

SERLOCK® SELF-LOCKING BUSHING



DRIVE  
SOLUTIONS

SERLOCK®



| SERLOCK® Self-Locking Bushing           | PAGE      |
|-----------------------------------------|-----------|
| SERLOCK®                                | 139       |
| Dimensions and technical caratteristics | 140 - 141 |

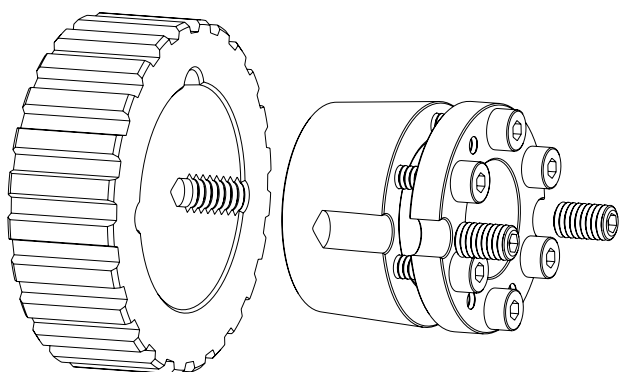
## SERLOCK®

SERLOCK® is the new patented, keyless self locking bushing for immediate use with all power transmission components suitable for the SER-SIT®, T/L or similar tapered bushings:

- Is directly interchangeable with SER-SIT® or T/L tapered bushings
- Available in 1108, 1210, 1610, 2012, 2517, 3020 sizes
- With bore diameters from 12 to 70 mm according to the bush sizes
- Allows infinite axial and angular adjustments

SERLOCK® is an innovative clamping system which combines all the advantages of SIT-LOCK® friction keyless bushings with the extensive availability of a wide range of PT components for tapered bushings such as:

- V and Poly-V Pulleys
- Timing Pulleys
- Couplings
- Sprockets



### SERLOCK® eliminates:

- All problems related to conventional keyway systems (backlash, breakage, fretting corrosion, difficult disassembly, restrained axial and angular positioning of the component on the shaft);
- Additional machining on the component to be fixed on the shaft, required when using conventional cone/clamping elements.

With the following benefits:

- Immediate availability of the system (element to be clamped + advanced clamping system);
- Easy assembly and disassembly;
- Possibility of reducing the diameter of the shafts used by up to 25%;
- Easy angular and axial adjustment of the component with respect to the shaft;
- Possibility of using SERLOCK® also on shafts with keyway.

All this means an immediate advantage for the user as a result of the potential increase in productivity.

### Assembly is extremely simple and fast:

- 1) Assemble SERLOCK® bushing to the hub by means of the two set screws;
- 2) Position the part on the shaft in the required axial and angular position;
- 3) Gradually tighten the set screws until the torque  $M_s$ , indicated in the technical tables, is achieved;
- 4) Tighten the clamping screws gradually and evenly according to the cross outline until the torque  $M_s$ , indicated in the technical tables is achieved.

#### Note:

**Do not lubricate the SERLOCK® bushing or the shaft on which it is mounted.**

### To disassemble:

- 1) Disassemble the tightening screws;
- 2) Insert the screws in the threaded disassembly holes, tightening them until the tapered bushing is released;

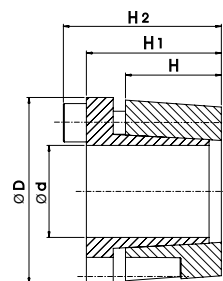
### In order to remove the outer ring, if necessary:

- 3) After having removed the inner bushing, loosen the set screws;
- 4) Keeping the loosened set screws in place, position the inner bushing rotated 30° in relation to the original position;
- 5) Insert the screws and tighten them gradually until the inner ring is released.

## SERLOCK® dimensions and performances of standard types

For different bore, sizes, or hollow shaft application, please contact our Technical Department.  
Shaft tolerance h8 or better if not otherwise specified, are shown in mm dimensions.

| SERLOCK® 1108 |                 |    |      |      |    |                        |                        |        |      |                |     |           |       |                |     |
|---------------|-----------------|----|------|------|----|------------------------|------------------------|--------|------|----------------|-----|-----------|-------|----------------|-----|
| Type          | Dimensions [mm] |    |      |      |    | Performances           |                        | Screws |      |                |     | Setscrews |       |                |     |
|               | d               | H  | H1   | H2   | D  | M <sub>T</sub><br>[Nm] | F <sub>ax</sub><br>[N] | No.    | Type | M <sub>s</sub> | Key | No.       | Type  | M <sub>s</sub> | Key |
| SL1108F12     | 12              | 20 | 29,5 | 33,5 | 39 | 109                    | 18200                  | 6      | M4   | 4,9            | 3   | 2         | 1/4 W | 4,9            | 3   |
| SL1108F14     | 14              | 20 | 29,5 | 33,5 | 39 | 128                    | 18200                  | 6      | M4   | 4,9            | 3   | 2         | 1/4 W | 4,9            | 3   |
| SL1108F15     | 15              | 20 | 29,5 | 33,5 | 39 | 137                    | 18200                  | 6      | M4   | 4,9            | 3   | 2         | 1/4 W | 4,9            | 3   |
| SL1108F16     | 16              | 20 | 29,5 | 33,5 | 39 | 146                    | 18200                  | 6      | M4   | 4,9            | 3   | 2         | 1/4 W | 4,9            | 3   |
| SL1108F18     | 18              | 20 | 29,5 | 33,5 | 39 | 164                    | 18200                  | 6      | M4   | 4,9            | 3   | 2         | 1/4 W | 4,9            | 3   |
| SL1108F19     | 19              | 20 | 29,5 | 33,5 | 39 | 173                    | 18200                  | 6      | M4   | 4,9            | 3   | 2         | 1/4 W | 4,9            | 3   |
| SL1108F20     | 20              | 20 | 29,5 | 33,5 | 39 | 182                    | 18200                  | 6      | M4   | 4,9            | 3   | 2         | 1/4 W | 4,9            | 3   |
| SL1108F22     | 22              | 20 | 29,5 | 33,5 | 39 | 201                    | 18200                  | 6      | M4   | 4,9            | 3   | 2         | 1/4 W | 4,9            | 3   |



| SERLOCK® 1210 |                 |    |      |      |    |                        |                        |        |      |                |     |           |       |                |     |
|---------------|-----------------|----|------|------|----|------------------------|------------------------|--------|------|----------------|-----|-----------|-------|----------------|-----|
| Type          | Dimensions [mm] |    |      |      |    | Performances           |                        | Screws |      |                |     | Setscrews |       |                |     |
|               | d               | H  | H1   | H2   | D  | M <sub>T</sub><br>[Nm] | F <sub>ax</sub><br>[N] | No.    | Type | M <sub>s</sub> | Key | No.       | Type  | M <sub>s</sub> | Key |
| SL1210F14     | 14              | 25 | 37,5 | 43,5 | 49 | 246                    | 35100                  | 6      | M6   | 14             | 5   | 2         | 3/8 W | 14             | 5   |
| SL1210F15     | 15              | 25 | 37,5 | 43,5 | 49 | 263                    | 35100                  | 6      | M6   | 14             | 5   | 2         | 3/8 W | 14             | 5   |
| SL1210F16     | 16              | 25 | 37,5 | 43,5 | 49 | 281                    | 35100                  | 6      | M6   | 14             | 5   | 2         | 3/8 W | 14             | 5   |
| SL1210F18     | 18              | 25 | 37,5 | 43,5 | 49 | 316                    | 35100                  | 6      | M6   | 14             | 5   | 2         | 3/8 W | 14             | 5   |
| SL1210F19     | 19              | 25 | 37,5 | 43,5 | 49 | 333                    | 35100                  | 6      | M6   | 14             | 5   | 2         | 3/8 W | 14             | 5   |
| SL1210F20     | 20              | 25 | 37,5 | 43,5 | 49 | 351                    | 35100                  | 6      | M6   | 14             | 5   | 2         | 3/8 W | 14             | 5   |
| SL1210F22     | 22              | 25 | 37,5 | 43,5 | 49 | 386                    | 35100                  | 6      | M6   | 14             | 5   | 2         | 3/8 W | 14             | 5   |
| SL1210F24     | 24              | 25 | 37,5 | 43,5 | 49 | 421                    | 35100                  | 6      | M6   | 14             | 5   | 2         | 3/8 W | 14             | 5   |
| SL1210F25     | 25              | 25 | 37,5 | 43,5 | 49 | 438                    | 35100                  | 6      | M6   | 14             | 5   | 2         | 3/8W  | 14             | 5   |

| SERLOCK® 1610 |                 |    |      |      |    |                        |                        |        |      |                |     |           |       |                |     |
|---------------|-----------------|----|------|------|----|------------------------|------------------------|--------|------|----------------|-----|-----------|-------|----------------|-----|
| Type          | Dimensions [mm] |    |      |      |    | Performances           |                        | Screws |      |                |     | Setscrews |       |                |     |
|               | d               | H  | H1   | H2   | D  | M <sub>T</sub><br>[Nm] | F <sub>ax</sub><br>[N] | No.    | Type | M <sub>s</sub> | Key | No.       | Type  | M <sub>s</sub> | Key |
| SL1610F14     | 14              | 25 | 37,5 | 43,5 | 59 | 246                    | 35100                  | 6      | M6   | 14             | 5   | 2         | 3/8 W | 14             | 5   |
| SL1610F15     | 15              | 25 | 37,5 | 43,5 | 59 | 263                    | 35100                  | 6      | M6   | 14             | 5   | 2         | 3/8W  | 14             | 5   |
| SL1610F16     | 16              | 25 | 37,5 | 43,5 | 59 | 281                    | 35100                  | 6      | M6   | 14             | 5   | 2         | 3/8 W | 14             | 5   |
| SL1610F18     | 18              | 25 | 37,5 | 43,5 | 59 | 316                    | 35100                  | 6      | M6   | 14             | 5   | 2         | 3/8W  | 14             | 5   |
| SL1610F19     | 19              | 25 | 37,5 | 43,5 | 59 | 333                    | 35100                  | 6      | M6   | 14             | 5   | 2         | 3/8 W | 14             | 5   |
| SL1610F20     | 20              | 25 | 37,5 | 43,5 | 59 | 351                    | 35100                  | 6      | M6   | 14             | 5   | 2         | 3/8W  | 14             | 5   |
| SL1610F22     | 22              | 25 | 37,5 | 43,5 | 59 | 386                    | 35100                  | 6      | M6   | 14             | 5   | 2         | 3/8 W | 14             | 5   |
| SL1610F24     | 24              | 25 | 37,5 | 43,5 | 59 | 421                    | 35100                  | 6      | M6   | 14             | 5   | 2         | 3/8W  | 14             | 5   |
| SL1610F25     | 25              | 25 | 37,5 | 43,5 | 59 | 438                    | 35100                  | 6      | M6   | 14             | 5   | 2         | 3/8W  | 14             | 5   |
| SL1610F26     | 26              | 25 | 37,5 | 43,5 | 59 | 456                    | 35100                  | 6      | M6   | 14             | 5   | 2         | 3/8W  | 14             | 5   |
| SL1610F28     | 28              | 25 | 37,5 | 43,5 | 59 | 491                    | 35100                  | 6      | M6   | 14             | 5   | 2         | 3/8 W | 14             | 5   |
| SL1610F30     | 30              | 25 | 37,5 | 43,5 | 59 | 526                    | 35100                  | 6      | M6   | 14             | 5   | 2         | 3/8W  | 14             | 5   |
| SL1610F32     | 32              | 25 | 37,5 | 43,5 | 59 | 561                    | 35100                  | 6      | M6   | 14             | 5   | 2         | 3/8 W | 14             | 5   |
| SL1610F35     | 35              | 25 | 34,8 | 40,8 | 59 | 614                    | 35100                  | 6      | M6   | 14             | 5   | 2         | 3/8W  | 14             | 5   |

|                 |                             |    |
|-----------------|-----------------------------|----|
| M <sub>T</sub>  | Screw tightening torque     | Nm |
| M <sub>s</sub>  | Transmissible torque moment | Nm |
| F <sub>ax</sub> | Transmissible axial load    | kN |

Part Number

SL 1108 F10

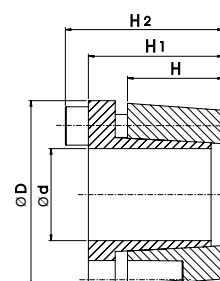
SERLOCK®

Size

Bore diameter [mm]

# SERLOCK® dimensions and performances of standard types

| SERLOCK® 2012 |                 |    |      |      |    |                        |                        |        |      |                |     |           |        |                |     |
|---------------|-----------------|----|------|------|----|------------------------|------------------------|--------|------|----------------|-----|-----------|--------|----------------|-----|
| Type          | Dimensions [mm] |    |      |      |    | Performances           |                        | Screws |      |                |     | Setscrews |        |                |     |
|               | d               | H  | H1   | H2   | D  | M <sub>T</sub><br>[Nm] | F <sub>ax</sub><br>[N] | No.    | Type | M <sub>S</sub> | Key | No.       | Type   | M <sub>S</sub> | Key |
| SL2012F19     | 19              | 30 | 45,5 | 53,5 | 71 | 436                    | 45900                  | 6      | M8   | 25             | 6   | 2         | 7/16 W | 25             | 6   |
| SL2012F20     | 20              | 30 | 45,5 | 53,5 | 71 | 459                    | 45900                  | 6      | M8   | 25             | 6   | 2         | 7/16 W | 25             | 6   |
| SL2012F22     | 22              | 30 | 45,5 | 53,5 | 71 | 505                    | 45900                  | 6      | M8   | 25             | 6   | 2         | 7/16 W | 25             | 6   |
| SL2012F24     | 24              | 30 | 45,5 | 53,5 | 71 | 551                    | 45900                  | 6      | M8   | 25             | 6   | 2         | 7/16 W | 25             | 6   |
| SL2012F25     | 25              | 30 | 45,5 | 53,5 | 71 | 574                    | 45900                  | 6      | M8   | 25             | 6   | 2         | 7/16 W | 25             | 6   |
| SL2012F26     | 26              | 30 | 45,5 | 53,5 | 71 | 597                    | 45900                  | 6      | M8   | 25             | 6   | 2         | 7/16 W | 25             | 6   |
| SL2012F28     | 28              | 30 | 45,5 | 53,5 | 71 | 643                    | 45900                  | 6      | M8   | 25             | 6   | 2         | 7/16 W | 25             | 6   |
| SL2012F30     | 30              | 30 | 45,5 | 53,5 | 71 | 689                    | 45900                  | 6      | M8   | 25             | 6   | 2         | 7/16 W | 25             | 6   |
| SL2012F32     | 32              | 30 | 45,5 | 53,5 | 71 | 735                    | 45900                  | 6      | M8   | 25             | 6   | 2         | 7/16 W | 25             | 6   |
| SL2012F35     | 35              | 30 | 45,5 | 53,5 | 71 | 804                    | 45900                  | 6      | M8   | 25             | 6   | 2         | 7/16 W | 25             | 6   |
| SL2012F38     | 38              | 30 | 45,5 | 53,5 | 71 | 873                    | 45900                  | 6      | M8   | 25             | 6   | 2         | 7/16 W | 25             | 6   |
| SL2012F40     | 40              | 30 | 45,5 | 53,5 | 71 | 919                    | 45900                  | 6      | M8   | 25             | 6   | 2         | 7/16 W | 25             | 6   |
| SL2012F42     | 42              | 30 | 45,5 | 53,5 | 71 | 965                    | 45900                  | 6      | M8   | 25             | 6   | 2         | 7/16 W | 25             | 6   |



| SERLOCK® 2517 |                 |    |      |      |    |                        |                        |        |      |                |     |           |       |                |     |
|---------------|-----------------|----|------|------|----|------------------------|------------------------|--------|------|----------------|-----|-----------|-------|----------------|-----|
| Type          | Dimensions [mm] |    |      |      |    | Performances           |                        | Screws |      |                |     | Setscrews |       |                |     |
|               | d               | H  | H1   | H2   | D  | M <sub>T</sub><br>[Nm] | F <sub>ax</sub><br>[N] | No.    | Type | M <sub>S</sub> | Key | No.       | Type  | M <sub>S</sub> | Key |
| SL2517F24     | 24              | 45 | 60,5 | 68,5 | 86 | 551                    | 45900                  | 6      | M8   | 25             | 6   | 2         | 1/2 W | 35             | 6   |
| SL2517F25     | 25              | 45 | 60,5 | 68,5 | 86 | 574                    | 45900                  | 6      | M8   | 25             | 6   | 2         | 1/2 W | 35             | 6   |
| SL2517F26     | 26              | 45 | 60,5 | 68,5 | 86 | 597                    | 45900                  | 6      | M8   | 25             | 6   | 2         | 1/2 W | 35             | 6   |
| SL2517F28     | 28              | 45 | 60,5 | 68,5 | 86 | 643                    | 45900                  | 6      | M8   | 25             | 6   | 2         | 1/2 W | 35             | 6   |
| SL2517F30     | 30              | 45 | 60,5 | 68,5 | 86 | 689                    | 45900                  | 6      | M8   | 25             | 6   | 2         | 1/2 W | 35             | 6   |
| SL2517F32     | 32              | 45 | 60,5 | 68,5 | 86 | 735                    | 45900                  | 6      | M8   | 25             | 6   | 2         | 1/2 W | 35             | 6   |
| SL2517F35     | 35              | 45 | 60,5 | 68,5 | 86 | 804                    | 45900                  | 6      | M8   | 25             | 6   | 2         | 1/2 W | 35             | 6   |
| SL2517F38     | 38              | 45 | 60,5 | 68,5 | 86 | 873                    | 45900                  | 6      | M8   | 25             | 6   | 2         | 1/2 W | 35             | 6   |
| SL2517F40     | 40              | 45 | 60,5 | 68,5 | 86 | 919                    | 45900                  | 6      | M8   | 25             | 6   | 2         | 1/2 W | 35             | 6   |
| SL2517F42     | 42              | 45 | 60,5 | 68,5 | 86 | 965                    | 45900                  | 6      | M8   | 25             | 6   | 2         | 1/2 W | 35             | 6   |
| SL2517F45     | 45              | 45 | 60,5 | 68,5 | 86 | 1034                   | 45900                  | 6      | M8   | 25             | 6   | 2         | 1/2 W | 35             | 6   |
| SL2517F48     | 48              | 45 | 60,5 | 68,5 | 86 | 1103                   | 45900                  | 6      | M8   | 25             | 6   | 2         | 1/2 W | 35             | 6   |
| SL2517F50     | 50              | 45 | 60,5 | 68,5 | 86 | 1148                   | 45900                  | 6      | M8   | 25             | 6   | 2         | 1/2 W | 35             | 6   |
| SL2517F55     | 55              | 45 | 60,5 | 68,5 | 86 | 1263                   | 45900                  | 6      | M8   | 25             | 6   | 2         | 1/2 W | 35             | 6   |

| SERLOCK® 2517 |                 |    |      |      |     |                        |                        |        |      |                |     |           |       |                |     |
|---------------|-----------------|----|------|------|-----|------------------------|------------------------|--------|------|----------------|-----|-----------|-------|----------------|-----|
| Type          | Dimensions [mm] |    |      |      |     | Performances           |                        | Screws |      |                |     | Setscrews |       |                |     |
|               | d               | H  | H1   | H2   | D   | M <sub>T</sub><br>[Nm] | F <sub>ax</sub><br>[N] | No.    | Type | M <sub>S</sub> | Key | No.       | Type  | M <sub>S</sub> | Key |
| SL3020F30     | 30              | 50 | 68,5 | 78,5 | 108 | 993                    | 66200                  | 6      | M10  | 49             | 8   | 2         | 5/8 W | 65             | 8   |
| SL3020F32     | 32              | 50 | 68,5 | 78,5 | 108 | 1059                   | 66200                  | 6      | M10  | 49             | 8   | 2         | 5/8 W | 65             | 8   |
| SL3020F35     | 35              | 50 | 68,5 | 78,5 | 108 | 1159                   | 66200                  | 6      | M10  | 49             | 8   | 2         | 5/8 W | 65             | 8   |
| SL3020F38     | 38              | 50 | 68,5 | 78,5 | 108 | 1258                   | 66200                  | 6      | M10  | 49             | 8   | 2         | 5/8 W | 65             | 8   |
| SL3020F40     | 40              | 50 | 68,5 | 78,5 | 108 | 1324                   | 66200                  | 6      | M10  | 49             | 8   | 2         | 5/8 W | 65             | 8   |
| SL3020F42     | 42              | 50 | 68,5 | 78,5 | 108 | 1391                   | 66200                  | 6      | M10  | 49             | 8   | 2         | 5/8 W | 65             | 8   |
| SL3020F45     | 45              | 50 | 68,5 | 78,5 | 108 | 1490                   | 66200                  | 6      | M10  | 49             | 8   | 2         | 5/8 W | 65             | 8   |
| SL3020F48     | 48              | 50 | 68,5 | 78,5 | 108 | 1589                   | 66200                  | 6      | M10  | 49             | 8   | 2         | 5/8 W | 65             | 8   |
| SL3020F50     | 50              | 50 | 68,5 | 78,5 | 108 | 1655                   | 66200                  | 6      | M10  | 49             | 8   | 2         | 5/8 W | 65             | 8   |
| SL3020F55     | 55              | 50 | 68,5 | 78,5 | 108 | 1821                   | 66200                  | 6      | M10  | 49             | 8   | 2         | 5/8 W | 65             | 8   |
| SL3020F60     | 60              | 50 | 68,5 | 78,5 | 108 | 1986                   | 66200                  | 6      | M10  | 49             | 8   | 2         | 5/8 W | 65             | 8   |
| SL3020F65     | 65              | 50 | 68,5 | 78,5 | 108 | 2152                   | 66200                  | 6      | M10  | 49             | 8   | 2         | 5/8 W | 65             | 8   |
| SL3020F70     | 70              | 50 | 68,5 | 78,5 | 108 | 2318                   | 66200                  | 6      | M10  | 49             | 8   | 2         | 5/8 W | 65             | 8   |

|                 |                             |    |
|-----------------|-----------------------------|----|
| M <sub>T</sub>  | Screw tightening torque     | Nm |
| M <sub>S</sub>  | Transmissible torque moment | Nm |
| F <sub>ax</sub> | Transmissible axial load    | kN |