

Garant**Stub drill HSS-E FS, uncoated, Ø DC h8: 12mm****Order data**

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|--------------|---------------|
| Order number | 113020 12 |
| GTIN | 4045197002914 |
| Item class | 11B |

Description**Version:**

Particularly **robust and strong** due to **strengthened core**.

Ground flutes, with high concentricity.

Bright finish flutes, nitrided lands.

With point geometry shape C up to 3.9 mm; shape S (special) from 4 mm.

Advantage:

Ideal for drilling shallow holes (approx. 2 - 4×D) on NC machines and automatic machines.

Recommendation:**Maximum drilling depth:**

$$L_2 = L_c - 1.5 \times D_c$$

Technical description

| | |
|--|--------------|
| Flute length L_c | 51 mm |
| Number of cutting edges Z | 2 |
| Nominal Ø D_c | 12 mm |
| Feed f in steel < 750 N/mm ² | 0.16 mm/rev. |
| Tolerance nominal Ø | h8 |
| Shank Ø D_s | 12 mm |
| Overall length L | 102 mm |
| Standard | DIN 1897 |
| recommended maximum drilling depth L_2 | 33 mm |
| Point angle | 135 degrees |

| | |
|-----------------|--------------|
| Shank | Plain shank |
| Coating | uncoated |
| Tool material | HSS E |
| Type | FS |
| Helix angle | 38 degrees |
| Through-coolant | no |
| Colour ring | without |
| Type of product | Jobber drill |

User data

| | Suitability | V_c | ISO code |
|-------------------------------|-------------|----------|----------|
| Alu plastics | suitable | 70 m/min | N |
| Aluminium (short chipping) | suitable | 45 m/min | N |
| Steel < 500 N/mm ² | suitable | 40 m/min | P |
| Steel < 750 N/mm ² | suitable | 30 m/min | P |
| GG(G) | suitable | 25 m/min | K |
| Oil | suitable | | |
| wet maximum | suitable | | |