

**Garant**
**GARANT Master Steel solid carbide ball nose slot drill HPC, TiAlN, Ø f8 DC / D  
S: 3mm**

**Order data**

|              |               |
|--------------|---------------|
| Order number | 207244 3      |
| GTIN         | 4062406285135 |
| Item class   | 11X           |

**Description**
**Version:**

**Precision ground for very high accuracy requirements.**

Tolerance: Radius contour =  $\pm 0.005$  mm.

Improved cutting edge protection thanks to slight edge honing. Tremendous bending strength due to the use of ultra-fine grain substrate.

**Technical description**

|  |               |
|--|---------------|
| Cutting edge $\varnothing D_c$                               | 3 mm          |
| Overall length L   | 75 mm         |
| Shank $\varnothing D_s$                                      | 3 mm          |
| Feed $f_z$ for copy milling in steel < 900 N/mm <sup>2</sup> | 0.06 mm       |
| Helix angle  | 28 degrees    |
| Flute length $L_c$   | 5 mm          |
| Feed $f_z$ for side milling in steel < 900 N/mm <sup>2</sup> | 0.04 mm       |
| No. of teeth Z   | 2             |
| Radius R   | 1.5 mm        |
| Series   | Master Steel  |
| Coating  | TiAlN         |
| Tool material  | Solid carbide |

|   |                                  |
|---|----------------------------------|
| Standard                                  | Manufacturer's standard          |
| Type                                      | N                                |
| Tolerance nominal $\varnothing$           | f8                               |
| Direction of infeed                       | horizontal, oblique and vertical |
| Cutting width $a_e$ for milling operation | 0.5×D for side milling           |
| Cutting width $a_e$ for milling operation | 0.03×D for copy milling          |
| Shank                                     | DIN 6535 HA to h6                |
| Through-coolant                           | no                               |
| Machining strategy                        | HPC                              |
| Colour ring                               | green                            |
| Type of product                           | Ball-nosed slot drill            |

## User data

|                                | Suitability                               | $V_c$     | ISO code |
|--------------------------------|---|-----------|----------|
| Steel < 500 N/mm <sup>2</sup>  | Suitable                                  | 260 m/min | P        |
| Steel < 750 N/mm <sup>2</sup>  | Suitable                                  | 230 m/min | P        |
| Steel < 900 N/mm <sup>2</sup>  | suitable                                  | 210 m/min | P        |
| Steel < 1100 N/mm <sup>2</sup> | suitable                                  | 180 m/min | P        |
| Steel < 1400 N/mm <sup>2</sup> | suitable                                  | 160 m/min | P        |
| Steel < 55 HRC                 | suitable only under restricted conditions | 130 m/min | H        |
| INOX < 900 N/mm <sup>2</sup>   | suitable                                  | 85 m/min  | M        |
| INOX > 900 N/mm <sup>2</sup>   | suitable only under restricted conditions | 75 m/min  | M        |
| GG(G)                          | suitable only under restricted conditions | 350 m/min | K        |
| Uni                            | Suitable                                  |           |          |
| wet maximum                    | suitable                                  |           |          |
| wet minimum                    | suitable only under restricted conditions |           |          |

|     |          |
|-----|----------|
| dry | Suitable |
| Air | Suitable |