

Garant
Solid carbide end mill HPC, ZOX, Ø f8 DC: 12mm

Order data

Order number	202548 12
GTIN	4045197271808
Item class	11X

Description
Version:

Sturdy roughing end mills **without** knuckle profile.

With strong core, **special chip breaker recesses** and **large polished flutes**.

Application:

For roughing milling with high demands on the component surface.

Technical description

Recess Ø D ₁	11 mm
Overhang length L ₁ incl. recess	36 mm
Feed f _z for slot milling in short-chipping aluminium	0.07 mm
Cutting edge Ø D _c	12 mm
Corner chamfer width at 45°	0.2 mm
Shank form	HA
No. of teeth Z	4
Feed f _z for side milling in short-chipping aluminium	0.09 mm
Shank Ø D _s	12 mm
Overall length L	83 mm
Flute length L _c	24 mm
Direction of infeed	horizontal, oblique and vertical
Shank	DIN 6535 HA to h6

Tolerance nominal Ø	f8
Balance quality with shank	G 2.5 with HA
Helix angle	45 degrees
Corner chamfer angle	45 degrees
Coating	ZOX
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	W
Helix angle characteristic	unequal spacing
Spacing of the cutters	unequal spacing
Cutting width a_e for milling operation	Full slot cutting depth $1 \times D$
Cutting width a_e for milling operation	$0.5 \times D$ 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 only under restricted conditions	500 m/min	N
Aluminium (short chipping)	suitable	480 m/min	N
Alu > 10% Si	suitable	240 m/min	N
Hybrids	suitable only under restricted conditions	m/min	N
CuZn	Suitable	240 m/min	N
wet maximum	suitable		
wet minimum	suitable		

dry	suitable only under restricted conditions
Air	suitable only under restricted conditions
Services	
Shank grinding Type HB	129100 HB