

## Garant

### Solid carbide milling cutter with internal coolant supply HPC, ZOx, Ø f8 DC: 16 mm



#### Order data

|              |               |
|--------------|---------------|
| Order number | 202259 16     |
| GTIN         | 4045197538673 |
| Item class   | 11X           |

#### Description

##### Version:

Sturdy roughing end mill **without** knuckle profile.

With strong core, **special chip breaker recesses** and **large polished flutes**.

##### Application:

For roughing milling with high demands on the component surface.

##### Note:

**NEW GENERATION AVAILABLE!**

**Recommended successor product is No. 202019.**

Tolerance nominal Ø: f8

No. of teeth Z: 3

Helix angle: 45 degrees

Direction of infeed: horizontal, oblique and vertical

Shank: DIN 6535 HB to h6

Balance quality with shank: G 2.5 with HB

No. of teeth Z: 3

Flute length  $L_c$ : 25 mm

Overhang length  $L_1$  incl. recess: 100 mm

Recess Ø  $D_1$ : 15 mm

Overall length L: 150 mm

Shank Ø  $D_s$ : 16 mm

#### Technical description

|                             |        |
|-----------------------------|--------|
| Corner chamfer width at 45° | 0.2 mm |
| Shank form                  | HB     |

|   |                                  |
|---|----------------------------------|
| Recess $\varnothing D_1$                                | 15 mm                            |
| Feed $f_z$ for side milling in short-chipping aluminium | 0.12 mm                          |
| Overhang length $L_1$ incl. recess                      | 100 mm                           |
| Feed $f_z$ for slot milling in short-chipping aluminium | 0.09 mm                          |
| Cutting edge $\varnothing D_c$                          | 16 mm                            |
| No. of teeth $Z$  | 3                                |
| Shank $\varnothing D_s$                                 | 16 mm                            |
| Overall length $L$                                      | 150 mm                           |
| Flute length $L_c$                                      | 25 mm                            |
| Direction of infeed                                     | horizontal, oblique and vertical |
| Shank   | DIN 6535 HB to h6                |
| Tolerance nominal $\varnothing$                         | f8                               |
| Balance quality with shank                              | G 2.5 with HB                    |
| Helix angle   | 45 degrees                       |
| Corner chamfer angle                                    | 45 degrees                       |
| Coating   | ZOX                              |
| Tool material   | Solid carbide                    |
| Standard  | Manufacturer's standard          |
| Type  | W                                |
| Helix angle characteristic                              | unequal spacing                  |
| Spacing of the cutters                                  | unequal spacing                  |
| Cutting width $a_e$ for milling operation               | 0.3×D for side milling           |
| Cutting width $a_e$ for milling operation               | Full slot cutting depth 1×D      |
| Through-coolant   | yes                              |
| Machining strategy                                      | HPC                              |
| Colour ring   | yellow                           |
| Type of product   | End mill                         |

## Services

|   |             |
|---|-------------|
| Shank recess Type FRST  | 209900 FRST |
| Shank clamping flats for shrink-fit chucks, with retainer function Shank Ø tool 16 mm | SZ2025 16   |