

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

**Order data**

Order number	135746 M12
GTIN	4045197508348
Item class	11H

**Description**
**Version:**

**Sturdy version with right-hand helix 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 coating** for optimum tool life. For use with **emulsion** (fat content minimum 8%). With **internal coolant supply** for maximum tool life.

**Note:**

**For use on synchronised spindles**, the **GARANT** quick-change tapping chuck **No. 338100 – 338121 with minimum length adjustment (MLA)** ensures very high 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  $\varnothing D_s$ : 12 mm

Shank square  $\square$ : 9 mm

Tapping hole  $\varnothing$ : 10.2 mm

**Technical description**

Number of clamping slots	4
Thread $\varnothing$	12 mm
Number of cutting edges Z	4
Tapping hole $\varnothing$	10.2 mm
Thread pitch	1.75 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	C
Helix angle	40 °
Shank	DIN 1835 B to h6
Through-coolant	yes
Application for type of drilling	up to 2.5×D for blind 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	32 m/min	N
Steel < 750 N/mm <sup>2</sup>	suitable	32 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	20 m/min	P

INOX < 900 N/mm <sup>2</sup>	suitable	11 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable	9 m/min	M
CuZn	suitable only under restricted conditions	30 m/min	N
Oil	suitable		
wet maximum	suitable		
wet minimum	suitable		