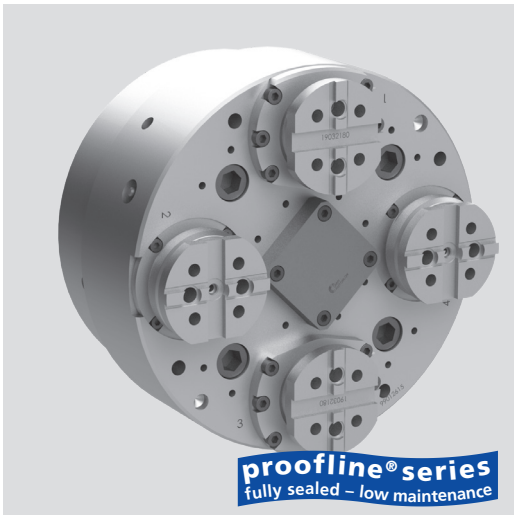
TSX-C 2+2

Pull down chuck
4 jaws 2+2

High precision pull-down chucks Ø 265 - 315 mm

- Active pull-down
- 2+2 jaws
- Tongue & groove



Application/customer benefits

- Self-centering clamping of irregular pieces on four sides even on two different axial levels. For example: 1st operation of the differential case turning
- Machining of parts where the concentricity between the turned diameters and the square / rectangular / irregular profile on which the chuck clamps is very accurate
- Centering the pieces with the two self-centering movements of the two pairs of jaws
- Actuation only with double piston cylinders of the series DCE
- Clamping of workpieces with highest demand for **parallelism**
- **Highest productivity** with long maintenance intervals
- Constant grip force and long lifetime ensure **constant quality of workpieces**

Technical features

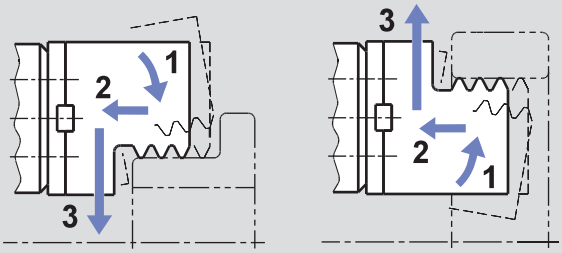
- 2+2 jaw chuck with 2 independent self-centering jaw drives, thanks to the 2 internal wedges
- Jaw 1+3: TX jaws very rigid and accurate
- Jaw 2+4: can be rigid (TSXR-C) or floating depending on the customer application
- Active pull-down
- Centrifugal force compensation
- TONGUE & GROOVE master jaws
- Optional central hole for air or coolant
- Permanent grease lubrication
- **proofline® chucks**
  = fully sealed - low maintenance

Standard equipment

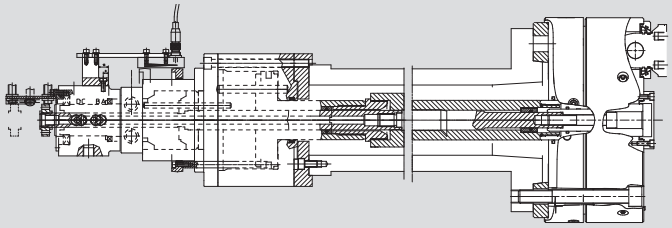
2+2-jaw chuck
Mounting bolts

Ordering example

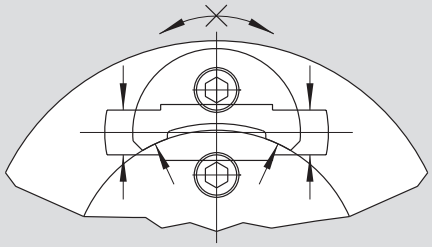
2+2-jaw chuck TSXR-C 265



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



- **TSX-C:** chuck operated with a DCE cylinder with central bore for air sensing or coolant flush (only 1 media).



TSX-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 Number of jaws		TSXR-C 265 2+2	TSXR-C 315 2+2
Angular jaw stroke U° (TX)	deg.	3.3°	3.9°
Radial jaw stroke at distance **h (TX)**	mm	4	5.5
Axial piston stroke (TX)	mm	16	20
Max. draw pull (TX)**	kN	16	26
Max. gripping force at distance **h** (TX)**	kN	40	64
Angular jaw stroke U1° (TS)	deg.	4.2	4,6
Radial jaw stroke at distance **h1 (TS)**	mm	5.1	6.6
Axial piston stroke (TS)	mm	20	24
Max. draw pull (TS)**	kN	16	26
Max. gripping force at distance **h1** (TS)**	kN	40	64
Pull down movement (standard)	mm	0.1	0.1
Max. speed*	r.p.m.	3250	2500
Weight (plain back without top jaws)	kg	52	88
Moment of inertia	kg·m²	0.45	1.1
Recommended actuating cylinders	**Type**	DCE 64-64	DCE 64-64

* 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%.

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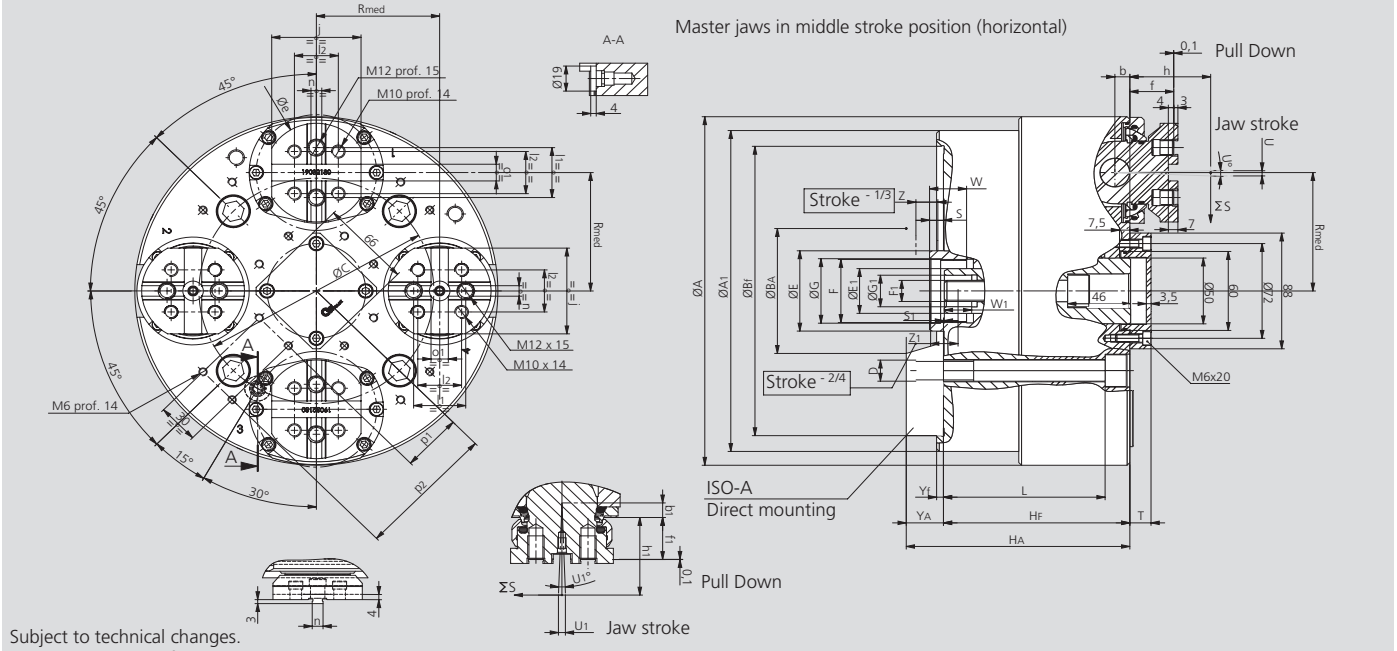

Subject to technical changes.
For more detailed information please ask our customer service.

SMW-AUTOBLOK Type			TSXR-C 265		TSXR-C 315	
Mounting			Z220	A8	Z220	A11
	A	mm	265		315	
	BF/BA H6	mm	220	139.719	300	196.869
	C	mm	171.4		235	
	D	mm	M16		M20	
	E	mm	48		48	
	F	mm	M48 x 1.5		M88 x 1.5	
	G H8	mm	49		49	
	HF/HA	mm	136	155	147	168
	E1	mm	34		34	
	F1	mm	M16		M16	
	G1 H8	mm	24		24	
	A1	mm	244		315	
	L	mm	118		124	
	Rmed	mm	90		107	
At middle stroke	**S**	mm	10.1		12.5	
At middle stroke	**S1**	mm	0.6		1.4	
	T	mm	15.5		15.5	
Radial stroke	**U°**	deg.	3.3°		3.9°	
Radial stroke	**U1°**	deg.	4.2°		4.6°	
Radial stroke(1) (1-3)	**U**	mm	4		5.5	
Radial stroke(1) (2-4)	**U1**	mm	5.1		6.6	
	W	mm	27		27	
	W1	mm	20		20	
Axial piston stroke 1-3	**Z**	mm	16		20	
Axial piston stroke 2-4	**Z1**	mm	20		24	
	e	mm	75		80	
	f	mm	32.1		32.1	
	f1	mm	32		32	
Reference height	**h**	mm	59		69	
Reference height	**h1**	mm	59		69	
	j	mm	65.2		72.2	
	l1	mm	38		44.4	
	l2	mm	32		36	
	b	mm	10.9		12.9	
	b1	mm	11		13.2	
	n h8	mm	7.94		12.7	
	o1 H7	mm	12.68		19.03	
	YF	mm	5		6	
	p1	mm	44		44	
	p2	mm	102		77	
	p3	mm	-		102	
	p4	mm	-		135	

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