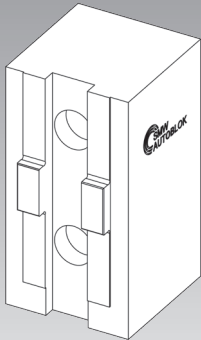


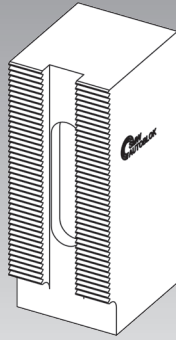
Clamping of easy deformed /  
thin walled workpieces

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

Tongue & groove



Metric serration



**SJL-C/-M 225-400**

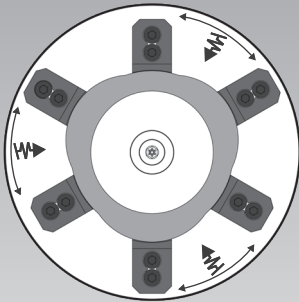
**SJL-C 500-800**

**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.

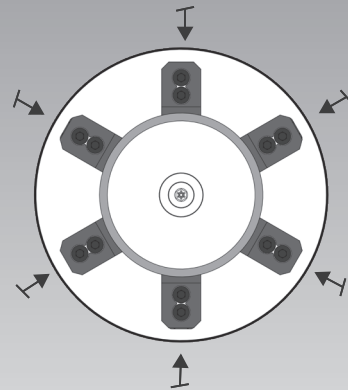


### Application for:

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.

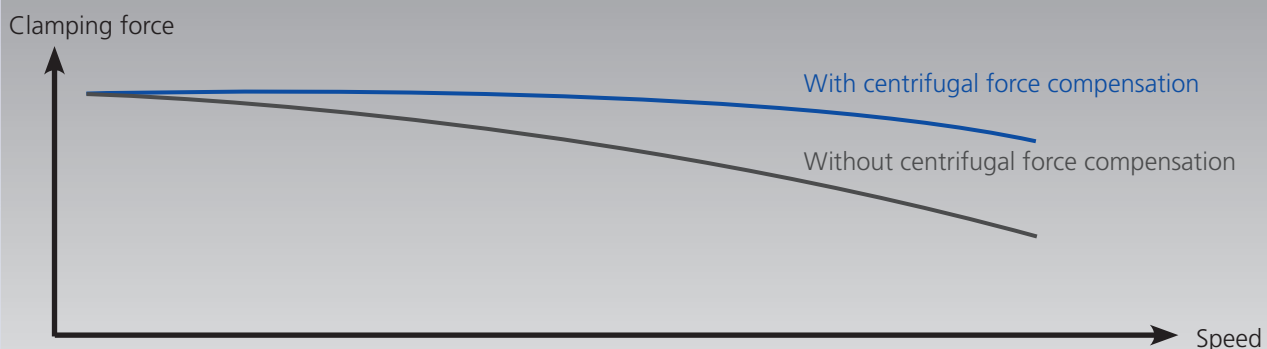


### Application for:

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 grip force is distributed onto all 6 jaws and reduces the deformation of the workpiece.

**Locking system for 6 jaw self centering:** **SJL chuck** 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.

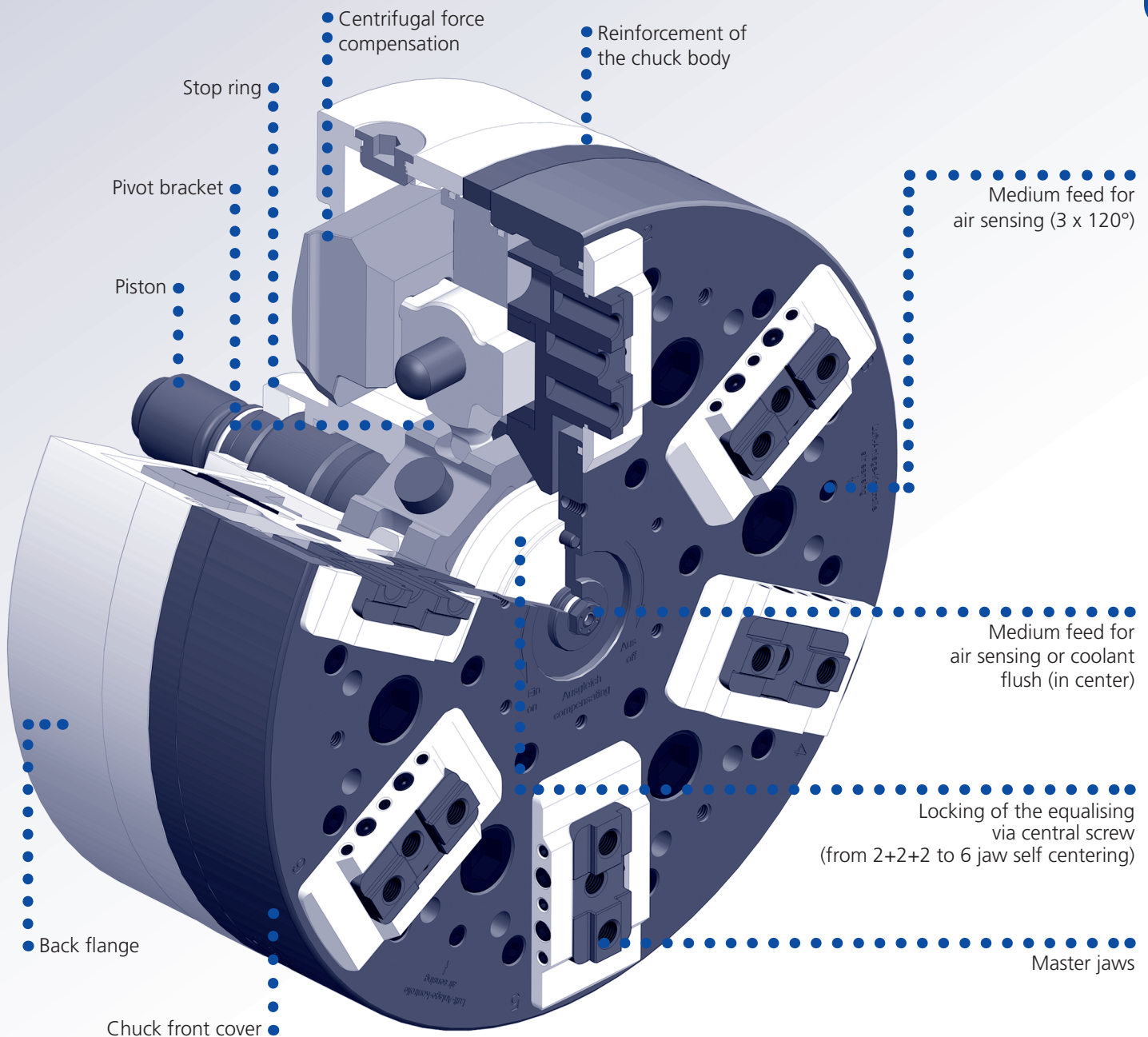
**Air sensing:** Air is fed through the contact face of the work stop. When the workpiece is in contact with the work stop, the airflow is stopped and converts into a signal. If the component is not correctly positioned or is lifted, the machine can not start or the spindle is stopped. The preparation 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 chuck** 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 grip 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.

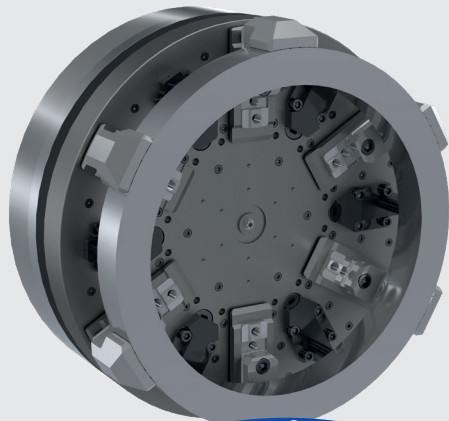


# SJL-C

Self centering  
TONGUE & GROOVE

## High precision 6 jaw chucks (2+2+2) equalising Ø 500 - 800 mm

- Jaws equalising as a pair
- Equalising mechanism lockable



**proofline® series**  
fully sealed – low maintenance

### Application/customer benefit

- Clamping of easy deformed workpieces
- Low deformation by means of 2+2+2 jaw clamping
- High radial and axial clamping accuracy
- Fully sealed and oil bath lubricated
- Ideal for highest speeds

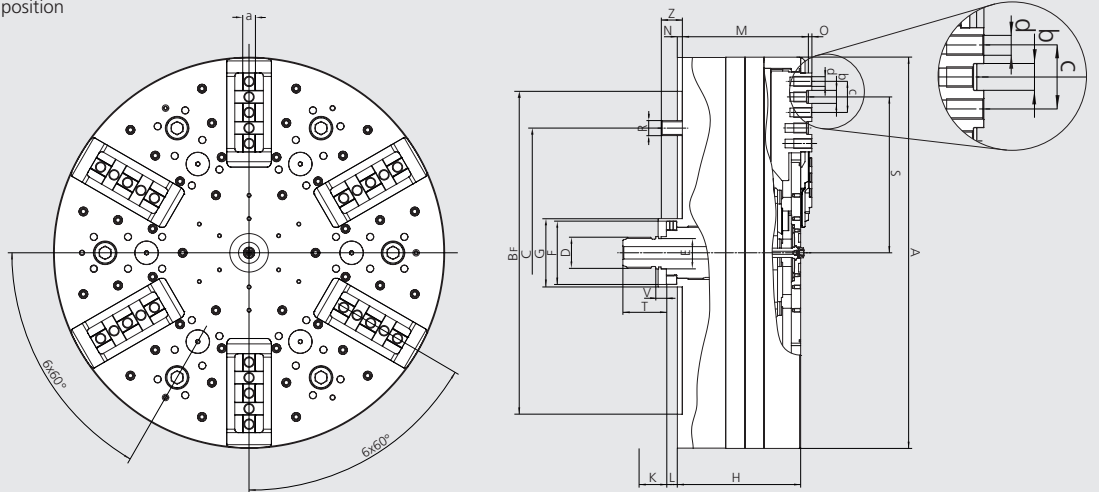
### Technical data

- Adjustable to 6 jaw 2+2+2 or true 6 jaw clamping
- Channels for air and / or coolant (2 media feed)
- Centrifugal force compensation
- **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			SJL-C-500	SJL-C-500	SJL-C-630	SJL-C-630	SJL-C-800	SJL-C-800
Mounting			Z300	Z380	Z380	Z520	Z380	Z520
	<b>A</b>	mm	500	500	630	630	800	800
	<b>BF H6</b>	mm	300	380	380	520	380	520
	<b>C</b>	mm	235	330.2	330.2	463.6	330.2	463.6
	<b>D</b>	mm	M42 x 3	M42 x 3	M50 x 3	M50 x 3	M50 x 3	M50 x 3
	<b>E f7</b>	mm	44	44	52	52	52	52
	<b>F</b>	mm	82	82	102	102	102	102
	<b>G</b>	mm	90	90	110	110	110	110
	<b>H</b>	mm	163.3	163.3	190.5	190.5	190.5	190.5
Piston stroke	<b>K</b>	mm	20.8	20.8	28.4	28.4	28.4	28.4
Piston position min.	<b>L</b>	mm	30.9	30.9	25.8	25.8	25.8	25.8
Piston position max.	<b>L</b>	mm	51.7	51.7	54.2	54.2	54.2	54.2
	<b>M</b>	mm	177.9	177.9	204.5	204.5	204.5	204.5
	<b>N</b>	mm	8	8	8	8	8	8
	<b>O</b>	mm	4	4	4	4	4	4
	<b>R</b>	mm	6 x M20	6 x M24	6 x M24	6 x M24	6 x M24	6 x M24
Max. multi tongue & groove	<b>S</b>	mm	141.5 / 186.5	141.5 / 186.5	201 / 251	201 / 251	336 / 286 / 236	336 / 286 / 236
Min. multi tongue & groove	<b>S</b>	mm	130.5 / 175.5	130.5 / 175.5	186 / 236	186 / 236	321 / 271 / 221	321 / 271 / 221
	<b>T</b>	mm	70	70	70	70	70	70
	<b>V</b>	mm	17	17	17	17	17	17
Protecting sleeve length	<b>Z</b>	mm	38.1	38.1	39	39	39	39
Width of tongue	<b>a</b>	mm	14	14	19	19	19	19
Width of groove	<b>b</b>	mm	2 x 19	2 x 19	2 x 21	2 x 21	3 x 21	3 x 21
	<b>c</b>	mm	2 x 45	2 x 45	2 x 50	2 x 50	3 x 50	3 x 50
Thread	<b>d</b>	mm	5 x M12	5 x M12	5 x M16	5 x M16	7 x M16	7 x M16

## High precision 6 jaw chucks (2+2+2) equalising Ø 500 - 800 mm

- Jaws equalising as a pair
- Equalising mechanism lockable

# SJL-C

Self centering  
TONGUE & GROOVE

### Technical data

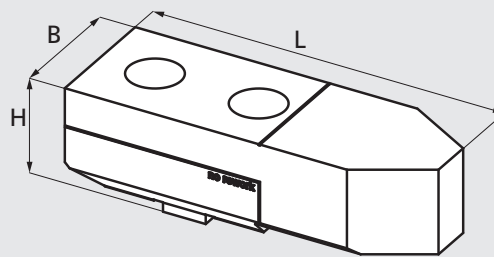
SMW-AUTOBLOK Type		SJL-C-500	SJL-C-630	SJL-C-800
Stroke per jaw	mm	11	15	15
Equalising stroke at mid of jaw stroke	mm	± 2.5	± 4	± 4
Max. actuating force	kN	78	97	97
Max. gripping force	kN	120	150	150
Max. Speed	r.p.m.	2000	1700	1100
Weight (without top jaws)	kg	220	422	675
Moment of inertia	kgm <sup>2</sup>	6.91	21.53	54.64

### Order review

SMW-AUTOBLOK Type	SJL-C-500	SJL-C-500	SJL-C-630	SJL-C-630	SJL-C-800	SJL-C-800
Mounting	Z300	Z380	Z380	Z520	Z380	Z520
Id. No.	162765	162750	162800	162820	162911	162910
Hex. Pin type socket wrench	203795					
Oil (RENOLIN CLPF 320 SUPER) 1 liter*	202532					

\* Oil not in scope of delivery. For total volume needed, please see the chuck manual.

### Top jaws for SJL



Top jaw WAC-SJL (Tongue and groove)

SMW-AUTOBLOK Type	SJL-C-500	SJL-C-630	SJL-C-800
Jaw type	WAC-SJL 500	WAC-SJL 630	WAC-SJL 630
Id. No. / set	5315987	5315988	5315988
Length L	150	200	200
Width B	52	60	60
Height H	46	50	50
kg / set	12.6 kg	21.6 kg	21.6 kg