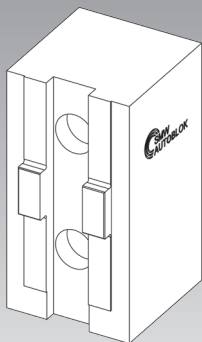


Clamping of easy deformed / thin walled workpieces

High precision 6 jaw chucks (2+2+2) equalising

Tongue & groove



Metric serration



SJL-C/-M 225-400

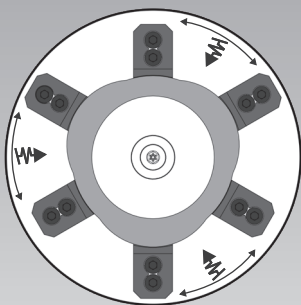
SJL-C 500-800

SJLS-C/-M 225-400

proofline® series
fully sealed – low maintenance

2+2+2 equalising

Is clamping with 6 jaws, where always 2 jaws are equalising as a pair. This allows to compensate inaccuracy of the workpiece roundness. The grip force is always distributed equally onto 6 jaws. The equal distribution of the grip forces results in a minimum of deformation.

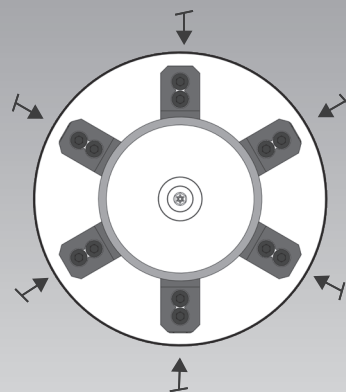


Application for:

Raw material clamping (1. Operation)

6 jaw self centering

Is clamping concentric with all 6 jaws, where no equalisation is done during clamping. All 6 jaws make the same radial movement towards the chucks center.

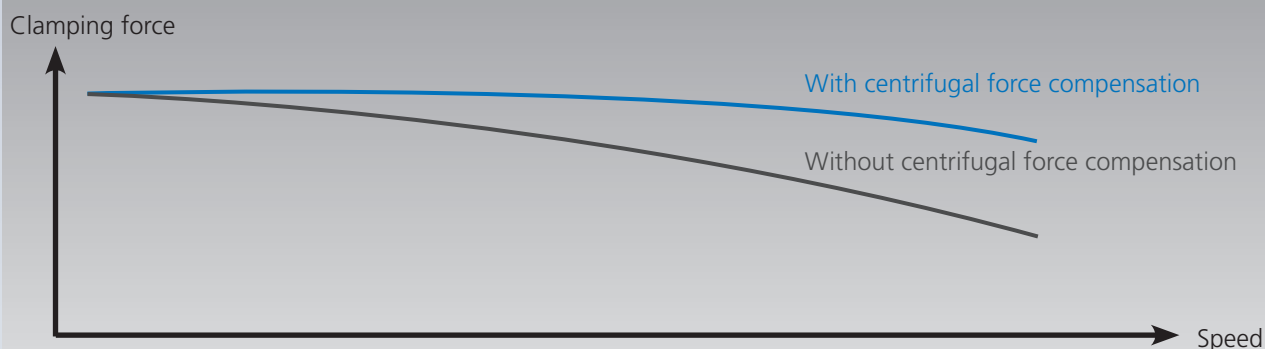


Application for:

Round, machined clamping diameters (2. Operation)

Centrifugal force compensation

The centrifugal forces of master- and top jaws are compensated by counter balance weights. The centrifugal forces of the jaws under rotation are mostly compensated.



Clamping glossary

2+2+2 Equalisation: A system which allows 2 jaws in a pair to do a different radial jaw stroke. On raw material clamping the system ensures that all 6 jaws are in contact with the workpiece. The gripping force is distributed onto all 6 jaws and reduces the deformation of the workpiece.

Locking system for 6 jaw self centering: SJL chucks have a locking system that allows to lock the 2+2+2 equalisation. In this setting the **SJL chuck** can be used like a standard 6 jaw chuck with 6 concentric jaws. This setting can be used to clamp thin walled workpieces that need an equal wall thickness.

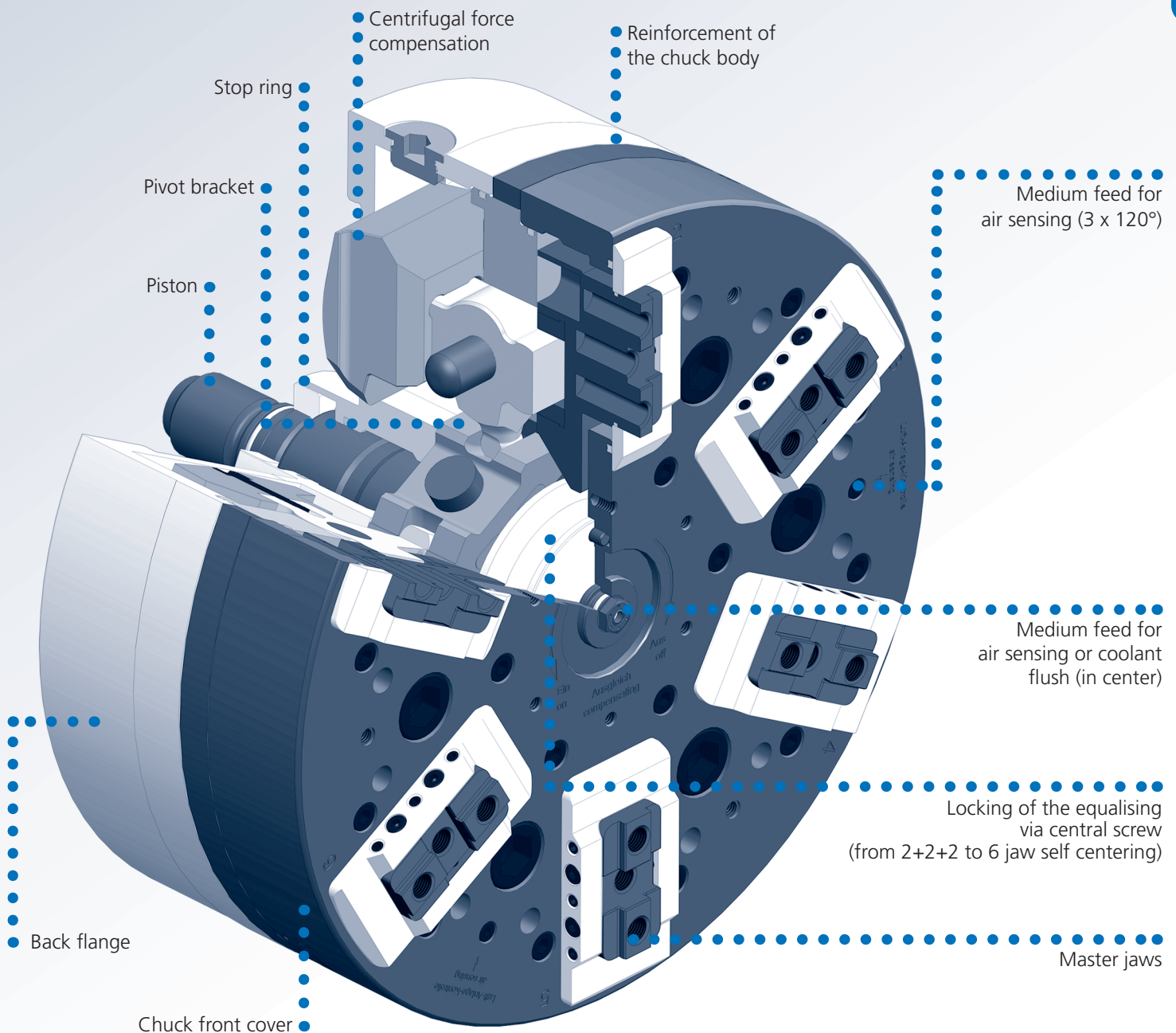
Air sensing: Air is fed through the contact face of the work stop. When the workpiece is in contact with the work stop, the airflow is stopped and converts into a signal. If the component is not correctly positioned or is lifted, the machine can not start or the spindle is stopped. The preparation of this important feature is standard on all **SJL type** chucks.

Centrifugal force compensation: When jaw chucks are rotating, the mass of the master jaws / top jaws is subject to centrifugal force. This centrifugal force reduces the dynamic grip force, and thus limits the feeds and speeds for machining.

All **SJL chucks (excluded SJLS)** have a centrifugal force compensation system built in by default which reduces this effect and allows machining at higher speed with more aggressive feed rates.

Chuck body reinforcement: When the chucks are rotating, the chuck body has to prop up against the static gripping force and against the centrifugal force caused by the rotation speed. On 6 jaw chucks, the centrifugal force caused by the jaws is the double compared to 3 jaw chucks. In order to increase the stiffness of the chuck body, **SJL chucks** have a reinforcement on the chuck body.

High-low clamping: For easily deformed components. High gripping forces for the rough cut are reduced to low gripping forces for the finish cut without unchucking. This means less deformation on the finished components. Contrarily to conventional chucks, the **SJL** lever drive is suitable for high-low clamping.



SJLS-C

Self centering
TONGUE & GROOVE

SJLS-M

Self centering
METRIC SERRATION

High precision 6-jaw chuck (2+2+2) equalising Ø 225 - 400 mm

- Jaws equalising as a pair
- Equalising mechanism lockable



proofline® series
fully sealed – low maintenance

Application/customer benefit

- Clamping of easy deformed workpieces
- Low height = More z-clearance
- Low deformation by means of 2+2+2 jaw clamping
- High radial and axial clamping accuracy
- Fully sealed and oil bath lubricated

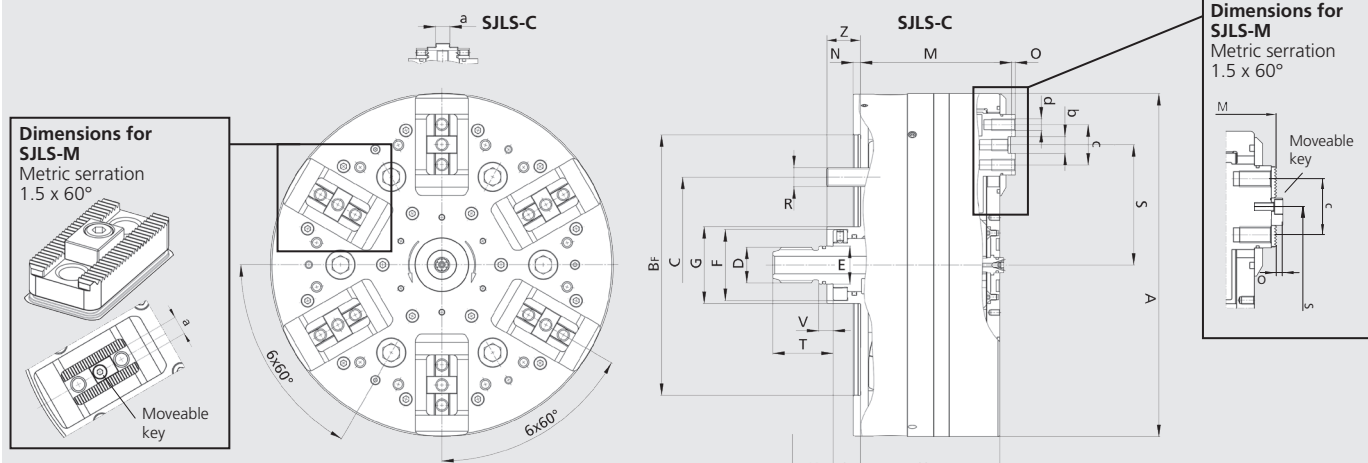
Technical data

- Adjustable to 6-jaw 2+2+2 or true 6-jaw clamping
- Channels for air and / or coolant (2 media feed)
- **proofline® chucks** = fully sealed - low maintenance

Standard equipment

6-jaw chuck with mounting bolts and adjustment key
Oil

Chuck in open position = right end position



Subject to technical changes.
For more detailed information please ask our customer service.

| SMW-AUTOBLOK Type | | | SJLS-C-225 | SJLS-M-225 | SJLS-C-290 | SJLS-M-290 | SJLS-C-400 | SJLS-M-400 |
|--------------------------|--------------|----|---------------|---------------|---------------|---------------|---------------|---------------|
| Mounting | | | Z170 | Z170 | Z220 | Z220 | Z300 | Z300 |
| | A | mm | 225 | 225 | 290 | 290 | 400 | 400 |
| | Bf H6 | mm | 170 | 170 | 220 | 220 | 300 | 300 |
| | C | mm | 133.4 | 133.4 | 171.4 | 171.4 | 235 | 235 |
| | D | mm | M24 | M24 | M30 | M30 | M42 x 3 | M42 x 3 |
| | E f7 | mm | 25 | 25 | 32 | 32 | 44 | 44 |
| | F | mm | 47 | 47 | 60 | 60 | 82 | 82 |
| | G | mm | 51 | 51 | 65 | 65 | 90 | 90 |
| | H | mm | 68 | 68 | 88 | 88 | 119 | 119 |
| Piston stroke | K | mm | 11.5 | 11.5 | 15 | 15 | 20.8 | 20.8 |
| Piston position min. | L | mm | 43.25 | 43.25 | 53 | 53 | 74.9 | 74.9 |
| Piston position max. | L | mm | 54.75 | 54.75 | 68 | 68 | 95.7 | 95.7 |
| | M | mm | 76 | 78.5 | 98 | 101 | 133 | 137 |
| | N | mm | 5 | 5 | 6 | 6 | 8 | 8 |
| | O | mm | 2.5 | 3 | 3 | 3.5 | 4 | 3.5 |
| | R | mm | M12 (6 x 60°) | M12 (6 x 60°) | M16 (6 x 60°) | M16 (6 x 60°) | M20 (6 x 60°) | M20 (6 x 60°) |
| Max. | S | mm | 79 | 79 | 101.5 | 101.5 | 139 | 139 |
| Min. | S | mm | 73 | 73 | 93.5 | 93.5 | 128 | 128 |
| | T | mm | 40 | 40 | 51 | 51 | 70 | 70 |
| | V | mm | 10 | 10 | 12.2 | 12.2 | 17 | 17 |
| Protecting sleeve length | Z | mm | 47.1 | 47.1 | 58.1 | 58.1 | 82.1 | 82.1 |
| Width of tongue | a | mm | 10 | 10 | 12 | 12 | 14 | 14 |
| Width of groove | b | mm | 11 | - | 14 | - | 19 | - |
| | c | mm | 27 (2 x 13.5) | 27 (2 x 13.5) | 34 (2 x 17.0) | 33 (2 x 16.5) | 45 (2 x 22.5) | 45 (2 x 22.5) |
| Thread | d | mm | M8 (3x) | M8 (3x) | M10 (3x) | M10 (3x) | M12 (3x) | M12 (3x) |

High precision 6-jaw chuck (2+2+2) equalising Ø 225 - 400 mm

- Jaws equalising as a pair
- Equalising mechanism lockable

SJLS-C

Self centering
TONGUE & GROOVE

SJLS-M

Self centering
METRIC SERRATION

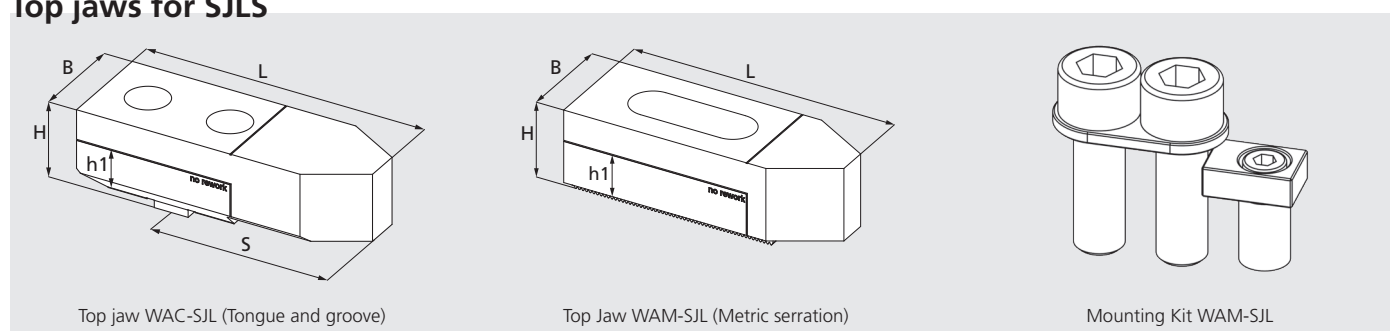
Technical data

| SMW-AUTOBLOK Type | | SJLS-C-225 | SJLS-M-225 | SJLS-C-290 | SJLS-M-290 | SJLS-C-400 | SJLS-M-400 |
|--|---------------------|------------|------------|------------|------------|------------|------------|
| Stroke per jaw | mm | 6 | 6 | 8 | 8 | 11 | 11 |
| Equalising stroke at mid of jaw stroke | mm | ±1 | ±1 | ±1 | ±1 | ±2.5 | ±2.5 |
| Max. actuating force | kN | 30 | 30 | 42 | 42 | 58 | 58 |
| Max. gripping force | kN | 45 | 45 | 65 | 65 | 90 | 90 |
| Max. Speed | r.p.m. | 3700 | 3700 | 2800 | 2800 | 1800 | 1800 |
| Weight (without top jaws) | kg | 20 | 20 | 44 | 44 | 115 | 115 |
| Moment of inertia | kg . m ² | 0.13 | 0.13 | 0.46 | 0.46 | 2.33 | 2.33 |

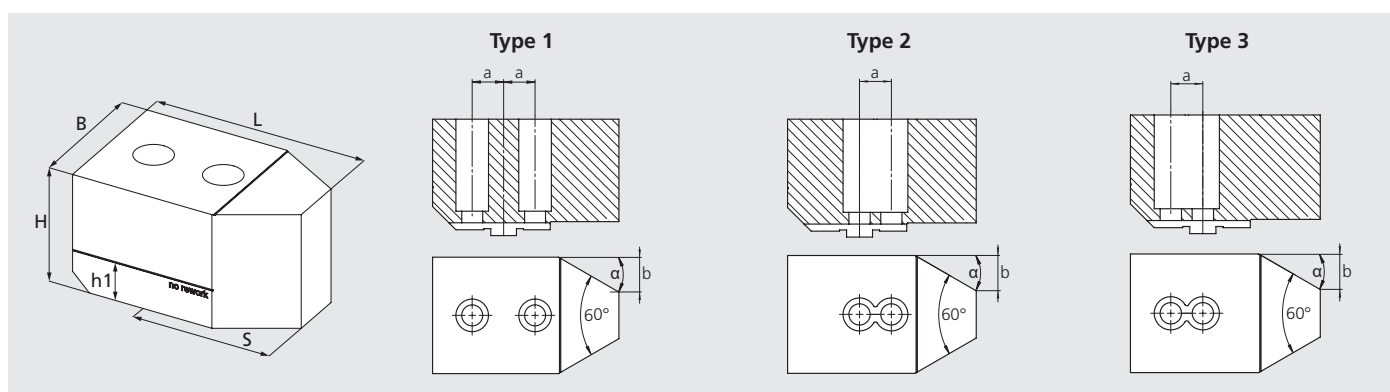
Order review

| SMW-AUTOBLOK Type | SJLS-C-225 | SJLS-M-225 | SJLS-C-290 | SJLS-M-290 | SJLS-C-400 | SJLS-M-400 |
|--------------------------------------|------------|------------|------------|------------|------------|------------|
| Mounting | Z170 | Z170 | Z220 | Z220 | Z300 | Z300 |
| Id. No. | 162675 | 162895 | 162680 | 162896 | 162685 | 162897 |
| Hex. Pin type socket wrench | 202881 | | 201064 | | 203795 | |
| Oil (RENOLIN CLPF 320 SUPER) 1 liter | 202532 | | | | | |

Top jaws for SJLS



| SMW-AUTOBLOK Type | WAC-SJLS-225 | WAM-SJLS-225 | WAC-SJLS-290 | WAM-SJLS-290 | WAC-SJLS-400 | WAM-SJLS-400 |
|-------------------------------|--------------|--------------|---------------|---------------|---------------|---------------|
| Id. No. / set | 5300950 | 539053 | 5300955 | 539055 | 5301053 | 5301052 |
| Mounting Kit (only WAM) / set | - | 203572 | - | 203573 | - | 204115 |
| Dimensions L x B x H | 94 x 20 x 32 | 84 x 20 x 32 | 115 x 40 x 36 | 108 x 40 x 35 | 150 x 52 x 46 | 153 x 52 x 46 |
| Height h1* (mm) | 16.5 | 20 | 21 | 22 | 25 | 26.5 |
| Weight / set (kg) | 2.2 | 1.8 | 5.4 | 4.9 | 12.5 | 12.5 |
| S (mm) | 63.5 | - | 80 | - | 105.5 | - |



| SMW-AUTOBLOK Type | | WAC-SJLS-225 | | | WAC-SJLS-290 | | | WAC-SJLS-400 | | |
|----------------------|----|--------------|---------|---------|---------------|---------|---------|---------------|---------|---------|
| Jaw type | | Type 1 | Type 2 | Type 3 | Type 1 | Type 2 | Type 3 | Type 1 | Type 2 | Type 3 |
| Id. No. / set | | 5316471 | 5316472 | 5316473 | 5316468 | 5316469 | 5316470 | 5316465 | 5316467 | 5316466 |
| Thread | | M8 | | | M10 | | | M12 | | |
| Dimensions L x B x H | mm | 80 x 50 x 50 | | | 100 x 60 x 65 | | | 140 x 80 x 65 | | |
| Height h1* | mm | 18.5 | | | 21 | | | 25 | | |
| Weight / Set | kg | 7 | | | 13.5 | | | 25.2 | | |
| S | mm | 49.5 | | | 65 | | | 95.5 | | |
| a | mm | 13.5 | | | 17 | | | 22.5 | | |
| b x α | | 15 x 30° | | | 20 x 30° | | | 28 x 30° | | |

* No rework.