Garant

# Solid carbide barrel milling cutter, tangential form PPC, TiAlN, ⌀ f8 DC / R2: 8/95mm

## Order data

| | |
|---|---|
| Order number | 207525 8/95 |
| GTIN | 4062406131135 |
| Item class | 11X |

## Description

**Version:**
High-performance tool for **exceptionally efficient finish machining of free-form surfaces.** For outstanding surface qualities in a **very short machining time.** For use on modern 5-axis milling machines with CAD / CAM support.
The end face geometry is designed so that the chips, especially those formed by the end radius, are of optimum shape and have optimum evacuation characteristics. For this purpose the number of cutting edges is reduced to the number of effective end face cutting edges.
**Recommendation:**
As an oversize for finishing operations we recommend 0.05 to 0.2 mm.
**Note:**
$R_2$ represents the effective radius on the tool.
Cannot be reground!

## Technical description

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|---|---|
| Cutting edge ⌀ $D_C$ | 8 mm |
| Feed $f_z$ for copy milling in steel < 900 N/mm$^2$ | 0.06 mm |
| Helix angle | 30 degrees |
| Overall length L | 70 mm |
| Corner radius $R_1$ | 1.5 mm |
| Effective radius $R_2$ | 95 mm |
| Flute length $L_c$ | 22 mm |

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|---|---|
| No. of teeth Z | 4 |
| Feed $f_z$ for side milling in steel < 900 N/mm² | 0.05 mm |
| Shank ⌀ $D_s$ | 8 mm |
| Coating | TiAlN |
| Tool material | Solid carbide |
| Standard | Manufacturer's standard |
| Type | N |
| Tolerance nominal ⌀ | f8 |
| Direction of infeed | horizontal |
| 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 |
| Shank | DIN 6535 HA to h6 |
| Through-coolant | no |
| Machining strategy | PPC |
| Colour ring | green |
| Type of product | Ball-nosed slot drill |

## User data

| | Suitability | $V_c$ | ISO code |
|---|---|---|---|
| Aluminium (short chipping) | suitable only under restricted conditions | 200 m/min | N |
| Alu > 10% Si | suitable only under restricted conditions | 200 m/min | N |
| Steel < 500 N/mm² | suitable | 250 m/min | P |
| Steel < 750 N/mm² | suitable | 200 m/min | P |
| Steel < 900 N/mm² | suitable | 180 m/min | P |
| Steel < 1100 N/mm² | suitable | 150 m/min | P |
| Steel < 1400 N/mm² | suitable | 130 m/min | P |
| Steel < 55 HRC | suitable only under restricted conditions | 90 m/min | H |

| | | | |
|---|---|---|---|
| INOX < 900 N/mm² | suitable | 130 m/min | M |
| INOX > 900 N/mm² | suitable | 120 m/min | M |
| Ti > 850 N/mm² | suitable only under restricted conditions | 60 m/min | S |
| GG(G) | suitable | 300 m/min | K |
| Uni | suitable | | |
| wet maximum | suitable | | |
| wet minimum | suitable only under restricted conditions | | |
| dry | suitable only under restricted conditions | | |
| Air | suitable only under restricted conditions | | |

## Services

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| Shank grinding Type HB | 129100 HB |