

TOX®-Powerpackage Type RZ

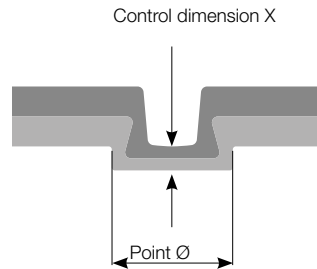
Data sheet 10.08
2021/07



TOX[®]-Powerpackage Type RZK

Advantages of the RZK

Adjustment of the total stroke on the RZK, e.g. for the control dimension X in clinching, is done directly over an adjustable collar of the RZK cylinder. The end position can be detected with a sensor for the X dimension.



Standard version:

Includes power bypass ZLB, hydraulic return stroke damping ZHD, total stroke adjustment, manually switchable power stroke valve, threads on working rod to match TOX[®]-Strippers, precision mounting flange for TZ-Tongs.

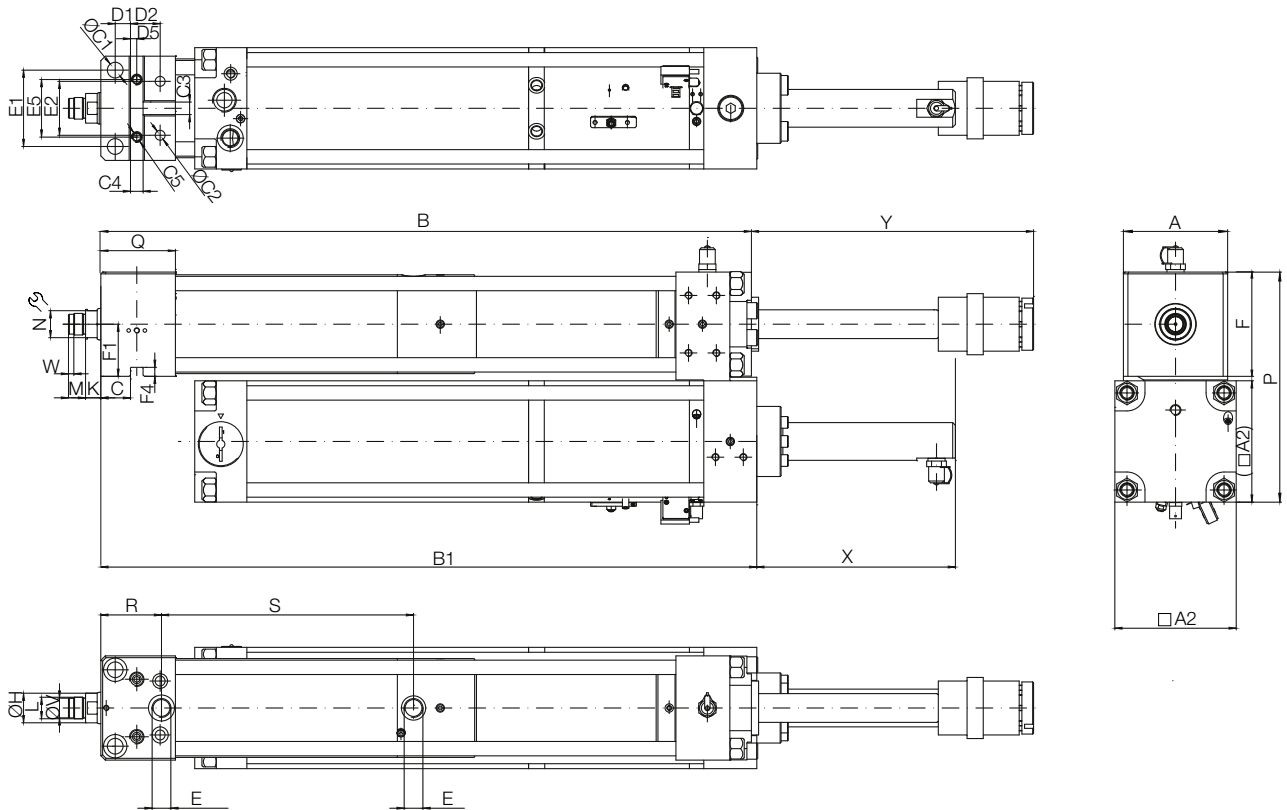
For complete installation, a tongs installation plate incl. main control valve, pneumatic spring with fast stroke support and necessary pneumatic components are optionally required.

Available alternatively with pneumatic spring assembly including fast stroke support, pneumatic spring pressure regulator and flow control "X". Main control valve required on customer-side.

Series:

35: with total stroke limiter 90 – 100 mm (150 or 200 mm on request).

37/48: with total stroke limiter with 50 mm travel adjustment (version 37/48 is available only for 200 mm stroke cylinder).



Type	Total stroke	Included power stroke	Max. press force at 6 bar air pressure kN	Approach force at 6 bar N	Return force at 6 bar N	Weight kg
RZK 05.35.100.07	100	7	52.1	1320	1890	43
RZK 05.37.200.12	200	12	52.1	1320	1890	54
RZK 08.35.100.08	100	8	82.4	2710	3570	74
RZK 08.48.200.12	200	12	82.4	2710	3570	86

Type	A	A2	B	B1	C	C1	C2	C3 ^{H7}	C4 ^{H7}	C5	D1	D2	D5	E	E1	E2	E5
RZK 05.35.100.07	85	110	542	542	27	13	9	14	14	M12	15	29	7	G1/4	60	50	55
RZK 05.37.200.12	85	110	695	695	27	13	9	14	14	M12	15	29	7	G1/4	60	50	55
RZK 08.35.100.08	116	135	577	583	33	17.5	11	14	14	M12	17	33	7	G1/2	85	60	64
RZK 08.48.200.12	116	135	724	730	33	17.5	11	14	14	M12	17	33	7	G1/2	85	60	64

Type	F	F1 ^{±0.02}	F4	H	K	L	M	N	P	Q	R	S	T1	V _{g6}	W	X	Y
RZK 05.35.100.07	90	45	9	30	18	M24x1.5	19	SW24	202.5	77	62	217	56	22	6	109	171.5
RZK 05.37.200.12	90	45	9	30	18	M24x1.5	19	SW30	202.5	77	62	271	65	22	6	222.5	301.5
RZK 08.35.100.08	116	85	10	35	17	M24x1.5	19	SW24	256	83	67.5	233.5	65	22	6	125	172.5
RZK 08.48.200.12	116	85	10	35	17	M24x1.5	19	SW30	256	83	67.5	280.5	65	22	6	221	312.5

Pneumatic connection sizes

Dimensions in mm

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

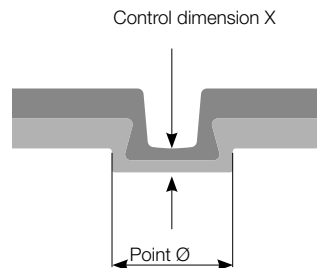
Note: For a trouble-free operation, the connection size and nominal size must be maintained throughout the compressed air supply.

TOX[®]-Powerpackage Type RZS

Advantages of the RZS

Adjustment of the stroke for the RZS, e.g. for the control dimension X in clinching, is done at the TOX[®]-Tooling using precision ground shim plates.

The RZS can be used for the TOX[®]-Clinching Process or for punching of round contours. A damping system to reduce cutting impact is always recommended. In this case, the damping should be integrated in the tooling.



Standard version:

Includes power bypass ZLB, hydraulic return stroke damping ZHD, defined end position stop with damping, threads on working rod to match TOX[®]-Strippers, precision mounting flange for TZ-Tongs.

For complete installation, a tongs installation plate incl. main control valve, pneumatic spring with fast stroke support and necessary pneumatic components are optionally required. Available alternatively with pneumatic spring assembly including fast stroke support, pneumatic spring pressure regulator and flow control "X". Main control valve required on customer-side. Switch for X dimension can be mounted on working rod. Prepared for mounting of stroke monitor (ZHU) or position sensor (ZHW).

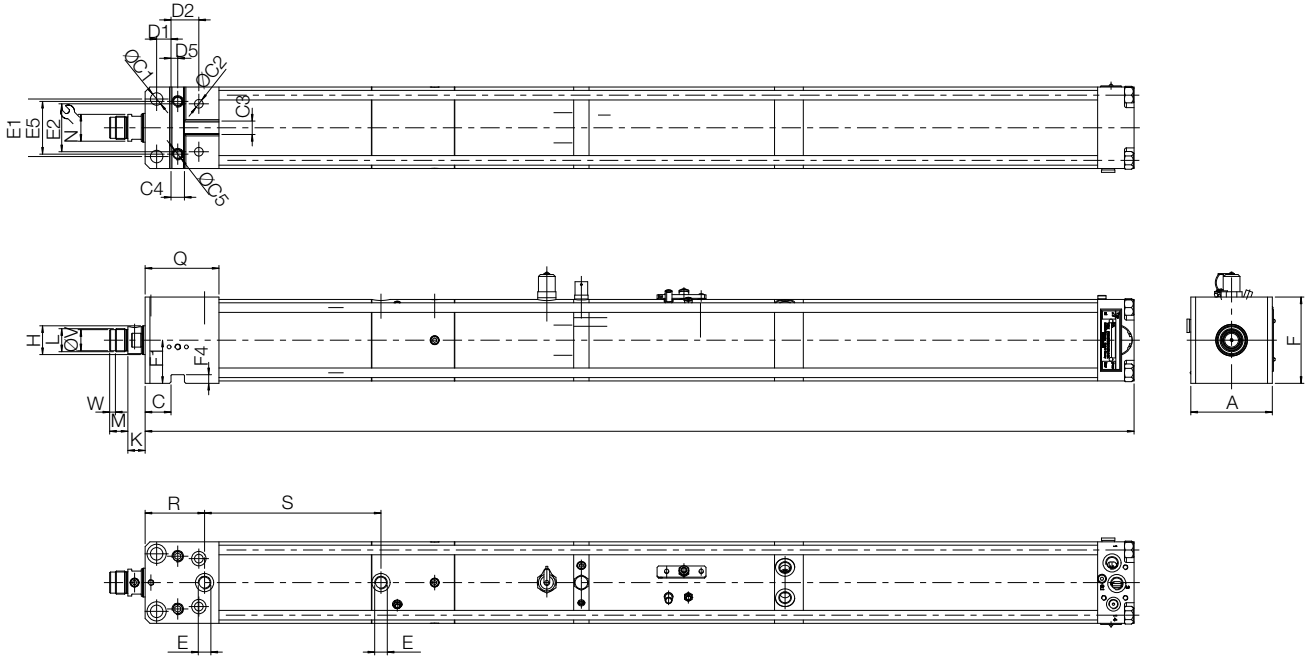
Recommended accessories:

■ End position monitoring

These TOX[®]-Powerpackages are equipped with a magnet on the working rod and a special barrel. Sensors can be mounted on the tie rods to monitor the cylinder rod position. Please order the position sensing option (ZHU) or the travel sensing option (ZHW) separately.

- In conjunction with a **TOX[®]-Process Monitoring System** and corresponding accessories, an inquiry of the control dimension X is possible for clinching processes.

The comprehensive TOX[®]-Powerpackage and accessories program, as well as the technical data on the stroke monitor ZHU are shown in the data sheet 10.10.



Type	Total stroke	Included power stroke	Max. air pressure bar	Max. press force kN	Approach force N	Return force N	Weight kg
RZS 05.30.100.07	100	7	6.0	55.4	1325	826	29
RZS 08.30.100.08	100	7	5.2	84.2	2352	1529	47

Dimensions in mm

Type	A	B	C	C1	C2	C3 ^{H7}	C4 ^{H7}	C5	D1	D2	D5	E	E1	E2	E5
RZS 05.30.100.07	85	1031.5	27	13	9	14	14	M12	15	29	7	G 1/4	60	50	55
RZS 08.30.100.08	116	1042.5	33	17.5	11	14	14	M12	17	33	7	G 1/2	85	60	64

Dimensions in mm

Type	F	F1 ^{±0.02}	F4	H	K	L	M	N [⊗]	Q	R	S	V _{g6}	W
RZS 05.30.100.07	90	45	9	30	18	M24x1.5	19	SW 24	77	62	184	22	6
RZS 08.30.100.08	116	58	10	35	17	M24x1.5	19	SW 30	83	67.5	186.5	22	6

Dimensions in mm

Pneumatic connection sizes

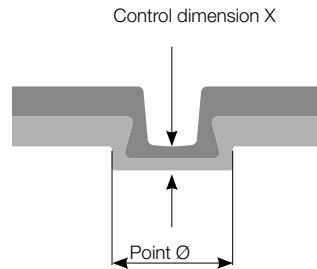
Connection	Nominal sizes /Inside-Ø hose
G1/4"	7 - 8 mm
G3/8"	8 - 9 mm
G1/2"	10 - 11 mm
G3/4"	19 - 20 mm
G1"	25 mm
G1 1/2"	38 mm

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

TOX[®]-Powerpackage Type RZHL and RZHO

Advantages of the RZH

Adjustment of the total stroke on the RZH, e.g. for the control dimension X in clinching, is done directly over an adjustable collar of the RZH cylinders series 00 and 30. For RZH series 200, the adjustment is done at the TOX[®]-Tooling using shim plates.



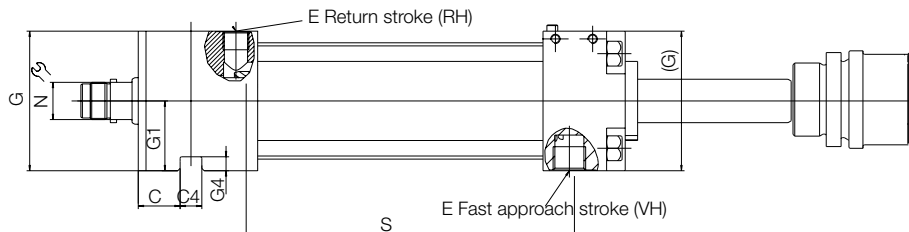
Note: hydraulic pressure to the RZH cylinder can be supplied by a hydraulic unit or one of our TOX[®]-Pneumohydraulic Intensifiers. The type of pressure media used for the return stroke determines the type of cylinder: a RZHL for air return, or a RZHO for oil return (for additional information, see data sheet 10.05).

Standard version:

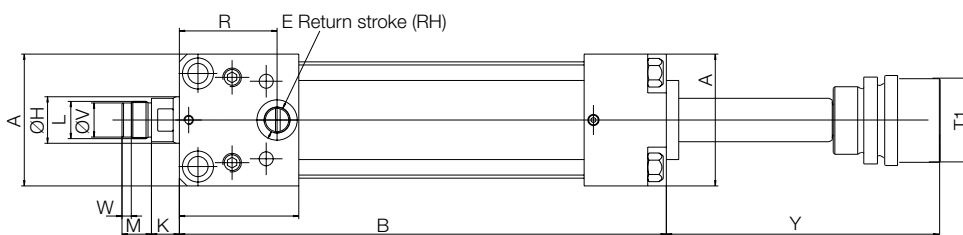
Threads to match TOX[®]-Strippers, precision mounting for TZ-Tongs. When ordered by itself, no guarding is provided (like version 151 for HZ), prepared for X dimension switch.

Series:

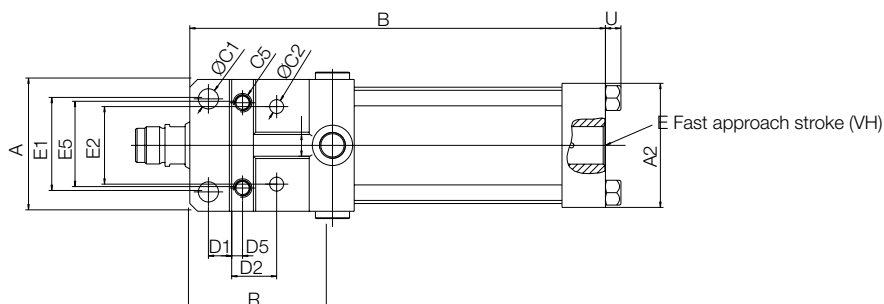
00: with total stroke limiter 10 mm range



30: with total stroke limiter 50 mm range



200: with 50 mm travel without adjustment, 4 return ports (90°), axial approach port for RZHx05 and radial for RZHx08.



Type x = L or O	Stroke	Press force max. (at oil pressure) kN	Approach force at 6 bar N	Return force at 6 bar N	Max. return force for oil / oil operation kN	V cm ³	F1*	F2*	Weight kg
RZHx 05.200.050	50	54.5 (175 bar)	1550	800	25	3.1	2.0	0.6	11
RZHx 05. 00.100	100	62.5 (250 bar)	1240	870	25	2.5	5.0	0.6	13
RZHx 05. 30.200	200	62.5 (250 bar)	1240	870	25	2.5	10.0	0.6	16
RZHx 08.200.050	50	88.3 (200 bar)	2250	1260	25	4.4	3.0	0.6	18
RZHx 08. 00.100	100	90.3 (250 bar)	1480	1370	25	3.6	7.0	0.6	23
RZHx 08. 30.200	200	90.3 (250 bar)	1480	1370	25	3.6	14.0	0.6	26

*For calculation of the factors F1 and F2 see data sheet 10.05 TOX®-Powerpackage X-KT-System.

Dimensions in mm

Caution: Observe max. return force.

Type x = L or O	A	A2	B	C	C1	C2	C3 ^{H7}	C4 ^{H7}	C5	D1	D2	D5	E (RH)	E (VH)
RZHx 05.200.050	85	80	268	27	13	9	14	14	M12	15	29	7	G3/8	G3/4
RZHx 05. 00.100	85	–	314	27	13	9	14	14	M12	15	29	7	G3/8	G1/2
RZHx 05. 30.200	85	–	414	27	13	9	14	14	M12	15	29	7	G3/8	G1/2
RZHx 08.200.050	116	90	301	33	17.5	11	14	14	M12	17	33	7	G1/2	G3/4
RZHx 08. 00.100	116	–	330	33	17.5	11	14	14	M12	17	33	7	G1/2	G3/4
RZHx 08. 30.200	116	–	430	33	17.5	11	14	14	M12	17	33	7	G1/2	G3/4

Dimensions in mm

Type x = L or O	E1	E2	E5	G	G1 ^{+0.02}	G4	H	K	L	M	N ^{SN}	Q	R	S	T1	U	V ₉₆	W	Y
RZHx 05.200.050	60	50	55	90	45	9	30	18	M24x1.5	19	SW24	77	92	–	–	10	22	6	–
RZHx 05. 00.100	60	50	55	90	45	9	30	18	M24x1.5	19	SW24	77	63	215	56	–	22	6	174.5
RZHx 05. 30.200	60	50	55	90	45	9	30	18	M24x1.5	19	SW24	77	63	315	56	–	22	6	314.5
RZHx 08.200.050	85	60	64	116	58	10	35	17	M24x1.5	19	SW24	123	104.5	137.5	–	–	22	6	–
RZHx 08. 00.100	85	60	64	116	58	10	35	17	M24x1.5	19	SW24	83	64.5	224.5	65	–	22	6	184.5
RZHx 08. 30.200	85	60	64	116	58	10	35	17	M24x1.5	19	SW24	83	64.5	324.5	65	–	22	6	324.5

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 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!