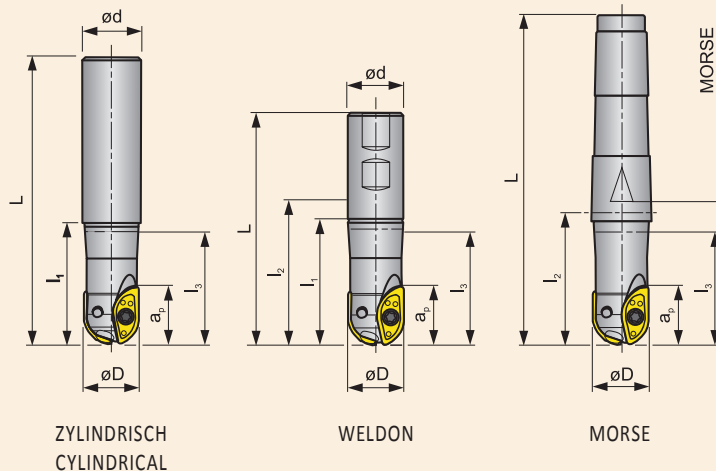
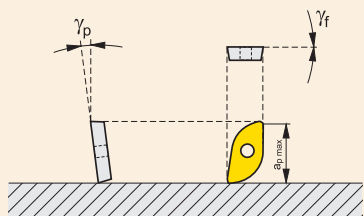


L2-SZP

KOPIERFRÄSER – SCHAFT COPY MILLING CUTTERS



γ_p	-10°	κ_r	-
γ_f	0°	$a_{p\ max}$	-

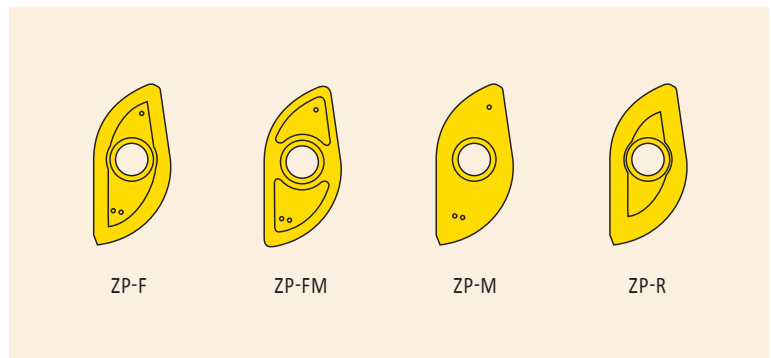
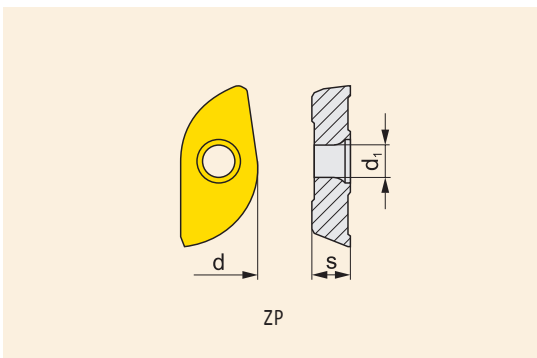


Z* – Anzahl Zähne / Number of teeth

Abmessungen [mm]. / Dimensions [mm].

ISO	Sortiment / Assortment	Abmessungen / Dimensions										Kühlung / Cooling	[kg]
		D	L	l ₁	l ₂	l ₃	d	Morse	Z*	WSP Inserts	a _{pmax}		
ZYLINDRISCH/CYLINDRICAL													
10L2R050A16-SZP10	●	10	160	50,0	-	22,3	16	-	2	ZP 10..	8,9		0,21
12L2R045A20-SZP12	●	12	200	44,8	-	22,0	20	-	2	ZP 12..	10,7		0,43
16L2R045A20-SZP16-C	●	16	200	44,5	-	29,4	20	-	2	ZP 16..	14,4	+	0,43
20L2R050A20-SZP20-C	●	20	250	50,0	-	-	20	-	2	ZP 20..	17,9	+	0,85
20L2R055A25-SZP20-C	●	20	200	54,4	-	36,1	25	-	2	ZP 20..	17,9	+	0,65
20L2R055A32-SZP20-C	●	20	250	55,7	-	34,5	32	-	2	ZP 20..	17,9	+	1,40
25L2R060A25-SZP25-C	●	25	250	60,0	-	-	25	-	2	ZP 25..	22,3	+	1,29
25L2R065A32-SZP25-C	●	25	250	64,7	-	43,0	32	-	2	ZP 25..	22,3	+	1,29
32L2R070A32-SZP32-C	●	32	250	70,3	-	-	32	-	2	ZP 32..	28,6	+	1,37
WELDON													
12L2R040B20-SZP12	○	12	91	40	66,5	21,5	20	-	2	ZP 12..	10,7		0,16
12L2R060B20-SZP12	●	12	111	60	86,5	23,8	20	-	2	ZP 12..	10,7		0,19
16L2R040B20-SZP16-C	●	16	91	40	66,5	28,3	20	-	2	ZP 16..	14,4	+	0,16
16L2R060B20-SZP16-C	●	16	111	60	86,5	32,9	20	-	2	ZP 16..	14,4	+	0,20
20L2R050B25-SZP20-C	●	20	107	50	75,5	35,1	25	-	2	ZP 20..	17,9	+	0,29
20L2R070B25-SZP20-C	●	20	127	70	95,5	39,5	25	-	2	ZP 20..	17,9	+	0,35
25L2R060B25-SZP25-C	●	25	117	60	85,5	-	25	-	2	ZP 25..	22,3	+	0,35
25L2R080B25-SZP25-C	●	25	137	80	105,0	-	25	-	2	ZP 25..	22,3	+	0,41
32L2R070B32-SZP32-C	●	32	131	70	95,5	-	32	-	2	ZP 32..	28,6	+	0,62
32L2R100B32-SZP32-C	●	32	161	100	125,5	-	32	-	2	ZP 32..	28,6	+	0,79
40L2R070B32-SZP40-C	●	40	131	70	95,5	-	32	-	2	ZP 40..	35,7	+	0,72
40L2R100B40-SZP40-C	●	40	171	100	131,0	-	40	-	2	ZP 40..	35,7	+	1,33
50L2R100B50-SZP50-C	○	50	181	100	136,5	-	50	-	2	ZP 50..	44,7	+	2,13

ISO	Sortiment / Assortment	Abmessungen / Dimensions										Kühlung Cooling	[kg]
		D	L	l ₁	l ₂	l ₃	d	Morse	Z*	WSP Inserts	a _{pmax}		
MORSE													
10L2R050E02-SZP10	●	10	114	–	50	21,9	–	2	2	ZP 10..	8,9	0,12	
12L2R040E02-SZP12	●	12	104	–	40	22,5	–	2	2	ZP 12..	10,7	0,11	
12L2R060E02-SZP12	●	12	124	–	60	25,8	–	2	2	ZP 12..	10,7	0,14	
12L2R090E02-SZP12	●	12	154	–	90	25,8	–	2	2	ZP 12..	10,7	0,19	
16L2R040E02-SZP16	○	16	104	–	40	31,3	–	2	2	ZP 16..	14,4	0,12	
16L2R060E02-SZP16	●	16	124	–	60	42,2	–	2	2	ZP 16..	14,4	0,15	
16L2R090E02-SZP16	●	16	154	–	90	75,9	–	2	2	ZP 16..	14,4	0,19	
20L2R050E03-SZP20	○	20	131	–	50	36,6	–	3	2	ZP 20..	17,9	0,27	
20L2R070E03-SZP20	●	20	151	–	70	–	–	3	2	ZP 20..	17,9	0,33	
20L2R100E03-SZP20	●	20	181	–	100	77,4	–	3	2	ZP 20..	17,9	0,39	
25L2R080E03-SZP25	●	25	161	–	80	–	–	3	2	ZP 25..	22,3	0,39	
25L2R110E04-SZP25	●	25	213	–	110	92,7	–	4	2	ZP 25..	22,3	0,76	
32L2R100E04-SZP32	●	32	203	–	100	–	–	4	2	ZP 32..	28,6	0,83	
32L2R150E04-SZP32	●	32	253	–	150	–	–	4	2	ZP 32..	28,6	1,10	
50L2R100E05-SZP50	○	50	230	–	100	–	–	5	2	ZP 50..	44,7	2,00	





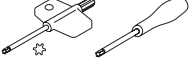



WENDESCHNEIDPLATTEN (WSP) / INDEXABLE CUTTING INSERTS

ISO	Materialien / Grades					Abmessungen / Dimensions		
	M8310	M8340	M8345	8230	8240	d	s	d ₁
ZP 20ER-F	●					20,00	3,97	4,0
ZP 50ER-F	○					50,00	7,94	9,6
ZP 10ER-FM	●	●				10,00	1,70	2,2
ZP 12ER-FM	●	●				12,00	2,38	2,9
ZP 16ER-FM	●	●				16,00	3,18	2,9
ZP 20ER-FM	●	○				20,00	3,97	4,0
ZP 25ER-FM	●	○				25,00	4,76	4,7
ZP 32ER-FM	●	○				32,00	6,35	5,9
ZP 12ER-M		●	●	●	●	12,00	2,38	2,9
ZP 16ER-M		●	●	●	●	16,00	3,18	2,9
ZP 20ER-M			●	●		20,00	3,97	4,0
ZP 25ER-M			●	●		25,00	4,76	4,7

ISO	Materialien / Grades										Abmessungen / Dimensions						
	M8310	M8340	M8345	8230	8240							d	s	d ₁			
ZP 32ER-M			●	●								32,00	6,35	5,9			
ZP 16ER-R			●									16,00	3,18	2,9			
ZP 20ER-R			●									20,00	3,97	4,0			
ZP 25ER-R			●									25,00	4,76	4,7			
ZP 32ER-R			●	●								32,00	6,35	5,9			
ZP 40ER-R			●									40,00	7,94	7,0			
ZP 50ER-R			○									50,00	7,94	9,6			

ERSATZTEILE / SPARE PARTS

*) Empfohlene Torxschraube – siehe Seite / For screw torques see pages: 394 – 397.

Fräser Marking of cutter	Spannschraube* Clamping screw*	Schraubendreher Screwdriver	Unterlage Shim seat	Unterlegplattenschraube Shim screw	Schraubendreher Screwdriver
					
SZP10	US 62004-T06P	FLAG T06P	–	–	–
SZP12	US 62506-T08P	FLAG T08P	–	–	–
SZP16	US 62508-T08P	FLAG T08P	–	–	–
SZP20	US 63510-T10P	FLAG T10P	–	–	–
SZP25	US 4011A-T15P	FLAG T15P	–	–	–
SZP32	US 65013-T20	SDR T20	–	–	–
SZP40	US 66015-T25P	SDR T25P	–	–	–
SZP50	US 68020-T30P	SDR T30	SZN 400322	US3508-T15P	FLAG T15P