

Garant
GARANT Master Tap machine tap HSS-E-PM, ALTiX, NPT: 3/8-18

Order data

Order number	138105 3/8-18
GTIN	4045197901927
Item class	111

Description
Version:

Universal taps, designed for use in a wide spectrum of materials with high process reliability.

- **HSS-E-PM tool material for maximum wear resistance.**
- **Reduced coefficient of friction due to the new high-performance coating.**
- **Special geometry for optimum chip evacuation.**

Application:

Tapered pipe threads (NPT) to **ANSI B1.20.1**, for threads with sealants. See the table for the specified minimum size of the tapping hole.

Recommendation:
Tapping hole Ø A:

Pre-drill a plain hole **without using a reamer**.

Tapping hole Ø B:

Pre-drill a plain hole and then **ream it using a 1:16 taper reamer (see No. 162650)**. The taper bore Ø B can then be checked laterally by reference to the D_{max} check dimension (see table). **Variant B** for drilling the tapping hole offers the best process reliability for the tapping operation.

Threads per inch: 18

Overall length L: 110 mm

Shank Ø D_s : 12 mm

Shank square □: 9 mm

Tapping hole Ø A: 14.29 mm

Tapping hole Ø A: 9/16 inch

Technical description

Thread gauge Ø $D_{max} + 0.05$	14.8 mm
---------------------------------	---------

Number of cutting edges Z	4
Thread size	3/8-18 NPT
Thread depth	29 mm
Tapping hole Ø A	9/16 inch
Thread pitch	1.411 mm
Tapping hole Ø A	14.29 mm
Thread Ø	17.055 mm
Tapping hole Ø B	14.1 mm
Tapping hole minimum depth	17.6 mm
Threads per inch	18
Shank square □	9 mm
Number of clamping slots	4
Overall length L	110 mm
Shank Ø D _s	12 mm
Coating	AlTiX
Thread type	NPT
Flank angle	60 degrees
Tool material	HSS E PM
Standard	Manufacturer's standard
Thread standard	ANSI B 1.20.1
Taper lead form	C
Taper ratio	1:16
Helix angle	40 degrees
Shank	Plain shank with h9
Through-coolant	no
Application for type of drilling	for blind hole and through hole
Cutting direction	right-hand
Type of threading tool	Machine tap for dynamic machining
Colour ring	green

Series	GARANT Master Tap
Type of product	Tap