

# GARANT Master Alu SlotMachine solid carbide roughing end mill HPC, DLC, Ø e8 DC: 12mm



#### **Order data**

Order number	205265 12
GTIN	4062406122560
Item class	11X

### **Description**

#### **Version:**

For roughing.

Special profile for machining non-ferrous metals.

#### **Advantage:**

#### Optimised flute form, eccentric relief ground, generous chip spaces.

Up to  $2 \times D$  into solid material at very high feed rates and smooth cutting action.

Ramping capability up to 45°.

Very high feed rates when plunging vertically, thanks to **special plunging geometry**.

Tolerance nominal Ø: e8

No. of teeth Z: 3 Helix angle: 35°

Direction of infeed: horizontal, oblique and vertical

Shank: DIN 6535 HA to h6

Balance quality with shank: G 2.5 with HA

No. of teeth Z: 3 Flute length L<sub>c</sub>: 36 mm

Overhang length L<sub>1</sub> incl. recess: 46 mm

Recess  $\varnothing$  D<sub>1</sub>: 11 mm Overall length L: 93 mm Shank  $\varnothing$  D<sub>5</sub>: 12 mm

## **Technical description**

Cutting edge $\emptyset$ D <sub>c</sub>	12 mm
Flute length L <sub>c</sub>	36 mm

Recess Ø D <sub>1</sub>	11 mm		
Shank Ø D <sub>s</sub>	12 mm		
Tolerance nominal Ø	e8		
No. of teeth Z	3		
Helix angle	35 °		
Overall length L	93 mm		
Feed $f_z$ for slot milling in short-chipping aluminium	0.15 mm		
Overhang length L <sub>1</sub> incl. recess	46 mm		
Feed f <sub>z</sub> for side milling in short-chipping aluminium	0.18 mm		
Balance quality with shank	G 2.5 with HA		
Shank	DIN 6535 HA to h6		
Direction of infeed	horizontal, oblique and vertical		
Corner rounding r <sub>v</sub>	0.32 mm		
Series	Master Alu		
Coating	DLC		
Tool material	Solid carbide		
Standard	Manufacturer's standard		
Milling profile	WR		
Helix angle characteristic	unequal spacing		
Spacing of the cutters	unequal spacing		
Cutting width a <sub>e</sub> for milling operation	0.5×D for side milling		
Cutting width a <sub>e</sub> for milling operation	Full slot cutting depth 1×D		
Through-coolant	no		
Machining strategy	HPC		
Colour ring	yellow		
Type of product	End / face mill		

## **User data**

	Suitability	$\mathbf{V}_{c}$	ISO code
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Aluminium	Suitable	450 m/min	N
Aluminium (short chipping)	suitable	400 m/min	N
Alu > 10% Si	suitable	380 m/min	N
PA 66	suitable only under restricted conditions	120 m/min	N
PEEK	suitable only under restricted conditions	100 m/min	N
Cu	Suitable	160 m/min	N
CuZn	Suitable	200 m/min	N
wet maximum	suitable		
wet minimum	Suitable only under restricted conditions		
dry	Suitable only under restricted conditions		
Air Services	<del>suitable</del>		

Shank grinding Type HB 129100 HB