

**Garant**
**GARANT Diabolo solid carbide torus cutter HPC, TiAlN, Ø e8 DC / R1:  
10/1,5mm**

**Order data**

Order number	206342 10/1,5
GTIN	4045197598929
Item class	11X

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

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

Double relief ground side clearance angle.

Tolerance: Corner radius **R<sub>1</sub> = ±0.005 mm.**

**Technical description**

Recess Ø D <sub>1</sub>	9.2 mm
Overhang length L <sub>1</sub> incl. recess	60 mm
Cutting edge Ø D <sub>c</sub>	10 mm
Feed f <sub>z</sub> for copy milling in steel < 65 HRC	0.07 mm
Feed f <sub>z</sub> for side milling in steel < 65 HRC	0.07 mm
Corner radius R <sub>1</sub>	1.5 mm
No. of teeth Z	4
Shank Ø D <sub>s</sub>	10 mm
Flute length L <sub>c</sub>	11 mm
Overall length L	100 mm
Shank	DIN 6535 HA to h6
Helix angle	30 degrees

Series	Diabolo
Coating	TiAlN
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	H
Tolerance nominal $\varnothing$	e8
Spacing of the cutters	unequal spacing
Direction of infeed	horizontal, oblique and vertical
Cutting width $a_e$ for milling operation	0.05×D for copy milling
Cutting width $a_e$ for milling operation	0.2×D for side milling
Through-coolant	no
Machining strategy	HPC
Shank tolerance	h6
Colour ring	red
Type of product	Torus cutter

## User data

	Suitability	$V_c$	ISO code
Steel < 1400 N/mm <sup>2</sup>	suitable	160 m/min	P
Steel < 50 HRC	suitable	150 m/min	H
Steel < 55 HRC	suitable	135 m/min	H
Steel < 60 HRC	suitable	120 m/min	H
Steel < 65 HRC	suitable	90 m/min	H
wet maximum	suitable only under restricted conditions		
wet minimum	suitable only under restricted conditions		
dry	suitable		
Air	suitable		

## Services

Shank grinding Type HB

129100 HB