

## Garant

### Deep hole drill HSS-E, TiAlN, Ø DC h8: 4,5mm



#### Order data

Order number	116063 4,5
GTIN	4045197871244
Item class	11B

#### Description

##### Version:

Significantly **strengthened core** without taper.

Precision ground point.

With **specialty shaped slots**. Designed for deep holes up to 10×D and materials with critical chip formation characteristics.

With **TiAlN coating** for long tool lives.

##### Recommendation:

##### Maximum drilling depth:

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

##### Note:

Suitable NC spotting drills No. 112120, 112140 and 112170 with **142° tip angle** for enhanced process reliability

#### Technical description

Number of cutting edges Z	2
Overall length L	126 mm
recommended maximum drilling depth L <sub>2</sub>	75.3 mm
Nominal Ø D <sub>c</sub>	4.5 mm
Feed f in steel < 750 N/mm <sup>2</sup>	0.05 mm/rev.
Standard	DIN 340
Shank Ø D <sub>s</sub>	4.5 mm
Tolerance nominal Ø	h8
Flute length L <sub>c</sub>	82 mm

Point angle	130 degrees
Shank	Plain shank
Coating	TiAlN
Tool material	HSS E
Type	FS
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	87 m/min	N
Aluminium (short chipping)	suitable only under restricted conditions	56 m/min	N
Alu > 10% Si	suitable only under restricted conditions	50 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable	31 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	23 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	20 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	12 m/min	P
Ti > 850 N/mm <sup>2</sup>	suitable only under restricted conditions	6 m/min	S
GG(G)	suitable	31 m/min	K
Oil	suitable		
wet maximum	suitable		