

Garant

GARANT Master Form Steel fluteless machine tap with oil grooves HSS-E-PM IC, TiAlN, MF: 12X1



Order data

Order number	139290 12X1
GTIN	4062406383961
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.**

DIN 2174 (\approx **DIN 371** \leq M10; **DIN 376** \geq 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 mm

Overall length L: 100 mm

Shank \varnothing D_s: 9 mm

Shank square □: 7 mm

Tapping hole \varnothing guide value: 11.55 mm

Technical description

Shank square □	7 mm
Number of cutting edges Z	8
Series	GARANT Master
Thread \varnothing	12 mm

Thread pitch	1 mm
Number of clamping slots	8
Shank $\varnothing D_s$	9 mm
Overall length L	100 mm
Thread depth	36 mm
Tolerance class	ISO 2X 6HX
Thread size	M12x1
Tapping hole \varnothing guide value	11.55 mm
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 3xD for blind holes
Application for type of drilling	up to 3xD 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 only under restricted conditions	42 m/min	N
Steel < 500 N/mm ²	suitable	40 m/min	P
Steel < 750 N/mm ²	suitable	38 m/min	P

Steel < 900 N/mm ²	suitable	29 m/min	P
Steel < 1100 N/mm ²	suitable	20 m/min	P
Steel < 1400 N/mm ²	suitable	15 m/min	P
INOX < 900 N/mm ²	suitable	15 m/min	M
INOX > 900 N/mm ²	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		