

Garant**GARANT Steel solid carbide roughing end mill with chip breakers HPC, TiAlN, Ø f8 DC: 10mm****Order data**

Order number	203049 10
GTIN	4069515028561
Item class	11Z

Description**Version:**

For **roughing and finishing. Chip breakers for controlled chip breaking.** For reliable working in automated production environments thanks to reliable chip evacuation from the component. Up to 1.5xD into solid material **at very high feed rates** with smooth cutting action.

Advantage:

Optimised flute form, eccentric relief ground, wide chip space.

Technical description

Shank Ø D _s	10 mm
Overall length L	72 mm
Number of chip separators	1
Corner chamfer width at 45°	0.2 mm
Corner chamfer angle	45 degrees
Recess Ø D ₁	9.8 mm
Flute length L _c	22 mm
Helix angle	38 degrees
Tolerance nominal Ø	f8
Feed f _z for side milling in steel < 900 N/mm ²	0.08 mm
Direction of infeed	horizontal, oblique and vertical

Data sheet

Shank	DIN 6535 HB
Feed f_z for slot milling in steel $< 900 \text{ N/mm}^2$	0.06 mm
Cutting edge $\varnothing D_c$	10 mm
No. of teeth Z	4
Overhang length L_1 incl. recess	30 mm
Series	Master Steel
Coating	TiAlN
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	Full slot cutting depth $1 \times D$
Cutting width a_e for milling operation	$0.3 \times D$ for side milling
Through-coolant	no
Machining strategy	HPC
Colour ring	green
Type of product	End / face mill

User data

	Suitability	V_c	ISO code
Steel $< 500 \text{ N/mm}^2$	suitable	250 m/min	P
Steel $< 750 \text{ N/mm}^2$	suitable	200 m/min	P
Steel $< 900 \text{ N/mm}^2$	suitable	180 m/min	P
Steel $< 1100 \text{ N/mm}^2$	suitable	160 m/min	P
INOX $< 900 \text{ N/mm}^2$	suitable	70 m/min	M
INOX $> 900 \text{ N/mm}^2$	suitable	50 m/min	M
GG(G)	suitable	120 m/min	K
Uni	suitable		

wet maximum	suitable
wet minimum	suitable only under restricted conditions
dry	suitable
Air	suitable