

**Garant**
**GARANT Master Steel SlotMachine solid carbide roughing end mill HPC, TiAlN, Ø d11 DC: 12 mm**

**Order data**

Order number	205552 12
GTIN	4045197958983
Item class	11X

**Description**
**Version:**

With a new-type knurled profile, optimised for higher feed rates. Improved cutting edge protection thanks to slight edge honing. Tremendous bending strength due to the use of ultra-fine grain substrate.

**Advantage:**

The tool geometry produces particularly tightly rolled swarf that is discharged via flat chip breaker recesses. As a result, the tool maintains an extremely stable core. Plunge angle of up to 10° possible thanks to generous recess on the front face.

**Application:**

For roughing machining, particularly suitable for full-slot machining.

Tolerance nominal Ø: d11

No. of teeth Z: 5

Helix angle: 42 degrees

Direction of infeed: horizontal, oblique and vertical

Shank: DIN 6535 HB to h6

No. of teeth Z: 5

Flute length  $L_c$ : 26 mm

Overhang length  $L_1$  incl. recess: 46 mm

Recess Ø  $D_1$ : 11.1 mm

Overall length L: 93 mm

Shank Ø  $D_s$ : 12 mm

**Technical description**

Corner chamfer width at 45°	0.6 mm
Cutting edge Ø $D_c$	12 mm

Feed $f_z$ for slot milling in steel < 900 N/mm <sup>2</sup>	0.065 mm
Recess $\varnothing D_1$	11.1 mm
Flute length $L_c$	26 mm
Tolerance nominal $\varnothing$	d11
Direction of infeed	horizontal, oblique and vertical
Overhang length $L_1$ incl. recess	46 mm
Helix angle	42 degrees
Shank $\varnothing D_s$	12 mm
Feed $f_z$ for side milling in steel < 900 N/mm <sup>2</sup>	0.09 mm
No. of teeth Z	5
Shank	DIN 6535 HB to h6
Overall length L	93 mm
Corner chamfer angle	45 degrees
Series	GARANT Master Steel
Coating	TiAlN
Tool material	Solid carbide
Standard	Manufacturer's standard
Milling profile	NR
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	$0.4 \times D$ for side milling
Through-coolant	no
Machining strategy	HPC
Colour ring	green
Type of product	End mill