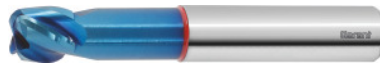


**Garant**
**GARANT Diabolo solid carbide torus cutter HPC, TiAlN, Ø e8 DC / R1:  
16/3,0mm**

**Order data**

|              |               |
|--------------|---------------|
| Order number | 206322 16/3,0 |
| GTIN         | 4045197598493 |
| Item class   | 11X           |

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

Special geometry, coating and carbide, specially for hard machining.

Double relief ground side clearance angle.

Tolerance: Corner radius  $R_1 = \pm 0.005 \text{ mm}$ .

**Technical description**

|   |                   |
|---|-------------------|
| Feed $f_z$ for copy milling in steel < 65 HRC | 0.09 mm           |
| Overhang length $L_1$ incl. recess            | 44 mm             |
| Cutting edge $\varnothing D_c$                | 16 mm             |
| Recess $\varnothing D_1$                      | 15 mm             |
| Corner radius $R_1$                           | 3 mm              |
| Feed $f_z$ for side milling in steel < 65 HRC | 0.09 mm           |
| No. of teeth $Z$                              | 4                 |
| Shank $\varnothing D_s$                       | 16 mm             |
| Flute length $L_c$                            | 16 mm             |
| Overall length $L$                            | 92 mm             |
| Shank   | DIN 6535 HA to h6 |
| Helix angle                                   | 30 degrees        |

|   |                                  |
|---|----------------------------------|
| Series                                    | Diabolo                          |
| Coating                                   | TiAlN                            |
| Tool material                             | Solid carbide                    |
| Standard                                  | Manufacturer's standard          |
| Type                                      | H                                |
| Tolerance nominal $\varnothing$           | e8                               |
| Spacing of the cutters                    | unequal spacing                  |
| Direction of infeed                       | horizontal, oblique and vertical |
| Cutting width $a_e$ for milling operation | 0.2×D for side milling           |
| Cutting width $a_e$ for milling operation | 0.05×D for copy milling          |
| Through-coolant                           | no                               |
| Machining strategy                        | HPC                              |
| Shank tolerance                           | h6                               |
| Colour ring                               | red                              |
| Type of product                           | Torus cutter                     |

## 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                                  |           |          |

## Services

Shank grinding Type HB

129100 HB