

Garant
GARANT Master Alu solid carbide milling cutter, HPC HPC, uncoated, Ø e8 DC: 12mm

Order data

Order number	203209 12
GTIN	4062406565992
Item class	11X

Description
Version:

For finishing operations.

Special geometry for optimum chip evacuation.

Unequal spacing gives high intrinsic stability and smooth cutting action.

For profile milling as a finishing operation.

Technical description

Overall length L	119 mm
Tolerance nominal Ø	h6
No. of teeth Z	5
Shank Ø D _s	12 mm
Balance quality with shank	G 2.5 with HA
Recess Ø D ₁	11.5 mm
Shank	DIN 6535 HA to h6
Cutting edge Ø D _c	12 mm
Overhang length L ₁ incl. recess	68 mm
Corner chamfer angle	90 degrees
Helix angle	38 degrees
Flute length L _c	60 mm

Direction of infeed	horizontal
Feed f_z for side milling in short-chipping aluminium	0.05 mm
Series	Master Alu
Coating	uncoated
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	W
Spacing of the cutters	unequal spacing
Cutting width a_e for milling operation	$0.05 \times D$ 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
Aluminium	Suitable	500 m/min	N
Aluminium (short chipping)	suitable	450 m/min	N
Alu > 10% Si	Suitable	400 m/min	N
PMMA acrylic	Suitable	180 m/min	N
PE-HD	Suitable	140 m/min	N
PA 66	Suitable	180 m/min	N
PEEK	Suitable	130 m/min	N
PF 31	Suitable	110 m/min	N
PVDF GF20	Suitable	160 m/min	N
POM GF25	Suitable	140 m/min	N
PA 66 GF30	Suitable	140 m/min	N
PEEK GF30	Suitable	120 m/min	N

PTFE CF25	Suitable	140 m/min	N
Honeycomb sandwich	suitable only under restricted conditions	260 m/min	N
Cu	Suitable	140 m/min	N
CuZn	suitable	120 m/min	N
wet maximum	Suitable		
wet minimum	suitable only under restricted conditions		
dry	suitable		
Air	Suitable		

Services

Shank grinding Type HB

129100 HB