

- self centering clamping
- LARGE THROUGH HOLE
- proofline® chucks = fully sealed – low maintenance



### Application/customer benefits

- Self centering clamping of flange or shaft type workpieces where the reference is not a center but the O.D. of the workpiece
- The through hole of the chuck allows to swallow the workpiece if needed
- Due to its high rigidity against torsion the chuck can be used for turning as well as for milling

### Technical features

- for O.D. clamping only
- large through hole
- tongue & groove base jaws
- pull-down

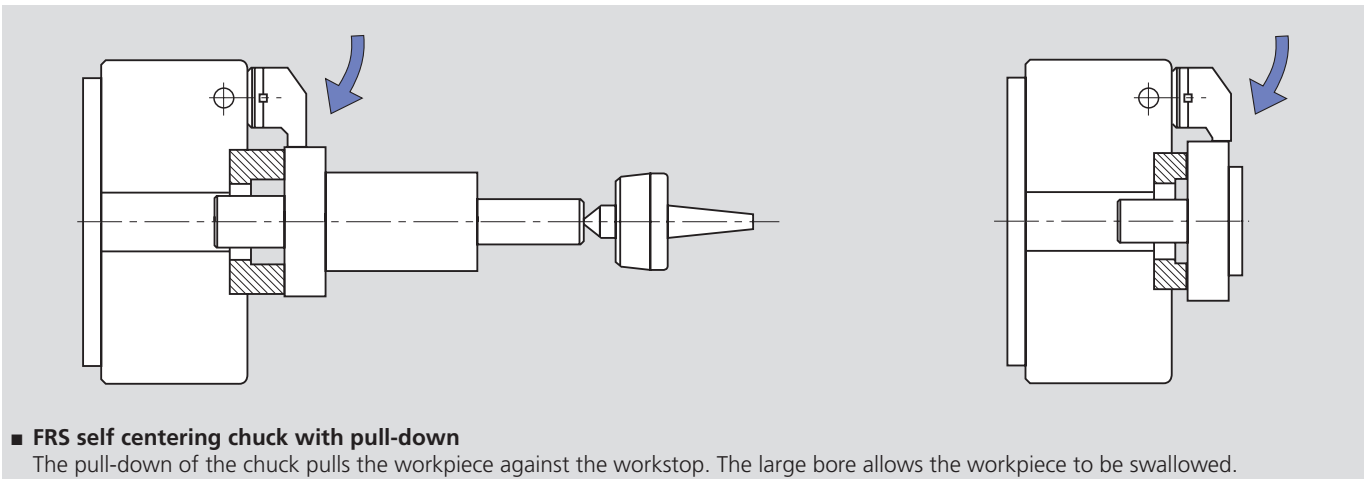
- permanent grease lubrication
- rigid design against torsion
- **proofline® chucks** = fully sealed – low maintenance

### Standard equipment

3-jaw chuck  
mounting bolts

### Ordering example

FRS 285 Z 220

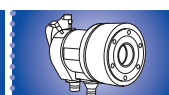
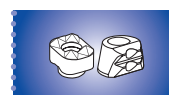


#### ■ FRS self centering chuck with pull-down

The pull-down of the chuck pulls the workpiece against the workstop. The large bore allows the workpiece to be swallowed.

## Technical data

SMW-AUTOBLOK Type		FRS 215	FRS 285	FRS 365
Angular jaw stroke	deg.	6°	6°	6°
Radial jaw stroke at distance h	mm	6.3	7.3	8.4
Wedge stroke	mm	22	26	31
Max. draw pull	kN	45	70	110
Max. gripping force at distance h	kN	100	150	240
Max. speed	r.p.m.	4500	3500	2500
Weight (plain back without top jaws)	kg	30	62	120
Moment of inertia	kg·m <sup>2</sup>	0.17	0.65	2
Recommended actuating cylinders		100 SIN-S	125 SIN-S	150 SIN-S
		125 SIN-S	150 SIN-S	200 SIN-S

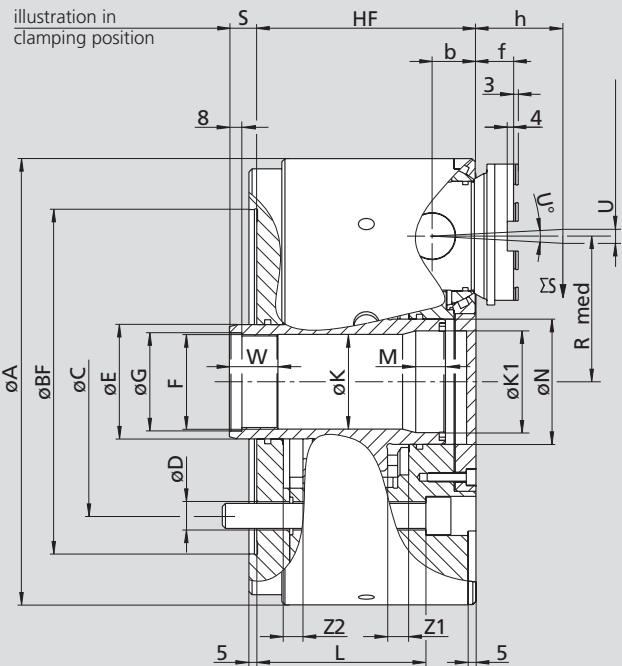
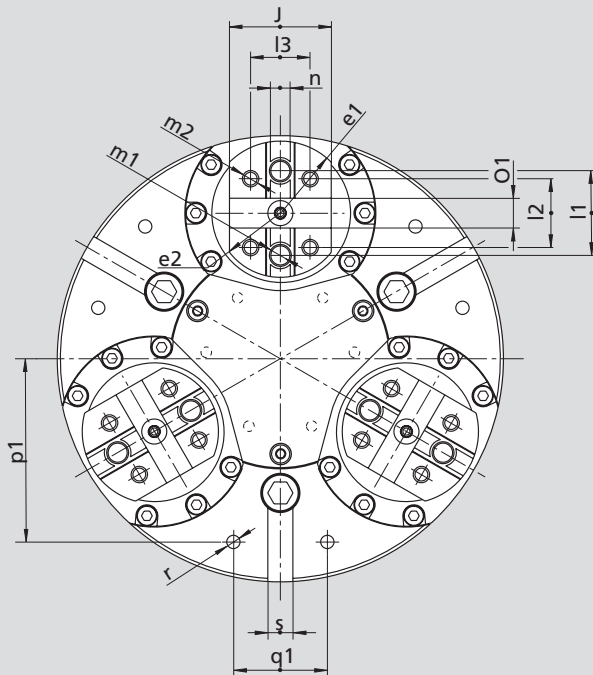


# Lever chuck $\varnothing$ 215 - 365 mm

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# FRS

Self centering clamping



Subject to technical changes  
For more detailed information please ask for customer drawing

SMW-AUTOBLOK Type			FRS 215	FRS 285	FRS 365
	<b>A</b>	mm	215	285	365
	<b>Bf</b>	H6 mm	170	220	300
	<b>C</b>	mm	133.4	171.4	235
	<b>D</b>	mm	M12	M16	M20
	<b>E</b>	mm	50	73	79
	<b>F</b>	mm	M42 x 1.5	M60 x 1.5	M68 x 2
	<b>G</b>	H8 mm	43	61	69
	<b>HF</b>	mm	120	140	168
Through-hole	<b>K</b>	mm	40	60.5	60.5
	<b>K1</b>	mm	-	65	75
	<b>L</b>	mm	95	108	123
	<b>M</b>	mm	-	19	23.8
	<b>N</b>	mm	52	80	90
	<b>Rmed</b>	mm	67	93	120
at middle stroke - clamping position	<b>S</b>	mm	15.4	17.5	24.8
min./max.	<b>S</b>	mm	4/26	4/30	9/40
Angular jaw movement	<b>U°</b>	deg.	6°	6°	6°
Radial stroke at distance <b>h</b> (1)	<b>U</b>	mm	6.3	7.3	8.4
	<b>W</b>	mm	30	31	30
	<b>Z1</b>	mm	11.4	13.5	15.8
	<b>Z2</b>	mm	10.6	12.5	15.2
	<b>b</b>	mm	22	28	34
	<b>e1</b>	mm	37.5	46	50
	<b>e2</b>	mm	33	41	50
Reference height	<b>f</b>	mm	18	24	21
	<b>h</b>	mm	38	42	46
	<b>j</b>	mm	55	65	70
	<b>l1</b>	mm	38	54	63.5
	<b>l2</b>	mm	32	44	48
	<b>l3</b>	mm	32	38	48
Thread/depth	<b>m1</b>	mm	M12/16	M16/20	M16/20
Thread/depth	<b>m2</b>	mm	M10/14	M12/19	M12/19
	<b>n</b>	h8 mm	7.94	12.7	12.7
	<b>o1</b>	H7 mm	12.68	19.03	19.03
	<b>p1</b>	mm	80	117	150
	<b>q1</b>	mm	45	60	80
Thread/depth	<b>r</b>	mm	M8/17	M10/19	M12/22
	<b>s</b>	H8 mm	16	16	20

(1) Calculated at **h** distance from the chuck's face (where normally the clamping takes place)