

**Garant**
**Diabolo solid carbide torus cutter HPC, TiAlN, Ø e8 DC / R1: 12/1,5 mm**

**Order data**

Order number	206162 12/1,5
GTIN	4045197597823
Item class	11X

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

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

For copy milling with **angle  $\alpha$ : 1° 30'**. Double relief ground side clearance angle.

Tolerances:

- **Corner radius:  $R_1 = \pm 0.005$  mm.**
- **Angle  $\alpha = \pm 20'$ .**

**Note:**

Standard application values:

$f_z$  for  $a_p = 0.1 \times D$ .

No. of teeth Z: 2

Helix angle: 30 degrees

Shank: DIN 6535 HA to h6

No. of teeth Z: 2

Flute length  $L_c$ : 8 mm

Corner radius  $R_1$ : 1.5 mm

Overhang length  $L_1$  incl. recess: 50 mm

maximum shank recess dia.  $D_6$ : 14.5 mm

Recess  $\varnothing D_1$ : 11.8 mm

**Technical description**

Overhang length $L_1$ incl. recess	50 mm
Corner radius $R_1$	1.5 mm
$L_2$	100 mm
Feed $f_z$ for copy milling in steel < 65 HRC	0.08 mm

Cutting edge $\varnothing D_c$	12 mm
Feed $f_z$ for side milling in steel < 65 HRC	0.08 mm
No. of teeth Z	2
Recess $\varnothing D_1$	11.8 mm
Shank $\varnothing D_s$	16 mm
Flute length $L_c$	8 mm
Overall length L	200 mm
Shank	DIN 6535 HA to h6
Helix angle	30 degrees
maximum shank recess dia. $D_6$	14.5 mm
Series	Diabolo
Coating	TiAlN
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	H
Tolerance nominal $\varnothing$	e8
Direction of infeed	horizontal, oblique and vertical
Cutting width $a_e$ for milling operation	0.2xD for side milling
Cutting width $a_e$ for milling operation	0.05xD for copy milling
Through-coolant	no
Machining strategy	HPC
Shank tolerance	h6
Colour ring	red
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

