

GARANT Master Steel DEEP solid carbide deep hole drill, plain shank DIN 6535 HA 16×D, TiAIN, Ø DC: 11mm

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Order data	
Order number	123888 11
GTIN	4062406267926
Item class	10E

### **Description**

#### **Version:**

**Excellent chip evacuation** due to the unequal helical pitch of the flutes, guide rings and additional guide chamfers for very high precision when drilling. **Maximum process reliability** due to exactly matching tools within the overall system. Drilling up to the maximum depth without a pilot drill. **Significantly increased tool stability** due to the substantially strengthened core. **Increased metal removal rates** and **outstanding tool lives** lead to an economical highend drilling process.

#### Note:

For process reliability when using the  $16\times D$  deep-hole drill, initial centre drilling with No. 121068 – 121121 or a pilot hole of at least  $4\times D$  with pilot drill No. 122736 is necessary. For deep holes greater than  $20\times D$ , 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. **The specified L/D ratio gives the minimum achievable depth of hole with the respective deep-hole drill.** Flute length  $L_C = L_2 + 1.5 \times D_C$ .

## **Technical description**

Overall length L	254 mm	
Feed f in steel < 900 N/mm <sup>2</sup>	0.21 mm/rev.	
Nominal Ø D <sub>c</sub>	11 mm	
Number of cutting edges Z	2	
Flute length L <sub>c</sub> 203 mm		
Standard	Manufacturer's standard	

Shank Ø D <sub>s</sub>	12 mm	
Tolerance nominal Ø	j6	
recommended maximum drilling depth $L_2$	186.5 mm	
Series	Master Steel	
Coating	TiAlN	
Tool material	Solid carbide	
Version	16×D	
Point angle	138 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	<b>V</b> <sub>c</sub>	ISO code
Steel < 500 N/mm <sup>2</sup>	suitable only under restricted conditions	125 m/min	Р
Steel < 750 N/mm <sup>2</sup>	suitable	115 m/min	Р
Steel < 900 N/mm <sup>2</sup>	suitable only under restricted conditions	110 m/min	Р
Steel < 1100 N/mm <sup>2</sup>	suitable	110 m/min	Р
Steel < 1400 N/mm <sup>2</sup>	suitable	90 m/min	Р
INOX < 900 N/mm <sup>2</sup>	suitable	65 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable only under restricted conditions	60 m/min	М
Ti > 850 N/mm <sup>2</sup>	suitable only under restricted conditions	30 m/min	S

GG(G)	suitable only under restricted conditions	115 m/min	К
Uni	suitable		
wet maximum	suitable only under restricted conditions		
wet minimum	suitable only under restricted conditions		