

**Garant**
**HSS jobber drill N, uncoated, Ø DC h8: 48mm**

**Order data**

Order number	116340 48
GTIN	4045197031075
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  $\varnothing$  ground from solid,  $> 26.5$  mm  $\varnothing$  milled. This ensures high concentricity and pitch accuracy, and precision ground point up to 40 mm  $\varnothing$ .

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**

Feed f in steel $< 750$ N/mm <sup>2</sup>	0.32 mm/rev.
Nominal $\varnothing D_c$	48 mm
Flute length $L_c$	220 mm
Number of cutting edges Z	2
Tolerance nominal $\varnothing$	h8
Overall length L	369 mm
Morse taper MT size	4
Standard	DIN 345

recommended maximum drilling depth L <sub>2</sub>	148 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		