

**Garant**
**GARANT Master Steel solid carbide ball nose slot drill HPC, TiAlN, Ø f8 DC / D S: 1,4mm**

**Order data**

|              |               |
|--------------|---------------|
| Order number | 207242 1,4    |
| GTIN         | 4062406284855 |
| 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**

|  |               |
|--|---------------|
| Helix angle  | 28 degrees    |
| Cutting edge $\varnothing D_c$                                 | 1.4 mm        |
| No. of teeth Z   | 2             |
| Feed $f_z$ for side milling in steel $< 900$ N/mm <sup>2</sup> | 0.012 mm      |
| Shank $\varnothing D_s$  | 3 mm          |
| Flute length $L_c$   | 3 mm          |
| Feed $f_z$ for copy milling in steel $< 900$ N/mm <sup>2</sup> | 0.015 mm      |
| Overall length L   | 50 mm         |
| Radius R   | 0.7 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 | Full slot cutting depth $1 \times D$ |
| Cutting width $a_e$ for milling operation | $0.03 \times D$ 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                                  | 270 m/min | P        |
| Steel < 750 N/mm <sup>2</sup>  | Suitable                                  | 240 m/min | P        |
| Steel < 900 N/mm <sup>2</sup>  | suitable                                  | 220 m/min | P        |
| Steel < 1100 N/mm <sup>2</sup> | suitable                                  | 190 m/min | P        |
| Steel < 1400 N/mm <sup>2</sup> | suitable                                  | 170 m/min | P        |
| Steel < 55 HRC                 | suitable only under restricted conditions | 140 m/min | H        |
| INOX < 900 N/mm <sup>2</sup>   | suitable                                  | 90 m/min  | M        |
| INOX > 900 N/mm <sup>2</sup>   | suitable only under restricted conditions | 80 m/min  | M        |
| GG(G)                          | suitable only under restricted conditions | 400 m/min | K        |
| Uni                            | Suitable                                  |           |          |
| wet maximum                    | Suitable                                  |           |          |
| wet minimum                    | suitable only under restricted conditions |           |          |

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