

Garant
Solid carbide HPC deep hole drill plain shank DIN 6535 HA 20×D, DLC, Ø DC h7: 4,5mm

Order data

Order number	123590 4,5
GTIN	4045197353986
Item class	11E

Description
Version:

Spiral fluted, with **6 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. 122606 is necessary. For deep holes greater than 20×D, a pilot hole to the maximum drilling depth with pilot drill No. 122606 is absolutely essential.

The generation of a pilot hole improves process reliability. See also pages 140/141.

Technical description

Number of cutting edges Z	2
Flute length L_c	110 mm
Nominal $\varnothing D_c$	4.5 mm
Feed f in aluminium short-chipping	0.22 mm/rev.
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	103.3 mm
Coating	DLC
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	yellow
Type of product	Jobber drill

User data

	Suitability	V _c	ISO code
Aluminium	suitable	150 m/min	N
Aluminium (short chipping)	suitable	180 m/min	N
Alu > 10% Si	suitable	130 m/min	N
PMMA acrylic	suitable	135 m/min	N
PEEK	suitable	105 m/min	N
PVDF GF20	suitable	80 m/min	N
PA 66 GF30	suitable	70 m/min	N
PEEK GF30	suitable	65 m/min	N
PTFE CF25	suitable	70 m/min	N
Cu	suitable	90 m/min	N
CuZn	suitable	100 m/min	N
GRP	suitable	70 m/min	N
CRP	suitable	70 m/min	N
wet maximum	suitable		

wet minimum

suitable