



## HAIMER MILL solid carbide torus cutter SAFE-LOCK, AlTiN, Ø f9 DC / R1: 4/0,5mm



### Order data

|              |               |
|--------------|---------------|
| Order number | 220298 4/0,5  |
| GTIN         | 4034221161802 |
| Item class   | 26X           |

### Description

#### Version:

With SAFE-LOCK pull-out protection to provide an additional form fit for the tool. In conjunction with SAFE-LOCK tool holders, it secures the tool to prevent it being pulled out.

For **general-purpose use** in steel materials and high-alloy steels, especially stainless steel. With **cylindrical core** for optimum tool stiffness when milling slots. Reliable processes guaranteed when ramping and during circular interpolation milling thanks to **special end face geometry**.

#### Note:

Tool arbor with the SAFE-LOCK pull-out protection can be found under clamping technology.

### Technical description

|   |              |
|---|--------------|
| Shank Ø D <sub>s</sub>  | 6 mm         |
| Flute length L <sub>c</sub>   | 11 mm        |
| No. of teeth Z  | 4            |
| Helix angle   | 32 degrees   |
| Shank   | Safe-Lock h6 |
| Overall length L  | 58 mm        |
| Feed f <sub>z</sub> for slot milling in steel < 900 N/mm <sup>2</sup> | 0.022 mm     |
| Feed f <sub>z</sub> for side milling in steel < 900 N/mm <sup>2</sup> | 0.026 mm     |
| Recess Ø D <sub>1</sub>   | 3.8 mm       |

|   |                                      |
|---|--------------------------------------|
| Corner radius $R_1$                       | 0.5 mm                               |
| Overhang length $L_1$ incl. recess        | 15 mm                                |
| Cutting edge $\varnothing D_c$            | 4 mm                                 |
| Coating                                   | AlTiN                                |
| Tool material                             | Solid carbide                        |
| Standard                                  | DIN 6527                             |
| Type                                      | N                                    |
| Tolerance nominal $\varnothing$           | f8                                   |
| Helix angle characteristic                | unequal spacing                      |
| Spacing of the cutters                    | unequal spacing                      |
| Direction of infeed                       | horizontal, oblique and vertical     |
| Cutting width $a_e$ for milling operation | Full slot cutting depth $1 \times D$ |
| Cutting width $a_e$ for milling operation | $0.5 \times D$ for side milling      |
| Through-coolant                           | no                                   |
| Machining strategy                        | HPC                                  |
| Type of product                           | Torus cutter                         |

## User data

|                                | Suitability                               | $V_c$     | ISO code |
|--------------------------------|---|-----------|----------|
| Alu plastics                   | suitable only under restricted conditions | 480 m/min | N        |
| Aluminium (short chipping)     | suitable only under restricted conditions | 480 m/min | N        |
| Alu > 10% Si                   | suitable only under restricted conditions | 375 m/min | N        |
| Steel < 500 N/mm <sup>2</sup>  | Suitable                                  | 275 m/min | P        |
| Steel < 750 N/mm <sup>2</sup>  | Suitable                                  | 255 m/min | P        |
| Steel < 900 N/mm <sup>2</sup>  | Suitable                                  | 210 m/min | P        |
| Steel < 1100 N/mm <sup>2</sup> | Suitable                                  | 190 m/min | P        |
| INOX < 900 N/mm <sup>2</sup>   | Suitable                                  | 95 m/min  | M        |

|                              |   |           |   |
|------------------------------|---|-----------|---|
| INOX > 900 N/mm <sup>2</sup> | Suitable                                  | 75 m/min  | M |
| Ti > 850 N/mm <sup>2</sup>   | suitable only under restricted conditions | 35 m/min  | S |
| GG(G)                        | suitable only under restricted conditions | 155 m/min | K |
| Uni                          | Suitable                                  |           |   |
| Oil                          | Suitable                                  |           |   |
| wet maximum                  | Suitable                                  |           |   |
| wet minimum                  | Suitable                                  |           |   |
| dry                          | Suitable                                  |           |   |
| Air                          | Suitable                                  |           |   |