

Garant
Diabolo solid carbide torus cutter R1 0.2, TiAlN, Ø DC × L1: 1X12 mm

Order data

| | |
|--------------|---------------|
| Order number | 206157 1X12 |
| GTIN | 4045197934543 |
| Item class | 11X |

Description
Version:
GARANT Diabolo:

Special geometry, coating and carbide **for hard machining in the high-performance field.**
Suitable even for machining **electrolytic copper.**

Double-relief ground with 2 chamfers hollow ground for high-precision hard machining.

Recess angle $\alpha = 16^\circ$.

Tolerances:

- **Corner radius: $R_1 = \pm 0.0025$ mm.**
- **Neck Ø: $D_1 = 0 / -0.01$ mm.**

Note:

At greater tool overhang lengths, use a reduced value for a_p !

Values for:

side milling: $a_p = 0.1 \times D \times a_{p \text{ korr}}$

copying: $a_p = 0.05 \times D \times a_{p \text{ korr}}$

To calculate the feed rate v_f please use the actual speed of the machine (the maximum possible speed)! e.g: $v_f = 18000 \text{ [rpm]} \times f_z \text{ [mm/Z]} \times z$

No. of teeth Z: 2

Helix angle: 30 degrees

Shank: DIN 6535 HA to h5

No. of teeth Z: 2

Flute length L_c : 1 mm

Corner radius R_1 : 0.2 mm

Overhang length L_1 incl. recess: 12 mm

Recess Ø D_1 : 0.95 mm

Overall length L: 55 mm

Technical description

| | |
|---|----------------------------------|
| Flute length L_c | 1 mm |
| Feed f_z for copy milling in steel < 65 HRC | 0.015 mm |
| Helix angle | 30 degrees |
| Corner radius R_1 | 0.2 mm |
| Recess $\varnothing D_1$ | 0.95 mm |
| Correction factor $a_{p\text{ corr}}$ | 0.35 |
| Overall length L | 55 mm |
| Shank | DIN 6535 HA to h5 |
| Overhang length L_1 incl. recess | 12 mm |
| Feed f_z for side milling in steel < 65 HRC | 0.015 mm |
| No. of teeth Z | 2 |
| Cutting edge $\varnothing D_c$ | 1 mm |
| Shank $\varnothing D_s$ | 4 mm |
| Series | Diabolo |
| Coating | TiAlN |
| Tool material | Solid carbide |
| Standard | Manufacturer's standard |
| Type | H |
| Tolerance nominal \varnothing | 0 / -0.005 |
| Direction of infeed | horizontal, oblique and vertical |
| Cutting width a_e for milling operation | 0.05×D for copy milling |
| Cutting width a_e for milling operation | 0.05×D for copy milling |
| Through-coolant | no |
| Colour ring | red |
| Type of product | End mill |