

**Garant**
**Solid carbide torus cutter, Diamond, Ø e8 DC / R1: 10/1,5mm**

**Order data**

|              |               |
|--------------|---------------|
| Order number | 209758 10/1,5 |
| GTIN         | 4045197475596 |
| 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**

|                                         |                   |
|-----------------------------------------|-------------------|
| Feed $f_z$ for copy milling in graphite | 0.091 mm          |
| Feed $f_z$ for side milling in graphite | 0.091 mm          |
| Cutting edge Ø $D_c$                    | 10 mm             |
| Recess Ø $D_1$                          | 9.2 mm            |
| No. of teeth Z                          | 4                 |
| Corner radius $R_1$                     | 1.5 mm            |
| Overhang length $L_1$ incl. recess      | 60 mm             |
| Shank Ø $D_s$                           | 10 mm             |
| Flute length $L_c$                      | 11 mm             |
| Overall length L                        | 100 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