

MILLING TOOLS

Profile Milling tool

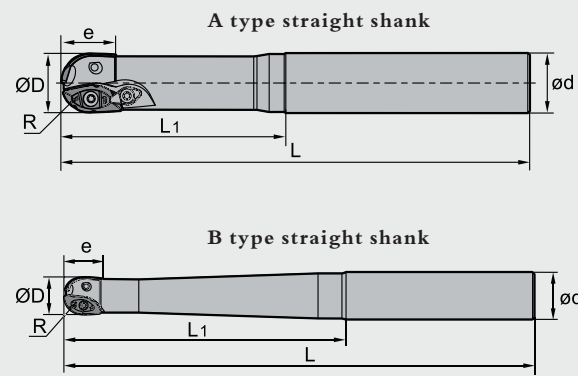


BMR03 P M K

A type (Ø30-Ø40)



B type (Ø16-Ø25)



Type of Milling Tools

Type	Stock	Dimension (mm)						Tooth Z	Weight (kg)	Type	Block
		R	ØD	ød	L	L ₁	e				
BMR03 -016-G20-S	▲	8	16	20	150	70	16	2	0.3	B	WD-208
-016-G20-M	▲	8	16	20	180	80	16	2	0.4	B	
-020-G25-S	▲	10	20	25	180	80	20	2	0.5	B	
-020-G25-M	▲	10	20	25	200	100	20	2	0.6	B	
-020-G25-L	▲	10	20	25	250	150	20	2	0.7	B	
-020-G25-XL	▲	10	20	25	300	110	20	2	1.0	B	
-025-G25-S	▲	12.5	25	25	180	80	25	2	0.6	B	
-025-G25-M	▲	12.5	25	25	200	100	25	2	0.7	B	
-025-G25-L	▲	12.5	25	25	250	110	25	2	0.8	B	
-025-G25-XL	▲	12.5	25	25	300	120	25	2	1.0	B	
-030-G32-S	△	15	30	32	200	120	30	2	1.0	A	
-030-G32-M	▲	15	30	32	250	150	30	2	1.3	A	CBH5R1
-030-G32-L	▲	15	30	32	300	200	30	2	1.6	A	
-030-G32-XL	△	15	30	32	350	200	30	2	1.9	A	
-032-G32-S	▲	16	32	32	200	120	32	2	1.1	A	
-032-G32-M	▲	16	32	32	250	150	32	2	1.4	A	
-032-G32-L	▲	16	32	32	300	200	32	2	1.6	A	
-032-G32-XL	△	16	32	32	350	200	32	2	2.0	A	
-040-G40-S	△	20	40	40	200	120	40	2	1.6	A	
-040-G40-M	▲	20	40	40	250	150	40	2	2.0	A	
-040-G40-L	▲	20	40	40	300	200	40	2	2.5	A	
-040-G40-XL	△	20	40	40	350	200	40	2	3.0	A	

▲ Stock △ Order

MILLING TOOLS

Profile Milling tool

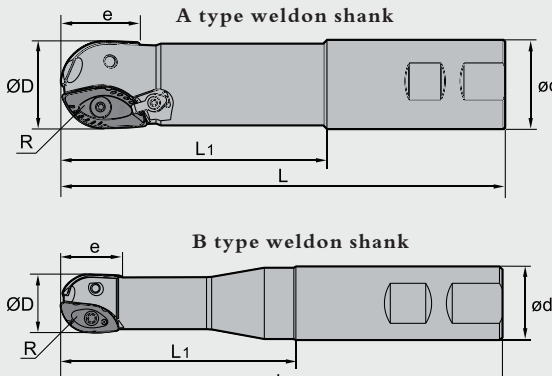


BMR03 P M K

A type Ø30-Ø40



B type (Ø16-Ø25)



Type of Milling Tools

Type	Stock	Dimension (mm)						Tooth Z	Weight (kg)	Type	Block
		R	ØD	ød	L	L ₁	e				
BMR03 -016-XP20-M	▲	8	16	20	111	60	16	2	0.2	B	WD-208
-020-XP25-M	▲	10	20	25	127	70	20	2	0.3	B	
-020-XP25-L	▲	10	20	25	150	80	20	2	0.4	B	
-025-XP25-M	▲	12.5	25	25	137	80	25	2	0.4	B	
-025-XP25-L	▲	12.5	25	25	200	100	25	2	0.6	B	
-030-XP32-M	▲	15	30	32	161	100	30	2	0.8	A	
-030-XP32-L	▲	15	30	32	250	150	30	2	1.3	A	
-032-XP32-M	▲	16	32	32	161	100	32	2	0.8	A	
-032-XP32-L	▲	16	32	32	250	120	32	2	1.3	A	
-040-XP40-M	▲	20	40	40	175	100	40	2	1.3	A	
-040-XP40-L	▲	20	40	40	250	120	40	2	2.0	A	
-050-XP50-M	▲	25	50	50	200	100	50	2	2.5	A	CBH5R1
-050-XP50-L	▲	25	50	50	250	150	50	2	3.1	A	

▲ Stock △ Order

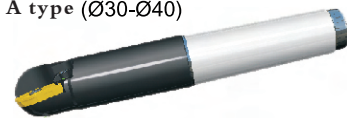
MILLING TOOLS

Profile Milling tool

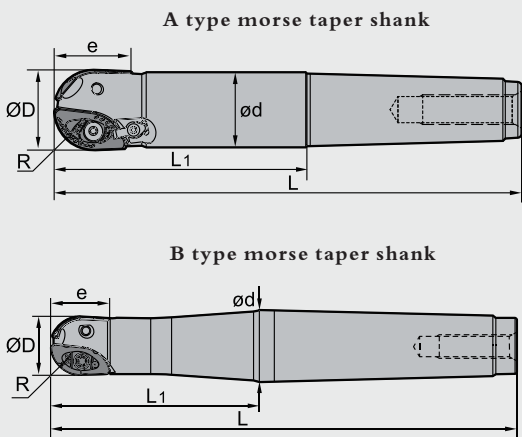


BMR03 P M K

A type (Ø30-Ø40)



B type (Ø16-Ø25)



Type of Milling Tools

Type		Stock	Dimension (mm)						Tooth Z	Weight (kg)	Type	Block
			R	ØD	ød	L	L1	e				
BMR03	-020-MT3-M	▲	10	20	18.7	156	70	20	2	0.4	B	WD-208
	-020-MT3-L	△	10	20	18.7	186	100	20	2	0.4	B	
	-025-MT3-M	▲	12.5	25	23.5	156	70	25	2	0.4	B	
	-025-MT3-L	△	12.5	25	23.5	186	100	25	2	0.4	B	
	-030-MT4-M	▲	15	30	28.2	189	70	30	2	0.8	A	
	-030-MT4-L	△	15	30	28.2	229	120	30	2	1.0	A	
	-032-MT4-M	▲	16	32	29.2	179	70	32	2	0.9	A	CBH5R1
	-032-MT4-L	△	16	32	29.2	209	100	32	2	0.9	A	
	-040-MT4-M	▲	20	40	36.9	199	100	40	2	1.0	A	
	-040-MT5-L	▲	20	40	36.9	226	90	40	2	1.8	A	
	-40-MT5-XL	▲	20	40	36.9	256	120	40	2	2.0	A	
	-050-MT5-M	▲	25	50	46.8	236	100	50	2	2.2	A	
-050-MT5-L	▲	25	50	46.8	286	150	50	2	2.9	A		

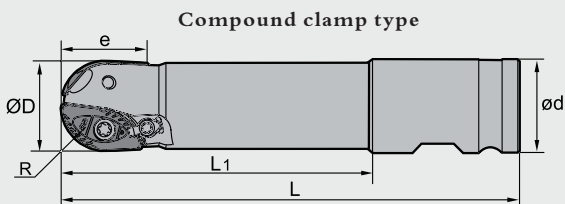
▲ Stock △ Order

MILLING TOOLS

Profile Milling tool



BMR03 P M K



Type of Milling Tools

Type		Stock	Dimension (mm)						Tooth Z	Weight (kg)	Block
			R	ØD	ød	L	L ₁	e			
BMR03	-040-XPX-M	▲	20	40	50.8	250	170	40	2	1.3	CBH5R1
	-040-XPX-L	▲	20	40	50.8	300	220	40	2	3.1	
	-040-XPX-XL	▲	20	40	50.8	350	270	40	2	3.5	
	-050-XPX-M	▲	25	50	50.8	250	170	50	2	3.1	
	-050-XPX-L	▲	25	50	50.8	300	200	50	2	3.8	
	-050-XPX-XL	▲	25	50	50.8	350	270	50	2	4.4	

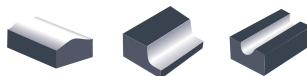
▲ Stock △ Order

Spare Parts

Diameter ØD	Applicable Insert	Inserts	Screw	Wrench
Φ16	XPHT16R803	—	L60M2.5×6.5	T08
Φ20	XPHT20R10T3	—	L60M3.5×08	T15
Φ25	XPHT25R1204	—	L60M4×10	T15
Φ30	XPHT30R1506	WD-208	L60M5×13	T20
Φ32	XPHT32R1606	WD-208	L60M5×13	T20
Φ40	XPHT40R2007	CBH5R1	L43M6×16	T20
Φ50	XPHT50R2507	CBH5R1	L43M8×21 L43M6×16	T30

MILLING TOOLS

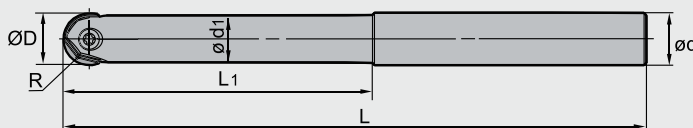
Profile Milling tool



BMR04 P M K



Straight shank and cone neck type



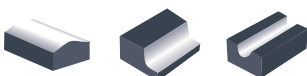
■ Type of Milling Tools

Type		Stock	Dimension (mm)						Weight (kg)
			R	ØD	ød	ød ₁	L ₁	L	
BMR04	-012-G12-M	▲	6	12	12	11	35	125	0.1
	-012-G12-L	△	6	12	12	11	45	150	0.1
	-016-G16-M	▲	8	16	16	14	40	150	0.2
	-016-G16-L	△	8	16	16	14	55	180	0.3
	-020-G20-M	▲	10	20	20	18	65	180	0.4
	-020-G20-L	△	10	20	20	18	100	250	0.6
	-025-G25-M	▲	12.5	25	25	23	70	200	0.7
	-025-G25-L	△	12.5	25	25	23	100	250	0.9
	-030-G32-M	▲	15	30	32	27	80	250	1.2
	-030-G32-L	△	15	30	32	27	110	300	1.5
	-032-G32-M	▲	16	32	32	29	80	250	1.4
	-032-G32-L	△	16	32	32	29	110	300	1.7

▲ Stock △ Order

MILLING TOOLS

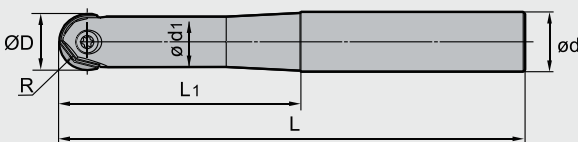
Profile Milling tool



BMR04 P M K



Straight shank and cone neck type



■ Type of Milling Tools

Type		Stock	Dimension (mm)						Weight (kg)
			R	ØD	ød	ød1	L1	L	
BMR04	-012-G16-M	▲	6	12	16	11	50	125	0.2
	-012-G16-L	△	6	12	16	11	70	150	0.2
	-016-G20-M	▲	8	16	20	14	60	150	0.3
	-016-G20-L	△	8	16	20	14	80	180	0.3
	-020-G25-M	▲	10	20	25	18	75	180	0.6
	-020-G25-L	△	10	20	25	18	95	200	0.6
	-025-G32-M	▲	12.5	25	32	23	90	200	1.0
	-025-G32-L	△	12.5	25	32	23	110	250	1.3
	-030-G40-M	▲	15	30	40	27	110	250	2.0
	-030-G40-L	△	15	30	40	27	125	300	2.4
	-032-G40-M	▲	16	32	40	29	110	250	2.0
	-032-G40-L	△	16	32	40	29	125	300	2.4

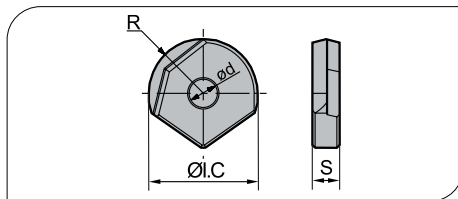
▲ Stock △ Order

MILLING TOOLS

■ Spare Parts

Diameter	Applicable Insert	Screw	Wrench	
				
Ø12	ZOHX1203	L90M4×10TT	T15	—
Ø16	ZOHX1604	L90M5×11TT	T20	—
Ø20	ZOHX2005	L90M5×13.5TT	T20	—
Ø25	ZOHX2506	L70M6×20TT	T20	—
Ø30	ZOHX3007	L70M8×25TT	—	T30S
Ø32	ZOHX3207	L70M8×25TT	—	T30S

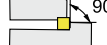
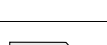
Insert selection



		😊 良好工况				😐 一般工况				😞 恶劣工况				
工 件 材 料	P 钢	😞	😞	😞		😞	😞		😊	😊	😊	😊	😞	
	M 不锈钢	😐	😐	😐		😐	😐		😊	😊	😊	😊	😐	
	K 铸铁				😞	😞	😊		😞	😊			😞	
	N 有色金属												😐	😐
	S 耐热合金、钛合金				😊	😐								

Insert shape	Type	Dimension (mm)					CVD coating					PVD coating					Cermet		hard alloy			
		R	I.C	S	d	适用刀 具ØD	YBC301	YBM251	YBM351	YBD152	YBD252	YBG102	YBG202	YBG302	YBG152	YBG252	YNG151	YNG151C	YC30S	YD051	YD101	YD201
	ZOHX1203-GF	6	12	3	4	Φ12										★						
	ZOHX1604-GF	8	16	4	5	Φ16										★						
	ZOHX2005-GF	10	20	5	5	Φ20										★						
	ZOHX2506-GF	12.5	25	6	6	Φ25										☆						
	ZOHX3007-GF	15	30	7	8	Φ30										☆						
	ZOHX3207-GF	16	32	7	8	Φ32										☆						
	ZOHX1203-GM	6	12	3	4	Φ12										★						
	ZOHX1604-GM	8	16	4	5	Φ16										★						
	ZOHX2005-GM	10	20	5	5	Φ20										★						
	ZOHX2506-GM	12.5	25	6	6	Φ25										★						
	ZOHX3007-GM	15	30	7	8	Φ30										★						
	ZOHX3207-GM	16	32	7	8	Φ32										★						

MILLING TOOLS

type of tools		Lead angle		Number of Type												
FM	Face milling tool	P	90° 	toolholders diameter ØD(mm) Cutter width tools installation posetion and size <table> <tr> <td>A</td> <td>A type of adapter</td> <td>D</td> <td>D type of adapter</td> </tr> <tr> <td>B</td> <td>B type of adapter</td> <td>K</td> <td>k type adapter</td> </tr> <tr> <td>C</td> <td>C type of adapter</td> <td></td> <td></td> </tr> </table>	A	A type of adapter	D	D type of adapter	B	B type of adapter	K	k type adapter	C	C type of adapter		
A	A type of adapter	D	D type of adapter													
B	B type of adapter	K	k type adapter													
C	C type of adapter															
EM	Square-should milling tool	E	75° 													
HM	Helical and face milling tool	D	60° 													
SM	Side and face milling tool	A	45° 													
BM	Profile milling tool	R														
CM	Chamfer milling tool															
XM	Special milling tool															

SM P 03 - 160 × 16 - K40

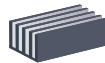
- M P 12 - 12 L

Shape of Blade		Insert Clearance Angle		Cutting Edge Length (mm)							Cutting Direction	
C	80 degrees diamond	N	0°	Insert incircle diameter	Shape of Blade						R: Right	L: Left
D	55 degrees diamond	B	5°		C	D	R	S	T	V		
R	Circle	C	7°		5.556	—	—	—	—	09	—	
S	Square	P	11°		6.350	06	07	—	—	11	—	
T	regular triangle square	D	15°		9.525	09	11	09	09	16	16	
V	35 degrees diamond	E	20°		12.700	12	15	12	12	22	22	
M	86 degrees diamond				15.875	16	19	15	15	27	—	
					19.050	19	—	19	19	33	—	
				25.400	25	—	25	25	44	—		

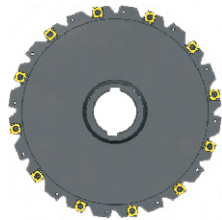
Tooth

MILLING TOOLS

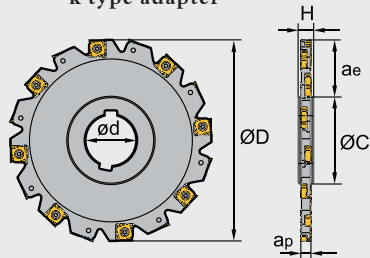
Side and face milling tool



SMP01 P M K



k type adapter



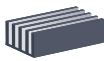
Type of Milling Tools

Type		Stock		Dimension (mm)						Applicable Insert	Tooth Z	Adapter	Weight (kg)
		R	L	ØD	ød	øc	H	ap	aemax				
SMP01	-100×4-K27-SN12-10	△	△	100	27	40.7	12	4	25	XSEQ1202	10	K	0.2
	-125×4-K40-SN12-12	△	△	125	40	50.5	12	4	32		12	K	0.3
	-160×4-K40-SN12-16	△	△	160	40	66.7	12	4	44		16	K	0.5
	-100×5-K27-SN12-10	△	△	100	27	45	12	5	25	XSEQ1203	10	K	0.2
	-125×5-K40-SN12-12	△	△	125	40	58	12	5	31		12	K	0.3
	-160×5-K40-SN12-16	△	△	160	40	68	12	5	44		16	K	0.6
	-100×6-K27-SN12-10	△	△	100	27	45	12	6	25	XSEQ12T3	10	K	0.3
	-125×6-K40-SN12-12	△	△	125	40	58	12	6	31		12	K	0.4
	-160×6-K40-SN12-16	△	△	160	40	68	12	6	44		16	K	0.7
	-200×6-K50-SN12-18	△	△	200	50	67.7	12	6	62	18	K	1.1	
	-250×6-K50-SN12-24	△	△	250	50	72	12	6	87	24	K	1.7	
	-100×7-K27-SN12-10	△	△	100	27	45	12	7	25	XSEQ1204	10	K	0.3
	-125×7-K40-SN12-12	△	△	125	40	58	12	7	31		12	K	0.4
	-160×7-K40-SN12-16	△	△	160	40	68	12	7	44		16	K	0.8
	-200×7-K50-SN12-18	△	△	200	50	72	12	7	62	18	K	1.2	
	-250×7-K50-SN12-24	△	△	250	50	72	12	7	87	24	K	1.9	
	-100×8-K27-SN12-10	△	△	100	27	45	12	8	25	XSEQ12T4	10	K	0.3
	-125×8-K40-SN12-12	△	△	125	40	58	12	8	31		12	K	0.5
	-160×8-K40-SN12-16	△	△	160	40	68	12	8	44		16	K	0.9
	-200×8-K50-SN12-18	△	△	200	50	72	12	8	62		18	K	1.4
	-250×8-K50-SN12-24	△	△	250	50	72	12	8	87		24	K	2.2

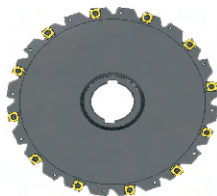
▲ Stock △ Order

MILLING TOOLS

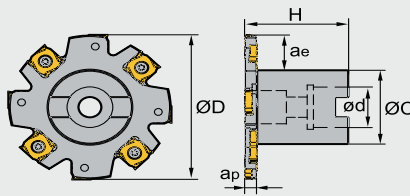
Side and face milling tool



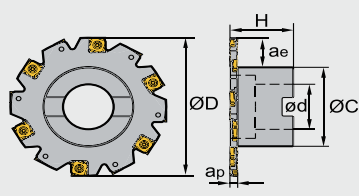
SMP01 P M K



A type of adapter



B type of adapter



Type of Milling Tools

Type		Stock		Dimension (mm)						Applicable Insert	Tooth Z	Adapter	Weight (kg)
		R	L	ØD	ød	øc	H	ap	aemax				
SMP01	-063×4-A22-SN12-06	△	△	63	22	40	50	4	10	XSEQ1202	6	A	0.2
	-080×4-A22-SN12-08	△	△	80	22	40	50	4	18		8	A	0.4
	-100×4-A27-SN12-10	△	△	100	27	48	50	4	23		10	A	0.6
	-063×5-A22-SN12-06	△	△	63	22	40	50	5	10	XSEQ1203	6	A	0.2
	-080×5-A22-SN12-08	△	△	80	22	40	50	5	18		8	A	0.4
	-100×5-A27-SN12-10	△	△	100	27	48	50	5	23		10	A	0.7
	-063×6-A22-SN12-06	△	△	63	22	40	50	6	10	XSEQ12T3	6	A	0.2
	-080×6-A22-SN12-08	△	△	80	22	40	50	6	18		8	A	0.5
	-100×6-A27-SN12-10	△	△	100	27	48	50	6	23		10	A	0.7
	-125×6-B40-SN12-12	△	△	125	40	70	50	6	24		12	B	1.0
	-160×6-B40-SN12-16	△	△	160	40	70	50	6	41		16	B	1.3
	-063×7-A22-SN12-06	△	△	63	22	40	50	7	10		XSEQ1204	6	A
	-080×7-A22-SN12-08	△	△	80	22	40	50	7	18	8		A	0.5
	-100×7-A27-SN12-10	△	△	100	27	48	50	7	23	10		A	0.7
	-125×7-B40-SN12-12	△	△	125	40	70	50	7	24		12	B	1.1
	-160×7-B40-SN12-16	△	△	160	40	70	50	7	41		16	B	1.4
	-063×8-A22-SN12-06	△	△	63	22	40	50	8	10		XSEQ12T4	6	A
	-080×8-A22-SN12-08	△	△	80	22	40	50	8	18	8		A	0.5
	-100×8-A27-SN12-10	△	△	100	27	48	50	8	23	10		A	0.8
	-125×8-B40-SN12-12	△	△	125	40	70	50	8	24	12		B	1.1
	-160×8-B40-SN12-16	△	△	160	40	70	50	8	41	16		B	1.5

▲ Stock △ Order

Spare Parts

Diameter ØD	Blade width ap	Screw	Wrench
Ø63-Ø160	4	L91M4×3.3X	T10T
Ø63-Ø160	5	L91M4×4.3X	
Ø63-Ø250	6	L91M4×5.3X	
Ø63-Ø250	7	L91M4×6.3X	
Ø63-Ø250	8	L91M4×7.3X	

MILLING TOOLS

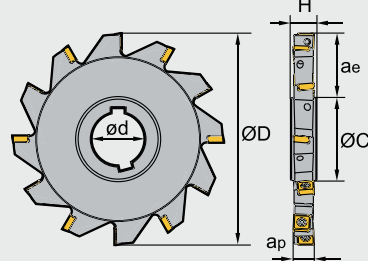
Side and face milling tool



SMP03 P M K



k type adapter



Type of Milling Tools

Type		Stock		Dimension (mm)						Applicable Insert	Tooth Z	Adapter	Weight (kg)
		R	L	ØD	øc	ød	ae _{max}	ap	H				
SMP03	-080×8-K27-MP06-10	△	△	80	41	27	17	8	12	MPHT060304-DM	10	K	0.2
	-100×8-K32-MP06-14	△	△	100	47	32	25	8	12		14	K	0.3
	-100×10-K32-MP06-14	△	△	100	47	32	25	10	14		14	K	0.4
	-125×10-K40-MP06-16	△	△	125	55	40	34	10	14		16	K	0.6
	-125×12-K40-MP08-12	△	△	125	55	40	34	12	16	MPHT080305-DM	12	K	0.7
	-160×12-K40-MP08-14	△	△	160	62	40	47	12	16		14	K	1.3
	-160×16-K40-MP12-12	△	△	160	62	40	49	16	20	MPHT120408-DM	12	K	1.6
	-160×18-K40-MP12-12	△	△	160	62	40	49	18	24		12	K	1.9
	-160×20-K40-MP12-12	△	△	160	62	40	49	18	26		12	K	2.1
	-200×16-K50-MP12-14	△	△	200	72	50	62	16	20		14	K	2.5
	-200×18-K50-MP12-14	△	△	200	72	50	62	18	24		14	K	2.9
	-200×20-K50-MP12-14	△	△	200	72	50	63	20	26		14	K	3.3

▲ Stock △ Order

Spare Parts

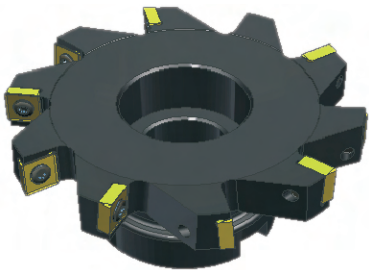
Diameter ØD	Insert	Screw	Wrench
Ø80-Ø125	MPHT0603	L60M2.5x6.5	T08T
Ø125-Ø160	MPHT0803	L60M3x7	T10T
Ø160-Ø200	MPHT1204	L60M5x13	T20T

MILLING TOOLS

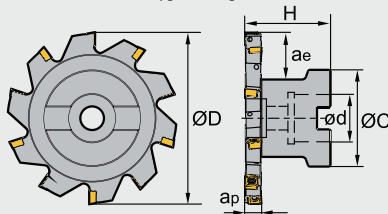
Side and face milling tool



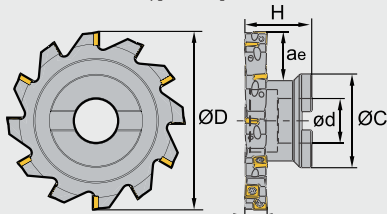
SMP03 P M K



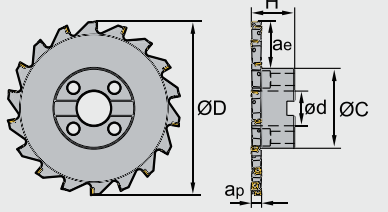
A type of adapter



B type of adapter



C type of adapter



Type of Milling Tools

Type		Stock		Dimension (mm)						Applicable Insert	Tooth Z	Adapter	Weight (kg)
		R	L	ØD	øc	ød	a _e max	a _p	H				
SMP03	-080×8-A22-MP06-10	△	△	80	45	22	21	8	40	MPHT060304-DM	10	A	0.4
	-100×8-B27-MP06-14	△	△	100	55	27	24	8	40		14	B	0.6
	-100×10-B27-MP06-14	△	△	100	55	27	24	10	40		14	B	0.7
	-125×10-B32-MP06-16	△	△	125	65	32	33	10	45		16	B	1.1
	-125×12-B32-MP08-12	△	△	125	65	32	33	12	45	MPHT080305-DM	12	B	1.4
	-160×12-B40-MP08-14	△	△	160	80	40	45	12	50		14	B	1.9
	-200×12-C40-MP08-18	△	△	200	92	40	53	12	50		18	C	3.2
	-125×16-B32-MP12-10	△	△	125	65	32	30	16	50	MPHT120408-DM	10	B	2.3
	-160×16-B40-MP12-12	△	△	160	80	40	45	16	60		12	B	2.3
	-160×18-B40-MP12-12	△	△	160	80	40	45	18	60		12	B	2.4
	-200×16-C40-MP12-14	△	△	200	92	40	53	16	50		14	C	3.6
	-200×18-C40-MP12-14	△	△	200	92	40	53	18	50		14	C	3.9
	-200×20-C40-MP12-14	△	△	200	92	40	53	20	50		14	C	4.2

▲ Stock △ Order

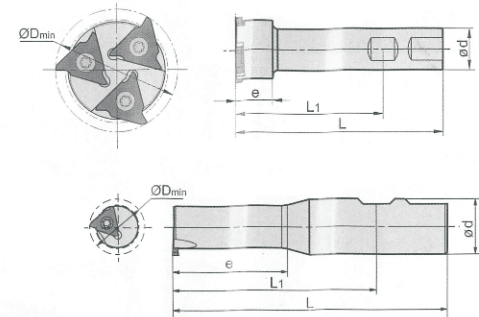
Spare Parts

Diameter ØD	Insert	Screw	Wrench
Ø80-Ø125	MPHT0603	L60M2.5x6.5	T08T
Ø125-Ø200	MPHT0803	L60M3x7	T10T
Ø125-Ø200	MPHT1204	L60M5x13	T20T

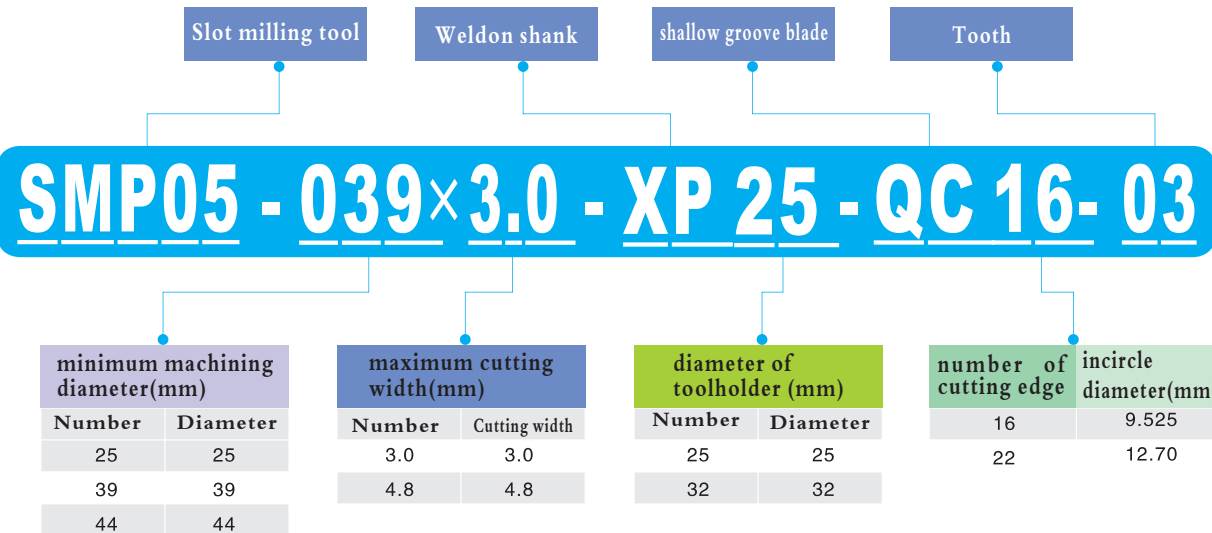
MILLING TOOLS

Slot milling tool

SMP05 P M K



Slot milling tool Code Key



Type of Milling Tools

Type	Stock	Dimension (mm)					Applicable Insert	Tooth Z	Width
		ØD _{min}	ød	e	L1	L			
SMP05 -025×3.0-XP25-QC16-01	△	25	25	40	89	125	QC16L 050-300	1	0.50-3.0
-039×3.0-XP25-QC16-03	△	39	25	23	89	125	QC16L 050-300	3	0.50-3.00
-044×4.8-XP25-QC22-03	△	44	25	23	89	125	QC22L 100-480	3	1.0-4.8

▲ Stock △ Order

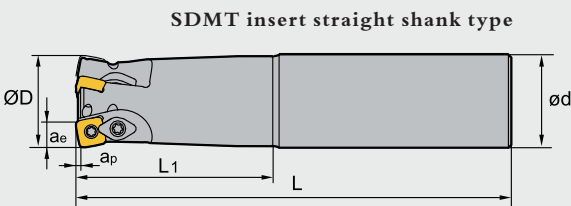
Spare Parts

Diameter ØD	Screw	Wrench
Ø25	L60M3.5x10	T15
Ø39	L60M3.5x10	T15
Ø44	L60M5x13	T20

MILLING TOOLS

大进给刀具

XMR01 P M K



Type of Milling Tools

Type		Stock	Dimension (mm)						Tooth Z	Weight (kg)
			ØD	a _p	a _e	L ₁	L	ød		
XMR01	-025-G25-SD09-02	▲	25	1.4	8.8	60	140	25	2	0.5
	-032-G32-SD09-03	▲	32	1.4	8.8	70	150	32	3	0.8
	-035-G32-SD09-03	▲	35	1.4	8.8	70	150	32	3	0.8
	-032-G32-SD12-02	▲	32	1.8	11.7	70	150	32	2	0.8
	-040-G40-SD12-03	▲	40	1.8	11.7	70	150	40	3	1.3

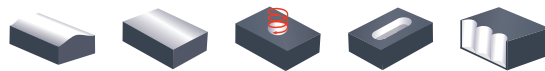
▲ Stock △ Order

Spare Parts

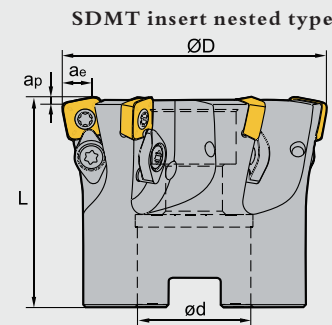
Type	Applicable Insert	Insert Screw	Clamp screw	Clamp	Insert wrench	Clamp wrench
XMR01□□-SD09□□	SDMT09T3	L60M3.5×8	L60M4×8	WD-204	T10	T15
XMR01□□-SD12□□	SDMT1204	L60M4×8			T15	

MILLING TOOLS

大进给刀具



XMR01 **P** **M** **K**



■ Type of Milling Tools

Type	Stock	Dimension (mm)					Tooth Z	Adapter	Weight (kg)
		ØD	ap	ae	L	ød			
XMR01 -050-A22-SD09-04	▲	50	1.4	8.8	40	22	4	A	0.3
-063-A22-SD09-06	▲	63	1.4	8.8	40	22	6	A	0.5
-063-A27-SD09-06	▲	63	1.4	8.8	50	27	6	A	0.6
-063-A22-SD12-05	▲	63	1.8	11.7	40	22	5	A	0.5
-063-A27-SD12-05	▲	63	1.8	11.7	50	27	5	A	0.6
-080-A27-SD12-05	▲	80	1.8	11.7	63	27	5	A	0.9
-100-B32-SD12-06	▲	100	1.8	11.7	50	32	6	B	1.8

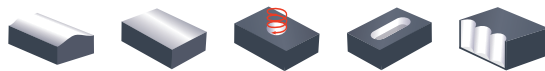
▲ Stock △ Order

■ Spare Parts

Type	Applicable Insert	Insert Screw	Clamp screw	Clamp	Insert wrench	Clamp wrench
XMR01□□-SD09□□	SDMT09T3	L60M3.5×8	L60M4×8	WD-204	T10	T15
XMR01□□-SD12□□	SDMT1204	L60M4×8		WD-204	T15	

MILLING TOOLS

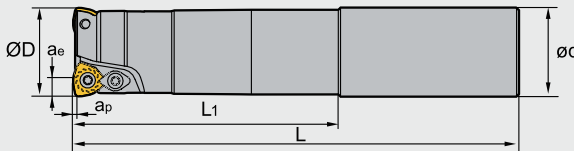
大进给刀具



XMR01 **P** **M** **K**



WPGT insert straight shank type



■ Type of Milling Tools

Type		Stock	Dimension (mm)						Tooth Z	Weight (kg)
			ØD	a _p	a _e	L ₁	L	ød		
XMR01	-020-G20-WP05-02-M	△	20	1.5	3.8	50	130	20	2	0.2
	-020-G20-WP05-02-L	△	20	1.5	3.8	100	180	20	2	0.3
	-020-G20-WP05-02-XL	△	20	1.5	3.8	130	250	20	2	0.8
	-025-G25-WP06-02-M	△	25	1.5	4.35	60	140	25	2	0.4
	-025-G25-WP06-02-L	△	25	1.5	4.35	120	200	25	2	0.6
	-025-G25-WP06-02-XL	△	25	1.5	4.35	180	300	25	2	1.0
	-032-G32-WP06-03-M	△	32	1.5	4.35	70	150	32	3	0.8
	-032-G32-WP06-03-L	△	32	1.5	4.35	120	200	32	3	1.0
	-032-G32-WP06-03-XL	△	32	1.5	4.35	180	300	32	3	1.6
	-040-G32-WP06-03-M	△	40	1.5	4.35	50	150	32	3	0.9
	-040-G32-WP06-03-L	△	40	1.5	4.35	50	250	32	3	1.5
	-040-G32-WP06-03-XL	△	40	1.5	4.35	50	300	32	3	1.8
	-040-G32-WP08-02-M	△	40	1.5	5.66	50	150	32	2	0.9
	-040-G32-WP08-02-L	△	40	1.5	5.66	50	250	32	2	1.5
	-040-G32-WP08-02-XL	△	40	1.5	5.66	50	300	32	2	1.9
	-050-G32-WP09-02-M	△	50	3.0	6.8	50	150	32	2	1.9
	-050-G32-WP09-02-L	△	50	3.0	6.8	50	250	32	2	2.5

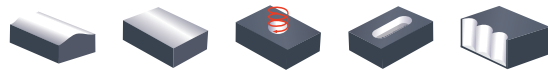
▲ Stock △ Order

■ Spare Parts

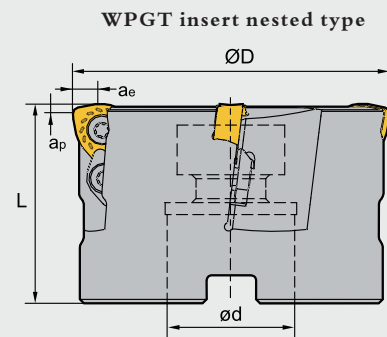
Type	Applicable Insert	Clamp/insert screw	Clamp	Wrench
XMR01□□-WP05□□	WPGT0503	L60M3.5×8	—	T10
XMR01□□-WP06□□	WPGT0604	L60M4×8	—	T15
XMR01□□-WP08□□	WPGT0806	L60M5×13	WD-208	T20
XMR01□□-WP09□□	WPGT0907			

MILLING TOOLS

大进给刀具



XMR01 P M K



Type of Milling Tools

Type		Stock	Dimension (mm)					Tooth Z	Adapter	Weight (kg)
			ØD	a _p	a _e	L	ød			
XMR01	-050-A22-WP06-04	△	50	1.5	4.35	50	22	4	A	0.4
	-050-A22-WP08-03	△	50	1.5	5.66	50	22	3	A	0.4
	-063-A22-WP08-04	△	63	1.5	5.66	50	22	4	A	0.7
	-063-A27-WP08-04	△	63	1.5	5.66	50	27	4	A	0.7
	-080-A27-WP08-05	△	80	1.5	5.66	63	27	5	A	1.5
	-100-B32-WP08-06	△	100	1.5	5.66	63	32	6	B	2.2
	-125-B40-WP08-07	△	125	1.5	5.66	63	40	7	B	3.5
	-160-B40-WP08-08	△	160	1.5	5.66	63	40	8	B	6.0
	-063-A22-WP09-03	△	63	3.0	6.8	50	22	3	A	0.7
	-080-A27-WP09-04	△	80	3.0	6.8	63	27	4	A	1.4
	-100-B32-WP09-05	△	100	3.0	6.8	63	32	5	B	2.1
	-125-B40-WP09-06	△	125	3.0	6.8	63	40	6	B	3.7
	-160-B40-WP09-07	△	160	3.0	6.8	63	40	7	B	6.3

▲ Stock △ Order

Spare Parts

Type	Applicable Insert	Clamp/insert screw	Clamp	Wrench
				
XMR01□□-WP06□□	WPGT0604	L60M4×8	—	T15T
XMR01□□-WP08□□	WPGT0806	L60M5×13	WD-208	T20T
XMR01□□-WP09□□	WPGT0907	L60M5×13	WD-208	T20T

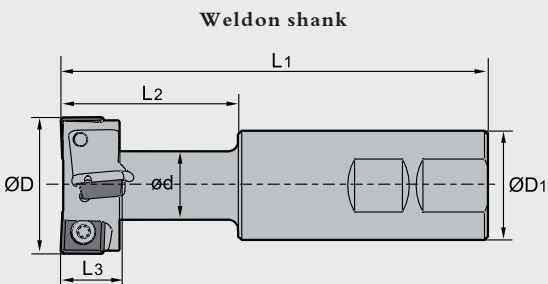
MILLING TOOLS

T slot milling tool

Kr:90°



TMP01 K



Type of Milling Tools

Type		Stock	Dimension (mm)						Tooth Z	Insert Quantity	T-slot size
			ØD	ØD ₁	ød	L ₁	L ₂	L ₃			
TMP01	-021-XP25-MP06-01	▲	21	25	10	100	32	9	1	2	12
	-025-XP25-MP06-01	▲	25	25	12	100	35	11	1	2	14
	-032-XP32-MP08-02	▲	32	32	15	110	45	14	2	4	18
	-040-XP32-MP12-02	▲	40	32	19	125	55	18	2	4	22
	-050-XP40-MP12-02	▲	50	40	25	140	65	22	2	4	28
	-060-XP50-MP12-02	▲	60	50	32	160	80	28	2	6	36

▲ Stock △ Order

Spare Parts

Type	Applicable Insert	Screw	Wrench
TMP01-021-XP25-MP06-01		L60M2.5×5.5	T08
TMP01-025-XP25-MP06-01		L60M2.5×5.5	
TMP01-032-XP32-MP08-02		L60M3×8	T10
TMP01-040-XP32-MP12-02		L60M5×10	
TMP01-050-XP40-MP12-02		L60M5×10	T20
TMP01-060-XP50-MP12-02		L60M5×10	

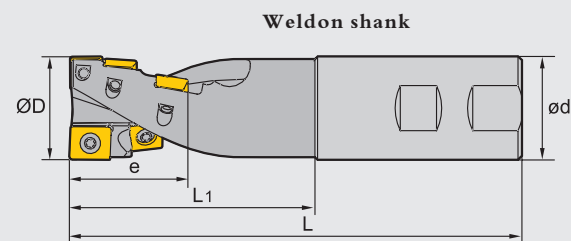
MILLING TOOLS

Helical and face milling tool

Kr:90°



HMP01 P K



■ Type of Milling Tools

Type		Stock		Dimension (mm)					Slot	Insert Quantity		Type of shank
		R	L	ØD	ød	e	L ₁	L		APKT 150412	SPMT 120408	
HMP01	-040×55-XP40-SP12-02	△	△	40	40	55	95	175	2	1	5	Weldon shank
	-050×55-XP40-SP12-04	△	△	50	40	55	95	175	4	2	10	Weldon shank

▲ Stock △ Order

■ Spare Parts

Diameter ØD	Screw	Wrench
Ø40	L60M5×10	T20T
Ø50	L60M5×13	T20T

MILLING TOOLS

Helical and face milling tool

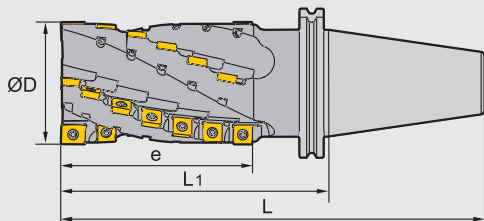
Kr:90°



HMP01 P K



JT holder / BT holder (eg. JT holder)



■ Type of Milling Tools

Type		Stock		Dimension (mm)				Slot Z	Insert Quantity		Type of shank
		R	L	ØD	e	L ₁	L		APKT 150412	SPMT 120408	
HMP01	-050×84-JT50-SP12-04	△	△	50	84	145	246.75	4	2	16	JT
	-063×74-JT50-SP12-04	△	△	63	74	135	236.75	4	2	14	JT
	-063×104-JT50-SP12-04	△	△	63	104	165	266.75	4	2	20	JT
	-063×134-JT50-SP12-04	△	△	63	134	195	296.75	4	2	26	JT
	-080×104-JT50-SP12-04	△	△	80	104	165	266.75	4	2	20	JT
	-080×144-JT50-SP12-04	△	△	80	144	205	306.75	4	2	28	JT
	-050×84-BT50-SP12-04	△	△	50	84	145	246.8	4	2	16	BT
	-063×74-BT50-SP12-04	△	△	63	74	135	236.8	4	2	14	BT
	-063×104-BT50-SP12-04	△	△	63	104	165	266.8	4	2	20	BT
	-063×134-BT50-SP12-04	△	△	63	134	195	296.8	4	2	26	BT
	-080×104-BT50-SP12-04	△	△	80	104	165	266.8	4	2	20	BT
	-080×144-BT50-SP12-04	△	△	80	144	205	306.8	4	2	28	BT

▲ Stock △ Order

■ Spare Parts

Diameter ØD	Screw	Wrench
Ø50	L60M5×13	T20T
Ø63	L60M5×13	T20T
Ø80	L60M5×13	T20T

MILLING TOOLS

conversion head Helical and face milling tool

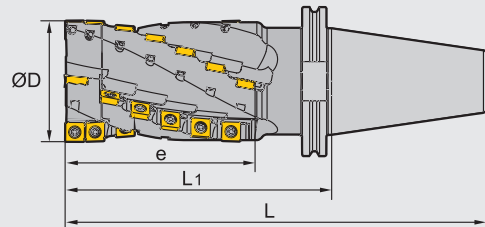
Kr:90°



HMP01 EC P K



JT holder / BT holder (eg. JT holder)



■ Type of Milling Tools

Type		Stock		Dimension (mm)				Slot Z	Insert Quantity		Type of shank
		R	L	ØD	e	L1	L		APKT 150412	SPMT 120408	
HMP01	-050×84EC-JT50-SP12-04	△	△	50	84	145	246.75	4	2	16	JT
	-063×74EC-JT50-SP12-04	△	△	63	74	135	236.75	4	2	14	JT
	-063×104EC-JT50-SP12-04	△	△	63	104	165	266.75	4	2	20	JT
	-063×134EC-JT50-SP12-04	△	△	63	134	195	296.75	4	2	26	JT
	-080×104EC-JT50-SP12-04	△	△	80	104	165	266.75	4	2	20	JT
	-080×144EC-JT50-SP12-04	△	△	80	144	205	306.75	4	2	28	JT
	-050×84EC-BT50-SP12-04	△	△	50	84	145	246.8	4	2	16	BT
	-063×74EC-BT50-SP12-04	△	△	63	74	135	236.8	4	2	14	BT
	-063×104EC-BT50-SP12-04	△	△	63	104	165	266.8	4	2	20	BT
	-063×134EC-BT50-SP12-04	△	△	63	134	195	296.8	4	2	26	BT
	-080×104EC-BT50-SP12-04	△	△	80	104	165	266.8	4	2	20	BT
	-080×144EC-BT50-SP12-04	△	△	80	144	205	306.8	4	2	28	BT

▲ Stock △ Order

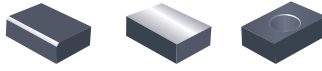
■ Spare Parts

Diameter ØD	Insert screw 	conversion head screw 	Wrench 	Wrench 	conversion head 
Ø50	L60M5×13	M10×50	T20T	S8	050EC
Ø63	L60M5×13	M10×50	T20T	S8	063EC
Ø80	L60M5×13	M12×55	T20T	S10	080EC

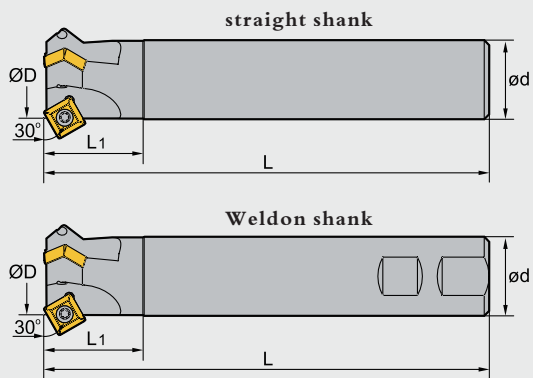
MILLING TOOLS

Chamfer milling tool

Kr:30°



CMZ01 P M K



■ Type of Milling Tools

Type		Stock	Dimension (mm)				Tooth Z	Weight (kg)
			ØD	ød	L	L1		
CMZ01 直柄	-012-G20-SP12-01	△	12	20	100	40	1	0.2
	-025-G25-SP12-02	△	25	25	120	40	2	0.8
	-032-G32-SP12-03	△	32	32	180	40	3	1.1
削平柄	-012-XP20-SP12-01	△	12	20	100	40	1	0.2
	-025-XP25-SP12-02	△	25	25	120	40	2	0.6
	-032-XP32-SP12-03	△	32	32	180	40	3	1.0

▲ Stock △ Order

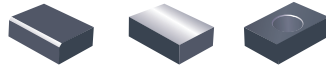
■ Spare Parts

Diameter ØD	Applicable Insert 	Screw 	Wrench 
Ø12-Ø32	SPMT120408	L43M5×11	T20T

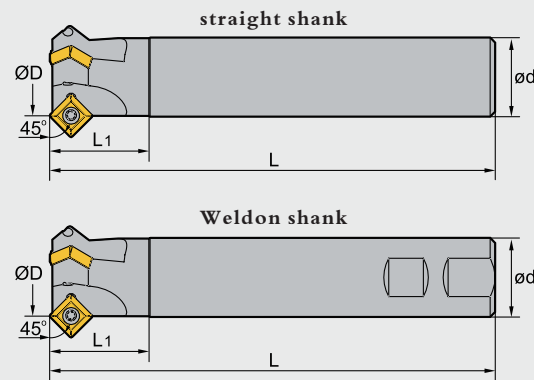
MILLING TOOLS

Chamfer milling tool

Kr:45°



CMA01 P M K



Type of Milling Tools

Type		Stock	Dimension (mm)				Tooth Z	Weight (kg)
			ØD	ød	L	L1		
CMA01 直柄	-012-G20-SP12-01	▲	12	20	100	40	1	0.2
	-025-G25-SP12-02	▲	25	25	120	40	2	0.8
	-032-G32-SP12-03	▲	32	32	180	40	3	1.1
削平柄	-012-XP20-SP12-01	▲	12	20	100	40	1	0.2
	-025-XP25-SP12-02	▲	25	25	120	40	2	0.6
	-032-XP32-SP12-03	▲	32	32	180	40	3	1.0

▲ Stock △ Order

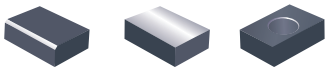
Spare Parts

Diameter ØD	Applicable Insert	Screw	Wrench
Ø12-Ø32			
	SPMT120408	L43M5×11	T20T

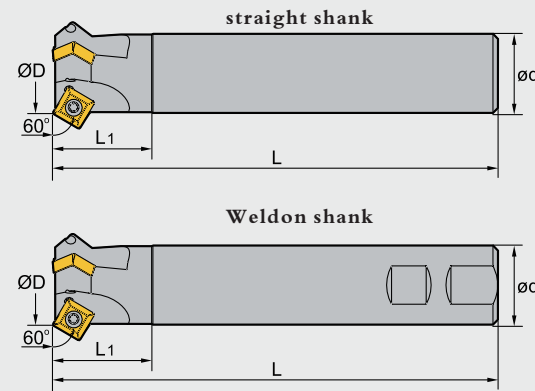
MILLING TOOLS

Chamfer milling tool

Kr:60°



CMD01 P M K



Type of Milling Tools

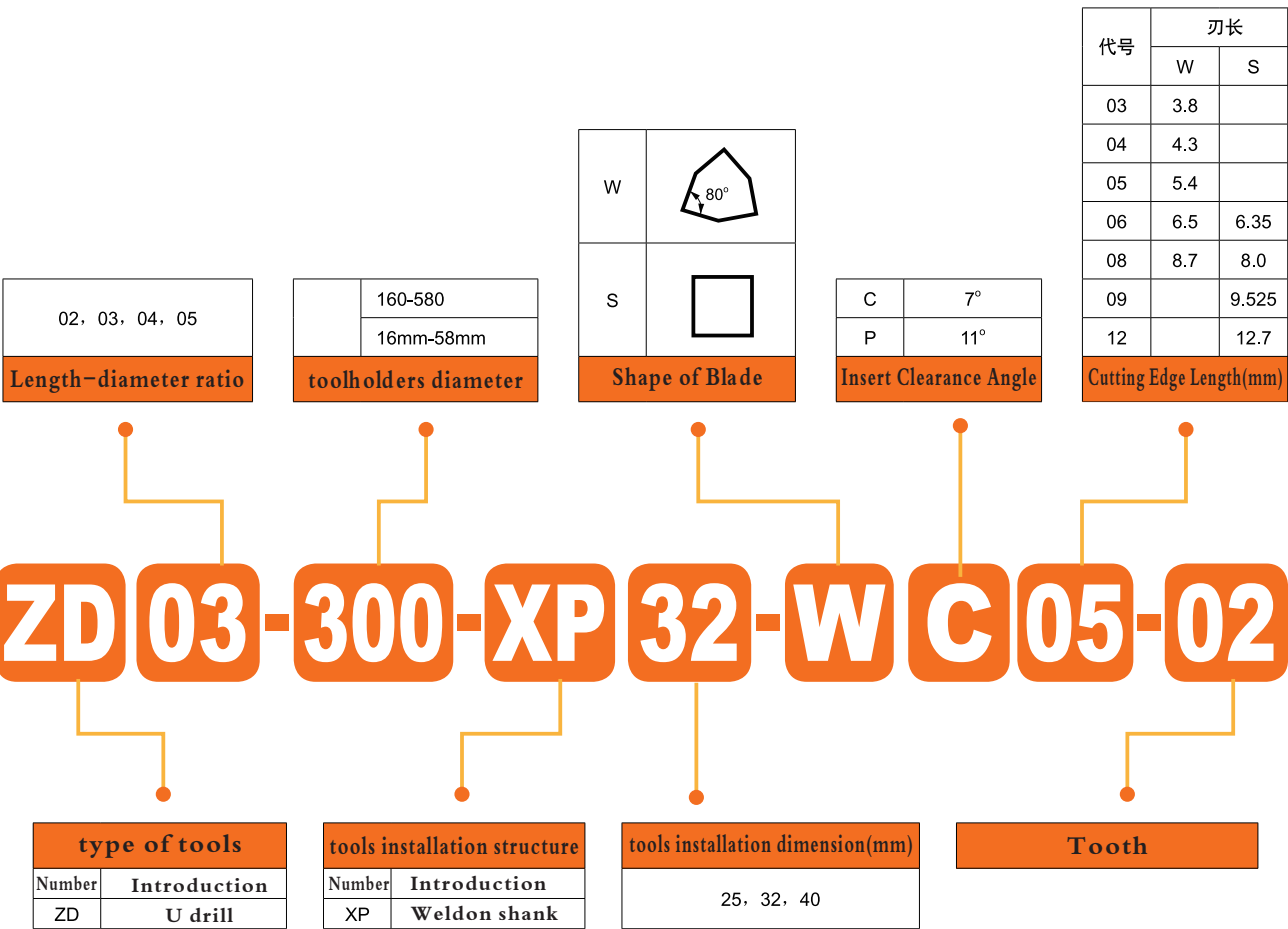
Type		Stock	Dimension (mm)				Tooth Z	Weight (kg)
			ØD	ød	L	L1		
CMD01 straight shank	-012-G20-SP12-01	▲	12	20	100	40	1	0.2
	-025-G25-SP12-02	▲	25	25	120	40	2	0.8
	-036-G32-SP12-03	▲	36	32	180	40	3	1.0
Weldon shank	-012-XP20-SP12-01	▲	12	20	100	40	1	0.2
	-025-XP25-SP12-02	▲	25	25	120	40	2	0.6
	-036-XP32-SP12-03	▲	36	32	180	40	3	1.0

▲ Stock △ Order

Spare Parts

Diameter ØD	Applicable Insert	Screw	Wrench
Ø12-Ø32			
	SPMT120408	L43M5×11	T20T

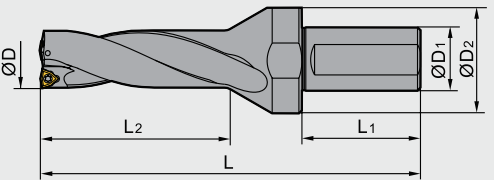
Indexable U drill Code Key



Indexable u drill



ZD03



Type	Stock	Dimension (mm)						Applicable Insert	Screw	Wrench
		D	D1	D2	L1	L2	L			
ZD03-160-XP25-WC03-02	▲	16	25	32	56	52	129	WCMX030208	L60M2.5×6	T08
ZD03-170-XP25-WC03-02	▲	17	25	32	56	55	133	WCMX030208	L60M2.5×6	T08
ZD03-180-XP25-WC03-02	▲	18	25	32	56	58	137	WCMX030208	L60M2.5×6	T08
ZD03-190-XP25-WC03-02	▲	19	25	32	56	61	140	WCMX030208	L60M2.5×6	T08
ZD03-200-XP25-WC03-02	▲	20	25	32	56	64	143	WCMX030208	L60M2.5×6	T08
ZD03-210-XP25-WC04-02	▲	21	25	45	56	67	153	WCMX040208	L60M2.5×6	T08
ZD03-220-XP25-WC04-02	▲	22	25	45	56	70	156	WCMX040208	L60M2.5×6	T08
ZD03-230-XP25-WC04-02	▲	23	25	45	56	73	159	WCMX040208	L60M2.5×6	T08
ZD03-240-XP25-WC04-02	▲	24	25	45	56	76	162	WCMX040208	L60M2.5×6	T08
ZD03-250-XP25-WC04-02	▲	25	25	45	56	79	165	WCMX040208	L60M2.5×6	T08
ZD03-260-XP32-WC05-02	▲	26	32	55	60	83	176	WCMX050308	L60M3×8	T10
ZD03-270-XP32-WC05-02	▲	27	32	55	60	86	180	WCMX050308	L60M3×8	T10
ZD03-280-XP32-WC05-02	▲	28	32	55	60	89	184	WCMX050308	L60M3×8	T10
ZD03-290-XP32-WC05-02	▲	29	32	55	60	92	188	WCMX050308	L60M3×8	T10
ZD03-300-XP32-WC05-02	▲	30	32	55	60	95	192	WCMX050308	L60M3×8	T10
ZD03-310-XP40-WC06-02	▲	31	40	60	70	98	203	WCMX06T308	L60M3×8	T10
ZD03-320-XP40-WC06-02	▲	32	40	60	70	101	206	WCMX06T308	L60M3×8	T10
ZD03-330-XP40-WC06-02	▲	33	40	60	70	104	209	WCMX06T308	L60M3×8	T10
ZD03-340-XP40-WC06-02	▲	34	40	60	70	107	212	WCMX06T308	L60M3×8	T10
ZD03-350-XP40-WC06-02	▲	35	40	60	70	110	215	WCMX06T308	L60M3×8	T10
ZD03-360-XP40-WC06-02	▲	36	40	60	70	113	218	WCMX06T308	L60M3×8	T10
ZD03-370-XP40-WC06-02	▲	37	40	60	70	116	221	WCMX06T308	L60M3×8	T10
ZD03-380-XP40-WC06-02	▲	38	40	60	70	119	225	WCMX06T308	L60M3×8	T10
ZD03-390-XP40-WC06-02	▲	39	40	60	70	122	228	WCMX06T308	L60M3×8	T10

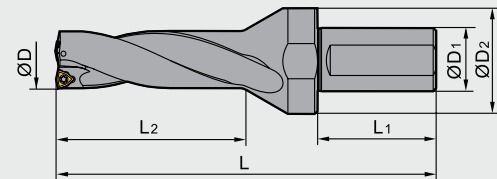
▲ Stock △ Order

MILLING TOOLS

Indexable u drill



ZD03



Type	Stock	Dimension (mm)						Applicable Insert	Screw	Wrench
		D	D1	D2	L1	L2	L			
ZD03-400-XP40-WC06-02	▲	40	40	60	70	125	231	WCMX06T308	L60M3×8	T10
ZD03-410-XP40-WC06-02	▲	41	40	60	70	128	234	WCMX06T308	L60M3×8	T10
ZD03-420-XP40-WC08-02	▲	42	40	60	70	131	239	WCMX080412	L60M3.5×10	T15
ZD03-430-XP40-WC08-02	▲	43	40	60	70	134	242	WCMX080412	L60M3.5×10	T15
ZD03-440-XP40-WC08-02	▲	44	40	60	70	137	245	WCMX080412	L60M3.5×10	T15
ZD03-450-XP40-WC08-02	▲	45	40	60	70	140	248	WCMX080412	L60M3.5×10	T15
ZD03-460-XP40-WC08-02	▲	46	40	60	70	143	251	WCMX080412	L60M3.5×10	T15
ZD03-470-XP40-WC08-02	▲	47	40	60	70	146	253	WCMX080412	L60M3.5×10	T15
ZD03-480-XP40-WC08-02	▲	48	40	70	70	149	255	WCMX080412	L60M3.5×10	T15
ZD03-490-XP40-WC08-02	▲	49	40	70	70	152	257	WCMX080412	L60M3.5×10	T15
ZD03-500-XP40-WC08-02	▲	50	40	70	70	155	259	WCMX080412	L60M3.5×10	T15
ZD03-510-XP40-WC08-02	▲	51	40	70	70	158	261	WCMX080412	L60M3.5×10	T15
ZD03-520-XP40-WC08-02	▲	52	40	70	70	161	263	WCMX080412	L60M3.5×10	T15
ZD03-530-XP40-WC08-02	▲	53	40	70	70	164	265	WCMX080412	L60M3.5×10	T15
ZD03-540-XP40-WC08-02	▲	54	40	70	70	167	267	WCMX080412	L60M3.5×10	T15
ZD03-550-XP40-WC08-02	▲	55	40	70	70	170	269	WCMX080412	L60M3.5×10	T15
ZD03-560-XP40-WC08-02	▲	56	40	70	70	173	271	WCMX080412	L60M3.5×10	T15
ZD03-570-XP40-WC08-02	▲	57	40	70	70	176	273	WCMX080412	L60M3.5×10	T15
ZD03-580-XP40-WC08-02	▲	58	40	70	70	179	275	WCMX080412	L60M3.5×10	T15

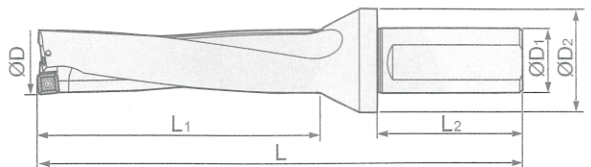
▲ Stock △ Order

MILLING TOOLS

Indexable u drill



ZTD03



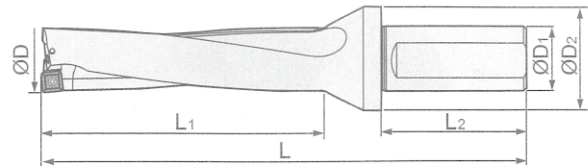
Type	Stock	Dimension (mm)						Applicable Insert	Screw	Wrench
		D	D1	D2	L1	L2	L			
ZTD03-170-XP25-SP06-02	▲	17	25	32	56	56	135	SPGT060204-PM	160M2.2×5	T08
ZTD03-180-XP25-SP06-02	▲	18	25	32	59	56	138	SPGT060204-PM	160M2.2×5	T08
ZTD03-190-XP25-SP06-02	▲	19	25	32	62	56	140	SPGT060204-PM	160M2.2×5	T08
ZTD03-200-XP25-SP06-02	▲	20	25	32	65	56	143	SPGT060204-PM	160M2.2×5	T08
ZTD03-210-XP25-SP06-02	▲	21	25	32	68	56	146	SPGT060204-PM	160M2.2×5	T08
ZTD03-220-XP25-SP06-02	▲	22	25	32	71	56	149	SPGT060204-PM	160M2.2×5	T08
ZTD03-230-XP25-SP07-02	▲	23	25	40	74	56	153	SPGT07T308-PM	160M2.5×6	T08
ZTD03-240-XP25-SP07-02	▲	24	25	40	77	56	159	SPGT07T308-PM	160M2.5×6	T08
ZTD03-250-XP25-SP07-02	▲	25	25	40	80	56	159	SPGT07T308-PM	160M2.5×6	T08
ZTD03-260-XP25-SP07-02	▲	26	25	40	83	56	162	SPGT07T308-PM	160M2.5×6	T08
ZTD03-270-XP25-SP07-02	▲	27	25	40	86	56	165	SPGT07T308-PM	160M2.5×6	T08
ZTD03-280-XP25-SP07-02	▲	28	25	40	89	56	168	SPGT07T308-PM	160M2.5×6	T08
ZTD03-290-XP25-SP07-02	▲	29	32	45	92	60	178	SPGT07T308-PM	160M2.5×6	T08
ZTD03-300-XP32-SP09-02	▲	30	32	45	95	60	181	SPGT090408-PM	160M3.5×8	T15
ZTD03-310-XP32-SP09-02	▲	31	32	45	98	60	184	SPGT090408-PM	160M3.5×8	T15
ZTD03-320-XP32-SP09-02	▲	32	32	45	101	60	187	SPGT090408-PM	160M3.5×8	T15
ZTD03-330-XP32-SP09-02	▲	33	32	45	104	60	190	SPGT090408-PM	160M3.5×8	T15
ZTD03-340-XP32-SP09-02	▲	34	32	45	107	60	193	SPGT090408-PM	160M3.5×8	T15
ZTD03-350-XP32-SP09-02	▲	35	32	45	110	60	196	SPGT090408-PM	160M3.5×8	T15
ZTD03-360-XP32-SP09-02	▲	36	32	45	113	60	199	SPGT090408-PM	160M3.5×8	T15
ZTD03-370-XP40-SP11-02	▲	37	40	55	117	70	217	SPGT110408-PM	160M4×10	T15
ZTD03-380-XP40-SP11-02	▲	38	40	55	119	70	220	SPGT110408-PM	160M4×10	T15
ZTD03-390-XP40-SP11-02	▲	39	40	55	122	70	223	SPGT110408-PM	160M4×11	T15
ZTD03-400-XP40-SP11-02	▲	40	40	55	125	70	231	SPGT110408-PM	160M4×10	T15
ZTD03-410-XP40-SP11-02	▲	41	40	55	128	70	229	SPGT110408-PM	160M4×10	T15
ZTD03-420-XP40-SP11-02	▲	42	40	55	131	70	232	SPGT110408-PM	160M4×10	T15
ZTD03-430-XP40-SP11-02	△	43	40	55	134	70	240	SPGT110408-PM	160M4×10	T15
ZTD03-440-XP40-SP14-02	△	44	40	60	138	70	248	SPGT140512-PM	160M5×13	T20
ZTD03-450-XP40-SP14-02	△	45	40	60	141	70	251	SPGT140512-PM	160M5×13	T20
ZTD03-460-XP40-SP14-02	△	46	40	60	144	70	254	SPGT140512-PM	160M5×13	T20
ZTD03-470-XP40-SP14-02	△	47	40	60	147	70	257	SPGT140512-PM	160M5×13	T20
ZTD03-480-XP40-SP14-02	△	48	40	60	149	70	260	SPGT140512-PM	160M5×13	T20
ZTD03-490-XP40-SP14-02	△	49	40	60	152	70	263	SPGT140512-PM	160M5×13	T20
ZTD03-500-XP40-SP14-02	△	50	40	60	155	70	266	SPGT140512-PM	160M5×13	T20

MILLING TOOLS

Indexable u drill



ZTD04



Type	Stock	Dimension (mm)						Applicable Insert	Screw	Wrench
		D	D1	D2	L1	L2	L			
ZTD04-170-XP25-SP06-02	▲	17	25	32	73	56	152	SPGT060204-PM	160M2.2×5	T08
ZTD04-180-XP25-SP06-02	▲	18	25	32	77	56	156	SPGT060204-PM	160M2.2×5	T08
ZTD04-190-XP25-SP06-02	▲	19	25	32	81	56	160	SPGT060204-PM	160M2.2×5	T08
ZTD04-200-XP25-SP06-02	▲	20	25	32	85	56	163	SPGT060204-PM	160M2.2×5	T08
ZTD04-210-XP25-SP06-02	▲	21	25	32	89	56	167	SPGT060204-PM	160M2.2×5	T08
ZTD04-220-XP25-SP06-02	▲	22	25	32	93	56	171	SPGT060204-PM	160M2.2×5	T08
ZTD04-230-XP25-SP07-02	▲	23	25	40	97	56	176	SPGT07T308-PM	160M2.5×6	T08
ZTD04-240-XP25-SP07-02	▲	24	25	40	101	56	180	SPGT07T308-PM	160M2.5×6	T08
ZTD04-250-XP25-SP07-02	▲	25	25	40	105	56	184	SPGT07T308-PM	160M2.5×6	T08
ZTD04-260-XP25-SP07-02	▲	26	25	40	109	56	188	SPGT07T308-PM	160M2.5×6	T08
ZTD04-270-XP25-SP07-02	▲	27	25	40	113	56	192	SPGT07T308-PM	160M2.5×6	T08
ZTD04-280-XP25-SP07-02	▲	28	25	40	117	56	196	SPGT07T308-PM	160M2.5×6	T08
ZTD04-290-XP32-SP07-02	▲	29	32	45	121	60	207	SPGT07T308-PM	160M2.5×6	T08
ZTD04-300-XP32-SP09-02	▲	30	32	45	125	60	211	SPGT090408-PM	160M3.5×8	T15
ZTD04-310-XP32-SP09-02	▲	31	32	45	129	60	215	SPGT090408-PM	160M3.5×8	T15
ZTD04-320-XP32-SP09-02	▲	32	32	45	133	60	219	SPGT090408-PM	160M3.5×8	T15
ZTD04-330-XP32-SP09-02	▲	33	32	45	137	60	223	SPGT090408-PM	160M3.5×8	T15
ZTD04-340-XP32-SP09-02	▲	34	32	45	141	60	227	SPGT090408-PM	160M3.5×8	T15
ZTD04-350-XP32-SP09-02	▲	35	32	45	145	60	231	SPGT090408-PM	160M3.5×8	T15
ZTD04-360-XP32-SP09-02	▲	36	32	45	149	60	235	SPGT090408-PM	160M3.5×8	T15
ZTD04-370-XP40-SP11-02	▲	37	40	55	154	70	254	SPGT110408-PM	160M4×10	T15
ZTD04-380-XP40-SP11-02	▲	38	40	55	158	70	258	SPGT110408-PM	160M4×10	T15
ZTD04-390-XP40-SP11-02	▲	39	40	55	161	70	267	SPGT110408-PM	160M4×11	T15
ZTD04-400-XP40-SP11-02	▲	40	40	55	165	70	271	SPGT110408-PM	160M4×10	T15
ZTD04-410-XP40-SP11-02	▲	41	40	55	169	70	270	SPGT110408-PM	160M4×10	T15
ZTD04-420-XP40-SP11-02	▲	42	40	55	173	70	279	SPGT110408-PM	160M4×10	T15
ZTD04-430-XP40-SP11-02	△	43	40	55	177	70	283	SPGT110408-PM	160M4×10	T15
ZTD04-440-XP40-SP14-02	△	44	40	60	182	70	292	SPGT140512-PM	160M5×13	T20
ZTD04-450-XP40-SP14-02	△	45	40	60	186	70	296	SPGT140512-PM	160M5×13	T20
ZTD04-460-XP40-SP14-02	△	46	40	60	190	70	300	SPGT140512-PM	160M5×13	T20
ZTD04-470-XP40-SP14-02	△	47	40	60	194	70	304	SPGT140512-PM	160M5×13	T20
ZTD04-480-XP40-SP14-02	△	48	40	60	198	70	308	SPGT140512-PM	160M5×13	T20
ZTD04-490-XP40-SP14-02	△	49	40	60	202	70	312	SPGT140512-PM	160M5×13	T20
ZTD04-500-XP40-SP14-02	△	50	40	60	206	70	316	SPGT140512-PM	160M5×13	T20

