

COVERSHEET

Planned document changes:


Briefly:


No planned changes.

Document changes:

Date:	Change:	Rev. after change:
2024-08-21	Valves for EC214 updated. ePS1 moved to spare parts.	E
2022-02-22	O-rings updated.	D
2021-04-26	Jumper for ss9SQ added.	C
2020-12-30	Hirschmann adapter cable added.	B
2020-08-21	EC226 ePS protection replaced.	A
2019-12-13	New document.	-

Readers note:

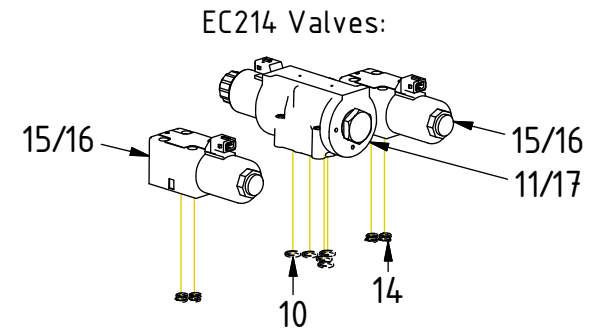
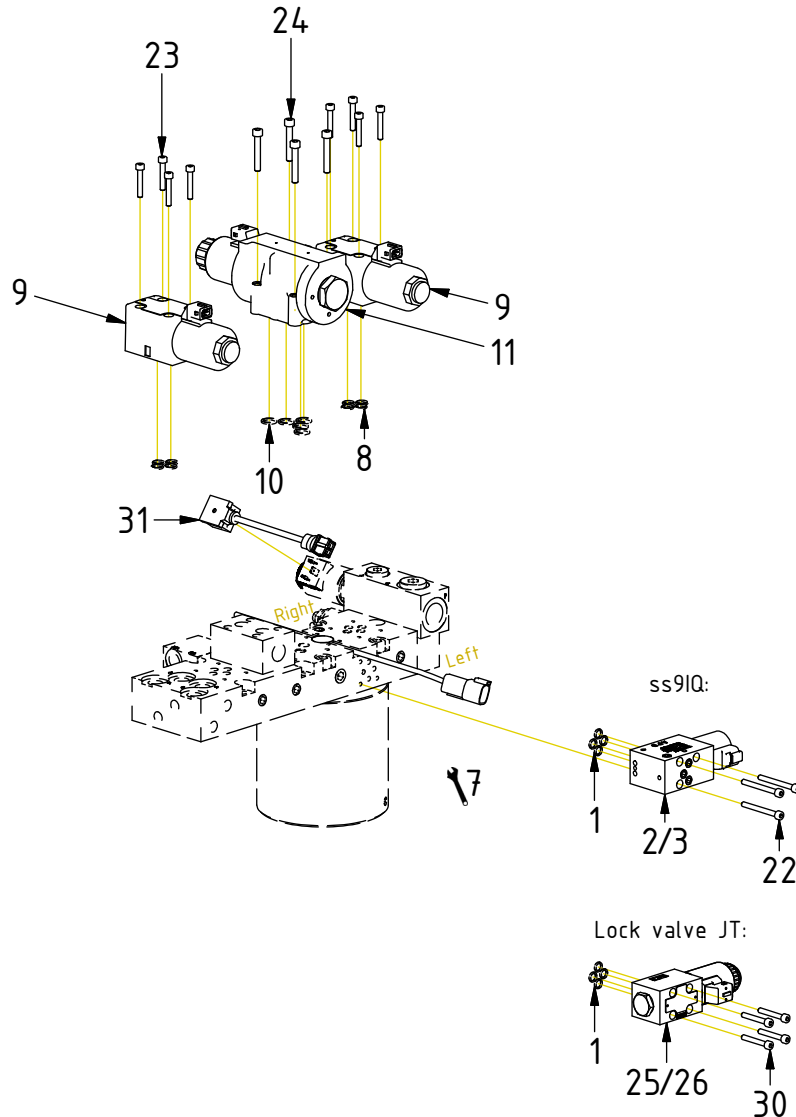
 Indicates instruction.

 Represents Hose.

Dashed lines for overview, mounts
on other pages/assemblies.

EC214, EC219, EC226, EC233

POS	DESCRIPTION	PART	QTY	COMMENTS
1	O-ring 7,65x1,78	710960	4	
2	Directional valve NG4 IQS 12V DT	1042045	1	For QS, CW, ECPUP, ss SIQ (POS.1, 4, 6 incl.)
3	Directional valve NG4 IQS 24V DT	1042188	1	For QS, CW, ECPUP, ss SIQ, EC233 (POS.1, 5, 6 incl.)
4	Coil IQS 12V DT	1042065	1	
5	Coil IQS 24V DT	1042066	1	
6	Nut 1270-04	710250	1	
7	For option XP, SQ, ST, SG			See p.7 for instruction
8	O-ring 9,25x1,78	710901	8	
9	Directional valve closed 24V	730110	2	EC219-233 (POS.8, 12, 13 incl.)
10	O-ring square 12,42x1,68	750704	5	
11	Directional valve closed NG10 24V	730341	1	(POS.10, 12, 13 incl.)
12	Coil 24V JT	730118	3	QTY: 1 for EC214
13	Nut directional valve	730135	3	QTY: 1 for EC214
14	O-ring 8,75x1,78	710959	8	
15	Directional valve closed 24V	7001618	1	EC214 (POS.14, 19, 21 incl.)
16	Directional valve closed 12V	7001619	1	EC214 (POS.14, 20, 21 incl.)
17	Directional valve closed NG10 12V	730342	1	EC214 (POS.14, 18, 13 incl.)
18	Coil 12V JT	730117	1	
19	Coil NG6 24V JT ATOS	7001736	1	
20	Coil NG6 12V JT ATOS	7001735	1	
21	Nut directional valve ATOS	7001887	3	
22	Screw MC6S M5x50 12.9	610407	3	Torque: 9,7Nm
23	Screw MC6S M5x30 12.9	610403	8	Torque: 9,7Nm
24	Screw MC6S M6x38 12.9	6000133	4	Torque: 17Nm
25	Directional valve NG4 24V JT	730310	1	(POS.1, 27, 29 incl.)
26	Directional valve NG4 12V JT	730312	1	(POS.1, 28, 29 incl.)
27	Coil NG4 24V JT	730311	1	
28	Coil NG4 12V JT	730313	1	
29	Nut directional valve NG4	1006785	1	
30	Screw MC6S M5x35 12.9	610404	4	Torque: 9,7Nm
31	Adapter cabel-Hirschmann-Amp	302971	1	



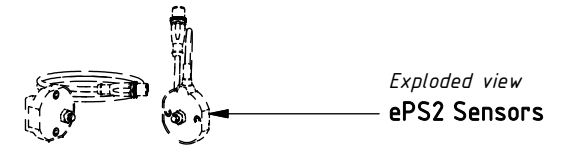
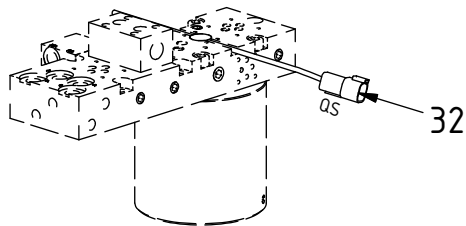
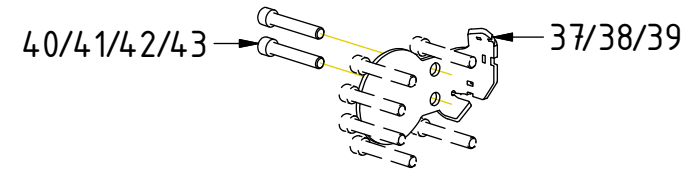
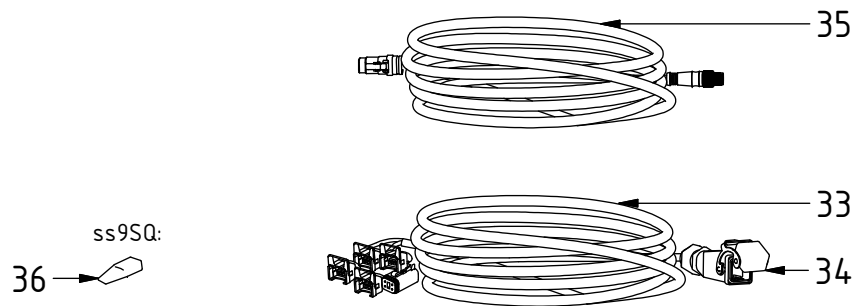
POS in order of assembly

Cables

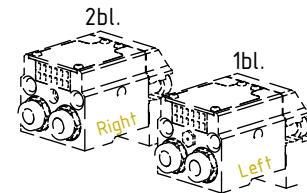
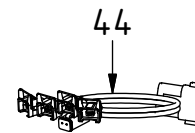
EC214, EC219, EC226, EC233

POS	DESCRIPTION	PART	QTY	COMMENTS
32	Only for QS, connector			
33	Aggregate cable ss9-2 DT Complete	8001823	1	
34	ILME cover	810208	1	(Incl. with agq.cable)
35	Cable QS QLM tiltrotator ss9-2	842148	1	For QS
36	DT Jumper SQ/QSC ss9-2	1034439	1	Plug DT connector for ss9SQ
37	Protection plate End lock EC209-219	1063372	1	
38	Protection plate End lock EC226	1063521	1	
39	Protection plate End lock EC233	1064168	1	
40	Screw MC6S M12x70 12.9 Geomet	611517	8	For EC214. Torque: 136Nm
41	Screw MC6S 12x90 12.9 ZFSL	6000147	8	For EC219. Torque: 136Nm
42	Screw MC6S 14x80 12.9 ZFSL	6000354	8	For EC226. Torque: 217Nm
43	Screw MC6S M12x80 12.9 ZFSL	6000148	12	For EC233. Torque: 136Nm
44	Adapter cable ECO (DTM) ss9-2	1029599	1	For EC-Oil. Instead of POS.33 & 35
45	Adapter cable DT>JT (Lockvalve JT)	8001989	1	

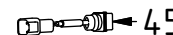
POS in order of assembly



EC-Oil:



Lock valve JT:



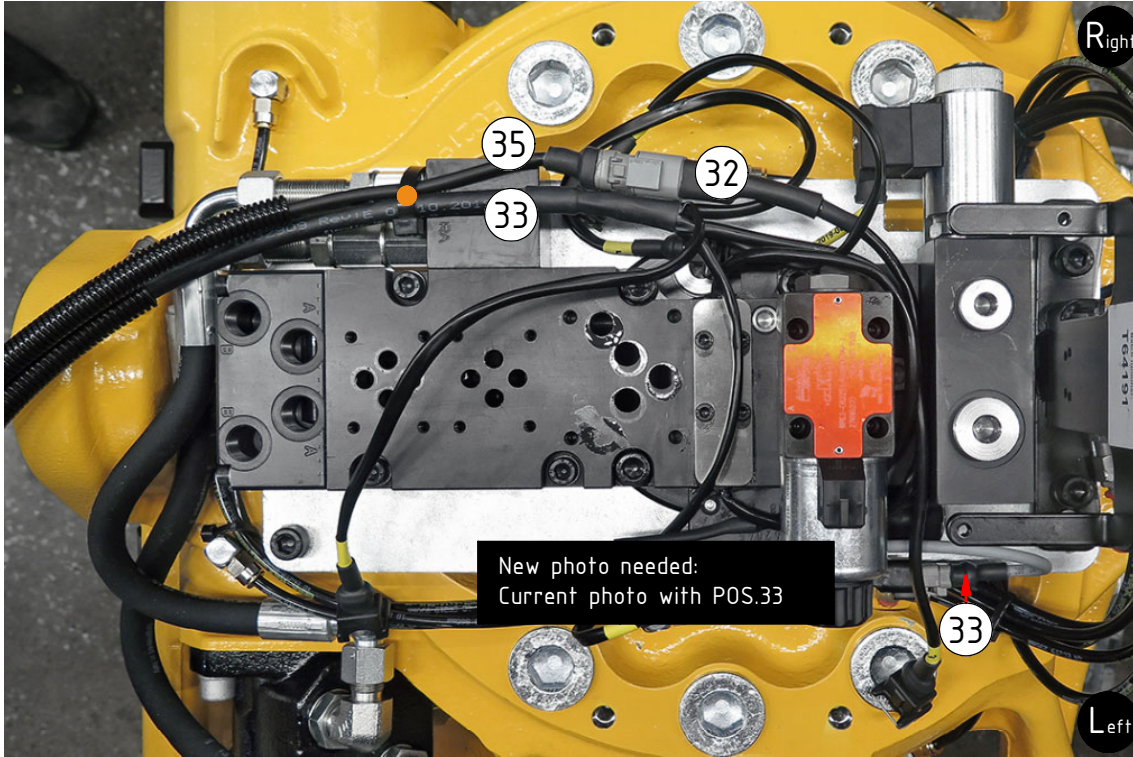
Std. Valves & cables - ss9 ECHF

Cables Without EC-Oil

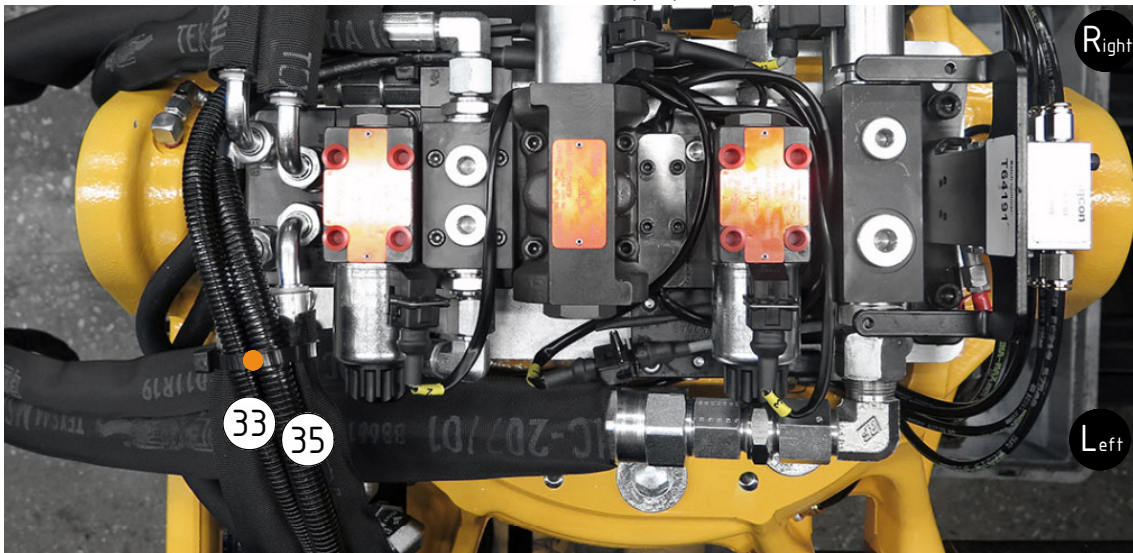
EC214, EC219, EC226, EC233

POS	DESCRIPTION	PART	QTY	COMMENTS
32	Only for QS, connector			
33	Aggregate cable ss9-2 DT Complete	8001823	1	
35	Cable QS QLM tiltrotator ss9-2	842148	1	For QS
●	Use cable ties			

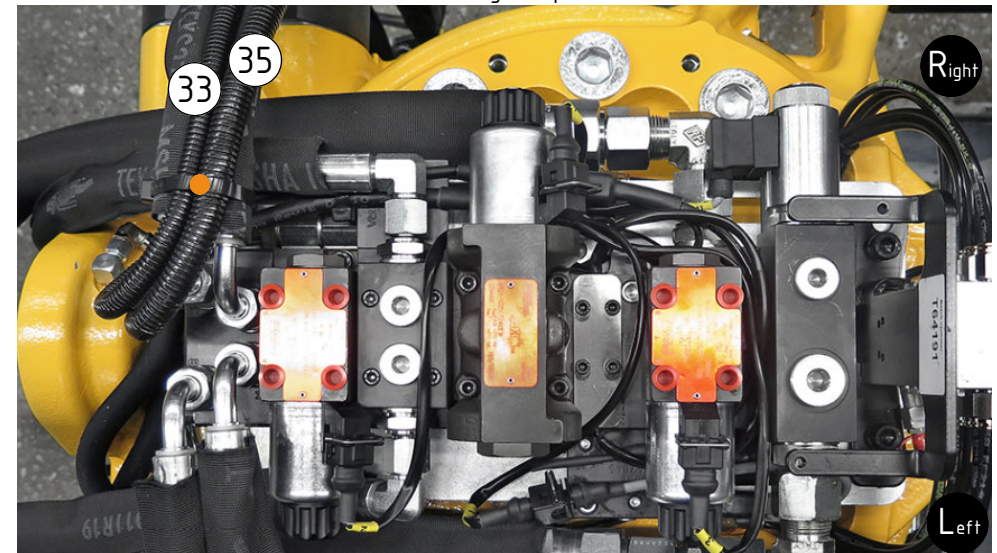
POS in order of assembly



Cables Left (std)



Cables Right (option)



Cables
EC-Oil

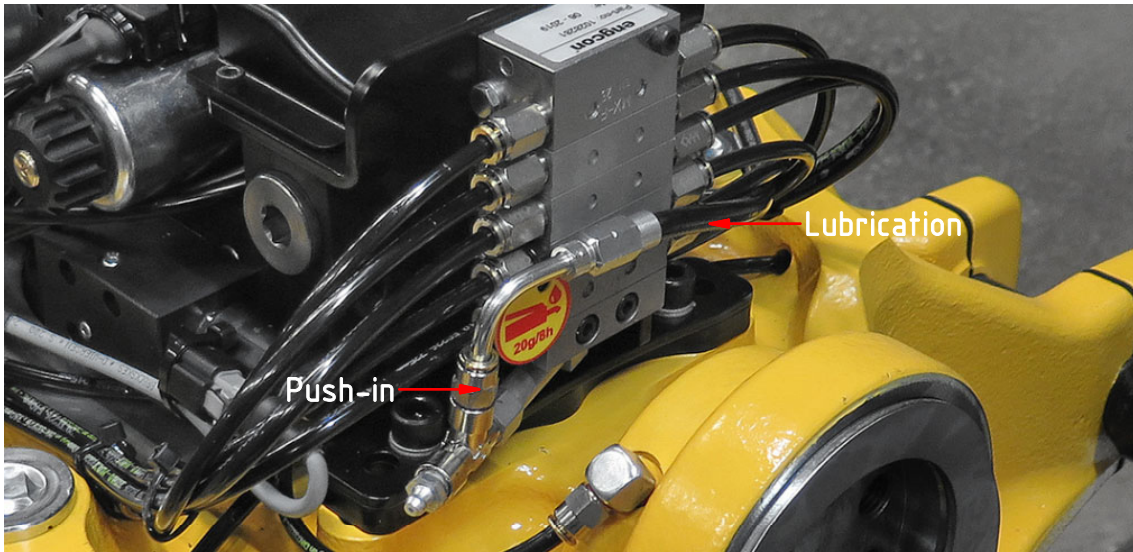
EC214, EC219, EC226, EC233

POS	DESCRIPTION	PART	QTY	COMMENTS
32	Only for QS, connector			
44	Adapter cable ECO (DTM) ss9-2	1029599	1	For EC-Oil. Instead of POS.33 & 35
●	Use cable ties			

POS in order of assembly

New photo needed: POS.32 to 6P from block, POS.44 to 12P from block

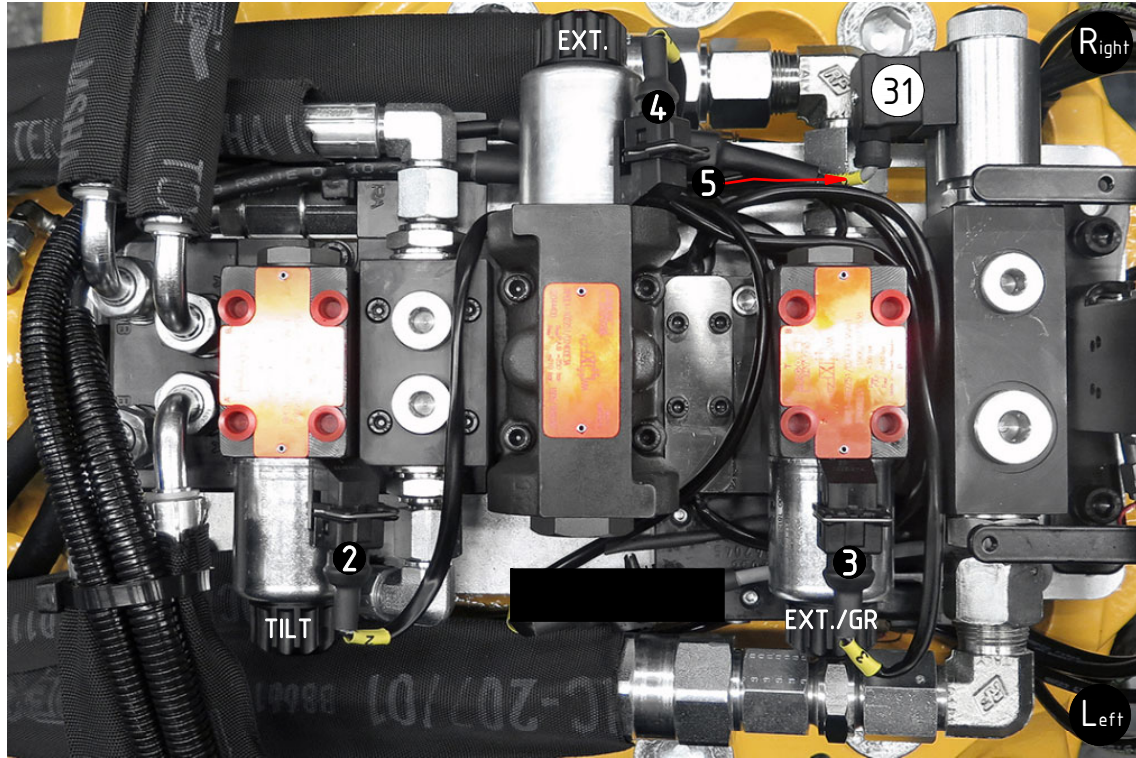
Lubrication



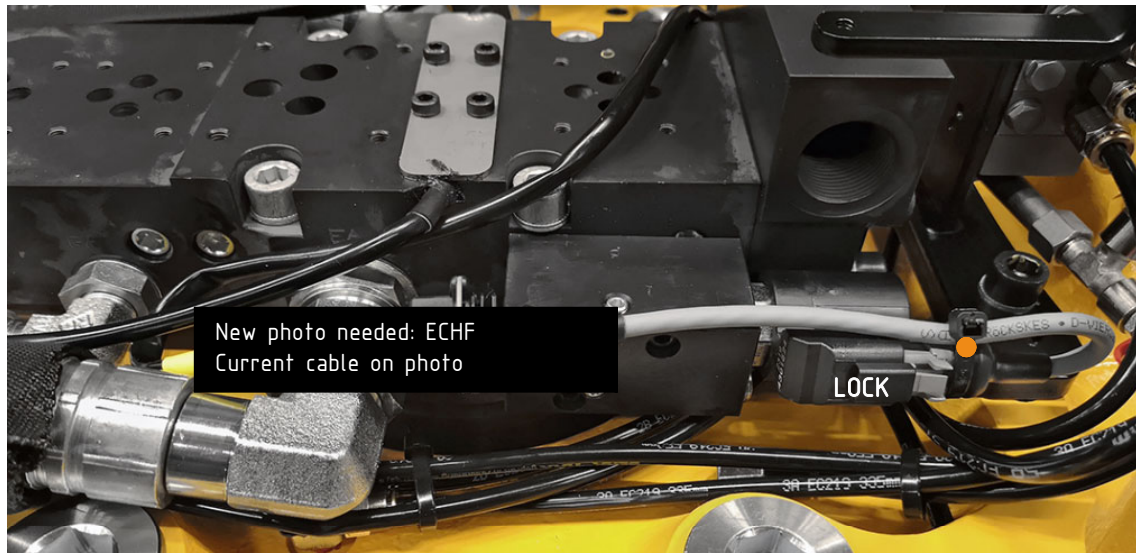
Valves

EC214, EC219, EC226, EC233

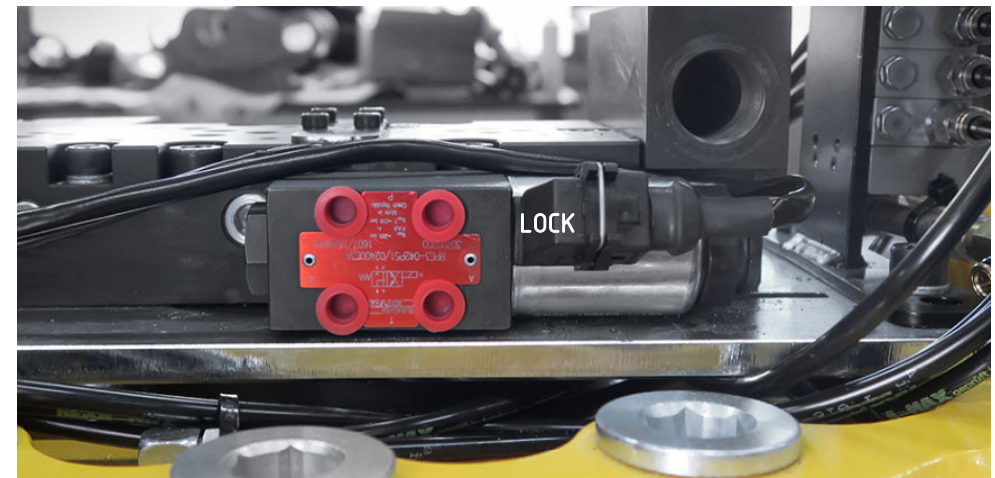
POS	DESCRIPTION	PART	QTY	COMMENTS
7	For option XP, SQ, ST, SG			See p.7 for instruction
31	Adapter cabel-Hirschmann-Amp	302971	1	
36	DT Jumper SQ/QSC ss9-2	1034439	1	Plug DT connector for ss9SQ
● Use cable ties				



ss9IQ:



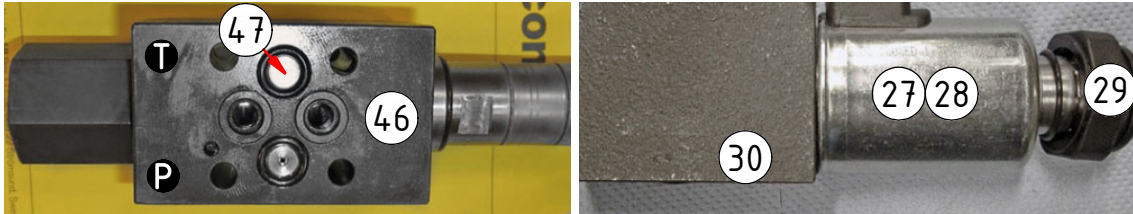
Lock valve JT:



POS in order of assembly

special/options

XP crossparallel:



POS	DESCRIPTION	PART	QTY	COMMENTS
27	Coil NG4 24V JT	730311	1	
28	Coil NG4 12V JT	730313	1	
29	Nut directional valve NG4	1006785	1	
30	Screw MC6S M5x35 12.9	610404	4	Torque: 9,7Nm
46	Directional valve XP crossparallel NG4 without Coil	730321	1	Nut & o-ring with chokevalve incl. Assemble with POS.27/28
47	Plug Dysa D0 for NG4 / VRP2-04	790191	1	O-ring incl.

POS in order of assembly

SX:

Instructions needed

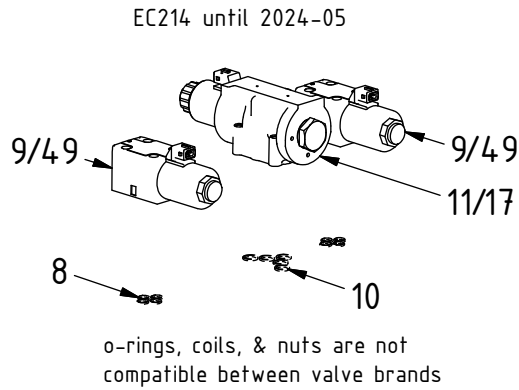
ST:

Instructions needed

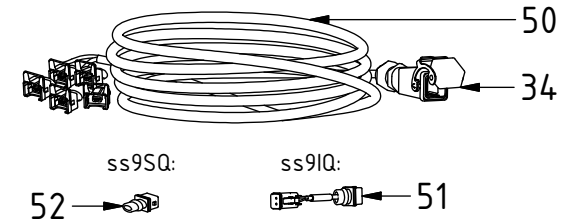
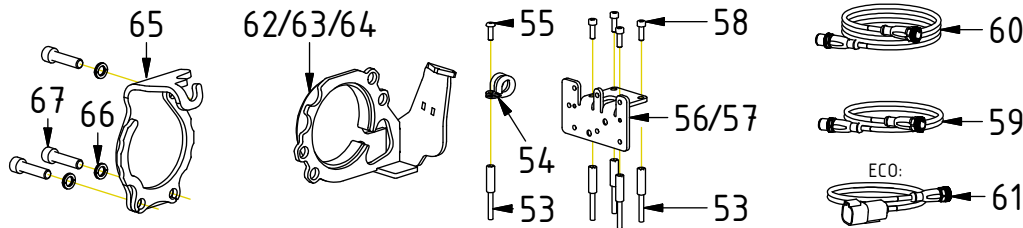
SG:

Instructions needed

SPARE PARTS



ePS1:



POS	DESCRIPTION	PART	QTY	COMMENTS
8	O-ring 9,25x1,78	710901	8	
9	Directional valve closed 24V	730110	2	EC219-233 (POS.8, 12, 13 incl.)
10	O-ring square 12,42x1,68	750704	5	
11	Directional valve closed NG10 24V	730341	1	(POS.10, 12, 13 incl.)
12	Coil 24V JT	730118	3	QTY: 1 for EC214
13	Nut directional valve	730135	3	QTY: 1 for EC214
17	Directional valve closed NG10 12V	730342	1	EC214 (POS.14, 18, 13 incl.)
18	Coil 12V JT	730117	1	
33	Aggregate cable ss9-2 DT Complete	8001823	1	
34	ILME cover	810208	1	(Incl. with agg.cable)
36	DT Jumper SQ/QSC ss9-2	1034439	1	Plug DT connector for ss9SQ
49	Directional valve closed 12V	730112	1	(POS.8, 18, 13 incl.)
50	Aggregate cable ss9-2 Dump Comp.	1032909	1	Replaced by POS.33 from 2022-06
51	Adapter cable JT>DT (Lockvalve DT)	1017478	1	Used with POS.50 for ss9IQ
52	JT Jumper Lock valve	1018662	1	Used with POS.50 for ss9SQ
53	Valve spacer ePS1	1034402	5	Torque: 9,7Nm
54	Rubber steel clamp \varnothing 16	6000009	1	
55	Screw K6S M5x16 10.9 FZB	611818	1	Torque: 8,1Nm
56	Bracket ePS1	1038119	1	For Topcon/LEICA/Novatron
57	Bracket ePS1 (Trimble only)	1038117	1	For Trimble
58	Screw MC6S M5x16 12.9	610401	4	Torque: 9,7Nm
59	Adapter cable ePS rotation sensor	8000784	1	
60	Unit cable ePS w. 120 ohm termin.	8000824	1	
61	Ad.cable ePS ECOW SVAB 120 ohm	8000825	1	For ECO w. ePS. Instead of POS.60
62	Protection EC214PS-EC219PS	1033565	1	
63	Protection EC233PS	1040940	1	
64	Protection EC226PS V2	1055677	1	
65	Protection EC226PS	1016554	1	Replaced by POS.64 from 2020-07
66	Washer NL 10mm	611041	3	
67	Screw MC6S M10x40 12.9	610453	3	

POS in order of assembly