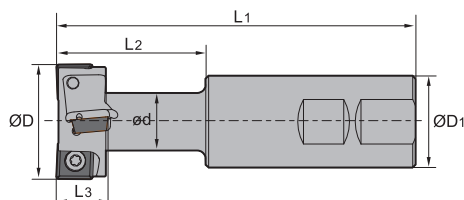
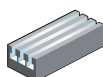
Grade selection > B24

Technical info > B527


Cutting data > B230

T-slot milling

TMP01 Kr: 90°

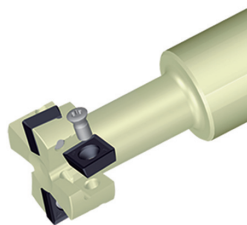





Weldon shank

Article	* Stock	Dimensions [mm]						Teeth	No. of inserts	T-slot specification	Inserts 
		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	

● Ex stock ○ On demand

* With internal cooling

Spare parts		MPHT0603	MPHT0803	MPHT1204	
Insert	ØD	21-25	32	40-60	
 Screw (insert)		I60M2.5×5.5 (1.0 Nm)	I60M3×7 (1.8 Nm)	I60M5×10 (6.7 Nm)	
 Wrench (insert)		WT07IP	WT09IP		
 Wrench (insert)				WT20IT	

System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230



A

Turning

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Turning

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Technical Information

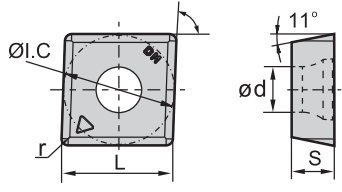

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-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions

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

Milling inserts

MP** milling insert		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	
	MPHT060304-DM	0.4	●			●											●							
	MPHT080305-DM	0.5	●			○											●							
	MPHT120408-DM	0.8	●			○		●									●							

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

System code > B26

Grade selection > B24

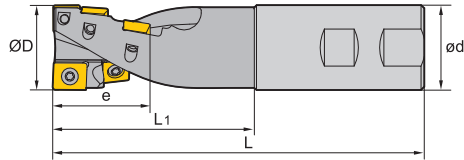
Technical info > B527

Cutting data > B230




Helical milling

HMP01 Kr: 90° 





Weldon shank

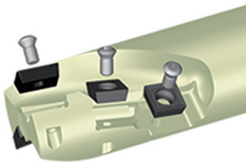
Article	* Stock	Dimensions [mm]						Teeth row	Teeth		Shanktype	Inserts 
		ØD	e	ød	L ₁	L	APKT		SPMT			
HMP01-040x55-XP40-SP12-02	●	40	55	40	95	175	2	1	5	Weldon	APKT1504 & SPMT1204	
HMP01-050x55-XP40-SP12-04	●	50	55	40	95	175	4	2	10	Weldon		

● Ex stock ○ On demand

* With internal cooling

Spare parts

Insert		APKT1504 & SPMT1204	APKT1504 & SPMT1204
ØD		40	50
 Screw (insert)		I60M5×10 (6.7 Nm)	I60M5×13 (6.7 Nm)
 Wrench (insert)		WT20T	WT20T



System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230

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Turning

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Milling

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Drilling

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Technical Information

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- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

APKT	L	S	d
15 04	16.33	4.76	5.4

Milling inserts

AP** milling insert		HC ¹ (CVD)						HC ¹ (PVD)					HT	HC ²	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
	APKT150412-PM	1.2	12.7			●												●						

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

SPMT	L	I.C	S	d
12 04	12.7	12.7	4.76	5.5

Milling inserts

SP** milling insert		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
	SPMT120408-PM	0.8			●												●						

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

System code > B26

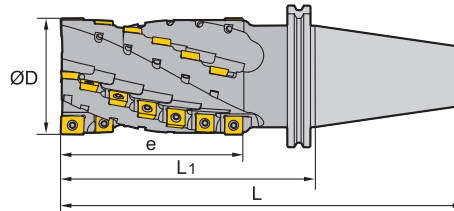
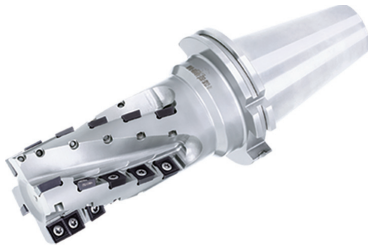
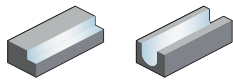
Grade selection > B24


Technical info > B527

Cutting data > B230

Helical milling



HMP01 Kr: 90°




Article	* Stock	Dimensions [mm]				Teeth row	Teeth		Shanktype	Inserts
		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	

● Ex stock ○ On demand

* With internal cooling

Spare parts		
Insert	APKT1504 & SPMT1204	
ØD	50-80	
 Screw (insert)	I60M5x10 (6.7 Nm)	
 Wrench (insert)	WT20IS	



System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230

A

Turning

B

Milling

C

Drilling

D

Technical Information

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Index

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

APKT	L	S	d
15 04	16.33	4.76	5.4

Milling inserts

AP** milling insert		HC ¹ (CVD)						HC ¹ (PVD)					HT	HC ²	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
	APKT150412-PM	1.2	12.7			●												●						

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

SPMT	L	I.C	S	d
12 04	12.7	12.7	4.76	5.5

Milling inserts

SP** milling insert		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
	SPMT120408-PM	0.8			●												●						

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide


System code > B26

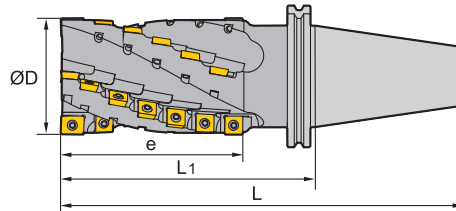
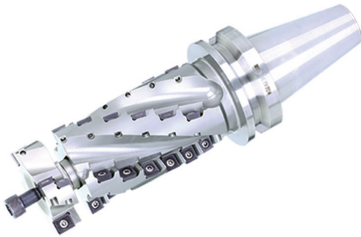
Grade selection > B24


Technical info > B527

Cutting data > B230

Helical milling






HMP01 EC Kr: 90° 

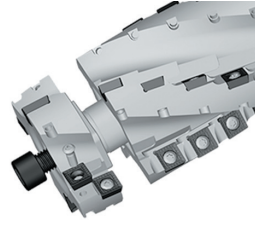


Article	*	Stock	Dimensions [mm]				Teeth row	Teeth		Shanktype	Inserts 
			ØD	e	L ₁	L		APKT	SPMT		
HMP01-050x84EC-BT50-SP12-04		○	50	84	145	246.8	4	2	16	BT	APKT1504 & SPMT1204
HMP01-050x84EC-JT50-SP12-04		●	50	84	145	246.75	4	2	16	JT	
HMP01-063x74EC-BT50-SP12-04		○	63	74	135	236.8	4	2	14	BT	
HMP01-063x74EC-JT50-SP12-04		○	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	

● Ex stock ○ On demand

* With internal cooling

Spare parts		APKT1504 & SPMT1204	APKT1504 & SPMT1204	APKT1504 & SPMT1204
Insert	ØD	50	63	80
 Indexable head		050EC	063EC	080EC
 Screw (head)		M10×50 (16.6 Nm)	M10×50 (16.6 Nm)	M12×55 (25.2 Nm)
 Screw (insert)		I60M5×13 (6.7 Nm)	I60M5×13 (6.7 Nm)	I60M5×13 (6.7 Nm)
 Wrench (head)		WH80L	WH80L	WH100L
 Wrench (insert)		WT20IS	WT20IS	WT20IS



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APKT	L	S	d
15 04	16.33	4.76	5.4

Milling inserts

AP** milling insert		HC ¹ (CVD)						HC ¹ (PVD)					HT	HC ²	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
	APKT150412-PM	1.2	12.7			●												●						

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

- Ideal machining conditions
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SPMT	L	I.C	S	d
12 04	12.7	12.7	4.76	5.5

Milling inserts

SP** milling insert		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
	SPMT120408-PM	0.8			●												●						

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide


System code > B26

Grade selection > B24

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Cutting data > B230

Chamfer milling

CMZ01 Kr: 30° 



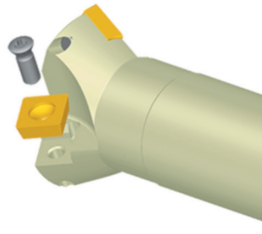


Straight shank

Article	*	Stock	Dimensions [mm]				Teeth	kg	Inserts
			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	

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert ØD	SPMT1204 12-32	
 Screw (insert)		M3M5×11 (6.7Nm)	
 Wrench (insert)		WT20IS	

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SPMT	L	I.C	S	d
12 04	12.7	12.7	4.76	5.5

Milling inserts

SP** milling insert		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	
	SPMT120408-HT-1	0.8												○											
	SPMT120408	0.8	○	●	○		●	○										○							

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide


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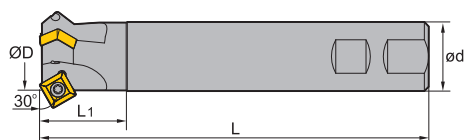
Grade selection > B24

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Chamfer milling

CMZ01 Kr: 30° 



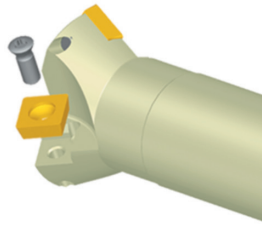


Weldon shank

Article	*	Stock	Dimensions [mm]				Teeth	kg	Inserts
			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	

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert ØD	SPMT1204 12-32	
	Screw (insert)	M3M5x11 (6.7Nm)	
	Wrench (insert)	WT20IS	

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SPMT	L	I.C	S	d
12 04	12.7	12.7	4.76	5.5

Milling inserts

SP** milling insert		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
	SPMT120408-HT-1	0.8												○										
	SPMT120408	0.8	○	●	○		●	○										○						

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide


System code > B26

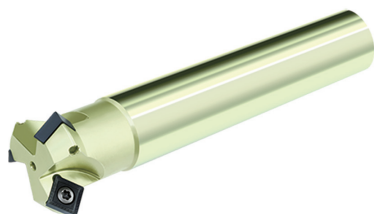
Grade selection > B24

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Chamfer milling

CMA01 Kr: 45° 



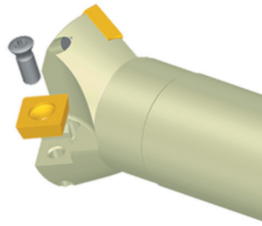


Straight shank

Article	*	Stock	Dimensions [mm]				Teeth	kg	Inserts
			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	

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert ØD	SPMT1204 12-32	
	Screw (insert)	M3M5x11 (6.7Nm)	
	Wrench (insert)	WT20IS	

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SPMT	L	I.C	S	d
12 04	12.7	12.7	4.76	5.5


Milling inserts

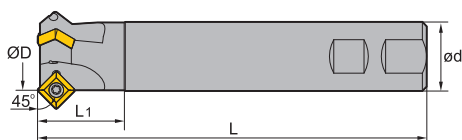
SP** milling insert		HC ¹ (CVD)						HC ¹ (PVD)						HT	HC ²	HW									
	P	●	●	●	●	●	●	●	●	●	●	●	●	●	●										
	M	●	●	●	●	●	●	●	●	●	●	●	●	●	●										
	K							●						●		●									
	N							●								●									
	S		●	●				●	●	●	●	●	●												
	H																								
	ISO	r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201	
	SPMT120408-HT-1	0.8												○											
	SPMT120408	0.8	○	●	○		●	○										○							

● Ex stock ○ On demand


HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Chamfer milling

CMA01 Kr: 45° 





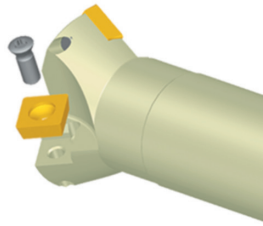
Weldon shank

Article	*	Stock	Dimensions [mm]				Teeth	kg	Inserts
			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	

● Ex stock ○ On demand

* With internal cooling

Spare parts		
	Insert ØD	SPMT1204 12-32
	Screw (insert)	M3M5x11 (6.7Nm)
	Wrench (insert)	WT20IS



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12 04	12.7	12.7	4.76	5.5

Milling inserts


SP** milling insert		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
	SPMT120408-HT-1	0.8												○										
	SPMT120408	0.8	○	●	○		●	○										○						

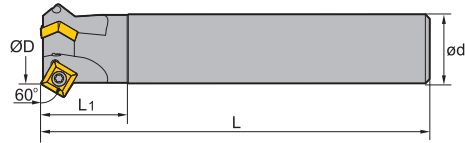
● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide




Chamfer milling

CMD01 Kr: 60° 



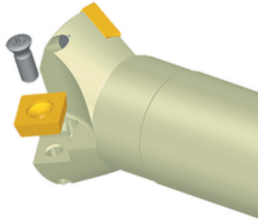


Straight shank

Article	*	Stock	Dimensions [mm]				Teeth	kg	Inserts
			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	

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert ØD	SPMT1204 12-36	
	Screw (insert)	M3M5×11 (6.7Nm)	
	Wrench (insert)	WT20IS	

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SPMT	L	I.C	S	d
12 04	12.7	12.7	4.76	5.5

Milling inserts

SP** milling insert		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
	SPMT120408-HT-1	0.8												○										
	SPMT120408	0.8	○	●	○		●	○										○						

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide


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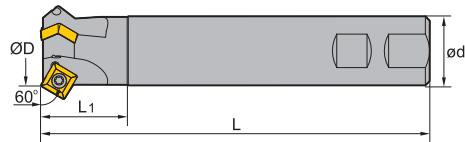
Grade selection > B24

Technical info > B527


Cutting data > B230

Chamfer milling

CMD01 Kr: 60° 



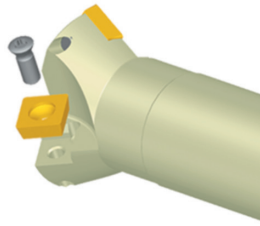


Weldon shank

Article	*	Stock	Dimensions [mm]				Teeth	kg	Inserts
			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	

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert ØD	SPMT1204 12-36	
	Screw (insert)	M3M5x11 (6.7Nm)	
	Wrench (insert)	WT20IS	

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- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

SPMT	L	I.C	S	d
12 04	12.7	12.7	4.76	5.5

Milling inserts

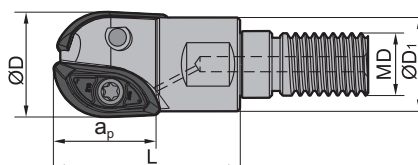
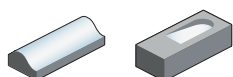
SP** milling insert		HC ¹ (CVD)						HC ¹ (PVD)						HT	HC ²	HW								
	P	●	●	●	●	●	●	●	●	●	●	●	●	●	●									
	M	●	●	●	●	●	●	●	●	●	●	●	●	●	●									
	K							●						●		●								
	N							●								●								
	S		●	●				●	●	●	●	●	●											
	H																							
	ISO	r	YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201
	SPMT120408-HT-1	0.8												○										
	SPMT120408	0.8	○	●	○		●	○										○						

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Profile milling

QCH - XPHT



Article	*	Stock	Dimensions [mm]					Teeth	kg	Inserts
			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

● Ex stock ○ On demand

* With internal cooling

Spare parts							
Insert	XPHT16	XPHT20	XPHT25	XPHT30	XPHT32		
ØD	16	20	25	30	32		
Screw (insert)	I60M2.5×6.5 (1.0 Nm)		I60M4×10 (3.4 Nm)	I60M5×13.2 (6.7 Nm)	I60M5×13.2 (6.7 Nm)		
Screw (insert)		I60M3.5×8TT (2.7 Nm)					
Wrench (insert)		WT10IP					
Wrench (insert)				WT20IT	WT20IT		
Wrench (insert)	WT07P						
Wrench (insert)			WT15S				

System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230

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Turning

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Technical Information

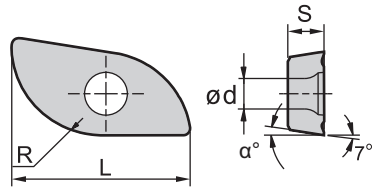





















































































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XPHT	L	S	d
16	16	3.18	3.1
20	20	3.97	4
25	25	4.76	4.7
30	30	6.35	5.8
32	32	6.35	5.8

-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions

Milling inserts

XP** milling insert		HC ¹ (CVD)						HC ¹ (PVD)						HT	HC ²	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																						

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

System code > B26

Grade selection > B24

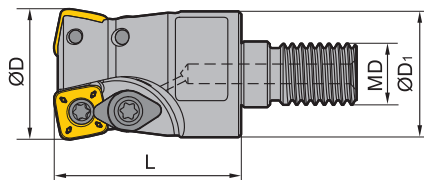
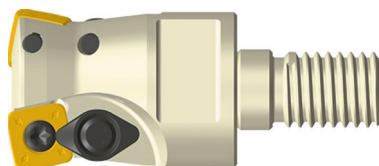
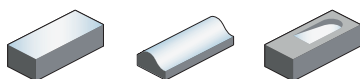
Technical info > B527

Cutting data > B230



High-feed mills

QCH - SDMT Kr: 15°



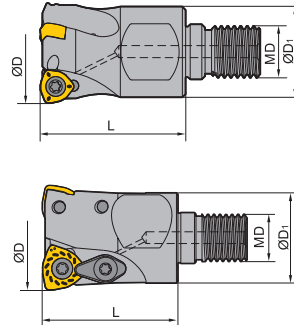
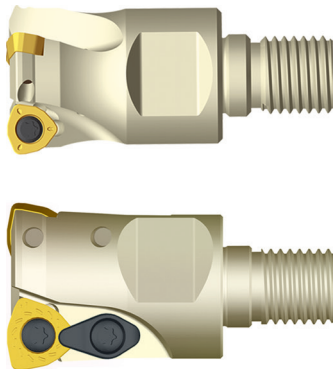
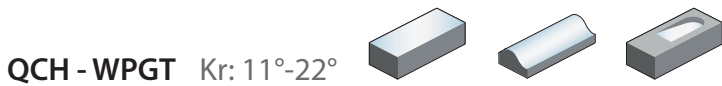
Article	*	Stock	Dimensions [mm]				Teeth	kg	Inserts
			ØD	ØD ₁	L	MD			
QCH-20-SDMT06-M10-03		●	20	19	30	10	3	0.058	SDMT06T2
QCH-25-SDMT06-M12-04		●	25	24	35	12	4	0.097	
QCH-32-SDMT06-M16-05		○	32	30	45	16	5	0.183	
QCH-25-SDMT09-M12-02		○	25	24	35	12	2	0.088	SDMT09T3
QCH-30-SDMT09-M16-03		●	30	29	45	16	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	

● Ex stock ○ On demand

*With internal cooling

Spare parts					
	Insert	SDMT06T2	SDMT09T3	SDMT1204	
	ØD	20-35	25-35	32-40	
	Clamp		WD-204	WD-204	
	Screw (clamp)			I60M4x8.4 (3.4 Nm)	
	Screw (clamp)		I60M3.5x08TT (2.7 Nm)		
	Screw (insert)	I60M2.2x5.5 (0.8 Nm)	I60M4x8.4 (3.4 Nm)	I60M4x8.4 (3.4 Nm)	
	Wrench (clamp)		WT10IP	WT15IP	
	Wrench (insert)	WT07IP	WT15IP	WT15IP	

High-feed mills



Article	*	Stock	Dimensions [mm]				Teeth	kg	Inserts
			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

● Ex stock ○ On demand

* With internal cooling

Variable lead angle (lead angle ist hier dependent on size of inserts)
 lead angle: WPGT05: 16°; WPGT06: 22°; WPGT08: 11°; WPGT09: 21°

Spare parts					
	Insert	WPGT0503	WPGT0604	WPGT0806	
	ØD	20	25-42	35	
	Clamp			WD-208	
	Screw (clamp)			I60M5×13 (6.7 Nm)	
	Screw (insert)		I60M4×8.4 (3.4 Nm)	I60M5×13 (6.7 Nm)	
	Screw (insert)	I60M3.5×08TT (2.7 Nm)			
	Wrench (clamp)			WT20IT	
	Wrench (insert)			WT20IT	
	Wrench (insert)	WT10P	WT15P		

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- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

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

Milling inserts

WP** positive insert		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	
	WPGT050315ZSR-PM	1.5													●										
	WPGT060415ZSR-PM	1.5	●												●	●		●							
	WPGT080615ZSR-PM	1.5	●												●	●		●							
	WPGT050315ZSR	1.5	●				●						●												
	WPGT060415ZSR	1.5	●				●						●		●										
	WPGT080615ZSR	1.5	●				●						●		●										

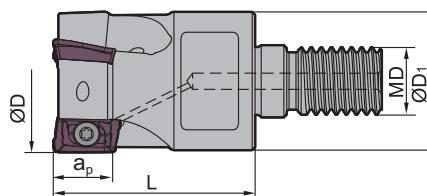
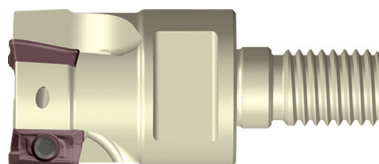
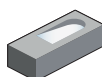
● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide



QCH series

QCH - APKT Kr: 90°



Article	*	Stock	Dimensions [mm]					Teeth	kg	Inserts
			ØD	ØD ₁	a _p	L	MD			
QCH-16-APKT11-M8-02		●	16	12.5	10.5	25	8	2	0.028	APKT11T3
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	
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		
QCH-40-APKT16-M16-04		○	40	29	10.5	46	16	4		

● Ex stock ○ On demand

* With internal cooling

Spare parts				
Insert	APKT11T3	APKT1604		
ØD	16-40	25-40		
Screw (insert)		I60M4x8,4 (3.4Nm)		
Screw (insert)	I60M2.5x6.5T (1.0Nm)			
Wrench (insert)	WT08IP	WT15IP		

System code > B26




Grade selection > B24

Technical info > B527

Cutting data > B230

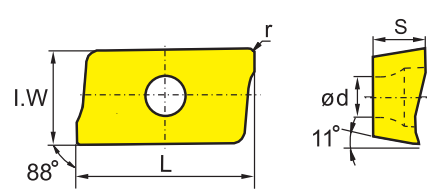















































































A

Turning

-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions







APKT	L	S	d
11 T3	12.24	3.6	2.8
16 04	17.877	5.76	4.4

Milling inserts

AP** milling insert		HC ¹ (CVD)						HC ¹ (PVD)					HT	HC ²	HW	
		P	M	K	N	S	H									
																
																
																
																
																
																

B

Milling

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	○								○													

● Ex stock ○ On demand




- HC¹ Coated carbide
- HT Uncoated cermet
- HC² Coated cermet
- HW Uncoated carbide

F

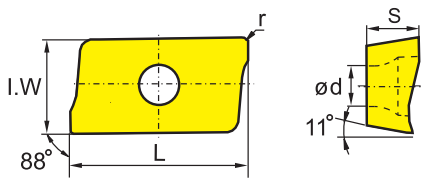


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Milling inserts

-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions

APKT	L	S	d
11 T3	12.24	3.6	2.8
16 04	17.877	5.76	4.4

AP** milling insert			HC ¹ (CVD)						HC ¹ (PVD)					HT	HC ²	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									●										●							

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

A

Turning

B

Milling

C

Drilling

D

Technical Information

E

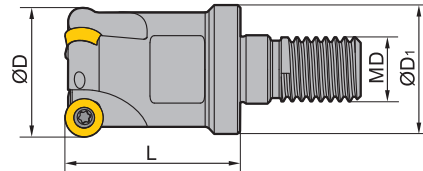
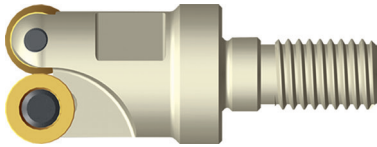
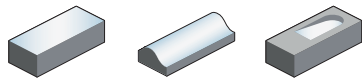
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Indexable milling QCH series

QCH series

QCH - RD



Article	*	Stock	Dimensions [mm]				Teeth	kg	Inserts
			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

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	RDKW0702	RDKW10T3	RDKW1605	
		ØD	16-25	20-32	
	Screw (insert)	I60M2.5×5.0 (1.0 Nm)	I60M4×8 (3.4 Nm)	I60M5×13 (6.7 Nm)	
	Wrench (insert)	WT08IP	WT15IP		
	Wrench (insert)			WT20IT	

System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

RDKT
10 T3

Milling inserts

RD** milling insert		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	
	RDKT10T3MO-MM																	○						

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

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

Milling inserts

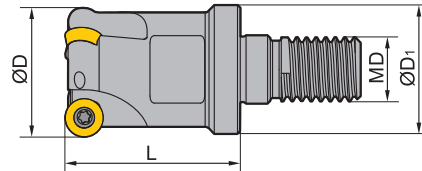
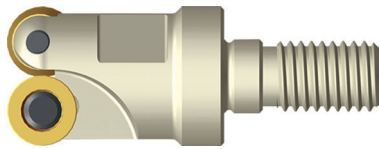
RD** milling insert		HC ¹ (CVD)						HC ¹ (PVD)					HT	HC ²	HW									
	P	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗										
	M	⊗	⊗	⊗	⊗	⊗		⊗	⊗	⊗	⊗	⊗	⊗	⊗										
	K							⊗							⊗									
	N							⊗							⊗									
	S			⊗	⊗			⊗	⊗	⊗	⊗	⊗	⊗	⊗										
	H																							
ISO		YBC302	YBC301	YBC401	YBM253	YBM251	YBM351	YBD152	YBD252	YBG101	YBG102	YBG202	YBG212	YBS203	YBG205	YB9320	YBG302	YBS303	YBG252	YNG151	YNG151C	YD101	YD201	
	RDKW10T3MO	●	○								●	○					○							
	RDKW1605MO						○					○	○				○							
	RDKW0702MO-1						●					○			●									
	RDKW0702MO-2										●													

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

QCH series

QCH - RD



Article	*	Stock	Dimensions [mm]				Teeth	kg	Inserts
			ØD	ØD ₁	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	RDKW1003	
QCH-20-RDKW1003-M10-02	●		20	18	30	10	2		
QCH-25-RDKW1003-M12-02	●		25	21	35	12	2		
QCH-25-RDKW1003-M12-03	●		25	21	35	12	3	RDKW1003	
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	RDKW12T3	
QCH-24-RDKW12T3-M12-02	●		24	21	35	12	2		
QCH-35-RDKW12T3-M16-03	●		35	29	43	16	3		
QCH-42-RDKW12T3-M16-04	●		42	29	43	16	4	RDKW1604	
QCH-32-RDKW1604-M16-02	●		32	29	43	16	2		

● Ex stock ○ On demand

* With internal cooling

Spare parts					
	Insert	RDKW0702	RDKW1003	RDKW12T3	RDKW1604
	ØD	15-25	20-42	24-42	32
	Clamp				WX16N
	Screw (clamp)				I60M4.5×10 (5.0 Nm)
	Screw (clamp)			LOM3.5×7.1	
	Screw (insert)	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)
	Wrench (insert)	WT07P	WT15P	WT15P	
	Wrench (insert)				WT20T




System code > B26

Grade selection > B24

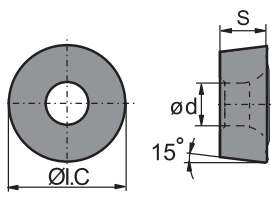

Technical info > B527

Cutting data > 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

-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions

Milling inserts

RD** milling insert		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			●											●										
	RDKW12T3MO-1				○	●						○			●	●									
	RDKW12T3MO-2									●						○									
	RDKW12T3MO-3			●											●										
	RDKW1604MO-1						●					○			●	●	●								
	RDKW1604MO-2										○														
RDKW1604MO-3		○		●				●		○				●		●									

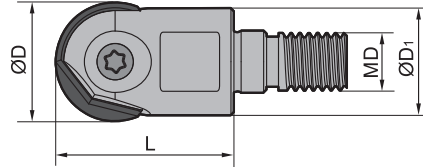
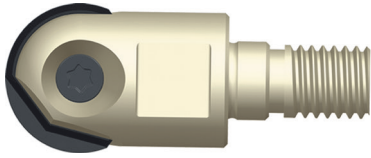
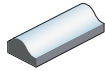
● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide



QCH series

QCH - ZOHX



Article	*	Stock	Dimensions [mm]				kg	Inserts
			ØD	ØD ₁	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

● Ex stock ○ On demand

* With internal cooling

Spare parts		ZOHX16	ZOHX20	ZOHX25	ZOHX30	ZOHX32	
Insert	ØD	16	20	25	30	32	
Screw (insert)		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)	
Wrench (insert)		WT20IP	WT20IP	WT20IP			
Wrench (insert)					WT30IT	WT30IT	




System code > B26

Grade selection > B24

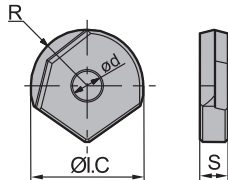


Technical info > B527

Cutting data > B230

ZOXX	I.C	S	d
16	16	4	5
20	20	5	5
25	25	6	6
30	30	7	8
32	32	7	8

-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions

Milling inserts

ZO** milling insert			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	
	ZOXX1604-GF	8																							
	ZOXX2005-GF	10																							
	ZOXX2506-GF	12.5																							
	ZOXX3007-GF	15																							
	ZOXX3207-GF	16																							
	ZOXX1604-GM	8																							
	ZOXX2005-GM	10																							
	ZOXX2506-GM	12.5																							
	ZOXX3007-GM	15																							
	ZOXX3207-GM	16																							

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

A

Turning

B

Milling

C

Drilling

D

Technical Information

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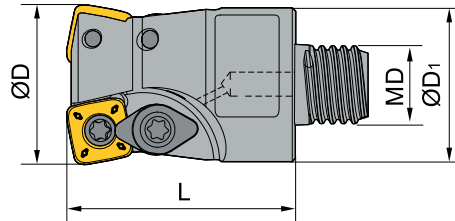
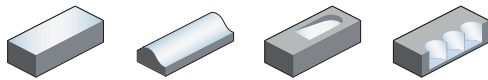
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Indexable milling QCH series

QCH series

QCH-SDMT-Q



Article	*	Stock	Dimensions [mm]				Teeth	kg	Inserts
			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	

● Ex stock ○ On demand

* With internal cooling




Spare parts		
	Insert	SDMT09T3
	ØD	25-35
	Clamp	WD-204
	Screw (clamp)	I60M4x8.4 (3.4 Nm)
	Screw (insert)	I60M3.5x08TT (2.7 Nm)
	Wrench (insert)	WT10IP

System code > B26

Grade selection > B24

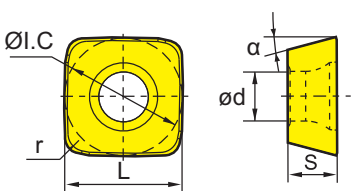



Technical info > B527

Cutting data > B230

-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions

SDMT	L	I.C	S	d
09 T3	9.525	9.525	3.97	4

Milling inserts

SD** milling insert			HC ¹ (CVD)						HC ¹ (PVD)					HT	HC ²	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				●			○				○			●									

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

A

Turning

B

Milling

C

Drilling

D

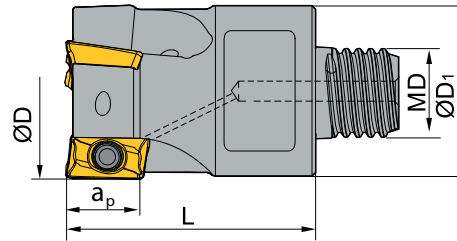
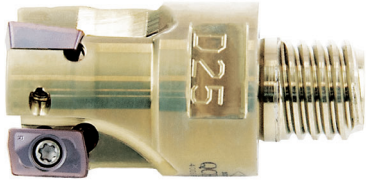
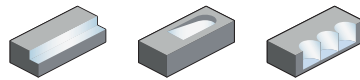
Technical Information


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QCH series

QCH-APKT-Q Kr: 90°





Article	*	Stock	Dimensions [mm]					Teeth	kg	Inserts
			ØD	ØD ₁	a _p	L	MD			
QCH-16-APKT11-Q10-02	*	●	16	15.2	10.5	28	10	2	0.028	 APKT11T3
QCH-20-APKT11-Q12-02	*	○	20	19	10.5	30	12	2	0.059	
QCH-25-APKT11-Q14-03	*	●	25	24	10.5	35	14	3	0.104	

● Ex stock ○ On demand

* With internal cooling

Spare parts

	Insert	APKT11T3
	ØD	16-25
	Screw (insert)	I60M2.5x5.5 (1.0Nm)
	Wrench (insert)	WT07IP

System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230

A

Turning

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Technical Information

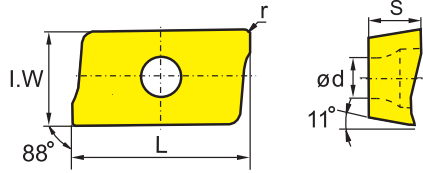
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- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

APKT	L	S	d
11 T3	12.24	3.6	2.8

Milling inserts



AP** milling insert			HC ¹ (CVD)						HC ¹ (PVD)					HT	HC ²	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
ISO	r	I.W																												
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																	●					●								

● Ex stock ○ On demand

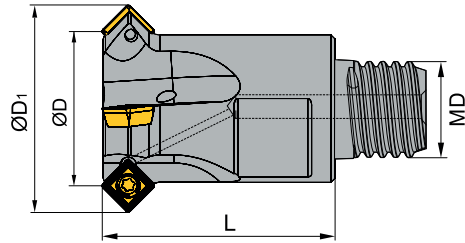
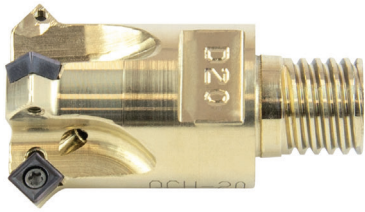
HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide



A Turning
B Milling
C Drilling
D Technical Information
E Index



QCH series

QCH-SPGT-Q



Article	*	Stock	Dimensions [mm]				Teeth	kg	Inserts
			ØD	ØD ₁	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	

- Ex stock ○ On demand
- * With internal cooling

Spare parts		
	Insert	SPGT0502
	ØD	16-20
	Screw (insert)	I60M2×4.3 (0.5 Nm)
	Wrench (insert)	WT06IP

System code > B26

Grade selection > B24

Technical info > B527

Cutting data > B230

A

Turning

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Technical Information

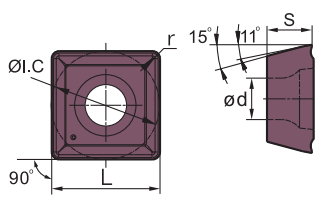


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SPGT
05 02

-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions

Milling inserts

SP** drilling insert		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												●		●									

● Ex stock ○ On demand

HC¹ Coated carbide
HT Uncoated cermet
HC² Coated cermet
HW Uncoated carbide

A

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System code > B26

Grade selection > B24

Technical info > B527

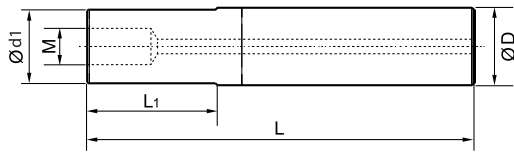
Cutting data > B230



A

Indexable heads shanks

Solid carbide shank, stepped, Q thread



Turning

B

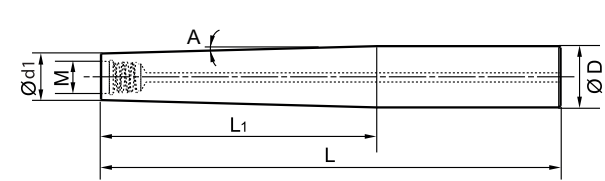
Milling

Article	Dimensions [mm]				Thread (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	●

C

Drilling

Solid carbide shank, tapered, Q thread




D

Technical Information

Article	Dimensions [mm]				Thread (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	●

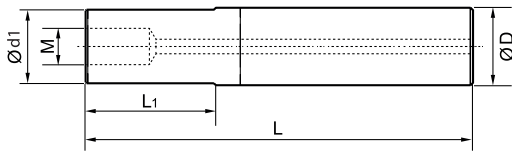
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Spare parts				
	Thread	Q8 / Q10	Q12 / Q14	Q18
	Wrench	QCH-10x13	QCH-16x20	QCH-26

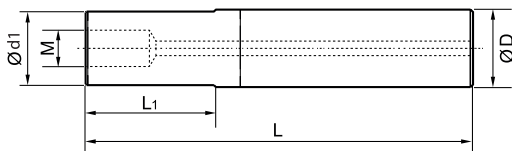
Indexable heads shanks

Steel shank, stepped, Q thread



Article	Dimensions [mm]				Thread (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	●

Solid carbide shank, stepped, metric thread



Article	Dimensions [mm]				Thread (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	○

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HNGX	L	I.C	S
09 05	9.16	15.875	5.56

Milling inserts

HN** milling insert			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
	HNGX090530-HDR	3							○	○														
	HNGX090516-MR	1.6							●															
	HNGX090520-MR	2							●															

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide



- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

LNE3	L	I.W	S
2.53	15.875	4.76	9.525

Milling inserts

LN** milling insert		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
	LNE32.534	1.6					○	○	○															

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

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LNCX	L	I.W	S
18 06	24	10	6.4

Milling inserts

LN** milling insert		HC ¹ (CVD)						HC ¹ (PVD)						HT	HC ²	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							○															

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide



- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

SNKN	L	I.C	S
12 04	12.7	12.7	4.76
15 04	15.875	15.875	4.76

Milling inserts

SN** milling insert			HC ¹ (CVD)						HC ¹ (PVD)						HT	HC ²	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	○																							

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

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SPCN	L	I.C	S
12 03	12.7	12.7	1.4
15 04	15.875	15.875	1.4

Milling inserts

SP** milling insert		HC ¹ (CVD)								HC ¹ (PVD)								HT	HC ²	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	●																					

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide



- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

SPMR	L	I.C	S
09 03	9.525	9.525	3.18
12 03	12.7	12.7	3.18

Milling inserts

SP** milling insert		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
	SPMR090304	0.4				○																		
	SPMR090308	0.8				○																		
	SPMR120304	0.4				●																		
	SPMR120308	0.8				●	○																	
	SPMR120312	1.2					○																	

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

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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

Milling inserts

SP** milling insert			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
	SPMT120408-HT-1	0.8												○										
	SPMT09T308-HT	0.8				●		●					○											
	SPMT060304-KT	0.4												○										

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

System code > B26

Grade selection > B24

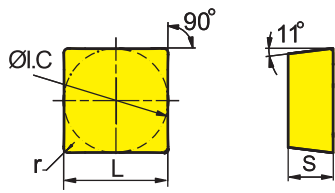
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SP**	L	I.C	S
12 03	12.7	12.7	3.18
15 04	15.875	15.875	4.76

Milling inserts



SP** milling insert			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
	SPGN120304	0.4											○											
	SPGN120308	0.8											○											
	SPUN120308	0.8					●	○																○
	SPUN120312	1.2					●																	
	SPUN150408	0.8																						○
	SPUN150412	1.2																						○

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

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TPKN	L	I.C	S
16 03	16.5	9.525	3.18

Milling inserts

TP** milling insert				HC ¹ (CVD)						HC ¹ (PVD)						HT	HC ²	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																							○

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide



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

- Ideal machining conditions
- ⊗ Normal machining conditions
- ⊗ Unfavourable machining conditions

Milling inserts

TP** milling insert			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
	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						○																	

● Ex stock ○ On demand

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide



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Guide for recommended cutting data – indexable milling

Indexable milling – group 1 (FMA07/11/12, FMD02, EMP09/13)

Material group	Composition / structure / heat treatment	Brinell hardness HB	Machining group	Starting values for cutting speed v_c (m/min)								
				HC (CVD)								
				YBC302		YBC401		YBD152		YBD252		
				a_p / D		a_p / D		a_p / D		a_p / D		
1/1 3/4		1/5		1/1 3/4		1/5		1/1 3/4		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				
P 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				
P 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	
K Cast iron with spheroidal graphite	ferritic		160	18				255	295	220	255	
	perlitic		250	19				170	200	145	170	
K 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								
	≤ 12 % Si, cannot be hardened		75	24								
	≤ 12 % Si, hardenable	hardened	90	25								
N Cast aluminium alloys	> 12 % Si, cannot be hardened		130	26								
N 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 base	annealed	250	32								
		hardened	350	33								
S Titanium alloys	cast	320	34									
	pure titanium		R _m 400	35								
S α and β alloys	hardened		R _m 1050	36								
H Hardened steel		hardened and tempered	55 HRC	37								
		hardened and tempered	60 HRC	38								
		cast	400	39								
H 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	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
	Low-alloyed steel		0,23	0,47		0,22			0,23		0,17	0,22		0,17	0,22			0,19	0,21
	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
	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
	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										
	Aluminium-Gusslegierungen					0,20			0,21										
	Copper and copper alloys(bronze/brass)					0,18			0,19										
S	Heat-resistant alloys																		
	Titanium alloys																		
H	Hardened steel																		
	Hard cast iron																		
X	Hardened cast iron																		
	Non-metallic materials																		

1. Select the appropriate product family/cutting data group.
2. Select the used grade.
3. Determine the immersion.
4. Select the used material and read the cutting speed.
5. Please have a look at the detached feed rate recommendations.
6. Select the used tool, the machining mode and the used material.

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Indexable milling – group 1 (FMA07/11/12, FMD02, FMP12, EMP09/13)

	Material group	Composition / structure / heat treatment		Brinell hardness HB	Machining group	Starting values for cutting speed 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			
A Turning	P Unalloyed steel	approx. 0,15 % C	annealed	125	1	260	300	225	260				
		approx. 0,45 % C	annealed	190	2	225	255	195	225				
		approx. 0,45 % C	tempered	250	3	210	240	180	210				
		approx. 0,75 % C	annealed	270	4	185	210	160	185				
		approx. 0,75 % C	tempered	300	5	170	195	150	170				
B Milling	P 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					
C Drilling	M Stainless steel	ferritic/martensitic	annealed	200	12								
			martensitic	tempered	240	13							
			austenitic	quench hardened	180	14							
			austenitic-ferritic		230	15							
			Grey cast iron	perlitic/ferritic	180	16				370	430	320	370
D Technical Information	K Cast iron with spheroidal graphite		perlitic (martensitic)	260	17				220	255	190	220	
			ferritic	160	18				255	295	220	255	
			perlitic	250	19				170	200	145	170	
			ferritic	130	20				305	355	265	305	
			perlitic	230	21				205	240	175	205	
E Index	N Aluminium wrought alloys	cannot be hardened		60	22								
			hardenable	hardened	100	23							
		Cast aluminium alloys	$\leq 12\% \text{ Si}$, cannot be hardened		75	24							
				$\leq 12\% \text{ Si}$, hardenable	hardened	90	25						
				$> 12\% \text{ Si}$, cannot be hardened		130	26						
S Heat-resistant alloys	Copper and copper alloys (bronze/brass)	machining steel, PB > 1%		110	27								
			CuZn, CuSnZn	90	28								
			CuSn, Pb-free copper, electrolytic copper	100	29								
F Index	X Non-metallic materials		Fe-based alloys	annealed	200	30							
				hardened	280	31							
				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								
	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 B254.
 For examples of material for cutting tool groups view page D11.

Starting values for cutting speed 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 Coated carbide
 HT Uncoated carbide, main component (TiC) o. (TiN), cermet
 HC₁ Coated cermet
 HW Uncoated carbide, main component (WC)

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Indexable milling – group 2 (FMA01/02/03/04, FME01/02, FMP01/02, EMP01/02/03/04)

	Material group	Composition / structure / heat treatment		Brinell hardness HB	Machining group	Starting values for cutting speed 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	
A Turning	P Unalloyed steel	approx. 0,15 % C	annealed	125	1	245	285	210	245					
		approx. 0,45 % C	annealed	190	2	210	245	180	210					
		approx. 0,45 % C	tempered	250	3	200	230	170	200					
		approx. 0,75 % C	annealed	270	4	175	200	150	175					
		approx. 0,75 % C	tempered	300	5	160	190	140	160					
B Milling	P Low-alloyed steel		annealed	180	6	210	245	180	210					
			tempered	275	7	175	200	150	175					
			tempered	300	8	160	190	140	160					
			tempered	350	9	135	160	120	135					
		High-alloyed steel and high-alloyed tool steel	annealed	200	10	125	145	105	125					
		hardened and tempered	325	11	90	100	75	90						
C Drilling	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					315	365	270	315
		perlitic (martensitic)		260	17					185	215	160	190	
	K Cast iron with spheroidal graphite	ferritic		160	18					215	250	185	215	
		perlitic		250	19					145	170	125	145	
	K Malleable cast iron	ferritic		130	20					260	300	225	260	
			perlitic		230	21					175	205	150	175
D Technical Information	N Aluminium wrought alloys	cannot be hardened		60	22									
		hardenable	hardened	100	23									
	N Cast aluminium alloys	$\leq 12\% \text{ Si}$, cannot be hardened			75	24								
		$\leq 12\% \text{ Si}$, hardenable	hardened		90	25								
		$> 12\% \text{ Si}$, cannot be hardened			130	26								
	N Copper and copper alloys (bronze/brass)	machining steel, PB > 1%			110	27								
		CuZn, CuSnZn			90	28								
CuSn, Pb-free copper, electrolytic copper			100	29										
E Index	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								
E Index	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							
E Index	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 B254.
 For examples of material for cutting tool groups view page D11.

Starting values for cutting speed 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 Coated carbide
 HT Uncoated carbide, main component (TiC) o. (TiN), cermet
 HC₁ Coated cermet
 HW Uncoated carbide, main component (WC)

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Indexable milling – group 2 (FMA01/02/03/04, FME01/02, FMP01/02, EMP01/02/03/04)

	Material group	Composition / structure / heat treatment		Brinell hardness HB	Machining group	Starting values for cutting speed vc [m/min]				
						HC ₁				
						YNG151C				
						a _e / D				
						1/1 3/4	1/5			
A Turning	P Unalloyed steel	approx. 0,15 % C	annealed	125	1	285	335			
		approx. 0,45 % C	annealed	190	2	250	285			
		approx. 0,45 % C	tempered	250	3	235	270			
		approx. 0,75 % C	annealed	270	4	205	235			
		approx. 0,75 % C	tempered	300	5	190	225			
	B Milling	Low-alloyed steel		annealed	180	6	250	285		
				tempered	275	7	205	235		
				tempered	300	8	190	225		
				tempered	350	9	160	190		
		High-alloyed steel and high-alloyed tool steel	annealed	200	10	150	170			
		hardened and tempered	325	11	105	120				
C Drilling	M Stainless steel	ferritic/martensitic	annealed	200	12	145	170			
		martensitic	tempered	240	13	120	145			
		austenitic	quench hardened	180	14	155	180			
		austenitic-ferritic		230	15	120	145			
D Technical Information	K Cast iron with spheroidal graphite	Grey cast iron	perlitic/ferritic	180	16					
			perlitic (martensitic)	260	17					
	Malleable cast iron	ferritic		160	18					
		perlitic		250	19					
	N Aluminium wrought alloys	cannot be hardened		60	22					
		hardenable	hardened	100	23					
E Index	S Heat-resistant alloys	Fe-based alloys	annealed	200	30					
			hardened	280	31					
		Ni or Co bass	annealed	250	32					
			hardened	350	33					
Titanium alloys	cast	320	34							
	pure titanium		R _m 400	35						
	α and β alloys	hardened	R _m 1050	36						
F Index	H Hardened steel	Hard cast iron	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	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 B254.
 For examples of material for cutting tool groups view page D11.

Indexable milling – group 3 (FMR01/02/03/04)

	Material group	Composition / structure / heat treatment		Brinell hardness HB	Machining group	Starting values for cutting speed v_c [m/min]								
						HC (CVD)								
						YBC302			YBC401					
						a_e / D			a_e / D					
1/1 3/4	1/5	1/20	1/1 3/4	1/5	1/20									
A Turning	P Unalloyed steel	approx. 0,15 % C	annealed	125	1	260	300	390	225	260	340			
		approx. 0,45 % C	annealed	190	2	225	255	335	195	225	295			
		approx. 0,45 % C	tempered	250	3	210	240	315	180	210	275			
		approx. 0,75 % C	annealed	270	4	185	210	275	160	185	245			
		approx. 0,75 % C	tempered	300	5	170	195	255	150	170	225			
	B Milling	P Low-alloyed steel		annealed	180	6	225	255	335	195	225	295		
				tempered	275	7	185	210	275	160	185	245		
				tempered	300	8	170	195	255	150	170	225		
				tempered	350	9	145	165	215	125	145	190		
	C Drilling	P High-alloyed steel and high-alloyed tool steel		annealed	200	10	130	150	195	115	130	170		
			hardened and tempered	325	11	95	105	140	80	95	125			
D Technical Information	M Stainless steel	ferritic/martensitic	annealed	200	12									
			martensitic	tempered	240	13								
			austenitic	quench hardened	180	14								
			austenitic-ferritic		230	15								
E Index	K Cast iron with spheroidal graphite	perlitic/ferritic		180	16									
			perlitic (martensitic)		260	17								
	K Malleable cast iron	ferritic		160	18									
			perlitic		250	19								
F Index	N Aluminium wrought alloys	cannot be hardened		60	22									
		hardenable	hardened	100	23									
	N Cast aluminium alloys	$\leq 12\% \text{ Si}$, cannot be hardened		75	24									
		$\leq 12\% \text{ Si}$, hardenable	hardened	90	25									
N Copper and copper alloys (bronze/brass)	$> 12\% \text{ Si}$, cannot be hardened		130	26										
	machining steel, PB > 1%		110	27										
	CuZn, CuSnZn		90	28										
H Hardened steel	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											
H Hard cast iron	S Titanium alloys	pure titanium		R_m 400	35									
		α and β alloys	hardened	R_m 1050	36									
H Hardened cast iron	H Hardened steel		hardened and tempered	55 HRC	37									
			hardened and tempered	60 HRC	38									
X Non-metallic materials	X Non-metallic materials		cast	400	39									
			hardened and tempered	55 HRC	40									
		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 B254.
 For examples of material for cutting tool groups view page D11.

Starting values for cutting speed 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 Coated carbide
 HT Uncoated carbide, main component (TiC) o. (TiN), cermet
 HC₁ Coated cermet
 HW Uncoated carbide, main component (WC)

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Indexable milling – group 3 (FMR01/02/03/04)

	Material group	Composition / structure / heat treatment		Brinell hardness HB	Machining group	Starting values for cutting speed v_c [m/min]						
						HC (PVD)						
						YBG212			YBG252			
						a_e / D			a_e / D			
	1/1 3/4	1/5	1/20	1/1 3/4	1/5	1/20						
P	Unalloyed steel	approx. 0,15 % C	annealed	125	1	240	280	365	230	265	345	
		approx. 0,45 % C	annealed	190	2	205	240	315	200	230	300	
		approx. 0,45 % C	tempered	250	3	195	225	295	185	215	280	
		approx. 0,75 % C	annealed	270	4	170	200	260	165	190	250	
		approx. 0,75 % C	tempered	300	5	160	185	245	150	175	230	
	Low-alloyed steel		annealed	180	6	205	240	315	200	230	300	
			tempered	275	7	170	200	260	165	190	250	
			tempered	300	8	160	185	245	150	175	230	
			tempered	350	9	135	155	205	130	150	195	
	High-alloyed steel and high-alloyed tool steel		annealed	200	10	120	140	185	115	135	180	
		hardened and tempered	325	11	85	100	130	85	95	125		
M	Stainless steel	ferritic/martensitic	annealed	200	12	120	140	185	115	135	175	
			martensitic	tempered	240	13	105	120	155	100	115	145
			austenitic	quench hardened	180	14	130	150	195	125	145	185
			austenitic-ferritic		230	15	105	120	155	100	115	145
K	Grey cast iron	perlitic/ferritic		180	16	265	305	400	255	295	385	
		perlitic (martensitic)		260	17	160	185	245	150	175	230	
	Cast iron with spheroidal graphite	ferritic		160	18	180	210	275	175	200	260	
		perlitic		250	19	120	140	185	115	135	180	
	Malleable cast iron	ferritic		130	20	220	255	335	210	240	315	
		perlitic		230	21	145	170	225	140	160	210	
N	Aluminium wrought alloys	cannot be hardened		60	22							
		hardenable	hardened	100	23							
	Cast aluminium alloys	$\leq 12\% \text{ Si}$, cannot be hardened		75	24							
		$\leq 12\% \text{ Si}$, hardenable	hardened	90	25							
		$> 12\% \text{ Si}$, 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 base	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 B254.
 For examples of material for cutting tool groups view page D11.

Indexable milling – group 4 (BMR01/02/03/04, TMP01, CMZ01, CMA01, CMD01)

	Material group	Composition / structure / heat treatment		Brinell hardness HB	Machining group	Starting values for cutting speed v_c [m/min]					
						HC (CVD)					
						YBC302			YBC401		
						a_e / D			a_e / D		
	1/1 3/4	1/5	1/20	1/1 3/4	1/5	1/20					
P	Unalloyed steel	approx. 0,15 % C	annealed	125	1	235	275	360	200	230	300
		approx. 0,45 % C	annealed	190	2	200	235	310	170	200	260
		approx. 0,45 % C	tempered	250	3	190	220	290	160	185	245
		approx. 0,75 % C	annealed	270	4	165	195	255	140	165	215
		approx. 0,75 % C	tempered	300	5	155	180	235	130	150	195
	Low-alloyed steel		annealed	180	6	200	235	310	170	200	260
			tempered	275	7	165	195	255	140	165	215
			tempered	300	8	155	180	235	130	150	195
		tempered	350	9	130	155	205	110	130	170	
High-alloyed steel and high-alloyed tool steel		annealed	200	10	120	140	185	100	115	150	
		hardened and tempered	325	11	85	100	130	70	85	115	
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						
			perlitic (martensitic)		260	17					
	Cast iron with spheroidal graphite	ferritic		160	18						
			perlitic		250	19					
	Malleable cast iron	ferritic		130	20						
			perlitic		230	21					
N	Aluminium wrought alloys	cannot be hardened		60	22						
		hardenable	hardened	100	23						
	Cast aluminium alloys	$\leq 12\% \text{ Si}$, cannot be hardened		75	24						
		$\leq 12\% \text{ Si}$, hardenable	hardened	90	25						
		$> 12\% \text{ Si}$, 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 base	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 B254.
 For examples of material for cutting tool groups view page D11.

Starting values for cutting speed 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 Coated carbide
 HT Uncoated carbide, main component (TiC) o. (TiN), cermet
 HC₁ Coated cermet
 HW Uncoated carbide, main component (WC)

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Indexable milling – group 4 (BMR01/02/03/04, TMP01, CMZ01, CMA01, CMD01)

	Material group	Composition / structure / heat treatment		Brinell hardness HB	Machining group	Starting values for cutting speed v_c [m/min]						
						HC (PVD)						
						YBG212			YBG252			
						a_e / D			a_e / D			
1/1 3/4	1/5	1/20	1/1 3/4	1/5	1/20							
P	Unalloyed steel	approx. 0,15 % C	annealed	125	1	215	250	325	205	240	315	
		approx. 0,45 % C	annealed	190	2	185	215	280	175	205	270	
		approx. 0,45 % C	tempered	250	3	175	200	260	165	195	255	
		approx. 0,75 % C	annealed	270	4	155	175	230	145	170	225	
		approx. 0,75 % C	tempered	300	5	140	165	215	135	160	210	
	Low-alloyed steel		annealed	180	6	185	215	280	175	205	270	
			tempered	275	7	155	175	230	145	170	225	
			tempered	300	8	140	165	215	135	160	210	
		tempered	350	9	120	140	185	115	135	180		
High-alloyed steel and high-alloyed tool steel		annealed	200	10	110	125	165	105	120	160		
		hardened and tempered	325	11	80	90	120	75	85	115		
M	Stainless steel	ferritic/martensitic	annealed	200	12	110	125	165	105	120	160	
			martensitic	tempered	240	13	95	105	140	90	105	135
			austenitic	quench hardened	180	14	115	135	175	110	130	170
			austenitic-ferritic		230	15	95	105	140	90	105	135
K	Grey cast iron	perlitic/ferritic		180	16	240	280	365	230	265	345	
		perlitic (martensitic)		260	17	140	165	215	135	160	210	
	Cast iron with spheroidal graphite	ferritic		160	18	165	190	250	155	180	235	
		perlitic		250	19	110	125	165	105	120	160	
Malleable cast iron	ferritic		130	20	195	225	295	185	220	290		
	perlitic		230	21	130	150	195	125	145	190		
N	Aluminium wrought alloys	cannot be hardened		60	22							
		hardenable	hardened	100	23							
	Cast aluminium alloys	$\leq 12\% \text{ Si}$, cannot be hardened		75	24							
		$\leq 12\% \text{ Si}$, hardenable	hardened	90	25							
		$> 12\% \text{ Si}$, 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 base	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 B254.
 For examples of material for cutting tool groups view page D11.

Indexable milling – group 5 (SMP01/03/05)

	Material group	Composition / structure / heat treatment		Brinell hardness HB	Machining group	Starting values for cutting speed v_c [m/min]			
						HC (CVD)		HC (PVD)	
						YBC302	YBM253	YBG101	YB9320
		a_e / D	a_e / D	a_e / D	a_e / D				
		1/4	1/4	1/4	1/4				
P	Unalloyed steel	approx. 0,15 % C	annealed	125	1	165	180	190	175
		approx. 0,45 % C	annealed	190	2	145	155	165	150
		approx. 0,45 % C	tempered	250	3	135	145	155	140
		approx. 0,75 % C	annealed	270	4	120	130	135	125
		approx. 0,75 % C	tempered	300	5	110	120	125	115
P	Low-alloyed steel		annealed	180	6	145	155	165	150
			tempered	275	7	120	130	135	125
			tempered	300	8	110	120	125	115
			tempered	350	9	95	100	105	100
P	High-alloyed steel and high-alloyed tool steel		annealed	200	10	85	90	95	90
			hardened and tempered	325	11	60	65	70	65
M	Stainless steel	ferritic/martensitic	annealed	200	12		90	95	90
		martensitic	tempered	240	13		80	80	75
		austenitic	quench hardened	180	14		100	105	95
		austenitic-ferritic		230	15		80	80	75
K	Grey cast iron	perlitic/ferritic		180	16			215	190
		perlitic (martensitic)		260	17			125	115
	Cast iron with spheroidal graphite	ferritic		160	18			145	135
		perlitic		250	19			95	90
K	Malleable cast iron	ferritic		130	20			175	160
		perlitic		230	21			115	105
N	Aluminium wrought alloys	cannot be hardened		60	22				
		hardenable	hardened	100	23				
	Cast aluminium alloys	$\leq 12\% \text{ Si}$, cannot be hardened		75	24				
		$\leq 12\% \text{ Si}$, hardenable	hardened	90	25				
		$> 12\% \text{ Si}$, cannot be hardened		130	26				
	Copper and copper alloys (bronze/brass)	machining steel, PB > 1%		110	27				
CuZn, CuSnZn		90	28						
S	Heat-resistant alloys	Fe-based alloys	annealed	200	30				
			hardened	280	31				
		Ni or Co base	annealed	250	32				
			hardened	350	33				
	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 B254.
 For examples of material for cutting tool groups view page D11.

Indexable milling – group 6 (FMD03, FME04, FMP03, HMP01)

	Material group	Composition / structure / heat treatment		Brinell hardness HB	Machining group	Starting values for cutting speed 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				
A Turning	P Unalloyed steel	approx. 0,15 % C	annealed	125	1	200	230	170	200					
		approx. 0,45 % C	annealed	190	2	170	200	145	170					
		approx. 0,45 % C	tempered	250	3	160	185	140	160					
		approx. 0,75 % C	annealed	270	4	140	165	120	140					
		approx. 0,75 % C	tempered	300	5	130	150	115	130					
	B Milling	P Low-alloyed steel		annealed	180	6	170	200	145	170				
				tempered	275	7	140	165	120	140				
				tempered	300	8	130	150	115	130				
				tempered	350	9	110	130	95	110				
			High-alloyed steel and high-alloyed tool steel		annealed	200	10	100	115	85	100			
			hardened and tempered	325	11	70	85	60	70					
C Drilling	M Stainless steel	ferritic/martensitic	annealed	200	12									
			martensitic	tempered	240	13								
			austenitic	quench hardened	180	14								
			austenitic-ferritic		230	15								
	K Cast iron with spheroidal graphite	Grey cast iron	perlitic/ferritic		180	16				255	295	220	255	
			perlitic (martensitic)		260	17				150	175	130	150	
		Malleable cast iron	ferritic		160	18				175	205	150	175	
			perlitic		250	19				115	135	100	115	
	D Technical Information	N Aluminium wrought alloys	cannot be hardened		60	22								
			hardenable	hardened	100	23								
Cast aluminium alloys			$\leq 12\% \text{ Si}$, cannot be hardened		75	24								
			$\leq 12\% \text{ Si}$, hardenable	hardened	90	25								
		$> 12\% \text{ Si}$, cannot be hardened		130	26									
S Heat-resistant alloys		Copper and copper alloys (bronze/brass)	machining steel, PB > 1%		110	27								
			CuZn, CuSnZn		90	28								
			CuSn, Pb-free copper, electrolytic copper		100	29								
E Index			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 B254.
 For examples of material for cutting tool groups view page D11.

Starting values for cutting speed 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 Coated carbide
 HT Uncoated carbide, main component (TiC) o. (TiN), cermet
 HC₁ Coated cermet
 HW Uncoated carbide, main component (WC)

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Indexable milling – group 7 (XMR01, XMP01)

	Material group	Composition / structure / heat treatment		Brinell hardness HB	Machining group	Starting values for cutting speed v_c [m/min]					
						HC (CVD)					
						YBC302			YBD152		
						a_e / D			a_e / D		
1/1 3/4	1/5	1/20	1/1 3/4	1/5	1/20						
P	Unalloyed steel	approx. 0,15 % C	annealed	125	1	260	300	390			
		approx. 0,45 % C	annealed	190	2	225	255	335			
		approx. 0,45 % C	tempered	250	3	210	240	315			
		approx. 0,75 % C	annealed	270	4	185	210	275			
		approx. 0,75 % C	tempered	300	5	170	195	255			
	Low-alloyed steel		annealed	180	6	225	255	335			
			tempered	275	7	185	210	275			
			tempered	300	8	170	195	255			
		tempered	350	9	145	165	215				
High-alloyed steel and high-alloyed tool steel		annealed	200	10	130	150	195				
		hardened and tempered	325	11	95	105	140				
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				335	390	510
		perlitic (martensitic)		260	17				200	230	300
	Cast iron with spheroidal graphite	ferritic		160	18				225	260	340
		perlitic		250	19				150	175	230
	Malleable cast iron	ferritic		130	20				275	320	420
		perlitic		230	21				185	215	280
N	Aluminium wrought alloys	cannot be hardened		60	22						
		hardenable	hardened	100	23						
	Cast aluminium alloys	$\leq 12\% \text{ Si}$, cannot be hardened		75	24						
		$\leq 12\% \text{ Si}$, hardenable	hardened	90	25						
		$> 12\% \text{ Si}$, 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 base	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 B254.
 For examples of material for cutting tool groups view page D11.

Indexable milling – group 7 (XMR01, XMP01)

	Material group	Composition / structure / heat treatment		Brinell hardness HB	Machining group	Starting values for cutting speed v_c [m/min]						
						HC (PVD)						
						YBG252			YBG302			
						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						
P	Unalloyed steel	approx. 0,15 % C	annealed	125	1	230	265	345	225	260	340	
		approx. 0,45 % C	annealed	190	2	200	230	300	195	225	295	
		approx. 0,45 % C	tempered	250	3	185	215	280	180	210	275	
		approx. 0,75 % C	annealed	270	4	165	190	250	160	185	245	
		approx. 0,75 % C	tempered	300	5	150	175	230	150	170	225	
	Low-alloyed steel		annealed	180	6	200	230	300	195	225	295	
			tempered	275	7	165	190	250	160	185	245	
			tempered	300	8	150	175	230	150	170	225	
		tempered	350	9	130	150	195	125	145	190		
High-alloyed steel and high-alloyed tool steel		annealed	200	10	115	135	180	115	130	170		
		hardened and tempered	325	11	85	95	125	80	95	125		
M	Stainless steel	ferritic/martensitic	annealed	200	12	115	135	175	115	130	170	
			martensitic	tempered	240	13	100	115	145	95	110	145
			austenitic	quench hardened	180	14	125	145	185	120	140	185
			austenitic-ferritic		230	15	100	115	145	95	110	145
K	Grey cast iron	perlitic/ferritic		180	16	255	295	385	250	290	380	
		perlitic (martensitic)		260	17	150	175	230	150	170	225	
	Cast iron with spheroidal graphite	ferritic		160	18	175	200	260	170	195	255	
		perlitic		250	19	115	135	180	115	130	170	
	Malleable cast iron	ferritic		130	20	210	240	315	205	235	310	
		perlitic		230	21	140	160	210	135	160	210	
N	Aluminium wrought alloys	cannot be hardened		60	22							
		hardenable	hardened	100	23							
	Cast aluminium alloys	$\leq 12\% \text{ Si}$, cannot be hardened		75	24							
		$\leq 12\% \text{ Si}$, hardenable	hardened	90	25							
		$> 12\% \text{ Si}$, 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 base	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 B254.
 For examples of material for cutting tool groups view page D11.

Recommended feed rate

Indexable milling – group1 (FMA07/11/12, FMD02, EMP09/13)

Material group	Feed rate per cutting edge [mm]																		
	EMP09			EMP09			EMP13			EMP13			FMA07			FMA07			
	LNKT08/12			LNKT16			ANGX11			ANGX15			ONHU06			ONHU08			
	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		0,28	0,55		0,23			0,25		0,19	0,23		0,19	0,23		
	Low-alloyed steel	0,23	0,47	0,26	0,51	0,22				0,23		0,17	0,22		0,17	0,22			
	High-alloyed steel and high-alloyed tool steel	0,22	0,44	0,24	0,48	0,20				0,22		0,16	0,20		0,16	0,20			
M Stainless steel		0,18	0,35		0,19	0,39		0,16			0,18								
K Grey cast iron		0,28	0,55		0,30	0,61		0,26			0,28		0,20	0,26		0,20	0,26		
	Cast iron with spheroidal graphite	0,25	0,50	0,28	0,55	0,23				0,25		0,19	0,23		0,19	0,23			
	Malleable cast iron	0,25	0,50	0,28	0,55	0,23				0,25		0,19	0,23		0,19	0,23			
N Aluminum wrought alloys								0,20			0,21								
	Aluminum cast alloys							0,20			0,21								
	Copper and copper alloys (bronze/brass)							0,18			0,19								
S Heat-resistant alloys																			
	Titanium alloys																		
H Hardened steel																			
	Hard cast iron																		
	Hardened cast iron																		
X Non-metallic materials																			

Note: The given cutting values are guide values, which were determined under ideal conditions.
The values have to be adapted in individual cases.

Indexable milling – group1 (FMA07/11/12, FMD02, EMP09/13)

Material group	Feed rate per cutting edge [mm]																		
	FMP12																		
	WNHU08																		
	Application																		
	F	M	R																
P Unalloyed steel		0,25																	
	Low-alloyed steel	0,23																	
	High-alloyed steel and high-alloyed tool steel	0,22																	
M Stainless steel		0,18																	
K Grey cast iron		0,28																	
	Cast iron with spheroidal graphite	0,25																	
	Malleable cast iron	0,25																	
N Aluminium wrought alloys																			
	Aluminum cast alloys																		
	Copper and copper alloys (bronze/brass)																		
S Heat-resistant alloys																			
	Titanium alloys																		
H Hardened steel																			
	Hard cast iron																		
	Hardened cast iron																		
X Non-metallic materials																			

Note: The given cutting values are guide values, which were determined under ideal conditions.
The values have to be adapted in individual cases.

Recommended feed rate

Indexable milling – group 2 (FMA01/02/03/04, FME01/02, FMP01/02, EMP01/02/03/04)

Material group		Feed rate per cutting edge [mm]																	
		FMA01 FMA02			FMA03			FMA03			FMA04			FMA04			FMA04		
		SEET12			SEKN12			SEKN15			OFKT05			OFKR07			ODHT06		
		Application																	
		F	M	R	F	M	R	F	M	R	F	M	R	F	M	R	F	M	R
P	Unalloyed steel	0,15	0,20	0,25		0,18			0,20		0,20	0,25		0,20	0,25		0,20	0,25	
	Low-alloyed steel	0,14	0,19	0,23		0,17			0,19		0,19	0,23		0,19	0,23		0,19	0,23	
	High-alloyed steel and high-alloyed tool steel	0,13	0,18	0,22		0,16			0,18		0,18	0,22		0,18	0,22		0,18	0,22	
M	Stainless steel	0,11	0,14	0,18		0,13			0,14		0,14	0,18		0,14	0,18		0,14	0,18	
K	Grey cast iron	0,17	0,22	0,28		0,20			0,22		0,22	0,28		0,22	0,28		0,22	0,28	
	Cast iron with spheroidal graphite	0,15	0,20	0,25		0,18			0,20		0,20	0,25		0,20	0,25		0,20	0,25	
	Malleable cast iron	0,15	0,20	0,25		0,18			0,20		0,20	0,25		0,20	0,25		0,20	0,25	
N	Aluminium wrought alloys	0,13	0,17	0,21							0,17	0,21		0,17	0,21		0,17	0,21	
	Aluminum cast alloys	0,13	0,17	0,21							0,17	0,21		0,17	0,21		0,17	0,21	
	Copper and copper alloys (bronze/brass)	0,11	0,15	0,19							0,15	0,19		0,15	0,19		0,15	0,19	
S	Heat-resistant alloys	0,11	0,14	0,18							0,14	0,18		0,14	0,18		0,14	0,18	
	Titanium alloys	0,11	0,14	0,18							0,14	0,18		0,14	0,18		0,14	0,18	
H	Hardened steel																		
	Hard cast iron																		
	Hardened cast iron																		
X	Non-metallic materials																		

Note: The given cutting values are guide values, which were determined under ideal conditions.
The values have to be adapted in individual cases.

Indexable milling – group 3 (FMR01/02/03/04) Face milling

Material group		Feed rate per cutting edge [mm]																	
		FMR01			FMR01			FMR02			FMR02			FMR02			FMR03		
		RCKT10			RC*12			RC*12			RCKT16			RCKT20			RDKW07		
		Application																	
		F	M	R	F	M	R	F	M	R	F	M	R	F	M	R	F	M	R
P	Unalloyed steel		0,20	0,25		0,20	0,25		0,20	0,25		0,23	0,29		0,26	0,33		0,17	
	Low-alloyed steel		0,19	0,23		0,19	0,23		0,19	0,23		0,21	0,27		0,25	0,31		0,16	
	High-alloyed steel and high-alloyed tool steel		0,18	0,22		0,18	0,22		0,18	0,22		0,20	0,25		0,23	0,29		0,15	
M	Stainless steel		0,14	0,18		0,14	0,18		0,14	0,18		0,16	0,20		0,19	0,23		0,12	
K	Grey cast iron		0,22	0,28		0,22	0,28		0,22	0,28		0,25	0,32		0,29	0,36		0,19	
	Cast iron with spheroidal graphite		0,20	0,25		0,20	0,25		0,20	0,25		0,23	0,29		0,26	0,33		0,17	
	Malleable cast iron		0,20	0,25		0,20	0,25		0,20	0,25		0,23	0,29		0,26	0,33		0,17	
N	Aluminium wrought alloys					0,17	0,21		0,17	0,21									
	Aluminum cast alloys					0,17	0,21		0,17	0,21									
	Copper and copper alloys (bronze/brass)					0,15	0,19		0,15	0,19									
S	Heat-resistant alloys																		
	Titanium alloys																		
H	Hardened steel																		
	Hard cast iron																		
	Hardened cast iron																		
X	Non-metallic materials																		

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 per cutting edge [mm]																										
FME02			FME03			FME03			FMP01			FMP02			EMP01 EMP02			EMP01 EMP02			EMP03 EMP04					
SPK*12			SPK*12			SPK*15			TPKN22			SEET12			APKT11			APKT16			APKT11					
Application																										
F	M	R	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 Finishing
M Medium machining
R Roughing

Feed rate per cutting edge [mm]														
FMR03			FMR03			FMR04			FMR04			FMR04		
RDKW08			RD*10			RD*12			RDKW16			RDKW20		
Application														
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 Finishing
M Medium machining
R Roughing

A

Turning

B

Milling

C

Drilling

D

Technical Information

E

Index



Recommended feed rate

Indexable milling – group 3 (FMR01/02/03/04) Circular milling

Material group	Feed rate per cutting edge [mm]								
	FMR01	FMR01	FMR02	FMR02	FMR02	FMR03			
	RCKT10	RC*12	RC*12	RCKT16	RCKT20	RDKW07			
	Tool diameter [mm]								
	25-32	40-50	50-100	63-125	160-200	80-125	160-250	15	
P	Unalloyed steel	0,12	0,16	0,18	0,24	0,32	0,26	0,35	0,07
	Low-alloyed steel	0,11	0,14	0,16	0,21	0,28	0,23	0,31	0,06
	High-alloyed steel and high-alloyed tool steel	0,10	0,13	0,14	0,19	0,26	0,21	0,28	0,06
M	Stainless steel	0,07	0,09	0,10	0,14	0,18	0,15	0,20	0,04
K	Grey cast iron	0,11	0,14	0,16	0,22	0,29	0,23	0,32	0,06
	Cast iron with spheroidal graphite	0,10	0,13	0,14	0,19	0,26	0,21	0,28	0,06
	Malleable cast iron	0,10	0,13	0,14	0,19	0,26	0,21	0,28	0,06
N	Aluminium wrought alloys								
	Aluminum cast alloys								
	Copper and copper alloys (bronze/brass)								
S	Heat-resistant alloys								
	Titanium alloys								
H	Hardened steel								
	Hard cast iron								
	Hardened cast iron								
X	Non-metallic materials								

Note: The given cutting values are guide values, which were determined under ideal conditions.
The values have to be adapted in individual cases.

Indexable milling – group 4 (BMR01/02/03/04, TMP01, CMZ01, CMA01, CMD01)

Material group	Feed rate per cutting edge [mm]									
	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	-	-	
	Tool diameter [mm]									
	20	25	32	40-63	12	16	20	16	20	
P	Unalloyed steel	0,14	0,21	0,26	0,32	0,10	0,13	0,14	0,13	0,14
	Low-alloyed steel	0,10	0,15	0,18	0,22	0,07	0,09	0,10	0,09	0,10
	High-alloyed steel and high-alloyed tool steel	0,09	0,14	0,17	0,21	0,07	0,08	0,09	0,08	0,09
M	Stainless steel	0,08	0,12	0,14	0,18	0,06	0,07	0,08	0,07	0,08
K	Grey cast iron	0,18	0,27	0,34	0,42	0,13	0,17	0,18	0,17	0,18
	Cast iron with spheroidal graphite	0,13	0,20	0,25	0,30	0,10	0,12	0,13	0,12	0,13
	Malleable cast iron	0,14	0,21	0,26	0,32	0,10	0,13	0,14	0,13	0,14
N	Aluminum wrought alloys									
	Aluminum cast alloys									
	Copper and copper alloys (bronze/brass)									
S	Heat-resistant alloys									
	Titanium alloys									
H	Hardened steel									
	Hard cast iron									
	Hardened cast iron									
X	Non-metallic materials									

Note: The given cutting values are guide values, which were determined under ideal conditions.
The values have to be adapted in individual cases.

Recommended feed rate

Indexable milling – group 5 (SMP01/03/05)

Material group	Feed rate per cutting edge [mm]									
	SMP01	SMP01	SMP01	SMP01	SMP01	SMP03	SMP03	SMP03	SMP05	
	XSEQ1202	XSEQ1203	XSEQ12T3	XSEQ1204	XSEQ12T4	MPHT06	MPHT08	MPHT12	QC16	
	Tool diameter [mm]									
	63-100	63-100	63-160	63-160	63-160	80-125	125-200	120-200	25-39	
P	Unalloyed steel	0,12	0,12	0,13	0,13	0,14	0,14	0,15	0,16	0,08
	Low-alloyed steel	0,11	0,11	0,12	0,12	0,13	0,13	0,14	0,15	0,08
	High-alloyed steel and high-alloyed tool steel	0,10	0,10	0,11	0,11	0,12	0,12	0,13	0,14	0,07
M	Stainless steel	0,10	0,10	0,11	0,11	0,12	0,12	0,13	0,14	0,07
K	Grey cast iron	0,11	0,11	0,12	0,12	0,13	0,13	0,14	0,15	0,08
	Cast iron with spheroidal graphite	0,11	0,11	0,12	0,12	0,13	0,13	0,14	0,15	0,07
	Malleable cast iron	0,11	0,11	0,12	0,12	0,13	0,13	0,14	0,15	0,07
N	Aluminium wrought alloys									
	Aluminum cast alloys									
	Copper and copper alloys (bronze/brass)									
S	Heat-resistant alloys									
	Titanium alloys									
H	Hardened steel									
	Hard cast iron									
	Hardened cast iron									
X	Non-metallic materials									

Note: The given cutting values are guide values, which were determined under ideal conditions.
The values have to be adapted in individual cases.

Indexable milling – group 6 (FMD03, FME04, FMP03, HMP01)

Material group	Feed rate per cutting edge [mm]																		
	FMD03			FMD03			FME04			FMP03			FMP03			FMP03			
	LNKT20			LNKT25			LNKT15			LNKT12			LNKT15			LNKT20			
	Application																		
	F	M	R	F	M	R	F	M	R	F	M	R	F	M	R	F	M	R	
P	Unalloyed steel			0,50			0,50			0,45			0,45			0,45			0,50
	Low-alloyed steel			0,47			0,47			0,42			0,42			0,42			0,47
	High-alloyed steel and high-alloyed tool steel			0,44			0,44			0,40			0,40			0,40			0,44
M	Stainless steel			0,45			0,45			0,40			0,40			0,40			0,45
K	Grey cast iron			0,55			0,55			0,50			0,50			0,50			0,55
	Cast iron with spheroidal graphite			0,50			0,50			0,45			0,45			0,45			0,50
	Malleable cast iron			0,50			0,50			0,45			0,45			0,45			0,50
N	Aluminium wrought alloys																		
	Aluminum cast alloys																		
	Copper and copper alloys (bronze/brass)																		
S	Heat-resistant alloys																		
	Titanium alloys																		
H	Hardened steel																		
	Hard cast iron																		
	Hardened cast iron																		
X	Non-metallic materials																		

Note: The given cutting values are guide values, which were determined under ideal conditions.
The values have to be adapted in individual cases.

Recommended feed rate

Indexable milling – group7 (XMR01, XMP01, QCH)

Material group	Feed rate per cutting edge [mm]									
	XMR01 face milling			XMR01 plunge milling			XMR01 circular milling			
	SDMT/WPGT			SDMT/WPGT			SDMT/WPGT			
	Tool diameter [mm]									
	20-25	30-50	63-160	20-25	30-50	63-160	20-25	30-50	63-160	
P	Unalloyed steel	1,00	1,20	2,00	0,20	0,25	0,30	0,80	0,96	1,40
	Low-alloyed steel	0,93	1,12	1,86	0,19	0,23	0,28	0,74	0,89	1,30
	High-alloyed steel and high-alloyed tool steel	0,70	0,84	1,40	0,18	0,22	0,26	0,70	0,84	1,23
M	Stainless steel	0,50	0,60	1,00	0,14	0,18	0,21	0,56	0,67	0,98
K	Grey cast iron	0,90	1,08	1,80	0,22	0,28	0,33	0,88	1,06	1,54
	Cast iron with spheroidal graphite	0,90	1,08	1,80	0,20	0,25	0,30	0,80	0,96	1,40
	Malleable cast iron	1,00	1,20	2,00	0,20	0,25	0,30	0,80	0,96	1,40
N	Aluminium wrought alloys									
	Aluminum cast alloys									
	Copper and copper alloys (bronze/brass)									
S	Heat-resistant alloys									
	Titanium alloys									
H	Hardened steel									
	Hard cast iron									
	Hardened cast iron									
X	Non-metallic materials									

Note: The given cutting values are guide values, which were determined under ideal conditions.
The values have to be adapted in individual cases.

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	Feed rate per cutting edge [mm]							
	XMP01	QCH	QCH	QCH	QCH	QCH	QCH	
	CNE	ZOHX	RD*	APKT	WPGT	SDMT	XPHT	
	Tool diameter [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				

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