

Garant
High-precision countersink, long 90°, TiAlN, External Ø Dc: 31 mm

Order data

| | |
|--------------|---------------|
| Order number | 150377 31 |
| GTIN | 4045197868046 |
| 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.

Application:

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

Technical description

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|---|--------------|
| Overall length L | 140 mm |
| Shank Ø D _s | 12 mm |
| Feed f in steel < 500 N/mm ² | 0.25 mm/rev. |
| smallest countersink Ø for holes from | 4.2 mm |
| Shank tolerance | h9 |
| for countersunk screws DIN 7991 | M16 |
| Number of cutting edges Z | 3 |
| External Ø | 31 mm |
| Pre-drill Ø | 4.2 mm |

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

User data

| | Suitability | V_c | 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 ² | suitable | 65 m/min | P |
| Steel < 750 N/mm ² | suitable | 50 m/min | P |
| Steel < 900 N/mm ² | suitable | 30 m/min | P |
| Steel < 1100 N/mm ² | suitable | 18 m/min | P |
| Steel < 1400 N/mm ² | suitable | 8 m/min | P |
| Steel < 55 HRC | suitable only under restricted conditions | 8 m/min | H |
| INOX < 900 N/mm ² | suitable | 16 m/min | M |
| INOX > 900 N/mm ² | suitable | 10 m/min | M |
| Ti > 850 N/mm ² | suitable only under restricted conditions | 12 m/min | S |
| GG(G) | suitable | 25 m/min | K |
| CuZn | suitable | 60 m/min | N |

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