TSBF-C
Self centering
Floating jaws

TSBR-C
Self centering
Rigid jaws

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

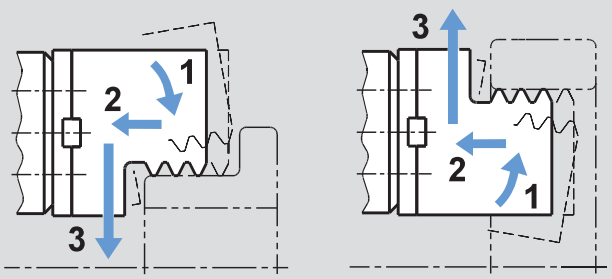
Application/customer benefits
- Clamping of workpieces with highest demand for **parallelism**
- **Highest productivity** with long maintenance intervals
- Constant gripping force and long lifetime ensure **constant quality of workpieces**
- Through-hole to insert long workpieces or for special clamping applications

TSBF-C: Floating base jaws to clamp raw and easy deformed workpieces (6-point-contact)
TSBR-C: Rigid base jaws for precise clamping on pre machined diameters

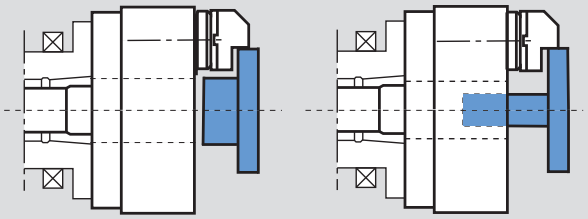
Technical features
- Active pull-down
- Centrifugal force compensation
- TONGUE & GROOVE base jaws
- **proofline® chucks** = fully sealed - low maintenance
- Permanent grease lubrication
- Large through-hole

Standard equipment
3-jaw chuck
Mounting bolts

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

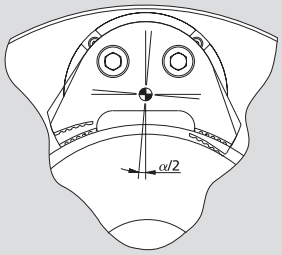


Principle of function:
- **1** pre-clamping - **2** active pull-down - **3** clamping
- For O.D. and I.D. clamping.



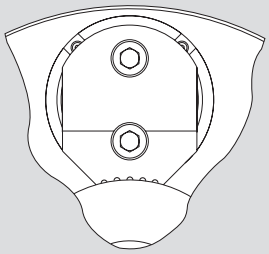
- Use of the larger space between the master jaws for bulky parts.
- Use of the bore for shaft or special locators or centering equipment.

TSBF-C

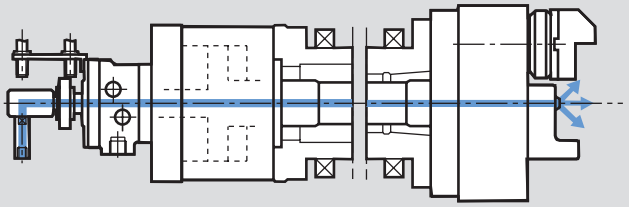


TSBF-C:
Floating jaws for clamping raw / easy deformed workpieces with 6-point-contact.

TSBR-C



TSBR-C:
Rigid jaws for precise clamping on premachined diameters with 3-point-contact.



- **TSBF-C** and **TSBR-C** chucks operated with a SIN-S cylinder with central bore for air sensing / coolant flush.

Technical data

SMW-AUTOBLOK Type		TSBF-C 220 TSBR-C 220	TSBF-C 260 TSBR-C 260	TSBF-C 330 TSBR-C 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
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 (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-C (center mounting)		77197922	77197926	77197933
Id. No. TSBR-C (center mounting)		77198122	77198126	77198133

* 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

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- Tongue & groove
- Large through-hole
- 3 jaws

TSBF-C

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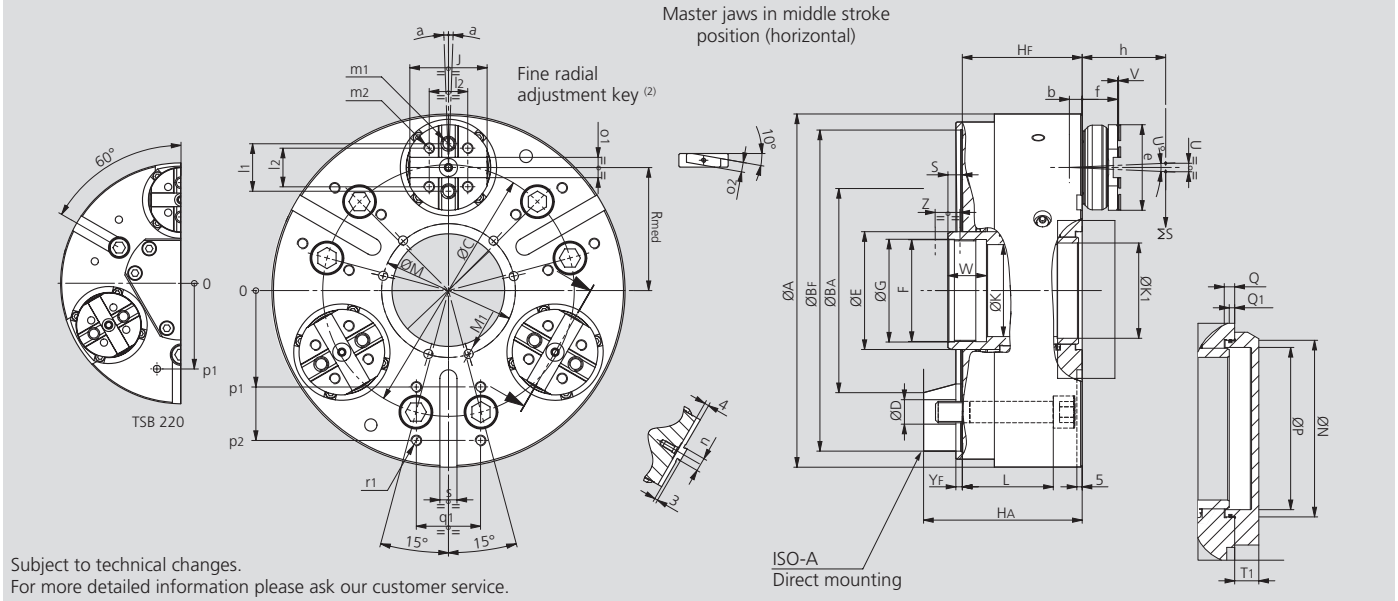
Rigid jaws



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

SMW-AUTOBLOK Type			TSBF-C 220 TSBR-C 220		TSBF-C 260 TSBR-C 260		TSBF-C 330 TSBR-C 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	55		62		86	
	K1	mm	-		65		89	
	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	
	T1	mm	13		16		15	
Radial stroke	**U°**	deg.	5.2°		5.2°		5°	
Radial stroke(1)	**U**	mm	5.3		6.3		7	
Pull-down s/d (option)	**V**	mm	0.1 (0.6)		0.1 (0.6)		0.1 (0.6)	
	W	mm	30		34		36	
Axial wedge stroke	**Z**	mm	21		25		25	
Only TSBF-C 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.