

**Garant**
**Machine tap for synchronised spindles HSS-E-PM, TiAlN, M: M12**

**Order data**

Order number	132280 M12
GTIN	4045197446152
Item class	11H

**Description**
**Version:**

**Sturdy design with spiral point and shank to DIN 1835-B.** Special geometry for use on machines with **synchronised spindle drives**. The tap is controlled by the synchronising spindle of the machine. Special **TiAlN-S coating** for optimum tool life. For use with **emulsion** (fat content minimum 8%).

**Note:**

**For use on synchronised spindles**, the **GARANT** quick-change tapping chuck **No. 338100 – 338121 with minimum length adjustment (MLA)** ensures maximum process reliability.

Thread type: M

Tool material: HSS E PM

Standard: Manufacturer's standard

Tolerance class: ISO 2X 6HX

Thread pitch: 1.75 mm

Overall length L: 110 mm

Shank  $\varnothing$  D<sub>s</sub>: 12 mm

Shank square □: 9 mm

Tapping hole  $\varnothing$ : 10.2 mm

**Technical description**

Number of cutting edges Z	3
Thread $\varnothing$	12 mm
Number of clamping slots	3
Thread pitch	1.75 mm
Tapping hole $\varnothing$	10.2 mm

Standard	Manufacturer's standard
Shank $\varnothing D_s$	12 mm
Overall length L	110 mm
Shank square $\square$	9 mm
Tolerance class	ISO 2X 6HX
Tool material	HSS E PM
Thread depth	30 mm
Thread type	M
Thread size	M12
Coating	TiAlN
Flank angle	60 °
Thread standard	DIN 13
Taper lead form	B
Shank	DIN 1835 B with h6
Through-coolant	no
Application for type of drilling	up to 2.5xD for through holes
Cutting direction	right-hand
Shank tolerance	h6
Type of threading tool	Machine tap for synchronous machining
Colour ring	blue
Type of product	Tap

## User data

	Suitability	$V_c$	ISO code
Aluminium (short chipping)	suitable only under restricted conditions	40 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable	37 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	35 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	22 m/min	P

INOX < 900 N/mm <sup>2</sup>	suitable	12 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable	10 m/min	M
CuZn	suitable only under restricted conditions	35 m/min	N
Oil	suitable		
wet maximum	suitable		
wet minimum	suitable		