# Garant

# Solid carbide HPC deep hole drill plain shank DIN 6535 HA 20×D, TiAlN, Ø DC h7: 3,5mm

## Order data

Order number	123690 3,5
GTIN	4045197263551
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**

Flute length L <sub>c</sub>	80 mm		
Nominal Ø D <sub>c</sub>	3.5 mm		
Feed f in steel < 900 N/mm <sup>2</sup>	0.08 mm/rev.		
Number of cutting edges Z	2		
Tolerance nominal $\varnothing$	h7		
Shank $\emptyset$ D <sub>s</sub>	6 mm		
Overall length L	120 mm		

Standard	Manufacturer's standard		
recommended maximum drilling depth $L_2$	74.8 mm		
Coating	TiAIN		
Tool material	Solid carbide		
Version	20×D		
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	Vc	ISO code
Steel < 500 N/mm <sup>2</sup>	suitable	105 m/min	Р
Steel < 750 N/mm <sup>2</sup>	suitable	90 m/min	Р
Steel < 900 N/mm <sup>2</sup>	suitable	90 m/min	Р
Steel < 1100 N/mm <sup>2</sup>	suitable	90 m/min	Р
Steel < 1400 N/mm <sup>2</sup>	suitable	70 m/min	Р
INOX < 900 N/mm <sup>2</sup>	suitable	50 m/min	М
INOX > 900 N/mm <sup>2</sup>	suitable only under restricted conditions	45 m/min	М
GG(G)	suitable	95 m/min	К
Uni	suitable		
wet maximum	suitable		