

**Garant**
**Machine tap HSS-E Form E, vaporised, M: M20**

**Order data**

|              |               |
|--------------|---------------|
| Order number | 136050 M20    |
| GTIN         | 4045197078124 |
| Item class   | 11H           |

**Description**
**Version:**
**Form E** (1.5–2 turns lead chamfer).

Thread type: M

Tool material: HSS E

Standard: DIN 376

Tolerance class: ISO 2 6H

Thread pitch: 2.5 mm

Overall length L: 140 mm

 Shank  $\varnothing D_s$ : 16 mm

 Shank square  $\square$ : 12 mm

 Tapping hole  $\varnothing$ : 17.5 mm

**Technical description**

|                            |         |
|----------------------------|---------|
| Tapping hole $\varnothing$ | 17.5 mm |
| Number of clamping slots   | 4       |
| Thread $\varnothing$       | 20 mm   |
| Thread pitch               | 2.5 mm  |
| Number of cutting edges Z  | 4       |
| Standard                   | DIN 376 |
| Shank $\varnothing D_s$    | 16 mm   |
| Overall length L           | 140 mm  |
| Shank square $\square$     | 12 mm   |

|                                  |                                   |
|----------------------------------|-----------------------------------|
| Tolerance class                  | ISO 2 6H                          |
| Tool material                    | HSS E                             |
| Thread depth                     | 60 mm                             |
| Thread type                      | M                                 |
| Thread size                      | M20                               |
| Coating                          | vaporised                         |
| Flank angle                      | 60°                               |
| Thread standard                  | DIN 13                            |
| Taper lead form                  | E                                 |
| Helix angle                      | 40°                               |
| 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 |
| Colour ring                      | green                             |
| Type of product                  | Tap                               |

## User data

|                                | Suitability                               | V <sub>c</sub> | ISO code |
|--------------------------------|---|----------------|----------|
| Aluminium (short chipping)     | suitable only under restricted conditions | 13 m/min       | N        |
| Steel < 500 N/mm <sup>2</sup>  | suitable                                  | 15 m/min       | P        |
| Steel < 750 N/mm <sup>2</sup>  | suitable                                  | 15 m/min       | P        |
| Steel < 900 N/mm <sup>2</sup>  | suitable                                  | 15 m/min       | P        |
| Steel < 1100 N/mm <sup>2</sup> | suitable only under restricted conditions | 6 m/min        | P        |
| INOX < 900 N/mm <sup>2</sup>   | suitable                                  | 6 m/min        | M        |
| CuZn                           | suitable only under restricted conditions | 13 m/min       | N        |

|             |  |
|-------------|--|
| Uni         | suitable                                     |
| Oil         | suitable                                     |
| wet maximum | suitable only under<br>restricted conditions |