

Garant
**Jobber drill extra long HSS FS, uncoated, Ø DC h8 × overall length L:
3,5X165mm**

Order data

| | |
|--------------|----------------|
| Order number | 116240 3,5X165 |
| GTIN | 4045197028648 |
| Item class | 11B |

Description
Version:

With precision ground point.

Significantly strengthened core without core taper. Bright finish flutes, nitrided chamfers.

With point geometry shape C.

Advantage:

Special deep hole drills. For particularly deep or recessed holes. Good chip evacuation due to parabolic flutes, resulting in fewer chip evacuations even in particularly deep holes.

Recommendation:
Maximum drilling depth:

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

Note:

Suitable NC spotting drills No. 112120, 112140 and 112170 with **142° tip angle** for enhanced process reliability

Technical description

| | |
|---|--------------|
| Nominal Ø D _c | 3.5 mm |
| Number of cutting edges Z | 2 |
| Feed f in steel < 750 N/mm ² | 0.05 mm/rev. |
| Flute length L _c | 115 mm |
| Tolerance nominal Ø | h8 |
| Shank Ø D _s | 3.5 mm |
| Overall length L | 165 mm |

| | |
|---|--------------|
| Standard | DIN 1869 |
| recommended maximum drilling depth L ₂ | 109.8 mm |
| Point angle | 130 degrees |
| Shank | Plain shank |
| Coating | uncoated |
| Tool material | HSS |
| 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 only under restricted conditions | 50 m/min | N |
| Aluminium (short chipping) | suitable only under restricted conditions | 32 m/min | N |
| Steel < 500 N/mm ² | suitable | 28 m/min | P |
| Steel < 750 N/mm ² | suitable | 21 m/min | P |
| GG(G) | suitable | 18 m/min | K |
| Oil | suitable | | |
| wet maximum | suitable | | |