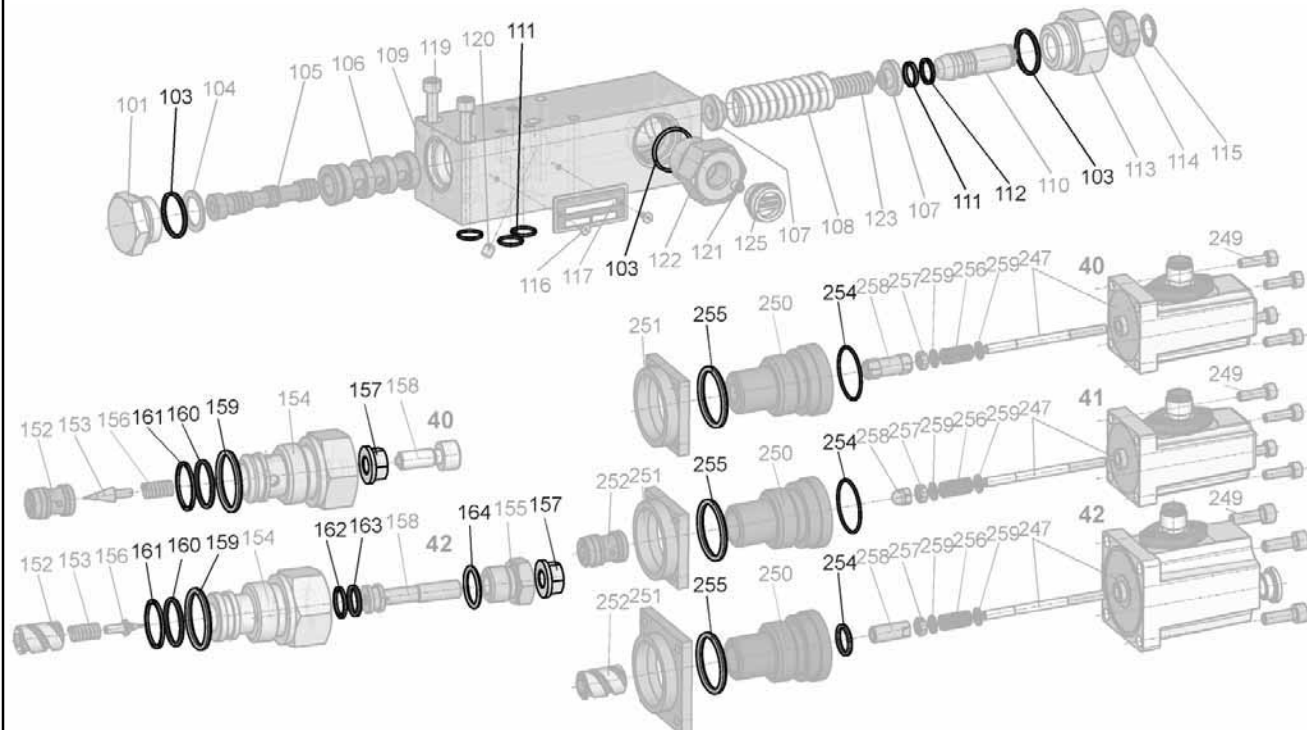


Replacement seal kit, compensator, code SK-PVC*

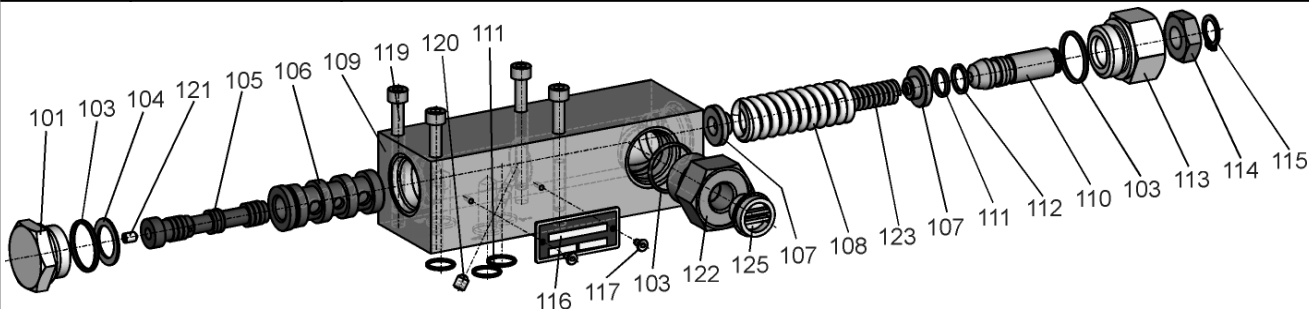
ordering code for replacement seal kit for compensator:

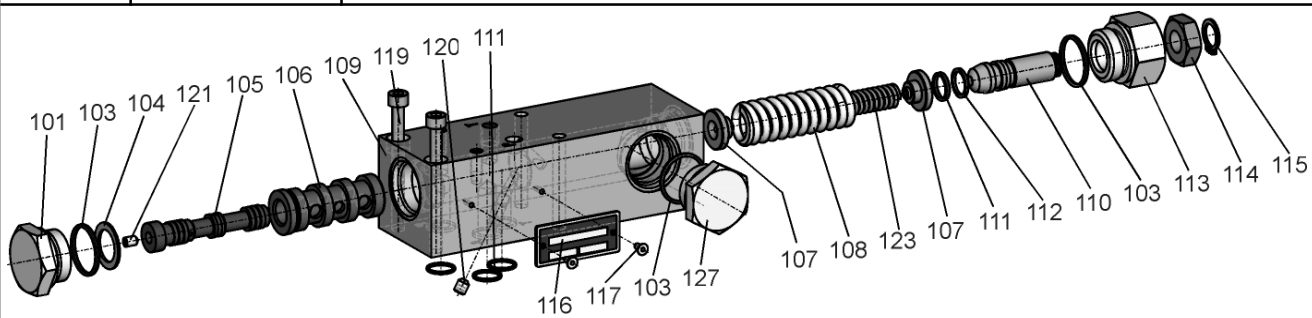
SK-	seal kit	Includes all seals for any type of single compensator. For two spool compensators, two seal kits must be ordered. Includes also seals for feedback cartridges (p-Q-control and horse power compensation) of all design series
PVC	for all single valve compensators	
N	seal material NBR	
V	seal material FPM	
E	seal material EPR	
	includes:	



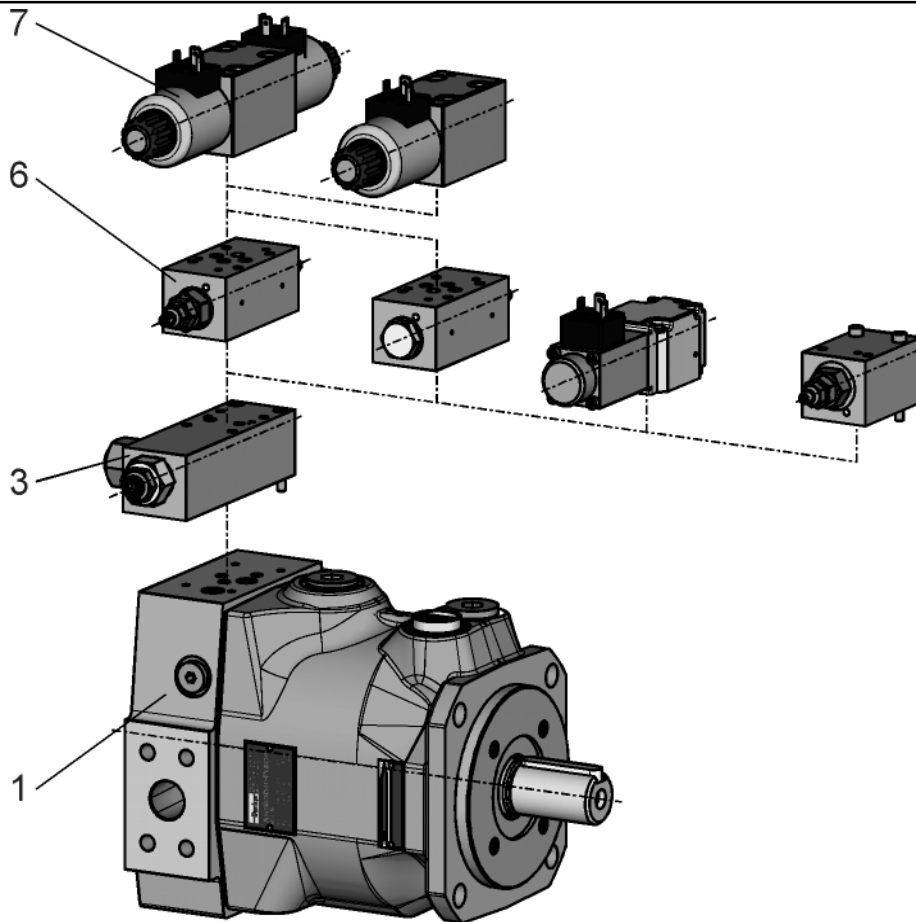
pos.	qty	item number	description	remark
103	3		o-ring 3-910-N552-90; 19,18 x 2,46	seal material NBR
103	(3)		o-ring 3-910-V747-75; 19,18 x 2,46	seal material FPM
103	(3)		o-ring 3-910-E540-80; 19,18 x 2,46	seal material EPR
111	5		o-ring 2-012-N552-90; 9,25 x 1,78	seal material NBR (= pos. 162 in RK-LC)
111	(5)		o-ring 2-012-V747-75; 9,25 x 1,78	seal material FPM (= pos. 162 in RK-LC)
111	(5)		o-ring 2-012-E540-80; 9,25 x 1,78	seal material EPR (= pos. 162 in RK-LC)
112	1		back up ring 8-012-N300-90; 9,91 x 1,35	seal material NBR (= pos. 163 in RK-LC)
112	(1)		back up ring 8-012-V709-90; 9,91 x 1,35	seal material FPM (= pos. 163 in RK-LC)
112	(1)		back up ring 8-012-E652-90; 9,91 x 1,35	seal material EPR (= pos. 163 in RK-LC)
157	1		lock nut M 8 x 1, Seal Lock	
159	1		o-ring 3-912-N552-90; 23,47 x 2,95	seal material NBR (= pos. 255 in RK-WC)
159	(1)		o-ring 3-912-V747-75; 23,47 x 2,95	seal material FPM (= pos. 255 in RK-WC)
159	(1)		o-ring 3-912-E540-80; 23,47 x 2,95	seal material EPR (= pos. 255 in RK-WC)
160	1		o-ring 2-018-N552-90; 18,77 x 1,78	seal material NBR
160	(1)		o-ring 2-018-V747-75; 18,77 x 1,78	seal material FPM
160	(1)		o-ring 2-018-E540-80; 18,77 x 1,78	seal material EPR
161	1		back up ring 8-018-N300-90; 19,12 x 1,35	seal material NBR
161	(1)		back up ring 8-018-V709-90; 19,12 x 1,35	seal material FPM
161	(1)		back up ring 8-018-E652-90; 19,12 x 1,35	seal material EPR
162	1		see pos. 112	see pos. 112
163	1		see pos. 111	see pos. 111
164	1		o-ring 6-349-N552-90; 15,40 x 2,10	seal material NBR, series 42
164	(1)		o-ring 6-349-V747-75; 15,40 x 2,10	seal material FPM, series 42
164	(1)		o-ring 6-349-E540-80; 15,40 x 2,10	seal material EPR, series 42
254	1		o-ring 2-021-N552-90; 23,52 x 1,78	seal material NBR
254	(1)		o-ring 2-021-V747-75; 23,52 x 1,78	seal material FPM
254	(1)		o-ring 2-021-E540-80; 23,52 x 1,78	seal material EPR
254	(1)		o-ring 2-013-N552-90; 10,82 x 1,78	seal material NBR, series 42
254	(1)		o-ring 2-013-V747-75; 10,82 x 1,78	seal material FPM, series 42
254	(1)		o-ring 2-013-E540-80; 10,82 x 1,78	seal material EPR, series 42
255	1		see pos. 159	see pos. 159

standard pressure compensator, codes ...FDS, ...FHS, ...FWS				
ordering code for replacement compensator:				
PVCP		standard pressure compensator		
A		for frame sizes BG1 and BG2, PV016 - PV046		
C		for frame size BG3, PV063 - PV092		
E		for frame sizes BG4 and BG5, PV140 - PV270		
DS		pressure range 10 - 140 bar		
HS		pressure range 40 - 210 bar		
WS		pressure range 70 - 350 bar		
1		metric bolts		
3		UNC bolts		
N		seal material NBR		
V		seal material FPM		
E		seal material EPD		
1		standard version		
2		for pump with min. displacement limiter		
includes:				
pos.	qty	item number	description	remark
101	1		port plug 7/8-20 UNEF, SW 27	
102	1		sensing spool	
103	2		o-ring 3-910-N552-90; 19,18 x 2,46	seal material NBR
103	(2)		o-ring 3-910-V747-75; 19,18 x 2,46	seal material FPM
103	(2)		o-ring 3-910-E540-80; 19,18 x 2,46	seal material EPD
104	1		snap ring SB 19	
105	1		control spool standard pressure compensator	
106	1		control sleeve, standard	PV016 - PV092
106	(1)		control sleeve, high flow	PV140 - PV270
107	2		spring washer	
108	1		compensator spring 10 - 140 bar	pressure rating D
108	(1)		compensator spring 20 - 210 bar	pressure rating H
108	(1)		compens. spring 70 - 350 bar and R- and F-comp.	pressure rating W
109	1		compensator body standard	
110	1		adjustment spindle compensator. int. hex SW 6	
111	4		o-ring 2-012-N552-90; 9,25 x 1,78	seal material NBR
111	(4)		o-ring 2-012-V747-75; 9,25 x 1,78	seal material FPM
111	(4)		o-ring 2-012-E540-80; 9,25 x 1,78	seal material EPD
112	1		back up ring 8-012-N300-90; 9,91 x 1,35	seal material NBR
112	(1)		back up ring 8-012-V709-90; 9,91 x 1,35	seal material FPM
112	(1)		back up ring 8-012-E652-90; 9,91 x 1,35	seal material EPD
113	1		adjustment plug 7/8-20 UNEF - M12 x 1; SW 27	
114	1		lock nut M12 x 1; DIN 936; SW 19	
115	1		snap ring for shafts DIN 471, 10 x 1	
116	1		name plate	
117	2		rivet, 1.9 X 3.2	
119	4		hex. head cap screw M 5 x 50 DIN 912, 12.9, SW 4	threads 1 and 8
119	(4)		hex. head cap screw Nr. 10-24 UNC x 2"	threads 3 and 7
120	1		orifice Ø0,6; M5 x 6; internal hex. SW 2,5	standard, PV016 - PV046
120	(1)		orifice Ø1,0; M5 x 6; internal hex. SW 2,5	standard, PV063 - PV092
120	(1)		orifice Ø1,2; M5 x 6; internal hex. SW 2,5	standard, PV140 - PV270
120	(1)		worm screw M5 x 6; internal hex. SW 2,5	for option min. displacement limit.

remote pressure compensator, code ...FRC				
ordering code for replacement compensator:				
PVCR		remote pressure compensator		
A		for frame sizes BG1 and BG2, PV016 - PV046		
C		for frame size BG3, PV063 - PV092		
E		for frame sizes BG4 and BG5, PV140 - PV270		
RC		standard version		
N		seal material NBR		
V		seal material FPM		
E		seal material EPR		
1		pilot port G 1/4 BSPP and metric bolts		
3		pilot port 7/16-20 UNF and UNC bolts		
7		pilot port M12x1,5 ISO 6149 and UNC bolts		
8		pilot port M12x1,5 ISO 6149 and metric bolts		
includes:				
				
pos.	qty	item number	description	remark
101	1		port plug 7/8-20 UNEF, SW 27	
103	3		o-ring 3-910-N552-90; 19,18 x 2,46	seal material NBR
103	(3)		o-ring 3-910-V747-75; 19,18 x 2,46	seal material FPM
103	(3)		o-ring 3-910-E540-80; 19,18 x 2,46	seal material EPR
104	1		PS 14 X 20 X 1.2 DIN 988 ST	
105	1		control spool R compensator	
106	1		control sleeve, standard	PV016 - PV092
106	(1)		control sleeve, high flow	PV140 - PV270
107	2		spring washer	
108	1		compens. spring 70 - 350 bar and R- and F-comp.	
109	1		compensator body RC- and FC-Regler	
110	1		adjustment spindle compensator. int. hex SW 6	
111	4		o-ring 2-012-N552-90; 9,25 x 1,78	seal material NBR
111	(4)		o-ring 2-012-V747-75; 9,25 x 1,78	seal material FPM
111	(4)		o-ring 2-012-E540-80; 9,25 x 1,78	seal material EPR
112	1		back up ring 8-012-N300-90; 9,91 x 1,35	seal material NBR
112	(1)		back up ring 8-012-V709-90; 9,91 x 1,35	seal material FPM
112	(1)		back up ring 8-012-E652-90; 9,91 x 1,35	seal material EPR
113	1		adjustment plug 7/8-20 UNEF - M12 x 1; SW 27	
114	1		lock nut M12 x 1; DIN 936; SW 19	
115	1		snap ring for shafts DIN 471, 10 x 1	
116	1		name plate	
117	2		rivet, 1.9 X 3.2	
119	4		hex. head cap screw M 5 x 50 DIN 912, 12.9, SW 4	threads 1 and 8
119	(4)		hex. head cap screw Nr. 10-24 UNC x 2"	threads 3 and 7
120	1		orifice Ø0,6; M5 x 6; internal hex. SW 2,5	PV016 - PV046
120	(1)		orifice Ø1,0; M5 x 6; internal hex. SW 2,5	PV063 - PV092
120	(1)		orifice Ø1,2; M5 x 6; internal hex. SW 2,5	PV140 - PV270
121	1		orifice Ø 0,8; M4 x 5; internal hex. SW 2	
122	1		pilot port plug 7/8-20 UNEF - G1/4	threads 1
122	(1)		pilot port plug 7/8-20 UNEF - 7/16 - 20 UNF	threads 3
122	(1)		pilot port plug 7/8-20 UNEF - M12 x 1,5 ISO6149	threads 7 and 8
123	1		compensator spring 2 for R- and F-comp.	
125	1		protecting plug- G1/4	threads 1
125	(1)		protecting plug- 7/16 - 20 UNF	threads 3
125	(1)		protecting plug- M12 x 1,5 ISO6149	threads 7 and 8

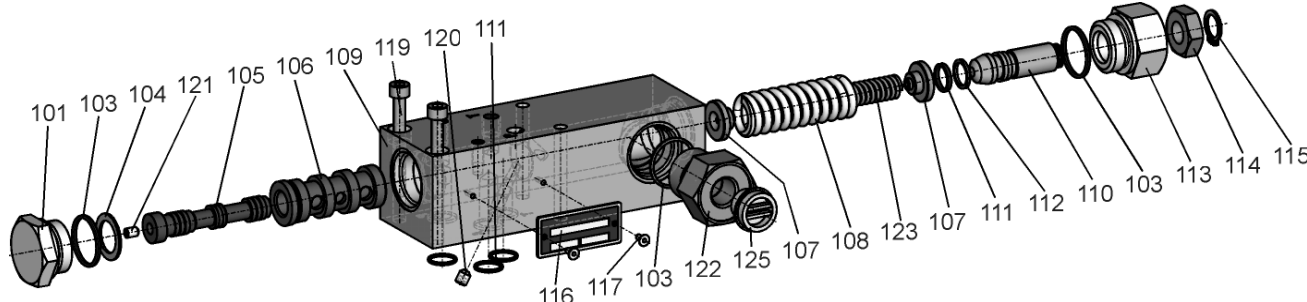
remote pressure compensator, code ...FR1				
ordering code for replacement compensator:				
PVCR		remote pressure compensator		
A		for frame sizes BG1 and BG2, PV016 - PV046		
C		for frame size BG3, PV063 - PV092		
E		for frame sizes BG4 and BG5, PV140 - PV270		
R1		version with topside NG6/D03 interface		
N		seal material NBR		
V		seal material FPM		
E		seal material EPR		
1		pilot port G 1/4 BSPP and metric bolts		
3		pilot port 7/16-20 UNF and UNC bolts		
7		pilot port M12x1,5 ISO 6149 and UNC bolts		
8		pilot port M12x1,5 ISO 6149 and metric bolts		
		includes:		
				
pos.	qty	item number	description	remark
101	1		port plug 7/8-20 UNEF, SW 27	
103	3		O-ring 3-910-N552-90; 19,18 x 2,46	seal material NBR
103	(3)		O-ring 3-910-V747-75; 19,18 x 2,46	seal material FPM
103	(3)		O-ring 3-910-E540-80; 19,18 x 2,46	seal material EPR
104	1		PS 14 X 20 X 1.2 DIN 988 ST	
105	1		control spool R compensator	
106	1		control sleeve, standard	PV016 - PV092
106	(1)		control sleeve, high flow	PV140 - PV270
107	2		spring washer	
108	1		compens. spring 70 - 350 bar and R- and F-comp.	
109	1		compensator body R1- and F1-comp., metric	threads 1 and 8
109	(1)		compensator body R1- and F1-comp., SAE/UNC	threads 3 and 7
110	1		adjustment spindle compensator. int. hex SW 6	
111	4		O-ring 2-012-N552-90; 9,25 x 1,78	seal material NBR
111	(4)		O-ring 2-012-V747-75; 9,25 x 1,78	seal material FPM
111	(4)		O-ring 2-012-E540-80; 9,25 x 1,78	seal material EPR
112	1		back up ring 8-012-N300-90; 9,91 x 1,35	seal material NBR
112	(1)		back up ring 8-012-V709-90; 9,91 x 1,35	seal material FPM
112	(1)		back up ring 8-012-E652-90; 9,91 x 1,35	seal material EPR
113	1		adjustment plug 7/8-20 UNEF - M12 x 1; SW 27	
114	1		lock nut M12 x 1; DIN 936; SW 19	
115	1		snap ring for shafts DIN 471, 10 x 1	
116	1		name plate	
117	2		rivet, 1.9 X 3.2	
119	2		hex. head cap screw M 5 x 45 DIN 912, 12.9, SW 4	threads 1 and 8
119	(2)		hex. head cap screw Nr. 10-24 UNC x 1 3/4"	threads 3 and 7
120	1		orifice Ø 0,6; M5 x 6; internal hex. SW 2,5	PV016 - PV046
120	(1)		orifice Ø 1,0; M5 x 6; internal hex. SW 2,5	PV063 - PV092
120	(1)		orifice Ø 1,2; M5 x 6; internal hex. SW 2,5	PV140 - PV270
121	1		orifice Ø 0,8; M4 x 5; internal hex. SW 2	
123	1		compensator spring 2 for R- and F-comp.	
127	1		port plug 7/8-20 UNEF, SW 27	

Assembly of pump with compensator and compensator accessories



pos.	qty	item number	description	remark
1	1	PV*	base pump	
2			not applicable	
3	1	PVC*	compensator with NG6 / D03 interface	codes ...FR1, ...FR2, ...FS1, ...FF1, ...*LA and ...*CA
4	1		not applicable	
5			not applicable	
6	1	PVAC1PS*S*	pressure pilot valve, manual, spindle and lock nut	code ...F*P resp. accessory
6	1	PVAC1PS*L*	pressure pilot valve, manual, key lock adjustment	code ...F*L resp. accessory
6	(1)	PVACPPS*	proportional pressure pilot valve	code ...F*D resp. accessory
6	(1)	PVACZ1*	pressure pilot manapak, one pressure	accessory
6	(1)	PVACZ2*	pressure pilot manapak, two pressures	accessory
6	(1)	PVACBL*	cover plate, with external pressure pilot valve	accessory
7	1	D1VW6K*	4/2-directional control valve for pressure selection	accessory
7	(1)	D1VW2C*	4/3-directional control valve for pressure selection	accessory
7	(1)	D1VW55C*	4/3-directional control valve for pressure selection	accessory

remote pressure compensator, code ...FR2		
ordering code for replacement compensator:		
PVCR	remote pressure compensator	
A	for frame sizes BG1 and BG2, PV016 - PV046	
C	for frame size BG3, PV063 - PV092	
E	for frame sizes BG4 and BG5, PV140 - PV270	
R2	version with topside NG6/D03 interface and external pilot port	
N	seal material NBR	
V	seal material FPM	
E	seal material EPD	
1	pilot port G 1/4 BSPP and metric bolts	
3	pilot port 7/16-20 UNF and UNC bolts	
7	pilot port M12x1,5 ISO 6149 and UNC bolts	
8	pilot port M12x1,5 ISO 6149 and metric bolts	
	includes:	

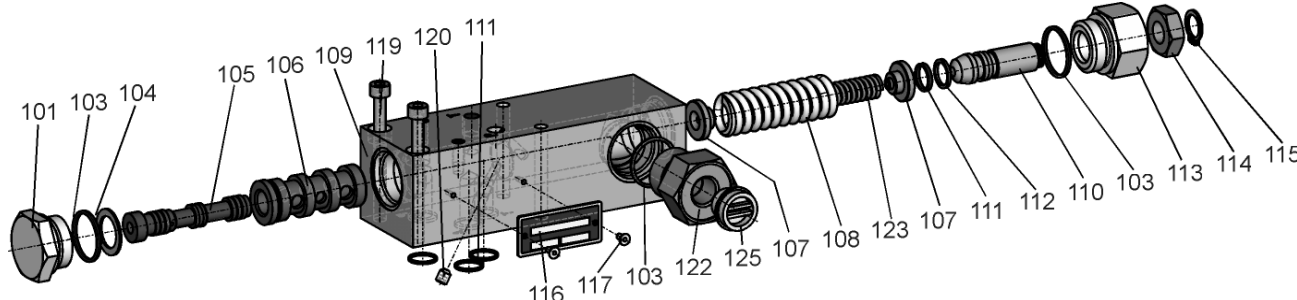


pos.	qty	item number	description	remark
101	1		port plug 7/8-20 UNEF, SW 27	
103	3		O-ring 3-910-N552-90; 19,18 x 2,46	seal material NBR
103	(3)		O-ring 3-910-V747-75; 19,18 x 2,46	seal material FPM
103	(3)		O-ring 3-910-E540-80; 19,18 x 2,46	seal material EPD
104	1		PS 14 X 20 X 1.2 DIN 988 ST	
105	1		control spool R compensator	
106	1		control sleeve, standard	PV016 - PV092
106	(1)		control sleeve, high flow	PV140 - PV270
107	2		spring washer	
108	1		compens. spring 70 - 350 bar and R- and F-comp.	
109	1		compensator body R1- and F1-comp., metric	threads 1 and 8
109	(1)		compensator body R1- and F1-comp., SAE/UNC	threads 3 and 7
110	1		adjustment spindle compensator. int. hex SW 6	
111	4		O-ring 2-012-N552-90; 9,25 x 1,78	seal material NBR
111	(4)		O-ring 2-012-V747-75; 9,25 x 1,78	seal material FPM
111	(4)		O-ring 2-012-E540-80; 9,25 x 1,78	seal material EPD
112	1		back up ring 8-012-N300-90; 9,91 x 1,35	seal material NBR
112	(1)		back up ring 8-012-V709-90; 9,91 x 1,35	seal material FPM
112	(1)		back up ring 8-012-E652-90; 9,91 x 1,35	seal material EPD
113	1		adjustment plug 7/8-20 UNEF - M12 x 1; SW 27	
114	1		lock nut M12 x 1; DIN 936; SW 19	
115	1		snap ring for shafts DIN 471, 10 x 1	
116	1		name plate	
117	2		rivet, 1.9 X 3.2	
119	2		hex. head cap screw M 5 x 45 DIN 912, 12.9, SW 4	threads 1 and 8
119	(2)		hex. head cap screw Nr. 10-24 UNC x 1 3/4"	threads 3 and 7
120	1		orifice Ø 0,6; M5 x 6; internal hex. SW 2,5	PV016 - PV046
120	(1)		orifice Ø 1,0; M5 x 6; internal hex. SW 2,5	PV063 - PV092
120	(1)		orifice Ø 1,2; M5 x 6; internal hex. SW 2,5	PV140 - PV270
121	1		orifice Ø 0,8; M4 x 5; internal hex. SW 2	
122	1		pilot port plug 7/8-20 UNEF - G1/4	threads 1
122	(1)		pilot port plug 7/8-20 UNEF - 7/16 - 20 UNF	threads 3
122	(1)		pilot port plug 7/8-20 UNEF - M12 x 1,5 ISO6149	threads 7 and 8
123	1		compensator spring 2 for R- and F-comp.	
125	1		protecting plug- G1/4	threads 1
125	(1)		protecting plug- 7/16 - 20 UNF	threads 3
125	(1)		protecting plug- M12 x 1,5 ISO6149	threads 7 and 8

Remote pressure compensator for quick unload manifold PVAPSE*, code FS1

ordering code for replacement compensator:

PVCR	remote pressure compensator
A	for frame sizes BG1 and BG2, PV016 - PV046
C	for frame size BG3, PV063 - PV092
E	for frame sizes BG4 and BG5, PV140 - PV270
S1	Remote pressure compensator for quick unload manifold PVAPSE*, code FS1
N	seal material NBR
V	seal material FPM
E	seal material EPD
1	pilot port G 1/4 BSPP and metric bolts
3	pilot port 7/16-20 UNF and UNC bolts
7	pilot port M12x1,5 ISO 6149 and UNC bolts
8	pilot port M12x1,5 ISO 6149 and metric bolts
	includes:

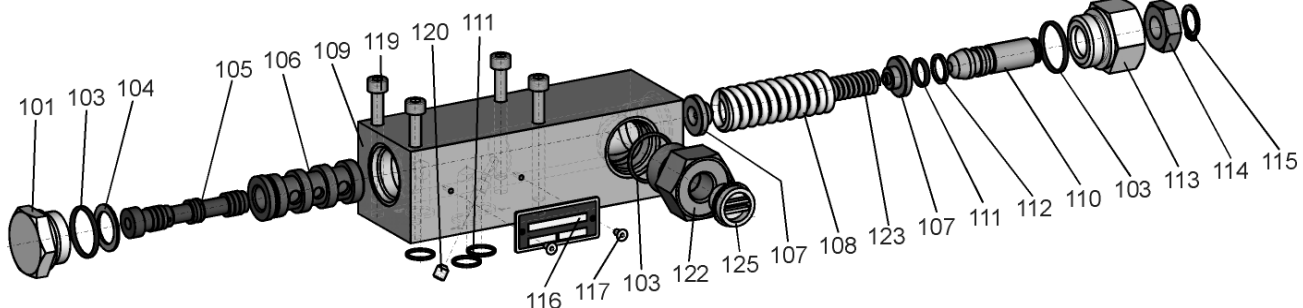


pos.	qty	item number	description	remark
101	1		port plug 7/8-20 UNEF, SW 27	
103	3		o-ring 3-910-N552-90; 19,18 x 2,46	seal material NBR
103	(3)		o-ring 3-910-V747-75; 19,18 x 2,46	seal material FPM
103	(3)		o-ring 3-910-E540-80; 19,18 x 2,46	seal material EPD
104	1		PS 14 X 20 X 1.2 DIN 988 ST	
105	1		control spool F-comp.	
106	1		control sleeve, standard	PV016 - PV092
106	(1)		control sleeve, high flow	PV140 - PV270
107	2		spring washer	
108	1		compens. spring 70 - 350 bar and R- and F-comp.	
109	1		compensator body R1- and F1-comp., metric	threads 1 and 8
109	(1)		compensator body R1- and F1-comp., SAE/UNC	threads 3 and 7
110	1		adjustment spindle compensator. int. hex SW 6	
111	4		o-ring 2-012-N552-90; 9,25 x 1,78	seal material NBR
111	(4)		o-ring 2-012-V747-75; 9,25 x 1,78	seal material FPM
111	(4)		o-ring 2-012-E540-80; 9,25 x 1,78	seal material EPD
112	1		back up ring 8-012-N300-90; 9,91 x 1,35	seal material NBR
112	(1)		back up ring 8-012-V709-90; 9,91 x 1,35	seal material FPM
112	(1)		back up ring 8-012-E652-90; 9,91 x 1,35	seal material EPD
113	1		adjustment plug 7/8-20 UNEF - M12 x 1; SW 27	
114	1		lock nut M12 x 1; DIN 936; SW 19	
115	1		snap ring for shafts DIN 471, 10 x 1	
116	1		name plate	
117	2		rivet, 1.9 X 3.2	
119	2		hex. head cap screw M 5 x 45 DIN 912, 12.9, SW 4	threads 1 and 8
119	(2)		hex. head cap screw Nr. 10-24 UNC x 1 3/4"	threads 3 and 7
120	1		orifice Ø 0,6; M5 x 6; internal hex. SW 2,5	PV016 - PV046
120	(1)		orifice Ø 1,0; M5 x 6; internal hex. SW 2,5	PV063 - PV092
120	(1)		orifice Ø 1,2; M5 x 6; internal hex. SW 2,5	PV140 - PV270
122	1		pilot port plug 7/8-20 UNEF - G1/4	threads 1
122	(1)		pilot port plug 7/8-20 UNEF - 7/16 - 20 UNF	threads 3
122	(1)		pilot port plug 7/8-20 UNEF - M12 x 1,5 ISO6149	threads 7 and 8
123	1		compensator spring 2 for R- and F-comp.	
125	1		protecting plug- G1/4	threads 1
125	(1)		protecting plug- 7/16 - 20 UNF	threads 3
125	(1)		protecting plug- M12 x 1,5 ISO6149	threads 7 and 8

Load sensing compensator, code ...FFC

ordering code for replacement compensator:

PVCF	flow compensator
A	for frame sizes BG1 and BG2, PV016 - PV046
C	for frame size BG3, PV063 - PV092
E	for frame sizes BG4 and BG5, PV140 - PV270
FC	load sensing compensator, standard version
N	seal material NBR
V	seal material FPM
E	seal material EPDM
1	pilot port G 1/4 BSPP and metric bolts
3	pilot port 7/16-20 UNF and UNC bolts
7	pilot port M12x1,5 ISO 6149 and UNC bolts
8	pilot port M12x1,5 ISO 6149 and metric bolts
	includes:

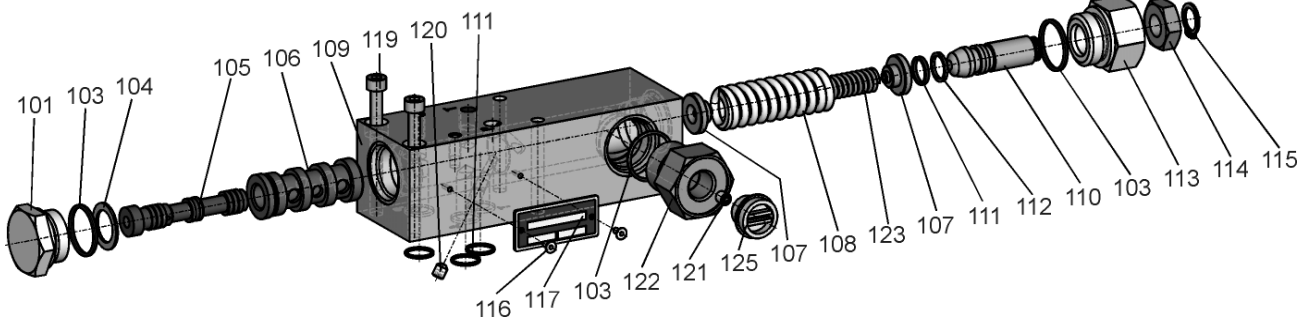


pos.	qty	item number	description	remark
101	1		port plug 7/8-20 UNEF, SW 27	
103	3		O-ring 3-910-N552-90; 19,18 x 2,46	seal material NBR
103	(3)		O-ring 3-910-V747-75; 19,18 x 2,46	seal material FPM
103	(3)		O-ring 3-910-E540-80; 19,18 x 2,46	seal material EPDM
104	1		PS 14 X 20 X 1.2 DIN 988 ST	
105	1		control spool F-comp.	
106	1		control sleeve, standard	PV016 - PV092
106	(1)		control sleeve, high flow	PV140 - PV270
107	2		spring washer	
108	1		compens. spring 70 - 350 bar and R- and F-comp.	
109	1		compensator body RC- and FC-Regler	
110	1		adjustment spindle compensator. int. hex SW 6	
111	4		O-ring 2-012-N552-90; 9,25 x 1,78	seal material NBR
111	(4)		O-ring 2-012-V747-75; 9,25 x 1,78	seal material FPM
111	(4)		O-ring 2-012-E540-80; 9,25 x 1,78	seal material EPDM
112	1		back up ring 8-012-N300-90; 9,91 x 1,35	seal material NBR
112	(1)		back up ring 8-012-V709-90; 9,91 x 1,35	seal material FPM
112	(1)		back up ring 8-012-E652-90; 9,91 x 1,35	seal material EPDM
113	1		adjustment plug 7/8-20 UNEF - M12 x 1; SW 27	
114	1		lock nut M12 x 1; DIN 936; SW 19	
115	1		snap ring for shafts DIN 471, 10 x 1	
116	1		name plate	
117	2		rivet, 1.9 X 3.2	
119	4		hex. head cap screw M 5 x 50 DIN 912, 12.9, SW 4	threads 1 and 8
119	(4)		hex. head cap screw Nr. 10-24 UNC x 2"	threads 3 and 7
120	1		orifice Ø 0,6; M5 x 6; internal hex. SW 2,5	PV016 - PV046
120	(1)		orifice Ø 1,0; M5 x 6; internal hex. SW 2,5	PV063 - PV092
120	(1)		orifice Ø 1,2; M5 x 6; internal hex. SW 2,5	PV140 - PV270
122	1		pilot port plug 7/8-20 UNEF - G1/4	threads 1
122	(1)		pilot port plug 7/8-20 UNEF - 7/16 - 20 UNF	threads 3
122	(1)		pilot port plug 7/8-20 UNEF - M12 x 1,5 ISO6149	threads 7 and 8
123	1		compensator spring 2 for R- and F-comp.	
125	1		protecting plug- G1/4	threads 1
125	(1)		protecting plug- 7/16 - 20 UNF	threads 3
125	(1)		protecting plug- M12 x 1,5 ISO6149	threads 7 and 8

Load sensing compensator, code ...FF1

ordering code for replacement compensator:

PVCF	flow compensator
A	for frame sizes BG1 and BG2, PV016 - PV046
C	for frame size BG3, PV063 - PV092
E	for frame sizes BG4 and BG5, PV140 - PV270
F1	load sensing compensator, version with topside NG6/D03 interface
N	seal material NBR
V	seal material FPM
E	seal material EPD
1	pilot port G 1/4 BSPP and metric bolts
3	pilot port 7/16-20 UNF and UNC bolts
7	pilot port M12x1,5 ISO 6149 and UNC bolts
8	pilot port M12x1,5 ISO 6149 and metric bolts
	includes:

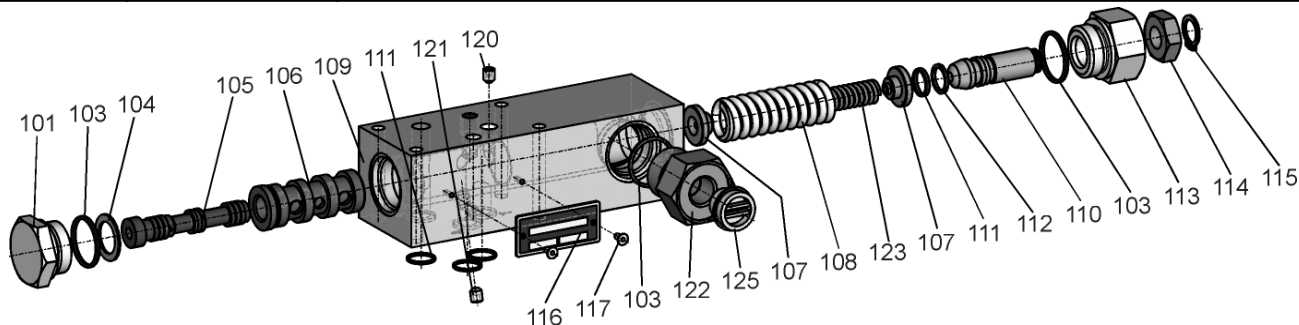


pos.	qty	item number	description	remark
101	1		port plug 7/8-20 UNEF, SW 27	
103	3		O-ring 3-910-N552-90; 19,18 x 2,46	seal material NBR
103	(3)		O-ring 3-910-V747-75; 19,18 x 2,46	seal material FPM
103	(3)		O-ring 3-910-E540-80; 19,18 x 2,46	seal material EPD
104	1		PS 14 X 20 X 1.2 DIN 988 ST	
105	1		control spool F-comp.	
106	1		control sleeve, standard	PV016 - PV092
106	(1)		control sleeve, high flow	PV140 - PV270
107	2		spring washer	
108	1		compens. spring 70 - 350 bar and R- and F-comp.	
109	1		compensator body R1- and F1-comp., metric	threads 1 and 8
109	(1)		compensator body R1- and F1-comp., SAE/UNC	threads 3 and 7
110	1		adjustment spindle compensator. int. hex SW 6	
111	4		O-ring 2-012-N552-90; 9,25 x 1,78	seal material NBR
111	(4)		O-ring 2-012-V747-75; 9,25 x 1,78	seal material FPM
111	(4)		O-ring 2-012-E540-80; 9,25 x 1,78	seal material EPD
112	1		back up ring 8-012-N300-90; 9,91 x 1,35	seal material NBR
112	(1)		back up ring 8-012-V709-90; 9,91 x 1,35	seal material FPM
112	(1)		back up ring 8-012-E652-90; 9,91 x 1,35	seal material EPD
113	1		adjustment plug 7/8-20 UNEF - M12 x 1; SW 27	
114	1		lock nut M12 x 1; DIN 936; SW 19	
115	1		snap ring for shafts DIN 471, 10 x 1	
116	1		name plate	
117	2		rivet, 1.9 X 3.2	
119	2		hex. head cap screw M 5 x 45 DIN 912, 12.9, SW 4	threads 1 and 8
119	(2)		hex. head cap screw Nr. 10-24 UNC x 1 3/4"	threads 3 and 7
120	1		orifice Ø 0,6; M5 x 6; internal hex. SW 2,5	PV016 - PV046
120	(1)		orifice Ø 1,0; M5 x 6; internal hex. SW 2,5	PV063 - PV092
120	(1)		orifice Ø 1,2; M5 x 6; internal hex. SW 2,5	PV140 - PV270
121	1		orifice Ø 0,8; M5 x 6; internal hex. SW 2,5	
122	1		pilot port plug 7/8-20 UNEF - G1/4	threads 1
122	(1)		pilot port plug 7/8-20 UNEF - 7/16 - 20 UNF	threads 3
122	(1)		pilot port plug 7/8-20 UNEF - M12 x 1,5 ISO6149	threads 7 and 8
123	1		compensator spring 2 for R- and F-comp.	
125	1		protecting plug- G1/4	threads 1
125	(1)		protecting plug- 7/16 - 20 UNF	threads 3
125	(1)		protecting plug- M12 x 1,5 ISO6149	threads 7 and 8

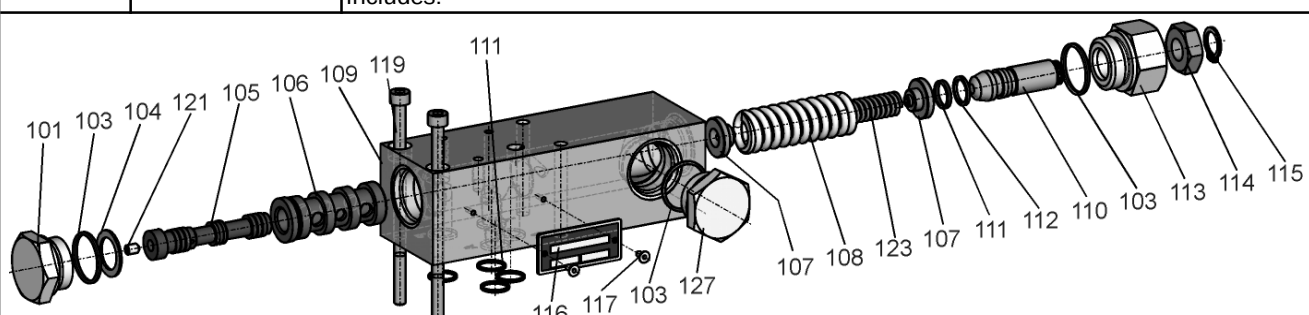
Two spool compensator, code ...FT1, load sensing compensator stage

ordering code for replacement compensator:

PVCF	flow compensator
A	for frame sizes BG1 and BG2, PV016 - PV046
C	for frame size BG3, PV063 - PV092
E	for frame sizes BG4 and BG5, PV140 - PV270
TF	flow compensator stage of two spool compensator, code T1
N	seal material NBR
V	seal material FPM
E	seal material EPD
1	pilot port G 1/4 BSPP
3	pilot port 7/16-20 UNF
7	pilot port M12x1,5 ISO 6149
8	pilot port M12x1,5 ISO 6149
	includes:



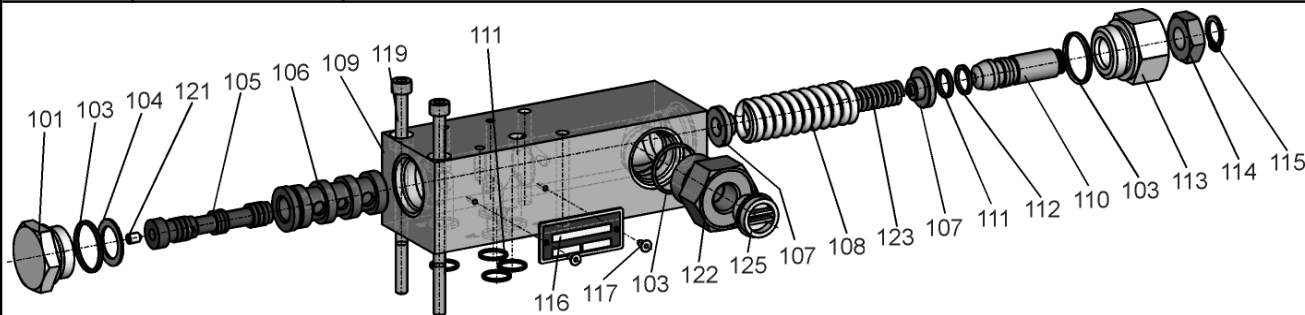
pos.	qty	item number	description	remark
101	1		port plug 7/8-20 UNEF, SW 27	
103	3		O-ring 3-910-N552-90; 19,18 x 2,46	seal material NBR
103	(3)		O-ring 3-910-V747-75; 19,18 x 2,46	seal material FPM
103	(3)		O-ring 3-910-E540-80; 19,18 x 2,46	seal material EPD
104	1		PS 14 X 20 X 1.2 DIN 988 ST	
105	1		control spool F-comp.	
106	1		control sleeve, standard	PV016 - PV092
106	(1)		control sleeve, high flow	PV140 - PV270
107	2		spring washer	
108	1		compens. spring 70 - 350 bar and R- and F-comp.	
109	1		compensator body FT1 comp., load sensing stage	
110	1		adjustment spindle compensator. int. hex SW 6	
111	4		O-ring 2-012-N552-90; 9,25 x 1,78	seal material NBR
111	(4)		O-ring 2-012-V747-75; 9,25 x 1,78	seal material FPM
111	(4)		O-ring 2-012-E540-80; 9,25 x 1,78	seal material EPD
112	1		back up ring 8-012-N300-90; 9,91 x 1,35	seal material NBR
112	(1)		back up ring 8-012-V709-90; 9,91 x 1,35	seal material FPM
112	(1)		back up ring 8-012-E652-90; 9,91 x 1,35	seal material EPD
113	1		adjustment plug 7/8-20 UNEF - M12 x 1; SW 27	
114	1		lock nut M12 x 1; DIN 936; SW 19	
115	1		snap ring for shafts DIN 471, 10 x 1	
116	1		name plate	
117	2		rivet, 1.9 X 3.2	
120	1		orifice Ø 0,6; M5 x 6; internal hex. SW 2,5	PV016 - PV046
120	(1)		orifice Ø 1,0; M5 x 6; internal hex. SW 2,5	PV063 - PV092
120	(1)		orifice Ø 1,2; M5 x 6; internal hex. SW 2,5	PV140 - PV270
121	1		orifice Ø 0,6; M5 x 6; internal hex. SW 2,5	PV016 - PV046
121	(1)		orifice Ø 1,0; M5 x 6; internal hex. SW 2,5	PV063 - PV092
121	(1)		orifice Ø 1,2; M5 x 6; internal hex. SW 2,5	PV140 - PV270
122	1		pilot port plug 7/8-20 UNEF - G1/4	threads 1
122	(1)		pilot port plug 7/8-20 UNEF - 7/16 - 20 UNF	threads 3
122	(1)		pilot port plug 7/8-20 UNEF - M12 x 1,5 ISO6149	threads 7 and 8
123	1		compensator spring 2 for R- and F-comp.	
125	1		protecting plug- G1/4	threads 1
125	(1)		protecting plug- 7/16 - 20 UNF	threads 3
125	(1)		protecting plug- M12 x 1,5 ISO6149	threads 7 and 8

Two spool compensator, code ...FT1, pressure compensator stage				
ordering code for replacement compensator:				
PVCF		flow compensator		
A		for frame sizes BG1 bis BG3, PV016 - PV092		
E		for frame sizes BG4 and BG5, PV140 - PV270		
TP		pressure compensator stage of two spool compensator, code T1		
N		seal material NBR		
V		seal material FPM		
E		seal material EPR		
1		metric bolts		
3		UNC bolts		
7		UNC bolts		
8		metric bolts		
includes:				
				
pos.	qty	item number	description	remark
101	1		port plug 7/8-20 UNEF, SW 27	
103	3		o-ring 3-910-N552-90; 19,18 x 2,46	seal material NBR
103	(3)		o-ring 3-910-V747-75; 19,18 x 2,46	seal material FPM
103	(3)		o-ring 3-910-E540-80; 19,18 x 2,46	seal material EPR
104	1		PS 14 X 20 X 1.2 DIN 988 ST	
105	1		control spool R compensator	
106	1		control sleeve, standard	PV016 - PV092
106	(1)		control sleeve, high flow	PV140 - PV270
107	2		spring washer	
108	1		compens. spring 70 - 350 bar and R- and F-comp.	
109	1		compensator body FT1 comp., press. stage, metric	threads 1 and 8
109	(1)		compensator body FT1 comp., press. stage, SAE/UNC	threads 3 and 7
110	1		adjustment spindle compensator. int. hex SW 6	
111	5		o-ring 2-012-N552-90; 9,25 x 1,78	seal material NBR
111	(5)		o-ring 2-012-V747-75; 9,25 x 1,78	seal material FPM
111	(5)		o-ring 2-012-E540-80; 9,25 x 1,78	seal material EPR
112	1		back up ring 8-012-N300-90; 9,91 x 1,35	seal material NBR
112	(1)		back up ring 8-012-V709-90; 9,91 x 1,35	seal material FPM
112	(1)		back up ring 8-012-E652-90; 9,91 x 1,35	seal material EPR
113	1		adjustment plug 7/8-20 UNEF - M12 x 1; SW 27	
114	1		lock nut M12 x 1; DIN 936; SW 19	
115	1		snap ring for shafts DIN 471, 10 x 1	
116	1		name plate	
117	2		rivet, 1.9 X 3.2	
119	2		hex. head cap screw M 5 x 85 DIN 912, 12.9, SW 4	threads 1 and 8
119	(2)		hex. head cap screw Nr. 10-24 UNC x 3 1/4"	threads 3 and 7
121	1		orifice Ø 0,8; M4 x 5; internal hex. SW 2	
127	1		port plug 7/8-20 UNEF, SW 27	
123	1		compensator spring 2 for R- and F-comp.	

Two spool compensator, code ...FT1, pressure comp. stage with ext. pilot port

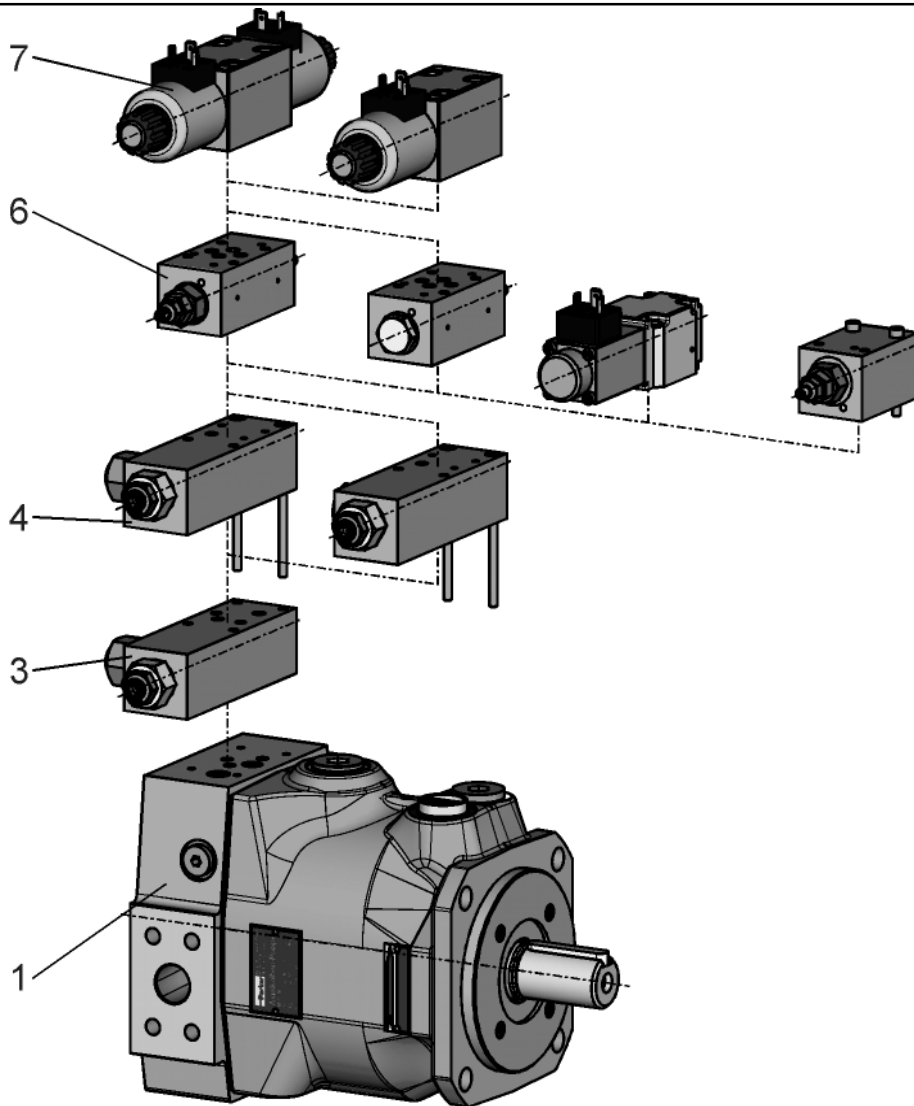
ordering code for replacement compensator:

PVCF	flow compensator
A	for frame sizes BG1 bis BG3, PV016 - PV092
E	for frame sizes BG4 and BG5, PV140 - PV270
T2	pressure comp. stage of two spool compensator, code T1, with ext. pilot port
N	seal material NBR
V	seal material FPM
E	seal material EPD
1	metric bolts
3	UNC bolts
7	UNC bolts
8	metric bolts
	includes:



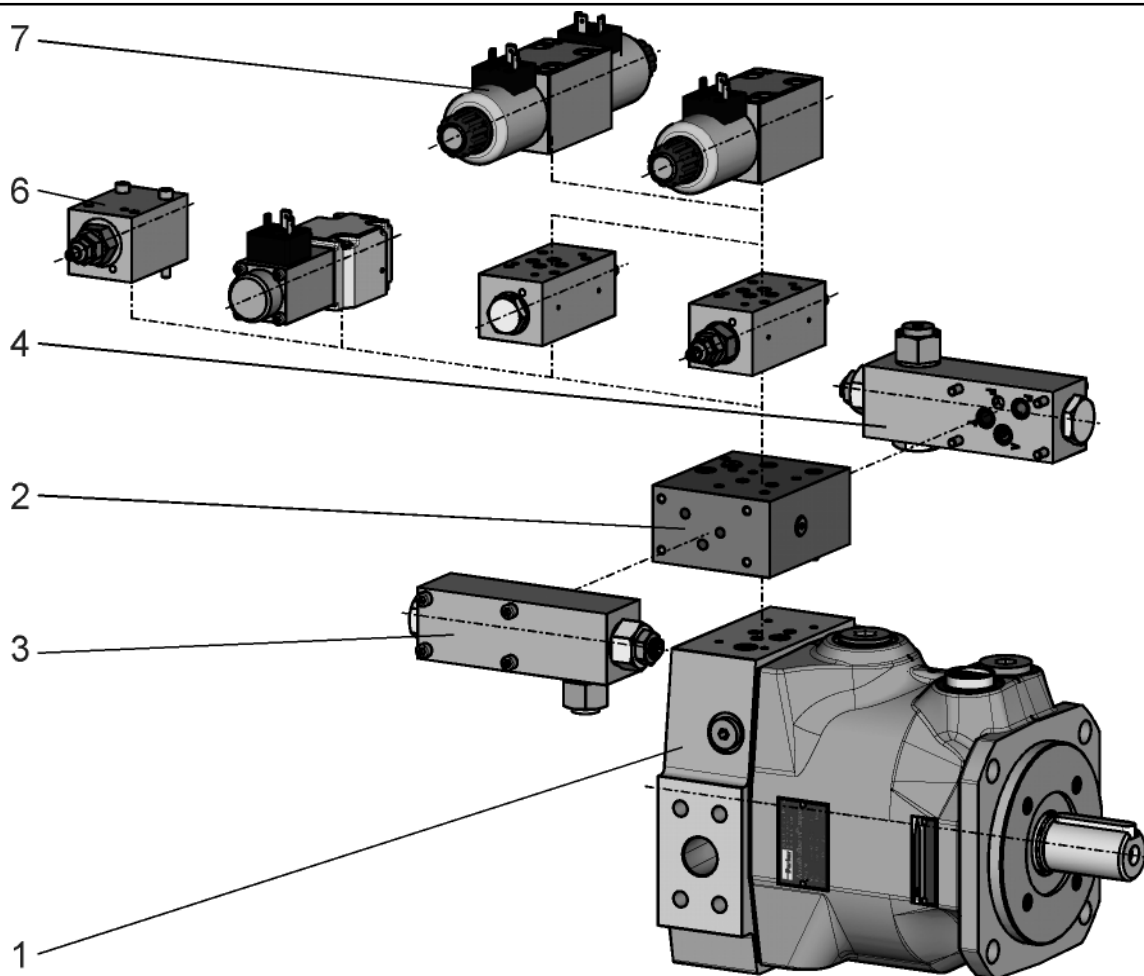
pos.	qty	item number	description	remark
101	1		port plug 7/8-20 UNEF, SW 27	
103	3		o-ring 3-910-N552-90; 19,18 x 2,46	seal material NBR
103	(3)		o-ring 3-910-V747-75; 19,18 x 2,46	seal material FPM
103	(3)		o-ring 3-910-E540-80; 19,18 x 2,46	seal material EPD
104	1		PS 14 X 20 X 1.2 DIN 988 ST	
105	1		control spool R compensator	
106	1		control sleeve, standard	PV016 - PV092
106	(1)		control sleeve, high flow	PV140 - PV270
107	2		spring washer	
108	1		compens. spring 70 - 350 bar and R- and F-comp.	
109	1		compensator body FT1 comp., press. stage, metric	threads 1 and 8
109	(1)		compensator body FT1 comp., press. stage, SAE/UNC	threads 3 and 7
110	1		adjustment spindle compensator. int. hex SW 6	
111	5		o-ring 2-012-N552-90; 9,25 x 1,78	seal material NBR
111	(5)		o-ring 2-012-V747-75; 9,25 x 1,78	seal material FPM
111	(5)		o-ring 2-012-E540-80; 9,25 x 1,78	seal material EPD
112	1		back up ring 8-012-N300-90; 9,91 x 1,35	seal material NBR
112	(1)		back up ring 8-012-V709-90; 9,91 x 1,35	seal material FPM
112	(1)		back up ring 8-012-E652-90; 9,91 x 1,35	seal material EPD
113	1		adjustment plug 7/8-20 UNEF - M12 x 1; SW 27	
114	1		lock nut M12 x 1; DIN 936; SW 19	
115	1		snap ring for shafts DIN 471, 10 x 1	
116	1		name plate	
117	2		rivet, 1.9 X 3.2	
119	2		hex. head cap screw M 5 x 85 DIN 912, 12.9, SW 4	threads 1 and 8
119	(2)		hex. head cap screw Nr. 10-24 UNC x 3 1/4"	threads 3 and 7
121	1		orifice Ø 0,8; M4 x 5; internal hex. SW 2	
122	1		pilot port plug 7/8-20 UNEF - G1/4	threads 1
122	(1)		pilot port plug 7/8-20 UNEF - 7/16 - 20 UNF	threads 3
122	(1)		pilot port plug 7/8-20 UNEF - M12 x 1,5 ISO6149	threads 7 and 8
123	1		compensator spring 2 for R- and F-comp.	
125	1		protecting plug- G1/4	threads 1
125	(1)		protecting plug- 7/16 - 20 UNF	threads 3
125	(1)		protecting plug- M12 x 1,5 ISO6149	threads 7 and 8

Assembly of pump with two spool compensator, version FT*



pos.	qty	item number	description	remark
1	1	PV*	base pump	
2			not applicable	
3	1	PVCFATF*	flow control stage, frame size 1 - 2	PV016 - PV046
3	(1)	PVCFCTF*	flow control stage, frame size 3	PV063 - PV092
3	(1)	PVCFETF*	flow control stage, frame size 4 - 5	PV140 - PV270
4	1	PVCFATP*	pressure control stage, standard, frame size 1 - 3	PV016 - PV092, code ...FT1
4	(1)	PVCFETP*	pressure control stage, standard, frame size 4 - 5	PV140 - PV270, code ...FT1
4	(1)	PVCFAT2*	pressure control stage, with ext. pilot port, BG 1 - 3	PV016 - PV092, code ...FT2
4	(1)	PVCFET2*	pressure control stage, with ext. pilot port, BG 4 - 5	PV140 - PV270, code ...FT2
5			not applicable	
6	1	PVAC1PT*S*	pressure pilot valve, manual, spindle and lock nut	code ...FTP resp. accessory
6	1	PVAC1PT*L*	pressure pilot valve, manual, key lock adjustment	code ...FTL resp. accessory
6	(1)	PVACPPT*	proportional pressure pilot valve	code ...FTD resp. accessory
6	(1)	PVACZ1*	pressure pilot manapak, one pressure	accessory
6	(1)	PVACZ2*	pressure pilot manapak, two pressures	accessory
6	(1)	PVACBL*	cover plate, with external pressure pilot valve	accessory
7	1	D1VW6K*	4/2-directional control valve for pressure selection	accessory
7	(1)	D1VW2C*	4/3-directional control valve for pressure selection	accessory
7	(1)	D1VW55C*	4/3-directional control valve for pressure selection	accessory

Assembly of pump with two spool compensator, version UT*

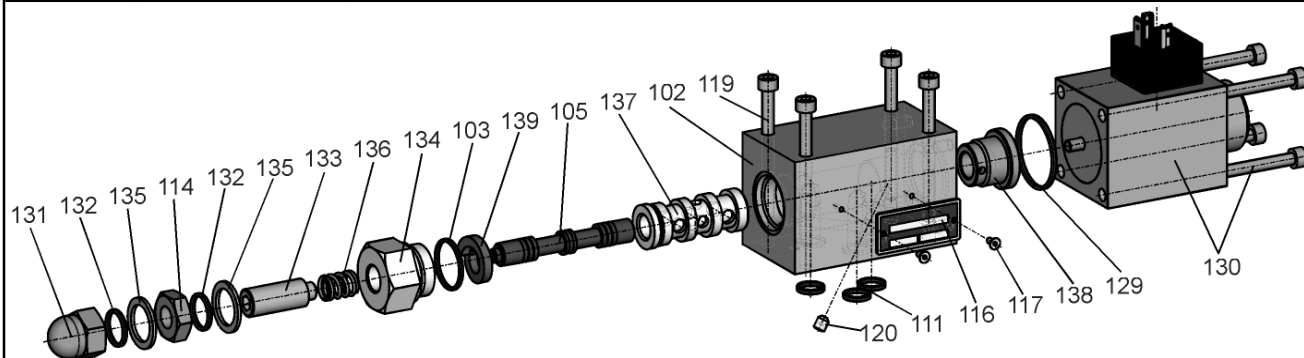


pos.	qty	item number	description	remark
1	1	PV*	base pump	
2	1	PVCFAUB*	elbow manifold	
3	1	PVCFAFC*	flow control stage, frame size 1 - 2	PV016 - PV046
3	(1)	PVCFCFC*	flow control stage, frame size 3	PV063 - PV092
3	(1)	PVCFEFC*	flow control stage, frame size 4 - 5	PV140 - PV270
4	1	PVCFAU2*	pressure control stage, standard, frame size 1 - 2	PV016 - PV046
4	(1)	PVCFCU2*	pressure control stage, standard, frame size 3	PV063 - PV092
4	(1)	PVCFEU2*	pressure control stage, standard, frame size 4 - 5	PV140 - PV270
5			not applicable	
6	1	PVAC1PU*S*	pressure pilot valve, manual, spindle and lock nut	code ...UTP resp. accessory
6	1	PVAC1PU*L*	pressure pilot valve, manual, key lock adjustment	code ...UTL resp. accessory
6	(1)	PVACPPU*	proportional pressure pilot valve	code ...UTD resp. accessory
6	(1)	PVACZ1*	pressure pilot manapak, one pressure	accessory
6	(1)	PVACZ2*	pressure pilot manapak, two pressures	accessory
6	(1)	PVACBL*	cover plate, with external pressure pilot valve	accessory
7	1	D1VW6K*	4/2-directional control valve for pressure selection	accessory
7	(1)	D1VW2C*	4/3-directional control valve for pressure selection	accessory
7	(1)	D1VW55C*	4/3-directional control valve for pressure selection	accessory

Proportional displacement control, code ...FPV

ordering code for replacement compensator:

PVCF	flow compensator
A	for frame sizes BG1 and BG2, PV016 - PV046
C	for frame size BG3, PV063 - PV092
E	for frame sizes BG4 and BG5, PV140 - PV270
PV	proportional displacement control
N	seal material NBR
V	seal material FPM
E	seal material EPR
1	metric bolts
3	UNC bolts
7	UNC bolts
8	metric bolts
	includes:



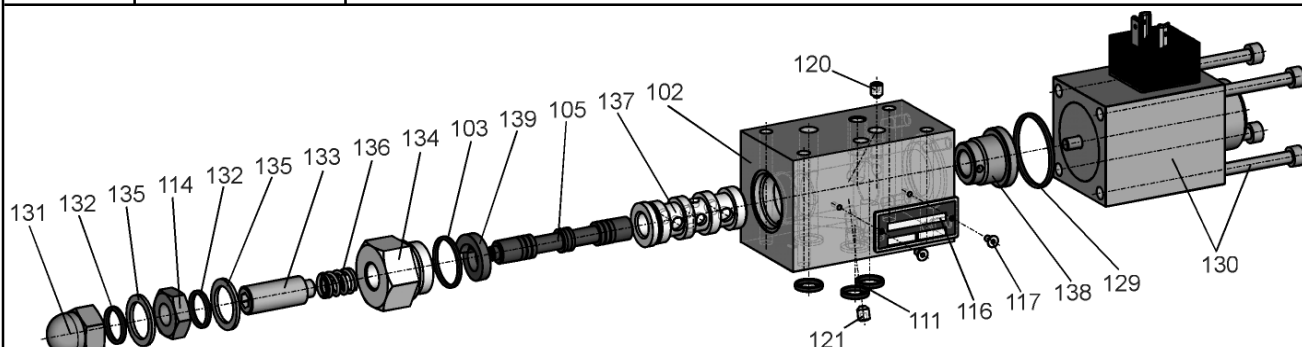
Proportional displacement control, code ...FPV				
ordering code for replacement compensator:				
PVCF		flow compensator		
A		for frame sizes BG1 and BG2, PV016 - PV046		
C		for frame size BG3, PV063 - PV092		
E		for frame sizes BG4 and BG5, PV140 - PV270		
PV		proportional displacement control		
N		seal material NBR		
V		seal material FPM		
E		seal material EPDM		
1		metric bolts		
3		UNC bolts		
7		UNC bolts		
8		metric bolts		
45		design series		

pos.	qty		description	remark
103	1		O ring 3-910-N552-90; 19,18 x 2,46	seals NBR
103	(1)		O ring 3-910-V747-75; 19,18 x 2,46	seals FPM
103	(1)		O ring 3-910-E540-80; 19,18 x 2,46	seals EPDM
105	1		control spool PV-comp., screw in type solenoid	
106	1		control sleeve high flow	
107	2		spring washer	
109	1		compensator body PV comp., screw in type solenoid	
110	1		adjustment spindle compensator. int. hex SW 6	
111	4		O ring 2-012-N552-90; 9,25 x 1,78	seals NBR
111	(4)		O ring 2-012-V747-75; 9,25 x 1,78	seals FPM
111	(4)		O ring 2-012-E540-80; 9,25 x 1,78	seals EPDM
112	1		back up ring 8-012-N300-90; 9,91 x 1,35	seals NBR
112	(1)		back up ring 8-012-V709-90; 9,91 x 1,35	seals FPM
112	(1)		back up ring 8-012-E652-90; 9,91 x 1,35	seals EPDM
113	1		adjustment plug 7/8-20 UNEF - M12 x 1; SW 27	
114	1		nut M12 x 1; DIN 936; SW 19	
116	1		name plate	
117	2		rivet 1,9 x 3,2	
119	4		hex head cap screw M 5 x 60 DIN 912, 12.9, SW 4	threads 1 and 8
119	(2)		hex head cap screw Nr. 10-24 UNC x 2 1/4"	threads 3 and 7
120	1		orifice Ø 0,6; M5 x 6; int. hex SW 2,5	PV016 - PV046
120	(1)		orifice Ø 1,0; M5 x 6; int. hex SW 2,5	PV063 - PV092
120	(1)		orifice Ø 1,2; M5 x 6; int. hex SW 2,5	PV140 - PV270
129	1		O ring 3-908-N552-90; 16,36 x 2,21	seals NBR
129	(1)		O ring 3-908-V747-75; 16,36 x 2,21	seals FPM
129	(1)		O ring 3-908-E540-80; 16,36 x 2,21	seals EPDM
130	1		prop. solenoid PR45P00, 16VDC 1,3A with plug	
131	1		cover cap M12-SW19	
135	2		O ring 2-118-N552-90; 21,98 x 2,62	seals NBR
135	(2)		O ring 2-118-V747-75; 21,98 x 2,62	seals FPM
135	(2)		O ring 2-118-E540-80; 21,98 x 2,62	seals EPDM
136	1		Compensator spring, PV comp with screw in sol.	
138	1		distance tube	

electro hydraulic p-Q-control, codes ...FPR, ...FPG, ...FPZ displacement control stage

ordering code for replacement compensator:

PVCF	flow compensator
A	for frame sizes BG1 and BG2, PV016 - PV046
C	for frame size BG3, PV063 - PV092
E	for frame sizes BG4 and BG5, PV140 - PV270
P1	displacement control stage of electro hydraulic p-Q-control
N	seal material NBR
V	seal material FPM
E	seal material EPR
	includes:

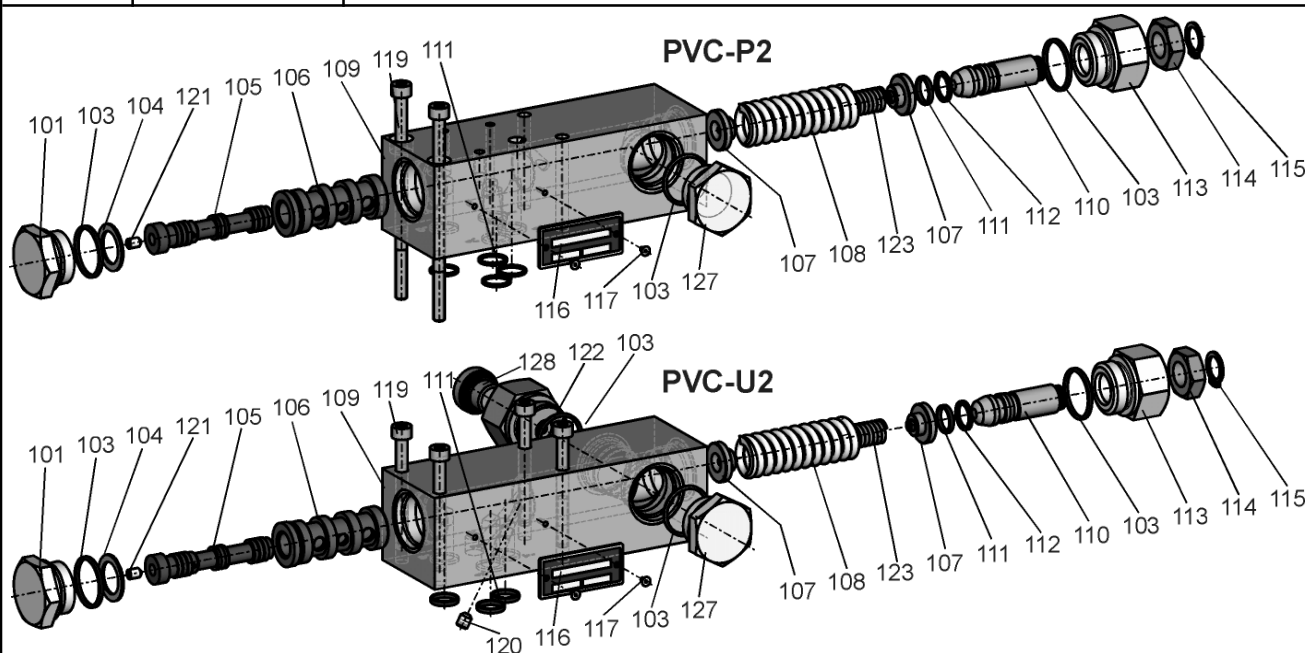


pos.	qty	item number	description	remark
102	1		compensator body PR comp., displ. control stage	
103	1		O-ring 3-910-N552-90; 19,18 x 2,46	seal material NBR
103	(1)		O-ring 3-910-V747-75; 19,18 x 2,46	seal material FPM
103	(1)		O-ring 3-910-E540-80; 19,18 x 2,46	seal material EPR
105	1		control spool PV compensator	
111	3		O-ring 2-012-N552-90; 9,25 x 1,78	seal material NBR
111	(3)		O-ring 2-012-V747-75; 9,25 x 1,78	seal material FPM
111	(3)		O-ring 2-012-E540-80; 9,25 x 1,78	seal material EPR
114	1		lock nut M12 x 1; DIN 936; SW 19	
116	1		name plate	
117	2		rivet, 1.9 X 3.2	
120	1		orifice Ø 0,6; M5 x 6; internal hex. SW 2,5	PV016 - PV046
120	(1)		orifice Ø 1,0; M5 x 6; internal hex. SW 2,5	PV063 - PV092
120	(1)		orifice Ø 1,2; M5 x 6; internal hex. SW 2,5	PV140 - PV270
121	1		orifice Ø 0,8; M5 x 6; internal hex. SW 2,5	PV016 - PV046
121	(1)		orifice Ø 1,2; M5 x 6; internal hex. SW 2,5	PV063 - PV092
121	(1)		orifice Ø 1,2; M5 x 6; internal hex. SW 2,5	PV140 - PV270
129	1		O-ring 2-024-N552-90; 28,30 x 1,78	seal material NBR
129	(1)		O-ring 2-024-V747-75; 28,30 x 1,78	seal material FPM
129	(1)		O-ring 2-024-E540-80; 28,30 x 1,78	seal material EPR
130	1		proportional solenoid GRFY045F20B01, 16V	
131	1		lock nut M12 x 1, DIN 1587	
132	2		O-ring 2-014-N552-90; 12,42 x 1,78	seal material NBR
132	(2)		O-ring 2-014-V747-75; 12,42 x 1,78	seal material FPM
132	(2)		O-ring 2-014-E540-80; 12,42 x 1,78	seal material EPR
133	1		adjustment spindle M12 x 1, internal hex. SW 6	
134	1		adjustment plug 7/8-20 UNEF - M12 x 1; SW 27	
135	2		washer SS16 x 22 x 1,2; DIN 988	
136	1		compensator spring PV compensator	
137	1		control sleeve, high flow	
138	1		distance sleeve	
139	1		spring washer 12 DIN 127, St	

electro hydraulic p-Q-control, code ...FPR, ...UPR, pressure compensator stage, standard

ordering code for replacement compensator:

PVCF	flow compensator
A	P2: for BG1 and BG3, PV016 - PV092; U2: for BG1 and BG2, PV016 - PV046
C	U2 only: for frame size BG3, PV063 - PV092
E	for frame sizes BG4 and BG5, PV140 - PV270
P2	pressure compensator stage, electro hydraulic p-Q-control
U2	pressure compensator stage, electro hydraulic p-Q-control, with elbow manifold
N	seal material NBR
V	seal material FPM
E	seal material EPD
1	metric bolts
3	UNC bolts
7	UNC bolts
8	metric bolts
	includes:



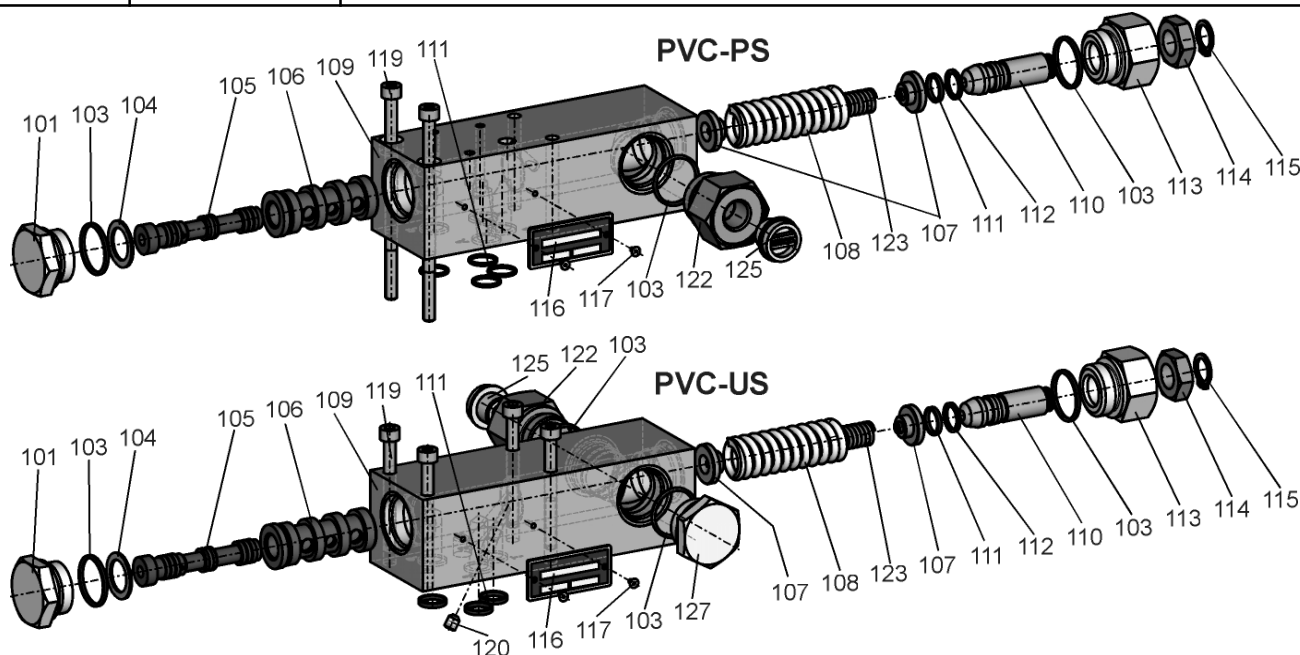
pos.	qty	item number	description	remark
101	1		port plug 7/8-20 UNEF, SW 27	
103	3		o-ring 3-910-N552-90; 19,18 x 2,46	seal material NBR
103	(3)		o-ring 3-910-V747-75; 19,18 x 2,46	seal material FPM
103	(3)		o-ring 3-910-E540-80; 19,18 x 2,46	seal material EPD
103	(4)		o-ring 3-910-N552-90; 19,18 x 2,46	seal material NBR, code U2
103	(4)		o-ring 3-910-V747-75; 19,18 x 2,46	seal material FPM, code U2
103	(4)		o-ring 3-910-E540-80; 19,18 x 2,46	seal material EPD, code U2
104	1		PS 14 X 20 X 1.2 DIN 988 ST	
105	1		control spool R compensator	
106	1		control sleeve, standard	PV016 - PV092
106	(1)		control sleeve, high flow	PV140 - PV270
107	2		spring washer	
108	1		compens. spring 70 - 350 bar and R- and F-comp.	
109	1		compensator body FT1 comp., press. stage, metric	threads 1 and 8
109	(1)		compensator body FT1 comp., press. stage, SAE/UNC	threads 3 and 7
109	(1)		compensator body LB compensator	for elbow manifold, code U2
110	1		adjustment spindle compensator. int. hex SW 6	
111	5		o-ring 2-012-N552-90; 9,25 x 1,78	seal material NBR
111	(5)		o-ring 2-012-V747-75; 9,25 x 1,78	seal material FPM
111	(5)		o-ring 2-012-E540-80; 9,25 x 1,78	seal material EPD
111	(4)		o-ring 2-012-N552-90; 9,25 x 1,78	seal material NBR, code U2
111	(4)		o-ring 2-012-V747-75; 9,25 x 1,78	seal material FPM, code U2
111	(4)		o-ring 2-012-E540-80; 9,25 x 1,78	seal material EPD, code U2

pos.	qty	item number	description	remark
112	1		back up ring 8-012-N300-90; 9,91 x 1,35	seal material NBR
112	(1)		back up ring 8-012-V709-90; 9,91 x 1,35	seal material FPM
112	(1)		back up ring 8-012-E652-90; 9,91 x 1,35	seal material EPR
113	1		adjustment plug 7/8-20 UNEF - M12 x 1; SW 27	
114	1		lock nut M12 x 1; DIN 936; SW 19	
115	1		snap ring for shafts DIN 471, 10 x 1	
116	1		name plate	
117	2		rivet, 1.9 X 3.2	
119	2		hex. head cap screw M 5 x 95 DIN 912, 12.9, SW 4	threads 1 and 8
119	(2)		hex. head cap screw Nr. 10-24 UNC x 3 3/4"	threads 3 and 7
120	1		orifice Ø 0,8; M5 x 6; internal hex. SW 2,5	PV016 - PV046, code U2
120	(1)		orifice Ø 1,2; M5 x 6; internal hex. SW 2,5	PV063 - PV092, code U2
120	(1)		orifice Ø 1,2; M5 x 6; internal hex. SW 2,5	PV140 - PV270, code U2
121	1		orifice Ø 0,8; M4 x 5; internal hex. SW 2	
122	1		pilot port plug 7/8-20 UNEF - G1/4	threads 1, code U2
122	(1)		pilot port plug 7/8-20 UNEF - 7/16 - 20 UNF	threads 3, code U2
122	(1)		pilot port plug 7/8-20 UNEF - M12 x 1,5 ISO6149	threads 7 and 8, code U2
123	1		compensator spring 2 for R- and F-comp.	
127	1		port plug 7/8-20 UNEF, SW 27	
128	1		pipe plug VSTI R1/4" ED NBR	seals NBR, code U2, thrd. 1
128	(1)		pipe plug VSTI R1/4" ED FPM	seals FPM, code U2, thrd. 1
128	(1)		pipe plug VSTI R1/4" ED EPR	seals EPR, code U2, thrd. 1
128	(1)		pipe plug 4HP50NS-NBR, 7/16-20 UNF	seals NBR, code U2, thrd. 3
128	(1)		pipe plug 4HP50NS-FPM, 7/16-20 UNF	seals FPM, code U2, thrd. 3
128	(1)		pipe plug 4HP50NS-EPR, 7/16-20 UNF	seals EPR, code U2, thrd. 3
128	(1)		pipe plug VSTI-12 x 1,5-OR-A3C ISO 6149 NBR	seals NBR, code U2, thrd. 7, 8
128	(1)		pipe plug VSTI-12 x 1,5-OR-A3C ISO 6149 FPM	seals FPM, code U2, thrd. 7, 8
128	(1)		pipe plug VSTI-12 x 1,5-OR-A3C ISO 6149 EPR	seals EPR, code U2, thrd. 7, 8
141	4		hex. head cap screw M 5 x 50 DIN 912, 12.9, SW 4	threads 1 and 8, code U2
141	(4)		hex. head cap screw Nr. 10-24 UNC x 2"	threads 3 and 7, code U2

p-Q-control, codes ...FPS, ...UPS, pressure comp. stage, for quick unload manifold

ordering code for replacement compensator:

PVCF	Förderstromregler
A	PS: for BG1 and BG3, PV016 - PV092; US: for BG1 and BG2, PV016 - PV046
C	US only: for frame size BG3, PV063 - PV092
E	for frame sizes BG4 and BG5, PV140 - PV270
PS	pressure compensator stage, electro hydr. p-Q-control for quick unload manifold
US	pressure comp. stage, electro hydr. p-Q-control for quick unload + elbow manifold
N	seal material NBR
V	seal material FPM
E	seal material EPD
1	metric bolts
3	UNC bolts
7	UNC bolts
8	metric bolts
	includes:



pos.	qty	item number	description	remark
101	1		port plug 7/8-20 UNEF, SW 27	
103	3		o-ring 3-910-N552-90; 19,18 x 2,46	seal material NBR
103	(3)		o-ring 3-910-V747-75; 19,18 x 2,46	seal material FPM
103	(3)		o-ring 3-910-E540-80; 19,18 x 2,46	seal material EPD
103	(4)		o-ring 3-910-N552-90; 19,18 x 2,46	seal material NBR
103	(4)		o-ring 3-910-V747-75; 19,18 x 2,46	seal material FPM
103	(4)		o-ring 3-910-E540-80; 19,18 x 2,46	seal material EPD
104	1		PS 14 X 20 X 1.2 DIN 988 ST	
105	1		control spool F-comp.	
106	1		control sleeve, standard	PV016 - PV092
106	(1)		control sleeve, high flow	PV140 - PV270
107	2		spring washer	
108	1		compens. spring 70 - 350 bar and R- and F-comp.	
109	1		compensator body FT1 comp., press. stage, metric	threads 1 and 8
109	(1)		compensator body FT1 comp., press. stage, SAE/UNC	threads 3 and 7
109	(1)		compensator body LB compensator	for elbow manifold, code US
110	1		adjustment spindle compensator. int. hex SW 6	
111	5		o-ring 2-012-N552-90; 9,25 x 1,78	seal material NBR
111	(5)		o-ring 2-012-V747-75; 9,25 x 1,78	seal material FPM
111	(5)		o-ring 2-012-E540-80; 9,25 x 1,78	seal material EPD
111	(4)		o-ring 2-012-N552-90; 9,25 x 1,78	seal material NBR, code US
111	(4)		o-ring 2-012-V747-75; 9,25 x 1,78	seal material FPM, code US
111	(4)		o-ring 2-012-E540-80; 9,25 x 1,78	seal material EPD, code US

pos.	qty	item number	description	remark
112	1		back up ring 8-012-N300-90; 9,91 x 1,35	seal material NBR
112	(1)		back up ring 8-012-V709-90; 9,91 x 1,35	seal material FPM
112	(1)		back up ring 8-012-E652-90; 9,91 x 1,35	seal material EPR
113	1		adjustment plug 7/8-20 UNEF - M12 x 1; SW 27	
114	1		lock nut M12 x 1; DIN 936; SW 19	
115	1		snap ring for shafts DIN 471, 10 x 1	
116	1		name plate	
117	2		rivet, 1.9 X 3.2	
119	2		hex. head cap screw M 5 x 95 DIN 912, 12.9, SW 4	threads 1 and 8
119	(2)		hex. head cap screw Nr. 10-24 UNC x 3 3/4"	threads 3 and 7
120	1		orifice Ø 0,8; M5 x 6; internal hex. SW 2,5	PV016 - PV046
120	(1)		orifice Ø 1,2; M5 x 6; internal hex. SW 2,5	PV063 - PV092
120	(1)		orifice Ø 1,2; M5 x 6; internal hex. SW 2,5	PV140 - PV270
122	1		pilot port plug 7/8-20 UNEF - G1/4	threads 1
122	(1)		pilot port plug 7/8-20 UNEF - 7/16 - 20 UNF	threads 3
122	(1)		pilot port plug 7/8-20 UNEF - M12 x 1,5 ISO6149	threads 7 and 8
123	1		compensator spring 2 for R- and F-comp.	
125	1		protecting plug- G1/4	threads 1
125	(1)		protecting plug- 7/16 - 20 UNF	threads 3
125	(1)		protecting plug- M12 x 1,5 ISO6149	threads 7 and 8
127	1		port plug 7/8-20 UNEF, SW 27	for elbow manifold, code US
141	4		hex. head cap screw M 5 x 50 DIN 912, 12.9, SW 4	threads 1 and 8, code US
141	(4)		hex. head cap screw Nr. 10-24 UNC x 2"	threads 3 and 7, code US

**p-Q-control, code ...FPP, ...UPP, pressure compensator stage
for pre load and quick unload manifold**

ordering code for replacement compensator:

PVCF

A

C

E

PP

UP

N

V

E

1

3

7

8

flow compensator

PP: for BG1 and BG3, PV016 - PV092; UP: for BG1 and BG2, PV016 - PV046

UP only: for frame size BG3, PV063 - PV092

for frame sizes BG4 and BG5, PV140 - PV270

pressure compensator stage, electro hydraulic p-Q-control for PVAPVE-manifold

pressure comp. stage, electro hydr. p-Q-control for PVAPVE- and elbow manifold

seal material NBR

seal material FPM

seal material EPR

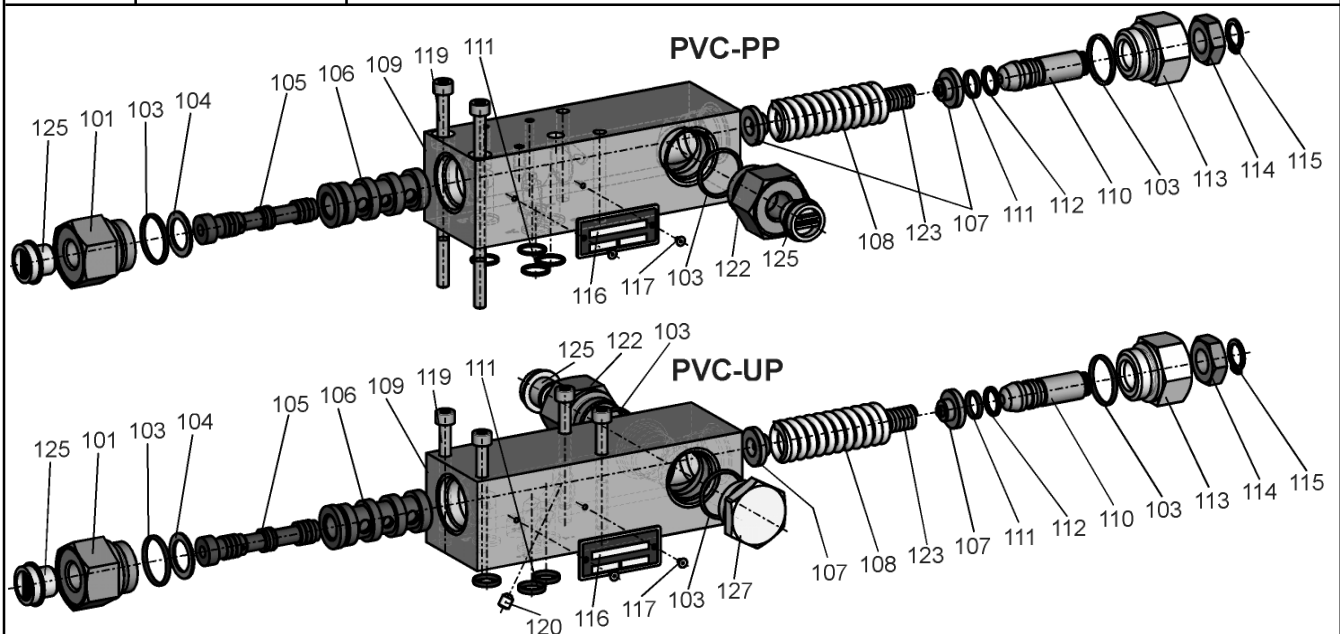
metric bolts

UNC bolts

UNC bolts

metric bolts

includes:



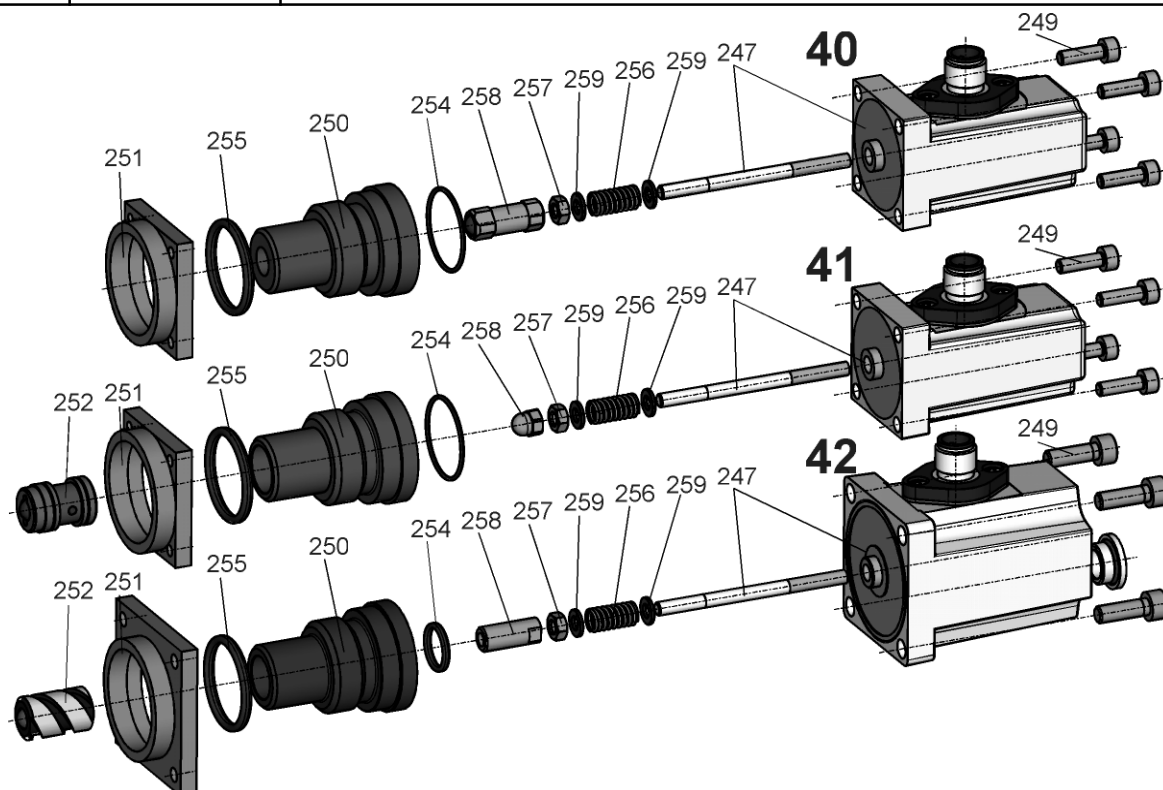
pos.	qty	item number	description	remark
101	1		special pilot port plug 7/8-20 UNEF - G1/4	threads 1
101	(1)		special pilot port plug 7/8-20 UNEF - 7/16 - 20 UNF	threads 3
101	(1)		special port plug 7/8-20 UNEF - M12 x 1,5 ISO6149	threads 7 and 8
103	3		o-ring 3-910-N552-90; 19,18 x 2,46	seal material NBR
103	(3)		o-ring 3-910-V747-75; 19,18 x 2,46	seal material FPM
103	(3)		o-ring 3-910-E540-80; 19,18 x 2,46	seal material EPR
103	(4)		o-ring 3-910-N552-90; 19,18 x 2,46	seal material NBR
103	(4)		o-ring 3-910-V747-75; 19,18 x 2,46	seal material FPM
103	(4)		o-ring 3-910-E540-80; 19,18 x 2,46	seal material EPR
104	1		PS 14 X 20 X 1.2 DIN 988 ST	
105	1		control spool PP compensator	
106	1		control sleeve, standard	PV016 - PV092
106	(1)		control sleeve, high flow	PV140 - PV270
107	2		spring washer	
108	1		compens. spring 70 - 350 bar and R- and F-comp.	
109	1		compensator body FT1 comp., press. stage, metric	threads 1 and 8
109	(1)		compensator body FT1 comp., press. stage, SAE/UNC	threads 3 and 7
109	(1)		compensator body LB compensator	for elbow manifold, code UP
110	1		adjustment spindle compensator. int. hex SW 6	
111	5		o-ring 2-012-N552-90; 9,25 x 1,78	seal material NBR
111	(5)		o-ring 2-012-V747-75; 9,25 x 1,78	seal material FPM
111	(5)		o-ring 2-012-E540-80; 9,25 x 1,78	seal material EPR
111	(4)		o-ring 2-012-N552-90; 9,25 x 1,78	seal material NBR, code UP
111	(4)		o-ring 2-012-V747-75; 9,25 x 1,78	seal material FPM, code UP
111	(4)		o-ring 2-012-E540-80; 9,25 x 1,78	seal material EPR, code UP

pos.	qty	item number	description	remark
112	1		back up ring 8-012-N300-90; 9,91 x 1,35	seal material NBR
112	(1)		back up ring 8-012-V709-90; 9,91 x 1,35	seal material FPM
112	(1)		back up ring 8-012-E652-90; 9,91 x 1,35	seal material EPR
113	1		adjustment plug 7/8-20 UNEF - M12 x 1; SW 27	
114	1		lock nut M12 x 1; DIN 936; SW 19	
115	1		snap ring for shafts DIN 471, 10 x 1	
116	1		name plate	
117	2		rivet, 1.9 X 3.2	
119	2		hex. head cap screw M 5 x 95 DIN 912, 12.9, SW 4	threads 1 and 8
119	(2)		hex. head cap screw Nr. 10-24 UNC x 3 3/4"	threads 3 and 7
120	1		orifice Ø 0,8; M5 x 6; internal hex. SW 2,5	PV016 - PV046
120	(1)		orifice Ø 1,2; M5 x 6; internal hex. SW 2,5	PV063 - PV092
120	(1)		orifice Ø 1,2; M5 x 6; internal hex. SW 2,5	PV140 - PV270
122	1		pilot port plug 7/8-20 UNEF - G1/4	threads 1
122	(1)		pilot port plug 7/8-20 UNEF - 7/16 - 20 UNF	threads 3
122	(1)		pilot port plug 7/8-20 UNEF - M12 x 1,5 ISO6149	threads 7 and 8
123	1		compensator spring 2 for R- and F-comp.	
125	2		protecting plug- G1/4	threads 1
125	(2)		protecting plug- 7/16 - 20 UNF	threads 3
125	(2)		protecting plug- M12 x 1,5 ISO6149	threads 7 and 8
127	1		port plug 7/8-20 UNEF, SW 27	for elbow manifold, code UP
141	4		hex. head cap screw M 5 x 50 DIN 912, 12.9, SW 4	threads 1 and 8, code UP
141	(4)		hex. head cap screw Nr. 10-24 UNC x 2"	threads 3 and 7, code UP

LVDT for displacement feedback, code RK-PV000WC**

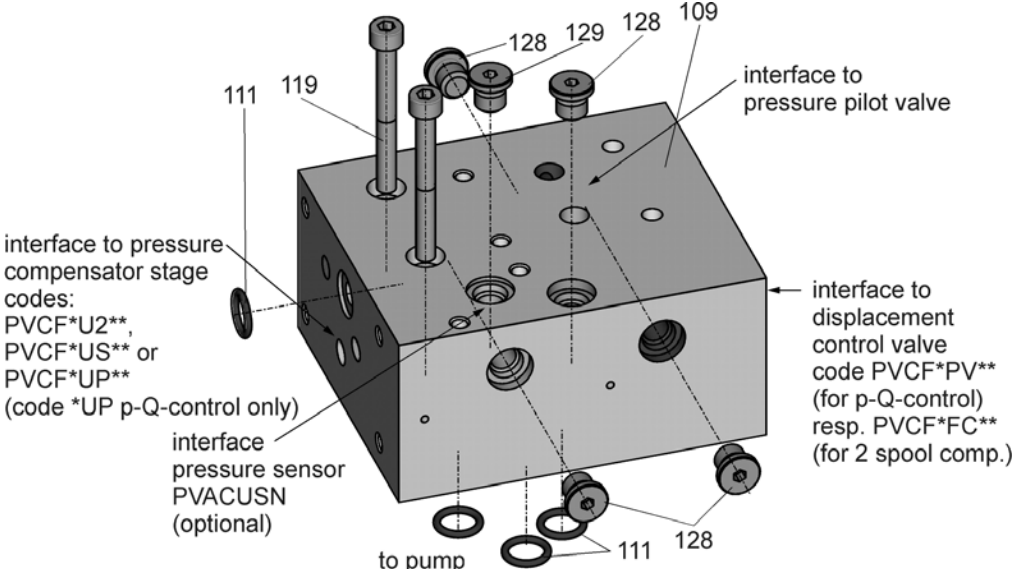
ordering code for replacement LVDT kit

RK-	replacement kit
PV000	for all frame sizes
WC	displacement feedback cartridge
M	metric bolts
S	UNC bolts
N	seal material NBR
V	seal material FPM
E	seal material EPR
40	compensator design series 40
41	compensator design series 41
42	compensator design series 42
	includes:

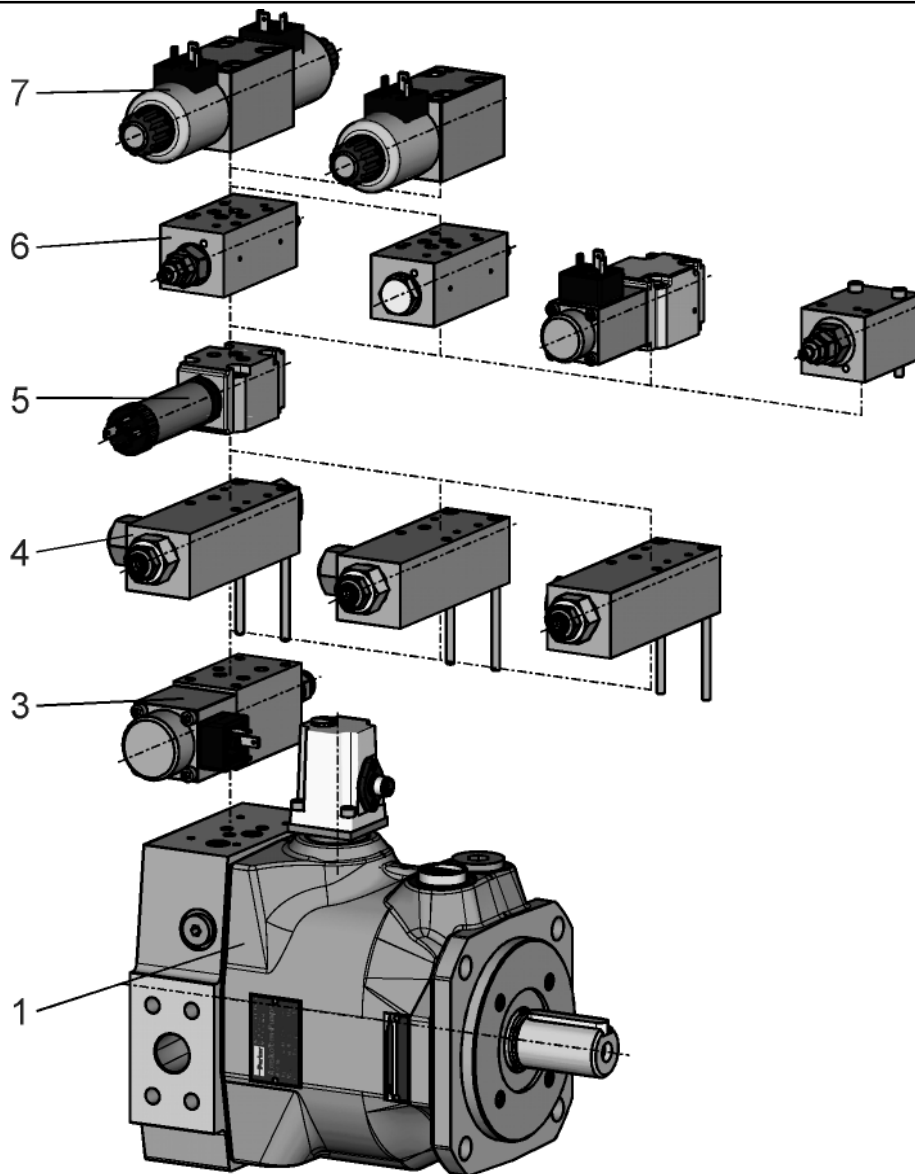


pos.	qty	item number	description	remark
247	1		inductive pos. transducer (LVDT) AWEF004D05, 35mm	series 40-41
247	(1)		inductive position transd. (LVDT) AWEF004D06, 45mm	series 42
	1		connector 99-1436-851-05 (not shown)	
249	4		hex. head cap screw M 4 x 14 DIN 912; 12.9	threads 1 and 8, series 40-41
249	(4)		hex. head cap screw Nr.8 - 32 x 1/2"	threads 3 and 7, series 40-41
249	4		hex. head cap screw M 5 x 16 DIN 912; 12.9	threads 1 and 8, series 42
249	(4)		hex. head cap screw Nr.10 - 24 x 1/2"	threads 3 and 7, series 42
250	1		body displacement feedback	series 40
250	(1)		body displacement feedback	series 41
250	(1)		body displacement feedback	series 42
251	1		adapter for displacement feedback, metric	threads 1 and 8, series 40-41
251	(1)		adapter for displacement feedback, SAE/UNC	threads 3 and 7, series 40-41
251	(1)		adapter for displacement feedback, metric	threads 1 and 8, series 42
251	(1)		adapter for displacement feedback, SAE/UNC	threads 3 and 7, series 42
252	1		adapter LVDT armature	series 40
252	(1)		seat spool horse power compensator	series 41
252	(1)		spring guide horse power compensator	series 42
254	1		o-ring 2-021-N552-90; 23,52 x 1,78	seal material NBR, series 40-41
254	(1)		o-ring 2-021-V747-75; 23,52 x 1,78	seal material FPM, series 40-41
254	(1)		o-ring 2-021-E540-80; 23,52 x 1,78	seal material EPR, series 40-41
254	(1)		o-ring 2-013-N552-90; 10,82 x 1,78	seal material NBR, series 42
254	(1)		o-ring 2-013-V747-75; 10,82 x 1,78	seal material FPM, series 42
254	(1)		o-ring 2-013-E540-80; 10,82 x 1,78	seal material EPR, series 42

pos.	qty	item number	description	remark
255	1		o-ring 3-912-N552-90; 23,47 x 2,95	seal material NBR
255	(1)		o-ring 3-912-V747-75; 23,47 x 2,95	seal material FPM
255	(1)		o-ring 3-912-E540-80; 23,47 x 2,95	seal material EPR
256	1		compensator spring LVDT	
257	1		hex. lock nut M 4 DIN 934 B	
258	1		feedback spool displacement feedback	series 40
258	(1)		lock nut M 4 DIN 1587	series 41
258	(1)		adapter LVDT armature	series 42
259	2		washer PS 4 x 8 x 1 DIN 988 ST2K60	

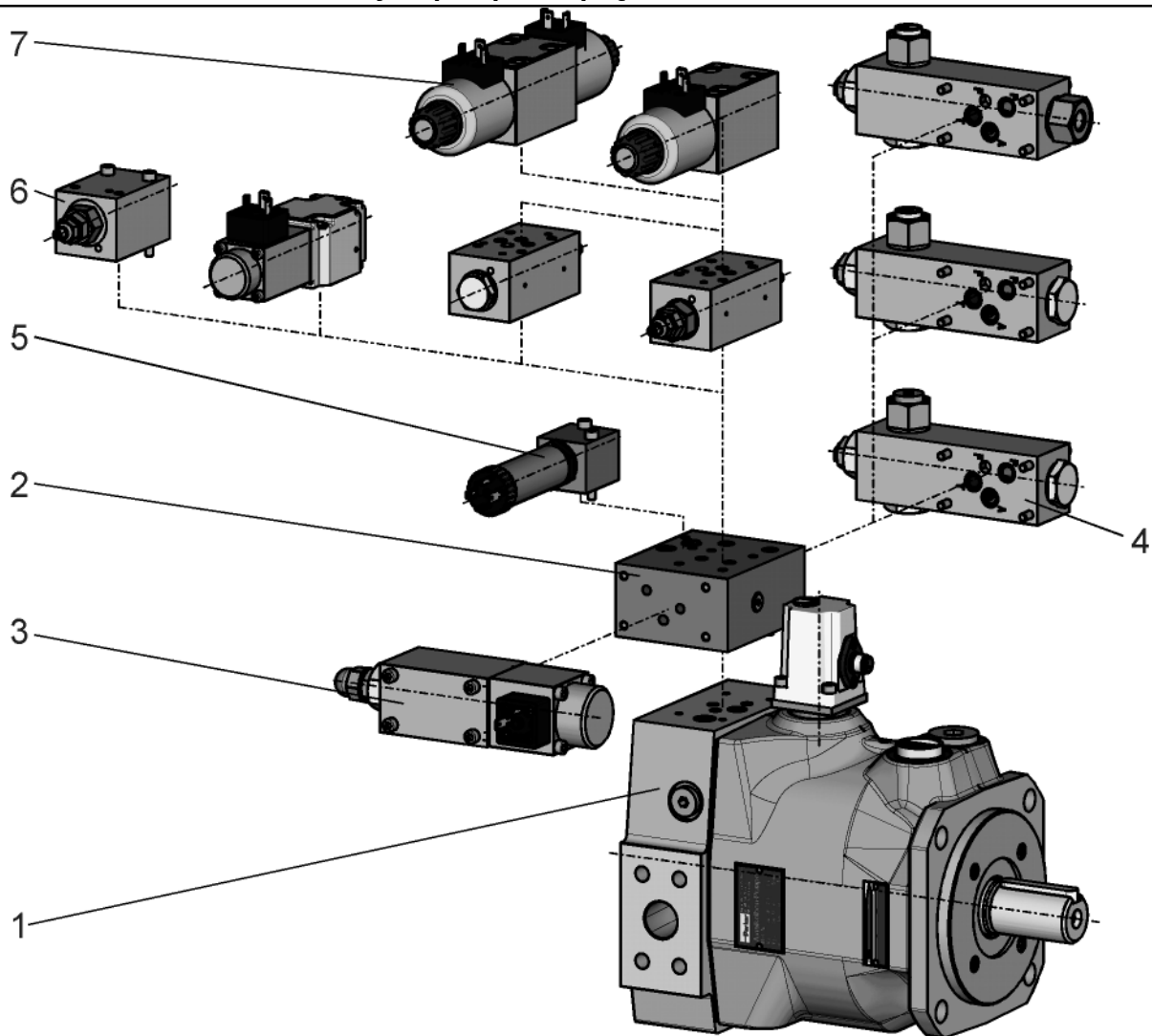
elbow manifold code PVACAUB, horizontal compensator mounting				
ordering code for replacement manifold				
PVCF		flow compensator		
A		for all frame sizes		
UB		elbow manifold for horizontal compensator mounting		
N		seal material NBR		
V		seal material FPM		
E		seal material EPR		
1		metric bolts		
3		UNC bolts		
		includes:		
				
pos.	qty	item number	description	remark
109	1		elbow manifold for horizontal comp. mounting, metric	threads code 1
109	(1)		elbow manifold for horizontal comp. mounting, UNC	threads code 3
111	4		o-ring 2-012-N552-90; 9,25 x 1,78	seal material NBR
111	(4)		o-ring 2-012-V747-75; 9,25 x 1,78	seal material FPM
111	(4)		o-ring 2-012-E540-80; 9,25 x 1,78	seal material EPR
128	4		port plug 5/16 - 24 UNF, NBR	seal material NBR
128	(4)		port plug 5/16 - 24 UNF, FPM	seal material FPM
128	(4)		port plug 5/16 - 24 UNF, EPR	seal material EPR
129	1		port plug 5/16 - 24 UNF, NBR	seals NBR, not with press. sensor
129	(1)		port plug 5/16 - 24 UNF, FPM	seals FPM, not with press. sensor
129	(1)		port plug 5/16 - 24 UNF, EPR	seals EPR, not with press. sensor
142	2		hex. head cap screw M 5 x 50 DIN 912, 12.9, SW 4	threads code 1
142	(2)		hex. head cap screw Nr. 10-24 UNC x 2"	threads code 3

Assembly of pump with p-Q-control, version FP*



pos.	qty	item number	description	remark
1	1	PV*	base pump with displacement feedback	
2			not applicable	
3	1	PVCFAP1*	displacement control stage, frame size 1 - 2	PV016 - PV046
3	(1)	PVCFCP1*	displacement control stage, frame size 3	PV063 - PV092
3	(1)	PVCFEP1*	displacement control stage, frame size 4 - 5	PV140 - PV270
4	1	PVCFAP2*	pressure control stage, standard, frame size 1 - 3	PV016 - PV092, code ...FPR, ...FPG
4	(1)	PVCFEP2*	pressure control stage, standard, frame size 4 - 5	PV140 - PV270, code ...FPR, ...FPG
4	(1)	PVCFAPS*	pressure control stage, with PVAPSE*, frame size 1 - 3	PV016 - PV092, code ...FPS, ...FPT
4	(1)	PVCFEPS*	pressure control stage, with PVAPSE*, frame size 4 - 5	PV140 - PV270, code ...FPS, ...FPT
4	(1)	PVCFAPP*	pressure control stage, with PVAPVE*, frame size 1 - 3	PV016 - PV092, code ...FPP, ...FPE
4	(1)	PVCFEPP*	pressure control stage, with PVAPVE*, frame size 4 - 5	PV140 - PV270, code ...FPP, ...FPE
5	1	PVACPS*	pressure sensor manapak, standard	codes ...FPG, ...FPT, ...FPE
6	1	PVAC1PP*S*	pressure pilot valve, manual, spindle and lock nut	accessory
6	(1)	PVACPPP*	proportional pressure pilot valve	codes ...FPD, ...FPG, ...FPT, ...FPE resp. as accessory
6	(1)	PVACZ1*	pressure pilot manapak, one pressure	accessory
6	(1)	PVACZ2*	pressure pilot manapak, two pressures	accessory
7	1	D1VW6K*	4/2-directional control valve for pressure selection	accessory
7	(1)	D1VW2C*	4/3-directional control valve for pressure selection	accessory
7	(1)	D1VW55C*	4/3-directional control valve for pressure selection	accessory

Assembly of pump with p-Q-control, version UP*



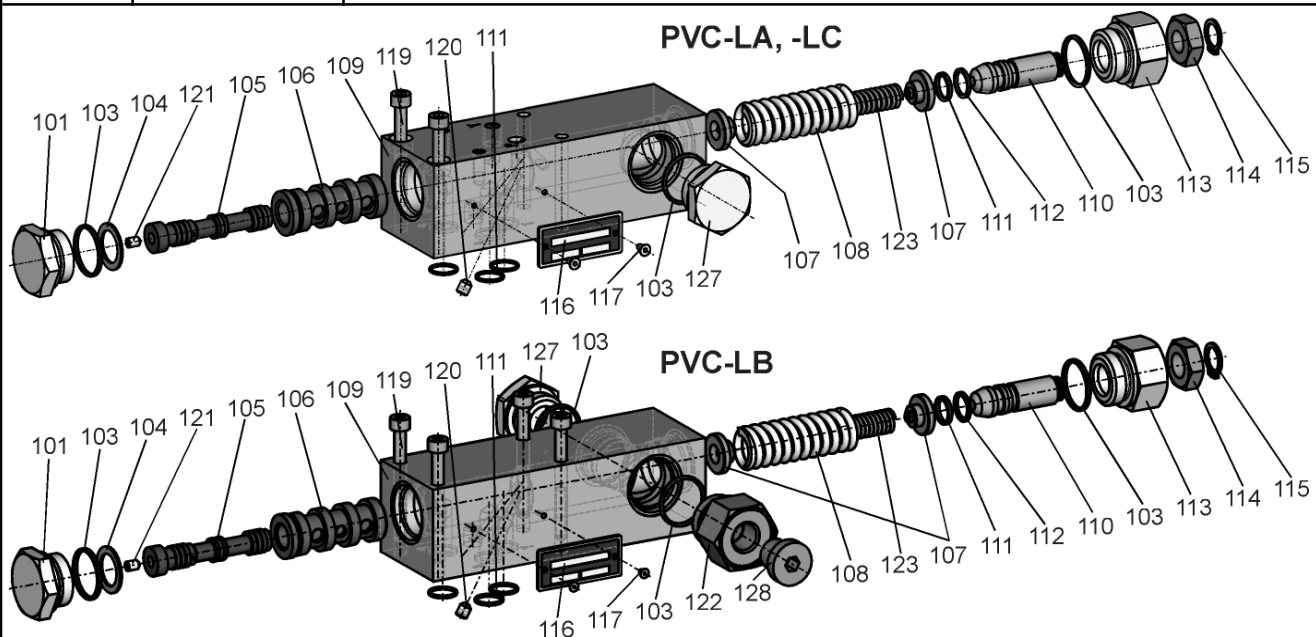
pos.	qty	item number	description	remark
1	1	PV*	base pump with displacement feedback	
2	1	PVCFAUB*	Umlenkblock	
3	1	PVCFAVP*	displacement control stage, frame size 1 - 2	PV016 - PV046
3	(1)	PVCFCPV*	displacement control stage, frame size 3	PV063 - PV092
3	(1)	PVCFEVP*	displacement control stage, frame size 4 - 5	PV140 - PV270
4	1	PVCFAU2*	pressure control stage, standard, frame size 1 - 2	PV016 - PV046, code ...UPR, ...UPG
4	(1)	PVCFCU2*	pressure control stage, standard, frame size 3	PV063 - PV092, code ...UPR, ...UPG
4	(1)	PVCFEU2*	pressure control stage, standard, frame size 4 - 5	PV140 - PV270, code ...UPR, ...UPG
4	(1)	PVCFAUS*	pressure control stage, with PVAPSE*, frame size 1 - 2	PV016 - PV046, code ...UPS, ...UPT
4	(1)	PVCFCUS*	pressure control stage, with PVAPSE*, frame size 3	PV063 - PV092, code ...UPS, ...UPT
4	(1)	PVCFEUS*	pressure control stage, with PVAPSE*, frame size 4 - 5	PV140 - PV270, code ...UPS, ...UPT
4	(1)	PVCFAUP*	pressure control stage, with PVAPVE*, frame size 1 - 2	PV016 - PV046, code ...UPP, ...UPE
4	(1)	PVCFCUP*	pressure control stage, with PVAPVE*, frame size 3	PV063 - PV092, code ...UPP, ...UPE
4	(1)	PVCFEUP*	pressure control stage, with PVAPVE*, frame size 4 - 5	PV140 - PV270, code ...UPP, ...UPE
5	1	PVACUS*	pressure sensor in body	codes ...UPG, ...UPT, ...UPE
6	1	PVAC1PU*S*	pressure pilot valve, manual, spindle plus lock nut	accessory
6	(1)	PVACPPU*	proportional pressure pilot valve	codes ...UPD, ...UPG, ...UPT, ...UPE resp. as accessory
6	(1)	PVACZ1*	pressure pilot manapak, one pressure	accessory
6	(1)	PVACZ2*	pressure pilot manapak, two pressures	accessory
7	1	D1VW6K*	4/2-directional control valve for pressure selection	accessory
7	(1)	D1VW2C*	4/2-directional control valve for pressure selection	accessory
7	(1)	D1VW55C*	4/3-directional control valve for pressure selection	accessory

Horse power compensator, code ...*LA, ...*LB, ...*LC

ordering code for replacement compensator:

PVCL	horse power compensator
A	for frame sizes BG1 and BG2, PV016 - PV046
C	for frame size BG3, PV063 - PV092
E	for frame sizes BG4 and BG5, PV140 - PV270
LA	standard version with topside interface NG6/D03
LB	standard version w/o topside interface, threaded pilot port for pressure pilot valve
LC	standard version with topside interface NG6/D03 (shipment of replacement compensator is w/o pilot valve)
N	seal material NBR
V	seal material FPM
E	seal material EPD
1	pilot port for codeLB: G 1/4 BSPP, metric bolts
3	pilot port for codeLB: 7/16-20 UNF, UNC bolts
7	pilot port for codeLB: M12x1,5 ISO 6149, UNC bolts
8	pilot port for codeLB: M12x1,5 ISO 6149, metric bolts

includes:



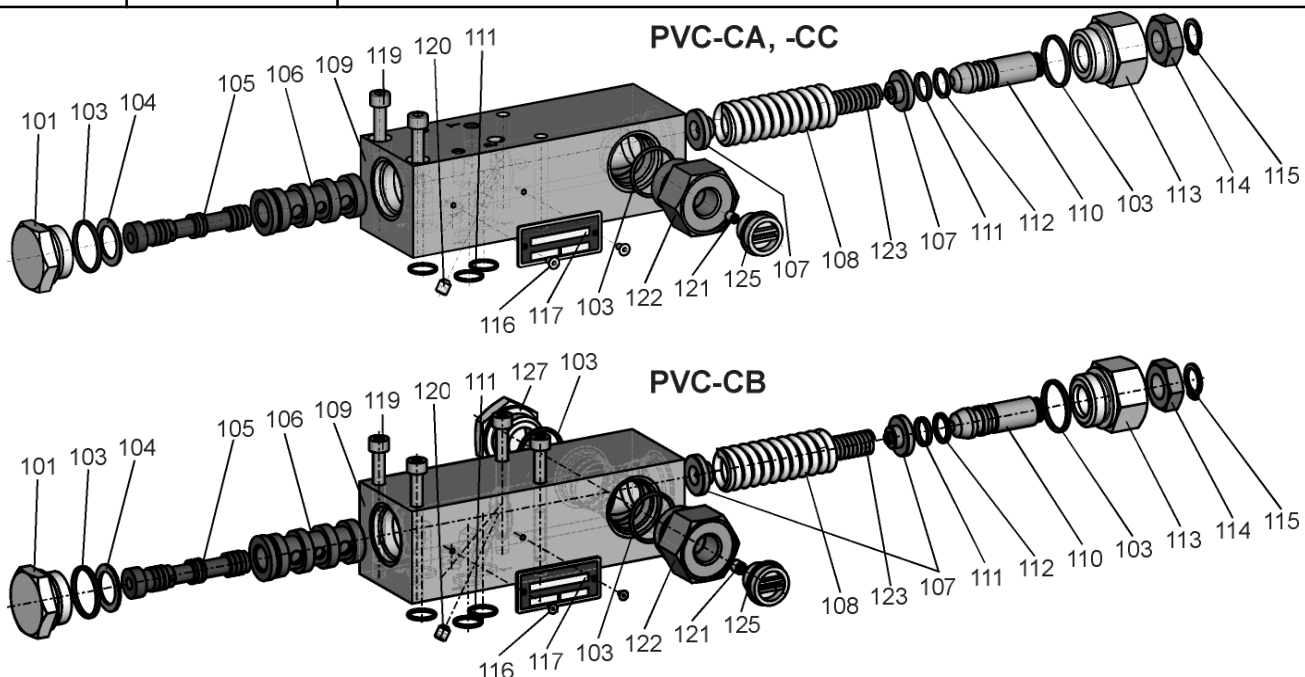
pos.	qty	item number	description	remark
101	1		port plug 7/8-20 UNEF, SW 27	
103	3		o-ring 3-910-N552-90; 19,18 x 2,46	seal material NBR
103	(3)		o-ring 3-910-V747-75; 19,18 x 2,46	seal material FPM
103	(3)		o-ring 3-910-E540-80; 19,18 x 2,46	seal material EPD
103	(4)		o-ring 3-910-N552-90; 19,18 x 2,46	seal material NBR, code *LB
103	(4)		o-ring 3-910-V747-75; 19,18 x 2,46	seal material FPM, code *LB
103	(4)		o-ring 3-910-E540-80; 19,18 x 2,46	seal material EPD, code *LB
104	1		PS 14 X 20 X 1.2 DIN 988 ST	
105	1		control spool R compensator	
106	1		control sleeve, standard	PV016 - PV092
106	(1)		control sleeve, high flow	PV140 - PV270
107	2		spring washer	
108	1		compens. spring 70 - 350 bar and R- and F-comp.	
109	1		compensator body LA compensator, metric	codes *LA and *LC, Gew. 1 and 8
109	1		compensator body LA compensator, SAE/UNC	codes *LA and *LC, Gew. 3 and 7
109	(1)		compensator body LB compensator	code *LB
110	1		adjustment spindle compensator. int. hex SW 6	
111	4		o-ring 2-012-N552-90; 9,25 x 1,78	seal material NBR
111	(4)		o-ring 2-012-V747-75; 9,25 x 1,78	seal material FPM
111	(4)		o-ring 2-012-E540-80; 9,25 x 1,78	seal material EPD
112	1		back up ring 8-012-N300-90; 9,91 x 1,35	seal material NBR
112	(1)		back up ring 8-012-V709-90; 9,91 x 1,35	seal material FPM
112	(1)		back up ring 8-012-E652-90; 9,91 x 1,35	seal material EPD

pos.	qty	item number	description	remark
113	1		adjustment plug 7/8-20 UNEF - M12 x 1; SW 27	
114	1		lock nut M12 x 1; DIN 936; SW 19	
115	1		snap ring for shafts DIN 471, 10 x 1	
116	1		name plate	
117	2		rivet, 1.9 X 3.2	
119	4		hex. head cap screw M 5 x 50 DIN 912, 12.9, SW 4	code *LB, threads 1 and 8
119	(4)		hex. head cap screw Nr. 10-24 UNC x 2"	code *LB, threads 3 and 7
119	(2)		hex. head cap screw M 5 x 45 DIN 912, 12.9, SW 4	code *LA and *LC, Gew. 1 and 8
119	(2)		hex. head cap screw Nr. 10-24 UNC x 1 3/4"	code *LA and *LC, Gew. 3 and 7
120	1		orifice Ø 0,6; M5 x 6; internal hex. SW 2,5	PV016 - PV046
120	(1)		orifice Ø 1,0; M5 x 6; internal hex. SW 2,5	PV063 - PV092
120	(1)		orifice Ø 1,2; M5 x 6; internal hex. SW 2,5	PV140 - PV270
121	1		orifice Ø 0,8; M4 x 5; internal hex. SW 2	
122	(1)		pilot port plug 7/8-20 UNEF - G1/4	code *LB, threads 1
122	(1)		pilot port plug 7/8-20 UNEF - 7/16 - 20 UNF	code *LB, threads 3
122	(1)		pilot port plug 7/8-20 UNEF - M12 x 1,5 ISO6149	code *LB, threads 7, 8
123	1		compensator spring 2 for R- and F-comp.	
127	1		port plug 7/8-20 UNEF, SW 27	
128	1		pipe plug VSTI R1/4" ED NBR	seals NBR, code *LB, thread 1
128	(1)		pipe plug VSTI R1/4" ED FPM	seals FPM, code *LB, thread 1
128	(1)		pipe plug VSTI R1/4" ED EPR	seals EPR, code *LB, thread 1
128	(1)		pipe plug 4HP50NS-NBR, 7/16-20 UNF	seals NBR, code *LB, thread 3
128	(1)		pipe plug 4HP50NS-FPM, 7/16-20 UNF	seals FPM, code *LB, thread 3
128	(1)		pipe plug 4HP50NS-EPR, 7/16-20 UNF	seals EPR, code *LB, thread 3
128	(1)		pipe plug VSTI-12 x 1,5-OR-A3C ISO 6149 NBR	seals NBR, code *LB, thread 7, 8
128	(1)		pipe plug VSTI-12 x 1,5-OR-A3C ISO 6149 FPM	seals FPM, code *LB, thread 7, 8
128	(1)		pipe plug VSTI-12 x 1,5-OR-A3C ISO 6149 EPR	seals EPR, code *LB, thread 7, 8

horse power compensator with load sensing, code ...*CA, ...*CB, ...*CC

ordering code for replacement compensator:

PVCL	horse power compensator
A	for frame sizes BG1 and BG2, PV016 - PV046
C	for frame size BG3, PV063 - PV092
E	for frame sizes BG4 and BG5, PV140 - PV270
CA	standard version with topside interface NG6/D03
CB	standard version w/o topside interface, threaded pilot port for pressure pilot valve
CC	standard version with topside interface NG6/D03 (shipment of replacement compensator is w/o pilot valve)
N	seal material NBR
V	seal material FPM
E	seal material EPD
1	pilot port for codeCB: G 1/4 BSPP, metric bolts
3	pilot port for codeCB: 7/16-20 UNF, UNC bolts
7	pilot port for codeCB: M12x1,5 ISO 6149, UNC bolts
8	pilot port for codeCB: M12x1,5 ISO 6149, metric bolts
	includes:



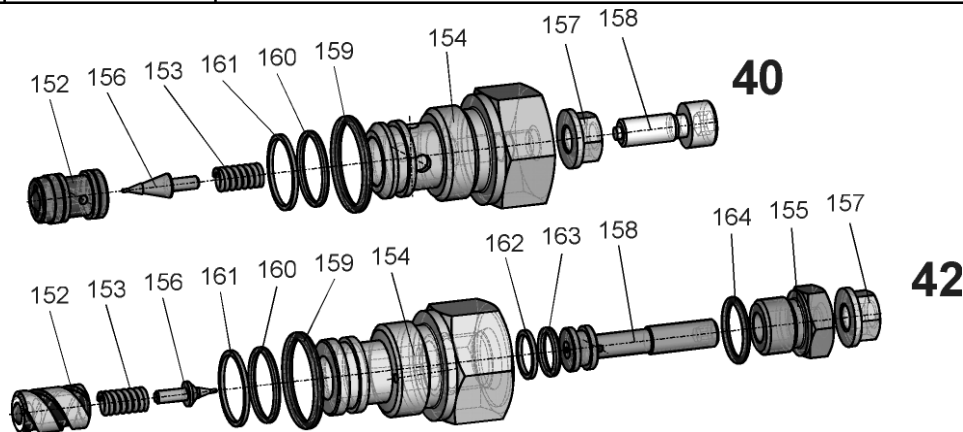
pos.	qty	item number	description	remark
101	1		port plug 7/8-20 UNEF, SW 27	
103	3		o-ring 3-910-N552-90; 19,18 x 2,46	seal material NBR
103	(3)		o-ring 3-910-V747-75; 19,18 x 2,46	seal material FPM
103	(3)		o-ring 3-910-E540-80; 19,18 x 2,46	seal material EPD
103	(4)		o-ring 3-910-N552-90; 19,18 x 2,46	seal material NBR, code *CB
103	(4)		o-ring 3-910-V747-75; 19,18 x 2,46	seal material FPM, code *CB
103	(4)		o-ring 3-910-E540-80; 19,18 x 2,46	seal material EPD, code *CB
104	1		PS 14 X 20 X 1.2 DIN 988 ST	
105	1		control spool F-comp.	
106	1		control sleeve, standard	PV016 - PV092
106	(1)		control sleeve, high flow	PV140 - PV270
107	2		spring washer	
108	1		compens. spring 70 - 350 bar and R- and F-comp.	
109	1		compensator body CA compensator, metric	code *CA and *CC, Gew. 1 and 8
109	(1)		compensator body CA compensator, SAE/UNC	code *CA and *CC, Gew. 3 and 7
109	(1)		compensator body CB compensator	code *CB
110	1		adjustment spindle compensator. int. hex SW 6	
111	4		o-ring 2-012-N552-90; 9,25 x 1,78	seal material NBR
111	(4)		o-ring 2-012-V747-75; 9,25 x 1,78	seal material FPM
111	(4)		o-ring 2-012-E540-80; 9,25 x 1,78	seal material EPD
112	1		back up ring 8-012-N300-90; 9,91 x 1,35	seal material NBR
112	(1)		back up ring 8-012-V709-90; 9,91 x 1,35	seal material FPM
112	(1)		back up ring 8-012-E652-90; 9,91 x 1,35	seal material EPD

pos.	qty	item number	description	remark
113	1		adjustment plug 7/8-20 UNEF - M12 x 1; SW 27	
114	1		lock nut M12 x 1; DIN 936; SW 19	
115	1		snap ring for shafts DIN 471, 10 x 1	
116	1		name plate	
117	2		rivet, 1.9 X 3.2	
119	4		hex. head cap screw M 5 x 50 DIN 912, 12.9, SW 4	code *CB, threads 1 and 8
119	(4)		hex. head cap screw Nr. 10-24 UNC x 2"	code *CB, threads 3 and 7
119	(2)		hex. head cap screw M 5 x 45 DIN 912, 12.9, SW 4	code *CA and *CC, Gew. 1 and 8
119	(2)		hex. head cap screw Nr. 10-24 UNC x 1 3/4"	code *CA and *CC, Gew. 3 and 7
120	1		orifice Ø 0,6; M5 x 6; internal hex. SW 2,5	PV016 - PV046
120	(1)		orifice Ø 1,0; M5 x 6; internal hex. SW 2,5	PV063 - PV092
120	(1)		orifice Ø 1,2; M5 x 6; internal hex. SW 2,5	PV140 - PV270
121	1		orifice Ø 0,8; M5 x 6; internal hex. SW 2,5	
122	1		pilot port plug 7/8-20 UNEF - G1/4	threads 1
122	(1)		pilot port plug 7/8-20 UNEF - 7/16 - 20 UNF	threads 3
122	(1)		pilot port plug 7/8-20 UNEF - M12 x 1,5 ISO6149	threads 7 and 8
123	1		compensator spring 2 for R- and F-comp.	
125	1		protecting plug- G1/4	threads 1
125	(1)		protecting plug- 7/16 - 20 UNF	threads 3
125	(1)		protecting plug- M12 x 1,5 ISO6149	threads 7 and 8
127	1		port plug 7/8-20 UNEF, SW 27	code *CB

Feedback cartridge horse power compensator, code RK-PV000LC**

ordering code for replacement cartridge

RK-	replacement kit
PV000	for all frame sizes
LC	horsepower compensator feedback cartridge
N	seal material NBR
V	seal material FPM
E	seal material EPD
40	compensator design series 40
42	compensator design series 42
	includes:



pos.	qty	item number	description	remark
152	1		seat spool, horse power compensator	series 40
152	(1)		spring guide, horse power compensator	series 42
153	1		spring for horse power compensator	
154	1		feedback cartridge body for horse power comp.	series 40
154	(1)		feedback cartr. body for horse power comp., ser. 42	series 42
155	1		adjustment plug, horse power comp.	series 42
156	1		valve poppet, horse power comp.	series 40
156	(1)		valve poppet, horse power comp., series 42	series 42
157	1		lock nut M 8 x 1, Seal Lock	
158	1		adjustment spindle feedback cartridge	series 40
158	(1)		adjustment spindle feedback cartridge, series 42	series 42
159	1		o-ring 3-912-N552-90; 23,47 x 2,95	seal material NBR
159	(1)		o-ring 3-912-V747-75; 23,47 x 2,95	seal material FPM
159	(1)		o-ring 3-912-E540-80; 23,47 x 2,95	seal material EPD
160	1		o-ring 2-018-N552-90; 18,77 x 1,78	seal material NBR
160	(1)		o-ring 2-018-V747-75; 18,77 x 1,78	seal material FPM
160	(1)		o-ring 2-018-E540-80; 18,77 x 1,78	seal material EPD
161	1		back up ring 8-018-N300-90; 19,12 x 1,35	seal material NBR
161	(1)		back up ring 8-018-V709-90; 19,12 x 1,35	seal material FPM
161	(1)		back up ring 8-018-E652-90; 19,12 x 1,35	seal material EPD
162	1		back up ring 8-012-N300-90; 9,91 x 1,35	seal material NBR, series 42
162	(1)		back up ring 8-012-V709-90; 9,91 x 1,35	seal material FPM, series 42
162	(1)		back up ring 8-012-E652-90; 9,91 x 1,35	seal material EPD, series 42
163	1		o-ring 2-012-N552-90; 9,25 x 1,78	seal material NBR, series 42
163	(1)		o-ring 2-012-V747-75; 9,25 x 1,78	seal material FPM, series 42
163	(1)		o-ring 2-012-E540-80; 9,25 x 1,78	seal material EPD, series 42
164	1		o-ring 6-348-N552-90; 13,40 x 2,10	seal material NBR, series 42
164	(1)		o-ring 6-348-V747-75; 13,40 x 2,10	seal material FPM, series 42
164	(1)		o-ring 6-348-E540-80; 13,40 x 2,10	seal material EPD, series 42