

**Solid carbide milling cutter with chip separators TPC, TiAlN, Ø f8 DC: 5mm****Order data**

|              |               |
|--------------|---------------|
| Order number | 203106 5      |
| GTIN         | 4069515013260 |
| Item class   | 11X           |

**Description**

Version:

High-performance milling cutter with irregular cutter spacing and irregular helical pitch. Optimised bending strength due to the use of ultra-fine grain substrates. Offset chip breakers for controlled chip breaking.

Note:

$a_e \max = 0.07 \times D$  for TPC machining.  $h_{\max}$ : The values stated in the table are maximum values. For finishing operations we recommend items No. 204012, 204014 and 204015. NEW GENERATION AVAILABLE! Recommended successor product is No. 203117.

**Technical description**

|                                                                                   |                                  |
|-----------------------------------------------------------------------------------|----------------------------------|
| Overall length L                                                                  | 62 mm                            |
| Corner chamfer angle                                                              | 45 degrees                       |
| Tolerance nominal Ø                                                               | f8                               |
| Direction of infeed                                                               | horizontal, oblique and vertical |
| Shank Ø D <sub>s</sub>                                                            | 6 mm                             |
| Average chip thickness $h_{\max}$ for TPC milling in INOX < 900 N/mm <sup>2</sup> | 0.023 mm                         |
| Overhang length L <sub>1</sub> incl. recess                                       | 24 mm                            |
| Number of chip separators                                                         | 1                                |
| Flute length L <sub>c</sub>                                                       | 17 mm                            |
| Helix angle                                                                       | 40 degrees                       |

## Data sheet

|                                                    |                         |
|----------------------------------------------------|-------------------------|
| No. of teeth Z                                     | 7                       |
| Balance quality with shank                         | G 2.5 with HB           |
| Corner chamfer width at 45°                        | 0.1 mm                  |
| Shank                                              | DIN 6535 HB to h6       |
| Recess Ø D <sub>1</sub>                            | 4.8 mm                  |
| Cutting edge Ø D <sub>c</sub>                      | 5 mm                    |
| 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 <sub>e</sub> for milling operation | 0.07×D                  |
| Through-coolant                                    | no                      |
| Machining strategy                                 | TPC                     |
| Colour ring                                        | blue                    |
| Type of product                                    | End / face mill         |

## User data

|                                | Suitability                               | V <sub>c</sub> | ISO code |
|--------------------------------|-------------------------------------------|----------------|----------|
| Steel < 500 N/mm <sup>2</sup>  | suitable                                  | 380 m/min      | P        |
| Steel < 750 N/mm <sup>2</sup>  | suitable                                  | 340 m/min      | P        |
| Steel < 900 N/mm <sup>2</sup>  | suitable                                  | 300 m/min      | P        |
| Steel < 1100 N/mm <sup>2</sup> | suitable                                  | 230 m/min      | P        |
| INOX < 900 N/mm <sup>2</sup>   | suitable                                  | 240 m/min      | M        |
| INOX > 900 N/mm <sup>2</sup>   | suitable                                  | 170 m/min      | M        |
| wet maximum                    | Suitable                                  |                |          |
| wet minimum                    | Suitable only under restricted conditions |                |          |

|     |          |
|-----|----------|
| Air | suitable |
|-----|----------|