



## HAIMER MILL solid carbide torus cutter SAFE-LOCK, AlTiN, Ø f9 DC / R1: 12/0,5mm



### Order data

Order number	220298 12/0,5
GTIN	4034221143389
Item class	26X

### Description

#### Version:

With SAFE-LOCK pull-out protection to provide an additional form fit for the tool. In conjunction with SAFE-LOCK tool holders, it secures the tool to prevent it being pulled out.

For **general-purpose use** in steel materials and high-alloy steels, especially stainless steel. With **cylindrical core** for optimum tool stiffness when milling slots. Reliable processes guaranteed when ramping and during circular interpolation milling thanks to **special end face geometry**.

#### Note:

Tool arbor with the SAFE-LOCK pull-out protection can be found under clamping technology.

### Technical description

Helix angle	32 degrees
No. of teeth Z	4
Recess Ø D <sub>1</sub>	11.4 mm
Overall length L	84 mm
Flute length L <sub>c</sub>	26 mm
Overhang length L <sub>1</sub> incl. recess	36.5 mm
Shank	Safe-Lock h6
Corner radius R <sub>1</sub>	0.5 mm
Cutting edge Ø D <sub>c</sub>	12 mm

Feed $f_z$ for slot milling in steel < 900 N/mm <sup>2</sup>	0.066 mm
Feed $f_z$ for side milling in steel < 900 N/mm <sup>2</sup>	0.078 mm
Shank $\varnothing D_s$	12 mm
Coating	AlTiN
Tool material	Solid carbide
Standard	DIN 6527
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	$0.5 \times D$ for side milling
Through-coolant	no
Machining strategy	HPC
Type of product	Torus cutter

## User data

	Suitability	$V_c$	ISO code
Alu plastics	suitable only under restricted conditions	480 m/min	N
Aluminium (short chipping)	suitable only under restricted conditions	480 m/min	N
Alu > 10% Si	suitable only under restricted conditions	375 m/min	N
Steel < 500 N/mm <sup>2</sup>	Suitable	275 m/min	P
Steel < 750 N/mm <sup>2</sup>	Suitable	255 m/min	P
Steel < 900 N/mm <sup>2</sup>	Suitable	210 m/min	P
Steel < 1100 N/mm <sup>2</sup>	Suitable	190 m/min	P
INOX < 900 N/mm <sup>2</sup>	Suitable	95 m/min	M

INOX > 900 N/mm <sup>2</sup>	Suitable	75 m/min	M
Ti > 850 N/mm <sup>2</sup>	suitable only under restricted conditions	35 m/min	S
GG(G)	suitable only under restricted conditions	155 m/min	K
Uni	Suitable		
Oil	Suitable		
wet maximum	Suitable		
wet minimum	Suitable		
dry	Suitable		
Air	Suitable		