

## GARANT Master Alu solid carbide finishing cutter HPC, uncoated, Ø h6 DC: 12mm



### Order data

Order number	203215 12
GTIN	4067263100447
Item class	11X

### Description

**Version:**

**For fine finishing operations.** Cutter geometry optimised for low infeeds and excellent surfaces. Unequal spacing gives high intrinsic stability and smooth cutting action.

**Application:**

For profile milling as a finishing operation.

**Note:**

Optimal production results in conjunction with the GARANT HiRunER precision ER collet chuck, GARANT Master Chuck hydraulic chuck and heavy-duty chuck.

### Technical description

Flute length $L_c$	63 mm
Direction of infeed	horizontal
Corner chamfer angle	90 degrees
Balance quality with shank	G 2.5 with HA
Overall length L	119 mm
Cutting edge $\varnothing D_c$	12 mm
No. of teeth Z	7
Helix angle	40 degrees
Shank $\varnothing D_s$	12 mm
Recess $\varnothing D_1$	11.5 mm

Overhang length $L_1$ incl. recess	68 mm
Tolerance nominal $\varnothing$	h6
Feed $f_z$ for side milling in short-chipping aluminium	0.03 mm
Shank	DIN 6535 HA to h6
Series	Master Alu
Coating	uncoated
Tool material	Solid carbide
Standard	Works standard
Type	W
Helix angle characteristic	unequal spacing
Spacing of the cutters	unequal spacing
Milling application	Mono milling tools high-precision 90°
Cutting width $a_e$ for milling operation	0.015×D for side milling
Through-coolant	no
Machining strategy	HPC
Colour ring	yellow
Type of product	End / face mill

## User data

	Suitability	$V_c$	ISO code
Alu plastics	suitable	380 m/min	N
Aluminium (short chipping)	suitable	360 m/min	N
Alu > 10% Si	suitable only under restricted conditions	320 m/min	N
PMMA acrylic	suitable	260 m/min	N
PE-HD	suitable	220 m/min	N
PA 66	suitable	250 m/min	N
PEEK	suitable	220 m/min	N

PF 31	suitable	200 m/min	N
Cu	suitable only under restricted conditions	160 m/min	N
CuZn	suitable	220 m/min	N
wet maximum	suitable		
wet minimum	suitable		
Air	suitable		
<b>Services</b>			

Shank grinding Type HB

129100 HB