

TOX®-Powerpackage Type RZ

The robot tongs drive with
precision guidance and adjustable
alignment flange mounting



Data
sheet
10.08

2016/04

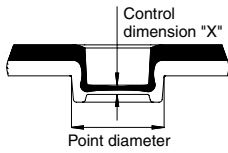
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TOX®-Powerpackage Type RZK

CAD data online:
www.tox-cad.com

Advantages of 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.

Series:

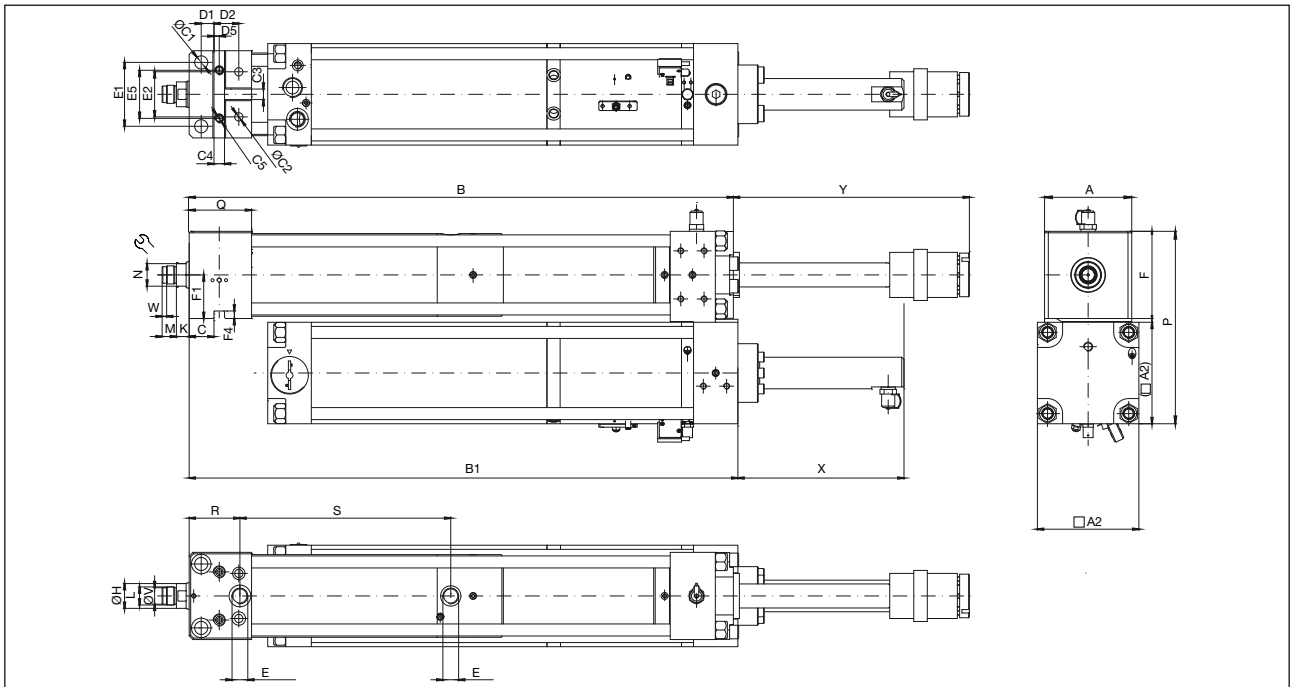
35: with total stroke limiter 90 – 100 mm (150 or 200 mm on request)
37/48: with total stroke limiter with 50 mm travel adjustment (version 37/48 is available only for 200 mm stroke cylinder).

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.



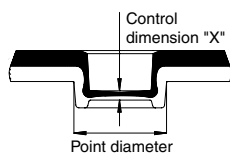
Order no.	Total stroke	Included power stroke	Max. press force at 6 bar air pressure [kN]	Approach force at 6 bar [N]	Return force at 6 bar [N]	A	A2	B	B1	C	C1	C2	C3 ^{H7}	C4 ^{H7}	C5	D1	D2	D5	E	E1	E2	E5
RZK 05.35.100.07	100	7	52.1	1320	1890	85	110	542	542	27	13	9	14	14	M12	15	29	7	G1/4	60	50	55
RZK 05.37.200.12	200	12	52.1	1320	1890	85	110	695	695	27	13	9	14	14	M12	15	29	7	G1/4	60	50	55
RZK 08.35.100.08	100	8	82.4	2710	3570	116	135	577	583	33	17.5	11	14	14	M12	17	33	7	G1/2	85	60	64
RZK 08.48.200.12	200	12	82.4	2710	3570	116	135	724	730	33	17.5	11	14	14	M12	17	33	7	G1/2	85	60	64

Dimensions in mm

Order no.	F	F1 ^{±0.02}	F4	H	K	L	M	N	P	Q	R	S	T1	V _{g6}	W	X	Y	Weight kg
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	43
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	54
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	74
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	86

TOX®-Powerpackage Type RZS

Advantages of 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.

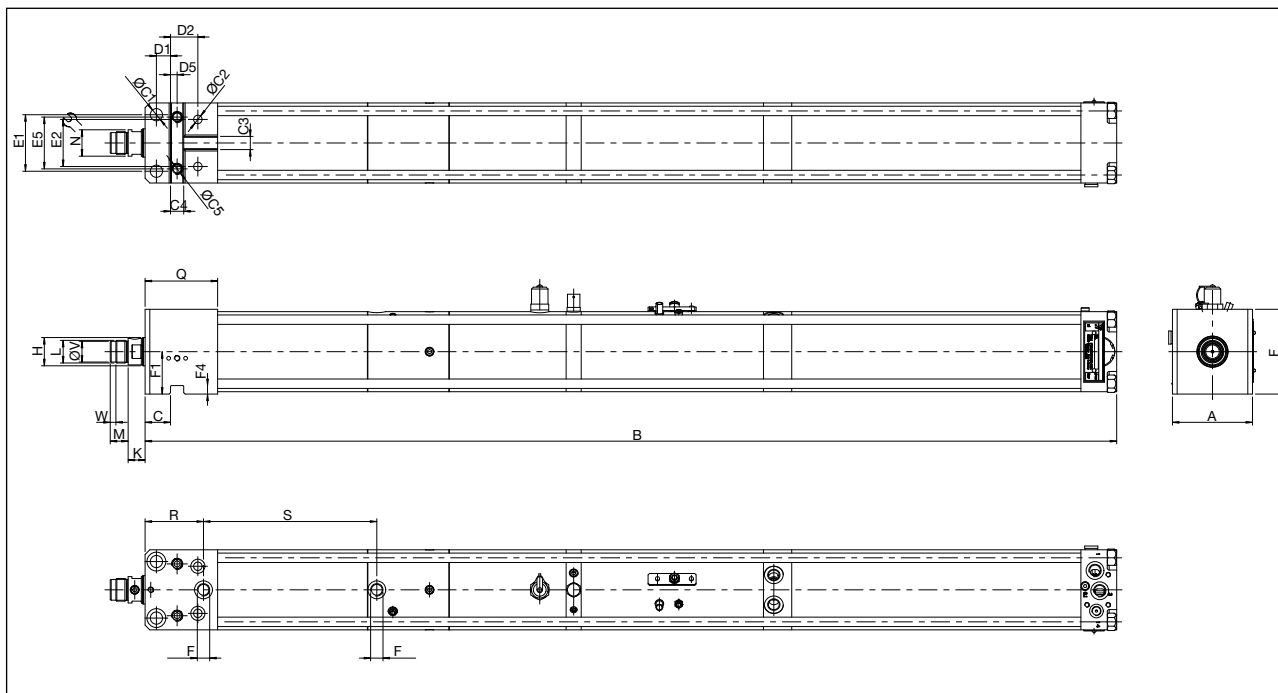
The RZS can be used for the TOX®-Clinching Process or for punching of round contours. A damping system to reduce cutting impact is always recommended. In this case, the damping should be integrated in the tooling.

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).



Order no.	Total stroke [mm]	Included power stroke [mm]	Max. air pressure [bar]	Max. press force [kN]	App- roach force [N]	Return force [N]	A	B	C	C1	C2	C3 ^{H7}	C4 ^{H7}	C5	D1	D2	D5	E	E1	E2	E5
RZS 05.30.100.07	100	7	6.0	55.4	1325	826	85	1031.5	27	13	9	14	14	M12	15	29	7	G 1/4	60	50	55
RZS 08.30.100.08	100	7	5.2	84.2	2352	1529	116	1042.5	33	17.5	11	14	14	M12	17	33	7	G 1/2	85	60	64

Order no.	F	F1 ^{±0.02}	F 4	H	K	L	M	N	Q	R	S	V ₉₆	W	Weight kg
RZS 05.30.100.07	90	45	9	30	18	M24x1.5	19	SW 24	77	62	184	22	6	29
RZS 08.30.100.08	116	58	10	35	17	M24x1.5	19	SW 30	83	67.5	186.5	22	6	47

Dimensions in mm

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

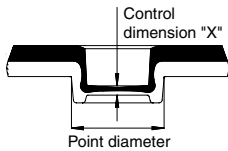
option (ZHU) or the travel sensing option (ZHW) separately.

- 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.

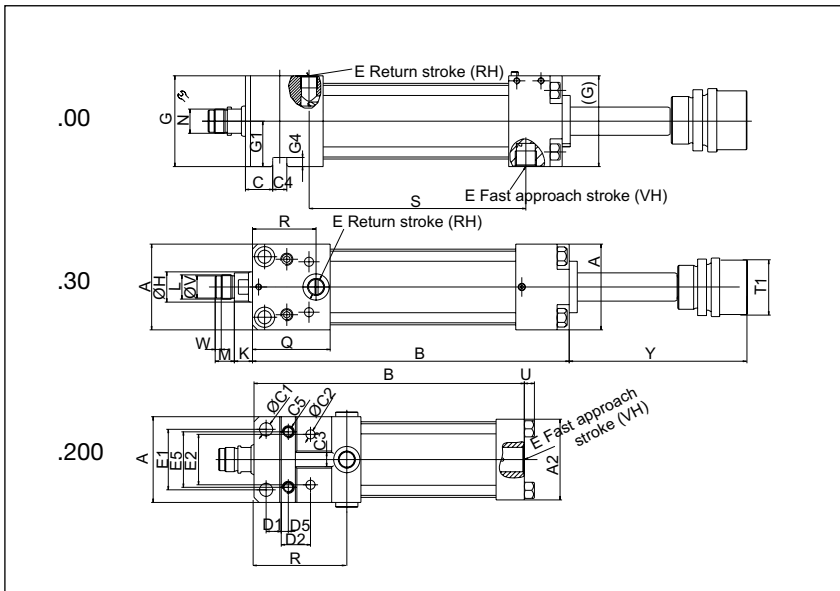
TOX®-Powerpackage Type RZHL and RZHO

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

Order no.	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	F1*	F2*	A	A2	B	C	C1	C2	C3 ^{H7}	C4 ^{H7}	C5	D1	D2	D5	E (RH)	E (VH)
RZHx 05.200.050	50	54.5 (175 bar)	1550	800	25	3.1	2.0	0.6	85	80	268	27	13	9	14	14	M12	15	29	7	G3/8	G3/4
RZHx 05.00.100	100	62.5 (250 bar)	1240	870	25	2.5	5.0	0.6	85	-	314	27	13	9	14	14	M12	15	29	7	G3/8	G1/2
RZHx 05.30.200	200	62.5 (250 bar)	1240	870	25	2.5	10.0	0.6	85	-	414	27	13	9	14	14	M12	15	29	7	G3/8	G1/2
RZHx 08.200.050	50	88.3 (200 bar)	2250	1260	25	4.4	3.0	0.6	116	90	301	33	17.5	11	14	14	M12	17	33	7	G1/2	G3/4
RZHx 08.00.100	100	90.3 (250 bar)	1480	1370	25	3.6	7.0	0.6	116	-	330	33	17.5	11	14	14	M12	17	33	7	G1/2	G3/4
RZHx 08.30.200	200	90.3 (250 bar)	1480	1370	25	3.6	14.0	0.6	116	-	430	33	17.5	11	14	14	M12	17	33	7	G1/2	G3/4

Dimensions in mm

Order no.	Type	E1	E2	E5	G	G1 ^{+0.02}	G4	H	K	L	M	N	Q	R	S	T1	U	Vg6	W	Y	Weight kg
RZHx 05.200.050		60	50	55	90	45	9	30	18	M24x1.5	19	SW24	77	92	-	-	10	22	6	-	11
RZHx 05.00.100		60	50	55	90	45	9	30	18	M24x1.5	19	SW24	77	63	215	56	-	22	6	174.5	13
RZHx 05.30.200		60	50	55	90	45	9	30	18	M24x1.5	19	SW24	77	63	315	56	-	22	6	314.5	16
RZHx 08.200.050		85	60	64	116	58	10	35	17	M24x1.5	19	SW24	123	104.5	137.5	-	-	22	6	-	18
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	23
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	26

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

Caution: Observe max. return force.