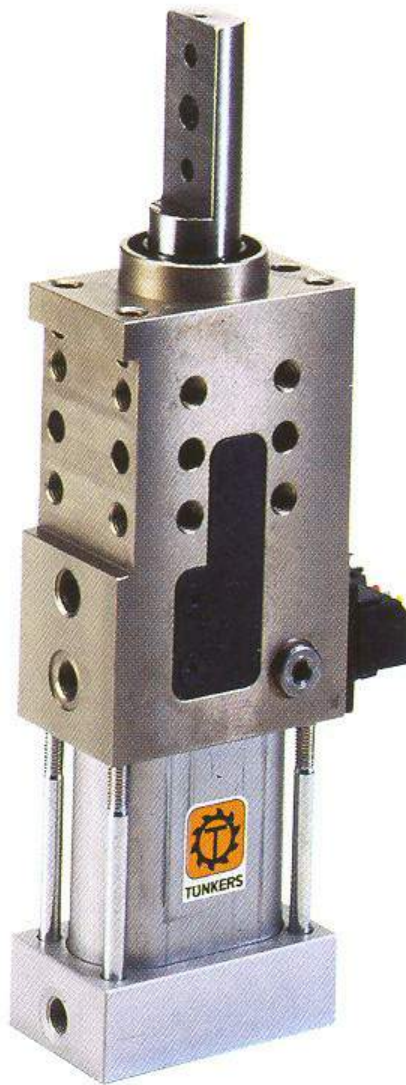


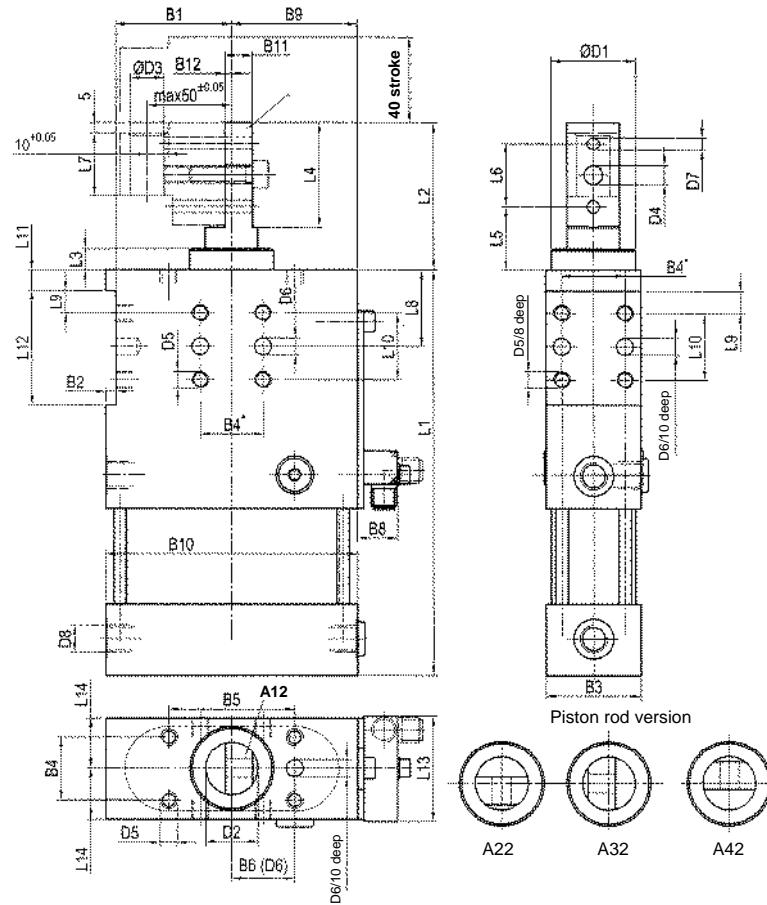


Tunkers SZK Locating Pins



SZK40/63 AXX T12

- 40mm stroke
- Standard mounting
- Integrated P&F PNP switch
- Available in 40 & 60MM sizes
- Available in 4 different piston rod configurations
- Rod secured against twisting by bronze bushings



Ordering example for special stroke:

SZK 40 x 25 A12

SZK 40: Type
 25: Special stroke (15 < 40 mm)
 A12: Piston rod version

*Tolerance for dowel holes ± 0.02 , for threaded holes ± 0.1 .

Medium: Air, max. 6 bar, operation permitted with oil-free air.

Attention!

External throttle check valves must be provided on assembly.
 They are not included in the scope of delivery!

Ordering example Tünkers sensing system:

...T12 Inductive sensor 24V, 1 output with integrated LED's

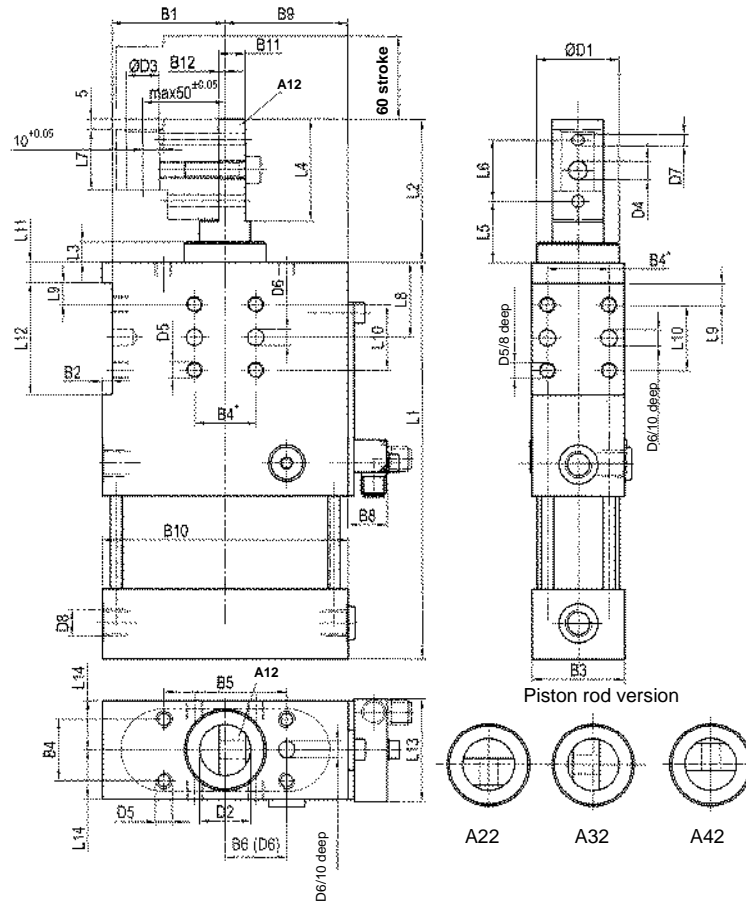
Type	Stroke	stat. shear force max (N)	Corresp. piston Ø (mm)	Weight ~ (kg)
SZK 40	40	150 N	40	1.8
SZK 63	40	200 N	63	2.4

Type	B1 ± 0.02	B2	B3	B4*	B5 ± 0.2	B6 ± 0.02	B7	B8	B9	B10	B11	B12 ± 0.05	D1 f7	D2 f7	D3 H7	D4	D5	D6 H7	D7 H7
SZK 40	32.5	5	45	30	60	30	-	21	37.5	75	13	3	40	25	16	9	M8	8	6
SZK 63	55	5	45	30	60	30	-	21	60	120	13	3	40	25	16	9	M8	8	6

Type	D8	L1	L2	L3	L4	L5	L6 ± 0.02	L7	L8 ± 0.05	L9 ± 0.1	L10 ± 0.1	L11	L12 ± 0.1	L13	L14 ± 0.02
SZK 40	G1/8	195	70	10	50	30	30	30	37	11	32	10	55	47	22.5
SZK 63	G1/4	195	70	10	50	30	30	30	37	11	32	10	55	47	22.5

SZK40.1/63.1 AXX T12

- 60mm stroke
- Standard mounting
- Integrated P&F PNP switch
- Available in 40 & 60MM sizes
- Available in 4 different piston rod configurations
- Rod secured against twisting by bronze bushings



Ordering example:

SZK 40.1 x 60 A12

SZK 40.1: Type
60: Stroke (special strokes 40 < 60 mm)
A12: Piston rod version

Side force max.: 200 N

*Tolerance for dowel holes ± 0.02, for screw holes ± 0.1.
Medium: Air, max. 6 bar, operation permitted with oil-free air.

Attention!

External throttle check valves must be provided on assembly.
They are not included in the scope of delivery!

Ordering example Tünkers sensing system:

...T12 Inductive switch 24V, 1 output with integrated LED's

Type	Stroke	Stat. side force max (N)	Piston-Ø (mm)	Weight -(kg)	B1 ±0.02	B2	B3	B4*	B5 ±0.2	B6 ±0.02	B7	B8	B9	B10
SZK 40.1	60	150 N	40	ca.2,1	32,5	5	45	30	60	30	-	21	37,5	75
SZK 63.1	60	200 N	63	ca. 3	55	5	45	30	60	30	-	21	60	120

Type	B1 ±0.02	B2	B3	B4*	B5 ±0.2	B6 ±0.02	B8	B9	B10	B11	B12 ±0.05	D1 f7	D2 f7	D3 H7	D4	D5	D6 H7	D7 H7	D8
SZK 40.1	32,5	5	45	30	60	30	21	37,5	75	13	3	40	25	16	9	M8	8	6	G1/8
SZK 63.1	55	5	45	30	60	30	21	60	120	13	3	40	25	16	9	M8	8	6	G1/4

Type	L1	L2	L3	L4	L5	L6 ±0.02	L7	L8 ±0.05	L9 ±0.1	L10 ±0.1	L11	L12 ±0.1	L13	L14 ±0.02
SZK 40.1	235	70	10	50	30	30	30	37	11	32	10	55	47	22,5
SZK 63.1	235	70	10	50	30	30	30	37	11	32	10	55	47	22,5



Operation Instructions Retractable Pin Cylinder

28/03/12

SZK 30,40, 63, B

1. Description

The retractable pin cylinder is a high-power tool designed for use in locating points in the processing of sheet metal. It consists of a pneumatic cylinder in flat design and a housing with integrated piston rod guiding and mountings at the front and the side.

The retractable pin cylinder is fitted with an inductive set, which allows positioning to be controlled with inductive switches.

2. Safety

The retractable pin cylinder was not conceived as a full tool supplied ready for independent use and has therefore not been fitted with its own safety equipment. Only when it is correctly installed in a production system and a corresponding safety control system is added, will all safety requirements be met.

Should any faults occur that place personnel at risk, the retractable pin cylinder is to be switched off immediately. Maintenance measures are only to be undertaken when the machine is at a complete standstill and by suitably qualified specialists.

After maintenance work has been carried out, the protection devices are to be refitted in the correct way.

3. Assembly of the retractable pin cylinder

- The retractable pin cylinder is installed by means of four head cap screws on the front side of the cylinder area or on the housing sides.
- The centering pin manufactured by the customer is secured in the piston rod receiver with a threaded pin M6X10 or a spring type straight pins.

Caution: The retractable pin cylinder was not provided with means of adjustment. This must be taken into account when designing / manufacturing the consoles / braces.

- Create supply of compressed air between pneumatic control and retractable pin cylinder (connections "N").

Caution: For fine adjustment of speed of positioning operation use of external regulating valves is recommended.

A. Inductive limit switch set (T06/T12)

Set plug on socket "C" according to the electrical design of the pneumatic clamp (see circuit diagrams), and tighten.

Caution: Operation with incorrect or too high voltage can lead to short circuiting and danger to personnel.

Function control with integrated LED as follows:

green operation voltage

yellow cylinder up

red cylinder down (new version from 01/99, was yellow)

B. Pneumatic limit switch set (T08/T10)

Connect control line for pneumatic limit switch set to the rear of the cylinder according to the marking.

Caution: Working pressure for control lines max. 6 bar.

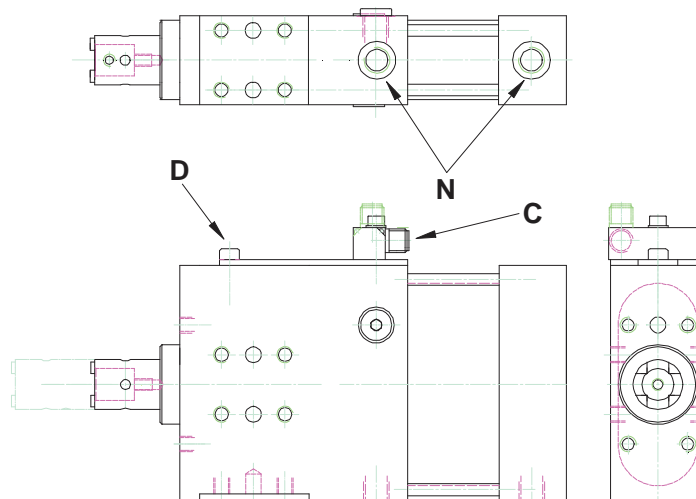
4. Replacement of limit switch cartridge

- Remove limit switch cartridge by releasing the screw "D".
- Set new limit switch cartridge and assemble.

5. Maintenance

The retractable pin cylinder is fitted with a view to application in series production with low-maintenance bearings and guides. Because of the closed structure of the retractable pin cylinder no special maintenance is necessary.

Caution: Damage can be caused to the retractable pin cylinder by cleaning with steam-jet or dry ice.

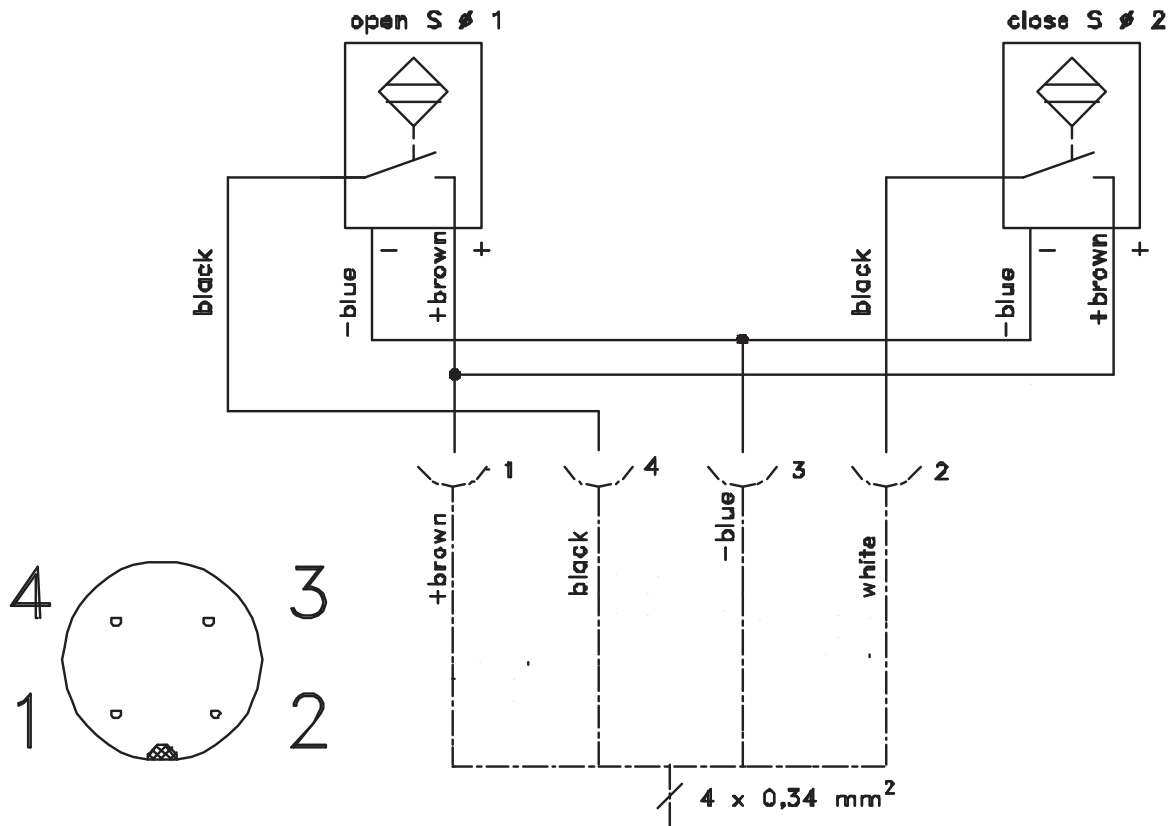
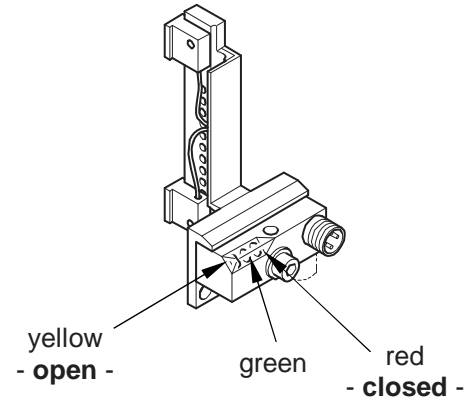




Operation Instructions Retractable Pin Cylinder

28/03/12

Detection set T12
Inductive switch, 1 connector



Technical Specifications

Inductive switch (Standard version)

Short circuit proof

Rated voltage 10-30 V

Working current 32 mA (one initiator connected with PLC)

Closer PNP exit

protective insulation according to DIN VDE 0100

Retractable Locating Pin

SZK 40 A12-A42 BR3

Spare Parts List

Spare Parts

Pos.	Part-no.	Quantity	Description	Type	Flag
10	266545	1.00	housing	SZK 40 A12 - A42 T12 BR3	
20	206909	1.00	cylinder bottom	SZK 40	
30	206942	1.00	cylinder pipe	SZK 40	
40	395848	1.00	piston rod complete	SZK 40/63 A12 – A32 BR3	
	395856	1.00	piston rod complete	SZK 40/63 A22 – A42 BR3	
60	265911	1.00	guide bush	SZK 40 – 63 BR3	R
70	265935	1.00	guide bush	SZK 40-63 BR3	R
80	201789	2.00	o-ring	48.00 x 1.50	RD
120	200190	4.00	hex. socket head cap screw	M 6 x 85 DIN 912	
130	200976	4.00	securing spring washer	S 6	
180	212064	1.00	cylinder seal Y3 (oval)	56/26 x 49/19 x 12	RD
190	212594	1.00	rod seal PR	D25 x D34 x 2.8	RD
200	248229	1.00	scraper	SZK.1 40 – 63	RD
220	201670	1.00	o-ring	12.00 x 2.00	RD
310	200582	1.00	set screw	M 5 x 8 DIN 914	R
320	200698	1.00	hexagon nut	M 5 DIN 439	
330	224722	2.00	cover plate	SZK.1 40	
350	202737	1.00	bolt	SZK 40	R
360	205234	2.00	bush	PKS 20	R
370	224726	2.00	guide plate	SZK 40	R
371	244639		adaptor plate	0.1 mm	
372	244943		adaptor plate	0.15 mm	
373	244640		adaptor plate	0.2 mm	
380	201291	2.00	circlips for shafts	A 6 x 0.70 DIN 471	R
400	200479	4.00	hexagon socket countersunk head screw	M 4 x 6 DIN 7991	
410	200137	2.00	hex. socket head cap screw	M 4 x 16 DIN 912	
420	200537	1.00	set screw	M 5 x 12 DIN 913	
430	214280	2.00	set screw	M 10 x 10 DIN 913	
440	200669	1.00	set screw	M 12 x 16 DIN 916	
	201497	1.00	screw plug	G 1/8"	
	201625	1.00	joint ring	A10 x 14.0 x 1.5 DIN 7603	

spare parts sets / accessories

Pos.	Part-no.	Quantity	Description	Type	
	351647	1.00	repair kit	SZK 40 A12..46 T12	
	283593	1.00	seal kit	SZK 40 A02/A06. A12..46 T12	
260	226743	1.00	limit switch set complete	SZK 40/63 T12	

R = included with repair kit. D = included with seal kit

Retractable Locating Pin

SZK 63 A12-A42 BR3

Spare Parts List

Spare Parts

Pos.	Part-no.	Quantity	Description	Type	Flag. ¹
10	273031	1.00	housing	SZK 63 A12 – A42 T12 BR3	
20	206911	1.00	cylinder bottom	SZK 63	
30	206946	1.00	cylinder pipe	SZK 63	
40	395857	1.00	piston rod complete	SZK 40-63 A12-A32 T12 BR3	
	395860	1.00	piston rod complete	SZK 40-63 A22-A42 T12 BR3	
60	265911	1.00	guide bush	SZK 40-63 BR3	R
70	265935	1.00	guide bush	SZK 40-63 BR3	R
80	201858	2.00	o-ring	76.00 x 2.00	RD
120	200190	4.00	hex. socket head cap screw	M 6 x 85 DIN 912	
130	200976	4.00	securing spring washer	S 6	
180	212061	1.00	cylinder seal Y3 (oval)	94/32 x 87/25 x 12	RD
190	212594	1.00	rod seal PR	D25 x D43 x 2.8	RD
200	248229	1.00	scraper	SZK.1 40-63	RD
220	201670	1.00	o-ring	12.00 x 2.00	RD
310	200582	1.00	set screw	M 5 x 8 DIN 914	R
320	200698	1.00	hexagon nut	M 5 DIN 439	
330	204722	2.00	cover plate	SZK 40	
350	202737	1.00	bolt	SZK 40	R
360	205234	2.00	bush	PKS 20	R
370	224726	2.00	guide plate	SZK 40	R
371	244639		adaptor plate	0.1 mm	
372	244943		adaptor plate	0.15 mm	
373	244640		adaptor plate	0.2 mm	
380	201291	2.00	circlips for shafts	A 6 x 0.70 DIN 471	R
400	200479	4.00	hexagon socket countersunk head screw	M 4 x 6 DIN 7991	
410	241993	2.00	hex. socket head cap screw	M 4 x 40 DIN 912	
420	200538	1.00	set screw	M 5 x 35 DIN 913	
430	214280	2.00	set screw	M 10 x 10 DIN 913	
440	200669	1.00	set screw	M 12 x 16 DIN 916	
	201497	1.00	screw plug	G 1/8"	
	201625	1.00	joint ring	A10 x 14.0 x 1.5 DIN 7603	

spare parts sets / accessories

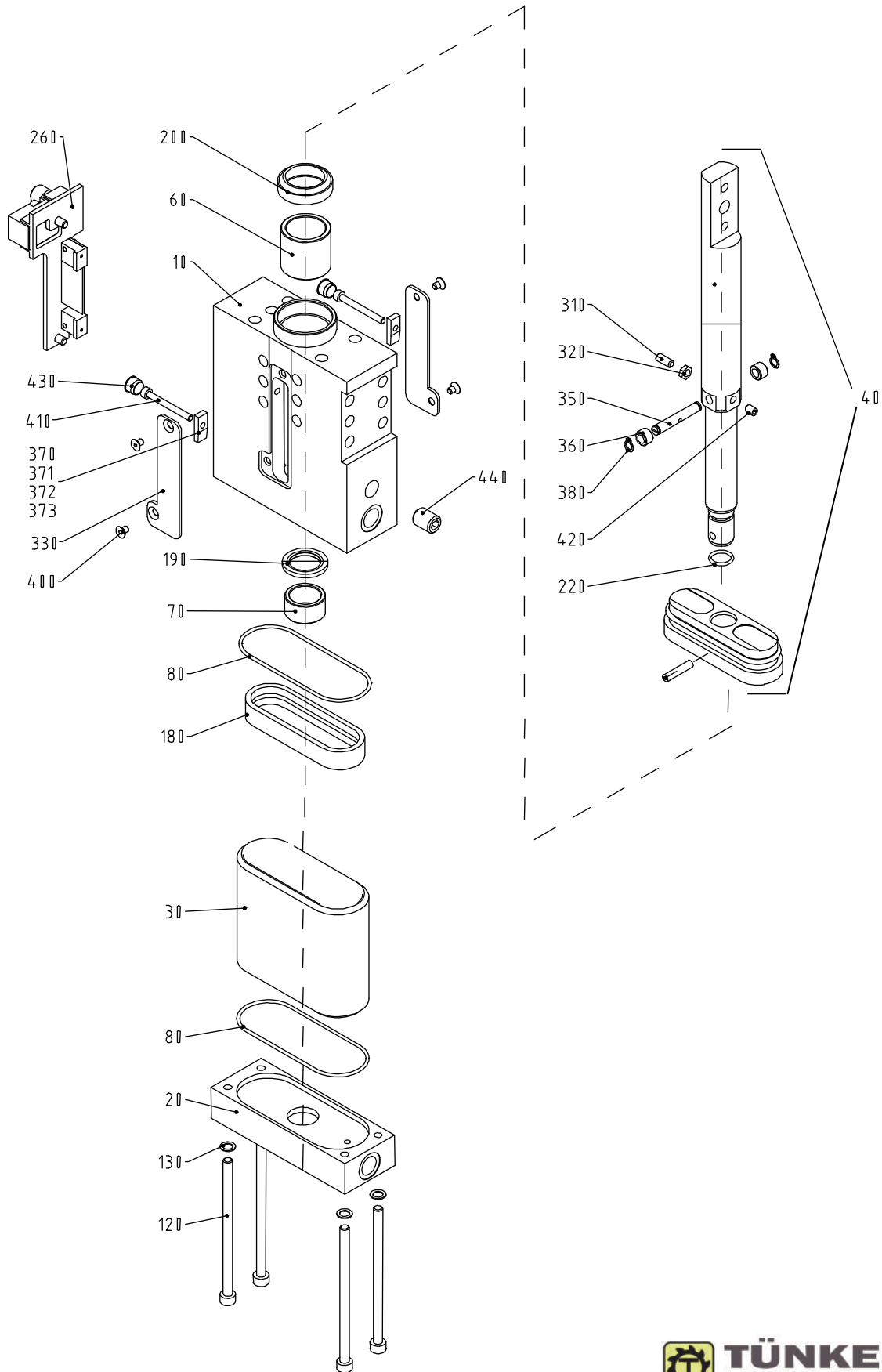
Pos.	Part-no.	Quantity	Description	Type	
	268440	1.00	repair kit	SZK 63 A12..46 T12	
	289288	1.00	seal kit	SZK 63 A02/A06. A12..46 T12	
260	226743	1.00	limit switch set complete	SZK 40/63 T12	

R = included with repair kit, D = included with seal kit

Retractable Locating Pin

Spare Parts Drawing

SZK 40/63 A12-A42 BR3



Retractable Locating Pin

SZK 40.1 A12-A42 BR3

Spare Parts List

Spare Parts

Pos.	Part-no.	Quantity	Description	Type	Flag. ¹
10	273028	1.00	housing	SZK 40.1 A12-A42 T12 BR3	
20	206909	1.00	cylinder bottom	SZK 40	
30	207056	1.00	cylinder pipe	SZK 40 x 60 Hub	
40	395864 395865	1.00 1.00	piston rod complete piston rod complete	SZK 40.1 – 63.1 A12-A32 T12 BR3 SZK 40.1 – 63.1 A22-A42 T12 BR3	
60	265911	1.00	guide bush	SZK 40-63 BR3	R
70	265935	1.00	guide bush	SZK 40-63 BR3	R
80	201789	2.00	o-ring	48,00 x 1,50	RD
120	223980	4.00	hex. socket head cap screw	M 6 x 105 DIN 912	
130	200976	4.00	securing spring washer	S 6	
180	212064	1.00	cylinder seal Y3 (oval)	56/26 x 49/19 x 12	RD
190	212594	1.00	rod seal PR	D25 x D43 x 2,8	RD
200	248229	1.00	scraper	SZK.1 40 – 63	RD
220	201670	1.00	o-ring	12,00 x 2,00	RD
310	200582	1.00	set screw	M 5 x 8 DIN 914	R
320	200698	1.00	hexagon nut	M5	
330	230176	2.00	cover plate	SZK.1 40.1, 63.1	
350	202737	1.00	bolt	SZK 40	R
360	205234	2.00	bush	PKS 20	R
370	224726	2.00	guide plate	SZK 40	R
371	244639		adaptor plate	0.1 mm	
372	244943		adaptor plate	0.15 mm	
373	244640		adaptor plate	0.2 mm	
380	201291	2.00	circlips for shafts	A 6 x 0,70 DIN 471	R
400	200479	4.00	hexagon socket countersunk head screw	M 4 x 6 DIN 7991	
410	200137	2.00	hex. socket head cap screw	M 4 x 16 DIN 912	
420	200537	1.00	set screw	M 5 x 12 DIN 913	
430	214280	2.00	set screw	M 10 x 10 DIN 913	
440	200669	1.00	set screw	M 12 x 16 DIN 916	
	244639	2.00	shims	0,1 mm	
	244943	2.00	shims	0,15 mm	
	244640	2.00	shims	0,2 mm	
	201497	1.00	screw plug	G 1/8	
	201625	1.00	joint ring	A 10 x 14,0 x 1,5	

Spare parts sets / accessories

Pos.	Part-no.	Quantity	Description	Type	
	351647	1.00	repair kit	SZK 40 A12..46 T12	
	351648	1.00	seal kit	SZK 40 A02/A06, A12..46 T12	
260	228693	1.00	limit switch set complete	SZK 40.1/63.1 T12	

¹R = included with repair kit, D = included with seal kit



Retractable Locating Pin

SZK 63.1 A12-A42 BR3

Spare Parts List

Spare Parts

Pos.	Part-no.	Quantity	Description	Type	Flag. ²
10	273033	1.00	housing	SZK.1 63.1 BR3	
20	206911	1.00	cylinder bottom	SZK 63	
30	218657	1.00	cylinder pipe	SZK 63 x 60	
40	395866	1.00	piston rod complete	SZK 40.1-63.1 A12-A32 T12 BR3	
	395867	1.00	piston rod complete	SZK 40.1-63.1 A22-A42 T12 BR3	
60	265911	1.00	guide bush	SZK 40/63 BR3	R
70	265935	1.00	guide bush	SZK 40, 63 BR3	R
80	201858	2.00	o-ring	76,00 x 2,00	RD
120	223980	4.00	hex. socket head cap screw	M 6 x 105 DIN 912	
130	200976	4.00	securing spring washer	S 6	
180	212061	1.00	cylinder seal Y3 (oval)	94 x 32 x 87 x 25 x 12	RD
190	212594	1.00	rod seal PR	D25 x D34 x 2,8	RD
200	248229	1.00	scraper	SZK.1 40-63	RD
220	201670	1.00	o-ring	12,00 x 2,00	RD
310	200582	1.00	set screw	M 5 x 8 DIN 914	R
320	200698	1.00	hexagon nut	M 5 DIN 439	
330	230176	2.00	cover plate	SZK.1 40.1 63.1	
350	202737	1.00	bolt	SZK 40/63 A12-A46	R
360	205234	2.00	bush	PKS 20	R
370	224726	2.00	guide plate	SZK 40	R
371	244639		adaptor plate	0.1 mm	
372	244943		adaptor plate	0.15 mm	
373	244640		adaptor plate	0.2 mm	
380	201291	2.00	circlips for shafts	A6,0 x 0,70	R
400	200479	4.00	hexagon socket countersunk head screw	M 4 x 6 DIN 7991	
410	241993	2.00	hex. socket head cap screw	M 4 x 40 DIN 912	
420	200538	1.00	set screw	M 6 x 35 DIN 913	
430	214280	2.00	set screw	M 10 x 10 DIN 913	
440	200669	1.00	set screw	M 12 x 16 DIN 916	
	244639	2.00	shims	0,1 mm	
	244943	2.00	shims	0,15 mm	
	244640	2.00	shims	0,2 mm	
	201497	1.00	screw plug	G 1/8	
	201625	1.00	joint ring	A 10 x 14,0 x 1,5	

Spare parts sets / accessories

Pos.	Part-no.	Quantity	Description	Type	
	350598	1.00	repair kit	SZK 63.1 A12-A42 BR3	
	289288	1.00	seal kit	SZK 63.1	
260	228693	1.00	limit switch set complete	SZK 40/63 T12	

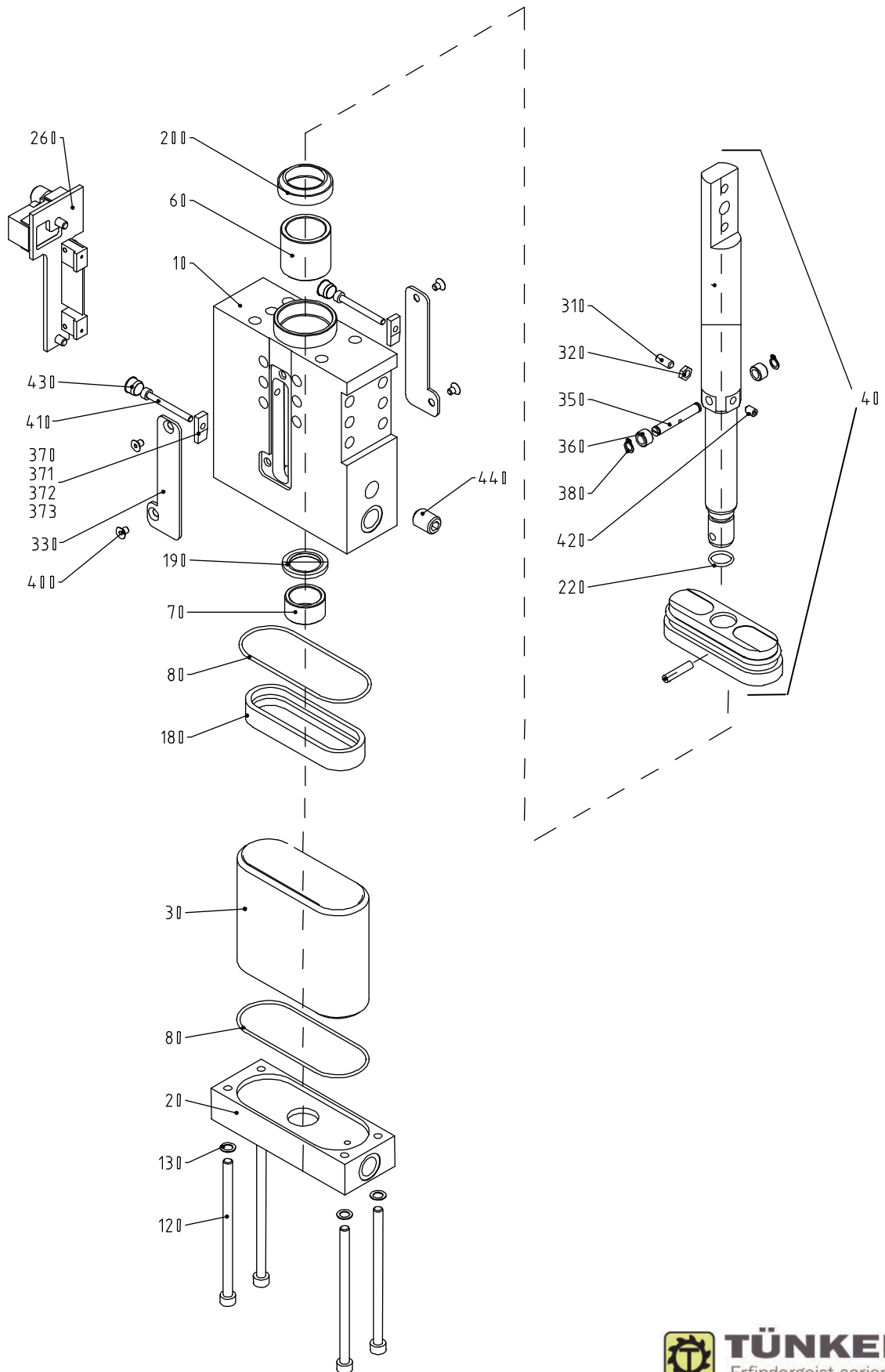
R = included with repair kit, D = included with seal kit



Retractable Locating Pin

Spare Parts Drawing

SZK 40.1, 63.1 A12-A42 BR3



Subject to technical modifications.

13.10.2014