

**Garant**
**Solid carbide torus cutter, Diamond, Ø e8 DC / R1: 12/2,0mm**

**Order data**

|              |               |
|--------------|---------------|
| Order number | 209758 12/2,0 |
| GTIN         | 4045197475640 |
| Item class   | 10Y           |

**Description**
**Version:**

With the latest generation of **crystalline diamond coating sp<sup>3</sup>**, for process reliability in machining **fibre-reinforced composites, CRP, GRP and graphite**. Double relief ground side clearance angle.

Tolerance: Corner radius  $R_1 = \pm 0.01$  mm.

**Technical description**

|                                                  |                   |
|--------------------------------------------------|-------------------|
| Recess Ø D <sub>1</sub>                          | 11 mm             |
| Corner radius R <sub>1</sub>                     | 2 mm              |
| Feed f <sub>z</sub> for copy milling in graphite | 0.105 mm          |
| No. of teeth Z                                   | 4                 |
| Feed f <sub>z</sub> for side milling in graphite | 0.105 mm          |
| Cutting edge Ø D <sub>c</sub>                    | 12 mm             |
| Overhang length L <sub>1</sub> incl. recess      | 75 mm             |
| Shank Ø D <sub>s</sub>                           | 12 mm             |
| Flute length L <sub>c</sub>                      | 12 mm             |
| Overall length L                                 | 120 mm            |
| Shank                                            | DIN 6535 HA to h6 |
| Helix angle                                      | 30 degrees        |
| Coating                                          | Diamond           |

|                                           |                                  |
|-------------------------------------------|----------------------------------|
| Tool material                             | Solid carbide                    |
| Standard                                  | Manufacturer's standard          |
| Tolerance nominal Ø                       | e8                               |
| Spacing of the cutters                    | unequal spacing                  |
| Direction of infeed                       | horizontal, oblique and vertical |
| Cutting width $a_e$ for milling operation | $0.2 \times D$ for side milling  |
| Cutting width $a_e$ for milling operation | $0.05 \times D$ for copy milling |
| Through-coolant                           | no                               |
| Shank tolerance                           | h6                               |
| Colour ring                               | black                            |
| Type of product                           | Torus cutter                     |

## User data

|                    | Suitability | $V_c$     | ISO code |
|--------------------|-------------|-----------|----------|
| PVDF GF20          | suitable    | 200 m/min | N        |
| POM GF25           | suitable    | 190 m/min | N        |
| PA 66 GF30         | suitable    | 170 m/min | N        |
| PEEK GF30          | suitable    | 150 m/min | N        |
| PTFE CF25          | suitable    | 180 m/min | N        |
| PEEK CF30          | suitable    | 160 m/min | N        |
| Hybrids            | suitable    |           |          |
| Honeycomb sandwich | suitable    | 350 m/min | N        |
| GRP                | suitable    | 190 m/min | N        |
| GRP, CRP           | suitable    | 190 m/min | N        |
| Graphite           | suitable    | 340 m/min | N        |
| wet minimum        | suitable    |           |          |
| dry                | Suitable    |           |          |
| Air                | suitable    |           |          |

## Services

Shank grinding Type HB

129100 HB