

## Garant

**Jobber drill, extra long HSS-E N, TiAlN, Ø DC h8 × overall length L: 4X280mm**



### Order data

Order number	116285 4X280
GTIN	4045197326874
Item class	11B

### Description

**Version:**

TiAlN and anti-friction coating, low wear and low tendency to edge build-up.  
With point geometry shape C.

**Advantage:**

Flute length to DIN 340. 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

Flute length $L_c$	78 mm
Number of cutting edges Z	2
Nominal $\varnothing D_c$	4 mm
Feed f in steel < 750 N/mm <sup>2</sup>	0.05 mm/rev.
Tolerance nominal $\varnothing$	h8
Shank $\varnothing D_s$	4 mm
Overall length L	280 mm
Standard	DIN 1869
recommended maximum drilling depth $L_2$	72 mm

Point angle	118 degrees
Shank	Plain shank
Coating	TiAlN
Tool material	HSS E
Type	N
Helix angle	38 degrees
Through-coolant	no
Colour ring	red
Type of product	Jobber drill

### User data

	Suitability	V <sub>c</sub>	ISO code
Steel < 500 N/mm <sup>2</sup>	suitable only under restricted conditions	38 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	28 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	22 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	7 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	5 m/min	P
TOOLOX 33	suitable	10 m/min	H
TOOLOX 44	suitable	8 m/min	H
INOX < 900 N/mm <sup>2</sup>	suitable only under restricted conditions	10 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable only under restricted conditions	5 m/min	M
CuZn	suitable only under restricted conditions	70 m/min	N
Oil	suitable		
wet maximum	suitable		