

## Garant

### GARANT Master Titan solid carbide milling cutter HPC, TiAlN, Ø DC: 12 mm



#### Order data

Order number	203029 12
GTIN	4045197991799
Item class	11Z

#### Description

##### Version:

Specially ground with **corner radii similar to torus cutters.**

##### Application:

For milling **titanium and titanium alloys**, with very smooth cutting action for optimum tool lives and top metal removal rate.

Tolerance nominal Ø: e8

No. of teeth Z: 4

Helix angle: 40 degrees

Direction of infeed: horizontal, oblique and vertical

Shank: DIN 6535 HA to h6

No. of teeth Z: 4

Flute length  $L_c$ : 26 mm

Overhang length  $L_1$  incl. recess: 38 mm

Recess Ø  $D_1$ : 11.6 mm

Overall length L: 83 mm

Shank Ø  $D_s$ : 12 mm

#### Technical description

Feed $f_z$ for slot milling in titanium > 850 N/mm <sup>2</sup>	0.04 mm
Overall length L	83 mm
Shank	DIN 6535 HA to h6
No. of teeth Z	4
Tolerance nominal Ø	e8

Direction of infeed	horizontal, oblique and vertical
Feed $f_z$ for side milling in titanium $> 850 \text{ N/mm}^2$	0.05 mm
Helix angle	40 degrees
Shank $\varnothing D_s$	12 mm
Overhang length $L_1$ incl. recess	38 mm
Cutting edge $\varnothing D_c$	12 mm
Recess $\varnothing D_1$	11.6 mm
Flute length $L_c$	26 mm
Corner rounding $r_v$	0.2 mm
Series	GARANT Master Titan
Coating	TiAlN
Tool material	Solid carbide
Standard	DIN 6527
Type	N
Spacing of the cutters	unequal spacing
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	pink
Type of product	End mill

## Services

Shank grinding Type HB

129100 HB