

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

**Order data**

Order number	116245 3,5X165
GTIN	4045197745705
Item class	11B

**Description**
**Version:**

With precision ground point.

Vaporised high performance drills for drilling particularly deep holes. Take particular care to ensure **frequent chip clearance**.

**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**

Feed f in steel < 750 N/mm <sup>2</sup>	0.05 mm/rev.
Shank Ø D <sub>s</sub>	3.5 mm
Overall length L	165 mm
Nominal Ø D <sub>c</sub>	3.5 mm
Flute length L <sub>c</sub>	115 mm
Number of cutting edges Z	2
Tolerance nominal Ø	h8
Standard	DIN 1869
recommended maximum drilling depth L <sub>2</sub>	109.8 mm

Point angle	118 degrees
Shank	Plain shank
Coating	uncoated
Tool material	HSS
Type	N
Helix angle	38 degrees
Through-coolant	no
Colour ring	without
Type of product	Jobber drill

### User data

	Suitability	V <sub>c</sub>	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 <sup>2</sup>	suitable	28 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	21 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	18 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	5 m/min	P
GG(G)	suitable	18 m/min	K
Oil	suitable		
wet maximum	suitable		