

Garant
GARANT Master Steel solid carbide roughing end mill HPC, TiAlN, Ø f8 DC: 12 mm

Order data

| | |
|--------------|---------------|
| Order number | 203038 12 |
| GTIN | 4045197718945 |
| Item class | 11X |

Description
Version:

For **roughing and finishing** up to $0.7 \times D$ into solid material **at very high feed rates** with smooth cutting action.

Advantage:

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

Tolerance nominal \varnothing : f8

No. of teeth Z: 4

Helix angle: 38 degrees

Direction of infeed: horizontal, oblique and vertical

Shank: DIN 6535 HB to h6

No. of teeth Z: 4

Flute length L_c : 26 mm

Overhang length L_1 incl. recess: 73 mm

Recess $\varnothing D_1$: 11.6 mm

Overall length L: 120 mm

Shank $\varnothing D_s$: 12 mm

Technical description

| | |
|---|---------|
| Feed f_z for slot milling in steel $< 900 \text{ N/mm}^2$ | 0.07 mm |
| Corner chamfer width at 45° | 0.24 mm |
| Recess $\varnothing D_1$ | 11.6 mm |
| Cutting edge $\varnothing D_c$ | 12 mm |
| Feed f_z for side milling in steel $< 900 \text{ N/mm}^2$ | 0.09 mm |

| | |
|---|--------------------------------------|
| Overhang length L_1 incl. recess | 73 mm |
| No. of teeth Z | 4 |
| Shank $\varnothing D_s$ | 12 mm |
| Overall length L | 120 mm |
| Flute length L_c | 26 mm |
| Direction of infeed | horizontal, oblique and vertical |
| Shank | DIN 6535 HB to h6 |
| Tolerance nominal \varnothing | f8 |
| Helix angle | 38 degrees |
| Corner chamfer angle | 45 degrees |
| Series | GARANT Master Steel |
| Coating | TiAlN |
| Tool material | Solid carbide |
| Standard | Manufacturer's standard |
| Type | N |
| Helix angle characteristic | unequal spacing |
| Spacing of the cutters | unequal spacing |
| Cutting width a_e for milling operation | $0.1 \times D$ for side milling |
| Cutting width a_e for milling operation | Full slot cutting depth $1 \times D$ |
| Through-coolant | no |
| Machining strategy | HPC |
| Colour ring | green |
| Type of product | End mill |

Services

Shank clamping flats for shrink-fit chucks, with retainer function Shank \varnothing tool 12 mm

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