

**Garant****GARANT Master Tap Alu machine tap extra long, DLC, M: M20****Order data**

Order number	134265 M20
GTIN	4067263830528
Item class	11I

**Description****Version:**

With extra long shank.

**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	2.5 mm
Shank $\varnothing D_s$	16 mm
Thread type	M
Number of clamping slots	4
Overall length L	200 mm
Shank square $\square$	12 mm
Thread depth	60 mm
Tool material	HSS E PM
Tapping hole $\varnothing$	17.5 mm
Thread $\varnothing$	20 mm
Standard	Works standard

Tolerance class	ISO 2X 6HX
Number of cutting edges Z	4
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	Taps

## User data

	Suitability	V <sub>c</sub>	ISO code
Aluminium	suitable	35 m/min	N
Aluminium (short chipping)	suitable	32 m/min	N
Alu > 10% Si	suitable	20 m/min	N
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	25 m/min	N

Oil	suitable
wet maximum	suitable
wet minimum	suitable