

Garant**GARANT Master Alu SlotMachine solid carbide roughing end mill HPC, DLC, Ø e8 DC: 12mm****Order data**

Order number	205250 12
GTIN	4062406122249
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**.

Technical description

Flute length L_c	26 mm
Shank $\varnothing D_s$	12 mm
Cutting edge $\varnothing D_c$	12 mm
Balance quality with shank	G 2.5 with HA
Overall length L	83 mm
Feed f_z for side milling in short-chipping aluminium	0.18 mm
Helix angle	35 degrees
No. of teeth Z	3
Tolerance nominal $\varnothing$	e8

Feed f_z for slot milling in short-chipping aluminium	0.15 mm
Recess $\varnothing D_1$	11 mm
Shank	DIN 6535 HA to h6
Overhang length L_1 incl. recess	36 mm
Direction of infeed	horizontal, oblique and vertical
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	$0.4 \times D$ for side milling
Cutting width a_e for milling operation	Full slot cutting depth $1 \times D$
Through-coolant	no
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
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	suitable		