

**Garant**
**HSS jobber drill N, uncoated, Ø DC h8 (mm or inch): 4**

**Order data**

|              |               |
|--------------|---------------|
| Order number | 114150 4      |
| GTIN         | 4045197012852 |
| Item class   | 11B           |

**Description**
**Version:**

Profile ground: Jobber drill with high pitch accuracy and concentricity as well as precision ground point.

Steam tempered from Ø 2.4 mm.

With point geometry shape C from size 4 mm

**Recommendation:**
**Maximum drilling depth:**

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

**Note:**

Size 16 - 20: Drills with shank Ø 16 mm.

Through-coolant: no

Standard: DIN 338

Tolerance nominal Ø: h8

Point angle: 118 °

Shank: Plain shank

Number of cutting edges Z: 2

recommended maximum drilling depth  $L_2$ : 37 mm

Flute length  $L_c$ : 43 mm

Overall length L: 75 mm

Shank Ø  $D_s$ : 4 mm

Feed f in steel < 750 N/mm<sup>2</sup>: 0.05 mm/rev.

**Technical description**

|   |              |
|---|--------------|
| Feed f in steel < 750 N/mm <sup>2</sup> | 0.05 mm/rev. |
| Nominal Ø $D_c$                         | 4 mm         |
| Flute length $L_c$                      | 43 mm        |

|  |              |
|--|--------------|
| Number of cutting edges Z                | 2            |
| Tolerance nominal $\varnothing$          | h8           |
| Shank $\varnothing D_s$                  | 4 mm         |
| Overall length L                         | 75 mm        |
| Standard                                 | DIN 338      |
| recommended maximum drilling depth $L_2$ | 37 mm        |
| Point angle                              | 118°         |
| Shank                                    | Plain shank  |
| Coating                                  | uncoated     |
| Tool material                            | HSS          |
| Type                                     | N            |
| 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 | 80 m/min | N        |
| Aluminium (short chipping)     | suitable only under restricted conditions | 45 m/min | N        |
| Alu > 10% Si                   | suitable only under restricted conditions | 50 m/min | N        |
| Steel < 500 N/mm <sup>2</sup>  | suitable                                  | 40 m/min | P        |
| Steel < 750 N/mm <sup>2</sup>  | suitable                                  | 30 m/min | P        |
| Steel < 900 N/mm <sup>2</sup>  | suitable                                  | 25 m/min | P        |
| Steel < 1100 N/mm <sup>2</sup> | suitable only under restricted conditions | 10 m/min | P        |
| Steel < 1400 N/mm <sup>2</sup> | suitable only under restricted conditions | 8 m/min  | P        |
| GG(G)                          | suitable                                  | 25 m/min | K        |

|             |          |          |   |
|-------------|----------|----------|---|
| CuZn        | suitable | 80 m/min | N |
| Oil         | suitable |          |   |
| wet maximum | suitable |          |   |