

**Garant**
**Stub subland drill HSS 90°, TiAlN, for screws: M8**

**Order data**

Order number	117140 M8
GTIN	4045197035998
Item class	11C

**Description**
**Version:**

**Very sturdy. Tight concentricity tolerances** between drill  $\varnothing$  and counterbore  $\varnothing$  guarantee exact alignment.

**Application:**

**Particularly suitable for NC machines** due to high positional accuracy, excellent centring properties and great sturdiness. The preceding centring operation can thus often be omitted. For through holes for screws to DIN-ISO 273 and countersinks to DIN 74, sheet 1 form A, fine version.

For screws to ISO 2009, 2010, 7046, 7047 (DIN 963, 964, 965 and 966).

Number of cutting edges Z: 2

$\varnothing D_1$  1st step with chamfer h8: 8.4 mm

$\varnothing D_2$  2nd step with chamfer h8: 15 mm

Step height  $L_1$  1st step: 19 mm

Flute length  $L_c$ : 56 mm

Overall length L: 111 mm

Shank  $\varnothing D_s$ : 15 mm

**Technical description**

Number of cutting edges Z	2
Feed f in steel < 750 N/mm <sup>2</sup>	0.1 mm/rev.
$\varnothing D_2$ 2nd step with chamfer h8	15 mm
$\varnothing D_1$ 1st step with chamfer h8	8.4 mm
for screws	M8

Flute length $L_c$	56 mm
Shank $\varnothing D_s$	15 mm
Overall length L	111 mm
Step height $L_1$ 1st step	19 mm
Coating	TiAlN
Tool material	HSS
Standard	DIN 1897
Tolerance nominal $\varnothing$	h8
Point angle	118 °
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	$V_c$	ISO code
Aluminium (short chipping)	suitable only under restricted conditions	56 m/min	N
Alu > 10% Si	suitable only under restricted conditions	50 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable	50 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	37 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	31 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable only under restricted conditions	12 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable only under restricted conditions	10 m/min	P
GG(G)	suitable	31 m/min	K

CuZn	suitable only under restricted conditions	80 m/min	N
Oil	suitable		
wet maximum	suitable		