FRAISE **Z1** · ENGRAVING-ENDMILL **Z1** · FRÄSSTICHEL **Z1**

21013-2.2 Version 07.05.2026

SWISS MADE

2.2	38	1
Ø D (MM)	L (MM)	Z

MATERIAL COMPATIBILITY

●●● Excellent (3/3) ●●○ Good (2/3) ●○○ Possible (1/3) ○○○ Not recommended

MATERIAL	SPECIFICATION	GRP	21013-2.2
Alloyed and non-alloyed steels Non-alloyed steels	Rm < 450 N/mm²	1a	○○○
	Rm 450–700 N/mm²	1b	○○○
	Rm 700–900 N/mm²	1c	○○○
	Rm > 1200 N/mm²	1d	○○○
Stainless steels Stainless steels	Rm < 650 N/mm²	2a	●○○
	Rm 650–950 N/mm²	2b	●○○
	Rm > 950 N/mm²	2c	●○○
Hardened steels Hardened steels	44–56 HRC	3a	○○○
	57–67 HRC	3b	○○○
Exotic materials Special alloys	< 32 HRC	4a	○○○
	> 32 HRC	4b	○○○
Graphite Industrial graphite		5	○○○
Cast iron Grey / nodular cast iron	< 32 HRC	6a	○○○
	> 32 HRC	6b	○○○
Titanium Titanium alloys	Rm < 600 N/mm²	7a	○○○
	600 < Rm N/mm²	7b	○○○
Nickel alloys Inconel, Hastelloy	Rm < 1000 N/mm²	8a	○○○
	Rm > 1000 N/mm²	8b	○○○
Copper, brass, bronze Copper-based	Rm < 850 N/mm²	9a	●●●
	Rm > 850 N/mm²	9b	●●●
Aluminum Aluminum alloys	Si < 0.5%	10a	●●○
	0.5% < Si < 5%	10b	●●○
	Si > 5%	10c	○○○
Synthetic materials Engineering plastics	Thermoplastic	11a	○○○
	Thermoset	11b	○○○
Composite materials Reinforced composites	Glass fiber / GFK	12a	○○○
	Carbon fiber / KFK	12b	○○○
Precious metals Gold, platinum, silver	Gold	13a	●●●
	Platinum	13b	○○○

TECHNICAL DRAWING

DIMENSIONS

NOMINAL DIMENSIONS	
D (0 / -0.01)	2.2 mm
d (h5)	3 mm
L	38 mm
l1	4 mm
l3	–
d3	–
R	–
e	–
Z	1
Chamfer K	-
w° collision	4.2°

E-SHOP / EZI CUT
eskenazi.ch/eshop/21013-2.2