

**Garant**
**GARANT Master Tap INOX machine tap HSS-E-PM Form B 6GX, TiAlN, M: M12**

**Order data**

Order number	132193 M12
GTIN	4062406209346
Item class	111

**Description**
**Version:**

High-performance tap, specially developed for **good process reliability in stainless and acid-resistant steels** and **duplex materials**.

- **HSS-E-PM tool material for maximum wear resistance**
- **The latest generation of TiAlN multi-layer coating**
- **Parameterised flute geometry for optimum chip formation and torsional rigidity**

**Tolerance class: ISO 3X/6GX.** For components which are **galvanised** or shrink slightly when hardened.

Thread type: M

Tool material: HSS E PM

Standard: DIN 376

Tolerance class: ISO 3X 6GX

Thread pitch: 1.75 mm

Overall length L: 110 mm

Shank  $\varnothing D_s$ : 9 mm

Shank square  $\square$ : 7 mm

Tapping hole  $\varnothing$ : 10.2 mm

**Technical description**

Standard	DIN 376
Number of clamping slots	3
Tolerance class	ISO 3X 6GX
Thread pitch	1.75 mm
Tool material	HSS E PM

Thread type	M
Thread Ø	12 mm
Shank Ø D <sub>s</sub>	9 mm
Shank square □	7 mm
Number of cutting edges Z	3
Thread depth	36 mm
Overall length L	110 mm
Tapping hole Ø	10.2 mm
Thread size	M12
Coating	TiAlN
Flank angle	60 °
Thread standard	DIN 13
Taper lead form	B
Shank	Plain shank with h9
Through-coolant	no
Application for type of drilling	up to 3×D for through holes
Cutting direction	right-hand
Type of threading tool	Machine tap for dynamic machining
Colour ring	blue
Series	Master Tap
Type of product	Tap

## User data

	Suitability	V <sub>c</sub>	ISO code
Aluminium (short chipping)	suitable only under restricted conditions	28 m/min	N
Steel < 750 N/mm <sup>2</sup>	suitable only under restricted conditions	23 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable only under restricted conditions	23 m/min	P

Steel < 1100 N/mm <sup>2</sup>	suitable	12 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
Oil	Suitable		
wet maximum	suitable		