

# Fluteless machine tap with oil grooves HSS-E-PM IC / Form C 6HX, TiAIN, M: M12



#### **Order data**

Order number	139202 M12
GTIN	4062406383503
Item class	111

## **Description**

#### **Version:**

The latest generation of **high-performance fluteless taps**, specially developed for **use in steel materials**.

- · Optimised polygon geometry for a lower torque.
- · Multi-layer HIPIMS coating for high wear resistance.
- · HSS-E-PM substrate for exceptional process reliability.

DIN 2174 ( $\approx$  DIN 371  $\leq$  M10;  $\approx$  DIN 376  $\geq$  M12). With oil grooves; optimum lubrication effect even in deeper threads.

Tolerance class: ISO 2X/6HX.

**With internal coolant feed laterally from the grooves.** Permits the longest possible tool life when machining through holes and blind holes.

Tolerance class: ISO 2X 6HX Thread pitch: 1.75 mm Overall length L: 110 mm

Shank Ø D₅: 9 mm Shank square □: 7 mm

Tapping hole Ø guide value: 11.2 mm

### **Technical description**

Series	GARANT Master	
Overall length L	110 mm	
Tapping hole Ø guide value	11.2 mm	
Thread depth	36 mm	

Number of cutting edges Z	8		
Thread size	M12		
Tolerance class	ISO 2X 6HX		
Shank Ø D <sub>s</sub>	9 mm		
Shank square □	7 mm		
Number of clamping slots	8		
Thread pitch	1.75 mm		
Thread Ø	12 mm		
Coating	TiAIN		
Thread type	M		
Flank angle	60 °		
Tool material	HSS E PM		
Standard	DIN 2174		
Thread standard	DIN 13		
Taper lead form	С		
Shank	Plain shank with h9		
Through-coolant	yes		
Application for type of drilling	up to 3×D for blind holes		
Application for type of drilling	up to 3×D for through holes		
Cutting direction	right-hand		
Colour ring	without		
Type of product	Fluteless tap		

## **User data**

	Suitability	$\mathbf{V}_{\mathrm{c}}$	ISO code
Aluminium (short chipping)	suitable	42 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable	40 m/min	Р
Steel < 750 N/mm <sup>2</sup>	suitable	38 m/min	Р

Steel < 900 N/mm <sup>2</sup>	suitable	29 m/min	Р
Steel < 1100 N/mm <sup>2</sup>	suitable	20 m/min	Р
Steel < 1400 N/mm <sup>2</sup>	suitable	15 m/min	Р
INOX < 900 N/mm <sup>2</sup>	suitable	15 m/min	М
INOX > 900 N/mm <sup>2</sup>	suitable	8 m/min	М
CuZn	suitable	25 m/min	N
Oil	suitable		
wet maximum	suitable		
wet minimum	suitable		