

Garant

GARANT Master Steel DEEP solid carbide deep hole drill, plain shank DIN 6535 HA 16×D, TiAlN, Ø DC: 4,3mm



Order data

| | |
|--------------|---------------|
| Order number | 123888 4,3 |
| GTIN | 4062406267674 |
| Item class | 10E |

Description

Version:

Excellent chip evacuation due to the unequal helical pitch of the flutes, guide rings and additional guide chamfers for very high precision when drilling. **Maximum process reliability** due to exactly matching tools within the overall system. Drilling up to the maximum depth without a pilot drill. **Significantly increased tool stability** due to the substantially strengthened core. **Increased metal removal rates** and **outstanding tool lives** lead to an economical high-end drilling process.

Note:

For process reliability when using the 16×D deep-hole drill, initial centre drilling with No. 121068 – 121121 or a pilot hole of at least 4×D with pilot drill No. 122736 is necessary. For deep holes greater than 20×D, a pilot hole to the maximum drilling depth with pilot drill No. 122736 is absolutely essential. The generation of a pilot hole improves process reliability. **The specified L/D ratio gives the minimum achievable depth of hole with the respective deep-hole drill.** Flute length $L_c = L_2 + 1.5 \times D_c$.

Technical description

| | |
|---|--------------|
| Nominal Ø D_c | 4.3 mm |
| Flute length L_c | 84 mm |
| Feed f in steel < 900 N/mm ² | 0.11 mm/rev. |
| Shank Ø D_s | 6 mm |
| Overall length L | 126 mm |
| recommended maximum drilling depth L_2 | 77.6 mm |

| | |
|---------------------------------|-------------------------|
| Number of cutting edges Z | 2 |
| Standard | Manufacturer's standard |
| Tolerance nominal \varnothing | j6 |
| Series | Master Steel |
| Coating | TiAlN |
| Tool material | Solid carbide |
| Version | 16xD |
| Point angle | 138 degrees |
| Shank | DIN 6535 HA to h6 |
| Through-coolant | yes, with 40 bar |
| Machining strategy | HPC |
| Pilot drill required | yes, pilot drill |
| Colour ring | green |
| Type of product | Jobber drill |

User data

| | Suitability | V_c | ISO code |
|--------------------------------|---|-----------|----------|
| Steel < 500 N/mm ² | suitable only under restricted conditions | 125 m/min | P |
| Steel < 750 N/mm ² | suitable | 115 m/min | P |
| Steel < 900 N/mm ² | suitable only under restricted conditions | 110 m/min | P |
| Steel < 1100 N/mm ² | suitable | 110 m/min | P |
| Steel < 1400 N/mm ² | suitable | 90 m/min | P |
| INOX < 900 N/mm ² | suitable | 65 m/min | M |
| INOX > 900 N/mm ² | suitable only under restricted conditions | 60 m/min | M |
| Ti > 850 N/mm ² | suitable only under restricted conditions | 30 m/min | S |

| | | | |
|-------------|---|-----------|---|
| GG(G) | suitable only under restricted conditions | 115 m/min | K |
| Uni | suitable | | |
| wet maximum | suitable only under restricted conditions | | |
| wet minimum | suitable only under restricted conditions | | |