

## Garant

### GARANT Master Form Steel fluteless machine tap with oil grooves HSS-E-PM IC, TiAlN, MF: 16X1,5



#### Order data

Order number	139290 16X1,5
GTIN	4062406383992
Item class	11I

#### Description

##### Version:

##### GARANT Master Form Steel:

The latest generation of **high-performance fluteless taps** are specially developed for **use in steels**.

- **Optimised polygon geometry for a reduced torque.**
- **Multi-layer HIPIMS coating for high wear resistance.**
- **HSS-E-PM substrate for top process reliability.**

<strong>DIN 2174</strong> (≈ <strong>DIN 371</strong> ≤ M10; <strong>DIN 376</strong> ≥ M12).

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: 1.5 mm

Overall length L: 100 mm

Shank Ø D<sub>s</sub>: 12 mm

Shank square □: 9 mm

Tapping hole Ø guide value: 15.35 mm

#### Technical description

Shank square □	9 mm
Thread pitch	1.5 mm
Thread Ø	16 mm
Shank Ø D <sub>s</sub>	12 mm

Series	GARANT Master
Thread depth	48 mm
Number of clamping slots	8
Thread size	M16×1.5
Tapping hole Ø guide value	15.35 mm
Tolerance class	ISO 2X 6HX
Overall length L	100 mm
Number of cutting edges Z	8
Coating	TiAlN
Thread type	MF
Flank angle	60 °
Tool material	HSS E PM
Standard	DIN 2174
Thread standard	DIN 13
Taper lead form	C
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	V <sub>c</sub>	ISO code
Aluminium (short chipping)	suitable only under restricted conditions	42 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable	40 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	38 m/min	P

Steel < 900 N/mm <sup>2</sup>	suitable	29 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	20 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	15 m/min	P
INOX < 900 N/mm <sup>2</sup>	suitable	15 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable only under restricted conditions	8 m/min	M
CuZn	suitable only under restricted conditions	25 m/min	N
Oil	suitable		
wet maximum	suitable		
wet minimum	suitable		