

**Garant****GARANT Steel solid carbide milling cutter HPC, TiAlN, Ø f8 DC: 6mm****Order data**

|              |               |
|--------------|---------------|
| Order number | 203053 6      |
| GTIN         | 4069515028363 |
| Item class   | 11Z           |

**Description****Version:**

For **roughing and finishing**. For use in unstable machining processes and for machining complex components.

Up to 1xD into solid material **at very high feed rates** with smooth cutting action.

At maximum machining depths, ensure compliance with the ratio dimension  $L_c$  (cutting length) /  $\varnothing D_c$  (cutting  $\varnothing$ )!

**Advantage:**

Optimised flute form, eccentric relief ground, wide chip space.

**Note:**

**Successor product to No. 203031.**

**Technical description**

|                                                              |                                  |
|--------------------------------------------------------------|----------------------------------|
| No. of teeth Z                                               | 4                                |
| Direction of infeed                                          | horizontal, oblique and vertical |
| Shank $\varnothing D_s$                                      | 6 mm                             |
| Tolerance nominal $\varnothing$                              | f8                               |
| Feed $f_z$ for side milling in steel < 900 N/mm <sup>2</sup> | 0.05 mm                          |
| Helix angle                                                  | 38 degrees                       |
| Shank                                                        | DIN 6535 HB                      |
| Overall length L                                             | 54 mm                            |
| Feed $f_z$ for slot milling in steel < 900 N/mm <sup>2</sup> | 0.04 mm                          |

## Data sheet

|                                           |                                      |
|-------------------------------------------|--------------------------------------|
| Corner chamfer width at 45°               | 0.12 mm                              |
| Flute length $L_c$                        | 10 mm                                |
| Cutting edge $\varnothing D_c$            | 6 mm                                 |
| Corner chamfer angle                      | 45 degrees                           |
| Series                                    | Master Steel                         |
| Coating                                   | TiAlN                                |
| Tool material                             | Solid carbide                        |
| Standard                                  | DIN 6527                             |
| Type                                      | N                                    |
| Helix angle characteristic                | unequal spacing                      |
| Spacing of the cutters                    | unequal spacing                      |
| 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                                  |
| Colour ring                               | green                                |
| Type of product                           | End / face mill                      |

## User data

|                                | Suitability | $V_c$     | ISO code |
|--------------------------------|-------------|-----------|----------|
| Steel < 500 N/mm <sup>2</sup>  | suitable    | 250 m/min | P        |
| Steel < 750 N/mm <sup>2</sup>  | suitable    | 200 m/min | P        |
| Steel < 900 N/mm <sup>2</sup>  | suitable    | 180 m/min | P        |
| Steel < 1100 N/mm <sup>2</sup> | suitable    | 160 m/min | P        |
| INOX < 900 N/mm <sup>2</sup>   | suitable    | 70 m/min  | M        |
| INOX > 900 N/mm <sup>2</sup>   | suitable    | 50 m/min  | M        |
| GG(G)                          | suitable    | 120 m/min | K        |
| Uni                            | suitable    |           |          |
| wet maximum                    | suitable    |           |          |

Data sheet

|             |                                              |
|-------------|----------------------------------------------|
| wet minimum | suitable only under<br>restricted conditions |
| dry         | suitable                                     |
| Air         | suitable                                     |