

# GUHRING

## THE BEST OF BOTH SYSTEMS

THE ADVANTAGES OF HYDRAULIC CHUCKS & SYNCHRO TAPPING CHUCKS IN ONE TOOL HOLDER

NOW ALSO AVAILABLE WITH ISO TAPER, MAS/BT AND STRAIGHT SHANK

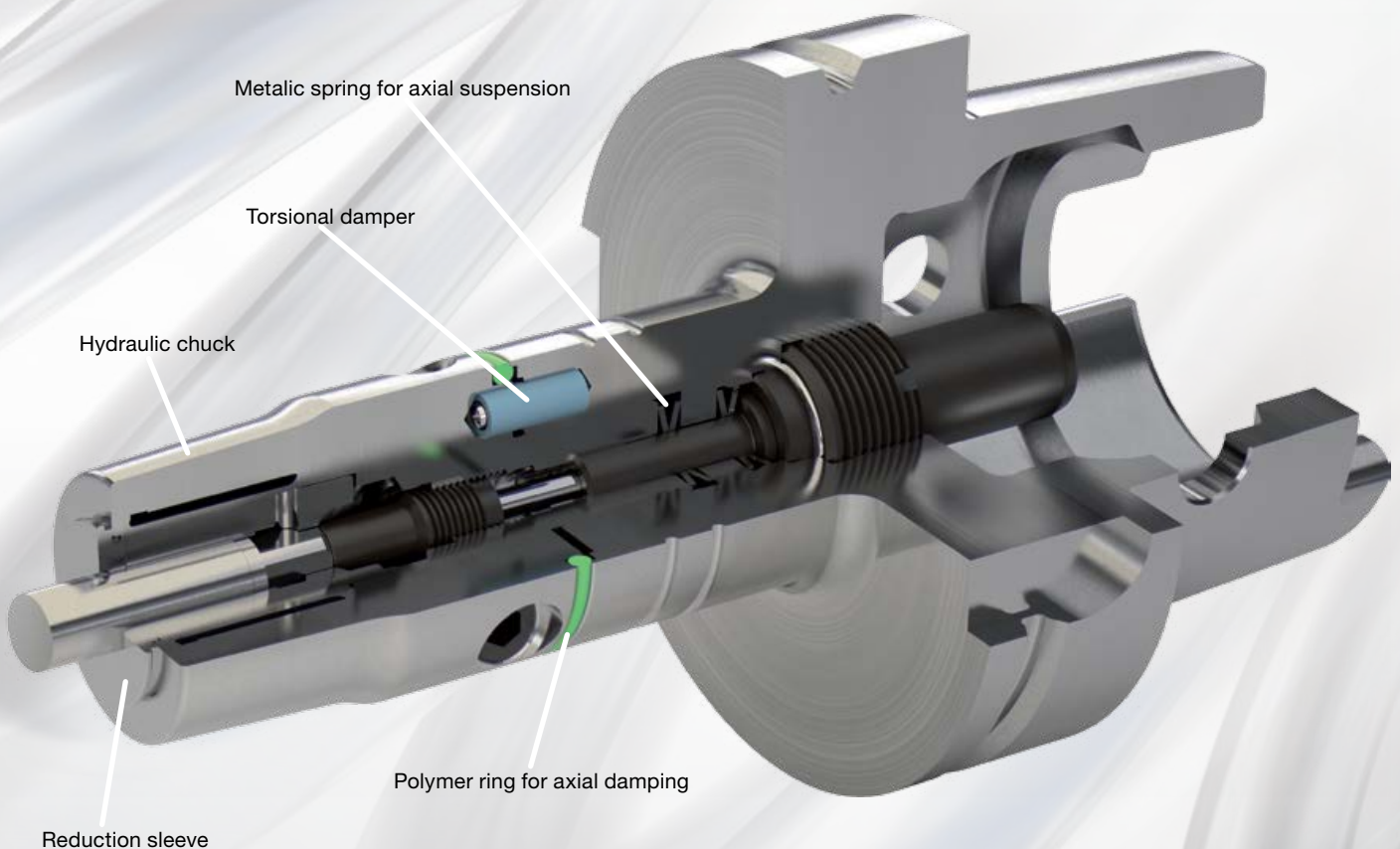


**GUHROSync** Synchro tapping chucks

GUHRING - YOUR WORLD-WIDE PARTNER

# GUHROSYN

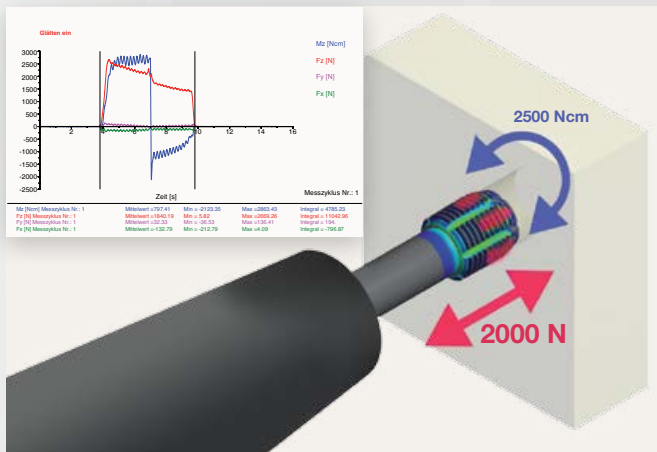
THE EASY WAY  
TO THE PERFECT THREAD



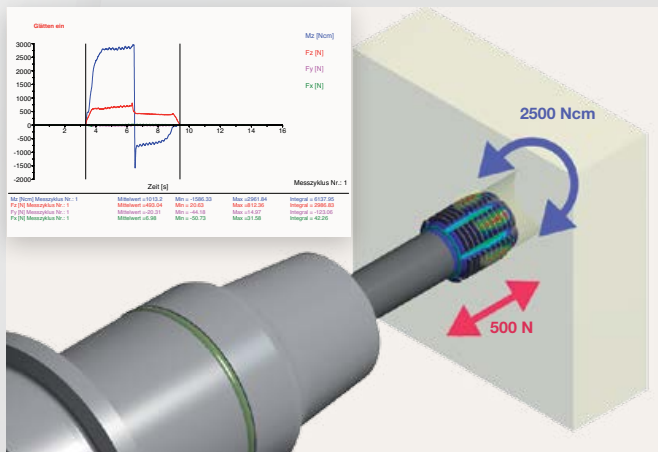
**Intelligent design:**

As well as the suspension and damping elements in the slender GUHROSyn chucks (for the reduction of axial and radial forces during the tapping process) there is also room for the delivery set for MQL or conventional cooling lubrication and the length setting screw.

The optimal combination of long-life metal spring and polymer damping elements considerably reduces axial and radial forces



Rigid chuck

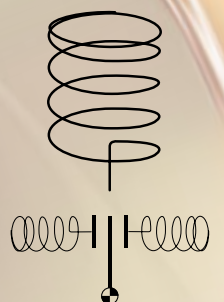


GUHROSsync

➔ **IMPROVED  
TOOL LIFE**

➔ **IMPROVED THREAD  
QUALITY**

➔ **GREATER PROCESS  
RELIABILITY**



**GUHRING**

**Made visible:**  
The spring symbol on the GUHROSsync displays the effect of axial and radial force.



*REDUCTION OF AXIAL  
AND RADIAL FORCES*



*COMPENSATES  
SYNCHRONISATION ERRORS*



*QUICK AND ACCURATE  
LENGTH SETTING OF TOOLS*



*MODULAR DESIGN  
FOR DIFFERENT STANDARD  
AND SPECIAL VERSIONS*



*LONGER  
TOOL LIFE*



*REDUCED  
CYCLE TIMES*



*IMPROVED  
THREAD QUALITY*













*GREATER PROCESS  
RELIABILITY*

## **GUHROSync synchro tapping chucks for internal cooling**

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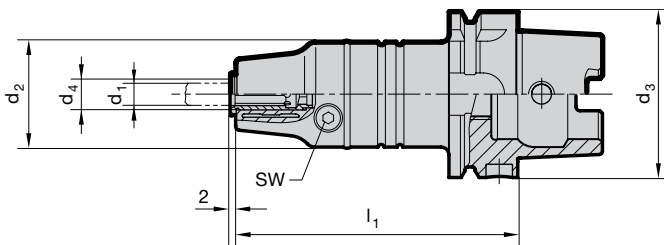
|  |  |  |   |   |
|--|--|--|---|---|
|  |  | <b>4949</b> Coolant delivery set HSK-A for conventional cooling                          | <b>4925</b> Pull studs for SK<br><b>4926</b>  | <b>4927</b> Pull studs for MAS/BT<br><b>4928</b>                                    |
| Shrink fit chucks  |  |  |   |   |
| <b>4736</b> HSK-A  | <b>4221</b> MAS-BT   |         |  |  |
| <b>4726</b> TSG 3000 HSK-A   | <b>4299</b> HSK-A  | Hydraulic synchro tapping chucks   | Hydraulic synchro tapping chucks  | Hydraulic synchro tapping chucks  |
| <b>4758</b> HSK-C  | <b>4267</b> HSK-C  | <b>4601</b> HSK-A  | <b>4576</b> ISO taper   | <b>4577</b> MAS-BT  |
| <b>4738</b> ISO taper  | <b>4213</b> ISO taper  |         |   |  |
| Hydraulic synchro tapping chucks with increased clamping force                     |  |  |   |   |
| <b>4525</b>  | Hydro-Ø 12 / Ø 20<br>Cylindrical hydraulic synchro tapping chucks Ø 20 with internal cooling |  |   |   |
|  |  |  |   |   |
|  |  | <b>4364</b> Setting screws "face" synchro tapping chucks, with conventional int. cooling |   |   |
|  |  |       |   |   |
|  |  | <b>4605</b> Reduction bush sealed  |   |   |
|  |  | <b>4606</b> GUHROJET reduction bush  |   |   |
|  |  |       |   |   |
|  |  | Threading tool:<br>shank diameter x square   |   |   |
|  |  |       |   |   |

## Product information

- compensates synchronisation errors
- guarantees high thread quality and optimal tool life
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap
- reduces an increase in axial forces during the cutting cycle to a minimum
- convenient hydraulic clamping using reduction bushes with active drive
- length-setting screw allows 3 mm readjustment
- suitable for internal cooling identifiable by black coloured ring
- coolant pressure up to max. 80 bar

## Scope of delivery

- incl. hexagon clamping key  
Guhring no. 4912
- incl. adjustment key for adjustment screws
- order setting screw "face"  
Guhring no. 4364 separately
- order reduction bushes  
Guhring no. 4605 or 4606 separately
- for conventional cooling order coolant delivery set Guhring no. 4949 separately



**GÜHROSync**

**Guhring no.** 4601

**Discount group** 114

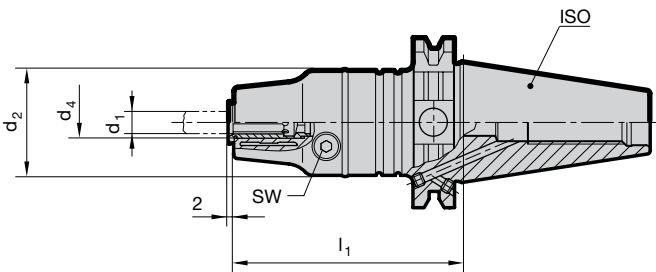
| HSK-A d <sub>3</sub> | d <sub>4</sub> mm | for shank Ø d <sub>1</sub> x VKT | for thread | d <sub>2</sub> mm | l <sub>1</sub> mm | tension/compr. ± mm | SW | kg  | Code no. | Availability |
|----------------------|-------------------|----------------------------------|------------|-------------------|-------------------|---------------------|----|-----|----------|--------------|
| 63                   | 12.00             | 2.8-10                           | M3-M12     | 40                | 106.5             | 0.3                 | 4  | 1.5 | 12.063   | ●            |
| 63                   | 20.00             | 6-16                             | M8-M20     | 40                | 120.5             | 0.3                 | 5  | 1.6 | 20.063   | ●            |
| 100                  | 12.00             | 2.8-10                           | M3-M12     | 40                | 113.0             | 0.3                 | 4  | 2.8 | 12.100   | ●            |
| 100                  | 20.00             | 6-16                             | M8-M20     | 40                | 127.0             | 0.3                 | 5  | 2.9 | 20.100   | ●            |

**Product information**

- SK30 to DIN 69871 form AD without coolant supply over collar
- SK40 to DIN 69871 form AD/B
- form B supplied with threaded pins in bores
- compensates synchronisation errors
- guarantees high thread quality and optimal tool life
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap
- reduces an increase in axial forces during the cutting cycle to a minimum
- convenient hydraulic clamping using reduction bushes with active drive
- length-setting screw allows 3 mm readjustment
- suitable for internal cooling identifiable by black coloured ring
- coolant pressure up to max. 80 bar

**Scope of delivery**

- incl. hexagon clamping key  
Guhring no. 4912
- incl. adjustment key for adjustment screws
- order setting screw "face"  
Guhring no. 4364 separately
- order reduction bushes  
Guhring no. 4605 or 4606 separately
- order pull studs, Guhring no. 4925 or 4926 separately



**GÜHROSync**

Guhring no. 4576

Discount group 114

| SK | d <sub>4</sub><br>mm | for shank Ø<br>d <sub>1</sub> | for thread | d <sub>2</sub><br>mm | l <sub>1</sub><br>mm | tension/<br>compr.<br>± mm | SW | kg  | Code no. | Availability |
|----|----------------------|-------------------------------|------------|----------------------|----------------------|----------------------------|----|-----|----------|--------------|
| 30 | 12.00                | 2.8-10                        | M3-M12     | 40                   | 81                   | 0.3                        | 4  | 0.8 | 12,030   | ●            |
| 30 | 20.00                | 6-16                          | M8-M20     | 40                   | 95                   | 0.3                        | 5  | 0.9 | 20,030   | ●            |
| 40 | 12.00                | 2.8-10                        | M3-M12     | 40                   | 85                   | 0.3                        | 4  | 1.3 | 12,040   | ●            |
| 40 | 20.00                | 6-16                          | M8-M20     | 40                   | 99                   | 0.3                        | 5  | 1.4 | 20,040   | ●            |

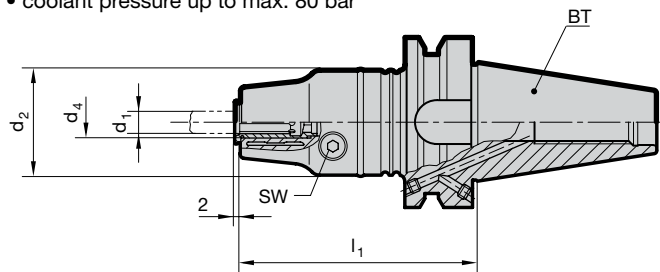


**Product information**

- MAS/BT30 to JIS B 6339-2 form JD without coolant supply over collar
- MAS/BT40 to JIS B 6339-2 form JD/JF (form AD/B)
- form B supplied with threaded pins in bores
- compensates synchronisation errors
- guarantees high thread quality and optimal tool life
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap
- reduces an increase in axial forces during the cutting cycle to a minimum
- convenient hydraulic clamping using reduction bushes with active drive
- length-setting screw allows 3 mm readjustment
- suitable for internal cooling identifiable by black coloured ring
- coolant pressure up to max. 80 bar

**Scope of delivery**

- incl. hexagon clamping key  
Guhring no. 4912
- incl. adjustment key for adjustment screws
- order setting screw "face"  
Guhring no. 4364 separately
- order reduction bushes  
Guhring no. 4605 or 4606 separately
- order pull studs, Guhring no. 4927 or 4928 separately



**GÜHROSync**

**Guhring no. 4577**

**Discount group 114**

| BT | d <sub>4</sub><br>mm | for<br>shank Ø<br>d <sub>1</sub> | for<br>thread | d <sub>2</sub><br>mm | l <sub>1</sub><br>mm | tension/<br>compr.<br>± mm | SW | kg  | Code no. | Availability |
|----|----------------------|----------------------------------|---------------|----------------------|----------------------|----------------------------|----|-----|----------|--------------|
| 30 | 12.00                | 2.8-10                           | M3-M12        | 40                   | 81                   | 0.3                        | 4  | 0.8 | 12,030   | ●            |
| 30 | 20.00                | 6-16                             | M8-M20        | 40                   | 95                   | 0.3                        | 5  | 0.9 | 20,030   | ●            |
| 40 | 12.00                | 2.8-10                           | M3-M12        | 40                   | 85                   | 0.3                        | 4  | 1.3 | 12,040   | ●            |
| 40 | 20.00                | 6-16                             | M8-M20        | 40                   | 99                   | 0.3                        | 5  | 1.4 | 20,040   | ●            |

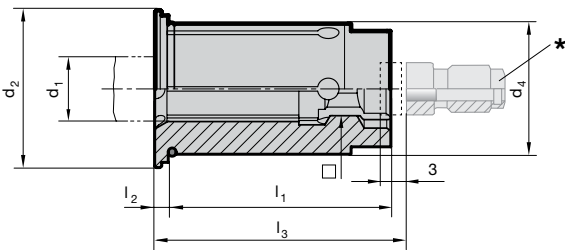


## Product information

- for clamping taps with square shank in GUHROSynch synchro tapping chucks
- clamping-Ø for tool shank tolerance h6-h9
- face side closed, therefore coolant leak-proof for threading tools with IC
- positive drive
- position setting screw on tap shank
- length-setting screw allows 3 mm readjustment

## Scope of delivery

- order setting screw "face" Guhring no. 4364 separately
- order MQL setting screws Guhring no. 4305 separately



**Guhring no.** 4605

**Discount group** 114

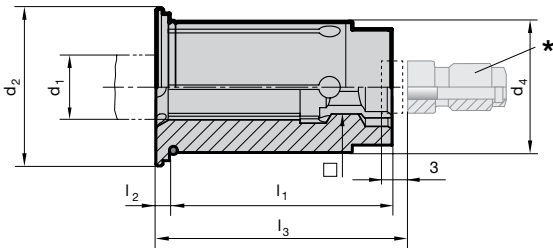
| d <sub>4</sub><br>mm | d <sub>1</sub><br>mm | □<br>mm | Standard  | d <sub>1</sub><br>inch | □<br>inch | d <sub>2</sub><br>mm | l <sub>1</sub><br>mm | l <sub>2</sub><br>mm | l <sub>3</sub><br>mm | * for<br>adjustment<br>screw | for<br>thread     | Code no. | Availability |
|----------------------|----------------------|---------|-----------|------------------------|-----------|----------------------|----------------------|----------------------|----------------------|------------------------------|-------------------|----------|--------------|
| 12.00                | 2.800                | 2.100   | DIN       | -                      | -         | 16.50                | 29.00                | 2.00                 | -                    | -                            | M2 / M4           | 2,812    | ●            |
| 12.00                | 3.500                | 2.700   | DIN       | -                      | -         | 16.50                | 29.00                | 2.00                 | -                    | -                            | M3 / M4.5 / M5    | 3,512    | ●            |
| 12.00                | 4.000                | 3.200   | JIS       | -                      | -         | 16.50                | 29.00                | 2.00                 | -                    | -                            | M3                | 4,012    | ●            |
| 12.00                | 4.500                | 3.400   | DIN       | -                      | -         | 16.50                | 29.00                | 2.00                 | 26.00                | 4364 5.020                   | M4 / M6           | 4,512    | ●            |
| 12.00                | 4.928                | 3.861   | ANSI      | 0.194                  | 0.152     | 16.50                | 29.00                | 2.00                 | 26.00                | 4364 5.020                   | 10-24 & 10-32     | 4,912    | ●            |
| 12.00                | 5.000                | 4.000   | JIS       | -                      | -         | 16.50                | 29.00                | 2.00                 | 26.00                | 4364 5.020                   | M4                | 5,012    | ●            |
| 12.00                | 5.500                | 4.500   | JIS       | -                      | -         | 16.50                | 29.00                | 2.00                 | 26.00                | 4364 5.020                   | M5                | 5,512    | ●            |
| 12.00                | 5.588                | 4.191   | ANSI      | 0.220                  | 0.165     | 16.50                | 29.00                | 2.00                 | 26.00                | 4364 5.020                   | 12-24 & 12-28     | 15,512   | ●            |
| 12.00                | 6.000                | 4.500   | JIS       | -                      | -         | 16.50                | 29.00                | 2.00                 | 26.00                | 4364 5.020                   | M6                | 16,012   | ●            |
| 12.00                | 6.000                | 4.900   | DIN       | -                      | -         | 16.50                | 29.00                | 2.00                 | 26.00                | 4364 6.020                   | M4.5/M5/M6/M8     | 6,012    | ●            |
| 12.00                | 6.200                | 5.000   | JIS       | -                      | -         | 16.50                | 29.00                | 2.00                 | 26.00                | 4364 6.020                   | M7 / M8           | 6,212    | ●            |
| 12.00                | 6.477                | 4.851   | ANSI      | 0.255                  | 0.191     | 16.50                | 29.00                | 2.00                 | 26.00                | 4364 6.020                   | 1/4-20 & 1/4-28   | 6,412    | ●            |
| 12.00                | 7.000                | 5.500   | DIN / JIS | -                      | -         | 16.50                | 29.00                | 2.00                 | 26.00                | 4364 7.020                   | M7 / M9 / M10     | 7,012    | ●            |
| 12.00                | 7.938                | 5.944   | ANSI      | 0.3125                 | 0.234     | 16.50                | 29.00                | 2.00                 | 31.00                | 4364 7.020                   | 1/16-27           | 7,912    | ●            |
| 12.00                | 8.000                | 6.200   | DIN       | -                      | -         | 16.50                | 29.00                | 2.00                 | 31.00                | 4364 8.020                   | M8 / M11          | 8,012    | ●            |
| 12.00                | 8.000                | 6.500   | JIS       | -                      | -         | 16.50                | 29.00                | 2.00                 | 31.00                | 4364 8.020                   | M11               | 18,012   | ●            |
| 12.00                | 8.077                | 6.045   | ANSI      | 0.318                  | 0.238     | 16.50                | 29.00                | 2.00                 | 31.00                | 4364 7.020                   | 5/16-18 & 5/16-24 | 28,012   | ●            |
| 12.00                | 8.204                | 6.147   | ANSI      | 0.323                  | 0.242     | 16.50                | 29.00                | 2.00                 | 31.00                | 4364 7.020                   | 7/16-14 & 7/16-20 | 8,212    | ●            |
| 12.00                | 8.500                | 6.500   | JIS       | -                      | -         | 16.50                | 29.00                | 2.00                 | 31.00                | 4364 8.020                   | M12               | 8,512    | ●            |
| 12.00                | 9.000                | 7.000   | DIN       | -                      | -         | 16.50                | 29.00                | 2.00                 | 32.00                | 4364 9.020                   | M9 / M12          | 9,012    | ●            |
| 12.00                | 9.322                | 6.985   | ANSI      | 0.367                  | 0.275     | 16.50                | 29.00                | 2.00                 | 32.00                | 4364 9.020                   | 1/2-13 & 1/2-20   | 9,312    | ●            |
| 12.00                | 9.677                | 7.264   | ANSI      | 0.381                  | 0.286     | 16.50                | 29.00                | 2.00                 | 33.00                | 4364 9.020                   | 3/8-16 & 3/8-24   | 9,612    | ●            |
| 12.00                | 10.000               | 8.000   | DIN       | -                      | -         | 16.50                | 29.00                | 2.00                 | 36.00                | 4364 10.020                  | M10               | 10,012   | ●            |

**Product information**

- for clamping taps with square shank in GUHROSynch synchro tapping chucks
- clamping-Ø for tool shank tolerance h6-h9
- face side closed, therefore coolant leak-proof for threading tools with IC
- positive drive
- position setting screw on tap shank
- length-setting screw allows 3 mm readjustment

**Scope of delivery**

- order setting screw "face"  
Guhring no. 4364 separately
- order MQL setting screws  
Guhring no. 4305 separately



**Guhring no.** 4605  
**Discount group** 114

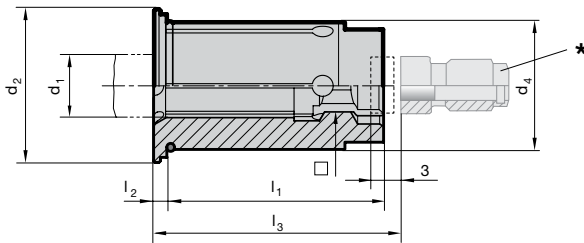
| d <sub>4</sub><br>mm | d <sub>1</sub><br>mm | □<br>mm | Standard  | d <sub>1</sub><br>inch | □<br>inch | d <sub>2</sub><br>mm | l <sub>1</sub><br>mm | l <sub>2</sub><br>mm | l <sub>3</sub><br>mm | * for<br>adjustment<br>screw | for<br>thread     | Code no. | Availability |
|----------------------|----------------------|---------|-----------|------------------------|-----------|----------------------|----------------------|----------------------|----------------------|------------------------------|-------------------|----------|--------------|
| 20.00                | 6.000                | 4.500   | JIS       | -                      | -         | 24.10                | 34.00                | 2.00                 | 26.00                | 4364 6.032                   | M6                | 26,020   | ●            |
| 20.00                | 6.000                | 4.900   | DIN       | -                      | -         | 24.10                | 34.00                | 2.00                 | 26.00                | 4364 6.032                   | M4.5/M5/M6/M8     | 6,020    | ●            |
| 20.00                | 6.200                | 5.000   | JIS       | -                      | -         | 24.10                | 34.00                | 2.00                 | 26.00                | 4364 6.032                   | M7 / M8           | 6,220    | ●            |
| 20.00                | 6.477                | 4.851   | ANSI      | 0.255                  | 0.191     | 24.10                | 34.00                | 2.00                 | 26.00                | 4364 6.032                   | 1/4-20 & 1/4-28   | 6,420    | ●            |
| 20.00                | 7.000                | 5.500   | DIN / JIS | -                      | -         | 24.10                | 34.00                | 2.00                 | 26.00                | 4364 7.032                   | M7 / M9 / M10     | 7,020    | ●            |
| 20.00                | 7.938                | 5.944   | ANSI      | 0.3125                 | 0.234     | 24.10                | 34.00                | 2.00                 | 31.00                | 4364 7.032                   | 1/16-27           | 7,920    | ●            |
| 20.00                | 8.000                | 6.200   | DIN       | -                      | -         | 24.10                | 34.00                | 2.00                 | 31.00                | 4364 8.032                   | M8 / M11          | 8,020    | ●            |
| 20.00                | 8.000                | 6.500   | JIS       | -                      | -         | 24.10                | 34.00                | 2.00                 | 31.00                | 4364 8.032                   | M11               | 18,020   | ●            |
| 20.00                | 8.077                | 6.045   | ANSI      | 0.318                  | 0.238     | 24.10                | 34.00                | 2.00                 | 31.00                | 4364 8.032                   | 5/16-18 & 5/16-24 | 28,020   | ●            |
| 20.00                | 8.204                | 6.147   | ANSI      | 0.323                  | 0.242     | 24.10                | 34.00                | 2.00                 | 31.00                | 4364 8.032                   | 7/16-14 & 7/16-20 | 8,220    | ●            |
| 20.00                | 8.500                | 6.500   | JIS       | -                      | -         | 24.10                | 34.00                | 2.00                 | 31.00                | 4364 8.032                   | M12               | 8,520    | ●            |
| 20.00                | 9.000                | 7.000   | DIN       | -                      | -         | 24.10                | 34.00                | 2.00                 | 32.00                | 4364 9.032                   | M9 / M12          | 9,020    | ●            |
| 20.00                | 9.322                | 6.985   | ANSI      | 0.367                  | 0.275     | 24.10                | 34.00                | 2.00                 | 32.00                | 4364 8.032                   | 1/2-13 & 1/2-20   | 9,320    | ●            |
| 20.00                | 9.677                | 7.264   | ANSI      | 0.381                  | 0.286     | 24.10                | 34.00                | 2.00                 | 33.00                | 4364 9.032                   | 3/8-16 & 3/8-24   | 9,620    | ●            |
| 20.00                | 10.000               | 8.000   | DIN       | -                      | -         | 24.10                | 34.00                | 2.00                 | 36.00                | 4364 10.032                  | M10               | 10,020   | ●            |
| 20.00                | 10.500               | 8.000   | JIS       | -                      | -         | 24.10                | 34.00                | 2.00                 | 36.00                | 4364 10.032                  | M14               | 10,520   | ●            |
| 20.00                | 10.897               | 8.179   | ANSI      | 0.4290                 | 0.3220    | 24.10                | 34.00                | 2.00                 | 35.00                | 4364 10.032                  | 9/16-12 & 9/16-18 | 10,820   | ●            |
| 20.00                | 11.000               | 9.000   | DIN       | -                      | -         | 24.10                | 34.00                | 2.00                 | 37.00                | 4364 11.032                  | M14               | 11,020   | ●            |
| 20.00                | 12.000               | 9.000   | DIN       | -                      | -         | 24.10                | 34.00                | 2.00                 | 37.00                | 4364 11.032                  | M12 / M16         | 12,020   | ●            |
| 20.00                | 12.192               | 9.144   | ANSI      | 0.480                  | 0.36      | 24.10                | 34.00                | 2.00                 | 36.00                | 4364 11.032                  | 5/8-11 & 5/8-18   | 12,120   | ●            |
| 20.00                | 12.500               | 10.000  | JIS       | -                      | -         | 24.10                | 34.00                | 2.00                 | 38.00                | 4364 11.032                  | M16               | 12,520   | ●            |
| 20.00                | 13.000               | 10.000  | JIS       | -                      | -         | 24.10                | 34.00                | 2.00                 | 38.00                | 4364 11.032                  | M17               | 13,020   | ●            |
| 20.00                | 14.000               | 11.000  | DIN / JIS | -                      | -         | 24.10                | 34.00                | 2.00                 | 39.00                | 4364 11.032                  | M18               | 14,020   | ●            |
| 20.00                | 14.288               | 10.693  | ANSI      | 0.5625                 | 0.421     | 24.10                | 34.00                | 2.00                 | 38.00                | 4364 11.032                  | 1/4-18            | 14,220   | ●            |
| 20.00                | 14.986               | 10.719  | ANSI      | 0.590                  | 0.422     | 24.10                | 34.00                | 2.00                 | 39.00                | 4364 11.032                  | 3/4-10 & 3/4-16   | 14,920   | ●            |
| 20.00                | 15.000               | 12.000  | JIS       | -                      | -         | 24.10                | 34.00                | 2.00                 | 40.00                | 4364 16.032                  | M20               | 15,020   | ●            |
| 20.00                | 16.000               | 12.000  | DIN       | -                      | -         | 24.10                | 34.00                | 2.00                 | 41.00                | 4364 16.032                  | M20               | 16,020   | ●            |

**Product information**

- for clamping taps with square shank in GUHROSync synchro tapping chucks
- clamping-Ø for tool shank tolerance h6-h9
- positive drive of reduction bush in Guhrosync synchro chuck
- with coolant slots for peripheral cooling, therefore process and tool life improvement
- coiled swarf is consistently washed away
- position setting screw on tap shank
- length-setting screw allows 3 mm readjustment

**Scope of delivery**

- order MQL setting screws Guhring no. 4305 separately
- order setting screw "face" Guhring no. 4364 separately



**GUHROJET**

Guhring no. **4606**

Discount group **114**

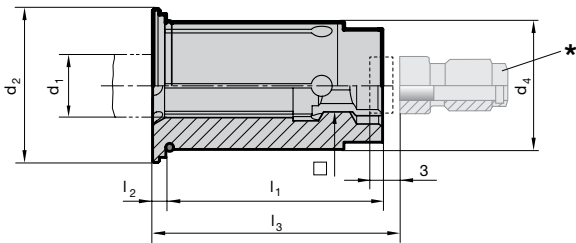
| d <sub>4</sub><br>mm | d <sub>1</sub><br>mm | □<br>mm | Standard  | d <sub>1</sub><br>inch | □<br>inch | d <sub>2</sub><br>mm | l <sub>1</sub><br>mm | l <sub>2</sub><br>mm | l <sub>3</sub><br>mm | * for<br>adjustment<br>screw | for<br>thread     | Code no. | Availability |
|----------------------|----------------------|---------|-----------|------------------------|-----------|----------------------|----------------------|----------------------|----------------------|------------------------------|-------------------|----------|--------------|
| 12.00                | 2.800                | 2.100   | DIN       | -                      | -         | 16.50                | 29.00                | 2.00                 | -                    | -                            | M2 / M4           | 2.812    | ●            |
| 12.00                | 3.500                | 2.700   | DIN       | -                      | -         | 16.50                | 29.00                | 2.00                 | -                    | -                            | M3 / M4.5 / M5    | 3.512    | ●            |
| 12.00                | 4.000                | 3.200   | JIS       | -                      | -         | 16.50                | 29.00                | 2.00                 | -                    | -                            | M3                | 4.012    | ●            |
| 12.00                | 4.500                | 3.400   | DIN       | -                      | -         | 16.50                | 29.00                | 2.00                 | -                    | -                            | M4 / M6           | 4.512    | ●            |
| 12.00                | 4.928                | 3.861   | ANSI      | 0.194                  | 0.152     | 16.50                | 29.00                | 2.00                 | -                    | -                            | 10-24 & 10-32     | 4.912    | ●            |
| 12.00                | 5.000                | 4.000   | JIS       | -                      | -         | 16.50                | 29.00                | 2.00                 | -                    | -                            | M4                | 5.012    | ●            |
| 12.00                | 5.500                | 4.500   | JIS       | -                      | -         | 16.50                | 29.00                | 2.00                 | -                    | -                            | M5                | 5.512    | ●            |
| 12.00                | 5.588                | 4.191   | ANSI      | 0.220                  | 0.165     | 16.50                | 29.00                | 2.00                 | -                    | -                            | 12-24 & 12-28     | 15.512   | ●            |
| 12.00                | 6.000                | 4.500   | JIS       | -                      | -         | 16.50                | 29.00                | 2.00                 | 26.00                | 6.020                        | M6                | 16.012   | ●            |
| 12.00                | 6.000                | 4.900   | DIN       | -                      | -         | 16.50                | 29.00                | 2.00                 | 26.00                | 6.020                        | M4.5/M5/M6/M8     | 6.012    | ●            |
| 12.00                | 6.200                | 5.000   | JIS       | -                      | -         | 16.50                | 29.00                | 2.00                 | 26.00                | 6.020                        | M7 / M8           | 6.212    | ●            |
| 12.00                | 6.477                | 4.851   | ANSI      | 0.255                  | 0.191     | 16.50                | 29.00                | 2.00                 | 26.00                | 6.020                        | 1/4-20 & 1/4-28   | 6.412    | ●            |
| 12.00                | 7.000                | 5.500   | DIN / JIS | -                      | -         | 16.50                | 29.00                | 2.00                 | 26.00                | 7.020                        | M7 / M9 / M10     | 7.012    | ●            |
| 12.00                | 7.938                | 5.944   | ANSI      | 0.3125                 | 0.234     | 16.50                | 29.00                | 2.00                 | 31.00                | 7.020                        | 1/16-27           | 7.912    | ●            |
| 12.00                | 8.000                | 6.200   | DIN       | -                      | -         | 16.50                | 29.00                | 2.00                 | 31.00                | 8.020                        | M8 / M11          | 8.012    | ●            |
| 12.00                | 8.000                | 6.500   | JIS       | -                      | -         | 16.50                | 29.00                | 2.00                 | 31.00                | 8.020                        | M11               | 18.012   | ●            |
| 12.00                | 8.077                | 6.045   | ANSI      | 0.318                  | 0.238     | 16.50                | 29.00                | 2.00                 | 31.00                | 7.020                        | 5/16-18 & 5/16-24 | 28.012   | ●            |
| 12.00                | 8.204                | 6.147   | ANSI      | 0.323                  | 0.242     | 16.50                | 29.00                | 2.00                 | 31.00                | 8.020                        | 7/16-14 & 7/16-20 | 8.212    | ●            |
| 12.00                | 8.500                | 6.500   | JIS       | -                      | -         | 16.50                | 29.00                | 2.00                 | 31.00                | 8.020                        | M12               | 8.512    | ●            |
| 12.00                | 9.000                | 7.000   | DIN       | -                      | -         | 16.50                | 29.00                | 2.00                 | 32.00                | 9.020                        | M9 / M12          | 9.012    | ●            |
| 12.00                | 9.322                | 6.985   | ANSI      | 0.367                  | 0.275     | 16.50                | 29.00                | 2.00                 | 32.00                | 9.020                        | 1/2-13 & 1/2-20   | 9.312    | ●            |
| 12.00                | 9.677                | 7.264   | ANSI      | 0.381                  | 0.286     | 16.50                | 29.00                | 2.00                 | 33.00                | 9.020                        | 3/8-16 & 3/8-24   | 9.612    | ●            |
| 12.00                | 10.000               | 8.000   | DIN       | -                      | -         | 16.50                | 29.00                | 2.00                 | 36.00                | 10.020                       | M10               | 10.012   | ●            |

**Product information**

- for clamping taps with square shank in GUHROSynch synchro tapping chucks
- clamping-Ø for tool shank tolerance h6-h9
- positive drive of reduction bush in Guhrosynch synchro chuck
- with coolant slots for peripheral cooling, therefore process and tool life improvement
- coiled swarf is consistently washed away
- position setting screw on tap shank
- length-setting screw allows 3 mm readjustment

**Scope of delivery**

- order MQL setting screws Guhring no. 4305 separately
- order setting screw “face” Guhring no. 4364 separately



**GUHROJET**

Guhring no. **4606**

Discount group **114**

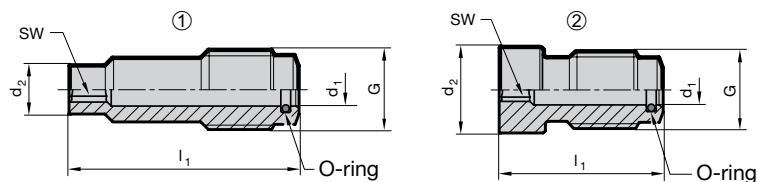
| d <sub>4</sub><br>mm | d <sub>1</sub><br>mm | □<br>mm | Standard  | d <sub>1</sub><br>inch | □<br>inch | d <sub>2</sub><br>mm | l <sub>1</sub><br>mm | l <sub>2</sub><br>mm | l <sub>3</sub><br>mm | * for<br>adjustment<br>screw | for<br>thread     | Code no. | Availability |
|----------------------|----------------------|---------|-----------|------------------------|-----------|----------------------|----------------------|----------------------|----------------------|------------------------------|-------------------|----------|--------------|
| 20.00                | 6.000                | 4.500   | JIS       | -                      | -         | 24.10                | 34.00                | 2.00                 | 26.00                | 6.032                        | M6                | 26,020   | ●            |
| 20.00                | 6.000                | 4.900   | DIN       | -                      | -         | 24.10                | 34.00                | 2.00                 | 26.00                | 6.032                        | M4.5/M5/M6/M8     | 6,020    | ●            |
| 20.00                | 6.200                | 5.000   | JIS       | -                      | -         | 24.10                | 34.00                | 2.00                 | 26.00                | 6.032                        | M7 / M8           | 6,220    | ●            |
| 20.00                | 6.477                | 4.851   | ANSI      | 0.255                  | 0.191     | 24.10                | 34.00                | 2.00                 | 26.00                | 6.032                        | 1/4-20 & 1/4-28   | 6,420    | ●            |
| 20.00                | 7.000                | 5.500   | DIN / JIS | -                      | -         | 24.10                | 34.00                | 2.00                 | 26.00                | 7.032                        | M7 / M9 / M10     | 7,020    | ●            |
| 20.00                | 7.938                | 5.944   | ANSI      | 0.3125                 | 0.234     | 24.10                | 34.00                | 2.00                 | 31.00                | 7.032                        | 1/16-27           | 7,920    | ●            |
| 20.00                | 8.000                | 6.200   | DIN       | -                      | -         | 24.10                | 34.00                | 2.00                 | 31.00                | 8.032                        | M8 / M11          | 8,020    | ●            |
| 20.00                | 8.000                | 6.500   | JIS       | -                      | -         | 24.10                | 34.00                | 2.00                 | 31.00                | 8.032                        | M11               | 18,020   | ●            |
| 20.00                | 8.077                | 6.045   | ANSI      | 0.318                  | 0.238     | 24.10                | 34.00                | 2.00                 | 31.00                | 8.032                        | 5/16-18 & 5/16-24 | 28,020   | ●            |
| 20.00                | 8.204                | 6.147   | ANSI      | 0.323                  | 0.242     | 24.10                | 34.00                | 2.00                 | 31.00                | 8.032                        | 7/16-14 & 7/16-20 | 8,220    | ●            |
| 20.00                | 8.500                | 6.500   | JIS       | -                      | -         | 24.10                | 34.00                | 2.00                 | 31.00                | 8.032                        | M12               | 8,520    | ●            |
| 20.00                | 9.000                | 7.000   | DIN       | -                      | -         | 24.10                | 34.00                | 2.00                 | 32.00                | 9.032                        | M9 / M12          | 9,020    | ●            |
| 20.00                | 9.322                | 6.985   | ANSI      | 0.367                  | 0.275     | 24.10                | 34.00                | 2.00                 | 32.00                | 9.032                        | 1/2-13 & 1/2-20   | 9,320    | ●            |
| 20.00                | 9.677                | 7.264   | ANSI      | 0.381                  | 0.286     | 24.10                | 34.00                | 2.00                 | 33.00                | 9.032                        | 3/8-16 & 3/8-24   | 9,620    | ●            |
| 20.00                | 10.000               | 8.000   | DIN       | -                      | -         | 24.10                | 34.00                | 2.00                 | 36.00                | 10.032                       | M10               | 10,020   | ●            |
| 20.00                | 10.500               | 8.000   | JIS       | -                      | -         | 24.10                | 34.00                | 2.00                 | 36.00                | 10.032                       | M14               | 10,520   | ●            |
| 20.00                | 10.897               | 8.179   | ANSI      | 0.4290                 | 0.3220    | 24.10                | 34.00                | 2.00                 | 35.00                | 10.032                       | 9/16-12 & 9/16-18 | 10,820   | ●            |
| 20.00                | 11.000               | 9.000   | DIN       | -                      | -         | 24.10                | 34.00                | 2.00                 | 37.00                | 11.032                       | M14               | 11,020   | ●            |
| 20.00                | 12.000               | 9.000   | DIN       | -                      | -         | 24.10                | 34.00                | 2.00                 | 37.00                | 11.032                       | M12 / M16         | 12,020   | ●            |
| 20.00                | 12.192               | 9.144   | ANSI      | 0.480                  | 0.36      | 24.10                | 34.00                | 2.00                 | 36.00                | 11.032                       | 5/8-11 & 5/8-18   | 12,120   | ●            |
| 20.00                | 12.500               | 10.000  | JIS       | -                      | -         | 24.10                | 34.00                | 2.00                 | 38.00                | 11.032                       | M16               | 12,520   | ●            |
| 20.00                | 13.000               | 10.000  | JIS       | -                      | -         | 24.10                | 34.00                | 2.00                 | 38.00                | 11.032                       | M17               | 13,020   | ●            |
| 20.00                | 14.000               | 11.000  | DIN / JIS | -                      | -         | 24.10                | 34.00                | 2.00                 | 39.00                | 14.032                       | M18               | 14,020   | ●            |
| 20.00                | 14.288               | 10.693  | ANSI      | 0.5625                 | 0.421     | 24.10                | 34.00                | 2.00                 | 38.00                | 11.032                       | 1/4-18            | 14,220   | ●            |
| 20.00                | 14.986               | 10.719  | ANSI      | 0.590                  | 0.422     | 24.10                | 34.00                | 2.00                 | 39.00                | 11.032                       | 3/4-10 & 3/4-16   | 14,920   | ●            |
| 20.00                | 15.000               | 12.000  | JIS       | -                      | -         | 24.10                | 34.00                | 2.00                 | 40.00                | 16.032                       | M20               | 15,020   | ●            |
| 20.00                | 16.000               | 12.000  | DIN       | -                      | -         | 24.10                | 34.00                | 2.00                 | 41.00                | 16.032                       | M20               | 16,020   | ●            |

## Product information

- for HSK-A synchro tapping chucks Guhring no. 4601
- for conventional internal cooling
- with facing stop for standard shank ends
- position setting screw on tap shank
- length-setting screw allows 3 mm readjustment

## Scope of delivery






























- with O-ring for secure seal



**Guhring no.** 4364

**Discount group** 114

| for nominal size | for tap shank-Ø x □ | G     | d <sub>1</sub> mm | d <sub>2</sub> mm | l <sub>1</sub> mm | SW  | O-ring | image | Code no. | Availability |
|------------------|---------------------|-------|-------------------|-------------------|-------------------|-----|--------|-------|----------|--------------|
| ER20 / Hydro12   | < Ø6                | M8x1  | 3.6               | 3.3               | 28.0              | 2.0 | 3.5x1  | 1     | 5,020    | ●            |
| ER20 / Hydro12   | 6x4.9               | M8x1  | 3.6               | 4.8               | 26.0              | 2.5 | 3.5x1  | 1     | 6,020    | ●            |
| ER20 / Hydro12   | 7x5.5               | M8x1  | 3.6               | 5.4               | 25.8              | 2.5 | 3.5x1  | 1     | 7,020    | ●            |
| ER20 / Hydro12   | 8x6.2               | M8x1  | 3.6               | 6.1               | 20.9              | 2.5 | 3.5x1  | 1     | 8,020    | ●            |
| ER20 / Hydro12   | 9x7                 | M8x1  | 3.6               | 6.9               | 20.3              | 2.5 | 3.5x1  | 1     | 9,020    | ●            |
| ER20 / Hydro12   | 10x8                | M8x1  | 3.6               | 7.8               | 15.8              | 2.5 | 3.5x1  | 2     | 10,020   | ●            |
| ER20 / Hydro12   | 11x9                | M8x1  | 3.6               | 8.8               | 14.8              | 2.5 | 3.5x1  | 2     | 11,020   | ●            |
| ER32 / Hydro20   | < Ø6                | M10x1 | 4.1               | 3.3               | 33.0              | 2.0 | 4x1    | 1     | 5,032    | ●            |
| ER32 / Hydro20   | 6x4.9               | M10x1 | 4.1               | 4.8               | 34.0              | 3.0 | 4x1    | 1     | 6,032    | ●            |
| ER32 / Hydro20   | 7x5.5               | M10x1 | 4.1               | 5.4               | 33.8              | 3.0 | 4x1    | 1     | 7,032    | ●            |
| ER32 / Hydro20   | 8x6.2               | M10x1 | 4.1               | 6.1               | 28.8              | 3.0 | 4x1    | 1     | 8,032    | ●            |
| ER32 / Hydro20   | 9x7                 | M10x1 | 4.1               | 6.9               | 28.3              | 3.0 | 4x1    | 1     | 9,032    | ●            |
| ER32 / Hydro20   | 10x8                | M10x1 | 4.1               | 7.8               | 23.8              | 3.0 | 4x1    | 1     | 10,032   | ●            |
| ER32 / Hydro20   | 11x9 & 12x9         | M10x1 | 4.1               | 8.8               | 22.9              | 3.0 | 4x1    | 1     | 11,032   | ●            |
| ER32 / Hydro20   | 14x11               | M10x1 | 4.1               | 10.8              | 20.7              | 3.0 | 4x1    | 2     | 14,032   | ●            |
| ER32 / Hydro20   | 16x12               | M10x1 | 4.1               | 11.8              | 19.7              | 3.0 | 4x1    | 2     | 16,032   | ●            |
| ER32 / Hydro20   | 18x14.5 & 20x16     | M10x1 | 4.1               | 14.3              | 18.0              | 3.0 | 4x1    | 2     | 18,032   | ●            |

|  |  |   |  |  |   |   |
|--|--|---|--|--|---|---|
| <p>MQL shrink fit chucks<br/>HSK-A<br/>auto. tool change</p> <p><b>4741</b>  <b>4614</b> </p> <p>man. tool change</p> <p><b>4735</b>  <b>4613</b> </p> |  | <p>MQL hydraulic tapping chucks<br/>HSK-A<br/>auto. tool change</p> <p><b>4210</b>  <b>4612</b> </p> <p>man. tool change</p> <p><b>4209</b>  <b>4611</b> </p> |  | <p><b>4508</b> </p> <p>MQL coolant delivery set<br/>for single channel<br/>HSK-A</p>   | <p><b>4511</b> </p> <p>MQL coolant delivery set<br/>for 2 channel systems<br/>HSK-A</p>  | <p><b>4513</b> <br/></p> <p>MQL coolant delivery set<br/>HSK-A (filler)</p>  |
|    |  |    |  |    |   |   |
|  <p><b>4524</b>  </p> <p>MQL Hydro-Ø 12/Ø 20<br/>synchro tapping chucks with internal cooling Ø 20</p>  |  |   |  |  |   |   |
|  |  |  <p><b>4305</b></p> <p>MQL setting screws with internal cone<br/>for MQL synchro tapping chucks</p>  |  |  <p><b>4605</b></p> <p>Reduction bushes, sealed</p>   |   |   |
|  |  |  <p><b>4606</b></p> <p>GUHROJET reduction bushes</p>   |  |  <p>Threading tool with MQL shank:<br/>shank diameter x square</p>  |   |   |

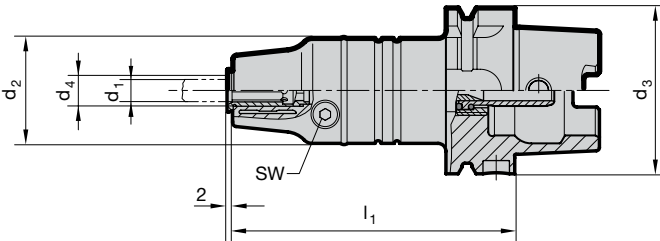


**Product information**

- for MQL single channel systems
- MQL coolant pressure up to max. 16 bar
- compensates synchronisation errors
- guarantees high thread quality and optimal tool life
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap
- reduces an increase in axial forces during the cutting cycle to a minimum
- convenient hydraulic clamping using reduction bushes with active drive
- length-setting screw allows 3 mm readjustment
- Guhring MQL identifiable by green coloured ring

**Scope of delivery**

- incl. hexagon clamping key  
Guhring no. 4912
- incl. MQL coolant delivery set for automatic tool change  
Guhring no. 4508
- incl. adjustment key for MQL adjustment screws
- order MQL adjustment screw  
Guhring no. 4305 separately
- order reduction bushes Guhring no. 4605 or 4606 separately



**Guhring no.** 4602

**Discount group** 114

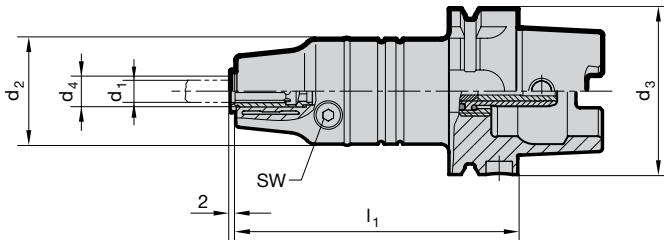
| HSK-A<br>d <sub>3</sub> | d <sub>4</sub><br>mm | for<br>shank-Ø<br>d <sub>1</sub> | for<br>thread | d <sub>2</sub><br>mm | l <sub>1</sub><br>mm | tension/<br>compr.<br>± mm | SW | kg  | Code no. | Availability |
|-------------------------|----------------------|----------------------------------|---------------|----------------------|----------------------|----------------------------|----|-----|----------|--------------|
| 63                      | 12.00                | 2.8-10                           | M3-M12        | 40                   | 106.5                | 0.3                        | 4  | 1.5 | 12.063   | ●            |
| 63                      | 20.00                | 6-16                             | M8-M20        | 40                   | 120.5                | 0.3                        | 5  | 1.6 | 20.063   | ●            |
| 100                     | 12.00                | 2.8-10                           | M3-M12        | 40                   | 113.0                | 0.3                        | 4  | 2.8 | 12.100   | ●            |
| 100                     | 20.00                | 6-16                             | M8-M20        | 40                   | 127.0                | 0.3                        | 5  | 2.9 | 20.100   | ●            |

**Product information**

- for MQL 2 channel systems
- MQL coolant pressure up to max. 16 bar
- compensates synchronisation errors
- guarantees high thread quality and optimal tool life
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap
- reduces an increase in axial forces during the cutting cycle to a minimum
- convenient hydraulic clamping using reduction bushes with active drive
- length-setting screw allows 3 mm readjustment
- Guhring MQL identifiable by green coloured ring

**Scope of delivery**

- incl. hexagon clamping key  
Guhring no. 4912
- incl. MQL coolant delivery set for automatic tool change Guhring no. 4511
- incl. adjustment key for MQL adjustment screws
- order MQL adjustment screw  
Guhring no. 4305 separately
- order reduction bushes Guhring no. 4605 or 4606 separately



Guhring no. 4603

Discount group 114

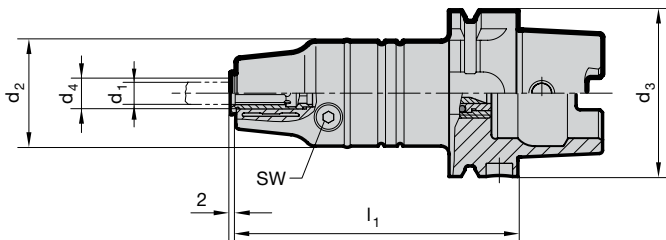
| HSK-A<br>d <sub>3</sub> | d <sub>4</sub><br>mm | for<br>shank-Ø<br>d <sub>1</sub> | for<br>thread | d <sub>2</sub><br>mm | l <sub>1</sub><br>mm | tension/<br>compr.<br>± mm | SW | kg  | Code no. | Availability |
|-------------------------|----------------------|----------------------------------|---------------|----------------------|----------------------|----------------------------|----|-----|----------|--------------|
| 63                      | 12.00                | 2.8-10                           | M3-M12        | 40                   | 106.5                | 0.3                        | 4  | 1.5 | 12,063   | ●            |
| 63                      | 20.00                | 6-16                             | M8-M20        | 40                   | 120.5                | 0.3                        | 5  | 1.6 | 20,063   | ●            |
| 100                     | 12.00                | 2.8-10                           | M3-M12        | 40                   | 113.0                | 0.3                        | 4  | 2.8 | 12,100   | ●            |
| 100                     | 20.00                | 6-16                             | M8-M20        | 40                   | 127.0                | 0.3                        | 5  | 2.9 | 20,100   | ●            |

**Product information**

- for MQL single and double channel systems
- MQL coolant pressure up to max. 16 bar
- compensates synchronisation errors
- guarantees high thread quality and optimal tool life
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap
- reduces an increase in axial forces during the cutting cycle to a minimum
- convenient hydraulic clamping using reduction bushes with active drive
- length-setting screw allows 3 mm readjustment
- Guhring MQL identifiable by green coloured ring

**Scope of delivery**

- incl. hexagon clamping key Guhring no. 4912
- incl. MQL coolant delivery set for manual tool change (filler) Guhring no. 4513
- incl. adjustment key for MQL adjustment screws
- order MQL adjustment screw Guhring no. 4305 separately
- order reduction bushes Guhring no. 4605 or 4606 separately



|                       |             |
|-----------------------|-------------|
| <b>Guhring no.</b>    | <b>4604</b> |
| <b>Discount group</b> | <b>114</b>  |

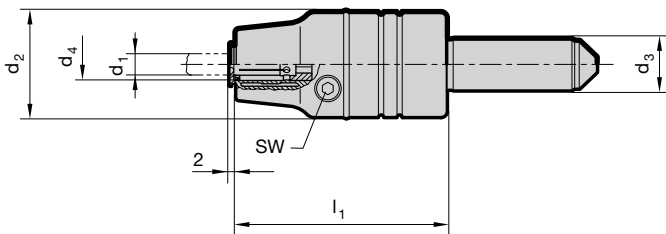
| HSK-A d <sub>3</sub> | d <sub>4</sub> mm | for shank-Ø d <sub>1</sub> | for thread | d <sub>2</sub> mm | l <sub>1</sub> mm | tension/compr. ± mm | SW | kg  | Code no. | Availability |
|----------------------|-------------------|----------------------------|------------|-------------------|-------------------|---------------------|----|-----|----------|--------------|
| 63                   | 12.00             | 2.8-10                     | M3-M12     | 40                | 106.5             | 0.3                 | 4  | 1.5 | 12,063   | ●            |
| 63                   | 20.00             | 6-16                       | M8-M20     | 40                | 120.5             | 0.3                 | 5  | 1.6 | 20,063   | ●            |
| 100                  | 12.00             | 2.8-10                     | M3-M12     | 40                | 113.0             | 0.3                 | 4  | 2.8 | 12,100   | ●            |
| 100                  | 20.00             | 6-16                       | M8-M20     | 40                | 127.0             | 0.3                 | 5  | 2.9 | 20,100   | ●            |

**Product information**

- for MQL single and double channel systems
- MQL coolant pressure up to max. 16 bar
- compensates synchronisation errors
- guarantees high thread quality and optimal tool life
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap
- reduces an increase in axial forces during the cutting cycle to a minimum
- convenient hydraulic clamping using reduction bushes with active drive
- length-setting screw allows 3 mm readjustment
- holder shank to DIN 1835-A or holding in precision chucks (hydraulic, shrink fit or power clamping chucks)
- Guhring MQL identifiable by green coloured ring

**Scope of delivery**

- incl. hexagon clamping key  
Guhring no. 4912
- incl. adjustment key for  
MQL adjustment screws  
Guhring no. 4305 separately
- order MQL adjustment screw  
Guhring no. 4305 separately
- order reduction bushes  
Guhring no. 4605 or 4606 separately



|                       |             |
|-----------------------|-------------|
| <b>Guhring no.</b>    | <b>4524</b> |
| <b>Discount group</b> | <b>114</b>  |

| d <sub>3</sub> h6<br>mm | d <sub>4</sub><br>mm | for<br>shank-Ø<br>d <sub>1</sub> | for<br>thread | d <sub>2</sub><br>mm | l <sub>1</sub><br>mm | tension/<br>compr.<br>± mm | SW | kg  | Code no. | Availability |
|-------------------------|----------------------|----------------------------------|---------------|----------------------|----------------------|----------------------------|----|-----|----------|--------------|
| 20                      | 12.00                | 2.8-10                           | M3-M12        | 40                   | 80                   | 0.3                        | 4  | 0.7 | 12,020   | ●            |
| 20                      | 20.00                | 6-16                             | M8-M20        | 40                   | 94                   | 0.3                        | 5  | 0.8 | 20,020   | ●            |

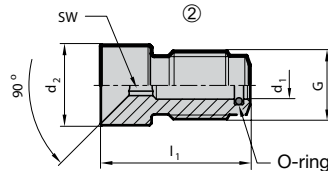
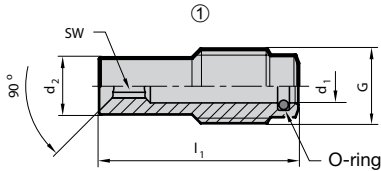
# MQL setting screws with internal cone for MQL synchro tapping chucks.

## Product information

- MQL setting screws with internal cone
- for MQL single and double channel systems
- for MQL taps with external cone
- for MQL synchro tapping chucks  
Guhring no. 4602, 4603 and 4604
- position setting screw on tap shank
- length-setting screw allows 3 mm readjustment

## Scope of delivery

- with O-ring for secure seal



Guhring no. 4305

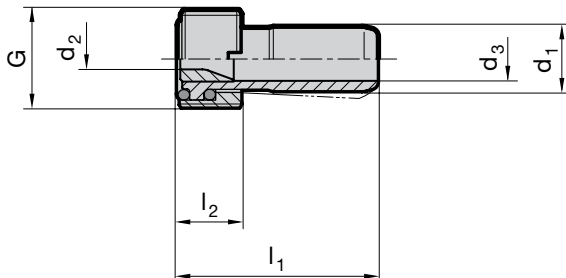
Discount group 114

| for nom. size  | for tap shank-Ø x □ | G     | d1 mm | d2 mm | l1 mm | SW  | O-ring | image | Code no. | Availability |
|----------------|---------------------|-------|-------|-------|-------|-----|--------|-------|----------|--------------|
| ER20 / Hydro12 | 6x4.9               | M8x1  | 3.6   | 4.8   | 26.5  | 2.5 | 3.5x1  | 1     | 6,020    | ●            |
| ER20 / Hydro12 | 7x5.5               | M8x1  | 3.6   | 5.4   | 26.5  | 2.5 | 3.5x1  | 1     | 7,020    | ●            |
| ER20 / Hydro12 | 8x6.2               | M8x1  | 3.6   | 6.1   | 21.5  | 2.5 | 3.5x1  | 1     | 8,020    | ●            |
| ER20 / Hydro12 | 9x7                 | M8x1  | 3.6   | 6.9   | 21.0  | 2.5 | 3.5x1  | 1     | 9,020    | ●            |
| ER20 / Hydro12 | 10x8                | M8x1  | 3.6   | 7.8   | 17.0  | 2.5 | 3.5x1  | 2     | 10,020   | ●            |
| ER20 / Hydro12 | 11x9                | M8x1  | 3.6   | 8.8   | 16.0  | 2.5 | 3.5x1  | 2     | 11,020   | ●            |
| ER32 / Hydro20 | 6x4.9               | M10x1 | 4.1   | 4.8   | 34.5  | 3.0 | 4x1    | 1     | 6,032    | ●            |
| ER32 / Hydro20 | 7x5.5               | M10x1 | 4.1   | 5.4   | 34.5  | 3.0 | 4x1    | 1     | 7,032    | ●            |
| ER32 / Hydro20 | 8x6.2               | M10x1 | 4.1   | 6.1   | 29.5  | 3.0 | 4x1    | 1     | 8,032    | ●            |
| ER32 / Hydro20 | 9x7                 | M10x1 | 4.1   | 6.9   | 29.0  | 3.0 | 4x1    | 1     | 9,032    | ●            |
| ER32 / Hydro20 | 10x8                | M10x1 | 4.1   | 7.8   | 25.0  | 3.0 | 4x1    | 1     | 10,032   | ●            |
| ER32 / Hydro20 | 11x9 & 12x9         | M10x1 | 4.1   | 8.8   | 24.0  | 3.0 | 4x1    | 1     | 11,032   | ●            |
| ER32 / Hydro20 | 14x11               | M10x1 | 4.1   | 10.8  | 22.5  | 3.0 | 4x1    | 2     | 14,032   | ●            |
| ER32 / Hydro20 | 16x12               | M10x1 | 4.1   | 11.8  | 22.0  | 3.0 | 4x1    | 2     | 16,032   | ●            |
| ER32 / Hydro20 | 18x14.5 & 20x16     | M10x1 | 4.1   | 14.3  | 20.5  | 3.0 | 4x1    | 2     | 18,032   | ●            |
|                |                     |       |       |       |       |     |        |       |          |              |
|                |                     |       |       |       |       |     |        |       |          |              |
|                |                     |       |       |       |       |     |        |       |          |              |
|                |                     |       |       |       |       |     |        |       |          |              |
|                |                     |       |       |       |       |     |        |       |          |              |
|                |                     |       |       |       |       |     |        |       |          |              |
|                |                     |       |       |       |       |     |        |       |          |              |
|                |                     |       |       |       |       |     |        |       |          |              |
|                |                     |       |       |       |       |     |        |       |          |              |
|                |                     |       |       |       |       |     |        |       |          |              |
|                |                     |       |       |       |       |     |        |       |          |              |
|                |                     |       |       |       |       |     |        |       |          |              |
|                |                     |       |       |       |       |     |        |       |          |              |
|                |                     |       |       |       |       |     |        |       |          |              |
|                |                     |       |       |       |       |     |        |       |          |              |
|                |                     |       |       |       |       |     |        |       |          |              |
|                |                     |       |       |       |       |     |        |       |          |              |

## MQL coolant delivery set for single channel HSK-A

### Product information

- to MQL standard
- version sim. to DIN 69895
- for MQL 1-channel systems
- for tool holders with automatic tool clamping
- dimensions  $d_2$  and  $l_1$  based on installed condition



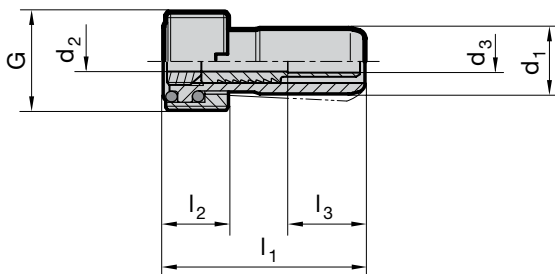
Guhring no. **4508**  
Discount group **114**

| for HSK-A | $d_1$ mm | $d_2$ mm | $d_3$ mm | $l_1$ mm | $l_2$ mm | G       | Code no. | Availability |
|-----------|----------|----------|----------|----------|----------|---------|----------|--------------|
| 32        | 6.00     | 3.00     | 4.00     | 26.00    | 5.50     | M10x1   | 10,032   | ●            |
| 40        | 8.00     | 3.80     | 5.40     | 29.50    | 7.50     | M12x1   | 12,040   | ●            |
| 50        | 10.00    | 3.80     | 6.40     | 33.00    | 9.50     | M16x1   | 16,050   | ●            |
| 63        | 12.00    | 3.80     | 8.00     | 36.50    | 11.50    | M18x1   | 18,063   | ●            |
| 80        | 14.00    | 3.80     | 10.00    | 40.00    | 13.50    | M20x1.5 | 20,080   | ●            |
| 100       | 16.00    | 3.80     | 12.00    | 44.00    | 15.50    | M24x1.5 | 24,100   | ●            |

## MQL coolant delivery set for 2 channel systems HSK-A

### Product information

- to MQL standard
- version sim. to DIN 69895
- for MQL 2-channel systems
- for tool holders with automatic tool clamping
- „Crashsafe“ version similar to DIN 69090-2 neck design
- dimensions  $d_2$  and  $l_1$  based on installed condition

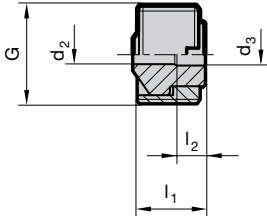


Guhring no. **4511**  
Discount group **114**

| for HSK-A | $d_1$ mm | $d_2$ mm | $d_3$ mm | $l_1$ mm | $l_2$ mm | $l_3$ mm | G       | Code no. | Availability |
|-----------|----------|----------|----------|----------|----------|----------|---------|----------|--------------|
| 32        | 6.00     | 3.00     | 4.00     | 26.00    | 5.50     | -        | M10x1   | 10,032   | ●            |
| 40        | 8.00     | 3.80     | 5.40     | 29.50    | 7.50     | -        | M12x1   | 12,040   | ●            |
| 50        | 10.00    | 3.60     | 4.00     | 33.00    | 9.50     | 21.00    | M16x1   | 16,050   | ●            |
| 63        | 12.00    | 3.60     | 4.00     | 36.50    | 11.50    | 13.80    | M18x1   | 18,063   | ●            |
| 80        | 14.00    | 3.60     | 4.00     | 40.00    | 13.50    | 14.00    | M20x1.5 | 20,080   | ●            |
| 100       | 16.00    | 3.60     | 4.00     | 44.00    | 15.50    | 14.00    | M24x1.5 | 24,100   | ●            |

**Product information**

- to MQL standard
- for internal cooling MQL 1 and 2 channel systems
- for tool holders with manual tool clamping
- optimally sealed for MQL clamping set
- dimensions  $d_2$  and  $l_1$  based on installed condition



|                       |             |
|-----------------------|-------------|
| <b>Guhring no.</b>    | <b>4513</b> |
| <b>Discount group</b> | <b>114</b>  |

| for HSK-A | $d_2$ mm | $d_3$ mm | $l_1$ mm | $l_2$ mm | G       | Code no. | Availability |
|-----------|----------|----------|----------|----------|---------|----------|--------------|
| 32        | 3.00     | 3.00     | 6.30     | -        | M10x1   | 10,032   | ●            |
| 40        | 3.60     | 4.00     | 8.30     | 5.00     | M12x1   | 12,040   | ●            |
| 50        | 3.60     | 4.00     | 10.30    | 5.00     | M16x1   | 16,050   | ●            |
| 50        | 5.00     | 5.00     | 10.30    | -        | M16x1   | 16,150   | ●            |
| 63        | 3.60     | 4.00     | 12.30    | 5.00     | M18x1   | 18,063   | ●            |
| 63        | 6.00     | 6.00     | 12.30    | -        | M18x1   | 18,163   | ●            |
| 80        | 3.60     | 4.00     | 14.40    | 5.00     | M20x1.5 | 20,080   | ●            |
| 80        | 8.00     | 8.00     | 14.40    | -        | M20x1.5 | 20,180   | ●            |
| 100       | 3.60     | 4.00     | 16.40    | 5.00     | M24x1.5 | 24,100   | ●            |
| 100       | 8.00     | 8.00     | 16.40    | -        | M24x1.5 | 24,101   | ●            |

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