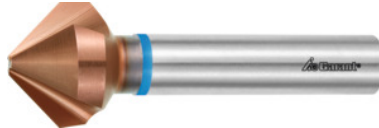


Garant

High-precision countersink with unequal spacing 90°, AlTiCN, External Ø Dc: 20,5mm



Order data

| | |
|--------------|---------------|
| Order number | 150389 20,5 |
| GTIN | 4062406073336 |
| Item class | 11M |

Description

Version:

All countersinks have 3 cutting edges, radially relieved.

Flutes are ground from solid.

High-precision countersink, produced with tight manufacturing tolerances similar to DIN 335-C.

Special geometry with **unequal spacing** and matching cutting edge preparation.

Newly developed AlTiCN coating especially **for stainless steels**.

Application:

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

Technical description

| | |
|---|--------------|
| Pre-drill Ø | 3.5 mm |
| Shank tolerance | h9 |
| for countersunk screws DIN 7991 | M10 |
| Shank Ø D _s | 10 mm |
| External Ø | 20.5 mm |
| smallest countersink Ø for holes from | 3.5 mm |
| Overall length L | 63 mm |
| Feed f in stainless steel < 900 N/mm ² | 0.14 mm/rev. |

| | |
|--|-------------------------------|
| Number of cutting edges Z | 3 |
| Coating | AlTiCN |
| Countersink tip angle | 90 degrees |
| Tool material | HSS E |
| Spacing of the countersink cutting edges | unequal spacing |
| Standard | DIN 335 C |
| Shank | Parallel shank to h9 |
| Through-coolant | no |
| Colour ring | blue |
| Type of product | Stepped drill and countersink |

User data

| | Suitability | V _c | ISO code |
|--------------------------------|---|----------------|----------|
| Alu plastics | suitable only under restricted conditions | 53 m/min | N |
| Aluminium (short chipping) | suitable only under restricted conditions | 40 m/min | N |
| Alu > 10% Si | suitable only under restricted conditions | 35 m/min | N |
| Steel < 500 N/mm ² | suitable | 55 m/min | P |
| Steel < 750 N/mm ² | suitable | 30 m/min | P |
| Steel < 900 N/mm ² | suitable | 25 m/min | P |
| Steel < 1100 N/mm ² | suitable | 15 m/min | P |
| Steel < 1400 N/mm ² | suitable | 12 m/min | P |
| INOX < 900 N/mm ² | suitable | 18 m/min | M |
| INOX > 900 N/mm ² | suitable | 13 m/min | M |
| Ti > 850 N/mm ² | suitable | 13 m/min | S |
| GG(G) | suitable only under restricted conditions | 30 m/min | K |

| | | | |
|-------------|---|----------|---|
| CuZn | suitable only under restricted conditions | 42 m/min | N |
| wet maximum | suitable | | |
| wet minimum | suitable | | |
| dry | suitable only under restricted conditions | | |