TX-C

Self centering
Rigid jaws

High precision pull-down chucks Ø 170 - 530 mm

- active pull-down
- tongue & groove
- 3 jaws

Application/customer benefits

- Clamping of workpieces with highest demand for **parallelism**
- Highest repeatability
- **Highest productivity** with long maintenance intervals
- Constant grip force and long lifetime ensure **constant quality of workpieces**

Technical features

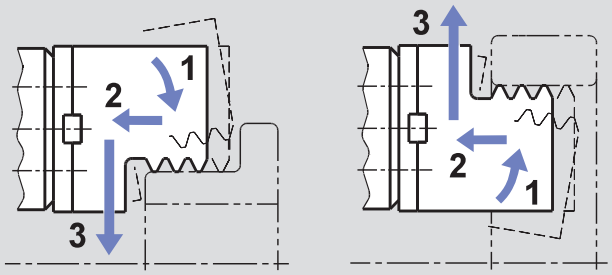
- 3-jaw-design
- active pull-down
- centrifugal force compensation
- tongue & groove base jaws
- Highest repeatability (similar to Diaphragm chucks)
- central bore for coolant and/or air
- permanent oil lubrication
- **proofline® chucks** = fully sealed – low maintenance

Standard equipment

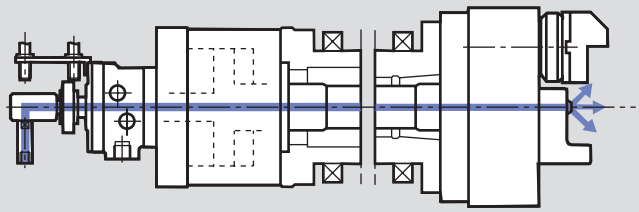
3-jaw-chuck
Mounting bolts

Ordering example

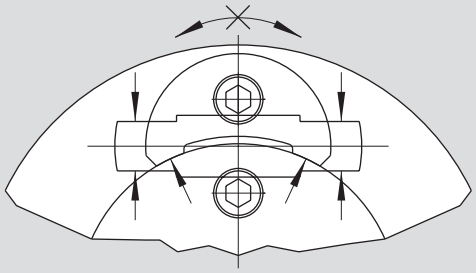
3-jaw-chuck TX-C 210/A6



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



- TX-C chuck operated with a SIN-S cylinder with central bore for air sensing and/or coolant flush



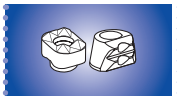
TX-C: High resistance to the radial torque, ideal for turning and milling application and guarantee of high precision, durability and constant process results

Technical data

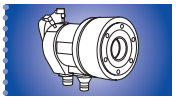
SMW-AUTOBLOK Type		TX-C 170	TX-C 210	TX-C 250	TX-C 315	TX-C 400	TX-C 530
Angular jaw stroke	deg.	5.2°	5.2°	4.9°	4.9°	4.7°	4.7°
Radial jaw stroke at distance **h**	mm	5.3	6.3	7	7	7.5	7.5
Pull down movement (standard)	mm	0.1	0.1	0.1	0.1	0.2	0.2
Axial piston stroke	mm	21	25	26	26	30	30
Max. draw pull**	kN	18	25	40	40	50	60
Max. gripping force** at distance **h**	kN	44	60	96	96	120	150
Max. speed*	r.p.m.	5000	4500	3800	3000	2200	1800
Weight (plain back without top jaws)	kg	16	28	42	67	125	248
Moment of inertia	kg·m²	0.06	0.17	0.35	0.84	2.3	8.8
Recommended actuating cylinders		SIN-S 85	SIN-S 100	SIN-S 125	SIN-S 125	SIN-S 150	SIN-S 150

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


on request: Tooling Standard Parts Catalog


Page 330


Page 324

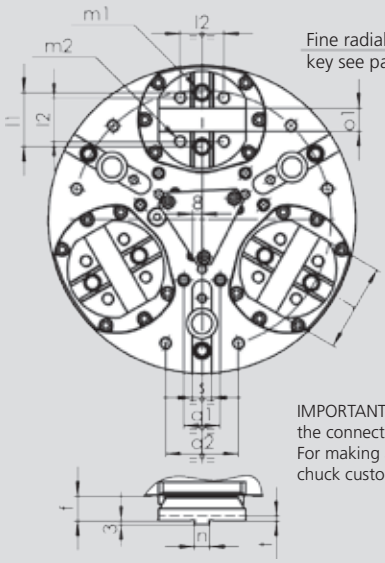

Page 225

High precision pull-down chucks Ø 170 - 530 mm

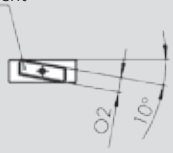
- active pull-down
- tongue & groove
- 3 jaws

TX-C

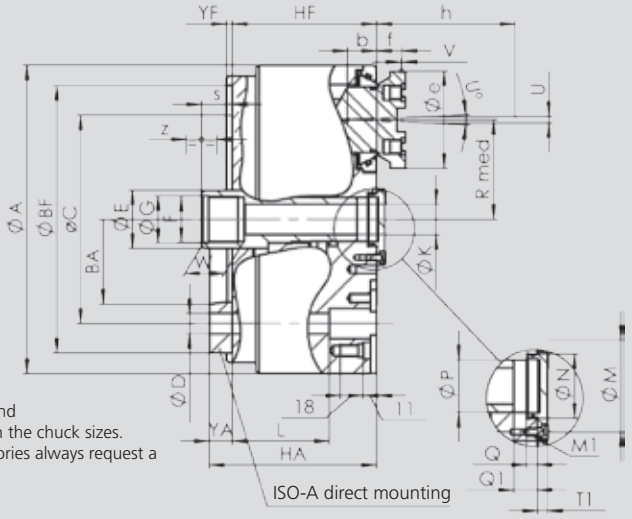
Self centering
Rigid jaws



Fine radial adjustment
key see page 132



Master jaws in middle stroke position (horizontal)



IMPORTANT: On TX chucks the bolt pattern and the connecting dimensions vary a lot between the chuck sizes. For making adapter parts or any other accessories always request a chuck customer drawing.

ISO-A direct mounting

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

4

SMW-AUTOBLOK Type				TX-C 170		TX-C 210		TX-C 250		TX-C 315		TX-C 400		TX-C 530	
Mounting				**Z140**	**A5**	**Z170**	**A6**	**Z220**	**A8**	**Z220**	**A8**	**Z300**	**A11**	**Z380**	**A11**
	A		mm	175		212		254		315		390		535	
	BF/BA	H6	mm	140	82,5	170	106.375	220	139.719	220	139.719	300	196.869	380	285.775
	C		mm	104.8		133.4		171.4		171.4		235		330.2	
	D		mm	11.5		13.5		17		17		21		25	
	E		mm	36		38		48		48		75		75	
	F		mm	M28x1.5		M32 x 1.5		M38 x 1.5		M38 x 1.5		M60x1.5		M60x1.5	
	G	H8	mm	29		33		39		39		61		61	
	HF/HA		mm	94	109	112	129	119	138	119	138	144	165	149	172
Through-hole	**K**		mm	14		18		25		25		52		52	
	L		mm	68		82		80		80		94		97	
	M		mm	36		42		63		63		90		90	
Thread/depth	**M1**		mm	M5/12		M6/11		M6/14		M6/14		M8/17		M8/17	
	N	H8	mm	28		34		44		44		75		75	
	P		mm	23		28		36		36		65		65	
	Q		mm	6		5.5		7.5		7.5		9		9	
At middle stroke	**Q1**		mm	13		14		16		16		21		21	
At middle stroke	**Rmed**		mm	55		64		82		107		130		190	
At middle stroke	**S**		mm	17		20		25		25		25		21	
	T1		mm	10		7		7		7		15		15	
Radial stroke	**U°**		deg.	5.2°		5.2°		4.9°		4.9°		4.7°		4.7°	
Radial stroke (1)	**U**		mm	5.3		6.3		7		7		7.5		7.5	
Pull-down s/d	**V**		mm	0.1		0.1		0.1		0.1		0.2		0.2	
	W		mm	25		25		30		30		25		25	
Axial piston stroke	**Z**		mm	21		25		26		26		30		30	
	e		mm	60		75		80		80		105		105	
	f		mm	17		21		21		21		28		28	
Reference height	**h**		mm	40		48		58		58		63		63	
	j		mm	48		65.2		72.2		72.2		100.2		100.2	
	l1		mm	32		38		44.4		44.4		63.5		63.5	
	l2		mm	24		32		36		36		48		48	
Thread/depth	**m1**		mm	M10/13		M12/15		M12/15		M12/15		M16/18		M16/18	
Thread/depth	**m2**		mm	M8/12		M10/14		M10/14		M10/14		M12/14		M12/14	
	n	h8	mm	7.94		7.94		12.7		12.7		12.7		12.7	
	o1	H7	mm	12.68		12.68		19.03		19.03		19.03		19.03	
	O2	h7	mm	9		9		12		12		12		12	
	s	H9	mm	16		16		16		16		-		-	
	t		mm	4		4		4		4		7		7	
	YF		mm	5		5		5		5		6		6	
	q1		mm	-		-		-		-		-		-	
	q2		mm	-		-		-		-		-		-	

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