

**Garant****Solid carbide torus cutter, uncoated, Ø e8 DC / R1: 12/4,0 mm****Order data**

Order number	206040 12/4,0
GTIN	4045197122858
Item class	11X

**Description****Version:**

With **double relief ground side clearance angle and corner radius.**

**High strength** due to **strengthened core.**

Tolerance:  $R_1 = \pm 0.01 \text{ mm}$ .

No. of teeth Z: 2

Helix angle: 30 degrees

Shank: DIN 6535 HA to h6

No. of teeth Z: 2

Flute length  $L_c$ : 12 mm

Corner radius  $R_1$ : 4 mm

Overhang length  $L_1$  incl. recess: 38 mm

Recess Ø  $D_1$ : 11 mm

Overall length L: 83 mm

**Technical description**

Feed $f_z$ for copy milling in short-chipping aluminium	0.079 mm
Overhang length $L_1$ incl. recess	38 mm
Corner radius $R_1$	4 mm
Feed $f_z$ for side milling in short-chipping aluminium	0.07 mm
Recess Ø $D_1$	11 mm
No. of teeth Z	2
Cutting edge Ø $D_c$	12 mm

Shank $\varnothing D_s$	12 mm
Flute length $L_c$	12 mm
Overall length L	83 mm
Shank	DIN 6535 HA to h6
Helix angle	30 degrees
Coating	uncoated
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	W
Tolerance nominal $\varnothing$	e8
Direction of infeed	horizontal, oblique and vertical
Cutting width $a_e$ for milling operation	0.5×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	yellow
Type of product	End mill

## Services

Shank recess Type FRST	209900 FRST
Shank clamping flats for shrink-fit chucks, with retainer function Shank $\varnothing$ tool 12 mm	SZ2025 12
Shank grinding Type HB	129100 HB