Data sheet

# GARANT Diabolo solid carbide torus cutter HRC 62 HPC, TiSiN, ∅ e8 DC / R1: 10/1,0mm

## Order data

| | |
|---|---|
| Order number | 206421 10/1,0 |
| GTIN | 4069515030670 |
| Item class | 11Z |

## Description

**Version:**
**GARANT Diabolo:**
Special geometry, coating and carbide for hard machining.
Tolerance: Corner radius **$R_1$ = ±0.005 mm.**
**Specialist for steels up to 62 HRC.** Reliable process and longer service life thanks to optimised cutter geometry and state-of-the-art high-performance coating.
Without dynamic helical pitch.

## Technical description

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|---|---|
| Overhang length $L_1$ incl. recess | 32 mm |
| Shank ∅ $D_s$ | 10 mm |
| Feed $f_z$ for copy milling in steel < 65 HRC | 0.07 mm |
| Shank | DIN 6535 HA to h6 |
| Cutting edge ∅ $D_C$ | 10 mm |
| Corner radius $R_1$ | 1 mm |
| No. of teeth Z | 6 |
| Recess ∅ $D_1$ | 9.2 mm |
| Flute length $L_c$ | 11 mm |
| Helix angle | 50 degrees |

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|---|---|
| Overall length L | 72 mm |
| Feed $f_z$ for side milling in steel < 60 HRC | 0.045 mm |
| Feed $f_z$ for copy milling in steel < 60 HRC | 0.07 mm |
| Series | Diabolo |
| Coating | TiSiN |
| Tool material | Solid carbide |
| Standard | Manufacturer's standard |
| Type | H |
| Tolerance nominal ∅ | h7 |
| Direction of infeed | horizontal, oblique and vertical |
| Cutting width $a_e$ for milling operation | 0.05×D for side milling |
| Cutting width $a_e$ for milling operation | 0.05×D for copy milling |
| Through-coolant | no |
| Machining strategy | HPC |
| Shank tolerance | h6 |
| Colour ring | red |
| Type of product | Torus cutter |

## User data

| | Suitability | $V_c$ | ISO code |
|---|---|---|---|
| Steel < 1400 N/mm² | suitable only under restricted conditions | 170 m/min | P |
| Steel < 50 HRC | suitable only under restricted conditions | 150 m/min | H |
| Steel < 55 HRC | suitable | 130 m/min | H |
| Steel < 60 HRC | suitable | 100 m/min | H |
| Steel < 65 HRC | suitable | 80 m/min | H |
| Steel < 67 HRC | suitable only under restricted conditions | 65 m/min | H |

| | |
|---|---|
| wet minimum | suitable only under restricted conditions |
| dry | suitable |
| Air | suitable |

## Suitable products

https://www.hoffmann-group.com/GB/en/hom/p/206421-10/1,0