

**Garant**
**GARANT Master Alu SlotMachine solid carbide roughing end mill with through-coolant HPC, DLC, Ø e8 DC: 12mm**

**Order data**

Order number	205256 12
GTIN	4062406276973
Item class	11X

**Description**
**Version:**

For roughing.

Special profile for machining non-ferrous metals.

Improved chip evacuation due to central through-coolant. Due to the patented geometry also suitable for boring.

**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  $45^\circ$ .

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

**Technical description**

Tolerance nominal $\varnothing$	e8
Overhang length $L_1$ incl. recess	36 mm
Flute length $L_c$	26 mm
Feed $f_z$ for side milling in short-chipping aluminium	0.18 mm
Balance quality with shank	G 2.5 with HB
Direction of infeed	horizontal, oblique and vertical
Recess $\varnothing D_1$	11 mm
Cutting edge $\varnothing D_c$	12 mm

Overall length L	83 mm
Shank $\varnothing D_s$	12 mm
Helix angle	35 degrees
Shank	DIN 6535 HB to h6
No. of teeth Z	3
Feed $f_z$ for slot milling in short-chipping aluminium	0.15 mm
Corner rounding $r_v$	0.32 mm
Series	Master Alu
Coating	DLC
Tool material	Solid carbide
Standard	DIN 6527
Milling profile	WR
Helix angle characteristic	unequal spacing
Spacing of the cutters	unequal spacing
Cutting width $a_e$ for milling operation	Full slot cutting depth $1 \times D$
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Through-coolant	yes
Machining strategy	HPC
Colour ring	yellow
Type of product	End / face mill

## User data

	Suitability	$V_c$	ISO code
Aluminium	Suitable	450 m/min	N
Aluminium (short chipping)	suitable	400 m/min	N
Alu > 10% Si	suitable	380 m/min	N
Cu	Suitable	160 m/min	N
CuZn	Suitable	200 m/min	N

wet maximum	suitable
Air	suitable
<b>Services</b>	

Shank grinding Type HB	129100 HB
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