

Garant

GARANT Master Steel DEEP solid carbide deep hole drill, plain shank DIN 6535 HA 20×D, TiAlN, Ø DC: 7,8mm



Order data

Order number	123890 7,8
GTIN	4067263122944
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 high-end drilling process.

Note:

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

For process reliability when using the 16×D deep-hole drill, initial centre drilling with No. 121068 – 121121 or a pilot hole of at least 4×D 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. **The specified L/D ratio gives the minimum achievable depth of hole with the respective deep-hole drill.**

Technical description

recommended maximum drilling depth L_2	168.3 mm
Shank $\varnothing D_s$	8 mm
Overall length L	220 mm
Number of cutting edges Z	2
Nominal $\varnothing D_c$	7.8 mm
Feed f in steel < 900 N/mm ²	0.16 mm/rev.

Flute length L_c	180 mm
Standard	Works standard
Tolerance nominal \varnothing	j6
Series	Master Steel
Coating	TiAlN
Tool material	Solid carbide
Version	20xD
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	V_c	ISO code
Steel < 500 N/mm ²	suitable	120 m/min	P
Steel < 750 N/mm ²	suitable	110 m/min	P
Steel < 900 N/mm ²	suitable	105 m/min	P
Steel < 1100 N/mm ²	suitable	105 m/min	P
Steel < 1400 N/mm ²	suitable	85 m/min	P
INOX < 900 N/mm ²	suitable	65 m/min	M
INOX > 900 N/mm ²	suitable only under restricted conditions	60 m/min	M
Ti > 850 N/mm ²	suitable only under restricted conditions	25 m/min	S
GG(G)	suitable	110 m/min	K
Uni	suitable		

wet maximum	suitable
wet minimum	suitable only under restricted conditions