

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

**Order data**

Order number	206342 12/1,5
GTIN	4045197598974
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  $R_1 = \pm 0.005 \text{ mm}$ .

**Technical description**

Recess $\varnothing D_1$	11 mm
Feed $f_z$ for copy milling in steel < 65 HRC	0.08 mm
Cutting edge $\varnothing D_c$	12 mm
Corner radius $R_1$	1.5 mm
No. of teeth Z	4
Feed $f_z$ for side milling in steel < 65 HRC	0.08 mm
Overhang length $L_1$ incl. recess	75 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

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