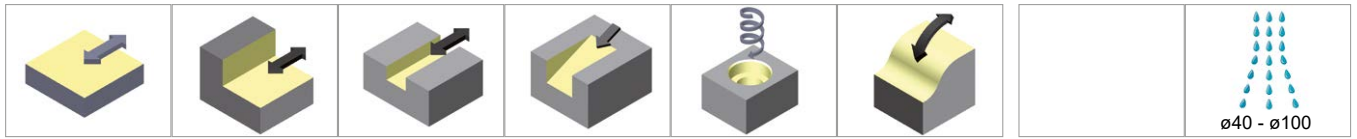
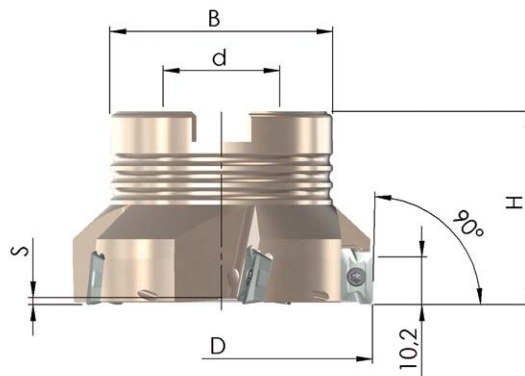
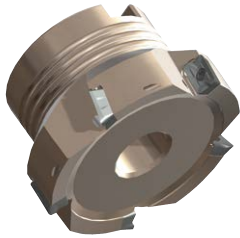


B17 Eckfräser 90° *Step mills, Fraises à 90°, Frese per spallamenti retti*



Aufsteckfräser *Shell type mills, Fraises à alésage, Frese per attacco a manicotto*



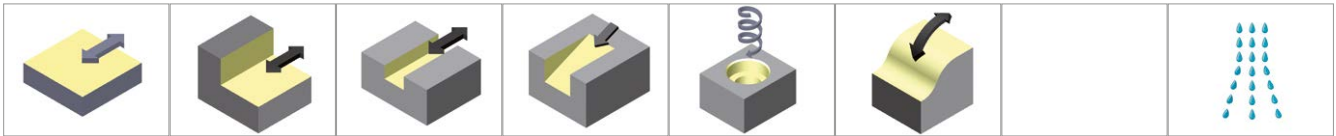
Bestell-Nr. <i>Order-No., Référence, Codice</i>	D	H	d	B	S	Z	MS
90PP-040-75-16-4	40	40	16	38	2,0	4	MS-8x25-912
90PP-040-75-22-4	40	40	22	38	2,0	4	MS-10x25-912
90PP-050-75-5	50	40	22	46	2,0	5	MS-10x25-912
90PP-063-75-5	63	40	22	46	2,0	5	MS-10x25-912
90PP-080-75-7	80	50	27	58	2,0	7	MS-12x35-912
90PP-100-75-9	100	50	32	78	2,0	9	MS-16x30-912
90PP-125-75-13	125	50	40	90	2,0	13	MS-20x45-7991

Enge Teilung *close pitch, à pas réduit, a passo stretto:*

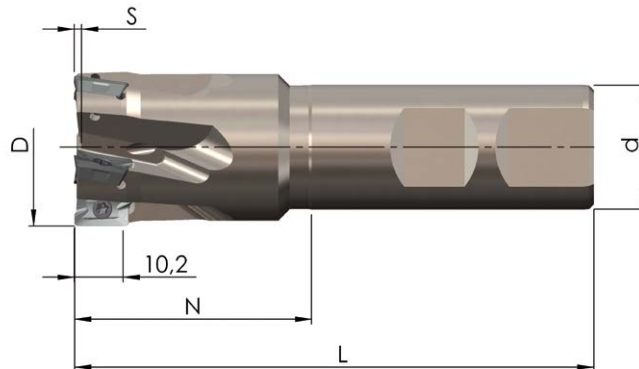
Bestell-Nr. <i>Order-No., Référence, Codice</i>	D	H	d	B	S	Z	MS
90PP-032-75-16-5	32	35	16	29	2,2	5	DS12
90PP-040-75-16-5	40	40	16	38	2,0	5	MS-8x25-912
90PP-040-75-22-5	40	40	22	38	2,0	5	MS-10x25-912
90PP-050-75-6	50	40	22	46	2,0	6	MS-10x25-912
90PP-063-75-7	63	40	22	46	2,0	7	MS-10x25-912
90PP-080-75-9	80	50	27	58	2,0	9	MS-12x35-912
90PP-100-75-12	100	50	32	78	2,0	12	MS-16x30-912

MS= Mittenschraube *Central screw, Vis centrale, Vite centrale di fissaggio*

B17 Eckfräser 90° *Step mills, Fraises à 90°, Frese per spallamenti retti*



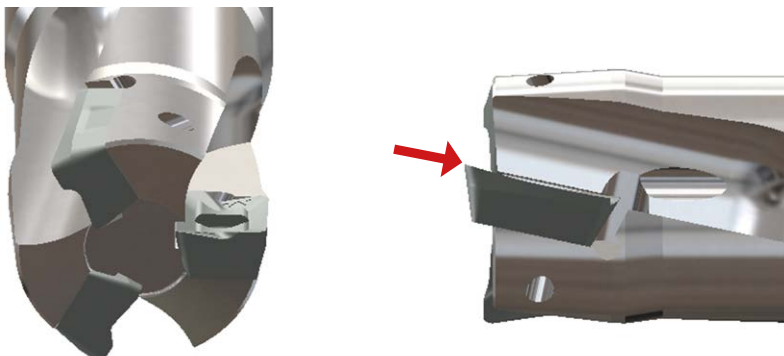
Schafffräser DIN 1835-B *Shank type mills, Fraises à queue Weldon, Frese a gambo Weldon*



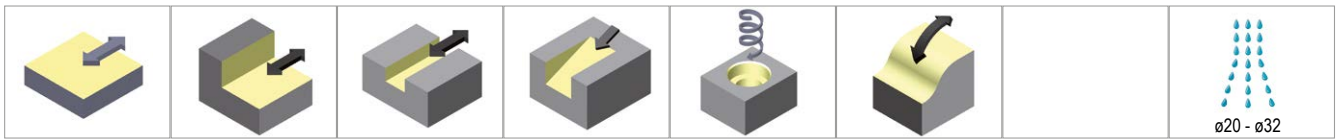
Bestell-Nr.	D	N	L	d	S	Z
<i>Order-No., Référence, Codice</i>						
90PP-20-32-75-2	20	32	82,4	20	2,0	2
90PP-20-50-75-2	20	50	100,4	20	2,0	2
90PP-22-33-75-3	22	33	83,3	20	2,0	3
90PP-25-38-75-3	25	38	95,2	25	2,0	3
90PP-25-60-75-3	25	60	117,2	25	2,0	3
90PP-28-42-75-4	28	42	98,4	25	2,0	4
90PP-30-45-75-4	30	45	101,3	25	2,0	4
90PP-32-48-75-3	32	48	104,3	25	2,0	3
90PP-32-60-75-3	32	60	116,3	25	2,0	3
90PP-36-48-75-5	36	48	104,2	25	2,0	5
90PP-40-48-75-5	40	48	104,1	25	2,0	5
Enge Teilung <i>close pitch, à pas réduit, a passo stretto:</i>						
90PP-20-30-75-3*	20	30	81,8	20	2,0	3
90PP-25-38-75-4	25	38	95,2	25	2,0	4
90PP-32-48-75-5	32	48	104,3	25	2,0	5

*Montageanleitung 90PP-20-03-75-3

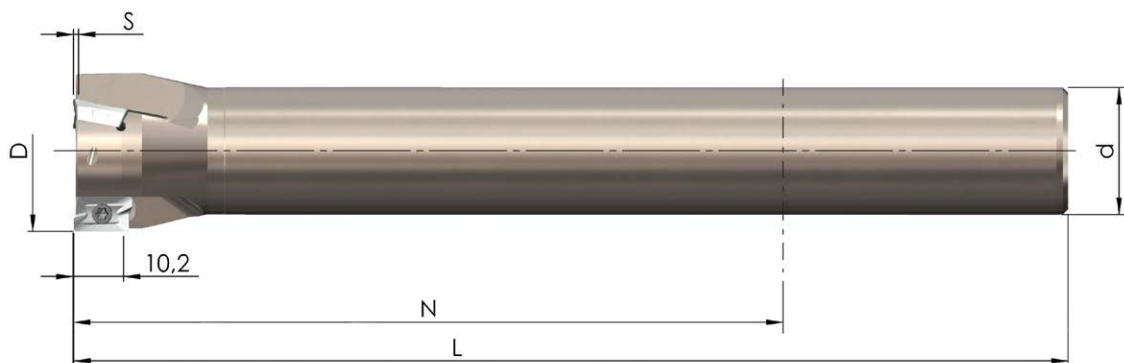
Assembly instruction, Instruction de montage, Istruzioni per il montaggio



B17 Eckfräser 90° *Step mills, Fraises à 90°, Frese per spallamenti retti*

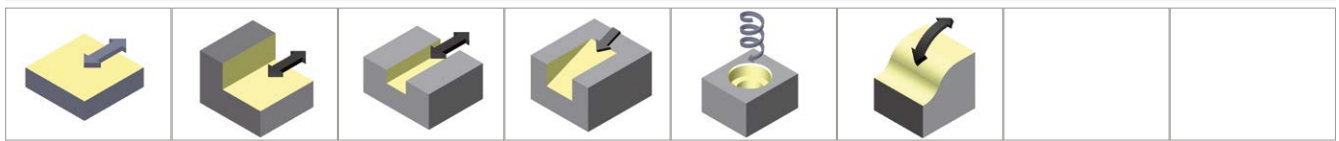


Schafffräser DIN 1835-A *Shank type mills, Fraises à queue, Frese a gambo*

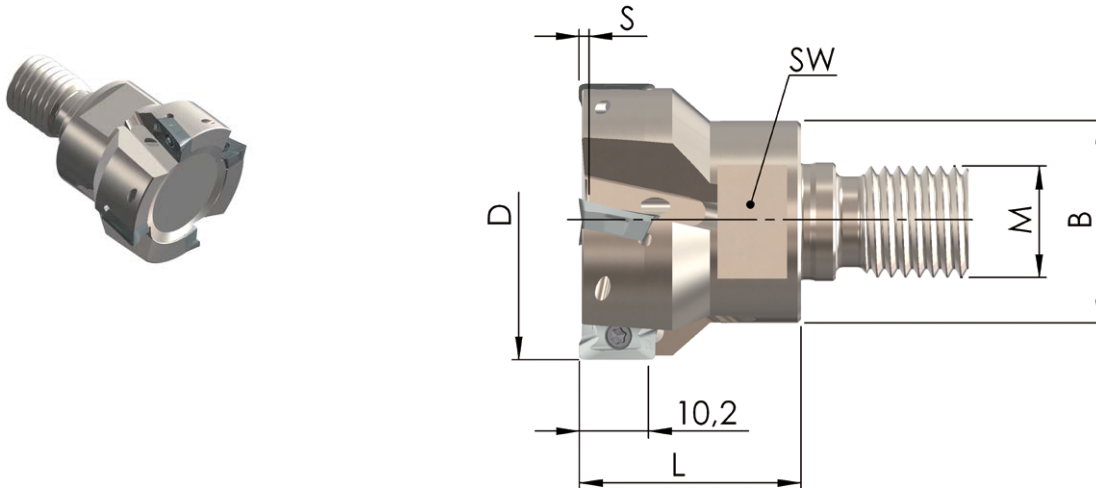


Bestell-Nr.	D	N	L	d	S	Z
<i>Order-No., Référence, Codice</i>						
90PP-16-75-2-150	16	28	150	16	1,3	2
90PP-20-75-2-150	20	101	150	18	2,0	2
90PP-25-75-2-170	25	119	170	20	2,0	2
90PP-32-75-3-195	32	138	195	25	2,0	3

B17 Eckfräser 90° *Step mills, Fraises à 90°, Frese per spallamenti retti*



Einschraubfräser *Screw-In cutters, Fraises à queue fileté, Frese con attacco filettato*



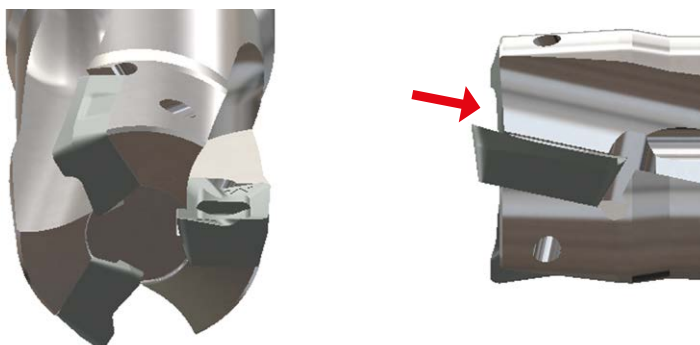
Bestell-Nr. <i>Order-No., Référence, Codice</i>	D	L	M	B	SW	S	Z
ESF-20-27-M10-75-2	20	27	M10	18	16	2,0	2
ESF-25-32-M12-75-3	25	32	M12	21	18	2,0	3
ESF-32-32-M16-75-3	32	32	M16	29	24	2,0	3
ESF-35-32-M16-75-4	35	32	M16	29	24	2,0	4
ESF-40-32-M16-75-4	40	32	M16	29	24	2,0	4

Enge Teilung *close pitch, à pas réduit, a passo stretto:*

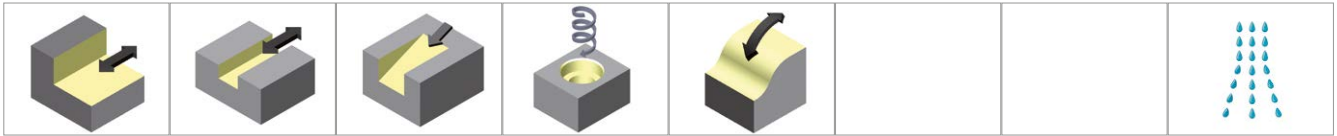
Bestell-Nr. <i>Order-No., Référence, Codice</i>	D	L	M	B	SW	S	Z
ESF-20-27-M10-75-3*	20	27	M10	18	16	2,0	3
ESF-25-32-M12-75-4	25	32	M12	21	18	2,0	4
ESF-32-32-M16-75-5	32	32	M16	29	24	2,0	5
ESF-35-32-M16-75-5	35	32	M16	29	24	2,0	5
ESF-40-32-M16-75-6	40	32	M16	29	24	2,0	6

*Montageanleitung ESF-20-27-M10-75-3

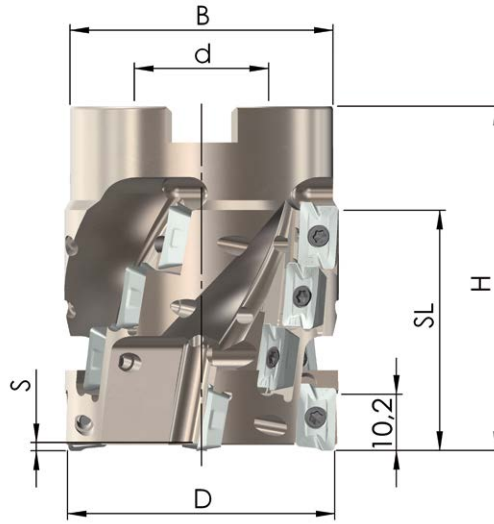
Assembly instruction, Instruction de montage, Istruzioni per il montaggio



B17 Vielzahnfräser *Multi-Tooth milling cutters, Fraises multi-dents (hérisson), Frese a riccio*



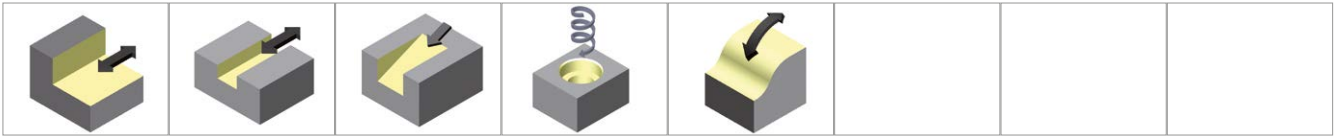
Aufsteckfräser *Shell type mills, Fraises à alésage, Frese per attacco a manicotto*



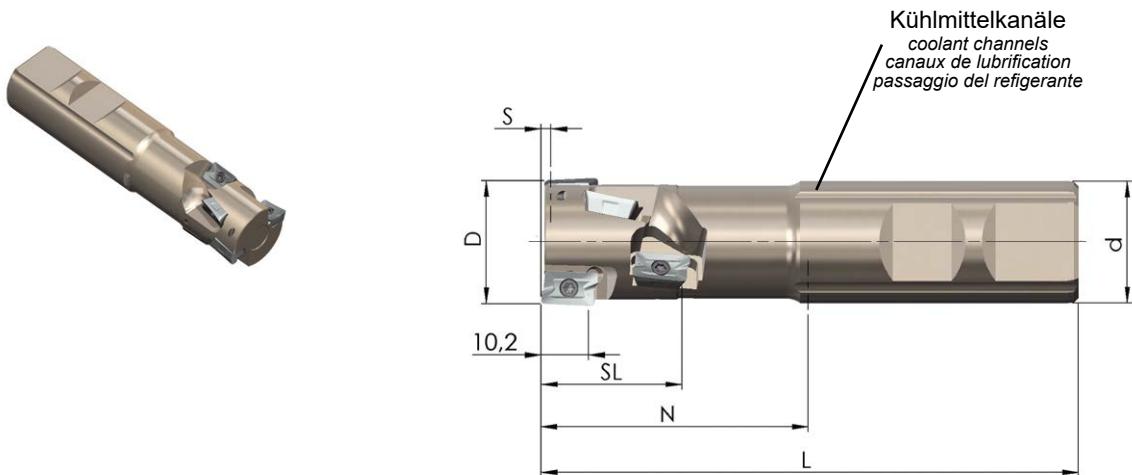
Bestell-Nr. <i>Order-No., Référence, Codice</i>	D	SL	H	d	B	S	Z _{eff.}	ZZ	MS
VZF 40-35-75-3 KD16	40	35	54	16	38	2,0	3	12	MS-8x50-912
VZF 50-35-75-4 KD22	50	35	60	22	46	2,0	4	16	MS-10x50-912
VZF 63-44-75-5 KD27	63	44	69	27	58	2,0	5	25	MS-12x60-912
Enge Teilung <i>close pitch, à pas réduit, a passo stretto:</i>									
VZF 40-35-75-4 KD16	40	35	54	16	38	2,0	4	16	MS-8x40-912

MS= Mittenschraube *Central screw, Vis centrale, Vite centrale di fissaggio*

B17 Vielzahnfräser *Multi-Tooth milling cutters, Fraises multi-dents (hérisson), Frese a riccio*

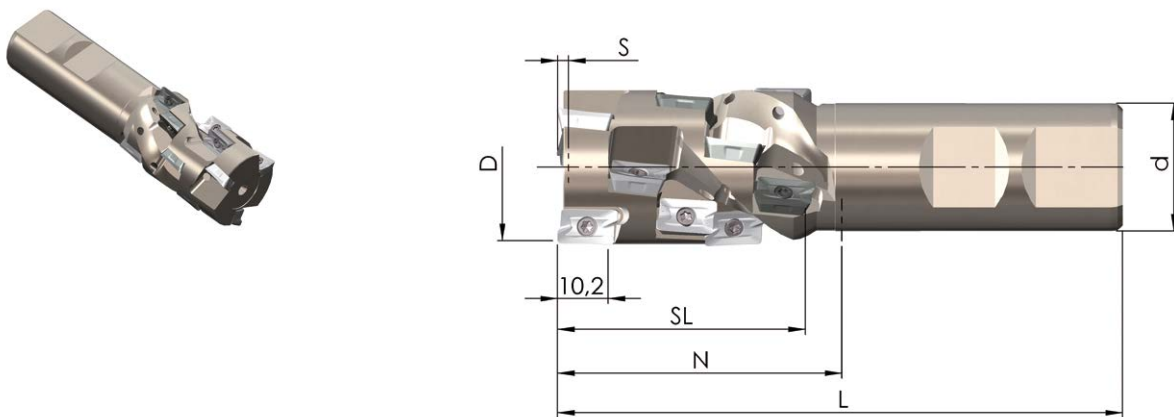
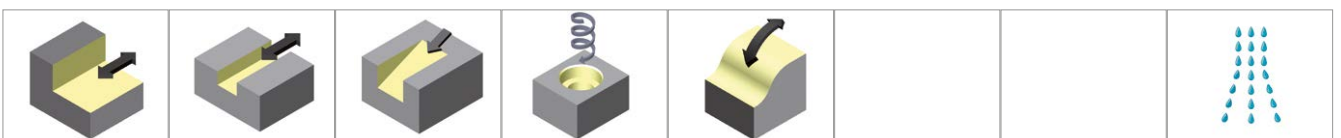


Schafffräser DIN 1835-B *Shank type mills, Fraises à queue Weldon, Frese a gambo Weldon*



Bestell-Nr. <i>Order-No., Référence, Codice</i>	D	SL	N	L	d	S	Z _{eff.}	ZZ
VZF 20-18-20-75-2	20	18	50	100	20	2,0	2	4
VZF 25-27-25-75-2	25	27	54	110	25	2,0	2	6
VZF 28-27-25-75-2	28	27	54	110	25	2,0	2	6

Schafffräser DIN 1835-B *Shank type mills, Fraises à queue Weldon, Frese a gambo Weldon*



Bestell-Nr. <i>Order-No., Référence, Codice</i>	D	SL	N	L	d	S	Z _{eff.}	ZZ
VZF 32-44-25-75-3	32	44	54	110	25	2,0	3	15
VZF 32-44-32-75-3	32	44	60	120	32	2,0	3	15

B17 Fräswendepplatten und Schnittdaten

Milling inserts and parameters, Plaquettes de fraiseage et paramètres, Inserti e parametri di taglio

			HC45 (code 41)	HT45 (code 31)	HT50 (code 22)	HT32 (code 33)	HT30 (code 29)	HC30 (code 52)	XC35 (code 46)
	JMB17-75R04- 12,0x7,0x4,0 R0,4	Order-No.		B17XM -31-A	B17YK -22-A	B17WL -33-A	B17UH -29-A		
		f_z [mm]		0,10 (0,05-0,30)	0,10 (0,05-0,30)	0,10 (0,05-0,30)	0,10 (0,05-0,30)		
	JMB17-275R04- 12,0x7,0x4,0 R0,4	Order-No.		B17DT -31-A		B17CX -33-A			
		f_z [mm]		0,10 (0,05-0,30)		0,10 (0,05-0,30)			
	JMB17-275R08- 12,0x7,0x4,0 R0,8	Order-No.		B17RA -31-A		B17KJ -33-A			
		f_z [mm]		0,10 (0,05-0,30)		0,10 (0,05-0,30)			
	JMB17-75MR10- 12,0x7,0x4,0 R1,0	Order-No.	B17TK -41-A					B17SH -52-A	
		f_z [mm]	0,15 (0,05-0,30)					0,15 (0,05-0,30)	
	JMB17-75R10- 12,0x7,0x4,0 R1,0	Order-No.		B17KU -31-A	B17LK -22-A	B17JP -33-A	B17HT -29-A		
		f_z [mm]		0,10 (0,05-0,30)	0,10 (0,05-0,30)	0,10 (0,05-0,30)	0,10 (0,05-0,30)		
	JMB17-76R04- 12,0x7,0x4,0 R0,4	Order-No.			B17NK -22-B		B17GP -29-B		
		f_z [mm]			0,15 (0,10-0,30)		0,10 (0,05-0,30)		
	JMB17-76R06- 12,0x7,0x4,0 R0,6	Order-No.			B17SX -22-B		B17RK -29-B		
		f_z [mm]			0,10 (0,05-0,30)		0,10 (0,05-0,30)		
	JMB17-76MR08- 12,0x7,0x4,0 R0,8	Order-No.						B17AO -46-B	
		f_z [mm]						0,10 (0,09-0,25)	
	JMB17-76R08- 12,0x7,0x4,0 R0,8	Order-No.			B17WR -22-B		B17UW -29-B		B17ZS -46-B
		f_z [mm]			0,10 (0,05-0,30)		0,10 (0,05-0,30)		0,10 (0,04-0,20)
	JMB17-76R02- 12,0x7,0x4,0 R0,2	Order-No.							
		f_z [mm]							
	JMB17-76R04- 12,0x7,0x4,0 R0,4	Order-No.							
		f_z [mm]							
	JMB17-76R06- 12,0x7,0x4,0 R0,6	Order-No.							
		f_z [mm]							
			20	20	20	20	20	20	20

B17 Fräswendeplatten und Schnittdaten

Milling inserts and parameters, Plaquettes de fraisage et paramètres, Inserti e parametri di taglio





			XC34 (code 64)	HT20 (code 32)	KT28 (code 23)	K15M (code 8)			
									
	JMB17-75R04- 12,0x7,0x4,0 R0,4 H M 	Order-No.			B17ZE -23-A				
		f_z [mm]				0,15 (0,10-0,30)			
	JMB17-275R04- 12,0x7,0x4,0 R0,4 H M 	Order-No.		B17BR -32-A					
		f_z [mm]			0,15 (0,10-0,30)				
	JMB17-275R08- 12,0x7,0x4,0 R0,8 H M 	Order-No.		B17FY -32-A					
		f_z [mm]			0,10 (0,05-0,30)				
	JMB17-75MR10- 12,0x7,0x4,0 R1,0 U 	Order-No.							
		f_z [mm]							
	JMB17-75R10- 12,0x7,0x4,0 R1,0 H M 	Order-No.			B17MU -23-A				
		f_z [mm]				0,10 (0,05-0,30)			
	JMB17-76R04- 12,0x7,0x4,0 R0,4 S 	Order-No.			B17JT -23-B				
		f_z [mm]				0,10 (0,05-0,30)			
	JMB17-76R06- 12,0x7,0x4,0 R0,6 S 	Order-No.			B17TY -23-B				
		f_z [mm]				0,10 (0,05-0,30)			
	JMB17-76MR08- 12,0x7,0x4,0 R0,8 U 	Order-No.	B17AP -64-B						
		f_z [mm]		0,10 (0,09-0,25)					
	JMB17-76R08- 12,0x7,0x4,0 R0,8 S 	Order-No.	B17LT -64 -B		B17YT -23-B				
		f_z [mm]		0,10 (0,04-0,20)		0,10 (0,05-0,30)			
	JMB17-76R02- 12,0x7,0x4,0 R0,2 S 	Order-No.				B17NU -08-D			
		f_z [mm]					0,10 (0,05-0,30)		
	JMB17-76R04- 12,0x7,0x4,0 R0,4 S 	Order-No.				B17MX -08-D			
		f_z [mm]					0,10 (0,05-0,30)		
	JMB17-76R06- 12,0x7,0x4,0 R0,6 S 	Order-No.				B17NT -08-D			
		f_z [mm]					0,10 (0,05-0,30)		
			20	20	20	20			

B17 Fräswendepplatten und Schnittdaten

Milling inserts and parameters, Plaquettes de fraisage et paramètres, Inserti e parametri di taglio

V _c [m/min]	Stahl Steel Acier Acciaio	Rostfrei Stainless Acier inoxydable Inossidabile	Guss Cast iron Fonte Ghisa	NE-Metalle Non-ferrous metals Non ferreux Metalli non ferrosi	Hochwarmfest Highly heat-resistant Superalliages Resistente al calore	Gehärtet Tempered Aciers traités Temprato
HC45	250 (200 - 350)	240 (140 - 300)	240 (130 - 280)			
HT45	250 (200 - 350)	240 (140 - 300)	240 (130 - 280)			
HT50	220 (160 - 300)	200 (100 - 300)	240 (200 - 300)			
HT32	250 (200 - 350)	240 (140 - 300)			60 (40 - 200)	
HT30		240 (140 - 300)			60 (40 - 200)	
HC30	160 (120-220)	200 (100 - 300)			60 (40 - 200)	
XC35	120 (60 - 160)	100 (60 - 180)			80 (40 - 200)	
XC34		100 (60 - 180)			80 (40 - 200)	
HT20			260 (180 - 350)			80 (40 - 120)
KT28			260 (180 - 350)			80 (40 - 120)
K15M				400 (300 - 600)		

Ersatzteile Spare parts, Pièces de rechange, Parti di ricambio

	SS 2,5-6 - ø16+20 (M = 1,2-1,3 Nm)		T 08+		Fett Grease, Graisse, Grasso
	SS 2,5-7 - ø22-125 (M = 1,2-1,3 Nm)				

B17 Rampingwinkel

Ramping angle type, Angle de ramping, Angolo rampa inserti

D	Ramping- winkel <i>Ramping angle type Angle de ramping Angolo rampa inserti</i> max. α (°)	Bearbeitungs- weg <i>Processing path Distance parcourue lunghezza di lavorazione</i> min. L (mm)	a_p max. $\phi/2$	ϕ WP <i>Insert Plaqueette Inserti</i>	WP <i>Insert Plaqueette Inserti</i>
20	7,9	13	3,00	7,00	JMB17 (FP 75, 75 R.., 75M, 275, 275 R.., 76, 76 R..)
22	6,8	15	3,00	7,00	
25	5,7	18	3,00	7,00	
28	4,9	21	3,00	7,00	
30	4,5	23	3,00	7,00	
32	4,1	25	3,00	7,00	
35	3,7	28	3,00	7,00	
36	3,6	29	3,00	7,00	
40	3,1	33	3,00	7,00	
50	2,4	43	3,00	7,00	
63	1,8	56	3,00	7,00	
80	1,4	73	3,00	7,00	
100	1,1	93	3,00	7,00	
125	0,9	118	3,00	7,00	