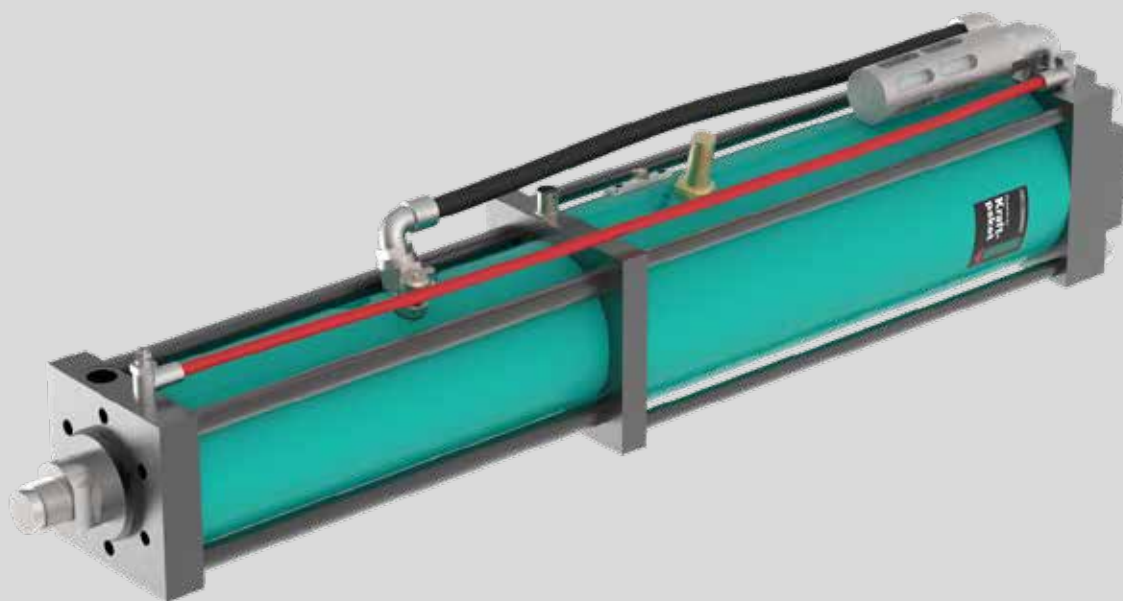


# TOX<sup>®</sup>-Powerpackage Type S and K

Data sheet 10.20  
2021/12



# TOX<sup>®</sup>-Powerpackage type S and type K

## The series S and K at a glance

### Type S (standard) and version S 50 with power stroke adjustment

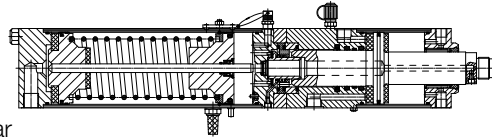
#### Version 030

- Up to 498 kN press force
- Up to 200 mm total stroke
- Up to 12 mm power stroke
- Operating pressure 2 – 6 bar

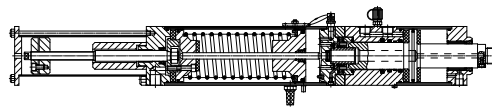
#### Version 000. 050

- Up to 515 kN press force
- Up to 400 mm total stroke
- Up to 80 mm power stroke
- Operating pressure 2 – 10 bar

#### Type S 6/10 bar



#### Version .50 with power stroke adjustment



Patented power bypass with integrated hydraulic end position cushioning in return stroke is a standard feature for all TOX<sup>®</sup>-Powerpackages type S 4 to S 50. Also available with fixed stop with elastomer cushioning on advance stroke FUD.

For further models see our data sheet 10.08.

### Type K (compact) and version K 51 with total stroke adjustment

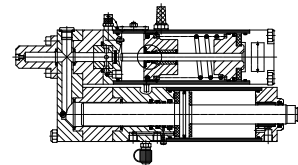
#### Version 030

- Up to 395 kN press force
- Up to 200 mm total stroke
- Up to 12 mm power stroke
- Operating pressure 2 – 6 bar

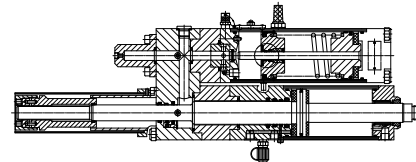
#### Version 000. 051

- Up to 515 kN press force
- Up to 400 mm total stroke
- Up to 50 mm power stroke
- Operating pressure 2 – 10 bar

#### Type K 6/10 bar



#### Version .51 with total stroke adjustment



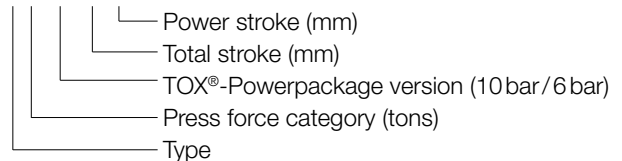
Patented power bypass, integrated hydraulic end position cushioning in return stroke and fixed stop with elastomer cushioning on advance stroke FUD is available on request.

The TOX<sup>®</sup>-Powerpackage is available with different press forces, strokes and designs.

Selection criteria:

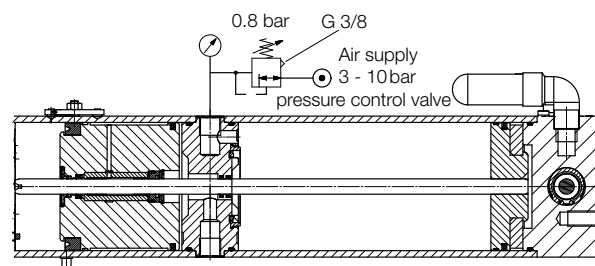
- 1) Press force required for the application
- 2) Available air pressure
- 3) Required total stroke of the TOX<sup>®</sup>-Powerpackage
- 4) Required power stroke of the TOX<sup>®</sup>-Powerpackage
- 5) Type of application e. g. punching, embossing etc.
- 6) Available installation space

Description for ordering the TOX<sup>®</sup>-Powerpackage  
S 4.30.50.6

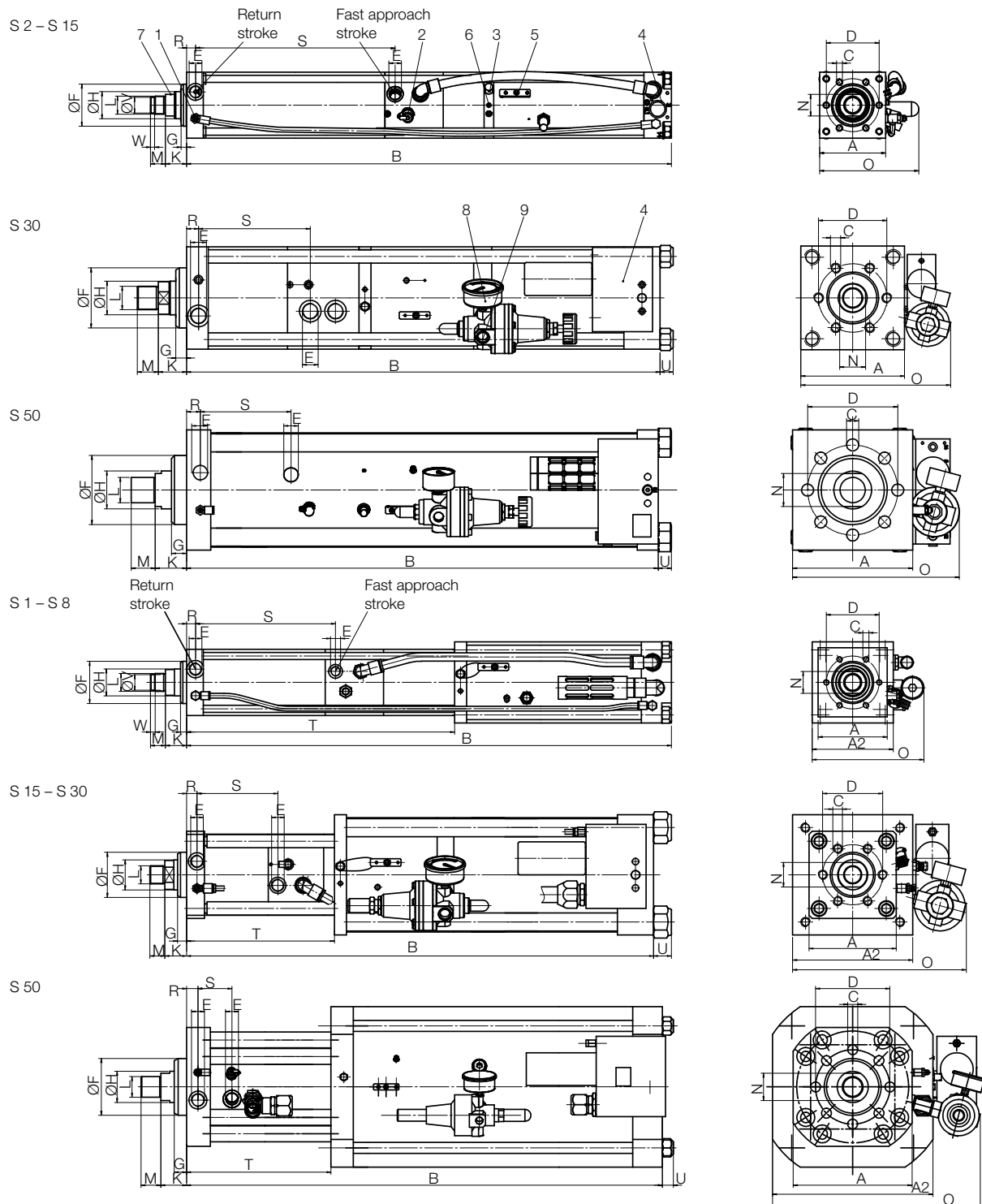


### Pneumatic spring LF

In TOX<sup>®</sup>-Powerpackages with pneumatic spring, the conventional pressure spring is replaced by the so called pneumatic spring. The oil volume is preloaded by the pressurized air volume in the intensifier chamber. The pressure regulator is supplied with the unit.



# TOX®-Powerpackage type S



- |                                |  |
|--------------------------------|--|
| 1 Control throttle X           | 6 Oil level indicator                              |
| 2 High-pressure measuring hose | 7 Bleed screw                                      |
| 3 Oil filling nipple           | 8 Pneumatic spring (LF)                            |
| 4 Power stroke valve           | 9 Pneumatic spring connection (permanent pressure) |
| 5 Bleed plate                  |  |

# TOX<sup>®</sup>-Powerpackage type S

## Version 030, 6 bar, 10 – 498 kN

### Forces

Type	Total stroke	Incl. Power stroke	At compressed air 6 bar			Weight kg
			Max. Press force kN	Fast approach force N	Retracting force N	
S 001.030.050.12	50	12	10.7	690	730	7
S 001.030.100.12	100	12	10.7	690	730	8
S 001.030.200.12	200	12	10.7	690	730	10
S 002.030.050.06	50	6	17.1	1420	1490	9
S 002.030.050.12	50	12	15.7	1420	1480	12
S 002.030.100.12	100	12	15.7	1420	1480	15
S 002.030.200.12	200	12	15.7	1420	1480	20
S 004.030.050.06D	50	6	31.4	1850	1940	16
S 004.030.050.12D	50	12	38.5	1840	1950	22
S 004.030.100.12D	100	12	38.5	1840	1950	25
S 004.030.200.12D	200	12	38.5	1840	1950	32
S 008.030.050.06D	50	6	73.9	3200	3280	28
S 008.030.100.06D	100	6	73.9	3200	3280	34
S 008.030.050.12D	50	12	69.0	3210	3270	42
S 008.030.100.12D	100	12	69.0	3210	3270	47
S 008.030.200.12D	200	12	69.0	3210	3270	59
S 015.030.050.06D	50	6	133.5	4610	5340	48
S 015.030.050.12D	50	12	130.8	4770	5180	85
S 015.030.100.12D	100	12	130.8	4770	5180	95
S 015.030.200.12D	200	12	130.8	4770	5180	116
S 030.030.070.06D	70	6	264.2	7080	8740	111
S 030.030.200.12D	200	12	261.9	7080	8740	185
S 050.030.070.06D	70	6	406.0	7850	10830	150
S 050.030.150.10D	150	10	498.0	7850	10830	254

Type with suffix D: Power bypass ZHD with hydraulic end position cushioning as standard.

Dimensions in mm

### Dimensions

Type	A	A <sub>2</sub>	B	C	D	E***	F <sub>17</sub>	G	H	K	L	M	N	O	R	S	T	U	V <sub>96</sub>	W	*LF	**IV
S 001.030.050.12	50	70	479	6xM6x11	40	G1/8	30	10	16	24	M12x1.5	12	14	102	11.5	106.5	197	-	-	-	-	■
S 001.030.100.12	50	70	589	6xM6x11	40	G1/8	30	10	16	24	M12x1.5	12	14	102	11.5	156.5	297	-	-	-	-	■
S 001.030.200.12	50	70	794	6xM6x11	40	G1/8	30	10	16	24	M12x1.5	12	14	102	11.5	256.5	497	-	-	-	-	■
S 002.030.050.06	70	-	474	6xM8x12	54	G1/4	40	10	20	26	M16x1.5	15	17	107	13	116	-	-	-	-	-	■
S 002.030.050.12	70	85	519	6xM8x12	54	G1/4	40	10	20	26	M16x1.5	15	17	116	13	116	210	-	-	-	-	■
S 002.030.100.12	70	85	649	6xM8x12	54	G1/4	40	10	20	26	M16x1.5	15	17	116	13	166	310	-	-	-	-	■
S 002.030.200.12	70	85	870	6xM8x12	54	G1/4	40	10	20	26	M16x1.5	15	17	116	13	266	510	-	-	-	-	■
S 004.030.050.06D	85	-	558	6xM8x15	64	G3/8	50	10	30	28.5	M22x2	20	24	120	14	125	-	-	18	7	-	■
S 004.030.050.12D	90	110	591	6xM8x15	64	G3/8	50	10	30	28.5	M22x2	20	24	165	14	125	226	-	18	7	-	■
S 004.030.100.12D	90	110	691	6xM8x15	64	G3/8	50	10	30	28.5	M22x2	20	24	165	14	175	326	-	18	7	-	■
S 004.030.200.12D	90	110	926	6xM8x15	64	G3/8	50	10	30	28.5	M22x2	20	24	165	14	275	526	-	18	7	-	■
S 008.030.050.06D	110	-	611	6xM10x16	88	G1/2	70	10	45	35	M30x2	25	36	165	15	133	-	-	26	7	-	■
S 008.030.100.06D	110	-	726	6xM10x16	88	G1/2	70	10	45	35	M30x2	25	36	165	15	183	-	-	26	7	-	■
S 008.030.050.12D	115	135	679	6xM10x16	88	G1/2	70	10	45	35	M30x2	25	36	190	15	133	246	-	26	7	-	■
S 008.030.100.12D	115	135	794	6xM10x16	88	G1/2	70	10	45	35	M30x2	25	36	190	15	183	346	-	26	7	-	■
S 008.030.200.12D	115	135	1024	6xM10x16	88	G1/2	70	10	45	35	M30x2	25	36	190	15	283	546	-	26	7	-	■
S 015.030.050.06D	135	-	680	6xM16x25	100	G1/2	75	15	50	36	M30x2	25	41	190	17.5	134.5	-	-	26	7	-	■
S 015.030.050.12D	145	170	867	6xM16x25	100	G1/2	75	15	50	36	M30x2	25	41	290	17.5	134.5	246	22	26	7	■	■
S 015.030.100.12D	145	170	967	6xM16x25	100	G1/2	75	15	50	36	M30x2	25	41	290	17.5	184.5	346	22	26	7	■	■
S 015.030.200.12D	145	170	1207	6xM16x25	100	G1/2	75	15	50	36	M30x2	25	41	290	17.5	284.5	546	22	26	7	■	■
S 030.030.070.06D	170	-	948	6xM20x30	132	G3/4	100	18	56	47	M39x2	35	50	290	20	206	-	22	-	-	■	■
S 030.030.200.12D	200	-	1428	6xM20x30	132	G3/4	100	18	56	47	M39x2	35	50	320	20	336	587	30	-	-	■	■
S 050.030.070.06D	200	-	1010	8xM20x30	150	G3/4	115	25	63	52	M42x2	40	55	320	23	213	-	30	-	-	■	■
S 050.030.150.10D	240	267	1231	8xM20x30	150	G3/4	115	25	63	52	M42x2	40	55	470	23	293	498	16	-	-	■	■

Type with suffix D: Power bypass ZHD with hydraulic end position cushioning as standard.

Dimensions in mm

\*LF: Version with pneumatic spring. See page 2.

\*\*IV: Integrated power stroke valve

\*\*\*See schedule pneumatic connection sizes page 8.

# TOX®-Powerpackage type S

## Version 000, 10 bar, 10 – 515 kN

Type	Total stroke	Incl. Power stroke	At compressed air 6 bar	At compressed air 10 bar	At compressed air 10 bar		Weight kg
			max. Press force kN	max. Press force kN	fast approach force N	retracting force N	
S 001.000.032.06	32	6	5.6	9.8	1150	1230	4
S 001.000.050.12	50	12	5.6	9.8	1150	1230	5
S 001.000.100.12	100	12	5.6	9.8	1150	1230	6
S 001.000.200.12	200	12	5.6	9.8	1150	1230	9
S 001.000.050.24	50	24	7.1	12.6	1150	1230	7
S 001.000.100.24	100	24	7.1	12.6	1150	1230	8
S 001.000.200.24	200	24	7.1	12.6	1150	1230	9
S 001.000.100.48	100	48	7.1	12.5	1150	1230	12
S 001.000.200.48	200	48	7.1	12.5	1150	1230	14
S 001.000.200.60	200	60	7.1	12.5	1150	1230	16
S 002.000.032.06	32	6	11.5	20.3	2360	2500	8
S 002.000.050.12	50	12	11.5	20.3	2360	2500	9
S 002.000.100.12	100	12	11.5	20.3	2360	2500	12
S 002.000.200.12	200	12	11.5	20.3	2360	2500	16
S 002.000.050.24	50	24	11.5	20.0	2370	2490	13
S 002.000.100.24	100	24	11.5	20.0	2370	2490	15
S 002.000.200.24	200	24	11.5	20.0	2370	2490	20
S 002.000.100.44	100	44	11.7	20.3	2360	2490	20
S 002.000.200.44	200	44	11.7	20.3	2360	2490	24
S 002.000.200.65	200	65	11.7	20.3	2360	2490	26
S 004.000.032.06 D	32	6	22.7	39.7	3070	3280	14
S 004.000.050.12 D	50	12	22.7	39.7	3070	3280	16
S 004.000.100.12 D	100	12	22.7	39.7	3070	3280	19
S 004.000.200.12 D	200	12	22.7	39.7	3070	3280	27
S 004.000.400.12 D	400	12	23.2	40.2	3070	3280	46
S 004.000.050.24 D	50	24	23.2	40.2	3070	3280	22
S 004.000.100.24 D	100	24	23.2	40.2	3070	3280	25
S 004.000.200.24 D	200	24	23.2	40.2	3070	3280	32
S 004.000.100.44 D	100	44	23.2	40.2	3070	3280	38
S 004.000.200.44 D	200	44	23.2	40.2	3070	3280	45
S 004.000.400.44 D	400	44	23.2	40.2	3070	3280	58
S 004.000.200.65 D	200	65	23.2	40.2	3070	3280	48
S 004.000.400.65 D	400	65	23.2	40.2	3070	3280	61
S 008.000.032.06 D	32	6	44.4	77	5320	5530	25
S 008.000.050.12 D	50	12	44.4	77	5320	5530	31
S 008.000.100.12 D	100	12	44.4	77	5320	5530	34
S 008.000.200.12 D	200	12	44.4	77	5320	5530	46
S 008.000.400.12 D	400	12	44.4	77	5330	5520	90
S 008.000.050.24 D	50	24	44.4	77	5330	5520	47
S 008.000.100.24 D	100	24	44.4	77	5330	5520	47
S 008.000.200.24 D	200	24	44.4	77	5330	5520	60
S 008.000.100.48 D	100	48	44.4	77	5410	5440	84
S 008.000.200.48 D	200	48	44.4	77	5410	5440	95
S 008.000.400.48 D	400	48	44.4	77	5410	5440	121
S 008.000.200.80 D	200	80	44.4	77	5410	5440	102
S 008.000.400.80 D	400	80	44.4	77	5410	5440	135
S 015.000.032.06 D	32	6	85.4	148	7640	9050	43
S 015.000.050.12 D	50	12	85.4	148	7640	9050	48
S 015.000.100.12 D	100	12	85.4	148	7640	9050	57
S 015.000.200.12 D	200	12	85.4	148	7640	9050	66
S 015.000.400.12 D	400	12	85.4	148	7810	8890	153
S 015.000.050.24 D	50	24	85.4	148	7810	8890	86
S 015.000.100.24 D	100	24	85.4	148	7810	8890	95

Type with suffix D: Power bypass ZHD with hydraulic end position cushioning as standard.

Dimensions in mm

# TOX<sup>®</sup>-Powerpackage type S

## Version 000, 10 bar, 10 – 515 kN

### Forces

Type	Total stroke	Incl. Power stroke	At compressed air 6 bar	At compressed air 10 bar	At compressed air 10 bar		Weight kg
			max. Press force kN	max. Press force kN	fast approach force N	retracting force N	
S 015.000.200.24 D	200	24	85.4	148.0	7810	8890	116
S 015.000.100.40 D	100	40	85.0	149.6	7810	8890	112
S 015.000.200.40 D	200	40	85.0	149.6	7810	8890	136
S 015.000.400.40 D	400	40	85.0	149.6	7810	8890	138
S 015.000.200.80 D	200	80	85.0	149.6	7810	8890	150
S 015.000.400.80 D	400	80	85.0	149.6	7810	8890	190
S 030.000.050.06 D	50	6	171.6	297.7	11490	15090	103
S 030.000.070.12 D	70	12	171.6	297.7	11490	15090	112
S 030.000.100.12 D	100	12	171.6	297.7	11490	15090	121
S 030.000.200.12 D	200	12	171.6	297.7	11490	15090	151
S 030.000.400.12 D	400	12	170.8	300.8	11490	15090	250
S 030.000.070.20 D	70	20	170.8	300.8	11490	15090	140
S 030.000.100.20 D	100	20	170.8	300.8	11490	15090	148
S 030.000.200.20 D	200	20	170.8	300.8	11490	15090	185
S 030.000.400.20 D	400	20	170.8	300.8	11490	15090	260
S 030.000.200.28 D	200	28	170.0	313.4	11490	15090	190
S 030.000.400.44 D	400	44	170.0	313.4	11490	15090	240
S 050.000.050.06 D	50	6	263.6	464.7	12590	18870	140
S 050.000.070.12 D	70	12	263.6	464.7	12590	18870	155
S 050.000.100.12 D	100	12	263.6	464.7	12590	18870	166
S 050.000.200.12 D	200	12	263.6	464.7	12590	18870	205
S 050.000.400.12 D	400	12	262.4	484.3	12590	18870	376
S 050.000.100.20 D	100	20	262.4	484.3	12590	18870	226
S 050.000.200.20 D	200	20	262.4	484.3	12590	18870	246
S 050.000.400.20 D	400	20	262.4	484.3	12590	18870	330
S 050.000.300.30 D	300	30	283.2	515.0	12590	18870	280
S 050.000.400.40 D	400	40	283.2	515.0	12590	18870	466

Type with suffix D: Power bypass ZHD with hydraulic end position cushioning as standard.

Dimensions in mm

# TOX®-Powerpackage type S

Version 000, 10 bar, 10 – 515 kN

## Dimensions

Type	A	A <sub>2</sub>	B	C	D	E	F <sub>17</sub>	G	H	K	L	M	N	O	R	S	T	U	V <sub>g6</sub>	W	*LF	**IV
S 001.000.032.06	50	–	360	6xM6x11	40	G1/8	30	10	16	24	M12x1.5	12	14	86	11.5	88.5	–	–	–	–	–	■
S 001.000.050.12	50	–	434	6xM6x11	40	G1/8	30	10	16	24	M12x1.5	12	14	86	11.5	106.5	–	–	–	–	–	■
S 001.000.100.12	50	–	565	6xM6x11	40	G1/8	30	10	16	24	M12x1.5	12	14	86	11.5	156.5	–	–	–	–	–	■
S 001.000.200.12	50	–	805	6xM6x11	40	G1/8	30	10	16	24	M12x1.5	12	14	86	11.5	256.5	–	–	–	–	–	■
S 001.000.050.24	50	70	479	6xM6x11	40	G1/8	30	10	16	24	M12x1.5	12	14	102	11.5	106.5	197	–	–	–	–	■
S 001.000.100.24	50	70	589	6xM6x11	40	G1/8	30	10	16	24	M12x1.5	12	14	102	11.5	156.5	297	–	–	–	–	■
S 001.000.200.24	50	70	794	6xM6x11	40	G1/8	30	10	16	24	M12x1.5	12	14	102	11.5	256.5	497	–	–	–	–	■
S 001.000.100.48	50	85	665	6xM6x11	40	G1/8	30	10	16	24	M12x1.5	12	14	116	11.5	156.5	297	–	–	–	–	■
S 001.000.200.48	50	85	865	6xM6x11	40	G1/8	30	10	16	24	M12x1.5	12	14	116	11.5	256.5	497	–	–	–	–	■
S 001.000.200.60	50	85	897	6xM6x11	40	G1/8	30	10	16	24	M12x1.5	12	14	116	11.5	256.5	497	–	–	–	–	■
S 002.000.032.06	70	–	386	6xM8x12	54	G1/4	40	10	20	26	M16x1.5	15	17	105	13	98	–	–	–	–	–	■
S 002.000.050.12	70	–	474	6xM8x12	54	G1/4	40	10	20	26	M16x1.5	15	17	105	13	116	–	–	–	–	–	■
S 002.000.100.12	70	–	589	6xM8x12	54	G1/4	40	10	20	26	M16x1.5	15	17	105	13	166	–	–	–	–	–	■
S 002.000.200.12	70	–	829	6xM8x12	54	G1/4	40	10	20	26	M16x1.5	15	17	105	13	266	–	–	–	–	–	■
S 002.000.050.24	70	85	519	6xM8x12	54	G1/4	40	10	20	26	M16x1.5	15	17	116	13	116	210	–	–	–	–	■
S 002.000.100.24	70	85	649	6xM8x12	54	G1/4	40	10	20	26	M16x1.5	15	17	116	13	166	310	–	–	–	–	■
S 002.000.200.24	70	85	870	6xM8x12	54	G1/4	40	10	20	26	M16x1.5	15	17	116	13	266	510	–	–	–	–	■
S 002.000.100.44	70	110	675	6xM8x12	54	G1/4	40	10	20	26	M16x1.5	15	17	165	13	166	310	–	–	–	–	■
S 002.000.200.44	70	110	875	6xM8x12	54	G1/4	40	10	20	26	M16x1.5	15	17	165	13	266	510	–	–	–	–	■
S 002.000.200.65	70	110	935	6xM8x12	54	G1/4	40	10	20	26	M16x1.5	15	17	165	13	266	510	–	–	–	–	■
S 004.000.032.06 D	85	–	449	6xM8x15	64	G3/8	50	10	30	28.5	M22x2	20	24	120	14	107	–	–	18	7	–	■
S 004.000.050.12 D	85	–	558	6xM8x15	64	G3/8	50	10	30	28.5	M22x2	20	24	120	14	125	–	–	18	7	–	■
S 004.000.100.12 D	85	–	679	6xM8x15	64	G3/8	50	10	30	28.5	M22x2	20	24	120	14	175	–	–	18	7	–	■
S 004.000.200.12 D	85	–	939	6xM8x15	64	G3/8	50	10	30	28.5	M22x2	20	24	120	14	275	–	–	18	7	–	■
S 004.000.400.12 D	90	110	1323	6xM8x15	64	G3/8	50	10	30	28.5	M22x2	20	24	165	14	475	926	–	18	7	–	■
S 004.000.050.24 D	90	110	591	6xM8x15	64	G3/8	50	10	30	28.5	M22x2	20	24	165	14	125	226	–	18	7	–	■
S 004.000.100.24 D	90	110	691	6xM8x15	64	G3/8	50	10	30	28.5	M22x2	20	24	165	14	175	326	–	18	7	–	■
S 004.000.200.24 D	90	110	926	6xM8x15	64	G3/8	50	10	30	28.5	M22x2	20	24	165	14	275	526	–	18	7	–	■
S 004.000.100.44 D	90	135	760	6xM8x15	64	G3/8	50	10	30	28.5	M22x2	20	24	176	14	175	326	–	18	7	–	■
S 004.000.200.44 D	90	135	960	6xM8x15	64	G3/8	50	10	30	28.5	M22x2	20	24	176	14	275	526	–	18	7	–	■
S 004.000.400.44 D	90	135	1380	6xM8x15	64	G3/8	50	10	30	28.5	M22x2	20	24	176	14	475	926	–	18	7	–	■
S 004.000.200.65 D	90	135	1059	6xM8x15	64	G3/8	50	10	30	28.5	M22x2	20	24	176	14	275	526	–	18	7	–	■
S 004.000.400.65 D	90	135	1479	6xM8x15	64	G3/8	50	10	30	28.5	M22x2	20	24	176	14	475	926	–	18	7	–	■
S 008.000.032.06 D	110	–	486	6xM10x16	88	G1/2	70	10	45	35	M30x2	25	36	165	15	115	–	–	26	7	–	■
S 008.000.050.12 D	110	–	611	6xM10x16	88	G1/2	70	10	45	35	M30x2	25	36	165	15	133	–	–	26	7	–	■
S 008.000.100.12 D	110	–	726	6xM10x16	88	G1/2	70	10	45	35	M30x2	25	36	165	15	183	–	–	26	7	–	■
S 008.000.200.12 D	110	–	964	6xM10x16	88	G1/2	70	10	45	35	M30x2	25	36	165	15	283	–	–	26	7	–	■
S 008.000.400.12 D	115	135	1409	6xM10x16	88	G1/2	70	10	45	35	M30x2	25	36	176	15	483	946	–	26	7	–	■
S 008.000.050.24 D	115	135	684	6xM10x16	88	G1/2	70	10	45	35	M30x2	25	36	176	15	133	251	–	26	7	–	■
S 008.000.100.24 D	115	135	794	6xM10x16	88	G1/2	70	10	45	35	M30x2	25	36	176	15	183	346	–	26	7	–	■
S 008.000.200.24 D	115	135	1024	6xM10x16	88	G1/2	70	10	45	35	M30x2	25	36	176	15	283	546	–	26	7	–	■
S 008.000.100.48 D	115	170	967	6xM10x16	88	G1/2	70	10	45	35	M30x2	25	36	290	15	183	346	22	26	7	–	■
S 008.000.200.48 D	115	170	1167	6xM10x16	88	G1/2	70	10	45	35	M30x2	25	36	290	15	283	546	22	26	7	–	■
S 008.000.400.48 D	115	170	1607	6xM10x16	88	G1/2	70	10	45	35	M30x2	25	36	290	15	483	946	22	26	7	–	■
S 008.000.200.80 D	115	200	1245	6xM10x16	88	G1/2	70	10	45	35	M30x2	25	36	320	15	283	546	30	26	7	–	■
S 008.000.400.80 D	115	200	1593	6xM10x16	88	G1/2	70	10	45	35	M30x2	25	36	320	15	483	946	30	26	7	–	■
S 015.000.032.06 D	135	–	532	6xM16x25	100	G1/2	75	15	50	36	M30x2	25	41	176	17.5	116.5	–	–	26	7	–	■
S 015.000.050.12 D	135	–	680	6xM16x25	100	G1/2	75	15	50	36	M30x2	25	41	176	17.5	134.5	–	–	26	7	–	■
S 015.000.100.12 D	135	–	805	6xM16x25	100	G1/2	75	15	50	36	M30x2	25	41	176	17.5	184.5	–	–	26	7	–	■
S 015.000.200.12 D	135	–	1062	6xM16x25	100	G1/2	75	15	50	36	M30x2	25	41	176	17.5	284.5	–	–	26	7	–	■
S 015.000.400.12 D	145	170	1643	6xM16x25	100	G1/2	75	15	50	36	M30x2	25	41	290	17.5	484.5	946	22	26	7	–	■
S 015.000.050.24 D	145	170	867	6xM16x25	100	G1/2	75	15	50	36	M30x2	25	41	290	17.5	134.5	246	22	26	7	–	■
S 015.000.100.24 D	145	170	967	6xM16x25	100	G1/2	75	15	50	36	M30x2	25	41	290	17.5	184.5	346	22	26	7	–	■

Type with suffix D: Power bypass ZHD with hydraulic end position cushioning as standard.

\*LF: Version with pneumatic spring. See page 2.

Dimensions in mm

\*\*IV: Integrated power stroke valve

# TOX<sup>®</sup>-Powerpackage type S

Version 000, 10 bar, 10 – 515 kN

## Dimensions

Type	A	A <sub>2</sub>	B	C	D	E	F <sub>17</sub>	G	H	K	L	M	N	O	R	S	T	U	V <sub>g6</sub>	W	*LF	**IV
S 015.000.200.24 D	145	170	1207	6xM16x25	100	G1/2	75	15	50	36	M30x2	25	41	290	17.5	284.5	546	22	26	7	■	–
S 015.000.100.40 D	145	200	1045	6xM16x25	100	G1/2	75	15	50	36	M30x2	25	41	320	17.5	184.5	346	30	26	7	■	–
S 015.000.200.40 D	145	200	1245	6xM16x25	100	G1/2	75	15	50	36	M30x2	25	41	320	17.5	284.5	546	30	26	7	■	–
S 015.000.400.40 D	145	200	1777	6xM16x25	100	G1/2	75	15	50	36	M30x2	25	41	320	17.5	484.5	946	30	26	7	■	–
S 015.000.200.80 D	145	200	1445	6xM16x25	100	G1/2	75	15	50	36	M30x2	25	41	320	17.5	284.5	546	30	26	7	■	–
S 015.000.400.80 D	145	200	2027	6xM16x25	100	G1/2	75	15	50	36	M30x2	25	41	320	17.5	484.5	946	30	26	7	■	–
S 030.000.050.06 D	170	–	788	6xM20x30	132	G3/4	100	18	56	47	M39x2	35	50	290	20	186	–	22	–	–	■	–
S 030.000.070.12 D	170	–	948	6xM20x30	132	G3/4	100	18	56	47	M39x2	35	50	290	20	206	–	22	–	–	■	–
S 030.000.100.12 D	170	–	1048	6xM20x30	132	G3/4	100	18	56	47	M39x2	35	50	290	20	236	–	22	–	–	■	–
S 030.000.200.12 D	170	–	1374	6xM20x30	132	G3/4	100	18	56	47	M39x2	35	50	290	20	336	–	22	–	–	■	–
S 030.000.400.12 D	200	–	1931	6xM20x30	132	G3/4	100	18	56	47	M39x2	35	50	320	20	536	987	30	–	–	■	–
S 030.000.070.20 D	200	–	1002	6xM20x30	132	G3/4	100	18	56	47	M39x2	35	50	320	20	206	327	30	–	–	■	–
S 030.000.100.20 D	200	–	1072	6xM20x30	132	G3/4	100	18	56	47	M39x2	35	50	320	20	236	387	30	–	–	■	–
S 030.000.200.20 D	200	–	1428	6xM20x30	132	G3/4	100	18	56	47	M39x2	35	50	320	20	336	587	30	–	–	■	–
S 030.000.400.20 D	200	–	2101	6xM20x30	132	G3/4	100	18	56	47	M39x2	35	50	320	20	536	987	30	–	–	■	–
S 030.000.200.28 D	190	267	1610	6xM20x30	132	G3/4	100	18	56	47	M39x2	35	50	470	20	336	587	16	–	–	■	–
S 030.000.400.44 D	190	267	1115	6xM20x30	132	G3/4	100	18	56	47	M39x2	35	50	470	20	536	987	16	–	–	■	–
S 050.000.050.06 D	200	–	827	8xM20x30	150	G3/4	115	25	63	52	M42x2	40	55	320	23	193	–	30	–	–	■	–
S 050.000.070.12 D	200	–	1010	8xM20x30	150	G3/4	115	25	63	52	M42x2	40	55	320	23	213	–	30	–	–	■	–
S 050.000.100.12 D	200	–	1122	8xM20x30	150	G3/4	115	25	63	52	M42x2	40	55	320	23	243	–	30	–	–	■	–
S 050.000.200.12 D	200	–	1495	8xM20x30	150	G3/4	115	25	63	52	M42x2	40	55	320	23	343	–	30	–	–	■	–
S 050.000.400.12 D	240	267	1871	8xM20x30	150	G3/4	115	25	63	52	M42x2	40	55	470	23	543	998	16	–	–	■	–
S 050.000.100.20 D	240	267	1051	8xM20x30	150	G3/4	115	25	63	52	M42x2	40	55	470	23	243	398	16	–	–	■	–
S 050.000.200.20 D	240	267	1361	8xM20x30	150	G3/4	115	25	63	52	M42x2	40	55	470	23	343	598	16	–	–	■	–
S 050.000.400.20 D	240	267	1971	8xM20x30	150	G3/4	115	25	63	52	M42x2	40	55	470	23	543	998	16	–	–	■	–
S 050.000.300.30 D	240	324	1623	8xM20x30	150	G3/4	115	25	63	52	M42x2	40	55	540	23	443	798	22	–	–	■	–
S 050.000.400.40 D	240	324	1968	8xM20x30	150	G3/4	115	25	63	52	M42x2	40	55	540	23	543	998	22	–	–	■	–

Type with suffix D: Power bypass ZHD with hydraulic end position cushioning as standard.

\*LF: Version with pneumatic spring. See page 2.

Dimensions in mm

\*\*IV: Integrated power stroke valve

### Pneumatic connection sizes

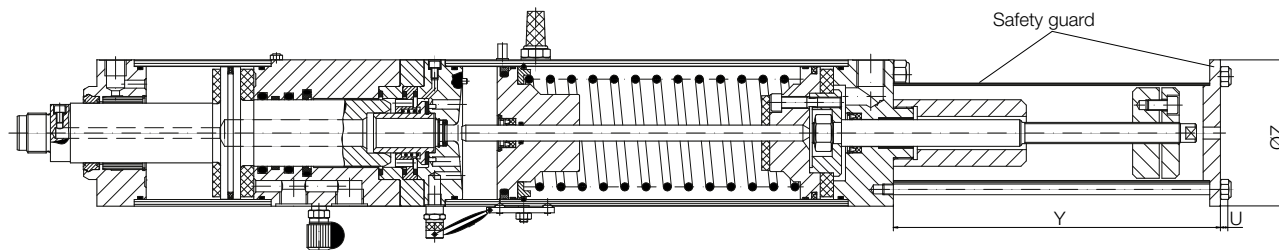
Connection	Nominal sizes/Inside-Ø hose
G1/4"	7 - 8 mm
G3/8"	8 - 9 mm
G1/2"	10 - 11 mm
G3/4"	19 - 20 mm
G1"	25 mm
G1 1/2"	38 mm

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



# TOX®-Powerpackage type S

Version 050, 10 bar, with power stroke adjustment 10 – 1000 kN



### Function:

The intensifier piston of the TOX®-Powerpackage has a spindle attached to it. On this spindle there is an adjusting nut, which accurately limits the stroke of the intensifier piston and hence the power stroke, irrespective of the fast approach stroke.

### Applications:

Insertion of wear marks with tolerances within the hundredth of a millimetre range. Stamping of parts with varying heights or a large height tolerance at a constant stamping depth. Pressing in of bushes with an accurately defined depth.

### Note:

Technical data are available on request.

### Advantage:

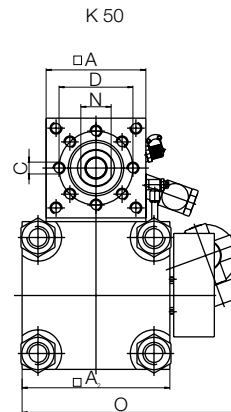
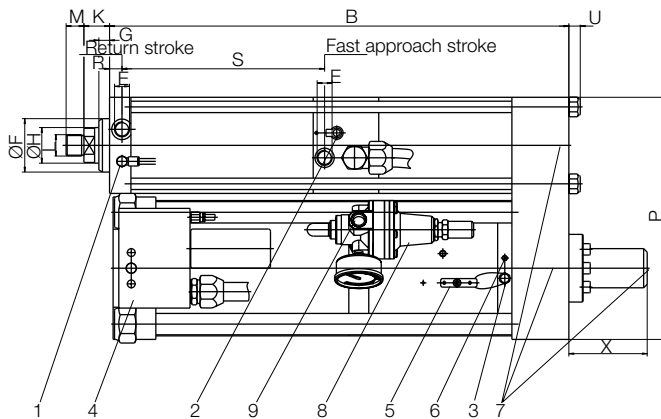
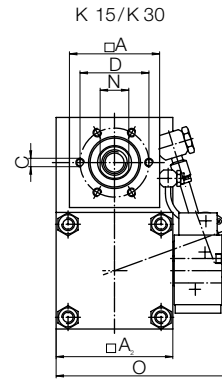
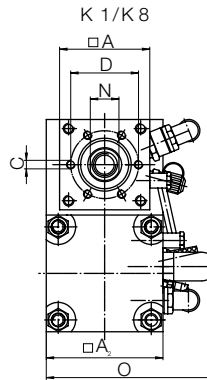
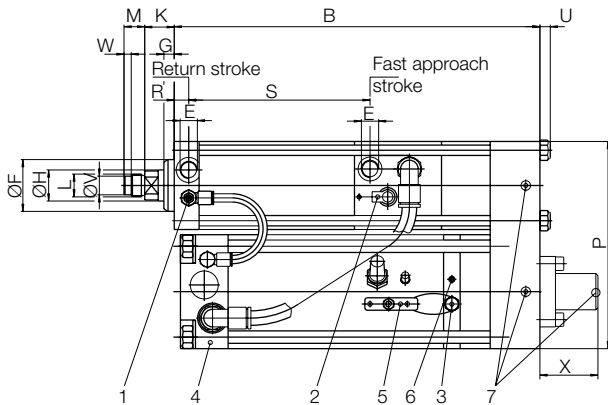
The adjustment or limitation relates to the power stroke only, i.e. directly to the application, and not to the approach stroke. This means that the height differences and tolerances of the component are irrelevant. The repeating accuracy is extremely exact. Patented power bypass and hydraulic end position cushioning are standard features of all TOX®-Powerpackages type S 4 to S 170.

### Quality/monitoring:

Due to the intensification ratio, the intensifier piston and the adjustment spindle travel proportionally to the working stroke travel (ratio approximately 1 : 10). The working stroke travel can be monitored very accurately with a travel sensor on the adjustment spindle.

# TOX<sup>®</sup>-Powerpackage type K

Version 030, 6 bar, compact design, 10 – 395 kN



- 1 Control throttle X
- 2 High-pressure measuring hose
- 3 Oil filling nipple
- 4 Power stroke valve
- 5 Bleed plate
- 6 Oil level indicator
- 7 Bleed screw
- 8 Pneumatic spring (LF)
- 9 Pneumatic spring connection (permanent pressure)

## Forces

Type	Total stroke	Incl. Power stroke	At compressed air 6 bar			Weight kg
			max. Press force kN	Fast approach force N	Retracting force N	
K 001.030.100.06	100	6	10.7	690	730	10
K 001.030.200.10	200	10	10.7	690	730	12
K 002.030.100.05	100	5	15.7	1420	1480	18
K 002.030.200.12	200	12	15.7	1420	1480	27
K 004.030.100.05	100	5	38.5	1840	1950	32
K 004.030.200.10	200	10	38.5	1840	1950	44
K 008.030.100.05	100	5	69.0	3210	3270	55
K 008.030.200.10	200	10	69.0	3210	3270	67
K 015.030.100.10	100	10	129.6	4770	5180	158
K 015.030.200.10	200	10	129.6	4770	5180	162
K 030.030.200.10	200	10	320.8	7080	8740	288
K 050.030.100.10	100	10	394.9	7850	10830	450
K 050.030.200.10	200	10	394.9	7850	10830	465

Dimensions in mm

# TOX®-Powerpackage type K

## Version 030, 6 bar, compact design, 10 – 395 kN

### Dimensions

Type	A	A <sub>2</sub>	B	C	D	E	F <sub>17</sub>	G	H	K	L	M	N	O	P	R	S	U	V <sub>g6</sub>	W	X	*LF	**IV
K 001.030.100.06	50	70	322	6xM 6x11	40	G1/8	30	10	16	24	M12x1.5	12	14	106	124	11.5	156.5	6	-	-	23	-	■
K 001.030.200.10	50	70	514	6xM 6x11	40	G1/8	30	10	16	24	M12x1.5	12	14	106	124	11.5	256.5	6	-	-	-	-	■
K 002.030.100.05	70	85	327	6xM 8x12	54	G1/4	40	10	20	26	M16x1.5	15	17	116	160	13	166	8	-	-	25	-	■
K 002.030.200.12	70	85	527	6xM 8x12	54	G1/4	40	10	20	26	M16x1.5	15	17	116	160	13	266	8	-	-	-	-	■
K 004.030.100.05	85	110	353	6xM 8x15	64	G3/8	50	10	30	28.5	M22x2	20	24	165	200	14	175	10	18	7	23	-	■
K 004.030.200.10	85	110	553	6xM 8x15	64	G3/8	50	10	30	28.5	M22x2	20	24	165	200	14	275	10	18	7	-	-	■
K 008.030.100.05	110	135	365	6xM10x16	88	G1/2	70	10	45	35	M30x2	25	36	176	250	15	183	12	26	7	56	-	■
K 008.030.200.10	110	135	565	6xM10x16	88	G1/2	70	10	45	35	M30x2	25	36	176	250	17	283	12	26	7	30	-	■
K 015.030.100.10	135	200	585	6xM16x25	100	G1/2	75	15	50	36	M30x2	25	41	320	340	17.5	184.5	16	26	7	110	■	-
K 015.030.200.10	135	200	645	6xM16x25	100	G1/2	75	15	50	36	M30x2	25	41	320	340	17.5	284.5	16	26	7	110	■	-
K 030.030.200.10	170	267	740	6xM20x30	132	G3/4	100	18	56	47	M39x2	35	50	470	445	20	336	22	-	-	175	■	-
K 050.030.100.10	200	324	715	8xM20x30	150	G3/4	115	25	63	52	M42x2	40	55	540	530	23	243	30	-	-	140	■	-
K 050.030.200.10	200	324	785	8xM20x30	150	G3/4	115	25	63	52	M42x2	40	55	540	530	23	343	30	-	-	160	■	-

\*LF: Version with pneumatic spring. See page 2.

Dimensions in mm

\*\*IV: Integrated power stroke valve

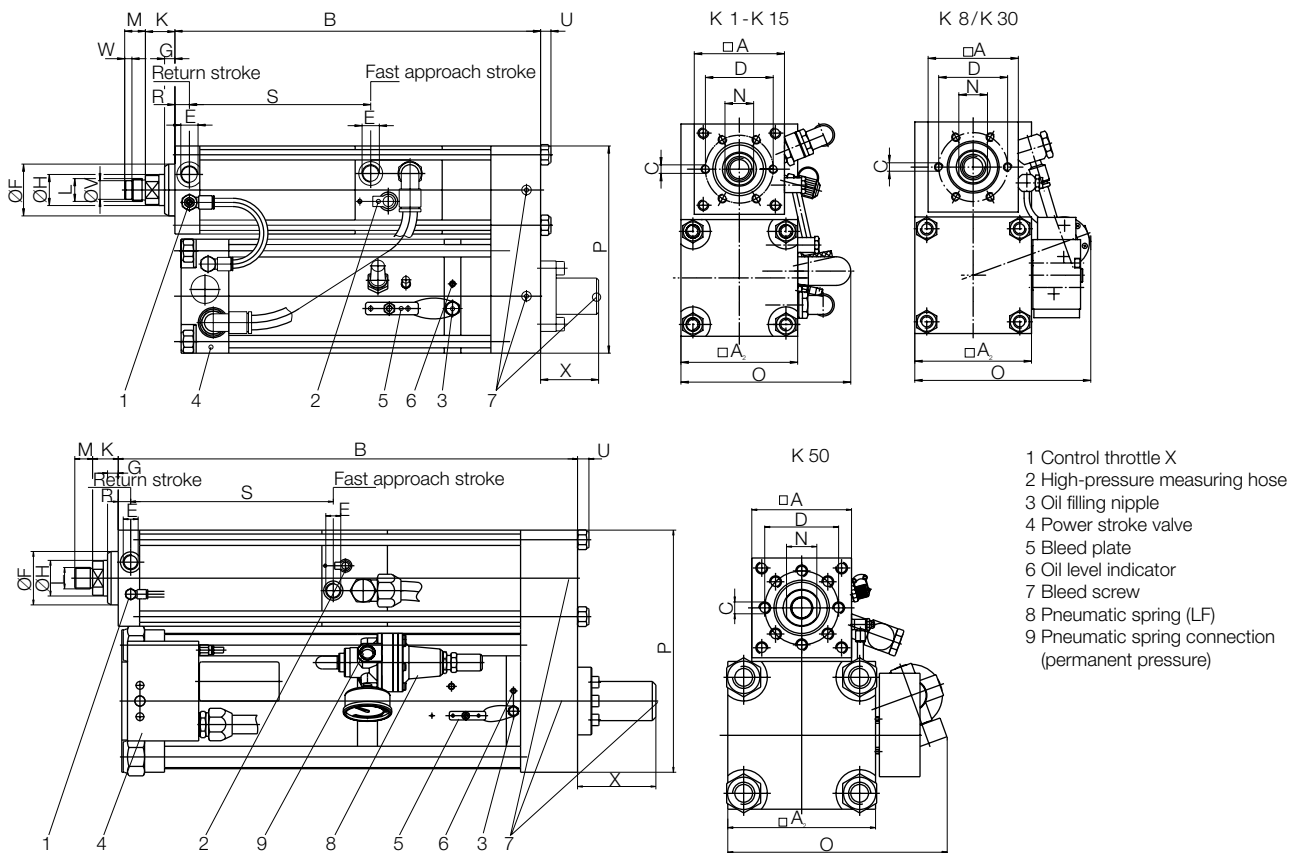
### Pneumatic connection sizes

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<sup>®</sup>-Powerpackage type K

## Version 000, 10 bar, compact design, 10 – 515 kN



- 1 Control throttle X
- 2 High-pressure measuring hose
- 3 Oil filling nipple
- 4 Power stroke valve
- 5 Bleed plate
- 6 Oil level indicator
- 7 Bleed screw
- 8 Pneumatic spring (LF)
- 9 Pneumatic spring connection (permanent pressure)

### Forces

Type	Total stroke	Incl. Power stroke	At compressed air 6 bar		At compressed air 10 bar		Weight kg
			max. Press force kN	max. Press force kN	Fast approach force N	Retracting force N	
K 001.000.050.05	50	5	5.6	9.8	1150	1230	5
K 001.000.100.10	100	10	5.6	9.8	1150	1230	8
K 001.000.150.20	150	20	7.1	12.6	1150	1230	13
K 001.000.250.20	250	20	7.1	12.5	1150	1230	13
K 002.000.050.04	50	4	11.5	20.3	2370	2500	10
K 002.000.100.12	100	12	11.5	20.0	2370	2490	18
K 002.000.200.24	200	24	11.5	20.0	2370	2490	26
K 002.000.300.20	300	20	11.5	20.0	2370	2490	33
K 004.000.100.10	100	10	23.2	40.2	3070	3280	32
K 004.000.300.20	300	20	23.2	40.2	3070	3280	54
K 004.000.300.50	300	50	23.2	40.2	3070	3280	63
K 008.000.100.10	100	10	44.4	77.0	5330	5520	45
K 008.000.300.20	300	20	44.4	77.0	5330	5520	100
K 008.000.300.50	300	50	44.4	77.0	5410	5440	135
K 015.000.100.10	100	10	85.0	149.5	7810	8890	148
K 015.000.300.10	300	10	85.0	149.5	7810	8890	90
K 015.000.100.20	100	20	85.0	149.5	7810	8890	158
K 015.000.300.20	300	20	85.0	149.5	7810	8890	130
K 015.000.100.40	100	40	84.6	155.7	7810	8890	150
K 015.000.300.40	300	40	84.6	155.7	7810	8890	269
K 030.000.100.10	100	10	170.0	313.4	11490	15090	238
K 030.000.300.10	300	10	170.0	313.4	11490	15090	290
K 030.000.300.20	300	20	170.0	313.4	11490	15090	310
K 030.000.300.40	300	40	170.0	313.4	11490	15090	345
K 050.000.100.10	100	10	283.2	515.0	12590	18870	400

Dimensions in mm

# TOX®-Powerpackage type K

## Version 000, 10 bar, compact design, 10 – 515 kN

Forces		At compressed air 6 bar		At compressed air 10 bar		At compressed air 10 bar		Weight kg
Type	Total stroke	Incl. Power stroke	max. Press force kN	max. Press force kN	Fast approach force N	Retracting force N		
K 050.000.300.10	300	10	283.2	515.0	12590	18870	460	
K 050.000.100.20	100	20	283.2	515.0	12590	18870	464	
K 050.000.300.20	300	20	283.2	515.0	12590	18870	500	
K 050.000.100.40	100	40	283.2	515.0	12590	18870	455	
K050.000.300.40	300	40	283.2	515.0	12590	18870	550	

Dimensions in mm

### Dimensions

Type	A	A <sub>2</sub>	B	C	D	E	F <sub>17</sub>	G	H	K	L	M	N	O	P	R	S	U	V <sub>g6</sub>	W	X	*LF	**IV
K 001.000.050.05	50	–	219	6xM6x11	40	G1/8	30	10	16	24	M12x1.5	12	14	86	104	11.5	106.5	–	–	–	17	–	■
K 001.000.100.10	50	–	319	6xM6x11	40	G1/8	30	10	16	24	M12x1.5	12	14	86	104	11.5	156.5	–	–	–	30	–	■
K 001.000.150.20	50	70	414	6xM6x11	40	G1/8	30	10	16	24	M12x1.5	12	14	106	124	11.5	206.5	6	–	–	–	–	■
K 001.000.250.20	50	70	614	6xM6x11	40	G1/8	30	10	16	24	M12x1.5	12	14	116	124	11.5	306.5	6	–	–	–	–	■
K 002.000.050.04	70	–	227	6xM8x12	54	G1/4	40	10	20	26	M16x1.5	15	17	106	145	13	116	8	–	–	23	–	■
K 002.000.100.12	70	85	327	6xM8x12	54	G1/4	40	10	20	26	M16x1.5	15	17	116	160	13	166	8	–	–	25	–	■
K 002.000.200.24	70	85	527	6xM8x12	54	G1/4	40	10	20	26	M16x1.5	15	17	116	160	13	266	8	–	–	–	–	■
K 002.000.300.20	70	85	727	6xM8x12	54	G1/4	40	10	20	26	M16x1.5	15	17	116	160	13	366	8	–	–	–	–	■
K 004.000.100.10	85	110	353	6xM8x15	64	G3/8	50	10	30	28.5	M22x2	20	24	165	200	14	175	10	18	7	23	–	■
K 004.000.300.20	85	110	753	6xM 8x15	64	G3/8	50	10	30	28.5	M22x2	20	24	165	200	14	375	10	18	7	–	–	■
K 004.000.300.50	85	135	759	6xM 8x15	64	G3/8	50	10	30	28.5	M22x2	20	24	176	225	14	375	10	18	7	–	–	■
K 008.000.100.10	110	135	365	6xM10x16	88	G1/2	70	10	45	35	M30x2	25	36	176	250	15	183	12	26	7	56	–	■
K 008.000.300.20	110	135	765	6xM10x16	88	G1/2	70	10	45	35	M30x2	25	36	176	250	15	383	12	26	7	–	–	■
K 008.000.300.50	110	170	765	6xM10x16	88	G1/2	70	10	45	35	M30x2	25	36	290	285	15	383	12	26	7	143	–	■
K 015.000.100.10	135	200	525	6xM16x25	100	G1/2	75	15	50	36	M30x2	25	41	320	340	17.5	184.5	16	26	7	40	–	■
K 015.000.300.10	135	200	785	6xM16x25	100	G1/2	75	15	50	36	M30x2	25	41	320	340	17.5	384.5	16	26	7	26	–	■
K 015.000.100.20	135	200	585	6xM16x25	100	G1/2	75	15	50	36	M30x2	25	41	320	340	17.5	184.5	16	26	7	110	–	■
K 015.000.300.20	135	200	785	6xM16x25	100	G1/2	75	15	50	36	M30x2	25	41	320	340	17.5	384.5	16	26	7	105	–	■
K 015.000.100.40	135	267	670	6xM16x25	100	G1/2	75	15	50	36	M30x2	25	41	470	410	17.5	184.5	16	26	7	150	–	■
K 015.000.300.40	135	267	785	6xM16x25	100	G1/2	75	15	50	36	M30x2	25	41	470	410	17.5	384.5	16	26	7	100	–	■
K 030.000.100.10	170	267	585	6xM20x30	132	G3/4	100	18	56	47	M39x2	35	50	470	445	20	236	22	–	–	45	–	■
K 030.000.300.10	170	267	840	6xM20x30	132	G3/4	100	18	56	47	M39x2	35	50	470	445	20	436	22	–	–	30	–	■
K 030.000.300.20	170	267	840	6xM20x30	132	G3/4	100	18	56	47	M39x2	35	50	470	445	20	436	22	–	–	82	–	■
K 030.000.300.40	170	267	940	6xM20x30	132	G3/4	100	18	56	47	M39x2	35	50	470	445	20	436	22	–	–	310	–	■
K 050.000.100.10	200	324	635	8xM20x30	150	G3/4	115	25	63	52	M42x2	40	55	540	530	23	243	30	–	–	50	–	■
K 050.000.300.10	200	324	855	8xM20x30	150	G3/4	115	25	63	52	M42x2	40	55	540	530	23	443	30	–	–	80	–	■
K 050.000.100.20	200	324	715	8xM20x30	150	G3/4	115	25	63	52	M42x2	40	55	540	530	23	243	30	–	–	140	–	■
K 050.000.300.20	200	324	855	8xM20x30	150	G3/4	115	25	63	52	M42x2	40	55	540	530	23	443	30	–	–	210	–	■
K 050.000.100.40	200	324	875	8xM20x30	150	G3/4	115	25	63	52	M42x2	40	55	540	530	23	243	30	–	–	310	–	■
K 050.000.300.40	200	324	1015	8xM20x30	150	G3/4	115	25	63	52	M42x2	40	55	540	530	23	443	30	–	–	340	–	■

\*LF: Version with pneumatic spring. See page 2.

Dimensions in mm

\*\*IV: Integrated power stroke valve

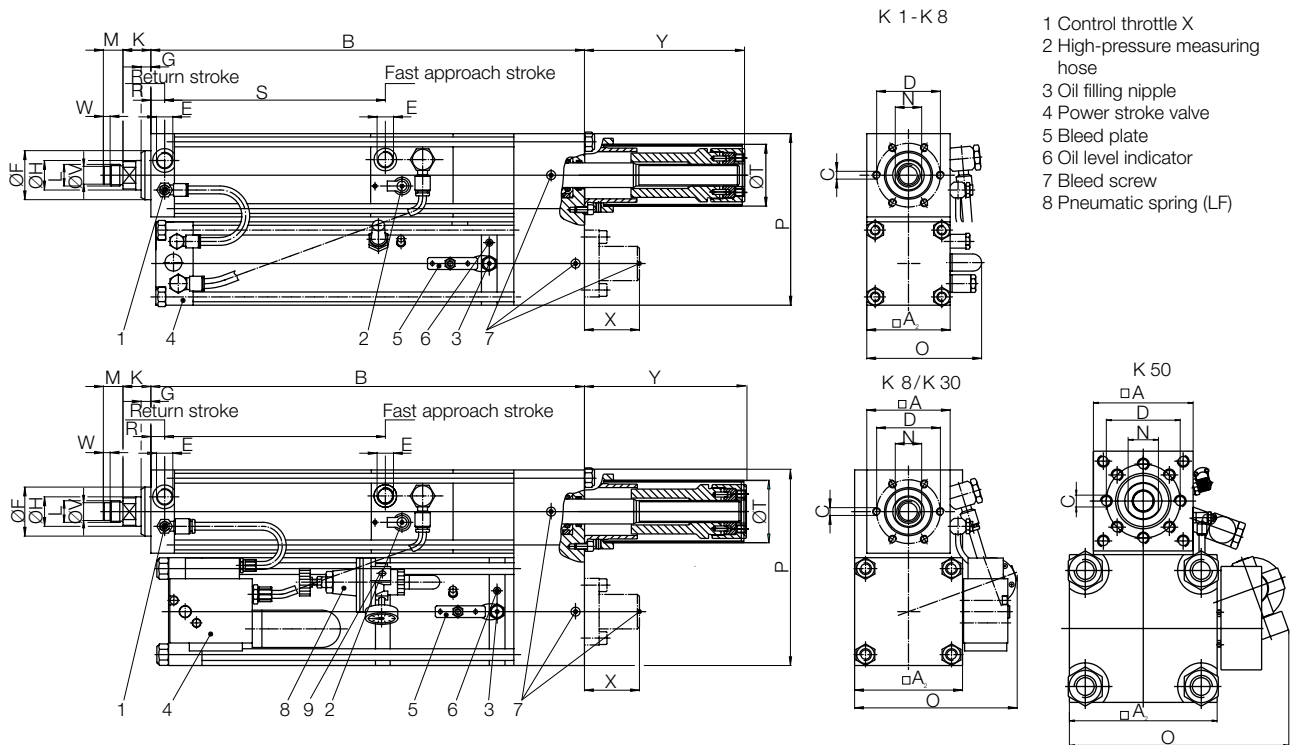
#### Pneumatic connection sizes

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<sup>®</sup>-Powerpackage type K

Version 051, 10 bar, compact design with total stroke adjustment,  
10 – 500 kN



Stroke length and hence LDC position adjustable. For pulling operations a special version is available.

## Forces

Type	Total stroke	Incl. Power stroke	At compressed air 6 bar	At compressed air 10 bar	At compressed air 10 bar		Weight kg
			max. Press force kN	max. Press force kN	Fast approach force N	Retracting force N	
K 001.051.050.05	50	5	5.1	9.0	990	1230	7
K 001.051.100.15	100	15	6.5	11.6	990	1230	13
K 001.051.200.20	200	20	6.5	11.6	990	1230	16
K 001.051.250.40	250	40	6.5	11.4	990	1230	23
K 002.051.050.04	50	4	11.3	20.0	2080	2500	14
K 002.051.100.12	100	12	11.3	19.7	2090	2490	22
K 002.051.200.24	200	24	11.3	19.7	2090	2490	34
K 002.051.300.50	300	50	11.5	20.0	2080	2490	50
K 004.051.100.10	100	10	24.6	42.7	2550	3280	38
K 004.051.200.20	200	20	24.6	42.7	2550	3280	53
K 004.051.400.20	400	20	24.6	42.7	2550	3280	75
K 004.051.400.50	400	50	24.6	42.7	2560	3270	90
K 008.051.100.10	100	10	45.2	78.4	4550	5520	66
K 008.051.200.10	200	10	45.2	78.4	4540	5530	71
K 008.051.200.20	200	20	45.2	78.4	4550	5520	94
K 008.051.400.20	400	20	45.2	78.4	4550	5520	128
K 008.051.400.50	400	50	45.2	78.4	4640	5430	168
K 015.051.100.10	100	10	88.9	156.6	6180	8860	160
K 015.051.200.10	200	10	88.9	156.6	6180	8860	177
K 015.051.400.10	400	10	88.9	156.6	6180	8860	207
K 015.051.100.20	100	20	88.9	156.6	6180	8860	171
K 015.051.200.20	200	20	88.9	156.6	6180	8860	181
K 015.051.400.20	400	20	88.9	156.6	6180	8860	230

Dimensions in mm

# TOX®-Powerpackage type K

Version 051, 10 bar, compact design with total stroke adjustment,  
10 – 500 kN

Forces		Incl.	At compressed air 6 bar	At compressed air 10 bar	At compressed air 10 bar		Weight
			max. Press force	max. Press force	Fast approach force	Retracting force	
Type	Total stroke	Power stroke	kN	kN	N	N	kg
K 015.051.100.40	100	40	88.5	163.2	6180	8860	237
K 015.051.200.40	200	40	88.5	163.2	6180	8860	259
K 015.051.400.40	400	40	88.5	163.2	6180	8860	305
K 030.051.100.10	100	10	162.6	299.8	9990	15120	288
K 030.051.200.10	200	10	162.6	299.8	9990	15120	308
K 030.051.400.10	400	10	162.6	299.8	9990	15120	398
K 030.051.200.20	200	20	162.6	299.8	9990	15120	331
K 030.051.400.20	400	20	162.6	299.8	9990	15120	440
K 030.051.200.40	200	40	162.6	299.8	9990	15120	328
K 030.051.400.40	400	40	162.6	299.8	9990	15120	384
K 050.051.100.10	100	10	277.1	504.1	9770	18890	474
K 050.051.300.10	300	10	277.1	504.1	9770	18890	485
K 050.051.100.20	100	20	277.1	504.1	9770	18890	509
K 050.051.300.20	300	20	277.1	504.1	9770	18890	552
K 050.051.100.40	100	40	277.1	504.1	9770	18890	–
K 050.051.300.40	300	40	277.1	504.1	9770	18890	–

Dimensions in mm

# TOX<sup>®</sup>-Powerpackage type K

## Version 051, 10 bar, compact design with total stroke adjustment, 10 – 500 kN

### Dimensions

Type	A	A <sub>1</sub>	B	C	D	E	F <sub>r</sub>	G	H	K	L	M	N	O	P	R	S	T	V <sub>g</sub>	W	X	Y	*LF	**IV
K 001.051.050.05	50	–	241	6xM 6x11	40	G1/8	30	10	16	24	M12x1.5	12	14	86	104	11.5	106.5	40	–	–	–	146	–	■
K 001.051.100.15	50	70	341	6xM 6x11	40	G1/8	30	10	16	24	M12x1.5	12	14	106	124	11.5	156.5	40	–	–	–	246	–	■
K 001.051.200.20	50	70	541	6xM 6x11	40	G1/8	30	10	16	24	M12x1.5	12	14	106	124	11.5	256.5	40	–	–	–	446	–	■
K 001.051.250.40	50	85	641	6xM 6x11	40	G1/8	30	10	16	24	M12x1.5	12	14	116	140	11.5	306.5	40	–	–	–	546	–	■
K 002.051.050.04	70	–	266	6xM 8x12	54	G1/4	40	10	20	26	M16x1.5	15	17	106	145	13	116	63	–	–	–	161	–	■
K 002.051.100.12	70	85	366	6xM 8x12	54	G1/4	40	10	20	26	M16x1.5	15	17	116	160	13	166	63	–	–	–	261	–	■
K 002.051.200.24	70	85	566	6xM 8x12	54	G1/4	40	10	20	26	M16x1.5	15	17	116	160	13	266	63	–	–	–	461	–	■
K 002.051.300.50	70	110	766	6xM 8x12	54	G1/4	40	10	20	26	M16x1.5	15	17	165	185	13	366	63	–	–	–	661	–	■
K 004.051.100.10	85	110	377	6xM 8x15	64	G3/8	50	10	30	28.5	M22x2	20	24	165	200	14	175	63	18	7	–	266	–	■
K 004.051.200.20	85	110	577	6xM 8x15	64	G3/8	50	10	30	28.5	M22x2	20	24	165	200	14	275	63	18	7	–	466	–	■
K 004.051.400.20	85	110	977	6xM 8x15	64	G3/8	50	10	30	28.5	M22x2	20	24	165	200	14	475	63	18	7	–	866	–	■
K 004.051.400.50	85	135	977	6xM 8x15	64	G3/8	50	10	30	28.5	M22x2	20	24	176	225	14	475	63	18	7	–	866	–	■
K 008.051.100.10	110	–	392	6xM10x16	88	G3/8	70	10	45	35	M30x2	25	36	176	250	15	183	90	26	7	47	273	–	■
K 008.051.200.10	110	–	592	6xM10x16	88	G3/8	70	10	45	35	M30x2	25	36	165	225	15	283	90	26	7	–	473	–	■
K 008.051.200.20	110	135	592	6xM10x16	88	G3/8	70	10	45	35	M30x2	25	36	176	250	15	283	90	26	7	47	473	–	■
K 008.051.400.20	110	135	992	6xM10x16	88	G3/8	70	10	45	35	M30x2	25	36	176	250	15	483	90	26	7	–	873	–	■
K 008.051.400.50	110	170	992	6xM10x16	88	G3/8	70	10	45	35	M30x2	25	36	241	285	15	483	90	26	7	–	873	■	■
K 015.051.100.10	135	200	535	6xM16x25	100	G3/8	75	15	50	36	M30x2	25	41	271	340	17.5	184.5	110	26	7	50	289	■	–
K 015.051.200.10	135	200	655	6xM16x25	100	G3/8	75	15	50	36	M30x2	25	41	271	340	17.5	284.5	110	26	7	70	489	■	–
K 015.051.400.10	135	200	1055	6xM16x25	100	G3/8	75	15	50	36	M30x2	25	41	271	340	17.5	484.5	110	26	7	26	889	■	–
K 015.051.100.20	135	200	595	6xM16x25	100	G3/8	75	15	50	36	M30x2	25	41	271	340	17.5	184.5	110	26	7	110	289	■	–
K 015.051.200.20	135	200	655	6xM16x25	100	G3/8	75	15	50	36	M30x2	25	41	271	340	17.5	284.5	110	26	7	110	489	■	–
K 015.051.300.20	135	200	855	6xM16x25	100	G3/8	75	15	50	36	M30x2	25	41	271	340	17.5	384.5	110	26	7	105	689	■	–
K 015.051.400.20	135	200	1055	6xM16x25	100	G3/8	75	15	50	36	M30x2	25	41	271	340	17.5	484.5	110	26	7	26	889	■	–
K 015.051.100.40	135	267	655	6xM16x25	100	G3/8	75	15	50	36	M30x2	25	41	410	410	17.5	184.5	110	26	7	100	289	■	–
K 015.051.200.40	135	267	655	6xM16x25	100	G3/8	75	15	50	36	M30x2	25	41	410	410	17.5	284.5	110	26	7	100	489	■	–
K 015.051.400.40	135	267	1055	6xM16x25	100	G3/8	75	15	50	36	M30x2	25	41	410	410	17.5	484.5	110	26	7	100	889	■	–
K 030.051.100.10	170	267	605	6xM20x30	132	G3/4	100	18	56	47	M39x2	35	50	410	445	20	236	125	–	–	65	307	■	–
K 030.051.200.10	170	267	700	6xM20x30	132	G3/4	100	18	56	47	M39x2	35	50	410	445	20	336	125	–	–	50	507	■	–
K 030.051.400.10	170	267	1060	6xM20x30	132	G3/4	100	18	56	47	M39x2	35	50	410	445	20	536	125	–	–	26	907	■	–
K 030.051.200.20	170	267	760	6xM20x30	132	G3/4	100	18	56	47	M39x2	35	50	410	445	20	336	125	–	–	170	507	■	–
K 030.051.400.20	170	267	1060	6xM20x30	132	G3/4	100	18	56	47	M39x2	35	50	410	445	20	536	125	–	–	40	907	■	–
K 030.051.200.40	170	267	900	6xM20x30	132	G3/4	100	18	56	47	M39x2	35	50	410	445	20	336	125	–	–	310	507	■	–
K 030.051.400.40	170	267	1060	6xM20x30	132	G3/4	100	18	56	47	M39x2	35	50	410	445	20	536	125	–	–	300	907	■	–
K 050.051.100.10	200	324	660	8xM20x30	150	G1/2	115	25	63	52	M42x2	40	55	500	530	23	243	140	–	–	90	313	■	–
K 050.051.300.10	200	324	880	8xM20x30	150	G1/2	115	25	63	52	M42x2	40	55	500	530	23	443	140	–	–	50	713	■	–
K 050.051.100.20	200	324	740	8xM20x30	150	G1/2	115	25	63	52	M42x2	40	55	500	530	23	243	140	–	–	140	313	■	–
K 050.051.300.20	200	324	880	8xM20x30	150	G1/2	115	25	63	52	M42x2	40	55	500	530	23	443	140	–	–	210	713	■	–
K 050.051.100.40	200	324	900	8xM20x30	150	G1/2	115	25	63	52	M42x2	40	55	500	530	23	243	140	–	–	330	313	■	–
K 050.051.300.40	200	324	1040	8xM20x30	150	G1/2	115	25	63	52	M42x2	40	55	500	530	23	443	140	–	–	370	713	■	–

\*LF: Version with pneumatic spring. See page 2.

Dimensions in mm

\*\*IV: Integrated power stroke valve

### 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:

TOX<sup>®</sup>-Powerpackages with compact design and total stroke adjustment are available on request with a operating pressure from 6 bar.

**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.

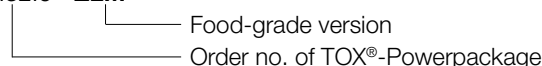
TOX®-Powerpackages are used in industrial food manufacturing, processing, filling and packaging machines, as well as in the pharmaceutical and cosmetics industry.

**Compatible with:**

All TOX®-Powerpackages (without line-Q)

**Order no.**

S 1.32.6 - **ZLM**



## TOX®-Powerpackage in anti-rust version ZRO

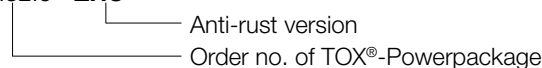
With the exception of line-Q, all TOX®-Powerpackages can be supplied with rust protection. All individual parts are either plasma nitrided, galvanised or primed and painted. These devices are particularly suitable for use in the food and packaging industries.

**Compatible with:**

All TOX®-Powerpackages (without line-Q)

**Order no.**

S 1.32.6 - **ZRO**



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

## TOX®-Powerpackage for the battery production (Cu/Zn/Ni - optimized)

Drives to be used in battery production must meet special requirements. All components such as bearings or guides which can show wear must be designed to prevent short circuits. They should also prevent conductive or interfering particles from getting into the production process. For these drives, some attachment parts and components were designed almost completely without copper, nickel and zinc, some entirely without. The proven pneumohydraulic TOX®-Powerpackage is available in this special version in different designs (type S and K; other types on request) and with comprehensive accessories.

