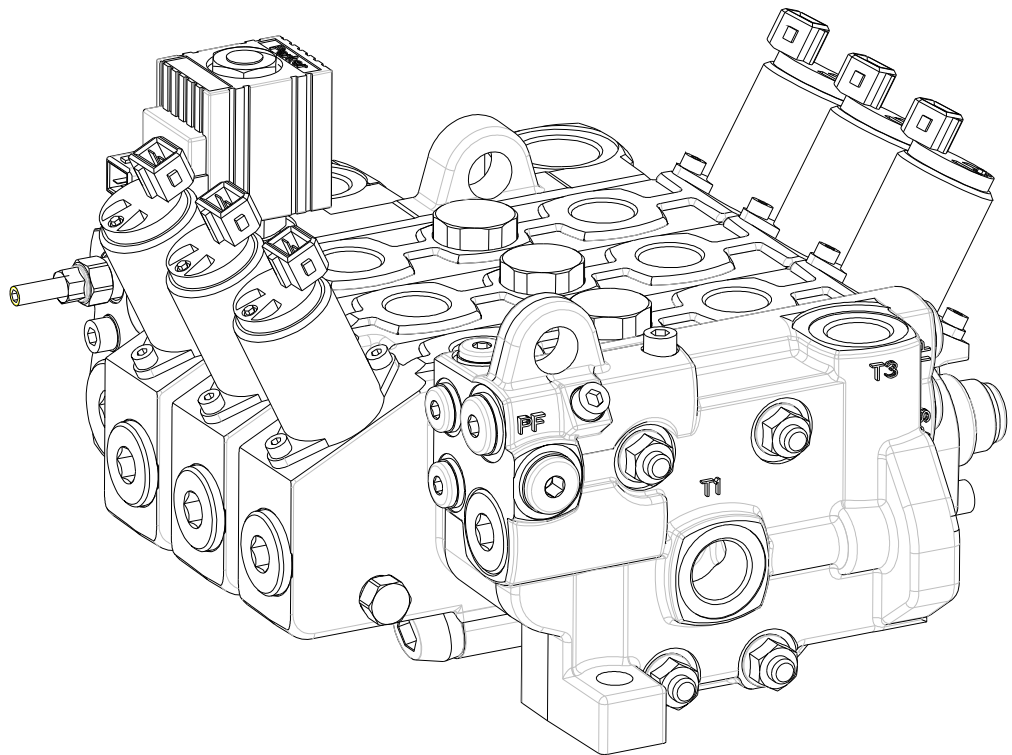




Spare Parts List **Series P70CF/CP**

Directional valve

Aug. 2005



Conversion factors

1 kg	= 2.2046 lb
1 N	= 0.22481 lbf
1 bar	= 14.504 psi
1 l	= 0.21997 UK gallon
1 l	= 0.26417 US gallon
1 cm ³	= 0.061024 in ³
1 m	= 3.2808 feet
1 mm	= 0.03937 in
9/5 °C + 32	= °F



WARNING

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application, including consequences of any failure, and review the information concerning the product or system in the current product catalogue. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

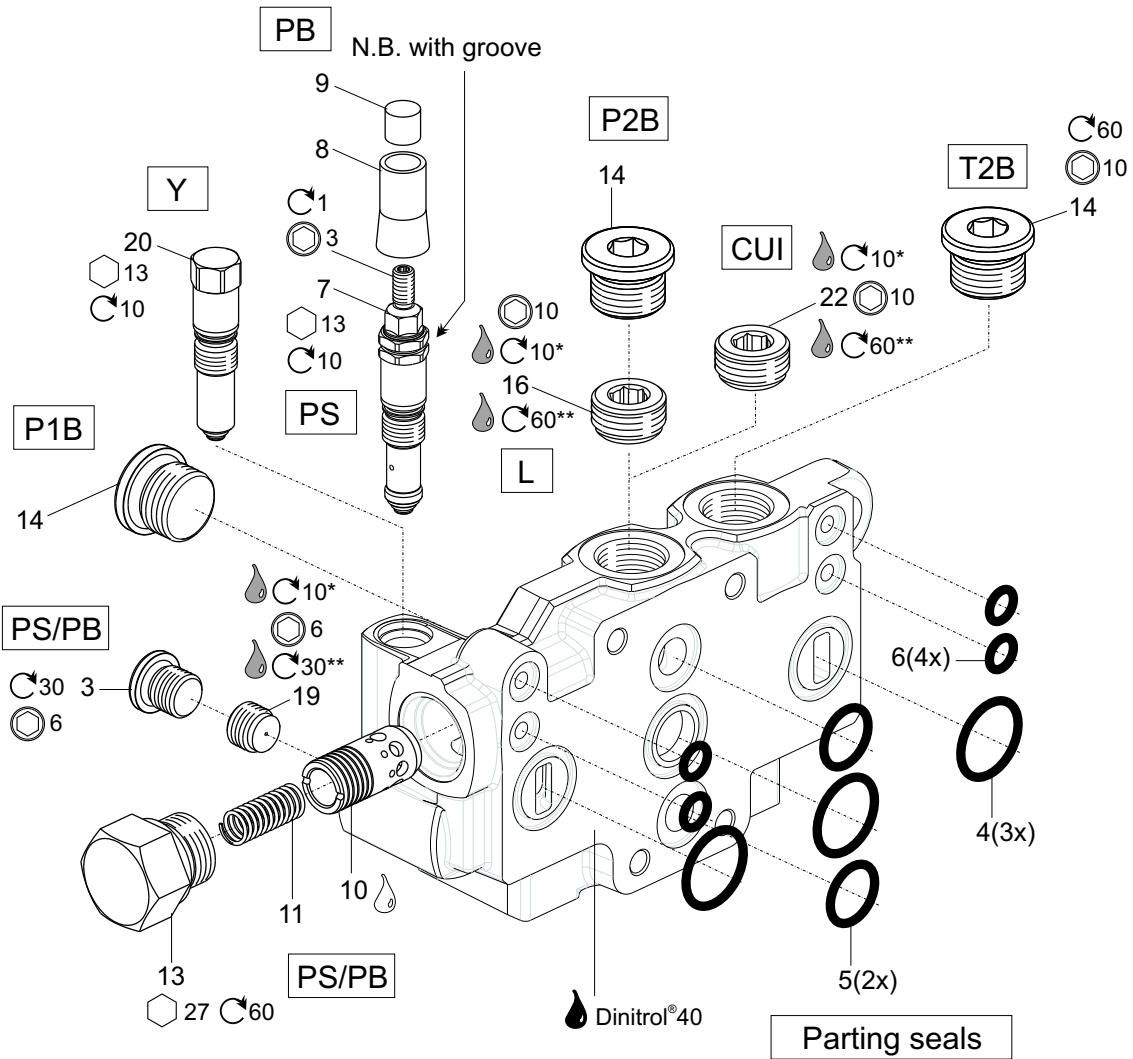
Offer of Sale

Please contact your Parker representation for a detailed "Offer of Sale".

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Inlet options

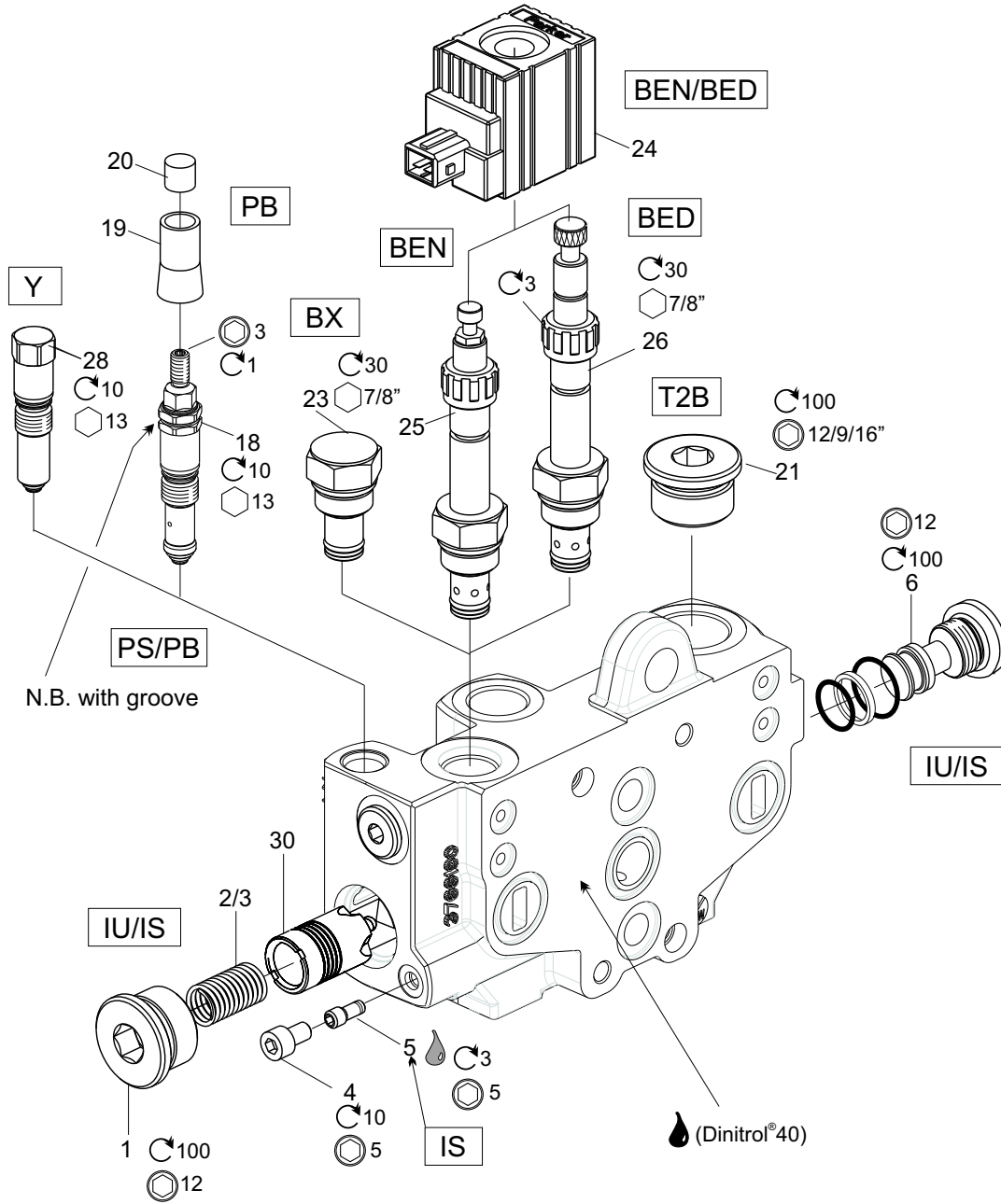
Inlet I PB, PS, Y, P2B, L, T2B, CUI



- = Locking/sealing fluid
- = Corrosion preventative
- = Lubricant/oil
- = Tightening torque in Nm
- = Assembly/disassembly tool
- = Phillips screw
- = Slot screw
- = Socket head
- = Hexagon
- = Greased

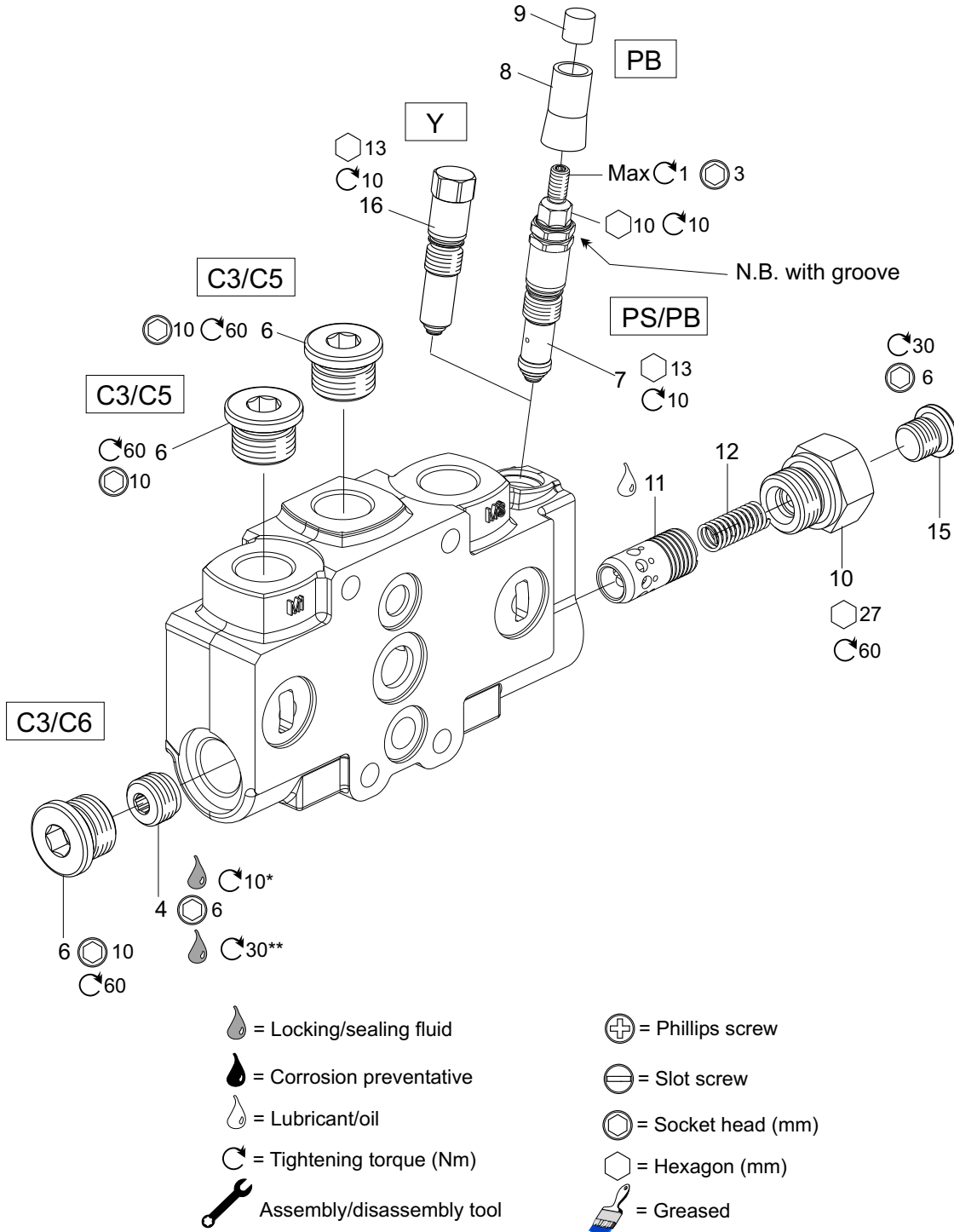
Inlet options

Inlet IS, IU PB, PS, Y, BX, BEN, T2B



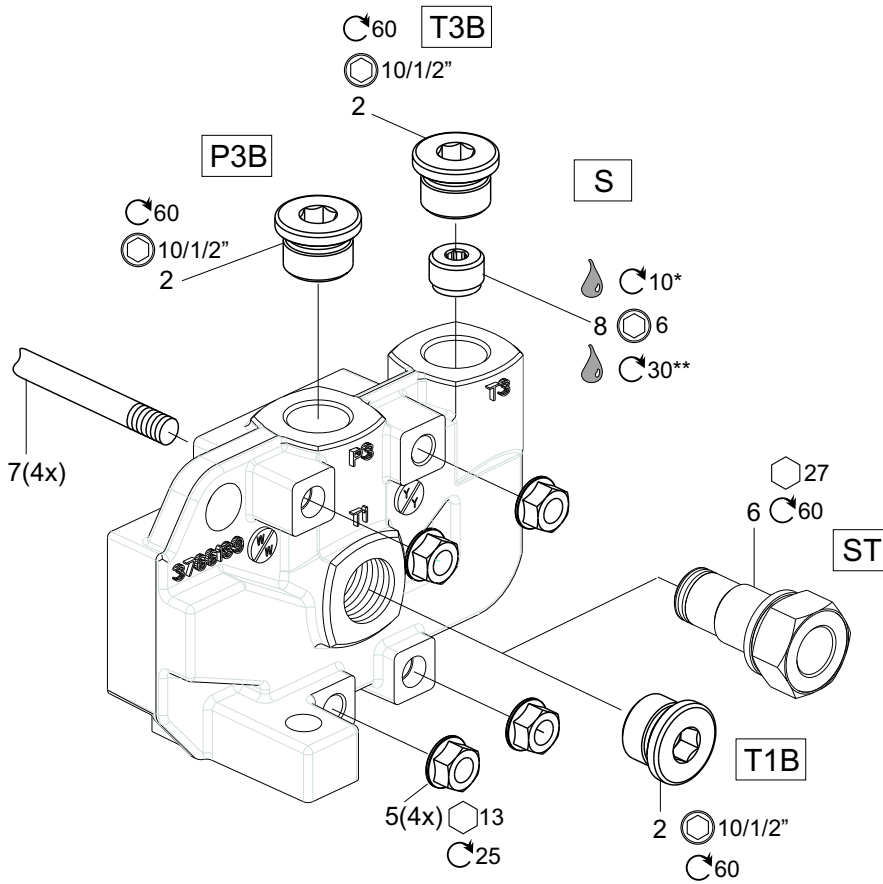
Inlet options

Mid - Inlet PS, PB, Y, C3, C5, C6



Outlet options

Outlet US S, ST, P3B, T3B, Tie-rods



☹ = Locking/sealing fluid

☹ = Corrosion preventative

☹ = Lubricant/oil

⌚ = Tightening torque in Nm

🔧 = Assembly/disassembly tool

⊕ = Phillips screw

⊖ = Slot screw

⊙ = Socket head

⬡ = Hexagon

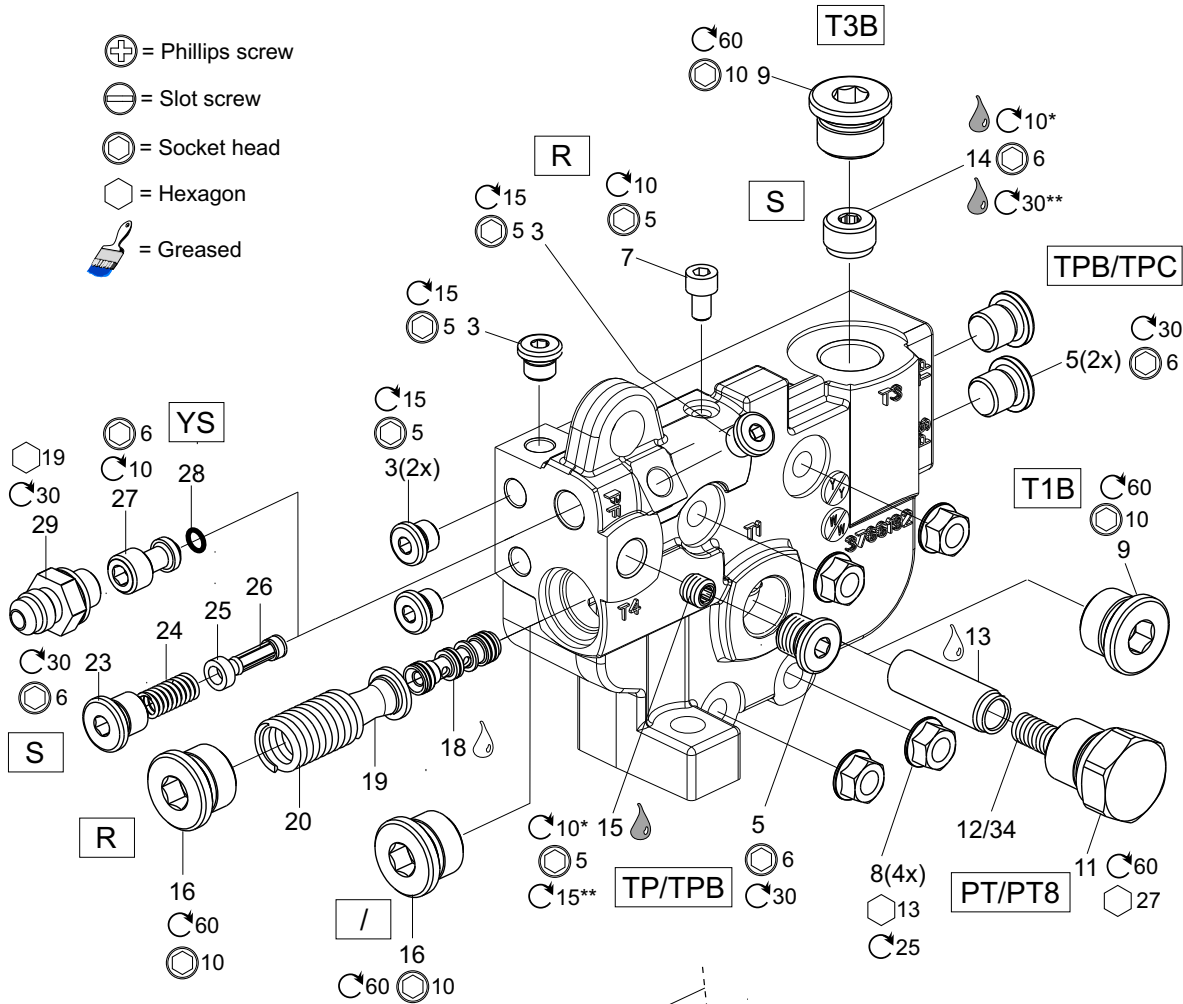
🖌 = Greased

Outlet Options

**Spare Parts List
Series P70**

Outlet options

Outlet USP S,YS, R,TP, MF



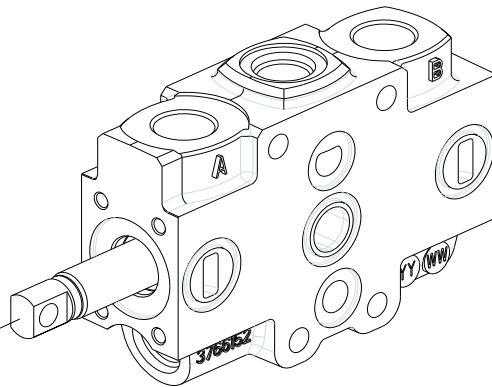
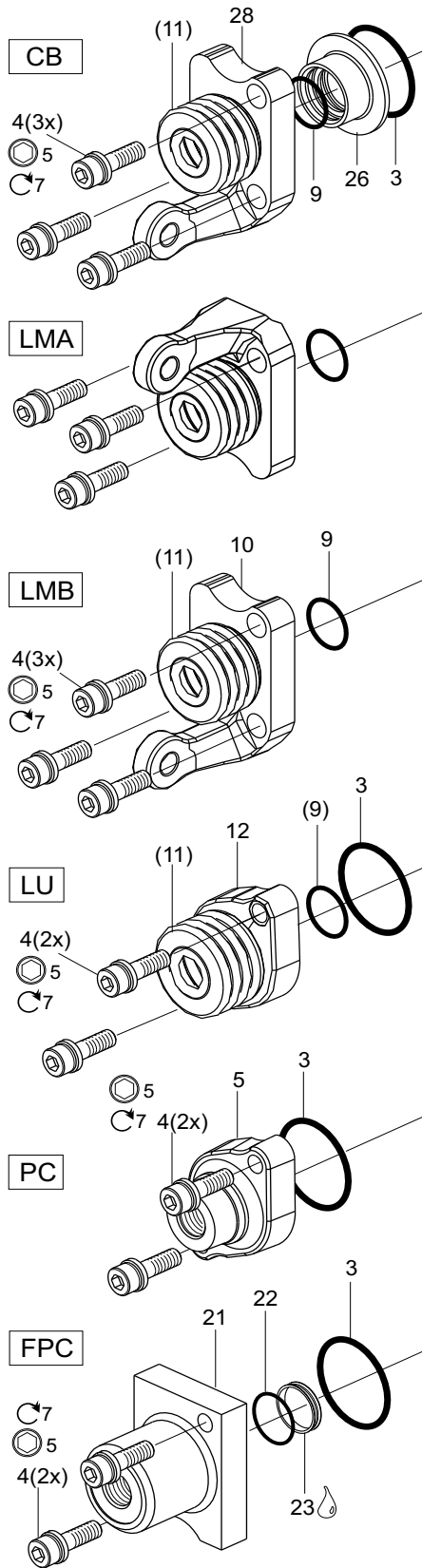
- = Phillips screw
- = Slot screw
- = Socket head
- = Hexagon
- = Greased

- = Locking/sealing fluid
- = Corrosion preventative
- = Lubricant/oil
- = Tightening torque in Nm
- = Assembly/disassembly tool

Code	Part#	Description	Remarks/Items
R35/R22	398000K053	Pilot reducing valve	16, 19
R35/R22	9126436801	Reducer spool, Red	18
R35/R22	9126436802	Reducer spool, Green	18
/	398000K061	Plug	16
R35	9127320014	Spring 35 bar	20
R22	3763020	Spring 22 bar	20
S	398000K054	Pilot supply strainer	23, 24, 25, 26
YS	398000K055	Connection for external strainer (BSP)	27, 28
YS	31766348	Connection UNF	29
TP	398000K075	Conn. for separate pilot tank, BSP	5, 15
TP	398000K275	Conn. for separate pilot tank, UNF	5, 15
TPB	398000K076	TP connection plugged BSP	5
TPB	398000K276	TP connection plugged UNF	5
TPC	301000K857	Internal pilot tank check valve, BSP	30, 31, 32, 33
TPC	398000K857	Internal pilot tank check valve, UNF	30, 31, 32, 33
PT	398000K050	Counter pressure valve 'BSP'	11, 12, 13
PT	398000K051	Counter pressure valve 'UNF'	11, 12, 13
PT8	398000K373	Counter pressure valve 'BSP'	11, 13, 34
PT8	398000K374	Counter pressure valve 'UNF'	11, 13, 34
T1B/T3B	398000K004	Connections plugged 'BSP'	9
T1B/T3B	398000K134	Connections plugged 'UNF'	9
S	398000K005	Series connection plug	14
-	VST11/8EDA3C	Plug	3
TP, S		Items 15, 14	* Torque for outlets with serial # < 0517xxxxxx
TP, S		Items 15, 14	** Torque for outlets with serial # > 0517xxxxxx

Spool section options











Actuators open spool end, A-side CB, LM, LU, PC, FPC

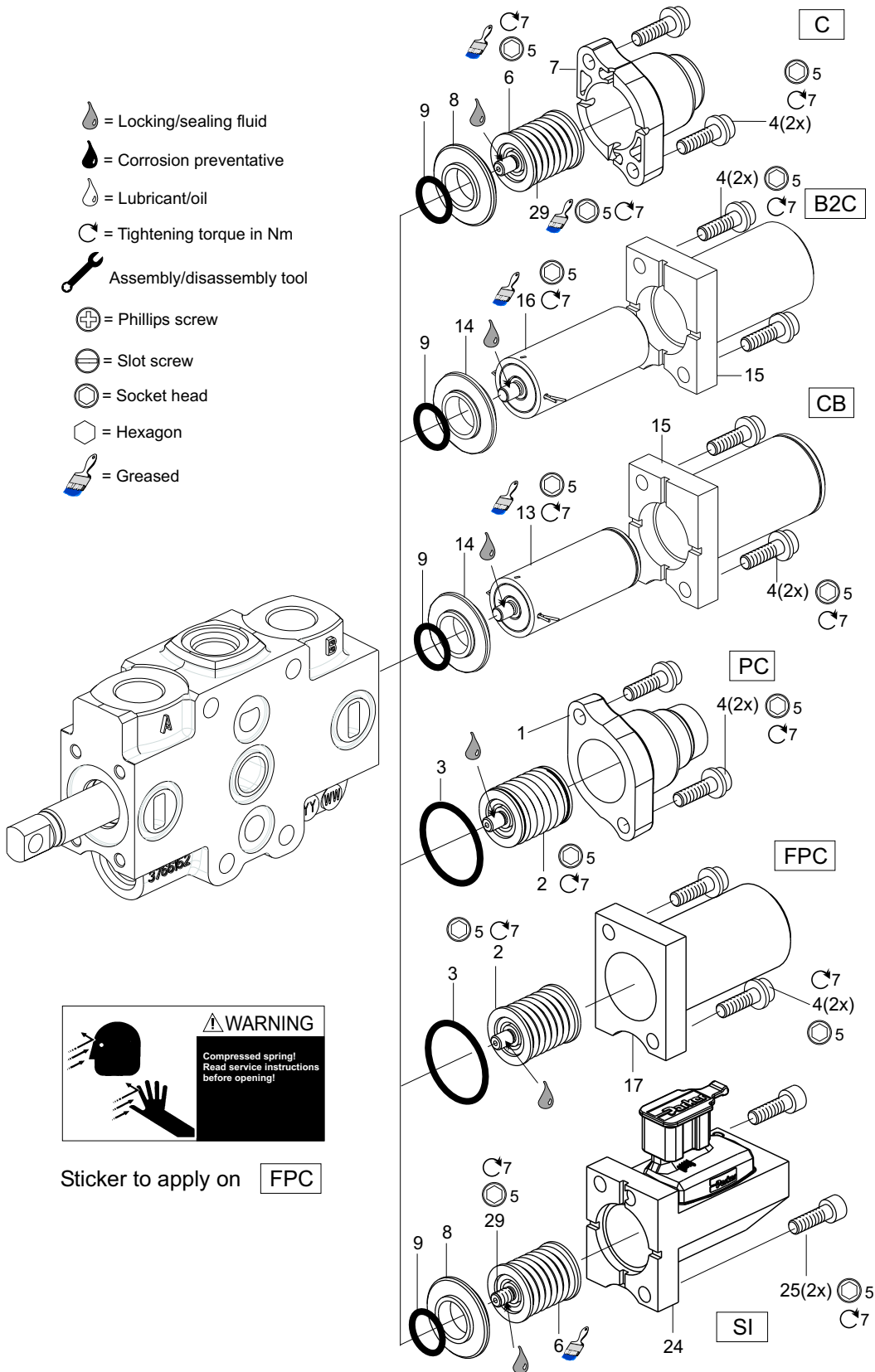


- = Locking/sealing fluid
- = Corrosion preventative
- = Lubricant/oil
- = Tightening torque in Nm
- = Assembly/disassembly tool
- = Phillips screw
- = Slot screw
- = Socket head
- = Hexagon
- = Greased

Spool section options

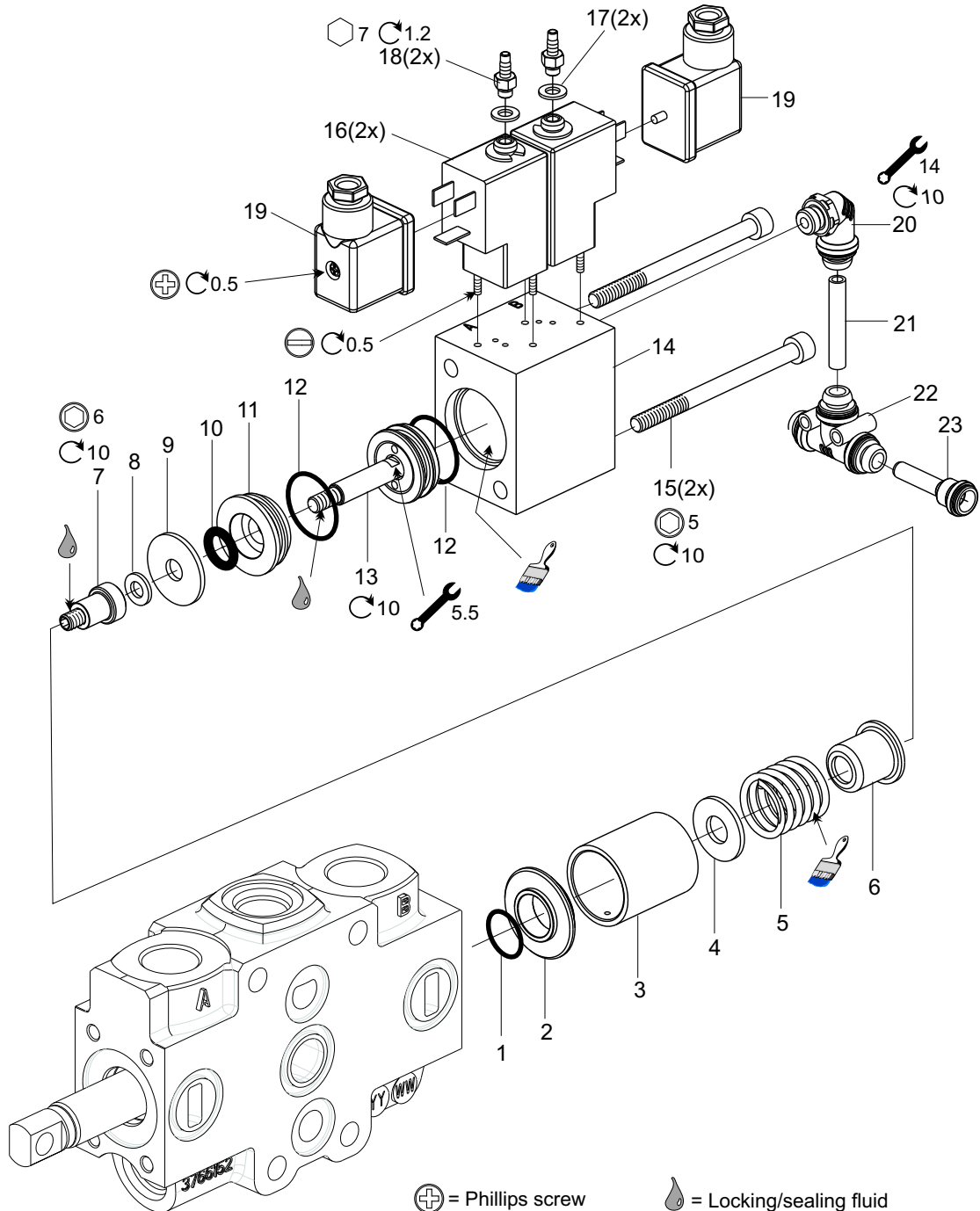
Actuators open spool end, B-side C, B2C, CB, PC, FPC, SI

-  = Locking/sealing fluid
-  = Corrosion preventative
-  = Lubricant/oil
-  = Tightening torque in Nm
-  = Assembly/disassembly tool
-  = Phillips screw
-  = Slot screw
-  = Socket head
-  = Hexagon
-  = Greased



Spool section options

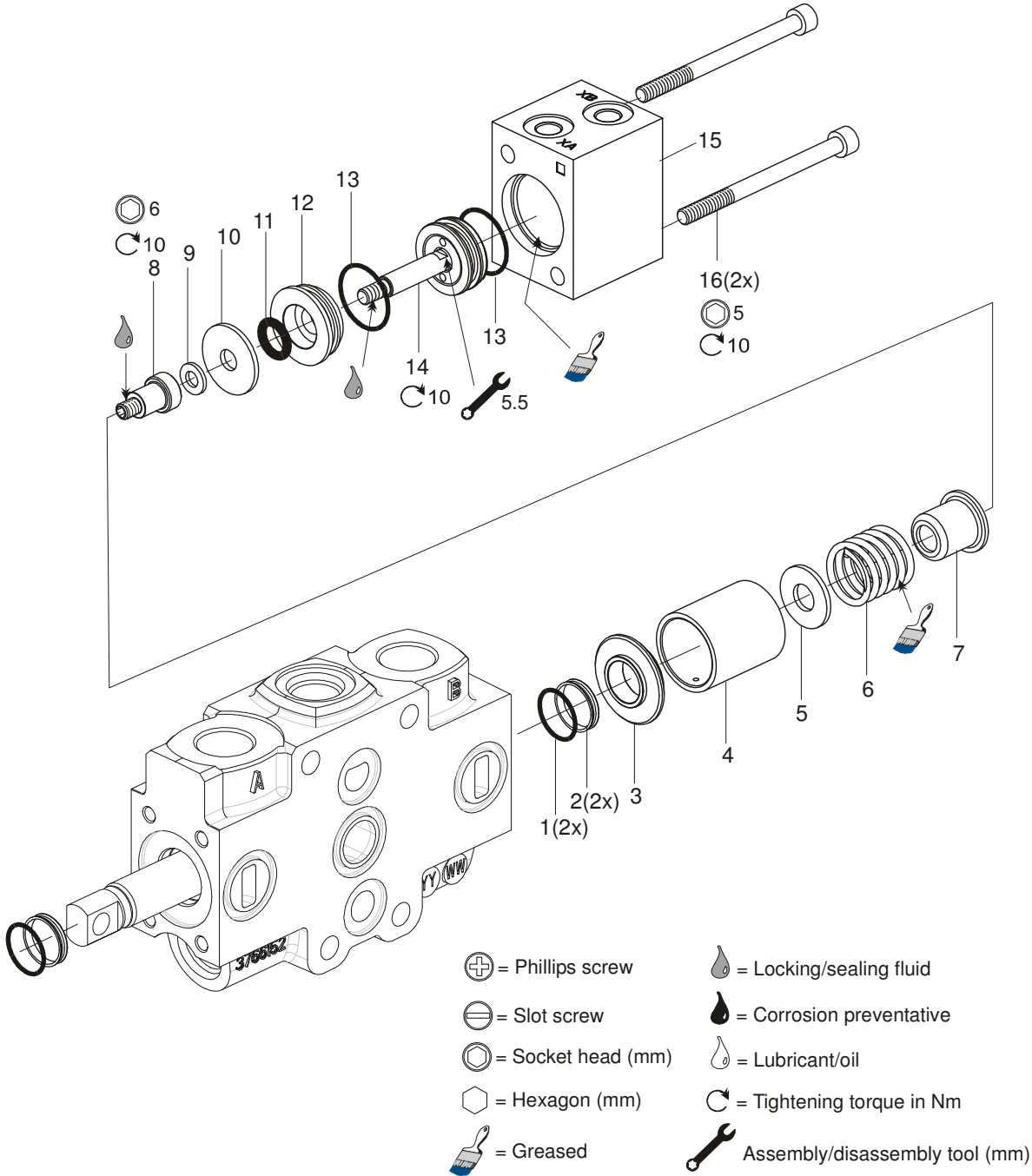
Actuators open spool end, B-side ACE



- | | |
|----------------------|------------------------------------|
| ⊕ = Phillips screw | ☼ = Locking/sealing fluid |
| ⊖ = Slot screw | ☹ = Corrosion preventative |
| ⊙ = Socket head (mm) | ☼ = Lubricant/oil |
| ⬡ = Hexagon (mm) | ⌚ = Tightening torque in Nm |
| 🖌 = Greased | 🔧 = Assembly/disassembly tool (mm) |

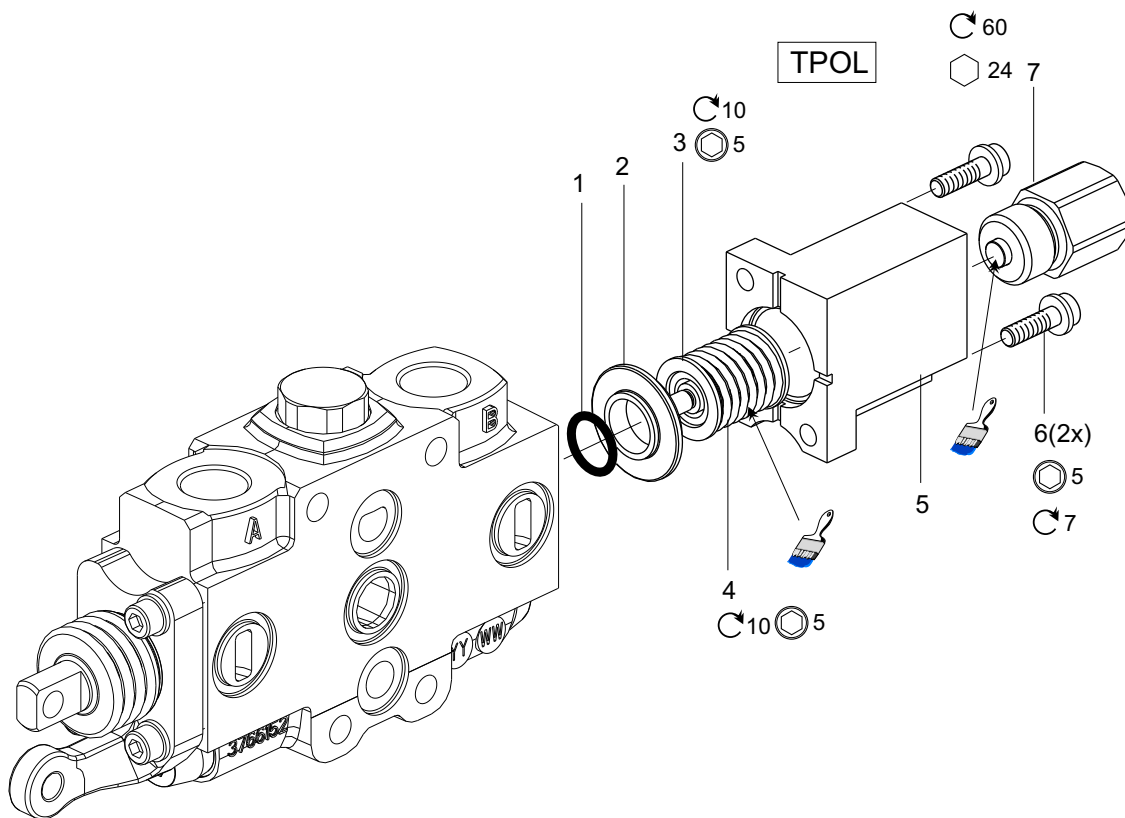
Spool section options




Actuators open spool end, B-side ACP






Spool section options

Actuators open spool end, B-side TPOL

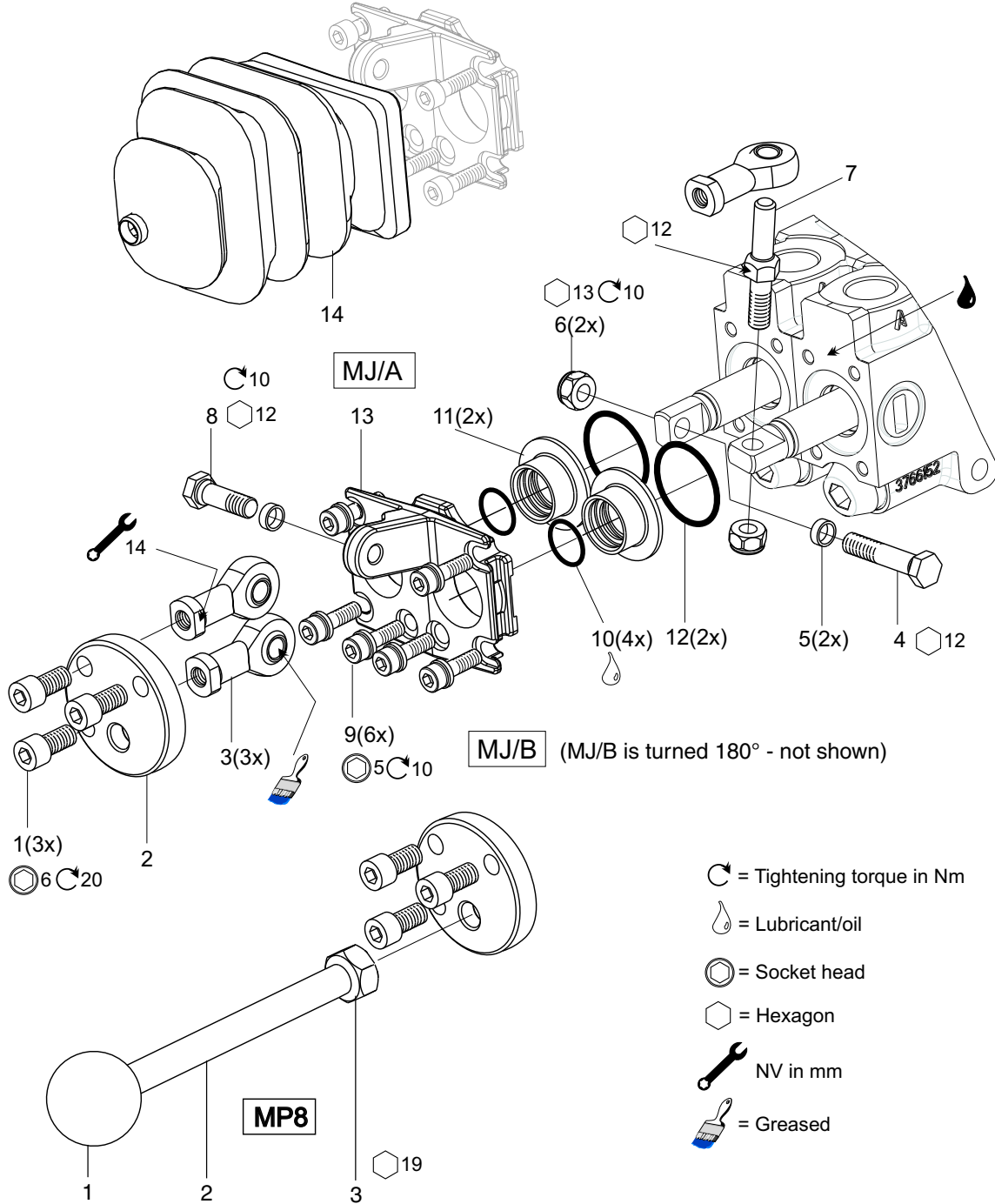


-  = Socket head
-  = Hexagon
-  = Greased

-  = Locking/sealing fluid
-  = Corrosion preventative
-  = Tightening torque in Nm

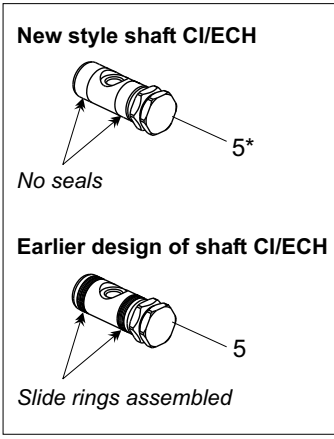
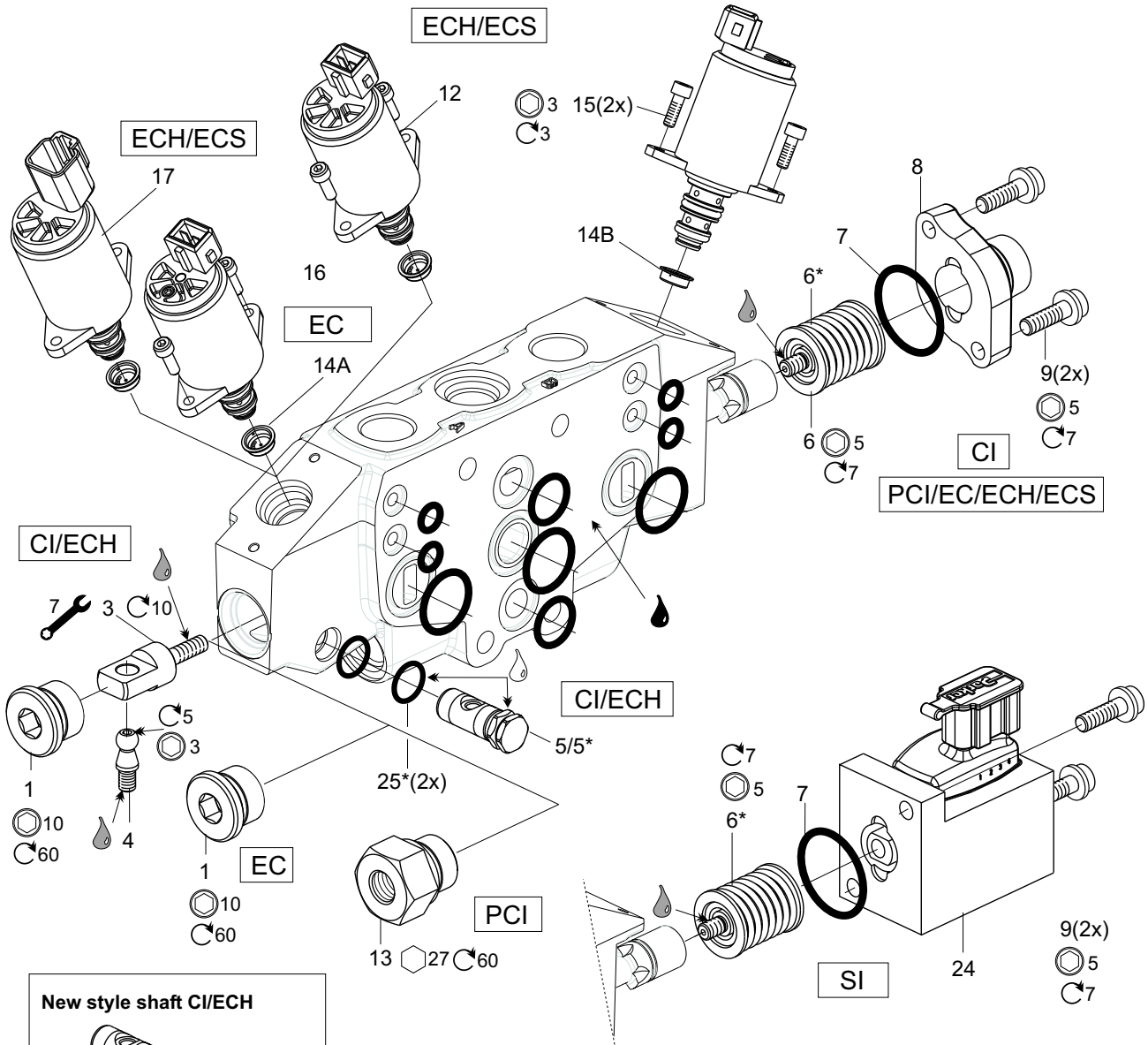
Spool section options

Actuators open spool end, A-side MP7, MP8 Joy-stick



Spool section options

Actuators closed spool end, CI, PCI, EC, ECH

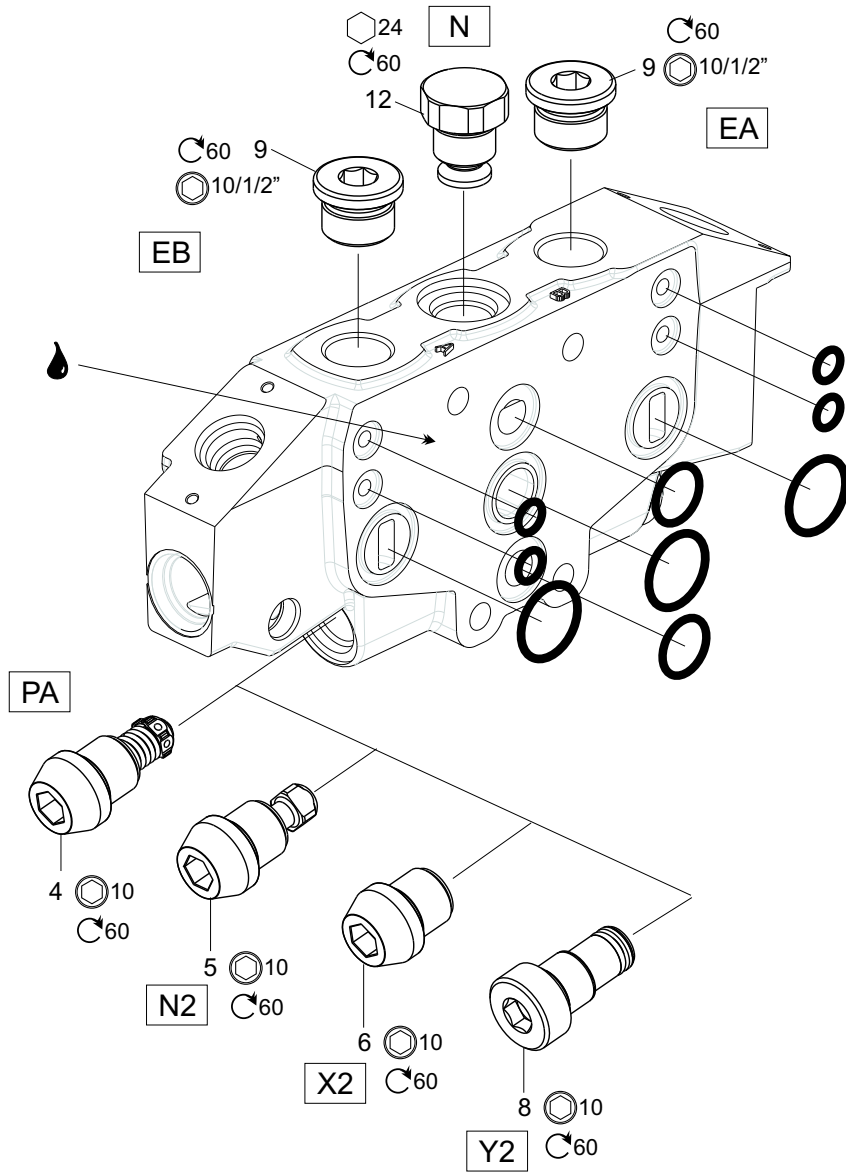


- = Locking/sealing fluid
- = Corrosion preventative
- = Lubricant/oil
- = Tightening torque in Nm
- mm = Assembly/disassembly tool
- = Phillips screw
- = Slot screw
- = Socket head (mm)
- = Hexagon (mm)

Code	Part#	Description	Remarks/Items
CI/ECH	398000K072	Spool actuator CI/ECH A-side	1, 3, 4, 5 Valves until serial number 0420xxxxxxx
	3767914	Shaft CI/ECH with seals assembled	5
CI/ECH	398000K172	Spool actuator CI/ECH A-side	1, 3, 4, 5*, 25* Valves from serial no. 0421xxxxxxx
	398000K173	Shaft CI/ECH, no seals	5*, 25* (O-rings mounted to grooves in cavity)
CI/ECH	398000K272	Cap kit for CI/ECH B-side, BSP	7, 8, 9
CI/ECH	398000K472	Cap kit for CI/ECH B-side, UNF	7, 8, 9
CI	3767175	Spring pack CI	6
SI/EC/ECH	398000K205	Actuator EC/ECH w. position sensing	6*, 7, 9, 24
EC/ECH	3766293	Spring pack EC, ECH	6*
PCI	398000K372	Spool actuator PCI B-side, BSP	7, 8, 9
PCI	398000K672	Spool actuator PCI B-side, UNF	7, 8, 9
PCI/EC/ECH	3766293	Spring pack PCI, EC, ECH	6*
CI/ECH	398000K803	Seal kit	5, 7, 25*(2x) (Both old and new style)
EC	398000K061	Plug EC, A-side	1
EC	398000K161	Cap kit EC, B-side	7, 8, 9
PCI	398000K108	Connection PCI, A-side, BSP	13
PCI	398000K308	Connection PCI, A-side, UNF	13
EC	393000M012	Solenoid valve PVC25, 12VDC	16 With air-bleed and manual override, AMP
EC	393000M024	Solenoid valve PVC25, 24VDC	16 With air-bleed and manual override, AMP
ECH/ECS	393000N012	Solenoid valve PVC25, 12 VDC	12 No air-bleed, no manual override, AMP
ECH/ECS	393000N024	Solenoid valve PVC25, 24 VDC	12 No air-bleed, no manual override, AMP
ECH/ECS	393000D012	Solenoid valve PVC25, 12 VDC	17 No air-bleed, no manual override, Deutsch
ECH/ECS	393000D024	Solenoid valve PVC25, 24 VDC	17 No air-bleed, no manual override, Deutsch
-	393000K813	Seal kit for PVC25	
-	393000K822	Connector kit AMP (for 1 PVC25)	
-	393000K825	Connector kit AMP (for 10 PVC25)	
PVC	3763308	Pilot restriction ø3.0	14, (Mounted on solenoids as spare part only, no damping function.)
PVC	3762399	Pilot restriction ø1.2, mark: 5 dots	14, "0" - Low damping
PVC	3762910	Pilot restriction ø0.9, mark: 10 dots	14, "N" - Normal damping (Std)
PVC	3762396	Pilot restriction ø0.6, mark: 1 dot	14, "H" - Hard damping

Basic functions, spool section

N, X, PA, N2, X2, Y2



- = Locking/sealing fluid
- = Corrosion preventative
- = Lubricant/oil
- = Tightening torque in Nm
- = Assembly/disassembly tool
- = Phillips screw
- = Slot screw
- = Socket head
- = Hexagon

Code	Part#	Description	Remarks/Items		
N	398000K011	Supply check valve	12		
EA/EB	398000K004	Plug in service port, 'BSP'	9		
EA/EB	398000K134	Plug in service port, 'UNF'	9		
N2	393000K194	Load hold check valve	5		
X2	393000K193	Cavity plugged (without check valve)	6		
Y2	393000K195	Cavity plugged	8		
Y2	393000K818	Seal kit Y2			
PA	Part # std	Part # A003	Part # A007	Description	Remarks/Items
PA		398000K208		PLC053-32-10	PLC053-BAR-at 10 l/min, Item 4
PA		398000K209		PLC053-40-10	
PA	393000K176	398000K301	393000K558	PLC053- 50-10	(P70CF/Std = L90LS/Std)
PA	393000K177		393000K559	PLC053- 63-10	(P70CF/A007 = L90LS/A005)
PA	393000K178	398000K210	393000K560	PLC053- 80-10	
PA	393000K179	398000K211	393000K561	PLC053-100-10	
PA		398000K318		PLC053-120-10	
PA	393000K180	398000K271	393000K562	PLC053-125-10	
PA	393000K181		393000K563	PLC053-140-10	
PA	393000K182		393000K564	PLC053-160-10	
PA		398000K319		PLC053-170-10	
PA	393000K183		393000K565	PLC053-175-10	
PA	393000K184		393000K566	PLC053-190-10	
PA	393000K185	398000K212	393000K567	PLC053-210-10	
PA	393000K186		393000K568	PLC053-230-10	
PA	393000K134		398000K249	PLC053-240-10	
PA	393000K187		393000K569	PLC053-250-10	
PA	393000K188		393000K570	PLC053-260-10	
PA	393000K189		393000K571	PLC053-280-10	
PA	393000K190		393000K572	PLC053-300-10	
PA	393000K191		393000K573	PLC053-320-10	
PA	393000K192		393000K574	PLC053-350-10	

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Publication No HY17-8810/UK



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Bulletin HY17-8812-M1/UK

Spare Parts List Series P70, Gen. 2

Effective: March 12, 2009
Supersedes: February 26, 2009



This list of spare parts is designed to give you a good idea of the components included in the product range for valves. To see precisely which component is used for a specific product, you will need to look at the customer specification for the product in question. The customer specification contains a number of entries, and for each entry, a code pressure or flow is specified with a code or a number. To help you find your way around, this list of spare parts contains references to these entries and codes.

Codes on the image page of the list of spare parts usually appear in bold and enclosed in a border. The table page contains available spare part sets. The ordering code is the product code that appears in the Part column.















The spare part to be used is determined by the first two columns, which contain the entry and the code from the customer specification. If these columns are empty, the spare part set is valid regardless of the selected code, unless indicated otherwise

The symbols in the frame below are used in this Spare Parts List to help you find the right tools, the right torques, suitable grease etc.

Conversion factors

1 kg	= 2.2046 lb
1 N	= 0.22481 lbf
1 Nm	= 0.10197 kpm
1 bar	= 14.504 psi
1 l	= 0.21997 UK gallon
1 l	= 0.26417 US gallon
1 cm ³	= 0.061024 in ³
1 m	= 3.2808 feet
1 mm	= 0.03937 in
9/5 °C + 32	= °F

Symbols for servicing

 = Phillips screw	 = Thread for disassembly type...
 = Slot screw	 = Tightening torque in Nm
 = Socket head dimensions in mm and/or inch	 = Use locking/sealing fluid type...
 = Hexagon dimensions in mm and/or inch	 = Use corrosion preventative type...
 = Sixpoint socket	 = Use hydraulic liquid for lubrication
 = Wrench size in mm and/or inch or special assembly/disassembly tool needed. No...	 = Use grease type...
 = See appendix A	 = See appendix A

 **WARNING – USER RESPONSIBILITY**

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker-Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

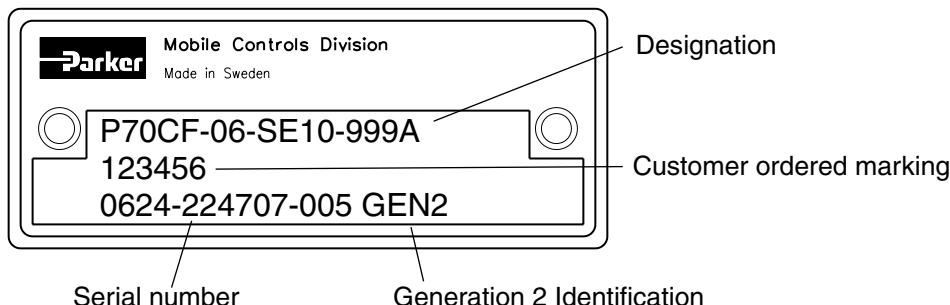
To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

Offer of Sale

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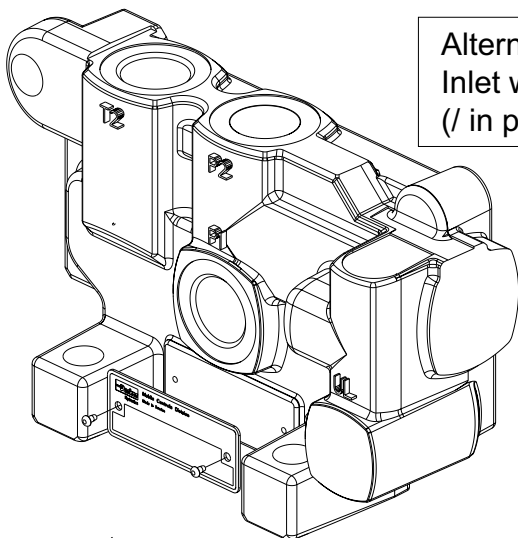
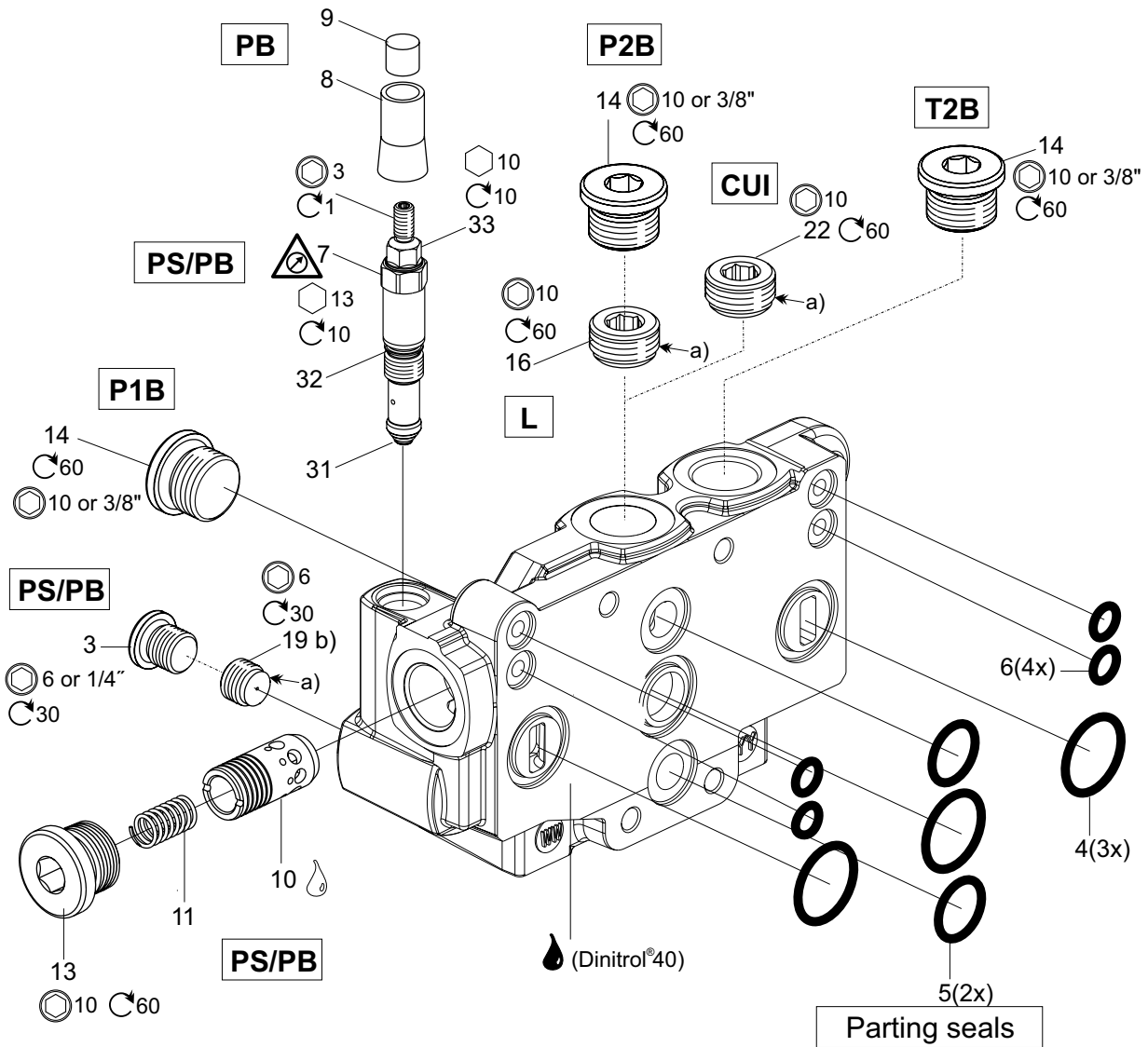
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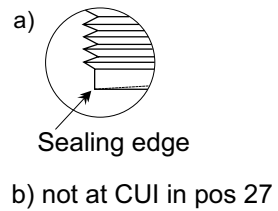


Valve serial numbers consist of three groups of digits
 The first group shows year and week of manufacture:
 In this example, 0624 means week 24 of 2006
 The remaining digits are for internal use within Parker

PB, PS, P1B, P2B, T2B, L, CUI, Parting seals

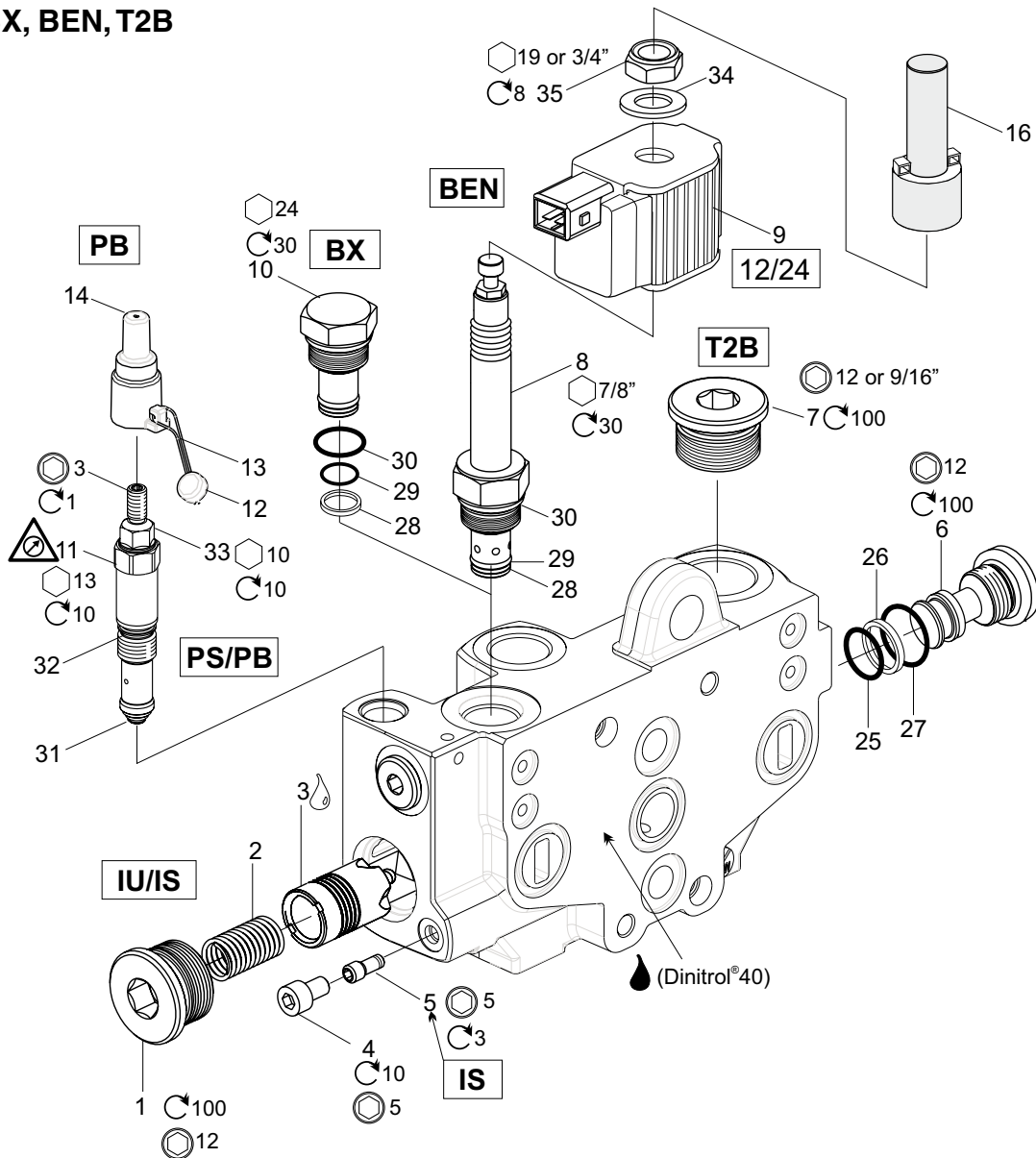


Alternative appearance,
 Inlet without Main relief
 (/ in pos 16)

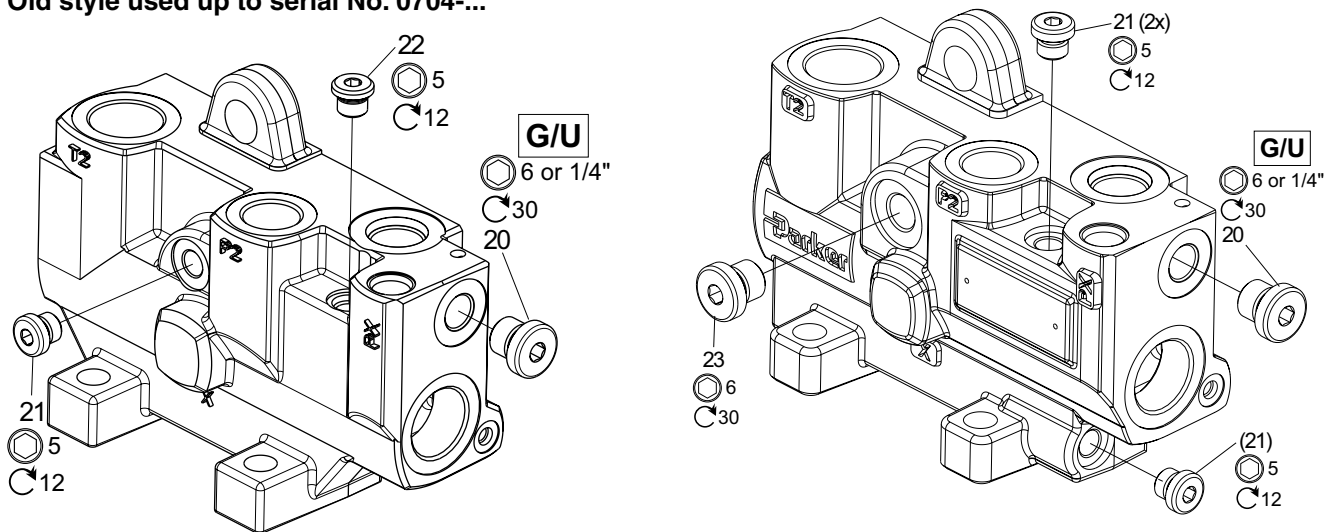


See Customer Specification				
Code	Pos	Part	Description	Remarks / Items
PS, PB	16	398000K042	Main stage	10, 11, 13
PS, PB	16	398000K069	Pilot part, main relief valve	7[31, 32, 33]
PS, PB	16	393000K831	Seal kit pilot part, main relief	31, 32, 33
PS, PB	16		Plug VST11/2EDCF 'BSP'	13
PB	16	393000K852	Sealing set	8, 9
PS, PB + G	16 + 04		Plug VST11/4EDCF	3
PS, PB + U	16 + 04		Plug 6HP50N-S 'UNF'	3
PS, PB + G	16 + 04	6760004	Orifice kit, BSP	19 (5 pcs in kit)
PS, PB + U	16 + 04	6760005	Orifice kit, UNF	19 (5 pcs in kit)
P1B, P2B, T2B + G	25, 26, 27 + 04		Plug VST11/2EDCF 'BSP'	14
P1B, P2B, T2B + U	25, 26, 27 + 04		Plug 10HP50N-S 'UNF'	14
L + G	27 + 04	398000K047	Plug (parallel connection) BSP	16
L + U	27 + 04	398000K185	Plug (parallel connection) UNF	16
CUI + G	27 + 04	398000K226	Orifice (unloaded const. press.) BSP	22
CUI + U	27 + 04	398000K227	Orifice (unloaded const. press.) UNF	22
		398000K801	Parting seals, standard	4(3x), 5(2x), 6(4x) (NBR)
A002	29, 49	398000V801	Parting seals, FPM	4(3x), 5(2x), 6(4x) (FPM)

PB, PS, BX, BEN, T2B

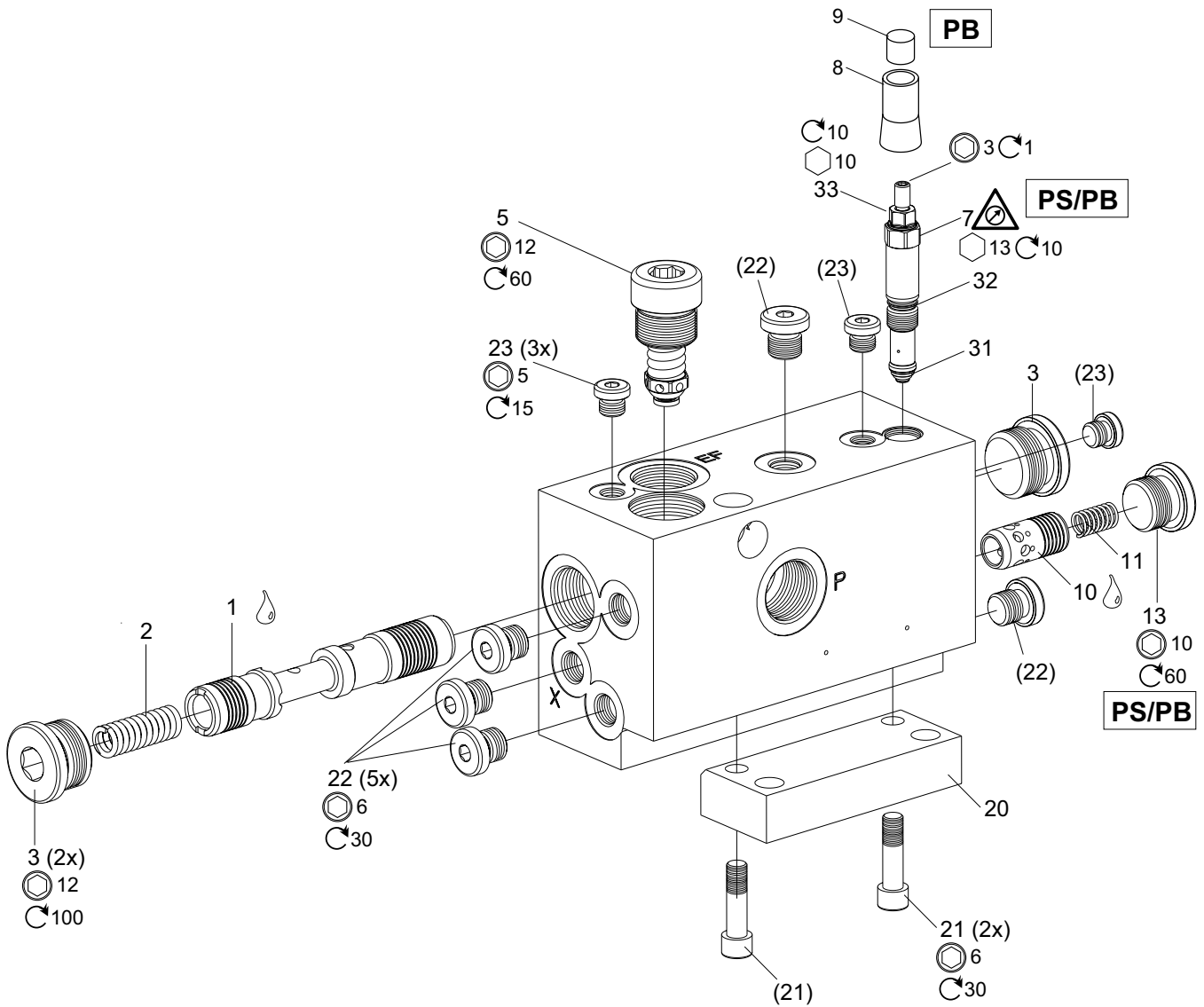


Old style used up to serial No. 0704-...



See Customer Specification				
Code	Pos	Part	Description	Remarks / Items
PS, PB	16	398000K069	Pilot part, Main relief valve	11[31, 32, 33]
PS, PB		393000K831	Seal kit, Pilot part relief	31, 32, 33
PB	16	398000K850	Sealing set (for PB)	12, 13, 14
		398000K851	Sealing cap	14 (500 pcs in kit)
T2B + G	25 + 04		Plug VST13/4EDCF 'BSP'	7
T2B + U	25 + 04		Plug 12HP5ON-S 'UNF'	7
BEN	22	398000K045	Pump unloading valve	8[28, 29, 30], 34, 35
12	05	3763396	Coil 12 VDC	9
24	05	3763397	Coil 24 VDC	9
BEN	22	SK08-2	Seal kit for item 8	28, 29, 30
BX	22	398000K044	Pump unloading blocked	10[28, 29, 30]
BX	22	SK08-2	Seal kit for BX	28, 29, 30
		398000K853	Sealing cap	16 (500 pcs in kit)
IS, IU	15		Plug VST13/4EDCF	1
		9120100109	Plug	6[25, 26, 27]
		9120091030	Seal kit for plug	25, 26, 27
		6760006	Spool kit IU	2, 3, 4 Inlet section with IU can not be rebuilt to IS.
		6760138	Spool kit IS	2, 3, 4, 5 Inlet section with IS can not be rebuilt to IU.
G	04		Plug VST11/4EDCF 'BSP'	20
U	04		Plug 6HP5ON-S 'UNF'	20
			Plug VST11/8EDCF	21
		6760040	Plug 1/8	22
			Plug VST11/4EDCF	23

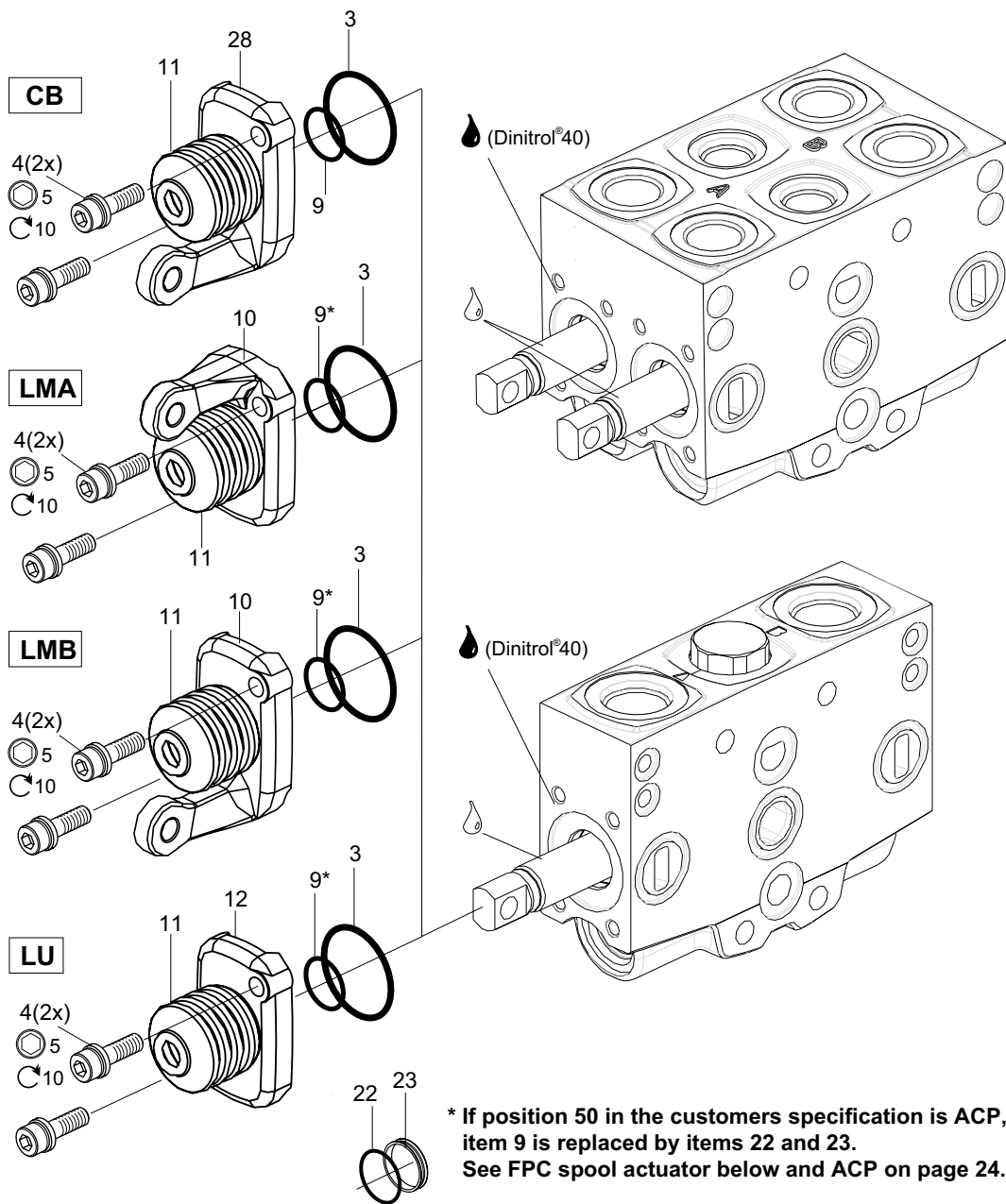
PS, PB



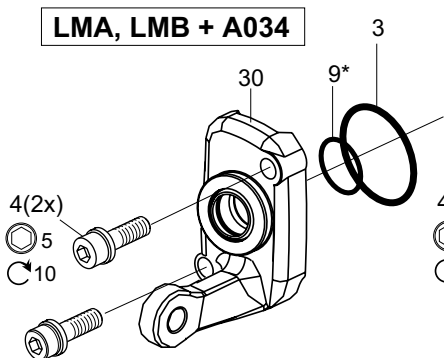
See Customer Specification				
Code	Pos	Part	Description	Remarks / Items
		6760580	Pilot spool	1, 2
			VSTI3/4EDCF	3
			VSTI1/2EDCF	13
PB	16	393000K852	Sealing kit	8, 9
PS/PB	16	398000K069	Pilot part, main relief valve	7, 31, 32, 33
PS, PB	16	398000K042	Main stage	10, 11, 13
		9120029116	PCL082-280	5
		6760581	Bracket kit	20, 21(2x)
			VSTI1/4EDCF	22
			VSTI1/8EDCF	23

See Customer Specification				
Code	Pos	Part	Description	Remarks / Items
		398000K042	Main stage	10, 11, 12
PS, PB	94	398000K069	Main relief valve pilot part	7[31, 32, 33]
PS, PB, (Y)	94	393000K831	Seal kit PS, PB, Y	31, 32, 33 (With exception of 33 for Y)
PB	94	393000K852	Sealing set (for PB)	8, 9
Y	94	398000K123	Cavity plug	16[31, 32]
C3, C5, C6 + G	93 + 04		Plug VST11/2EDCF 'BSP'	6
C3, C5, C6 + U	93 + 04		Plug 10HP50N-S 'UNF'	6
C3, C5, C6	93	398000K405	Plug	4
C3, C5, C6	93	6760405	Plug	4 (50 pcs in kit)

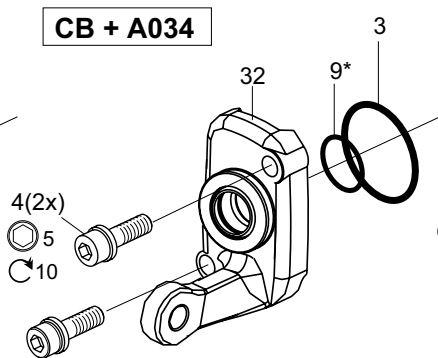
CB, LMA, LMB, LU, A034



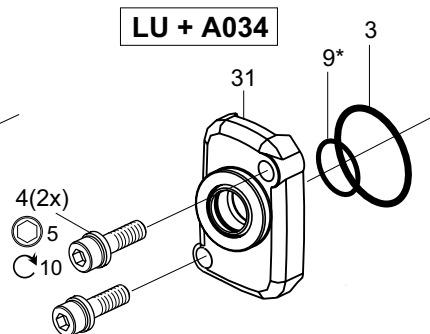
LMA, LMB + A034



CB + A034

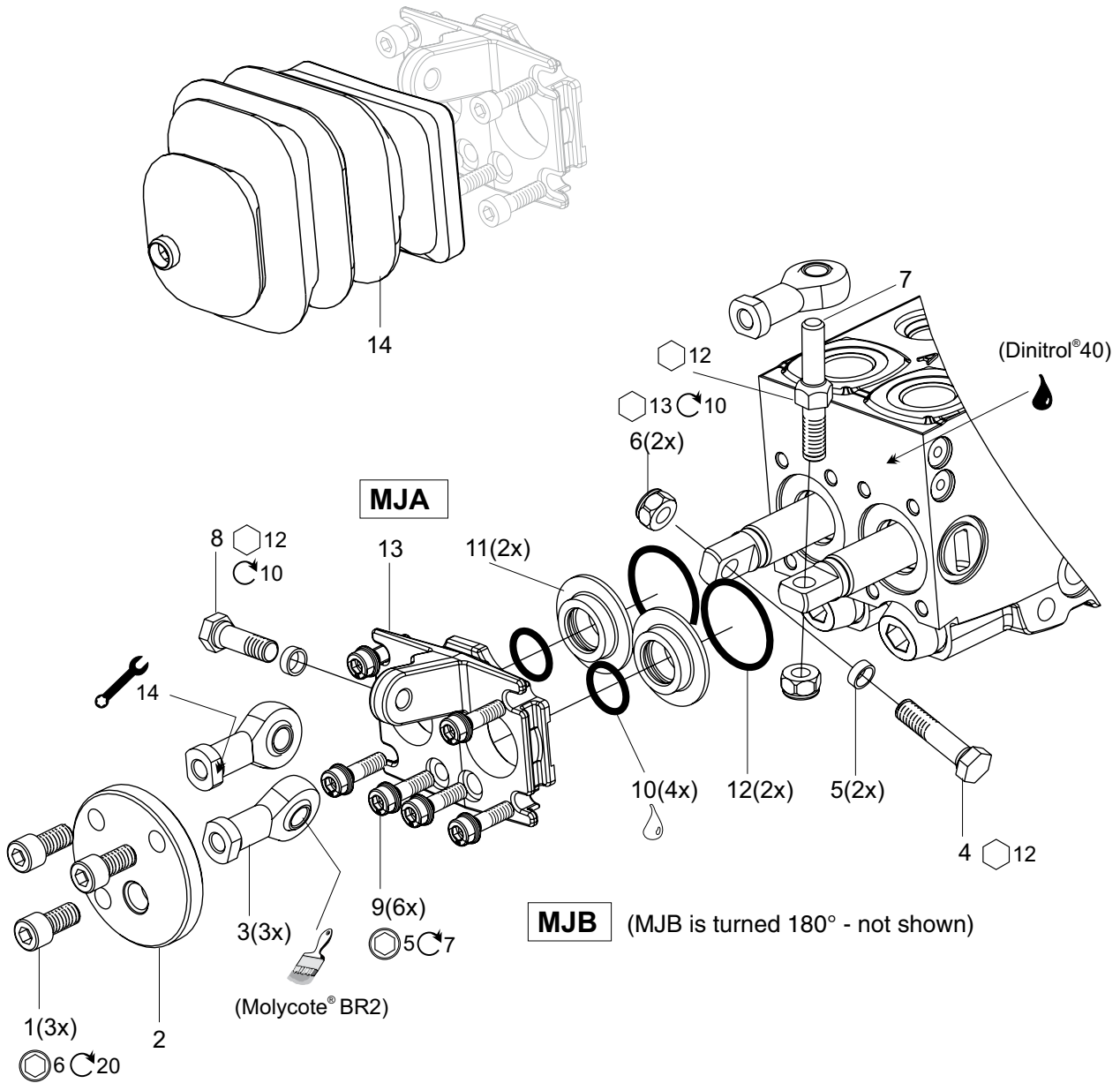


LU + A034



See Customer Specification				
Code	Pos	Part	Description	Remarks / Items
LMA, LMB	51	398000K009	Lever holder kit	3, 4(2x), 9, 10[11]
LU	51	398000K010	Cover	3, 4(2x), 9, 12[11]
CB	50	398000K073	Lever holder kit CB	3, 4(2x), 28[9, 11]
	–	398000K806	Seal kit ACP	3(2x), 22, 23
	–	398000K805	Boot and Seal kit LMA/LMB	3, 9(2x), 11
	–	398000K807	Boot kit	11(6 pcs in kit)
LMA, LMB + A034	51, 59	6760215	Lever holder kit scraper A034	3, 4(2x), 9, 30
LU + A034	51, 59	6760214	Cover scraper A034	3, 4(2x), 9, 31
CB + A034	51, 59	6760216	Lever holder kit CB scraper A034	3, 4(2x), 9, 32

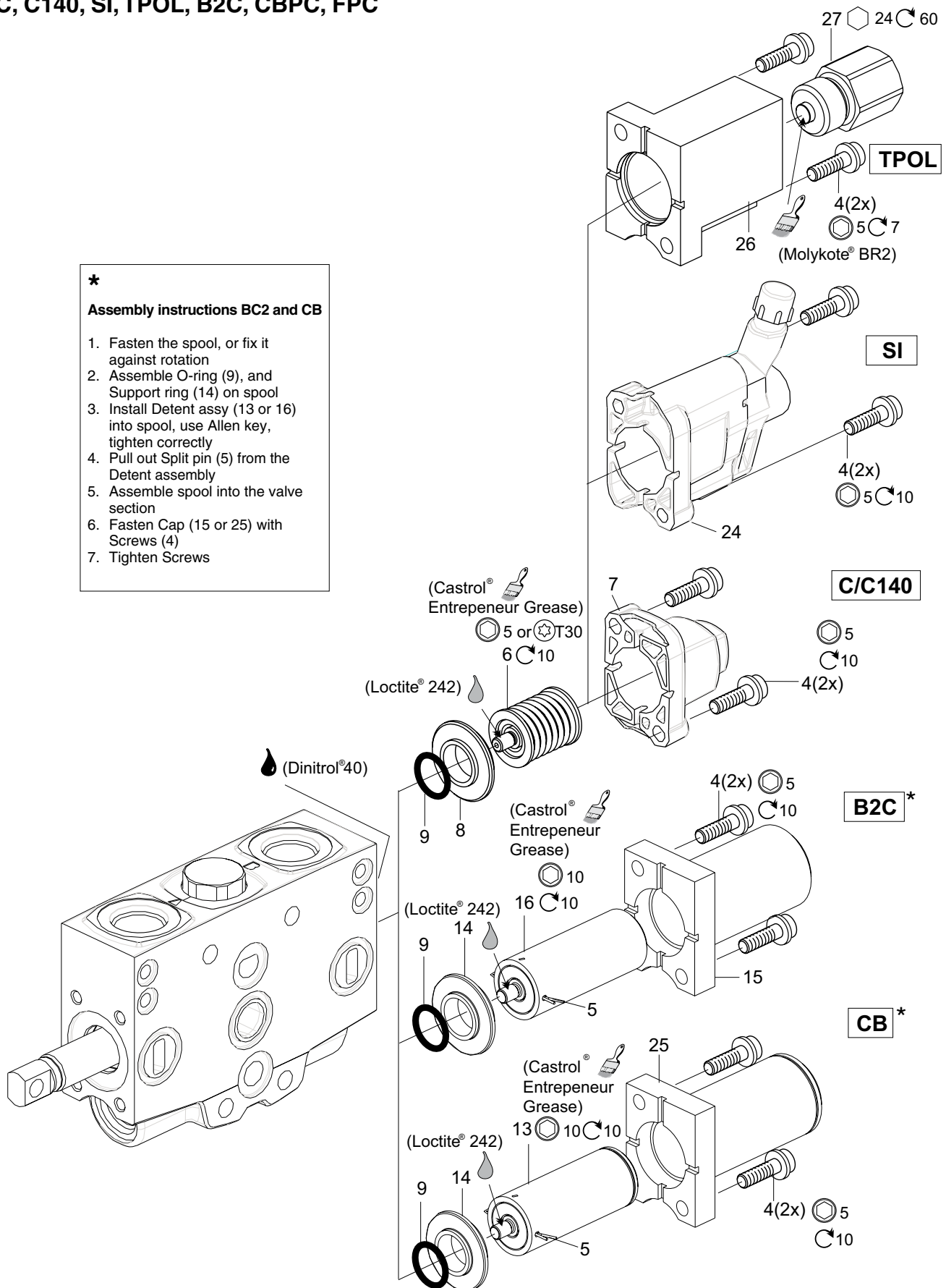
MJA, MJB



See Customer Specification				
Code	Pos	Part	Description	Remarks / Items
MJA, MJB	51	8234939027	Joy-stick actuator (MJA/MJB)	1(3x), 2, 3(3x), 4, 5(2x), 6(2x), 7, 8, 9(6x), 10(4x), 11(2x), 12(2x), 13, 14
		398000K808	Joint kit	1(3x), 3(3x), 4, 5(2x), 6(2x), 7, 8
		6760531	Kit MJ lever bracket	13, 9(6x), 10(2x), 11(2x), 12(2x)
		398000K238	Seal kit	10(4x), 12(2x), 14

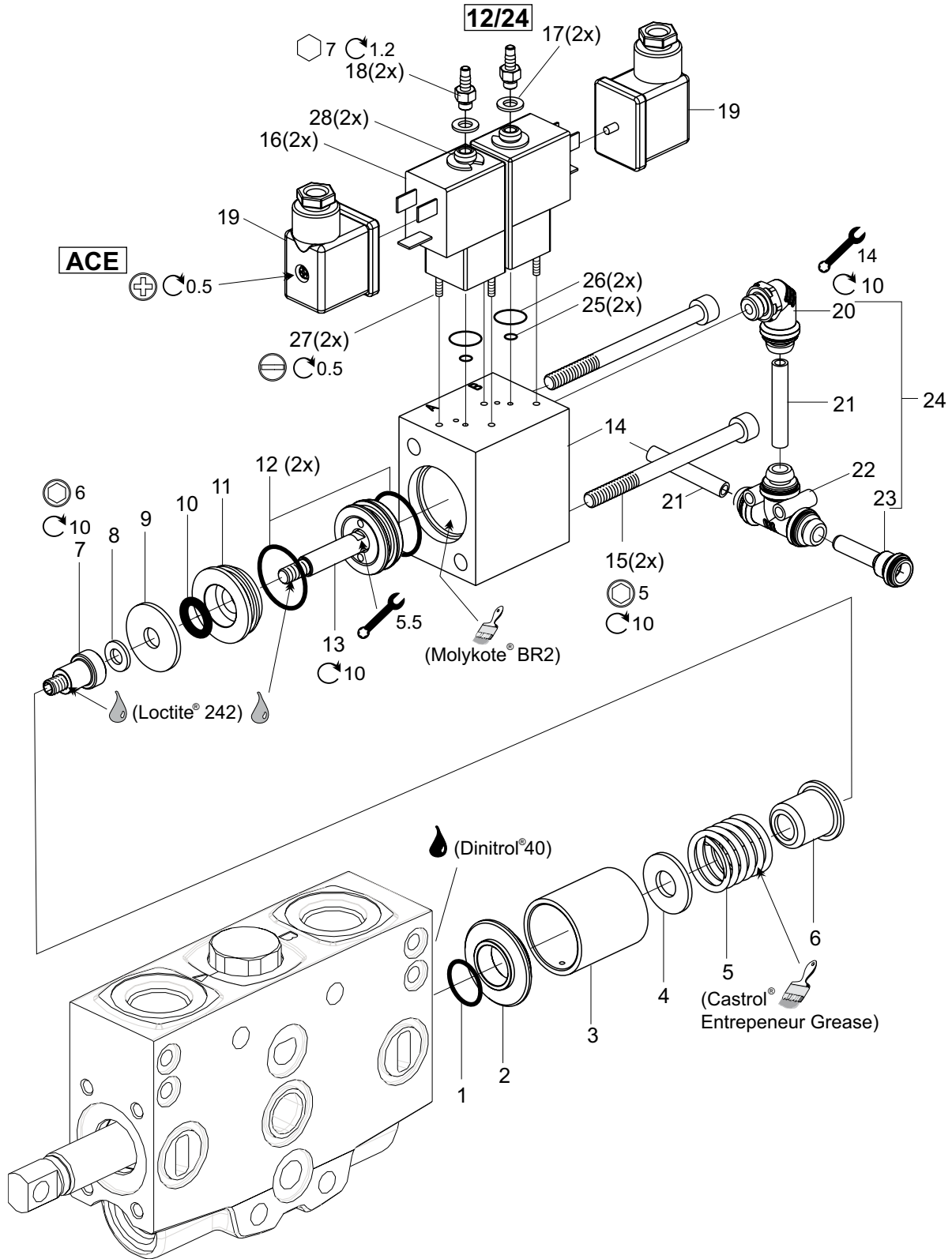
C, C140, SI, TPOL, B2C, CBPC, FPC

- ***
Assembly instructions BC2 and CB
1. Fasten the spool, or fix it against rotation
 2. Assemble O-ring (9), and Support ring (14) on spool
 3. Install Detent assy (13 or 16) into spool, use Allen key, tighten correctly
 4. Pull out Split pin (5) from the Detent assembly
 5. Assemble spool into the valve section
 6. Fasten Cap (15 or 25) with Screws (4)
 7. Tighten Screws



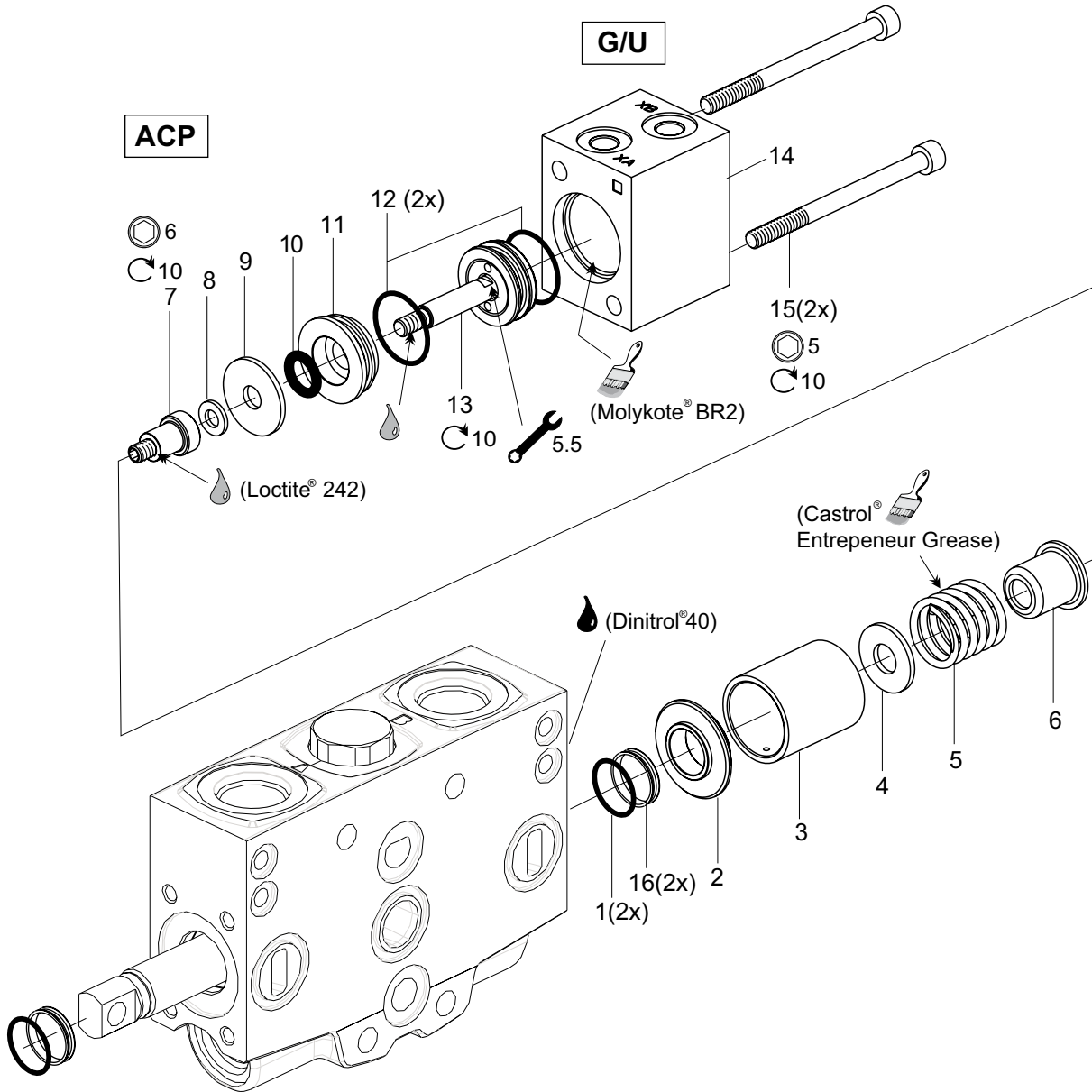
See Customer Specification				
Code	Pos	Part	Description	Remarks / Items
C, C140	50	398000K008	Cap kit C/C140	4(2x), 7, 8, 9
C	50	6760041	Spring pack, C	6
C+A020	50, 52, 59	398000K484	Spring pack, C+A020	6
C140	50	6760042	Spring pack, C140	6
C140+A020	50, 52, 59	6760470	Spring pack, C140+A020	6
		6760544	Support washer multipack 100 pcs	8(100x)
B2C	50	398000K059	Spool actuator B2C	4(2x), 9, 14, 15, 16
B2C	50	398000K159	Cap kit B2C	4(2x), 9, 14, 15
B2C	50	398000K259	Spring/detent pack	16
CB	50	398000K060	Spool actuator CB	4(2x), 9, 13, 14, 25
CB	50	398000K160	Cap kit CB	4(2x), 9, 14, 25
CB	50	398000K260	Spring/detent pack	13
		398000K805	Seal kit C, B2C, CB (A and B side)	3, 9(2x), 11 (See page 14)
TPOL	52	398000K420	Cap kit, TPOL	4(2x), 8, 9, 26
TPOL	52	6760044	Cylinder assembly, TPOL	27
SI	52	398000K404	Spool position sensor kit	4(2x), 9, 8, 24

ACE



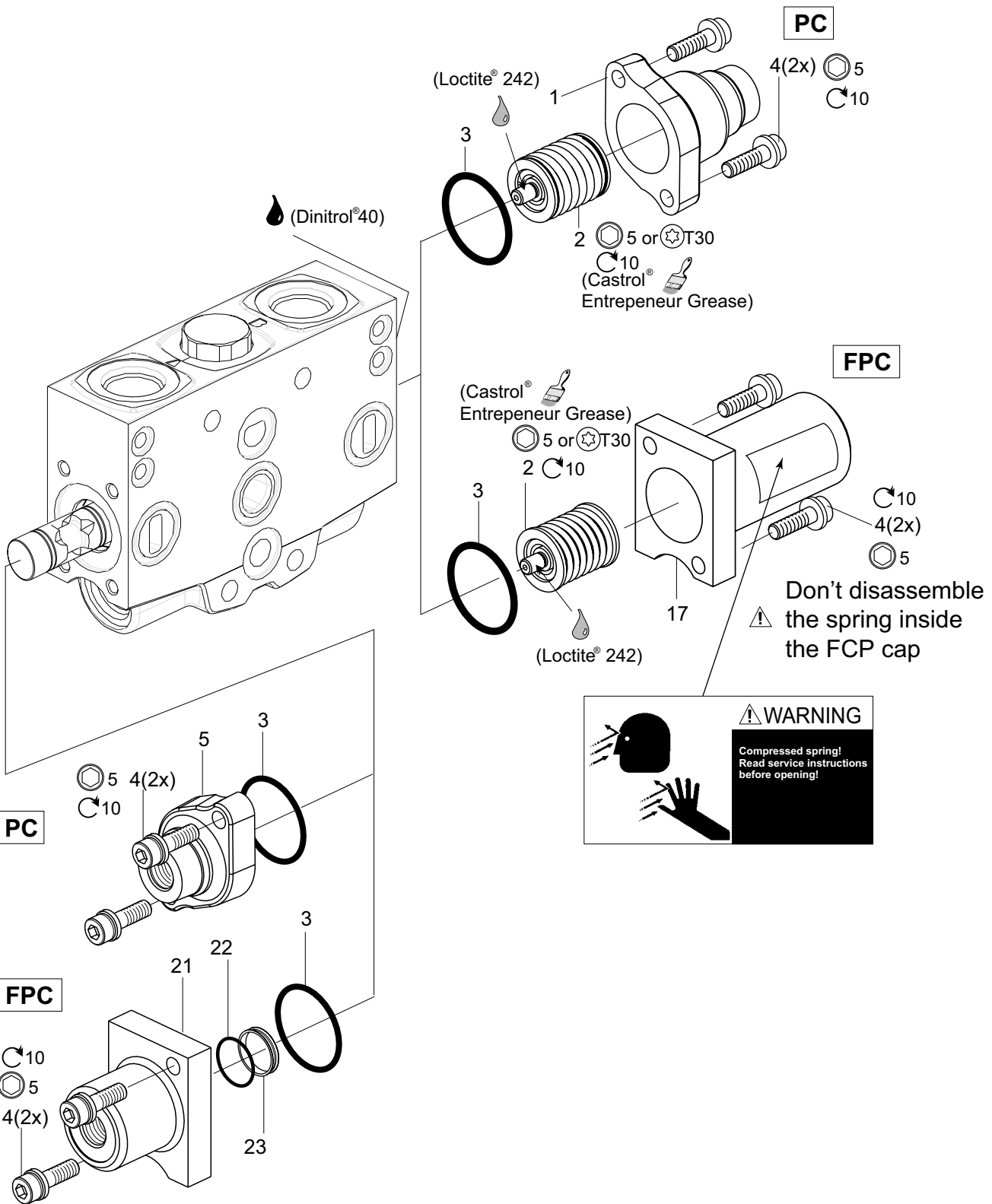
See Customer Specification				
Code	Pos	Part	Description	Remarks / Items
ACE + 12	50 + 05	398000K058	Spool actuator ACE, 12 VDC	1, 2, 3, 4, 5, 6, 7, 8, 9, 13[10, 11, 12(2x)], 14[16(2x), 17(2x), 18(2x), 25(2x), 26(2x), 27(4x), 28(2x)], 15(2x)
ACE + 24	50 + 05	398000K958	Spool actuator ACE, 24 VDC	1, 2, 3, 4, 5, 6, 7, 8, 9, 13[10, 11, 12(2x),] 14[16(2x), 17(2x), 18(2x), 25(2x), 26(2x), 27(4x), 28(2x)], 15(2x)
ACE	50	398000K062	Spring kit for ACE actuator	1(2x), 2, 4, 5, 6, 7
ACE	50	398000K063	Piston kit for ACE actuator	3, 8, 9, 13[10, 11, 12(2x)]
ACE + 12	50 + 05	398000K064	Cylinder housing ACE, 12 VDC	14[16(2x), 17(2x), 18(2x), 25(2x), 26(2x), 27(4x), 28(2x)]
ACE + 24	50 + 05	398000K964	Cylinder housing ACE, 24 VDC	14[16(2x), 17(2x), 18(2x), 25(2x), 26(2x), 27(4x), 28(2x)]
ACE	50	393000K808	Seal kit ACE (B-side)	1(2x), 10, 12(2x)
ACE + 12	50 + 05	9123958812	Solenoid valve ACE, 12 VDC	16[25, 26], 17, 18, 19, 27(2x)
ACE + 24	50 + 05	9123958824	Solenoid valve ACE, 24 VDC	16[25, 26], 17, 18, 19, 27(2x)
		91259551	Connector kit	19 (1 pc in kit)
		9125955110	Connector kit	19 (10 pcs in kit)
		9125955125	Connector kit	19 (25 pcs in kit)
		9125955150	Connector kit	19 (50 pcs in kit)
		9125955199	Connector kit	19 (100 pcs in kit)
			Connector, inlet (P6F-BEAA146)	20
			Tube, \varnothing 6 (L=35 mm) (P6T-PN06100)	21
			Connector, intermediate (P6F-BTS46)	22
			End plug (P6F-BVP46)	23
		6760043	Connector kit for sections	24, [20(4x), 21(7x), 22(4x), 23]

ACP



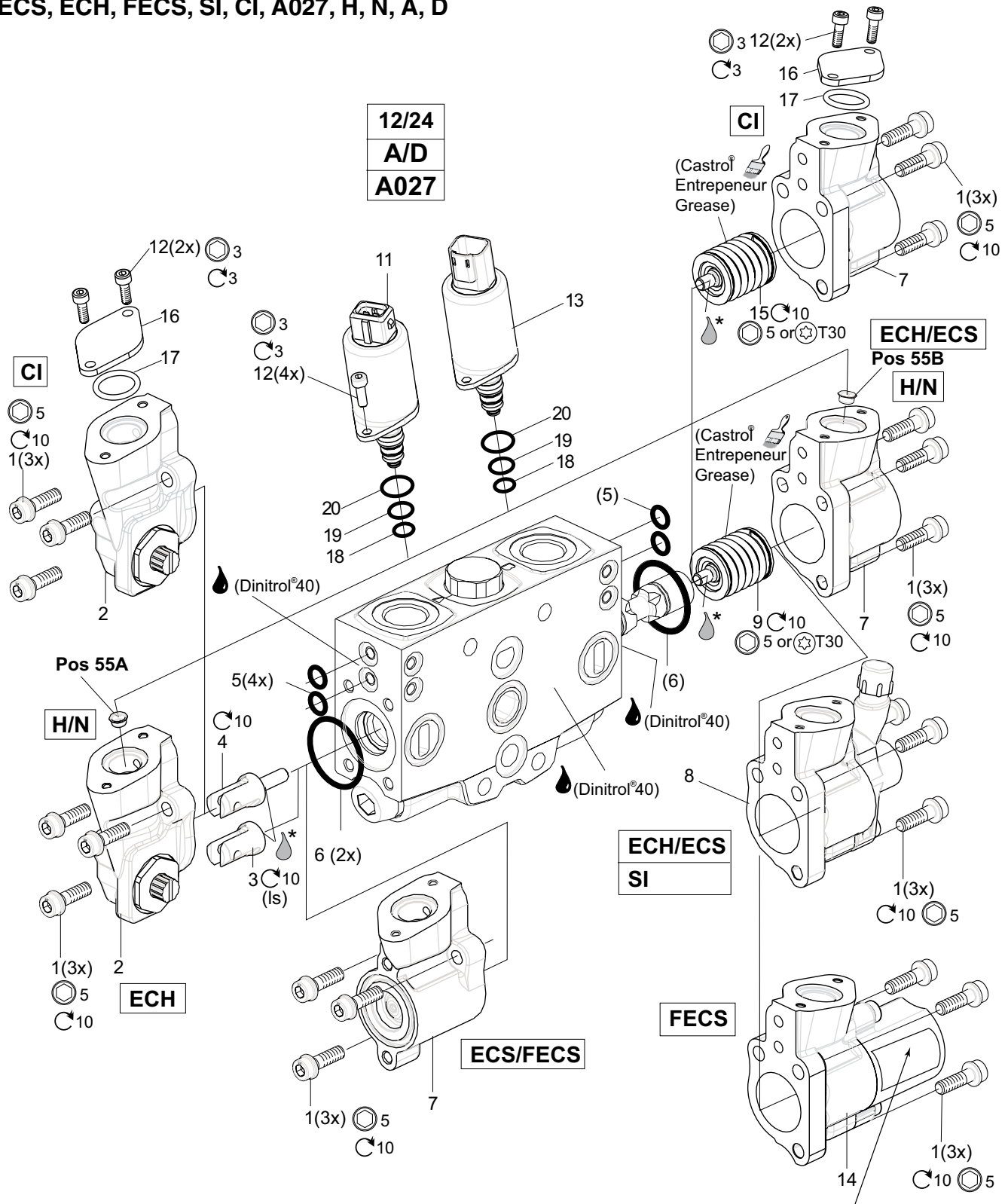
See Customer Specification				
Code	Pos	Part	Description	Remarks / Items
ACP + G	50 + 04	398000K292	Spool actuator ACP, BSP	1(2x), 2, 3, 4, 5, 6, 7, 8, 9, 13[10, 11, 12(2x)], 14, 15(2x), 16(2x)
ACP + U	50 + 04	398000K296	Spool actuator ACP, NPTF	1(2x), 2, 3, 4, 5, 6, 7, 8, 9, 13[10, 11, 12(2x)], 14, 15(2x), 16(2x)
ACP	50	398000K293	Spring kit for ACP actuator	1(2x), 16(2x), 2, 4, 5, 6, 7
ACP + G	50 + 04	398000K294	Cylinder kit for ACP actuator, BSP	3, 8, 9, 13 [10, 11, 12(2x)], 14, 15
ACP + U	50 + 04	398000K297	Cylinder kit for ACP actuator, NPTF	3, 8, 9, 13 [10, 11, 12(2x)], 14, 15
ACP + G	50 + 04	398000K295	Cylinder housing ACP, BSP	14, 15(2x)
ACP + U	50 + 04	398000K298	Cylinder housing ACP, NPTF	14, 15(2x)
ACP	50	9120079115	Seal kit ACP (A and B-side)	1(2x), 16(2x), 10, 12(2x)

PC, FPC



See Customer Specification				
Code	Pos	Part	Description	Remarks / Items
PC + G	50 + 04	398000K001	PC cap kit A-side 'BSP'	3, 4, 5
PC + U	50 + 04	398000K281	PC cap kit A-side 'UNF'	3, 4, 5
PC + G	50 + 04	398000K201	PC cap kit B-side 'BSP'	1, 3, 4(2x)
PC + U	50 + 04	398000K181	PC cap kit B-side 'UNF'	1, 3, 4(2x)
PC, FPC	50	6760048	Spring pack, PC/FPC	2
PC+A020	50, 59	398000K023	Spring pack, PC+A020	2
FPC + G	50 + 04	398000K067	FPC cap kit A-side 'BSP'	3, 4, 21, 22, 23
FPC + U	50 + 04	398000K267	FPC cap kit A-side 'UNF'	3, 4, 21, 22, 23
FPC + G	50 + 04	398000K167	Spool actuator FPC, B-side, 'BSP'	2, 3, 4(2x), 17
FPC + U	50 + 04	398000K367	Spool actuator FPC, B-side, 'UNF'	2, 3, 4(2x), 17
		398000K806	Seal kit PC, FPC (A and B side)	3(2x), 22, 23 (See page 14)

ECS, ECH, FECS, SI, CI, A027, H, N, A, D



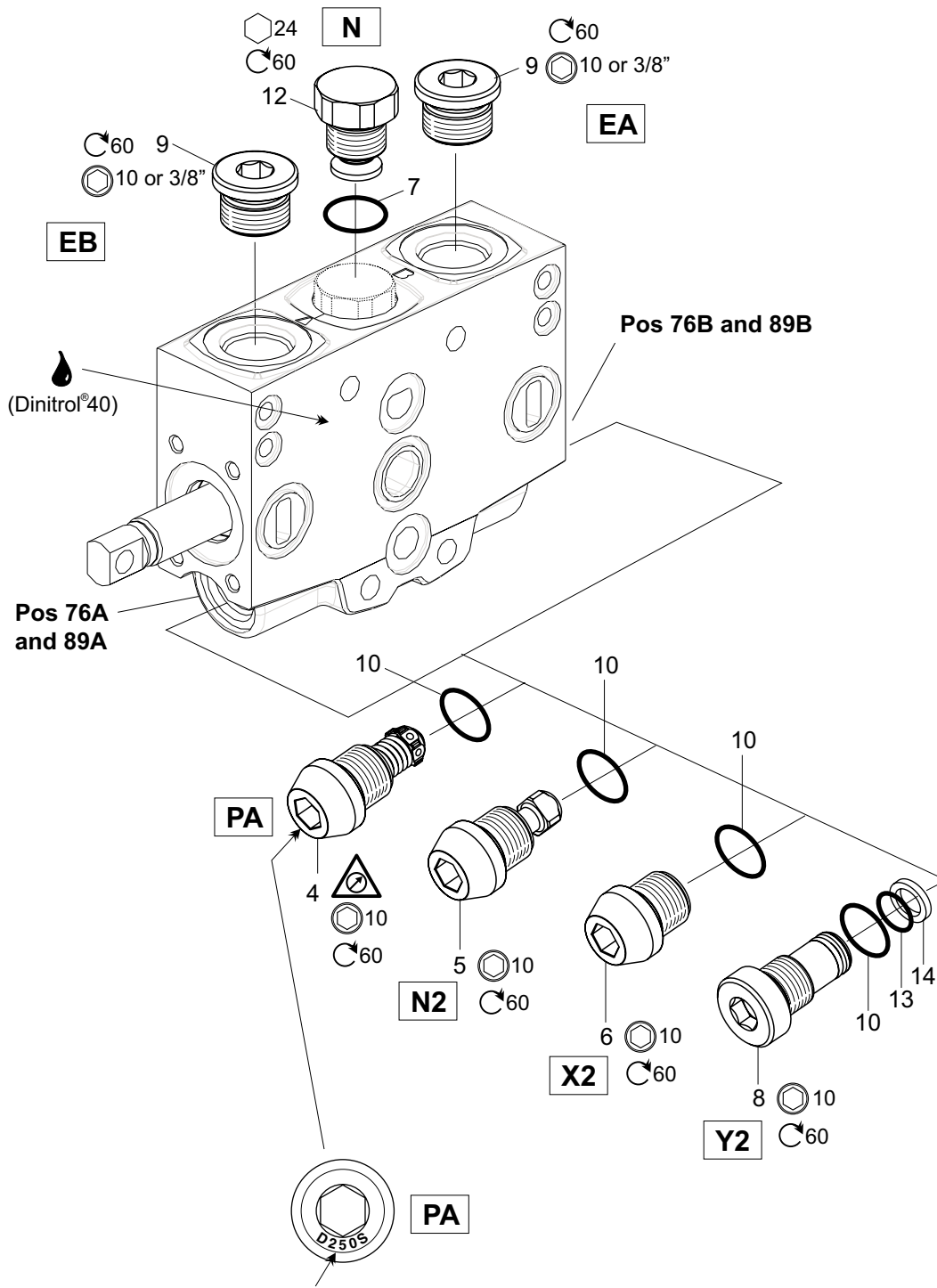
* (Loctite® 242)

⚠ Don't disassemble the spring inside the FECS cap

⚠ WARNING
 Compressed spring!
 Read service instructions before opening!

See Customer Specification				
Code	Pos	Part	Description	Remarks / Items
ECH	50	398000ECH2	Actuator ECH, A-side	1(3x), 2
ECH	50	6760046	Spool stud for LS spools (5 pcs in kit)	3 (5x) Used if pos 60 are DIs, EAls or MIs
ECH	50	6760047	Spool stud	4 (5 pcs in kit)
FECS	50	6760179	Spool actuator, B-side	1(3x), 14
ECS/ECH/FECS	50	398000ECS2	Actuator cap	1(3x), 7
SI	52	398000ESI2	Actuator cap and position sensor	1(3x), 8
		398000ECSK	Seal kit, CI, ECH, ECS, FECS	5(4x), 6(2x)
ECS/ECH/FECS	50	6760048	Spring Pack ECH, ECS, FECS	9
ECS/ECH/FECS +A020	50, 59	398000K023	Spring Pack ECS, ECH, FECS+A020	9
CI	50	6760352	Spool actuator, A-side	1(3x), 2, 12(2x) 16, 17
CI	50	6760353	Spool actuator, B-side	1(3x), 7, 12(2x) 16, 17
CI	50	6760042	Spring Pack CI	15
CI	50	6760354	Seal kit, CI	17(5 pcs in kit)
A + 12	56 + 05	398000MA12	Solenoid valve, PS25, 12 VDC	11[18, 19, 20], 12(2x)
A + 24	56 + 05	398000MA24	Solenoid valve, PS25, 24 VDC	11[18, 19, 20], 12(2x)
D + 12	56 + 05	398000MD12	Solenoid valve, PS25, 12 VDC	13[18, 19, 20], 12(2x)
D + 24	56 + 05	398000MD24	Solenoid valve, PS25, 24 VDC	13[18, 19, 20], 12(2x)
D + 12 + A027	56 + 05 + 59	398000MA02712	Solenoid valve (PS25) w. man. override 12 VDC	11[18, 19, 20], 12(2x)
D + 24 + A027	56 + 05 + 59	398000MA02724	Solenoid valve (PS25) w. man. override 24 VDC	11[18, 19, 20], 12(2x)
		6760309	Seal kit for PS25	18, 19, 20 (5 pcs in kit)
H	55A/55B	398000K601	Pilot orifice ø0.6 mm, marked 6	10 (5 pcs in kit)
N	55A/55B	398000K602	Pilot orifice ø0.9 mm, marked 9	10 (5 pcs in kit)

N, X, PA, N2, X2, Y2



Design, Setting Pressure

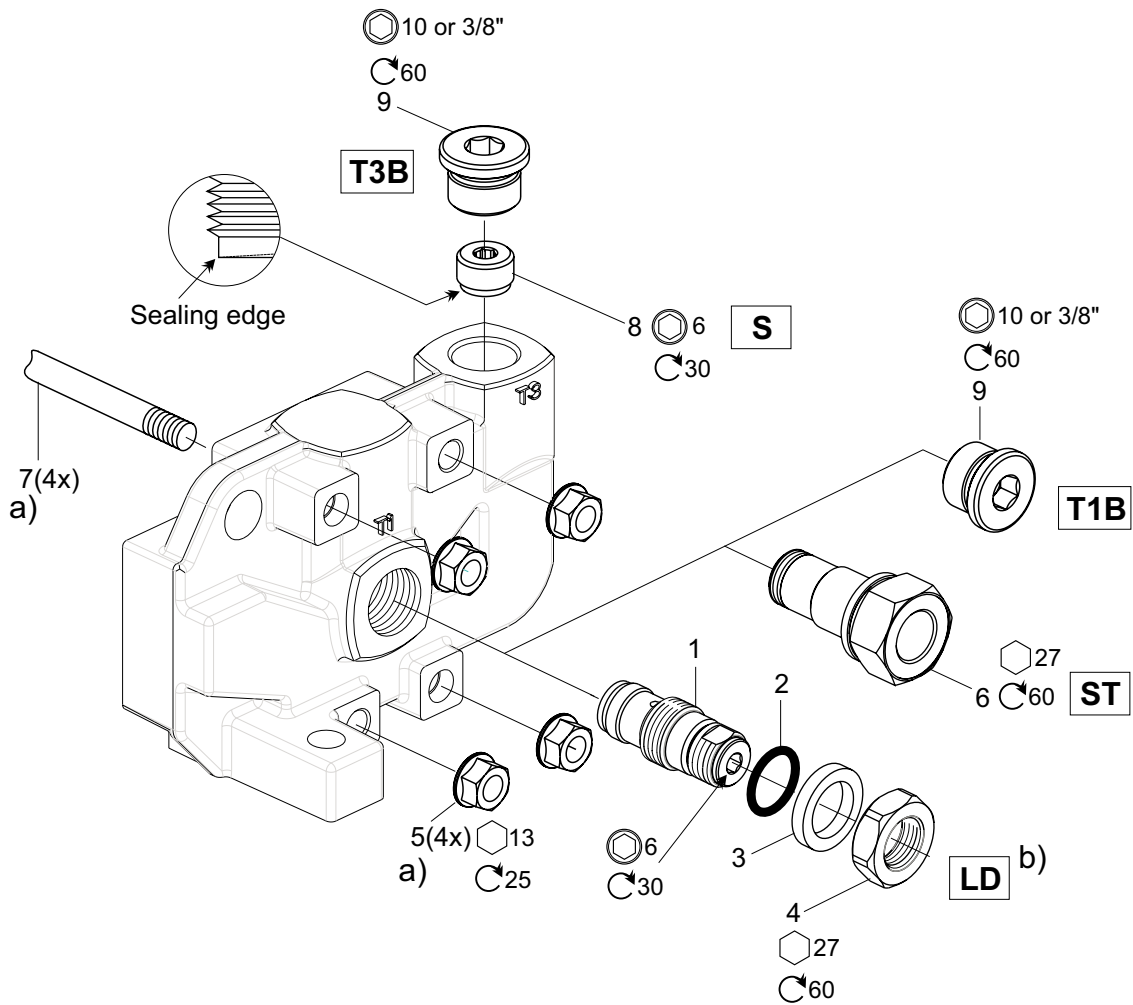
- D = Std
- S = Variant A003
- U = Variant A007

See Customer Specification				
Code	Pos	Part	Description	Remarks / Items
N	66	398000K011	Supply check valve	12[7]
N	66	6760444	Seal kit	7 (5 pcs in kit)
EA, EB + G	60 + 04		Plug VST11/2EDCF, 'BSP'	9
EA, EB + U	60 + 04		Plug 10HP5ON-S, 'UNF'	9
N2	76A, 76B	393000K194	Load hold check valve	5[10]
X2	76A, 76B	393000K193	Cavity plugged (without check valve)	6[10]
Y2	76A, 76B	393000K195	Cavity plugged	8[10, 13, 14]
N2, X2	-	6760445	Seal kit N2, X2	10 (5 pcs in kit)
Y2	-	393000K818	Seal kit Y2	10, 13, 14

See Customer Specification							
Code	Pos	Standard	A003 a)	A007 a)	A029 a)	Description	Remarks/Items
PA	76A, 76B	393000U052		393000U053		PLC053-025	4 [10]
PA	76A, 76B		398000K208			PLC053-032	4 [10]
PA	76A, 76B		398000K209			PLC053-040	4 [10]
PA	76A, 76B	393000K176	398000K301	393000K558		PLC053-050	4 [10]
PA	76A, 76B	393000K177		393000K559		PLC053-063	4 [10]
PA	76A, 76B	393000K178	398000K210	393000K560		PLC053-080	4 [10]
PA	76A, 76B	393000K179	398000K211	393000K561	398000K515	PLC053-100	4 [10]
PA	76A, 76B		398000K318			PLC053-120	4 [10]
PA	76A, 76B	393000K180	398000K271	393000K562		PLC053-125	4 [10]
PA	76A, 76B	393000K181		393000K563		PLC053-140	4 [10]
PA	76A, 76B	393000K182		393000K564	398000K516	PLC053-160	4 [10]
PA	76A, 76B		398000K319			PLC053-170	4 [10]
PA	76A, 76B	393000K183		393000K565		PLC053-175	4 [10]
PA	76A, 76B	393000K184		393000K566		PLC053-190	4 [10]
PA	76A, 76B	393000K185	398000K212	393000K567		PLC053-210	4 [10]
PA	76A, 76B	393000K186		393000K568		PLC053-230	4 [10]
PA	76A, 76B	393000K134		398000K249		PLC053-240	4 [10]
PA	76A, 76B	393000K187		393000K569	6760486	PLC053-250	4 [10]
PA	76A, 76B	393000K188		393000K570		PLC053-260	4 [10]
PA	76A, 76B	393000K189		393000K571		PLC053-280	4 [10]
PA	76A, 76B	393000K190		393000K572		PLC053-300	4 [10]
PA	76A, 76B	393000K191		393000K573		PLC053-320	4 [10]
PA	76A, 76B	393000K192		393000K574		PLC053-350	4 [10]

a) See position 89A and 89 B

T1B, T3B, S, ST, LD, Tie-rods

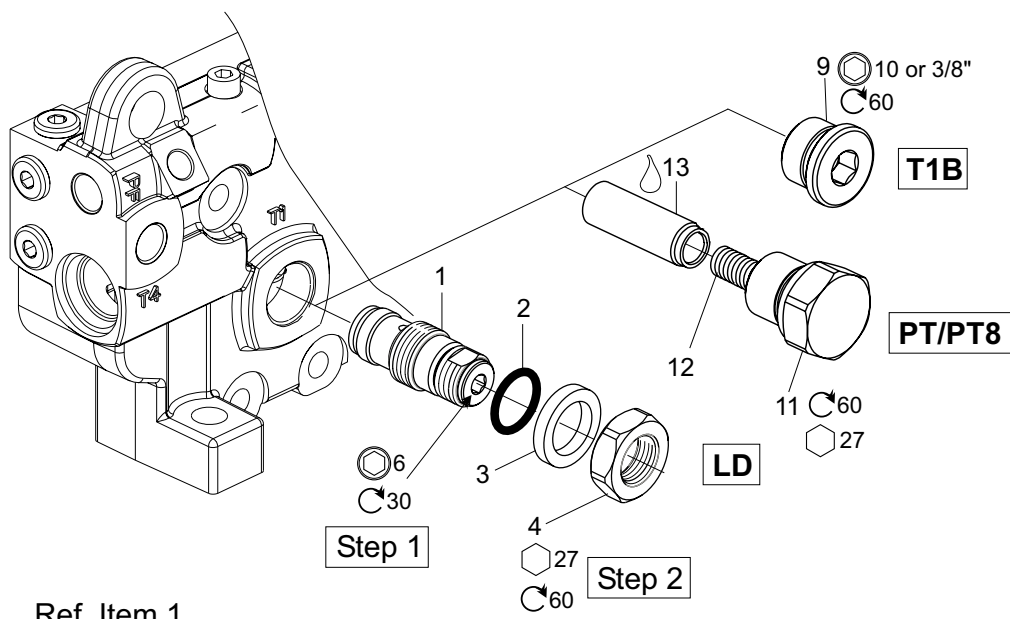
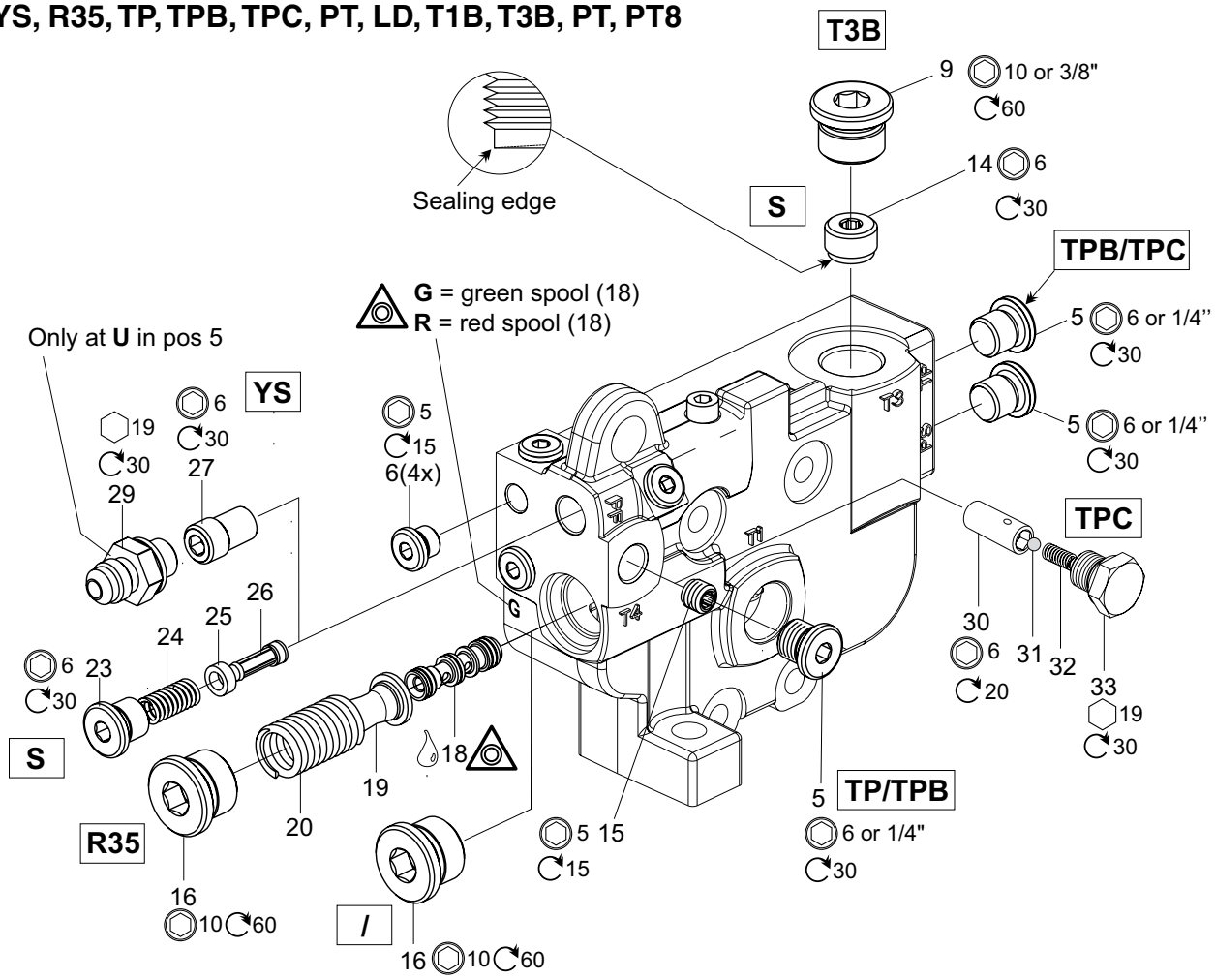


- a) **Assembly of tie-rods**
- 1 Tie-rods item 7 to tightened in the Inlet section with 15 Nm
 - 2 Tie-rod nuts item 5 to be tightened in 2 steps: 20 Nm and 25 Nm according to the figure below
- C20

C25
- b)
- Step 1. Assemble Item 1, tighten 30 Nm
 - Step 2. Assemble Items 2, 3 and 4. Tighten Item 4, 60 Nm



See Customer Specification				
Code	Pos	Part	Description	Remarks / Items
T1B, T3B + G	33, 34 + 04		Plug VST11/2EDCF 'BSP'	9
T1B, T3B + U	33, 34 + 04		Plug 10HP50N-S 'UNF'	9
S	36	398000K005	Plug 'S'	8 Please see Appendix B
S	36	6760405	Plug 'S'	8 (50 pcs in kit) Please see Appendix B
ST + G	33 + 04	6760008	ST adaptor 'BSP'	6
ST + U	33 + 04	6760009	ST adaptor 'UNF'	6
LD + G	33 + 04	398000K538	Load signal drain, BSP	1, 2, 3, 4
LD + U	33 + 04	398000K539	Load signal drain, UNF	1, 2, 3, 4
LD	33	398000K540	Seal kit	2
		398000K098	Tie rod kit, 1 section	7(4x)
		398000K099	Tie rod kit, 2 sections	7(4x)
		398000K100	Tie rod kit, 3 sections	7(4x)
		398000K101	Tie rod kit, 4 sections	7(4x)
		398000K102	Tie rod kit, 5 sections	7(4x)
		398000K103	Tie rod kit, 6 sections	7(4x)
		398000K104	Tie rod kit, 7 sections	7(4x)
		398000K105	Tie rod kit, 8 sections	7(4x)
		398000K106	Tie rod kit, 9 sections	7(4x)
		398000K107	Tie rod kit, 10 sections	7(4x)
		398000K003	Tie rod kit, 11 sections	7(4x)
		398000K802	Nut kit	5(4x)





S, YS, R35, TP, TPB, TPC, PT, LD, T1B, T3B, PT, PT8

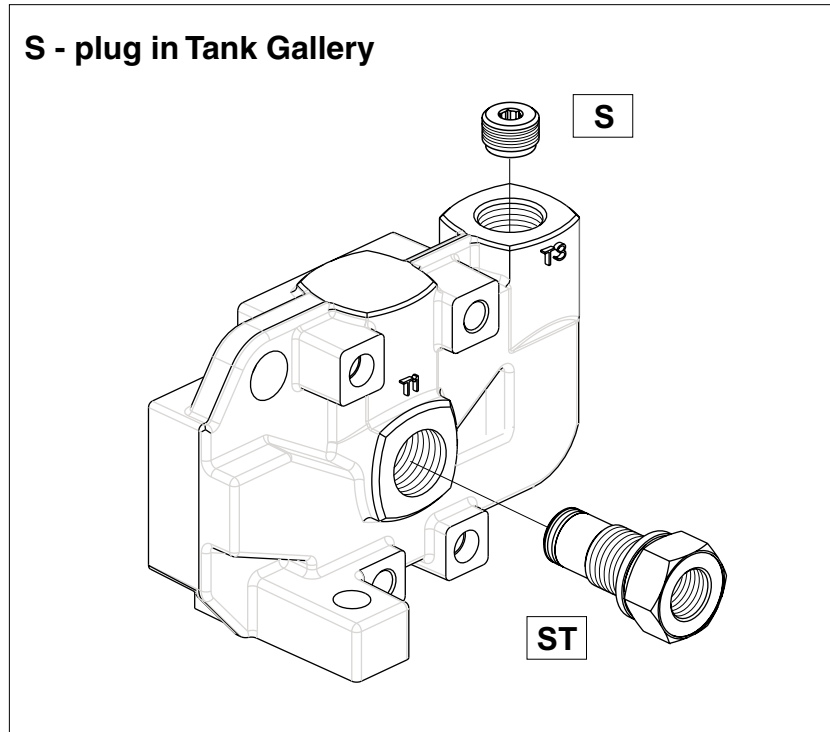


Ref. Item 1.

- Step 1. Assemble Item 1, tighten 30 Nm
- Step 2. Assemble Items 2, 3 and 4. Tighten Item 4, 60 Nm

See Customer Specification				
Code	Pos	Part	Description	Remarks / Items
R35	37	6760010	Reducer spool, size marked Green	16, 18, 19, 20 
R35	37	6760011	Reducer spool, size marked Red	16, 18, 19, 20 
/	37	398000K061	Plug	16
S	39	398000K054	Pilot supply strainer	23, 24, 25, 26
YS + G	39 + 04	398000K055	Connection for external filter 'BSP'	27
YS + U	39 + 04	393000K076	Connection for external filter 'UNF'	27, 29
TP + G	40 + 04	398000K075	Conn. for separate pilot tank, 'BSP'	5, 15
TP + U	40 + 04	398000K275	Conn. for separate pilot tank, 'UNF'	5, 15
TPB + G	40 + 04		Plug VSTI1/4EDCF 'BSP'	5
TPB + U	40 + 04		Plug 6HP50N-S 'UNF'	5
TPC + G	40 + 04	301000K857	Internal pilot tank check valve, 'BSP'	30, 31, 32, 33
TPC + U	40 + 04	398000K857	Internal pilot tank check valve, 'UNF'	30, 31, 32, 33
PT + G	33 + 04	398000K050	Counter pressure valve 'BSP'	11, 12, 13
PT + U	33 + 04	398000K051	Counter pressure valve 'UNF'	11, 12, 13
PT8 + G	33 + 04	398000K373	Counter pressure valve 'BSP'	11, 12, 13
PT8 + U	33 + 04	398000K374	Counter pressure valve 'UNF'	11, 12, 13
LD + G	33 + 04	398000K538	Load signal drain, 'BSP'	1, 2, 3, 4
LD + U	33 + 04	398000K539	Load signal drain, 'UNF'	1, 2, 3, 4
LD	33	398000K540	Seal kit	2
T1B, T3B + G	36 + 04		Plug VSTI1/2EDCF 'BSP'	9
T1B, T3B + U	36 + 04		Plug 10HP50N-S 'UNF'	9
S	36	398000K405	Series connection plug	14
S	36	6760405	Series connection plug	14 (50 pcs in kit)
			Plug VSTI1/8EDCF	6
		398000K802	Nut kit	8

Symbol	Description
	<p>For optimum function, the radial play between spool and spool bore must be correct. Spools are therefore colour-coded to identify sizes. We recommend that the whole valve/section is changed if the spool has to be replaced (valve housings cannot be purchased as spares, so if a new one is required a new valve or complete section should be ordered). If the spool has to be changed, it is extremely important that the new spool is the right size.</p> <p>If the spool is too large, it will not work properly even if it appears to function perfectly on assembly, and if the spool is too small, function will also be adversely affected. Spools that are classified by size are marked in the list with  .</p> <p>The colour-marking of the spool may disappear after a time, so, unless otherwise stated, the housing is marked with a letter to indicate the respective colour as follows: B for Blue, G for Green, R for Red.</p>
	<p>Changing the settings, replacing the preset pressure relief valve or breaking the seal must only be done in accordance with the manufacturer's instructions. Other settings may seriously damage the machine and other assets, and may cause personal injury. Note that a value contained in the customer specification manual does not apply if the manufacturer changed the settings at installation.</p> <p>Always contact the manufacturer's service organisation before servicing items marked with  .</p>



Using S-plug in Tank Gallery in combination with conventional outlet, Option US, and system pressures higher than 250 bar may cause a decrease of the section's lifetime.

Recommendation: use outlet option ST if system pressures go beyond 250 bar.

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