Garant

GARANT Master Tap machine tap HSS-E-PM, AlTiX, NPT: 3/4-14

Order data

Order number	138105 3/4-14
GTIN	4045197901941
Item class	11l

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 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: 14
Overall length L: 140 mm
Shank Ø D_s: 20 mm
Shank square □: 16 mm
Tapping hole Ø A: 23.3 mm
Tapping hole Ø B: 22.7 mm

Technical description

Thread gauge Ø D_{max} + 0.05	23.67 mm

Thread ∅	26.568 mm
Number of cutting edges Z	4
Threads per inch	14
Tapping hole minimum depth	23 mm
Shank square ☐	16 mm
Tapping hole ∅ B	22.7 mm
Number of clamping slots	4
Shank ∅ D_s	20 mm
Thread depth	46.4 mm
Tapping hole ∅ A	23.3 mm
Thread size	3/4-14 NPT
Thread pitch	1.814 mm
Overall length L	140 mm
Coating	AlTiX
Thread type	NPT
Flank angle	60 °
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 °
Shank	Plain shank with h9
Through-coolant	no
Application for type of drilling	Blind hole
Application for type of drilling	Through hole
Cutting direction	right-hand
Type of threading tool	Machine tap for dynamic machining
Colour ring	green

Series	Master Tap
Type of product	Tap

User data

	Suitability	V_c	ISO code
Alu plastics	suitable	30 m/min	N
Aluminium (short chipping)	suitable	35 m/min	N
Alu > 10% Si	suitable	20 m/min	N
Steel < 500 N/mm²	suitable	30 m/min	P
Steel < 750 N/mm²	suitable	30 m/min	P
Steel < 900 N/mm²	suitable	25 m/min	P
Steel < 1100 N/mm²	suitable	12 m/min	P
Steel < 1400 N/mm²	suitable	8 m/min	P
INOX < 900 N/mm²	suitable	10 m/min	M
INOX > 900 N/mm²	suitable	8 m/min	M
GG(G)	suitable	20 m/min	K
CuZn	suitable	20 m/min	N
Uni	suitable		
Oil	suitable		
wet maximum	suitable		