

**Garant**
**Solid carbide stepped drill for tapping holes 90°, TiAlN, for threads: M12**

**Order data**

Order number	125100 M12
GTIN	4045197065001
Item class	11E

**Description**
**Version:**

**Drill and counterbore each with its own chip flutes and guide chamfers.** This special design permits frequent regrinding without losing the stepped drill profile. Countersink angle 90°.

**Advantage:**

Precisely aligned **tapping drill hole and countersink** produced **in a single operation**. For tapping drill holes.

No. of teeth Z: 2

Through-coolant: no

Ø D<sub>1</sub> 1st step with chamfer h7: 10.2 mm

Ø D<sub>2</sub> 2nd step with chamfer h7: 14 mm

Step height L<sub>1</sub> 1st step: 30 mm

Flute length L<sub>c</sub>: 60 mm

Overall length L: 107 mm

Shank Ø D<sub>s</sub>: 14 mm

**Technical description**

Ø D <sub>2</sub> 2nd step with chamfer h7	14 mm
for threads	M12
Ø D <sub>1</sub> 1st step with chamfer h7	10.2 mm
Feed f in steel < 1100 N/mm <sup>2</sup>	0.18 mm/rev.
Flute length L <sub>c</sub>	60 mm
Shank Ø D <sub>s</sub>	14 mm
Overall length L	107 mm

Through-coolant	no
No. of teeth Z	2
Step height L <sub>1</sub> 1st step	30 mm
Coating	TiAlN
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	N
Tolerance nominal Ø	h7
Point angle	140 °
Shank	DIN 6535 HA to h6
Countersink angle	90 °
Shank tolerance	h6
Colour ring	without
Application for type of drilling	for blind hole and through hole
Type of product	Stepped drill

## User data

	Suitability	V <sub>c</sub>	ISO code
Alu plastics	suitable only under restricted conditions	260 m/min	N
Aluminium (short chipping)	suitable	180 m/min	N
Alu > 10% Si	suitable	180 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable	90 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	90 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	90 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	60 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	35 m/min	P
INOX < 900 N/mm <sup>2</sup>	suitable	35 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable	30 m/min	M

Ti > 850 N/mm <sup>2</sup>	suitable	25 m/min	S
GG(G)	suitable	110 m/min	K
CuZn	suitable	180 m/min	N
Uni	suitable		
wet maximum	suitable		
dry	suitable only under restricted conditions		