

X-Series

Load-Sensing Sectional Control Block LX-6 Spare parts list



Nominal pressure: 350 bar
 Nominal flow rate
 ● Pump port: 250 l/min
 ● Working ports: 160 l/min
 with compensator and load holding function

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General information

The information in this brochure relates to the operating conditions, applications and product described in the product documentation.

For applications and operating conditions not described. Please contact the relevant technical department.

Subject to technical and other changes.

Load-Sensing Sectional Control Block, 5.282.1 , datasheet
Load-Sensing Sectional Control Block, 5.292, operating manual



Warning

All service and repair work on HYDAC mobile control blocks must be carried out by suitably trained staff!

Incorrect handling can cause safety related malfunctions.



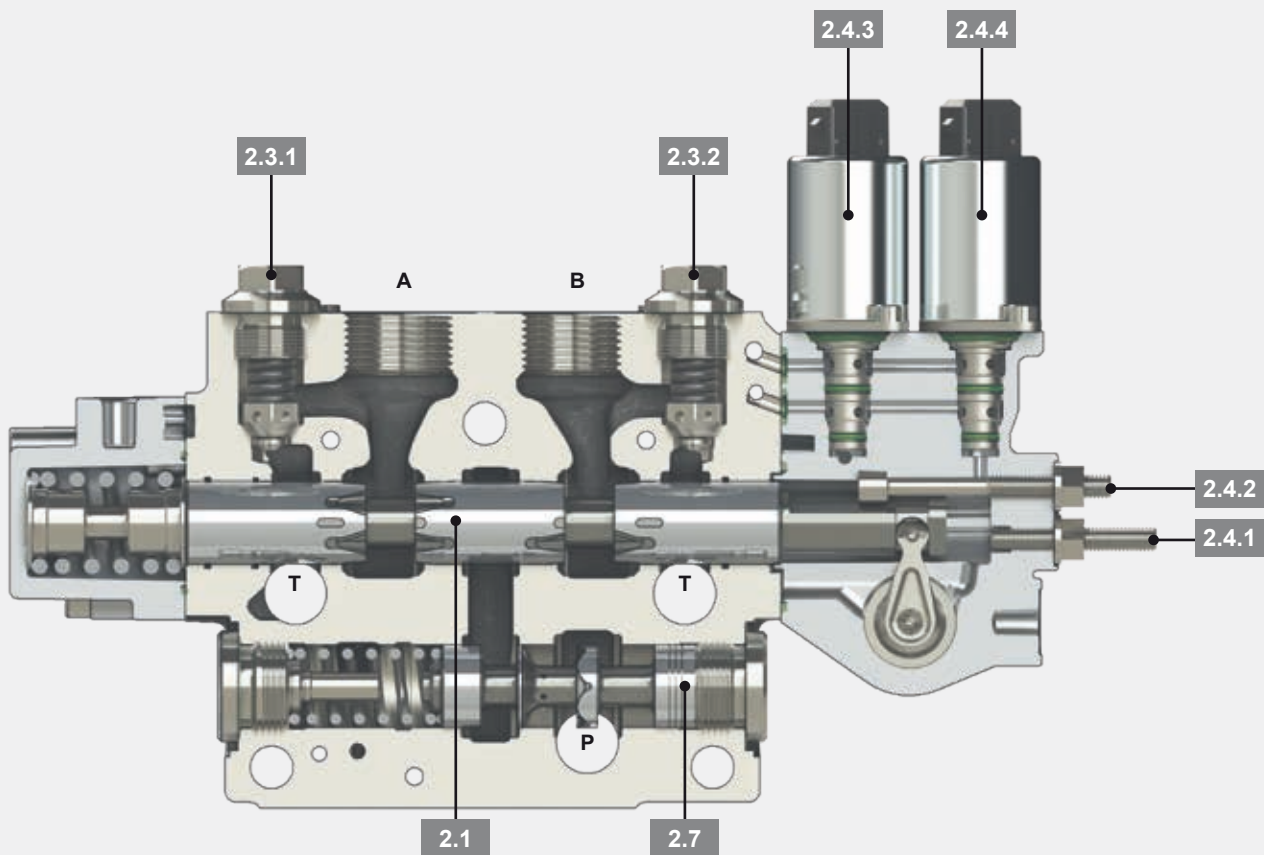
Warning

On delivery, the adjustment screw of all adjustable pressure relief valves is turned down to end stop (max. pressure setting > 350 bar).

Before operation, the pressure settings must be reduced to max. values according to LX-6 product or machine specification.

Too high pressure settings can be a danger to life and machine!

LX-6 working section (sample configuration)



2.7 Pressure compensator

2.1 Main spool

2.3.1 Workport valve port A (anti-cavitation valve)

2.3.2 Workport valve port B (shock / anti-cavitation valve)

2.4.1 Stroke limiter port A (clockwise rotation)

2.4.2 Stroke limiter port B (counterclockwise rotation)

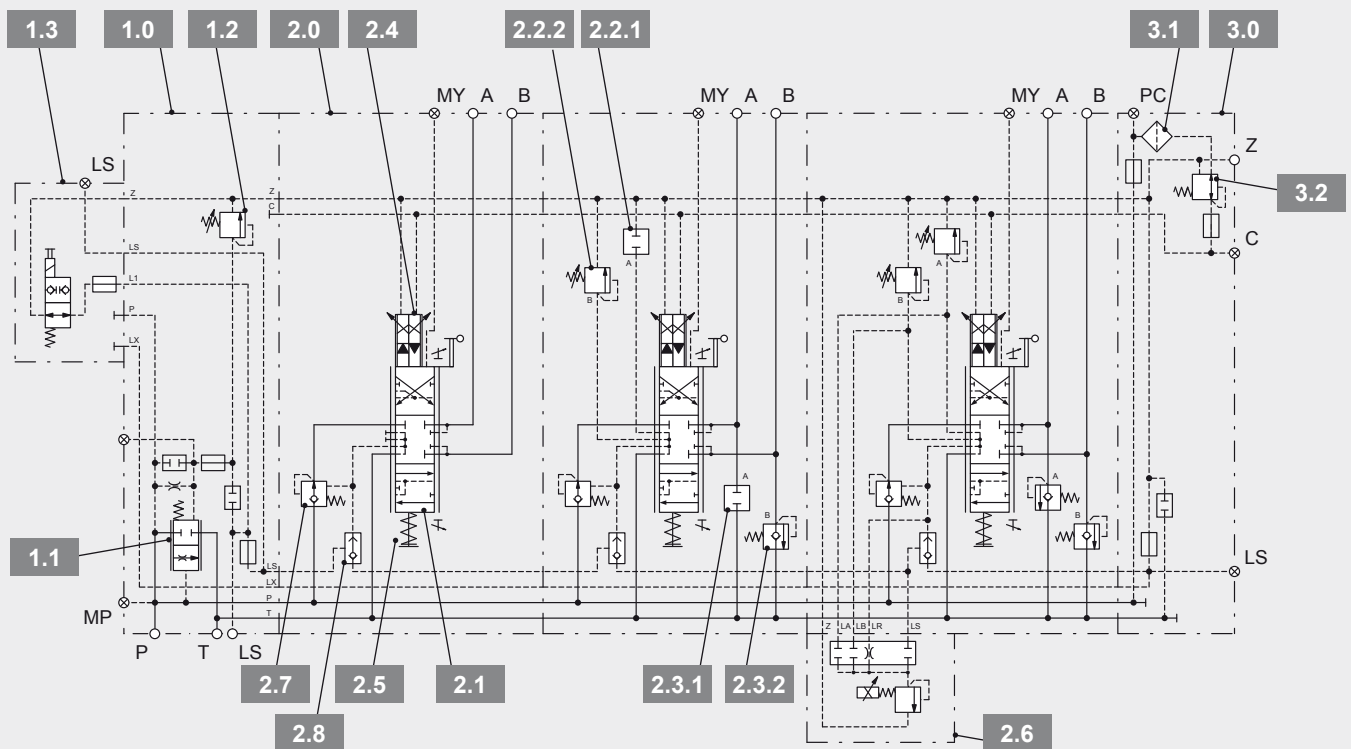
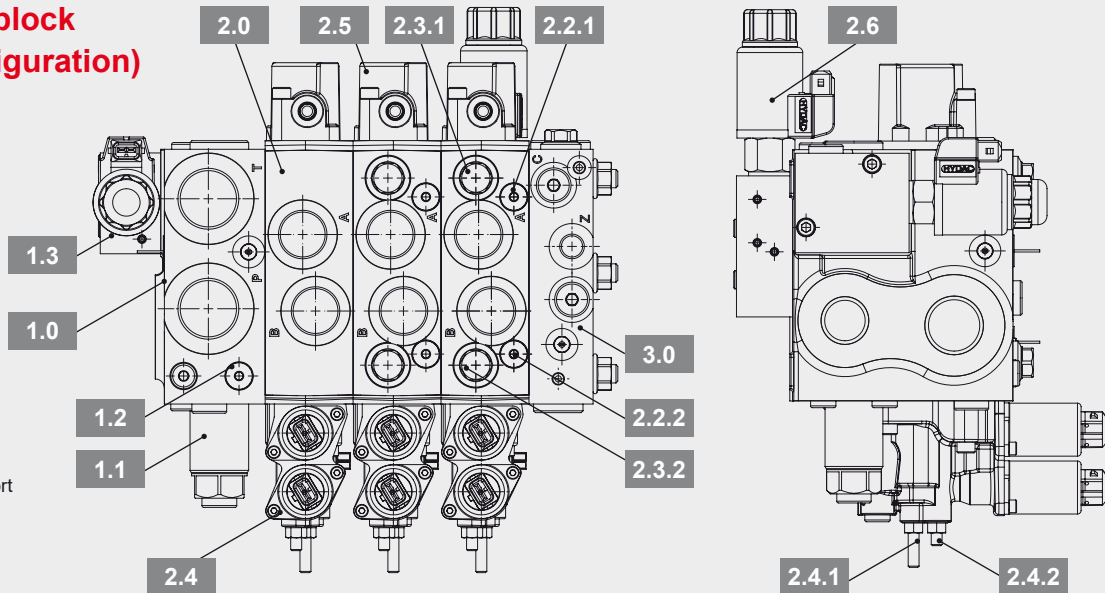
2.4.3 Pressure control valve port A

2.4.4 Pressure control valve port B

LX-6 control block (sample configuration)

Ports

P	Pump
MP	Pump measuring port
T	Tank
LS	Load-sensing
A, B	Working ports
C	Pilot oil supply
Z	Pilot drain
MY	Pilot pressure measuring port (port B)



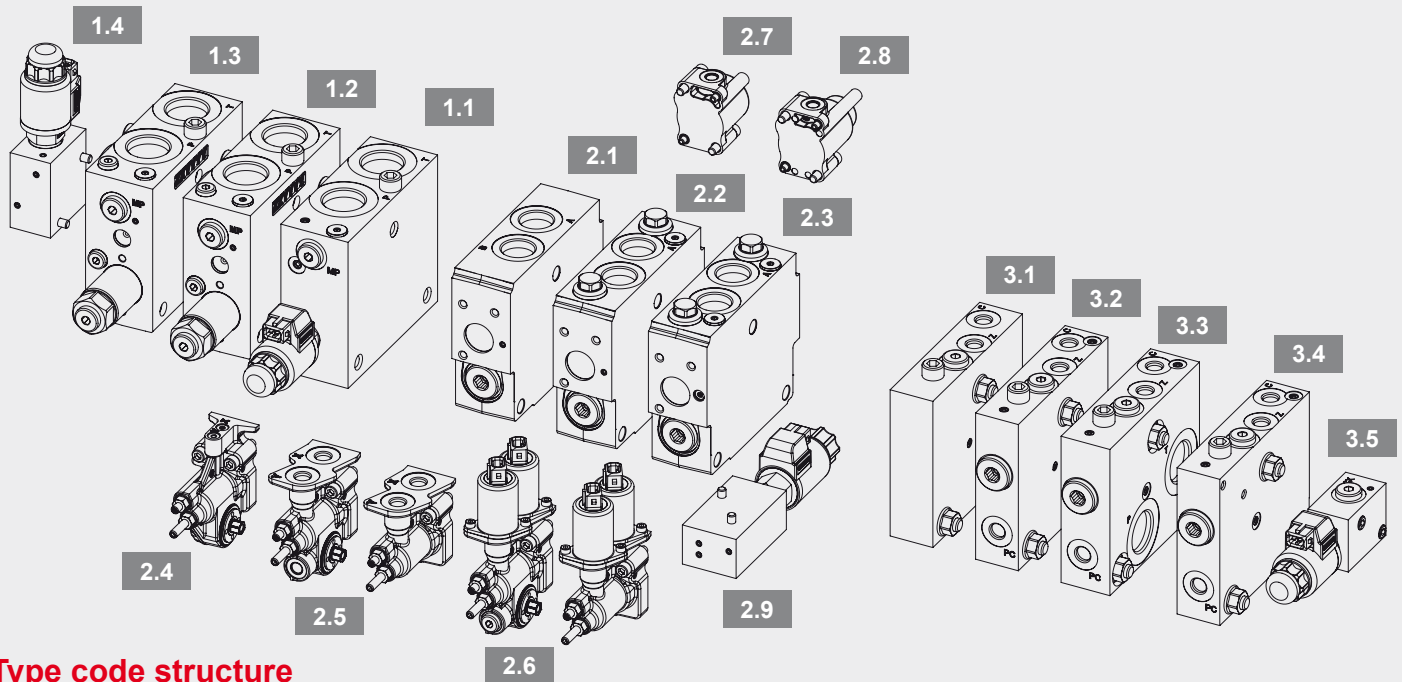
1.0	Inlet plate	2.4	Operation unit
1.1	Main axis of 3-way flow controller or pump pressure limiter	2.4.1	Stroke limiter of main spool port A
1.2	Pilot pressure relief valve of main axis 1.1	2.4.2	Stroke limiter of main spool port B
1.3	Option block for inlet plate	2.5	Spring cap
2.0	Working section	2.6	Option block for working section
2.1	Main spool	2.7	Pressure compensator
2.2.1	LS pressure limitation port A	2.8	LS shuttle valve
2.2.2	LS pressure limitation port B	3.0	End plate
2.3.1	Workport valve port A	3.1	Filter element
2.3.2	Workport valve port B	3.2	Pressure reducing valve for internal pilot oil supply

Modular structure

The LX-6 can be customised to different applications and machines.

The principle sectional design and modular structure consists of an inlet plate, max. 10 working sections and an end plate. A complete control block is defined by a type code system.

Setup with left hand inlet plate



Type code structure

General

LX-6 __ / B 0

Connection type B (BSPP) or S (SAE)
No. of working sections (01-10)

Inlet plate

UL17F / ... / UW1...

1.1	Inlet plate CL17
1.2	Inlet plate UL17
1.3	Inlet plate UL17F
1.4	Option block UD1, UW1...

Working section

LS6F / ... / LW...

2.1	Working section B6
2.2	Working section CS6
2.3	Working section LS6, LS6F, LS6M
2.4	Manual operation MH...
2.5	Hydraulic operation H...
2.6	Electrohydraulic operation E...
2.7	Spring cap C1...
2.8	Spring cap F1
2.9	Option block LD1, LW..., LW1...

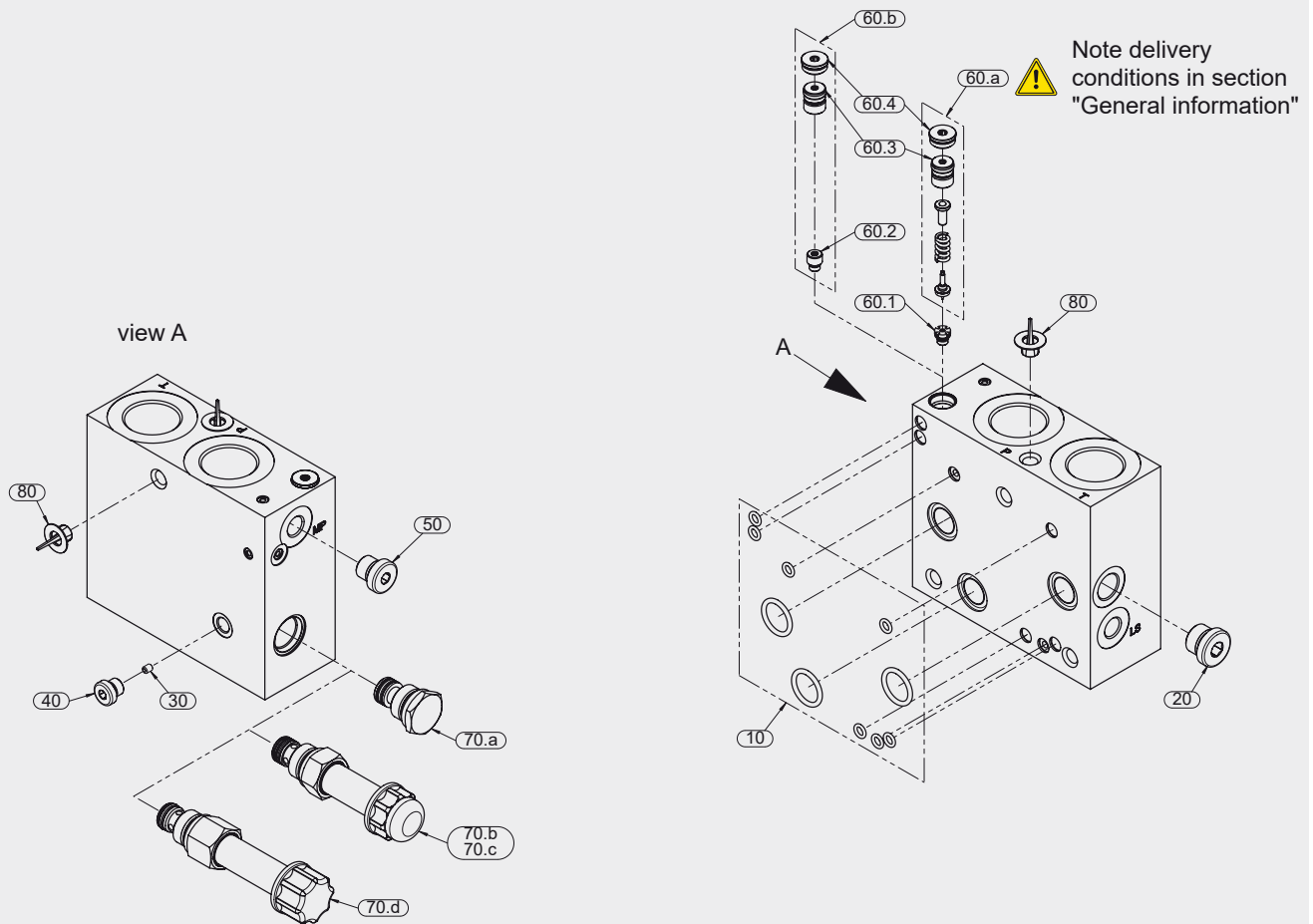
End plate

ER2F / ... / E1C...

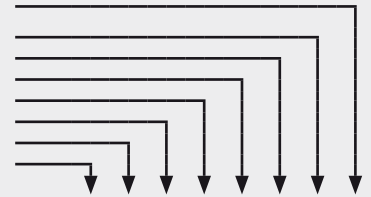
3.1	End plate ER1
3.2	End plate ER2
3.3	End plate ER27
3.4	End plate ER2F
3.5	Option block E1C

Inlet plate CL17

Closed Center system for variable displacement pump



Type code	Description / Function	Port thread type	Part-No.
CL17 /.../ P	LS pressure relief valve, w/o LS option valves	1.) BSPP SAE	4222054 4229722
CL17 /.../ V...	LS pressure relief valve, LS unloading valve type "V"	1.)	
CL17 /.../ W...	LS pressure relief valve, LS unloading valve type "W"	1.)	
CL17 /.../ P0A...	LS pressure relief valve, LS prop. relief valve type "P0A"	1.)	
CL17 / P / P	w/o LS pressure relief valve, w/o LS option valves	1.) 2.)	
CL17 / P / V...	w/o LS pressure relief valve, LS unloading valve "V"	1.) 2.)	
CL17 / P / W...	w/o LS pressure relief valve, LS unloading valve "W"	1.) 2.)	
CL17 / P / P0A...	w/o LS pressure relief valve, LS prop. relief valve "P0A"	1.) 2.)	



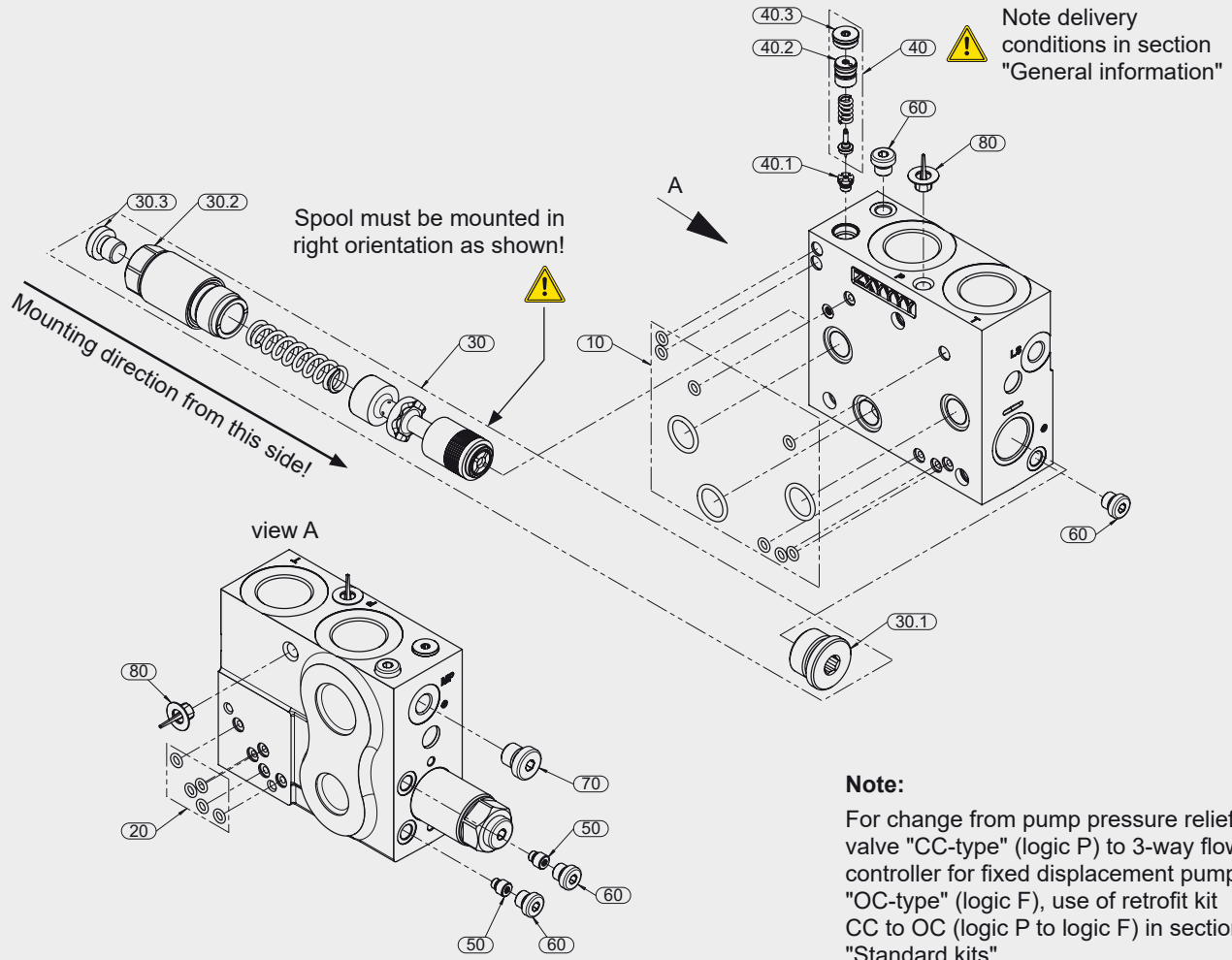
Item	Part No.	Description	Port thread type	Wrench [mm]	Torque [Nm ±10 %]										
10	4263493	Seal-kit	Seal-kit - LX/V01	-	-	1	1	1	1	1	1	1	1	1	1
20	-	Plug screw	VSTI G3/8-ED-CF/FPM	8	40	1	1	1	1	1	1	1	1	1	1
30	-	Orifice	M4 x 5 x Ø1,0	2	1,5	1				1					
40	-	Plug screw	VSTI G1/8-ED-CF/FPM	5	10	1	1	1	1	1	1	1	1	1	1
50	-	Plug screw	VSTI G1/4-ED-CF/FPM	6	30	1	1	1	1	1	1	1	1	1	1
	4025053	Plug screw	9/16-18UNF	6	30										
60.a	4263721	LS relief valve	Kit - DB25-01V35	-	-						1	1	1	1	1
60.b	4273994	LS relief valve plug	Kit - DB25-01VP	-	-	1	1	1	1						
60.1	4275608	LS relief valve seat	Tool part no.: 4275607	3	5						1	1	1	1	1
60.2	4263496	Plug screw	M6 - O-Ring	3	5	1	1	1	1						
60.3	-	Adjustment/plug screw	(Torque value for plug kit 60.b)	3	5	1	1	1	1	1	1	1	1	1	1
60.4	4263719	Plug screw		4	5	1	1	1	1	1	1	1	1	1	1
70.a	4263372	Cavity plug screw		24	25						1				1
70.b	4263373	Solenoid valve type "V"	Normally open	24	25					1					1
70.c	4263374	Solenoid valve type "W"	Normally closed	24	25					1					1
70.d	4263485	Prop. relief valve type "P0A"		24	25	1						1			
80	-	Tapered rubber plug	(for M10x1,5 thread hole)	-	-	2	2	2	2	2	2	2	2	2	2

1.) For different LS option valves item 70... and coil types, see section "Solenoid valves and coils"

2.) If LX-6 specification w/o LS pressure relief valve is required (with relief valve plug "P"), use of specified spare part with LS pressure relief valve and turning down adjustment /plug screw (item 40.3) to end stop with 5 Nm.

Universal inlet plate UL17(F) with logic P

Closed Center system for variable displacement pump with main pressure relief valve

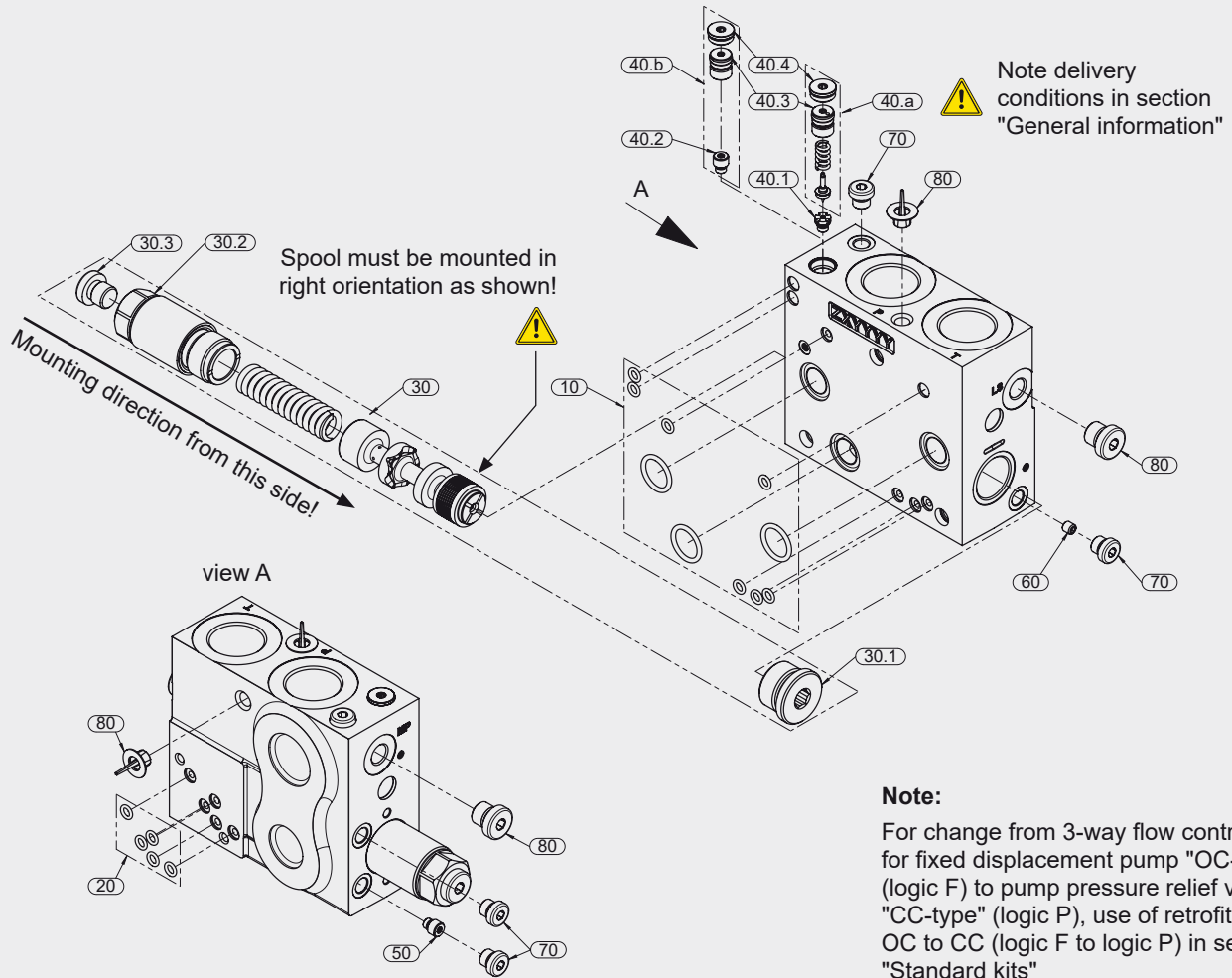


Type code	Description / Function	Port thread type	Part.-No.
UL17 /.../ P	Pump pressure relief valve	BSPP SAE	4268794 4268896
UL17F /.../ P /...	Pump pressure relief valve Flange interface for option blocks	BSPP SAE	4268895 4245925

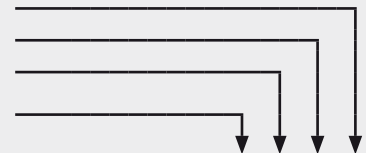
Item	Part No.	Description	Port thread type	Wrench [mm]	Torque [Nm ±10 %]		
10	4263493	Seal-kit Seal-kit - LX/V01		-	-	1	1
20	4380281	Seal-kit LX/V02 Seal-kit - LX/V02		-	-	1	1
30	4372496	Spool-axis type "P" Kit - Inlet-axis-P		-	-	1	1
30.1	4263497	Plug screw		10	80	1	1
30.2	4263498	Spring cap		27	80	1	1
30.3	-	Plug screw VSTI G1/4-ED-CF/FPM		6	30	1	1
40	4263721	LS relief valve KIT - DB25-01V35		-	-	1	1
40.1	4275608	LS relief valve seat Tool part no.: 4275607		3	5	1	1
40.2	-	Adjustment screw		3	-	1	1
40.3	4263719	Plug screw		4	5	1	1
50	4263496	Plug screw M6 - O-Ring		3	5	2	2
60	-	Plug screw VSTI G1/8-ED-CF/FPM		5	10	4	4
70	-	Plug screw VSTI G1/4-ED-CF/FPM	BSPP	6	30	1	1
	4025053	Plug screw 9/16-18UNF	SAE	6	30		
80	-	Tapered rubber plug (for M10x1,5 thread hole)		-	-	2	2

Universal inlet plate UL17(F) with logic F

Open Center system for fixed displacement pump with 3-way flow controller



Type code	Description / Function	Port thread type	Part.-No.
UL17 /.../ F	3-way flow controller with pilot pressure relief valve	BSPP SAE	4229721 4268897
UL17 / P / F	3-way flow controller w/o pilot pressure relief valve	1.)	
UL17F /.../ F /...	3-way flow controller + pilot pressure relief valve Flange interface for option blocks	BSPP SAE	4229724 4145350
UL17F / P / F /...	3-way flow controller w/o pilot pressure relief valve Flange interface for option blocks	1.)	

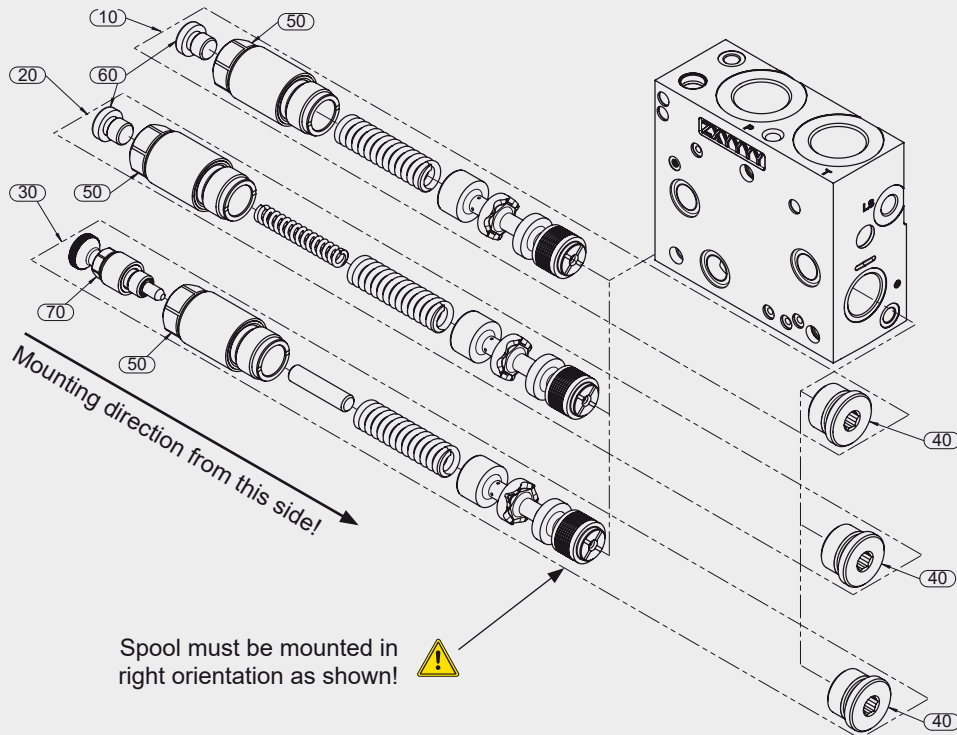


Item	Part No.	Description	Port thread type	Wrench [mm]	Torque [Nm ±10 %]				
10	4263493	Seal-kit Seal-kit - LX/V01		-	-	1	1	1	1
20	4380281	Seal-kit Seal-kit - LX/V02		-	-	1	1		
30	4372324	Spool-axis type "F" Kit - Inlet-axis-F		-	-	1	1	1	1
30.1	4263497	Plug screw		10	80	1	1	1	1
30.2	4263498	Spring cap		27	80	1	1	1	1
30.3	-	Plug screw VSTI G1/4-ED-CF/FPM		6	30	1	1	1	1
40.a	4263722	LS relief valve Kit - DB25-02V35		-	-		1		1
40.b	4273994	LS relief valve plug Kit - DB25-01VP		-	-	1		1	
40.1	4275608	LS relief valve seat Tool part no.: 4275607		3	5		1		1
40.2	4263496	Plug screw M6 - O-Ring		3	5	1		1	
40.3	-	Adjustment/plug screw (Torque value for plug kit 40.b)		3	5	1	1	1	1
40.4	4263719	Plug screw		4	5	1	1	1	1
50	4263496	Plug screw M6 - O-Ring		3	5	1	1	1	1
60	-	Orifice M6 x 6 x Ø1,2		3	3	1	1	1	1
70	-	Plug screw VSTI G1/8-ED-CF/FPM		5	10	1	4	4	4
80	-	Plug screw VSTI G1/4-ED-CF/FPM	BSPP	6	30	1	1	1	1
	4025053	Plug screw 9/16-18UNF	SAE	6	30				
90	-	Tapered rubber plug (for M10x1,5 thread hole)		-	-	2	2	2	2

1.) If LX-6 specification w/o LS pressure relief valve is required (with relief valve plug "P"), use of specified spare part with LS pressure relief valve and turning down adjustment /plug screw (item 40.3) to end stop with 5 Nm.

Spool axis options for inlet plate UL17(F)/.../F

Open Center systems for fixed displacement pump with 3-way flow controller

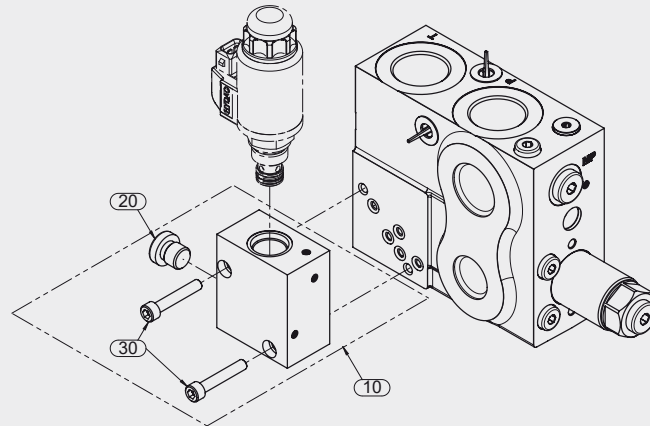


Type code	Item	Description / Function	Part.-No.
UL17(F) /.../ F	10	3-way flow controller with standard spring setting 12 bar	4372324
UL17(F) /.../ FH	20	3-way flow controller Higher spring setting 16 bar	4372502
UL17(F) /.../ FC	30	3-way flow controller with standard spring setting 12 bar Changing unit between fixed and variable displacement pump systems	4372529

Item	Part No.	Description	Port thread type	Wrench [mm]	Torque [Nm ±10 %]		
40	4263497	Plug screw		10	80	1	1
50	4263498	Spring cap		27	80	1	1
60	-	Plug screw	VSTI G1/4-ED-CF/FPM	6	30	1	1
70	4120390	Manual shut-off unit	LV-02BV	BSPP	16	30	1

Option blocks for inlet plate UL17F

LS option blocks



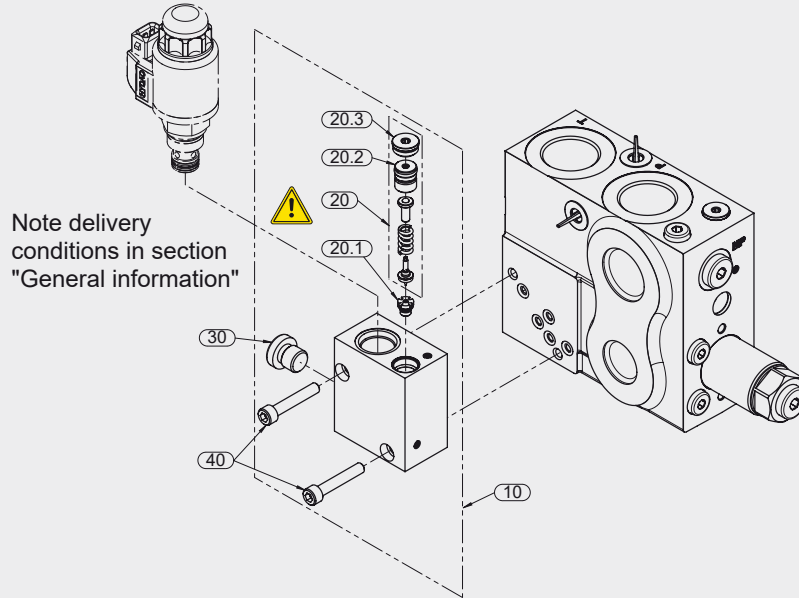
Type code	Item	Description / Function	Port thread type	Part.-No.
UL17F /.../ UW1...	10	LS unloading or pressure limitation for all sections for LS option valve types "V", "W", "P0A" - Solenoid valve type "V" (normally open) - Solenoid valve type "W" (normally closed) - Prop. relief valve type "P0A"	1.) BSPP SAE (not part of scope)	4245950 4245949

Item	Part No.	Description	Port thread type	Wrench [mm]	Torque [Nm ±10 %]	
20	- 4025053	Plug screw Plug screw	VSTI G1/4-ED-CF/FPM 9/16-18UNF	6 6	30 30	1
30	-	Socket cap screw	ISO4762 - M6x35-8.8-A3B	5	10	2

1.) See section "Solenoid valves and coils"

Option blocks for inlet plate UL17F

Switchable LS pressure limitation (2. pressure stage)



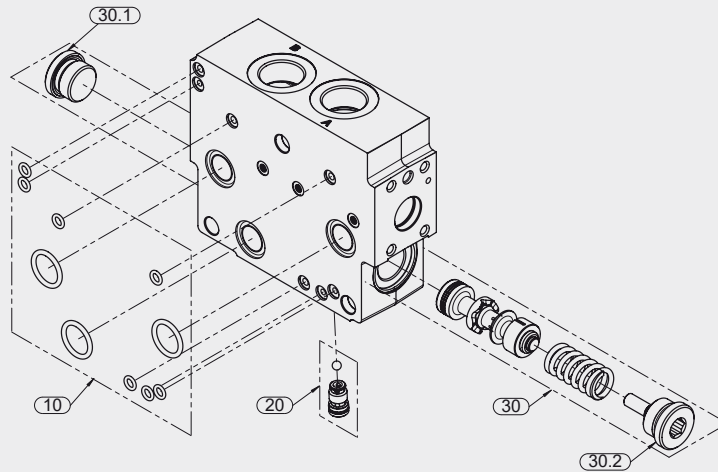
Type code	Item	Description / Function	Port thread type	Part.-No.
UL17F /.../ UW1M...	10	Switchable LS pressure limitation for all sections: for LS option valve types "V", "W" - Solenoid valve type "V" (normally open) - Solenoid valve type "W" (normally closed)	1.) BSPP SAE (not part of scope)	4237405 4245931

Item	Part No.	Description	Port thread type	Wrench [mm]	Torque [Nm ±10 %]	
20	4263721	LS relief valve KIT - DB25-01V35		-	-	1
20.1	4275608	LS relief valve seat Tool part no.: 4275607		3	5	1
20.2	-	Adjustment screw		3	-	1
20.3	4263719	Plug screw		4	5	1
30	-	Plug screw	VSTI G1/4-ED-CF/FPM	6	30	1
	4025053	Plug screw	9/16-18UNF	6	30	1
40	-	Socket cap screw	ISO4762 - M6x35-8.8-A3B	5	10	2

1.) See section "Solenoid valves and coils"

Working section B6

Basic section type w/o LS pressure limitation and workport valves



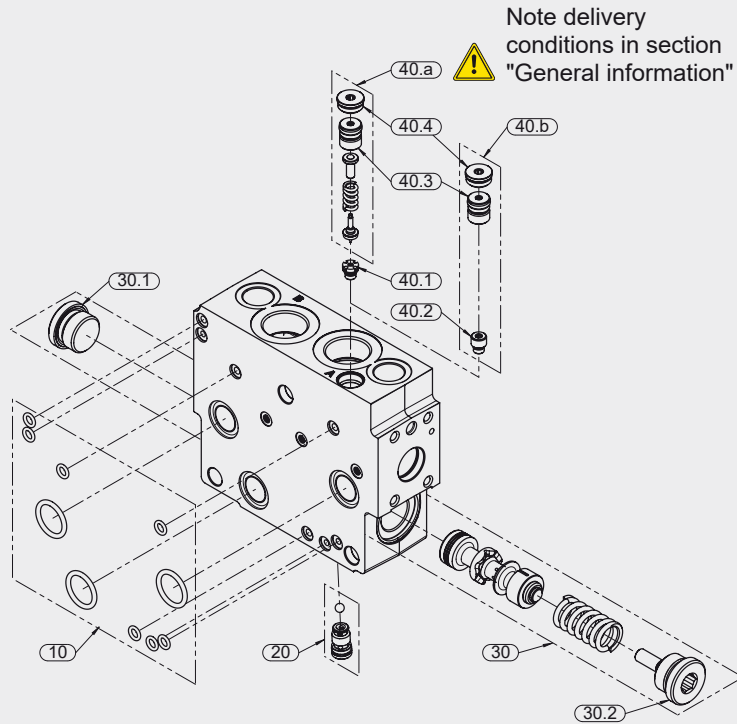
Type code	Description / Function	Port thread type	Part.-No.
B6 /...	w/o compensator axis	1.) BSPP SAE	4407674 4407680
B6 /... RN	Compensator type "RN"	BSPP SAE	4268900 4268903

Item	Part No.	Description	Wrench [mm]	Torque [Nm ±10 %]		
10	4263493	Seal-kit	Seal-kit - LX/V01	-	-	1 1
20	4274125	LS shuttle valve	4	7		1 1
30	4377127	Spool-axis type "RN"			Kit - IDW-axis-RN (spring color: none)	1
30.1	4263501	Plug screw	10	80		1 1
30.2	4263502	Plug screw	10	80	Spring side	1 1

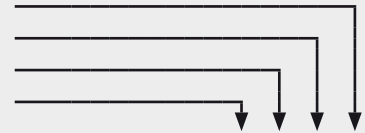
1.) See section "Pressure compensator and options"

Working section CS6

Working section type with 1x LS pressure limitation for port A/B and workport valves



Type code	Description / Function	Port thread type	Part.-No.
CS6 / ... / ...	w/o compensator axis, LS pressure relief valve 1.)	BSPP SAE	4407683 4477392
CS6 / ... / P	w/o compensator axis, w/o LS pressure relief valve 1.) 2.)		
CS6 /... RN /...	Compensator type "RN", LS pressure relief valve	BSPP SAE	4373692 4477388
CS6 /... RN / P	Compensator type "RN", w/o LS pressure relief valve 2.)		



Item	Part No.	Description	Wrench [mm]	Torque [Nm ±10 %]				
10	4263493	Seal-kit Seal-kit - LX/V01	-	-	1	1	1	1
20	4274125	LS shuttle valve	4	7	1	1	1	1
30	4377127	Spool-axis type "RN" Kit - IDW-axis-RN (spring color: none)	-	-	1	1		
30.1	4263501	Plug screw	10	80	1	1		
30.2	4263502	Plug screw Spring side	10	80	1	1		
40.a	4263721	LS relief valve Kit - DB25-01V35	-	-		1		1
40.b	4273994	LS relief valve plug Kit - DB25-01VP	-	-	1		1	
40.1	4275608	LS relief valve seat Tool part no.: 4275607	3	5		1		1
40.2	4263496	Plug screw M6 - O-Ring	3	5	1		1	
40.3	-	Adjustment/plug screw (Torque value for plug kit 40.b)	3	5	1	1	1	1
40.4	4263719	Plug screw	4	5	1	1	1	1

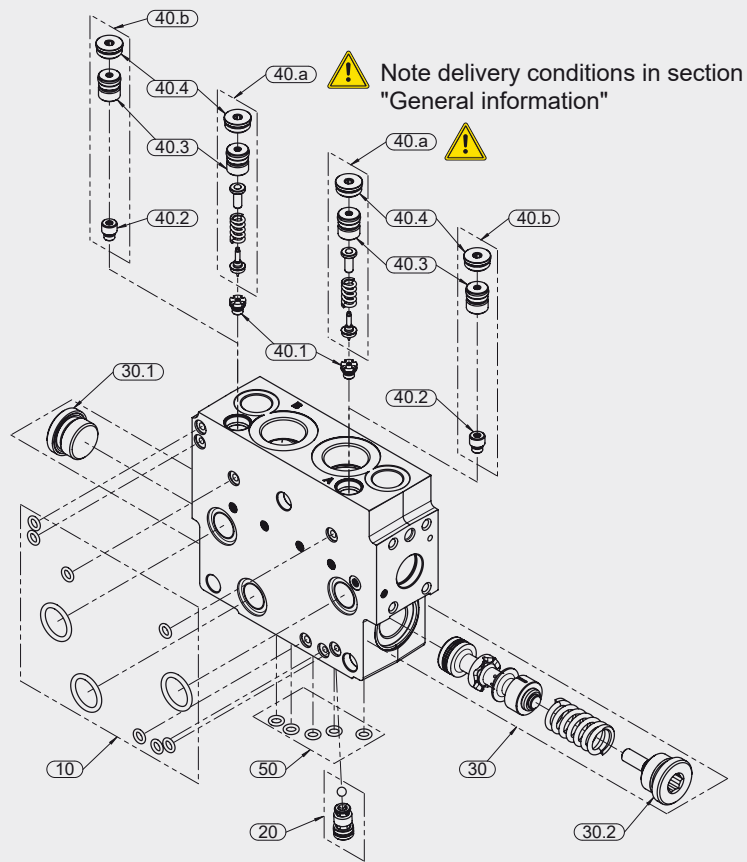
1.) See section "Pressure compensator and options"

2.) If LX-6 specification w/o LS pressure relief valve is required (with relief valve plug "P"), use of specified spare part with LS pressure relief valve and turning down adjustment /plug screw (item 40.3) to end stop with 5 Nm.

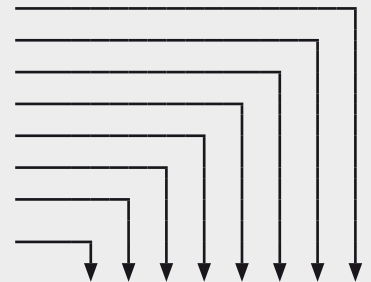
Working section LS6 / LS6F / LS6M

LS6 Section type with LS pressure limitation for port A and B and workport valves

LS6F Section type LS6 with flange interface for option blocks



Type code	Description / Function	Port thread type	Part.-No.
LS6 / ... / ... - ...	w/o compensator axis, LS pressure relief valve	1.) BSPP SAE	4407737 4407742
LS6 / ... / P - P	w/o compensator axis, w/o LS pressure relief valve	1.) 2.)	
LS6 / ... RN / ... - ...	Compensator type "RN", LS pressure relief valves	BSPP SAE	4268899 4268902
LS6 / ... RN / P - P	Compensator type "RN", w/o LS pressure relief valves	2.)	
LS6F / ... / ...	w/o compensator axis, LS pressure relief valve	1.)	4407743 4407820
LS6F / ... / P - P	w/o compensator axis, w/o LS pressure relief valve	1.) 2.)	
LS6F / ... RN / ... - ...	Compensator type "RN", LS pressure relief valves Flange interface for option blocks	BSPP SAE	4268898 4268901
LS6F / ... RN / P - P	Compensator type "RN", w/o LS pressure relief valves Flange interface for option blocks	2.)	



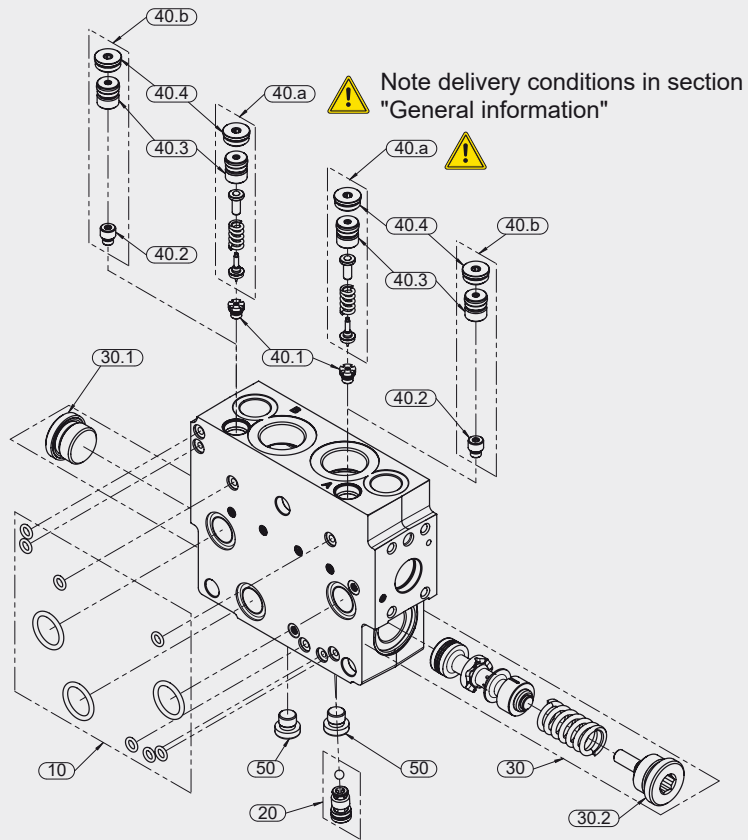
Item	Part No.	Description	Wrench [mm]	Torque [Nm ±10 %]									
10	4263493	Seal-kit	Seal-kit - LX/V01	-	-	1	1	1	1	1	1	1	1
20	4274125	LS shuttle valve		4	7	1	1	1	1	1	1	1	1
30	4377127	Spool-axis type "RN"	Kit - IDW-axis-RN (spring color: none)	-	-	1	1			1	1		
30.1	4263501	Plug screw		10	80	1	1			1	1		
30.2	4263502	Plug screw	Spring side	10	80	1	1			1	1		
40.a	4263721	LS relief valve	Kit - DB25-01V35	-	-		2		2	2	2		2
40.b	4273994	LS relief valve plug	Kit - DB25-01VP	-	-	2		2	2	2	2		2
40.1	4275608	LS relief valve seat	Tool part no.: 4275607	3	5		2		2	2	2		2
40.2	4263496	Plug screw	M6 - O-Ring	3	5	2		2	2	2	2		2
40.3	-	Adjustment/plug screw	(Torque value for plug kit 40.b)	3	5	2	2	2	2	2	2		2
40.4	4263719	Plug screw		4	5	2	2	2	2	2	2		2
50	4380281	Seal-kit LX/V02	Kit - LX/V02	-	-	1	1	1	1				

1.) See section "Pressure compensator and options"

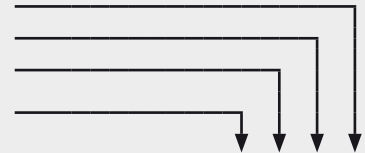
2.) If LX-6 specification w/o LS pressure relief valve is required (with relief valve plug "P"), use of specified spare part with LS pressure relief valve and turning down adjustment /plug screw (item 40.3) to end stop with 5 Nm.

Working section LS6 / LS6F / LS6M

LS6M Section type LS6 with LS ports LA and LB for LS pressure port A and B



Type code	Description / Function	Port thread type	Part.-No.
LS6M /... / ...-...	w/o compensator axis, LS pressure relief valve 1.)	BSPP SAE	4407824
LS6M /... / P - P	w/o compensator axis, w/o LS pressure relief valve 1.) 2.)		
LS6M /... RN / ... - ...	Compensator type "RN", LS pressure relief valves LS pressure ports LA and LB	BSPP SAE	4373694 -
LS6M /... RN / P - P	Compensator type "RN", w/o LS pressure relief valves LS pressure ports LA and LB 2.)		

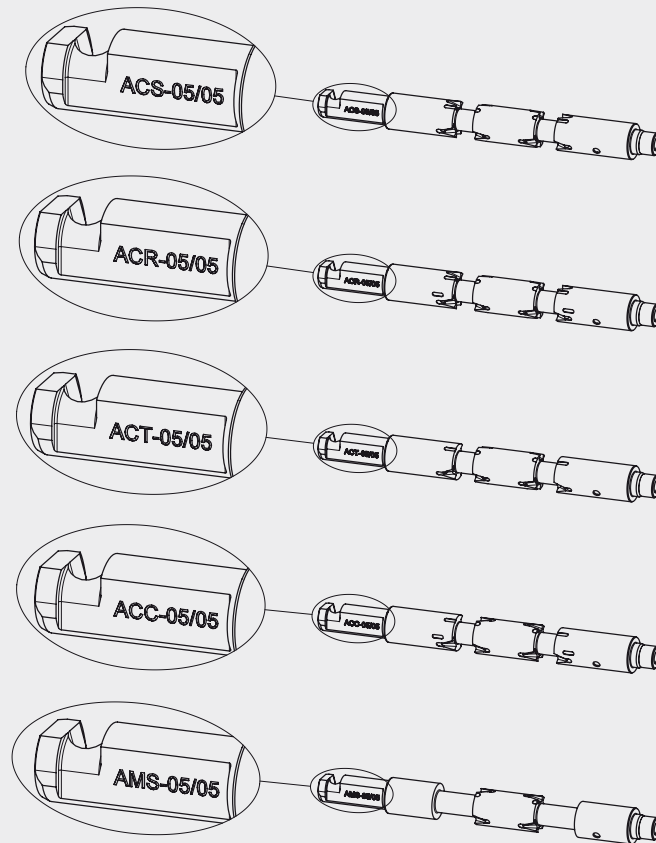


Item	Part No.	Description	Port thread type	Wrench [mm]	Torque [Nm ±10 %]				
10	4263493	Seal-kit Seal-kit - LX/V01		-	-	1	1	1	1
20	4274125	LS shuttle valve		4	7	1	1	1	1
30	4377127	Spool-axis type "RN" Kit - IDW-axis-RN (spring color: none)		-	-	1	1		
30.1	4263501	Plug screw		10	80	1	1		
30.2	4263502	Plug screw Spring side		10	80	1	1		
40.a	4263721	LS relief valve Kit - DB25-01V35		-	-		2		2
40.b	4273994	LS relief valve plug Kit - DB25-01VP		-	-	2		2	
40.1	4275608	LS relief valve seat Tool part no.: 4275607		3	5		2		2
40.2	4263496	Plug screw M6 - O-Ring		3	5	2		2	
40.3	-	Adjustment/plug screw (Torque value for plug kit 40.b)		3	5	2	2	2	2
40.4	4263719	Plug screw		4	5	2	2	2	2
50	-	Plug screw VSTI G1/8-ED-CF/FPM	BSPP SAE	5	10	2	2	2	2

1.) See section "Pressure compensator and options"

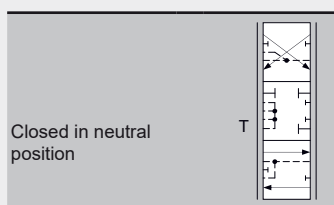
2.) If LX-6 specification w/o LS pressure relief valve is required (with relief valve plug "P"), use of specified spare part with LS pressure relief valve and turning down adjustment /plug screw (item 40.3) to end stop with 5 Nm.

Standard, symmetrical spool types with progressive characteristic curve

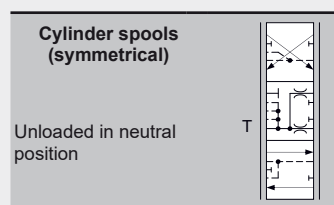


Disassembly/assembly of main spool see section "Mounting instructions main spool disassembly/assembly"

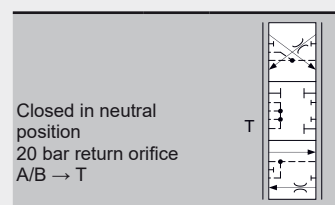
Further on request



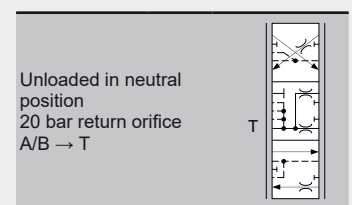
Part No.	Spool type CS
4380389	ACS-00/00
4380390	ACS-01/01
4380391	ACS-02/02
4380392	ACS-03/03
4380393	ACS-04/04
4380394	ACS-05/05
4380425	ACS-06/06
4380427	ACS-07/07
4380428	ACS-08/08



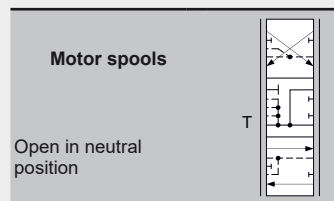
Part No.	Spool type CR
4380431	ACR-00/00
4380433	ACR-01/01
4380434	ACR-02/02
4380435	ACR-03/03
4380436	ACR-04/04
4380437	ACR-05/05
4380438	ACR-06/06
4380439	ACR-07/07
4380440	ACR-08/08



Part No.	Spool type CT
-	-
4380441	ACT-01/01
4380442	ACT-02/02
4380443	ACT-03/03
4380444	ACT-04/04
4380445	ACT-05/05
4380456	ACT-06/06
4380457	ACT-07/07
4380458	ACT-08/08



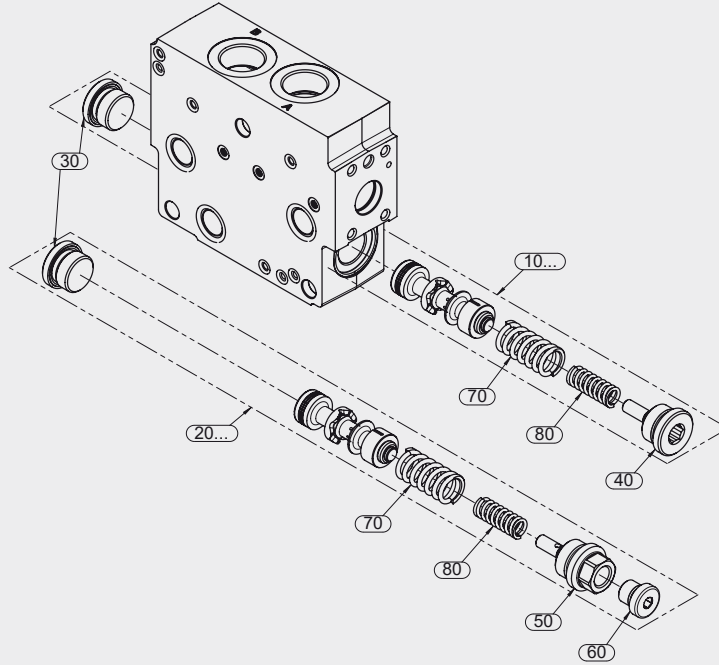
Part No.	Spool type CC
-	-
4424372	ACC-01/01
4424567	ACC-02/02
4424568	ACC-03/03
4424569	ACC-04/04
4424570	ACC-05/05
4424571	ACC-06/06
4424572	ACC-07/07
4424573	ACC-08/08



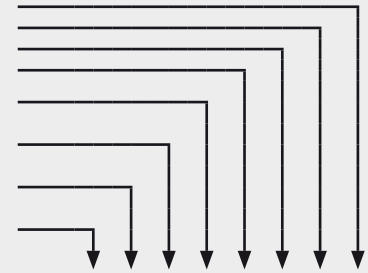
Part No.	Spool type MS
4380460	AMS-00/00
4380462	AMS-01/01
4380463	AMS-02/02
4380464	AMS-03/03
4380475	AMS-04/04
4380476	AMS-05/05
4380477	AMS-06/06
4380478	AMS-07/07
4380479	AMS-08/08

Pressure compensator options for section

- R...** Standard pressure compensator with load holding function
R...M Type R with 1x common port LR for LS ... LR for LS pressure port A/B



Type code	Item	Description / Function	Port thread type	Part.-No.
LS6 / ... RG / ...	10a	Standard compensator axis (spring color: green)		4377128
LS6 / ... RN / ...	10b	Standard compensator axis (spring color: none)		4377127
LS6 / ... RB / ...	10c	Standard compensator axis (spring color: blue)		4377129
LS6 / ... RY / ...	10d	Standard compensator axis (spring color: yellow)		4377131
LS6 / ... RGM / ...	20a	Standard compensator axis (spring color: green) with LS pressure measurement port	BSPP SAE	4377084
LS6 / ... RNM / ...	20b	Standard compensator axis (spring color: none) with LS pressure measurement port	BSPP SAE	4377125
LS6 / ... RBM / ...	20c	Standard compensator axis (spring color: blue) with LS pressure measurement port	BSPP SAE	4377083
LS6 / ... RYM / ...	20d	Standard compensator axis (spring color: yellow) with LS pressure measurement port	BSPP SAE	4377155

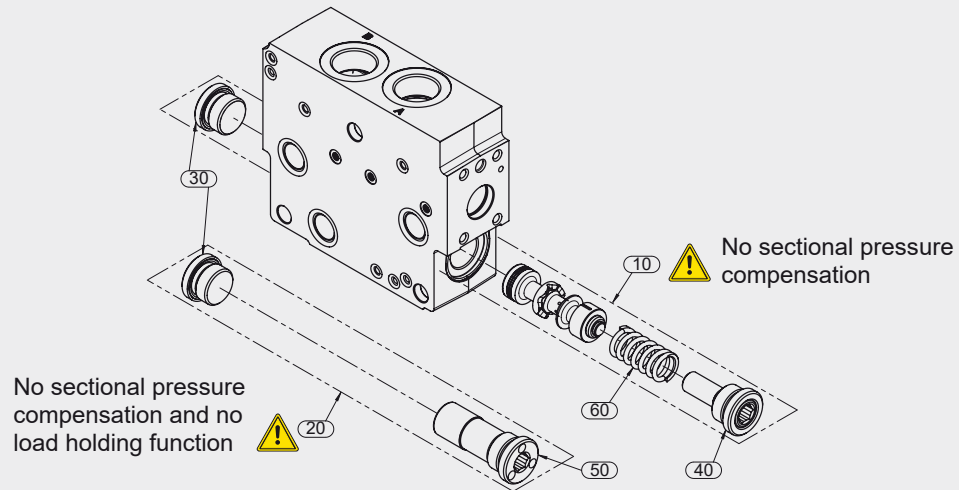


Item	Part No.	Description	Port thread type	Wrench [mm]	Torque [Nm ±10 %]										
30	4263501	Plug screw		10	80	1	1	1	1	1	1	1	1	1	1
40	4263502	Plug screw	Spring side	10	80							1	1	1	1
50	4263504	Plug screw	Spring side w/ measuring port	BSPP SAE	19 -	80 -	1	1	1	1					
60	-	Plug screw	VSTI G1/4-ED-CF/FPM	BSPP SAE	6 -	30 -	1	1	1	1					
70	4268963	IDW-spring	Spring color: green	-	-	-					1				1
	4268964	IDW-spring	Spring color: none	-	-	-					1				1
	4269096	IDW-spring	Spring color: blue	-	-	-		1							1
	4269097	IDW-spring	Spring color: yellow	-	-	-	1					1			
80	4269098	IDW-spring (inner spring type)	Spring color: green 1.)	-	-	-									

- 1.) Additional, inner spring type not released in general for LX-6.
 Combinations with main compensator spring types N, B, Y can create malfunctions under certain conditions.
 Type code letter for this additional, second spring is "G" after the first/main spring type code letter (e.g. RGG, RNG, ..., RGGM, RNGM, ...)
 - use only after technical approval.

Pressure compensator options for section

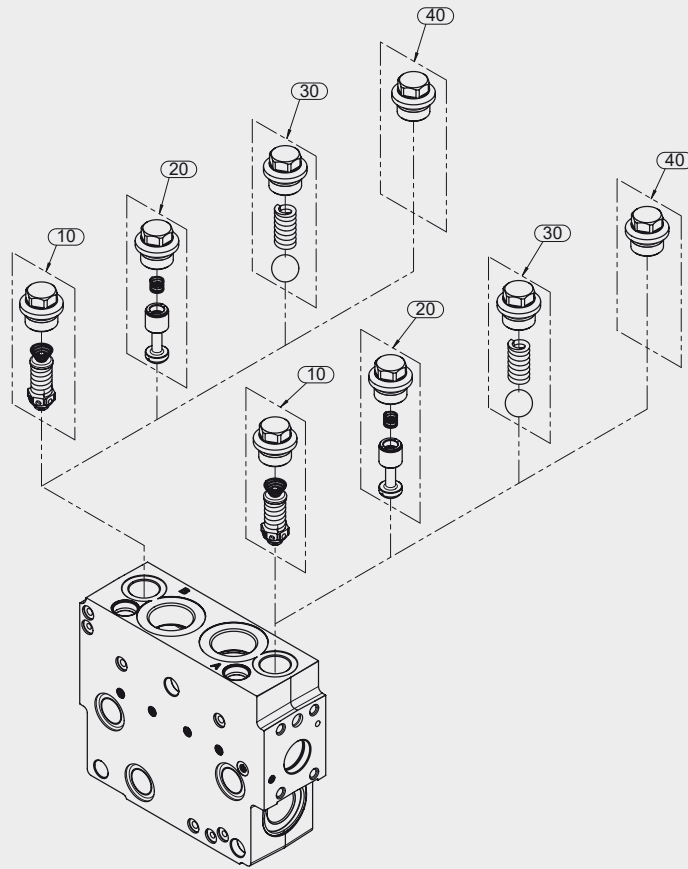
- L** Load holding function only, no pressure compensation
- N** No pressure compensation and no load holding function



Type code	Item	Description / Function	Part.-No.
B6 /... L /...	10	Load holding function axis (spring color: green)	4377132
B6 /... N /...	20	Dummy plug screws axis	special type 4377133

Item	Part No.	Description	Wrench [mm]	Torque [Nm ±10 %]		
30	4263501	Plug screw	10	80	1	1
40	4263503	Plug screw	10	80		1
50	4263536	Plug screw	10	80	1	
60	4268963	IDW-spring	-	-		1

Workport valves



Type code	Item	Description / Function	Part-No.
LS6 /.../ ...	10	Shock / anti-cavitation valve (pressure setting in bar, 3-digit)	see table below
LS6 /.../ A	20	Anti-cavitation valve	4263718
LS6 /.../ P	30	Plug screw	4274127
LS6 /.../ U	40	Unloading function	4263537

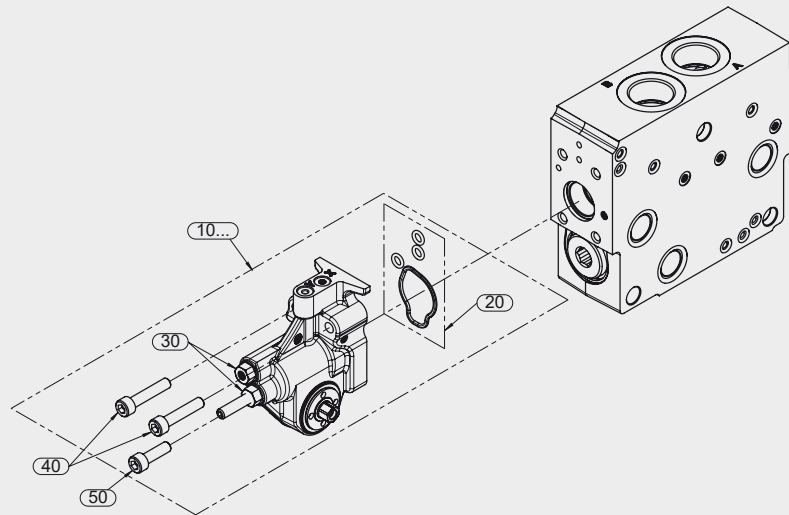
Item	Part No.	Description	Wrench [mm]	Torque [Nm ±10 %]	
40	4263537	Plug screw	16	40	1

Part No.	Description	fixed setting [bar]
4263538	Shock/anti-cavitation valve	50
4263539	Shock/anti-cavitation valve	65
4263541	Shock/anti-cavitation valve	80
4263542	Shock/anti-cavitation valve	100
4263543	Shock/anti-cavitation valve	125
4263582	Shock/anti-cavitation valve	140
4263583	Shock/anti-cavitation valve	150
4263584	Shock/anti-cavitation valve	160
4263695	Shock/anti-cavitation valve	175
4263696	Shock/anti-cavitation valve	190
4263697	Shock/anti-cavitation valve	200

Part No.	Description	fixed setting [bar]
4263698	Shock/anti-cavitation valve	210
4263699	Shock/anti-cavitation valve	230
4263700	Shock/anti-cavitation valve	240
4263701	Shock/anti-cavitation valve	250
4263702	Shock/anti-cavitation valve	265
4263703	Shock/anti-cavitation valve	280
4263704	Shock/anti-cavitation valve	300
4376198	Shock/anti-cavitation valve	310
4263715	Shock/anti-cavitation valve	320
4263716	Shock/anti-cavitation valve	350
4263717	Shock/anti-cavitation valve	380

Operation unit

M ... Manual actuation type w and w/o options



Note:
Disassembly/assembly of main spool see section
"Mounting instructions main spool disassembly/assembly"



Lock/seal nut part of item 30 should be exchanged after two times of loosen/tighting to ensure the sealing function

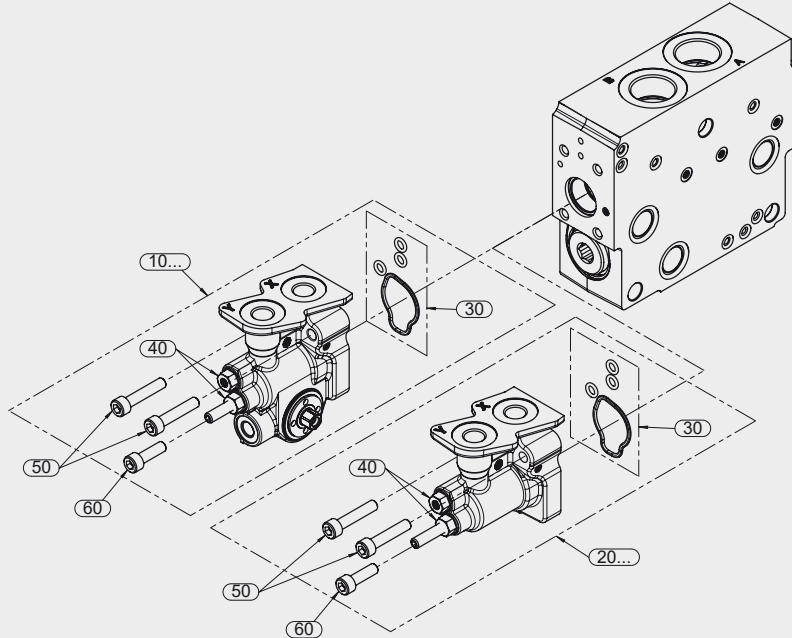
Type code	Item	Description / Function	Part.-No.
B6 /.../ MHS...	10.a	Hand lever axis, stroke limiter	4275610
B6 /.../ MH...	10.b	Hand lever axis	4380113

Item	Part No.	Description	Wrench [mm]	Torque [Nm ±10 %]		
20	4263494	Seal-kit	Seal-kit - LX/V04	-	-	1 1
	4464018	Stroke limiter-kit	Stroke limiter-kit - LX/V01	3/10	7	1 1
30	4463730	Seal nut	M6-8/A3B/PA	10	7	2 2
	-	Hex. sock. set screw	ISO4026 - M6x16-45H	3	-	2 2
40	-	Socket cap screw	ISO4762 - M6x60-8.8-A3B	5	7	2 2
50	-	Socket cap screw	ISO4762 - M6x20-8.8-A3B	5	7	1 1

- 1.) See section "Standard kits"
- 2.) Scope of delivery 10 pieces

Operation unit

H ... Hydraulic actuation types w and w/o options



Note:
Disassembly/assembly of main spool see section
"Mounting instructions main spool disassembly/assembly"

Lock/seal nut part of item 40 should be exchanged after two times of loosen/tighting to ensure the sealing function

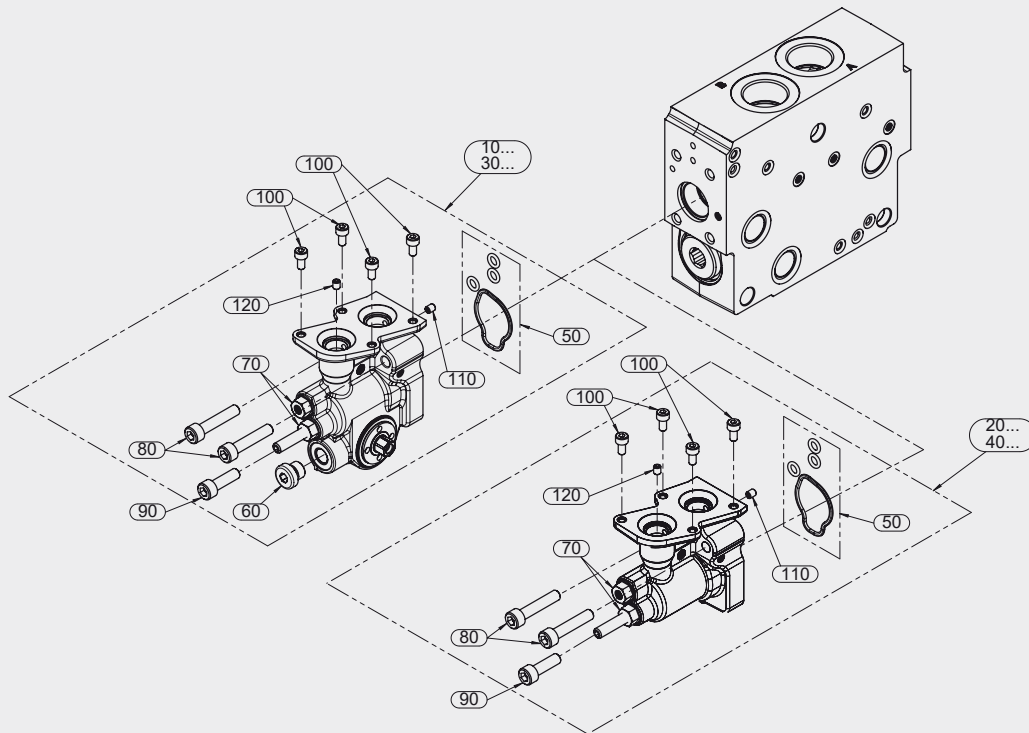
Type code	Item	Description / Function	Port thread type	Part.-No.
B6 /.../ HHS...	10.a	Hand lever axis, stroke limiter	BSPP	4465033
B6 /.../ HS...	20.a	Stroke limiter	BSPP	4465075

Item	Part No.	Description	Wrench [mm]	Torque [Nm ±10 %]		
30	4263494	Seal-kit	-	-	1	1
	4464018	Stroke limiter-kit	3/10	7		1
40	4463730	Seal nut	10	7	2	2
	-	Hex. sock. set screw	3	-	2	
50	-	Socket cap screw	5	10	2	2
60	-	Socket cap screw	5	10	1	1

- 1.) See section "Standard kits"
- 2.) Scope of delivery 10 pieces

Operation unit

E ... Electrohydraulic actuation types w and w/o options

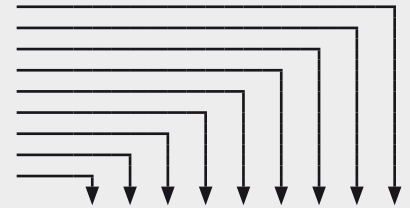


Note:
Disassembly/assembly of main spool see section
"Mounting instructions main spool disassembly/assembly"



Lock/seal nut part of item 70 should be exchanged after two times of loosen/tighting to ensure the sealing function

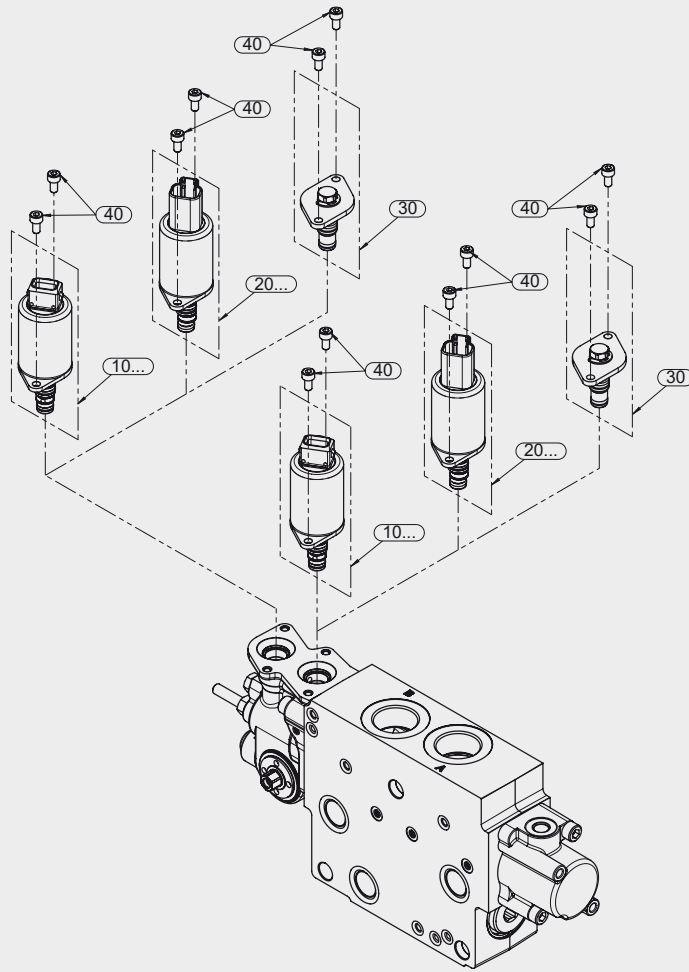
Type code	Item	Description / Function	Port thread type	Part.-No.
B6 /.../ EYHS...	10.a	Port MY, hand lever axis, stroke limiter	BSPP	4263724
B6 /.../ EYH...	10.b	Port MY, hand lever axis	BSPP	4263795
B6 /.../ ES...	20.a	Stroke limiter		4263796
B6 /.../ E...	20.b	No options		4263797
B6 /.../ E1YHS...	30.a	EYHS + dampening orifice Ø1,0	BSPP	4263798
B6 /.../ E1YH...	30.b	EYH + dampening orifice Ø1,0	BSPP	4263799
B6 /.../ E1S...	40.a	Stroke limiter + dampening orifice Ø1,0		4263800
B6 /.../ E1...	40.b	No options + dampening orifice Ø1,0		4263801
B6 /.../ E6YHS...	30.a	EYHS + dampening orifice Ø0,6	BSPP	4263802



Item	Part No.	Description	Wrench [mm]	Torque [Nm ±10 %]													
50	4263494	Seal-kit Seal-kit - LX/V04	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1
60	-	Plug screw VSTI G1/8-ED-CF/FPM	5	10	1			1	1								1
	4464018	Stroke limiter-kit Stroke limiter-kit - LX/V01	1.) 3/10	7	2		2	2	2	2	2	2	2	2	2	2	2
70	4463730	Seal nut M6-8/A3B/PA	2.) 10	7	2	2	2	2	2	2	2	2	2	2	2	2	2
	-	Hex. sock. set screw ISO4026 - M6x16-45H	3	-			2	2	2	2	2	2	2	2	2	2	2
80	-	Socket cap screw ISO4762 - M6x60-8.8-A3B	5	10	2	2	2	2	2	2	2	2	2	2	2	2	2
90	-	Socket cap screw ISO4762 - M6x20-8.8-A3B	5	10	1	1	1	1	1	1	1	1	1	1	1	1	1
100	-	Socket cap screw ISO4762 - M4x8-8.8-A3B	3	2	4	4	4	4	4	4	4	4	4	4	4	4	4
	-	Orifice Orifice-B-M4x5x1,5-C35	2	1									1	1	1	1	1
110	-	Orifice Orifice-B-M4x5x1,0-C35						1	1	1	1						
	-	Orifice Orifice-B-M4x5x0,6-C35			2		1										
	-	Orifice Orifice-K-M4-1,5-NR			2		1						1	1	1	1	1
120	-	Orifice Orifice-K-M4-1,0-NR								1	1	1	1				
	-	Orifice Orifice-K-M4-0,6-NR			2		1	1									

- 1.) See section "Standard kits"
- 2.) Scope of delivery 10 pieces

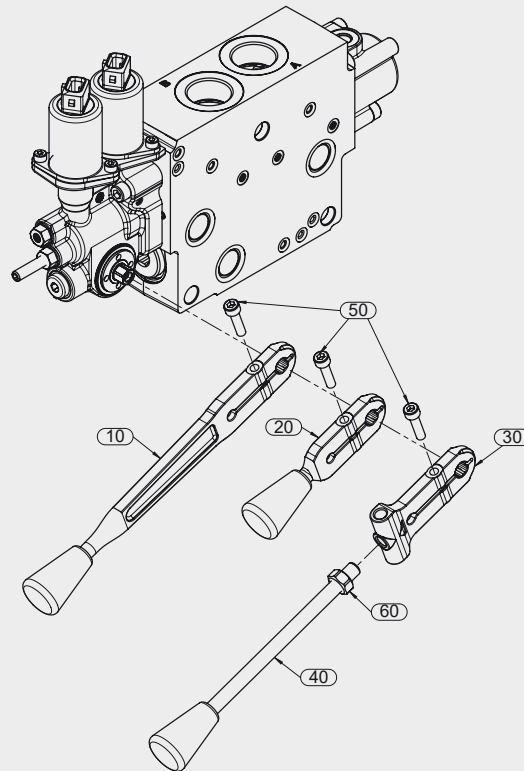
Electrohydraulic pilot valves



Type code	Item	Description / Function	Part.-No.
LS6 /.../ E...1A...	10.a	Supply voltage 12 VDC, connector type AMP Junior Timer 2-pin	4262683
LS6 /.../ E...2A...	10.b	Supply voltage 24 VDC, connector type AMP Junior Timer 2-pin	4262846
LS6 /.../ E...1D...	20.a	Supply voltage 12 VDC, connector type Deutsch DT04 2-pin	4262847
LS6 /.../ E...2D...	20.b	Supply voltage 24 VDC, connector type Deutsch DT04 2-pin	4262848
LS6 /.../ E...P...	30	Cavity plug Pilot oil supply closed, pilot pressure chambers unloaded to drain/tank	4263720

Item	Part No.	Description	Wrench [mm]	Torque [Nm ±10 %]
40	-	Socket cap screw ISO4762 - M4x8-8.8-A3B (not part of scope)	3	2

Hand levers



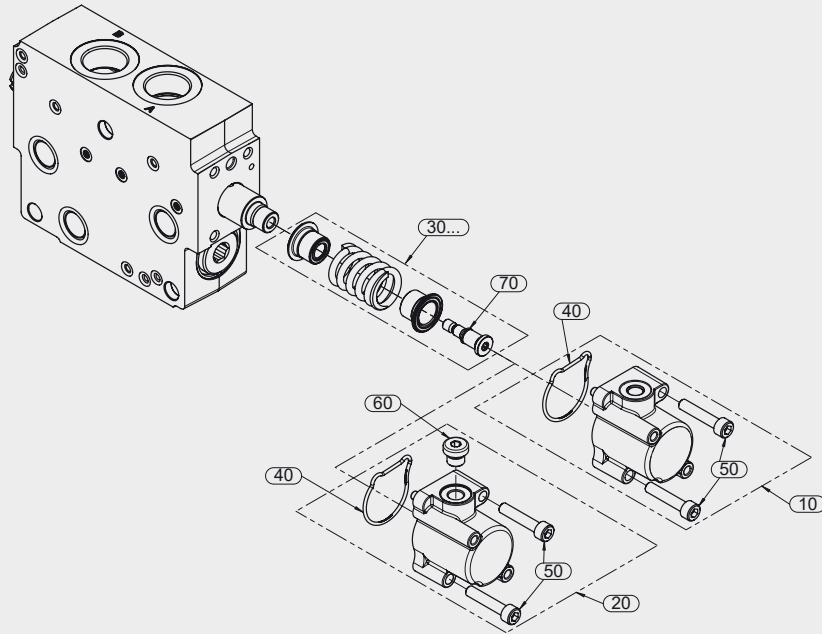
Type code	Item	Description / Function	Part.-No.
B6 /... - 1 /...	10	Standard lever	4263803
B6 /... - 2 /...	20	Short lever (for emergency operation)	4263804
B6 /... - 3 /...	30	Universal clamp (without hand lever)	3979692
Lever-rod 160	40	Lever-rod M8, length 160 mm for hand lever type 3	4263815



Item	Part No.	Description	ISO	Wrench [mm]	Torque [Nm ±10 %]		
50	-	Socket cap screw	ISO4762 - M5x20-8.8-A3B	4	7		1
60	-	Hex. nut	ISO4032 - M8-8-A3B	13	15		1

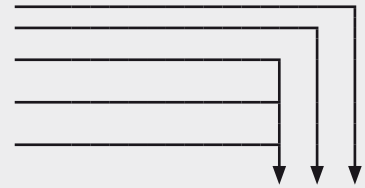
Spring caps

- C1** Standard type
C1X Type C1 with port G1/8



Note:
 Disassembly/assembly of main spool see section
 "Mounting instructions main spool disassembly/assembly"

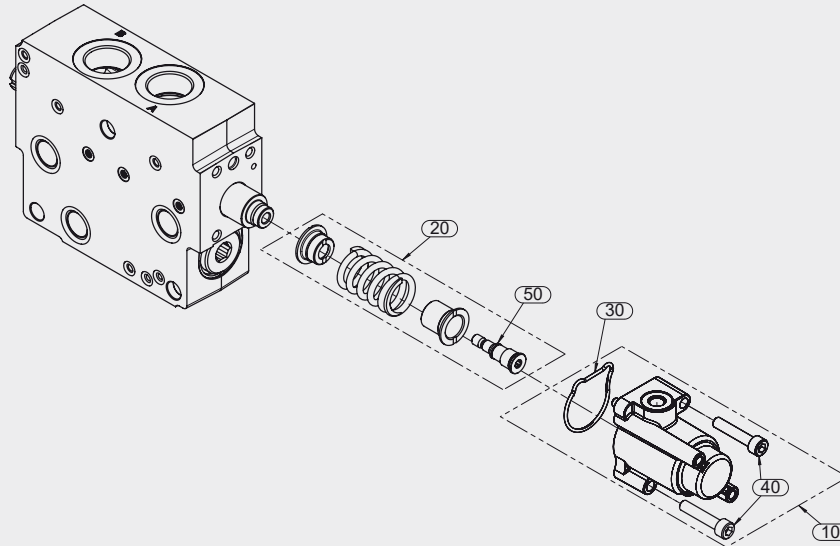
Type code	Item	Description / Function	Port thread type	Part.-No.
B6 /.../ C1...	10	Standard cap		4263822
B6 /.../ C1X...	20	Standard cap, port MX	BSPP	4263823
B6 /.../ C1E	30.a	Standard spring package - electrohydraulic operation Spring color: none		4263816
B6 /.../ C1H	30.b	Spring package - hydraulic operation Spring color: red		4263819
B6 /.../ C1M	30.c	Standard spring package - manual operation Spring color: green		4263820



Item	Part No.	Description	Port thread type	Wrench [mm]	Torque [Nm ±10 %]		
40	4263495	Seal-kit Seal-kit - LX/V03		-	-		1 1
50	-	Socket cap screw ISO4762 - M6x30-8.8-A3B		5	7		2 2
60	-	Plug screw VSTI G1/8-ED-CF/FPM	BSPP	5	7		1
70	-	Spool screw		4	7		1

Spring caps

F1 Standard cap for floating spool types



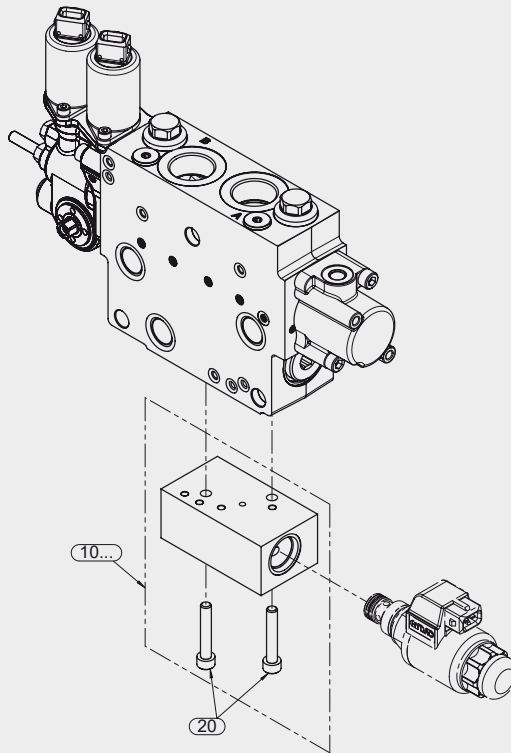
Note:
Disassembly/assembly of main spool see section
"Mounting instructions main spool disassembly/assembly"

Type code	Item	Description / Function	Port thread type	Part.-No.
B6 /.../ F1...	10	Standard floating cap		4263824
B6 /.../ F1E	20	Standard floating spring package - electrohydraulic operation Spring color: white		4263821

Item	Part No.	Description	Wrench [mm]	Torque [Nm ±10 %]		
30	4263495	Seal-kit Seal-kit - LX/V03	-	-		1
40	-	Socket cap screw ISO4762 - M6x30-8.8-A3B	5	7		2
50	-	Spool screw	4	7		1

Option blocks for working section type LS6F

LW Standard type for one LS option valve



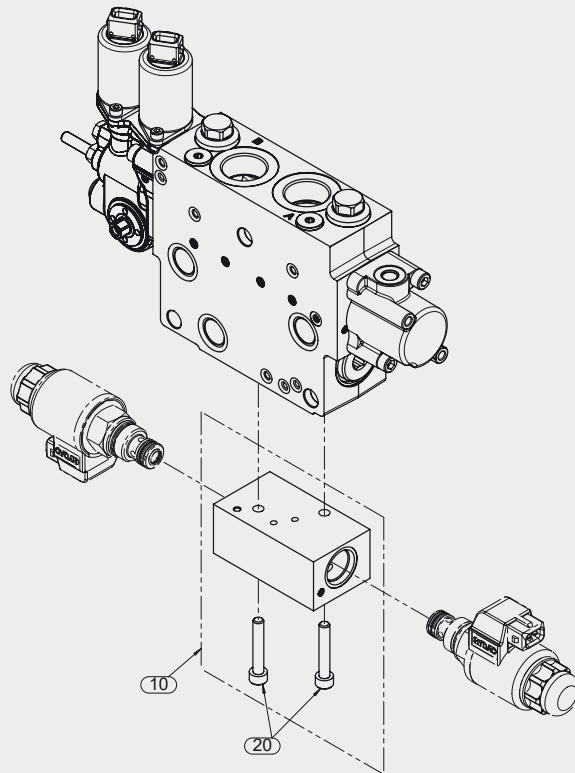
Type code	Item	Description / Function	Part.-No.
LS6F /.../ LWA...	10.a	LS unloading or pressure limitation for port A 1.)	4247196
LS6F /.../ LWB...	10.b	LS unloading or pressure limitation for port B 1.)	4242797
LS6F /.../ LWR...	10.c	LS unloading or pressure limitation for port A/B 1.)	4242802
LS6F /.../ LWS...	10.d	LS unloading or pressure limitation for further sections 1.)	4242803
		for LS option valve types "V", "W", "POA" - Solenoid valve type "V" (normally open) - Solenoid valve type "W" (normally closed) - Prop. relief valve type "POA" (not part of scope)	

Item	Part No.	Description	Wrench [mm]	Torque [Nm ±10 %]	
20	-	Socket cap screw ISO4762 - M6x35-8.8-A3B	5	10	2

1.) See section "Solenoid valves and coils"

Option blocks for working section type LS6F

LW1 Type for two LS option valves (port A and port B separately)



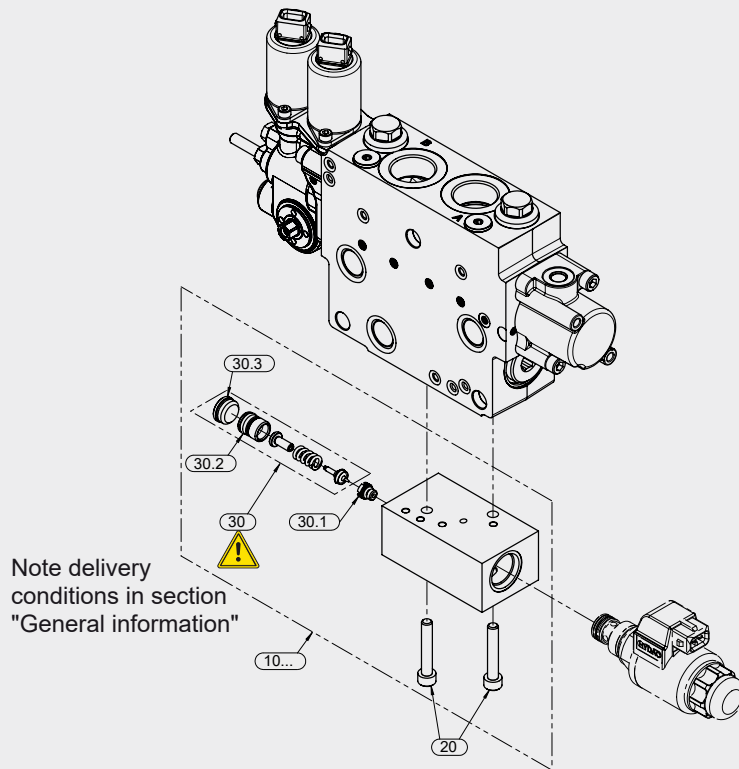
Type code	Item	Description / Function	Part.-No.
LS6F /.../ LW1...	10	LS unloading for port A and B separately for LS option valve types "V", "W" - Solenoid valve type "V" (normally open) - Solenoid valve type "W" (normally closed)	4390879

Item	Part No.	Description	Wrench [mm]	Torque [Nm ±10 %]	
20	-	Socket cap screw ISO4762 - M6x35-8.8-A3B	5	10	2

1.) See section "Solenoid valves and coils"

Option blocks for working section type LS6F

LWM Switchable LS pressure limitation (2. pressure stage)



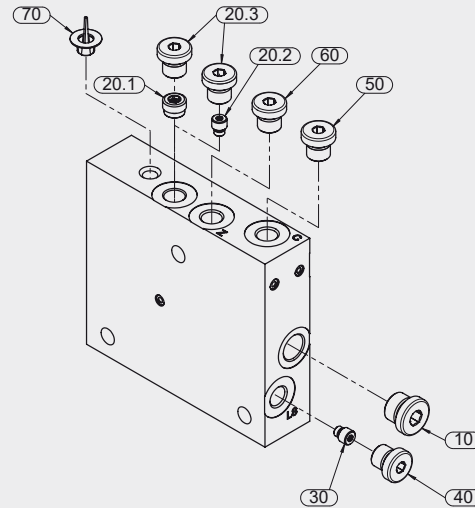
Type code	Item	Description / Function	Part.-No.
LS6F /.../ LWAM...	10.a	Switchable LS pressure limitation for port A 1.)	4238364
LS6F /.../ LWBM...	10.b	Switchable LS pressure limitation for port B 1.)	4238632
LS6F /.../ LWRM...	10.c	Switchable LS pressure limitation for port A/B 1.)	4245951
LS6F /.../ LWSM...	10.d	Switchable LS pressure limitation for further sections 1.)	4243739
		for LS option valve types "V", "W" - Solenoid valve type "V" (normally open) - Solenoid valve type "W" (normally closed)	(not part of scope)

Item	Part No.	Description	Wrench [mm]	Torque [Nm ±10 %]	
20	-	Socket cap screw ISO4762 - M6x35-8.8-A3B	5	10	2
30	4263721	LS relief valve KIT - DB25-01V35	-	-	1
30.1	4275608	LS relief valve seat Tool part no.: 4275607	3	5	1
30.2	-	Adjustment screw	3	-	1
30.3	4263719	Plug screw	4	5	1

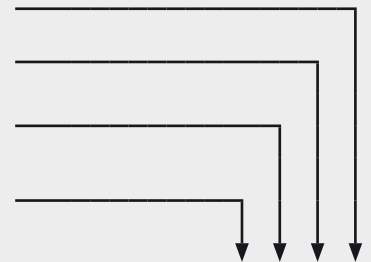
1.) See section "Solenoid valves and coils"

End plate ER1

End plate w and w/o external pilot oil supply



Type code	Description / Function	Port thread type	Part.-No.
ER1	Pilot drain port Z open Pilot supply port C open	BSPP SAE	
ER1ZC	Internal connection Z → T with check valve Pilot drain port Z closed Pilot supply port C closed	BSPP SAE	4246043 4251267
ER1E	Pilot drain port Z open Pilot supply port C open External LS signal input	BSPP SAE	
ER1ZEC	Internal connection Z → T with check valve Pilot drain port Z closed Pilot supply port C closed External LS signal input	BSPP SAE	4242798 4245872



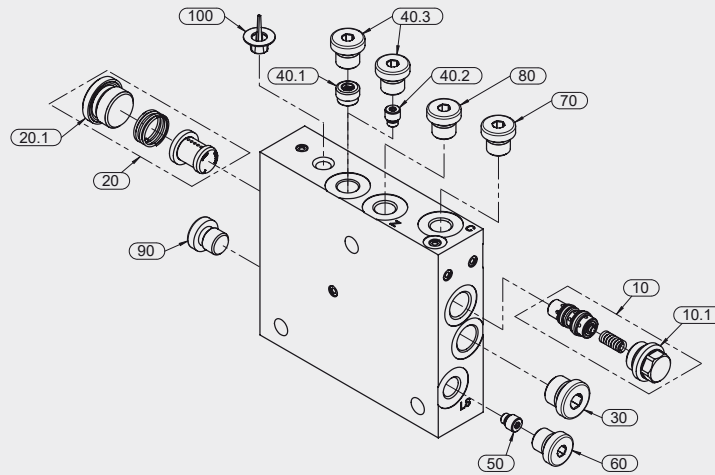
Item	Part No.	Description	Port thread type	Wrench [mm]	Torque [Nm ±10 %]				
10	-	Plug screw	VSTI G3/8-ED-CF/FPM	8	40		1	1	1
20.1	4263825	Check valve		6	10		1		1
20.2	4263496	Plug screw	M6 - O-Ring	3	5			1	1
20.3	-	Plug screw	VSTI G1/4-ED-CF/FPM	6	30		1	1	1
30	4263496	Plug screw	M6 - O-Ring	3	5		1	1	
40	-	Plug screw	VSTI G1/4-ED-CF/FPM	6	30				1
	4025053	Plug screw	9/16-18UNF	6	30				1
50	-	Plug screw	VSTI G1/4-ED-CF/FPM	6	30		1		1
	4025053	Plug screw	9/16-18UNF	6	30		1		1
60	-	Plug screw	VSTI G1/4-ED-CF/FPM	6	30		1		1
	4025053	Plug screw	9/16-18UNF	6	30		1		1
70	-	Tapered rubber plug	(for M10x1,5 thread hole)	-	-		1	1	1

If following type codes (specifications) are required:

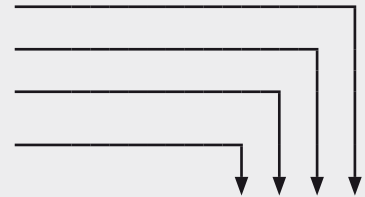
ER1	use of ER1ZC and remove of plug screw port C and Z Pos. 50 and 60
ER1C	use of ER1ZC and remove of plug screw port Z Pos. 60
ER1E	use of ER1ZEC and remove of plug screw port C and Z Pos. 50 and 60
ER1EC	use of ER1ZEC and remove of plug screw port Z Pos. 60
ER1Y	use of ER1ZC and remove of plug screw port C and Z Pos. 50 and 60
ER1YC	use of ER1ZC and remove of plug screw port Z Pos. 60
ER1YE	use of ER1ZEC and remove of plug screw port C and Z Pos. 50 and 60
ER1YEC	use of ER1ZEC and remove of plug screw port Z Pos. 60
ER1Z	use of ER1ZC and remove of plug screw port C Pos. 50
ER1ZE	use of ER1ZEC and remove of plug screw port C Pos. 50

End plate ER2

End plate with internal pilot oil supply



Type code	Description / Function	Port thread type	Part.-No.
ER2/0	Pilot drain port Z open, no options at port PC, C	BSPP SAE	
ER2Z/0	Internal connection Z → T with check valve Pilot drain port Z open, no options at port PC, C	BSPP SAE	4229255 4243184
ER2E/0	Pilot drain port Z open, no options at port PC, C External LS signal input	BSPP SAE	
ER2ZE/0	Internal connection Z → T with check valve Pilot drain port Z open, no options at port PC, C External LS signal input	BSPP SAE	4246075 4234712



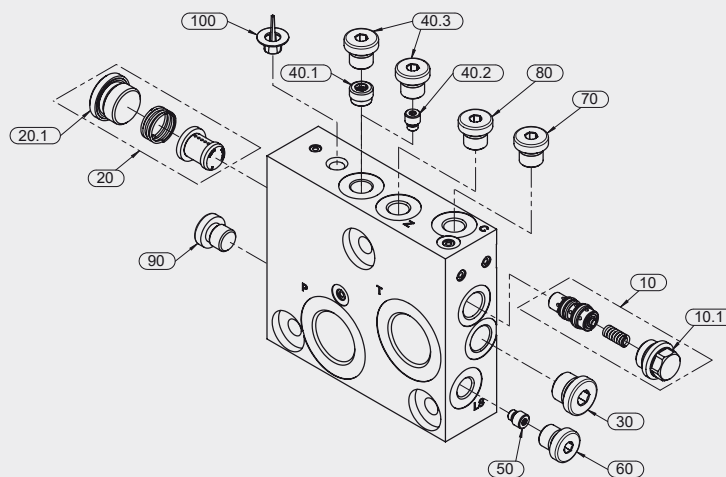
Item	Part No.	Description	Port thread type	Wrench [mm]	Torque [Nm ±10 %]				
10	4105105	Pressure reducing valve	Kit - PRV-01V30	-	-	1	1	1	1
10.1	4263826	Plug screw		16	40	1	1	1	1
20	4022938	Filter unit	Kit - HPF-01VT25	-	-	1	1	1	1
20.1	4263501	Plug screw		10	80	1	1	1	1
30	-	Plug screw	VSTI G3/8-ED-CF/FPM	8	40	1	1	1	1
40.1	4263825	Check valve		6	10	1		1	
40.2	4263496	Plug screw	M6 - O-Ring	3	5			1	1
40.3	-	Plug screw	VSTI G1/4-ED-CF/FPM	6	30	1	1	1	1
50	4263496	Plug screw	M6 - O-Ring	3	5	1	1		
60	-	Plug screw	VSTI G1/4-ED-CF/FPM	6	30				1
	4025053	Plug screw	9/16-18UNF	6	30				1
70	4025053	Plug screw	VSTI G1/4-ED-CF/FPM	6	30	1	1	1	1
	-	Plug screw	9/16-18UNF	6	30				
80	-	Plug screw	VSTI G1/4-ED-CF/FPM	6	30				
	4025053	Plug screw	9/16-18UNF	6	30	1			1
90	-	Plug screw	VSTI G1/4-ED-CF/FPM	6	30				
	4025053	Plug screw	9/16-18UNF	6	30	1	1	1	1
100	-	Tapered rubber plug	(for M10x1,5 thread hole)	-	-	1	1	1	1

If following type codes (specifications) are required:

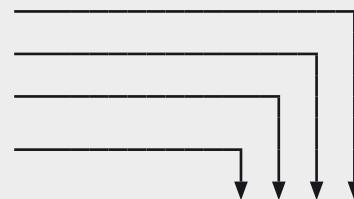
ER2/0	use of ER2Z/0 and remove of plug screw port Z Pos. 80
ER2E/0	use of ER2ZE/0 and remove of plug screw port Z Pos. 80
ER2Y/0	use of ER2Z/0 and remove of plug screw port Z Pos. 80
ER2YE/0	use of ER2ZE/0 and remove of plug screw port Z Pos. 80

End plate ER27

End plate with internal pilot oil supply and port P/T



Type code	Description / Function	Port thread type	Part.-No.
ER27/0	Pilot drain port Z open, no options at port PC, C	BSPP SAE	
ER27Z/0	Internal connection Z → T with check valve Pilot drain port Z open, no options at port PC, C	BSPP SAE	4243735 4249231
ER27E/0	Pilot drain port Z open, no options at port PC, C External LS signal input	BSPP SAE	
ER27ZE/0	Internal connection Z → T with check valve Pilot drain port Z open, no options at port PC, C External LS signal input	BSPP SAE	4239491 4245900



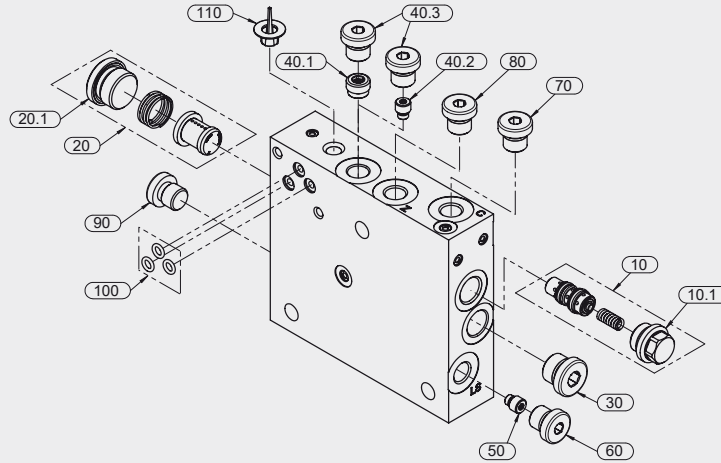
Item	Part No.	Description	Port thread type	Wrench [mm]	Torque [Nm ±10 %]				
10	4105105	Pressure reducing valve	Kit - PRV-01V30	-	-	1	1	1	1
10.1	4263826	Plug screw		16	40	1	1	1	1
20	4022938	Filter unit	Kit - HPF-01VT25	-	-	1	1	1	1
20.1	4263501	Plug screw		10	80	1	1	1	1
30	-	Plug screw	VSTI G3/8-ED-CF/FPM	8	40	1	1	1	1
40.1	4263825	Check valve		6	10	1	1		
40.2	4263496	Plug screw	M6 - O-Ring	3	5		1		1
40.3	-	Plug screw	VSTI G1/4-ED-CF/FPM	6	30	1	1	1	1
50	4263496	Plug screw	M6 - O-Ring	3	5	1	1		
60	-	Plug screw	VSTI G1/4-ED-CF/FPM	6	30				1
	4025053	Plug screw	9/16-18UNF	6	30				1
70	-	Plug screw	VSTI G1/4-ED-CF/FPM	6	30	1	1	1	1
	4025053	Plug screw	9/16-18UNF	6	30				1
80	-	Plug screw	VSTI G1/4-ED-CF/FPM	6	30	1		1	
	4025053	Plug screw	9/16-18UNF	6	30				1
90	-	Plug screw	VSTI G1/4-ED-CF/FPM	6	30	1	1	1	1
	4025053	Plug screw	9/16-18UNF	6	30				1
100	-	Tapered rubber plug	(for M10x1,5 thread hole)	-	-	1	1	1	1

If following type codes (specifications) are required:

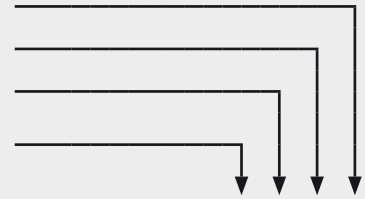
ER27/0	use of ER2Z/0 and remove of plug screw port Z Pos. 80
ER27E/0	use of ER2ZE/0 and remove of plug screw port Z Pos. 80
ER27Y/0	use of ER2Z/0 and remove of plug screw port Z Pos. 80
ER27YE/0	use of ER2ZE/0 and remove of plug screw port Z Pos. 80

End plate ER2F

End plate with internal pilot oil supply and flange interface for option blocks



Type code	Description / Function	Port thread type	Part.-No.
ER2F/0	Pilot drain port Z open, no options at port PC, C	BSPP SAE	
ER2FZ/0	Internal connection Z → T with check valve Pilot drain port Z open, no options at port PC, C	BSPP SAE	4246077 4234711
ER2FE/0	Pilot drain port Z open, no options at port PC, C External LS signal input	BSPP SAE	
ER2FZE/0	Internal connection Z → T with check valve Pilot drain port Z open, no options at port PC, C External LS signal input	BSPP SAE	4216296 4149434



Item	Part No.	Description	Port thread type	Wrench [mm]	Torque [Nm ±10 %]				
10	4105105	Pressure reducing valve	Kit - PRV-01V30	-	-	1	1	1	1
10.1	4263826	Plug screw		16	40	1	1	1	1
20	4022938	Filter unit	Kit - HPF-01VT25	-	-	1	1	1	1
20.1	4263501	Plug screw		10	80	1	1	1	1
30	-	Plug screw	VSTI G3/8-ED-CF/FPM	8	40	1	1	1	1
40.1	4263825	Check valve		6	10	1	1		
40.2	4263496	Plug screw	M6 - O-Ring	3	5			1	1
40.3	-	Plug screw	VSTI G1/4-ED-CF/FPM	6	30	1	1	1	1
50	4263496	Plug screw	M6 - O-Ring	3	5	1	1		
60	-	Plug screw	VSTI G1/4-ED-CF/FPM	6	30				1
	4025053	Plug screw	9/16-18UNF	6	30				1
70	-	Plug screw	VSTI G1/4-ED-CF/FPM	6	30				1
	4025053	Plug screw	9/16-18UNF	6	30	1	1	1	1
80	-	Plug screw	VSTI G1/4-ED-CF/FPM	6	30			1	
	4025053	Plug screw	9/16-18UNF	6	30	1		1	
90	-	Plug screw	VSTI G1/4-ED-CF/FPM	6	30	1	1	1	1
	4025053	Plug screw	9/16-18UNF	6	30				1
100	4380281	Seal-kit - LX/V02	1.)	-	-	1	1	1	1
110	-	Tapered rubber plug	(for M10x1,5 thread hole)	-	-	1	1	1	1

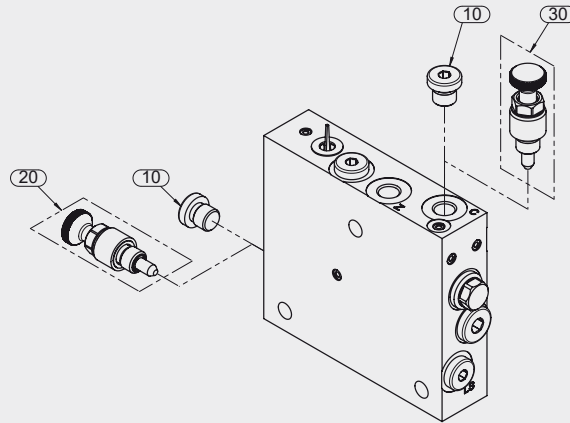
If following type codes (specifications) are required:

ER2F/0	use of ER2Z/0 and remove of plug screw port Z Pos. 80
ER2FE/0	use of ER2ZE/0 and remove of plug screw port Z Pos. 80
ER2FY/0	use of ER2Z/0 and remove of plug screw port Z Pos. 80
ER2FYE/0	use of ER2ZE/0 and remove of plug screw port Z Pos. 80

1.) Scope of delivery 5 o-rings

Options at port PC and C

For end plate type ER2... with internal pilot oil supply



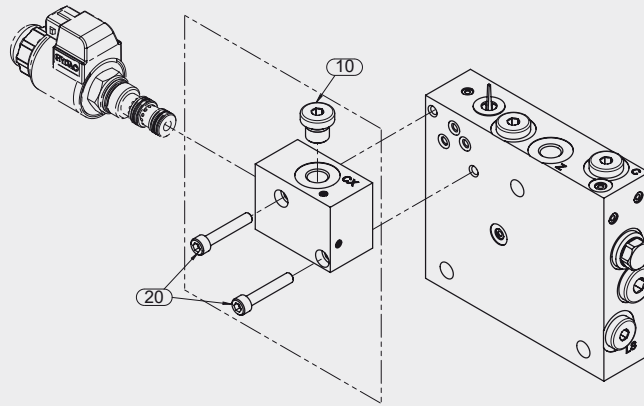
Type code	Item	Description / Function	Port thread type	Part.-No.
ER2 ... / 0	10	Standard w/o options for port PC and C	BSPP SAE	
ER2 ... / P1	20	Manual operated cut-off valve for pilot oil supply in port PC	BSPP SAE	
ER2 ... / C1	30	Manual operated cut-off valve for pilot oil supply in port C	BSPP SAE	



Item	Part No.	Description		Port thread type	Wrench [mm]	Torque [Nm ±10 %]			
-	-	Plug screw	VSTI G1/4-ED-CF/FPM	BSPP	6	30			
-	4025053	Plug screw	9/16-18UNF	SAE	6	30		1	1 2
-	4120390	Manual shut-off unit	LV-02BV	BSPP	16	30		1	1
-	4106532	Manual shut-off unit	LV-02SV	SAE	16	30			

Option blocks for end plate ER2F

E1 Standard type for pilot oil unloading

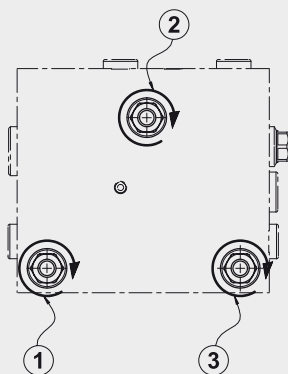


Type code	Description / Function	Port thread type	Part.-No.
ER2F /.../ E1...	Pilot oil supply unloading	1.) BSPP SAE	4241089 4241091
	for pilot oil option valve type "C" - Solenoid valve type "C" (normally open)	(not part of scope)	

Item	Part No.	Description	Port thread type	Wrench [mm]	Torque [Nm ±10 %]		
10	- 4025053	Plug screw Plug screw	VST1 G1/4-ED-CF/FPM 9/16-18UNF	BSPP SAE	6 6	30 30	1
20	-	Socket cap screw	ISO4762 - M6x35-8.8-A3B		5	10	2

1.) See section "Solenoid valves and coils"

Tie-rod kits

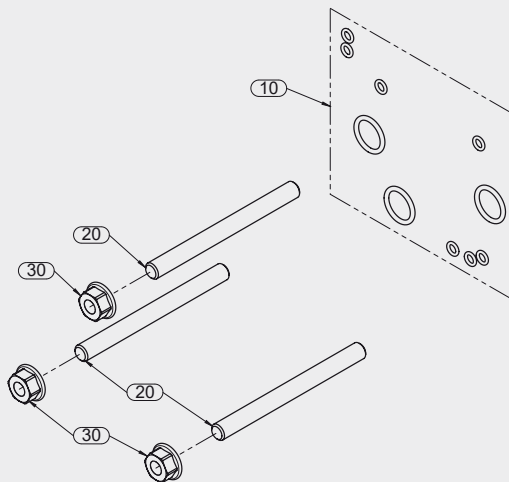


Mounting instruction:

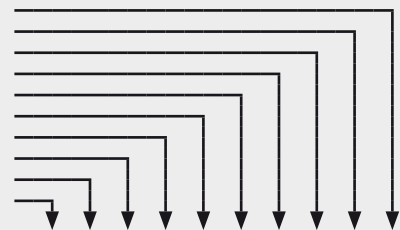
1. Check, if all sealings in the flange interfaces are mounted and in correct position
2. Pre-assembling of tie-rod nuts with 10Nm in inlet-plate
3. Mounting of inlet-plate, section, ... and end-plate in correct order und orientation
4. Pre-assembling of tie-rod nuts by hand
5. Check, if inlet-plate, section, ... and end-plate are in line. Twisted valve block is **not** permitted!
6. Tightning of tie-rod nuts with a torque wrench clockwise

Tightning sequence ① → ② → ③ with 10Nm

Tightning sequence ① → ② → ③ with 40Nm



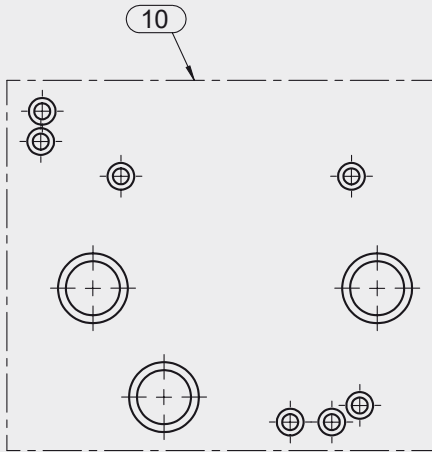
Kit	Description / Function	Part.-No.
Tie-rod kit	Number of sections: 1	4265679
Tie-rod kit	Number of sections: 2	4265680
Tie-rod kit	Number of sections: 3	4265681
Tie-rod kit	Number of sections: 4	4265682
Tie-rod kit	Number of sections: 5	4265684
Tie-rod kit	Number of sections: 6	4265705
Tie-rod kit	Number of sections: 7	4265706
Tie-rod kit	Number of sections: 8	4265707
Tie-rod kit	Number of sections: 9	4265708
Tie-rod kit	Number of sections: 10	4265710



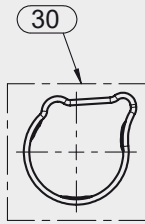
Item	Part No.	Description	Wrench [mm]	Torque [Nm ±10 %]	11	10	9	8	7	6	5	4	3	2
10	4263493	Seal-kit	Seal-kit - LX/V01	-										
	-	Tie-rod screw	L = 112	-										3
	-	Tie-rod screw	L = 160	-									3	
	-	Tie-rod screw	L = 208	-									3	
	-	Tie-rod screw	L = 256	-									3	
20	-	Tie-rod screw	L = 304	-						3				
	-	Tie-rod screw	L = 352	-					3					
	-	Tie-rod screw	L = 400	-				3						
	-	Tie-rod screw	L = 448	-				3						
	-	Tie-rod screw	L = 496	-			3							
	-	Tie-rod screw	L = 544	-		3								
30	-	Hex. nut	EN1661 M10-10 - fiZnnc	16	40	3	3	3	3	3	3	3	3	3

Standard kits

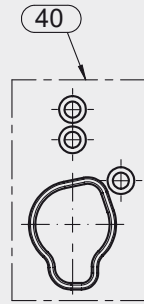
Section flange interface



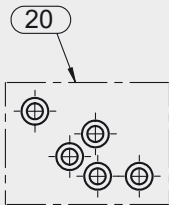
Spring cap flange interface



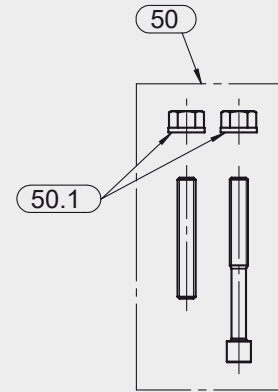
Operation unit flange interface



Option block flange interface

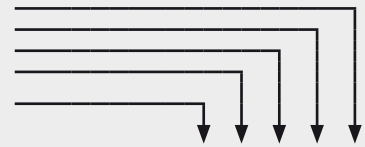


Stroke limiter kit



Note: Visual difference to schematic possible

Kit	Item	Description / Function	Part.-No.
Seal-kit LX/V01	10	Interface between inlet ↔ sections ↔ end plate	4263493
Seal-kit LX/V02	20	Interface between option block ↔ inlet, section, end plate	4380281
Seal-kit LX/V03	30	Interface between section ↔ spring cap	4263495
Seal-kit LX/V04	40	Interface between section ↔ operation unit	4263494
Stroke-limiter-kit - LX/V01	50	Operation unit type MHS, H...S, E...S	4464018

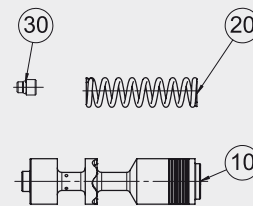
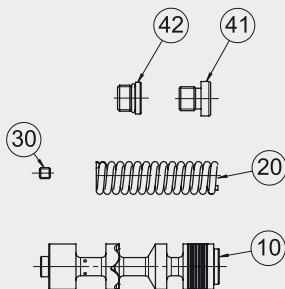


Item	Part No.	Description	Wrench [mm]	Torque [Nm ±10 %]					
-	-	O-Ring 17,86 x 2,62 - FKM	-	-					3
-	-	O-Ring 5,28 x 1,78 - FKM	-	-			3		5 7
-	-	Gasket - FKM	-	-				1	
-	-	O-Ring 26,70 x 1,78 - FKM	-	-			1		
50.1	4463730	Seal nut M6-8/A3B/PA 1.)	10	7		2			

Retrofit kits for inlet plate type UL17(F) with logic F and P

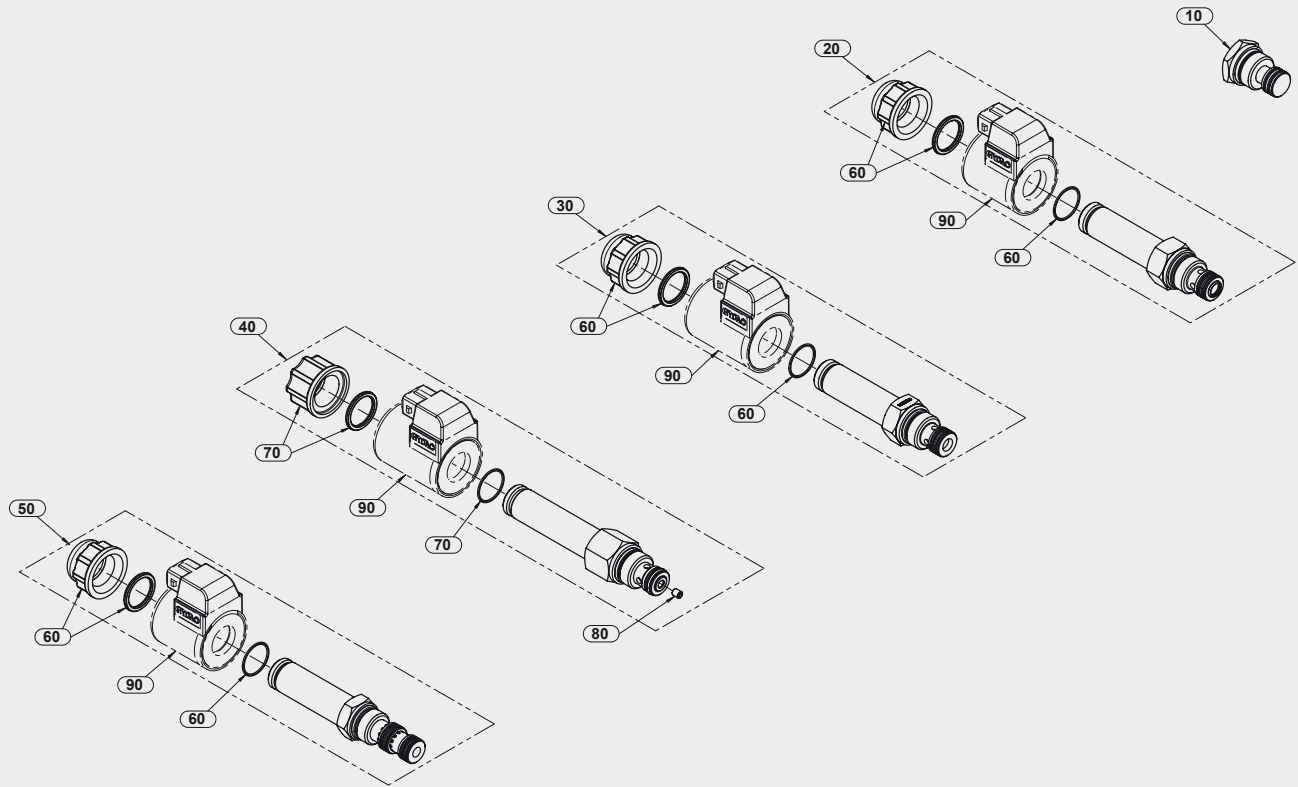
Kit	Description / Function	Part.-No.
Inlet-retrofit-kit P → F - LX/V	change from "CC"-system to "OC"-system	4458664

Kit	Description / Function	Part.-No.
Inlet-retrofit-kit F → P - LX/V	change from "OC"-system to "CC"-system	4458784

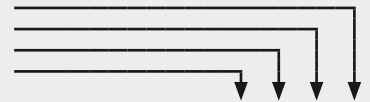


1.) Scope of delivery 10 pieces, lock/seal nut should be exchanged after two times of loosen/tighting to ensure the sealing function

Solenoid valves and coils



Kit	Item	Description / Function	Wrench	Torque [Nm ±10 %]	Part-No.
... P	10	Plug screw	24 mm	25	4263372
... V...	20	Unloading valve type "V" 1.) (normally open)	24 mm	25	4263373
... W...	30	Unloading valve type "W" 1.) (normally closed)	24 mm	25	4263374
... P0A...	40	Prop. relief valve type "P0A" 1.)	24 mm	25	4263485
... C...	50	Unloading valve type "C" 1.) (normally open)	7/8 "	25	4106481



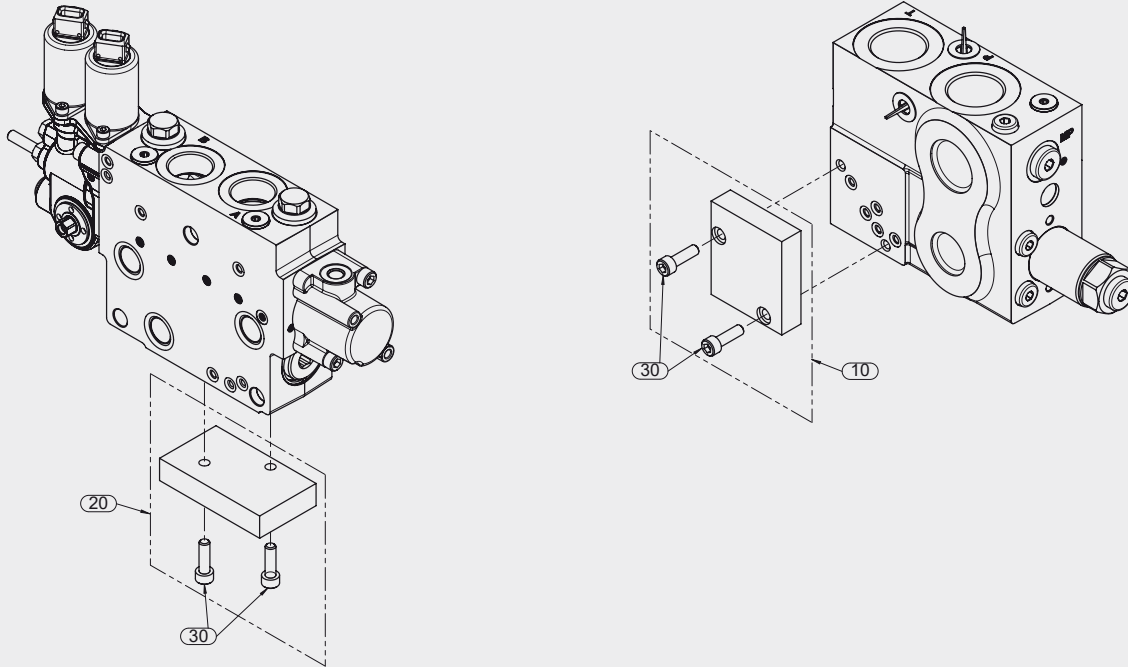
Item	Part No.	Description	Wrench [mm]	Torque [Nm ±10 %]				
60	4263491	Coil-nut-kit Kit - M18V01 - emergency actuation	-	4		1		1 1
70	4263492	Coil-nut-kit Kit - M18V02 - standard end cap	-	4			1	
80	-	Orifice M4 x 5 x Ø1,0	2	1,5			1	

Item	Part No.	Coil type classification	Wrench [mm]	Torque [Nm ±10 %]	Coil not part of scope			
90	3554185	Coil 12VDC - AMP Junior Timer	-	-	•			•
	3674092	Coil 24VDC - AMP Junior Timer	-	-	•			•
	4263487	Coil 12VDC - AMP Junior Timer	-	-				•
	4263486	Coil 24VDC - AMP Junior Timer	-	-				•
	3808663	Coil 12VDC - AMP Junior Timer	-	-		•		
	4263488	Coil 24VDC - AMP Junior Timer	-	-		•		
	3214994	Coil 12VDC - Deutsch DT04	-	-	•			•
	3285220	Coil 24VDC - Deutsch DT04	-	-	•			•
	4135145	Coil 12VDC - Deutsch DT04	-	-				•
	3888028	Coil 24VDC - Deutsch DT04	-	-				•
	4135064	Coil 12VDC - Deutsch DT04	-	-		•		
	4263490	Coil 24VDC - Deutsch DT04	-	-		•		

1.) Coils are not part of scope

Dummy plates for option blocks

Section flange interface



Type code	Description / Function	Part.-No.
UL17F /.../ UD1	Dummy plate for inlet plate type "UL17F"	4245903
LS6F /.../ LD1	Dummy plate for section type "LS6F"	4246076

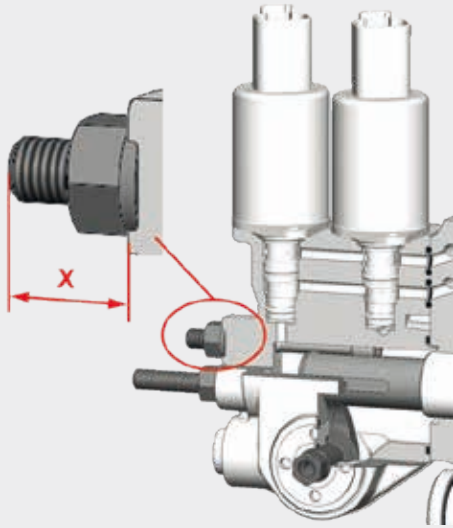
Item	Part No.	Description	Wrench [mm]	Torque [Nm ±10 %]	
30	-	ISO4762 - M6x20-8.8-A3B	5	10	2

Mounting instruction main spool for disassembly / assembly

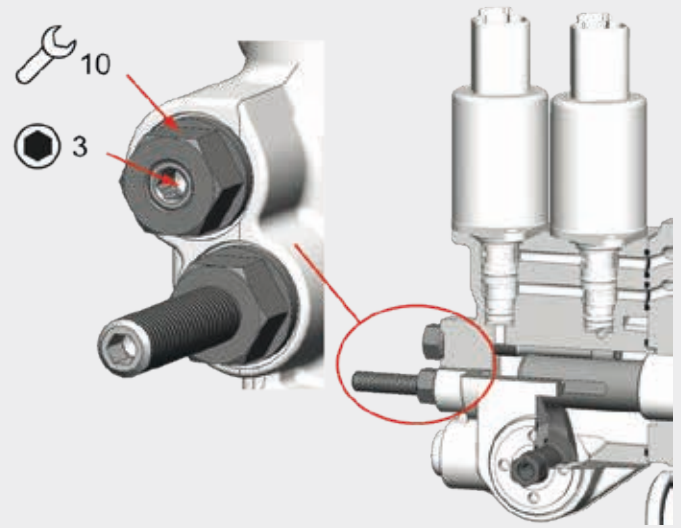
Operation unit EHS / HHS / MHS

Disassembly

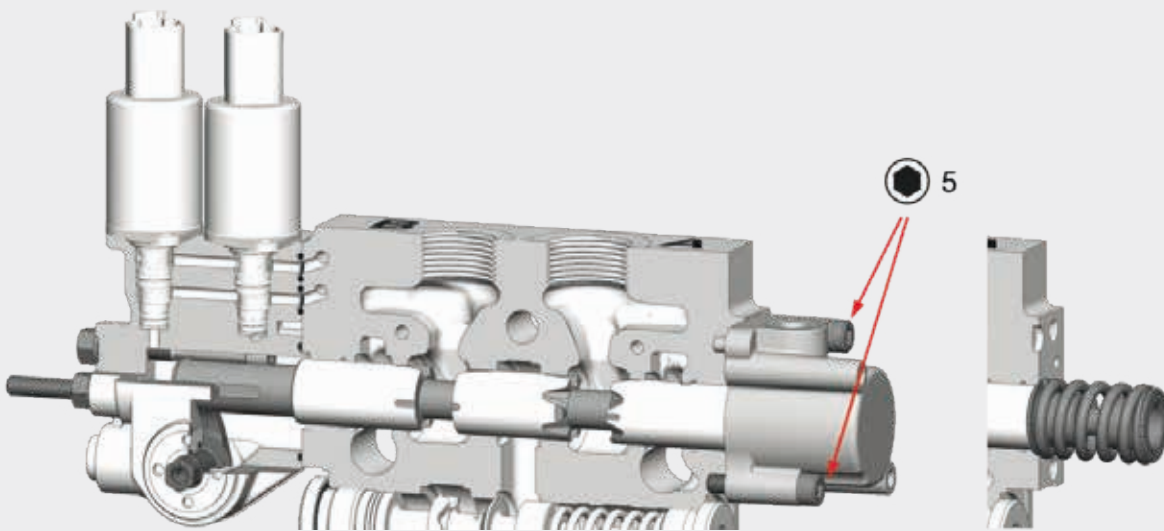
1/6 Measuring dimension "X" at upper stroke limiter for port B



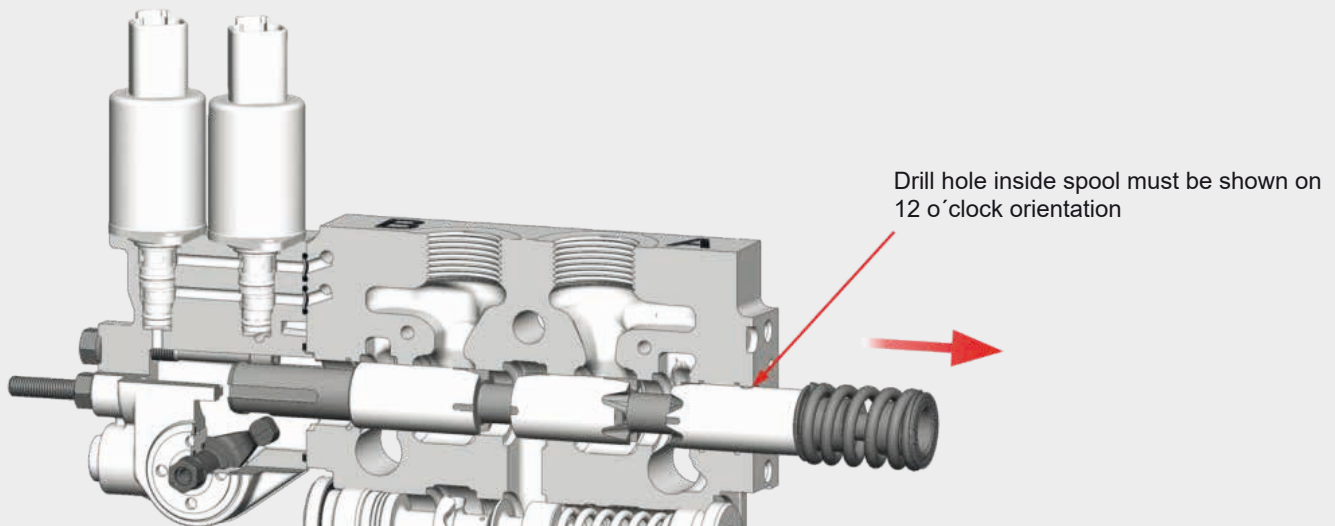
2/6 Loosen of lock nut and screwing in upper stroke limiter screw 1-3 mm inside lock/seal nut



3/6 Disassembling of spring cap



4/6 Moving main spool out of bore up to end stop

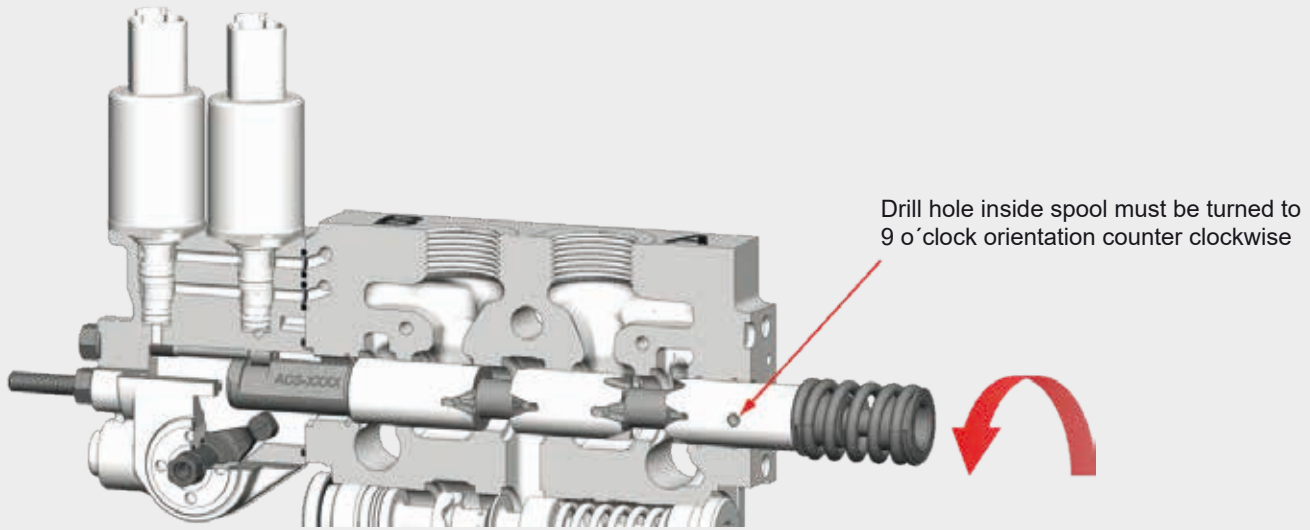


Mounting instruction main spool for disassembly / assembly

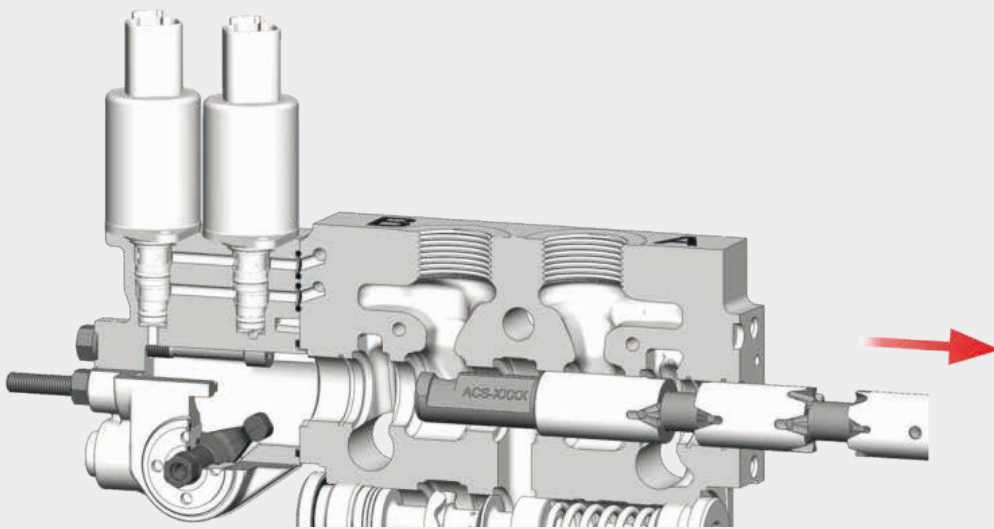
Operation unit EHS / HHS / MHS

Disassembly

5/6 Turning of main spool 90° counter clockwise



6/6 Moving main spool out of bore completely with care

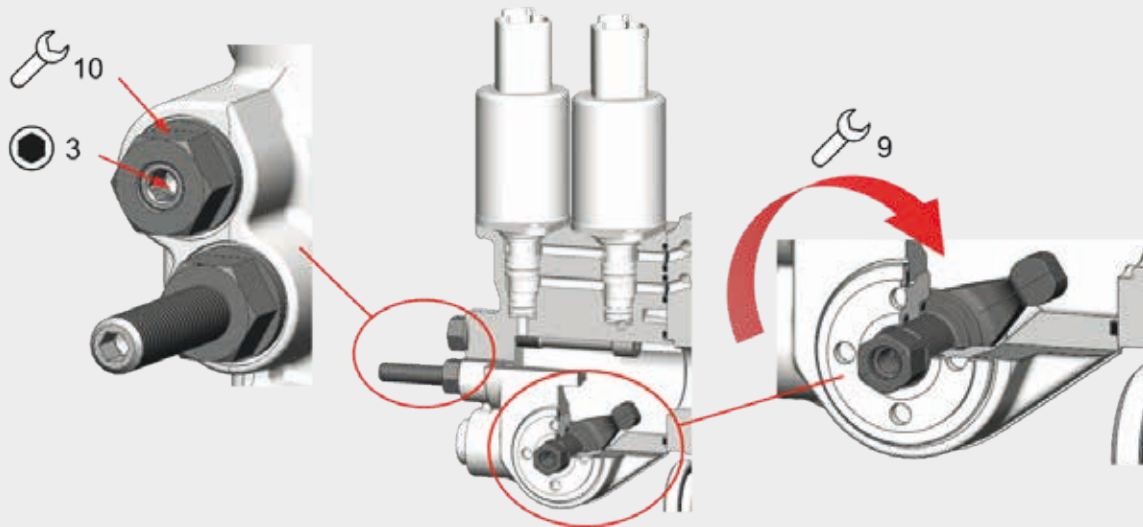


Mounting instruction main spool for disassembly / assembly

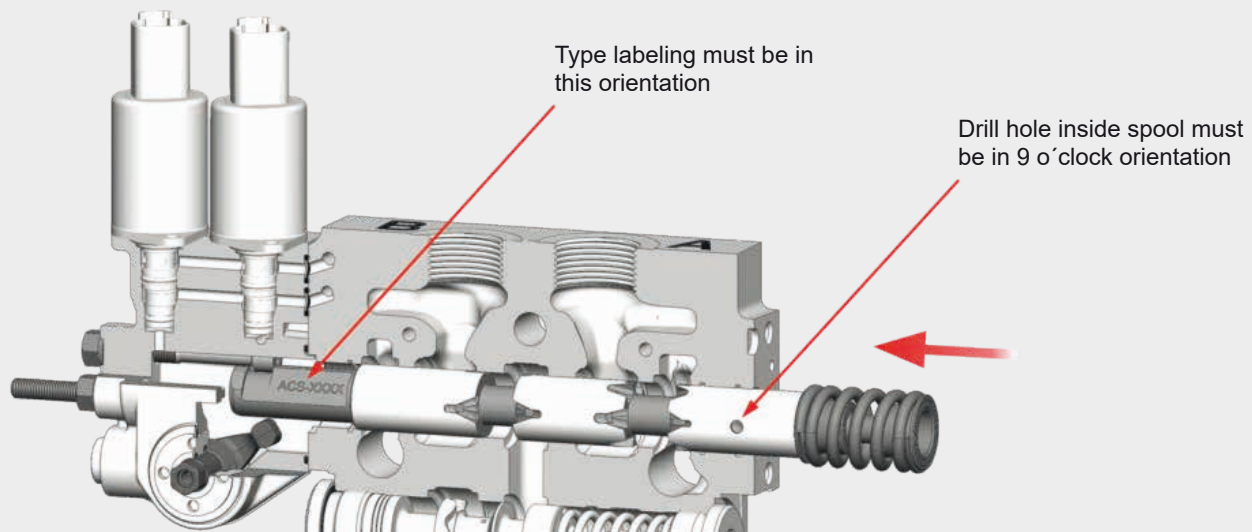
Operation unit EHS / HHS / MHS

Assembly

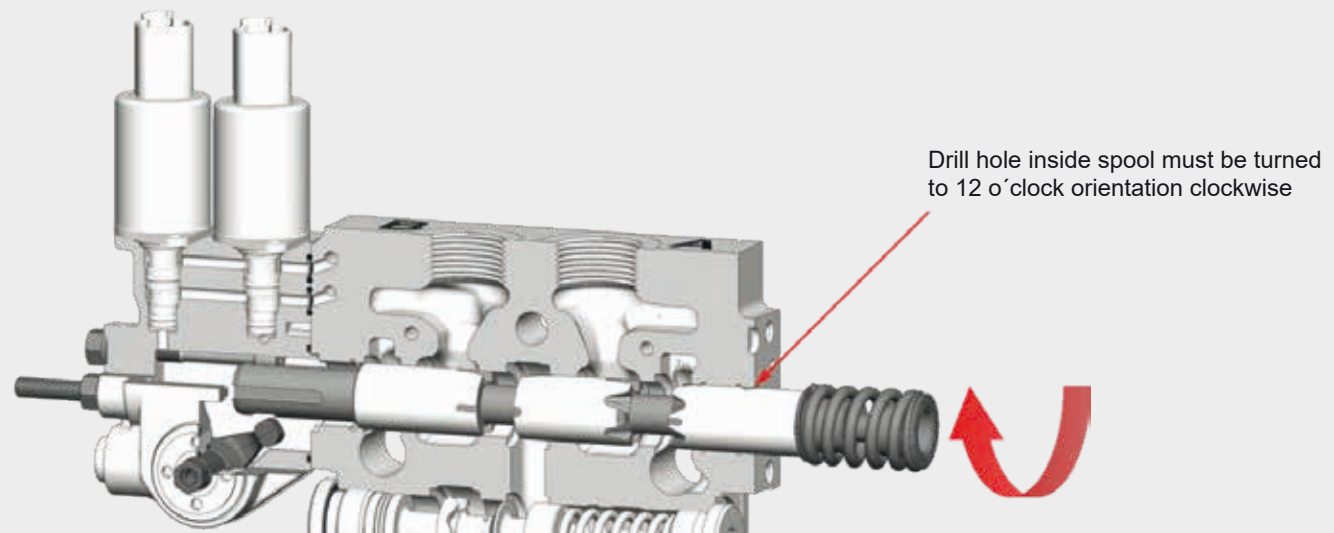
1/6 Screwing in upper stroke limiter screw 1-3 mm inside lock/seal nut and turning hand lever cam clockwise to end stop



2/6 Moving main spool inside bore in shown orientation up to end stop



3/6 Turning of main spool 90° clockwise

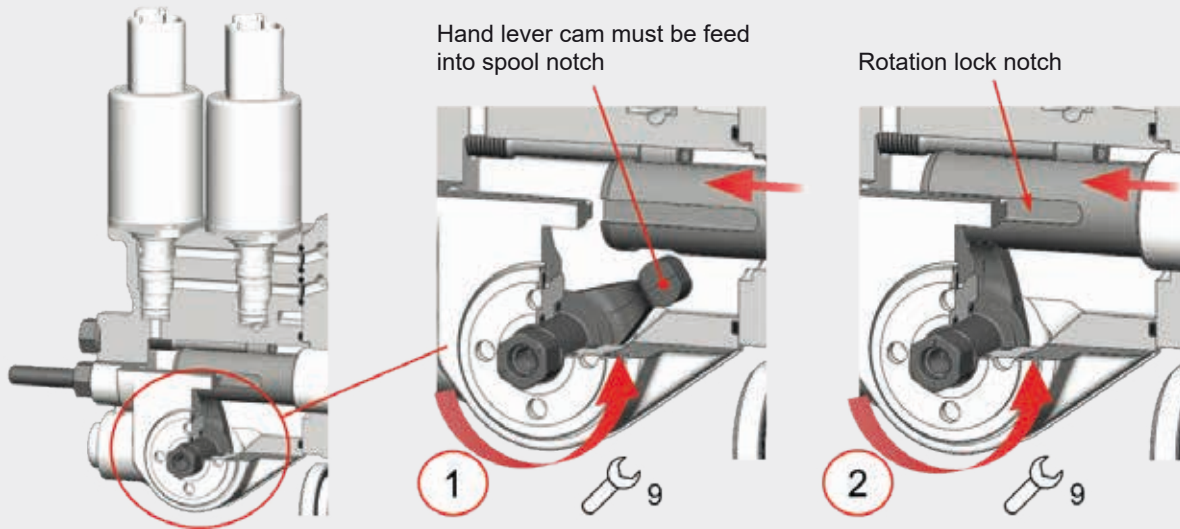


Mounting instruction main spool for disassembly / assembly

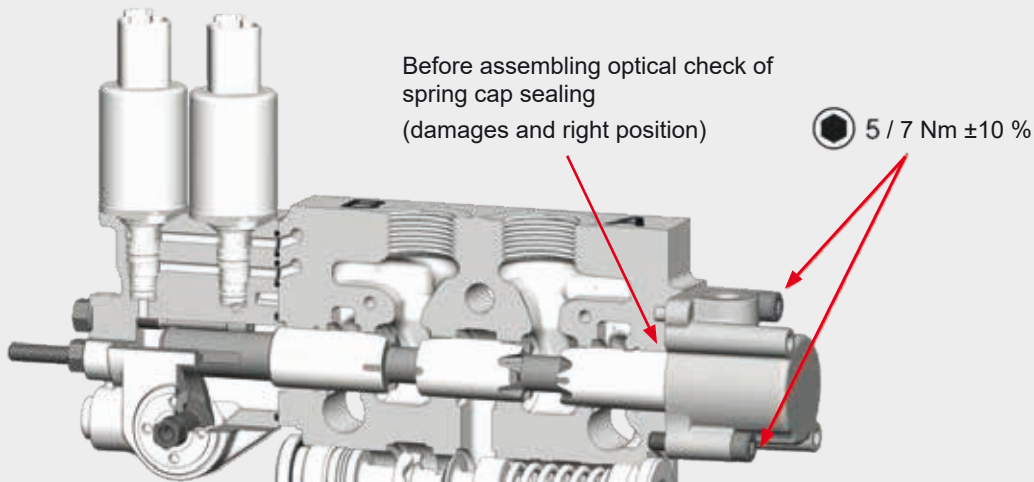
Operation unit EHS / HHS / MHS

Assembly

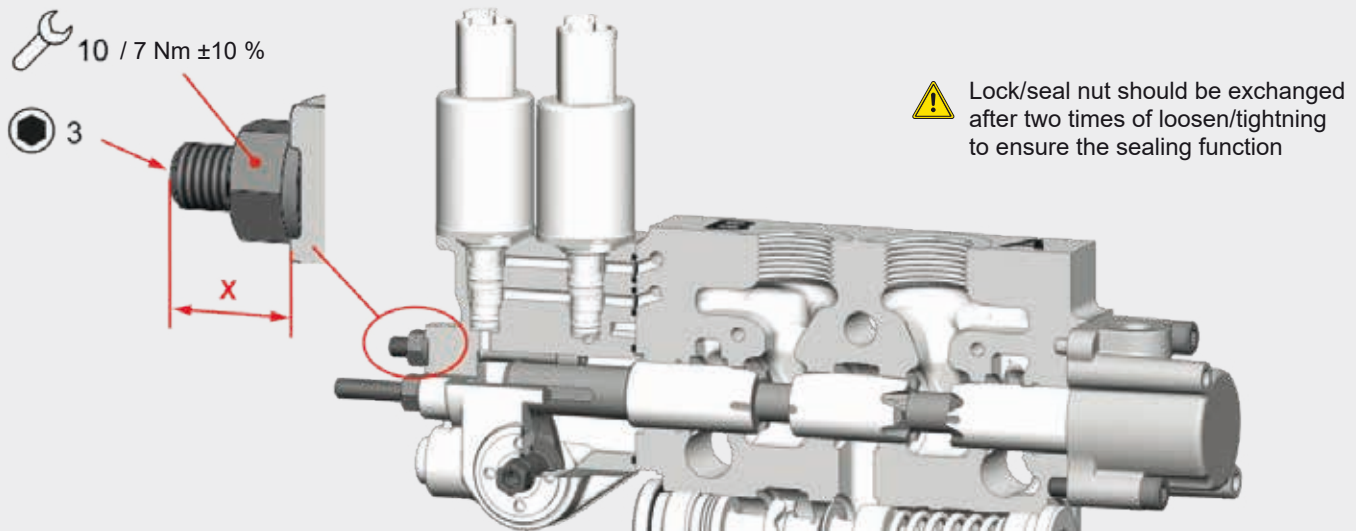
4/6 Moving main spool inside bore/rotation lock in shown orientation and feeding hand lever cam counter clockwise into spool notch



5/6 Assembling of spring cap with defined torque



6/6 Screwing out upper stroke limiter screw up to defined dimension "X" (max. flow at port B) and fixation of lock/seal nut with defined torque

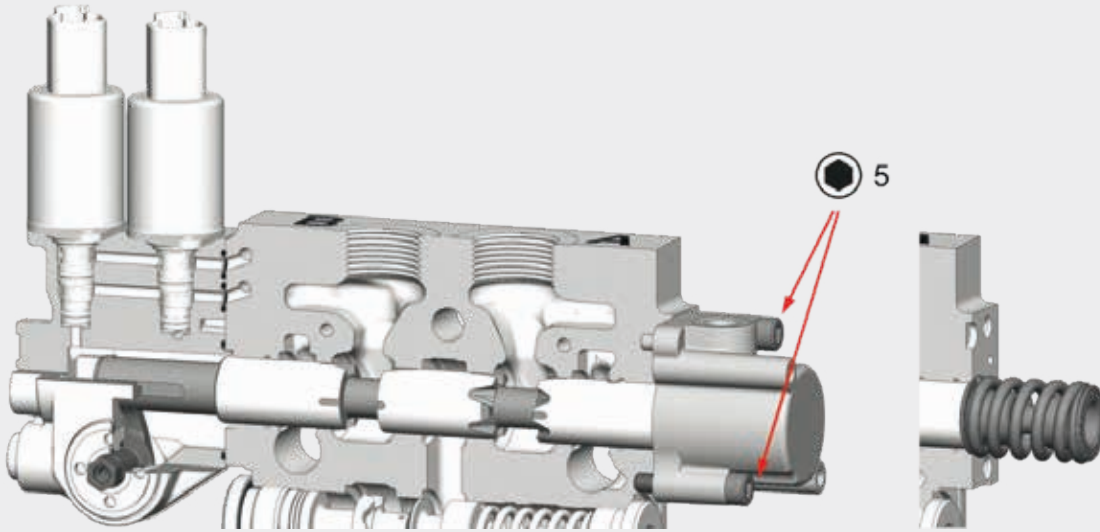


Mounting instruction main spool for disassembly / assembly

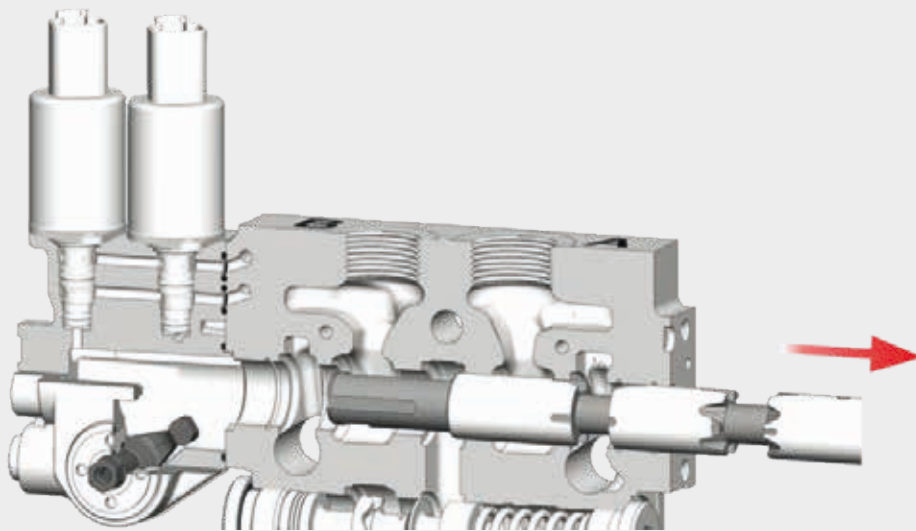
Operation unit EH / HH / MH

Disassembly

1/2 Disassembling of spring cap



2/2 Moving main spool out of bore completely with care

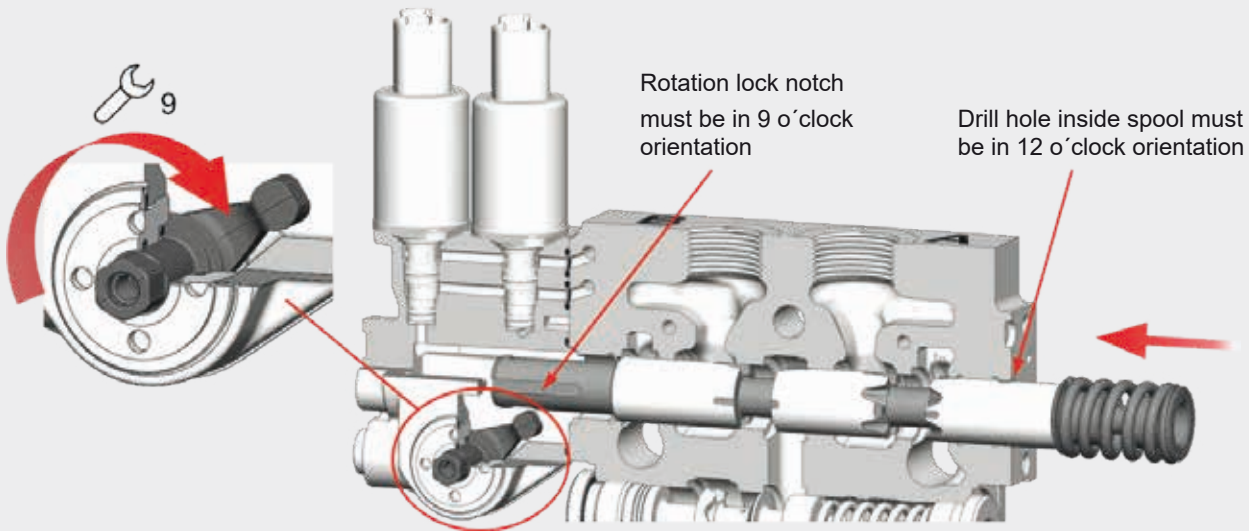


Mounting instruction main spool for disassembly / assembly

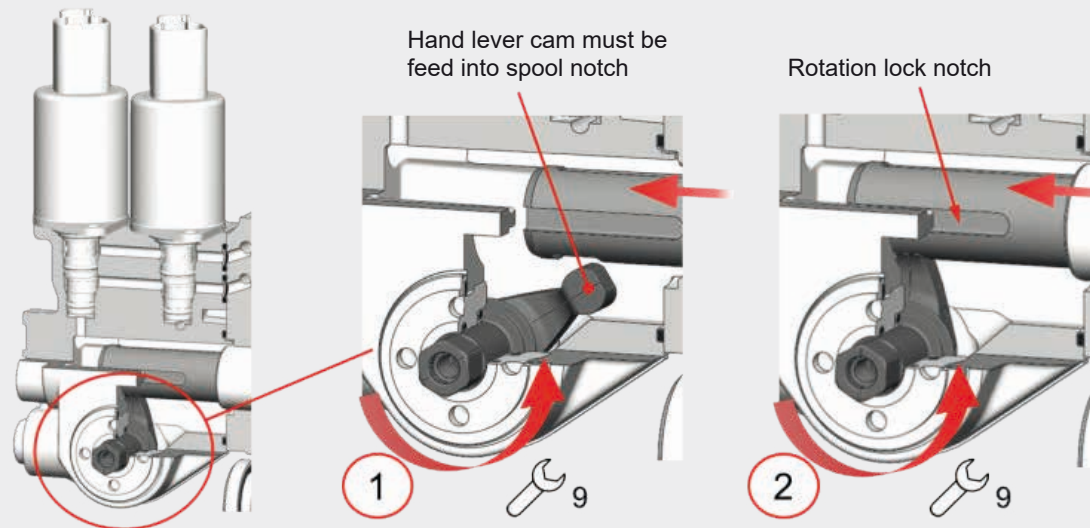
Operation unit EH / HH / MH

Assembly

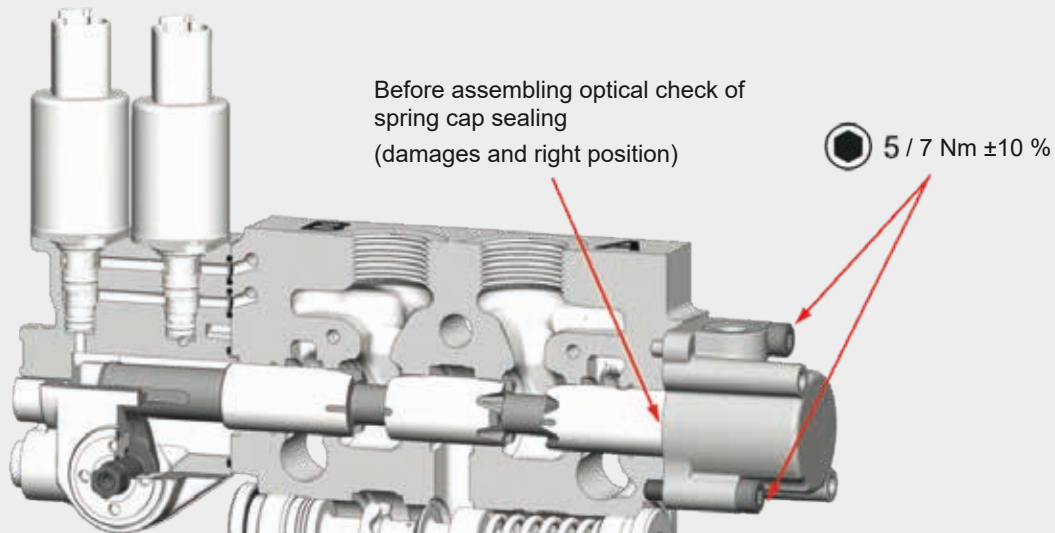
1/3 Turning hand lever cam clockwise to end stop and moving main spool inside bore in shown orientation up to end stop



2/3 Moving main spool inside bore/rotation lock in shown orientation and feeding hand lever cam counter clockwise into spool notch



3/3 Assembling of spring cap with defined torque

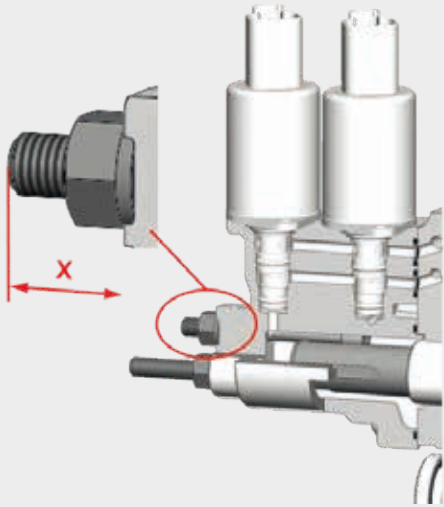


Mounting instruction main spool disassembly / assembly

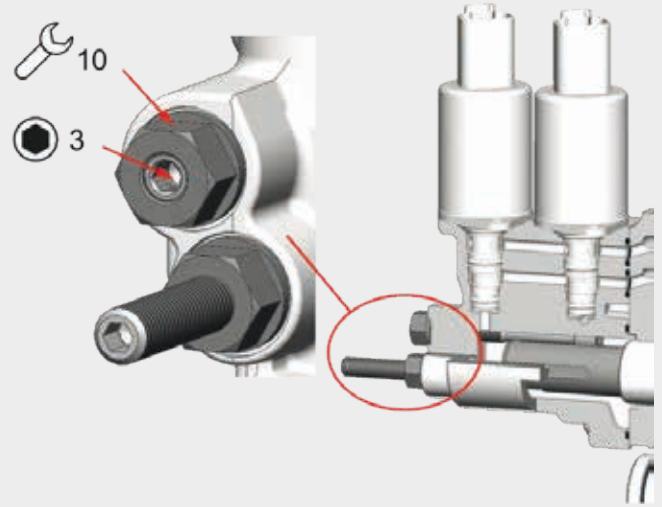
Operation unit ES / HS

Disassembly

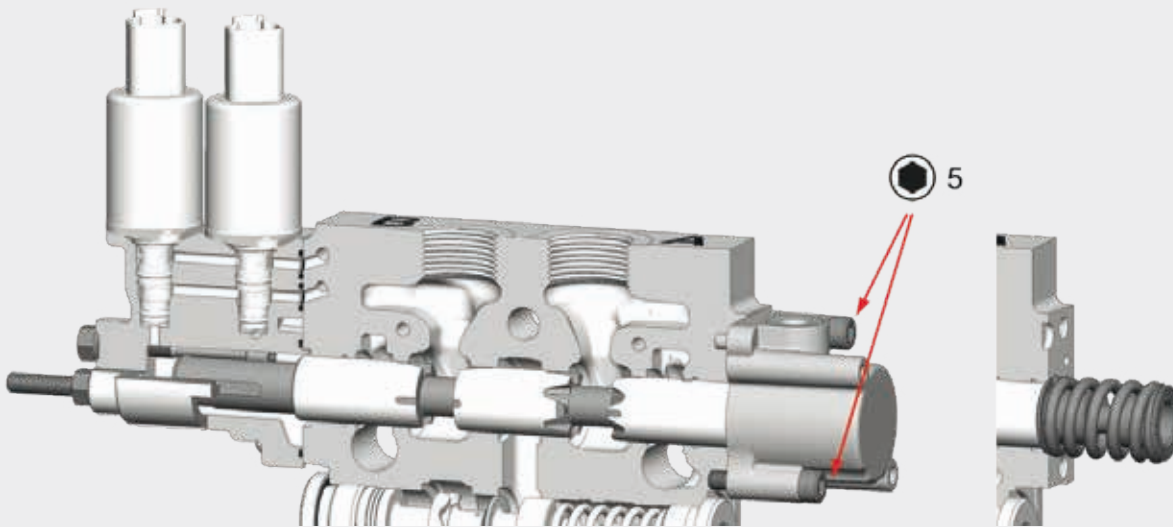
1/6 Measuring dimension "X" at upper stroke limiter for port B



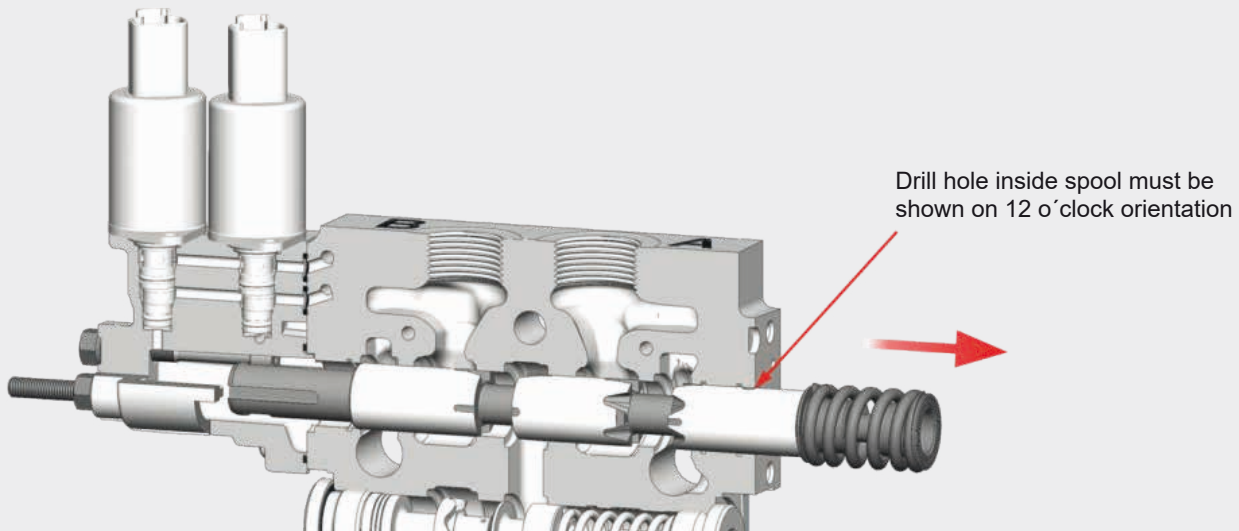
2/6 Loosen of lock nut and screwing in upper stroke limiter screw 1-3 mm inside lock/seal nut



3/6 Disassembling of spring cap



4/6 Moving main spool out of bore up to end stop

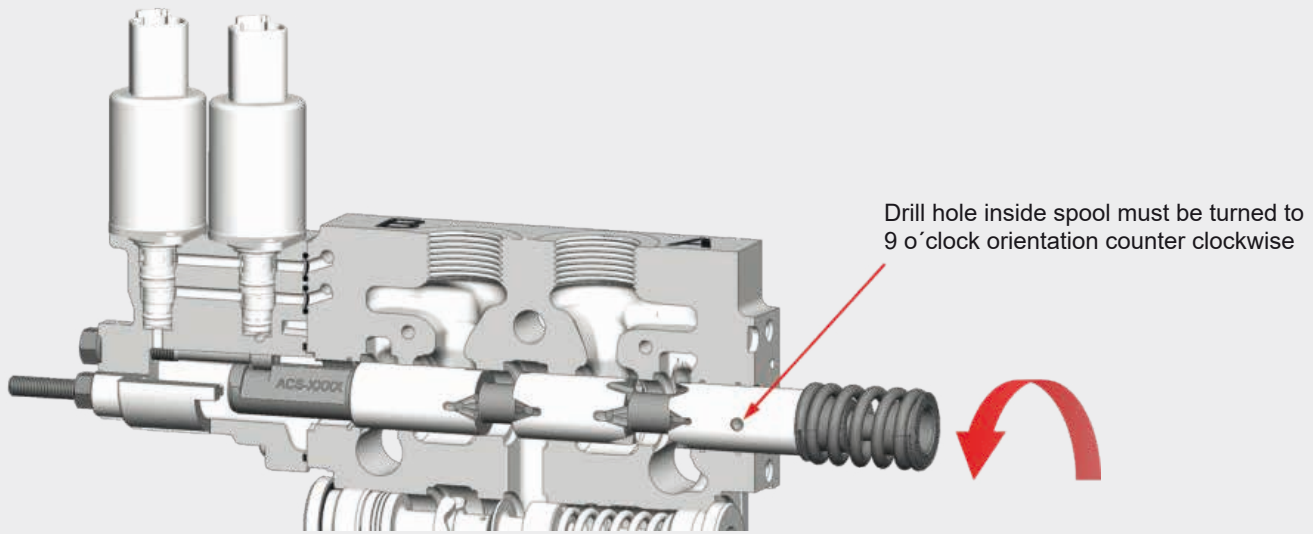


Mounting instruction main spool disassembly / assembly

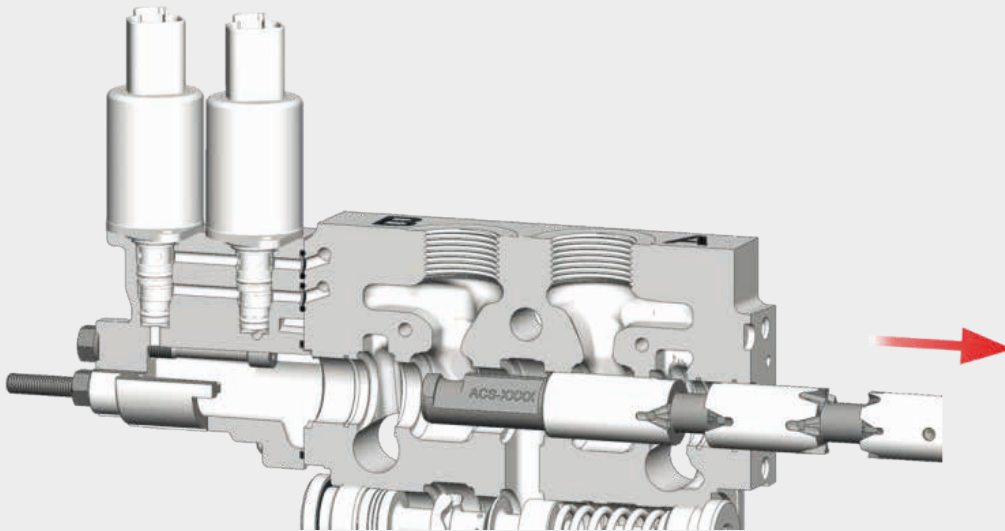
Operation unit ES / HS

Disassembly

5/6 Turning of main spool 90° counter clockwise



6/6 Moving main spool out of bore completely with care

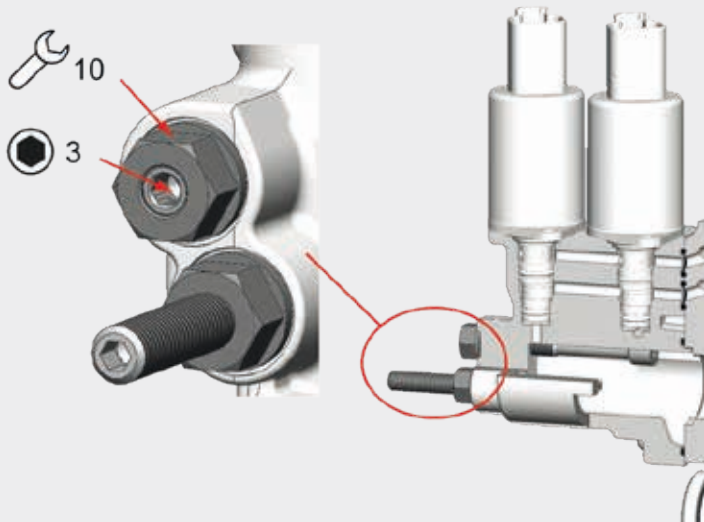


Mounting instruction main spool disassembly / assembly

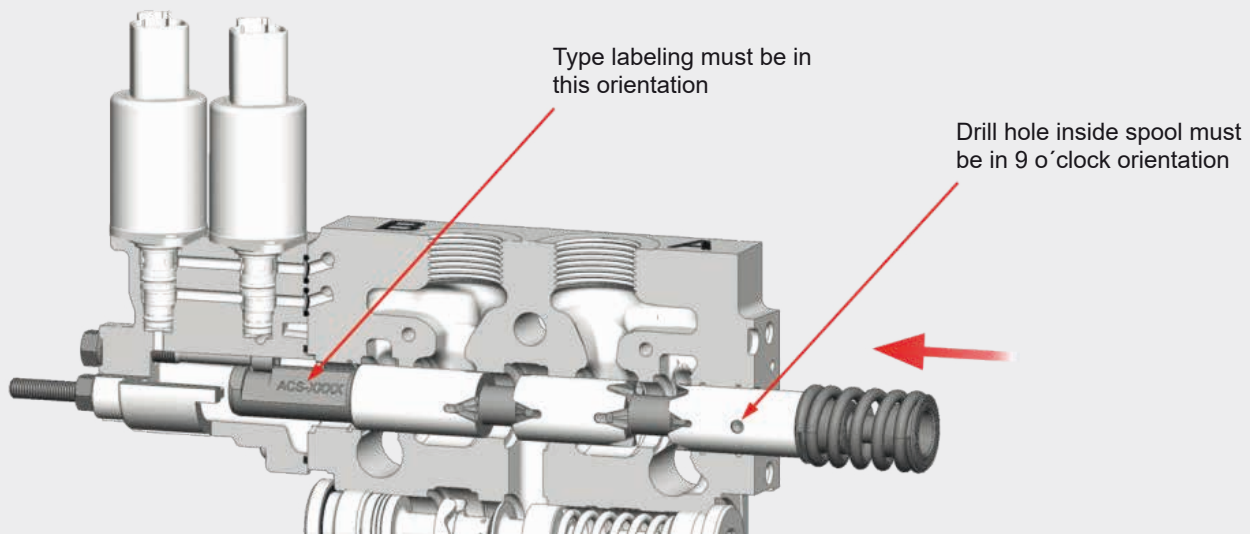
Operation unit ES / HS

Assembly

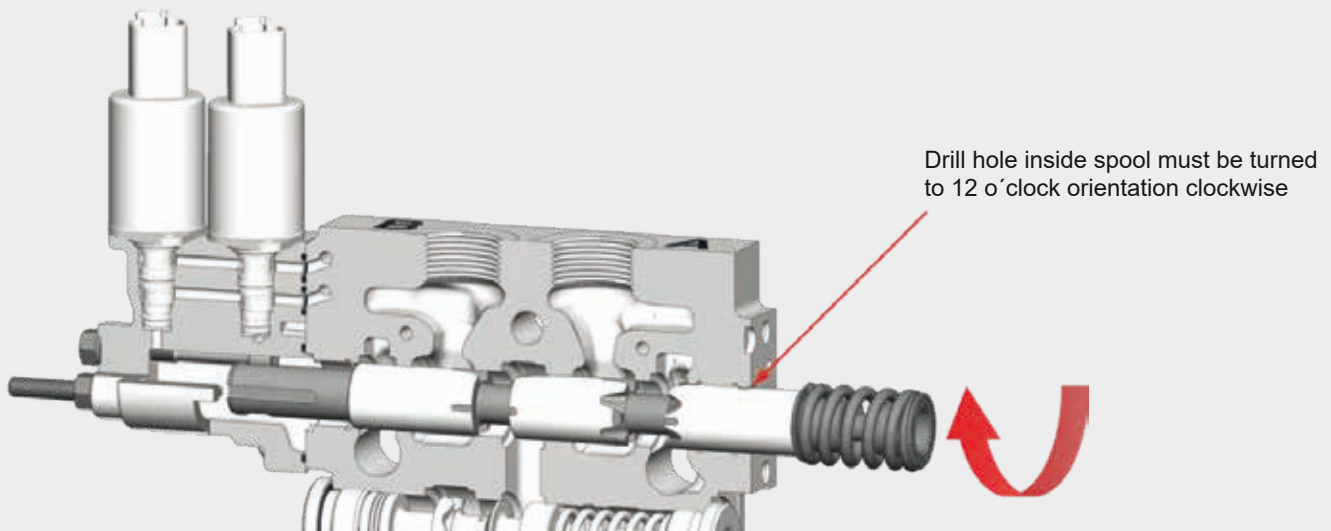
1/6 Screwing in upper stroke limiter screw 1-3 mm inside lock/seal nut and turning hand lever cam clockwise to end stop



2/6 Moving main spool inside bore in shown orientation up to end stop



3/6 Turning of main spool 90° clockwise

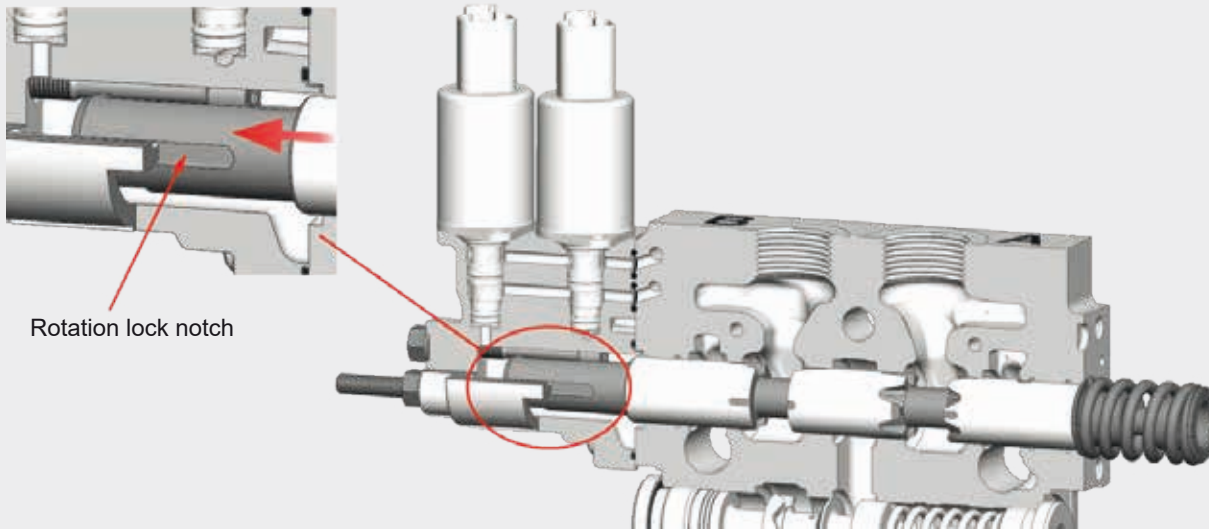


Mounting instruction main spool disassembly / assembly

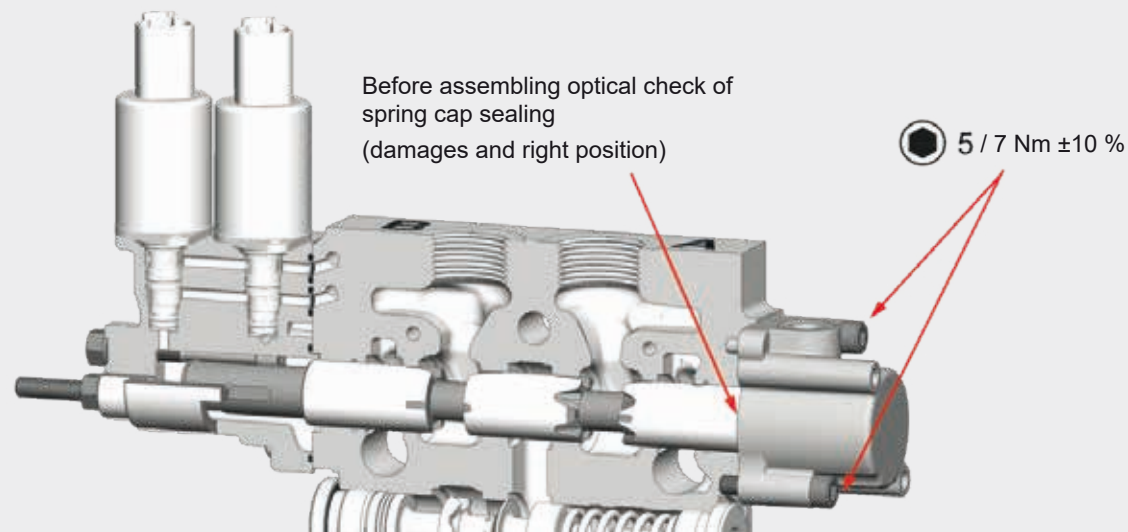
Operation unit ES / HS

Assembly

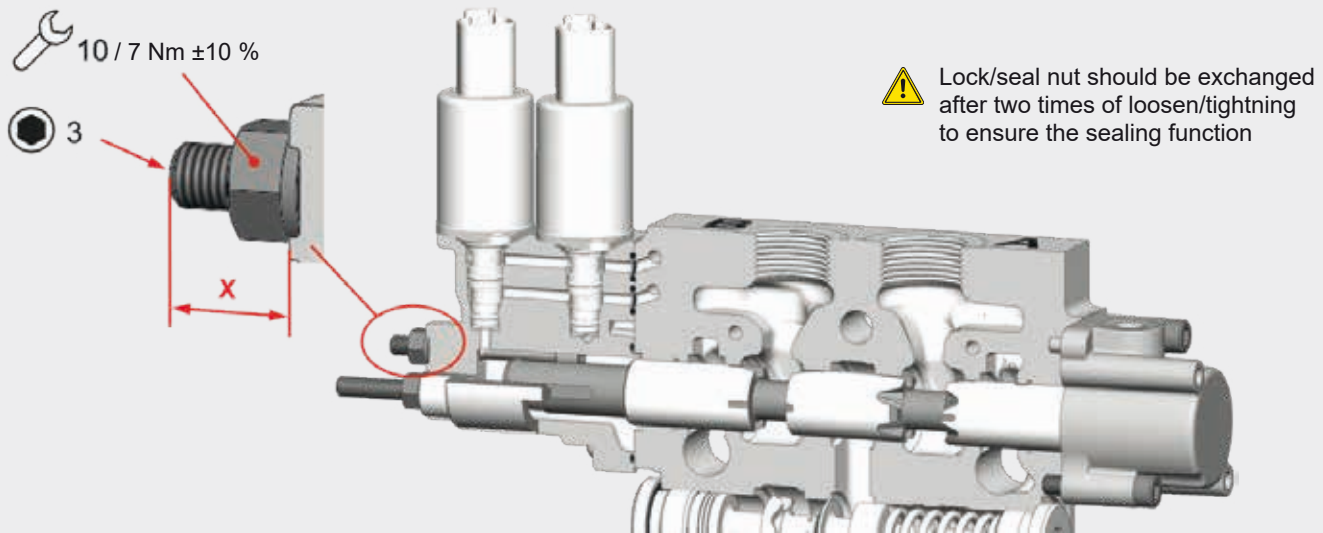
4/6 Moving main spool inside bore/rotation lock in shown orientation



5/6 Assembling of spring cap with defined torque



6/6 Screwing out upper stroke limiter screw up to defined dimension "X" (max. flow at port B) and fixation of lock/seal nut with defined torque

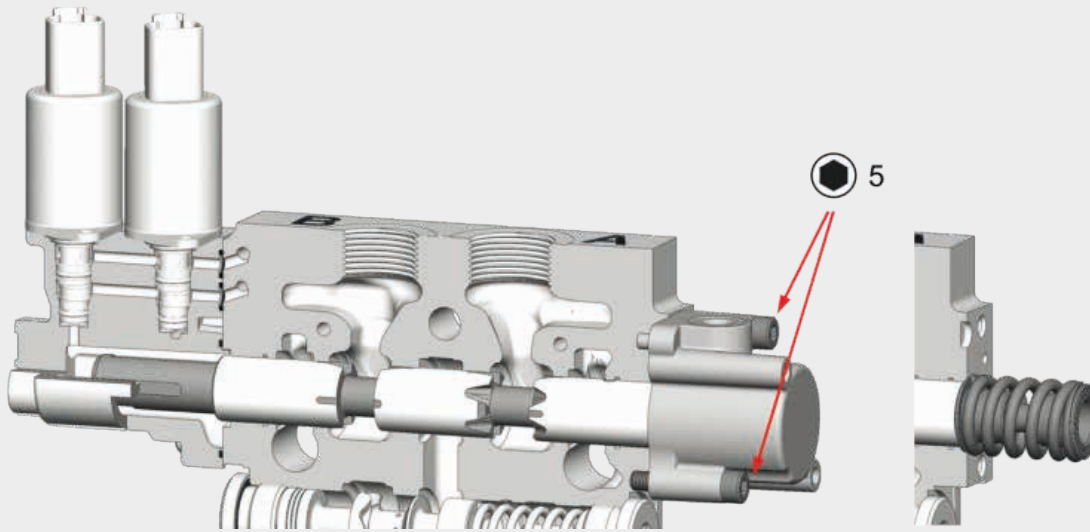


Mounting instruction main spool disassembly / assembly

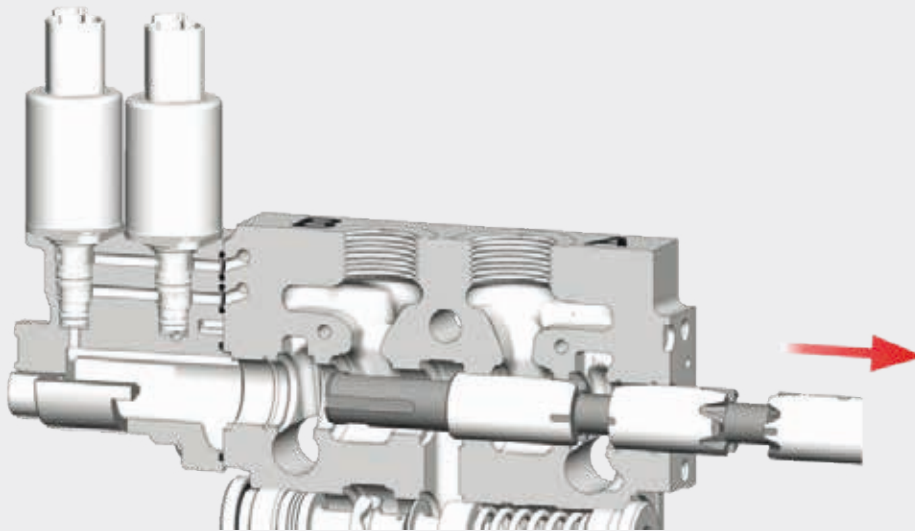
Operation unit E / H

Disassembly

1/2 Disassembling of spring cap



2/2 Moving main spool out of bore completely with care

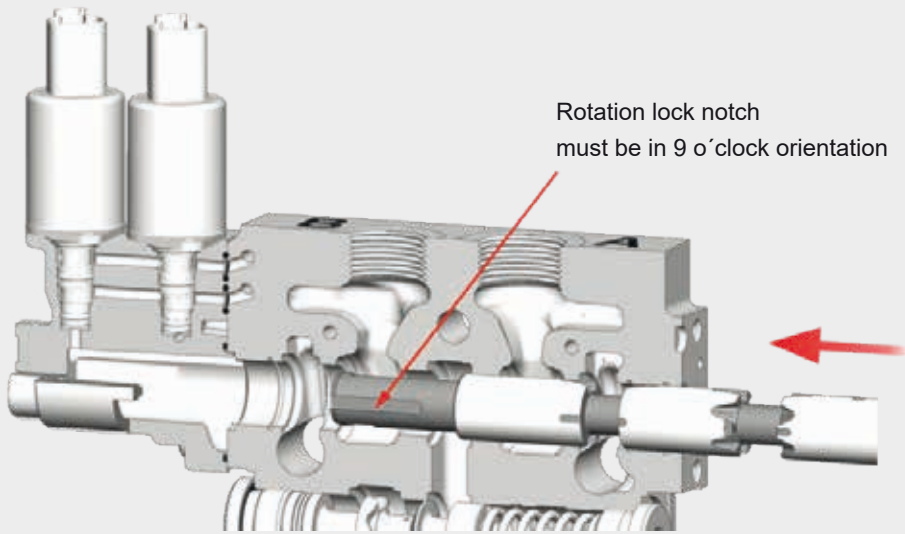


Mounting instruction main spool disassembly / assembly

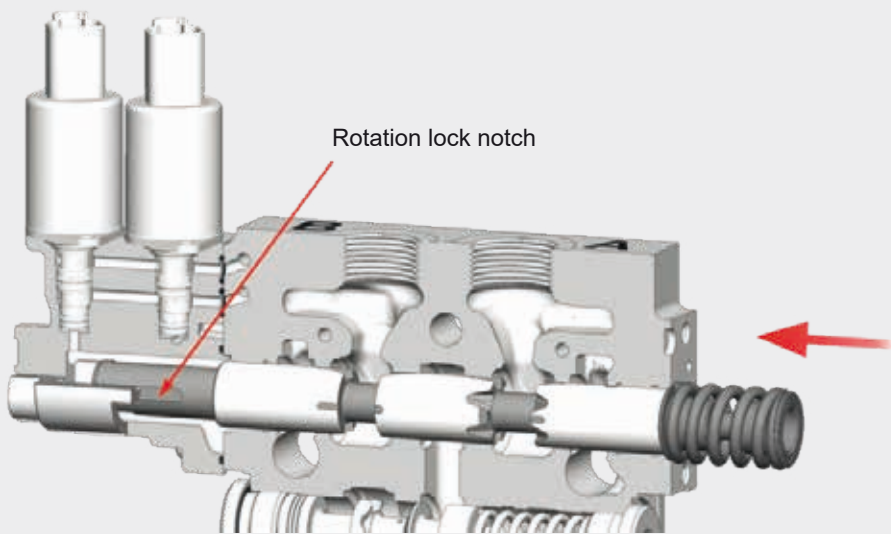
Operation unit E / H

Assembly

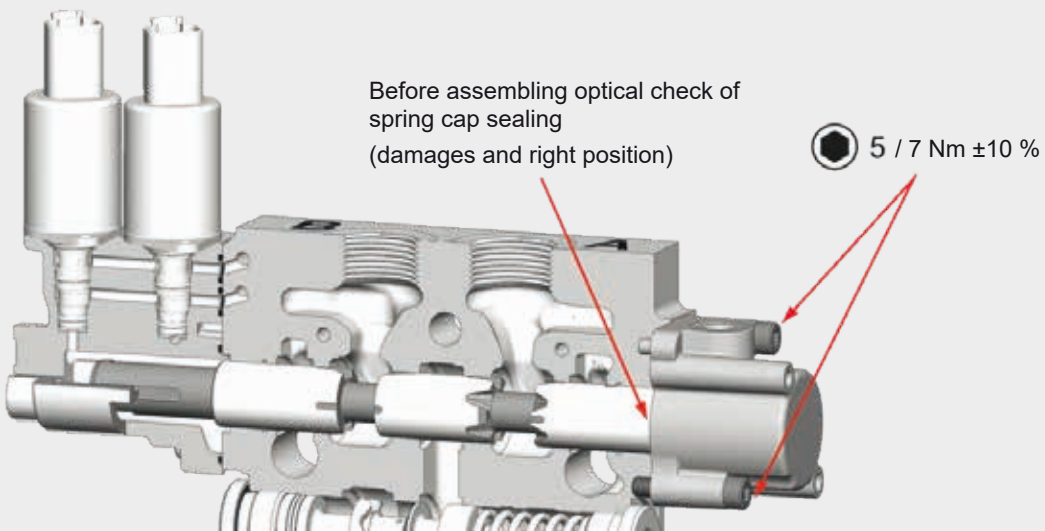
1/3 Moving main spool inside bore in shown orientation up to end stop



2/3 Moving main spool inside bore/rotation lock in shown orientation



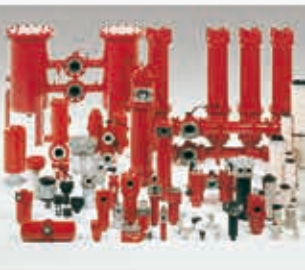
3/3 Assembling of spring cap with defined torque



A large grid of graph paper for taking notes, consisting of 20 columns and 30 rows of small squares.



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