

**Garant****GARANT Diabolo solid carbide milling cutter HRC 62 HPC, TiSiN, Ø DC: 12mm****Order data**

|              |               |
|--------------|---------------|
| Order number | 203221 12     |
| GTIN         | 4069515036634 |
| Item class   | 11Z           |

**Description****Version:****GARANT Diabolo:**

Special geometry, coating and carbide specially for hard machining.

**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.

Dimensions similar to DIN 6527.

**Application:**

**For peripheral milling** as a **finishing operation**.

(plunge cutting only to shallow depths).

**Technical description**

|                                               |                                  |
|-----------------------------------------------|----------------------------------|
| Overall length L                              | 83 mm                            |
| Helix angle                                   | 50 degrees                       |
| Feed $f_z$ for side milling in steel < 60 HRC | 0.05 mm                          |
| Direction of infeed                           | horizontal, oblique and vertical |
| No. of teeth Z                                | 6                                |
| Corner chamfer angle                          | 90 degrees                       |
| Cutting edge Ø $D_c$                          | 12 mm                            |
| Shank                                         | DIN 6535 HA to h6                |
| Shank Ø $D_s$                                 | 12 mm                            |
| Tolerance nominal Ø                           | h7                               |

## Data sheet

|                                           |                                  |
|-------------------------------------------|----------------------------------|
| Flute length $L_c$                        | 28 mm                            |
| Series                                    | Diabolo                          |
| Coating                                   | TiSiN                            |
| Tool material                             | Solid carbide                    |
| Standard                                  | DIN 6527                         |
| Type                                      | H                                |
| Helix angle characteristic                | unequal spacing                  |
| Cutting width $a_e$ for milling operation | $0.05 \times D$ for side milling |
| Through-coolant                           | no                               |
| Machining strategy                        | HPC                              |
| Colour ring                               | red                              |
| Type of product                           | Indexable end mill               |

## User data

|                                | Suitability                               | $V_c$     | ISO code |
|--------------------------------|-------------------------------------------|-----------|----------|
| Steel < 1400 N/mm <sup>2</sup> | 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/203221-12>

