

Garant

GARANT Master Form Steel fluteless machine tap with oil grooves HSS-E-PM, TiAlN, G: G1/2



Order data

Order number	139415 G1/2
GTIN	4062406384029
Item class	11I

Description

Version:

DIN 2189 (≈ DIN 5156). **With oil grooves; optimum lubrication effect even in deeper threads.**

GARANT Master Form Steel:

The latest generation of high-performance fluteless taps, specially developed for **use in steels.**

- **Optimised polygon geometry for a lower torque.**
- **Multi-layer HIPIMS coating for high wear resistance.**
- **HSS-E-PM substrate for top process reliability.**

Application:

For **Whitworth parallel pipe threads** DIN-ISO 228/1 (threads that do not form a seal within the connection).

Thread pitch: 1.814 mm

Threads per inch: 14

Thread Ø: 20.96 mm

Overall length L: 125 mm

Shank Ø D_s: 16 mm

Shank square □: 12 mm

Technical description

Shank square □	12 mm
Thread Ø	20.96 mm
Number of clamping slots	8
Threads per inch	14

Shank $\varnothing D_s$	16 mm
Thread depth	62.88 mm
Thread size	G1/2
Thread pitch	1.814 mm
Overall length L	125 mm
Number of cutting edges Z	8
Tapping hole \varnothing guide value	20.05 mm
Coating	TiAlN
Thread type	G
Flank angle	55°
Tool material	HSS E PM
Standard	DIN 2189
Tolerance class	ISO 228 X
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	blue
Type of product	Fluteless tap

User data

	Suitability	V_c	ISO code
Aluminium (short chipping)	suitable only under restricted conditions	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 only under restricted conditions	7 m/min	M
CuZn	suitable only under restricted conditions	22 m/min	N
Oil	suitable		
wet maximum	suitable		
wet minimum	suitable		