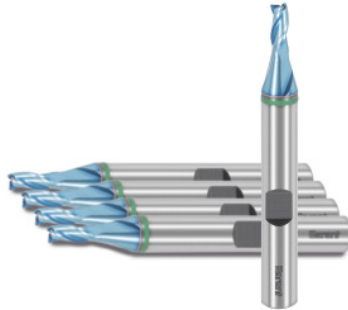


**Garant****GARANT Master Steel solid carbide mini milling cutter HPC, TiAlN, Ø e8 DC: 5mm****Order data**

|              |               |
|--------------|---------------|
| Order number | GG2291 5      |
| GTIN         | 4067263091745 |
| Item class   | GGN           |

**Description****Version:**

**Extra short cutter** for maximum stability. **Shank length to DIN** for improved support of the tool in the holder. This significantly increases the tool life.

**Save the regrinding costs:** It is cheaper to use a carbide mini slot drill to the limit of wear and throw it away, than to regrind it.

**Same as No. 202291.**

**Technical description**

|                               |                   |
|-------------------------------|-------------------|
| Shank Ø D <sub>s</sub>        | 6 mm              |
| Corner chamfer angle          | 90 degrees        |
| Shank form                    | HB                |
| Flute length L <sub>c</sub>   | 8 mm              |
| Shank                         | DIN 6535 HB to h6 |
| Cutting edge Ø D <sub>c</sub> | 5 mm              |
| Contents                      | 5                 |

|  |                                  |
|--|----------------------------------|
| Feed $f_z$ for side milling in steel < 900 N/mm <sup>2</sup> | 0.028 mm                         |
| Tolerance nominal $\varnothing$                              | e8                               |
| No. of teeth Z   | 3                                |
| Feed $f_z$ for slot milling in steel < 900 N/mm <sup>2</sup> | 0.025 mm                         |
| Overall length L   | 50 mm                            |
| Helix angle  | 30 degrees                       |
| Direction of infeed  | horizontal, oblique and vertical |
| Series   | Master Steel                     |
| Coating  | TiAlN                            |
| Tool material  | Solid carbide                    |
| Standard   | Works standard                   |
| Type   | N                                |
| Cutting width $a_e$ for milling operation                    | 0.3×D for side milling           |
| Cutting width $a_e$ for milling operation                    | 0.5×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 |
|--------------------------------|---|-----------|----------|
| Aluminium (short chipping)     | suitable only under restricted conditions | 290 m/min | N        |
| Alu > 10% Si                   | suitable only under restricted conditions | 240 m/min | N        |
| Steel < 500 N/mm <sup>2</sup>  | suitable                                  | 140 m/min | P        |
| Steel < 750 N/mm <sup>2</sup>  | suitable                                  | 120 m/min | P        |
| Steel < 900 N/mm <sup>2</sup>  | suitable                                  | 100 m/min | P        |
| Steel < 1100 N/mm <sup>2</sup> | suitable                                  | 70 m/min  | P        |

|                                |   |          |   |
|--------------------------------|---|----------|---|
| Steel < 1400 N/mm <sup>2</sup> | suitable                                  | 50 m/min | P |
| INOX < 900 N/mm <sup>2</sup>   | suitable                                  | 90 m/min | M |
| INOX > 900 N/mm <sup>2</sup>   | suitable                                  | 70 m/min | M |
| Ti > 850 N/mm <sup>2</sup>     | suitable only under restricted conditions | 40 m/min | S |
| GG(G)                          | suitable                                  | 85 m/min | K |
| Uni                            | suitable                                  |          |   |
| wet maximum                    | suitable                                  |          |   |
| wet minimum                    | suitable only under restricted conditions |          |   |
| dry                            | suitable                                  |          |   |
| Air                            | suitable                                  |          |   |

## Accessories

GARANT Master Steel solid carbide mini-milling cutterHPC  
Ø e8 DC 5 mm

202291 5

GARANT Master Steel solid carbide mini milling cutterHPC  
Ø e8 DC 5 mm

202289 5