Garant

# Solid carbide drill plain shank DIN 6535 HA 180°, TiAlN, ⌀ DC m7: 10,7mm

## Order data

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|---|---|
| Order number | 122506 10,7 |
| GTIN | 4062406090074 |
| Item class | 11E |

## Description

**Version:**
Special point geometry for generating **180° flat-bottomed holes.** Low radial forces even when spot drilling on faces with up to 45° slope. Flute geometry for optimum chip evacuation. With 4 guide chamfers to stabilise the drill in the hole.
**Advantage:**
**The 180° point angle** permits drilling and counterboring in a single operation.
**Recommendation:**
When using the solid carbide 180° drill it is absolutely essential for process reliability:
- **when spot drilling on flat surfaces to drill a pilot hole 1×D using pilot drill No. 122736.**
- **when spot drilling on sloping surfaces up to 15° : reduce the feed rate f to 50 %, up to 30°: reduce the feed rate f to 40 % and up to 45°: reduce the feed rate f to 25 % of the stated value. After spot drilling, the normal feed rate value can be used.**

**Note:**
Flute length $L_C = L_2 + 1.5 \times D_C$.
Form HB and HE supplied at the same price as HA.
Form **HB:** order with **No. 122506 + 129100HB** .
Form **HE:** order with **No. 122506 + 129100HE**.
180° solid carbide drills for machining aluminium available on request.
**Not** suitable for generating counterbores for socket-head screws to DIN974-1.

## Technical description

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| Flute length $L_c$ | 53 mm |
| Shank tolerance | h6 |
| Tolerance nominal ⌀ | m7 |
| Shank ⌀ $D_s$ | 12 mm |

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| Nominal Ø $D_C$ | 10.7 mm |
| Feed f in steel < 900 N/mm² | 0.15 mm/rev. |
| recommended maximum drilling depth $L_2$ | 37 mm |
| Number of cutting edges Z | 2 |
| Overall length L | 100 mm |
| Standard | Manufacturer's standard |
| Coating | TiAlN |
| Tool material | Solid carbide |
| Version | 3×D |
| Point angle | 180 degrees |
| Shank | DIN 6535 HA to h6 |
| Use for drilling | limited convexity |
| Use for drilling | limited cross-drilling |
| Use for drilling | limited oblique spot drilling |
| Through-coolant | yes, with 25 bar |
| Pilot drill required | yes, pilot drill |
| Semi-Standard | yes |
| Colour ring | green |
| Type of product | Jobber drill |

## User data

| | Suitability | $V_c$ | ISO code |
|---|---|---|---|
| Steel < 500 N/mm² | suitable | 85 m/min | P |
| Steel < 750 N/mm² | suitable | 75 m/min | P |
| Steel < 900 N/mm² | suitable | 60 m/min | P |
| Steel < 1100 N/mm² | suitable | 50 m/min | P |
| INOX < 900 N/mm² | suitable only under restricted conditions | 45 m/min | M |
| GG(G) | suitable | 90 m/min | K |

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| Uni | suitable |
| wet maximum | suitable |
| wet minimum | suitable |
| Air | suitable |

## Services

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| Shank grinding Type HB | 129100 HB |
| Shank grinding Type HE | 129100 HE |