

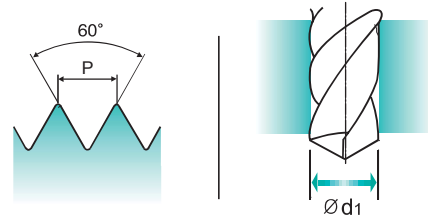
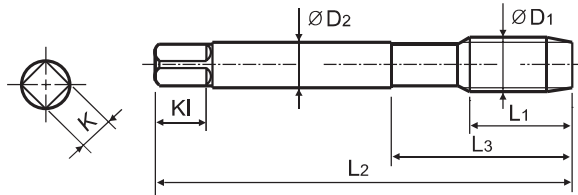
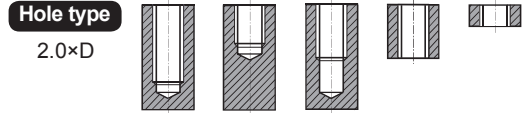
M ISO metric coarse threads DIN 13

M

- Metrisches ISO-Gewinde DIN 13
- ISO MÉTRIQUE DIN13
- ISO Metrico passo grosso DIN 13

▶ This tap is a serial hand tap in set, First, Second and Bottoming.
▶ Bottoming tap of set has final internal thread dimensions only..

▶ Dies ist ein Handgewindebohrer im Satz mit Vor-, Mittel- und Fertigschneider.
▶ Nur der Fertigschneider kann das gewünschte Gewinde schneiden.



Material groups **VG** **HSS-E** **DIN 352** **6H** **60°** **Bright**

Sets of taps
Gewindebohrer-Satz

Unit : mm

| SIZE | Pitch | EDP No. | Thread Length | Overall Length | Neck Length | Shank Diameter | Square Size | Square Length | No. of Flute | Tapping Drill Diameter |
|------|--------|----------|---------------|----------------|-------------|----------------|-------------|---------------|--------------|------------------------|
| ØD1 | P | Bright | L1 | L2 | L3 | ØD2 | K | K1 | Z | Ød1 |
| M3 | × 0.5 | TC353209 | 11 | 40 | 18 | 3.5 | 2.7 | 6 | 3 | 2.5 |
| M3.5 | × 0.6 | TC353229 | 13 | 45 | 21 | 4 | 3 | 6 | 3 | 2.9 |
| M4 | × 0.7 | TC353249 | 13 | 45 | 21 | 4.5 | 3.4 | 6 | 3 | 3.3 |
| M4.5 | × 0.75 | TC353269 | 16 | 50 | 25 | 6 | 4.9 | 8 | 3 | 3.7 |
| M5 | × 0.8 | TC353289 | 16 | 52 | 26 | 6 | 4.9 | 8 | 3 | 4.2 |
| M6 | × 1 | TC353319 | 18 | 56 | 27 | 6 | 4.9 | 8 | 3 | 5 |
| M8 | × 1.25 | TC353369 | 20 | 63 | 34 | 6 | 4.9 | 8 | 3 | 6.8 |
| M10 | × 1.5 | TC353429 | 22 | 70 | 38 | 7 | 5.5 | 8 | 4 | 8.5 |
| M12 | × 1.75 | TC353509 | 24 | 80 | 45 | 9 | 7 | 10 | 4 | 10.2 |
| M14 | × 2 | TC353549 | 26 | 80 | 45 | 11 | 9 | 12 | 4 | 12 |
| M16 | × 2 | TC353609 | 27 | 80 | 45 | 12 | 9 | 12 | 4 | 14 |
| M18 | × 2.5 | TC353659 | 30 | 95 | 58 | 14 | 11 | 14 | 4 | 15.5 |
| M20 | × 2.5 | TC353709 | 32 | 95 | 58 | 16 | 12 | 15 | 4 | 17.5 |

▶ First with pilot guide

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | | M | | | | K | | | | | | | | |
|----------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|-----|------------------------------------|-----|-----|-----|-----------------|-----|-----|-----|----------------|--|-------------------|--|---------------------|
| | Non-alloy steel | | | | | Low alloy steel | | | | | | High alloyed steel, and tool steel | | | | Stainless steel | | | | Grey cast iron | | Nodular cast iron | | Malleable cast iron |
| Material Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | | | |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | | | |
| HRc | 13 | 25 | 28 | 32 | 10 | 29 | 32 | 38 | 15 | 35 | 15 | 23 | 10 | 10 | 26 | 3 | 25 | | | | | | | |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 | | | | |
| Recommended | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | | | | |

| ISO | N | | | | | | | | | | S | | | | | | | H | | | |
|----------------------|------------------------|-----|------------------------|----|-----|---|----|-----|------------------------|----|-----------------------------|-----|-----|-----|-----|-------|--------|-----------------|-----|----------------|-------------------|
| | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | | Copper and Copper Alloys (Bronze / Brass) | | | Non Metallic Materials | | Heat Resistant Super Alloys | | | | | | | Titanium Alloys | | Hardened steel | Chilled Cast Iron |
| Material Description | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HRc | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 15 | 30 | 25 | 38 | 34 | | | 55 | 60 | 42 | 55 |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 200 | 280 | 250 | 350 | 320 | 400Rm | 1050Rm | 550 | 630 | 400 | 550 |
| Recommended | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |