

## Garant

### Solid carbide HPC deep-hole drill plain shank DIN 6535 HA 20×D, TiAlN, Ø DC h7: 4,8mm



#### Order data

Order number	123690 4,8
GTIN	4045197320278
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 – 121130 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 129/130.

Standard: Manufacturer's standard

Tolerance nominal Ø: h7

Number of cutting edges Z: 2

recommended maximum drilling depth  $L_2$ : 112.8 mm

Tolerance nominal Ø: h7

Overall length L: 160 mm

Shank Ø  $D_s$ : 6 mm

Feed f in steel < 900 N/mm<sup>2</sup>: 0.1 mm/rev.

#### Technical description

Feed f in steel < 900 N/mm <sup>2</sup>	0.1 mm/rev.
Nominal Ø $D_c$	4.8 mm

Flute length $L_c$	120 mm
Number of cutting edges Z	2
Tolerance nominal $\varnothing$	h7
Shank $\varnothing D_s$	6 mm
Overall length L	160 mm
Standard	Manufacturer's standard
recommended maximum drilling depth $L_2$	112.8 mm
Coating	TiAlN
Tool material	Solid carbide
Version	20xD
Point angle	135°
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	$V_c$	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