

**Garant**
**Solid carbide torus cutter, Diamond, Ø e8 DC / R1: 12/1,5 mm**

**Order data**

|              |               |
|--------------|---------------|
| Order number | 209758 12/1,5 |
| GTIN         | 4045197475633 |
| Item class   | 11Y           |

**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.

No. of teeth Z: 4

Helix angle: 30 degrees

Shank: DIN 6535 HA to h6

No. of teeth Z: 4

Flute length  $L_c$ : 12 mm

Corner radius  $R_1$ : 1.5 mm

Overhang length  $L_1$  incl. recess: 75 mm

Recess Ø  $D_1$ : 11 mm

Overall length L: 120 mm

**Technical description**

|   |          |
|---|----------|
| Cutting edge Ø $D_c$                    | 12 mm    |
| No. of teeth Z                          | 4        |
| Feed $f_z$ for copy milling in graphite | 0.105 mm |
| Overhang length $L_1$ incl. recess      | 75 mm    |
| Recess Ø $D_1$                          | 11 mm    |
| Feed $f_z$ for side milling in graphite | 0.105 mm |
| Corner radius $R_1$                     | 1.5 mm   |

|   |                                  |
|---|----------------------------------|
| Shank $\varnothing D_s$                   | 12 mm                            |
| Flute length $L_c$                        | 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 $\varnothing$           | 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                               |
| Shank tolerance                           | h6                               |
| Colour ring                               | black                            |
| Type of product                           | End mill                         |

## Services

|   |           |
|---|-----------|
| Shank clamping flats for shrink-fit chucks, with retainer function Shank $\varnothing$ tool 12 mm | SZ2025 12 |
| Shank grinding Type HB  | 129100 HB |