

**Garant**
**GARANT Master Tap SteelHT machine tap HSS-E-PM Form B 6HX, TiCN, M: M16**

**Order data**

Order number	131940 M16
GTIN	4062406236229
Item class	11I

**Description**
**Version:**

High-performance tap, specially developed for use in **steels with high tensile strength** and for **difficult-to-machine materials**. **Strong spiral point**, for process stability at high cutting forces.

- **HSS-E-PM tool material – for very high cutting edge stability.**
- **Optimised honed cutting edges.**
- **TiCN coating – for maximum wear protection.**

**Recommendation:**

For **TOOLOX and HARDOX materials we recommend deviating from the DIN data** (see table) by **selecting a larger tapping hole  $\varnothing$** .

Thread type: M

Tool material: HSS E PM

Standard: DIN 376

Tolerance class: ISO 2X 6HX

Thread pitch: 2 mm

Overall length L: 110 mm

Shank  $\varnothing D_s$ : 12 mm

Shank square  $\square$ : 9 mm

Tapping hole  $\varnothing$ : 14 mm

**Technical description**

Thread size	M16
Tolerance class	ISO 2X 6HX
Thread type	M

Overall length L	110 mm
Standard	DIN 376
Tapping hole Ø	14 mm
Thread depth	48 mm
Thread Ø	16 mm
Shank Ø D <sub>s</sub>	12 mm
Shank square □	9 mm
Number of clamping slots	3
Thread pitch	2 mm
Tool material	HSS E PM
Number of cutting edges Z	3
Coating	TiCN
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	red
Series	Master Tap
Type of product	Tap

## User data

	Suitability	V <sub>c</sub>	ISO code
Steel < 750 N/mm <sup>2</sup>	suitable only under restricted conditions	30 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	20 m/min	P

Steel < 1100 N/mm <sup>2</sup>	suitable	15 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable		
Steel < 50 HRC	suitable only under restricted conditions		
TOOLOX 33	suitable	15 m/min	H
TOOLOX 44	suitable		
HARDOX 500 < 1600 N/mm <sup>2</sup>	suitable only under restricted conditions		
INOX > 900 N/mm <sup>2</sup>	suitable		
Ti > 850 N/mm <sup>2</sup>	suitable only under restricted conditions		
Oil	suitable		
wet maximum	suitable		