

## Garant

### High-precision countersink, long, with 3 drive flats 90°, TiAlN, External Ø Dc: 6,3mm



#### Order data

|              |               |
|--------------|---------------|
| Order number | 150376 6,3    |
| GTIN         | 4062406065980 |
| Item class   | 11M           |

#### Description

##### Version:

**All countersinks have 3 cutting edges**, radially relief ground. Flutes ground from solid. High-precision countersink, produced to tight manufacturing tolerances similar to DIN335-C, **with long plain shank.**

**Special geometry with extremely unequal spacing** and matching cutting edge preparation. Newly developed, **special TiAlN coating** for long tool life.

Three **drive flats on the shank** for use in a 3-jaw chuck.

##### Application:

High-precision countersinks for chatter-free production of **precise, round 90° countersunk surfaces.**

#### Technical description

|   |             |
|---|-------------|
| smallest countersink Ø for holes from   | 1.5 mm      |
| Feed f in steel < 500 N/mm <sup>2</sup> | 0.1 mm/rev. |
| Shank tolerance                         | h9          |
| Overall length L                        | 104 mm      |
| Shank Ø D <sub>s</sub>                  | 5 mm        |
| Pre-drill Ø                             | 1.5 mm      |
| External Ø                              | 6.3 mm      |
| Number of cutting edges Z               | 3           |
| for countersunk screws DIN 7991         | M3          |

|  |                               |
|--|-------------------------------|
| Coating                                  | TiAlN                         |
| Countersink tip angle                    | 90 degrees                    |
| Tool material                            | HSS                           |
| Spacing of the countersink cutting edges | unequal spacing               |
| Standard                                 | Manufacturer's standard       |
| Shank                                    | Three clamping flats to h9    |
| Through-coolant                          | no                            |
| Colour ring                              | green                         |
| Type of product                          | Stepped drill and countersink |

### User data

|                                | Suitability                               | V <sub>c</sub> | ISO code |
|--------------------------------|---|----------------|----------|
| Alu plastics                   | suitable                                  | 75 m/min       | N        |
| Aluminium (short chipping)     | suitable                                  | 75 m/min       | N        |
| Alu > 10% Si                   | suitable                                  | 50 m/min       | N        |
| Steel < 500 N/mm <sup>2</sup>  | suitable                                  | 65 m/min       | P        |
| Steel < 750 N/mm <sup>2</sup>  | suitable                                  | 50 m/min       | P        |
| Steel < 900 N/mm <sup>2</sup>  | suitable                                  | 30 m/min       | P        |
| Steel < 1100 N/mm <sup>2</sup> | suitable                                  | 18 m/min       | P        |
| Steel < 1400 N/mm <sup>2</sup> | suitable                                  | 8 m/min        | P        |
| Steel < 55 HRC                 | Suitable only under restricted conditions | 8 m/min        | H        |
| INOX < 900 N/mm <sup>2</sup>   | suitable                                  | 16 m/min       | M        |
| INOX > 900 N/mm <sup>2</sup>   | suitable                                  | 10 m/min       | M        |
| Ti > 850 N/mm <sup>2</sup>     | suitable only under restricted conditions | 12 m/min       | S        |
| GG(G)                          | suitable                                  | 25 m/min       | K        |
| CuZn                           | suitable                                  | 60 m/min       | N        |

|                    |   |
|--------------------|---|
| Graphite, GRP, CRP | suitable only under restricted conditions |
| Uni                | suitable                                  |
| wet maximum        | suitable                                  |
| dry                | suitable only under restricted conditions |