

Garant

GARANT Master Form Steel fluteless machine tap with oil grooves HSS-E-PM Form C 6HX, TiAlN, M: M20



Order data

Order number	139194 M20
GTIN	4062406383350
Item class	11I

Description

Version:

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.**

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

Tolerance class: ISO 2X/6HX.

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Thread pitch: 2.5 mm

Overall length L: 140 mm

Shank \varnothing D_s: 16 mm

Shank square \square : 12 mm

Tapping hole \varnothing guide value: 18.9 mm

Technical description

Thread \varnothing	20 mm
Tolerance class	ISO 2X 6HX
Shank square \square	12 mm
Thread pitch	2.5 mm
Thread depth	60 mm
Tapping hole \varnothing guide value	18.9 mm

Number of cutting edges Z	8
Thread size	M20
Overall length L	140 mm
Series	GARANT Master
Shank $\varnothing D_s$	16 mm
Number of clamping slots	8
Coating	TiAlN
Thread type	M
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	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	V_c	ISO code
Aluminium (short chipping)	suitable	38 m/min	N
Steel < 500 N/mm ²	suitable	37 m/min	P
Steel < 750 N/mm ²	suitable	35 m/min	P
Steel < 900 N/mm ²	suitable	27 m/min	P
Steel < 1100 N/mm ²	suitable	18 m/min	P

Steel < 1400 N/mm ²	suitable	12 m/min	P
INOX < 900 N/mm ²	suitable	12 m/min	M
INOX > 900 N/mm ²	suitable	7 m/min	M
CuZn	suitable	22 m/min	N
Oil	suitable		
wet maximum	suitable		
wet minimum	suitable		