

## Garant

### Solid carbide HPC deep hole drill plain shank DIN 6535 HA 20×D, TiAlN, Ø DC h7: 2,2mm



#### Order data

Order number	123690 2,2
GTIN	4045197320179
Item class	11E

#### Description

##### Version:

Spiral fluted, with **4 guide chamfers** and internal cooling channels. New generation of high performance deep hole drills in the HPC range.

**With 135° point angle** and special **h7 cutting edge tolerance** for optimum generation of a deep hole.

**High roundness and alignment accuracy of the deep hole.**

##### Note:

Flute length  $L_c = L_2 + 1.5 \times D_c$ .

For process reliability when using the 16×D deep hole drill, an initial centre drilling with No. 121068 – 121121 or 4×D pilot drilling operation with pilot drill No. 122736 is necessary. For deep holes greater than 20×D, a pilot hole to the maximum drilling depth with pilot drill No. 122736 is absolutely essential. **The generation of a pilot hole improves process reliability.** See also pages 140/141.

#### Technical description

Nominal Ø $D_c$	2.2 mm
Number of cutting edges Z	2
Feed f in steel < 900 N/mm <sup>2</sup>	0.06 mm/rev.
Flute length $L_c$	50 mm
Tolerance nominal Ø	h7
Shank Ø $D_s$	4 mm
Overall length L	92 mm

Standard	Manufacturer's standard
recommended maximum drilling depth L <sub>2</sub>	46.7 mm
Coating	TiAlN
Tool material	Solid carbide
Version	20xD
Point angle	135 degrees
Shank	DIN 6535 HA to h6
Through-coolant	yes, with 40 bar
Machining strategy	HPC
Pilot drill required	yes, pilot drill
Colour ring	green
Type of product	Jobber drill

## User data

	Suitability	V <sub>c</sub>	ISO code
Steel < 500 N/mm <sup>2</sup>	suitable	105 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	90 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	90 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	90 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	70 m/min	P
INOX < 900 N/mm <sup>2</sup>	suitable	50 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable only under restricted conditions	45 m/min	M
GG(G)	suitable	95 m/min	K
Uni	suitable		
wet maximum	suitable		