

Hydraulic vehicle lift

ST 4032 / ST 4040



List of parts and appendices

43508020-D



List of parts for the 2, 3 and 4 ton Steril-Koni hydraulic vehicle lift

ST 4032 / ST 4040

Starting at serial number:

TS/TP119252

1 List of parts and appendices

The following sections will give an overview of the main assemblies and their components:

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- 1.2 'Tracks' on page 6,
- 1.3 'Cross beams' on page 8,
- 1.4 'Post with operation devices' on page 10,
- 1.5 'Cylinder' on page 12,
- 1.6 'Slack cable / Cable breakage safety device' on page 13,
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1.1 Summary vehicle lift

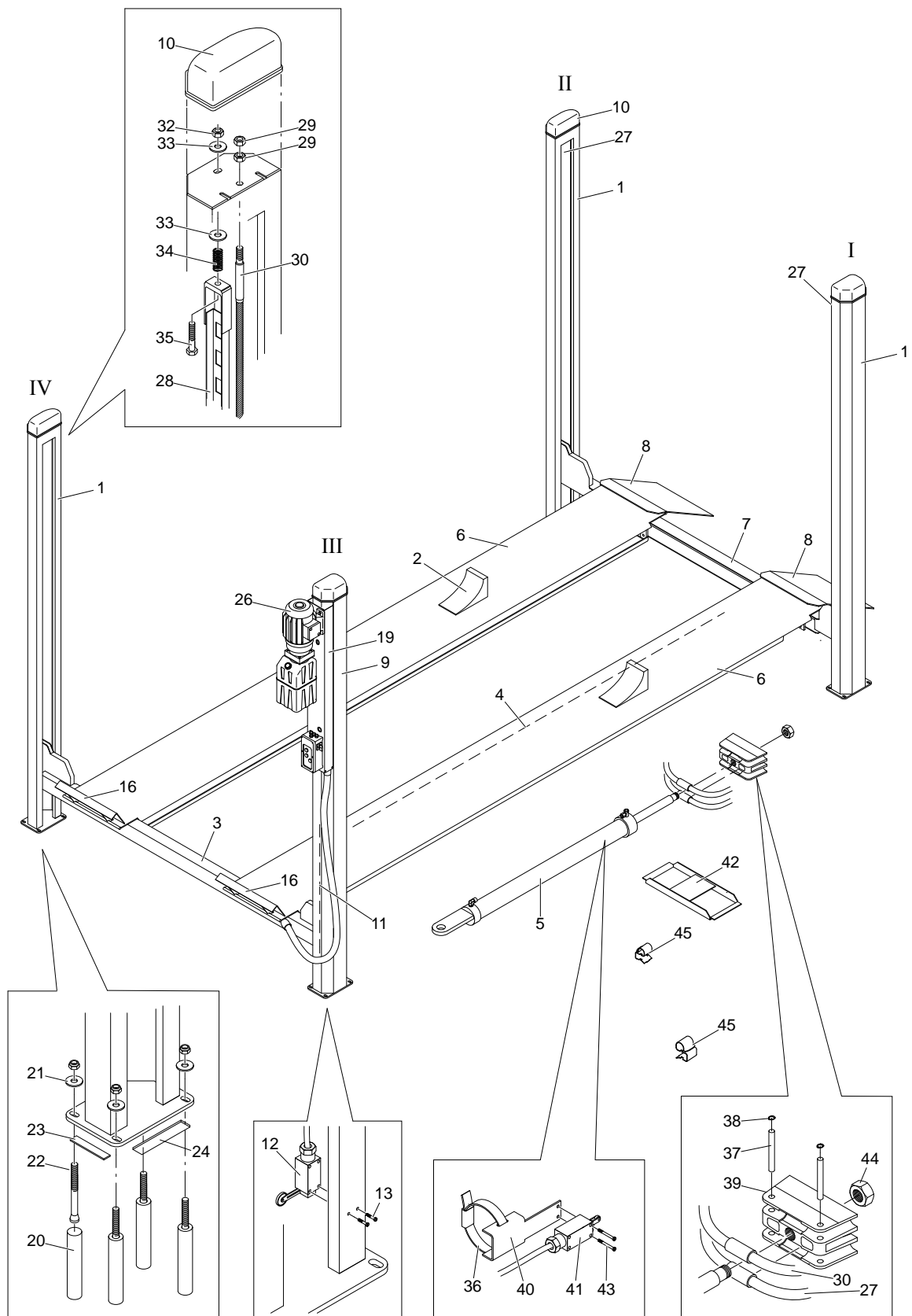


Figure 1.1 Vehicle lift

Table 1.1 Summary vehicle lift

Index	No.	Reference	Description	Remarks
1	3	43501150	Post No. 1, 2 and 4	
2	2	1020.50.00.01	Stop block	
3	1	See Figure 1.3	Cross beam 3-4 assembly	
4	1	43507111	El. cable track	
5	1	See Figure 1.5	Hydraulic cylinder assembly	
6	2	See Figure 1.2	Track	
7	1	See Figure 1.3	Cross beam 1-2 assembly	
8	2	See Figure 1.2	Ramp	
9	1	43501050	Post 3	
10	4	43500101	Post cover	
11	1	66102015	Cable duct	
12	1	43507108	End switch	
13	2	65045017	Screw M6x20	
16	2	See Figure 1.2	Stop plate	
19	1	See Figure 1.4	Operating panel assembly, 400 V	
20	16	65016005	Capsule UKA 3 EAP M10, 420 upat	
21	16	65055310	Washer M10, DIN440R GV	
22	16	65016004	Anchor rod ASTA M10x130, 7831 upat GV	
23	1	43500110	Filling plates (18 pieces), 1 mm	
23	1	43500115	Filling plates (18 pieces), 0.5 mm	
24	1	3583.04.60.00	Filling plates (12 pieces), 1 mm	
24	1	3583.04.61.00	Filling plates (12 pieces), 0.5 mm	
26	1	See Figure 1.7	Hydraulic unit assembly	
27	1	43006050	Steel cable 1-2 L=8140	ST4032/ST4032-S/ST4040-N
27	1	43506050	Steel cable 1-2 L=8440	ST4040/ST4040-M/ST4040-S
27	1	43516050	Steel cable 1-2 L=9340	ST4040-L/ST4040-LM
27	1	43526050	Steel cable 1-2 L=8740	ST4040-V/ST4040-VM
27	1	43536050	Steel cable 1-2 L=9640	ST4040-LV/ST4040-LVM
27	1	43596050	Steel cable 1-2 L=8840	ST4040-MOT
28	4	43505050	Locking profile	
29	8	65050146	Nut M22, 8 DIN934 GV	
30	1	43006150	Steel cable 3-4 L=17270	ST4032/ST4040-N
30	1	43066150	Steel cable 3-4 L=16770	ST4032-S
30	1	43506150	Steel cable 3-4 L=17570	ST4040/ST4040-M
30	1	43541650	Steel cable 3-4 L=17070	ST4040-S
30	1	43516150	Steel cable 3-4 L=19370	ST4040-L/ST4040-LM
30	1	43526150	Steel cable 3-4 L=17870	ST4040-V/ST4040-VM
30	1	43536150	Steel cable 3-4 L=19670	ST4040-LV/ST4040-LVM
30	1	43596150	Steel cable 3-4 L=18370	ST4040-MOT
32	4	65051040	Selflocking nut M16, 8 DIN985 GV	
33	8	65055432	Washer, DIN9021 GV	
34	4	43500103	Compression spring	
35	4	65012540	Bolt M16x90, 8.8 DIN912 GV	
36	1	65099028	Hose clip norma torro, DIN3017 60-80 B9 W3	
37	2	43506003	Pin	
38	2	1038.33.00.70	Shaft locking ring, DIN6799 FF	
39	1	43506255	Plunger head	
40	1	43505020	Limit switch support	Level limit
41	1	43507109	Limit switch level limit	
42	1	43500150	Cylinder support / drip tray	
43	2	65030226	Bolt M4x25, 4.8 DIN84 GV	
44	2	65051044	Self-locking nut M20, 8 DIN985 GV	Tightening moment 270 Nm
45	2	00920442	Clamp	

1.2 Tracks

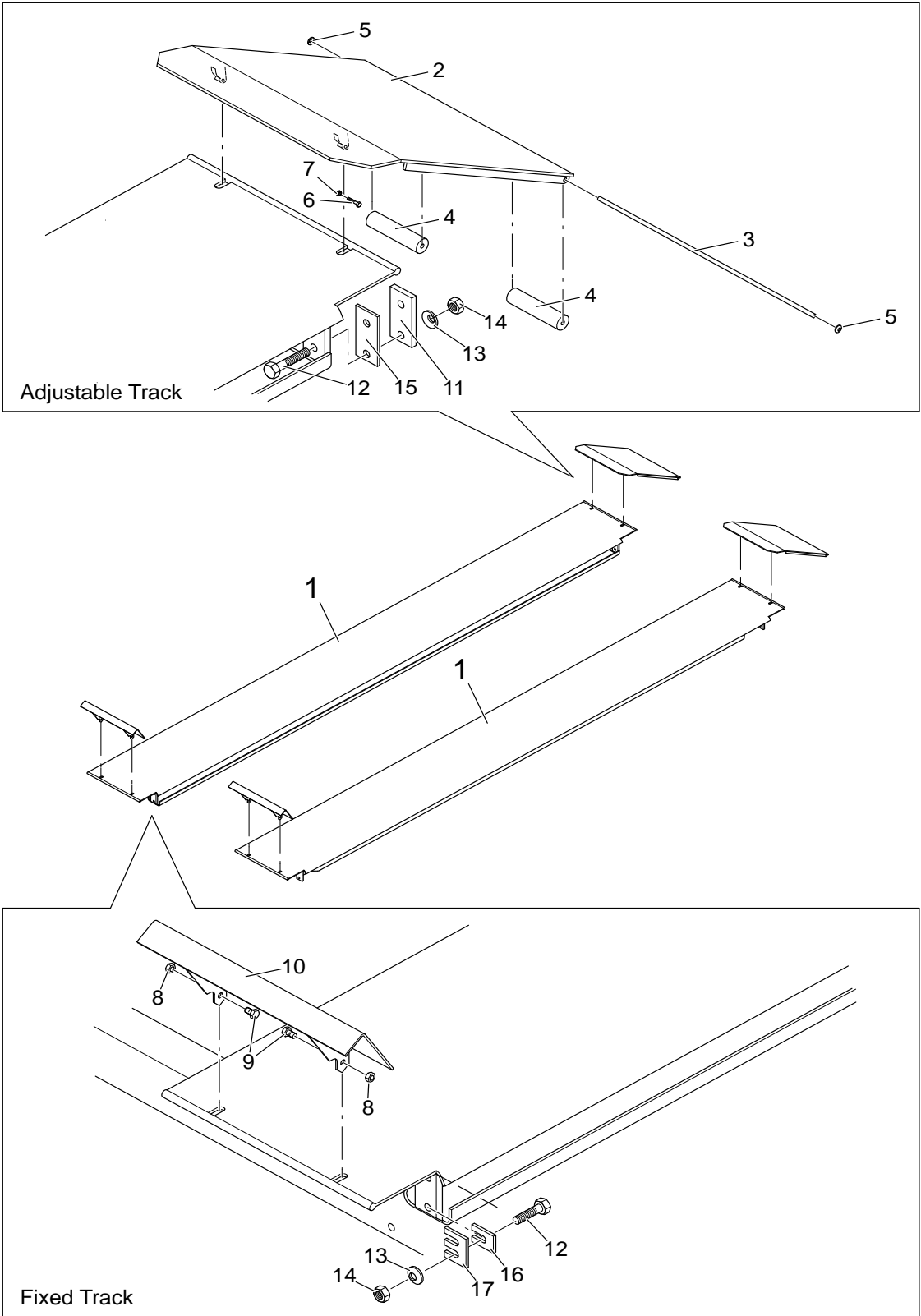


Figure 1.2 Tracks

Table 1.2 Tracks

Index	No.	Reference	Description	Remarks
1	2	43503050	Track 520-4450	ST4032/ST4040/ST4040-N/ ST4040-V
1	2	43063050	Track 520-4200	ST4032-S/ST4040-S
1	2	43513050	Track 520-4900	ST4040-L/ST4040-LV
1	2	43553050	Track 630-4450	ST4040-M/ST4040-VM
1	2	43593050	Track 630-4650	ST4040-MOT
1	2	43563050	Track 630-4900	ST4040-LM/ST4040-LVM
2	2	43504550	Drive on ramp 520 mm wide	ST4032/ST4032-S/ST4040/ ST4040-N/ST4040-V/ST4040-L/ ST4040LV/ST4040-S
2	2	43504910	Extended drive on ramp 520 mm wide	ST4032/ST4032-S/ST4040/ ST4040-N/ST4040-V/ST4040-L/ ST4040LV/ST4040-S
2	2	44504300	Drive on ramp 630 mm wide	ST4040-M/ST4040-MOT/ ST4040-LM/ST4040-LVM/ ST4040-VM
2	2	43554910	Extended drive on ramp 630 mm wide	ST4040-M/ST4040-MOT/ ST4040-LM/ST4040-LVM/ ST4040-VM
3	2	3617.58.02.00	Shaft 520 mm wide	ST4032/ST4032-S/ST4040/ ST4040-N/ST4040-V/ST4040-L/ ST4040LV/ST4040-S
3	2	3621.14.02.00	Shaft 630 mm wide	ST4040-M/ST4040-MOT/ ST4040-LM/ST4040-LVM/ ST4040-VM
4	4	3617.58.03.00	Roller	
5	4	1038.34.01.00	Circlip with cap 10 mm	
6	4	65003283	Bolt M6x12, 8.8 DIN933 GV	
7	4	1037.86.06.06	Self locking nut M6, 8 DIN985 GV	
8	4	65050134	Nut M10, 8 DIN934 GV	
9	4	65003405	Bolt M10x25, 8.8 DIN933 GV	
10	2	43504150	Stop plate 520 mm wide	ST4032/ST4032-S/ST4040/ ST4040-N/ST4040-V/ST4040-L/ ST4040LV/ST4040-S
10	2	43554150	Stop plate 630 mm wide	ST4040-M/ST4040-MOT/ ST4040-LM/ST4040-LVM/ ST4040-VM
11	4	43503061	Clamping plate	
12	16	65002450	Bolt M12x45, 8.8 DIN931 GV	
13	16	65058032	Spring ringM12, DIN127B GV	
14	16	65050136	Nut M12, 8 DIN934 GV	
15	4	43503060	Guide plate	
16	6	43500104	Filling plate	
17	10	43500105	Filling plate	

1.3 Cross beams

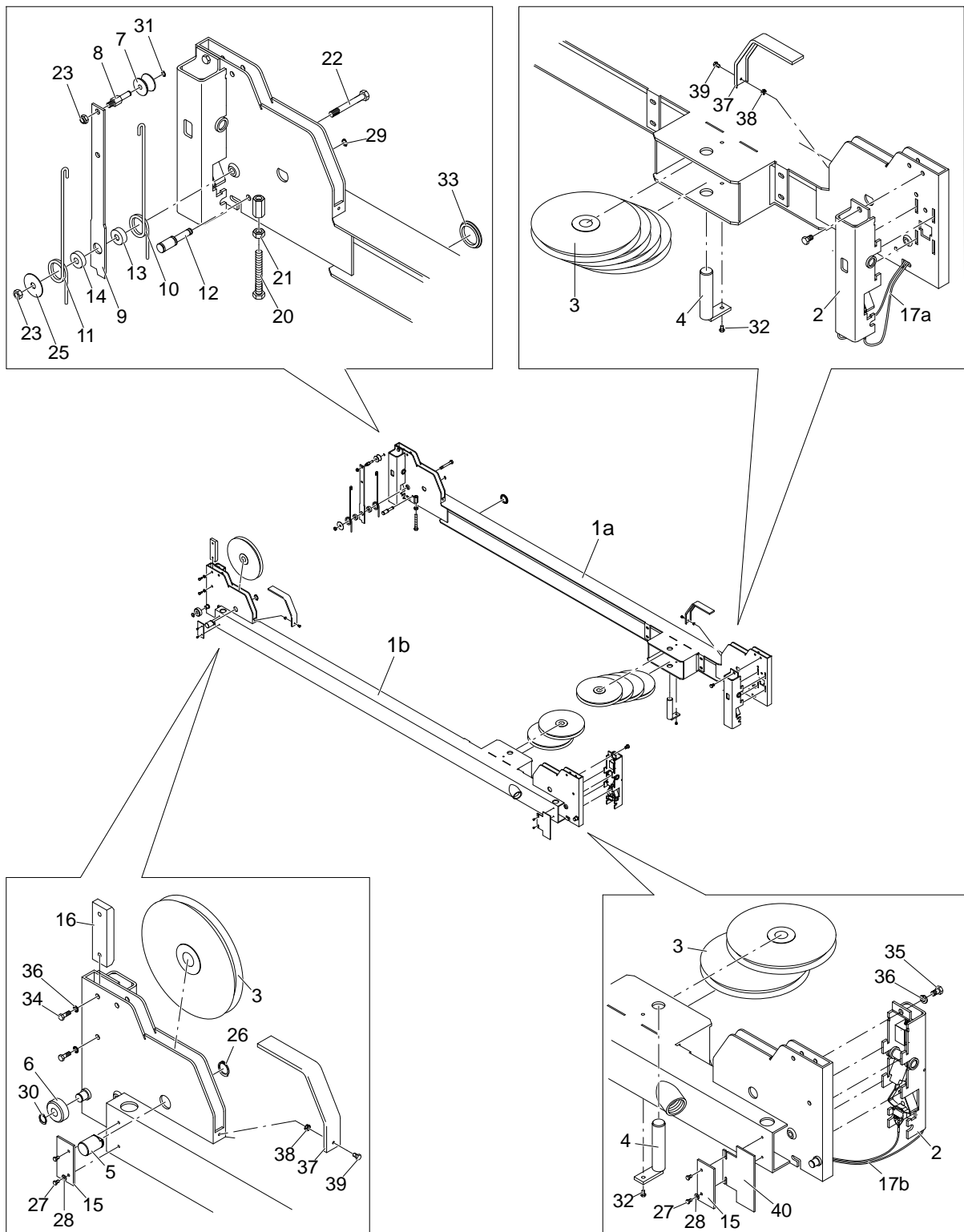


Figure 1.3 Cross beams

Table 1.3 Cross beams

Index	No.	Reference	Description	Remarks
1a	1	43002050	Cross beam 1-2 L=2700	ST4032/ST4032-S/ST4040-N
1a	1	43502050	Cross beam 1-2 L=3000	ST4040/ST4040-L/ST4040-M/ ST4040-LM/ST4040-MOT/ ST4040-S
1a	1	43522050	Cross beam 1-2 L=3300	ST4040-V/ST4040-LV/ST4040- VM/ST4040-LVM
1b	1	43002300	Cross beam 3-4 L=2700	ST4032/ST4032-S/ST4040-N
1b	1	43502300	Cross beam 3-4 L=3000	ST4040/ST4040-L/ST4040-M/ ST4040-LM/ST4040-MOT/ ST4040-S
1b	1	43522300	Cross beam 3-4 L=3300	ST4040-V/ST4040-LV/ST4040- VM/ST4040-LVM
2	4	43505400 See Figure 1.6	Slack cable / cable breakage safety device	
3	10	43506001	Pulley	
4	2	43506010	Shaft	
5	4	43506002	Shaft	
6	4	43502003	Roller	
7	4	43505005	Roller	
8	4	43505012	Shaft	
9	4	43505013	Lever	
10	4	43505007	Torsion spring right	
11	4	43505006	Torsion spring left	
12	4	43505008	Shaft	
13	4	43505009	Bush	
14	4	43505010	Bush	
15	10	43502002	Guide strip	
16	4	43502004	Guide block	
17a	1	43507107	Cable assy cross beam 1-2	
17b	1	43507106	Cable assy cross beam 3-4	
20	4	65003457	Bolt M12x80, 8.8 DIN933 GV	
21	4	65050136	Nut M12, 8 DIN934 GV	
22	4	65002419	Bolt M10x90, 8.8 DIN931 GV	
23	8	65051034	Self-locking nut M10, 8 DIN985 GV	
25	4	65055711	Washer M10x50	
26	4	1038.40.03.00	Retaining ring a30, DIN471 FF	
27	8	1036.30.06.16	Screw M6x16, uls-109 GV	
28	8	65055015	Washer M6, DIN125A GV	
29	4	65062028	Retaining ring No. 12, DIN6799 GV	
30	4	65062030	Retaining ring No. 15, DIN6799 FF	
31	4	65062024	Retaining ring No. 9, DIN6799 FF	
32	2	65025039	Bolt M8x12, 8.8 DIN7991 GV	
33	1	66201092	Plug GPN320 GL70, Black 021185 Emergo	
34	8	65025056	Bolt M10x25, 10.9 ISO7380 GV	
35	4	65003401	Bolt M10x16, 8.8 DIN933 GV	
36	12	65258228	Circlip M10, DIN6798A GV	
37	4	43502001	Wheel cover	
38	4	65052910	Special nut M5 cv-4825	
39	4	65034251	Screw M5x16, 4.8 DIN7985 GV	
40	1	43500102	Switching plate foot safety	

1.4 Post with operation devices

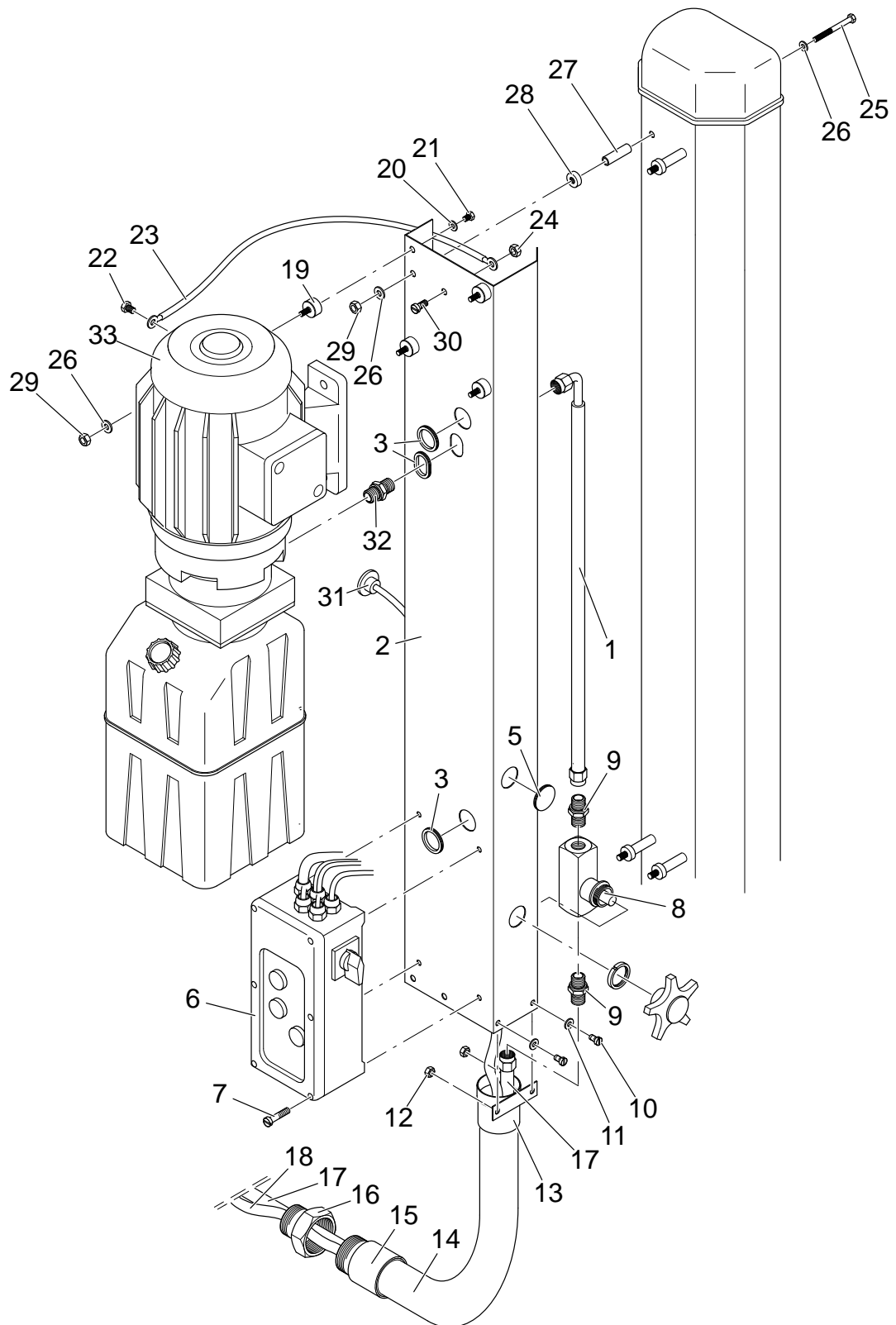


Figure 1.4 Post with operation devices

Table 1.4 Post with operation devices

Index	No.	Reference	Description	Remarks
	1	43507000	Operating panel assembly (400 V)	
	1	43507200	Operating panel assembly (230 V)	
	1	43507910	Operating panel assembly (1x230V)	Single phase
1	1	43506004	Hydr. hose, L=640	
2	1	43507001	Operating panel	
3	3	66201093	Side protection 387-6, L=125	
5	1	66201094	Plug	
6	1	Figure 1.11	Control box	
7	4	1039.64.02.80	Drive screw M4x16	
8	1	68900041	Tap FT-257-5-38-G-MP	
9	2	68700450	Coupling, GE 10-PSR	
10	2	65003287	Bolt M6x20, 8.8 DIN933 GV	
11	2	65055015	Washer M6, DIN125A GV	
12	2	65051028	Self-locking nut, 8 DIN985 GV	
13	1	1002.02.05.10	Hose swivel	
14	1	1002.02.04.08	Protective hose, L=1550	
15	1	1002.02.05.09	Hose swivel	
16	1	69061041	Reduction ring RED 48/36 M	
17	1	43506005	Hydr. hose, L=4500	
18	1	43507105	Extension cableSLK/KBR/ONT	
19	4	1009.19.00.75	Buffer	
20	4	65055018	Washer M8, DIN125A GV	
21	4	65003359	Bolt M8x12, 8.8 DIN933 GV	
22	1	1039.55.02.60	Screw M4x10, DIN7516A GV	
23	1	02335602	Earth cable	
24	1	65050126	Nut M5, 8 DIN934 GV	
25	4	65002374	Bolt M8x65, 8.8 DIN931 GV	
26	12	65055018	Washer M8, DIN125A GV	
27	4	66201089	Distance bush 8.2 - 18-40	
28	4	1037.96.00.80	Nut skiffy 73-8	
29	8	65051032	Self-locking nut M8, 8 DIN985 GV	
30	1	65034251	Screw M5x16, 4.8 DIN7985 GV	
31	1	69202008	Acoustic alarm	
32	1	68700451	Coupling, GE 10-PS/R 1/4	
33	1	See Figure 1.7	Pump unit	

1.5 Cylinder

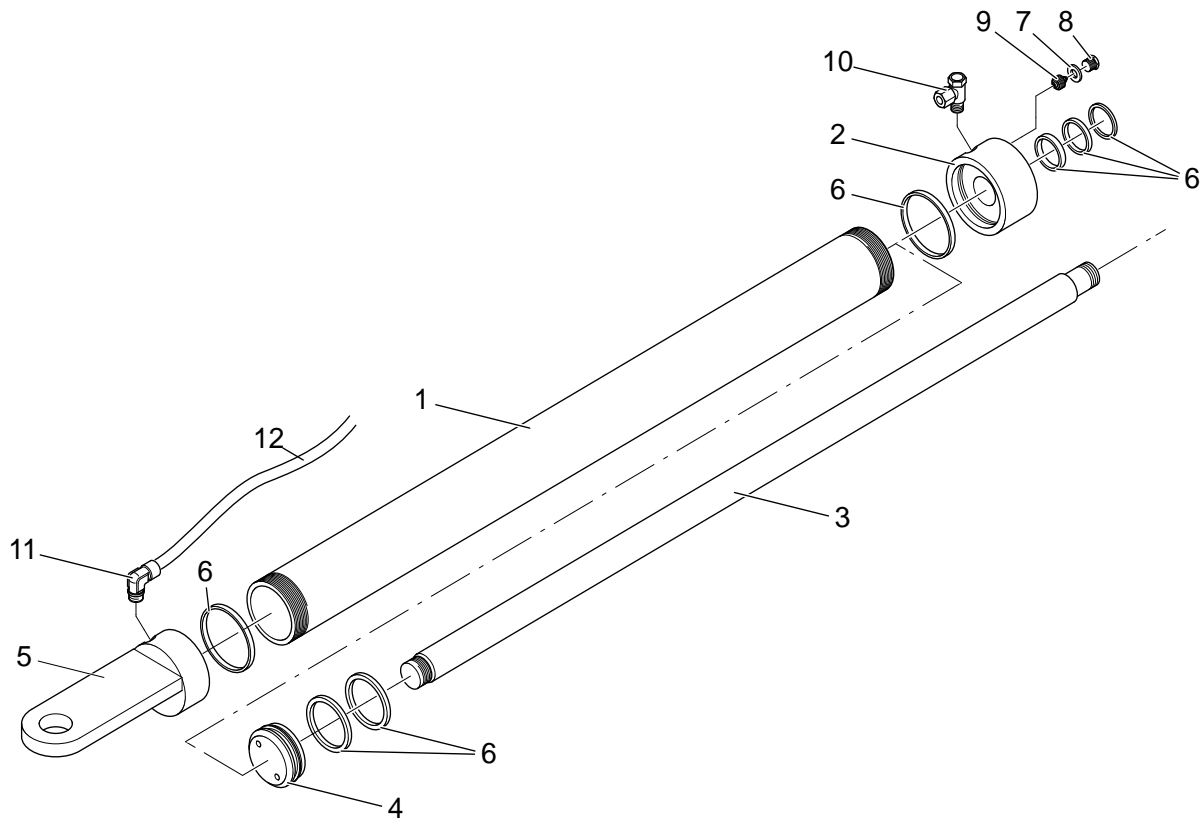


Figure 1.5 Cylinder

Table 1.5 Cylinder

Index	No.	Reference	Description	Remarks
		43006250	Cylinder assy, L=2173, Hub=1870	ST4032
		43066250	Cylinder assy, L=2048, Hub=1745	ST4032-S
		43506250	Cylinder assy, L=2173, Hub=1870	ST4040/ST4040-L/ST4040-M/ ST4040-LM/ST4040-MOT/ ST4040-N/ST4040-V/ST4040- LV/ST4040-LVM
		43547600	Cylinder assy, L=2048, Hub=1745	ST4040-S
1	1		Cylinder	
2	1		Cylinder head	
3	1		Piston rod	
4	1		Piston	
5	1		Cylinder attachment	
6	1	43006901	Seal kit	ST4032 all types
6	1	43506901	Seal kit	ST4040 all types
7	1		Sealing ring 13,7x20x1,5, usit	
8	1	68790019	Plug G1/4" bzk, DIN908	
9	1	68228000	Hose burst check valve vp-n-14	28 l/min, Tightening moment 2 Nm
10	1	68702213	Coupling, SWVE 10-PSR	
11	1	1003.95.17.08	Elbow, KIKI 8x1/8	
12	1	70900033	Air hose PU Naturel, Round 8-6 Length 2 mtr.	

1.6 Slack cable / Cable breakage safety device

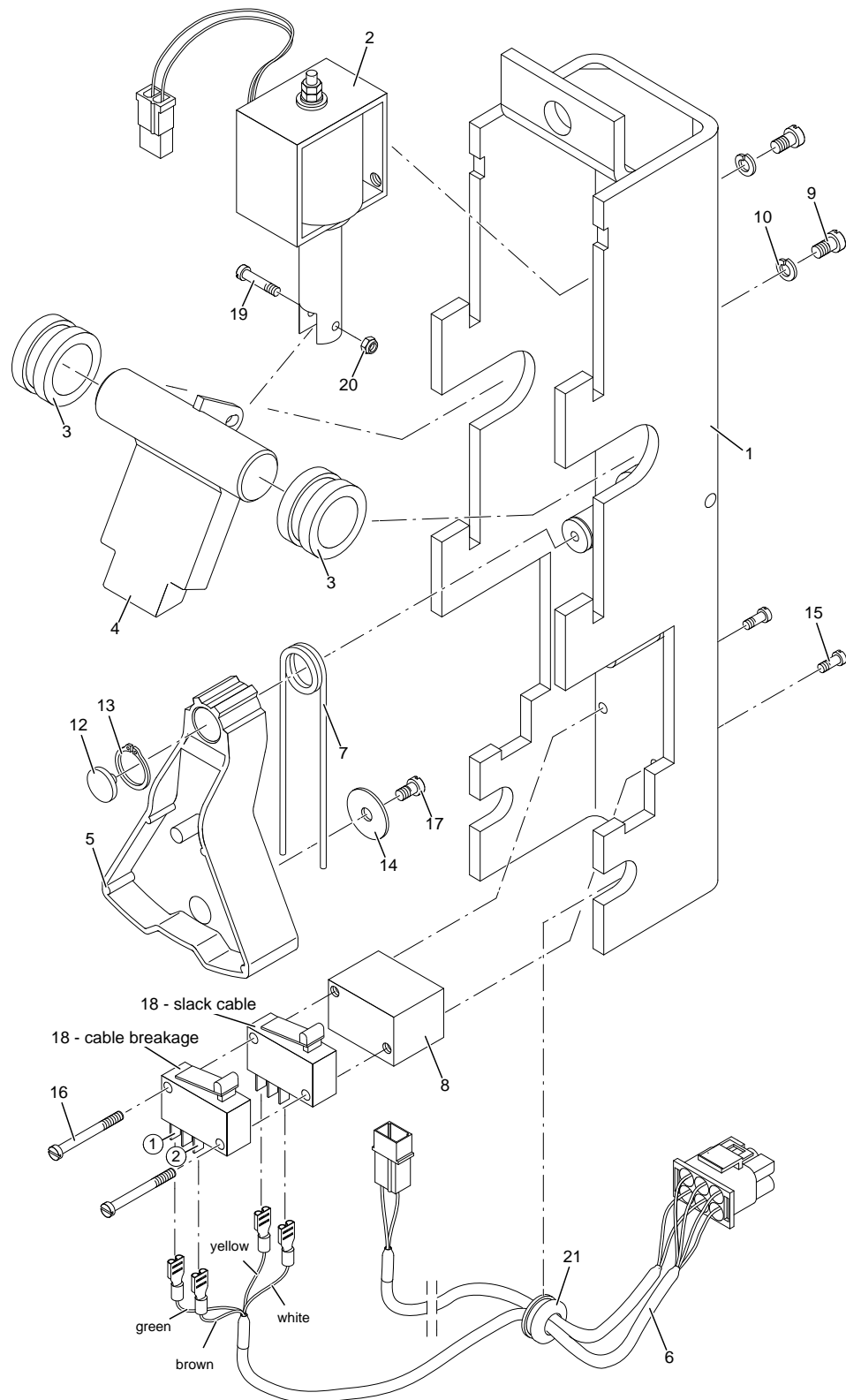


Figure 1.6 Cable safety device

Table 1.6 Cable safety device

Index	No.	Reference	Description	Remarks
		43505400	Console assembly	
1	4	43505450	Console	
2	4	69451420	Lifting magnet	
3	8	43505401	Bearing bush	
4	4	43505404	Pawl	
5	4	43505402	Toggle lever	
6	4	43507110	Cable assy	
7	4	43505403	Torsion spring	
8	4	43505408	Distance block	
9	8	65034219	Screw M4x10, 4.8 DIN7985 GV	
10	8	1038.27.00.43	Lock washer M4, DIN6798A GV	
11	8	66201052	Tyrap	
12	4	66201085	Protective cap	
13	4	1038.40.01.20	Retaining ring a12, DIN471 FF	
14	4	66201100	Insulating sheath	
15	8	1036.23.01.76	Screw M3x16, 4.8 DIN84 GV	
16	8	1036.23.01.83	Screw M3x30, 4.8 DIN84 GV	
17	4	65045018	Screw 3,9x9,5	
18	8	69175101	Safety switch	
19	4	65034224	Screw M4x20, 4.8 DIN7985 GV	
20	4	65051024	Self-locking nut M4, 8 DIN985 GV	
21	4	1002.22.01.35	Grommet	

1.7 Pump unit
(Oil system)

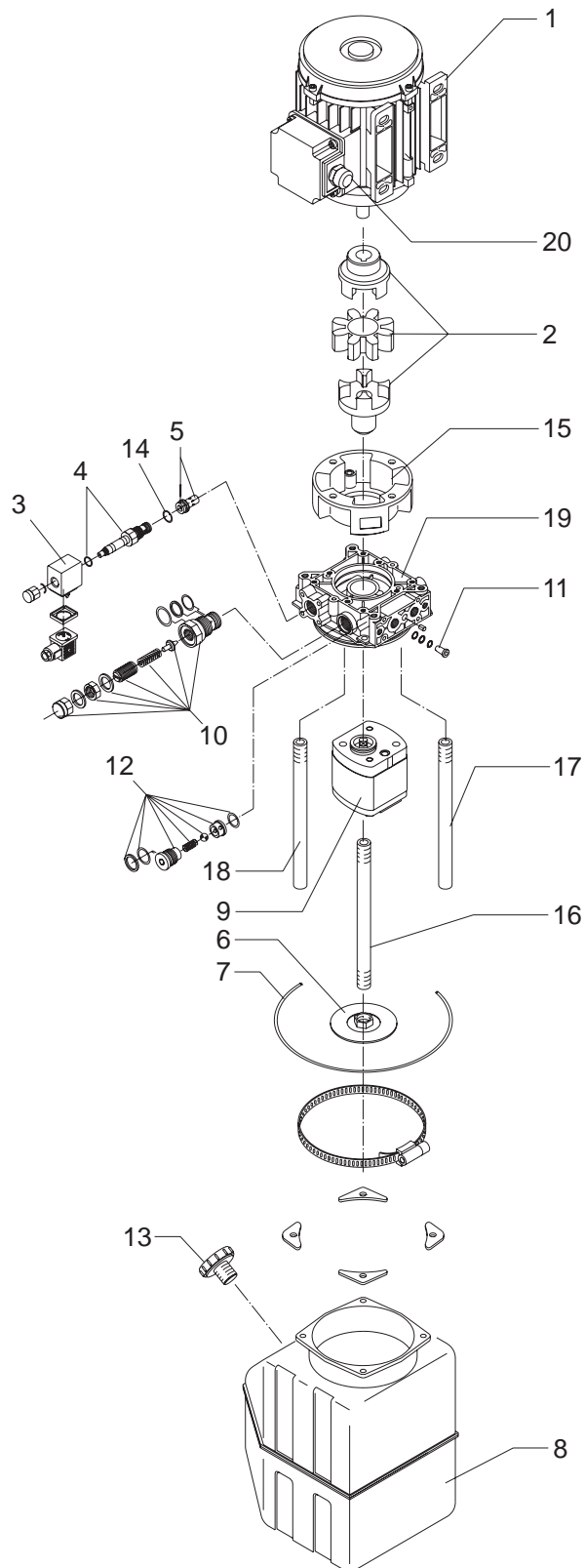


Figure 1.7 Pump unit

Table 1.7a Pump unit

Index	No.	Reference	Description	Remarks
		68040026	Hydr.unit 260 bar 230/400V 50Hz	
		68042026	Hydr.unit 260 bar 1x230V 50Hz	Single phase
		68040028	Hydr.unit 280 bar 230/400V 50Hz	ST 4040-LWA/LVWA
1	1	68049001	Electric motor 230/400V 50Hz, 3,6kW	
1	1	68049026	Electric motor 1x230V 50Hz 1,8kW, 1400 rpm	Single phase
2	1	68049003	Coupling	
3	1	68059015	Solenoid 24 Vcc	
4	1	68049014	2/2 bi-dir valve	Tightening moment 45 Nm
5	1	68049013	Flow control valve 9 ltr/min.	
6	1	68049008	Suction filter 90 micron	
7	1	68049011	O-ring 112 x 3	
8	1	68049021	Tank reservoir 8 liter	
9	1	68049006	Pump K1PS 5.0G 3,2cc	
10	1	68049016	Relief valve	Tightening moment 45 Nm
11	1	68049017	Retour filter 1/4"BSPP	
12	1	68049018	Check valve	Tightening moment 18 Nm
13	1	68049022	Breather cap	
14	1	68511160	O-ring 16,36 x 2,21 90° sh.	
15	1	68049002	Flange	
16	1	68049007	Suction pipe L=211	
17	1	68049009	Return pipe L=300	
18	1	68049010	Return pipe overflow	
19	1	68049012	Pump housing A8F	
20	1	1002.15.00.53	Gland Pg16, Wiska KVG 16	

Table 1.7b Pump unit (alternative Brevini/Hydr app)

Index	No.	Reference	Description	Remarks
		68040026-BR	Hydr.unit 260 bar 230/400V 50Hz	
		68040028-BR	Hydr.unit 280 bar 230/400V 50Hz	ST 4040-LWA/LVWA
1	1	32506110	Electric motor 230/400V 50Hz,	
3	1	68059015	Solenoid 24 Vcc	
4	1	68308005	2/2 bi-dir valve	
8	1	68039003	Tank reservoir 7 liter	
9	1	68029004	Pump 3,2cc	

1.8 Schematic diagram
380/415V - 220/240V

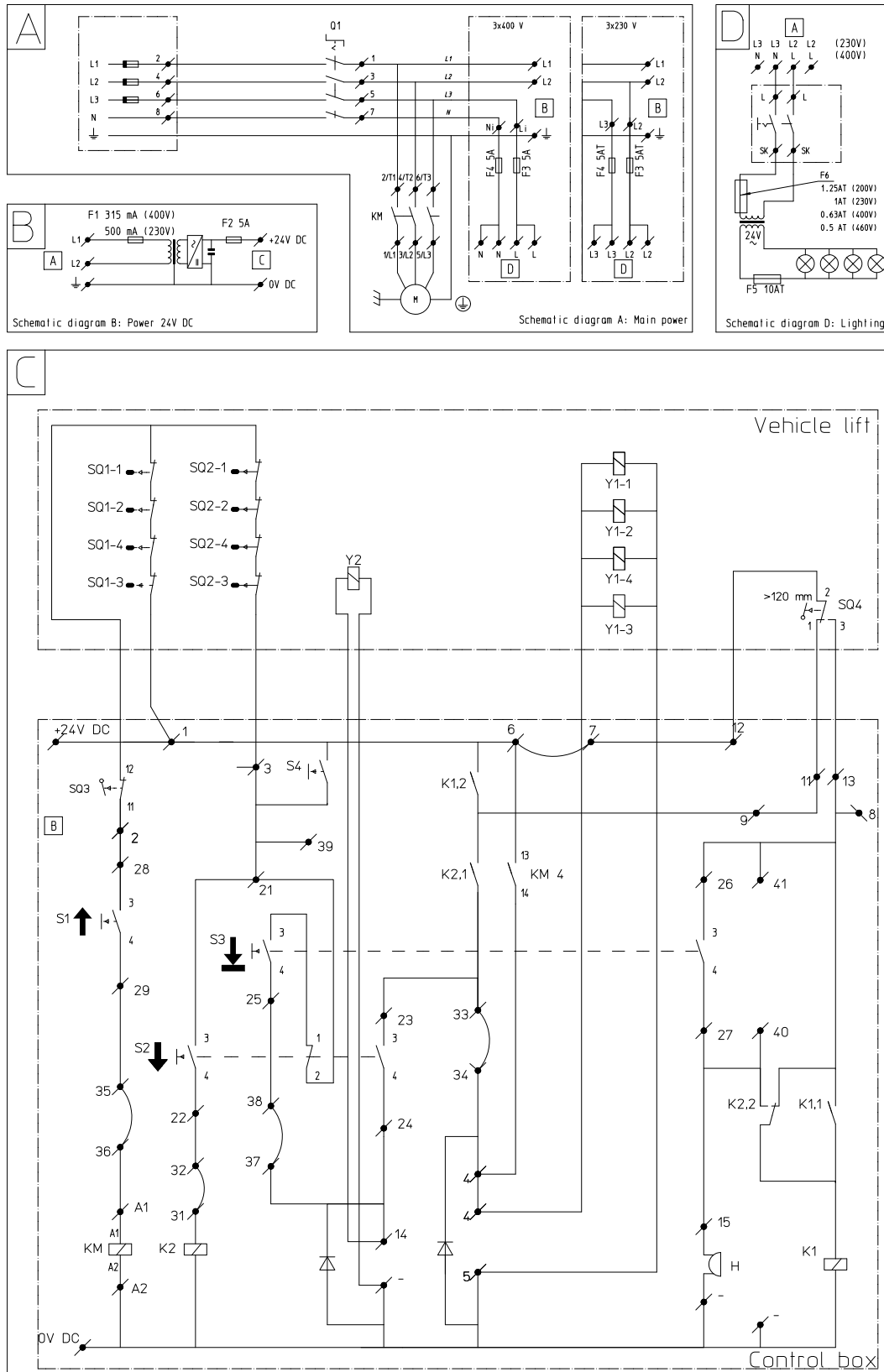


Figure 1.8 Schematic diagram

Table 1.8 Schematic diagram

Index	Description
Q	Main switch
M	El. motor
F	Fuse
SQ1	Cable break switch
SQ2	Slack cable switch
SQ3	End switch highest position
SQ4	End switch foot protection
S1	Switch raise
S2	Switch lower
S3	Switch lower by interlock
S4	Override switch
K1/K2	Relay
KM	Motor relay
Y1	Unlocking magnets
Y2	Lowering valve
H	Acoustic alarm

**Note**

For vehicle lifts with an optional freewheel system, refer to the schematic diagram in section 2.2 'Wheel free system" on page 30.

1.9 Wiring diagram

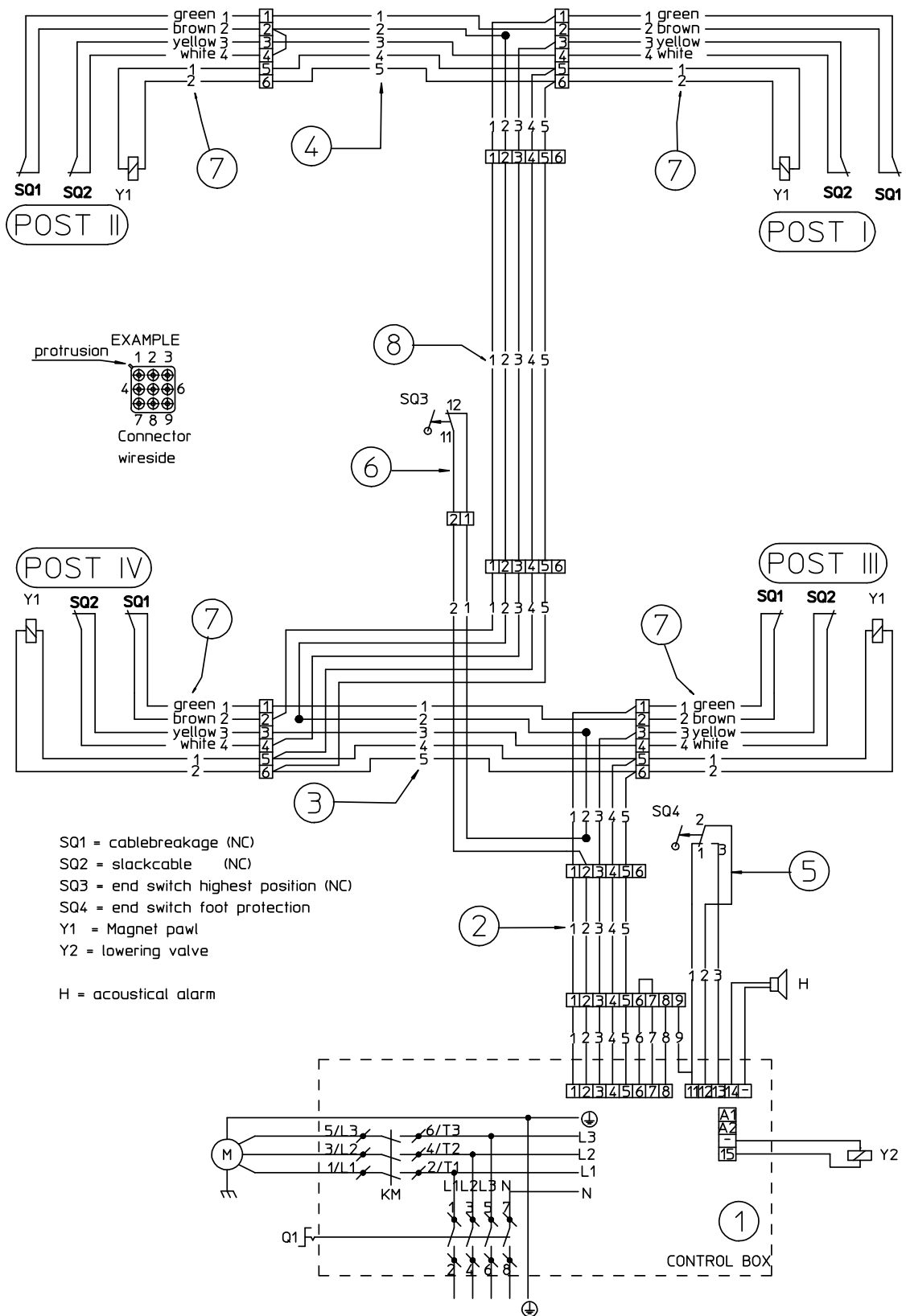


Figure 1.9 Wiring diagram

1.10 Electric cables

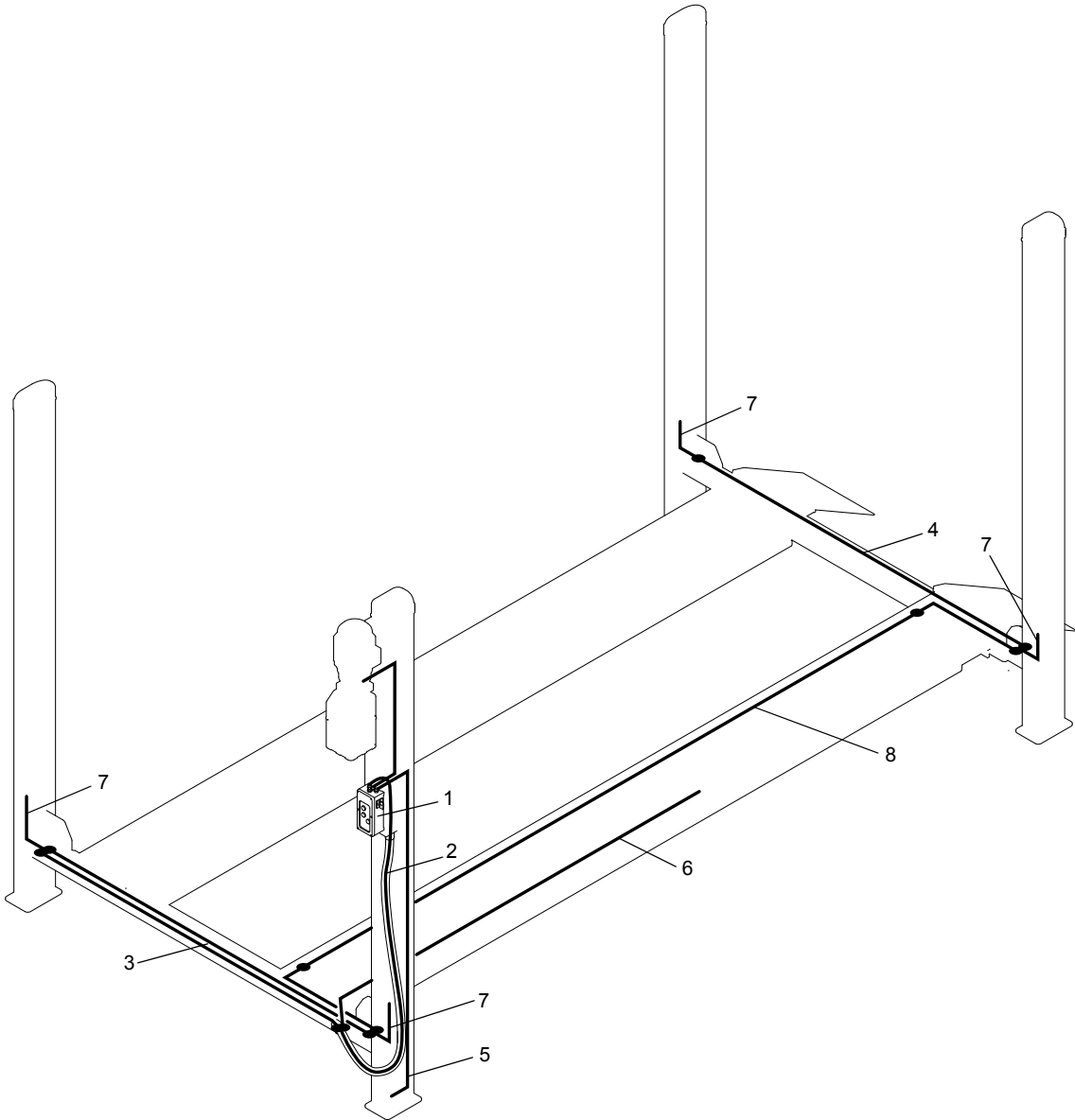


Figure 1.10 Electric cables

Table 1.10 Electric cables

Index	No.	Reference	Description	Remarks
1	1	43507100	Control box incl. cables	
2	1	43507105	Extension cable	
3	1	43507106	Cable tree cross beam 3-4	
4	1	43507107	Cable tree cross beam 1-2	
5	1	43507108	Switch foot protection (incl. cable)	
6	1	43507109	Switch highest position (incl. cable)	
7	4	43507110	Cable tree (slack-steel cable/steel cable breakage/locking pawl)	
8	1	43507111	Cable track	

1.11 Control box

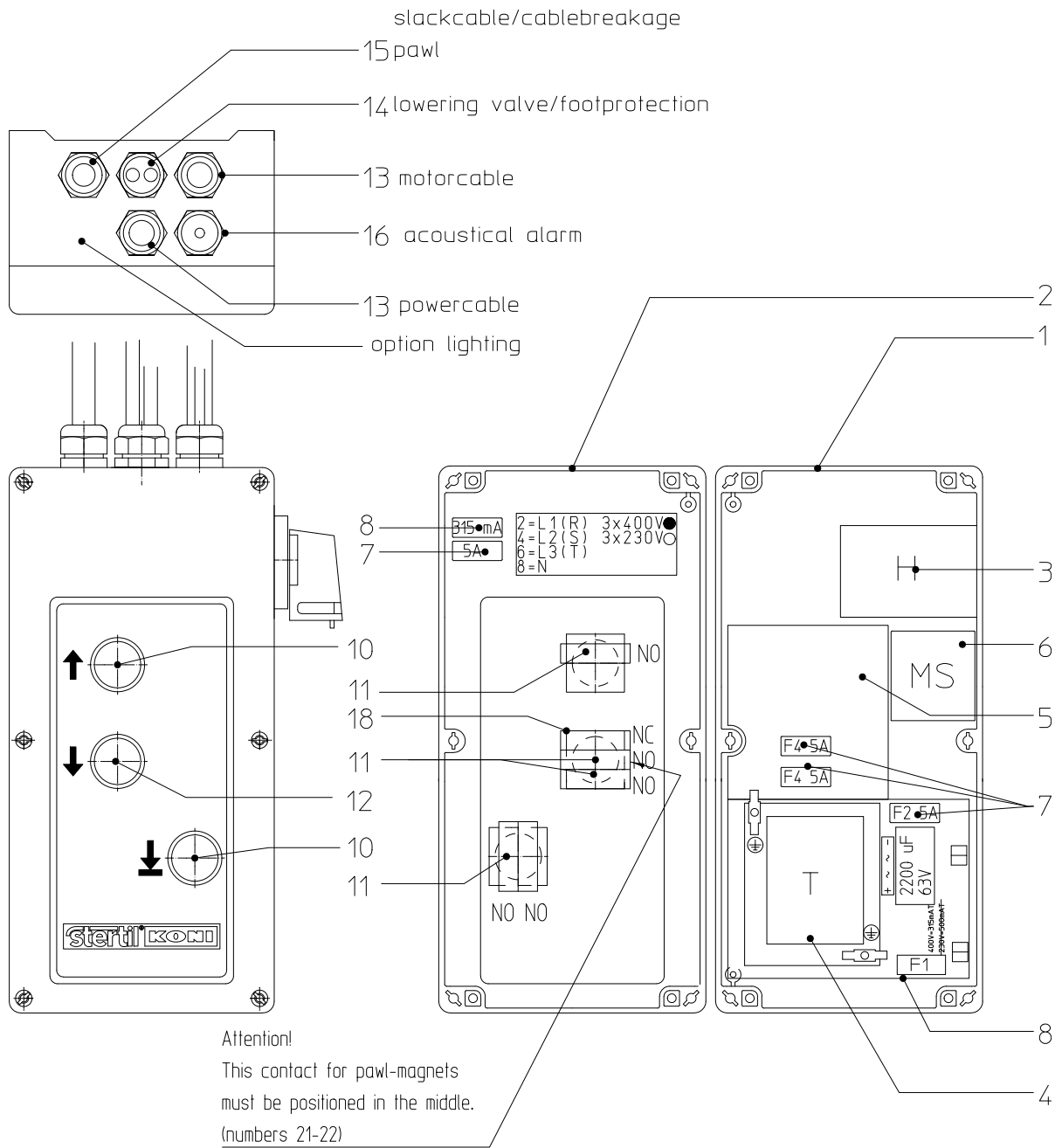


Figure 1.11 Control box

Table 1.11 Control box

Index	No.	Reference	Description	Remarks
		43507100	Control box 400V	
		43507300	Control box 230V	
1	1	3501.50.00.01	Bottom control box	
2	1	43507125	Cover control box, incl. sticker	
3	1	3501.50.90.02	Main switch, ASN AV4 ZM/Z20/F901 g/r	
4	1	69900075	Power board 400V, incl. components	400V control box
4	1	69900080	Power board 230V, incl. components	230V control box
5	1	69900070	Control board, incl. components	
6	1	69152006	Magnetic switch, 3RT 1017-1BB41 Siemens	
7	4	3501.50.90.08	Fuse 5A/slow, round 5x20	
8	2	69206005	Fuse 315mA/slow, round 5x20	400V control box
8	2	69206011	Fuse 500mA/slow	230V control box
10	2	69141039	Push button, Siemens 3SB3000-OAA11	
11	5	69141014	NO-contact, Siemens 3SB3400-OB	
12	1	69141040	Push button, 3SB3001-OAA..Z+3SB3901-OAC Siemens	
13	2	69062009	Rope swivel M20x1,5 22052u13 red Pflitsch	
14	1	69062050	Rope swivel M20x1,5 22052um2x6 Pflitsch	
15	1	69062008	Rope swivel M20x1,5 22052u11 green Pflitsch	
16	1	69062006	Rope swivel M20x1,5 22052u8 grey Pflitsch	
17	4	69062033	Connection nut M20x1,5 1420/220 Pflitsch	
18	1	69141041	NC-contact Siemens 3SB3400-OC	

1.12 Stickers

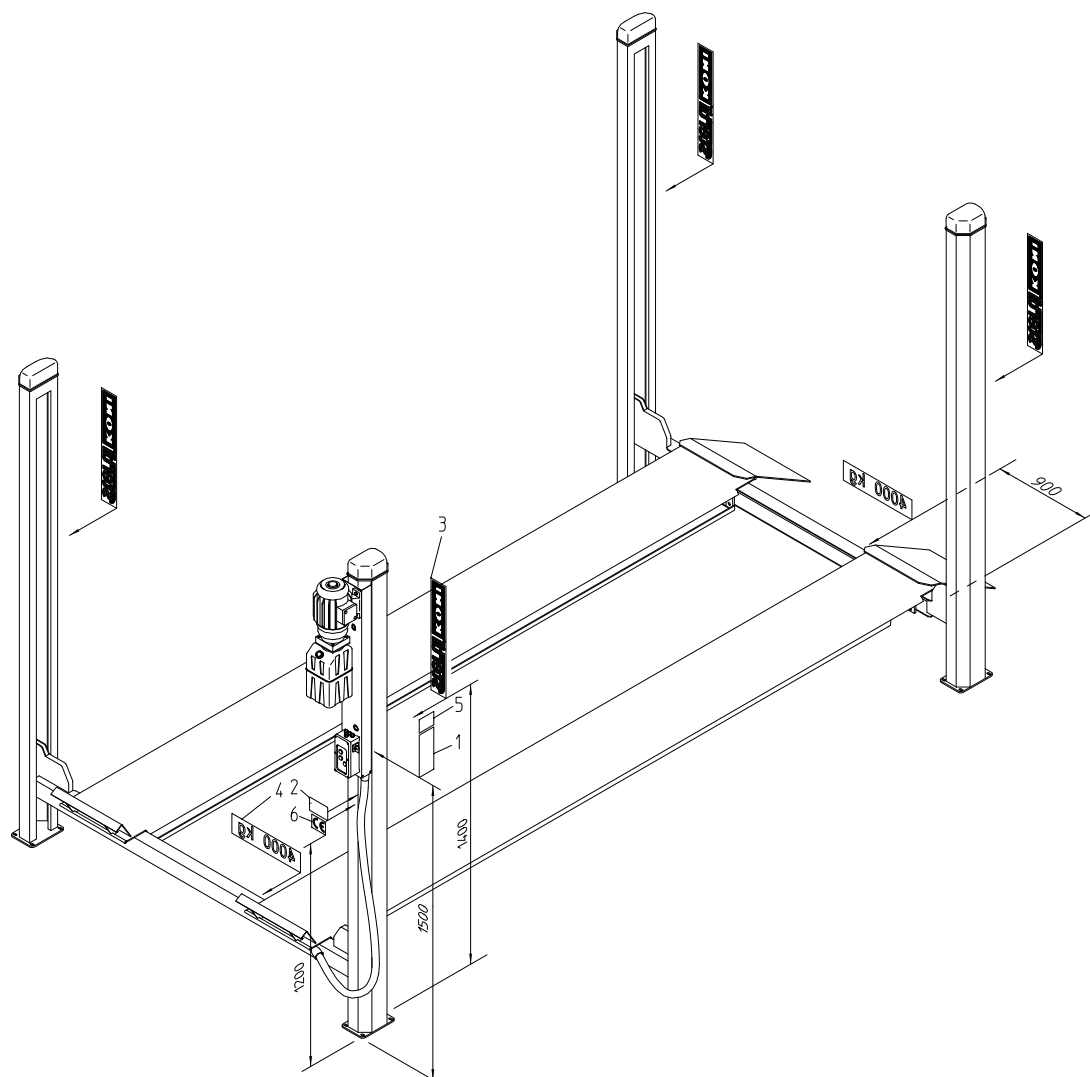


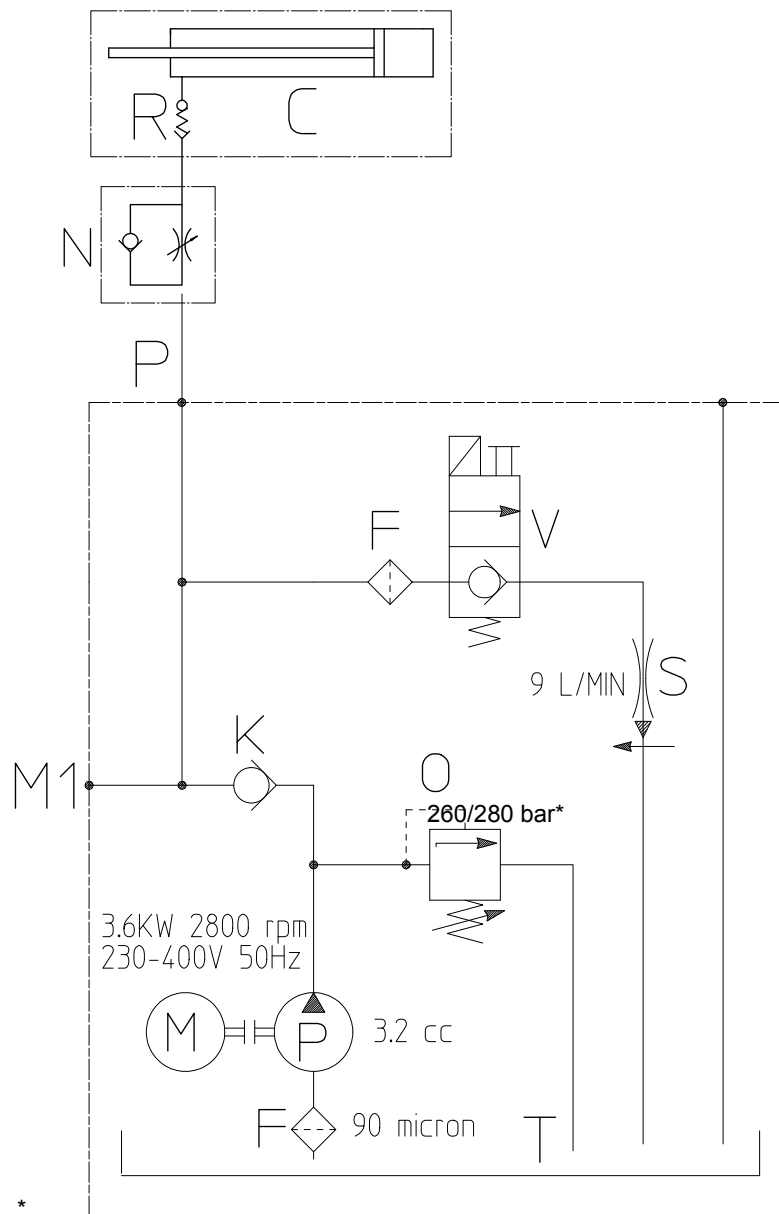
Figure 1.12 Stickers

Table 1.12 Stickers

Index	No.	Reference	Description	Remarks
1	1	60700179	Operation sticker - English	
1	1	60700180	Operation sticker - German	
1	1	60700181	Operation sticker - French	
1	1	60700182	Operation sticker - Swedish	
1	1	60700178	Operation sticker - Dutch	
2	1	1005-01-01-92	Identification plate	
3	4	60-700-053	Stertil / Koni sticker	
4	2	60700185	Capacity sticker 3200 kg	ST 4032
4	2	60700186	Capacity sticker 4000 kg	ST 4040
5	1	1005-01-01-67	Service sticker	
6	1	60-700-006	CE sticker	

1.13 Hydraulic scheme

- C. Cylinder
- V. 2/2 valve
- S. Orifice
- O. Safety pressure valve
- F. Filter
- K. Non-return valve
- P. Pump
- M. Motor
- T. Tank
- R. Hose burst check valve
- N. Needle valve
- M1. Measuring point



*
260 bar standard adjustment
280 bar for ST 4040-LWA and LVWA

Figure 1.13 Hydraulic scheme



Note

For vehicle lifts with an optional freewheel system, refer to the hydraulic scheme in section 2.2 'Wheel free system' on page 30.

1.14 Dimensions

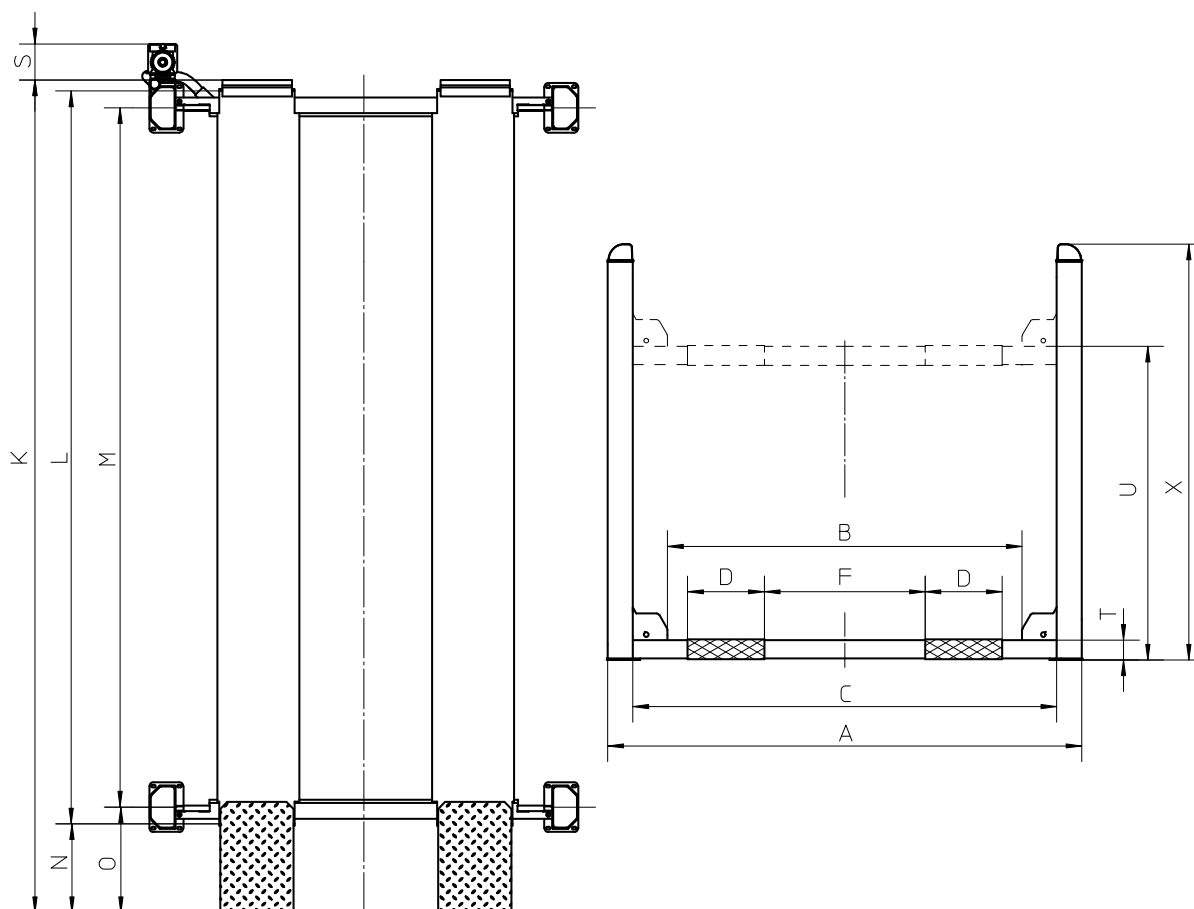


Figure 1.14 Dimensions

Table 1.14 Dimensions

Model	A	B	C	D	F-max	K	L	M	N	O	S	T	U	X
ST4032	2730	1955	2400	520	870	5470	4665	4450	730	840	300	130	2000	2650
ST4032-S	2730	1955	2400	520	870	5220	4415	4200	730	840	300	130	1875	2650
ST4040	3030	2255	2700	520	1100	5470	4665	4450	730	840	300	130	2000	2650
ST4040-S	3030	2255	2700	520	1100	5220	4415	4200	730	840	300	130	1875	2650
ST4040-N	2730	1955	2400	520	870	5470	4665	4450	730	840	300	130	2000	2650
ST4040-M	3030	2255	2700	630	925	5470	4665	4450	730	840	300	130	2000	2650
ST4040-MOT	3030	2255	2700	630	925	5670	4865	4650	730	840	300	130	2000	2650
ST4040-V	3330	2555	3000	520	1250	5470	4665	4450	730	840	300	130	2000	2650
ST4040-VM	3330	2555	3000	630	1075	5470	4665	4450	730	840	300	130	2000	2650
ST4040-L	3030	2255	2700	520	1100	5920	5115	4900	730	840	300	130	2000	2650
ST4040-LV	3330	2555	3000	520	1250	5920	5115	4900	730	840	300	130	2000	2650
ST4040-LM	3030	2255	2700	630	925	5920	5115	4900	730	840	300	130	2000	2650
ST4040-LVM	3330	2555	3000	630	1075	5920	5115	4900	730	840	300	130	2000	2650

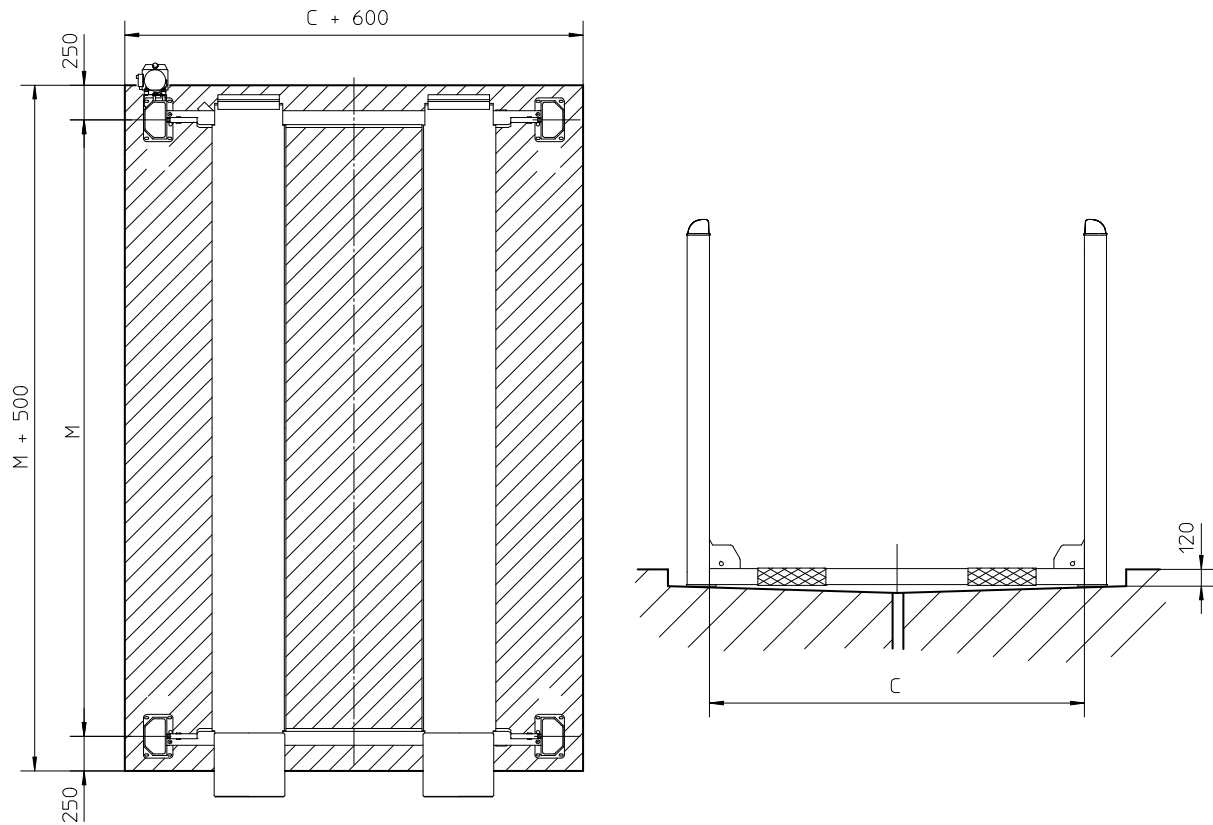


Figure 1.15 Dimensions pit

2

List of parts - Variants and options

The following sections will give an overview of the main assemblies of the variants and options of the Hydraulic vehicle lift ST 4032 / ST 4040, and their components:

[2.1 'Lighting' on page 28,](#)

[2.2 'Wheel free system' on page 30,](#)

[2.3 'Wheel alignment' on page 40.](#)

2.1 Lighting

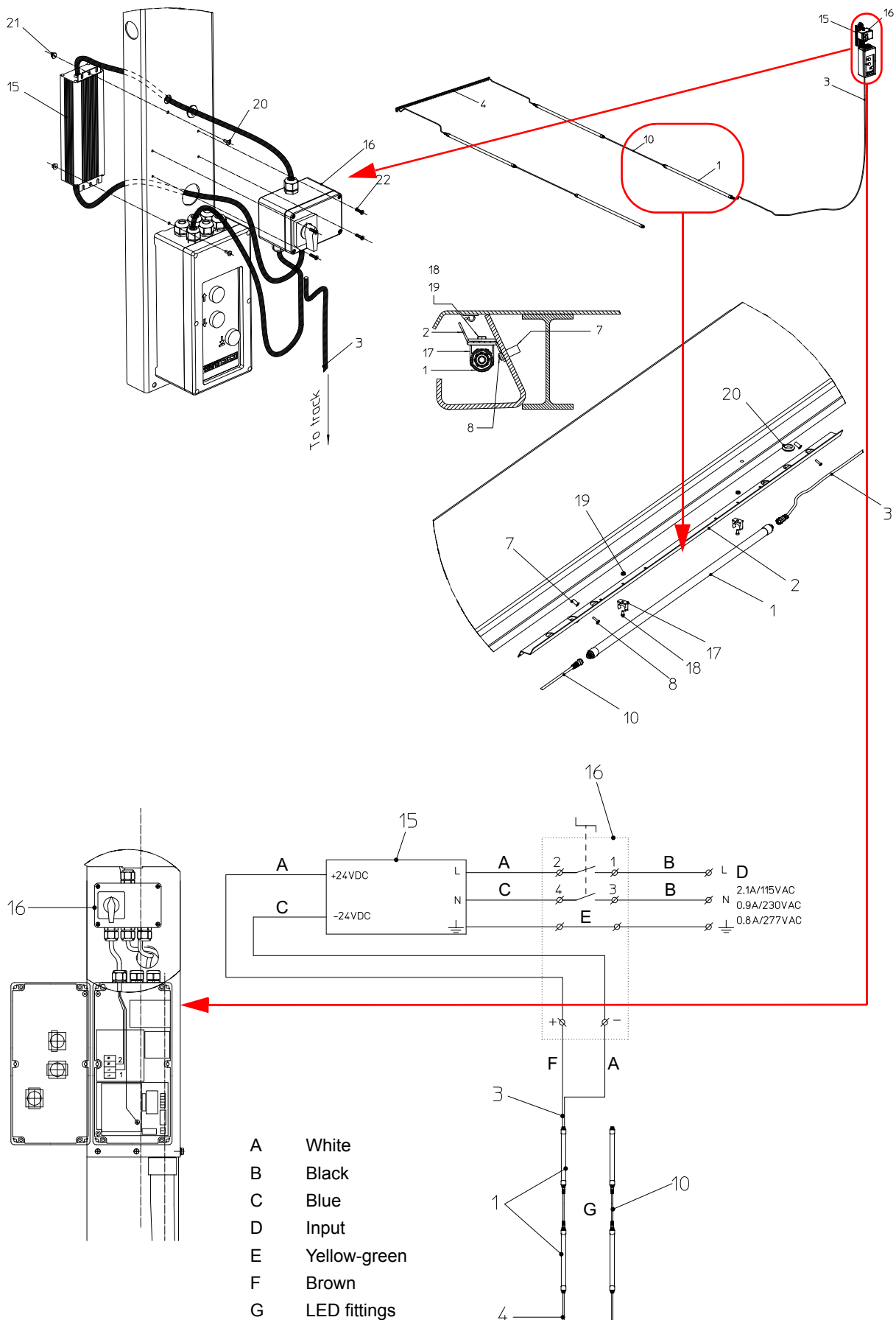


Figure 2.1.1 Lighting

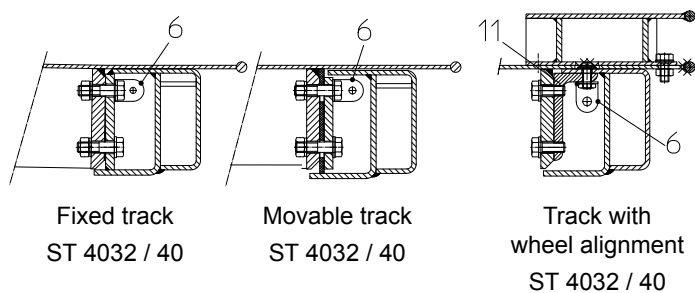


Figure 2.1.2 Lighting

Table 2.1 Lighting

Index	No.	Reference	Description	Remarks
1		43509600	LED Lighting set 24V	4 LED fittings
1	4	69700150	LED-armature	
2	4	43509601	Cable tray	
3	1	43509610	Cable Control box - track	
4	1	43509625	Coiled cable	
5	1	43509505	Guide rod	
6	1	43509507	Bracket	
7	8	65099053	Insert nut M5	
8	8	65034253	Screw M5x20	
9	2	66201106	Cable strain relief	
10	2	69700160	Interconnection cable	
11	1		Hexagon thin nut M10	
12	1		Hexagon headscrew M12x40	
13	1		Hexagon thin nut M12	
15	1	69500204	24 V power supply	
16	1	43509615	Control box lighting	
17	8	66201169	Pipe clamp	
18	8	65025148	Screw M6x12	
19	8	65052926	Nut M6	
20	8	1002.22.01.36	Grommet	

2.2 Wheel free system

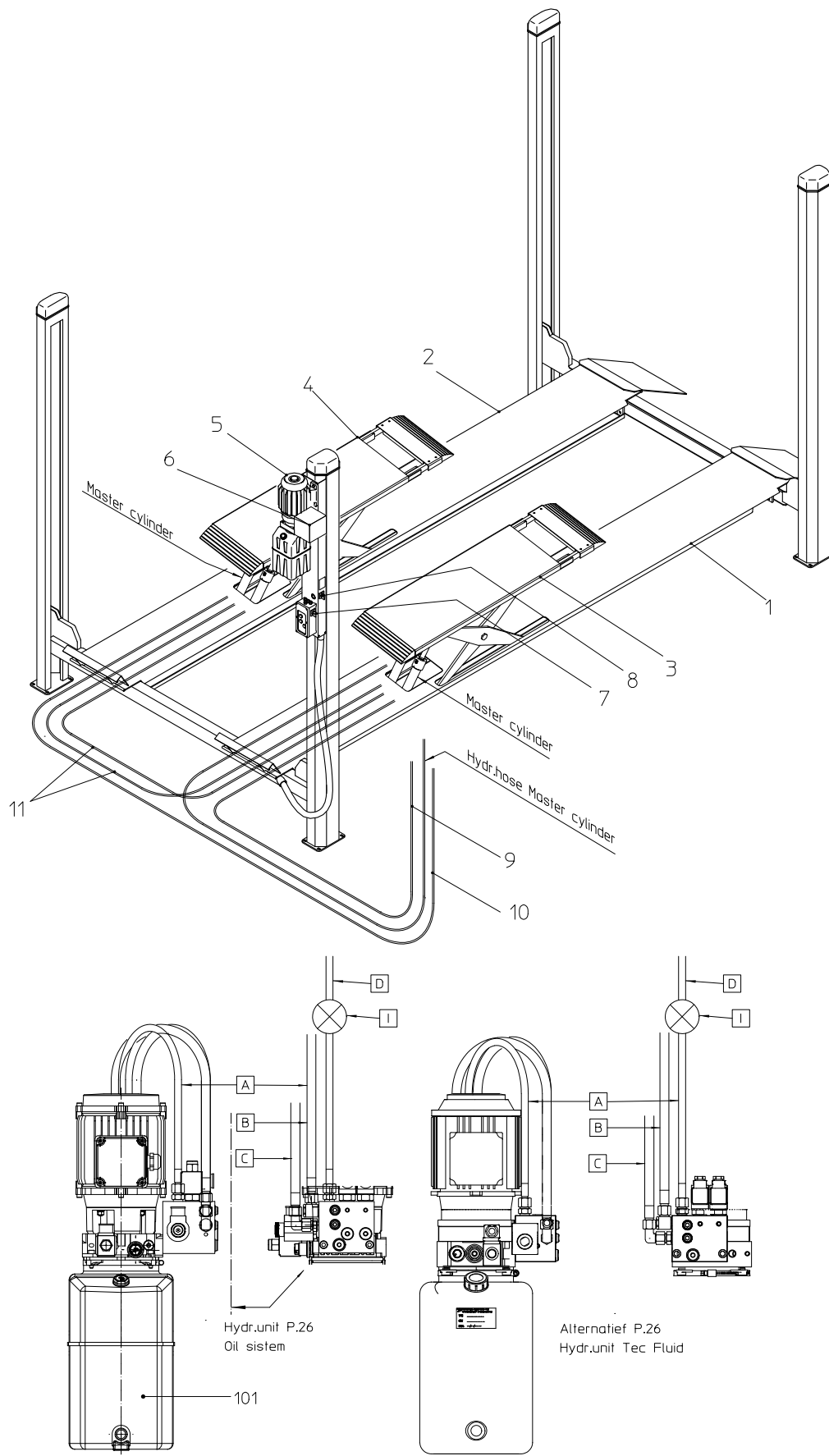
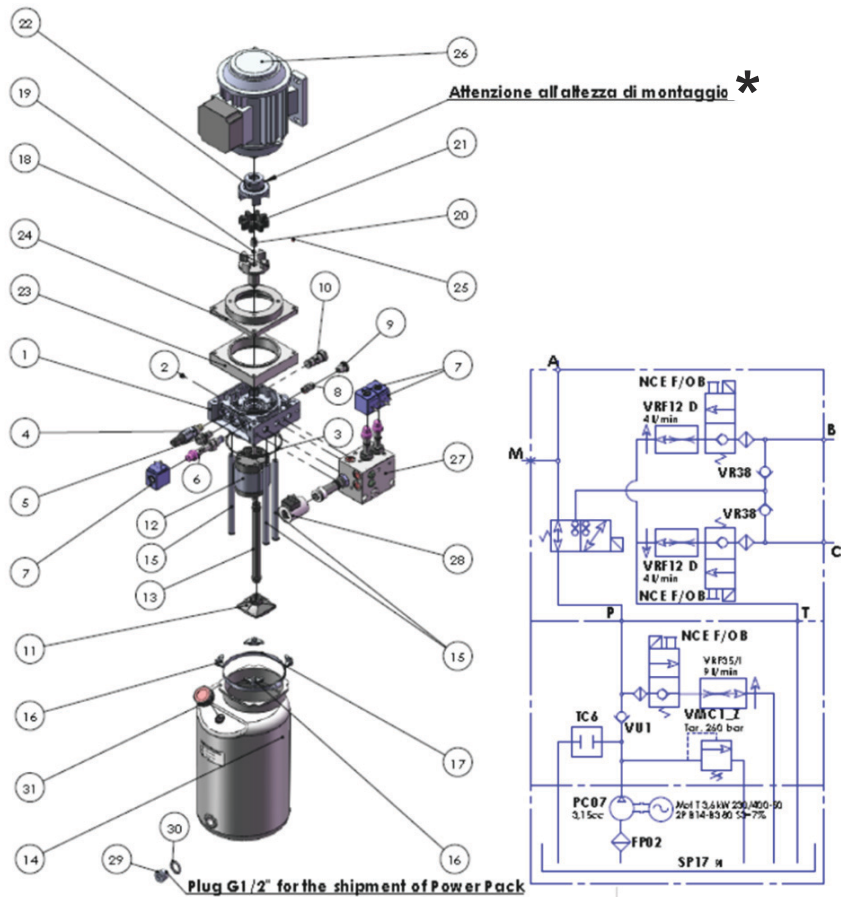


Figure 2.2.1 Wheel free system (1)

Table 2.2.1 Wheel free system (1)

Index	No.	Reference	Description	Remarks
1	1	43163050	Track 520-4200 fixed	ST4032F-S
1	1	43603050	Track 520-4450 fixed	ST4040F
1	1	43613050	Track 520-4900 fixed	ST4040F-L
1	1	43653050	Track 630-4450 fixed	ST4040F-M
1	1	43663050	Track 630-4900 fixed	ST4040F-LM
1	1	43693050	Track 630-4650 fixed	ST4040F-MOT
2	1	43163100	Track 520-4200 adjustable	ST4032F-S
2	1	43603100	Track 520-4450 adjustable	ST4040F
2	1	43613100	Track 520-4900 adjustable	ST4040F-L
2	1	43653100	Track 630-4450 adjustable	ST4040F-M
2	1	43663100	Track 630-4900 adjustable	ST4040F-LM
2	1	43693100	Track 630-4650 adjustable	ST4040F-MOT
3	1	43603000 See Figure 2.2.3	Wheel free system assembly	Fixed track
4	1	43603500 See Figure 2.2.3	Wheel free system assembly	Adjustable track
5	1	68040726	Hydraulic unit 260 bar wv 230/400/50/3,2/9/8	Oil system / Bosch Rexroth
5	1	68040728	Hydraulic unit 280 bar wv 230/400/50/3,2/9/8	ST 4040F-LWA / LVWA Oil system / Bosch Rexroth
6	1	68049032	Valve block	
7	1	43607000	Control panel assembly	Wheel free system
8	1	43607010	Selection switch incl. cables	Wheel free system
9	1	43606120	Hydraulic hose L=5050 WVS	Hydraulic unit - fixed track
10	1	43606110	Hydraulic hose L=6500 WVS	Hydraulic unit - adjustable track
11	2	43606100	Hydraulic hose L=4450 WVS	Mastercylinder - slavecylinder
12	2	68049030	2/2 bi-dir valve	Tightening 45 Nm
13	2	68059015	Solenoid 24 Vcc	
14	1	68049031	3/2 bi-dir valve	Tightening 45 Nm
15	1	68049029	Solenoid 24 Vcc	

For the continuation of wheel free system see [Figure 2.2.3 on page 2-34](#).



* Pay attention to the mounting height

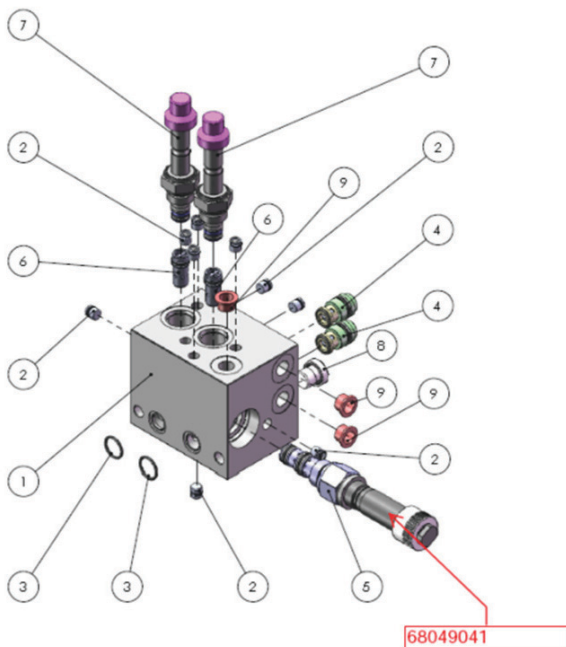


Figure 2.2.2 Hydraulic unit alternative Tecfluid

Table 2.2.2 Hydraulic unit alternative Tecfluid

Index	No.	Reference	Description	Remarks
	1	68040726-TF	Hydr. unit 260 bar WV 230/400/50/3.15/9/9	ST 4040F-WA
	1	68040728-TF	Hydr. unit 280 bar WV 230/400/50/3.15/9/9	ST 4040F-LWA / LVWA
4	1	68049016-TF	Relief valve VMC1	
5	1	68049018-TF	Non return valve VU1	
6	3	68059035-TF	2/2 valve VE6-NC-EM	
7	3	68059015-TF	Solenoid 24Vdc 18W N-H13	
12	1	68049006-TF	Hydr. pump 3.15 cc-S-131 SX	
26	1	68049028	El.motor 230/400 V 50 Hz 3.6 kW	
27	1	68049040-TF	Valve block Wheel free system	
28	1	68049029-TF	Solenoid 24Vdc-36W CT-9800	
Valve block Tecfluid				
5	1	68049041	Ventiel V32/8 DT	
6	2	68059018-TF	Pr. comp. flow regulator 4 l/min	
7	2	68059035-TF	2/2 valve VE6-NC-EM	

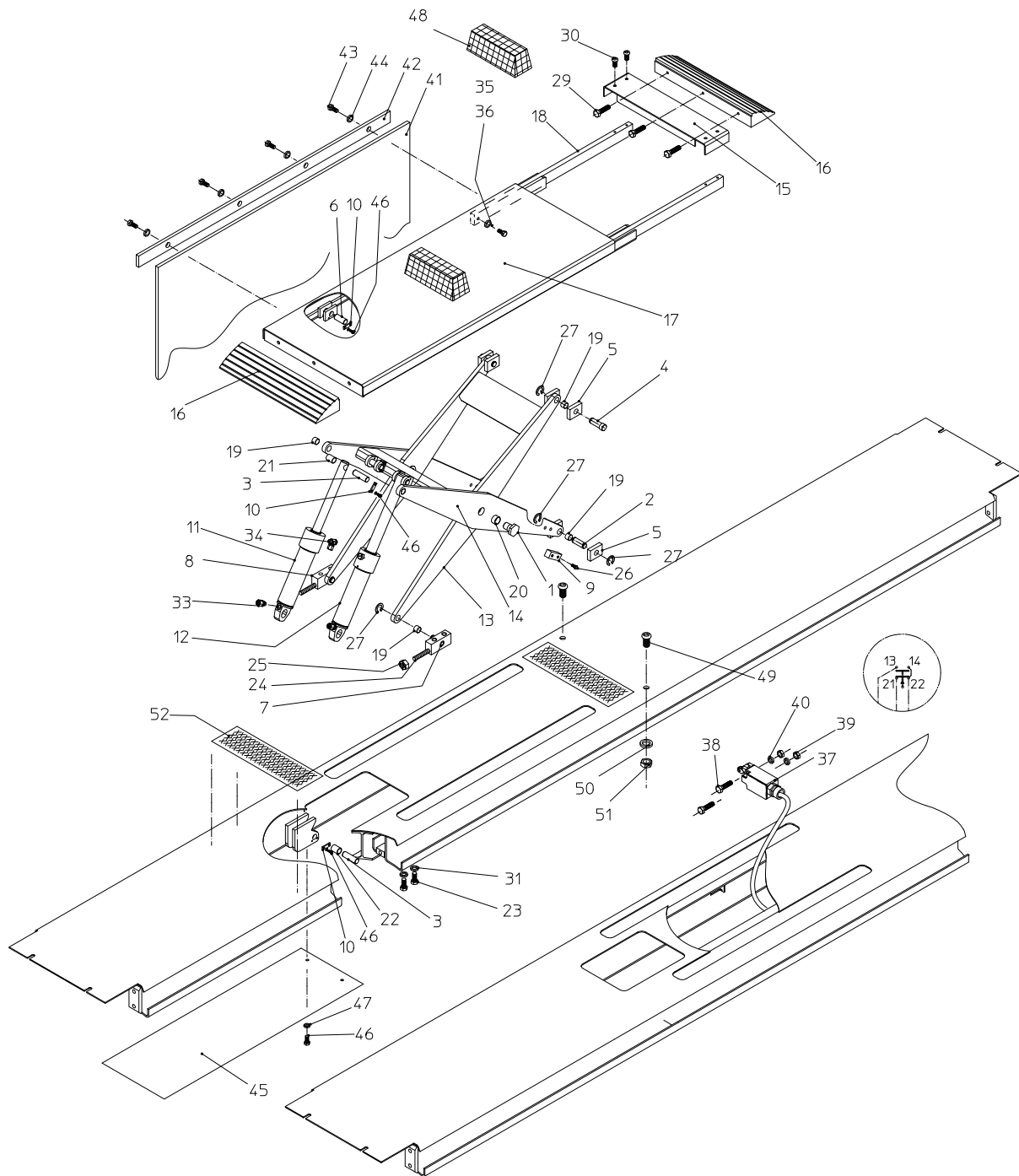


Figure 2.2.3 Wheel free system (2)

Table 2.2.3 Wheel free system (2)

Index	No.	Reference	Description	Remarks
1	4	43603001	Shoulder bolt	
2	4	43603002	Shaft sliding blocks (bottom)	
3	8	43603003	Cylinder dowel	
4	4	43603004	Shaft sliding blocks (top)	
5	16	43603005	Sliding block	
6	4	43603006	Dowel lifting tong (top)	
7	2	43603150	Hinge block (right)	
8	2	43603200	Hinge block (left)	
9	4	43603007	Sliding block (bottom)	
10	12	43603008	Locking plate	
11	2	43606000	Master cylinder	
12	2	43606250	Slave cylinder	
13	2	43603250	Lifting tong	
14	2	43603300	Lifting tong cylinder	
15	2	43603375	Nesting plate	
16	4	43603352	Ramp	
17	2	43603400	Cover plate	
18	4	43603351	Guide	
19	16	66103914	Bearing bush GSM-2022-15 Igus	
20	4	66103913	Bearing bush GSM-2630-16 Igus	
21	4	66103915	Bearing bush GSM-2022-30 Igus	
22	4	43603009	Slide bearing 202425 SKF	
23	8	65003530	Bolt M16x40 8.8 DIN933 GV	
24	4	43603010	Stud M12x90 8.8 GV	
25	4	65051036	Self locking nut M12 8 DIN985 GV	
26	8	65002368	Bolt M8x35 8.8 DIN931 GV	
27	16	65762030	Retaining ring no.15 DIN6799	
29	12	65003409	Bolt M10x40 8.8 DIN933 GV	
30	8	65025002	Bolt M8x20 8.8 ISO7380 GV	
31	8	65055024	Washer M16 DIN125A GV	
33	4	68700448	Insert joint GE 8-PSR	
34	2	68702212	Universal joint SWVE 8-PSR	
35	4	65025097	Bolt M8x12 12.9 DIN912 GV	
36	4	65070024	Spring ring M8 DIN7980 GV	
37	1	43607011	End switch	
38	2	65012224	Screw M4x30 8.8 DIN912 GV	
39	2	65050124	Nut M4 8 DIN934 GV	
40	2	65055013	Washer M4 DIN125A GV	
41	2	43603014	Curtain	
42	2	43603013	Strip	
43	8	1036.30.06.16	Screw M6x16	
44	8	65055015	Washer M6	
45	2	43600101	Cover	
46	28	65025081	Screw M6x8	
47	4	65055015	Washer M6	
48	4	66201034	Lift block	
49	4	65012401	Bolt M10x16 8.8 DIN912	
50	4	65055019	Washer M10	
51	4	65050134	Nut M10 8 DIN934	
52	4	66701105	Anti-slip plate 500x120	

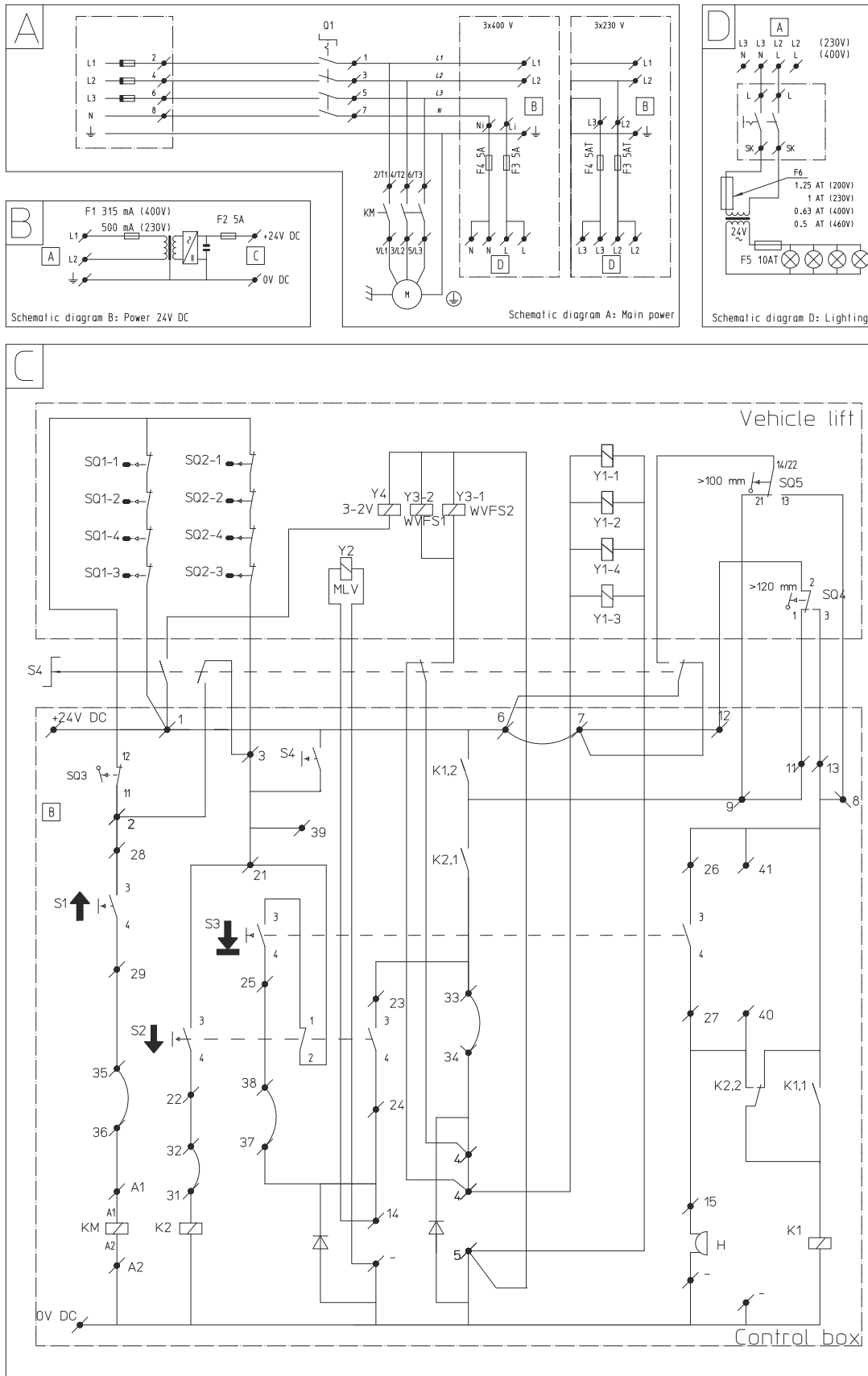


Figure 2.2.4 Schematic diagram (wheel free system)

Table 2.2.4 Schematic diagram (wheel free system)

Index	Description
Q	Main switch
M	El. motor
F	Fuse
SQ1	Cable break switch
SQ2	Slack cable switch
SQ3	End switch highest position
SQ4	End switch foot protection
S1	Switch raise
S2	Switch lower
S3	Switch lower by interlock
S4	Switch wheel free system
K1/K2	Relay
KM	Motor relay
Y1	Unlocking magnets
Y2	Lowering valve
Y3-1	Lowering valve 1 (wheel free system)
Y3-2	Lowering valve 2 (wheel free system)
Y4	2-3 valve
H	Acoustic alarm
SQ5	End switch finger protection

- C. Cylinder vehicle lift
- CM. Master cylinder with correction valve
- CS. Slave cylinder
- Y2/Y3. 2/2 valve
- Y4. 3/2 valve
- S. Orifice
- O. Safety pressure valve
- F. Filter
- K. Non-return valve
- P. Pump
- M. Motor
- T. Tank
- R. Hose burst check valve
- N. Needle valve
- M1. Measuring point
- M2. Measuring point

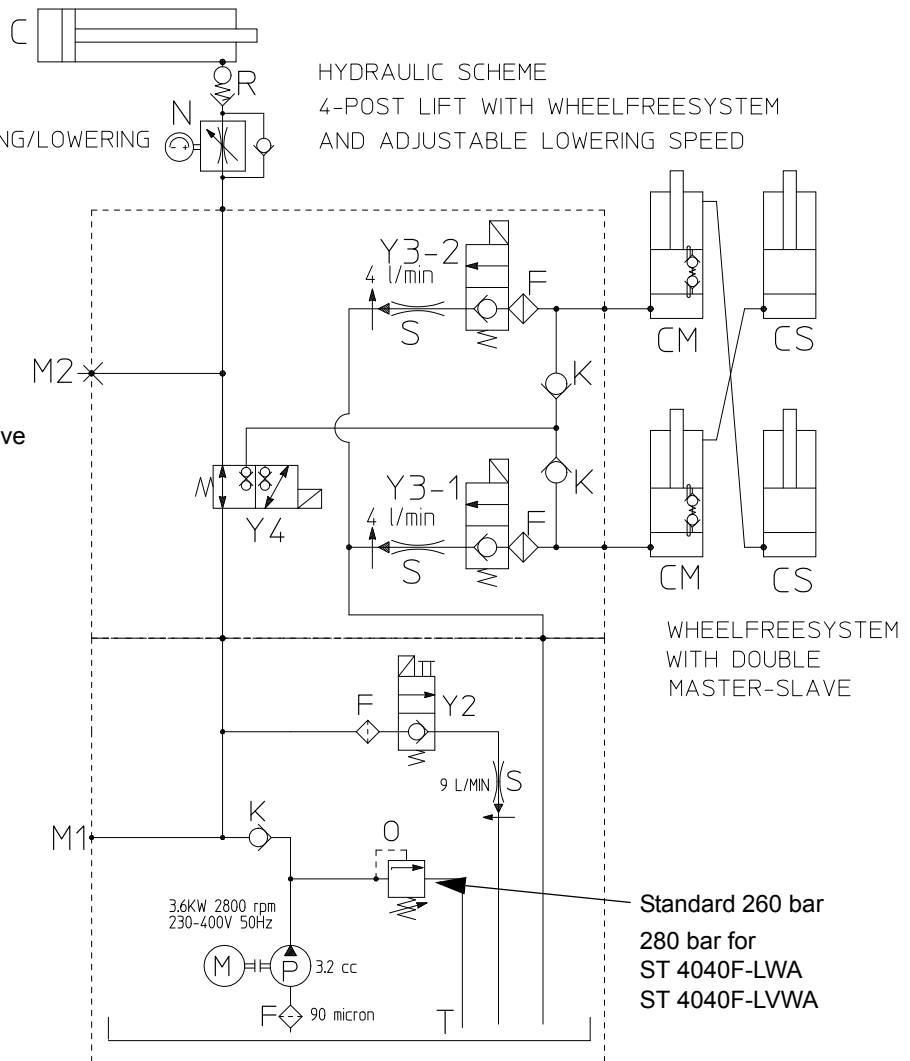


Figure 2.2.5 Hydraulic scheme (wheel free system)

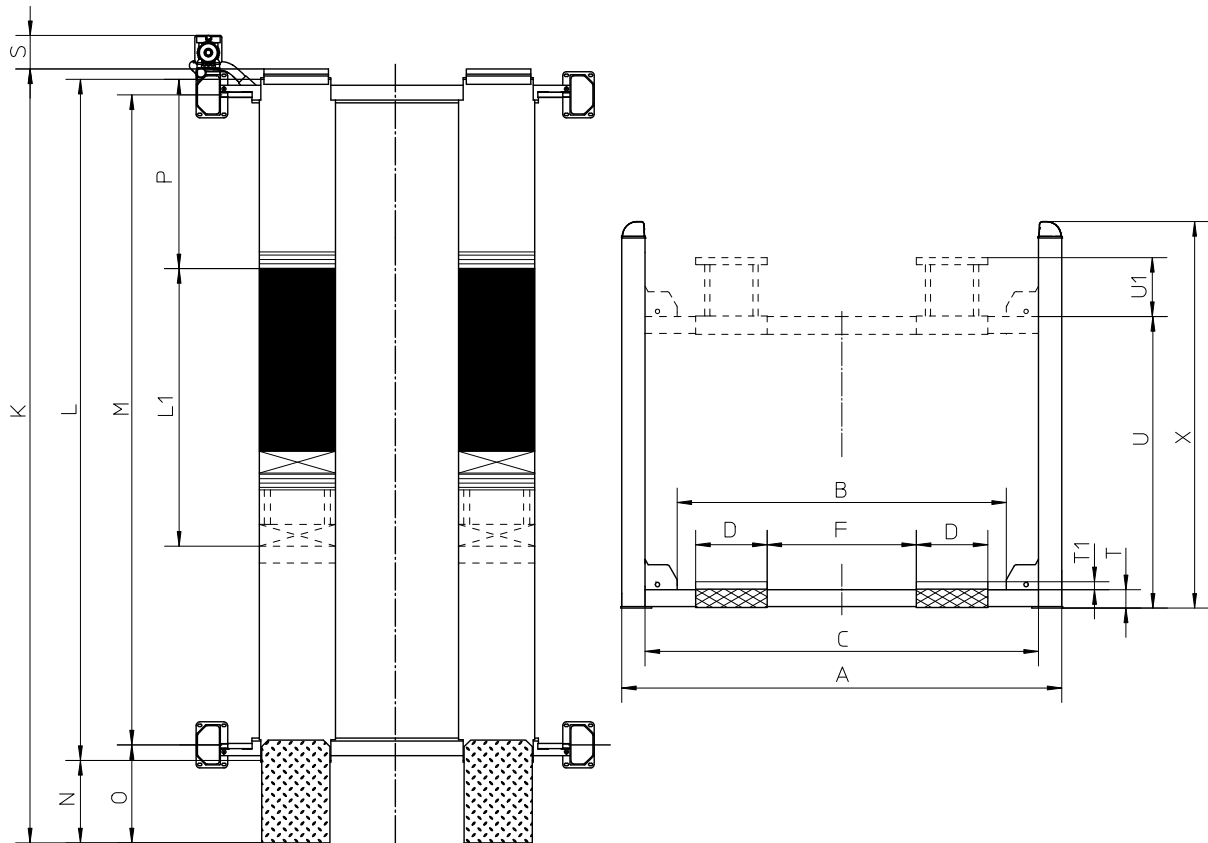


Figure 2.2.6 Dimensions with wheel free system

Table 2.2.5 Dimensions with wheel free system

Model	A	B	C	D	F min	F max	K	L	L1 max	L1 min	M	N	O	P	S	T	T1	U	U1	X
ST4032F	2730	1955	2400	520	750	870	5470	4665	1900	1400	4450	730	840	1300	300	130	50	2000	450	2650
ST4032F-S	2730	1955	2400	520	750	870	5220	4415	1900	1400	4200	730	840	1300	300	130	50	1875	450	2650
ST4040F	3030	2255	2700	520	750	1100	5470	4665	1900	1400	4450	730	840	1300	300	130	50	2000	450	2650
ST4040F-N	2730	1955	2400	520	750	870	5470	4665	1900	1400	4450	730	840	1300	300	130	50	2000	450	2650
ST4040F-V	3330	2555	3000	520	750	1250	5470	4665	1900	1400	4450	730	840	1300	300	130	50	2000	450	2650
ST4040F-L	3030	2255	2700	520	750	1100	5920	5115	1900	1400	4900	730	840	1300	300	130	50	2000	450	2650
ST4040F-LV	3330	2555	3000	520	750	1250	5920	5115	1900	1400	4900	730	840	1300	300	130	50	2000	450	2650

2.3 Wheel alignment

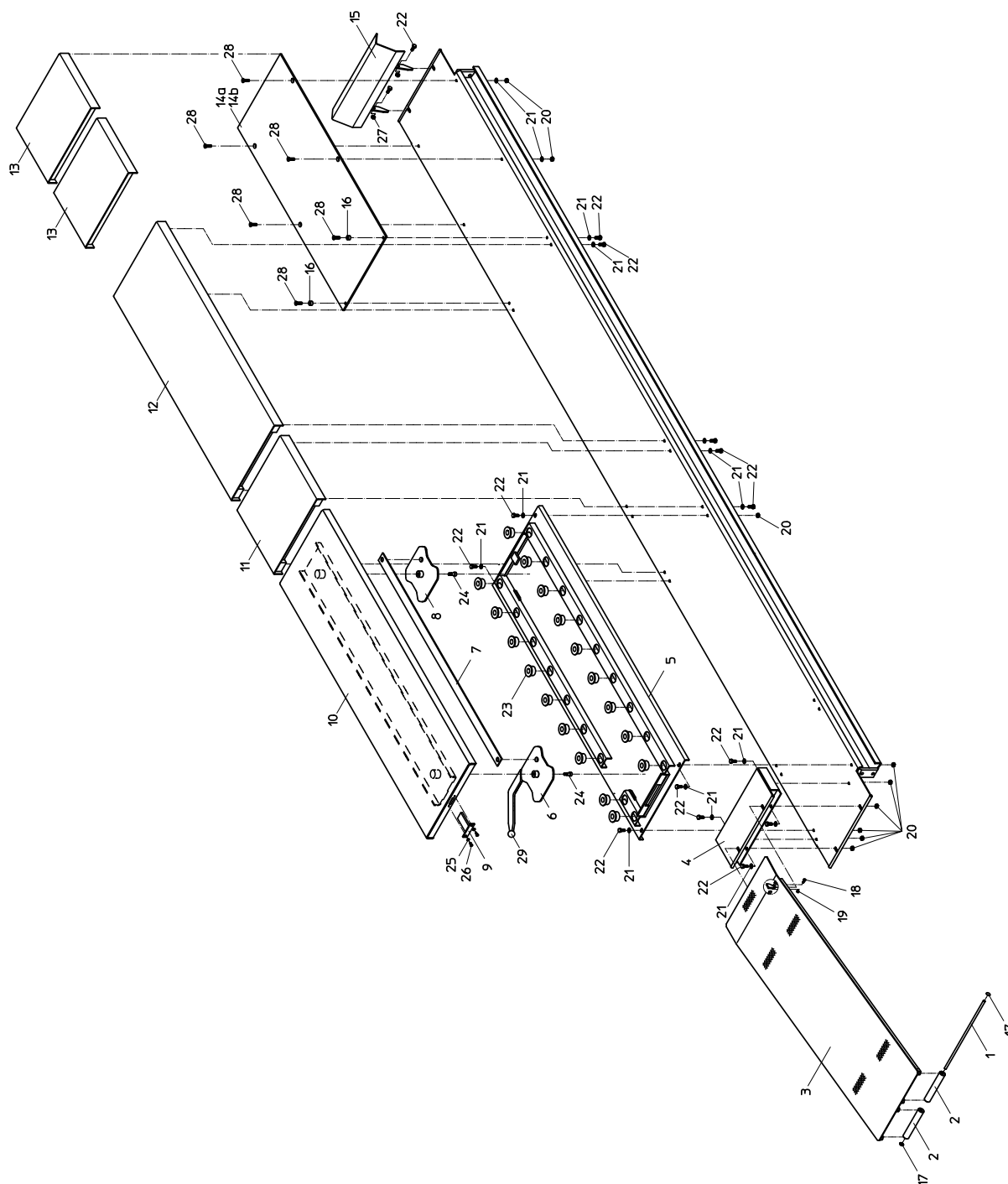


Figure 2.3 Wheel alignment

Table 2.3 Wheel alignment

Index	No.	Reference	Description	Remarks
1	2	3617.58.02.00	Shaft	
2	4	3617.58.03.00	Roller	
3	2	43509155	Drive on ramp	
4	2	43509165	Filling plate	
5	2	43509110	Mounting plate	
6	2	43509130	Locking handle	
7	2	43509106	Draw bar	
8	2	43509135	Locking plate	
9	2	43509107	Locking strip	
10	2	43509120	Slip plate	
11	2	43519105	Filling plate L=436	
12	2	43509140	Filling plate L=1400	
13	4	43509170	Filling plate L=375	
14a	1	43509158	Slide plate track 1-3	ST4040-LWA / ST4040-LVWA ST4040F-LWA / ST4040F-LVWA
14b	1	43509159	Slide plate track 2-4	ST4040-WA / ST4040-LWA ST4040-VWA / ST4040-LVWA
15	2	43509160	Stop plate	
16	4	43509157	Stop	
17	4	1038.34.01.00	Circlip with cap 10 mm	
18	4	65003283	Bolt M6x12, 8.8 DIN933 GV	
19	4	1037.86.06.06	Self locking nut M6, 8 DIN985 GV	
20	28	65050134	Nut M10, 8 DIN933 GV	
21	28	65055019	Washer M10, DIN125A GV	ST4040F-WA / ST4040F-VWA
21	36	65055019	Washer M10, DIN125A GV	ST4040-WA / ST4040-VWA ST4040F-LWA / ST4040F-LVWA
21	44	65055019	Washer M10, DIN125A GV	ST4040-LWA / ST4040-LVWA
22	20	65003405	Bolt M10x25, 8.8 DIN933 GV	ST4040F-WA / ST4040F-VWA
22	28	65003405	Bolt M10x25, 8.8 DIN933 GV	ST4040-WA / ST4040-VWA ST4040F-LWA / ST4040F-LVWA
22	36	65003405	Bolt M10x25, 8.8 DIN933 GV	ST4040-LWA / ST4040-LVWA
23	36	66104001	Ball unit	
24	4	65225007	Hexagon socket head shoulder screw M10(12)x12 12.9 ISO 7379	
25	4	65058018	Spring ring M6, DIN127B GV	
26	4	65003285	Bolt M6x16, 8.8 DIN933 GV	
27	4	65051034	Self locking nut M10, 8 DIN985 GV	
28	12	65025102	Bolt M10x35 10.9 DIN7991 GV	
29	2	1005.11.00.05	Ball knob	