

Garant
Solid carbide roughing end mill HPC, AlCrN, Ø e8 DC: 12mm

Order data

Order number	203072 12
GTIN	4062406565190
Item class	11X

Description
Version:

For **roughing and finishing**. Up to 1.5xD into solid material **at very high feed rates** with smooth cutting action. Optimised end face geometry.

Application:

- **Optimised flute form, eccentric relief ground.**
- **Large flute profiles.**
- **Improved chip evacuation due to optimised end face geometry.**
- **Minimal wear due to sturdy cutting edges.**

Technical description

Corner chamfer width at 45°	0.4 mm
No. of teeth Z	4
Flute length L_c	26 mm
Tolerance nominal Ø	e8
Feed f_z for side milling in steel < 900 N/mm ²	0.095 mm
Shank Ø D_s	12 mm
Overhang length L_1 incl. recess	36 mm
Direction of infeed	horizontal, oblique and vertical
Feed f_z for slot milling in steel < 900 N/mm ²	0.05 mm
Corner chamfer angle	45 degrees

Shank	DIN 6535 HB to h6
Recess $\varnothing D_1$	11.7 mm
Cutting edge $\varnothing D_c$	12 mm
Overall length L	83 mm
Helix angle	38 degrees
Coating	AlCrN
Tool material	solid carbide
Standard	DIN 6527
Type	N
Helix angle characteristic	unequal spacing
Spacing of the cutters	unequal spacing
Cutting width a_e for milling operation	0.3×D for side milling
Cutting width a_e for milling operation	Full slot cutting depth 1×D
Through-coolant	no
Machining strategy	MTC
Colour ring	green
Type of product	End / face mill

User data

	Suitability	V_c	ISO code
Steel < 500 N/mm ²	suitable	265 m/min	P
Steel < 750 N/mm ²	suitable	250 m/min	P
Steel < 900 N/mm ²	suitable	200 m/min	P
Steel < 1100 N/mm ²	suitable	180 m/min	P
Steel < 1400 N/mm ²	suitable only under restricted conditions	160 m/min	P
INOX < 900 N/mm ²	suitable only under restricted conditions	100 m/min	M
INOX > 900 N/mm ²	suitable only under restricted conditions	90 m/min	M

GG(G)	suitable	250 m/min	K
Uni	suitable		
wet maximum	suitable		
wet minimum	suitable only under restricted conditions		
dry	suitable		
Air	suitable		