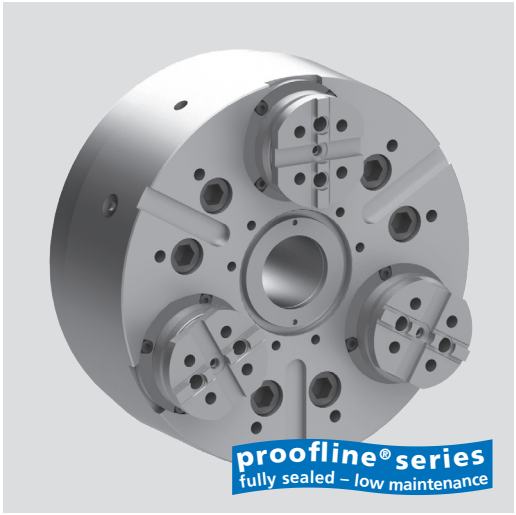
TSBF-CP
Compensating
Floating jaws

TSBR-CP
Compensating
Rigid jaws

Compensating pull-down chuck Ø 220 - 330 mm
- Active pull-down
- Tongue & groove
- Large through-hole
- 3 jaws



Application/customer benefits
- Clamping of shafts or chuck parts where the reference is not the O.D. but a center or a centering diameter
- A center point or a centering insert will center the workpieces and the jaws will clamp compensating and actively pull the workpiece down to the datum
- Through-hole to insert long workpieces or for special clamping applications

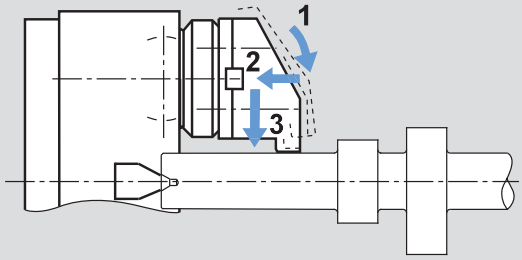
TSBF-CP: Compensating clamping with active pull down and floating base jaws
TSBR-CP: Compensating clamping with active pull down and rigid base jaws

Technical features
- Active pull-down
- Compensating clamping
- Centrifugal force compensation
- Large through-hole
- TONGUE & GROOVE base jaws
- Permanent grease lubrication
- **proofline® chucks** = fully sealed - low maintenance

Standard equipment
3-jaw chuck
Mounting bolts

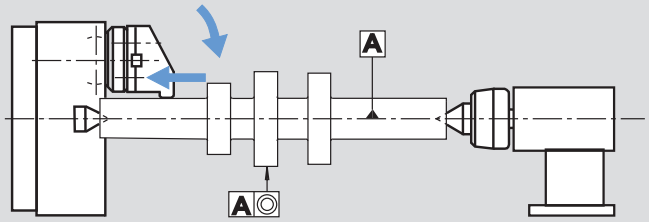
Ordering example
3-jaw chuck TSBF-CP 220 / A6
or 3-jaw chuck TSBR-CP 330 / Z300

TSBF-CP/TSBR-CP



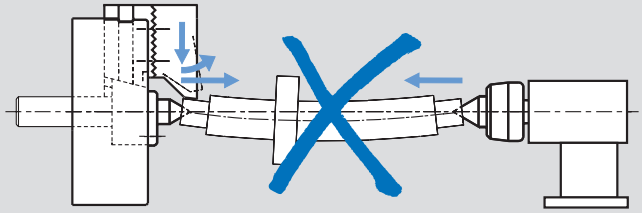
Principle of function:
■ **1** compensating pre-clamping - **2** active pull-down - **3** clamping

TSBF-CP/TSBR-CP



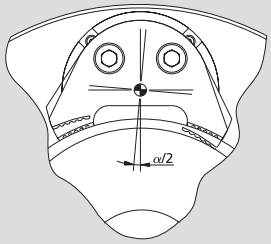
■ The workpiece is actively pulled down to the center point. The tailstock just supplies the necessary force to support the workpiece. The result is an exact cylindrical and straight workpiece.

Non active pull down compensating chuck



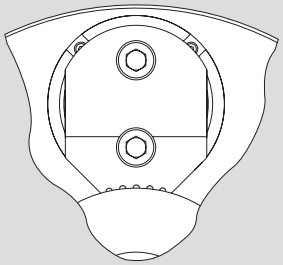
■ The workpiece is lifted by the jaws from the center point. When a higher tailstock force is applied for compensation, the workpiece will be bent.

TSBF-CP



Floating jaws

TSBR-CP



Rigid jaws

Technical data

SMW-AUTOBLOK Type		TSBF-CP 220 TSBR-CP 220	TSBF-CP 260 TSBR-CP 260	TSBF-CP 330 TSBR-CP 330
Angular jaw stroke U°	deg.	5.2°	5.2°	5°
Radial jaw stroke at distance **h**	mm	5.3	6.3	7
Pull down movement (standard)	mm	0.1	0.1	0.1
Axial piston stroke	mm	21	25	25
Compensation (on the dia.) at distance **h**	mm	±1.5	±1.5	±2.5
Max. draw pull**	kN	18	25	40
Max. gripping force at distance **h****	kN	44	60	96
Max. speed*	r.p.m.	4250	3750	3000
Weight (plain back without top jaws)	kg	25	40	67
Moment of inertia	kg·m²	0.165	0.34	0.97
Recommended actuating cylinders	**Type**	**SIN-S 85**	**SIN-S 100**	**SIN-S 125**
Id.No. TSBF-CP (center mounting)		77198322	77198326	77198333
Id.No. TSBR-CP (center mounting)		77198522	77198526	77198533

* The above maximum speed is allowed with standard weight / height top jaws and applying the full draw pull only. For more information please contact SMW-AUTOBLOK.
** For internal clamping reduce the draw pull by 30%.


SMW-AUTOBLOK 472


SMW-AUTOBLOK 466


SMW-AUTOBLOK 327

Compensating pull-down chuck Ø 220 - 330 mm

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- 3 jaws

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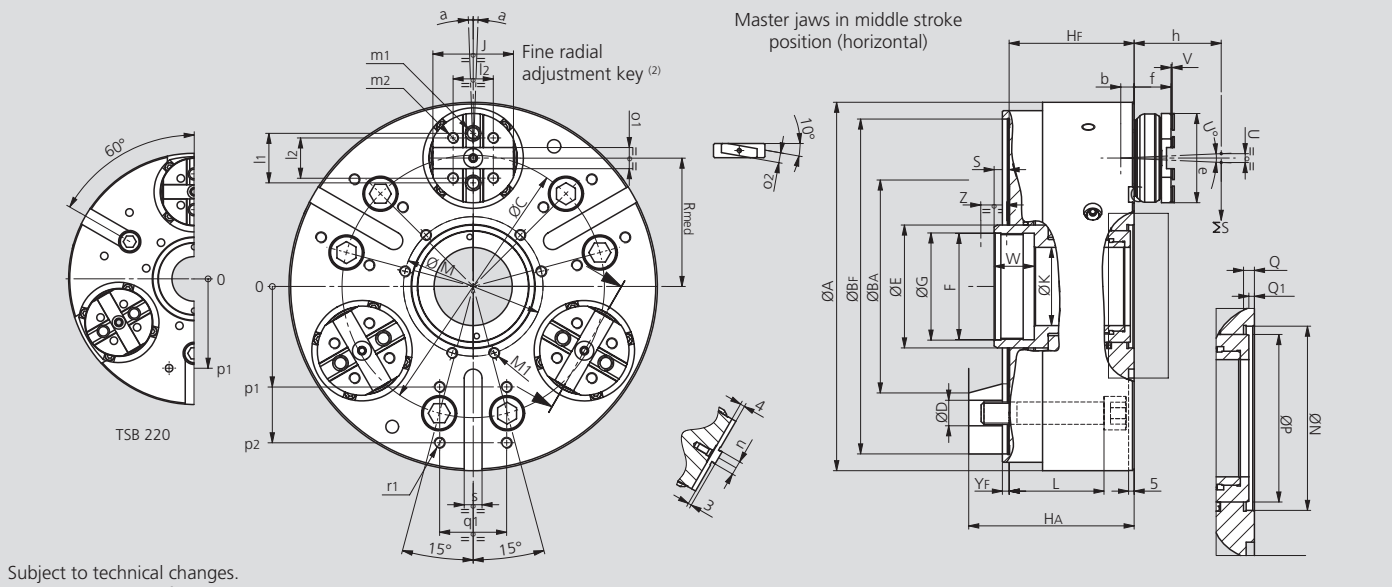

Subject to technical changes.
For more detailed information please ask our customer service.

SMW-AUTOBLOK Type			TSBF-CP 220 TSBR-CP 220		TSBF-CP 260 TSBR-CP 260		TSBF-CP 330 TSBR-CP 330	
Mounting			**Z170**	**A6**	**Z220**	**A8**	**Z300**	**A11**
	A	mm	225		265		330	
	BF/BA H6	mm	170	106.375	220	139.719	300	196.869
	C	mm	133.4		171.4		235	
	D	mm	13.5		17		21	
	E	mm	75		85		110	
	F	mm	M65 x 2		M75 x 2		M95 x 2	
	G H8	mm	66		76		96	
	HF/HA	mm	86	103	100	119	112	133
Through-hole	**K**	mm	40		50		70	
	L	mm	66		80		85	
	M	mm	88		100		125	
Thread / depth	**M1**	mm	M8 / 20		M8 / 20		M10 / 20	
	N H8	mm	74		85		110	
	P	mm	65		75		100	
	Q	mm	6.5		6.5		6.5	
At middle stroke	**Q1**	mm	2		1		3	
At middle stroke	**Rmed**	mm	78		90		115	
At middle stroke	**S**	mm	15		13		14	
Radial stroke	**U°**	deg.	5.2°		5.2°		5°	
Radial stroke(1)	**U**	mm	5.3		6.3		7	
Pull-down s/d (opt.)	**V**	mm	0.1 (0.6)		0.1 (0.6)		0.1 (0.6)	
	W	mm	30		34		36	
Axial piston stroke	**Z**	mm	21		25		25	
Only TSBF-CP max.	**α**	deg.	±2°		±2°		±1.5°	
	b	mm	9		10		12	
	e	mm	60		75		80	
	f	mm	27		33		33	
Reference height	**h**	mm	50		60		70	
	j	mm	55		65		72	
	l1	mm	32		38		44.4	
	l2	mm	24		32		36	
Thread / depth	**m1**	mm	M10 / 16		M12 / 18		M12 / 18	
Thread / depth	**m2**	mm	M8 / 14		M10 / 14		M10 / 14	
	n h8	mm	7.94		7.94		12.7	
	o1 H7	mm	12.68		12.68		19.03	
	o2 h7	mm	9		9		12	
	p1	mm	80		102		90	
	p2	mm	-		-		140	
	q1	mm	45		60		60	
Thread / depth	**r1**	mm	M8 / 15		M10 / 20		M10 / 20	
	s	mm	16		16		16	
	YF	mm	5		5		5	

(1) Calculated at **h** distance from the chuck's face (where normally the clamping takes place).
(2) SMW-AUTOBLOK 192: General catalog.