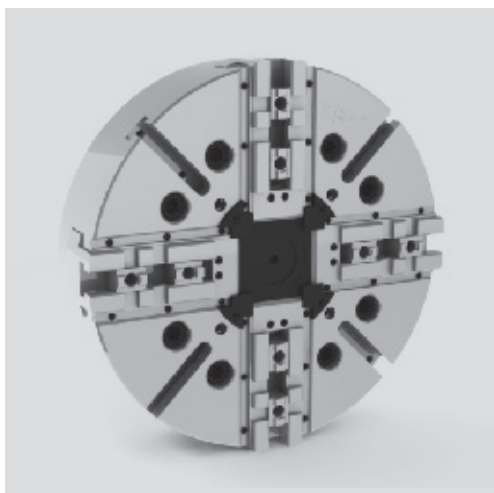


# TPT-C

2+2 independent jaw movement  
Tongue & groove

## High precision 2+2 jaw power chuck with self-centering independent jaw movement Ø 500 - 800 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
- case hardened internal parts for high precision and long life
- high quality cast iron body for lightweight and durability
- protection from contamination with seals along the master jaw profiles

### Standard equipment

- 2+2 jaw chuck
- 1 set of T-nuts and bolts
- 1 set of soft top jaws
- Mounting bolts

### Ordering example

- Power chuck TPT C 500 2+2 Z380
- or
- Power chuck TPT C 800 2+2 A15

## 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 from the cylinder to center the component on the second axis and to apply the gripping force to drive the component.
- Only for external 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		TPT-C 500	TPT-C 630	TPT-C 800
Number of jaws		2+2	2+2	2+2
Radial jaw stroke	mm	8.5	10	10
Wedge stroke	mm	32	38	38
Weight (plain back without top jaws)	kg	180	325	550
Moment of inertia	kg·m <sup>2</sup>	6	16	44

## A ONE wedge drive

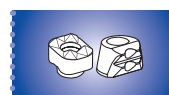
Max. draw pull* (clamping wedge, jaw 1 + 3)	kN	80	80	80
Max. gripping force jaw 1 + 3* (power operated)	kN	160	160	160
Max. centering force jaw 2 + 4 (spring operated)	kN	30	30	30
Max. speed	r.p.m.	800	630	500
Recommended actuating cylinders	type	SIN-S 175-200	SIN-S 175-200	SIN-S 175-200

## B TWO independent wedge drives

Max. draw pull*(clamping wedge, jaw 1 + 3)	kN	67	67	67
Max. draw pull*(centering wedge, jaw 2 + 4)	kN	50	50	50
Max. gripping force jaw 1 + 3* (power operated)	kN	160	160	160
Max. centering force jaw 2 + 4 (power operated)	kN	120	120	120
Max. speed	r.p.m.	1200	850	700
Recommended actuating cylinders**	type	DCE 140/140	DCE 140/140	DCE 140/140

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

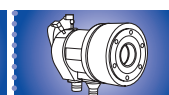
\*\* Technical details of DCE cylinders see page 238



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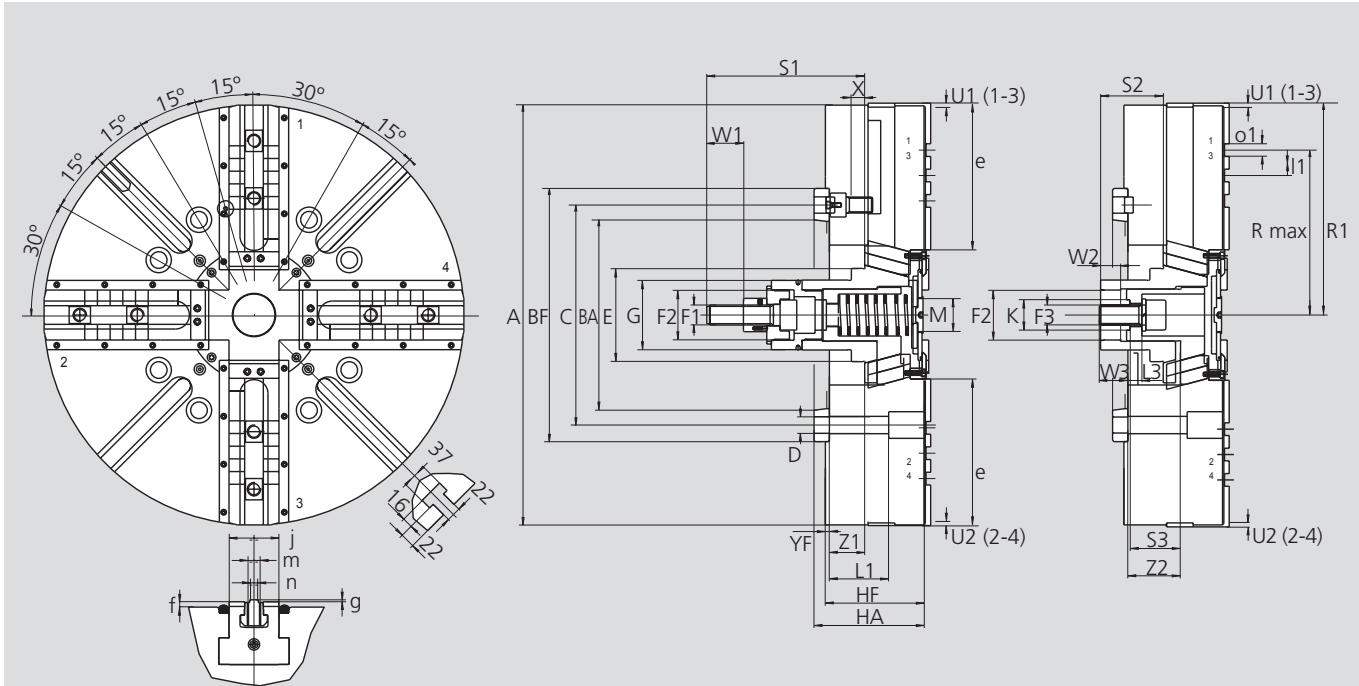
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# High precision 2+2 jaw power chuck with self-centering independent jaw movement Ø 500 - 800 mm

# TPT-C

- closed center
- tongue & groove

2+2 independent jaw movement  
Tongue & groove



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

# 4

SMW-AUTOBLOK Type			TPT-C 500		TPT-C 630		TPT-C 800	
Mounting			Z380	A15	Z380	A15	Z380	A15
	<b>A</b>	mm		510		630		800
	<b>Bf/BAH6</b>	mm	380	285.775	380	285.775	380	285.775
	<b>C</b>	mm		330.2		330.2		330.2
	<b>D</b>	mm		25		25		25
	<b>E</b>	mm		140		140		140
	<b>F1</b>	mm		M30		M30		M30
	<b>F2</b>	mm		M75 x 2		M75 x 2		M75 x 2
	<b>F3</b>	mm		M30		M30		M30
	<b>G</b>	mm		104		104		104
Chuck height	<b>Hf/HA</b>	mm	130	147	150	167	150	167
	<b>K</b>	mm		45		45		45
	<b>L1</b>	mm		89		89		89
	<b>L3</b>	mm		18		18		18
	<b>M</b>	mm		M52 x 1.5		M52 x 1.5		M52 x 1.5
	<b>R1</b>	mm		263		318		405
	<b>Rmax</b>	mm		209.5		247.5		349
	<b>S1</b>	mm		237		237		237
	<b>S2</b>	mm		94		94		94
	<b>S3</b>	mm		76		76		76
Jaw stroke (power 1 + 3)	<b>U1</b>	mm		8.5		10		10
Jaw stroke (spring 2 + 4)	<b>U2</b>	mm		6.5		8		8
	<b>W1</b>	mm		55		55		55
	<b>W2</b>	mm		30		30		30
	<b>W3</b>	mm		46		46		46
	<b>X</b>	mm		20		20		20
	<b>Yf/YA</b>	mm		6/23		6/23		6/23
Wedge 1 max./min.	<b>Z1</b>	mm		33/1		53/15		53/15
Wedge 2 max./min.	<b>Z2</b>	mm		59/27		79/41		79/41
	<b>e</b>	mm		165		220		307
	<b>f</b>	mm		8		8		8
	<b>g</b>	mm		3		3		3
	<b>j</b>	mm		75		75		75
	<b>l1</b>	mm		38.1		38.1		38.1
	<b>m</b>	mm		20		20		20
	<b>n</b>	mm		12.7		12.7		12.7
	<b>o1</b>	mm		19.03		19.03		19.03