

# N/C LATHE TOOLING



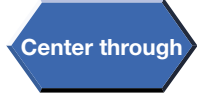
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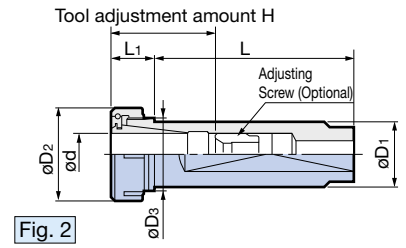
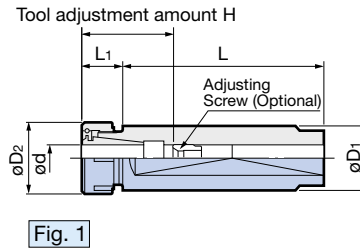
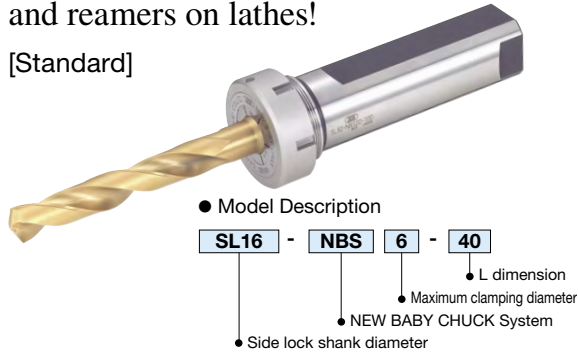
Clamping diameter:  $\varnothing 0.25 - \varnothing 20$

# NEW BABY CHUCK PAT.

Ideal as a basic holder for drills, taps, small-diameter cylindrical turning tools and reamers on lathes!



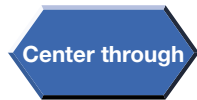
[Standard]



| Model           | Fig. | $\varnothing d$ | $\varnothing D_1$ | $\varnothing D_2$ | $\varnothing D_2$ | L       | L <sub>1</sub> | Tool adjustment amount H |         |
|-----------------|------|-----------------|-------------------|-------------------|-------------------|---------|----------------|--------------------------|---------|
| SL16 -NBS 6- 40 | 1    | 0.25 - 6        | 16                | 20                | -                 | 40      | 15             | 20 - 40                  |         |
|                 |      |                 |                   |                   |                   | 80      |                |                          |         |
|                 |      | 0.5 - 8         |                   | 25                | 40                | 16.5    | 23 - 42        |                          |         |
|                 |      |                 |                   |                   | 80                |         |                |                          |         |
| -NBS10- 40      | 2    | 1.5 - 10        | 20                | 30                | 21                | 40      | 37             | 35 - 45                  |         |
|                 |      |                 |                   |                   |                   | 80      |                |                          |         |
|                 |      | 0.25 - 6        |                   | 22                | 20                | -       | 40             | 15                       | 20 - 40 |
|                 |      |                 |                   |                   |                   |         | 80             |                          |         |
| 0.5 - 8         | 25   | -               | 40                |                   | 16.5              | 23 - 42 |                |                          |         |
|                 |      |                 | 80                |                   |                   |         |                |                          |         |
| -NBS10- 40      | 2    | 1.5 - 10        | 20                | 30                | 21                | 40      | 18             | 35 - 45                  |         |
|                 |      |                 |                   |                   |                   | 80      |                |                          |         |
|                 |      | 2.5 - 13        |                   | 35                | 26                | 40      | 43             | 41 - 60                  |         |
|                 |      |                 |                   |                   |                   | 80      |                |                          |         |
| SL22 -NBS 6- 40 | 1    | 0.25 - 6        | 22                | 20                | -                 | 40      | 15             | 20 - 40                  |         |
|                 |      |                 |                   |                   |                   | 80      |                |                          |         |
|                 |      | 0.5 - 8         |                   | 25                | -                 | 40      | 16.5           | 23 - 42                  |         |
|                 |      |                 |                   |                   |                   | 80      |                |                          |         |
| -NBS10- 40      | 2    | 1.5 - 10        | 20                | 30                | 26                | 40      | 18             | 35 - 45                  |         |
|                 |      |                 |                   |                   |                   | 80      |                |                          |         |
|                 |      | 2.5 - 13        |                   | 35                | 26                | 40      | 21.5           | 41 - 47                  |         |
|                 |      |                 |                   |                   |                   | 80      |                |                          |         |
| -NBS13- 40      | 2    | 2.5 - 13        | 20                | 20                | -                 | 80      | 15             | 20 - 40                  |         |
|                 |      |                 |                   |                   |                   | 120     |                |                          |         |
|                 |      | 0.5 - 8         |                   | 25                | -                 | 80      | 16.5           | 23 - 42                  |         |
|                 |      |                 |                   |                   |                   | 120     |                |                          |         |
| -NBS10- 80      | 1    | 1.5 - 10        | 25                | 30                | -                 | 80      | 18             | 35 - 45                  |         |
|                 |      |                 |                   |                   |                   | 120     |                |                          |         |
|                 |      | 2.5 - 13        |                   | 35                | 26                | 80      | 21.5           | 41 - 60                  |         |
|                 |      |                 |                   |                   |                   | 120     |                |                          |         |
| -NBS13- 80      | 2    | 2.5 - 13        | 20                | 20                | -                 | 80      | 15             | 20 - 40                  |         |
|                 |      |                 |                   |                   |                   | 120     |                |                          |         |
|                 |      | 0.5 - 8         |                   | 25                | -                 | 80      | 16.5           | 23 - 42                  |         |
|                 |      |                 |                   |                   |                   | 120     |                |                          |         |
| -NBS16- 80      | 2    | 2.5 - 16        | 25.4              | 30                | -                 | 80      | 18             | 35 - 45                  |         |
|                 |      |                 |                   |                   |                   | 120     |                |                          |         |
|                 |      | 2.5 - 13        |                   | 35                | 26                | 80      | 21.5           | 41 - 50                  |         |
|                 |      |                 |                   |                   |                   | 120     |                |                          |         |
| -NBS16- 80      | 2    | 2.5 - 16        | 20                | 20                | -                 | 80      | 15             | 20 - 40                  |         |
|                 |      |                 |                   |                   |                   | 120     |                |                          |         |
|                 |      | 0.5 - 8         |                   | 25                | -                 | 80      | 16.5           | 23 - 42                  |         |
|                 |      |                 |                   |                   |                   | 120     |                |                          |         |
| -NBS10- 80      | 1    | 1.5 - 10        | 25.4              | 30                | -                 | 80      | 18             | 35 - 45                  |         |
|                 |      |                 |                   |                   |                   | 120     |                |                          |         |
|                 |      | 2.5 - 13        |                   | 35                | 26                | 80      | 21.5           | 41 - 50                  |         |
|                 |      |                 |                   |                   |                   | 120     |                |                          |         |
| -NBS13- 80      | 2    | 2.5 - 13        | 20                | 20                | -                 | 80      | 15             | 20 - 40                  |         |
|                 |      |                 |                   |                   |                   | 120     |                |                          |         |
|                 |      | 0.5 - 8         |                   | 25                | -                 | 80      | 16.5           | 23 - 42                  |         |
|                 |      |                 |                   |                   |                   | 120     |                |                          |         |
| -NBS16- 80      | 2    | 2.5 - 16        | 25.4              | 30                | -                 | 80      | 18             | 35 - 45                  |         |
|                 |      |                 |                   |                   |                   | 120     |                |                          |         |
|                 |      | 2.5 - 13        |                   | 35                | 26                | 80      | 21.5           | 41 - 50                  |         |
|                 |      |                 |                   |                   |                   | 120     |                |                          |         |
| -NBS16- 80      | 2    | 2.5 - 16        | 20                | 20                | -                 | 80      | 15             | 20 - 40                  |         |
|                 |      |                 |                   |                   |                   | 120     |                |                          |         |
|                 |      | 0.5 - 8         |                   | 25                | -                 | 80      | 16.5           | 23 - 42                  |         |
|                 |      |                 |                   |                   |                   | 120     |                |                          |         |
| -NBS20-100      | 1    | 2.5 - 13        | 32                | 35                | -                 | 100     | 21.5           | 41 - 60                  |         |
|                 |      |                 |                   |                   |                   | 150     |                |                          |         |
|                 |      | 2.5 - 16        |                   | 42                | -                 | 100     | 45 - 65        |                          |         |
|                 |      |                 |                   |                   |                   | 150     |                |                          |         |
| 2.5 - 20        | 46   | 36              | 100               | 48 - 65           |                   |         |                |                          |         |
|                 |      |                 | 150               |                   |                   |         |                |                          |         |

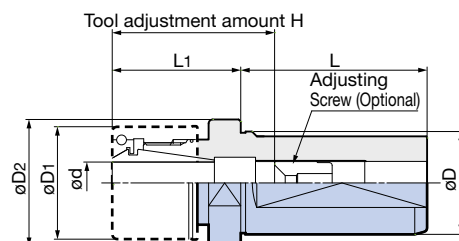
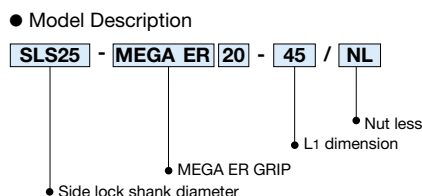
Refer to NEW BABY CHUCK [With Stopper] on the left page for remarks

Popular 8° (single angle) taper ER collet.  
Achieves stable machining with highly accurate chucking repeatability.



● Flat is provided on the shank to be mounted in the tool post of the NC lathe directly.

[With Stopper]



| Model                        | $\varnothing d$ | $\varnothing D$ | $\varnothing D_1$ | $\varnothing D_2$ | L  | L <sub>1</sub> | H       | Adjusting Screw |
|------------------------------|-----------------|-----------------|-------------------|-------------------|----|----------------|---------|-----------------|
| <b>SLS25-MEGA ER20-45/NL</b> | 2.75 - 13       | 25              | 35                | 32                | 54 | 45             | 42 - 62 | NBA13B          |
| <b>-75/NL</b>                |                 |                 |                   |                   |    | 75             |         |                 |
| <b>SLS32-MEGA ER20-45/NL</b> | 2.75 - 13       | 32              | 35                | 39.5              | 58 | 45             | 42 - 62 | NBA13B          |
| <b>-75/NL</b>                |                 |                 |                   |                   |    | 75             |         |                 |
| <b>-MEGA ER32-45/NL</b>      | 2.75 - 20       |                 | 50                | 50                |    | 45             | 47 - 68 | NBA20B          |
| <b>-75/NL</b>                |                 |                 | 75                | 50 - 68           |    |                |         |                 |
| <b>SLS40-MEGA ER20-45/NL</b> | 2.75 - 13       | 40              | 35                | 49.5              | 68 | 45             | 42 - 62 | NBA13B          |
| <b>-75/NL</b>                |                 |                 |                   |                   |    | 75             |         |                 |
| <b>-MEGA ER32-45/NL</b>      | 2.75 - 20       |                 | 50                | 50                |    | 45             | 50 - 68 | NBA20B          |
| <b>-75/NL</b>                |                 |                 | 75                |                   |    |                |         |                 |

1. Collet, nut, Adjusting Screw and wrench must be ordered separately.
2. Center through coolant supply is available.
3. Tool adjustment amount "H" indicates the adjustment length with an Adjusting Screw.

### Optional Accessories

|                                  |  |                                      |                                  |                             |                                      |                                      |
|----------------------------------|--|--------------------------------------|----------------------------------|-----------------------------|--------------------------------------|--------------------------------------|
| <b>MEGA ER NUT</b><br><p>G16</p> | <b>MEGA ER SOLID NUT</b><br><p>G16</p> | <b>ER PERFECT SEAL</b><br><p>G17</p> | <b>Mega Wrench</b><br><p>G22</p> | <b>ER NUT</b><br><p>G16</p> | <b>New Baby Wrench</b><br><p>G16</p> | <b>Adjusting Screw</b><br><p>G16</p> |
|----------------------------------|--|--------------------------------------|----------------------------------|-----------------------------|--------------------------------------|--------------------------------------|

For Mega ER Collets, **G15**

Collet and nut must be ordered separately.

### ● Example

MEGA ER PERFECT SEAL Model  
**MERPS20-030035**



MEGA ER NUT Model  
**MERN20**



MEGA ER SOLID NUT Model  
**MER20SN**



ER NUT Model  
**ERN20**

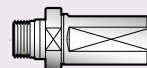


+



MEGA ER Collet  
**ERC20-3AA**

+



MEGA ER GRIP  
**SLS25-MEGA ER20-45/NL**

Clamping diameter:  $\varnothing 1.9 - \varnothing 16$ 

Center through

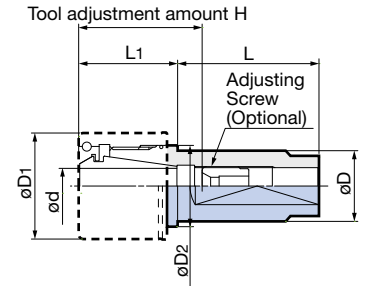
[Standard]



## ● Model Description

**SL16** - **MEGA ER 11** - **40** / **NL**

- Side lock shank diameter
- MEGA ER GRIP
- L dimension
- Nut less



| Model                           | $\varnothing d$ | $\varnothing D$ | $\varnothing D_1$ | $\varnothing D_2$ | L  | L <sub>1</sub> | H       | Adjusting Screw |
|---------------------------------|-----------------|-----------------|-------------------|-------------------|----|----------------|---------|-----------------|
| <b>SL16-MEGA ER11- 40/NL</b>    | 2.75 - 6        | 16              | 19                | —                 | 40 | 19             | 23 - 40 | NBA 6B          |
| <b>- 80/NL</b>                  |                 |                 |                   |                   | 80 |                |         |                 |
| <b>SL20-MEGA ER11- 40/NL</b>    | 2.75 - 6        | 20              | 19                | —                 | 40 | 19             | 23 - 40 | NBA 6B          |
| <b>- 80/NL</b>                  |                 |                 |                   |                   | 80 |                |         |                 |
| <b>-MEGA ER16- 40/NL</b>        | 1.9 - 10        |                 | 30                | 23                | 40 | 28             | 35 - 47 | NBA10B          |
| <b>- 80/NL</b>                  |                 |                 | 80                |                   |    |                |         |                 |
| <b>SL25-MEGA ER11- 60/NL</b>    | 2.75 - 6        | 25              | 19                | —                 | 60 | 19             | 23 - 40 | NBA 6B          |
| <b>-100/NL</b>                  | 100             |                 |                   |                   |    |                |         |                 |
| <b>-MEGA ER16- 60/NL</b>        | 1.9 - 10        |                 | 30                | —                 | 60 | 28             | 35 - 47 | NBA10B          |
| <b>-100/NL</b>                  |                 |                 | 100               |                   |    |                |         |                 |
| <b>-MEGA ER20- 60/NL</b>        | 2.75 - 13       |                 | 35                | 27                | 60 | 30             | 42 - 62 | NBA13B          |
| <b>-100/NL</b>                  |                 |                 | 100               |                   |    |                |         |                 |
| <b>-MEGA ER25- 60/NL</b>        | 2.75 - 16       | 42              | 33.5              | 60                | 48 | 44 - 67        | NBA16B  |                 |
| <b>-100/NL</b>                  |                 | 100             |                   |                   |    |                |         |                 |
| <b>SL19.05-MEGA ER11- 40/NL</b> | 2.75 - 6        | 19.05           | 19                | —                 | 40 | 19             | 23 - 40 | NBA 6B          |
| <b>- 80/NL</b>                  |                 |                 |                   |                   | 80 |                |         |                 |
| <b>-MEGA ER16- 40/NL</b>        | 1.9 - 10        |                 | 30                | 23                | 40 | 28             | 35 - 47 | NBA10B          |
| <b>- 80/NL</b>                  |                 |                 | 80                |                   |    |                |         |                 |

- Collet, nut, Adjusting Screw and wrench must be ordered separately.
- Center through coolant supply is available.
- Tool adjustment amount "H" indicates the adjustment length with an Adjusting Screw.

**Optional Accessories**

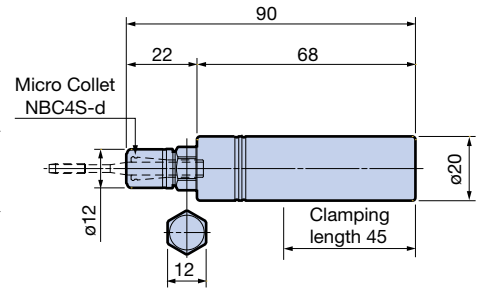
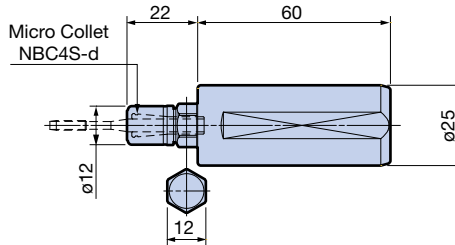
| MEGA ER NUT   | MEGA ER SOLID NUT   | ER PERFECT SEAL   | Mega Wrench   | ER NUT   | New Baby Wrench   | Adjusting Screw   |
|---|---|---|---|--|---|---|
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

 For Mega ER Collets, **G15**

Improves thread quality and tap life  
by reducing thrust loads caused by synchronization errors up to 90%.

[Small Diameter Tap MTG3]

• Cannot be used with machining center without synchronized tapping function.



● Model Description

**SLS25** - **MGT3** - **22**

- Side lock shank diameter
- MEGA SYNCHRO TAPPING HOLDER
- Tip length

| Model | <b>SLS25-MGT3-22</b> |
|-------|----------------------|
|-------|----------------------|

1. Nut is included. (MGN4S)  
Collet and wrench must be ordered separately.
2. When attaching or detaching the tap, use the Mega Wrench and a commercially available flat wrench (12mm).

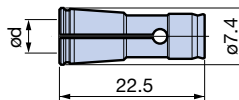
| Model | <b>ST20-MGT3-90</b> |
|-------|---------------------|
|-------|---------------------|

1. Nut is included. (MGN4S)  
Collet and wrench must be ordered separately.
2. There is no flat on the shank part.
3. When attaching or detaching the tap, use the Mega Wrench and a commercially available flat wrench (12mm).

## Mega Wrench



## Micro Collet



● Collet accuracy

| Collet class | Runout accuracy |             |
|--------------|-----------------|-------------|
|              | Nose            | 4D          |
| AA           | Within 1 μm     | Within 3 μm |

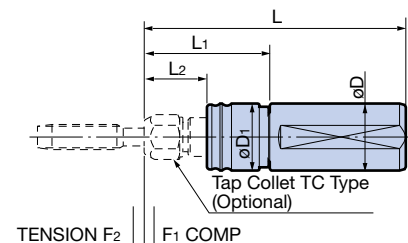
| Model | <b>MGR12</b> |
|-------|--------------|
|-------|--------------|

1. When attaching or detaching the tap, a commercially available flat wrench (12mm width) is also required.  
Prepare this on your own.

| Model                | Tapping range |          | Tap shank diameter ød |
|----------------------|---------------|----------|-----------------------|
|                      | Metric        | Unify    |                       |
| <b>NBC4S - 3.0AA</b> | M1 - M2.6     | No.0 - 4 | 3                     |
| <b>NBC4S - 4.0AA</b> | M3            | No.5, 6  | 4                     |

F  
N/C LATHE TOOLING

- Built-in radial float mechanism absorbs misalignment with the spindle center.  
Excellent for rigid tapping with NC Lathes.
- Small axial float absorbs synchronization errors occurring when changing over the rotation from forward to reverse, reducing loads to the tap.



Radial float = ±0.5mm/ø

● Model Description

**SLS32** - **ATS** - **12** - **R** - **60**

- Side lock shank diameter
- MEGA SYNCHRO TAPPING HOLDER TYPE R
- Tapping range
- Radial float mechanism
- L1 dimension

| Model                   | Tapping range | øD | øD <sub>1</sub> | L   | L <sub>1</sub> | L <sub>2</sub> | F <sub>1</sub> | F <sub>2</sub> | Compatible Tap Collet |
|-------------------------|---------------|----|-----------------|-----|----------------|----------------|----------------|----------------|-----------------------|
| <b>SLS32-ATS12R- 60</b> | M3 - M12      | 32 | 32              | 125 | 60             | 30             | 0.5            | 0.5            | TC12-d                |
| <b>SLS40-ATS12R- 60</b> |               | 40 | 32              | 125 | 60             | 25             | 0.5            | 0.5            |                       |
| <b>-ATS20R- 70</b>      | M8 - M20      | 40 | 44              | 145 | 70             | 25             | 0.5            | 0.5            | TC20-d                |

1. Tap Collet is not included.  
TC Tap Collet must be ordered separately.

F<sub>1</sub>: Compression amount  
F<sub>2</sub>: Tension amount

• Cannot be used with machining center without synchronized tapping function.

For Tap Collets, **A135**

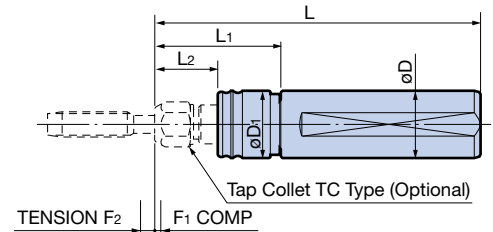
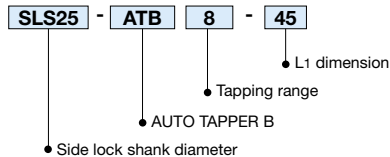
## AUTO TAPPER B M3 - M20

- Auto depth control eliminates variation in the tapping depth, ideal for blind-hole or pipe tapping.
- Minimized projection length avoids interference on turret lathes.

Automatic  
depth control



● Model Description



| Model                  | Tapping range | øD | øD <sub>1</sub> | L   | L <sub>1</sub> | L <sub>2</sub> | F <sub>1</sub> | F <sub>2</sub> | Compatible Tap Collet |
|------------------------|---------------|----|-----------------|-----|----------------|----------------|----------------|----------------|-----------------------|
| <b>SLS25-ATB 8- 45</b> | M3 - M 8      | 25 | 25.5            | 130 | 45             | 17             | 0.5            | 3              | TC 8-d                |
| <b>SLS32-ATB12- 60</b> | M3 - M12      | 32 | 32              | 155 | 60             | 30             |                | 4              | TC12-d                |
| <b>SLS40-ATB12- 60</b> |               | 32 | 32              | 155 | 60             | 25             |                | 4              |                       |
| <b>-ATB20- 70</b>      | M8 - M20      | 40 | 44              | 180 | 70             | 25             |                | 5              | TC20-d                |

1. Tap Collet is not included. TC Tap Collet must be ordered separately.
2. Cannot be used in left-hand thread machining.
3. F<sub>2</sub> dimension in the table is the tension amount until it reaches neutral.

F<sub>1</sub>: Compression amount  
F<sub>2</sub>: Tension amount

For Tap Collets, **A135**

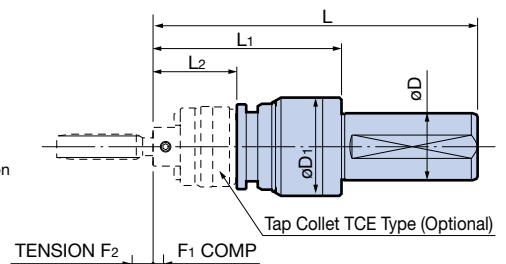
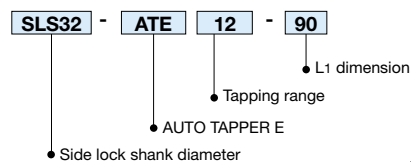
## AUTO TAPPER E M3 - M24

- Easy-to-use built-in torque limiter.
- Extended axial float allows stable and reliable use.

Torque limiter



● Model Description



| Model                  | Tapping range | øD | øD <sub>1</sub> | L   | L <sub>1</sub> | L <sub>2</sub> | F <sub>1</sub> | F <sub>2</sub> | Compatible Tap Collet |
|------------------------|---------------|----|-----------------|-----|----------------|----------------|----------------|----------------|-----------------------|
| <b>SLS32-ATE12- 90</b> | M 3 - M12     | 32 | 47              | 155 | 90             | 40             | 5              | 10             | TCE12-d               |
| <b>SLS40-ATE12- 90</b> |               | 47 | 165             | 90  | 40             | 5              | 10             |                |                       |
| <b>-ATE24-135</b>      | M10 - M24     | 40 | 64              | 210 | 135            | 55             | 7              | 15             | TCE24-d               |

1. Tap Collet is not included. TCE Tap Collet must be ordered separately.
2. Cannot be used in left-hand thread machining.

F<sub>1</sub>: Compression amount  
F<sub>2</sub>: Tension amount

For Tap Collets, **A138**



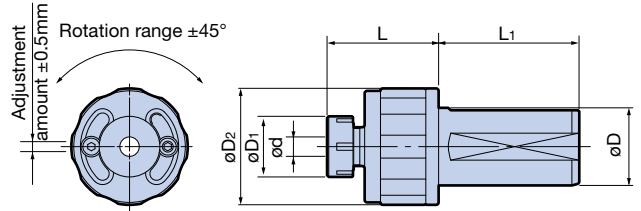
Easy and reliable centering adjustment for turret lathe sleeve holder.

Center through

### Polar coordinate system realizing intuitive adjustment

The rotation center of the workpiece and the center of the turret pot may be misaligned not only in the center height direction, but also in the X-axis direction.

In order to easily correct the deviation of both directions at the same time, a polar coordinate system combining rotary and linear movement is used. Single 2-way adjusting bolt completes adjustment of center height both up and down.



| Model            | $\phi d$ | $\phi D$ | $\phi D_1$ | $\phi D_2$ | L  | L <sub>1</sub> | Weight (kg) |
|------------------|----------|----------|------------|------------|----|----------------|-------------|
| SLS32-NBS 8CH-45 | 0.5 - 8  | 32       | 25         | 48         | 46 | 58             | 1.6         |
| SLS40-NBS20CH-60 | 2.5 - 20 | 40       | 46         | 74         | 60 | 68             | 2.5         |

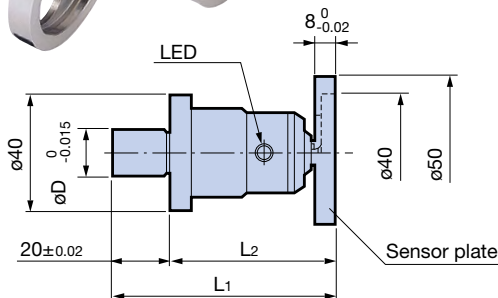
1. Nut is included. Collet and wrench must be ordered separately.
2. Center through coolant supply is available.

3. Adjusting Screw cannot be used.

| Standard Accessory   | Optional Accessories   |  |   |
|--|--|--|---|
| Nut<br><br>For Spares  | Wrench<br><br> | Collet<br><br> | BABY PERFECT SEAL<br><br> |

Setup of tool offset is possible without trial cut.

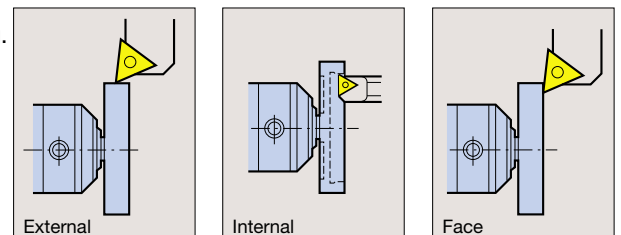
- Effective in reducing setup time for NC Lathes.
- Detectable with various tool bits for external, internal and face turning.



| Model | $\phi D$ | L <sub>1</sub> | L <sub>2</sub> | Repeatability | Battery  |
|-------|----------|----------------|----------------|---------------|----------|
| LM-15 | 15       | 75             | 55             | $\pm 2 \mu$   | BR425    |
| LM-30 | 30       | 65             | 45             |               | SR44 x 2 |

### Caution

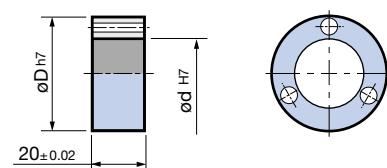
- Machine and tools must be electro-conductive for measurement.



Clamp the  $\phi D$  section of the LATHE MASTER with chuck jaws. LED illuminates when the tip of the tool touches the sensor plate.

### Collar Set <Optional>

If the chuck jaw diameter does not fit, an optional collar set is available.



| Model  | Inner diameter $\phi d$ | Outer diameter $\phi D$    |
|--------|-------------------------|----------------------------|
| LM15CS | 15                      | 20, 25, 30 (1 pc each)     |
| LM30CS | 30                      | 35, 40, 45, 50 (1 pc each) |