

**Garant**
**GARANT Master Steel solid carbide torus cutter HPC, TiAlN, Ø DC / R1: 12/3,0 mm**

**Order data**

Order number	206359 12/3,0
GTIN	4045197943514
Item class	11X

**Description**
**Version:**

Tolerance: Corner radius  $R_1 = \pm 0.01$  mm.

**Advantage:**

HPC milling cutters with various corner radii for all radial transitions.

Optimised flute form, eccentric relief ground, wide chip space.

No. of teeth Z: 4

Helix angle: 38 degrees

Shank: DIN 6535 HB to h6

No. of teeth Z: 4

Flute length  $L_c$ : 26 mm

Corner radius  $R_1$ : 3 mm

Overhang length  $L_1$  incl. recess: 46 mm

Recess  $\varnothing D_1$ : 11.6 mm

Overall length L: 93 mm

**Technical description**

Overhang length $L_1$ incl. recess	46 mm
Cutting edge $\varnothing D_c$	12 mm
Recess $\varnothing D_1$	11.6 mm
Feed $f_z$ for slot milling in steel < 900 N/mm <sup>2</sup>	0.07 mm
Overall length L	93 mm
Feed $f_z$ for side milling in steel < 900 N/mm <sup>2</sup>	0.09 mm

Corner radius $R_1$	3 mm
Helix angle	38 degrees
Shank $\varnothing D_s$	12 mm
No. of teeth Z	4
Flute length $L_c$	26 mm
Shank	DIN 6535 HB to h6
Series	GARANT Master Steel
Coating	TiAlN
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	N
Tolerance nominal $\varnothing$	f8
Helix angle characteristic	unequal spacing
Spacing of the cutters	unequal spacing
Direction of infeed	horizontal, oblique and vertical
Cutting width $a_e$ for milling operation	Full slot cutting depth $1 \times D$
Cutting width $a_e$ for milling operation	$0.3 \times D$ for side milling
Through-coolant	no
Machining strategy	HPC
Colour ring	green
Type of product	End mill