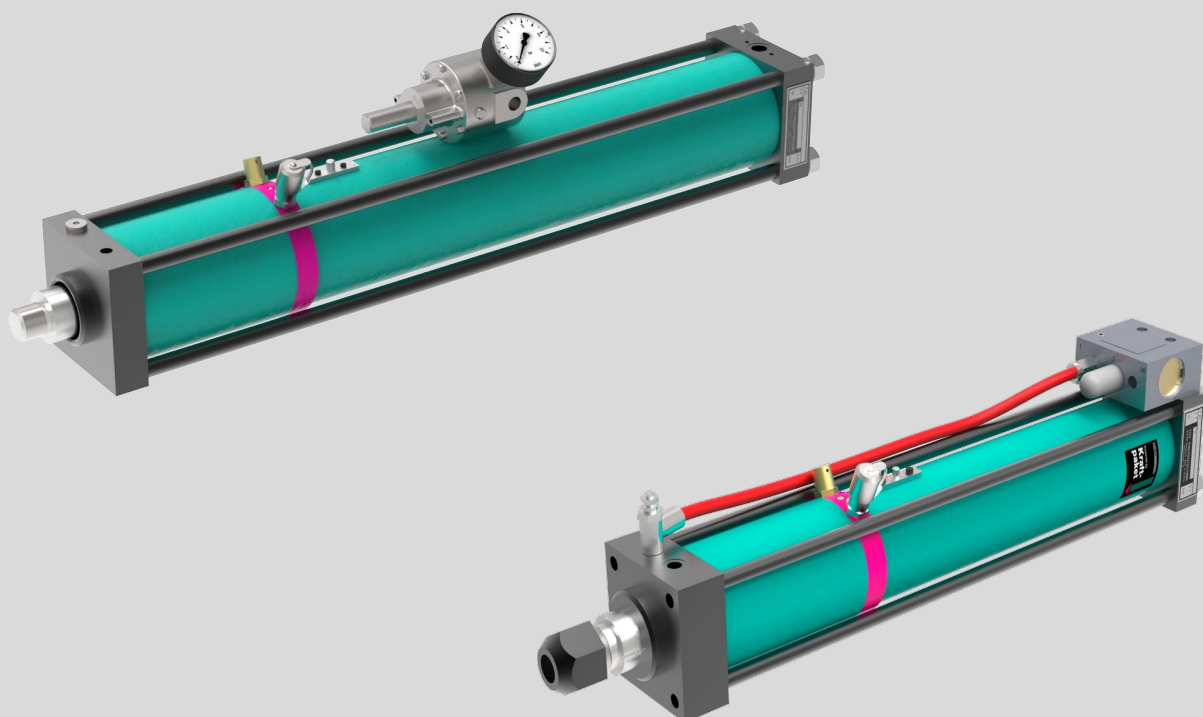


TOX® Powerpackage Type T and RP

Data sheet 10.21
2022/05



TOX® Powerpackage type T

The “Turbo cylinder“ with cycle speeds up to 550 strokes/min.
With integrated power bypass.

Advantages:

- Patented power bypass
- Constant press force
- 10 million cycles within 12 months without work shift restrictions
- Can be mounted in any orientation
- Internal positive stop

This cylinder is ideal for punching and nibbling machines providing optimum performance. External dampening is recommended.

Function:

The full stroke of the cylinder is power stroke. Constant air supply on retract side. Force is generated by the integrated air to oil intensifier. Features complete air to oil separation, integrated oil reservoir, precisely defined end positions, oil level indicator, standard oil refill nipple and high pressure measuring connection.

Controls:

Simple – like any single acting pneumatic cylinder. Return port is connected to a constant air supply.
Min. air supply 3 bar.

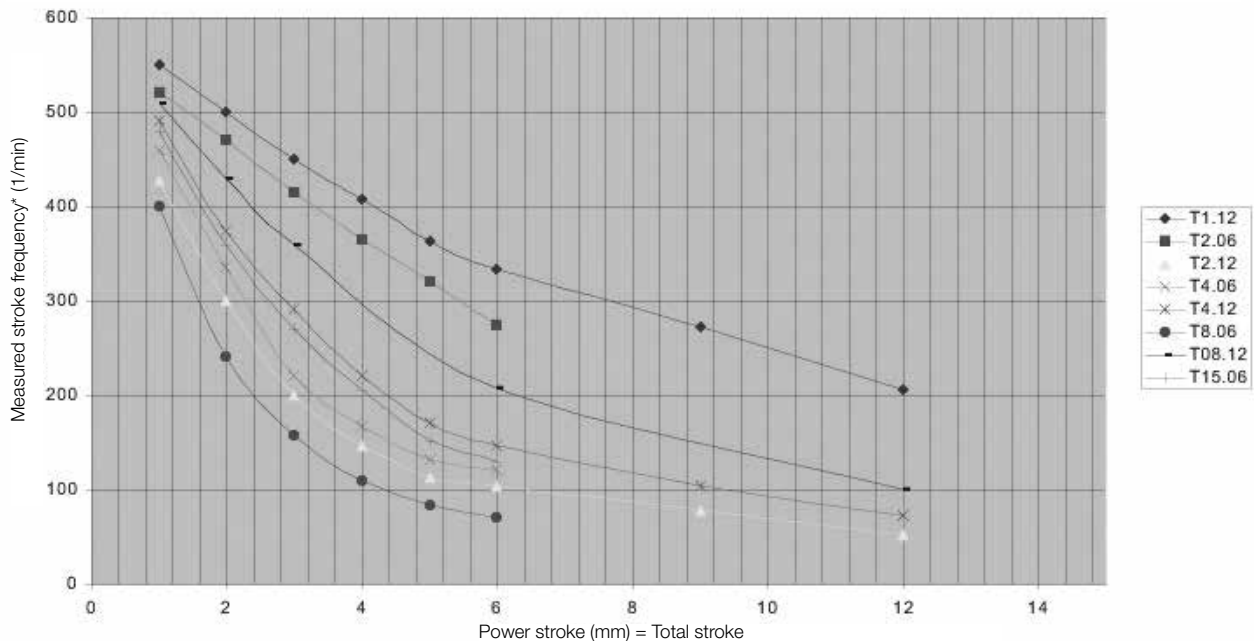
Mounting:

Can be mounted in any orientation. Side loads on working rod are not permitted. We recommend use of a flexible coupling from our TOX® Powerpackage accessories.

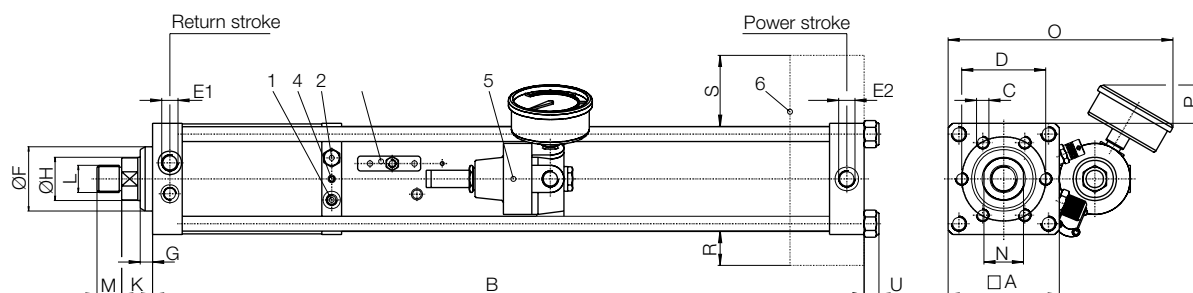
Accessories:

High frequency power stroke valve ZVT (double solenoid 24 V).

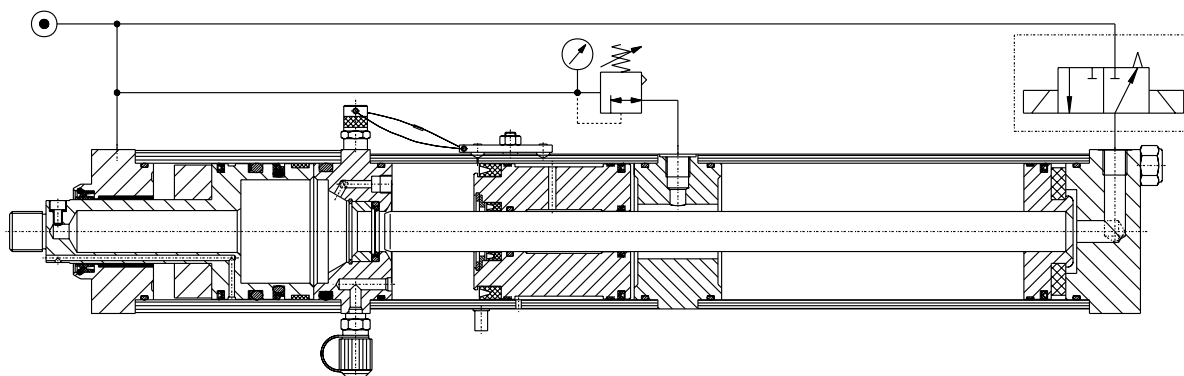
Cycle speed for TOX® Powerpackage series T at 70 % effective force and 10bar (145psi) air pressure



*Values can vary depending on use and technical boundary conditions



- 1 High-pressure measuring hose
2 Oil filling nipple
3 Bleed plate
4 Oil level indicator
5 Pneumatic spring
6 Power stroke valve (please order separately)



Type	Total stroke	Power stroke	at 6 bar compressed air max. Press force	at 10 bar compressed air max. Press force	at 6 bar compressed air Retracting force	at 10 bar compressed air Retracting force
			kN	kN	N	N
T 1.12.	12	12	7	12.5	300	590
T 2.6.	6	6	13	23.0	300	590
T 2.12.	12	12	11	20.0	770	1500
T 4.6.	6	6	22	39.0	770	1500
T 4.12.	12	12	23	41.0	1280	2450
T 8.6.	6	6	45	80.0	1280	2450
T 8.12.	12	12	35	63.0	2300	4450
T 15.6.	6	6	68	120.0	2300	4450

Type	A	B	C	D	E ₁	E ₂	F ₁₇	G	H	K	L	M	N ¹	O	P	R	S	U
T 1.12.	65	465	6xM 6x12	54	G1/8	G1/4	45	10	30	25	M16x1,5	15	27	160	40	93	93	8
T 2.6.	65	465	6xM 6x12	54	G1/8	G1/4	45	10	30	25	M16x1,5	15	27	160	40	93	93	8
T 2.12.	80	514	6xM 8x12	65	G1/8	G1/4	52	10	35	25	M22x2	20	32	165	35	80	80	10
T 4.6.	80	514	6xM 8x12	65	G1/8	G1/4	52	10	35	25	M22x2	20	32	165	35	80	80	10
T 4.12.	90	576	6xM10x16	68	G1/4	G1/4	52	10	35	25	M22x2	20	32	185	25	75	75	12
T 8.6.	90	576	6xM10x16	68	G1/4	G1/4	52	10	35	25	M22x2	20	32	185	25	75	75	12
T 8.12.	110	582	6xM10x16	88	G1/4	G1/2	70	10	45	25	M30x2	25	36	220	40	110	110	12
T 15.6.	110	582	6xM10x16	88	G1/4	G1/2	70	10	45	25	M30x2	25	36	220	40	110	110	12

Dimensions in mm

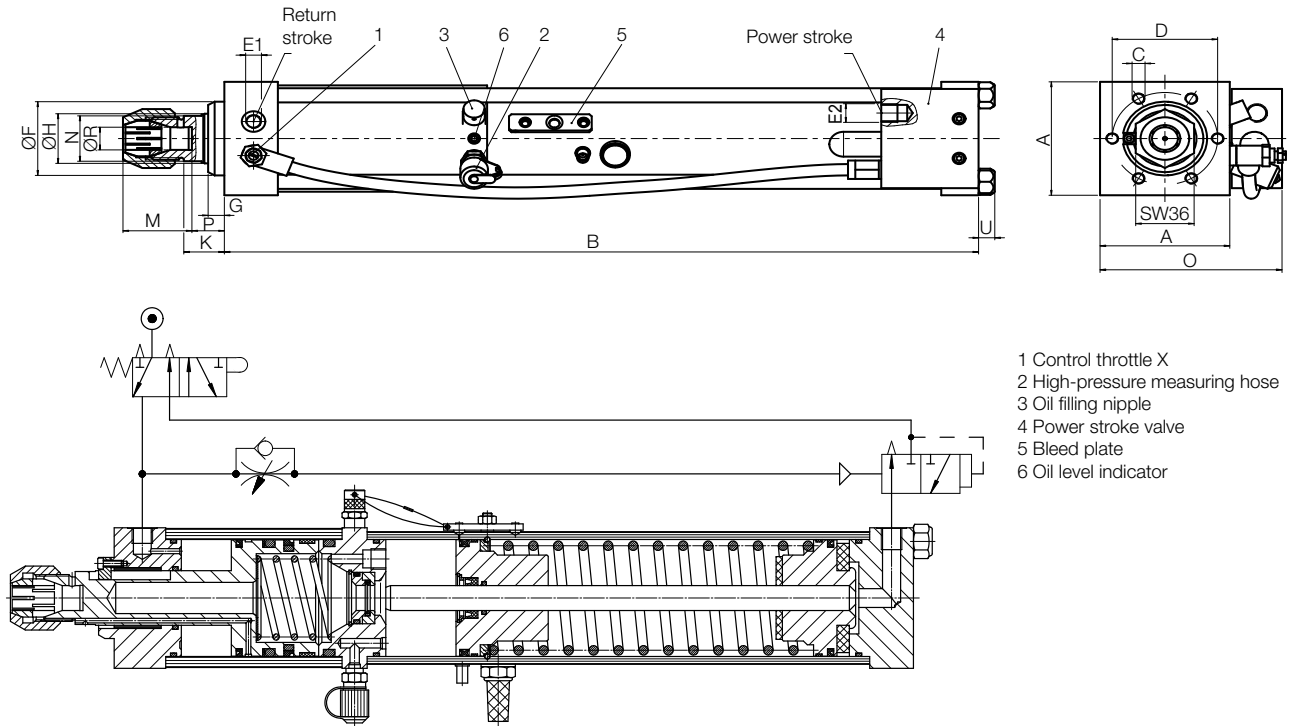
Pneumatic connection sizes

Connection	Nominal sizes /Inside-Ø hose
G1/4"	7 - 8 mm
G3/8"	8 - 9 mm
G1/2"	10 - 11 mm
G3/4"	19 - 20 mm
G1"	25 mm
G1 1/2"	38 mm

Note: For a trouble-free operation, the connection size and nominal size must be maintained throughout the compressed air supply.

TOX® Powerpackage type RP

Embossing cylinder with anti-rotation device and clamping chuck



Type	Total stroke	Power stroke	at 6 bar compressed air max. Press force kN	at compressed air 10 bar max. Press force kN	Fast approach force N	at 6 bar compressed air Retracting force N	at 10 bar compressed air Retracting force N
RP 8.32.3	32.	3	44	79	400	510	860
RP 15.32.3	32.	3	91	159	500	920	1540

Dimensions in mm

Type	A	B	C	D	E ₁	E ₂	F ₁₇	G	H	K	M	N	O	P	R	U
RP 8.32.3	80	465	6xM 8x12	65	G1/8	G1/4	52	10	35	25	46.5	32	113	20	16	10
RP 15.32.3	90	512	6xM10x16	68	G1/4	G1/4	52	10	35	25	46.5	32	123	20	16	12

Dimensions in mm

Pneumatic connection sizes

Connection	Nominal sizes /Inside-Ø hose
G1/4"	7 - 8 mm
G3/8"	8 - 9 mm
G1/2"	10 - 11 mm
G3/4"	19 - 20 mm
G1"	25 mm
G1 1/2"	38 mm

Note: For a trouble-free operation, the connection size and nominal size must be maintained throughout the compressed air supply.

Function:

Fast approach via built-in spring. Pneumatic-hydraulic power stroke activated at any point of fast approach. Return stroke entirely pneumatic. Force generated via pressure intensifier, absolute air/oil separation, integrated oil reservoir, oil level indicator and oil filling nipple, measuring and control connection for pressure gauge or pressure switch. This allows sequential functions to be controlled, such as return stroke activation, stamping depth adjustment, etc.

Attention:

In pressureless state the piston rod extends due to the spring-driven fast approach force. Return stroke air pressure: minimum 5 bar.

TOX® Powerpackage special versions

TOX® Powerpackage ZLM for use in the food industry

With the exception of line-Q, all TOX® Powerpackages are available with food grade oil and grease lubrication. Both lubricants are certified according to USDA-H11 and are used wherever there is a chance of occasional, technically unavoidable contact between foodstuffs and lubricant.

TOX® Powerpackages are used in industrial food manufacturing, processing, filling and packaging machines, as well as in the pharmaceutical and cosmetics industry.

Compatible with:

All TOX® Powerpackages (without line-Q)

Order no.

S 1.32.6 - **ZLM**

Food-grade version

Order no. of TOX® Powerpackage

TOX® Powerpackage in anti-rust version ZRO

With the exception of line-Q, all TOX® Powerpackages can be supplied with rust protection. All individual parts are either plasma nitrided, galvanised or primed and painted. These devices are particularly suitable for use in the food and packaging industries.

Compatible with:

All TOX® Powerpackages (without line-Q)

Order no.

S 1.32.6 - **ZRO**

Anti-rust version

Order no. of TOX® Powerpackage

On request, we can provide TOX® Powerpackages as stainless steel version. Please contact us!