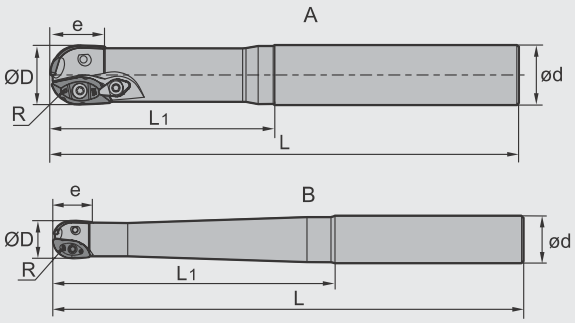
Profile milling tools · Profilfräser

BMR03 P M K

Straigth shank
Zylinder Schaft



Specification of tools · Werkzeug Beschreibung

Type Typ		Stock Lager	Dimensions (mm) Abmessungen						No. of teeth Zähne	Weight Gewicht (kg)	Type Typ	Clamp Pratze
			R	Ø D	ø d	L	L_1	e				
BMR03	**-016-G20-S**	●	8	16	20	150	70	16	2	0.3	B	
	-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	
	-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	WD-208
	-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	CBH5R1
	-040-G40-XL	○	20	40	40	350	200	40	2	3.0	A	

● Ex Stock / ab Lager ○ On demand / auf Anfrage

Applicable tool B11-B18
Werkzeug
Tools code key B25-B27
Werkzeug ISO
Grade selection guide B19-B23
Sortenauswahl
Technical data B215-B220
Technische Daten

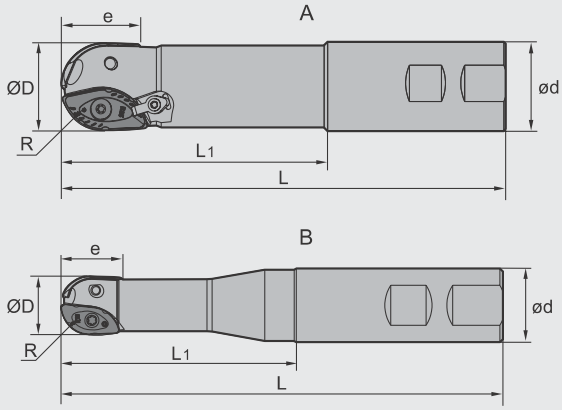
Profile milling tools · Profilfräser

BMR03 P M K

A (Ø30-Ø50)

B (Ø16-Ø25)

Weldon shank
Weldon Schaft



Specification of tools · Werkzeug Beschreibung

Type Typ		Stock Lager	Dimensions (mm) Abmessungen						No. of teeth Zähne	Weight Gewicht (kg)	Type Typ	Clamp Pratze
			R	Ø D	ø d	L	L_1	e				
BMR03	**-016-XP20-M**	●	8	16	20	111	60	16	2	0.2	B	
	-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	WD-208
	-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	CBH5R1
	-050-XP50-M	○	25	50	50	200	100	50	2	2.5	A	
	-050-XP50-L	○	25	50	50	250	150	50	2	3.1	A	

● Ex Stock / ab Lager ○ On demand / auf Anfrage

Profile milling tools · Profilfräser

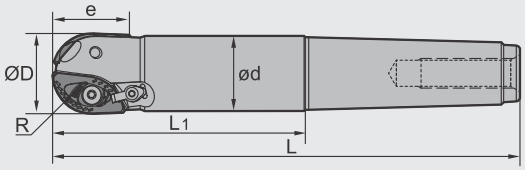
BMR03 P M K

A (Ø30-Ø50)

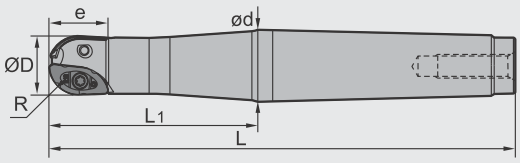
B (Ø20-Ø25)

Morse taper shank
Morsekegel Schaft

A



B



Specification of tools · Werkzeug Beschreibung

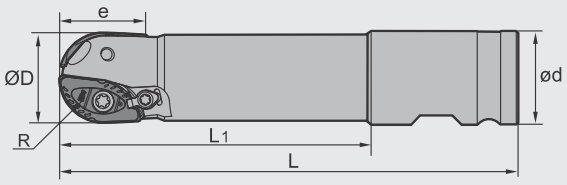
Type Typ		Stock Lager	Dimensions (mm) Abmessungen						No. of teeth Zähne	Weight Gewicht (kg)	type typ	Clamp Pratze
			R	Ø D	ø d	L	L1	e				
BMR03	**-020-MT3-M**	○	10	20	18.7	156	70	20	2	0.4	B	
	-020-MT3-L	○	10	20	18.7	186	100	20	2	0.4	B	
	-025-MT3-M	○	12.5	25	23.5	156	70	25	2	0.4	B	
	-025-MT3-L	○	12.5	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	WD-208
	-032-MT4-M	○	16	32	29.2	179	70	32	2	0.9	A	
	-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	
	-040-MT5-XL	○	20	40	36.9	256	120	40	2	2.0	A	CBH5R1
	-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	

Applicable tool B11-B18
Werkzeug
Tools code key B25-B27
Werkzeug ISO
Grade selection guide B19-B23
Sortenauswahl
Technical data B215-B220
Technische Daten

Profile milling tools · Profilfräser

BMR03 P M K

Compound shank
Komplex Schaft



Specification of tools · Werkzeug Beschreibung

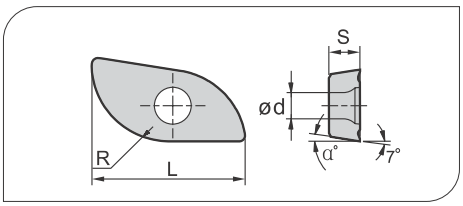
Type Typ		Stock Lager	Dimensions (mm) Abmessungen						No. of teeth Zähne	Weight Gewicht (kg)	Clamp Pratze
			R	Ø D	ø d	L	L_1	e			
BMR03	**-040-XPX-M**	○	20	40	50.8	250	170	40	2	1.3	CBH5R1
	-040-XPX-L	○	20	40	50.8	300	220	40	2	3.1	
	-040-XPX-XL	○	20	40	50.8	350	270	40	2	3.5	
	-050-XPX-M	○	25	50	50.8	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	

Spare parts · Ersatzteile

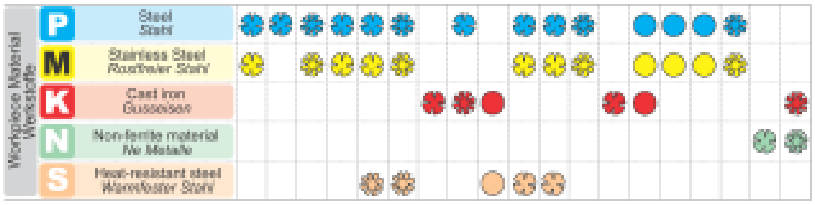
Diameter Durchmesser Ø D	Clamp Pratze	Screw Schraube	Wrench Schlüssel		
					
Φ16	--	I60M2.5×6.5	--	WT07P	
Φ20	--	I60M3.5×08TT		WT10IP	
Φ25	--	I60M4×10		WT15S	
Φ30	WD-208	I60M5×13	WT20IT	--	
Φ32	WD-208	I60M5×13			
Φ40	CBH5R1	I43M6×16	WT25IT		
Φ50	CBH5R1	I43M8×21 I43M6×16	WT25IT WT30IT		

● Ex Stock / ab Lager ○ On demand / auf Anfrage

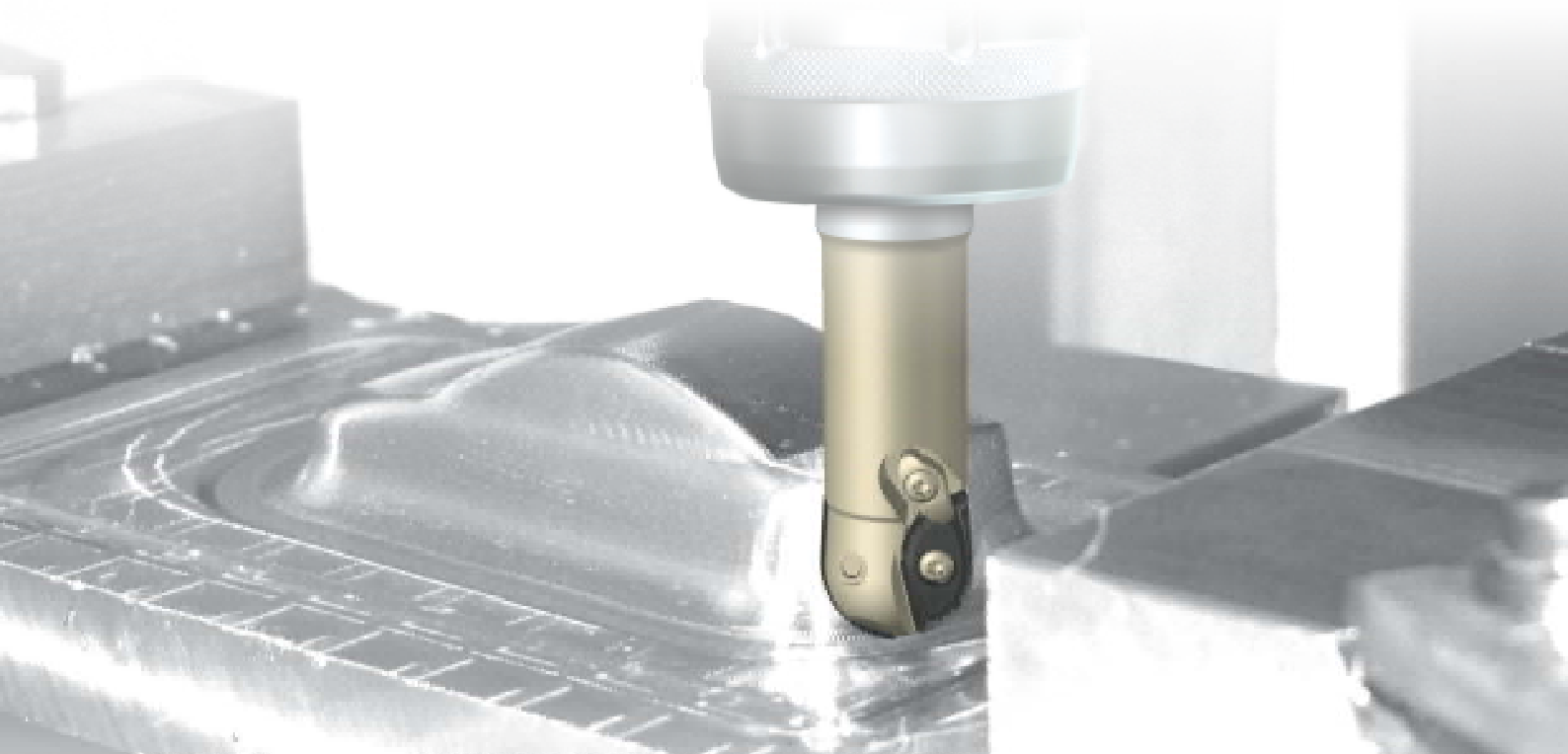
Applicable inserts · Wendeschneidplatten



Ideal Machining Condition
Gute Bearbeitungsbedingungen
Normal Machining Condition
Normale Bearbeitungsbedingungen
Unfavorable Machining Condition
Ungünstige Bearbeitungsbedingungen

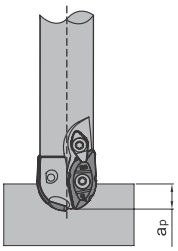
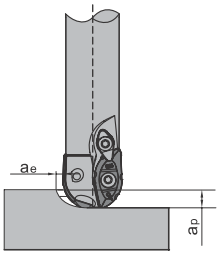
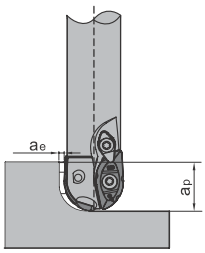


Insert WSP	Type Typ	Dimensions (mm) Abmessungen						CVD Coating CVD Beschicht.							PVD Coating PVD Beschicht.						Cermet Cermet		Carbide uncoat. unbe. Hartmetall		
		R	d	S	α°	L	Applicable tools Entsprechendes Werkzeug	YBC301	YBC302	YBC401	YBM251	YBM253	YBM351	YBD152	YBD252	YBG102	YBG202	YBG205	YBG302	YBG152	YBG252	YNG151	YNG151C	YC30S	YD101	YD201
	**XPHT16R0803-GM**	8	3.1	3.18	9	16	Φ16											●							
	XPHT20R10T3-GM	10	4.0	3.97	9	20	Φ20											●							
	XPHT25R1204-GM	12.5	4.7	4.76	9	25	Φ25											●							
	XPHT30R1506-GM	15	5.8	6.35	11	30	Φ30											●							
	XPHT32R1606-GM	16	5.8	6.35	9	32	Φ32											●							
	XPHT40R2007-GM	20	6.8	7.94	9	40	Φ40											●							
	XPHT50R2507-GM	25	9.2	7.94	9	50	Φ50											●							



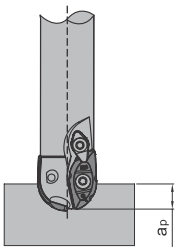
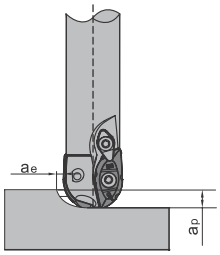
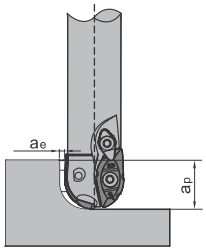
Recommended Cutting data · Schnittdaten

Diameter range
Durchmesser Bereich Ø16

Operations Anwendung						
Workpiece material Werkstück-stoff	Cutting data Schnittdaten	Machining of slot Nutenfräsen	Side milling (slight) Schulterfräsen		Side milling (deep) Schulterfräsen	Grade Sorte
Medium carbon steel Kohlenstoff-stahl Hardness Härte 150~250HB	V(m/min)	150~220	150~220	150~220	150~220	YBG302
	Fz(mm/z)	0.1~0.4	0.1~0.4	0.1~0.4	0.1~0.4	
	a_p(mm)	4	4	8	16	
	a_e(mm)	--	3	4	1.5	
Alloy steel Leg. Stahl Hardness Härte 150~280HB	V(m/min)	100~150	100~150	100~150	100~150	
	Fz(mm/z)	0.1~0.4	0.1~0.4	0.1~0.4	0.1~0.4	
	a_p(mm)	4	4	8	16	
	a_e(mm)	--	3	4	1.5	
Die steel Gesenkstahl Hardness Härte 150~255HB	V(m/min)	80~120	80~120	80~120	80~120	
	Fz(mm/z)	0.1~0.3	0.1~0.3	0.1~0.3	0.1~0.3	
	a_p(mm)	4	4	8	16	
	a_e(mm)	--	3	4	1.5	
Hardened steel gehärteter Stahl Hardness Härte 40~50HRC	V(m/min)	80~100	80~100	80~100	--	
	Fz(mm/z)	0.08~0.15	0.08~0.15	0.08~0.15	--	
	a_p(mm)	4	4	8	--	
	a_e(mm)	--	2	3	--	
Grey Cast iron Grausguss Hardness Härte 160~260HB	V(m/min)	250~300	250~300	250~300	250~300	
	Fz(mm/z)	0.08~0.15	0.08~0.15	0.08~0.15	0.08~0.15	
	a_p(mm)	4	4	8	16	
	a_e(mm)	--	3	4	1.5	
Nodular Cast iron Kugelgrafitguss Hardness Härte 170~300HB	V(m/min)	200~250	200~250	200~250	200~250	
	Fz(mm/z)	0.08~0.15	0.08~0.15	0.08~0.15	0.08~0.15	
	a_p(mm)	4	4	8	16	
	a_e(mm)	--	3	4	1.5	

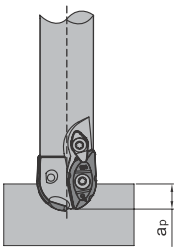
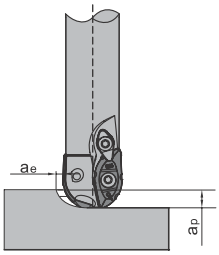
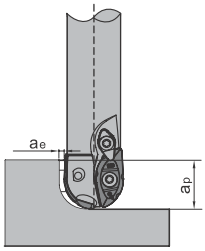
Recommended Cutting data · Schnittdaten

Diameter range Ø20
Durchmesser Bereich Ø20

Operations Anwendung						
Workpiece material Werkstück-stoff	Cutting data Schnittdaten	Machining of slot Nutenfräsen	Side milling (slight) Schulterfräsen		Side milling (deep) Schulterfräsen	Grade Sorte
Medium carbon steel Kohlenstoff-stahl Hardness Härte 150~250HB	V(m/min)	150~220	150~220	150~220	150~220	YBG302
	Fz(mm/z)	0.1~0.4	0.1~0.4	0.1~0.4	0.1~0.4	
	a_p(mm)	5	5	10	20	
	a_e(mm)	--	4	5	2	
Alloy steel Leg. Stahl Hardness Härte 150~280HB	V(m/min)	100~150	100~150	100~150	100~150	
	Fz(mm/z)	0.1~0.4	0.1~0.4	0.1~0.4	0.1~0.4	
	a_p(mm)	5	5	10	20	
	a_e(mm)	--	4	5	2	
Die steel Gesenkstahl Hardness Härte 150~255HB	V(m/min)	80~120	80~120	80~120	80~120	
	Fz(mm/z)	0.1~0.3	0.1~0.3	0.1~0.3	0.1~0.3	
	a_p(mm)	5	5	10	20	
	a_e(mm)	--	4	5	2	
Hardened steel gehärteter Stahl Hardness Härte 40~50HRC	V(m/min)	80~100	80~100	80~100	--	
	Fz(mm/z)	0.08~0.15	0.08~0.15	0.08~0.15	--	
	a_p(mm)	5	5	10	--	
	a_e(mm)	--	4	5	--	
Grey Cast iron Grausguss Hardness Härte 160~260HB	V(m/min)	250~300	250~300	250~300	250~300	
	Fz(mm/z)	0.08~0.15	0.08~0.15	0.08~0.15	0.08~0.15	
	a_p(mm)	5	5	10	20	
	a_e(mm)	--	4	5	2	
Nodular Cast iron Kugelgrafitguss Hardness Härte 170~300HB	V(m/min)	200~250	200~250	200~250	200~250	
	Fz(mm/z)	0.08~0.15	0.08~0.15	0.08~0.15	0.08~0.15	
	a_p(mm)	5	5	10	20	
	a_e(mm)	--	4	5	2	

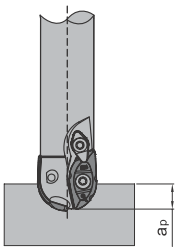
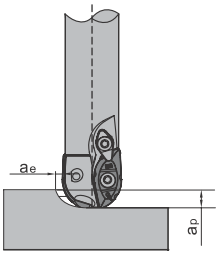
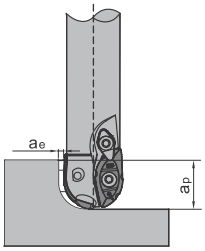
Recommended Cutting data · Schnittdaten

Diameter range
Durchmesser Bereich Ø25

Operations **Anwendung**						
Workpiece material Werkstück-stoff	Cutting data Schnittdaten	Machining of slot Nutenfräsen	Side milling (slight) Schulterfräsen		Side milling (deep) Schulterfräsen	Grade Sorte
Medium carbon steel Kohlenstoff-stahl Hardness Härte 150~250HB	V(m/min)	150~220	150~220	150~220	150~220	YBG302
	Fz(mm/z)	0.1~0.4	0.1~0.4	0.1~0.4	0.1~0.4	
	a_p(mm)	6	6	12.5	25	
	a_e(mm)	--	5	6.5	3	
Alloy steel Leg. Stahl Hardness Härte 150~280HB	V(m/min)	100~150	100~150	100~150	100~150	
	Fz(mm/z)	0.1~0.4	0.1~0.4	0.1~0.4	0.1~0.4	
	a_p(mm)	6	6	12.5	25	
	a_e(mm)	--	5	6.5	3	
Die steel Gesenkstahl Hardness Härte 150~255HB	V(m/min)	80~120	80~120	80~120	80~120	
	Fz(mm/z)	0.1~0.3	0.1~0.3	0.1~0.3	0.1~0.3	
	a_p(mm)	6	6	12.5	25	
	a_e(mm)	--	5	6.5	3	
Hardened steel gehärteter Stahl Hardness Härte 40~50HRC	V(m/min)	80~100	80~100	80~100	--	
	Fz(mm/z)	0.08~0.15	0.08~0.15	0.08~0.15	--	
	a_p(mm)	6	6	12.5	--	
	a_e(mm)	--	5	6.5	--	
Grey Cast iron Grausguss Hardness Härte 160~260HB	V(m/min)	250~300	250~300	250~300	250~300	
	Fz(mm/z)	0.08~0.15	0.08~0.15	0.08~0.15	0.08~0.15	
	a_p(mm)	6	6	12.5	25	
	a_e(mm)	--	5	6.5	3	
Nodular Cast iron Kugelgrafitguss Hardness Härte 170~300HB	V(m/min)	200~250	200~250	200~250	200~250	
	Fz(mm/z)	0.08~0.15	0.08~0.15	0.08~0.15	0.08~0.15	
	a_p(mm)	6	6	12.5	25	
	a_e(mm)	--	5	6.5	3	

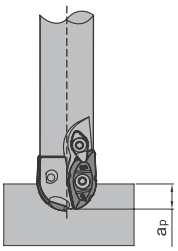
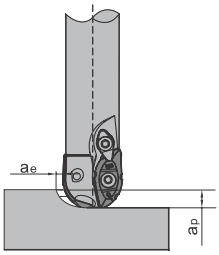
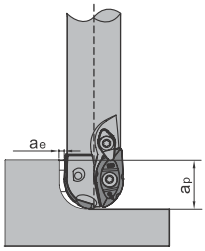
Recommended Cutting data · Schnittdaten

Diameter range
Durchmesser Bereich Ø30 Ø32

Operations Anwendung						
Workpiece material Werkstück-stoff	Cutting data Schnittdaten	Machining of slot Nutenfräsen	Side milling (slight) Schulterfräsen		Side milling (deep) Schulterfräsen	Grade Sorte
Medium carbon steel Kohlenstoff-stahl Hardness Härte 150~250HB	V(m/min)	150~220	150~220	150~220	150~220	YBG302
	Fz(mm/z)	0.1~0.4	0.1~0.4	0.1~0.4	0.1~0.4	
	a_p(mm)	10	10	16	28	
	a_e(mm)	--	6	9	6	
Alloy steel Leg. Stahl Hardness Härte 150~280HB	V(m/min)	100~150	100~150	100~150	100~150	
	Fz(mm/z)	0.1~0.4	0.1~0.4	0.1~0.4	0.1~0.4	
	a_p(mm)	10	10	16	28	
	a_e(mm)	--	6	9	6	
Die steel Gesenkstahl Hardness Härte 150~255HB	V(m/min)	80~120	80~120	80~120	80~120	
	Fz(mm/z)	0.1~0.3	0.1~0.3	0.1~0.3	0.1~0.3	
	a_p(mm)	10	10	16	28	
	a_e(mm)	--	6	9	6	
Hardened steel gehärteter Stahl Hardness Härte 40~50HRC	V(m/min)	80~100	80~100	80~100	--	
	Fz(mm/z)	0.08~0.15	0.08~0.15	0.08~0.15	--	
	a_p(mm)	10	10	16	--	
	a_e(mm)	--	6	9	--	
Grey Cast iron Grausguss Hardness Härte 160~260HB	V(m/min)	250~300	250~300	250~300	250~300	
	Fz(mm/z)	0.08~0.15	0.08~0.15	0.08~0.15	0.08~0.15	
	a_p(mm)	10	10	16	28	
	a_e(mm)	--	6	9	6	
Nodular Cast iron Kugelgrafitguss Hardness Härte 170~300HB	V(m/min)	200~250	200~250	200~250	200~250	
	Fz(mm/z)	0.08~0.15	0.08~0.15	0.08~0.15	0.08~0.15	
	a_p(mm)	10	10	16	28	
	a_e(mm)	--	6	9	6	

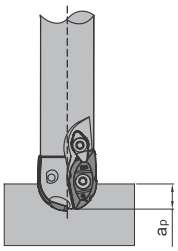
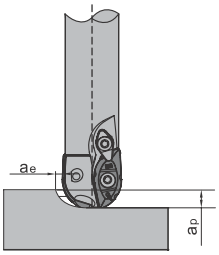
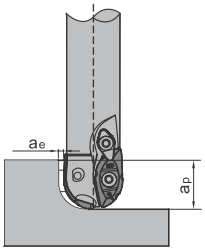
Recommended Cutting data · Schnittdaten

Diameter range
Durchmesser Bereich Ø40

Operations Anwendung						
Workpiece material Werkstück-stoff	Cutting data Schnittdaten	Machining of slot Nutenfräsen	Side milling (slight) Schulterfräsen		Side milling (deep) Schulterfräsen	Grade Sorte
Medium carbon steel	V(m/min)	150~220	150~220	150~220	150~220	YBG302
Kohlenstoff-stahl	Fz(mm/z)	0.1~0.4	0.1~0.4	0.1~0.4	0.1~0.4	
Hardness Härte	a_p(mm)	12	10	20	35	
150~250HB	a_e(mm)	--	8	12	8	
Alloy steel leg. Stahl	V(m/min)	100~150	100~150	100~150	100~150	
	Fz(mm/z)	0.1~0.4	0.1~0.4	0.1~0.4	0.1~0.4	
Hardness Härte	a_p(mm)	12	10	20	35	
150~280HB	a_e(mm)	--	8	12	8	
Die steel Gesenkstahl	V(m/min)	80~120	80~120	80~120	80~120	
	Fz(mm/z)	0.1~0.3	0.1~0.3	0.1~0.3	0.1~0.3	
Hardness Härte	a_p(mm)	12	10	20	35	
150~255HB	a_e(mm)	--	8	12	8	
Hardened steel gehärteter Stahl	V(m/min)	80~100	80~100	80~100	–	
	Fz(mm/z)	0.08~0.15	0.08~0.15	0.08~0.15	–	
Hardness Härte	a_p(mm)	12	10	20	–	
40~50HRC	a_e(mm)	--	8	12	–	
Grey Cast iron Grausguss	V(m/min)	250~300	250~300	250~300	250~300	
	Fz(mm/z)	0.08~0.15	0.08~0.15	0.08~0.15	0.08~0.15	
Hardness Härte	a_p(mm)	12	10	20	35	
160~260HB	a_e(mm)	--	8	12	8	
Nodular Cast iron Kugelgrafitguss	V(m/min)	200~250	200~250	200~250	200~250	
	Fz(mm/z)	0.08~0.15	0.08~0.15	0.08~0.15	0.08~0.15	
Hardness Härte	a_p(mm)	12	10	20	35	
170~300HB	a_e(mm)	--	8	12	8	

Recommended Cutting data · Schnittdaten

Diameter range
Durchmesser Bereich Ø50

Operations Anwendung						
Workpiece material Werkstück-stoff	Cutting data Schnittdaten	Machining of slot Nutenfräsen	Side milling (slight) Schulterfräsen		Side milling (deep) Schulterfräsen	Grade Sorte
Medium carbon steel Kohlenstoff-stahl Hardness Härte 150~250HB	V(m/min)	150~220	150~220	150~220	150~220	YBG302
	Fz(mm/z)	0.1~0.4	0.1~0.4	0.1~0.4	0.1~0.4	
	a_p(mm)	15	10	25	40	
	a_e(mm)	--	10	15	10	
Alloy steel leg. Stahl Hardness Härte 150~280HB	V(m/min)	100~150	100~150	100~150	100~150	
	Fz(mm/z)	0.1~0.4	0.1~0.4	0.1~0.4	0.1~0.4	
	a_p(mm)	15	10	25	40	
	a_e(mm)	--	10	15	10	
Die steel Gesenkstahl Hardness Härte 150~255HB	V(m/min)	80~120	80~120	80~120	80~120	
	Fz(mm/z)	0.1~0.3	0.1~0.3	0.1~0.3	0.1~0.3	
	a_p(mm)	15	10	25	40	
	a_e(mm)	--	10	15	10	
Hardened steel gehärteter Stahl Hardness Härte 40~50HRC	V(m/min)	80~100	80~100	80~100	–	
	Fz(mm/z)	0.08~0.15	0.08~0.15	0.08~0.15	–	
	a_p(mm)	15	10	25	–	
	a_e(mm)	--	10	15	–	
Grey Cast iron Grausguss Hardness Härte 160~260HB	V(m/min)	250~300	250~300	250~300	250~300	
	Fz(mm/z)	0.08~0.15	0.08~0.15	0.08~0.15	0.08~0.15	
	a_p(mm)	15	10	25	40	
	a_e(mm)	--	10	15	10	
Nodular Cast iron Kugelgrafitguss Hardness Härte 170~300HB	V(m/min)	200~250	200~250	200~250	200~250	
	Fz(mm/z)	0.08~0.15	0.08~0.15	0.08~0.15	0.08~0.15	
	a_p(mm)	15	10	25	40	
	a_e(mm)	--	10	15	10	