

# Synchronised fluteless machine tap with oil grooves HSS-E-PM Form E, TiN, M: M3



### **Order data**

Order number	139215 M3
GTIN	4045197705846
Item class	11H

## **Description**

#### **Version:**

Special polygon geometry and shank to DIN 1835-B for machines with synchronised spindle drive. With oil grooves; optimal lubrication effect even in deeper threads.

The **innovative polygon form** permits a wide application spectrum. The **multi-function layered coating** achieves **maximum service life** even in **high-tensile materials** in **fixed** applications.

Form E (lead-in: 1.5 - 2 turns) for deep threads with short run-out.

Note:

For use on synchronised spindles, the GARANT quick-change tapping chuck No. 338100 – 338121 with minimum length adjustment (MLA) ensures the highest process reliability.

Tolerance class: ISO 2X 6HX

Thread pitch: 0.5 mm Overall length L: 70 mm Shank Ø D.: 6 mm

Shank square □: 4.9 mm

Tapping hole Ø guide value: 2.8 mm

## **Technical description**

Thread pitch	0.5 mm
Number of clamping slots	4
Number of cutting edges Z	4
Thread Ø	3 mm
Shank Ø D <sub>s</sub>	6 mm

Shank square □	4.9 mm		
Overall length L	70 mm		
Tapping hole Ø guide value	2.8 mm		
Tolerance class	ISO 2X 6HX		
Thread depth	9 mm		
Thread size	M3		
Coating	TiN		
Thread type	M		
Flank angle	60°		
Tool material	HSS E PM		
Standard	Manufacturer's standard		
Thread standard	DIN 13		
Taper lead form	E		
Shank	DIN 1835 B with h6		
Through-coolant	no		
Application for type of drilling	up to 2×D for blind holes		
Application for type of drilling	up to 2.5×D for through holes		
Cutting direction	right-hand		
Shank tolerance	h6		
Colour ring	green		
Type of product	Fluteless tap		

## **User data**

	Suitability	$\mathbf{V}_{c}$	ISO code
Alu plastics	suitable	45 m/min	N
Aluminium (short chipping)	suitable	45 m/min	N
Alu > 10% Si	suitable only under restricted conditions	40 m/min	N

Steel < 500 N/mm <sup>2</sup>	suitable	45 m/min	Р
Steel < 750 N/mm <sup>2</sup>	suitable	37 m/min	Р
Steel < 900 N/mm <sup>2</sup>	suitable	35 m/min	Р
Steel < 1100 N/mm <sup>2</sup>	suitable	32 m/min	Р
Steel < 1400 N/mm <sup>2</sup>	suitable only under restricted conditions	22 m/min	Р
INOX < 900 N/mm <sup>2</sup>	suitable	10 m/min	M
CuZn	suitable only under restricted conditions	35 m/min	N
Uni	suitable		
Oil	suitable		
wet maximum	suitable		