



***TAPMATIC***

TAPPING ATTACHMENTS  
TAP CHUCKS  
MARKING HEADS



## Quality, reliability and good service are what TAPMATIC stands for



Since its establishment in 1952, Tapmatic has manufactured tapping attachments of the highest quality and efficiency. Our focus on tapping attachments and tap holders, and our commitment to research and development, have led to the granting of more than 30 patents in countries all over the world. This investment in innovation and quality has made Tapmatic a world leading manufacturer of tap holding tools.

Today, Tapmatic products are represented through our agents in more than 40 countries.

Our Tapping Attachments and Tap Holders are produced using highly automated equipment. Tapmatic Corporation is an ISO 9001 certified company. This guarantees you of our continued commitment to offering products of the highest quality.

Quality and economic efficiency, innovation and reliability are what have made Tapmatic one of the world's most recognized names for Tapping.



*We're not just tapping!*

Now Tapmatic also offers a complete program of marking tools. Whether your application calls for dot peen marking, scribing, or stamping, our tools allow you to mark the work piece during the machining process. Mark it while you make it.



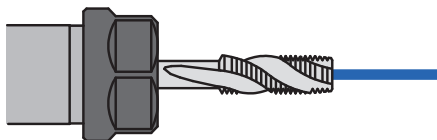
TAPMATIC Post Falls, USA

|                                                                                     |                                                                                                                                                                                                                                                                                       |                                                                                               |                                            |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------|
|    | <b>Description</b><br><b>Self-reversing CNC tapping attachments</b><br>For vertical and horizontal CNC machining centers, for continuous production. Extended spindles and interchangeable shanks available. ASR and RSR driven tools for CNC lathes.                                 | Model<br>Introduction<br>RCT<br>RCT150<br>RDT<br>SPD CNC<br>ASR, RSR                          | Page<br>4-5<br>6-9<br>10<br>11<br>12<br>13 |
|    | <b>Synchronized Tapping</b><br><b>SynchroFlex®</b> For rigid, or synchronized tapping on CNC machines with or without internal coolant, or with minimum quantity lubrication (MQL). ER collet or Quick Change Spindles.                                                               | Introduction<br>SFT (Internal Coolant)<br>SFT (MQL)                                           | 14-16<br>17-21<br>22                       |
|    | <b>Tension compression tap chucks</b><br>For use on CNC machining centers, lathes and all machines with controlled feed when tapping cycle is not synchronized.                                                                                                                       | Introduction<br>SM<br>TA<br>TIC<br>NC                                                         | 23<br>24<br>25<br>26<br>27                 |
|   | <b>Self-reversing manual tapping attachments with pre-selective torque drive</b><br>Automatic reverse with increased reverse ratio. For manually operated drilling and milling machines.<br><b>Heavy duty self-reversing tapping attachment also for machines with automatic feed</b> | Introduction<br>RX<br>X<br>TC/DC<br><br>SPD/SPD-QC                                            | 28<br>29<br>30<br>31<br><br>32             |
|  | <b>In machine marking</b><br>Marking tools for in machine marking.<br>Dot peen marking tool.<br>Scribing tool.<br>Stamping head.                                                                                                                                                      | Introduction<br><br>TapWriter<br>Scribe Writer<br>MH                                          | 33<br><br>34-35<br>36-37<br>38-39          |
|  | <b>Quick-change adapters</b><br>Modular accessories, compatible with the respective tapping attachment or chuck.                                                                                                                                                                      | P - positive drive<br>T - torque control<br>TF - rubber flex                                  | 40-41<br>42-43<br>44                       |
|  | <b>Various accessories</b><br>For use on attachments and chucks.                                                                                                                                                                                                                      | Rubber flex collets<br>ER-GB<br>ER<br>Clamping nuts<br>Sealing disks                          | 44<br>45-46<br>47<br>48<br>48              |
|  | <b>Various accessories</b><br>For use and installation of attachments and chucks on intended machines.                                                                                                                                                                                | Torque wrenches<br>Torque Bars<br>Mounting device<br>CNC Shanks<br>Arbors                     | 49<br>49<br>49<br>50-51                    |
| <b>Information</b>                                                                  |                                                                                                                                                                                                                                                                                       | Speed Chart<br>Installation<br>ER Clamping<br>Safety<br>Warranty<br>Application Questionnaire | 52-54<br>55<br>56<br>57<br>57<br>59        |

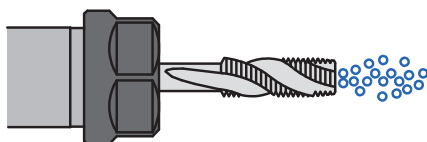
## Thread production on machining centers with constant speed tapping



### Two Through the Spindle Lubrication Options...



Standard balanced high pressure coolant through the spindle.



Minimum Quantity Lubrication, available on request.

CST Constant Speed Tapping relies on a compact tapping attachment to provide tap reversal. The machine spindle runs in one direction at the exact programmed speed and reversal occurs within the tapping attachment instantaneously upon machine retraction. This avoids the inevitable RPM fluctuations which occur with reversal of the machine spindle. Benefits include the following...

#### Reduced Cycle Time

By eliminating the machine spindles need to decelerate, stop, reverse and reaccelerate twice for each tapped hole the tapping time is dramatically reduced.

#### Longer Tap Life, Improved Thread Quality

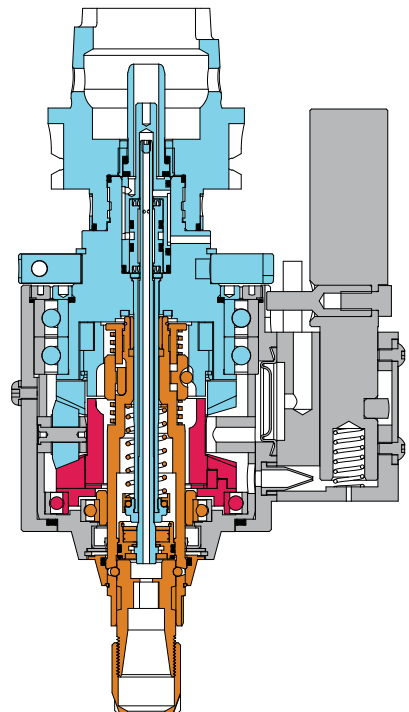
Constant speed tapping means that the tap is allowed to cut at the optimum speed continuously without deceleration at the bottom of the hole. The result is the longest tap life and improved thread quality.

#### Reduced Machine Spindle Wear

Tapping is the only operation requiring machine reversal. Using a Constant Speed Tapping Head eliminates this strain on the machine.

#### Reduced Energy Costs of up to 75 %

CST attachments reduce the energy costs required by machine spindle reversal by 75%.



#### Patented Design

TAPMATIC tapping attachments include a patented reversing ball drive. The ball drive allows for an exact and immediate change over into reverse once the desired thread depth is reached.

## Advantages of tapping attachments with automatic reversal

### General Information

Thread cutting is the only machining operation which requires a change of direction for the retraction of the tool. Reversing the spindle causes wear and is a costly procedure for any machine.

### RCT and RDT tapping attachments

These reversing tapping attachments are specially designed for fast thread production on CNC machining centers. They eliminate reversal related machine wear and tear and reduce energy consumption. The patented ball drive with integrated planet gear for automatic reversal creates an almost constant cutting speed and eliminates the need to stop and reverse the machine spindle twice per tapped hole.

By using the RDT and RCT tapping attachments the cycle time is reduced and the life of the tap is increased. The IC-version allows coolant to flow directly through the tapping head.

### Case history:

#### Original Application

Thread cutting on a horizontal machining center Fritz Werner TC800 with internal coolant.

#### Material

GG20

#### Tap

M6 standard thread HSS with TIN-AL coating

#### Thread

M6 standard thread, 9 mm deep, tapping drill  $\varnothing$  5.05 and 12.5 mm deep

#### Speed with machine reversal

Rigid tapping with spindle reversal, programmed speed 1,200 RPM

#### Original Results

Cycle time of 6 min 34 sec for 68 threads

#### Change with TAPMATIC

Using a TAPMATIC tapping attachment RDT-IC50 with ER16 spindle, programmed speed 1,800 RPM.

#### Improvement

Cycle time reduced to 3 min 22 sec for 68 threads, tap life tripled.

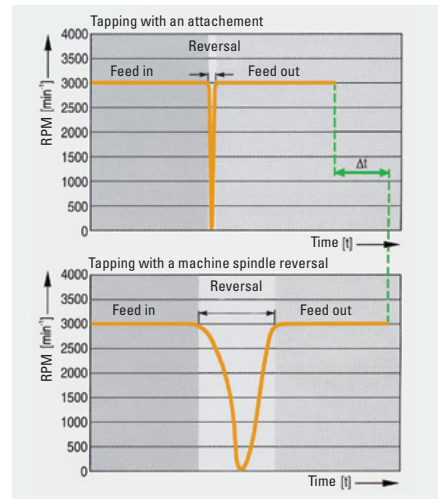
#### Advantage

Besides reducing the cycle time, tap life was considerably increased.

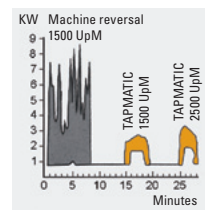
#### Results

- reduction of cycle time by 50 %
- increase of production capacity
- tap life tripled
- less machine wear (no spindle reversals)
- roughly 75 % energy savings by constant speed tapping

### Constant speed tapping – the secret of longer tap life



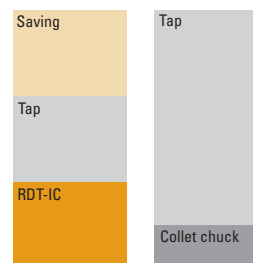
### Power consumption for 144 threads M8



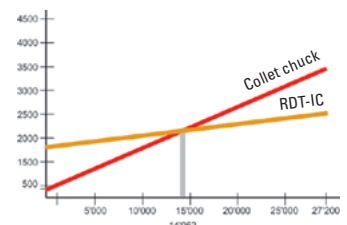
Energy cost saving of 75 %

Not only is the shorter cycle time of importance, but also the constant spindle direction. By changing the direction (decelerating and accelerating) of the spindle, higher spikes of power are needed, which can be prevented by constant spindle rotation.

### Total cost/year



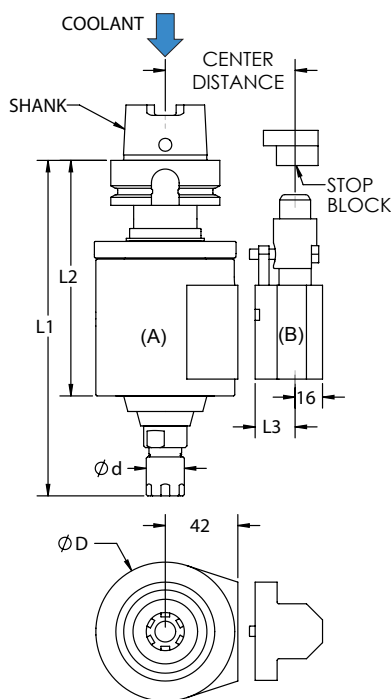
### Break Even Point



### Conclusion

With the use of Tapmatic constant speed tapping, the cycle time is less, which increases productivity. Additionally, machine repair / downtime and energy costs are reduced and tap life is dramatically improved.

## High speed tapping attachments with integral HSK shank and internal coolant system



### Features and Advantages

- high speed self-reversing tapping for fastest cycle time
- rugged design for years of production, with little maintenance
- high pressure internal coolant system, 50 Bar
- simple installation and programming

### How to Order

Please select the Tapping attachment (A) and stop arm (B) to fit your machine. Accessories like steel collets, sealing gaskets and stop blocks are not included. Please order these separately.

Tapmatic can provide a complete tool ready to fit your machine. Please simply provide the information shown on installation page 55, fill in the form on the back cover or contact us directly.



(A) Tapping Attachment RCT HSK

| Model   | Order code  | Capacity (steel)      | Shank   | Collets | Max. RPM | Weight kg | D   | d  | L1  | L2  |
|---------|-------------|-----------------------|---------|---------|----------|-----------|-----|----|-----|-----|
| RCT50   | 0550H63161  | M4.5–M12<br>#10–1/2"  | HSK63A  | ER16    | 2500     | 3.5       | 80  | 22 | 194 | 136 |
|         | 0550H80161  |                       | HSK80A  |         |          | 3.9       |     |    | 199 | 141 |
|         | 0550H100161 |                       | HSK100A |         |          | 4.8       |     |    | 201 | 143 |
|         | 0550H63201  | M10–M20<br>7/16"–3/4" | HSK63A  | ER20    | 2300     | 3.5       | 80  | 28 | 206 | 136 |
|         | 0550H80201  |                       | HSK80A  |         |          | 3.9       |     |    | 211 | 141 |
|         | 0550H100201 |                       | HSK100A |         |          | 4.8       |     |    | 213 | 143 |
| RCT85HS | 0585H6325   | M10–M20<br>7/16"–3/4" | HSK63A  | ER25    | 1500     | 4.2       | 80* | 42 | 217 | 168 |
|         | 0585H8025   |                       | HSK80A  |         |          | 4.6       |     |    | 222 | 173 |
|         | 0585H10025  |                       | HSK100A |         |          | 5.5       |     |    | 224 | 175 |
| RCT85HD | 0585H6332   | M12–M25<br>1/2"–1"    | HSK63A  | ER32    | 1200     | 4.4       | 80* | 50 | 223 | 168 |
|         | 0585H8032   |                       | HSK80A  |         |          | 4.8       |     |    | 228 | 173 |
|         | 0585H10032  |                       | HSK100A |         |          | 5.7       |     |    | 230 | 175 |
| RCT100  | 05100H6340  | M18–M27<br>3/4"–1"    | HSK63A  | ER40    | 800      | 4.6       | 80* | 63 | 229 | 168 |
|         | 05100H8040  |                       | HSK80A  |         |          | 5.0       |     |    | 234 | 173 |
|         | 05100H10040 |                       | HSK100A |         |          | 5.9       |     |    | 236 | 175 |

**Notes:** These internal coolant tools come standard with sealing nuts. These models are also available without internal coolant upon request. When using Roll Form Taps the tool's capacity must be reduced 25%. All dimensions are shown in mm. 25.4mm = 1"

\*Please note that size 85 and 100 tools have an 80mm square housing with ø102mm across corners

(B) Stop Arm Assembly

| Center Distance (42+L3) | Order code RCT50 | Order code RCT85, 100 | L3 |
|-------------------------|------------------|-----------------------|----|
| 55                      | 0550551          | 3985551               | 13 |
| 65                      | 0550651          | 3985651               | 23 |
| 80                      | 0550801          | 3985801               | 38 |



Stop Block  
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Steel Collets



Sealing Gaskets

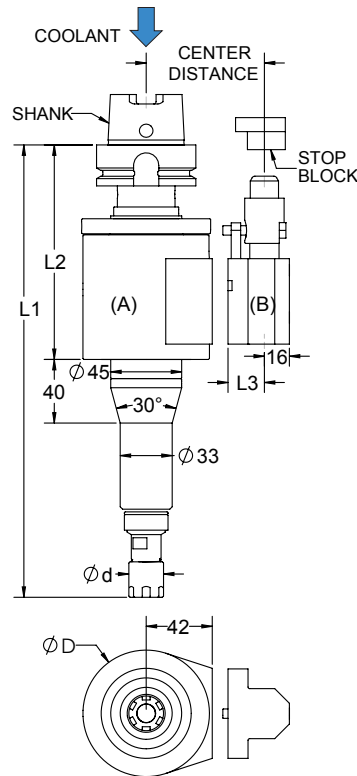


Speed Chart



Installation

## Extended length tapping attachments with integral HSK shank and internal coolant system



### Features and Advantages

- high speed self-reversing tapping for fastest cycle time
- extended length for difficult to reach holes
- rugged design for years of production, with little maintenance
- RCTXT50 for high pressure internal coolant, 50 Bar
- simple installation and programming

### How to Order

Please select the Tapping attachment (A), and stop arm (B) to fit your application. Accessories like steel collets, sealing gaskets and stop blocks are not included. Please order these separately.

Tapmatic can provide a complete tool ready to fit your machine. Please simply provide the information shown on installation page 55, fill in the form on the back cover or contact us directly.

### (A) Tapping Attachment RCTXT50 HSK Shank, Internal Coolant System



| Model   | Order code     | Capacity (steel)     | Shank   | Collets | Max. RPM | Weight kg | D  | d  | L1  | L2  |
|---------|----------------|----------------------|---------|---------|----------|-----------|----|----|-----|-----|
| RCTXT50 | 0550H6316L287  | M4.5-M12<br>#10-1/2" | HSK63A  | ER16    | 1800     | 4.0       | 80 | 22 | 287 | 136 |
|         | 0550H8016L292  |                      | HSK80A  |         |          | 4.4       |    |    | 292 | 141 |
|         | 0550H10016L294 |                      | HSK100A |         |          | 5.3       |    |    | 294 | 143 |
|         | 0550H6320L297  |                      | HSK63A  | ER20    | 1600     | 4.0       | 80 | 28 | 297 | 136 |
|         | 0550H8020L302  |                      | HSK80A  |         |          | 4.4       |    |    | 302 | 141 |
|         | 0550H10020L304 |                      | HSK100A |         |          | 5.3       |    |    | 304 | 143 |
|         | 0550H6316L360  |                      | HSK63A  | ER16    | 1600     | 4.2       | 80 | 22 | 360 | 136 |
|         | 0550H8016L365  |                      | HSK80A  |         |          | 4.6       |    |    | 365 | 141 |
|         | 0550H10016L367 |                      | HSK100A |         |          | 5.5       |    |    | 367 | 143 |
|         | 0550H6320L370  |                      | HSK63A  | ER20    | 1400     | 4.2       | 80 | 28 | 370 | 136 |
|         | 0550H8020L375  |                      | HSK80A  |         |          | 4.6       |    |    | 375 | 141 |
|         | 0550H10020L377 |                      | HSK100A |         |          | 5.5       |    |    | 377 | 143 |

**Notes:** Special extended length tools are also available on request. These models are also available without internal coolant on request. When using Roll Form Taps the tool's capacity must be reduced 25 %. All dimensions are shown in mm. 25.4mm = 1"

### (B) Stop Arm Assembly



| Center Distance (42+L3) | Order code RCT50 | L3 |
|-------------------------|------------------|----|
| 55                      | 0550551          | 13 |
| 65                      | 0550651          | 23 |
| 80                      | 0550801          | 38 |



Stop Block  
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Steel Collets



Sealing Gaskets

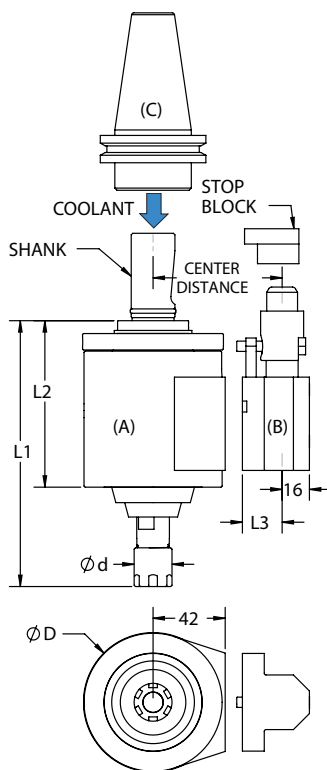


Speed Chart



Installation

## High speed tapping attachments with modular straight shank and internal coolant system or without internal coolant, (W/O IC)



### Features and Advantages

- high speed self-reversing tapping for fastest cycle time
- rugged design for years of production, with little maintenance
- high pressure internal coolant system, 50 Bar
- simple installation and programming

### How to Order

Please select the Tapping attachment (A) and stop arm (B) and CAT, SK or BT shank (C) to fit your machine. Accessories like steel collets, sealing gaskets and stop blocks are not included. Please order these separately.

Tapmatic can provide a complete tool ready to fit your machine. Please simply provide the information shown on installation page 55, fill in the form on the back cover or contact us directly.

### (A) Tapping Attachment RCT Cylindrical Shank



| Model   | Order code | Capacity (steel) | Shank | Collets | Max. RPM | Weight kg | D   | d  | L1  | L2  | Order Code W/O IC | L1 W/O IC |
|---------|------------|------------------|-------|---------|----------|-----------|-----|----|-----|-----|-------------------|-----------|
| RCT50   | 05502516   | M4.5-M12         | 25 mm | ER16    | 2500     | 3.0       | 80  | 22 | 155 | 97  | 04502516          | 152       |
|         | 05501116   | #10-1/2"         | 1"    |         |          |           |     |    |     |     | 04501116          |           |
|         | 05502520   |                  | 25 mm | ER20    | 2300     |           | 80  | 28 | 167 | 97  | 04502520          | 162       |
|         | 0550120    |                  | 1"    |         |          |           |     |    |     |     | 0450120           |           |
| RCT85HS | 05852525   | M10-M20          | 25 mm | ER25    | 1500     | 3.7       | 80* | 42 | 168 | 119 | 04852525          | 163       |
|         | 0585125    | 7/16"-3/4"       | 1"    |         |          |           |     |    |     |     | 0485125           |           |
| RCT85HD | 05852532   | M12-M25          | 25 mm | ER32    | 1200     | 3.9       | 80* | 50 | 174 | 119 | 04852532          | 169       |
|         | 0585132    | 1/2"-1"          | 1"    |         |          |           |     |    |     |     | 0485132           |           |
| RCT100  | 051002540  | M18-M27          | 25 mm | ER40    | 800      | 4.1       | 80* | 63 | 180 | 119 | 041002540         | 175       |
|         | 05100140   | 3/4"-1"          |       |         |          |           |     |    |     |     | 04100140          |           |

**Notes:** These internal coolant tools come standard with sealing nuts. These models are also available without internal coolant upon request. When using Roll Form Taps the tool's capacity must be reduced 25 %. All dimensions are shown in mm. 25.4mm = 1".

\* Please note that size 85 and 100 tools have an 80mm square housing with ø102mm across corners.

### (B) Stop Arm Assembly



| Center Distance (42+L3) | Order code RCT50 | Order Code RCT 85, 100 | L3 |
|-------------------------|------------------|------------------------|----|
| 55                      | 0550551          | 3985551                | 13 |
| 65                      | 0550651          | 3985651                | 23 |
| 80                      | 0550801          | 3985801                | 38 |



Stop Block  
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(C)



Interchangeable  
Steep Taper



Steel Collets



Sealing Gaskets

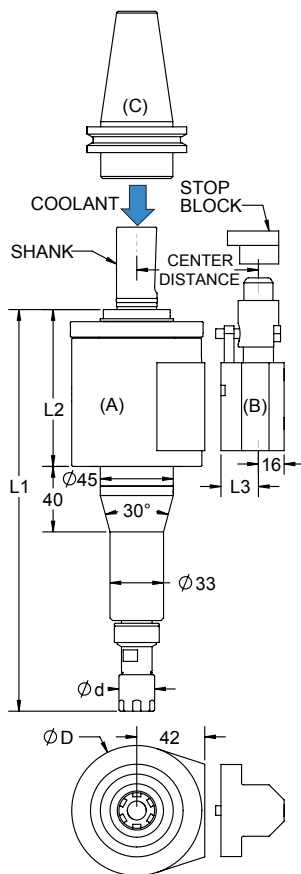


Speed Chart



Installation

## Extended length tapping attachments with modular straight shank and internal coolant system or without internal coolant, (W/O IC)



### Features and Advantages

- high speed self-reversing tapping for fastest cycle time
- extended length for difficult to reach holes
- rugged design for years of production, with little maintenance
- RCTXT50 for high pressure internal coolant, 50 Bar
- simple installation and programming

### How to Order

Please select the Tapping attachment (A), stop arm (B), shank (C) to fit your application. Accessories like steel collets, sealing gaskets and stop blocks are not included. Please order these separately.

Tapmatic can provide a complete tool ready to fit your machine. Please simply provide the information shown on installation page 55, fill in the form on the back cover or contact us directly.

### (A) Tapping Attachment RCTXT50 Cylindrical Shank, Internal Coolant System



| Model   | Order code   | Capacity (steel)     | Shank | Collets | Max. RPM | Weight kg | D  | d  | L1  | L2 | Order code W/O IC | L1 W/O IC |
|---------|--------------|----------------------|-------|---------|----------|-----------|----|----|-----|----|-------------------|-----------|
| RCTXT50 | 05502516L248 | M4.5–M12<br>#10–1/2" | 25 mm | ER16    | 1800     | 3.5       | 80 | 22 | 248 | 97 | 04502516L245      | 245       |
|         | 0550116L248  |                      | 1"    |         |          |           |    |    |     |    | 0450116L245       |           |
|         | 05502520L258 |                      | 25 mm | ER20    | 1600     |           |    | 28 | 258 |    | 04502520L253      | 253       |
|         | 0550120L258  |                      | 1"    |         |          |           |    |    |     |    | 0450120L253       |           |
|         | 05502516L321 | 25 mm                | 1"    | ER16    | 1600     | 3.7       |    | 22 | 321 |    | 04502516L318      | 318       |
|         | 0550116L321  |                      | 1"    |         |          |           |    |    |     |    | 0450116L318       |           |
|         | 05502520L331 |                      | 25 mm | ER20    | 1400     |           |    | 28 | 331 |    | 04502520L326      | 326       |
|         | 0550120L331  |                      | 1"    |         |          |           |    |    |     |    | 0450120L326       |           |

**Notes:** These internal coolant tools come standard with sealing nuts. These models are also available without internal coolant upon request. Special extended length tools are also available on request. When using Roll Form Taps the tool's capacity must be reduced 25%. All dimensions are shown in mm. 25.4mm = 1"

### (B) Stop Arm Assembly



| Center Distance (42+L3) | Order code RCT50 | L3 |
|-------------------------|------------------|----|
| 55                      | 0550551          | 13 |
| 65                      | 0550651          | 23 |
| 80                      | 0550801          | 38 |



**Stop Block**  
Page 55

(C)



Interchangeable  
Steep Taper



Steel Collets



Sealing Gaskets



Speed Chart



Installation

Large capacity tapping attachments with modular straight shank and internal coolant system

The RCT150 is our new, large capacity self-reversing tapping attachment for CNC machining centers. Heavy duty precision gearing transmits high torque for reversing tap sizes up to M42. They are ruggedly built to provide years of service, and include high volume, high pressure internal coolant.

The RCT150 was developed for the large tapping applications required by the wind energy, heavy industry, and power generation fields. By eliminating machine spindle reversal, cycle time is dramatically improved, electrical power consumption is reduced by as much as 75% and wear and tear to the machine spindle caused by stopping and reversing twice for each tapped hole is eliminated.

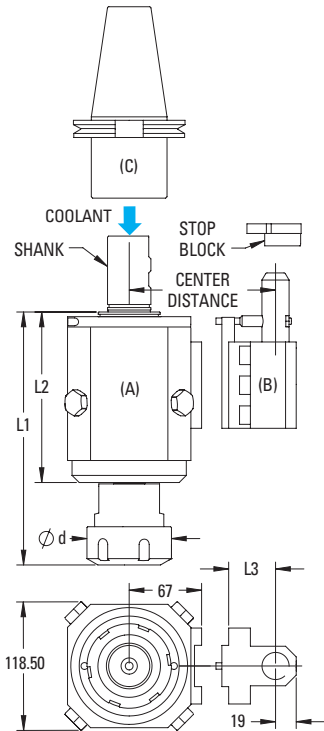
Features and Advantages

- high speed self-reversing tapping for fastest cycle time
- rugged design for years of production, with little maintenance
- high pressure internal coolant system, 50 Bar
- simple installation and programming

How to Order

Please select the Tapping attachment (A), stop arm (B) and CAT, SK, or BT shank (C), to fit your machine. Accessories like steel collets, sealing gaskets and stop blocks are not included. Please order these separately.

Tapmatic can provide a complete tool ready to fit your machine. Please simply provide the information shown on installation page 55, fill in the form on the back cover or contact us directly.



(A) Tapping Attachment RCT150 Cylindrical Shank

| Model  | Order code | Capacity (steel)     | Shank | Collets | Max. RPM | Weight kg | d  | L1  | L2  |
|--------|------------|----------------------|-------|---------|----------|-----------|----|-----|-----|
| RCT150 | 051504050  | M25-M42<br>1"-1 5/8" | 40 mm | ER50    | 500      | 6.2       | 78 | 234 | 158 |

Notes: When using Roll Form Taps the tool's capacity must be reduced 25%. All dimensions are shown in mm. 25.4mm = 1"



(B) Stop Arm Assembly

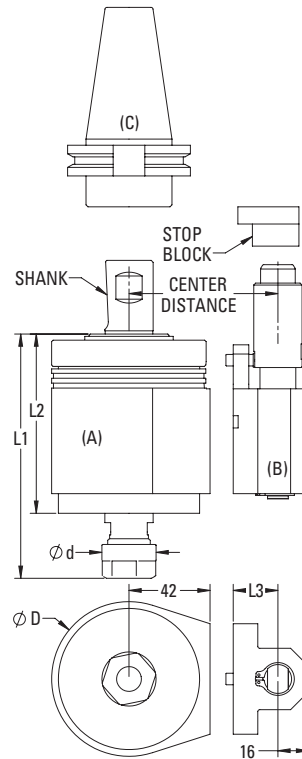
| Center Distance (67+L3) | Order code RCT150 | L3 |
|-------------------------|-------------------|----|
| 80                      | 0515080           | 13 |
| 110                     | 05150110          | 43 |



Stop Block  
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## High speed tapping attachments with modular straight shank, without internal coolant system



### Features and Advantages

- high speed self-reversing tapping for fastest cycle time
- rugged design for years of production, with little maintenance
- simple installation and programming
- large capacity

### How to Order

Please select the Tapping attachment (A), stop arm (B) and CAT, SK, or BT shank (C), to fit your machine. Accessories like steel collets, sealing gaskets and stop blocks are not included. Please order these separately.

Tapmatic can provide a complete tool ready to fit your machine. Please simply provide the information shown on installation page 55, fill in the form on the back cover or contact us directly.

### (A) Tapping Attachment RDT Cylindrical Shank



| Model | Order code | Capacity (steel) | Shank | Collets | Max. RPM | Weight kg | D  | d  | L1  | L2 |
|-------|------------|------------------|-------|---------|----------|-----------|----|----|-----|----|
| RDT15 | 3915258HD  | M1-M3            | 25 mm | ER8     | 5000     | 1.7       | 57 | 12 | 97  | 79 |
|       | 391518HD   | #0-#6            | 1"    |         |          |           |    |    |     |    |
| RDT25 | 39252511   | M2-M6            | 25 mm | ER11    | 4000     | 1.7       | 57 | 19 | 106 | 79 |
|       | 39251111   | #4-1/4"          | 1"    |         |          |           |    |    |     |    |
| RDT50 | 39502516   | M4.5-M12         | 25 mm | ER16    | 2000     | 3.7       | 80 | 28 | 126 | 93 |
|       | 3950116    | #10-1/2"         | 1"    |         |          |           |    |    |     |    |

**Notes:** When using Roll Form Taps the tool's capacity must be reduced 25 %.  
To hold larger taps with RDT50 ER16, use standard collet 20953 and separate square drives packaged with tool.  
All dimensions are shown in mm. 25.4mm = 1"

### (B) Stop Arm Assembly



| Center Distance (42+L3) | Order code RDT15 RDT25 | Order code RDT50 | L3 |
|-------------------------|------------------------|------------------|----|
| 55                      | 3925551                | 3950551          | 13 |
| 65                      | 3925651                | 3950651          | 23 |
| 80                      | 3925801                | 3950801          | 38 |



Stop Block  
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Steel Collets



Speed Chart



Installation

## Economical tapping attachments with modular straight shank

The SPD CNC are low cost, self-reversing tapping attachments for CNC machining centers. They use ER collets and employ a simple stop arm system for easy installation on machines with automatic tool change.

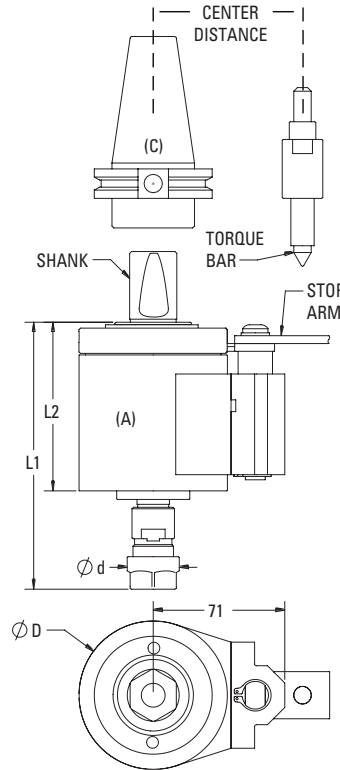
The SPD CNC were developed specifically for short run job shop applications. Their low cost make them economical to use, and they provide all the advantages associated with the elimination of machine spindle reversal. Faster cycle time, elimination of machine spindle wear and tear due to reversal, lower energy costs and longer tap life.

### Features and Advantages

- faster cycle time
- eliminates machine reversal for lower energy costs and reduced wear to machine spindle
- ER collets
- simple installation with torque bar and stop arm
- Stop Arm Assembly included
- simple programming

### How to Order

Please select the Tapping attachment (A) and CAT, SK or BT shank (C) to fit your machine. Please order accessories like collets, and torque bars separately. Please note the tool comes with a stop arm that can be modified or you can also order a readymade stop arm to fit your machine's bolt circle. Torque bar holders are not included and need to be ordered according to the bolt size of your machine.



(A) Tapping Attachment SPD CNC Cylindrical Shank

| Model    | Order code | Shank | Capacity (steel) | Collets | Max. RPM | Weight kg | d  | L1  | L2 |
|----------|------------|-------|------------------|---------|----------|-----------|----|-----|----|
| SPD CNC3 | 0283251152 | 25 mm | M2-M6            | ER11    | 2000     | 1.7       | 19 | 106 | 73 |
|          | 0283111152 | 1"    | #4-1/4"          |         |          |           |    |     |    |
| SPD CNC5 | 0285251652 | 25 mm | M4.5-M12         | ER16    | 1500     | 3.7       | 28 | 140 | 91 |
|          | 028511652  | 1"    | #10-1/2"         |         |          |           |    |     |    |

**Notes:** The SPD CNC tools include a stop arm assembly, but it is possible to use the RDT25 and 50 stop arm assemblies with them as well. When using Roll Form Taps the tool's capacity must be reduced 25%. All dimensions are shown in mm. 25.4mm = 1"

### Stop Arm Plate

| Order code | Center distance mm |
|------------|--------------------|
| 723420     | 53-69              |
| 723421     | 68-77              |
| 723422     | 74-88              |
| 723423     | 86-100             |



### Torque Bar Holder Assemblies

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Pages 55

(C)



Interchangeable Steep Taper



Steel Collets



Speed Chart



Installation

## Tapping attachments with VDI shank for CNC lathes



Model RSR



Model ASR

### Features and Advantages

- high speed self reversing tapping for fastest cycle time
- lower energy cost
- improves tap life
- steel collets ER-GB (ER)
- modular base adaptors VDI and BMT, to fit all turrets, provided by EWS

Developed in cooperation with EWS, a world leader in driven tooling for CNC lathes

### Radial Tapping Attachment RSR

| Model | Order code | Capacity (steel) | Collets ER | Max. RPM (I - O = 1 - .666) |
|-------|------------|------------------|------------|-----------------------------|
| RSR50 | 37014E1    | M4.5–M12         | ER16       | 3300                        |

### Axial Tapping Attachment ASR

| Model | Order code | Capacity (steel) | Collets ER | Max. RPM |
|-------|------------|------------------|------------|----------|
| ASR50 | 32161E     | M4.5–M12         | ER16       | 2500     |

**Note:** Steel collets and VDI shank have to be ordered separately. The VDI shank is manufactured specifically for your lathe. When using Roll Form Taps the tools capacity must be reduced by 25 %. Dimensions for the attachments available on request.

## Right angle tapping attachment RSR50 VMC



- self-reversing right angle tapping attachment for machining centers
- capacity: M4.5–M12
- simple installation and programming, suitable for machines with automatic tool change
- automatic reversal for faster cycle time
- lower energy cost
- improves tap life
- eliminates secondary tapping operations
- on request

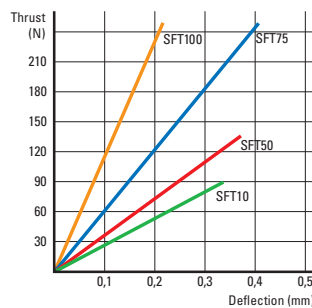


## Tap holders for synchronized tapping cycles



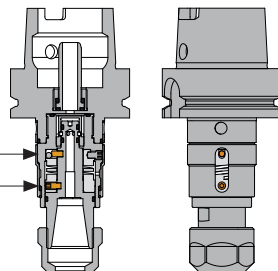
### SynchroFlex® – Force vs. Deflection Rates

Unlike competitors that employ elastomer rings to provide a small amount of axial compensation ( $\pm 0.5$  mm), the SynchroFlex® flexure has a consistent force vs. deflection rate. This means consistently superior tap life and thread quality.



Axial micro compensation is closely limited (mechanically secured)

Torque is transmitted through the drive pins – not through the flexure.



### Design and Development

Flexure geometries have been designed using the ANSYS finite element analysis method in order to achieve the optimal force vs. deflection rates for the tap capacity of each holder.

As you can see from the cross section drawing, torque is transmitted through the drive pins not through the flexure.

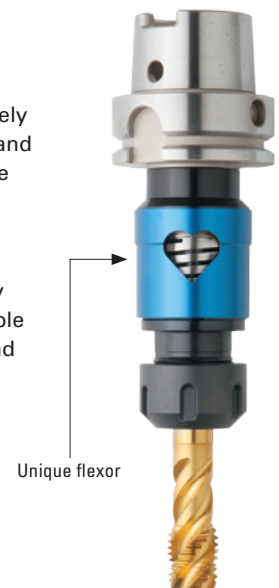
### General Information

Modern CNC machines have the capability of synchronizing the spindle rotation to match the feed advance for a specific tap pitch. The «Rigid» or synchronized tapping cycle is very accurate, but it is impossible to avoid small discrepancies between the machine synchronization and the actual pitch of the specific tap being used. Using a rigid tap holder means that any deviation at all increases the thrust forces acting on the tap and this dramatically reduces tap life.

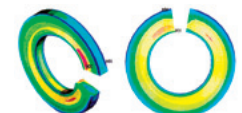
**New SynchroFlex® II with increased flow rates for high pressure internal coolant.**

### SynchroFlex® – The Unique Solution

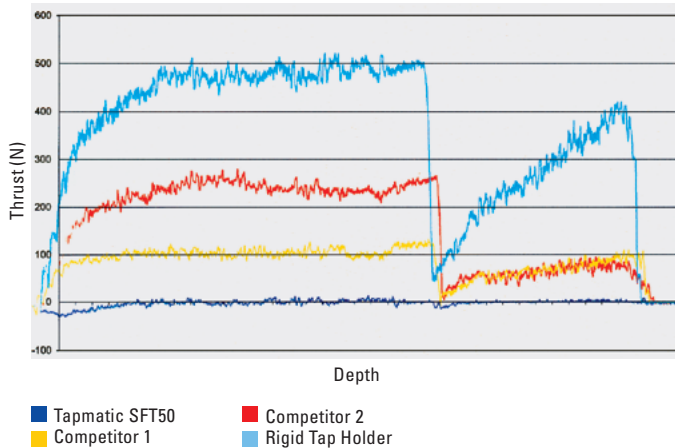
At the heart of SynchroFlex® is a precisely machined flexure which provides axial and radial compensation for the unavoidable discrepancy between the machine feed advance and the actual tap pitch. By compensating for this error, the thrust forces acting on the tap are dramatically reduced. The result is the longest possible tap life, 100% improvement or more, and much better quality threads.



By limiting the axial compensation travel, and torsional forces acting on the flexure, millions of holes can be tapped without causing the SynchroFlex® holder to fatigue, take a set, or wear out. Below is an example of stress analysis at maximum compression.



### Comparison tapping with an M6 spiral fluted tap in 6061 Aluminum to depth of 18 mm.



### Case History

**Application:** Thread cutting on horizontal machining center rigid tapping during an unmanned shift.

**Material:** 42CrMo4V steel, heat treated to 650 N/mm<sup>2</sup>

**Tap Size:** M8 x 1

**Lubrication:** Coolant, oil emulsion 6%

**Results:** With the tap held in a rigid holder the life was just 1'000 components per tap.

### Improvement with SynchroFlex®

Tap life increased to 2'400 to 2'900 components per tap saving the customer not only in tap costs, but the ability to run without interruption through the entire unmanned shift.

### Test Results

SynchroFlex® tap holders have been tested by tap manufacturers all over the world and they have confirmed the dramatic improvement in tap life, and thread quality resulting from the reduction of thrust forces acting on the tap.

The graph to the left is an example of a test conducted by an independent tap manufacturer using a Kistler dynamometer to measure the thrust forces during the tapping process. As you can see from the graph, although the competitive holders do reduce thrust forces compared to a rigid tap holder, they are not as effective as SynchroFlex®.

### Case History

**Application:** Thread cutting on machining center rigid tapping.

**Material:** CF8M steel casting

**Tap Size:** #10-32

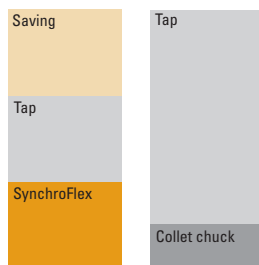
**Lubrication:** Coolant

**Results:** With the tap held in a rigid holder the life was just 72 holes per tap.

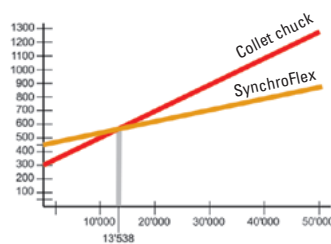
### Improvement with SynchroFlex®

Tap life increased to more than 216 holes per tap in this difficult material saving the customer not only in tap costs, but by also reducing his down time caused by frequent tap replacement.

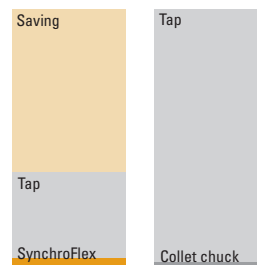
### Total cost/year



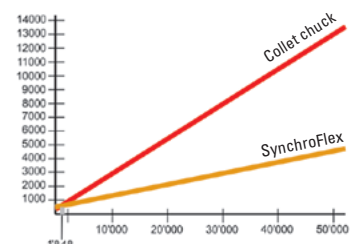
### Break Even Point



### Total cost/year



### Break Even Point



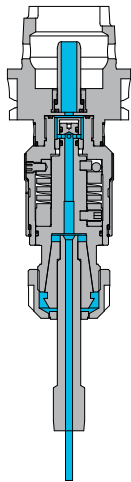
## Overview of the SynchroFlex® program



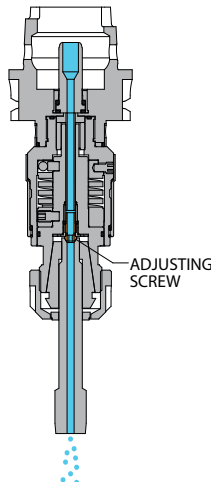
Pictured with ER-collet, spindle and straight shank

### Six Sizes to Cover a Wide Range of Taps

- SFT II 5 with capacity M1–M3
- SFT II 10 with capacity M2–M5
- SFT II 50 with capacity M4–M12
- SFT II 75 with capacity M8–M20
- SFT II 100 with capacity M16–M30
- SFT II 150 with capacity M22–M48



SFT II  
High Pressure Internal Coolant  
with increased flow rates



Minimum Quantity Lubrication  
Available for 1 channel or  
Multi channel systems

### Internal Coolant and MQL

Tapmatic's high pressure internal coolant system may be used at pressures up to 80 bar without affecting the axial compensation.

Tapmatic also can provide tools ready for Minimum Quantity Lubrication through the spindle. Our system provides direct flow of air and lubricant to the back of the tap. See page 22.

### Available with QC spindle

Accepts the standard Quick Change adapters or Tapmatic's ER collet chuck QC adapters for improved tap grip.



### Integral shank models

Tapmatic offers standard integral shank HSK and Tapmatic Capto tools. ABS shanks are also available on request.

We can also offer integral Steep Taper shank tools but in most cases we recommend a modular system using a cylindrical shank SynchroFlex® together with our Short Projection SK, BT or CAT shank.



### No hole beyond your reach

Four standard extensions are available which increase the tool length by 50, 100, 150, or 200 mm.

Special extensions are also available to fit your specific application. Our extensions keep the flexure in close proximity to the tap ensuring the best performance.



# Synchronous feed tap holders with modular straight shank, with internal coolant system



ER Collet Chuck



Quick-Change

## Features and Advantages

- increase tap life by 100% or more
- improves thread quality
- reduces downtime by lowering frequency of tap replacement
- Axial compensation +/- 0.5mm (SFT II 150 +/- 1.5mm)
- wide range of sizes
- available with ER collet or Quick Change chuck
- available with high pressure internal coolant system up to 80 bar (Balanced Coolant System)

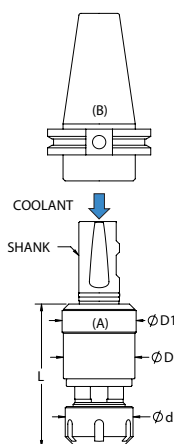
## How to Order

Please select the tap holder (A) and SK or BT shank (B), to fit your machine. For Quick Change models order ER collet adapter (C) shown below or standard adapters shown in accessories section. Please order accessories like collets and sealing gaskets separately as they are not included.

## (A) Tap Holder SFTII Cylindrical Shank, ER Collet Chuck, Internal Coolant System

| Model      | Order code (with seal nut) | Capacity (steel) | Shank | Collets | Weight kg | D    | D1   | d  | L (with seal nut) | Order code (nut w/o seal) | L (nut w/o seal) |
|------------|----------------------------|------------------|-------|---------|-----------|------|------|----|-------------------|---------------------------|------------------|
| SFT II 5   |                            | M1-M3<br>#00-#5  | 12 mm | ER8     | 0.1       | 12.0 | 12.0 | 12 |                   | 41051208                  | 28               |
| SFT II 10  |                            | M2-M5<br>#2-#10  | 25 mm | ER11    | 0.4       | 23.5 | 23.5 | 19 |                   | 41102511                  | 52               |
|            |                            |                  | 1"    |         |           |      |      |    |                   | 41101111                  |                  |
|            |                            |                  | 20 mm |         |           |      |      |    |                   | 41102011                  |                  |
|            |                            |                  | 16 mm |         |           |      |      |    |                   | 41101611                  |                  |
| SFT II 50  | 41502520                   | M4.5-M12         | 25 mm | ER20    | 0.5       | 34.6 | 36.3 | 34 | 69                | 41502520N                 | 64               |
|            | 4150120                    | #8-1/2"          | 1"    |         |           |      |      |    |                   | 4150120N                  |                  |
|            | 41502020                   |                  | 20 mm |         |           |      |      |    |                   | 41502020N                 |                  |
| SFT II 75  | 41752525                   | M8-M20           | 25 mm | ER25    | 1.0       | 44.0 | 45.6 | 42 | 88                | 41752525N                 | 83               |
|            | 4175125                    | 1/4"-3/4"        | 1"    |         |           |      |      |    |                   | 4175125N                  |                  |
| SFT II 100 | 411002540                  | M16-M30          | 25 mm | ER40    | 2.0       | 62.0 | 63.6 | 63 | 117               | 411002540N                | 112              |
|            | 41100140                   | 5/8"-1"          | 1"    |         |           |      |      |    |                   | 41100140N                 |                  |
| SFT II 150 | 411504050                  | M22-M48          | 40 mm | ER50    | 5.1       | 80.0 | 86.0 | 78 | 166               | 411504050N                | 159              |
|            |                            | * 7/8"-1 7/8"    |       |         |           |      |      |    |                   |                           |                  |

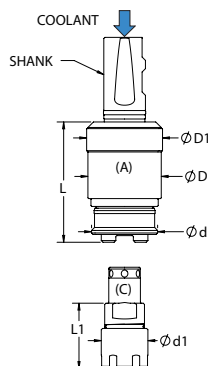
**\*Note:** Availability of inch size ER50GB collets is limited. Please consult a Tapmatic sales representative for sizes currently available. These internal coolant tools come standard with sealing nut, but tools with standard nuts are also available. When using Roll Form Taps the tool's capacity must be reduced 25%. All dimensions are shown in mm. 25.4mm = 1".



## (A) Tap Holder SFTII Cylindrical Shank, Quick-Change Internal Coolant System

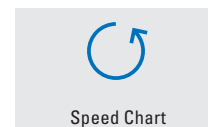
| Model      | Order code | Capacity (steel) | Shank | Adapter | Weight kg | D    | D1   | d  | L   |
|------------|------------|------------------|-------|---------|-----------|------|------|----|-----|
| SFT II 50  | 415025QC   | M4-M12           | 25 mm | Nr. 1   | 0.5       | 34.6 | 36.3 | 35 | 56  |
|            | 41501QC    | #8-1/2"          | 1"    |         |           |      |      |    |     |
| SFT II 75  | 417525QC   | M8-M16           | 25 mm | Nr. 1   | 1.0       | 44.0 | 45.6 | 40 | 72  |
|            | 41751QC    | 1/4"-5/8"        | 1"    |         |           |      |      |    |     |
| SFT II 100 | 4110025QC  | M16-M30          | 25 mm | Nr. 2   | 2.0       | 62.0 | 63.6 | 59 | 105 |
|            | 411001QC   | 1/2"-7/8"        | 1"    |         |           |      |      |    |     |

**Note:** When using Roll Form Taps the tool's capacity must be reduced 25%. All dimensions are shown in mm. 25.4mm = 1". For best performance we recommend ER collet adapters shown below.

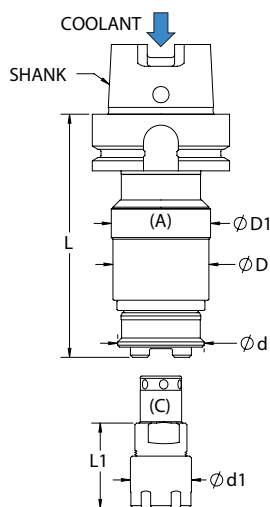
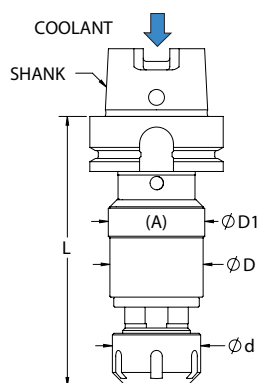


## (C) ER collet adapter

| Order code with Standard Nut | Adapter | Collets | d1 | L1 | Order code with Seal Nut for BCS version | L1 (BCS) |
|------------------------------|---------|---------|----|----|------------------------------------------|----------|
| 8208216                      | Nr. 1   | ER16    | 22 | 24 | 8208216S                                 | 28       |
| 8218220                      | Nr. 1   | ER20    | 28 | 35 | 8218220S                                 | 40       |
| 8288225                      | Nr. 2   | ER25    | 35 | 38 | 8288225S                                 | 43       |
| 8288232                      | Nr. 2   | ER32    | 50 | 48 | 8288232S                                 | 53       |



## Synchronous feed tap holders with integral HSK shank, with internal coolant system



## Features and Advantages

- increase tap life by 100% or more
- improves thread quality
- reduces downtime by lowering frequency of tap replacement
- Axial compensation +/- 0.5mm
- wide range of sizes
- available with ER collet or Quick Change chuck
- available with high pressure internal coolant system up to 80 bar. (Balanced Coolant System)
- also available for Minimum Quantity Lubrication (MQL) through the spindle. Please see page 22

## How to Order

Please select the tap holder (A) including the HSK shank, to fit your machine. For Quick Change models order ER collet adapter (C) shown below or standard adapters shown in Accessories section. Please order accessories like collets and sealing gaskets separately as they are not included.

## (A) Tap Holder SFT HSK Shank, ER Collet Chuck, Internal Coolant System

| Model      | Order code (with seal nut) | Capacity (steel) | Shank   | Collets | Weight kg | D    | D1   | d  | L   |
|------------|----------------------------|------------------|---------|---------|-----------|------|------|----|-----|
| SFT II 50  | 4150H6320                  | M4-M12           | HSK63A  | ER20    | 1.0       | 34.6 | 36.3 | 34 | 108 |
|            | 4150H8020                  | #8-1/2"          | HSK80A  |         | 1.9       |      |      |    | 113 |
|            | 4150H10020                 |                  | HSK100A |         | 2.7       |      |      |    | 115 |
|            | 4175H6325                  | M8-M20           | HSK63A  | ER25    | 1.6       | 44.0 | 45.6 | 42 | 128 |
| SFT II 75  | 4175H8025                  | 1/4"-3/4"        | HSK80A  |         | 2.4       |      |      |    | 131 |
|            | 4175H10025                 |                  | HSK100A |         | 3.2       |      |      |    | 133 |
|            | 41100H6340                 | M16-M30          | HSK63A  | ER40    | 2.2       | 62.0 | 63.6 | 63 | 160 |
|            | 41100H8040                 | 5/8"-1"          | HSK80A  |         | 2.9       |      |      |    | 161 |
| SFT II 100 | 41100H10040                |                  | HSK100A |         | 3.7       |      |      |    | 163 |

**Note:** These internal coolant tools come standard with sealing nut, but tools with standard nuts are also available. When using Roll Form Taps the tool's capacity must be reduced 25%. All dimensions are shown in mm. 25.4mm = 1".

## (A) Tap Holder SFTII HSK Shank, Quick-Change, Internal Coolant System

| Model      | Order code  | Capacity (steel) | Shank   | Adapter | Weight kg | D    | D1   | d  | L   |
|------------|-------------|------------------|---------|---------|-----------|------|------|----|-----|
| SFT II 50  | 4150H63QC   | M4-M12           | HSK63A  | Nr. 1   | 1.0       | 34.6 | 36.3 | 35 | 95  |
|            | 4150H80QC   | #8-1/2"          | HSK80A  |         | 1.9       |      |      |    | 100 |
|            | 4150H100QC  |                  | HSK100A |         | 2.7       |      |      |    | 102 |
|            | 4175H63QC   | M8-M16           | HSK63A  | Nr. 1   | 1.6       | 44.0 | 45.6 | 40 | 112 |
| SFT II 75  | 4175H80QC   | 1/4"-5/8"        | HSK80A  |         | 2.4       |      |      |    | 115 |
|            | 4175H100QC  |                  | HSK100A |         | 3.2       |      |      |    | 117 |
|            | 41100H63QC  | M16-M30          | HSK63A  | Nr. 2   | 2.2       | 62.0 | 63.6 | 59 | 148 |
|            | 41100H80QC  | 1/2"-7/8"        | HSK80A  |         | 2.9       |      |      |    | 149 |
| SFT II 100 | 41100H100QC |                  | HSK100A |         | 3.7       |      |      |    | 151 |

**Note:** When using Roll Form Taps the tool's capacity must be reduced 25%. All dimensions are shown in mm. 25.4mm = 1". For best performance we recommend ER collet adapters shown below.

## (C) ER Collet Adapter

| Order code with Standard Nut | Adapter | Collets | d1 | L1 | Order code with Seal Nut | L1 |
|------------------------------|---------|---------|----|----|--------------------------|----|
| 8208216                      | Nr. 1   | ER16    | 22 | 24 | 8208216S                 | 28 |
| 8218220                      | Nr. 1   | ER20    | 28 | 35 | 8218220S                 | 40 |
| 8288225                      | Nr. 2   | ER25    | 35 | 38 | 8288225S                 | 43 |
| 8288232                      | Nr. 2   | ER32    | 50 | 48 | 8288232S                 | 53 |



Steel Collets

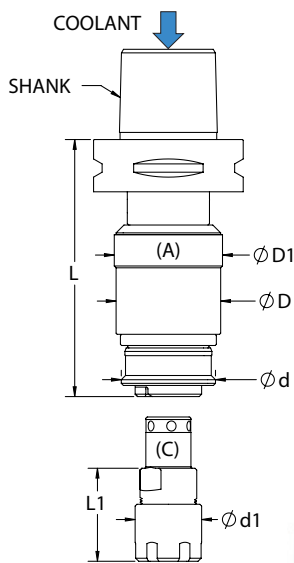
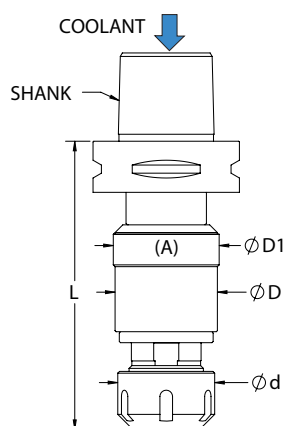


Sealing Gaskets



Speed Chart

## Synchronous feed tap holders with Tapmatic Capto shank, with internal coolant system



## Features and Advantages

- increase tap life by 100% or more
- improves thread quality
- reduces downtime by lowering frequency of tap replacement
- Axial compensation +/- 0.5mm
- wide range of sizes
- available with ER collet or Quick Change chuck
- available with high pressure internal coolant system up to 80 bar. (Balanced Coolant System)

## How to Order

Please select the tap holder (A) including the Tapmatic Capto shank, to fit your machine. For Quick Change models order ER collet adapter (C) shown below or standard adapters shown in Accessories section. Please order accessories like collets and sealing gaskets separately as they are not included.

## (A) Tap Holder SFT II Tapmatic Capto Shank, ER Collet Chuck, Internal Coolant System

| Model      | Order code (with seal nut) | Capacity (steel) | Shank | Collets | Weight kg | D    | D1   | d  | L   |
|------------|----------------------------|------------------|-------|---------|-----------|------|------|----|-----|
| SFT II 50  | 4150C420                   | M4-M12           | C4    | ER20    | 0.7       | 34.6 | 36.3 | 34 | 102 |
|            | 4150C520                   | #8-1/2"          | C5    |         | 1.0       |      |      |    | 103 |
|            | 4150C620                   |                  | C6    |         | 1.2       |      |      |    | 105 |
|            | 4150C820                   |                  | C8    |         | 2.1       |      |      |    | 112 |
| SFT II 75  | 4175C525                   | M8-M20           | C5    | ER25    | 1.2       | 44.0 | 45.6 | 42 | 122 |
|            | 4175C625                   | 1/4"-3/4"        | C6    |         | 1.5       |      |      |    | 124 |
|            | 4175C825                   |                  | C8    |         | 2.4       |      |      |    | 131 |
| SFT II 100 | 41100C640                  | M16-M30          | C6    | ER40    | 2.9       | 62.0 | 63.6 | 63 | 154 |
|            | 41100C840                  | 5/8"-1"          | C8    |         | 3.8       |      |      |    | 161 |

**Note:** These internal coolant tools come standard with sealing nut, but tools with standard nuts are also available. Please add N to part number to specify nut without sealing.

When using Roll Form Taps the tool's capacity must be reduced 25%.

All dimensions are shown in mm. 25.4mm = 1"

## (A) Tap Holder SFT II Tapmatic Capto Shank, Quick-Change, Internal Coolant System

| Model      | Order code | Capacity (steel) | Shank | Adapter | Weight kg | D    | D1   | d  | L   |
|------------|------------|------------------|-------|---------|-----------|------|------|----|-----|
| SFT II 50  | 4150C4QC   | M4-M12           | C4    | Nr. 1   | 0.7       | 34.6 | 36.3 | 35 | 89  |
|            | 4150C5QC   | #8-1/2"          | C5    |         | 1.0       |      |      |    | 90  |
|            | 4150C6QC   |                  | C6    |         | 1.2       |      |      |    | 92  |
|            | 4150C8QC   |                  | C8    |         | 2.1       |      |      |    | 99  |
| SFT II 75  | 4175C5QC   | M8-M16           | C5    | Nr. 1   | 1.2       | 44.0 | 45.6 | 40 | 106 |
|            | 4175C6QC   | 1/4"-5/8"        | C6    |         | 1.5       |      |      |    | 108 |
|            | 4175C8QC   |                  | C8    |         | 2.4       |      |      |    | 115 |
| SFT II 100 | 41100C6QC  | M16-M30          | C6    | Nr. 2   | 2.9       | 62.0 | 63.6 | 59 | 142 |
|            | 41100C8QC  | 1/2"-7/8"        | C8    |         | 3.8       |      |      |    | 149 |

**Note:** When using Roll Form Taps the tool's capacity must be reduced 25%.

All dimensions are shown in mm. 25.4mm = 1"

For best performance we recommend ER collet adapters shown below.

## (C) ER Collet Adapter

| Order code with Standard Nut | Adapter | Collets | d1 | L1 | Order code with seal nut | L1 |
|------------------------------|---------|---------|----|----|--------------------------|----|
| 8208216                      | Nr. 1   | ER16    | 22 | 24 | 8208216S                 | 28 |
| 8218220                      | Nr. 1   | ER20    | 28 | 35 | 8218220S                 | 40 |
| 8288225                      | Nr. 2   | ER25    | 35 | 38 | 8288225S                 | 43 |
| 8288232                      | Nr. 2   | ER32    | 50 | 48 | 8288232S                 | 53 |



Steel Collets



Sealing Gaskets

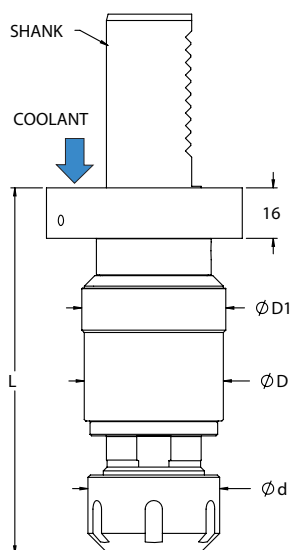


Speed Chart

## Synchronous feed tap holders with VDI shank, with internal coolant system



Synchronized Tapping

**Features and Advantages**

- increase tap life by 100% or more
- improves thread quality
- reduces downtime by lowering frequency of tap replacement
- Axial compensation +/- 0.5mm
- wide range of sizes
- available with high pressure internal coolant system up to 80 bar. (Balanced Coolant System)

**How to Order**

Please select the tap holder (A) including the VDI shank, to fit your machine. Please order accessories like collets and sealing gaskets separately as they are not included.

**(A) Tap Holder SFT II VDI Shank, ER Collet Chuck, Internal Coolant System**

| Model     | Order code<br>(with seal nut) | Capacity<br>(steel) | Shank  | Collets | Weight kg | D    | D1   | d  | L   |
|-----------|-------------------------------|---------------------|--------|---------|-----------|------|------|----|-----|
| SFT II 50 | 4150VDI3020                   | M4–M12<br>#8–1/2"   | VDI 30 | ER20    | 1.2       | 34.6 | 36.3 | 34 | 97  |
|           | 4150VDI4020                   |                     | VDI 40 |         | 2.1       |      |      |    | 97  |
| SFT II 75 | 4175VDI3025                   | M8–M20<br>1/4"–3/4" | VDI 30 | ER25    | 1.5       | 44   | 45.6 | 42 | 116 |
|           | 4175VDI4025                   |                     | VDI 40 |         | 2.4       |      |      |    | 116 |

**Note:** These internal coolant tools come standard with sealing nut, but tools with standard nuts are also available. Please add N to part number to specify nut without sealing.  
When using Roll Form Taps the tool's capacity must be reduced 25%.  
All dimensions are shown in mm. 25.4mm = 1"



Steel Collets

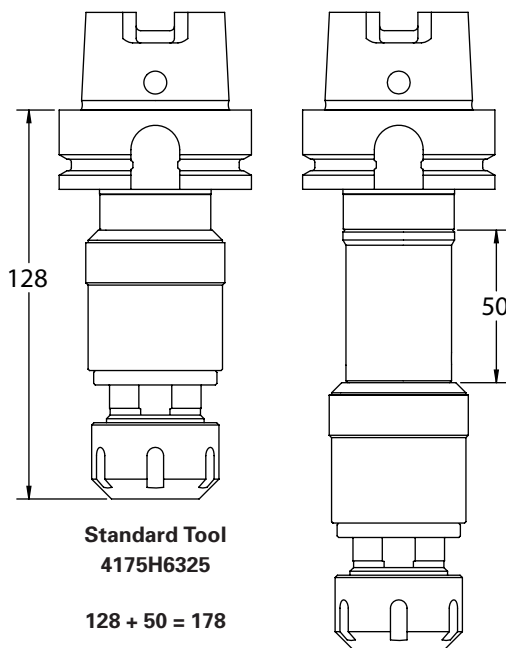


Sealing Gaskets



Speed Chart

## Synchronous feed tap holders with extended length, with internal coolant



Extended Tool  
4175H63L17825

### Features and Advantages

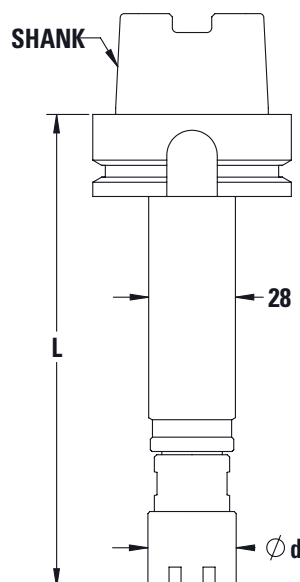
- four standard extensions of 50, 100, 150 and 200 mm
- increased tap life of 100% or more
- improved thread quality
- reduced downtime by lowering frequency of tap replacement
- Axial compensation +/- 0.5mm
- available with internal coolant pressure up to 80 bar

### How to Order

Please select the standard length SFT50 or SFT75, including the integral shank of your choice. Then choose a standard extension of 50, 100, 150 or 200mm. The order code is given as shown in the example drawing at left. Accessories like steel collets and sealing gaskets are not included. Please order these separately.

Special length extensions are also available upon request.

## Synchronous feed tap holders with reduced diameter and extended length



### Features and Advantages

- special reduced diameter extended length tools for difficult to reach holes
- increased tap life of 100% or more
- improved thread quality
- reduced downtime by lowering frequency of tap replacement
- Axial compensation +/- 0.5mm
- available with internal coolant pressure up to 50 bar
- available with ER16 or ER20 mini nut collet chuck

### How to Order

Please simply let us know the type of shank, length (L), and your preference of the ER16 or ER20 collet chuck. Please note diameter "d" for ER16 mini nut is 22mm and for ER20 it is 26mm. Accessories like steel collets and sealing gaskets are not included. Please order these separately.



Steel Collets



Sealing Gaskets

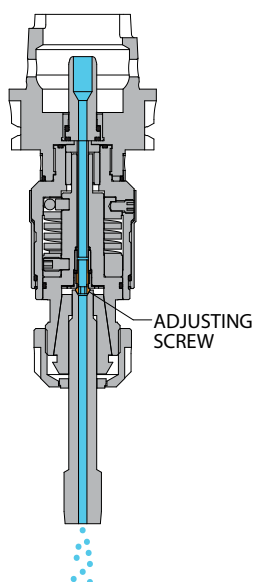
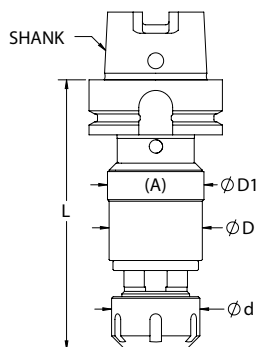


Speed Chart

## Synchronous feed tap holders with integral HSK shank, with MQL, minimum quantity lubrication



Synchronized Tapping



### Features and Advantages

- increase tap life by 100% or more
- improves thread quality
- precise lubrication delivery for improved tool life
- reduce coolant and maintenance costs
- environmentally friendly alternative to recirculating coolant
- standard for one channel system, but multi-channel also available

### How to Order

Please select the tap holder (A) including the HSK shank, to fit your machine. Please order accessories like collets, adjusting screws and sealing gaskets separately as they are not included.

### (A) Tap Holder SFTII HSK Shank, ER Collet Chuck, MQL, minimum quantity lubrication system

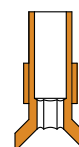
| Model     | Order code for MQL version | Capacity (steel) | Shank   | Collets | Weight kg | D    | D1   | d  | L   |
|-----------|----------------------------|------------------|---------|---------|-----------|------|------|----|-----|
| SFT II 50 | 4150H6320M                 | M4-M12           | HSK63A  | ER20    | 1.0       | 34.6 | 36.3 | 34 | 108 |
|           | 4150H8020M                 | #8-1/2"          | HSK80A  |         | 1.9       |      |      |    | 113 |
|           | 4150H10020M                |                  | HSK100A |         | 2.7       |      |      |    | 115 |
| SFT II 75 | 4175H6325M                 | M8-M20           | HSK63A  | ER25    | 1.6       | 44.0 | 45.6 | 42 | 128 |
|           | 4175H8025M                 | 1/4"-3/4"        | HSK80A  |         | 2.4       |      |      |    | 131 |
|           | 4175H10025M                |                  | HSK100A |         | 3.2       |      |      |    | 133 |

**Note:** These MQL tools come standard with sealing nut.  
When using Roll Form Taps the tool's capacity must be reduced 25%.  
All dimensions are shown in mm. 25.4mm = 1"  
Other shank sizes are also available

## Adjusting Screws

### Taps with External Center

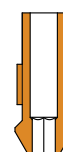
| Tap Shank    | SFT50II | SFT75II |
|--------------|---------|---------|
| 6mm, 7mm     | 810836  |         |
| 8mm, 9mm     | 810838  | 811838  |
| 10mm         | 8108310 | 8108310 |
| 11mm to 16mm |         | 8118311 |



Taps with External Center

### Taps with Internal Center

| Tap Shank    | SFT50II   | SFT75II   |
|--------------|-----------|-----------|
| 6mm, 7mm     | 810836IN  |           |
| 8mm, 9mm     | 810838IN  | 811838IN  |
| 10mm         | 8108310IN | 8108310IN |
| 11mm to 16mm |           | 8118311IN |



Taps with Internal Center

Additional sizes available on request.



Steel Collets



Sealing Gaskets



Speed Chart

## Tension / Compression tap chucks for tapping cycles that are not synchronized

For tapping applications on CNC machines where the revolutions per minute and feed rate are not synchronized to the tap pitch, tap holders with tension / compression float are recommended. These tap chucks rely on the machine spindle for reversal, but by providing axial float, the tap is able to follow the correct pitch, producing gage perfect threads.

Tapmatic offers a complete program of tension / compression tap chucks with a wide range of sizes, and three different tap holding options. Rubberflex multi range collets, ER collets, or Quick Change.



### **SM** Rubberflex Collets

Tension / compression floating tap holders for gage perfect threads with releasable hard start for consistent tapping depth control.

For tap sizes M1.4-M30.

Only two collets needed to cover the capacity of each holder.



### **SM** ER Collets

All the same features as the rubberflex version but for use with ER square drive collets.

For tap sizes M1.4-M18.

ER GB square drive collets include an internal square drive for securely gripping the tap shank.



### **TA** Quick Change

In addition to tension/compression and releasable hard start, the TA series includes front release. A safety feature that releases the quick change tap adapter when the extension float is exceeded.

For tap sizes M1-M49.

Quick Change for fast tap change without wrenches



### **TIC** Quick Change

All the same features as the TA series but with the addition of high pressure internal coolant up to 50 bar.

For tap sizes M3-M36.



### **NC** Quick Change

In addition to tension/compression and releasable hard start, the NC series includes a unique release to neutral feature that allows you to control tapping depth independent of the machine spindle stopping point.

For tap sizes M2-M22.

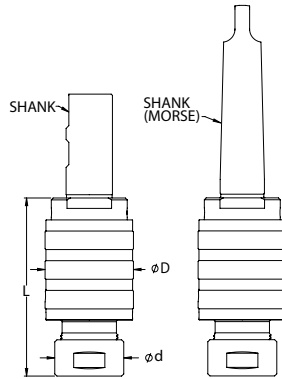


### **NC150** Large capacity ER50

Tension floating tap holder for large sizes with release to neutral. Includes high pressure internal coolant.

For tap sizes M22-M48.

## Tension/Compression tap chucks with modular straight shank and RF collet



### Dimensions

| Model | D    | d  | L   | Weight kg |
|-------|------|----|-----|-----------|
| SM2   | 27   | 19 | 53  | 0.2       |
| SM4   | 38   | 27 | 71  | 0.4       |
| SM6   | 48   | 37 | 96  | 0.8       |
| SM8   | 63.5 | 57 | 128 | 2.5       |

Tapping chuck with increased tension and compression to accommodate tapping cycles that are not synchronized.

### Features and Advantages

- increased tension and compression
- releasable hard start for consistent depth control
- right hand and left hand tapping
- multi-range collets (RF), adjustable back jaw for driving tap square

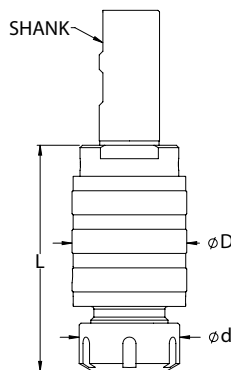
### How to Order

Please select the tap chuck (A) and CAT, SK or BT shank (C), to fit your application. Please order rubber flex collets separately.

| Model | Order code | Capacity (steel) | Shank       | Collets Rubber Flex | Tension T | Compression H |
|-------|------------|------------------|-------------|---------------------|-----------|---------------|
| SM2   | 023216     | M1.4–M7          | 16mm        | 21600, 21700        | 4.5       | 6             |
|       | 023262     | #0 - 1/4"        | 5/8"        |                     |           |               |
|       | 023202     |                  | No. 2 Morse |                     |           |               |
| SM4   | 023420     | M3–M12           | 20mm        | 22100, 22200        | 7         | 7             |
|       | 023475     | #6 - 1/2"        | 3/4"        |                     |           |               |
|       | 023402     |                  | No. 2 Morse |                     |           |               |
| SM6   | 023625     | M5–M18           | 25mm        | 24100, 24500        | 11        | 11            |
|       | 023610     | #10 - 3/4"       | 1"          |                     |           |               |
|       | 023603     |                  | No. 3 Morse |                     |           |               |
| SM8   | 023832     | M10–M30          | 32mm        | 26100, 26200        | 17        | 17            |
|       | 023815     | 1/2" - 1 1/8"    | 1 1/2"      |                     |           |               |
|       | 023803     |                  | No. 3 Morse |                     |           |               |
|       | 023804     |                  | No. 4 Morse |                     |           |               |

**Note:** Additional shanks available. When using roll form taps, the tool capacity must be reduced 25%.

## Tension/Compression tap chucks with modular straight shank and ER collet



### Dimensions

| Model | D  | d  | L  | Weight kg |
|-------|----|----|----|-----------|
| SM2   | 27 | 28 | 65 | 0.2       |
| SM4   | 38 | 34 | 74 | 0.4       |
| SM6   | 48 | 42 | 94 | 0.8       |

Tapping chuck with increased tension and compression to accommodate tapping cycles that are not synchronized.

### Features and Advantages

- increased tension and compression
- releasable hard start for consistent depth control
- right hand and left hand tapping
- ER steel collet chuck

### How to Order

Please select the tap chuck (A) and CAT, SK or BT shank (C), to fit your application. Please order ER steel collets separately.

| Model | Order code | Capacity (steel) | Shank | Collets | Tension T | Compression H |
|-------|------------|------------------|-------|---------|-----------|---------------|
| SM2   | 023216ER   | M1.4–M7          | 16mm  | ER16    | 4.5       | 5             |
|       | 023262ER   | #0 - 1/4"        | 5/8"  |         |           |               |
| SM4   | 023420ER   | M3–M12           | 20mm  | ER20    | 7         | 7             |
|       | 023475ER   | #6 - 1/2"        | 3/4"  |         |           |               |
| SM6   | 023625ER   | M5–M18           | 25mm  | ER25    | 11        | 11            |
|       | 023610ER   | #10 - 3/4"       | 1"    |         |           |               |

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(C)



Interchangeable  
Steep Tapers



RF Multi-range Collets

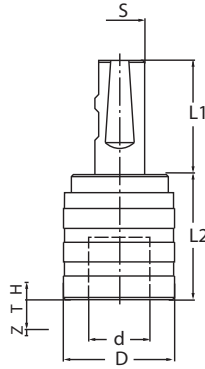


Steel collets



Speed Chart

## Tension/Compression tap chucks with modular straight shank and quick change



### Dimensions

| Model   | D  | d  | L1 | L2    |
|---------|----|----|----|-------|
| TA0-016 | 29 | 13 | 48 | 38.0  |
| TA0-020 |    |    | 50 |       |
| TA1-016 | 39 | 19 | 49 | 39.0  |
| TA1-020 |    |    | 51 |       |
| TA1-025 |    |    | 57 |       |
| TA2-025 | 56 | 31 | 57 | 63.0  |
| TA2-032 |    |    |    |       |
| TA3-032 | 81 | 48 | 61 | 124.0 |
| TA4-040 | 99 | 60 | 71 | 135.5 |

TA tapping chuck with tension/compression. With its quick change spindle the taps can be changed in seconds.

### Features and Advantages

- tension and compression
- releaseable hard start for consistent depth control
- front release protects against damage if over extended
- right hand and left hand tapping
- short projection

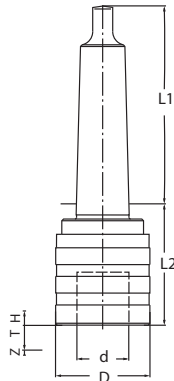
### How to Order

Please order the tap chuck (A) and CAT, SK or BT shank (C) to fit your application. Please order tap adapters separately

| (A) Model | Order code | Capacity (steel)         | Shank | Adapter | Tension T | Compression H | Front release Z |
|-----------|------------|--------------------------|-------|---------|-----------|---------------|-----------------|
| TA0-016   | 490016     | M1-M10                   | 16 mm | Nr. 0   | 7.5       | 5             | 1.7             |
| TA0-020   | 490020     | #0 - 1/4"                | 20 mm | Nr. 0   | 7.5       | 5             | 1.7             |
| TA1-016   | 491016     | M3-M14                   | 16 mm | Nr. 1   | 8         | 5             | 2.1             |
| TA1-020   | 491020     | #8 - 9/16"               | 20 mm | Nr. 1   | 8         | 5             | 2.1             |
| TA1-025   | 491025     |                          | 25 mm | Nr. 1   | 8         | 5             | 2.1             |
| TA2-025   | 492025     | M4.5-M24                 | 25 mm | Nr. 2   | 15        | 8.5           | 2.8             |
| TA2-032   | 492032     | 5/16" - 7/8"             | 32 mm | Nr. 2   | 15        | 8.5           | 2.8             |
| TA3-032   | 493032     | M14-M36, 13/16" - 1 3/8" | 32 mm | Nr. 3   | 23.5      | 15            | 4.1             |
| TA4-040   | 494040     | M22-M48, 7/8" - 1 7/8"   | 40 mm | Nr. 4   | 25        | 16.5          | 5.7             |

**Note:** When using Roll Form Taps the chuck's tapping capacity must be reduced by 25 %.

## Tension/Compression tap chucks with morse taper and quick change



### Dimensions

| Model   | D  | d  | L1    | L2    |
|---------|----|----|-------|-------|
| TA0-MT1 | 29 | 13 | 62.0  | 43.5  |
| TA0-MT2 | 29 | 13 | 75.0  | 45.0  |
| TA1-MT2 | 39 | 19 | 75.0  | 47.0  |
| TA2-MT3 | 56 | 31 | 94.0  | 71.0  |
| TA3-MT4 | 81 | 48 | 117.5 | 105.0 |
| TA4-MT5 | 99 | 60 | 149.5 | 116.5 |

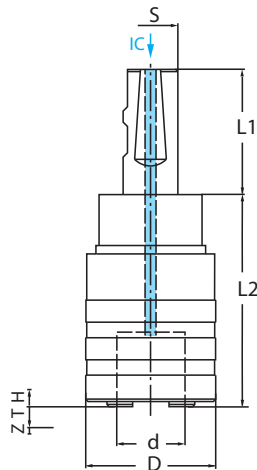
### How to Order

Please select the tap chuck (A) to fit your application. Please order quick change tap adapters separately.

| (A) Model | Order code | Capacity (steel) | Morse taper MT | Tap adapters | Tension T | Compression H | Front release Z |
|-----------|------------|------------------|----------------|--------------|-----------|---------------|-----------------|
| TA0-MT1   | 490MT1     | M1-M10           | 1              | Nr. 0        | 7.5       | 5             | 1.7             |
| TA0-MT2   | 490MT2     | #0-1/4"          | 2              |              |           |               |                 |
| TA1-MT2   | 491MT2     | M3-M14           | 2              | Nr. 1        | 8         | 5             | 2.1             |
| TA1-MT3   | 491MT3     | #8-9/16"         | 3              |              |           |               |                 |
| TA2-MT3   | 492MT3     | M4.5-M24         | 3              | Nr. 2        | 15        | 8.5           | 2.8             |
| TA2-MT4   | 492MT4     | 5/16"-7/8"       | 4              |              |           |               |                 |
| TA2-MT5   | 492MT5     |                  | 5              |              |           |               |                 |
| TA3-MT4   | 493MT4     | M14-M36          | 4              | Nr. 3        | 23.5      | 15            | 4.1             |
| TA3-MT5   | 493MT5     | 13/16"-1 3/8"    | 5              |              |           |               |                 |
| TA4-MT5   | 494MT5     | M22-M48          | 5              | Nr. 4        | 25        | 16.5          | 5.7             |
| TA4-MT6   | 494MT6     | 7/8"-1 7/8"      | 6              |              |           |               |                 |

**Note:** When using Roll Form Taps the chuck's tapping capacity must be reduced by 25 %. All dimensions are shown in mm. 25.4mm = 1"

## Tension/Compression tap chucks with modular straight shank, quick change and internal coolant



Tapping chuck with internal coolant system, tension, compression and quick-change spindle, where the tap can be changed in seconds.

### Features and Advantages

- tension and compression
- releaseable hard start for consistent depth control
- front release protects against damage if over extended
- right hand and left hand tapping
- internal coolant system (max. 50 bar)
- short projection

### How to Order

Please order the tap chuck (A) and CAT, SK or BT shank (C) to fit your application. Please order tap adapters separately.

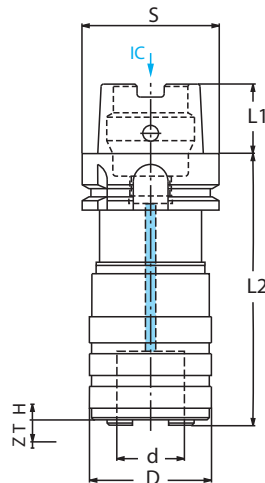
### Dimensions

| Model    | D mm | d mm | L1 mm | L2 mm |
|----------|------|------|-------|-------|
| TIC1-025 | 43   | 19   | 57    | 62    |
| TIC2-025 | 59   | 31   | 57    | 98    |
| TIC3-032 | 80   | 48   | 61    | 147   |

| (A) Model | Order code | Capacity (steel)         | Shank | Adapter | Tension T | Compression H | Front release Z |
|-----------|------------|--------------------------|-------|---------|-----------|---------------|-----------------|
| TIC1-025  | 49C1025    | M3-M14, #8 - 9/16"       | 25    | Nr. 1   | 7.5       | 5             | 2.5             |
| TIC2-025  | 49C2025    | M4.5-M24, 5/16" - 7/8"   | 25    | Nr. 2   | 10        | 7             | 3               |
| TIC3-032  | 49C3032    | M14-M36, 13/16" - 1 3/8" | 32    | Nr. 3   | 20        | 15            | 5               |

**Note:** When using Roll Form Taps the chuck's tapping capacity must be reduced by 25%.

## Tension/Compression tap chucks with HSK shank, quick change and internal coolant



### Dimensions

| Model        | D  | d  | L1 | L2  |
|--------------|----|----|----|-----|
| TIC1-HSK50A  | 43 | 19 | 25 | 91  |
| TIC1-HSK63A  |    |    | 32 | 93  |
| TIC1-HSK80A  |    |    | 40 | 97  |
| TIC1-HSK100A |    |    | 50 | 98  |
| TIC2-HSK50A  | 59 | 31 | 25 | 140 |
| TIC2-HSK63A  |    |    | 32 | 130 |
| TIC2-HSK80A  |    |    | 40 | 133 |
| TIC2-HSK100A |    |    | 50 | 135 |

### How to Order

Please select the tap chuck (A) to fit your application. Please order quick change tap adapters separately.

| (A) Model    | Order code | Capacity (steel) | Shank S HSK-A | Adapter | Tension T | Compression H | Front release Z |
|--------------|------------|------------------|---------------|---------|-----------|---------------|-----------------|
| TIC1-HSK50A  | 49C1H50    | M3-M14           | 50            | Nr. 1   | 7.5       | 5             | 2.5             |
| TIC1-HSK63A  | 49C1H63    | #8 - 9/16"       | 63            |         |           |               |                 |
| TIC1-HSK80A  | 49C1H80    |                  | 80            |         |           |               |                 |
| TIC1-HSK100A | 49C1H100   |                  | 100           |         |           |               |                 |
| TIC2-HSK50A  | 49C2H50    | M4.5-M24         | 50            | Nr. 2   | 10        | 7             | 3               |
| TIC2-HSK63A  | 49C2H63    | 5/16" - 7/8"     | 63            |         |           |               |                 |
| TIC2-HSK80A  | 49C2H80    |                  | 80            |         |           |               |                 |
| TIC2-HSK100A | 49C2H100   |                  | 100           |         |           |               |                 |

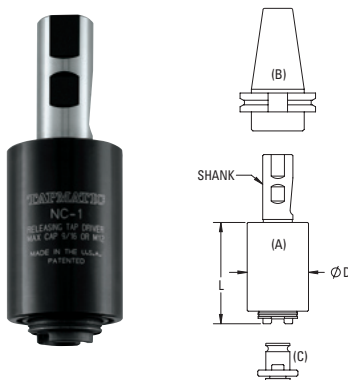
**Note:** When using Roll Form Taps the chuck's tapping capacity must be reduced by 25%. All dimensions are shown in mm. 25.4mm = 1"



## Tension/Compression tap holders with self feed and release to neutral

The **NC Series Tools** include a unique feature which allows you to control the tapping depth independent of the stopping position of the machine spindle. When the feed is paused with the spindle of the machine still rotating, the tap will continue into the hole for a short "self feed" distance, extending the tension float of the tap holder. Once this position is reached the drive of the tap holder releases and the tap stops. The machine spindle can then be stopped, reversed and retracted. The release feature is an accurate way to control tapping depth in blind holes and can be used on both CNC controlled machines or even on conventional machines where the operator is controlling the feed.

## Tension/Compression tap chucks with modular straight shank, quick change and release to neutral



Tapping chuck with quick change spindle and self-release.

### Features and Advantages

- tension compression
- releasable hard start for consistent depth control
- self-release for precise depth control independent of machine spindle stop
- quick-change version for fast tap changes without any wrenches

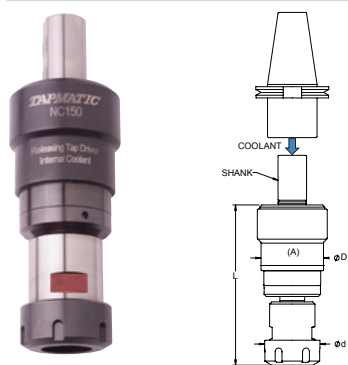
### How to order

Please select the tapping chuck (A) and CAT, SK or BT shank (B), to fit your application. Standard adapters (C) shown in accessories section.

### (A) NC Tapping Chuck with Straight Shank, Quick-Change Adapter

| Model | Order code | Capacity (steel) | Shank | Adapter Size | Weight kg | D  | L  | Self-feed<br>self-release | Compression |
|-------|------------|------------------|-------|--------------|-----------|----|----|---------------------------|-------------|
| NC0   | 34002      | M2-M6            | 20 mm | Nr. 0        | 0.4       | 38 | 60 | 5                         | 8           |
|       | 34000      | #4-1/4"          | 3/4"  |              |           |    |    |                           |             |
| NC1   | 34012      | M3-M12           | 25 mm | Nr. 1        | 1.2       | 51 | 85 | 5                         | 15          |
|       | 34010      | #8-9/16"         | 1"    |              |           |    |    |                           |             |
| NC2S  | 34022S     | M5-M22           | 25 mm | Nr. 2        | 2.0       | 70 | 89 | 8                         | 11          |
|       | 34020S     | 5/16"-7/8"       | 1"    |              |           |    |    |                           |             |

## NC150 large capacity, tension float with release to neutral and internal coolant system



### (A) NC150 Tapping Chuck with Straight Shank, ER50 Steel Collet, Internal Coolant System

| Model | Order code | Capacity (steel) | Shank | Collets | Weight kg | D  | d  | L   | Self-feed<br>self-release |
|-------|------------|------------------|-------|---------|-----------|----|----|-----|---------------------------|
| NC150 | 3415040    | M22-M48          | 40 mm | ER50    | 4.0       | 88 | 78 | 227 | 9                         |



## Tapping attachments for manual tapping application



**X**  
For general tapping with sensitive fiber clutch.



**RX**  
Newest series for high production with heavy duty ball clutch.



**TC/DC**  
Adjustable self feed for accurate depth control in shallow holes.



**SPD**  
Positive drive for applications where torque control is not desirable. 1 to 1 reverse ratio simplifies adjustment of automatically controlled feed.



**SPD-OC**  
With quick change spindle. Recommended for pipe taps.

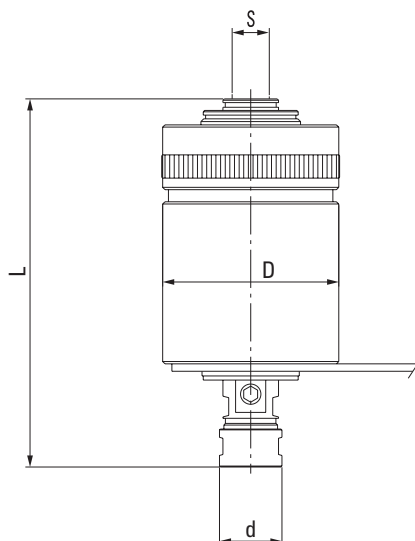
### Tapping attachments for drilling and milling machines and pneumatic, hydraulic and electric spindles

Since 1952 Tapmatic has manufactured the world's most popular line of compact self-reversing tapping attachments. Our experience and commitment to quality make these tools an excellent value. Although there are other products available on the market, a Tapmatic head is still the most economical to use. Our customers know they can count on our tools for many, many years of service.

Tapmatic offers a complete program of self-reversing tapping attachments to meet the most difficult requirements. Ruggedly built, these Tapmatic tools provide higher production rates due to:

- decrease in tap breakage
- production of perfect threads
- reduced cycle time through increased 1.75:1 reverse speed
- longer tap life
- accurate depth control
- better thread quality
- consistent trouble free performance
- interchangeable mounts
- left hand versions available on request

## High production self-reversing tapping attachments with high-speed reverse and pre-selective torque control



- for hard to machine material and high
- torque applications like roll form tapping
- less tap breakage due to pre-selective torque control
- reduced cycle time through increased 1.75:1 reverse speed
- easy handling, compact design
- easy adaptation with multiple interchangeable arbors

### How to Order

Please select the tapping attachment (A) and arbor (C) to fit your application. Choose an arbor to fit the thread or taper mount of the tapping attachment, with the Morse Taper, R8 or straight shank to fit your machine. Please order rubber flex collets and torque bars separately .

### Dimensions

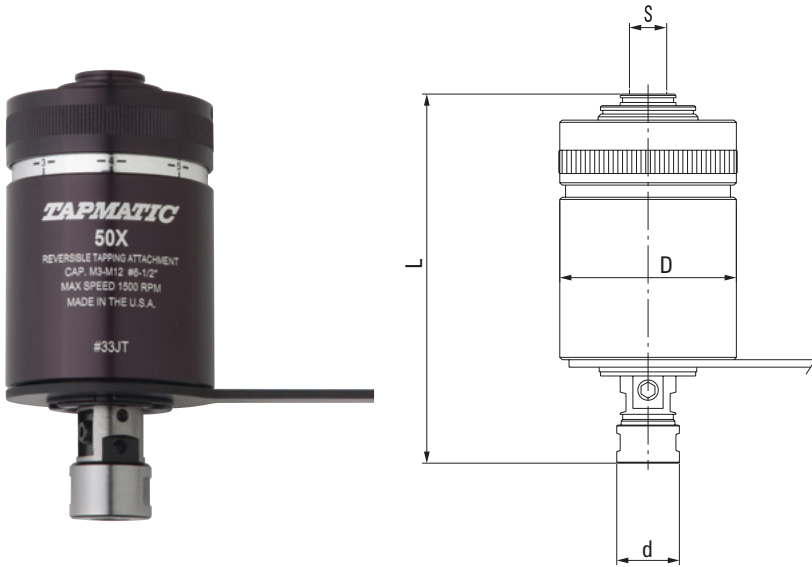
| (A) Model | D mm | d mm | Self-feed mm T | Weight kg |
|-----------|------|------|----------------|-----------|
| RX30      | 53   | 19   | 3              | 0.7       |
| RX50      | 76   | 27   | 5              | 1.8       |
| RX70      | 88   | 36   | 7              | 3.0       |

| Model | Order code | Capacity (steel)     | Collets Rubber Flex | Max. RPM | Mounts S     |                    | L   |
|-------|------------|----------------------|---------------------|----------|--------------|--------------------|-----|
|       |            |                      |                     |          | Taper mounts | Thread. mounts     |     |
| RX 30 | 013006     | M1.4–M7<br>#0 - 1/4" | 21600<br>21700      | 2000     | JT6          | 3/8"–24<br>1/2"–20 | 116 |
|       | 013016     |                      |                     |          | B16          |                    |     |
|       | 013033     |                      |                     |          | JT33         |                    |     |
|       | 013037     |                      |                     |          |              |                    |     |
|       | 013050     |                      |                     |          |              |                    |     |
| RX 50 | 015006     | M3–M12<br>#6 - 1/2"  | 22100<br>22200      | 1500     | JT6          | 1/2"–20            | 157 |
|       | 015016     |                      |                     |          | B16          |                    |     |
|       | 015033     |                      |                     |          | JT33         |                    |     |
|       | 015050     |                      |                     |          |              |                    |     |
| RX 70 | 017003     | M5–M18<br>#10 - 3/4" | 24100<br>24500      | 1200     | JT3          | 1/2"–20<br>7/8"–20 | 182 |
|       | 017050     |                      |                     |          |              |                    |     |
|       | 017087     |                      |                     |          |              |                    |     |

**Note:** When using Roll Form Taps the tool's tapping capacity must be reduced by 25 %.  
Special thread mounts are also available to fit Burgmaster machines.  
All dimensions are shown in mm. 25.4mm = 1"



## Self-reversing tapping attachments with high-speed reverse and pre-selective torque control



- easy handling, compact design
- less tap breakage due to pre-selective torque control
- easy adaptation with multiple interchangeable arbors
- reduced cycle time through increased 1.75:1 reverse speed
- only 2 Rubber Flex collets per model required. (exception 100XB)

### How to Order

Please select the tapping attachment (A) and arbor (C) to fit your application. Choose an arbor to fit the thread or taper mount of the tapping attachment, with the Morse Taper, R8 or straight shank to fit your machine. Please order rubber flex collets and torque bars separately.

**Note:** X models with Quick Change or ER collet chuck are also available on request.

### Dimensions

| Model | D   | d  | Self-feed | Weight kg |
|-------|-----|----|-----------|-----------|
| 100XB | 33  | 9  | 5         | 0.2       |
| 30X   | 48  | 19 | 3.5       | 0.5       |
| 50X   | 70  | 27 | 6         | 1.4       |
| 70X   | 76  | 36 | 9         | 2.1       |
| 90X   | 105 | 57 | 13        | 5.0       |

| (A) | Model | Order code | Capacity (steel)         | Collets Rubber Flex | Max. RPM | Mounts S     |                | L   |
|-----|-------|------------|--------------------------|---------------------|----------|--------------|----------------|-----|
|     |       |            |                          |                     |          | Taper mounts | Thread. mounts |     |
|     | 100XB | 16101      | M0.5–M2, #0000-0         | XB                  | 2000     | JT1          |                | 94  |
|     | 30X   | 10306      | M1.4–M7<br>#0 - 1/4"     | 21600<br>21700      | 2000     | JT6          |                | 113 |
|     |       | 10312      |                          |                     |          | B12          |                |     |
|     |       | 10316      |                          |                     |          | B16          |                |     |
|     |       | 10333      |                          |                     |          | JT33         |                |     |
|     |       | 10331      |                          |                     |          |              | 5/16"–24*      | 104 |
|     |       | 10337      |                          |                     |          |              | 3/8"–24        |     |
|     |       | 10350      |                          |                     |          |              | 1/2"–20        | 113 |
|     |       | 10362      |                          |                     |          |              | 5/8"–16*       |     |
|     |       | 10375      |                          |                     |          |              | 3/4"–16*       |     |
|     | 50X   | 10506      | M3–M12<br>#6 - 1/2"      | 22100<br>22200      | 1500     | JT6          |                | 153 |
|     |       | 10516      |                          |                     |          | B16          |                |     |
|     |       | 10533      |                          |                     |          | JT33         |                |     |
|     |       | 10537      |                          |                     |          |              | 3/8"–24        | 148 |
|     |       | 10550      |                          |                     |          |              | 1/2"–20        |     |
|     |       | 10562      |                          |                     |          |              | 5/8"–16*       |     |
|     |       | 10575      |                          |                     |          |              | 3/4"–16*       |     |
|     |       |            |                          |                     |          |              |                |     |
|     | 70X   | 10703      | M5–M18<br>#10 - 5/8"     | 24100<br>24500      | 1200     | JT3          |                | 176 |
|     |       | 10718      |                          |                     |          | B18          |                |     |
|     |       | 10750      |                          |                     |          |              | 1/2"–20        |     |
|     |       | 10762      |                          |                     |          |              | 5/8"–16*       |     |
|     |       | 10775      |                          |                     |          |              | 3/4"–16*       |     |
|     |       | 10787      |                          |                     |          |              | 7/8"–20        |     |
|     |       |            |                          |                     |          |              |                |     |
|     |       |            |                          |                     |          |              |                |     |
|     | 90X   | 10904      | M10–M30<br>1/2" - 1 1/8" | 26100<br>26200      | 600      | JT4          |                | 219 |
|     |       | 10915      |                          |                     |          |              | 1.1/2"–18      |     |

**Note:** When using Roll Form Taps the tool's tapping capacity must be reduced by 25%.

\* These special thread mounts are only for Burgmaster machines.

All dimensions are shown in mm. 25.4mm = 1"



RF Multi-range Collets



Arbors

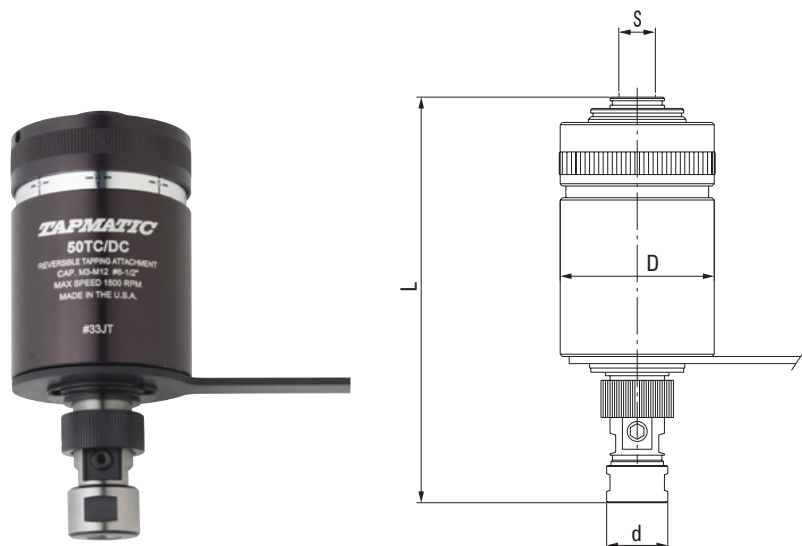


Torque Bar



Speed Chart

## Self-reversing tapping attachments with high-speed reverse, pre-selective torque control and adjustment for shallow depth tapping



- adjustable depth control for shallow blind hole
- easy handling, compact design
- less tap breakage due to pre-selective torque control
- easy adaption with multiple interchangeable arbors
- reduced cycle time through increased 1.75:1 reverse speed
- only 2 Rubber Flex collets per model required.

### How to Order

Please select the tapping attachment (A) and arbor (C) to fit your application. Choose an arbor to fit the thread or taper mount of the tapping attachment, with the Morse Taper, R8 or straight shank to fit your machine. Please order rubber flex collets and torque bars separately.

### Dimensions

| Model   | D  | d  | Self-feed | Weight kg |
|---------|----|----|-----------|-----------|
| 30TC/DC | 48 | 19 | 1.5–3.5   | 0.5       |
| 50TC/DC | 70 | 27 | 2–6       | 1.2       |
| 70TC/DC | 76 | 36 | 3–9       | 2.3       |

| (A) | Model   | Order code | Capacity (steel)     | Collets Rubber Flex | Max. RPM | Mounts S     |                | L   |
|-----|---------|------------|----------------------|---------------------|----------|--------------|----------------|-----|
|     |         |            |                      |                     |          | Taper mounts | Thread. mounts |     |
|     | 30TC/DC | 14306      | M1.4–M7<br>#0 - 1/4" | 21600<br>21700      | 2000     | JT6          |                | 122 |
|     |         | 14312      |                      |                     |          | B12          |                |     |
|     |         | 14316      |                      |                     |          | B16          |                |     |
|     |         | 14333      |                      |                     |          | JT33         |                |     |
|     |         | 14331      |                      |                     |          |              | 5/16"–24*      | 113 |
|     |         | 14337      |                      |                     |          |              | 3/8"–24        |     |
|     |         | 14350      |                      |                     |          |              | 1/2"–20        | 122 |
|     |         | 14362      |                      |                     |          |              | 5/8"–16*       |     |
|     | 50TC/DC | 14506      | M3–M12<br>#6 - 1/2"  | 22100<br>22200      | 1500     | JT6          |                | 169 |
|     |         | 14516      |                      |                     |          | B16          |                |     |
|     |         | 14533      |                      |                     |          | JT33         |                |     |
|     |         | 14537      |                      |                     |          |              | 3/8"–24        |     |
|     |         | 14550      |                      |                     |          |              | 1/2"–20        |     |
|     |         | 14562      |                      |                     |          |              | 5/8"–16*       |     |
|     | 70TC/DC | 14703      | M5–M18<br>#10 - 5/8" | 24100<br>24500      | 1200     | JT3          |                | 191 |
|     |         | 14718      |                      |                     |          | B18          |                |     |
|     |         | 14750      |                      |                     |          |              | 1/2"–20        |     |
|     |         | 14762      |                      |                     |          |              | 5/8"–16*       |     |
|     |         | 14787      |                      |                     |          |              | 7/8"–20        |     |
|     |         |            |                      |                     |          |              |                |     |

**Note:** When using Roll Form Taps the tool's tapping capacity must be reduced by 25 %.

\* These special thread mounts are only for Burgmaster machines.

All dimensions are shown in mm. 25.4mm = 1"



## Tapping attachments with automatic reversal for conventional machines



## Features and Advantages

- rugged design
- short lengths
- 1:1 reverse speed
- for heavy applications like drill tapping or roll form tapping
- SPD QC also recommended for pipe taps

## Dimensions

| Model     | D mm | d mm | Self-feed mm | Weight kg |
|-----------|------|------|--------------|-----------|
| SPD-3     | 53   | 19   | 3            | 0.5       |
| SPD-5     | 69   | 27   | 5            | 1.4       |
| SPD-7     | 76   | 36   | 7            | 2.1       |
| SPD-9A    | 103  | 57   | 10           | 5.0       |
| SPD-3 QC  | 53   | 28   | 3            | 0.5       |
| SPD-5 QC  | 69   | 36   | 5            | 1.4       |
| SPD-7 QC  | 76   | 54   | 7            | 2.1       |
| SPD-9A QC | 103  | 76   | 10           | 5.0       |
| SPD-11 QC | 146  | 90   | 13           | 14.0      |

**Note:** When using Roll Form Taps the tool's tapping capacity must be reduced by 25%.

\* These special thread mounts are only for Burgmaster machines.

All dimensions are shown in mm. 25.4mm = 1"

| Model     | Order code | Capacity (steel)         | Collets        | Max. RPM | Mounts S     |                | L mm |
|-----------|------------|--------------------------|----------------|----------|--------------|----------------|------|
|           |            |                          |                |          | Taper mounts | Thread. mounts |      |
| SPD-3     | 18306      | M1.4–M7<br>#0 - 1/4"     | 21600<br>21700 | 2000     | JT6          |                | 118  |
|           | 18316      |                          |                |          | B16          |                |      |
|           | 18333      |                          |                |          | JT33         |                |      |
|           | 18337      |                          |                |          |              | 3/8"–24        | 105  |
|           | 18350      |                          |                |          |              | 1/2"–20        | 113  |
|           | 18362      |                          |                |          |              | 5/8"–16*       |      |
| SPD-5     | 18506      | M3–M12<br>#6 - 1/2"      | 22100<br>22200 | 1500     | JT6          |                | 148  |
|           | 18516      |                          |                |          | B16          |                |      |
|           | 18533      |                          |                |          | JT33         |                |      |
|           | 18537      |                          |                |          |              | 3/8"–24        | 138  |
|           | 18550      |                          |                |          |              | 1/2"–20        |      |
|           | 18575      |                          |                |          |              | 3/4"–16*       |      |
| SPD-7     | 18587      | M5–M18<br>#10 - 5/8"     | 24100<br>24500 | 1200     |              | 7/8"–20        | 148  |
|           | 18703      |                          |                |          | JT3          |                | 175  |
|           | 18750      |                          |                |          |              | 1/2"–20        | 162  |
|           | 18762      |                          |                |          |              | 5/8"–16*       |      |
| SPD-9A    | 18787      | M10–M30<br>1/2" - 1 1/8" | 26100<br>26200 | 600      |              | 7/8"–20        | 175  |
|           | 17904      |                          |                |          | JT4          |                | 228  |
|           | 17915      |                          |                |          |              | 1 1/2"–18      | 200  |
| SPD-3 QC  | 18216      | M1.4–M7<br>#0 - 1/4"     | Nr 0           | 2000     | B16          |                | 109  |
|           | 18233      |                          |                |          | JT33         |                |      |
|           | 18237      |                          |                |          |              | 3/8"–24        | 96   |
|           | 18250      |                          |                |          |              | 1/2"–20        | 104  |
|           | 18262      |                          |                |          |              | 5/8"–16*       |      |
|           | 18275      |                          |                |          |              | 3/4"–16*       | 109  |
| SPD-5 QC  | 18416      | M3–M12<br>#6 - 1/2"      | Nr 1           | 1500     | B16          |                | 130  |
|           | 18433      |                          |                |          | JT33         |                |      |
|           | 18450      |                          |                |          |              | 1/2"–20        | 122  |
|           | 18462      |                          |                |          |              | 5/8"–16*       |      |
| SPD-7 QC  | 18487      | M5–M18<br>#10 - 5/8"     | Nr 2           | 1200     |              | 7/8"–20        | 130  |
|           | 18603      |                          |                |          | JT3          |                | 159  |
|           | 18650      |                          |                |          |              | 1/2"–20        | 147  |
|           | 18662      |                          |                |          |              | 5/8"–16*       |      |
| SPD-9 QC  | 18687      | M10–M30<br>1/2" - 1 1/8" | Nr 3           | 600      |              | 7/8"–20        | 159  |
|           | 17804      |                          |                |          | JT4          |                | 217  |
|           | 17815      |                          |                |          |              | 1 1/2"–18      | 189  |
| SPD-11 QC | 18100      | M22–M42, 3/4" - 2"       | Nr 4           | 400      |              | 2 1/4"–10      | 236  |

**Note:** SPD-11 QC Recommended capacity 1 1/2" steel, 2" aluminum

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Pages 40-44

Pages 52-54



RF Multi-range Collets



Torque Bar



Arbors



Quick-Change Adapters



Speed Chart

**NOW!!! A COMPLETE PROGRAM FOR IN MACHINE MARKING  
DOT PEENING, SCRIBING OR STAMPING**



The collage features three main tool types and their applications:

- TapWriter:** A black tool with a silver tip, shown marking a metal surface with the text "WELCOME TO TAPMATIC". The tool body has text: "effectivity tools", "TapWriter", "Die Set Marker", "SPEED 750 - 1500 RPM", "Order Code 57810", and "TAPMATIC".
- ScribeWriter Force II:** A black tool with a blue band, shown marking a metal surface with the text "TAPMATIC". The tool body has text: "effectivity tools", "ScribeWriter Force II", and "TAPMATIC".
- Marking Head MH 1/2:** A black tool with a silver tip, shown marking a metal surface with the text "TAPMATIC". The tool body has text: "effectivity tools", "MARKING HEAD MH 1/2", "Loading Stroke= 0.500/12mm", "Order Code 575010TH", and "TAPMATIC".

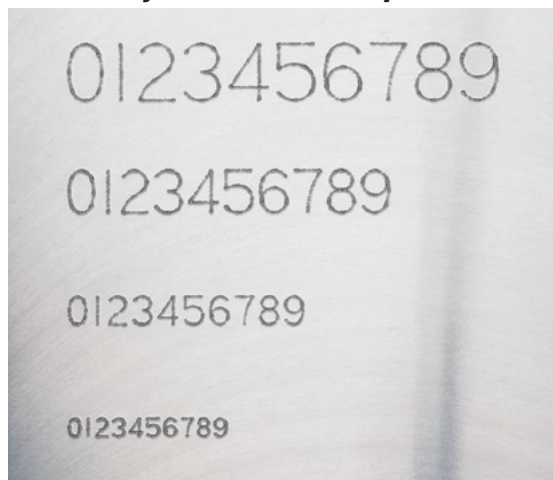
Other markings shown include "WELCOME TO TAPMATIC" in a stylized font, "TAPMATIC" in a grid pattern, and "TAPMATIC" in a large, bold font. The background also features the "effectivity tools" logo and the text "INTRODUCING THE NEW... ScribeWriter® Force II".

**THREE WAYS TO MARK IT WHILE YOU MAKE IT FOR MAXIMUM EFFICIENCY**

## Dot Peen Marking tool for CNC marking



***Here are just a few examples...***



**Character heights shown from 6 mm to 2 mm, using standard engraving software.**



**Point to point programming for creating characters with defined dot position or 2D Data Matrix codes.**

### ***Tapmatic Is Pleased To Introduce An Exciting New Product.... The TAPMATIC TapWriter.***

The TapWriter allows you to mark your work piece while you are machining it without the need for a secondary marking operation. Part numbers, date codes, logos and even decorative patterns and artwork can easily be created with this unique dot marking tool.

It can also be used for controlled, consistent shot peening to improve a parts resistance to fatigue. Using the TapWriter for shot peening allows treating specific areas of a part without the need for masking, and no special cleaning is needed afterwards.

Installs easily on Machining Centers or CNC lathes with Live Tooling.

It utilizes standard engraving software, but unlike engraving, dot-peen marking does not require the use of delicate cutting tools and high speed spindles.

You can mark soft plastics or steel as hard as 55 RC.

The durable carbide stylus is thrown against the work piece which allows the marking of uneven or round surfaces.

The TapWriter is Fast. Up to 80 characters per minute or more just depending on the capabilities of your machine.

Dot peen marking is widely used in the aerospace industry because the cross section of the dot has gentle curves, resulting in no significant stress concentration.

With the TapWriter you have complete control of the mark. The revolutions per minute determines the dots per minute, and the velocity of the carbide stylus when it impacts the work piece. The feed rate controls the distance between dots allowing you to select the appearance of discrete dots or a continuous line.



**Mark logos using standard CAD/CAM software for the tool path.**

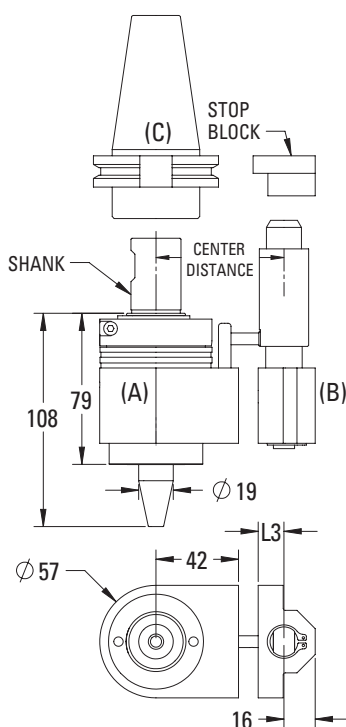
- **Eliminates extra operations**
- **Faster than engraving**
- **Long tool life with replaceable carbide stylus**
- **Mark hard or soft materials**
- **Mark round or uneven surfaces**
- **Simple to install and program**



### How to Order

The TapWriter® adapts to machining centers with automatic change, using a locking stop arm, similar to those used with self reversing tapping attachments. Select the installation method you prefer as shown below. Please select the TapWriter® (A), stop arm (B), and CAT, SK, or BT shank (C), to fit your machine. Please order accessories like torque bars, ready made stop arms and stop blocks separately.

### TapWriter® with Stop Arm Bar and Stop Block Installation



(A) TapWriter® CNC Dot Peen Marking Tool

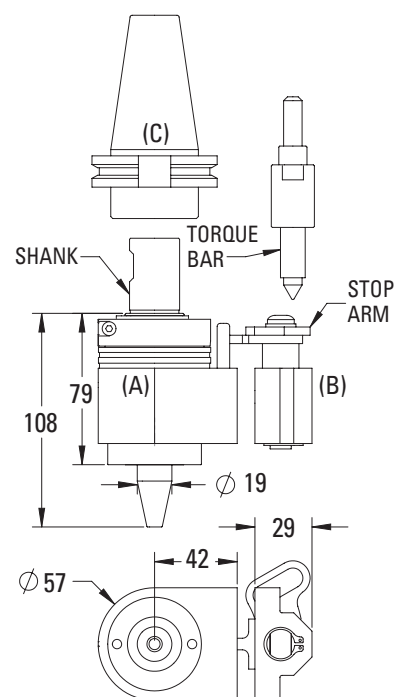
| Model     | Order code | Shank | Weight kg |
|-----------|------------|-------|-----------|
| TAPWRITER | 57820      | 20 mm | 1.7       |
|           | 57825      | 25 mm |           |
|           | 57810      | 1"    |           |

(B) Stop Arm Assembly

| Center Distance (42+L3) | Order code | L3 |
|-------------------------|------------|----|
| 55                      | 3925551    | 13 |
| 65                      | 3925651    | 23 |
| 80                      | 3925801    | 38 |

Special stylus points or extended lengths are available on request.

### TapWriter® with Stop Arm Plate and Torque Bar Installation



(A) TapWriter® CNC Dot Peen Marking Tool

| Model     | Order code | Shank | Weight kg |
|-----------|------------|-------|-----------|
| TAPWRITER | 57820      | 20 mm | 1.7       |
|           | 57825      | 25 mm |           |
|           | 57810      | 1"    |           |

(B) Stop Arm Plate Assembly  
392552

Please note a blank stop arm which can be modified is included. Please see torque bars on Pg. 55.



Interchangeable  
Steep tapers



Stop Block



Installation

**NEW!**

# ScribeWriter® Force II

Marking tool for work piece scribing



With high pressure internal coolant



## Mark It While You Make It.

- Scribing tool for CNC machines.
- For marking of different materials up to 62 HRC hardness, and surface variations up to 5mm.
- Fast marking without spindle rotation.
- Simple programming directly at the machine control or from the programmers work station using engraving software.
- Marking force and resulting depth are adjustable by turning the knurled sleeve.
- Easy to read marking force reference scale with high quality magnification lens from Thorlabs.
- Settings 0-7 for gradually increasing force up to setting H for marking the hardest materials. There is no need to change springs.
- With high pressure internal coolant capability for improved stylus lubrication and increased marking force.
- Simple to change, long life, carbide stylus. A 90° and 60° stylus are available.
- New ball point stylus option. The rolling ball creates very smooth lines, but depth is shallower in comparison to scribing points.

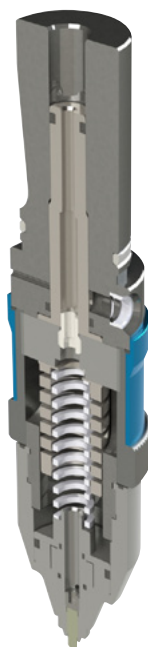


Marking force reference scale.

Turn to increase or decrease marking force.

Easy to exchange long life carbide stylus.

## Setting 0-7 for marking all kinds of materials



## Setting H for deep marking or for hard materials

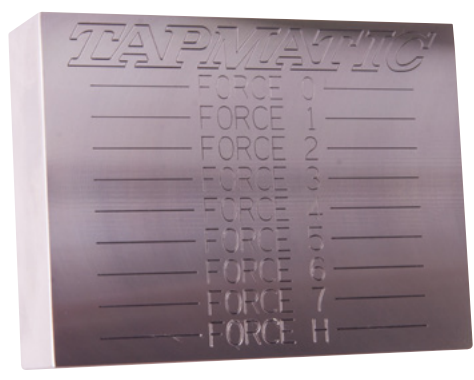


Unique flexure technology for higher marking force without the need to change springs.

NEW!

# ScribeWriter® Force II

Marking tool for work piece scribing



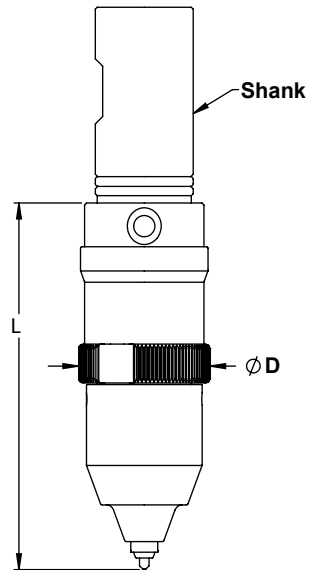
Example in 4140 pre heat treated material with hardness 28 HRC. Marking at different settings with 1.3 mm compression against the surface.



Example created with new ball point stylus in aluminum material.



Example marking a curved surface programmed at constant marking plane. Material is S7 tool steel heat treated to 60 HRC. Setting 'H' with 2mm compression at closest point on surface.



### How to Order

Please select the ScribeWriter® with shank to fit your application. Please order CAT, SK, or BT shanks separately. The ScribeWriter® comes with one standard 90° stylus. A 60° stylus is also available.

| Order code | Shank | L  | Ø D |
|------------|-------|----|-----|
| 57601      | 1"    | 95 | 32  |
| 57625      | 25 mm | 95 | 32  |
| 57620      | 20 mm | 95 | 32  |
| 57616      | 16 mm | 95 | 32  |

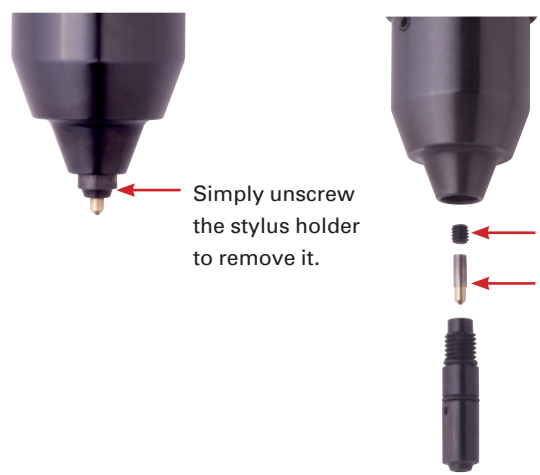
**Note:** To order the ScribeWriter with 60° stylus, please specify by adding "-60" to the above order codes.  
To order the ScribeWriter with a ball point stylus please specify by adding "-B" to the above order codes.

### Standard Stylus Options

| Order code | Stylus Point |
|------------|--------------|
| 7361608    | 90°          |
| 7361611    | 60°          |



### Changing the stylus

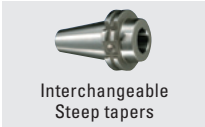


Simply unscrew the stylus holder to remove it.

Remove the retaining screw.  
The stylus can then be removed and changed.

### Ball Point Stylus Options

| Order code | Description                  |
|------------|------------------------------|
| 73602BN4A  | Complete ball point assembly |
| 71735C     | 2mm carbide ball             |



Interchangeable Steep tapers

## CNC Marking Heads for use with standard type or custom stamps



### Tapmatic MH Series Marking Heads

**Eliminate the need for expensive secondary marking operations.** The Marking Head allows you to mark the work piece during the machining process.

**Simple to install on Machining Centers, CNC lathes or even manually controlled conventional machines.** Compact in size, they fit easily in the tool magazine or turret without interference.

**With the Marking Head, no rotation is required.** Simply advance the head against the work piece a short distance to charge the internal impact system and rapid feed away.

**The impact force and marking depth can be adjusted by turning the knurled sleeve.**

**The Marking Heads shock absorbtion system cushions any recoil effect on the machine spindle or turret.**

**With the Marking Head you can hold standard type or custom made stamps.** Mark part numbers, date codes, batch codes, logos or other information.

**The marking location and depth are accurate and consistent.**

**Characters and stamps are securely held and can be changed quickly.**

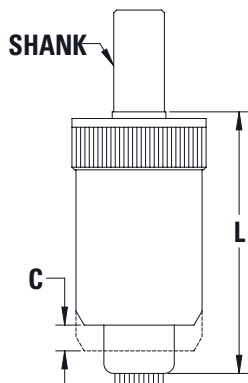
**The Marking Head is fast.** Stamping the work piece takes less than one second.



## CNC Marking Heads for use with standard type or custom stamps

### How to Order

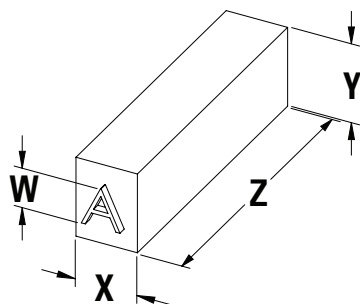
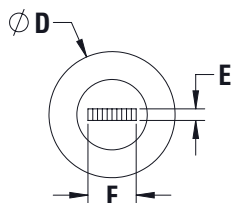
Please select the Marking Head with the shank to fit your application. Please order accessories like standard type or custom stamps separately. Please note the Marking Head accepts standard type directly or you can use one of the separate Type Holders for quick replacement of characters and fast change over.



### MH Marking Heads

| Model  | Order code | Shank      | E   | F    | D  | L   | Stroke C | Weight kg |
|--------|------------|------------|-----|------|----|-----|----------|-----------|
| MH 1/2 | 575020TH   | 20 mm      | 6.4 | 24.5 | 62 | 128 | 12       | 1.6       |
|        | 575025TH   | 25 mm      |     |      |    |     |          |           |
|        | 575075TH   | 3/4"       |     |      |    |     |          |           |
|        | 575010TH   | 1"         |     |      |    |     |          |           |
|        | 575003TH   | No.3 Morse |     |      |    |     |          |           |
| MH 3/4 | 577525TH   | 25mm       | 6.4 | 40   | 86 | 172 | 18       | 3.4       |
|        | 577510TH   | 1"         |     |      |    |     |          |           |

**Note:** The impact force of each marking head may be adjusted by turning its knurled sleeve. For softer materials like plastic we also have the ability to deliver a Marking Head with lighter springs. Please just let us know the details about your specific application for a recommendation.



### Standard Type Dimensions

| W   | X   | Y   | Z    | Order code<br>26 Letters | Order code<br>10 Numbers | Order code<br>Blank Spacer |
|-----|-----|-----|------|--------------------------|--------------------------|----------------------------|
| 1   | 1.6 | 6.4 | 22.2 | 5707111006               | 5707101000               | 5707014002                 |
| 1.5 | 1.6 | 6.4 | 22.2 | 5707112009               | 5707102003               | 5707014002                 |
| 2   | 2   | 6.4 | 22.2 | 5707113001               | 5707103006               | 5707015005                 |
| 2.5 | 2.4 | 6.4 | 22.2 | 5707114004               | 5707104009               | 5707016008                 |
| 3   | 3.2 | 6.4 | 22.2 | 5707115007               | 5707105001               | 5707017000                 |
| 4   | 4   | 6.4 | 22.2 | 5707120001               | 5707118008               | 5707021008                 |
| 5   | 4.8 | 6.4 | 22.2 | 5707117002               | 5707106004               | 5707018003                 |
| 6   | 6.5 | 9.5 | 19   | 5707950 *                | 5707951 *                | 5707952 *                  |

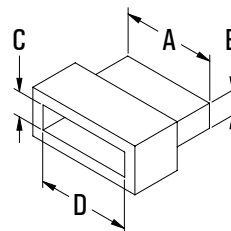
**Note:** To order individual letters or numbers please use the set order code shown above followed by the desired character.

FOR EXAMPLE: "5707111006D" for the letter D character with height of 1mm.

\* Only for use with type holder 5775THILG

### Type Holders for fast change over

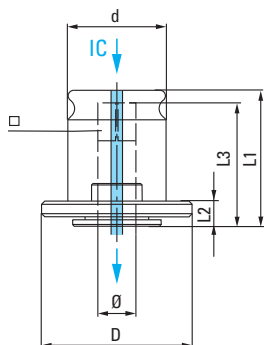
| Model  | Order code | A  | B    | C   | D  |
|--------|------------|----|------|-----|----|
| MH 1/2 | 5750THI    | 24 | 6.35 | 6.4 | 24 |
| MH 3/4 | 5775THI    | 40 | 6.35 | 6.4 | 40 |
| MH 3/4 | 5775THILG  | 40 | 6.35 | 9.6 | 40 |



### Custom Stamps Available on Request

**Note:** Tapmatic can also supply custom stamps to fit the Marking Heads. Please let us know the details of your application and we will be pleased to provide a proposal drawing and quote.

## Quick-change adapters, positive drive *inch* sizes



For quick change tap chucks TA, TIC, NC and SPD QC, with or without internal coolant system.

### Features and Advantages

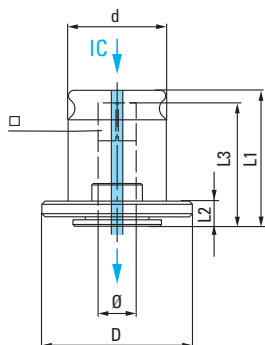
- equally appropriate for taps with internal coolant
- no pre-selective torque drive
- suitable for right and left hand tapping

| Model | Adapter Size | Dimensions |       |      |       |
|-------|--------------|------------|-------|------|-------|
|       |              | d mm       | L1 mm | D mm | L2 mm |
| P0    | 0            | 13         | 26.5  | 22   | 7     |
| P1    | 1            | 19         | 28.5  | 30   | 7     |
| P2    | 2            | 31         | 46.5  | 48   | 11    |
| P3    | 3            | 48         | 68.5  | 70   | 14    |
| P4    | 4            | 60         | 105.0 | 92   | 42    |

### Product range – Adapters

| Tap         | Shank<br>Ø inch | Square<br>inch | Order code<br>P0 | Order code<br>P1 | Order code<br>P2 | Order code<br>P3 | Order code<br>P4 |
|-------------|-----------------|----------------|------------------|------------------|------------------|------------------|------------------|
| #0 - #6     | .141            | .110           | 1001             | 1006             |                  |                  |                  |
| #8          | .168            | .131           | 1002             | 1007             |                  |                  |                  |
| #10         | .194            | .152           | 1003             | 1008             | 1016             |                  |                  |
| #12         | .220            | .165           | 1004             | 1009             |                  |                  |                  |
| 1/4"        | .255            | .191           | 1005             | 1010             | 1017             |                  |                  |
| 5/16"       | .318            | .238           |                  | 1012             | 1018             |                  |                  |
| 3/8"        | .381            | .286           |                  | 1013             | 1019             |                  |                  |
| 7/16"       | .323            | .242           |                  | 1014             | 1020             |                  |                  |
| 1/2"        | .367            | .275           |                  | 1015             | 1021             |                  |                  |
| 9/16"       | .429            | .322           |                  | 10155            | 1022             |                  |                  |
| 1/8" Pipe   | .313            | .234           |                  | 10166            | 10266            |                  |                  |
| 1/8" Pipe   | .438            | .328           |                  | 10177            | 10277            |                  |                  |
| 5/8"        | .480            | .360           |                  |                  | 1023             |                  |                  |
| 11/16"      | .542            | .406           |                  |                  | 1024             |                  |                  |
| 3/4"        | .590            | .442           |                  |                  | 1025             |                  | 10392            |
| 13/16"      | .652            | .489           |                  |                  | 1026             | 1031             |                  |
| 7/8"        | .697            | .523           |                  |                  | 1027             | 1032             |                  |
| 1/4" Pipe   | .562            | .421           |                  |                  | 10288            |                  |                  |
| 3/8" Pipe   | .700            | .531           |                  |                  | 10299            | 10386            |                  |
| 1/2" Pipe   | .687            | .515           |                  |                  | 10300            | 10387            |                  |
| 15/16"      | .760            | .570           |                  |                  |                  | 1033             |                  |
| 1"          | .800            | .600           |                  |                  |                  | 1034             | 10391            |
| 1 1/8"      | .896            | .672           |                  |                  |                  | 1035             | 10393            |
| 1 1/4"      | 1.021           | .766           |                  |                  |                  | 1036             | 1039             |
| 1 3/8"      | 1.108           | .831           |                  |                  |                  | 1037             | 1040             |
| 3/4" Pipe   | .906            | .679           |                  |                  |                  | 10388            | 10440            |
| 1" Pipe     | 1.125           | .843           |                  |                  |                  | 10389            | 10442            |
| 1 1/2"      | 1.233           | .925           |                  |                  |                  |                  | 1041             |
| 1 5/8"      | 1.305           | .979           |                  |                  |                  |                  | 1042             |
| 1 3/4"      | 1.430           | 1.072          |                  |                  |                  |                  | 1043             |
| 1 7/8"      | 1.519           | 1.139          |                  |                  |                  |                  | 10435            |
| 1 1/4" Pipe | 1.312           | .984           |                  |                  |                  |                  | 10444            |
| 1 1/2" Pipe | 1.500           | 1.125          |                  |                  |                  |                  | 10455            |
| 2"          | 1.644           | 1.233          |                  |                  |                  |                  | 1044             |

## Quick-change adapters, positive drive *metric* sizes



For quick change tap chucks TA, TIC, NC and SPD QC with or without internal coolant system.

### Features and Advantages

- equally appropriate for taps with internal coolant
- no pre-selective torque drive
- suitable for right and left hand tapping

| Model | Adapter Size | Dimensions |       |      |       |
|-------|--------------|------------|-------|------|-------|
|       |              | d mm       | L1 mm | D mm | L2 mm |
| P0    | 0            | 13         | 26.5  | 22   | 7     |
| P1    | 1            | 19         | 28.5  | 30   | 7     |
| P2    | 2            | 31         | 46.5  | 48   | 11    |
| P3    | 3            | 48         | 68.5  | 70   | 14    |
| P4    | 4            | 60         | 105.0 | 92   | 42    |

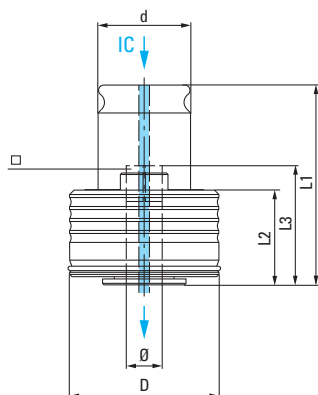
### Quick change adapters, positive drive metric sizes

| Tap                | Shank<br>Ømm | Square<br>mm | Order code<br>P0 | Order code<br>P1 | Order code<br>P2 | Order code<br>P3 | Order code<br>P4 |
|--------------------|--------------|--------------|------------------|------------------|------------------|------------------|------------------|
| M2, M2.5, M4       | 2.8          | 2.1          | P0-028021        |                  |                  |                  |                  |
| M3, M5             | 3.5          | 2.7          | P0-035027        | P1-035027        |                  |                  |                  |
| M3.5               | 4            | 3            | P0-040030        | P1-040030        |                  |                  |                  |
| M4                 | 4.5          | 3.4          | P0-045034        | P1-045034        |                  |                  |                  |
| M4, M4.5           | 5            | 4            | P0-050040        | P1-050040        |                  |                  |                  |
| M4.5, M5, M6, M8   | 6            | 4.9          | P0-060049        | P1-060049        | P2-060049        |                  |                  |
| M8                 | 8            | 6.2          | P0-080062*       | P1-080062        | P2-080062        |                  |                  |
| M7, M9, M10        | 7            | 5.5          | P0-070055*       | P1-070055        | P2-070055        |                  |                  |
| M12                | 9            | 7            |                  | P1-090070        | P2-090070        |                  |                  |
| M10                | 10           | 8            |                  | P1-100080        | P2-100080        |                  |                  |
| M14                | 11           | 9            |                  | P1-110090        | P2-110090        | P3-110090        |                  |
| M16                | 12           | 9            |                  |                  | P2-120090        | P3-120090        |                  |
| M18                | 14           | 11           |                  |                  | P2-140110        | P3-140110        |                  |
| M20                | 16           | 12           |                  |                  | P2-160120        | P3-160120        |                  |
| M22, M24, M25, M26 | 18           | 14.5         |                  |                  | P2-180145        | P3-180145        | P4-180145        |
| M27, M28           | 20           | 16           |                  |                  |                  | P3-200160        | P4-200160        |
| M30, M32           | 22           | 18           |                  |                  |                  | P3-220180        | P4-220180        |
| M33                | 25           | 20           |                  |                  |                  | P3-250200        | P4-250200        |
| M34, M35, M36, M38 | 28           | 22           |                  |                  |                  | P3-280220        | P4-280220        |
| M39, M40, M42      | 32           | 24           |                  |                  |                  |                  | P4-320240        |
| M45, M48, M50      | 36           | 29           |                  |                  |                  |                  | P4-360290        |

**Note:** Version with (\*) only suitable for light processing

**Note:** other sizes available on request.

## Quick-change adapters, with pre-selective torque drive *inch sizes*



For quick change tap chucks TA, TIC, NC and SPD QC, with or without internal coolant system. A pre-selective torque drive protects the tap from breakage.

### Features and Advantages

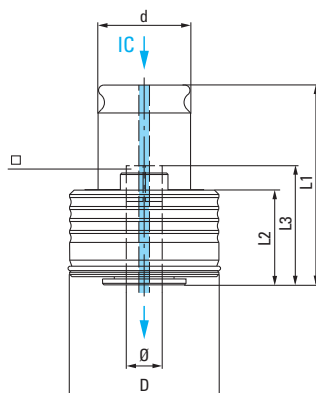
- equally appropriate for taps with internal coolant
- with pre-selective torque drive
- suitable for right and left hand tapping

| Model | Adapter Size | Dimensions |       |      |       |
|-------|--------------|------------|-------|------|-------|
|       |              | d mm       | L1 mm | D mm | L2 mm |
| TC0   | 0            | 13         | 40.5  | 23   | 21    |
| TC1   | 1            | 19         | 46.5  | 32   | 25    |
| TC2   | 2            | 31         | 69    | 50   | 34    |
| TC3   | 3            | 48         | 100.5 | 72   | 45    |
| TC4   | 4            | 60         | 131   | 95   | 68    |

### Product range – Adapters with torque control

| Tap         | Shank<br>Ø inch | Square<br>inch | Order code<br>TC0 | Order code<br>TC1 | Order code<br>TC2 | Order code<br>TC3 | Order code<br>TC 4 |
|-------------|-----------------|----------------|-------------------|-------------------|-------------------|-------------------|--------------------|
| #0 - #6     | .141            | .110           | 1046              | 1051              |                   |                   |                    |
| #8          | .168            | .131           | 1047              | 1052              |                   |                   |                    |
| #10         | .194            | .152           | 1048              | 1053              |                   |                   |                    |
| #12         | .220            | .165           | 1049              | 1054              |                   |                   |                    |
| 1/4"        | .255            | .191           | 1050              | 1055              | 10614             |                   |                    |
| 5/16"       | .318            | .238           |                   | 1056              | 1062              |                   |                    |
| 3/8"        | .381            | .286           |                   | 1057              | 1063              |                   |                    |
| 7/16"       | .323            | .242           |                   | 1058              | 1064              |                   |                    |
| 1/2"        | .367            | .275           |                   | 1059              | 1065              |                   |                    |
| 9/16"       | .429            | .322           |                   | 10595             | 1066              |                   |                    |
| 1/8" Pipe   | .313            | .234           |                   | 10600             |                   |                   |                    |
| 1/8" Pipe   | .438            | .328           |                   | 10611             |                   |                   |                    |
| 5/8"        | .480            | .360           |                   |                   | 1067              |                   |                    |
| 11/16"      | .542            | .406           |                   |                   | 1068              |                   |                    |
| 3/4"        | .590            | .442           |                   |                   | 1069              | 1074              |                    |
| 13/16"      | .652            | .489           |                   |                   | 1070              | 1075              |                    |
| 7/8"        | .697            | .523           |                   |                   | 1071              | 1076              |                    |
| 1/4" Pipe   | .562            | .421           |                   |                   | 10722             |                   |                    |
| 3/8" Pipe   | .700            | .531           |                   |                   | 10733             | 1082              |                    |
| 1/2" Pipe   | .687            | .515           |                   |                   | 10744             | 10821             |                    |
| 15/16"      | .760            | .570           |                   |                   |                   | 1077              |                    |
| 1"          | .800            | .600           |                   |                   | 10711             | 1078              | 10835              |
| 1 1/8"      | .896            | .672           |                   |                   |                   | 1079              | 10836              |
| 1 1/4"      | 1.021           | .766           |                   |                   |                   | 1080              | 10837              |
| 1 3/8"      | 1.108           | .831           |                   |                   |                   | 1081              | 1084               |
| 3/4" Pipe   | .906            | .679           |                   |                   |                   | 10822             | 10880              |
| 1" Pipe     | 1.125           | .843           |                   |                   |                   | 10833             | 10882              |
| 1 1/2"      | 1.233           | .925           |                   |                   |                   |                   | 1085               |
| 1 5/8"      | 1.305           | .979           |                   |                   |                   |                   | 1086               |
| 1 3/4"      | 1.430           | 1.072          |                   |                   |                   |                   | 1087               |
| 1 7/8"      | 1.519           | 1.139          |                   |                   |                   |                   | 10875              |
| 1 1/4" Pipe | 1.312           | .984           |                   |                   |                   |                   | 10899              |
| 1 1/2" Pipe | 1.500           | 1.125          |                   |                   |                   |                   | 10900              |

## Quick-change adapters, with pre-selective torque drive *metric sizes*



For quick change tap chucks TA, TIC, NC and SPD QC, with or without internal coolant system. A pre-selective torque drive protects the tap from breakage.

### Features and Advantages

- equally appropriate for taps with internal coolant
- with pre-selective torque drive
- suitable for right and left hand tapping

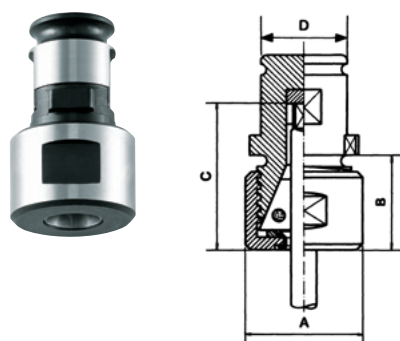
| Model | Adapter Size | Dimensions |       |      |       |
|-------|--------------|------------|-------|------|-------|
|       |              | d mm       | L1 mm | D mm | L2 mm |
| TC0   | 0            | 13         | 40.5  | 23   | 21    |
| TC1   | 1            | 19         | 46.5  | 32   | 25    |
| TC2   | 2            | 31         | 69    | 50   | 34    |
| TC3   | 3            | 48         | 100.5 | 72   | 45    |
| TC4   | 4            | 60         | 131   | 95   | 68    |

### Product range – Adapters with torque control

| Tap                | Shank<br>Ø mm | Square<br>mm | Order code<br>TC0 | Order code<br>TC1 | Order code<br>TC2 | Order code<br>TC3 | Order code<br>TC4 |
|--------------------|---------------|--------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| M2, M2.5, M4       | 2.8           | 2.1          | TC0-028021        |                   |                   |                   |                   |
| M3, M5             | 3.5           | 2.7          | TC0-035027        | TC1-035027        |                   |                   |                   |
| M3.5               | 4             | 3            | TC0-040030        | TC1-040030        |                   |                   |                   |
| M4                 | 4.5           | 3.4          | TC0-045034        | TC1-045034        |                   |                   |                   |
| M4, M4.5           | 5             | 4            | TC0-050040        | TC1-050040        |                   |                   |                   |
| M4.5, M5, M6, M8   | 6             | 4.9          | TC0-060049        | TC1-060049        | TC2-060049        |                   |                   |
| M8                 | 8             | 6.2          | TC0-080062*       | TC1-080062        | TC2-080062        |                   |                   |
| M7, M9, M10        | 7             | 5.5          | TC0-070055*       | TC1-070055        | TC2-070055        |                   |                   |
| M12                | 9             | 7            |                   | TC1-090070        | TC2-090070        |                   |                   |
| M10                | 10            | 8            |                   | TC1-100080        | TC2-100080        |                   |                   |
| M14                | 11            | 9            |                   | TC1-110090        | TC2-110090        | TC3-110090        |                   |
| M16                | 12            | 9            |                   |                   | TC2-120090        | TC3-120090        |                   |
| M18                | 14            | 11           |                   |                   | TC2-140110        | TC3-140110        |                   |
| M20                | 16            | 12           |                   |                   | TC2-160120        | TC3-160120        |                   |
| M22, M24, M25, M26 | 18            | 14.5         |                   |                   | TC2-180145        | TC3-180145        | TC4-180145        |
| M27, M28           | 20            | 16           |                   |                   |                   | TC3-200160        | TC4-200160        |
| M30, M32           | 22            | 18           |                   |                   |                   | TC3-220180        | TC4-220180        |
| M33                | 25            | 20           |                   |                   |                   | TC3-250200        | TC4-250200        |
| M34, M35, M36, M38 | 28            | 22           |                   |                   |                   | TC3-280220        | TC4-280220        |
| M39, M40, M42      | 32            | 24           |                   |                   |                   |                   | TC4-320240        |
| M45, M48, M50      | 36            | 29           |                   |                   |                   |                   | TC4-360290        |

**Note:** Version with (\*) only suitable for light processing

## Quick-change collet chuck adapters for rubber flex collets (RF)



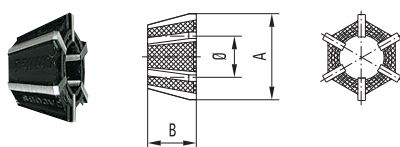
Tap holders with various or adjustable back jaws for quick change tap chucks TA and NC. Only 2 multi-range collets (RF) per type necessary to cover capacity.

### Delivery

Accessories include wrench and necessary square drives for the specified capacity. Please note that rubber flex collets are also included

| Model | Order code | Tap size | Collets Rubber Flex Included | Dimensions |      |      |      |
|-------|------------|----------|------------------------------|------------|------|------|------|
|       |            |          |                              | A mm       | B mm | C mm | D mm |
| TF0   | 29350      | M1.4–M7  | 21600<br>21700               | 18.6       | 18.6 | 21.0 | 13   |
| TF1   | 29351      | M3–M12   | 22100<br>22200               | 27.4       | 18.6 | 27.0 | 19   |
| TF2   | 29352      | M5–M18   | 24100<br>24500               | 37.2       | 24.6 | 38.1 | 31   |
| TF3   | 29353      | M10–M30  | 26100<br>26200               | 54.0       | 31.8 | 50.5 | 48   |

## Rubber Flex multi-range collets



Rubber Flex collets for TAPMATIC tapping attachments and chucks.

| Model capacity         | Order code | Capacity mm | Type     | Model capacity             | Order code | Capacity mm | Type     |
|------------------------|------------|-------------|----------|----------------------------|------------|-------------|----------|
| M1.4 - M7<br>#0 - 1/4" | 21500      | 1.0–2.5     | Extra    | M5 - M18<br>#10 - 3/4"     | 24000      | 7.0–13.0    | Extra    |
|                        | 21600      | 2.5–4.5     | Standard |                            | 24100      | 4.5–10.0    | Standard |
|                        | 21700      | 4.5–6.5     | Standard |                            | 24300      | 2.8–7.0     | Extra    |
| M3 - M12<br>#6 - 1/2"  | 22000      | 4.5–8.0     | Extra    |                            | 24500      | 10.0–15.0   | Standard |
|                        | 22100      | 3.5–6.5     | Standard |                            | 26100      | 10.0–16.0   | Standard |
|                        | 22200      | 6.5–10.0    | Standard | M10 - M30<br>1/2" - 1 1/8" | 26200      | 16.0–23.0   | Standard |
|                        | 22300      | 2.0–4.5     | Extra    |                            |            |             |          |

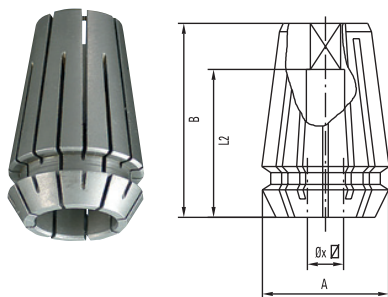
## XB collets



For TAPMATIC miniature tapping attachment model 100XB.

| Model  | Order code | Capacity mm | Type    | Model  | Order code | Capacity mm | Type    |
|--------|------------|-------------|---------|--------|------------|-------------|---------|
| 117XB1 | 20100      | 0.9–1.0     | DIN 376 | 117XB5 | 20500      | 2.0–2.2     | DIN 376 |
| 117XB2 | 20200      | 1.1–1.25    | ISO     | 117XB6 | 20600      | 2.3–2.5     | DIN 371 |
| 117XB3 | 20300      | 1.4–1.55    |         | 117XB7 | 20700      | 2.8–3.0     | ISO     |
| 117XB4 | 20400      | 1.6–1.8     |         | 117XB8 | 20800      | 3.3–3.6     |         |

All dimensions are shown in mm. 25.4mm = 1"

Steel collets ER-GB with inner square *metric sizes*

Collets to DIN 6499B with inner square for positive drive of tap square.

## ER11GB

|            | A = 11.5 mm B = 17.0 mm |           |
|------------|-------------------------|-----------|
| Order code | Shank mm                | Square mm |
| GB111028   | 2.8                     | 2.1       |
| GB111035   | 3.5                     | 2.7       |
| GB111045   | 4.5                     | 3.4       |
| GB111050   | 5.0                     | 4.0       |
| GB111060   | 6.0                     | 4.9       |

## ER16GB

|            | A = 17.0 mm B = 27.5 mm |           |
|------------|-------------------------|-----------|
| Order code | Shank mm                | Square mm |
| GB116040   | 4.0                     | 3.15/3.2  |
| GB116045   | 4.5                     | 3.4       |
| GB116050   | 5.0                     | 4.0       |
| GB116053   | 5.5                     | 4.3       |
| GB116055   | 5.5                     | 4.5       |
| GB116065   | 6.0                     | 4.5       |
| GB116060   | 6.0                     | 4.9       |
| GB116062   | 6.2                     | 5.0       |
| GB116063   | 6.3                     | 5.0       |
| GB116070   | 7.0                     | 5.5       |
| GB116071   | 7.1                     | 5.6       |
| GB116080   | 8.0                     | 6.2/6.3   |
| GB116085   | 8.5                     | 6.5       |
| GB116090   | 9.0                     | 7.0/7.1   |

## ER20GB

|            | A = 21.0 mm B = 31.5 mm |           |
|------------|-------------------------|-----------|
| Order code | Shank mm                | Square mm |
| GB120040   | 4.0                     | 3.15/3.2  |
| GB120045   | 4.5                     | 3.4       |
| GB120050   | 5.0                     | 4.0       |
| GB120053   | 5.5                     | 4.3       |
| GB120055   | 5.5                     | 4.5       |
| GB120065   | 6.0                     | 4.5       |
| GB120060   | 6.0                     | 4.9       |
| GB120062   | 6.2                     | 5.0       |
| GB120063   | 6.3                     | 5.0       |
| GB120070   | 7.0                     | 5.5       |
| GB120071   | 7.1                     | 5.6       |
| GB120080   | 8.0                     | 6.2/6.3   |
| GB120085   | 8.5                     | 6.5       |
| GB120090   | 9.0                     | 7.0/7.1   |
| GB120100   | 10.0                    | 8.0       |
| GB120105   | 10.5                    | 8.0       |
| GB120110   | 11.0                    | 9.0       |
| GB120112   | 11.2                    | 9.0       |
| GB120120   | 12.0                    | 9.0       |

## ER25GB

|            | A = 26.0 mm B = 34.0 mm |           |
|------------|-------------------------|-----------|
| Order code | Shank mm                | Square mm |
| GB125040   | 4.0                     | 3.15/3.2  |
| GB125045   | 4.5                     | 3.4       |
| GB125050   | 5.0                     | 4.0       |
| GB125053   | 5.5                     | 4.3       |
| GB125055   | 5.5                     | 4.5       |
| GB125065   | 6.0                     | 4.5       |
| GB125060   | 6.0                     | 4.9       |
| GB125062   | 6.2                     | 5.0       |
| GB125063   | 6.3                     | 5.0       |
| GB125070   | 7.0                     | 5.5       |
| GB125071   | 7.1                     | 5.6       |
| GB125080   | 8.0                     | 6.2/6.3   |
| GB125085   | 8.5                     | 6.5       |
| GB125090   | 9.0                     | 7.0/7.1   |
| GB125100   | 10.0                    | 8.0       |
| GB125105   | 10.5                    | 8.0       |
| GB125110   | 11.0                    | 9.0       |
| GB125112   | 11.2                    | 9.0       |
| GB125120   | 12.0                    | 9.0       |
| GB125125   | 12.5                    | 10.0      |
| GB125140   | 14.0                    | 11.0/11.2 |
| GB125150   | 15.0                    | 12.0      |
| GB125160   | 16.0                    | 12.0      |

## ER32GB

|            | A = 33.0 mm B = 40.0 mm |           |
|------------|-------------------------|-----------|
| Order code | Shank mm                | Square mm |
| GB132040   | 4.0                     | 3.15/3.2  |
| GB132045   | 4.5                     | 3.4       |
| GB132050   | 5.0                     | 4.0       |
| GB132053   | 5.5                     | 4.3       |
| GB132055   | 5.5                     | 4.5       |
| GB132065   | 6.0                     | 4.5       |
| GB132060   | 6.0                     | 4.9       |
| GB132062   | 6.2                     | 5.0       |
| GB132063   | 6.3                     | 5.0       |
| GB132070   | 7.0                     | 5.5       |
| GB132071   | 7.1                     | 5.6       |
| GB132080   | 8.0                     | 6.2/6.3   |
| GB132085   | 8.5                     | 6.5       |
| GB132090   | 9.0                     | 7.0/7.1   |
| GB132100   | 10.0                    | 8.0       |
| GB132105   | 10.5                    | 8.0       |
| GB132110   | 11.0                    | 9.0       |
| GB132112   | 11.2                    | 9.0       |
| GB132120   | 12.0                    | 9.0       |
| GB132125   | 12.5                    | 10.0      |
| GB132140   | 14.0                    | 11.0/11.2 |
| GB132150   | 15.0                    | 12.0      |
| GB132160   | 16.0                    | 12.0      |
| GB132170   | 17.0                    | 13.0      |
| GB132180   | 18.0                    | 14.0/14.5 |
| GB132200   | 20.0                    | 16.0      |

## ER40GB

|            | A = 41.0 mm B = 46.0 mm |           |
|------------|-------------------------|-----------|
| Order code | Shank mm                | Square mm |
| GB140065   | 6.0                     | 4.5       |
| GB140060   | 6.0                     | 4.9       |
| GB140062   | 6.2                     | 5.0       |
| GB140063   | 6.3                     | 5.0       |
| GB140070   | 7.0                     | 5.5       |
| GB140071   | 7.1                     | 5.6       |
| GB140080   | 8.0                     | 6.2/6.3   |
| GB140085   | 8.5                     | 6.5       |
| GB140090   | 9.0                     | 7.0/7.1   |
| GB140100   | 10.0                    | 8.0       |
| GB140105   | 10.5                    | 8.0       |
| GB140110   | 11.0                    | 9.0       |
| GB140112   | 11.2                    | 9.0       |
| GB140120   | 12.0                    | 9.0       |
| GB140125   | 12.5                    | 10.0      |
| GB140140   | 14.0                    | 11.0/11.2 |
| GB140150   | 15.0                    | 12.0      |
| GB140160   | 16.0                    | 12.0      |
| GB140170   | 17.0                    | 13.0      |
| GB140180   | 18.0                    | 14.0/14.5 |
| GB141200   | 20.0                    | 16.0      |
| GB141220   | 22.0                    | 18.0      |

## ER50GB

|            | A = 60.0 mm B = 52.0 mm |           |
|------------|-------------------------|-----------|
| Order code | Shank mm                | Square mm |
| GB150220   | 22.0                    | 18.0      |
| GB150250   | 25.0                    | 20.0      |
| GB150280   | 28.0                    | 22.0      |
| GB150320   | 32.0                    | 24.0      |

Steel collets ER-GB with inner square *inch sizes*

## ER11GB

| Order code | Tap size | Shank inch | Square inch | A    | B    | L2   |
|------------|----------|------------|-------------|------|------|------|
| 21000      | #0 - #6  | .141       | .110        | .444 | .708 | .472 |
| 21001      | #8       | .168       | .131        | .444 | .708 | .551 |
| 21002      | #10      | .194       | .152        | .444 | .708 | .551 |

## ER16GB

| Order code | Tap size | Shank inch | Square inch | A    | B     | L2   |
|------------|----------|------------|-------------|------|-------|------|
| 21004      | #0 - #6  | .141       | .110        | .629 | 1.083 | .709 |
| 21005      | #8       | .168       | .131        | .629 | 1.083 | .709 |
| 21006      | #10      | .194       | .152        | .629 | 1.083 | .709 |
| 21008      | #12      | .220       | .165        | .629 | 1.083 | .709 |
| 21010      | 1/4"     | .255       | .191        | .629 | 1.083 | .709 |
| 21012      | 5/16"    | .318       | .238        | .629 | 1.083 | .866 |
| 21014      | 7/16"    | .323       | .242        | .629 | 1.083 | .866 |

## ER20GB

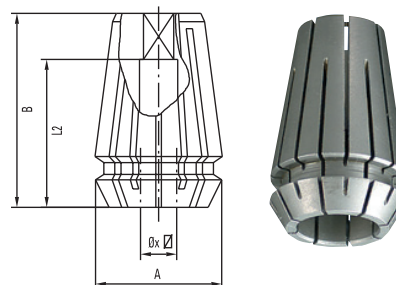
| Order code | Tap size   | Shank inch | Square inch | A    | B     | L2   |
|------------|------------|------------|-------------|------|-------|------|
| 21019      | #8         | .168       | .131        | .787 | 1.240 | .709 |
| 21020      | #10        | .194       | .152        | .787 | 1.240 | .709 |
| 21021      | #12        | .220       | .165        | .787 | 1.240 | .709 |
| 21022      | 1/4"       | .255       | .191        | .787 | 1.240 | .709 |
| 21023      | 5/16"      | .318       | .238        | .787 | 1.240 | .866 |
| 21024      | 7/16"      | .323       | .242        | .787 | 1.240 | .866 |
| 21025      | 1/2"       | .367       | .275        | .787 | 1.240 | .866 |
| 21026      | 3/8"       | .381       | .286        | .787 | 1.240 | .866 |
| 21027      | 1/16" Pipe | .3125      | .234        | .787 | 1.240 | .866 |

## ER25GB

| Order code | Tap size  | Shank inch | Square inch | A    | B     | L2   |
|------------|-----------|------------|-------------|------|-------|------|
| 21031      | 1/4"      | .255       | .191        | .984 | 1.338 | .709 |
| 21029      | 5/16"     | .318       | .238        | .984 | 1.338 | .866 |
| 21030      | 7/16"     | .323       | .242        | .984 | 1.338 | .866 |
| 21032      | 1/2"      | .367       | .275        | .984 | 1.338 | .866 |
| 21034      | 3/8"      | .381       | .286        | .984 | 1.338 | .866 |
| 21036      | 9/16"     | .429       | .322        | .984 | 1.338 | .984 |
| 21038      | 5/8"      | .480       | .360        | .984 | 1.338 | .984 |
| 21040      | 11/16"    | .542       | .406        | .984 | 1.338 | .984 |
| 21028      | 1/8" Pipe | .312       | .234        | .984 | 1.338 | .866 |
| 21037      | 1/8" Pipe | .437       | .328        | .984 | 1.338 | .984 |
| 21043      | 1/4" Pipe | .562       | .421        | .984 | 1.338 | .984 |
| 21044      | 3/4"      | .590       | .442        | .984 | 1.338 | .984 |

## ER32GB

| Order code | Tap size  | Shank inch | Square inch | A     | B     | L2    |
|------------|-----------|------------|-------------|-------|-------|-------|
| 21047      | 1/4"      | .255       | .191        | 1.260 | 1.575 | .709  |
| 21048      | 5/16"     | .318       | .238        | 1.260 | 1.575 | .866  |
| 21049      | 7/16"     | .323       | .242        | 1.260 | 1.575 | .866  |
| 21052      | 3/8"      | .381       | .286        | 1.260 | 1.575 | .866  |
| 21050      | 1/2"      | .367       | .275        | 1.260 | 1.575 | .866  |
| 21054      | 9/16"     | .429       | .322        | 1.260 | 1.575 | .984  |
| 21058      | 5/8"      | .480       | .360        | 1.260 | 1.575 | .984  |
| 21060      | 11/16"    | .542       | .406        | 1.260 | 1.575 | .984  |
| 21064      | 3/4"      | .590       | .442        | 1.260 | 1.575 | .984  |
| 21066      | 13/16"    | .652       | .489        | 1.260 | 1.575 | .984  |
| 21068      | 7/8"      | .697       | .523        | 1.260 | 1.575 | .984  |
| 21056      | 1/8" Pipe | .437       | .328        | 1.260 | 1.575 | .984  |
| 21062      | 1/4" Pipe | .562       | .421        | 1.260 | 1.575 | .984  |
| 21067      | 1/2" Pipe | .687       | .515        | 1.260 | 1.575 | .984  |
| 21070      | 1"        | .800       | .600        | 1.260 | 1.575 | 1.102 |



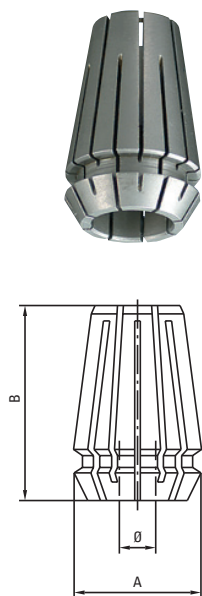
## ER40GB

| Order code | Tap size  | Shank inch | Square inch | A     | B     | L2    |
|------------|-----------|------------|-------------|-------|-------|-------|
| 21104      | 1/2"      | .367       | .275        | 1.575 | 1.811 | .866  |
| 21105      | 3/8"      | .381       | .286        | 1.575 | 1.811 | .866  |
| 21106      | 9/16"     | .429       | .322        | 1.575 | 1.811 | .984  |
| 21107      | 5/8"      | .480       | .360        | 1.575 | 1.811 | .984  |
| 21108      | 11/16"    | .542       | .406        | 1.575 | 1.811 | .984  |
| 21109      | 3/4"      | .590       | .442        | 1.575 | 1.811 | .984  |
| 21110      | 13/16"    | .652       | .489        | 1.575 | 1.811 | .984  |
| 21111      | 7/8"      | .697       | .523        | 1.575 | 1.811 | .984  |
| 21112      | 15/16"    | .760       | .570        | 1.575 | 1.811 | .984  |
| 21113      | 1"        | .800       | .600        | 1.575 | 1.811 | 1.102 |
| 21117      | 1 1/8"    | .896       | .672        | 1.575 | 1.811 | 1.102 |
| 21114      | 1/4" Pipe | .562       | .421        | 1.575 | 1.811 | .984  |
| 21115      | 3/8" Pipe | .700       | .531        | 1.575 | 1.811 | .984  |
| 21116      | 1/2" Pipe | .687       | .515        | 1.575 | 1.811 | .984  |

## ER50GB

| Order code | Tap size  | Shank inch | Square inch |
|------------|-----------|------------|-------------|
| 21137      | 1"        | .800       | .600        |
| 21138      | 1 1/8"    | .896       | .672        |
| 21139      | 1 3/16"   | 1.021      | .766        |
| 21140      | 1 5/16"   | 1.108      | .831        |
| 21141      | 1 7/16"   | 1.233      | .925        |
| 21170      | 1/2" Pipe | .687       | .515        |
| 21171      | 3/8" Pipe | .700       | .531        |
| 21172      | 3/4" Pipe | .906       | .679        |
| 21136      | 1" Pipe   | 1.125      | .843        |

## Steel collets ER acc. to DIN 6499B without inner square

**ER8**

A = 8.5 mm B = 12.0 mm

| Order code | Capacity<br>Shank Ø mm |
|------------|------------------------|
| 20910      | 1.5–1.0                |
| 20911      | 2.0–1.5                |
| 20912      | 2.5–2.0                |
| 20913      | 3.0–2.5                |
| 20915      | 3.5–3.0                |
| 20916      | 4.0–3.5                |
| 20918      | 4.5–4.0                |

**ER11**

A = 11.5 mm B = 17.0 mm

| Order code | Capacity<br>Shank Ø mm |
|------------|------------------------|
| 20929      | 3.0–2.5                |
| 20930      | 3.5–3.0                |
| 20931      | 4.0–3.5                |
| 20932      | 4.5–4.0                |
| 20934      | 5.0–4.5                |
| 20933      | 5.5–5.0                |
| 20935      | 6.0–5.5                |
| 20936      | 6.5–6.0                |

**ER16**

A = 17.0 mm B = 27.5 mm

| Order code | Capacity<br>Shank Ø mm |
|------------|------------------------|
| 20940      | 4.0–3.0                |
| 20943      | 5.0–4.0                |
| 20945      | 6.0–5.0                |
| 20946      | 7.0–6.0                |
| 20949      | 8.0–7.0                |
| 20950      | 9.0–8.0                |
| 20953      | 10.0–9.0               |

**ER20**

A = 21.0 mm B = 31.5 mm

| Order code | Capacity<br>Shank Ø mm |
|------------|------------------------|
| 20983      | 4.0–3.0                |
| 20984      | 5.0–4.0                |
| 20985      | 6.0–5.0                |
| 20977      | 7.0–6.0                |
| 20986      | 8.0–7.0                |
| 20978      | 9.0–8.0                |
| 20979      | 10.0–9.0               |
| 20980      | 11.0–10.0              |
| 20981      | 12.0–11.0              |
| 20982      | 13.0–12.0              |

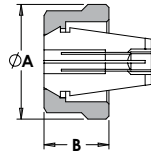
**ER25**

A = 26.0 mm B = 34.0 mm

| Order code | Capacity<br>Shank Ø mm |
|------------|------------------------|
| 20963      | 5.0–4.0                |
| 20965      | 7.0–6.0                |
| 20968      | 9.0–8.0                |
| 20969      | 10.0–9.0               |
| 20970      | 11.0–10.0              |
| 20971      | 12.0–11.0              |
| 20973      | 13.0–12.0              |
| 20974      | 14.0–13.0              |
| 20975      | 15.0–14.0              |
| 20976      | 16.0–15.0              |

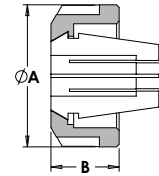
Please note that these collets *do not* include a square drive.  
For tapping we recommend the use of ERGB collets, with inner square, whenever possible.  
All dimensions are shown in mm. 25.4mm = 1"

## Clamping nuts acc. to DIN 6499 standard without internal coolant sealing



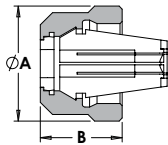
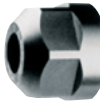
**Note:** For recommended tightening torque, please see page 56.

| Order code | Type | A mm | B mm |
|------------|------|------|------|
| 69318      | ER11 | 19   | 11.3 |
| 69518      | ER16 | 28   | 17.5 |
| 70018      | ER20 | 34   | 19.0 |

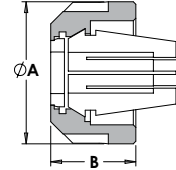


| Order code | Type | A mm | B mm |
|------------|------|------|------|
| 69918      | ER25 | 42   | 20.0 |
| 71118      | ER32 | 50   | 22.5 |
| 71318      | ER40 | 63   | 25.5 |
| 66018      | ER50 | 78   | 35.3 |

## Clamping nuts to DIN 6499 for internal coolant system, for use with sealing disks



| Order code | Type | A mm | B mm |
|------------|------|------|------|
| 70116      | ER16 | 28   | 22.5 |
| 70120      | ER20 | 34   | 24.5 |



| Order code | Type | A mm | B mm |
|------------|------|------|------|
| 70125      | ER25 | 42   | 25.0 |
| 70132      | ER32 | 50   | 27.5 |
| 70140      | ER40 | 63   | 30.5 |
| 66050      | ER50 | 78   | 42.5 |

## Steel collet seals for use with coolant through steel collet models and sealing disk nuts.

| Description<br>#16 Series Seals |             |
|---------------------------------|-------------|
| Size                            | Catalog No. |
| Complete Set                    | 70117       |
| 3-3.5mm (.118-.138)             | 70117-35    |
| 3.5-4mm (.138-.157)             | 70117-40    |
| 4-4.5mm (.157-.177)             | 70117-45    |
| 4.5-5mm (.177-.197)             | 70117-50    |
| 5-5.5mm (.197-.217)             | 70117-55    |
| 5.5-6mm (.217-.236)             | 70117-60    |
| 6-6.5mm (.236-.256)             | 70117-65    |
| 6.5-7mm (.256-.276)             | 70117-70    |
| 7-7.5mm (.276-.295)             | 70117-75    |
| 7.5-8mm (.295-.315)             | 70117-80    |
| 8-8.5mm (.315-.335)             | 70117-85    |
| 8.5-9mm (.335-.354)             | 70117-90    |
| 9-9.5mm (.354-.374)             | 70117-95    |
| 9.5-10mm (.374-.394)            | 70117-100   |

| Description<br>#20 Series Seals |             |
|---------------------------------|-------------|
| Size                            | Catalog No. |
| Complete Set                    | 70121       |
| 3-3.5mm (.118-.138)             | 70121-35    |
| 3.5-4mm (.138-.157)             | 70121-40    |
| 4-4.5mm (.157-.177)             | 70121-45    |
| 4.5-5mm (.177-.197)             | 70121-50    |
| 5-5.5mm (.197-.217)             | 70121-55    |
| 5.5-6mm (.217-.236)             | 70121-60    |
| 6-6.5mm (.236-.256)             | 70121-65    |
| 6.5-7mm (.256-.276)             | 70121-70    |
| 7-7.5mm (.276-.295)             | 70121-75    |
| 7.5-8mm (.295-.315)             | 70121-80    |
| 8-8.5mm (.315-.335)             | 70121-85    |
| 8.5-9mm (.335-.354)             | 70121-90    |
| 9-9.5mm (.354-.374)             | 70121-95    |
| 9.5-10mm (.374-.394)            | 70121-100   |
| 10-10.5mm (.394-.413)           | 70121-105   |
| 10.5-11mm (.416-.433)           | 70121-110   |
| 11-11.5mm (.433-.453)           | 70121-115   |
| 11.5-12mm (.453-.472)           | 70121-120   |
| 12-12.5mm (.472-.492)           | 70121-125   |

| Description<br>#25 Series Seals |             |
|---------------------------------|-------------|
| Size                            | Catalog No. |
| Complete Set                    | 70126       |
| 3-3.5mm (.118-.138)             | 70126-35    |
| 3.5-4mm (.138-.157)             | 70126-40    |
| 4-4.5mm (.157-.177)             | 70126-45    |
| 4.5-5mm (.177-.197)             | 70126-50    |
| 5-5.5mm (.197-.217)             | 70126-55    |
| 5.5-6mm (.217-.236)             | 70126-60    |
| 6-6.5mm (.236-.256)             | 70126-65    |
| 6.5-7mm (.256-.276)             | 70126-70    |
| 7-7.5mm (.276-.295)             | 70126-75    |
| 7.5-8mm (.295-.315)             | 70126-80    |
| 8-8.5mm (.315-.335)             | 70126-85    |
| 8.5-9mm (.335-.354)             | 70126-90    |
| 9-9.5mm (.354-.374)             | 70126-95    |
| 9.5-10mm (.374-.394)            | 70126-100   |
| 10-10.5mm (.394-.413)           | 70126-105   |
| 10.5-11mm (.416-.433)           | 70126-110   |
| 11-11.5mm (.433-.453)           | 70126-115   |
| 11.5-12mm (.453-.472)           | 70126-120   |
| 12-12.5mm (.472-.492)           | 70126-125   |
| 12.5-13mm (.492-.512)           | 70126-130   |
| 13-13.5mm (.512-.531)           | 70126-135   |
| 13.5-14mm (.531-.551)           | 70126-140   |
| 14-14.5mm (.551-.571)           | 70126-145   |
| 14.5-15mm (.571-.591)           | 70126-150   |
| 15-15.5mm (.591-.610)           | 70126-155   |
| 15.5-16mm (.610-.630)           | 70126-160   |

| Description<br>#32 Series Seals |             |
|---------------------------------|-------------|
| Size                            | Catalog No. |
| Complete Set                    | 70133       |
| 3-3.5mm (.118-.138)             | 70133-35    |
| 3.5-4mm (.138-.157)             | 70133-40    |
| 4-4.5mm (.157-.177)             | 70133-45    |
| 4.5-5mm (.177-.197)             | 70133-50    |
| 5-5.5mm (.197-.217)             | 70133-55    |
| 5.5-6mm (.217-.236)             | 70133-60    |
| 6-6.5mm (.236-.256)             | 70133-65    |
| 6.5-7mm (.256-.276)             | 70133-70    |
| 7-7.5mm (.276-.295)             | 70133-75    |
| 7.5-8mm (.295-.315)             | 70133-80    |
| 8-8.5mm (.315-.335)             | 70133-85    |
| 8.5-9mm (.335-.354)             | 70133-90    |
| 9-9.5mm (.354-.374)             | 70133-95    |
| 9.5-10mm (.374-.394)            | 70133-100   |
| 10-10.5mm (.394-.413)           | 70133-105   |
| 10.5-11mm (.416-.433)           | 70133-110   |
| 11-11.5mm (.433-.453)           | 70133-115   |
| 11.5-12mm (.453-.472)           | 70133-120   |
| 12-12.5mm (.472-.492)           | 70133-125   |
| 12.5-13mm (.492-.512)           | 70133-130   |
| 13-13.5mm (.512-.531)           | 70133-135   |
| 13.5-14mm (.531-.551)           | 70133-140   |
| 14-14.5mm (.551-.571)           | 70133-145   |
| 14.5-15mm (.571-.591)           | 70133-150   |
| 15-15.5mm (.591-.610)           | 70133-155   |
| 15.5-16mm (.610-.630)           | 70133-160   |
| 16-16.5mm (.630-.650)           | 70133-165   |
| 16.5-17mm (.650-.670)           | 70133-170   |
| 17-17.5mm (.670-.690)           | 70133-175   |
| 17.5-18mm (.690-.710)           | 70133-180   |
| 18-18.5mm (.710-.730)           | 70133-185   |
| 18.5-19mm (.730-.748)           | 70133-190   |
| 19-19.5mm (.749-.767)           | 70133-195   |
| 19.5-20mm (.767-.787)           | 70133-200   |



**Note:** #40 and #50 seals also available on request

Also available, coolant flush disks for directing coolant down the tap shank.



■ on request

## Torque wrenches. For recommended tightening torque, please see page 56



| Order code | Model                                                   |
|------------|---------------------------------------------------------|
| 84.600.00  | Power-Collet<br>Torque wrench incl. case,<br>no inserts |
| 84.620.16  | ER 16 insert                                            |
| 84.620.25  | ER 25 insert                                            |
| 84.620.32  | ER 32 insert                                            |

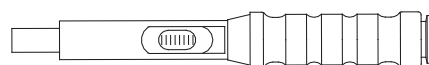
## Clamping device for ER collet chuck SFT Tools



For easy and controlled tightening of nuts for collet chuck holders, without damaging the tool. For use with SFT10, 50, 75 and 100.

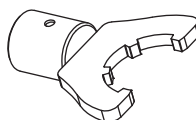
| Order code | Length mm |
|------------|-----------|
| 28SFT132   | 132       |
| 28SFT240   | 240       |

Holds collet chuck allowing you to tighten collet nut with a torque wrench.

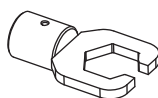


| Order code | Model         |
|------------|---------------|
| 7150.02025 | Torco-Fix 0   |
| 7150.05050 | Torco-Fix I   |
| 7150.20200 | Torco-Fix II  |
| 7150.60300 | Torco-Fix III |
| 7159.09000 | TSD 0.9       |

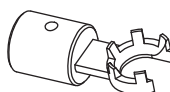
## Clip-on wrenches for torque wrench



| Order code | Model  |
|------------|--------|
| 7151.16000 | A-E 16 |
| 7151.20000 | A-E 20 |
| 7151.25000 | A-E 25 |
| 7151.32000 | A-E 32 |
| 7151.40000 | A-E 40 |
| 7151.50000 | A-E 50 |



| Order code | Model    |
|------------|----------|
| 7152.11010 | A-E 11 P |
| 7152.16010 | A-E 16 P |
| 7152.20010 | A-E 20 P |



| Order code | Model    |
|------------|----------|
| 7153.08000 | A-E 8 M  |
| 7153.11000 | A-E 11 M |
| 7153.16000 | A-E 16 M |
| 7153.20000 | A-E 20 M |
| 7153.25000 | A-E 25 M |

## Quill Mount Torque Bars – clamp around quill of machine for use with Manual Tapping



| Order code | Diameter                   | Capacity    |
|------------|----------------------------|-------------|
| V-Typ      |                            |             |
| 29099      | 38–60 mm<br>1 1/2"–2 3/8"  | M16<br>1/2" |
| 290991     | 60–114 mm<br>2 3/8"–4 1/2" | M18<br>3/4" |

Always mount a torque bar to hold the tapping attachment's stop arm from rotating. The stop arm should not be installed permanently, not under any circumstances be held by hand or fastened with wire. The torque bar must be mounted securely to the table or quill of your machine. The torque bar installation must be stronger than the largest tap in the capacity range of your tapping attachment. Please order Tapmatic torque bars shown.

## Table Mount Torque Bars – mount to the «T» slots of table

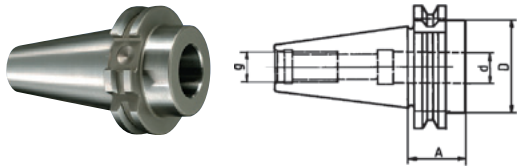


| Order code | Tap capacity  |
|------------|---------------|
| 29096      | M33<br>1 3/4" |



| Order code | Tap capacity |
|------------|--------------|
| 29097      | M18<br>3/4"  |

## NC shanks DIN 69871A/D and CAT

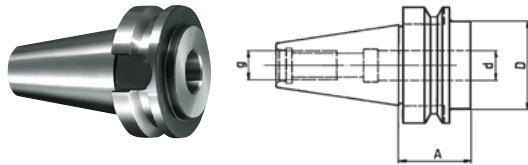


| Order code | Shank | Bore d mm | Dimensions mm |     |     | Weight kg |
|------------|-------|-----------|---------------|-----|-----|-----------|
| DIN 69871  |       |           | D             | A   | g   |           |
| S-241      | SK40  | 20        | 45            | 35  | M16 | 0.9       |
| S-242      | SK40  | 25        | 45            | 35  | M16 | 0.8       |
| S-244      | SK40  | 40        | 90            | 122 | M16 | 2.6       |
| S-251      | SK50  | 20        | 72            | 35  | M24 | 2.9       |
| S-252      | SK50  | 25        | 72            | 35  | M24 | 2.8       |
| S-254      | SK50  | 40        | 90            | 112 | M24 | 4.9       |

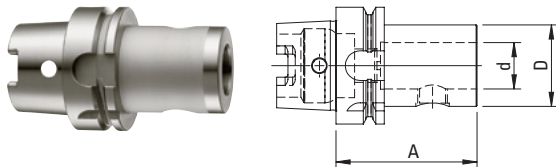
| Order code | Shank | Bore d mm | Dimension |       |         | Weight kg |
|------------|-------|-----------|-----------|-------|---------|-----------|
| CAT        |       |           | D         | A     | g       |           |
| 23951      | CAT40 | 1"        | 1.75"     | 1.38" | 5/8"-11 | 0.7       |
| 23947      | CAT40 | 25mm      | 45mm      | 35mm  | 5/8"-11 | 0.7       |
| 23954      | CAT45 | 1"        | 2.25"     | 1.38" | 3/4"-10 | 1.6       |
| 23953      | CAT50 | 1"        | 2.75"     | 1.38" | 1"-8    | 2.7       |
| 23948      | CAT50 | 25mm      | 70mm      | 35mm  | 1"-8    | 2.7       |
| 23957      | CAT50 | 1 1/2"    | 2.75"     | 2.00" | 1"-8    | 2.7       |
| 23964      | CAT50 | 40mm      | 70mm      | 75mm  | 1"-8    | 4.9       |

## NC shanks MAS-BT



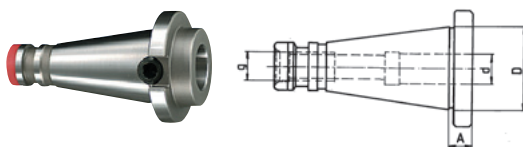
| Order code | Arbors | Bore d | Dimensions mm |       |     | Weight kg |
|------------|--------|--------|---------------|-------|-----|-----------|
| BT         |        |        | D             | A     | g   |           |
| 23949      | BT30   | 1"     | 1.81"         | 1.50" | M12 | 0.4       |
| 23958      | BT35   | 1"     | 1.50"         | 1.38" | M16 | 0.4       |
| 23943      | BT40   | 25mm   | 45mm          | 35mm  | M16 | 0.8       |
| 23952      | BT40   | 1"     | 1.75"         | 1.38" | M16 | 0.8       |
| 23955      | BT50   | 1"     | 2.75"         | 1.88" | M24 | 3.6       |
| 23945      | BT50   | 25mm   | 70mm          | 48mm  | M24 | 3.6       |
| S-354      | BT50   | 40mm   | 90mm          | 110mm | M24 | 5.3       |

## Modular NC shanks HSK-A



| Order code | Shank HSK-A | Bore d mm | Dimensions mm |     |   | Weight kg |
|------------|-------------|-----------|---------------|-----|---|-----------|
|            |             |           | D             | A   | g |           |
| S-451      | HSK50       | 25        | 44            | 76  |   | 0.8       |
| S-461      | HSK63       | 25        | 44            | 76  |   | 1.0       |
| S-463      | HSK63A      | 40        | 72            | 120 |   | 2.6       |
| S-481      | HSK80       | 25        | 65            | 100 |   | 2.7       |
| S-411      | HSK100      | 25        | 65            | 100 |   | 3.5       |
| S-413      | HSK100A     | 40        | 80            | 105 |   | 4.7       |

## NC shanks DIN 2080 and NMTB



| Order code | Shank | Bore d mm | Dimensions mm |    |     | Weight kg |
|------------|-------|-----------|---------------|----|-----|-----------|
| DIN 2080   |       |           | D             | A  | g   |           |
| S-141      | SK40  | 20        | 44            | 24 | M16 | 0.7       |
| S-142      | SK40  | 25        | 44            | 24 | M16 | 0.6       |
| S-151      | SK50  | 20        | 65            | 34 | M24 | 2.5       |
| S-152      | SK50  | 25        | 65            | 34 | M24 | 2.4       |

| Order code | Shank  | Bore d | Dimensions |       |         | Weight kg |
|------------|--------|--------|------------|-------|---------|-----------|
| NMTB       |        |        | D          | A     | g       |           |
| 23950      | NMTB40 | 1"     | 1.75"      | .039" | 5/8"-11 | 0.5       |

## NMTB with threaded mount



| Order code | NMTB    | Thread   |
|------------|---------|----------|
| 23050      | NMTB-30 | 1/2-20   |
| 24050      | NMTB-40 | 1/2-20   |
| 23087      | NMTB-30 | 7/8-20   |
| 24087      | NMTB-40 | 7/8-20   |
| 23015      | NMTB-30 | 1 1/2-18 |
| 24015      | NMTB-40 | 1 1/2-18 |
| 25015      | NMTB-50 | 1 1/2-18 |
| 29106      | NMTB-50 | 2 1/4-10 |

## Reducing sleeve

| Order code | Outside Ø | Inside Ø |
|------------|-----------|----------|
| 23921      | 1"        | 3/4"     |

## R8 arbors to Jacobs taper



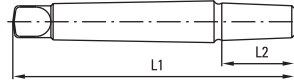
| Order code | R8             | Jacobs Taper |
|------------|----------------|--------------|
| 20833      | R-8 Bridgeport | #33 J.T.     |
| 20803      | R-8 Bridgeport | #3 J.T.      |
| 20804      | R-8 Bridgeport | #4 J.T.      |

## R8 arbors with threaded mount



| Order code | R8             | Thread    |
|------------|----------------|-----------|
| 20887      | R-8 Bridgeport | 7/8"-20   |
| 20815      | R-8 Bridgeport | 1 1/2"-18 |

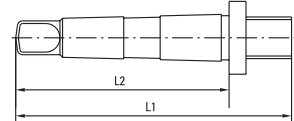
## Morse taper arbors to JACOBS taper



| Order code | Morse taper | DIN Taper | Length mm |    |
|------------|-------------|-----------|-----------|----|
|            |             |           | L1        | L2 |
| 20112      | MK1         | B12       | 91        | 22 |
| 20116      | MK1         | B16       | 98        | 29 |
| 20212      | MT2         | B12       | 107       | 22 |
| 20216      | MK2         | B16       | 114       | 29 |
| 20218      | MK2         | B18       | 122       | 37 |
| 20312      | MK3         | B12       | 126       | 22 |
| 20316      | MK3         | B16       | 133       | 29 |
| 20318      | MK3         | B18       | 141       | 37 |
| 20416      | MK4         | B16       | 160       | 29 |
| 20418      | MK4         | B18       | 168       | 37 |

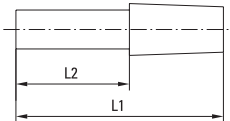
| Order code | Morse taper | JACOBS taper | Length mm |    |
|------------|-------------|--------------|-----------|----|
|            |             |              | L1        | L2 |
| 20101      | MT1         | 1            | 86        | 18 |
| 20133      | MT1         | 33           | 96        | 26 |
| 20206      | MT2         | 6            | 96        | 26 |
| 20201      | MT2         | 1            | 103       | 18 |
| 20233      | MT2         | 33           | 111       | 26 |
| 20203      | MT2         | 3            | 117       | 32 |
| 20306      | MT3         | 6            | 117       | 43 |
| 20301      | MT3         | 1            | 122       | 18 |
| 20333      | MT3         | 33           | 130       | 26 |
| 20303      | MT3         | 3            | 136       | 32 |
| 20304      | MT3         | 4            | 147       | 43 |
| 20433      | MT4         | 33           | 157       | 26 |
| 20403      | MT4         | 3            | 162       | 32 |
| 20404      | MT4         | 4            | 173       | 43 |
| 20504      | MT5         | 4            | 205       | 43 |

## Morse taper arbors with threaded mount



| Order code | Morse taper | Thread   | Length mm |      |
|------------|-------------|----------|-----------|------|
|            |             |          | L1        | L2   |
| 20150      | MT1         | 1/2-20   | 87        | 65.5 |
| 20250      | MT2         | 1/2-20   | 103       | 80   |
| 20287      | MT2         | 7/8-20   | 100       | 80   |
| 20387      | MT3         | 7/8-20   | 116       | 99   |
| 20315      | MT3         | 1 1/2-18 | 118       | 99   |
| 20487      | MT4         | 7/8-20   | 142       | 124  |
| 20415      | MT4         | 1 1/2-18 | 118       | 99   |
| 20515      | MT5         | 1 1/2-18 |           |      |
| 29104      | MT4         | 2 1/4-10 |           |      |
| 29105      | MT5         | 2 1/4-10 |           |      |

## Straight shank arbors to JACOBS taper



| Order code | Straight shank<br>Ø mm | JACOBS taper | Length mm |    |
|------------|------------------------|--------------|-----------|----|
|            |                        |              | L1        | L2 |
| 10-33      | 10                     | 33           | 64        | 35 |
| 12-33      | 12                     | 33           | 64        | 35 |
| 16-33      | 16                     | 33           | 64        | 35 |

| Order code | Straight shank<br>Ø inch | JACOBS taper |  |  |
|------------|--------------------------|--------------|--|--|
|            |                          |              |  |  |
| 25001      | 1/2"                     | 1            |  |  |
| 25006      | 1/2"                     | 6            |  |  |
| 25033      | 1/2"                     | 33           |  |  |
| 25003      | 1/2"                     | 3            |  |  |
| 26233      | 5/8"                     | 33           |  |  |
| 26203      | 5/8"                     | 3            |  |  |
| 27533      | 3/4"                     | 33           |  |  |
| 27503      | 3/4"                     | 3            |  |  |
| 20003      | 1"                       | 3            |  |  |

## Straight shank arbors with threaded mount



| Order code | Straight shank<br>Ø inch | Thread   |
|------------|--------------------------|----------|
| 25037      | 1/2" S.S.                | 3/8-24   |
| 25087      | 1/2" S.S.                | 7/8-20   |
| 26287      | 5/8" S.S.                | 7/8-20   |
| 27587      | 3/4" S.S.                | 7/8-20   |
| 28787      | 7/8" S.S.                | 7/8-20   |
| 20087      | 1" S.S.                  | 7/8-20   |
| 20015      | 1" S.S.                  | 1 1/2-18 |

## Standard Taps

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TAPMATIC

|                 | Low Carbon Steel,<br>Medium Carbon<br>Steel                    | High Carbon Steel,<br>High Strength Steel,<br>Tool Steel | High Strength Steel,<br>Tool Steel Hardened | Stainless 303,<br>304, 316 | Stainless<br>410, 430, 17-4<br>Hardened | Stainless 17-4<br>Annealed | Titanium Alloys       | Nickel Base Alloys  | Aluminium Alloys       | Aluminium<br>Die Cast  | Magnesium              | Brass, Bronze          | Copper                 | Cast Iron              |
|-----------------|----------------------------------------------------------------|----------------------------------------------------------|---------------------------------------------|----------------------------|-----------------------------------------|----------------------------|-----------------------|---------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| A) m/min        | 10–20                                                          | 8–12                                                     | 4–6                                         | 6–12                       | 3–5                                     | 6–12                       | 4–8                   | 3–5                 | 15–25                  | 10–15                  | 15–25                  | 15–25                  | 8–12                   | 10–20                  |
| B) m/min        | 20–40                                                          | 15–25                                                    | 12–18                                       | 8–15                       | 4–10                                    | 8–20                       | 8–15                  | 5–10                | 40–60                  | 30–40                  | 40–60                  | 40–60                  | 15–25                  | 20–30                  |
| Tap size        | A) rpm for HSS-E uncoated taps<br>B) rpm for HSS-E coated taps |                                                          |                                             |                            |                                         |                            |                       |                     |                        |                        |                        |                        |                        |                        |
| M2<br>(#2)      | 1600–3200<br>3200–6350                                         | 1250–1900<br>2400–4000                                   | 640–800<br>1900–2850                        | 800–1900<br>1250–2400      | 480–800<br>640–1600                     | 800–1900<br>1250–3200      | 640–1250<br>1250–2400 | 480–800<br>800–1600 | 2400–4000<br>6350–9550 | 1600–2400<br>4750–6350 | 2400–4000<br>6350–9550 | 2400–4000<br>6350–9550 | 1250–1900<br>2400–4000 | 1600–3200<br>3200–4750 |
| M3<br>(#5)      | 1050–2100<br>2100–4250                                         | 850–1250<br>1600–2650                                    | 420–530<br>1250–1900                        | 530–1250<br>850–1600       | 320–530<br>420–1050                     | 530–1250<br>850–2100       | 420–850<br>850–1600   | 320–530<br>530–1050 | 1600–2650<br>4250–6350 | 1050–1600<br>3200–4250 | 1600–2650<br>4250–6350 | 1600–2650<br>4250–6350 | 850–1250<br>1600–2650  | 1050–2100<br>2100–3200 |
| M4<br>(#8)      | 800–1600<br>1600–3200                                          | 640–950<br>1200–2000                                     | 320–400<br>950–1450                         | 400–950<br>640–1200        | 240–400<br>320–800                      | 400–950<br>640–1600        | 320–640<br>640–1200   | 240–400<br>400–800  | 1200–2000<br>3200–4750 | 800–1200<br>2400–3200  | 1200–2000<br>3200–4750 | 1200–2000<br>3200–4750 | 640–950<br>1200–2000   | 800–1600<br>1600–2400  |
| M5<br>(#10)     | 640–1250<br>1250–2550                                          | 510–760<br>950–1600                                      | 250–320<br>760–1150                         | 320–760<br>510–950         | 190–320<br>250–640                      | 320–760<br>510–1250        | 250–510<br>510–950    | 190–320<br>320–640  | 950–1600<br>2550–3800  | 640–950<br>1900–2550   | 950–1600<br>2550–3800  | 950–1600<br>2550–3800  | 510–760<br>950–1600    | 640–1250<br>1250–1900  |
| M6<br>(1/4)     | 530–1050<br>1050–2100                                          | 420–640<br>800–1350                                      | 210–270<br>640–950                          | 270–640<br>420–800         | 160–270<br>210–530                      | 270–640<br>420–1050        | 210–420<br>420–800    | 160–270<br>270–530  | 800–1350<br>2100–3200  | 530–800<br>1600–2100   | 800–1350<br>2100–3200  | 800–1350<br>2100–3200  | 420–640<br>800–1350    | 530–1050<br>1050–1600  |
| M7              | 450–910<br>910–1800                                            | 360–550<br>680–1150                                      | 180–230<br>550–820                          | 230–550<br>360–680         | 140–230<br>180–450                      | 230–550<br>360–910         | 180–360<br>360–680    | 140–230<br>230–450  | 680–1150<br>1800–2750  | 450–1150<br>1350–1800  | 680–1150<br>1800–2750  | 680–680<br>1800–2750   | 360–550<br>680–1150    | 450–910<br>910–1350    |
| M8<br>(5/16)    | 400–800<br>800–1600                                            | 320–480<br>600–990                                       | 160–200<br>480–720                          | 200–480<br>320–600         | 120–200<br>160–400                      | 200–480<br>320–800         | 160–320<br>320–600    | 120–200<br>200–400  | 600–990<br>1600–2400   | 400–600<br>1200–1600   | 600–990<br>1600–2400   | 600–990<br>1600–2400   | 320–480<br>600–990     | 400–800<br>800–1200    |
| M9              | 350–710<br>710–1400                                            | 280–420<br>530–880                                       | 140–180<br>420–640                          | 180–420<br>280–530         | 110–180<br>140–350                      | 180–420<br>280–710         | 140–280<br>280–530    | 110–180<br>180–350  | 530–880<br>1400–2100   | 350–530<br>1050–1400   | 530–880<br>1400–2100   | 530–880<br>1400–2100   | 280–420<br>530–880     | 350–710<br>710–1050    |
| M10<br>(3/8)    | 320–640<br>640–1250                                            | 250–380<br>480–800                                       | 130–160<br>380–570                          | 160–380<br>250–480         | 100–160<br>130–320                      | 160–380<br>250–640         | 130–250<br>250–480    | 100–160<br>160–320  | 480–800<br>1250–1900   | 320–480<br>950–1250    | 480–800<br>1250–1900   | 480–800<br>1250–1900   | 250–380<br>480–800     | 320–640<br>640–950     |
| M12<br>(1/2)    | 270–530<br>530–1050                                            | 210–320<br>400–660                                       | 110–130<br>320–480                          | 130–320<br>210–400         | 80–130<br>110–270                       | 130–320<br>210–530         | 110–210<br>210–400    | 80–130<br>130–270   | 400–660<br>1050–1600   | 270–400<br>800–1050    | 400–660<br>1050–1600   | 400–660<br>1050–1600   | 210–320<br>400–660     | 270–530<br>530–800     |
| M14<br>(9/16)   | 230–450<br>450–910                                             | 180–270<br>340–570                                       | 90–110<br>270–410                           | 110–270<br>180–340         | 70–110<br>90–230                        | 110–270<br>180–450         | 90–180<br>180–340     | 70–110<br>110–230   | 340–570<br>910–1350    | 230–340<br>680–910     | 340–570<br>910–1350    | 340–570<br>910–1350    | 180–270<br>340–570     | 230–450<br>450–680     |
| M16<br>(5/8)    | 200–400<br>400–800                                             | 160–240<br>300–500                                       | 80–100<br>240–360                           | 100–240<br>160–300         | 60–100<br>80–200                        | 100–240<br>160–400         | 80–160<br>160–300     | 60–100<br>100–200   | 300–500<br>800–1200    | 200–300<br>600–800     | 300–500<br>800–1200    | 300–500<br>800–1200    | 160–240<br>300–500     | 200–400<br>400–600     |
| M18<br>(11/16)  | 180–350<br>350–710                                             | 140–210<br>270–440                                       | 70–90<br>210–320                            | 90–210<br>140–270          | 50–90<br>70–180                         | 90–210<br>140–350          | 70–140<br>140–270     | 50–90<br>90–180     | 270–440<br>710–1050    | 180–270<br>530–710     | 270–440<br>710–1050    | 270–440<br>710–1050    | 140–210<br>270–440     | 180–350<br>350–530     |
| M20<br>(3/4)    | 160–320<br>320–640                                             | 130–190<br>240–400                                       | 60–80<br>190–290                            | 80–190<br>130–240          | 50–80<br>60–160                         | 80–190<br>130–320          | 60–130<br>130–240     | 50–80<br>80–160     | 240–400<br>640–950     | 160–240<br>480–640     | 240–400<br>640–950     | 240–400<br>640–950     | 130–190<br>240–400     | 160–320<br>320–480     |
| M22<br>(7/8)    | 140–290<br>290–580                                             | 120–170<br>220–360                                       | 60–70<br>170–260                            | 70–170<br>120–220          | 40–70<br>60–140                         | 70–170<br>120–290          | 60–120<br>120–220     | 40–70<br>70–140     | 220–360<br>580–870     | 140–220<br>430–580     | 220–360<br>580–870     | 220–360<br>580–870     | 120–170<br>220–360     | 140–290<br>290–430     |
| M24<br>(15/16)  | 130–270<br>270–530                                             | 110–160<br>200–330                                       | 50–70<br>160–240                            | 70–160<br>110–200          | 40–70<br>50–130                         | 70–160<br>110–270          | 50–110<br>110–200     | 40–70<br>70–130     | 200–330<br>530–800     | 130–200<br>400–530     | 200–330<br>530–800     | 200–330<br>530–800     | 110–160<br>200–330     | 130–270<br>270–400     |
| M25<br>(1)      | 130–250<br>250–510                                             | 100–150<br>190–320                                       | 50–60<br>150–230                            | 60–150<br>100–190          | 40–60<br>50–130                         | 60–150<br>100–250          | 50–100<br>100–190     | 40–60<br>60–130     | 190–320<br>510–760     | 130–190<br>380–510     | 190–320<br>510–760     | 190–320<br>510–760     | 100–150<br>190–320     | 130–250<br>250–380     |
| M26             | 120–240<br>240–490                                             | 100–150<br>180–310                                       | 50–60<br>150–220                            | 60–150<br>100–180          | 40–60<br>50–120                         | 60–150<br>100–240          | 50–100<br>100–180     | 40–60<br>60–120     | 180–310<br>490–730     | 120–180<br>370–490     | 180–310<br>490–730     | 180–310<br>490–730     | 100–150<br>180–310     | 120–240<br>240–370     |
| M27<br>(1 1/16) | 120–240<br>240–470                                             | 90–140<br>180–290                                        | 50–60<br>140–210                            | 60–140<br>90–180           | 40–60<br>50–120                         | 60–140<br>90–240           | 50–90<br>90–180       | 40–60<br>60–120     | 180–290<br>470–710     | 120–180<br>350–470     | 180–290<br>470–710     | 180–290<br>470–710     | 90–140<br>180–290      | 120–240<br>240–350     |
| M28<br>(1 1/8)  | 110–230<br>230–450                                             | 90–140<br>170–280                                        | 50–60<br>140–200                            | 60–140<br>90–170           | 30–60<br>50–110                         | 60–140<br>90–230           | 50–90<br>90–170       | 30–60<br>60–110     | 170–280<br>450–680     | 110–170<br>340–450     | 170–280<br>450–680     | 170–280<br>450–680     | 90–140<br>170–280      | 110–230<br>230–340     |
| M30<br>(1 3/16) | 110–210<br>210–420                                             | 80–130<br>160–270                                        | 40–50<br>130–190                            | 50–130<br>80–160           | 30–50<br>40–110                         | 50–130<br>80–210           | 40–80<br>80–160       | 30–50<br>50–110     | 160–270<br>420–640     | 110–160<br>320–420     | 160–270<br>420–640     | 160–270<br>420–640     | 80–130<br>160–270      | 110–210<br>210–320     |
| M32<br>(1 1/4)  | 100–200<br>200–400                                             | 80–120<br>150–250                                        | 40–50<br>120–180                            | 50–120<br>80–150           | 30–50<br>40–100                         | 50–120<br>80–200           | 40–80<br>80–150       | 30–50<br>50–100     | 150–250<br>400–600     | 100–150<br>300–400     | 150–250<br>400–600     | 150–250<br>400–600     | 80–120<br>150–250      | 100–200<br>200–300     |
| M33<br>(1 5/16) | 100–190<br>190–390                                             | 80–120<br>140–240                                        | 40–50<br>120–170                            | 50–120<br>80–140           | 30–50<br>40–100                         | 50–120<br>80–190           | 40–80<br>80–140       | 30–50<br>50–100     | 140–240<br>390–580     | 100–140<br>290–390     | 140–240<br>390–580     | 140–240<br>390–580     | 80–120<br>140–240      | 100–190<br>190–290     |
| M36<br>(1 7/16) | 90–180<br>180–350                                              | 70–110<br>130–220                                        | 40–40<br>110–160                            | 40–110<br>70–130           | 30–40<br>40–90                          | 40–110<br>70–180           | 40–70<br>70–130       | 30–40<br>40–90      | 130–220<br>350–530     | 90–130<br>270–350      | 130–220<br>350–530     | 130–220<br>350–530     | 70–110<br>130–220      | 90–180<br>180–270      |
| M39<br>(1 5/8)  | 80–160<br>160–330                                              | 70–100<br>120–200                                        | 30–40<br>100–150                            | 40–100<br>70–120           | 20–40<br>30–80                          | 40–100<br>70–160           | 30–70<br>70–120       | 20–40<br>40–80      | 120–200<br>330–490     | 80–120<br>240–330      | 120–200<br>330–490     | 120–200<br>330–490     | 70–100<br>120–200      | 80–160<br>160–240      |
| M40             | 80–160<br>160–320                                              | 60–100<br>120–200                                        | 30–40<br>100–140                            | 40–100<br>60–120           | 20–40<br>30–80                          | 40–100<br>60–160           | 30–60<br>60–120       | 20–40<br>40–80      | 120–200<br>320–480     | 80–120<br>240–320      | 120–200<br>320–480     | 120–200<br>320–480     | 60–100<br>120–200      | 80–160<br>160–240      |
| M42<br>(1 3/4)  | 80–150<br>150–300                                              | 60–90<br>110–190                                         | 30–40<br>90–140                             | 40–90<br>60–110            | 20–40<br>30–80                          | 40–90<br>60–150            | 30–60<br>60–110       | 20–40<br>40–80      | 110–190<br>300–450     | 80–110<br>230–300      | 110–190<br>300–450     | 110–190<br>300–450     | 60–90<br>110–190       | 80–150<br>150–230      |

Calculation:

Example: M8 with 25 m/min

Tapping speed  
RPM  
Diameter

vc = m/min  
n = U/min  
d = mm

$$n = \frac{vc \times 1000}{d \times \pi}$$

$$n = \frac{25 \times 1000}{8 \times 3.14} = 995 \text{ U/min (RPM)}$$

- The speed given are guide values acc. to general information and can vary depending on tap manufacturer.
- For optimal production and correct speed, we suggest following the specifications of the tap manufacturer.
- Furthermore, the maximum speed of the tapping attachment must not be exceeded.

|       |       |                           |                           |       |       |        |        |
|-------|-------|---------------------------|---------------------------|-------|-------|--------|--------|
| RDT15 | RDT25 | RDT50<br>RCT50<br>RCTXT50 | RDT50<br>RCT50<br>RCTXT50 | RCT85 | RCT85 | RCT100 | RCT150 |
|       |       | sintered gears            | cut gears                 |       |       |        |        |

|                 | Low Carbon Steel,<br>Medium Carbon<br>Steel                    | High Carbon Steel,<br>High Strength Steel,<br>Tool Steel | High Strength Steel,<br>Tool Steel Hardened | Stainless 303,<br>304, 316 | Stainless<br>410, 430, 17-4<br>Hardened | Stainless 17-4<br>Annealed | Titanium Alloys | Nickel Base Alloys | Aluminium Alloys         | Aluminium<br>Die Cast   | Magnesium                | Brass, Bronze            | Copper                 | Cast Iron              |
|-----------------|----------------------------------------------------------------|----------------------------------------------------------|---------------------------------------------|----------------------------|-----------------------------------------|----------------------------|-----------------|--------------------|--------------------------|-------------------------|--------------------------|--------------------------|------------------------|------------------------|
| A) m/min        | 50-70                                                          | 20-30                                                    | 15-20                                       | 10-15                      | 6-10                                    | 10-15                      | 12-15           | 6-12               | 50-70                    | 40-50                   | 50-70                    | 30-70                    | 20-30                  | 25-40                  |
| B) m/min        | —                                                              | 40-60                                                    | 30-50                                       | —                          | —                                       | —                          | —               | —                  | 60-80                    | 50-70                   | 40-80                    | 60-80                    | 30-50                  | 30-50                  |
| Tap size        | A) rpm for HSS-E uncoated taps<br>B) rpm for HSS-E coated taps |                                                          |                                             |                            |                                         |                            |                 |                    |                          |                         |                          |                          |                        |                        |
| M2<br>(#2)      | 7950-11150<br>640-800                                          | 3200-4750<br>6350-9550                                   | 2400-3200<br>4750-7950                      | 1600-2400<br>640-800       | 800-1600<br>640-800                     | 1600-2400<br>640-800       | 1900-2400<br>—  | 800-1900<br>—      | 7950-11150<br>9550-12750 | 6350-7950<br>7950-11150 | 7950-11150<br>6350-12750 | 4750-11150<br>9550-12750 | 3200-4750<br>4750-7950 | 4000-6350<br>4750-7950 |
| M3<br>(#5)      | 5300-7450<br>420-530                                           | 2100-3200<br>4250-6350                                   | 1600-2100<br>3200-5300                      | 1050-1600<br>420-530       | 530-1050<br>420-530                     | 1050-1600<br>420-530       | 1250-1600<br>—  | 530-1250<br>—      | 5300-7450<br>6350-8500   | 4250-5300<br>5300-7450  | 5300-7450<br>4250-8500   | 3200-7450<br>6350-8500   | 2100-3200<br>3200-5300 | 2650-4250<br>3200-5300 |
| M4<br>(#8)      | 4000-5550<br>320-600                                           | 1600-2400<br>3200-4750                                   | 1200-1600<br>2400-4000                      | 800-1200<br>320-400        | 400-800<br>320-400                      | 800-1200<br>320-400        | 950-1200<br>—   | 400-950<br>—       | 4000-5550<br>4750-6350   | 3200-4000<br>4000-5550  | 4000-5550<br>3200-6350   | 2400-5550<br>4750-6350   | 1600-2400<br>2400-4000 | 2000-3200<br>2400-4000 |
| M5<br>(#10)     | 3200-4450<br>250-320                                           | 1250-1900<br>2550-3800                                   | 950-1250<br>1900-3200                       | 640-950<br>250-320         | 320-640<br>250-320                      | 640-950<br>250-320         | 760-950<br>—    | 320-760<br>—       | 3200-4450<br>3800-5100   | 2550-3200<br>3200-4450  | 3200-4450<br>2550-5100   | 1900-4450<br>3800-5100   | 1250-1900<br>1900-3200 | 1600-2550<br>1900-3200 |
| M6<br>(1/4)     | 2650-3700<br>210-270                                           | 1050-1600<br>2100-3200                                   | 800-1050<br>1600-2650                       | 530-800<br>210-270         | 270-530<br>210-270                      | 530-800<br>210-270         | 640-800<br>—    | 270-640<br>—       | 2650-3700<br>3200-4250   | 2100-2650<br>2650-3700  | 2650-3700<br>2100-4250   | 1600-3700<br>3200-4250   | 1050-1600<br>1600-2650 | 1350-2100<br>1600-2650 |
| M7              | 2250-3200<br>180-230                                           | 910-1350<br>1800-2750                                    | 680-910<br>1350-2250                        | 450-680<br>180-230         | 230-450<br>180-230                      | 450-680<br>180-230         | 550-680<br>—    | 230-550<br>—       | 2250-3200<br>2750-3650   | 1800-2250<br>2250-3200  | 2250-3200<br>1800-3650   | 1350-3200<br>2750-3650   | 910-1350<br>1350-2250  | 1150-1800<br>1350-2250 |
| M8<br>(5/16)    | 2000-2800<br>160-200                                           | 800-1200<br>1600-2400                                    | 600-800<br>1200-2000                        | 400-600<br>160-200         | 200-400<br>160-200                      | 400-600<br>160-200         | 480-600<br>—    | 200-480<br>—       | 2000-2800<br>2400-3200   | 1600-2000<br>2000-2800  | 2000-2800<br>1600-3200   | 1200-2800<br>2400-3200   | 800-1200<br>1200-2000  | 990-1600<br>1200-2000  |
| M9              | 1750-2500<br>140-180                                           | 710-1050<br>1400-2100                                    | 530-710<br>1050-1750                        | 350-530<br>140-180         | 180-350<br>140-180                      | 350-530<br>140-180         | 420-530<br>—    | 180-420<br>—       | 1750-2500<br>2100-2850   | 1400-1750<br>1750-2500  | 1750-2500<br>1400-2850   | 1050-2500<br>2100-2850   | 710-1050<br>1050-1750  | 880-1400<br>1050-1750  |
| M10<br>(3/8)    | 1600-2250<br>130-160                                           | 640-950<br>1250-1900                                     | 480-640<br>950-1600                         | 320-480<br>130-160         | 160-320<br>130-160                      | 320-480<br>130-160         | 380-480<br>—    | 160-380<br>—       | 1600-2250<br>1900-2550   | 1250-1600<br>1600-2250  | 1600-2250<br>1250-2550   | 950-2250<br>1900-2550    | 640-950<br>950-1600    | 800-1250<br>950-1600   |
| M12<br>(1/2)    | 1350-1850<br>110-130                                           | 530-800<br>1050-1600                                     | 400-530<br>800-1350                         | 270-400<br>110-130         | 130-270<br>110-130                      | 270-400<br>110-130         | 320-400<br>—    | 130-320<br>—       | 1350-1850<br>1600-2100   | 1050-1350<br>1350-1850  | 1350-1850<br>1050-2100   | 800-1850<br>1600-2100    | 530-800<br>800-1350    | 660-1050<br>800-1350   |
| M14<br>(9/16)   | 1150-1600<br>90-110                                            | 450-680<br>910-1350                                      | 340-450<br>680-1150                         | 230-340<br>90-110          | 110-230<br>90-110                       | 230-340<br>90-110          | 270-340<br>—    | 110-270<br>—       | 1150-1600<br>1350-1800   | 910-1150<br>1150-1600   | 1150-1600<br>910-1800    | 680-1600<br>1350-1800    | 450-680<br>680-1150    | 570-910<br>680-1150    |
| M16<br>(5/8)    | 990-1400<br>80-100                                             | 400-600<br>800-1200                                      | 300-400<br>600-990                          | 200-300<br>80-100          | 100-200<br>80-100                       | 200-300<br>80-100          | 240-300<br>—    | 100-240<br>—       | 990-1400<br>1200-1600    | 800-990<br>990-1400     | 990-1400<br>800-1600     | 600-1400<br>1200-1600    | 400-600<br>600-990     | 500-800<br>600-990     |
| M18<br>(11/16)  | 880-1250<br>70-90                                              | 350-530<br>710-1050                                      | 270-350<br>530-880                          | 180-270<br>70-90           | 90-180<br>70-90                         | 180-270<br>70-90           | 210-270<br>—    | 90-210<br>—        | 880-1250<br>1050-1400    | 710-880<br>880-1250     | 880-1250<br>710-1400     | 530-1250<br>1050-1400    | 350-530<br>530-880     | 440-710<br>530-880     |
| M20<br>(3/4)    | 800-1100<br>60-80                                              | 320-480<br>640-950                                       | 240-320<br>480-800                          | 160-240<br>60-80           | 80-160<br>60-80                         | 160-240<br>60-80           | 190-240<br>—    | 80-190<br>—        | 800-1100<br>950-1250     | 640-800<br>800-1100     | 800-1100<br>640-1250     | 480-1100<br>950-1250     | 320-480<br>480-800     | 400-640<br>480-800     |
| M22<br>(7/8)    | 720-1000<br>60-70                                              | 290-430<br>580-870                                       | 220-290<br>430-720                          | 140-220<br>60-70           | 70-140<br>60-70                         | 140-220<br>60-70           | 170-220<br>—    | 70-170<br>—        | 720-1000<br>870-1150     | 580-720<br>720-1000     | 720-1000<br>580-1150     | 430-1000<br>870-1150     | 290-430<br>430-720     | 360-580<br>430-720     |
| M24<br>(15/16)  | 660-930<br>50-70                                               | 270-400<br>530-800                                       | 200-270<br>400-660                          | 130-200<br>50-70           | 70-130<br>50-70                         | 130-200<br>50-70           | 160-200<br>—    | 70-160<br>—        | 660-930<br>800-1050      | 530-660<br>660-930      | 660-930<br>530-1050      | 400-930<br>800-1050      | 270-400<br>400-660     | 330-530<br>400-660     |
| M25<br>(1)      | 640-890<br>50-60                                               | 250-380<br>510-760                                       | 190-250<br>380-640                          | 130-190<br>50-60           | 60-130<br>50-60                         | 130-190<br>50-60           | 150-190<br>—    | 60-150<br>—        | 640-890<br>760-1000      | 510-640<br>640-890      | 640-890<br>510-1000      | 380-890<br>760-1000      | 250-380<br>380-640     | 320-510<br>380-640     |
| M26             | 610-860<br>50-60                                               | 240-370<br>490-730                                       | 180-240<br>370-610                          | 120-180<br>50-60           | 60-120<br>50-60                         | 120-180<br>50-60           | 150-180<br>—    | 60-150<br>—        | 610-860<br>730-980       | 490-610<br>610-860      | 610-860<br>490-980       | 370-860<br>730-980       | 240-370<br>370-610     | 310-490<br>370-610     |
| M27<br>(1 1/16) | 590-830<br>50-60                                               | 240-350<br>470-710                                       | 180-240<br>350-590                          | 120-180<br>50-60           | 60-120<br>50-60                         | 120-180<br>50-60           | 140-180<br>—    | 60-140<br>—        | 590-830<br>710-940       | 470-590<br>590-830      | 590-830<br>470-940       | 350-830<br>710-940       | 240-350<br>350-590     | 290-470<br>350-590     |
| M28<br>(1 1/8)  | 570-800<br>50-60                                               | 230-340<br>450-680                                       | 170-230<br>340-570                          | 110-170<br>50-60           | 60-110<br>50-60                         | 110-170<br>50-60           | 140-170<br>—    | 60-140<br>—        | 570-800<br>680-910       | 450-570<br>570-800      | 570-800<br>450-910       | 340-800<br>680-910       | 230-340<br>340-570     | 280-450<br>340-570     |
| M30<br>(1 3/16) | 530-740<br>40-50                                               | 210-320<br>420-640                                       | 160-210<br>320-530                          | 110-160<br>40-50           | 50-110<br>40-50                         | 110-160<br>40-50           | 130-160<br>—    | 50-130<br>—        | 530-740<br>640-850       | 420-530<br>530-740      | 530-740<br>420-850       | 320-740<br>640-850       | 210-320<br>320-530     | 270-420<br>320-530     |
| M32<br>(1 1/4)  | 500-700<br>40-50                                               | 200-300<br>400-600                                       | 150-200<br>300-500                          | 100-150<br>40-50           | 50-100<br>40-50                         | 100-150<br>40-50           | 120-150<br>—    | 50-120<br>—        | 500-700<br>600-800       | 400-500<br>500-700      | 500-700<br>400-800       | 300-700<br>600-800       | 200-300<br>300-500     | 250-400<br>300-500     |
| M33<br>(1 5/16) | 480-680<br>40-50                                               | 190-290<br>390-580                                       | 140-190<br>290-480                          | 100-140<br>40-50           | 50-100<br>40-50                         | 100-140<br>40-50           | 120-140<br>—    | 50-120<br>—        | 480-680<br>580-770       | 390-480<br>480-680      | 480-680<br>390-770       | 290-680<br>580-770       | 190-290<br>290-480     | 240-390<br>290-480     |
| M36<br>(1 7/16) | 440-620<br>40-40                                               | 180-270<br>350-530                                       | 130-180<br>270-440                          | 90-130<br>40-40            | 40-90<br>40-40                          | 90-130<br>40-40            | 110-130<br>—    | 40-110<br>—        | 440-620<br>530-710       | 350-440<br>440-620      | 440-620<br>350-710       | 270-620<br>530-710       | 180-270<br>270-440     | 220-350<br>270-440     |
| M39<br>(1 5/8)  | 410-570<br>30-40                                               | 160-240<br>330-490                                       | 120-160<br>240-410                          | 80-120<br>30-40            | 40-80<br>30-40                          | 80-120<br>30-40            | 100-120<br>—    | 40-100<br>—        | 410-570<br>490-650       | 330-410<br>410-570      | 410-570<br>330-650       | 240-570<br>490-650       | 160-240<br>240-410     | 200-330<br>240-410     |
| M40             | 400-560<br>30-40                                               | 160-240<br>320-480                                       | 120-160<br>240-400                          | 80-120<br>30-40            | 40-80<br>30-40                          | 80-120<br>30-40            | 100-120<br>—    | 40-100<br>—        | 400-560<br>480-640       | 320-400<br>400-560      | 400-560<br>320-640       | 240-560<br>480-640       | 160-240<br>240-400     | 200-320<br>240-400     |
| M42<br>(1 3/4)  | 380-530<br>30-40                                               | 150-230<br>300-450                                       | 110-150<br>230-380                          | 80-110<br>30-40            | 40-80<br>30-40                          | 80-110<br>30-40            | 90-110<br>—     | 40-90<br>—         | 380-530<br>450-610       | 300-380<br>380-530      | 380-530<br>300-610       | 230-530<br>450-610       | 150-230<br>230-380     | 190-300<br>230-380     |

Calculation: Example: M8 with 40 m/min

Tapping speed  
RPM  
Diametervc = m/min  
n = U/min  
d = mm

$$n = \frac{vc \times 1000}{d \times \pi} = \frac{40 \times 1000}{8 \times 3.14} = 1592 \text{ U/min (RPM)}$$

- The speed given are guide values acc. to general information and can vary depending on tap manufacturer.
- For optimal production and correct speed, we suggest following the specifications of the tap manufacturer.
- Furthermore, the maximum speed of the tapping attachment must not be exceeded.

|       |       |                           |                           |       |       |        |        |
|-------|-------|---------------------------|---------------------------|-------|-------|--------|--------|
| RDT15 | RDT25 | RDT50<br>RCT50<br>RCTXT50 | RDT50<br>RCT50<br>RCTXT50 | RCT85 | RCT85 | RCT100 | RCT150 |
|       |       | sintered gears            | cut gears                 |       |       |        |        |

Roll From Taps

www.tapmatic.com



|                 | Low Carbon Steel,<br>Medium Carbon<br>Steel                    | High Carbon Steel,<br>High Strength Steel,<br>Tool Steel | High Strength Steel,<br>Tool Steel Hardened | Stainless 303,<br>304, 316 | Stainless 17-4<br>Annealed | Titanium Alloys      | Nickel Base Alloys   | Aluminium Alloys        | Aluminium<br>Die Cast  | Copper                 |
|-----------------|----------------------------------------------------------------|----------------------------------------------------------|---------------------------------------------|----------------------------|----------------------------|----------------------|----------------------|-------------------------|------------------------|------------------------|
| A) m/min        | 30-40                                                          | 20-30                                                    | 15-25                                       | 10-15                      | 10-15                      | 5-15                 | 3-5                  | 30-60                   | 20-40                  | 15-25                  |
| B) m/min        | 40-60                                                          | 30-50                                                    | 25-40                                       | 12-20                      | —                          | —                    | 8-12                 | 50-70                   | 30-50                  | 25-50                  |
| Tap size        | A) rpm for HSS-E uncoated taps<br>B) rpm for HSS-E coated taps |                                                          |                                             |                            |                            |                      |                      |                         |                        |                        |
| M2<br>(#2)      | 4750-6350<br>6350-9550                                         | 3200-4750<br>4750-7950                                   | 2400-4000<br>4000-6350                      | 1600-2400<br>1900-3200     | 1600-2400<br>—             | 800-2400<br>320-1600 | 480-800<br>1250-1900 | 4750-9550<br>7950-11150 | 3200-6350<br>4750-7950 | 2400-4000<br>4000-7950 |
| M3<br>(#5)      | 3200-4250<br>4250-6350                                         | 2100-3200<br>3200-5300                                   | 1600-2650<br>2650-4250                      | 1050-1600<br>1250-2100     | 1050-1600<br>—             | 530-1600<br>210-1050 | 320-530<br>850-1250  | 3200-6350<br>5300-7450  | 2100-4250<br>3200-5300 | 1600-2650<br>2650-5300 |
| M4<br>(#8)      | 2400-3200<br>3200-4750                                         | 1600-2400<br>2400-4000                                   | 1200-2000<br>2000-3200                      | 800-1200<br>950-1600       | 800-1200<br>—              | 400-1200<br>160-800  | 240-400<br>640-950   | 2400-4750<br>4000-5550  | 1600-3200<br>2400-4000 | 1200-2000<br>2000-4000 |
| M5<br>(#10)     | 1900-2550<br>2550-3800                                         | 1250-1900<br>1900-3200                                   | 950-1600<br>1600-2550                       | 640-950<br>760-1250        | 640-950<br>—               | 320-950<br>130-640   | 190-320<br>510-760   | 1900-3800<br>3200-4450  | 1250-2550<br>1900-3200 | 950-1600<br>1600-3200  |
| M6<br>(1/4)     | 1600-2100<br>2100-3200                                         | 1050-1600<br>1600-2650                                   | 800-1350<br>1350-2100                       | 530-800<br>640-1050        | 530-800<br>—               | 270-800<br>110-530   | 160-270<br>420-640   | 1600-3200<br>2650-3700  | 1050-2100<br>1600-2650 | 800-1350<br>1350-2650  |
| M7              | 1350-1800<br>1800-2750                                         | 910-1350<br>1350-2250                                    | 680-1150<br>1150-1800                       | 450-680<br>550-910         | 450-680<br>—               | 230-680<br>90-450    | 140-230<br>360-550   | 1350-2750<br>2250-3200  | 910-1800<br>1350-2250  | 650-1150<br>1150-2250  |
| M8<br>(5/16)    | 1200-1600<br>1600-2400                                         | 800-1200<br>1200-2000                                    | 600-990<br>990-1600                         | 400-600<br>480-800         | 400-600<br>—               | 200-600<br>80-400    | 120-200<br>320-480   | 1200-2400<br>2000-2800  | 800-1600<br>1200-2000  | 600-990<br>990-2000    |
| M9              | 1050-1400<br>1400-2100                                         | 710-1050<br>1050-1750                                    | 530-880<br>880-1400                         | 350-530<br>420-710         | 350-530<br>—               | 180-530<br>70-350    | 110-180<br>280-420   | 1050-2100<br>1750-2500  | 710-1400<br>1050-1750  | 530-880<br>880-1750    |
| M10<br>(3/8)    | 950-1250<br>1250-1900                                          | 640-950<br>950-1600                                      | 480-800<br>800-1250                         | 320-480<br>380-640         | 320-480<br>—               | 160-480<br>60-320    | 100-160<br>250-380   | 950-1900<br>1600-2250   | 640-1250<br>950-1600   | 480-800<br>800-1600    |
| M12<br>(1/2)    | 800-1050<br>1050-1600                                          | 530-800<br>800-1350                                      | 400-660<br>660-1050                         | 270-400<br>320-530         | 270-400<br>—               | 130-400<br>50-270    | 80-130<br>210-320    | 800-1600<br>1350-1850   | 530-1050<br>800-1350   | 400-660<br>660-1350    |
| M14<br>(9/16)   | 680-910<br>910-1350                                            | 450-680<br>680-1150                                      | 340-570<br>570-910                          | 230-340<br>270-450         | 230-340<br>—               | 110-340<br>50-230    | 70-110<br>180-270    | 680-1350<br>1150-1600   | 450-910<br>680-1150    | 340-570<br>570-1150    |
| M16<br>(5/8)    | 600-800<br>800-1200                                            | 400-600<br>600-990                                       | 300-500<br>500-800                          | 200-300<br>240-400         | 200-300<br>—               | 100-300<br>40-200    | 60-100<br>160-240    | 600-1200<br>990-1400    | 400-800<br>600-990     | 300-500<br>500-990     |
| M18<br>(11/16)  | 530-710<br>710-1050                                            | 350-530<br>530-880                                       | 270-440<br>440-710                          | 180-270<br>210-350         | 180-270<br>—               | 90-270<br>40-180     | 50-90<br>140-210     | 530-1050<br>880-1250    | 350-710<br>530-880     | 270-440<br>440-880     |
| M20<br>(3/4)    | 480-640<br>640-950                                             | 320-480<br>480-800                                       | 240-400<br>400-640                          | 160-240<br>190-320         | 160-240<br>—               | 80-240<br>30-160     | 50-80<br>130-190     | 480-950<br>800-1100     | 320-640<br>480-800     | 240-400<br>400-800     |
| M22<br>(7/8)    | 430-580<br>580-870                                             | 290-430<br>430-720                                       | 220-360<br>360-580                          | 140-220<br>170-290         | 140-220<br>—               | 70-220<br>30-140     | 40-70<br>120-170     | 430-870<br>720-1000     | 290-580<br>430-720     | 220-360<br>360-720     |
| M24<br>(15/16)  | 400-530<br>530-800                                             | 270-400<br>400-660                                       | 200-330<br>330-530                          | 130-200<br>160-270         | 130-200<br>—               | 70-200<br>30-130     | 40-70<br>110-160     | 400-800<br>660-930      | 270-530<br>400-660     | 200-330<br>330-660     |
| M25<br>(1)      | 380-510<br>510-760                                             | 250-380<br>380-640                                       | 190-320<br>320-510                          | 130-190<br>150-250         | 130-190<br>—               | 60-190<br>30-130     | 40-60<br>100-150     | 380-760<br>640-890      | 250-510<br>380-640     | 190-320<br>320-640     |
| M26             | 370-490<br>490-730                                             | 240-370<br>370-610                                       | 180-310<br>310-490                          | 120-180<br>150-240         | 120-180<br>—               | 60-180<br>20-120     | 40-60<br>100-150     | 370-730<br>610-860      | 240-490<br>370-610     | 180-310<br>310-610     |
| M27<br>(1 1/16) | 350-470<br>470-710                                             | 240-350<br>350-590                                       | 180-290<br>290-470                          | 120-180<br>140-240         | 120-180<br>—               | 60-180<br>20-120     | 40-60<br>90-140      | 350-710<br>590-830      | 240-470<br>350-590     | 180-290<br>290-590     |
| M28<br>(1 1/8)  | 340-450<br>450-680                                             | 230-340<br>340-570                                       | 170-280<br>280-450                          | 110-170<br>140-230         | 110-170<br>—               | 60-170<br>20-110     | 30-60<br>90-140      | 340-680<br>570-800      | 230-450<br>340-570     | 170-280<br>280-570     |
| M30<br>(1 3/16) | 320-420<br>420-640                                             | 210-320<br>320-530                                       | 160-270<br>270-420                          | 110-160<br>130-210         | 110-160<br>—               | 50-160<br>20-110     | 30-50<br>80-130      | 320-640<br>530-740      | 210-420<br>320-530     | 160-270<br>270-530     |
| M32<br>(1 1/4)  | 300-400<br>400-600                                             | 200-300<br>300-500                                       | 150-250<br>250-400                          | 100-150<br>120-200         | 100-150<br>—               | 50-150<br>20-100     | 30-50<br>80-120      | 300-600<br>500-700      | 200-400<br>300-500     | 150-250<br>250-500     |
| M33<br>(1 5/16) | 290-390<br>390-580                                             | 190-290<br>290-480                                       | 140-240<br>240-390                          | 100-140<br>120-190         | 100-140<br>—               | 50-140<br>20-100     | 30-50<br>80-120      | 290-580<br>480-680      | 190-390<br>290-480     | 140-240<br>240-480     |

Calculation:

Example: M8 with 30 m/min

Tapping speed  
RPM  
Diameter

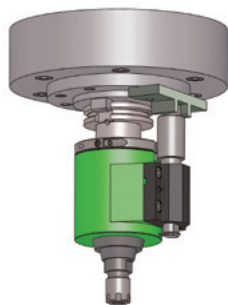
vc = m/min  
n = U/min  
d = mm

$$n = \frac{vc \times 1000}{d \times \pi}$$

$$n = \frac{30 \times 1000}{8 \times 3.14} = 1194 \text{ U/min (RPM)}$$

- The speed given are guide values acc. to general information and can vary depending on tap manufacturer.
- For optimal production and correct speed, we suggest following the specifications of the tap manufacturer.
- Furthermore, the maximum speed of the tapping attachment must not be exceeded.

|       |       |                           |                           |       |       |        |        |
|-------|-------|---------------------------|---------------------------|-------|-------|--------|--------|
| RDT15 | RDT25 | RDT50<br>RCT50<br>RCTXT50 | RDT50<br>RCT50<br>RCTXT50 | RCT85 | RCT85 | RCT100 | RCT150 |
|       |       | sintered gears            | cut gears                 |       |       |        |        |



## Tapmatic can supply a tapping attachment ready to fit your machining center

RDT and RCT tapping attachments eliminate the need for the machine spindle to reverse by automatically reversing the taps rotation when the machine retracts. For the automatic reversal to function a stop arm is needed to prevent the housing of the tapping attachment from rotating. Our stop arm locking mechanism allows the tool to easily make automatic tool changes.

## Tapmatic maintains a large data base of machining center installations

Please simply let us know the machine manufacturer, make and model and we may already have the installation information available to provide a tool ready to run on your machine.

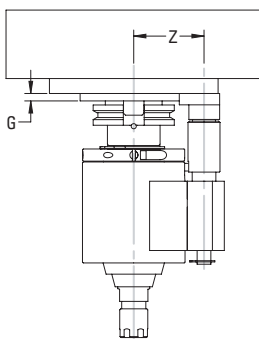
### My machine already has a stop block

If your machine already has an anti-rotation stop block installed, please let us know the dimensions shown in the drawing below. We can prepare a tool to go with your existing stop block.

### My machine does not have a stop block

If your machine does not have a stop block already installed, we would be pleased to prepare one for you. Please simply fill in the form on the back cover or download it from our homepage and forward us the information. We will be pleased to submit an offer to you.

## Preferred Installation



Gage Line to Mounting Surface

G =

Center Distance

(commonly 55, 65, or 80)

Z =

Diameter of Bore or

Width of Slot in Stop Block

D =

Depth of Bore or Slot in Stop Block

E =

Total Height of Stop Block

F =

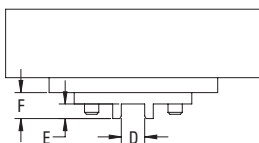
Machine Spindle Taper

(SK, BT, CAT, HSK... )

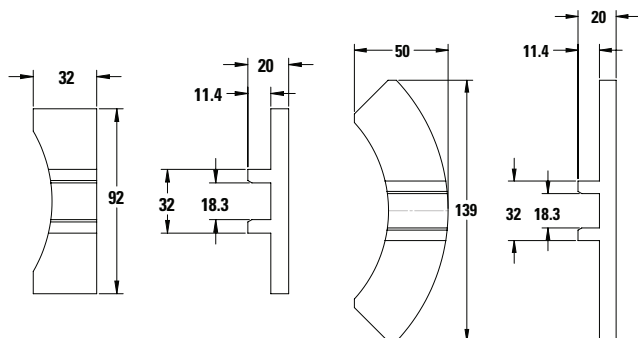
Shank =

Machine Manufacturer and

Model =



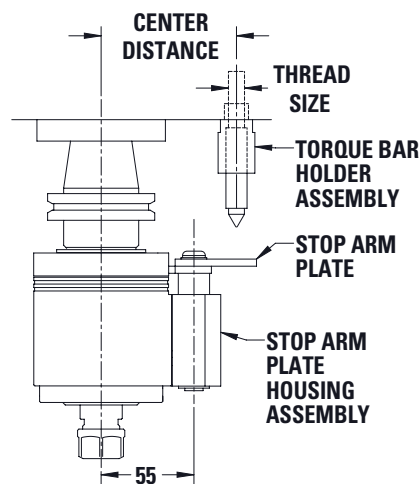
**Standard stop blocks are available if you would like to design your own installation.** These blank stop blocks can be modified to fit the bolt pattern of your machine.



Order code.  
36007 Standard Block

Order code  
36010 Standard Block

## Alternative installation



### Stop arm plate housing assembly

| Order code | For Model    |
|------------|--------------|
| 392552     | RDT15, RDT25 |
| 395052     | RDT50        |

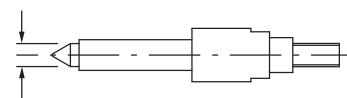
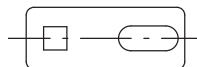
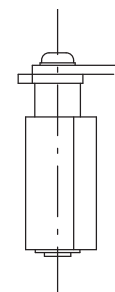
### Stop arm plate

| Order code | Center Distance |
|------------|-----------------|
| 723420     | 53-69           |
| 723421     | 68-77           |
| 723422     | 74-88           |
| 723423     | 86-100          |

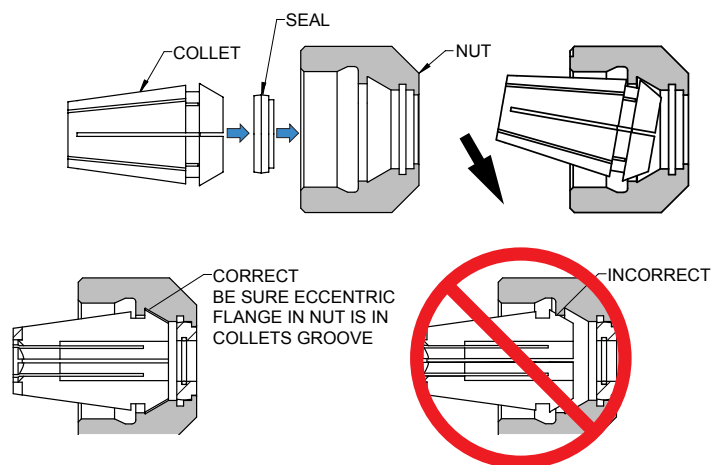
### Torque bar holder assemblies

For the use with straight stop arm. Torque bar installation must be stronger than the largest tap.

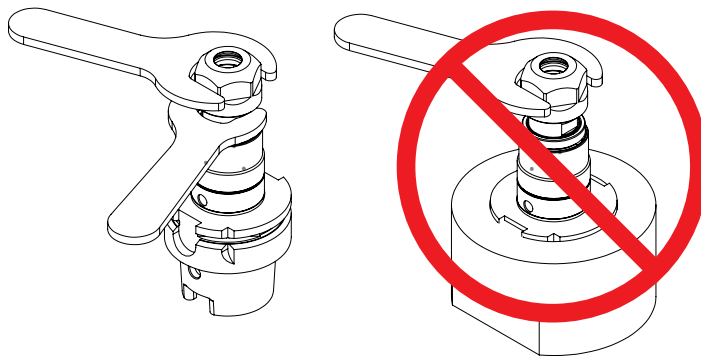
| Order code | Bolt size | Order code | Bolt size |
|------------|-----------|------------|-----------|
| 69383A     | M6        | 69389A     | 5/16"-18  |
| 69384A     | M8        | 69390A     | 5/16"-24  |
| 69385A     | M10       | 69391A     | 3/8"-16   |
| 69386A     | M12       | 69392A     | 3/8"-24   |
| 69387A     | 1/4"-20   | 69393A     | 1/2"-13   |
| 69388A     | 1/4"-28   | 69394A     | 1/2"-20   |



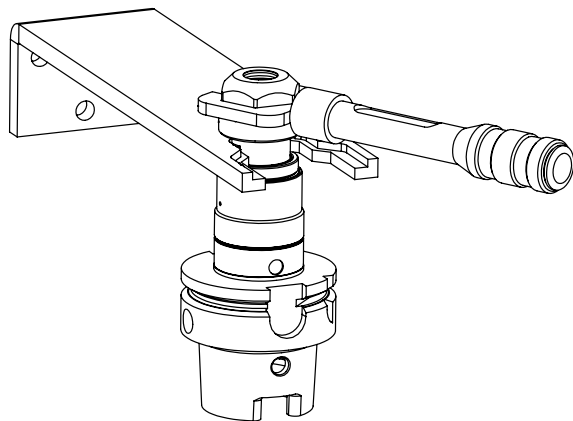
## Installing Collet in Nut



## Tightening



## Using a Torque Wrench

Recommended clamping torque  
in Nm for collets

GB Tap Collets (With Square) should be used whenever possible

| Type      | Shank Ø                    | GB Collets<br>(With Square) | Collets<br>(Without Square) |
|-----------|----------------------------|-----------------------------|-----------------------------|
| ER 8      | 1.0 - 5.0 (.039 - .196")   | -                           | 6                           |
| ER 11     | 1.0 - 2.9 (.039 - .098)    | 8                           | 8                           |
| Hi-Q      | 3.0 - 7.0 (.118 - .256")   | 16                          | 24                          |
| ER 16     | 4.0 - 4.5 (.157 - .177")   | 40                          | Not Recommended             |
| Hi-Q/ER C | 5.0 - 10.0 (.197 - .394")  | 44                          | Not Recommended             |
| ER 20     | 1.5 - 6.5 (.059 - .256")   | 32                          | Not Recommended             |
| Hi-Q/ER C | 7.0 - 13.0 (.276 - .512")  | 35                          | Not Recommended             |
| ER 25     | 5.0 - 7.5 (.196 - .295")   | 80                          | Not Recommended             |
| Hi-Q/ER C | 8.0 - 17.0 (.315 - .669")  | 80                          | Not Recommended             |
| ER 32     | 8.0 - 22.0 (.315 - .787")  | 136                         | Not Recommended             |
| Hi-Q/ER C |                            |                             |                             |
| ER 40     | 6.0 - 26.0 (.236 - 1.023") | 176                         | Not Recommended             |
| Hi-Q/ER C |                            |                             |                             |
| ER 50     | 6.0 - 36.0 (.236 - 1.417") | 300                         | See Note 2                  |
| Hi-Q/ER C |                            |                             |                             |

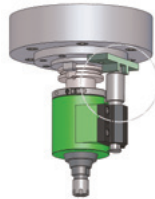
Note 1: Maximum torque must not be more than 25% higher than above values

Note 2: For large taps with 36mm shank, a collet without square is used. There is a 29mm socket inside holder

**WARNING**

**To Avoid Serious Injury And Ensure Best Results For Your Tapping Operation, Please Read Carefully All Operator And Safety Instructions Provided For This Tapping Unit as well as all other safety instructions that are applicable, especially those for your machine tool.**

- **1. Proper clothing:** The rotating spindle of a machine tool can snag loose fitting clothing, jewelry or long hair. Never wear jewelry, long sleeves, neckties, gloves or anything else that could become caught when operating a machine tool. Long hair must be restrained or netted to prevent it from becoming entangled in rotating spindle.
- **2. Proper eye protection:** Always wear safety glasses with side shields to protect your eyes from flying particles.
- **3. Proper work piece fixation:** Never hold the work piece or the vise it is held in, by hand. Never fasten it with wire or anything similar! The work piece must be clamped firmly to the table of the machine so that it cannot move, rotate or lift.
- **4. On machining centers:** The same rule for stop arm and stop block installation applies «Always be sure that the installation is stronger than the largest tap.» Automatic tool changes should only be made on enclosed machines.
- **5. The tapping attachment housing, drive spindle and tap itself can become hot to the touch after operation. Use caution when removing the attachment from the machine or handling.**



- **6. Always be aware of the potential hazards of a machining operation:** Sometimes working with your machine can seem routine. You may find that you are no longer concentrating on the operation. A feeling of false security can lead to serious injury. Always be alert to the dangers of the machines with which you work. Always keep hands, body parts, clothing, jewelry and hair out of the areas of operation, when the machine spindle is rotating. Areas of operation include the immediate point of machining and all transmission components including the tapping attachment. Never bring your hand, other body parts or anything attached to your body into any of these areas until the machine spindle is completely stopped.

- **7. Be aware of any other applicable safety instructions/requirements.**

**Check List for good tapping**

1. Never use this unit before reading all safety instructions for this attachment as well as the machine it is to be used on.
2. Is tap sharp and of correct design for current job?
3. Is tap in proper alignment with drilled hole?
4. Is machine speed correct?
5. Is machine feed correct?
6. Is machine stop set properly so tap releases in neutral rather than bottoming in work piece or fixture?
7. Is drilled hole the correct size?
8. Is clearance between the drilled hole and tap sufficient at start position to allow the tap to clear the hole upon retraction?
9. Is the stop arm of the tapping attachment held rigidly against rotation. Stop Arm installation must be stronger than largest tap.
10. Is the proper cutting fluid or coolant being used for lubricating the tap?
11. If a bottom hole is being tapped is there sufficient chip clearance?
12. Is the correct Tapmatic model for the specific job requirement being used? (Capacity should be reduced by 25% for roll form taps.)

**TAPMATIC Warranty Policy**

Tapmatic Corporation warrants to original equipment manufacturers, distributors and industrial users of its products, that each new product manufactured or supplied by Tapmatic Corporation shall be free from defects in material and workmanship. Tapmatic Corporation's obligation under this warranty is limited to repairing any product which shall, within one year from the date of sale, be returned freight prepaid to Tapmatic Corporation, Post Falls, Idaho.

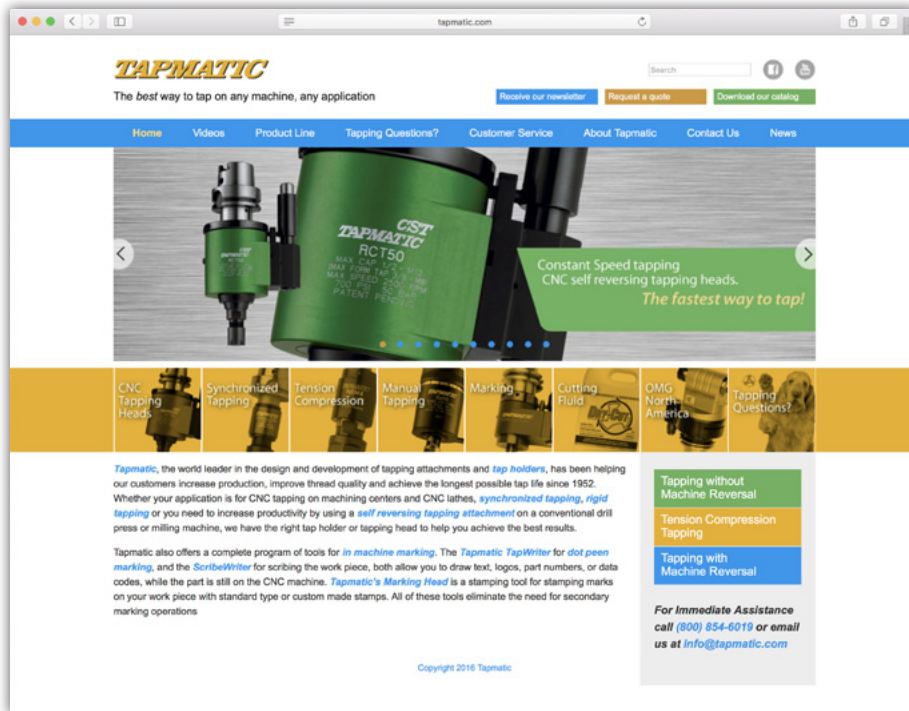
Any product returned for inspection for warranty repair consideration must be returned complete with chuck nut, back jaw and if the tool is a reversing unit, stop arm, as well as, complete information as to operating conditions, machine set up and application of cutting fluid.

The provision of this warranty shall not apply to any parts of a Tapmatic product subject to conditions, machine setup or application of cutting fluid or which has been repaired or altered if such repair or alteration, which in the judgement of Tapmatic Corporation, would adversely affect the performance of the product.

This warranty is in lieu of all other warranties, express or implied, including any implied warranty of merchantability or fitness for particular purpose. Tapmatic Corporation shall have no liability or responsibility on any claim of any kind, whether in contract, tort, or otherwise, for any loss or damage arising out of, connected with, or resulting from the manufacture, sale, delivery or use of any products sold hereunder in excess of the cost of repair as provided herein. In no event shall Tapmatic Corporation be liable for any special, incidental, or consequential damages.

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## 24 hours a day, information is only a mouse click away



Our websites are a giant database with many useful features like:

- product information with detailed downloads
- general technical information about tapping, which will help you get the best possible results
- video demonstration of our tools in action
- the newest applications and innovations
- contact information of your local Tapmatic representative

Visit [www.tapmatic.com](http://www.tapmatic.com)

Customer: \_\_\_\_\_ Date: \_\_\_\_\_

Contact person: \_\_\_\_\_ Department: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Postal Code: \_\_\_\_\_

Phone: \_\_\_\_\_ E-Mail: \_\_\_\_\_

Machine: \_\_\_\_\_

Model/Description: \_\_\_\_\_

☐ vertical☐ horizontal

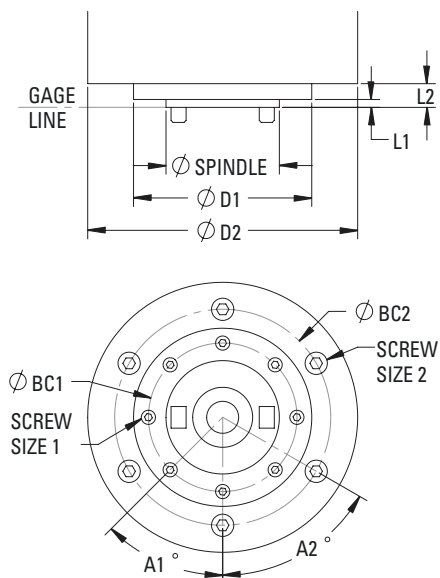
Shank type: \_\_\_\_\_ TAPMATIC Model: \_\_\_\_\_

Thread: ☐ forming ☐ cuttingQuantity: ☐ through hole ☐ bottom hole

Drill depth: \_\_\_\_\_ Tap Depth: \_\_\_\_\_ RPM: \_\_\_\_\_ Feed: \_\_\_\_\_

Material: \_\_\_\_\_ Internal coolant: ☐ Yes ☐ No

Remarks: \_\_\_\_\_



|                      |  |
|----------------------|--|
| Machine Manufacturer |  |
| Machine Model        |  |
| Machine Spindle Type |  |
| Ø-Spindle            |  |
| Ø D1                 |  |
| L1                   |  |
| Ø BC1                |  |
| Screw Size 1         |  |
| Angle A1°            |  |
| Only if Applicable   |  |
| Ø D2                 |  |
| L2                   |  |
| Ø BC2                |  |
| Screw Size 2         |  |
| Angle A2°            |  |



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