# Garant

Subland drill HSS 90°, vaporised, for screws: M10



## Order data

Order number	117180 M10		
GTIN	4045197036117		
Item class	11C		

## Description

#### Version:

**Drill and counterbore each with its own chip flutes and guide chamfers.** This means it can be reground many times.

#### **Application:**

For through holes for screws to DIN-ISO 273 and countersinks to DIN 74, sheet 1 form A, fine version. For countersunk screws to ISO 2009, 2010, 7046, 7047 (DIN 963, 964, 965 and 966).

Number of cutting edges Z: 2  $\varnothing$  D<sub>1</sub> 1st step with chamfer h9: 10.5 mm

 $\emptyset$  D<sub>2</sub> 2nd step with chamfer h8: 19 mm

Step height  $L_1$  1st step: 23 mm

Flute length  $L_c$ : 135 mm

Overall length L: 198 mm

Overall length L. 196 m

Shank Ø D<sub>s</sub>: 19 mm

### **Technical description**

Feed f in steel < 750 N/mm <sup>2</sup>	0.1 mm/rev.		
for screws	M10		
Flute length L <sub>c</sub>	135 mm		
Ø $D_2$ 2nd step with chamfer h8	19 mm		
$\emptyset$ D <sub>1</sub> 1st step with chamfer h9	10.5 mm		
Number of cutting edges Z	2		
Shank Ø D <sub>s</sub>	19 mm		

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Overall length L	198 mm		
Step height L <sub>1</sub> 1st step	23 mm		
Coating	vaporised		
Tool material	HSS		
Standard	DIN 8374		
Tolerance nominal Ø	h9		
Point angle	118 °		
Helix angle	20-30 °		
Shank	Parallel shank to h8		
Countersink angle	90 °		
Through-coolant	no		
Shank tolerance	h8		
Colour ring	without		
Type of product	Stepped drill		

# User data

	Suitability	V <sub>c</sub>	ISO code
Aluminium (short chipping)	suitable only under restricted conditions	45 m/min	Ν
Steel < 500 N/mm²	suitable	40 m/min	Р
Steel < 750 N/mm²	suitable	30 m/min	Р
Steel < 900 N/mm <sup>2</sup>	suitable	25 m/min	Р
GG(G)	suitable	25 m/min	К
CuZn	suitable only under restricted conditions	80 m/min	Ν
Oil	suitable		
wet maximum	suitable		