# Garant

# GARANT Master Form Steel fluteless machine tap with oil grooves HSS-E-PM Form C 6GX, TiAIN, M: M5



#### **Order data**

Order number	139205 M5
GTIN	4062406383558
Item class	111

### **Description**

**Version:** 

**DIN 2174 (\approx DIN 371**  $\leq$  M10;  $\approx$  **DIN 376**  $\geq$  M12).

**Tolerance class: ISO 3X/6GX.** 

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.

#### **Application:**

For components which are **galvanised**, or shrink slightly when hardened.

## **Technical description**

Thread depth	15 mm		
Shank Ø D <sub>s</sub>	6 mm		
Tolerance class	ISO 3X 6GX		
Number of clamping slots	5		
Number of cutting edges Z	5		
Tapping hole Ø guide value	4.65 mm		
Thread size	M5		
Series	GARANT Master		
Overall length L	70 mm		

# Data sheet

Thread pitch	0.8 mm		
Shank square □	4.9 mm		
Thread Ø	5 mm		
Coating	TiAIN		
Thread type	M		
Flank angle	60 degrees		
Tool material	HSS E PM		
Standard	DIN 2174		
Thread standard	DIN 13		
Taper lead form	С		
Shank	Plain shank with h9		
Through-coolant	no		
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	<b>V</b> <sub>c</sub>	ISO code
Aluminium (short chipping)	suitable	38 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable	37 m/min	Р
Steel < 750 N/mm <sup>2</sup>	suitable	35 m/min	Р
Steel < 900 N/mm <sup>2</sup>	suitable	27 m/min	Р
Steel < 1100 N/mm <sup>2</sup>	suitable	18 m/min	Р
Steel < 1400 N/mm <sup>2</sup>	suitable	12 m/min	Р
INOX < 900 N/mm <sup>2</sup>	suitable	12 m/min	М
INOX > 900 N/mm <sup>2</sup>	suitable	7 m/min	М

# Data sheet

CuZn	suitable	22 m/min	N
Oil	suitable		
wet maximum	suitable		
wet minimum	suitable		