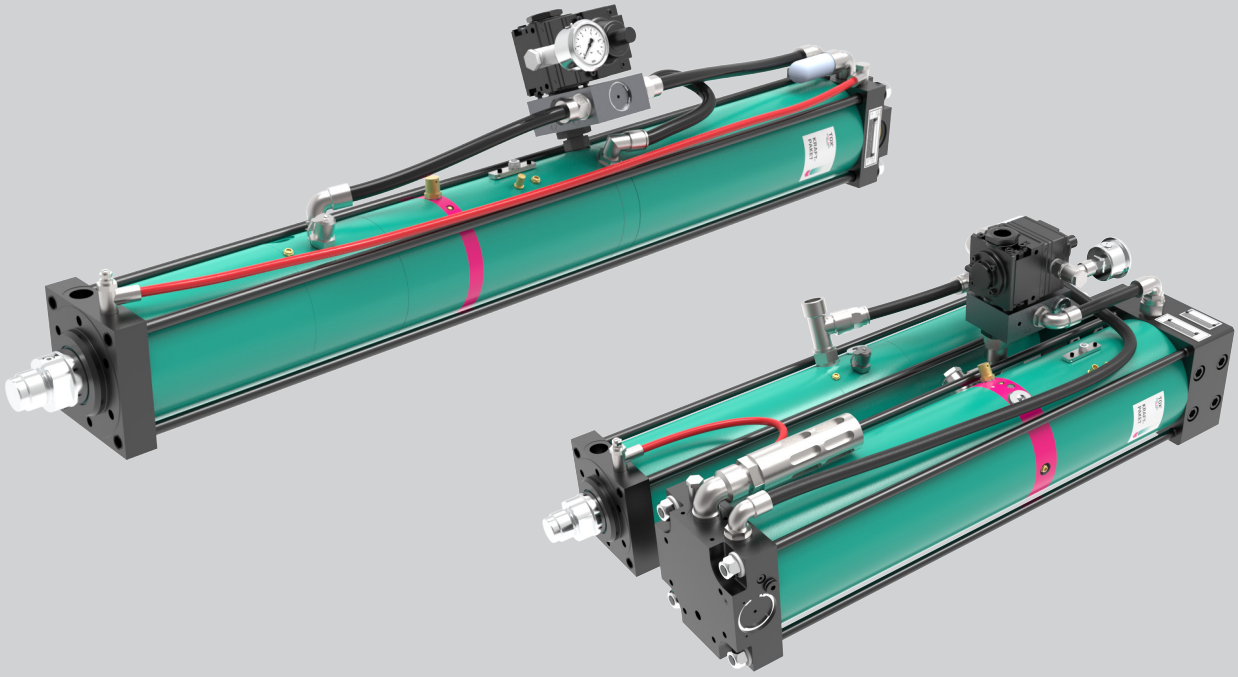
TOX® Powerpackage line-X
Type X-S and X-K

Data sheet 10.30
2026/02



TOX® PRESSOTECHNIK SE & Co. KG, Riedstrasse 4, 88250 Weingarten/Germany
Find your local contact at: www.tox.com

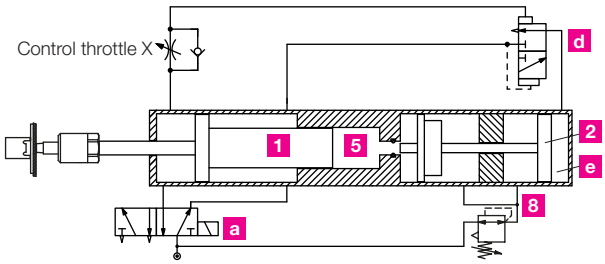
Subject to technical modifications.

TOX® Powerpackage line-X

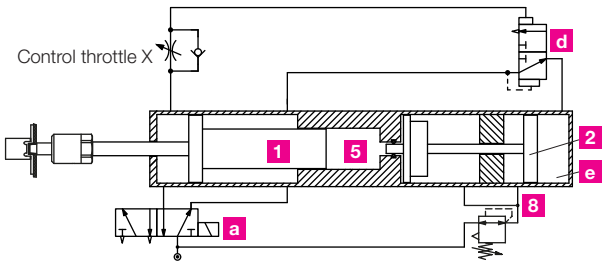
Advantages:

- Excellent controllability and adjustability
- Very efficient sealing technique
- Particularly applicable for punching applications
- Patented power bypass ZLB
- Hydraulic end position damping ZHD
- Significantly increased fast approach force at small size
- 10 million cycles within 12 months without work shift restrictions
- Venting in 3 main mounting positions (vertical down and up, horizontal)
- Prepared for stroke monitoring ZHU (up to design size 030)
- Prepared for external linear position sensor ZHW (up to design size 030)
- Fixed stop with elastomer cushioning
- Type X-K with patented circular buffer design for shorter overall length

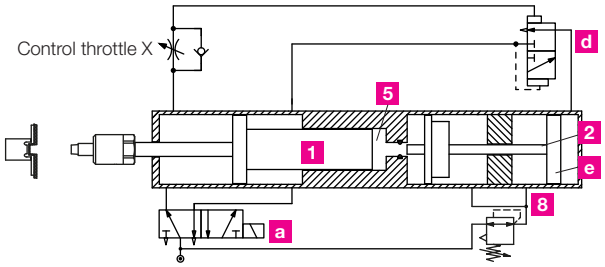
Functioning of the TOX® Powerpackage



Fast approach – the main control valve **a** is switched. The working piston **1** extends, initially with a fast approach stroke, until it meets resistance at any point. It stopps and the integrated power stroke valve **d** is shifted. Air flows into chamber **e**.



Power stroke – the intensifier piston **2** closes the high pressure chamber **5** and compresses the oil in the working area up to 400 bar. This oil pressure applies pressure to the back of the working piston **1** and triggers the power stroke.



Return stroke – after the changeover of the main control valve **a** the power stroke valve **d** automatically vents the chamber **e**. The intensifier piston **2** and the working piston **1** return to their initial position one after the other.

Example for ordering:

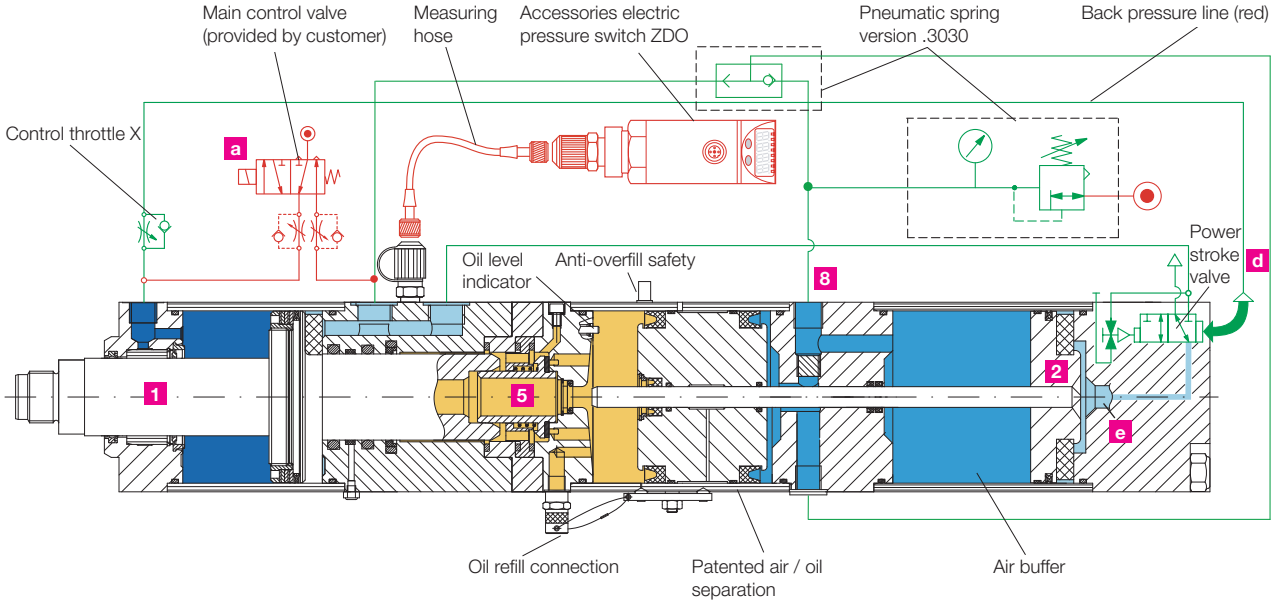
X-S 001.3030.100.22

- Power stroke (mm)
- Total stroke (mm)
- Version
- Press force category (t)
- Type

Pneumatic control Version .3030

The TOX® Powerpackages line-X version .3030 are offered in two designs type X-S and X-K. They are equipped with pneumatic spring, power stroke valve and fast approach stroke support. Beside a maximum approach force and high stroke frequencies, this allows longest maintenance intervals. Three pneumatic connections are required for forward stroke, return stroke and permanent supply of the pneumatic spring.

All drives are provided with dynamic pressure switch (control throttle X). Optional control variants such as pressure regulation in the power stroke line, external switch-on of the power stroke or external power stroke release are possible (see TOX® Data Sheet 10.16).



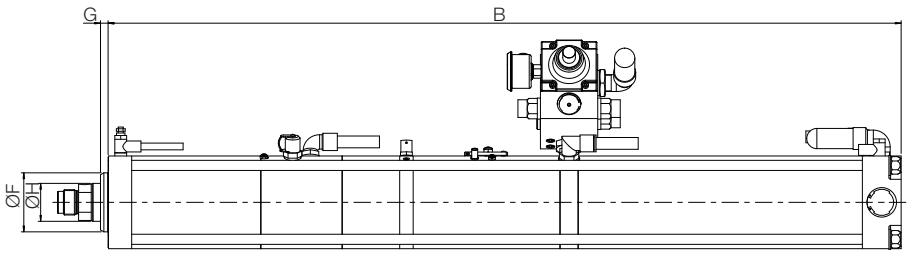
Within the TOX® Powerpackage, the oil pretension is effected by compressed air applied to the piston surface in the intensifier chamber. The air pressure is set with a pressure regulator (set at the factory to a pressure of 0.8 bar). Also, air is connected to connector **8** of the pneumatic spring pressure regulator (minimum pressure 2.5 bar). This pressurizes the oil reservoir to assist the oil flow during approach stroke and allows the cylinder to operate in any mounting orientation. In addition, the air pressure is used to retract the intensifier piston during the return stroke.

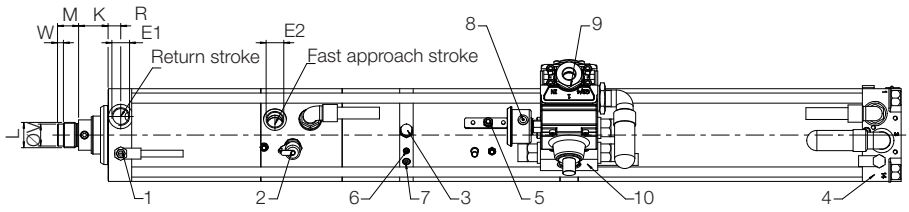
Legend:

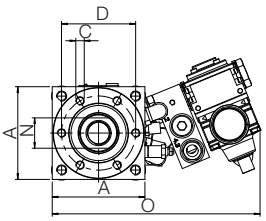
- **1** Working piston
- **2** Intensifier piston
- **5** High pressure chamber
- **8** Connection for pneumatic spring regulator
- **a** Main control valve
- **d** Power stroke valve
- **e** Buffer area of the intensifier piston

TOX® Powerpackage line-X, Type X-S

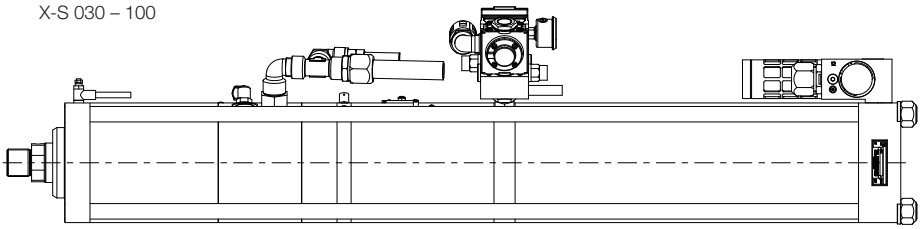
X-S 001 – 015

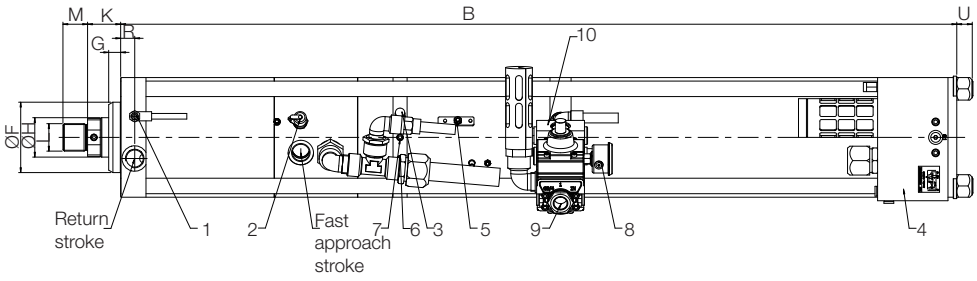






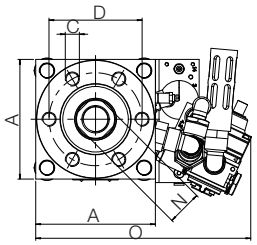
X-S 030 – 100



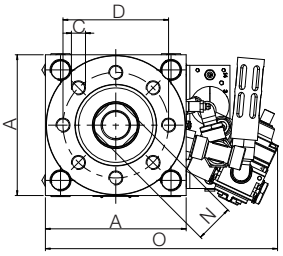


1 Control throttle X
2 High-pressure measuring hose
3 Oil filling nipple
4 Change over valve fast approach stroke/power stroke
5 Bleed plate
6 Oil level indicator
7 Bleed screw
8 Pneumatic spring with manometer
9 Pneumatic spring connection (permanent pressure)
10 Fast approach stroke support

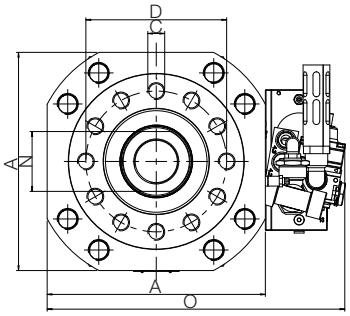
X-S 030



X-S 050



X-S 075-100



TOX® Powerpackage line-X, Type X-S

Type	Total stroke	Incl. Power stroke	at 6 bar compressed air: max. press force kN	at 6 bar compressed air: Fast approach force N	at 6 bar compressed air: Retracting N	Pneumatic connection: E_1	Pneumatic connection: E_2	Pneumatic connection: Pneumatic spring connection	Weight kg
X-S 001.3030.050.23*** X-S 001.3030.100.22***	050 100	23 22	10.9	1700	1460	G1/4	G1/4	G1/4	14 15
X-S 002.3030.050.12 X-S 002.3030.100.12	050 100	12 12	16.9	1700	1460	G1/4	G1/4	G1/4	14 15
X-S 004.3030. 050.12 X-S 004.3030. 100.12	050 100	12 12	36.2	2430	1870	G3/8	G3/8	G1/4	22 23
X-S 008.3030. 050.12 X-S 008.3030. 100.12	050 100	12 12	70.9	4320	3180	G1/2	G1/2	G1/2	37 40
X-S 015.3030. 050.12 X-S 015.3030. 100.12	050 100	12 12	119.2	6780	5180	G1/2	G1/2	G1/2	62 65
X-S 030.3030. 100.12	100	12	264.2	11170	8740	G3/4	G3/4	G3/4	119
X-S 050.3030. 100.08	100	08	500.4	14230	10830	G3/4	G3/4	G3/4	174
X-S 075.3030. 100.12	100	12	806.7	27520	19720	G1	G1	G3/4	396
X-S 100.3030. 100.08	100	08	1030.6	27520	19720	G1	G1	G3/4	396
X-S 170.3030. 100.06	100	06	1727.5	39830	24470	G1	G1	G3/4	735

Dimensions in mm

Type	A	B	C	D	F_{f7}	G	H	K	L	M	N	O	R	U	V_{g6}	W	*IV
X-S 001.3030.050.23*** X-S 001.3030.100.22***	70	638 738	6xM8x12	54	40	9	20	26	M16x1.5	15	17	210	13	–	–	–	■
X-S 002.3030.050.12 X-S 002.3030.100.12	70	638 738	6xM8x12	54	40	9	20	26	M16x1.5	15	17	210	13	–	–	–	■
X-S 004.3030. 050.12 X-S 004.3030. 100.12	85	811 911	6xM8x15	64	50	10	30	28.5	M22x2	20	24	225	14	–	18	7	■
X-S 008.3030. 050.12 X-S 008.3030. 100.12	110	841 941	6xM10x16	88	70	9	45	35	M30x2	25	36	250	15	–	26	7	■
X-S 015.3030. 050.12 X-S 015.3030. 100.12	135	878 978	6xM16x25	100	75	15	50	36	M30x2	25	41	272	17.5	–	26	7	■
X-S 030.3030. 100.12	170	1188	6xM20x30	132	100	17	56	47	M39x2	35	50	310	20	22	–	–	–
X-S 050.3030. 100.08	200	1294	8xM20x30	150	115	25	63	52	M42x2	40	55	335	23	30	–	–	–
X-S 075.3030. 100.12	310	1387	12xM24x40	200	150	20	100	60	M64x2	60	85	425	40	30	–	–	–
X-S 100.3030. 100.08	310	1387	12xM24x40	200	150	20	100	60	M64x2	60	85	430	40	30	–	–	–
X-S 170.3030. 100.06	420	1562	18xM30x55	320	240	35	150	70	M80x2	80	4xØ16	510	99	30	–	–	–

*IV = with integrated power stroke valve

Dimensions in mm

*****Note for devices of type 001:** To assemble accessories (see data sheets 10.10 TOX® Powerpackage Accessories / 110.00 Sensors) please observe the TOX® Powerpackage dimensions and use compatible accessories of type 002.

Pneumatic connection sizes

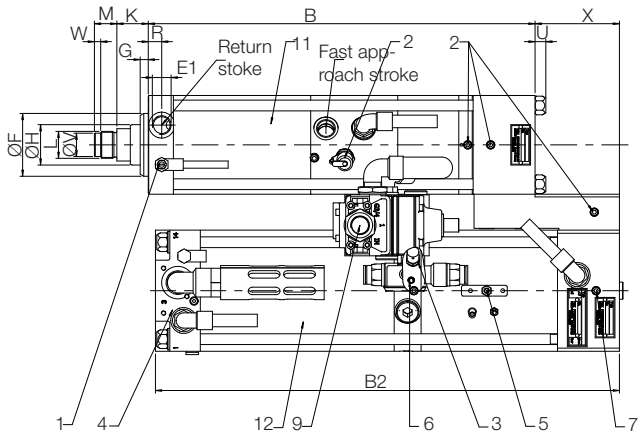
Connection	Nominal sizes / Inside-Ø hose
G1/4“	7 - 8 mm
G3/8“	8 - 9 mm
G1/2“	10 - 11 mm
G3/4“	19 - 20 mm
G1“	25 mm
G1 1/2“	38 mm

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

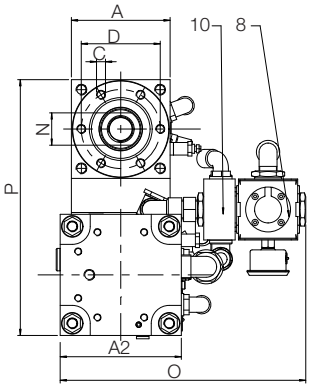
Notes

All TOX® Powerpackage types up to X-S 030 are prepared for stroke monitoring ZHU and external linear position sensor ZHW. Please order the required number of sensors ZHS and mounting brackets ZMP separately (see TOX® Data Sheet 110.00).

TOX® Powerpackage line-X, Type X-K

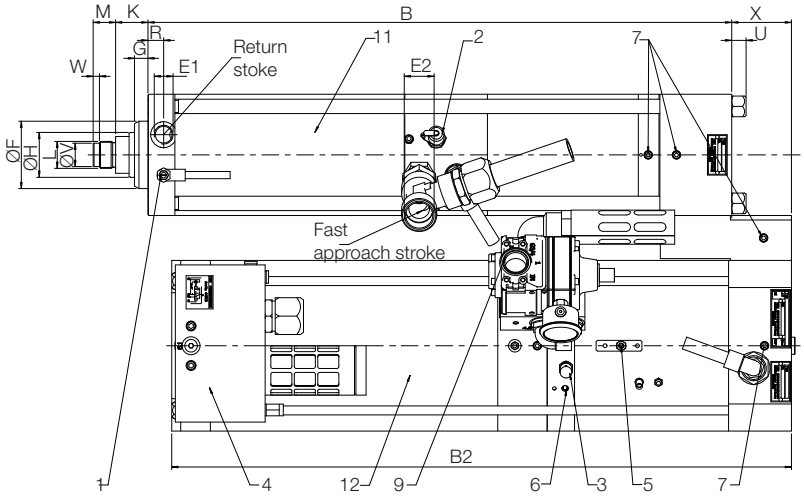


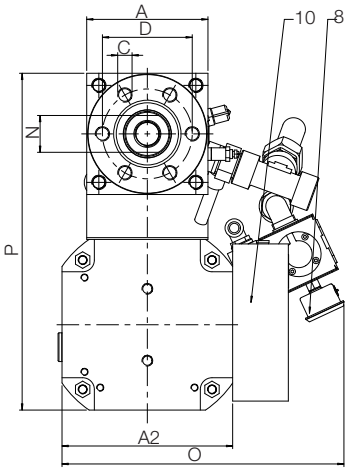
X-K 001-008



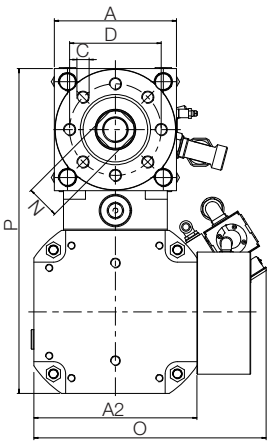
1 Control throttle X
2 High-pressure measuring hose
3 Oil filling nipple
4 Change over valve fast approach stroke/power stroke
5 Bleed plate
6 Oil level indicator
7 Bleed screw
8 Pneumatic spring with manometer
9 Pneumatic spring connection (permanent pressure)
10 Fast approach stroke support
11 Working part
12 Intensifier

X-K 015-030

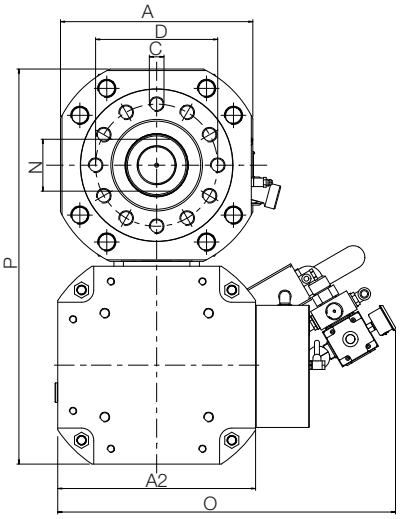




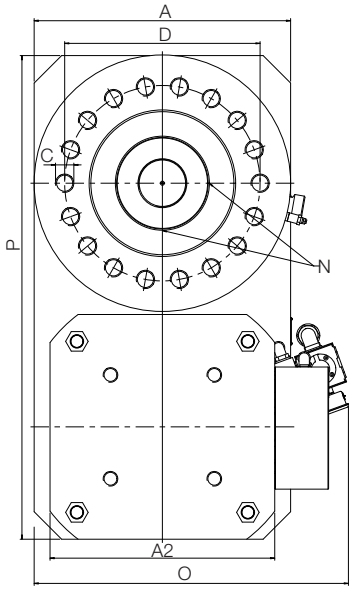
X-K 050



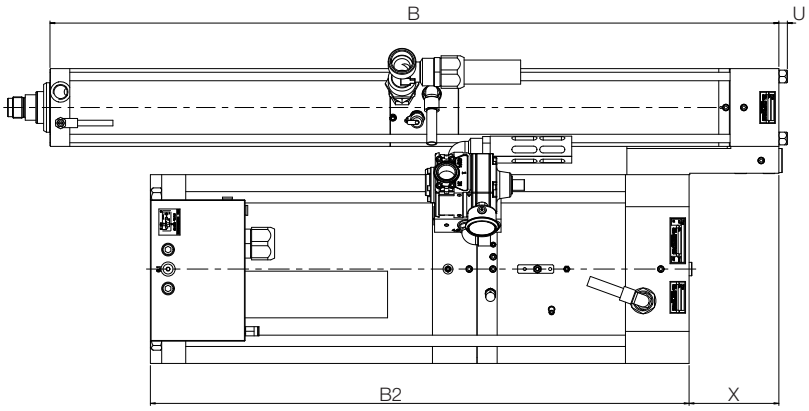
X-K 075-100

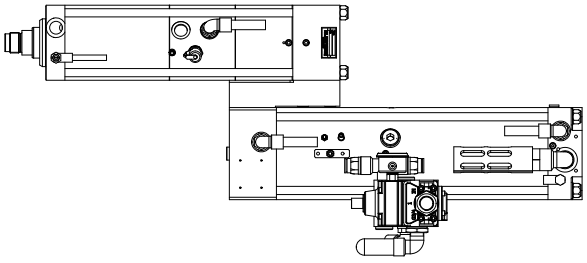


X-K 170-200



TOX® Powerpackage line-X, Type X-K





Example: Model version Z form. Intermediate flange, mounting flange and pressured air connection are also available in twisted layout mounting. Additionally, the intermediate flange can be replaced by a hydraulic hose. These drives can be found in leaflet TOX® Pneumohydraulic Unit X-KT.

Notes

- All TOX® Powerpackage types up to X-K 030 are prepared for stroke monitoring ZHU and external linear position sensor ZHW. Please order the required number of sensors ZHS and mounting brackets ZMP separately (see TOX® Data Sheet 110.00).
- In order to keep overall length to a minimum, the intermediate flange is rotated 180° when dimension B > B_2.

TOX® Powerpackage line-X, Type X-K

			at 6 bar compressed air			Pneumatic connection			
Type	Total stroke	Incl. power stroke	Max. press force kN	Fast approach force N	Retracting force N	E_1	E_2	Pneumatic spring connection	Weight kg
X-K 001.3030.100.30***	100	30	14.3	1700	1460	G1/4	G1/2	G3/8	39
X-K 001.3030.200.28***	200	28	14.3	1700	1460	G1/4	G1/2	G3/8	43
X-K 001.3030.300.26***	300	26	14.3	1700	1460	G1/4	G1/2	G3/8	47
X-K 002.3030.100.19	100	19	18.7	1700	1460	G1/4	G1/2	G3/8	39
X-K 002.3030.200.17	200	17	18.7	1700	1460	G1/4	G1/2	G3/8	43
X-K 002.3030.200.39	200	39	18.7	1700	1460	G1/4	G1/2	G3/8	46
X-K 002.3030.200.34	200	34	21.1	1700	1460	G1/4	G1/2	G1/2	55
X-K 002.3030.200.68	200	68	21.1	1700	1460	G1/4	G1/2	G1/2	65
X-K 002.3030.300.14	300	14	18.7	1700	1460	G1/4	G1/2	G3/8	46
X-K 002.3030.300.31	300	31	21.1	1700	1460	G1/4	G1/2	G1/2	62
X-K 002.3030.300.37	300	37	18.7	1700	1460	G1/4	G1/2	G3/8	49
X-K 002.3030.300.65	300	65	21.1	1700	1460	G1/4	G1/2	G1/2	64
X-K 004.3030.100.06	100	06	45.8	2430	1870	G3/8	G1/2	G3/8	43
X-K 004.3030.100.12	100	12	52.1	2430	1870	G3/8	G1/2	G1/2	61
X-K 004.3030.200.12	200	12	45.8	2430	1870	G3/8	G1/2	G3/8	51
X-K 004.3030.200.22	200	22	52.1	2430	1870	G3/8	G1/2	G1/2	69
X-K 004.3030.200.49	200	49	52.2	2430	1870	G3/8	G3/4	G3/4	113
X-K 004.3030.400.24	400	24	45.8	2430	1870	G3/8	G1/2	G3/8	74
X-K 004.3030.400.45	400	45	52.1	2430	1870	G3/8	G1/2	G1/2	103
X-K 004.3030.400.44	400	44	52.2	2430	1870	G3/8	G3/4	G3/4	124
X-K 008.3030.100.06	100	06	81.9	4320	3180	G1/2	G1/2	G1/2	71
X-K 008.3030.200.12	200	12	81.9	4320	3180	G1/2	G1/2	G1/2	85
X-K 008.3030.200.29	200	29	82.1	4320	3180	G1/2	G3/4	G3/4	126
X-K 008.3030.200.69	200	69	81.7	4320	3180	G1/2	G1	G3/4	236
X-K 008.3030.400.24	400	24	82.1	4320	3180	G1/2	G3/4	G3/4	145
X-K 008.3030.400.65	400	65	81.7	4320	3180	G1/2	G1	G3/4	257
X-K 015.3030.200.12	200	12	159.2	6780	5180	G1/2	G3/4	G3/4	154
X-K 015.3030.200.32	200	32	158.5	6780	5180	G1/2	G1	G3/4	259
X-K 015.3030.200.64	200	64	158.5	6780	5180	G1/2	G1	G3/4	325
X-K 015.3030.400.27	400	27	158.5	6780	5180	G1/2	G1	G3/4	286
X-K 015.3030.400.61	400	61	158.5	6780	5180	G1/2	G1	G3/4	336
X-K 030.3030.200.12	200	12	320.8	11170	8740	G3/4	G1	G3/4	305
X-K 030.3030.200.27	200	27	320.8	11170	8740	G3/4	G1	G3/4	378
X-K 030.3030.400.24	400	24	320.8	11170	8740	G3/4	G1	G3/4	397
X-K 050.3030.200.15	200	15	498.0	14230	10830	G3/4	G1	G3/4	422
X-K 050.3030.400.11	400	11	498.0	14230	10830	G3/4	G1	G3/4	455
X-K 050.3030.400.23	400	23	498.0	14230	10830	G3/4	G1	G3/4	556
X-K 075.3030.300.21	300	21	771.6	27520	19720	G1	G1	G3/4	960
X-K 100.3030.300.10	300	10	1030.0	27520	19720	G1	G1	G3/4	960
X-K 170.3030.200.10	200	10	1627.0	39830	24470	G1	G1	G3/4	1580
X-K 200.3030.200.10	200	10	2122.2	39832	24473	G1	G1	G3/4	1770

Dimensions in mm

TOX® Powerpackage line-X, Type X-K

Type	A	A_2	B	B_2	C	D	F_{f7}	G	H	K	L	M	N	O	P	R	U	V_{g6}	W	X	*IV
X-K 001.3030.100.30***	70	110	377	479	6xM8x12	54	40	9	20	26	M16x1.5	15	17	250	220	13	8	–	–	134	■
X-K 001.3030.200.28***	70	110	577	479	6xM8x12	54	40	9	20	26	M16x1.5	15	17	250	220	13	8	–	–	55**	■
X-K 001.3030.300.26***	70	110	777	479	6xM8x12	54	40	9	20	26	M16x1.5	15	17	250	220	13	8	–	–	55**	■
X-K 002.3030.100.19	70	110	377	479	6xM8x12	54	40	9	20	26	M16x1.5	15	17	240	220	13	8	–	–	134	■
X-K 002.3030.200.17	70	110	577	479	6xM8x12	54	40	9	20	26	M16x1.5	15	17	250	220	13	8	–	–	55**	■
X-K 002.3030.200.39	70	110	577	634	6xM8x12	54	40	9	20	26	M16x1.5	15	17	250	220	13	8	–	–	72	■
X-K 002.3030.200.34	70	135	577	517	6xM8x12	54	40	9	20	26	M16x1.5	15	17	275	245	13	8	–	–	50**	■
X-K 002.3030.200.68	70	135	577	709	6xM8x12	54	40	9	20	26	M16x1.5	15	17	275	245	13	8	–	–	155.5	■
X-K 002.3030.300.14	70	110	777	479	6xM8x12	54	40	9	20	26	M16x1.5	15	17	250	220	13	8	–	–	55**	■
X-K 002.3030.300.31	70	135	777	517	6xM8x12	54	40	9	20	26	M16x1.5	15	17	275	245	13	8	–	–	50**	■
X-K 002.3030.300.37	70	110	777	634	6xM8x12	54	40	9	20	26	M16x1.5	15	17	250	220	13	8	–	–	55**	■
X-K 002.3030.300.65	70	135	777	709	6xM8x12	54	40	9	20	26	M16x1.5	15	17	275	245	13	8	–	–	38.5**	■
X-K 004.3030.100.06	85	110	402	479	6xM8x15	64	50	10	30	28.5	M22x2	20	24	250	235	14	10	18	7	111	■
X-K 004.3030.100.12	85	135	402	517	6xM8x15	64	50	10	30	28.5	M22x2	20	24	275	260	14	10	18	7	126	■
X-K 004.3030.200.12	85	110	602	634	6xM8x15	64	50	10	30	28.5	M22x2	20	24	250	235	14	10	18	7	69	■
X-K 004.3030.200.22	85	135	602	709	6xM8x15	64	50	10	30	28.5	M22x2	20	24	275	260	14	10	18	7	151	■
X-K 004.3030.200.49	85	190	602	690	6xM8x15	64	50	10	30	28.5	M22x2	20	24	315	315	14	10	18	7	102	–
X-K 004.3030.400.24	85	110	1002	999	6xM8x15	64	50	10	30	28.5	M22x2	20	24	250	235	14	10	18	7	69	■
X-K 004.3030.400.45	85	135	1002	1207	6xM8x15	64	50	10	30	28.5	M22x2	20	24	275	260	14	10	18	7	216	■
X-K 004.3030.400.44	85	190	1002	690	6xM8x15	64	50	10	30	28.5	M22x2	20	24	315	315	14	10	18	7	92**	–
X-K 008.3030.100.06	110	135	431	517	6xM10x16	88	70	9	45	35	M30x2	25	36	275	285	15	12	26	7	94	■
X-K 008.3030.200.12	110	135	631	709	6xM10x16	88	70	9	45	35	M30x2	25	36	280	285	15	12	26	7	86	■
X-K 008.3030.200.29	110	190	631	690	6xM10x16	88	70	9	45	35	M30x2	25	36	315	340	15	12	26	7	66	–
X-K 008.3030.200.69	110	267	631	762	6xM10x16	88	70	9	45	35	M30x2	25	36	385	417	15	12	26	7	147	–
X-K 008.3030.400.24	110	190	1031	420	6xM10x16	88	70	9	45	35	M30x2	25	36	315	340	15	12	26	7	64**	–
X-K 008.3030.400.65	110	267	1031	762	6xM10x16	88	70	9	45	35	M30x2	25	36	385	417	15	12	26	7	127**	–
X-K 015.3030.200.12	135	190	650	690	6xM16x25	100	75	15	50	36	M30x2	25	41	315	375	15	16	26	7	66.5	–
X-K 015.3030.200.32	135	267	650	762	6xM16x25	100	75	15	50	36	M30x2	25	41	385	452	15	16	26	7	142.5	–
X-K 015.3030.200.64	135	267	650	1177	6xM16x25	100	75	15	50	36	M30x2	25	41	385	452	15	16	26	7	539.5	–
X-K 015.3030.400.27	135	267	1050	762	6xM16x25	100	75	15	50	36	M30x2	25	41	385	452	15	16	26	7	124.5**	–
X-K 015.3030.400.61	135	267	1050	1177	6xM16x25	100	75	15	50	36	M30x2	25	41	385	452	15	16	26	7	142.5	–
X-K 030.3030.200.12	170	267	700	762	6xM20x30	132	100	17	56	47	M39x2	35	50	385	502	15	22	–	–	86.5	–
X-K 030.3030.200.27	170	267	700	1177	6xM20x30	132	100	17	56	47	M39x2	35	50	385	502	15	22	–	–	489.5	–
X-K 030.3030.400.24	170	267	1100	1177	6xM20x30	132	100	17	56	47	M39x2	35	50	385	502	15	22	–	–	86.5	–
X-K 050.3030.200.15	200	267	719	1177	8xM20x30	150	115	25	63	52	M42x2	40	55	385	532	23	30	–	–	489.5	–
X-K 050.3030.400.11	200	267	1119	1177	8xM20x30	150	115	25	63	52	M42x2	40	55	385	532	23	30	–	–	86.5	–
X-K 050.3030.400.23	200	267	1119	1731	8xM20x30	150	115	25	63	52	M42x2	40	55	385	532	23	30	–	–	622.5	–
X-K 075.3030.300.21	315	324	1337	1327	12xM24x40	200	150	25	100	60	M64x2	60	85	555	647	40	30	–	–	–	–
X-K 100.3030.300.10	315	324	1337	1327	12xM24x40	200	150	25	100	60	M64x2	60	85	555	647	40	30	–	–	–	–
X-K 170.3030.200.10	420	368	1404	1805	18xM30x55	320	240	35	150	70	M80x2	80	4xØ16	515	792	99	30	–	–	433	–
X-K 200.3030.200.10	420	368	1644	2287	18xM30x55	320	240	35	150	70	M80x2	80	4xØ16	515	792	95	30	–	–	675	–

*IV = with integrated power stroke valve

Dimensions in mm

**Intermediate flange between working part and intensifier twisted by 180° (B_2 + X = B)

***Note for devices of type 001:** To assemble accessories (see data sheets 10.10 TOX® Powerpackage Accessories / 110.00 Sensors) please observe the TOX® Powerpackage dimensions and use compatible accessories of type 002.

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 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**
- **ZLM**: Food-grade version
- S 1.32.6: 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**
- **ZRO**: Anti-rust version
- S 1.32.6: Order no. of TOX® Powerpackage

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