

Garant

Fluteless machine tap with oil grooves HSS-E-PM Form E 6HX, TiAlN, M: M20



Order data

Order number	139198 M20
GTIN	4062406383466
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.

Form E (lead-in 1.5 – 2 turns) **for deep threads with short run-out.** The thread is tapped almost to the bottom of the hole.

Tolerance class: ISO 2X 6HX

Thread pitch: 2.5 mm

Overall length L: 140 mm

Shank \varnothing D_s: 16 mm

Shank square □: 12 mm

Tapping hole \varnothing guide value: 18.9 mm

Technical description

Tapping hole \varnothing guide value	18.9 mm
Shank square □	12 mm
Number of cutting edges Z	8
Thread depth	60 mm
Thread size	M20

Tolerance class	ISO 2X 6HX
Thread pitch	2.5 mm
Shank $\varnothing D_s$	16 mm
Thread \varnothing	20 mm
Overall length L	140 mm
Number of clamping slots	8
Series	GARANT Master
Coating	TiAlN
Thread type	M
Flank angle	60°
Tool material	HSS E PM
Standard	DIN 2174
Thread standard	DIN 13
Taper lead form	E
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		