

MICRO-FRAISE Z3 · MICRO-ENDMILL Z3 · MICRO-FRÄSER Z3



21034A-0.3 Version 10.09.2026



E25  
UF

ULTRAFINE  
GRADE HIGH-  
END GRADE  
WITH VERY  
HIGH HARDNESS  
AND  
TOUGHNESS FOR  
MICRO-  
MACHINING

$\lambda=30^{\circ}\text{--}35^{\circ}$   
 $\gamma=8^{\circ}$

VARIABLE HELIX  
ANGLES  $30^{\circ}$  -  
 $35^{\circ}$  AND  
CUTTING ANGLE  
 $8^{\circ}$

angle  
vif

SHARP EDGE

SIDE AND  
CENTER CUT

$l_1$   
 $1.2 \times D$

CUTTING EDGE  
LENGTH  $1.2 \times D$

$l_3$   
 $5 \times D$

CUTTING  
LENGTH  $5 \times D$

FITTING LENGTH  
STANDARD

IRREGULAR  
TOOTHING

$\lambda_2$   
 $\lambda_1$

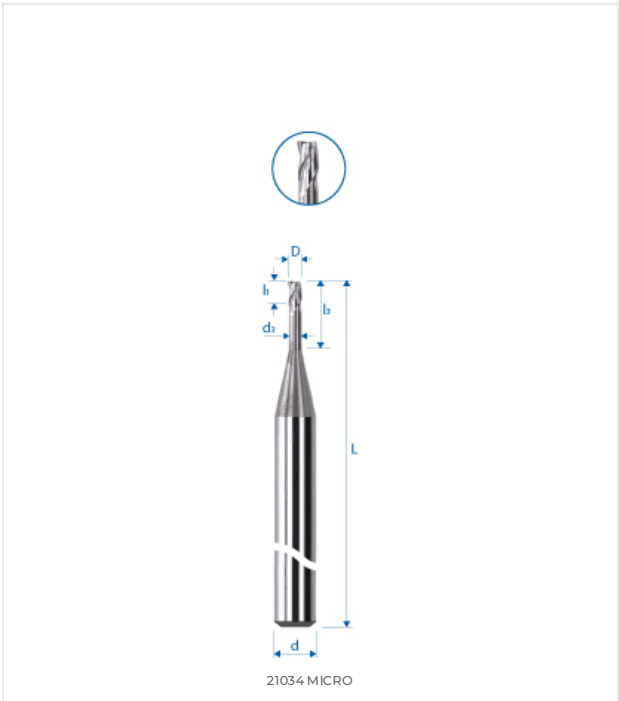
VARIABLE HELIX  
ANGLES

MATERIAL COMPATIBILITY

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

| Product material compatibility                                      |          |                              |     |            |
|---------------------------------------------------------------------|----------|------------------------------|-----|------------|
| CATEGORY                                                            | MATERIAL | SPECIFICATION                | GRP | 21034A-0.3 |
| Alloyed and non-alloyed steels<br><small>Non-alloyed steels</small> |          | Rm < 450 N/mm <sup>2</sup>   | 1a  | ●●● 3/3    |
|                                                                     |          | Rm 450–700 N/mm <sup>2</sup> | 1b  | ●●● 3/3    |
|                                                                     |          | Rm 700–900 N/mm <sup>2</sup> | 1c  | ●●● 3/3    |
|                                                                     |          | Rm > 1200 N/mm <sup>2</sup>  | 1d  | ●●● 3/3    |
| Stainless steels<br><small>Stainless steels</small>                 |          | Rm < 650 N/mm <sup>2</sup>   | 2a  | ●●● 3/3    |
|                                                                     |          | Rm 650–950 N/mm <sup>2</sup> | 2b  | ●●● 3/3    |
|                                                                     |          | Rm > 950 N/mm <sup>2</sup>   | 2c  | ●●● 3/3    |
| Hardened steels<br><small>Hardened steels</small>                   |          | 44–56 HRC                    | 3a  | ●●○ 2/3    |
|                                                                     |          | 57–67 HRC                    | 3b  | ●○○ 1/3    |
| Exotic materials<br><small>Special alloys</small>                   |          | < 32 HRC                     | 4a  | ●●○ 2/3    |
|                                                                     |          | > 32 HRC                     | 4b  | ●●○ 2/3    |
| Graphite<br><small>Industrial graphite</small>                      |          |                              | 5   | ●●○ 2/3    |
| Cast iron<br><small>Grey / nodular cast iron</small>                |          | < 32 HRC                     | 6a  | ●●○ 2/3    |
|                                                                     |          | > 32 HRC                     | 6b  | ●●○ 2/3    |
| Titanium<br><small>Titanium alloys</small>                          |          | Rm < 600 N/mm <sup>2</sup>   | 7a  | ●●● 3/3    |
|                                                                     |          | 600 < Rm N/mm <sup>2</sup>   | 7b  | ●●● 3/3    |
| Nickel alloys<br><small>Inconel, Hastelloy</small>                  |          | Rm < 1000 N/mm <sup>2</sup>  | 8a  | ●●● 3/3    |
|                                                                     |          | Rm > 1000 N/mm <sup>2</sup>  | 8b  | ●●● 3/3    |
| Copper, brass, bronze<br><small>Copper-based</small>                |          | Rm < 850 N/mm <sup>2</sup>   | 9a  | ●○○ 1/3    |
|                                                                     |          | Rm > 850 N/mm <sup>2</sup>   | 9b  | ●○○ 1/3    |
| Aluminum<br><small>Aluminum alloys</small>                          |          | Si < 0.5%                    | 10a | ●○○ 1/3    |
|                                                                     |          | 0.5% < Si < 5%               | 10b | ●○○ 1/3    |
|                                                                     |          | Si > 5%                      | 10c | ●●○ 2/3    |
| Synthetic materials<br><small>Engineering plastics</small>          |          | Thermoplastic                | 11a | ○○○ 0/3    |
|                                                                     |          | Thermoset                    | 11b | ○○○ 0/3    |
| Composite materials<br><small>Reinforced composites</small>         |          | Glass fiber / GFK            | 12a | ●●○ 2/3    |
|                                                                     |          | Carbon fiber / KFK           | 12b | ●●○ 2/3    |
| Precious metals<br><small>Gold, platinum, silver</small>            |          | Gold                         | 13a | ●○○ 1/3    |
|                                                                     |          | Platinum                     | 13b | ●○○ 1/3    |

TECHNICAL DRAWING



DIMENSIONS

| NOMINAL DIMENSIONS |        |
|--------------------|--------|
| D (0 / -0.01)      | 0.3 mm |
| d (h5)             | 3 mm   |
| L                  | 38 mm  |
| l1                 | 0.4 mm |
| l3                 | 1.5 mm |
| d3                 | –      |
| R                  | –      |
| e                  | –      |
| Z                  | 3      |
| Chamfer K          | –      |
| w° collision angle | 10.7°  |





eskenazi.ch/eshop/21034A-0.3

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