

Garant
**GARANT Master Steel solid carbide torus cutter HPC, TiAlN, Ø DC / R1:
12/1,0mm**

Order data

| | |
|--------------|---------------|
| Order number | 206354 12/1,0 |
| GTIN | 4045197778710 |
| Item class | 11X |

Description
Version:

Tolerance: Corner radius $R_1 = \pm 0.01$ mm.

Advantage:

HPC milling cutters with various corner radii for all radial transitions.
Optimised flute form, eccentric relief ground, wide chip space.

Technical description

| | |
|--|-------------------|
| No. of teeth Z | 4 |
| Feed f_z for side milling in steel < 900 N/mm ² | 0.09 mm |
| Overall length L | 83 mm |
| Flute length L_c | 26 mm |
| Overhang length L_1 incl. recess | 36 mm |
| Cutting edge $\varnothing D_c$ | 12 mm |
| Shank $\varnothing D_s$ | 12 mm |
| Corner radius R_1 | 1 mm |
| Recess $\varnothing D_1$ | 11.8 mm |
| Feed f_z for slot milling in steel < 900 N/mm ² | 0.07 mm |
| Shank | DIN 6535 HB to h6 |
| Helix angle | 38 degrees |

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|---|--------------------------------------|
| Series | Master Steel |
| Coating | TiAlN |
| Tool material | Solid carbide |
| Standard | DIN 6527 |
| Type | N |
| Tolerance nominal \varnothing | f8 |
| Helix angle characteristic | unequal spacing |
| Spacing of the cutters | unequal spacing |
| Direction of infeed | horizontal, oblique and vertical |
| 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 | Torus cutter |

User data

| | Suitability | V_c | ISO code |
|--------------------------------|---|-----------|----------|
| Steel < 500 N/mm ² | suitable | 260 m/min | P |
| Steel < 750 N/mm ² | suitable | 240 m/min | P |
| Steel < 900 N/mm ² | suitable | 190 m/min | P |
| Steel < 1100 N/mm ² | suitable | 180 m/min | P |
| Steel < 1400 N/mm ² | suitable only under restricted conditions | 150 m/min | P |
| INOX < 900 N/mm ² | suitable | 80 m/min | M |
| INOX > 900 N/mm ² | suitable | 70 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 |