

Garant**Jobber drill, long, HSS-E N, uncoated, Ø DC h8: 4,5mm****Order data**

Order number	116065 4,5
GTIN	4045197270597
Item class	11B

Description**Version:**

Profile ground. Standard core thickness and core taper. Bright finish.
With point geometry shape AC from 2 mm.

Advantage:

For drilling with drill bushes or long reach applications.
For high-tensile tempered steels, **including TOOLOX.**

Recommendation:**Maximum drilling depth:**

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

Note:

Suitable NC spotting drills No. 112103, 112110 and 112160 with **120° tip angle** for enhanced process reliability

Technical description

Nominal Ø D _c	4.5 mm
Flute length L _c	82 mm
Number of cutting edges Z	2
Feed f in steel < 1100 N/mm ²	0.05 mm/rev.
Tolerance nominal Ø	h8
Shank Ø D _s	4.5 mm
Overall length L	126 mm
Standard	DIN 340
recommended maximum drilling depth L ₂	75.3 mm

Point angle	118 degrees
Shank	Plain shank
Coating	uncoated
Tool material	HSS E
Type	N
Helix angle	35-40 degrees
Through-coolant	no
Colour ring	red
Type of product	Jobber drill

User data

	Suitability	V _c	ISO code
Steel < 750 N/mm ²	suitable	30 m/min	P
Steel < 900 N/mm ²	suitable	25 m/min	P
Steel < 1100 N/mm ²	suitable	10 m/min	P
Steel < 1400 N/mm ²	suitable	8 m/min	P
TOOLOX 33	suitable	8 m/min	H
TOOLOX 44	suitable	5 m/min	H
INOX < 900 N/mm ²	suitable only under restricted conditions	12 m/min	M
INOX > 900 N/mm ²	suitable only under restricted conditions	8 m/min	M
CuZn	suitable only under restricted conditions	80 m/min	N
Oil	suitable		
wet maximum	suitable		