

**Garant**
**GARANT Master Tap Alu machine tap, DLC, M: M12**

**Order data**

Order number	134260 M12
GTIN	4067263830412
Item class	11I

**Description**
**Version:**

**High-performance tap**, specially developed for **aluminium and non-ferrous alloys**. **Dynamic helical pitch** of the clamping slots ensure **optimum chip evacuation** and **process reliability**.

- **HSS-E-PM tool material – for high cutting edge stability.**
- **Ultra-smooth DLC coating for wear resistance and avoidance of edge build-up.**
- **Dynamic helical pitch of the flutes.**
- **Short lead chamfer form E.**

**Technical description**

Thread pitch	1.75 mm
Shank $\varnothing D_s$	9 mm
Thread depth	36 mm
Tapping hole $\varnothing$	10.2 mm
Shank square $\square$	7 mm
Tool material	HSS E PM
Tolerance class	ISO 2X 6HX
Standard	Works standard
Thread $\varnothing$	12 mm
Number of cutting edges Z	3
Thread type	M

Number of clamping slots	3
Overall length L	115 mm
Coating	DLC
Flank angle	60 degrees
Thread standard	DIN 13
Taper lead form	E
Helix angle	45 degrees
Shank	Plain shank with h9
Through-coolant	no
Application for type of drilling	up to 3×D for blind holes
Cutting direction	right-hand
Type of threading tool	Machine tap for dynamic machining
Helix angle characteristic	unequal spacing
Colour ring	yellow
Series	Master Tap
Type of product	Tap

## User data

	Suitability	V <sub>c</sub>	ISO code
Aluminium	suitable	35 m/min	N
Aluminium (short chipping)	suitable		
Alu > 10% Si	suitable		
PMMA acrylic	suitable only under restricted conditions	20 m/min	N
PA 66	suitable only under restricted conditions	18 m/min	N
PEEK	suitable	18 m/min	N
Cu	suitable	18 m/min	N
CuZn	suitable		

Oil	suitable
wet maximum	suitable
wet minimum	suitable