

**Garant**
**HSS jobber drill N, uncoated, Ø DC h8: 51mm**

**Order data**

|              |               |
|--------------|---------------|
| Order number | 116340 51     |
| GTIN         | 4045197031105 |
| Item class   | 11C           |

**Description**
**Version:**

Special surface treatment, resulting in reduced tendency to edge build-up **and improved chip evacuation.**

**Top quality high performance twist drills.**

Cutting edge section  $\leq 26.5$  mm Ø ground from solid,  $> 26.5$  mm Ø milled. This ensures high concentricity and pitch accuracy, and precision ground point up to 40 mm Ø.

With shape A point.

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

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

**Note:**

For suitable reducing adapters for tools with MT shanks see **No. 343000-343530.**

**Technical description**

|   |              |
|---|--------------|
| Flute length $L_c$                          | 225 mm       |
| Number of cutting edges $Z$                 | 2            |
| Feed $f$ in steel $< 750$ N/mm <sup>2</sup> | 0.32 mm/rev. |
| Nominal Ø $D_c$                             | 51 mm        |
| Tolerance nominal Ø                         | h8           |
| Overall length $L$                          | 412 mm       |
| Morse taper MT size                         | 5            |
| Standard                                    | DIN 345      |

|   |               |
|---|---------------|
| recommended maximum drilling depth L <sub>2</sub> | 148.5 mm      |
| Point angle                                       | 118 degrees   |
| Shank   | Morse taper   |
| Coating   | uncoated      |
| Tool material                                     | HSS           |
| Type  | N             |
| Helix angle                                       | 20-30 degrees |
| Through-coolant                                   | no            |
| Colour ring                                       | without       |
| Type of product                                   | Jobber drill  |

## User data

|                               | Suitability                               | V <sub>c</sub> | ISO code |
|-------------------------------|---|----------------|----------|
| Aluminium (short chipping)    | suitable only under restricted conditions | 45 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        |
| GG(G)                         | suitable                                  | 25 m/min       | K        |
| Oil                           | suitable                                  |                |          |
| wet maximum                   | suitable                                  |                |          |