

TPT-C

2+2 independent jaw movement
TONGUE & GROOVE

High precision 2+2 jaw power chuck with self-centering independent jaw movement Ø 210 - 400 mm

- Closed center
- Tongue & groove

Application/customer benefits

- Clamping of rectangular and square workpieces, self-centering in two axes

Technical features

- 2+2 jaw chuck with 2 independent self-centering jaw drives (two wedge drives)
- Jaw No. 1 + 3 (clamping jaws): power operated
- Jaw No. 2 + 4 (centering jaws): spring operated or optionally power operated*
- Chuck body and internal parts are case hardened for high precision and long life

Standard equipment*

2+2 jaw chuck
Mounting bolts

Ordering example

Power chuck TPT-C 250 A8
or
Power chuck TPT-C 400-Z



A One wedge drive

- Operated by standard closed center cylinders.
- Jaws 2 and 4 are spring operated to center the component in one axis.
- Jaws 1 and 3 are power operated by the cylinder to center the component on the second axis and to apply the gripping force to drive the component.
- Only for external clamping (on request internal clamping).
- See specific draw pull, gripping force and maximum speed in the technical data table below.

B Two independent wedge drives*

- Operated by independent double piston cylinders.
- Jaws 2 and 4 are power operated (using the small cylinder) to center the component in one axis.
- Jaws 1 and 3 are also power operated (using the large cylinder) to center the component on the second axis and to apply the gripping force to drive the component.
- Since both pair of jaws are power operated the chuck can reach higher speeds.
- See specific draw pull, gripping force and maximum speed in the technical data table below.

***Note:** The chucks are always delivered as „one wedge drive“ version: To use them as „two independent wedge drives“ version, just remove the internal spring assembly according to instruction manual

Technical data

SMW-AUTOBLOK Type Number of jaws		TPT-C 210 2+2	TPT-C 250 2+2	TPT-C 315 2+2	TPT-C 400 2+2
Radial jaw stroke	mm	4	5	5	7
Wedge stroke	mm	19	24	24	33
Weight (plain back without top jaws)	kg	21	32	48	102
Moment of inertia	kg·m ²	0.12	0.27	0.64	1.95
Id. No. TPT-C (center mounting)		77992105	77992513	77993121	77994013

A ONE wedge drive

SMW-AUTOBLOK Type Number of jaws		TPT-C 210 2+2	TPT-C 250 2+2	TPT-C 315 2+2	TPT-C 400 2+2
Max. draw pull (clamping wedge, jaw 1 + 3)	kN	29	39	45	60
Max. gripping force jaw 1 + 3** (power operated)	kN	72	98	115	150
Max. centering force jaw 2 + 4 (spring operated)	kN	11	15	15	24
Max. speed	r.p.m.	2500	2400	2000	1500
Recommended actuating cylinders	Type	SIN-S 125	SIN-S 125	SIN-S 150	SIN-S 150

B TWO independent wedge drives

SMW-AUTOBLOK Type Number of jaws		TPT-C 210 2+2	TPT-C 250 2+2	TPT-C 315 2+2	TPT-C 400 2+2
Max. draw pull (clamping wedge, jaw 1 + 3)	kN	25	34	40	50
Max. draw pull (centering wedge, jaw 2 + 4)	kN	19	25	30	35
Max. gripping force jaw 1 + 3** (power operated)	kN	72	98	115	150
Max. centering force jaw 2 + 4 (power operated)	kN	55	72	85	100
Max. speed	r.p.m.	4300	3400	2700	2000
Recommended actuating cylinders***	Type	DCE 64 / 64	DCE 64 / 64	DCE 64 / 64	DCE 64 / 64

** For internal clamping reduce the draw pull by 30%.

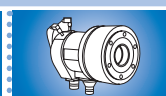
*** SMW-AUTOBLOK 340: Technical details of DCE cylinders see general catalog.



SMW-AUTOBLOK
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SMW-AUTOBLOK
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SMW-AUTOBLOK
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TPT-C

- 2+2 independent jaw movement**
TONGUE & GROOVE



SMW-AUTOBLOK Type			TPT-C 210		TPT-C 250			TPT-C 315			TPT-C 400	
Mounting			Z170	A6	Z220	A6*	A8	Z300	A8*	A11	Z300	A11
	A	mm	210		254			315			390	
	BF/BA H6	mm	170	106.375	220	106.375	139.719	300	139.719	196.869	300	196.869
	C	mm	133.4		171.4	-		235	-		235	
	CA	mm	-	-	-	133.4	-	-	171.4	-	-	-
	D	mm	13.5		17	13.5	17	21	17	21	21	
	E	mm	70		88			110			98	
	F1	mm	M20		M24			M24			M24	
	F2	mm	M38 x 1.5		M56 x 2			M56 x 2			M56 x 2	
	F3	mm	M16		M20			M20			M20	
	G	mm	51		61			61			70	
Chuck height	Hf/HA	mm	92	111	105	124	127	111	127	136	116	140
	K H8	mm	24		30			30			35	
	L1	mm	66		59			33			54	
	L3	mm	11		9			11			11	
	M	mm	M28 x 1.5		M28 x 1.5			M28 x 1.5			M24 x 1	
	R1	mm	105.5		127.5			158			196	
	Rmax	mm	72		88			105			133.5	
	S1	mm	189		203			201			218	
	S2	mm	61		71			69			86	
	S3	mm	21		33			31			45.5	
Jaw stroke (power 1 + 3)	U1	mm	4		5			5			7	
Jaw stroke (power / spring 2 + 4)	U2	mm	3		4			4			5.4	
	W1	mm	60		60			60			60	
	W2	mm	20		20			20			20	
	W3	mm	29		31			29			29	
	X	mm	8		8			10			10	
	Yf/YA	mm	5	24	5	24	27	5	30	30	6	30
Wedge stroke	Z	mm	19		24			24			33	
	e	mm	66		77.5			93			116	
	f	mm	4		4			4			7	
	g	mm	2.5		3			3			3	
	j	mm	36		45			45			62	
	k1	mm	11		12			12			14	
	l	mm	44.4		54			54			76.2	
	m	mm	M12		M16			M16			M20	
	n h8	mm	7.94		12.7			12.7			12.7	
	o H7	mm	12.68		19.03			19.03			19.03	
	p	mm	80		102			100			150	
	q	mm	45		60			60			80	
	r	mm	M8		M10			M10			M12	
	s H8	mm	16		16			20			20	
	t	mm	5		5			5			5	

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