

# 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\*
- 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 by the cylinder to center the component on the second axis and to apply the gripping force to drive the component.
- For external clamping only (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 500 2+2	TPT-C 630 2+2	TPT-C 800 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·m²	6	16	44
Id. No. TPT-C (center mounting)		77995007	77996307	77998007

## A ONE wedge drive

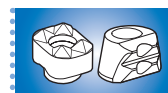
SMW-AUTOBLOK Type Number of jaws		TPT-C 500 2+2	TPT-C 630 2+2	TPT-C 800 2+2
Max. draw pull** (clamping wedge, jaw 1 + 3)	kN	80	80	80
Max. gripping force jaw 1 + 3 (power operated)	kN	160	160	160
Max. centering force jaw 2 + 4 (spring operated)	kN	30	30	30
Max. speed	r.p.m.	800	630	500
Recommended actuating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

## B TWO independent wedge drives

SMW-AUTOBLOK Type Number of jaws		TPT-C 500 2+2	TPT-C 630 2+2	TPT-C 800 2+2
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%.

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



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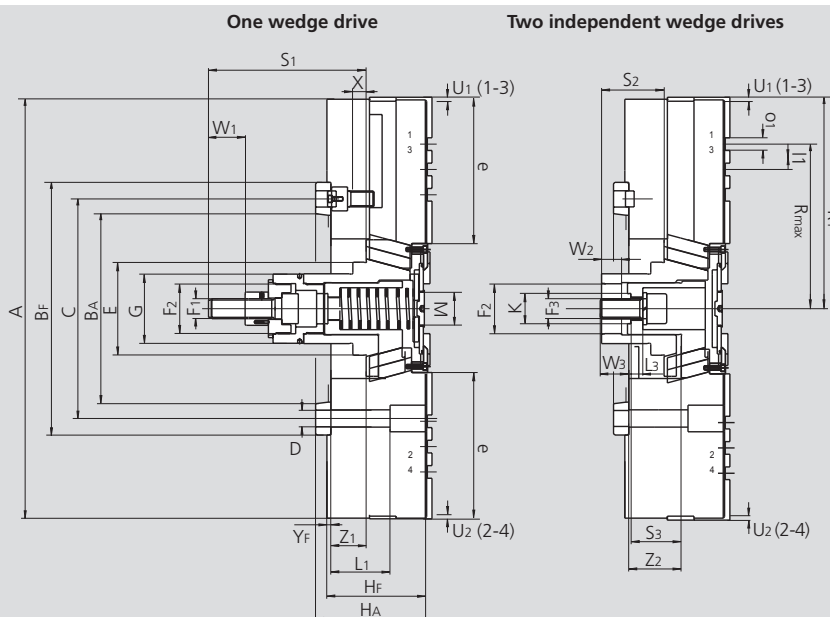
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**TPT-C**

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



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