

**Garant**
**GARANT Diabolo solid carbide high-precision ball nose slot drill HPC, TiAlN, Ø DC: 5mm**

**Order data**

|              |               |
|--------------|---------------|
| Order number | 207347 5      |
| GTIN         | 4045197600011 |
| Item class   | 11X           |

**Description**
**Version:**
**GARANT Diabolo:**

Special geometry, coating and carbide for hard machining.

**Solid carbide high precision ball nose slot drill with radius Ø and contour variations within the µm range.**

Tolerance: Radius contour = ±0.005 mm.

**Technical description**

|  |            |
|--|------------|
| Cutting edge Ø D <sub>c</sub>                          | 5 mm       |
| Feed f <sub>z</sub> for copy milling in steel < 65 HRC | 0.048 mm   |
| No. of teeth Z   | 2          |
| Feed f <sub>z</sub> for side milling in steel < 65 HRC | 0.048 mm   |
| Overhang length L <sub>1</sub> incl. recess            | 10 mm      |
| Recess Ø D <sub>1</sub>                                | 4.8 mm     |
| Shank Ø D <sub>s</sub>                                 | 5 mm       |
| Overall length L                                       | 54 mm      |
| Flute length L <sub>c</sub>                            | 5 mm       |
| Helix angle  | 30 degrees |
| Radius R   | 2.5 mm     |

|   |                                  |
|---|----------------------------------|
| Series                                    | Diabolo                          |
| Coating                                   | TiAlN                            |
| Tool material                             | Solid carbide                    |
| Standard                                  | Manufacturer's standard          |
| Type                                      | H                                |
| Tolerance nominal $\varnothing$           | -0.007 / 0.002                   |
| Direction of infeed                       | horizontal, oblique and vertical |
| Cutting width $a_e$ for milling operation | 0.05×D for copy milling          |
| Cutting width $a_e$ for milling operation | 0.2×D for side milling           |
| Shank                                     | DIN 6535 HA to h5                |
| Through-coolant                           | no                               |
| Machining strategy                        | HPC                              |
| Colour ring                               | red                              |
| Type of product                           | Ball-nosed slot drill            |

## User data

|                                | Suitability                               | $V_c$     | ISO code |
|--------------------------------|---|-----------|----------|
| Steel < 1400 N/mm <sup>2</sup> | suitable                                  | 200 m/min | P        |
| Steel < 50 HRC                 | suitable                                  | 190 m/min | H        |
| Steel < 55 HRC                 | suitable                                  | 170 m/min | H        |
| Steel < 60 HRC                 | suitable                                  | 150 m/min | H        |
| Steel < 65 HRC                 | suitable                                  | 110 m/min | H        |
| wet maximum                    | suitable only under restricted conditions |           |          |
| wet minimum                    | suitable only under restricted conditions |           |          |
| dry                            | suitable                                  |           |          |
| Air                            | suitable                                  |           |          |

