

Parts Manual

V40E Series

Swash-type Plate Axial Piston
Variable Displacement Pump

Contents

V40E Series

1.General Information	02
2.Functional Description	02
3.Product Parts	03
3.1 V40E-32*	-
3.2 V40E-47	03
3.3 V40E-60*	-
3.4 V40E-75*	-
3.5 V40E-100*	-
3.6 V40E-135*	-

Note: "*" indicates under production.

1 General information

This manual lists parts related information for the full range of V40E swash plate axial piston pumps. The main purpose of this manual is to better serve our customers by enabling them to quickly locate parts and find Hengli Genuine Parts.

If you require more detailed information on parts, please contact
Jiangsu Hengli Hydraulic Co.,Ltd.

www.henglihydraulics.com

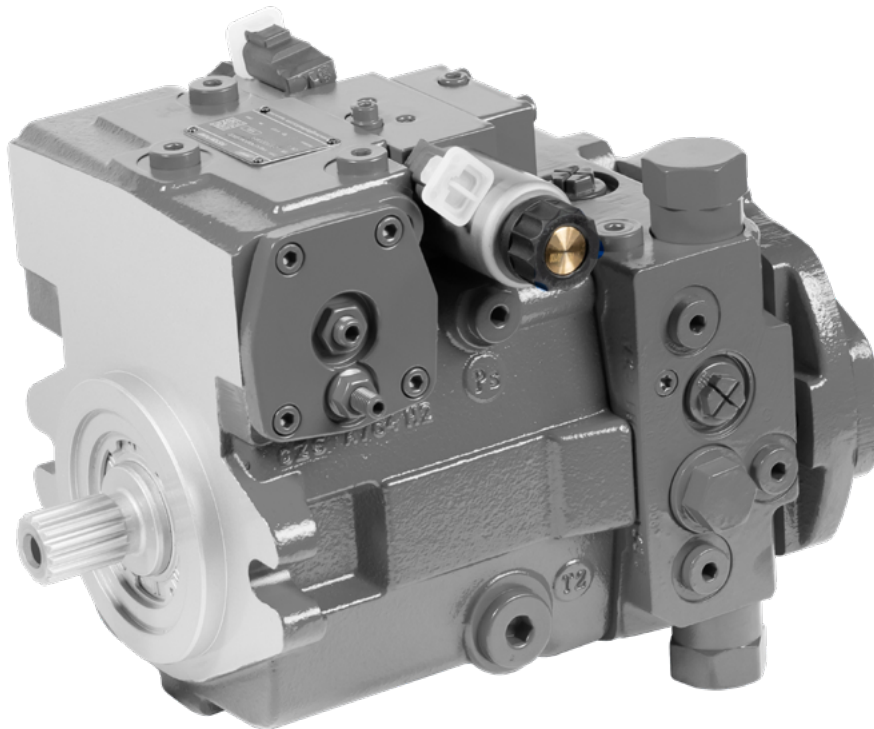
or consult with the relevant sales engineer.

2 Functional Description

- Based on the information on the nameplate attached to the pump, the basic configuration of the pump can be determined, e.g.: V40E47E1D/RJB31F2B15D-2
For specific information, please refer to the Hengli catalogue selection to find the corresponding parts.
- With the nameplate information, you can quickly find information such as shaft, housing, bearing and other component material numbers in this manual.

3 V40E47 Product Parts

3.2 V40E47

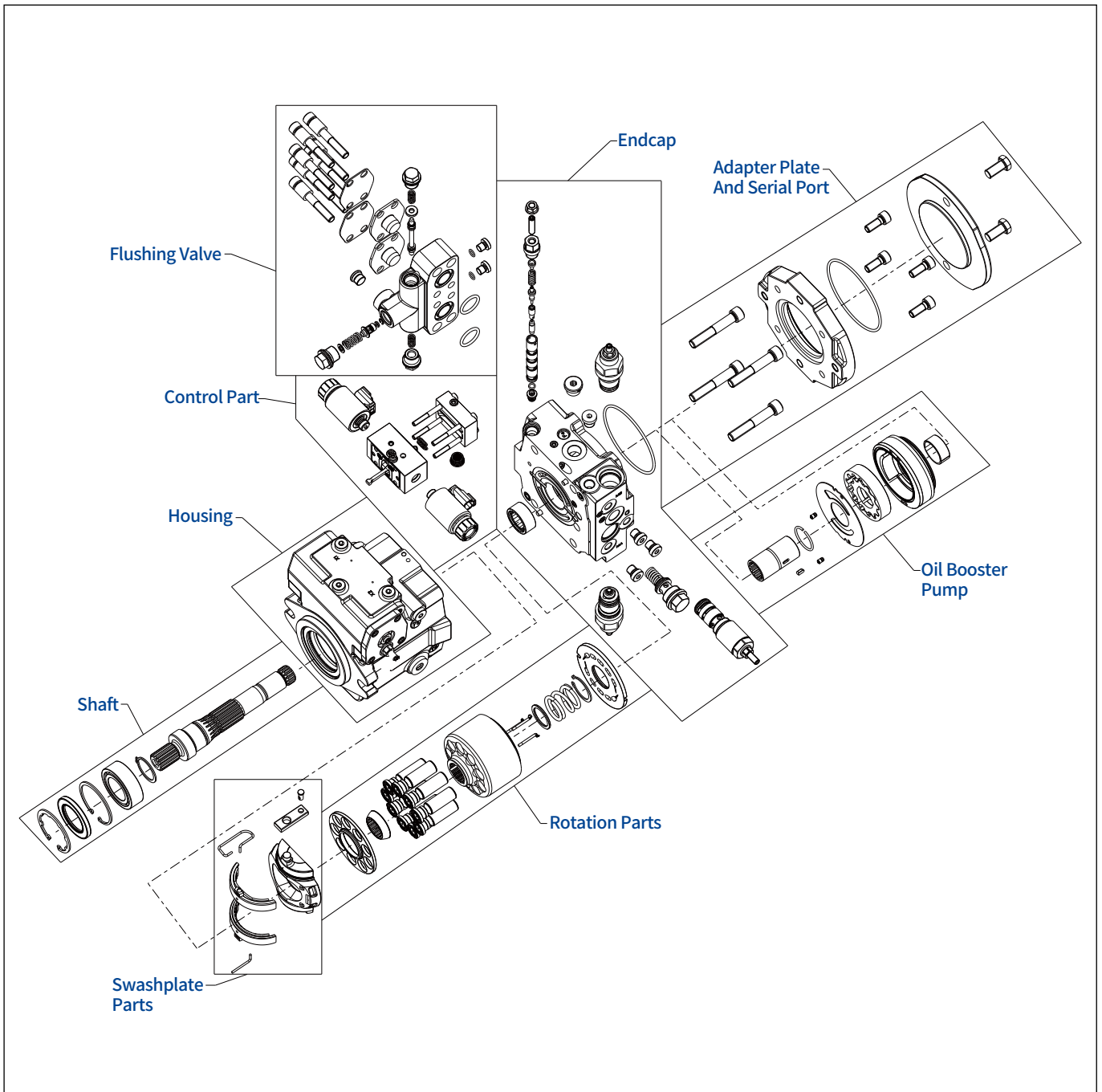


V40E-47

3.2 V40E47

·Take E1 with electric proportional displacement control as an example

V40E47 Integral Parts



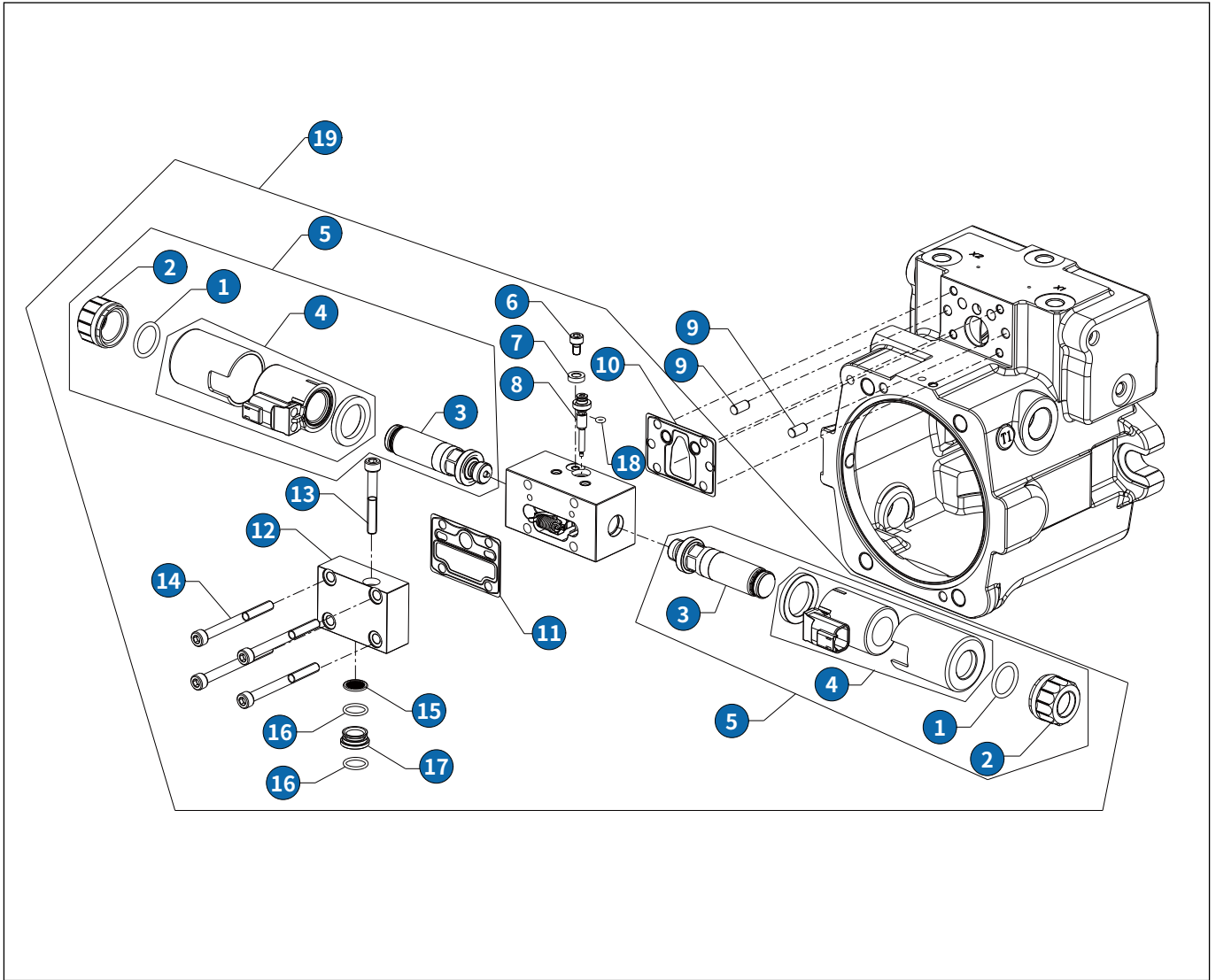
3.2 V40E47

V40E47 Parts Catalogue

3.2.1 Control Mode Parts	
Control mode selection E1/E2	06-07
Control mode selection E3/E4	08-09
Control mode selection H1	10-11
Control mode selection H9	12-13
Control mode selection H2	14-15
3.2.2 DA Control Valve Parts	
DA control selection A	16
DA control selection B	17
3.2.3 Pressure Cut-off Parts	
Pressure cut-off parts selection D	18-19
3.2.4 Rotation+Swashplate	
Rotation+swashplate selection R/L	20-21
3.2.5 Oil Port Specifications and Sealing Parts	
Specifications and sealing selection J	22-23
Specifications and sealing selection K	24-25
3.2.6 Shaft Parts	
Shaft parts selection B3/B4	26-27
3.2.7 Oil Booster Pump Parts	
Oil booster pump selection F0/F2	28-29
3.2.8 Relief Valve Parts	
Relief valve parts selection 3/5	30-31
3.2.9 Pressure Oil Filter Screw Plug Parts	
Pressure oil filter screw plug selection Blank/D	32-33
3.2.10 Flushing Valve Parts	
Flushing valve parts selection 7/2	34-35
3.2.11 Piston Parts	
Piston parts	36-37
3.2.12 Low Pressure Valve Parts	
Low pressure valve parts	38
3.2.13 Coupling Sleeve Selection Table	
Coupling sleeve selection table	39
3.2.14 Adapter Plate Selection Table	
Adapter plate selection table	40

3.2.1 V40E47 Cotrol Mode Parts

• Order code E1/E2: Proportional control



3.2.1 V40E47 Cotrol Mode Parts

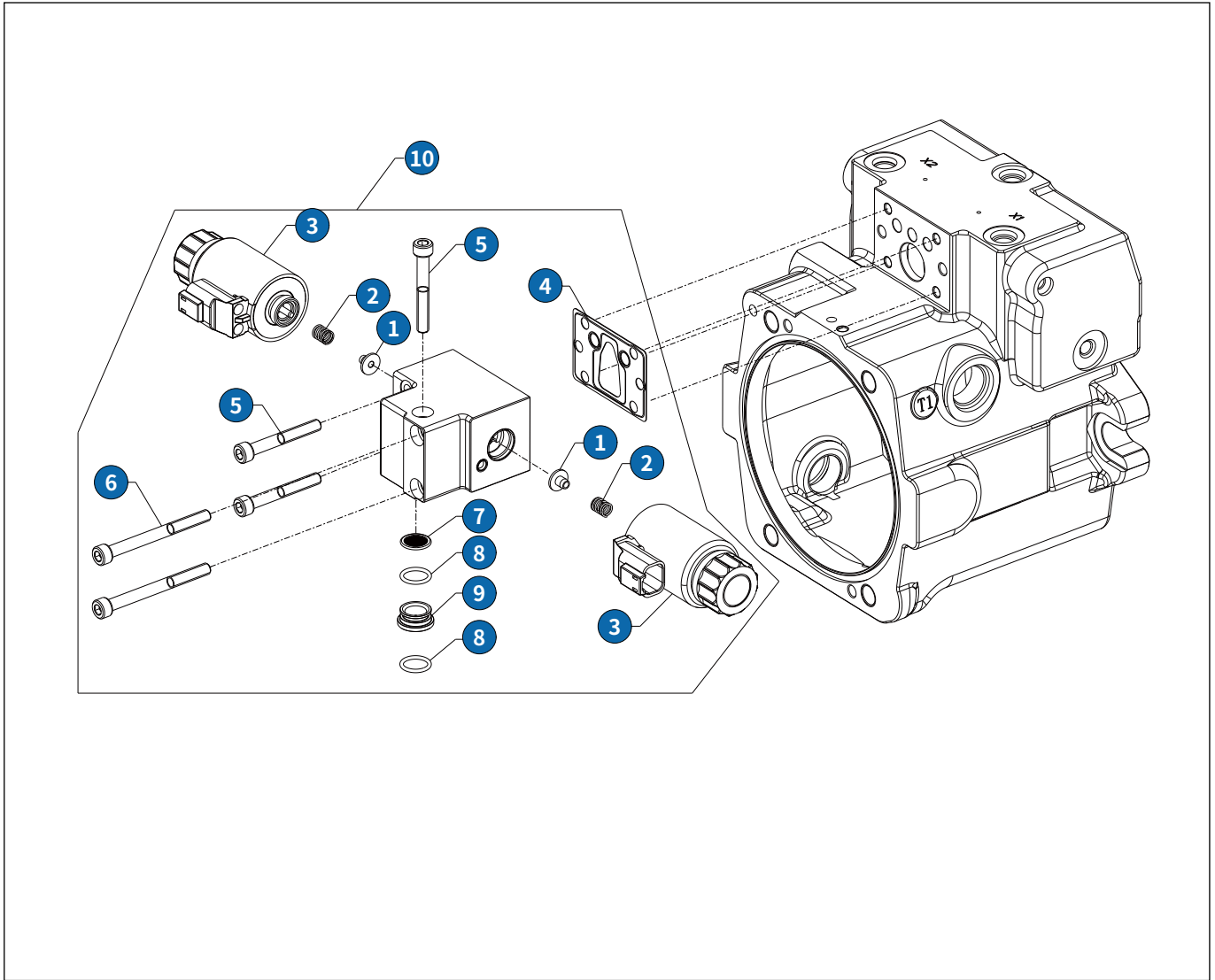
Order code: E1/E2

Serial No.	Part Name	Specification	Order No.	QTY.per kit	Drawing No.
1	O-ring	φ18.72*2.62	110000110022	2	OR2-116-N6
2	Lock nut	M18*1.5*20	210000427176	2	EP37-00000C
3	Magnetic core tube	1923M14-01	210000463000	2	1923M14-01
4	E1: Electromagnetic coil	EP37-K7-DC12V-R5.7-130	210000601843	2	EP37-K7-DC12V-R5.7-130
	E2: Electromagnetic coil	EP37-K7-DC24V-R23.5-065	210000601867	2	EP37-K7-DC24V-R23.5-065
5	E1: Proportional solenoid	EP37-14M12K7	210000423196	2	EP37-14M12K7
	E2: Proportional solenoid	EP37-14M24K7-02	210000473038	2	EP37-14M24K7-02
6	Hexagon socket head cap screw	M5*8	210000206388	1	GB/T 70.1
7	Gasket	HP4VG175-060008	210000301984	1	HP4VG175-060008
8	Eccentric adjustment rod	HP4VG60-060005	210000378601	1	HP4VG60-060005
9	Locating pin	φ6*12	210000299773	2	HLPV80-050003
10	Sealing gasket	HP4VG60-060007	210000460542	1	HP4VG60-060007
11	Sealing gasket	HP4VG60-060006	210000460540	1	HP4VG60-060006
12	Cover plate	HP4VG60-060002	210000378641	1	HP4VG60-060002
13	Hexagon socket head cap screw	M6*45	210000206184	1	GB/T 70.1
14	Hexagon socket head cap screw	M6*65	210000206189	4	GB/T 70.1
15	Filter screen	HP4VG60-06000A	210000377551	1	HP4VG60-06000A
16	O-ring	φ12.42*1.78	210000294313	2	014
17	Filter housing	HP4VG60-060008	210000378657	1	HP4VG60-060008
18	O-ring	φ2.9*1.78	210000422730	1	2-006
19	E1: Control valve	HP4VGT45-080000-12V	210000509850	1	HP4VGT45-080000-12V
	E2: Control valve	HP4VGT45-080000-24V	210000477890	1	HP4VGT45-080000-24V

Note: The solenoid coils and control valves for codes E1 and E2 are different.

3.2.1 V40E47 Cotrol Mode Parts

· Order code E3/E4: Electrical two-point control



3.2.1 V40E47 Cotrol Mode Parts

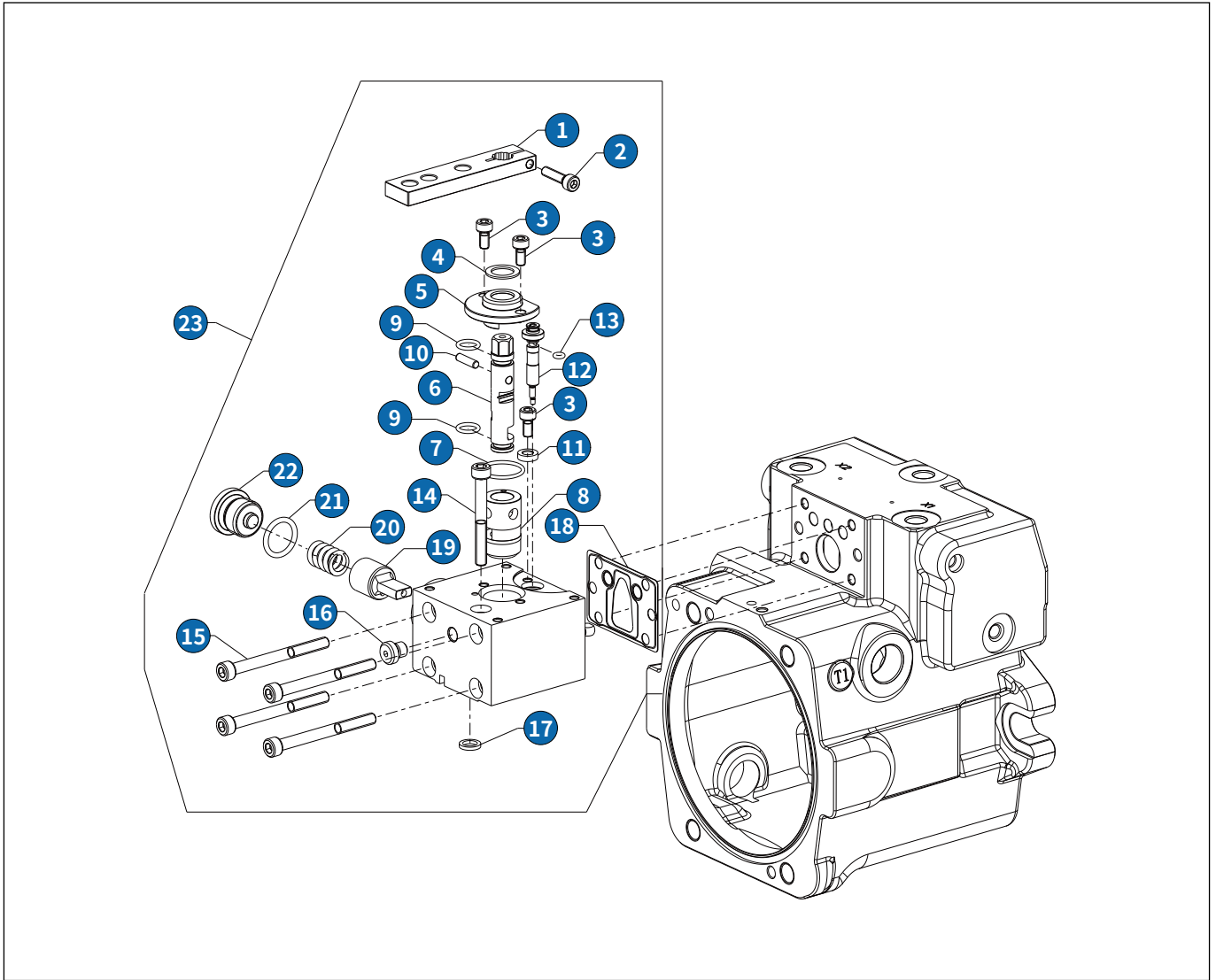
Order code: E3/E4

Serial No.	Part Name	Specification	Order No.	QTY.per kit	Drawing No.
1	Spring seat	HP4VG45-090002	210000745596	2	HP4VG45-090002
2	Spring	HP4VG45-090001	210000741562	2	HP4VG45-090001
3	E3: Solenoid	MFZ12-40YC(A09)DC12V	210000951258	2	MFZ12-40YC(A09)DC12V
	E4: Solenoid	ES37-16M24K7-26W	210000759867	2	ES37-16M24K7-26W
4	Sealing gasket	HP4VG60-060007	210000460542	1	HP4VG60-060007
5	Hexagon socket head cap screw	M6*45	210000206184	2	GB/T 70.1
6	Hexagon socket head cap screw	M6*65	210000206189	2	GB/T 70.1
7	Filter screen	HP4VG60-06000A	210000377551	1	HP4VG60-06000A
8	O-ring	φ12.42*1.78	110000110026	2	OR2-014-F5
9	Filter screen holder	HP4VG60-060008	210000378657	1	HP4VG60-060008
10	E3: Control valve	V40E47-06E0000-01	210000862820	1	V40E47-06E0000-01
	E4: Control valve	HP4VG45-090000	210000754035	1	HP4VG45-090000

Note: The solenoids and control valves for codes E3 and E4 are different.

3.2.1 V40E47 Cotrol Mode Parts

· Order code H1: Mechanical servo control



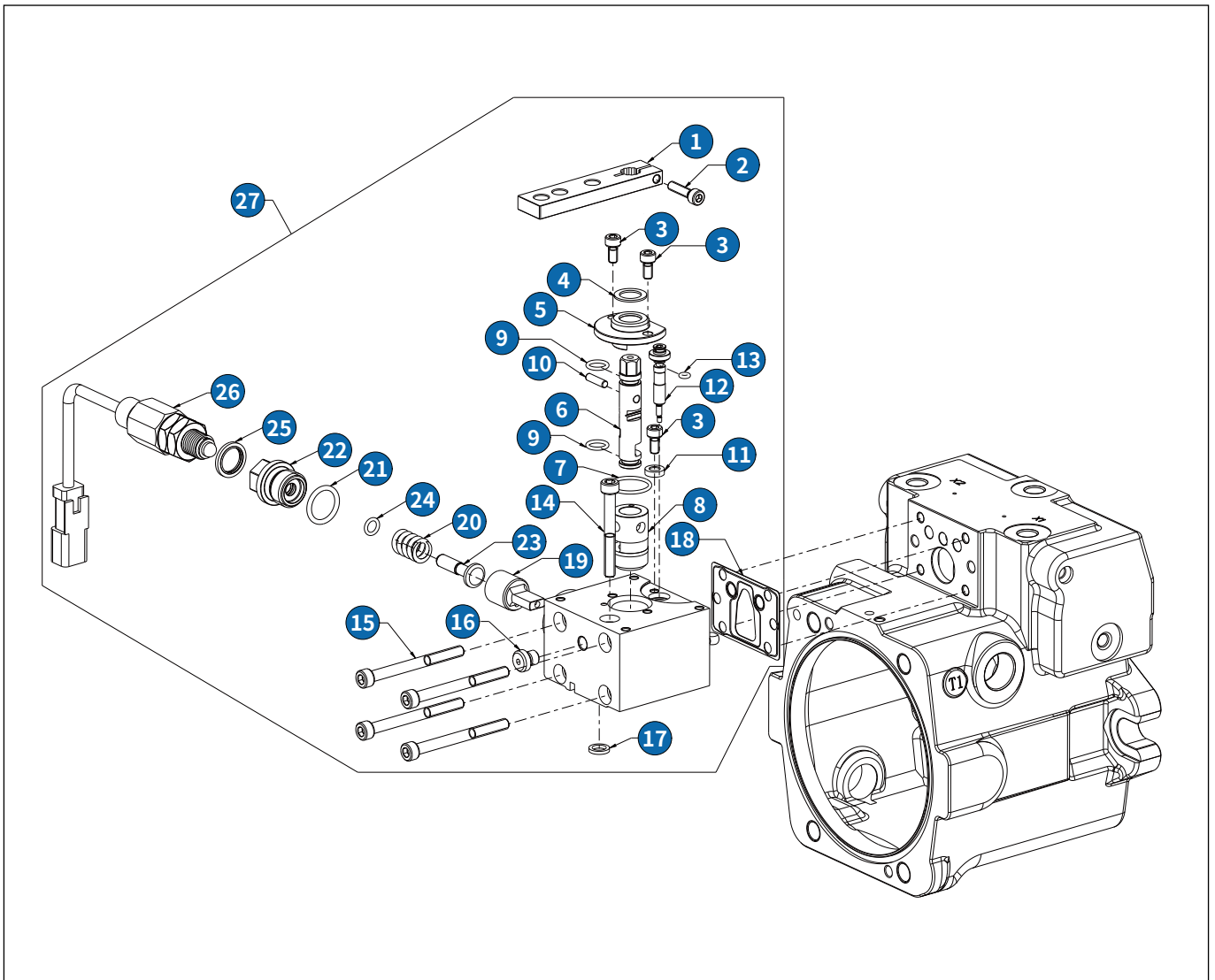
3.2.1 V40E47 Control Mode Parts

Order code: H1

Serial No.	Part Name	Specification	Order No.	QTY.per kit	Drawing No.
1	Pull rod	HP21VG45-080004	210000553631	1	HP21VG45-080004
2	Hexagon socket head cap screw	M5*20	210000206156	1	GB/T 70.1
3	Hexagon socket head cap screw	M5*10	210000206152	3	GB/T 70.1
4	Gasket	HP4VG75-080009	210000468888	1	HP4VG75-080009
5	Stop block	HP4VG75-080008	210000489564	1	HP4VG75-080008
6	Spool	HP4VG75-080004	210000627268	1	HP4VG75-080004
7	O-ring	φ20.35*1.78	210000290201	1	2-019
8	Valve sleeve	HP4VG75-080003	210000468742	1	HP4VG75-080003
9	O-ring	φ9.25*1.78	110000060607	2	OR2-012-N7
10	Pin	HP4VG75-08000A	210000468879	1	HP4VG75-08000A
11	Gasket	HP4VG175-060008	210000301984	1	HP4VG175-060008
12	Adjustment rod	HP4VG75-08000B-X	210000540460	1	HP4VG75-08000B-X
13	O-ring	φ2.9*1.78	210000422730	1	2-006
14	Hexagon socket head cap screw	M6*50	210000206185	1	GB/T 70.1
15	Hexagon socket head cap screw	M6*65	210000206189	4	GB/T 70.1
16	Hexagon socket plug	M8*1	210000379358	1	ISO 9974-4
17	Rectangular ring	φ11.4*φ7.8*1.8	110000078773	1	QT-23-02-020-002-A
18	Sealing gasket	HP4VG60-060007	210000460542	1	HP4VG60-060007
19	Spring seat	HP4VG75-080002	210000489563	1	HP4VG75-080002
20	Spring	11.3/2.5*22.5/4	210000467980	1	HP4VG75-080006
21	O-ring	φ17.12*2.62	110000053275	1	OR2621712
22	Hexagon socket plug	V40E100-0600001	210001054496	1	V40E100-0600001
23	Control valve	V40E47-06H0000-01	210000989059	1	V40E47-06H0000-01

3.2.1 V40E47 Cotrol Mode Parts

• Order code H9: Mechanical servo + Center position switch



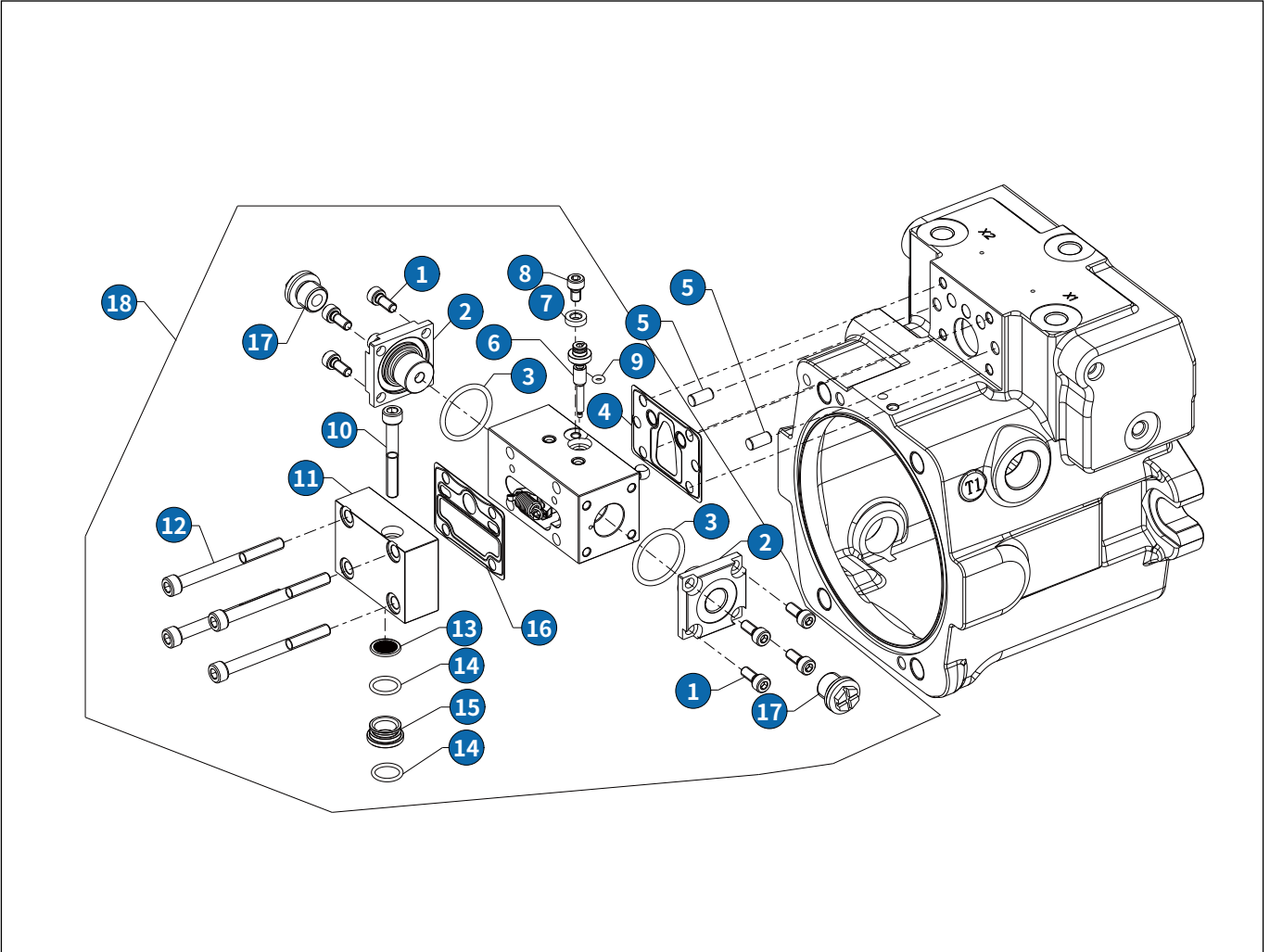
3.2.1 V40E47 Cotrol Mode Parts

Order code: H9

Serial No.	Part Name	Specification	Order No.	QTY.per kit	Drawing No.
1	Pull rod	HP21VG45-080004	210000553631	1	HP21VG45-080004
2	Hexagon socket head cap screw	M5*20	210000206156	1	GB/T 70.1
3	Hexagon socket head cap screw	M5*10	210000206152	3	GB/T 70.1
4	gasket	HP4VG75-080009	210000468888	1	HP4VG75-080009
5	Limit block	HP4VG75-080008	210000489564	1	HP4VG75-080008
6	Spool	HP4VG75-080004	210000627268	1	HP4VG75-080004
7	O-ring	φ20.35*1.78	210000290201	1	2-019
8	Valve sleeve	HP4VG75-080003	210000468742	1	HP4VG75-080003
9	O-ring	φ9.25*1.78	110000060607	2	OR2-012-N7
10	Pin	HP4VG75-08000A	210000468879	1	HP4VG75-08000A
11	gasket	HP4VG175-060008	210000301984	1	HP4VG175-060008
12	Adjustment rod	HP4VG75-08000B-X	210000540460	1	HP4VG75-08000B-X
13	O-ring	φ2.9*1.78	210000422730	1	2-006
14	Hexagon socket head cap screw	M6*50	210000206185	1	GB/T 70.1
15	Hexagon socket head cap screw	M6*65	210000206189	4	GB/T 70.1
16	Hexagon socket plug	M8*1	210000379358	1	ISO 9974-4
17	Rectangular ring	φ11.4*φ7.8*1.8	110000078773	1	QT-23-02-020-002-A
18	Sealing gasket	HP4VG60-060007	210000460542	1	HP4VG60-060007
19	Spring seat	HP4VG75-080002	210000489563	1	HP4VG75-080002
20	Spring	11.3/2.5*22.5/4	210000467980	1	HP4VG75-080006
21	O-ring	φ17.12*2.62	110000053275	1	OR2621712
22	Plug	HP4VG75-080007	210000468885	1	HP4VG75-080007
23	Push rod	HP4VG75-08000D	210000468891	1	HP4VG75-08000D
24	O-ring	φ6.7*1.8	110000051270	1	General purpose
25	Composite sealing gasket	φ14	210000270985	1	JB 982
26	Limit switch	JK942C normally closed-160	210001032448	1	JK942C normally closed-160
27	Control valve	V40E47-06H0000-03	210000994543	1	V40E47-06H0000-03

3.2.1 V40E47 Cotrol Mode Parts

• Order code H2: Hydraulic pilot proportional control



3.2.1 V40E47 Control Mode Parts

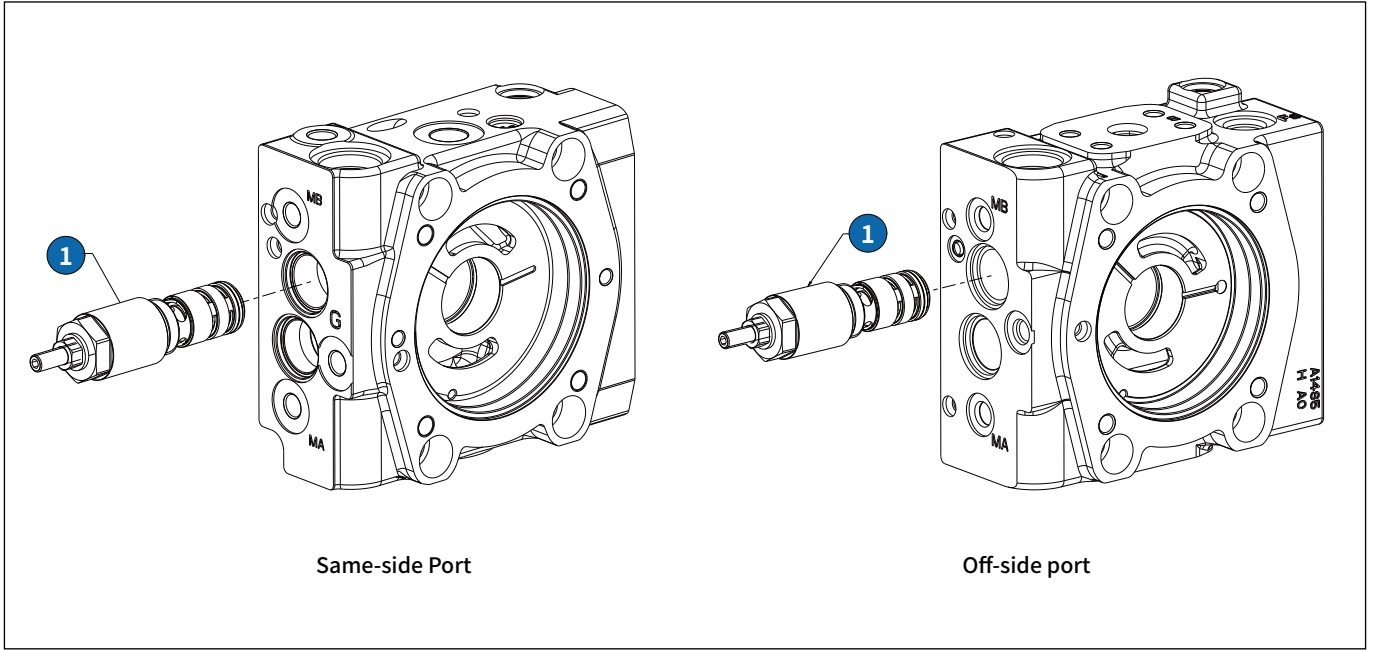
Order code: H2

Serial No.	Part Name	Specification	Order No.	QTY.per kit	Drawing No.
1	Hexagon socket head cap screw	M5*12	210000206409	8	GB/T 70.1
2	Cover plate*	V40E47-06K0001	210000817370	2	V40E47-06K0001
	Cover plate [#]	HP4VG135B-060002	210000539568	2	HP4VG135B-060002
3	O-ring	φ26.64*2.62	110000000022	2	OR2-121-N1
4	Sealing gasket	HP4VG60-060007	210000460542	1	HP4VG60-060007
5	Locating pin	φ6*12	210000299773	2	HLPV80-050003
6	Eccentric adjustment rod	HP4VG60-060001-Y	210000378601	1	HP4VG60-060001-Y
7	Gasket	HP4VG175-060008	210000301984	1	HP4VG175-060008
8	Hexagon socket head cap screw	M5*8	210000206388	1	GB/T 70.1
9	O-ring	φ2.9*1.78	210000422730	1	2-006
10	Hexagon socket head cap screw	M6*45	210000206184	1	GB/T 70.1
11	Cover plate	HP4VG60-060002	210000378641	1	HP4VG60-060002
12	Hexagon socket head cap screw	M6*65	210000206189	4	GB/T 70.1
13	Filter screen	HP4VG60-06000A	210000377551	1	HP4VG60-06000A
14	O-ring	φ12.42*1.78	210000294313	2	014
15	Filter housing	HP4VG60-060008	210000378657	1	HP4VG60-060008
16	Sealing gasket	HP4VG60-060006	210000460540	1	HP4VG60-060006
17	External plug (Cross-head with gasket)*	7/16-20UNF	110000078020	2	7/16-20UNF
	Cross-head external plug (With gasket) [#]	M14*1.5	110000047135	2	DIN 3852-1
18	Control valve	HP4VG45-080000-HD	210000586480	1	HP4VG45-080000-HD

Note: “*” indicates that the port size and seal type are K; “#” indicates that the port size and seal type are J.

3.2.2 V40E47 DA Cotrol Valve Parts

- Order code A: Swivel DA cotrol valve
- Order code Blank: Please skip without swivel DA control valve

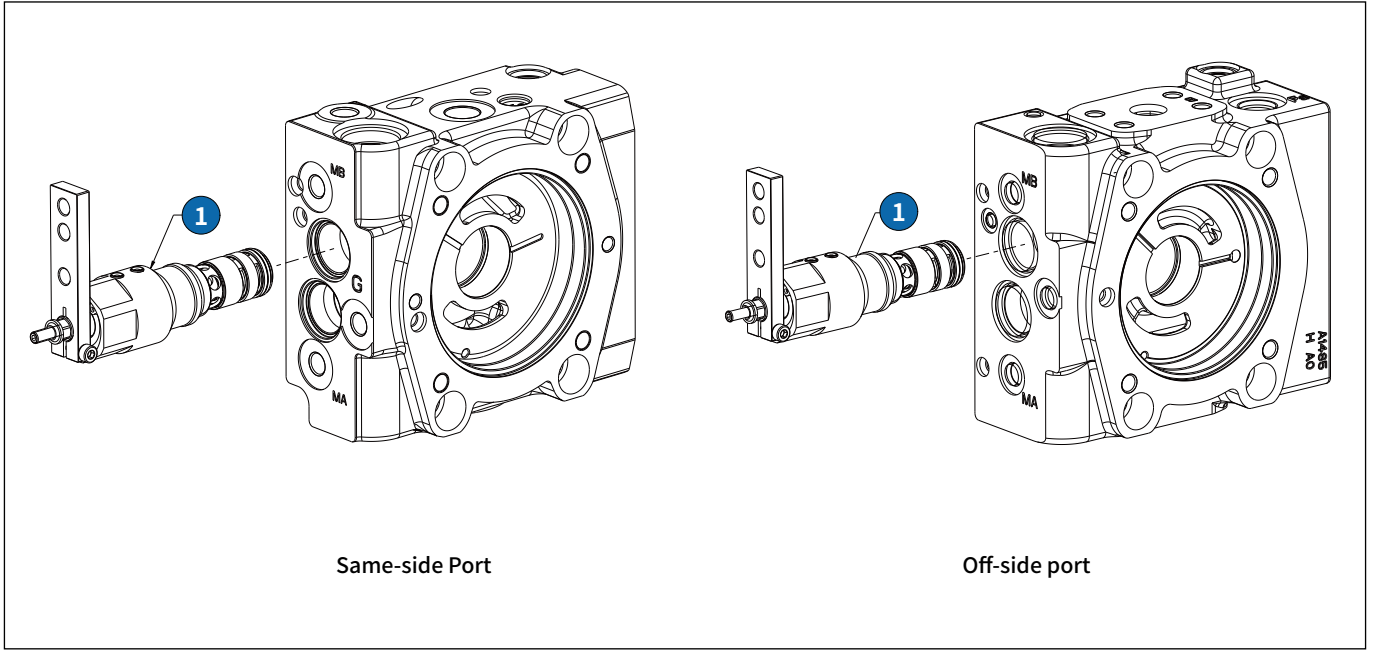


Order code: A

Serial No.	Part Name	Specification	Order No.	QTY.per kit	Drawing No.
1	Pilot valve	V40E47-0690000	Not sold separately; please contact a service representative for replacement	1	V40E47-0690000

3.2.2 V40E47 DA Cotrol Valve Parts

- Order code B: Swivel DA control valve, and integrate manual storage function
- Order code Blank: Please skip without swivel DA control valve

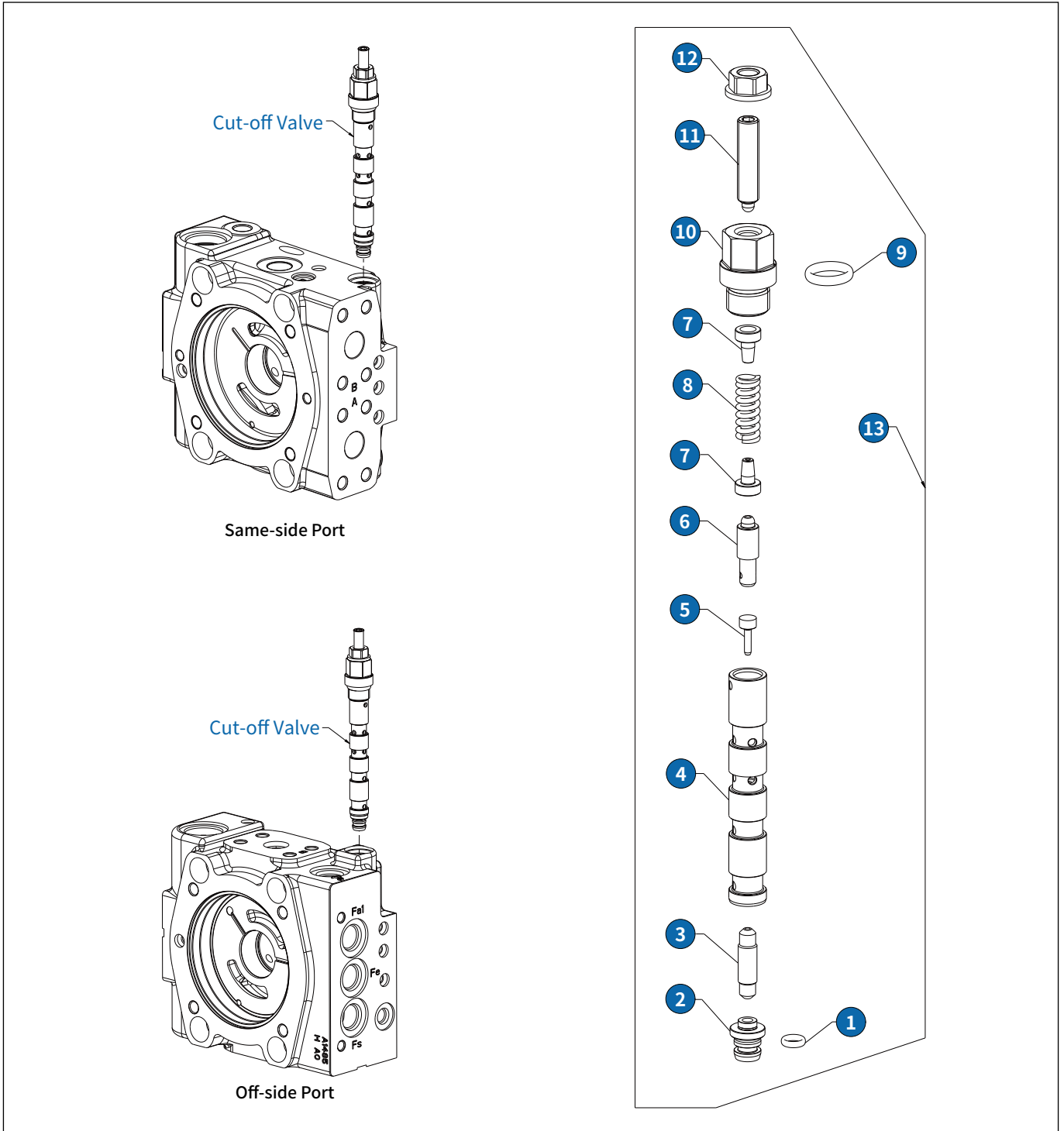


Order code: B

Serial No.	Part Name	Specification	Order No.	QTY.per kit	Drawing No.
1	Pilot valve	V40E32-0690000	Not sold separately; please contact a service representative for replacement	1	V40E32-0690000

3.2.3 V40E47 Pressure Cut-off Parts

· Order code D: Pressure cut-off/ · Order code Blank: Please skip without pressure cut-off



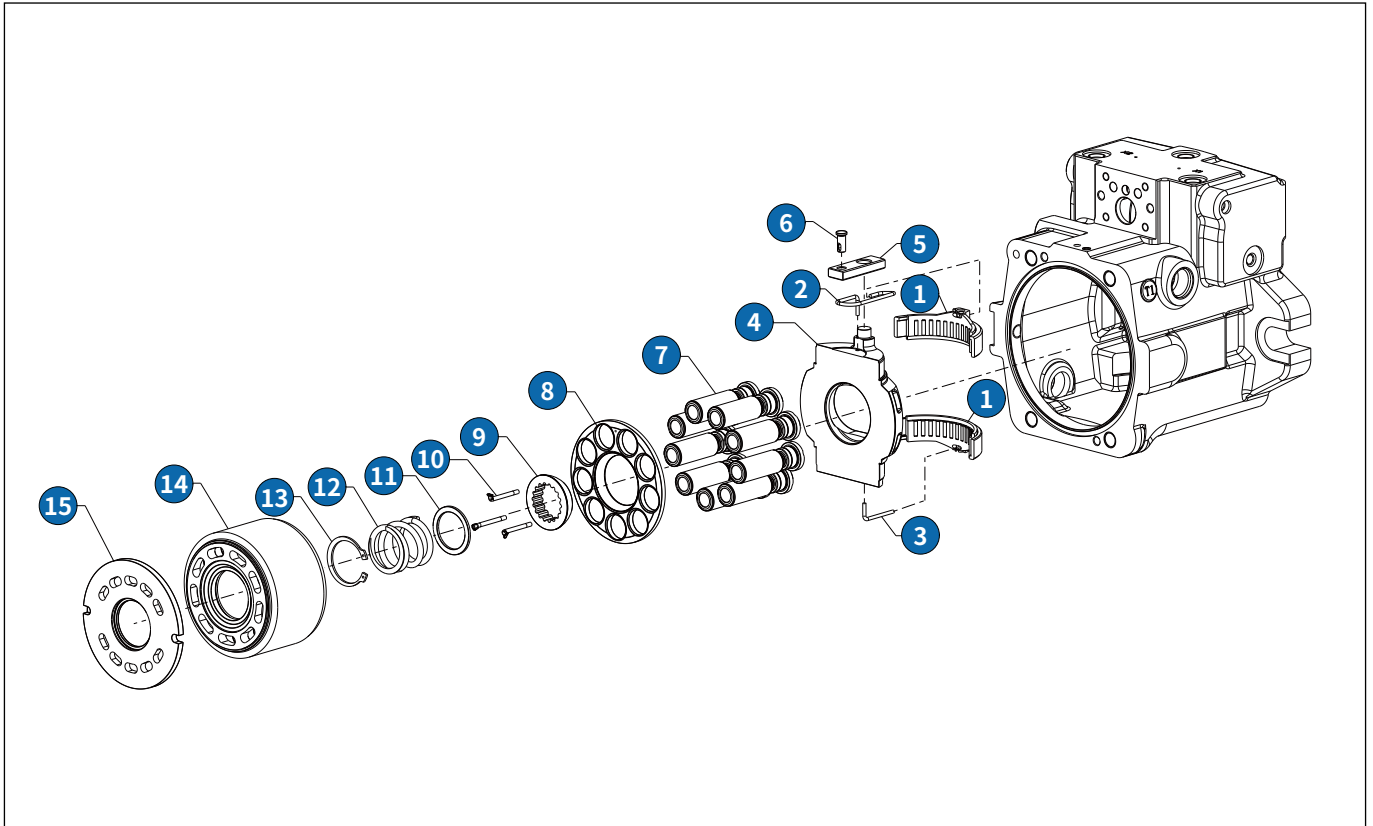
3.2.3 V40E47 Pressure Cut-off Parts

Order code: D

Serial No.	Part Name	Specification	Order No.	QTY.per kit	Drawing No.
1	O-ring	$\phi 6.07 \times 1.78$	110000081242	1	OR2-010-N7
2	Spring seat	HP4VG60-043008	210000378672	1	HP4VG60-043008
3	Spool	HP4VG60-043007	210000378670	1	HP4VG60-043007
4	Valve sleeve	HP4VG60-043004	210000595447	1	HP4VG60-043004
5	Push rod	HP4VG60-043006	210000526569	1	HP4VG60-043006
6	Spool	HP4VG60-043005	210000441085	1	HP4VG60-043005
7	Spring seat	HP4VG60-043002	210000378649	2	HP4VG60-043002
8	Spring	7.3/1.8*24.85/7.0	210000378679	1	HP4VG60-043003
9	O-ring	$\phi 12.37 \times 2.62$	210000005127	1	2-112
10	Threaded insert	HP4VG60-043001	210000378669	1	HP4VG60-043001
11	Adjusting screw	HP4VG175-090002	210000298754	1	HP4VG175-090002
12	Sealing lock nut	M8*1	210000295823	1	05310083230
13	Cut-off valve	HP4VG60-043000	210000378808	1	HP4VG60-043000

3.2.4 V40E47 Rotation+Swashplate

• Order code R: Clockwise/ • Order code L: Counterclockwise



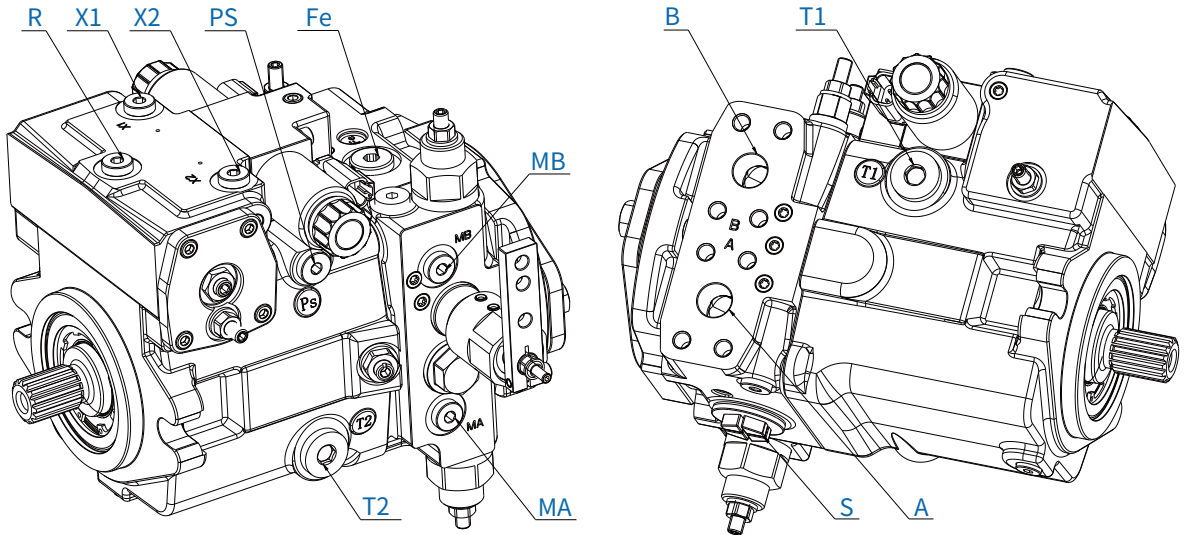
3.2.4 V40E47 Rotation+Swashplate

Order code: R/L

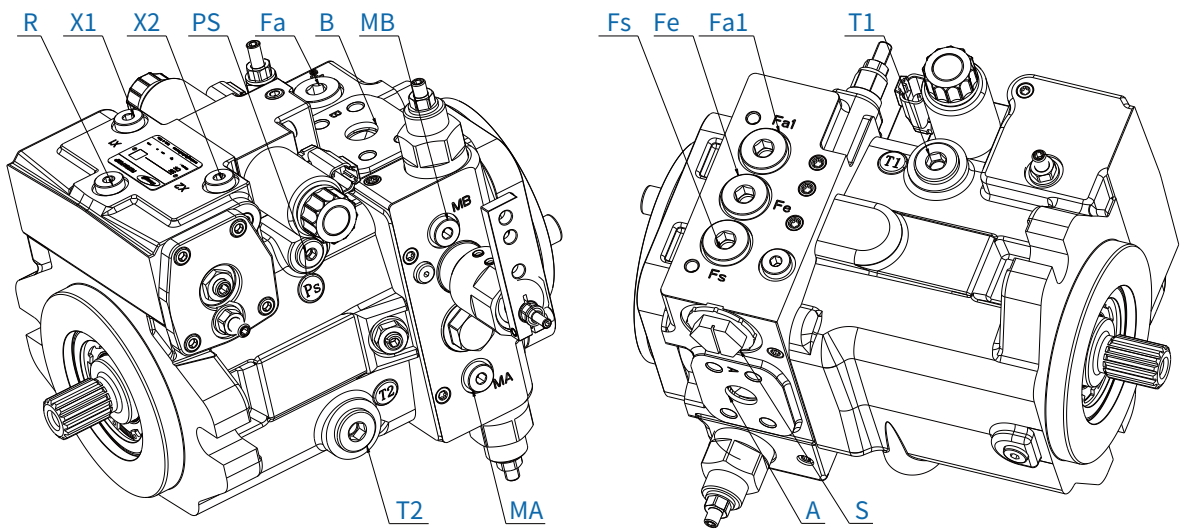
Serial No.	Part Name	Specification	Order No.	QTY.per kit	Drawing No.
1	Crescent bearing	F-084068015	210000475497	2	F-084068015
2	Lifting hook	HP4VGT45-040003	210000479865	1	HP4VGT45-040003
3	Lifting hook	HP4VGT60-020004	210000405639	1	HP4VGT60-020004
4	Swash plate	HP4VGT45-040001	210000479557	1	HP4VGT45-040001
5	Slider	HP4VGT45-040002	210000479847	1	HP4VGT45-040002
6	Pin	HP4VGT60-020003	210000378647	1	HP4VGT60-020003
7	Piston parts	HP6V47-0220000	210000785664	9	HP6V47-0220000
8	Slipper retainer	V90C47-0230RTP	210000856929	1	V90C47-0230RTP
9	Slipper retainer guide	HP4VGT45-052001	210000479853	1	HP4VGT45-052001
10	Pinch pin	HP4VGT45-050001	210000479850	3	HP4VGT45-050001
11	Gasket	HP4VGT45-050002	210000479852	1	HP4VGT45-050002
12	Spring	HP4VGT45-050003	210000478185	1	HP4VGT45-050003
13	Retaining ring for reverse bore	IRTW-38	210000475040	1	JIS B 2804
14	Cylinder block	HP6V46-0211CYD-01	210000882396	1	HP6V46-0211CYD-01
15	R: Valve plate	V40E47-0212RCP	210000955258	1	V40E47-0212RCP
	L: Valve plate	V40E47-0212LCP	210000955252	1	V40E47-0212LCP

3.2.5 V40E47 Oil Port Specifications and Sealing Parts

• Order code J: DIN 3852 (Metric Thread Flat Seals)



Selection 1: Same-side Port, Oil Port Distribution



Selection 2: Off-side Port, Oil Port Distribution

3.2.5 V40E47 Oil Port Specifications and Sealing Parts

Order code: J(Room temperature sealing)

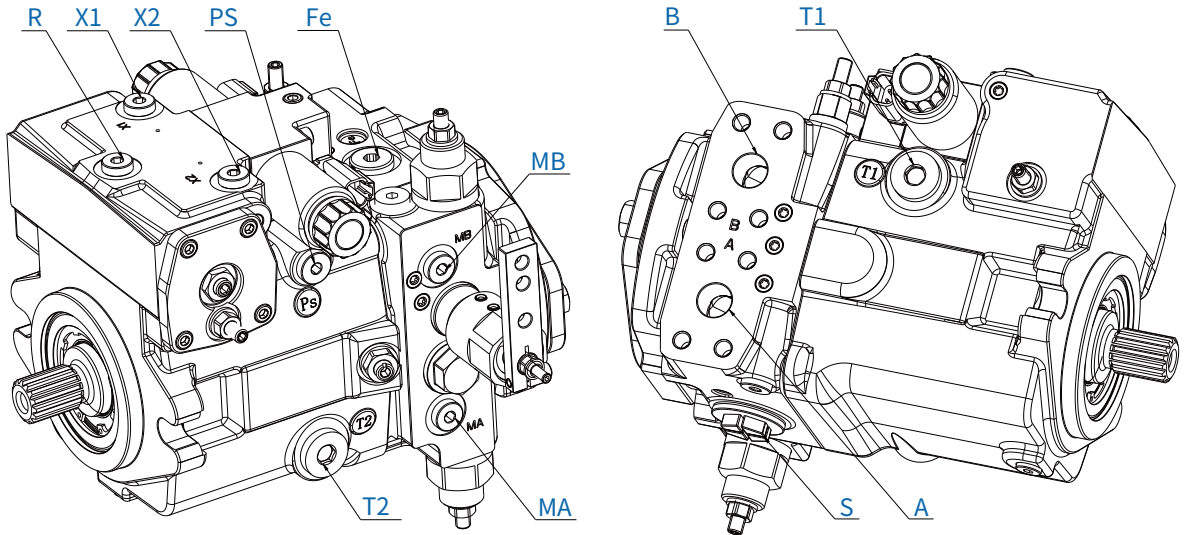
Oil port specification and sealing selection J				
Oil Port	Useage	Standard	Size	Max.pressure(bar)
A、 B	Working line	SAE J518	3/4"	450
	Threaded connection A/B	DIN 13	M10×1.5, depth 17	
S	Suction line	DIN 3852	M33×2, depth 18	5
T1	Discharge line	DIN 3852	M22×1.5, depth 14	3
T2	Discharge line	DIN 3852	M22×1.5, depth 14	3
R	Vent port	DIN 3852	M12×1.5, depth 12	3
X1、 X2	Control chamber pressure tap	DIN 3852	M12×1.5, depth 12	30
G	Replenishment pressure	DIN 3852	M12×1.5, depth 12	30
Ps	Pilot pressure	DIN 3852	M14×1.5, depth 12	30
MA、 MB	Pressure at ports A and B	DIN 3852	M12×1.5, depth 12	450
MH	High-pressure measurement	DIN 3852	M12×1.5, depth 12	450
Fa	Replenishment pressure inlet	DIN 3852	M18×1.5, depth 12	40
Fa1	Replenishment pressure inlet (Filter may be fitted)	DIN 3852	M18×1.5, depth 12	40
Fe	Replenishment pressure outlet	DIN 3852	M18×1.5, depth 12	40
Fs	From filter to suction line (Cold start)	DIN 3852	M18×1.5, depth 12	40

List of mating plugs and seals					
Part Name	Material/Grade	Specification	Order No.	Drawing No.	Remarks
Screw plug*	Steel	M12*1.5	210000294368	HLPV1401-020001	Purchased together
E-ring*	Rubber	M12.1.5	210000343139	ISO 9974-4	
External plug (cross-head with gasket)	Plastic	M12*1.5	110000065135	YY-22-13-030-020-002-A	
Screw plug*	Steel	M14*1.5	210000294369	HLPV1401-020002	Purchased together
E-ring*	Rubber	G1/4	210000375955	ISO 1179-2	
Cross-head external plug (with gasket)	Plastic	M14*1.5	110000047135	DIN 3852-1	
Hexagon socket plug	Steel	M18*1.5	210000293557	ISO 9974-4	
External plug (cross-head with gasket)	Plastic	M18*1.5	110000062139	YY-22-13-030-020-002-A	
Hexagon socket plug	Steel	M22*1.5	210000294484	ISO 9974-4	
External plug (cross-head with gasket)	Plastic	M22*1.5	110000056014	YY-19-13-010-013	
External plug (cross-head with gasket)	Plastic	M33*2	110000052890	M33*2	
Hexagon socket plug*	Steel	M33*2	210000294487	ISO 6149-4	Purchased together
O-ring*	Rubber	φ29.6*2.9	110000001222	OR2902960	

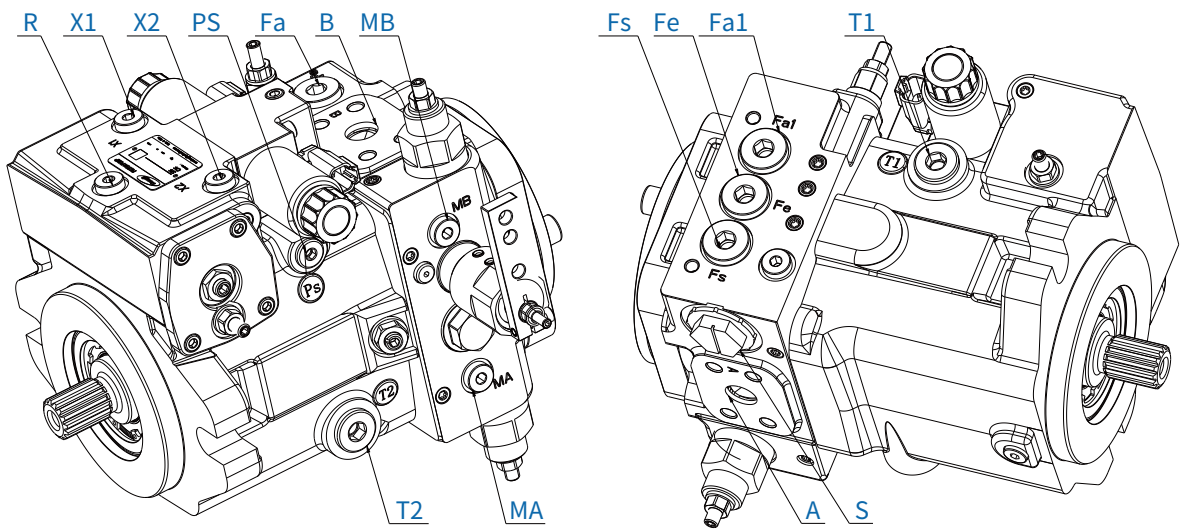
Note: “*” indicates that this part must be purchased together with a plug or seal of the corresponding specification.

3.2.5 V40E47 Oil Port Specifications and Sealing Parts

• Order code K: ISO 11926 (UNF Thread angle seal)



Selection 1: Same-side Port, Oil Port Distribution



Selection 2: Off-side Port, Oil Port Distribution

3.2.5 V40E47 Oil Port Specifications and Sealing Parts

Order code: K(Room temperature sealing)

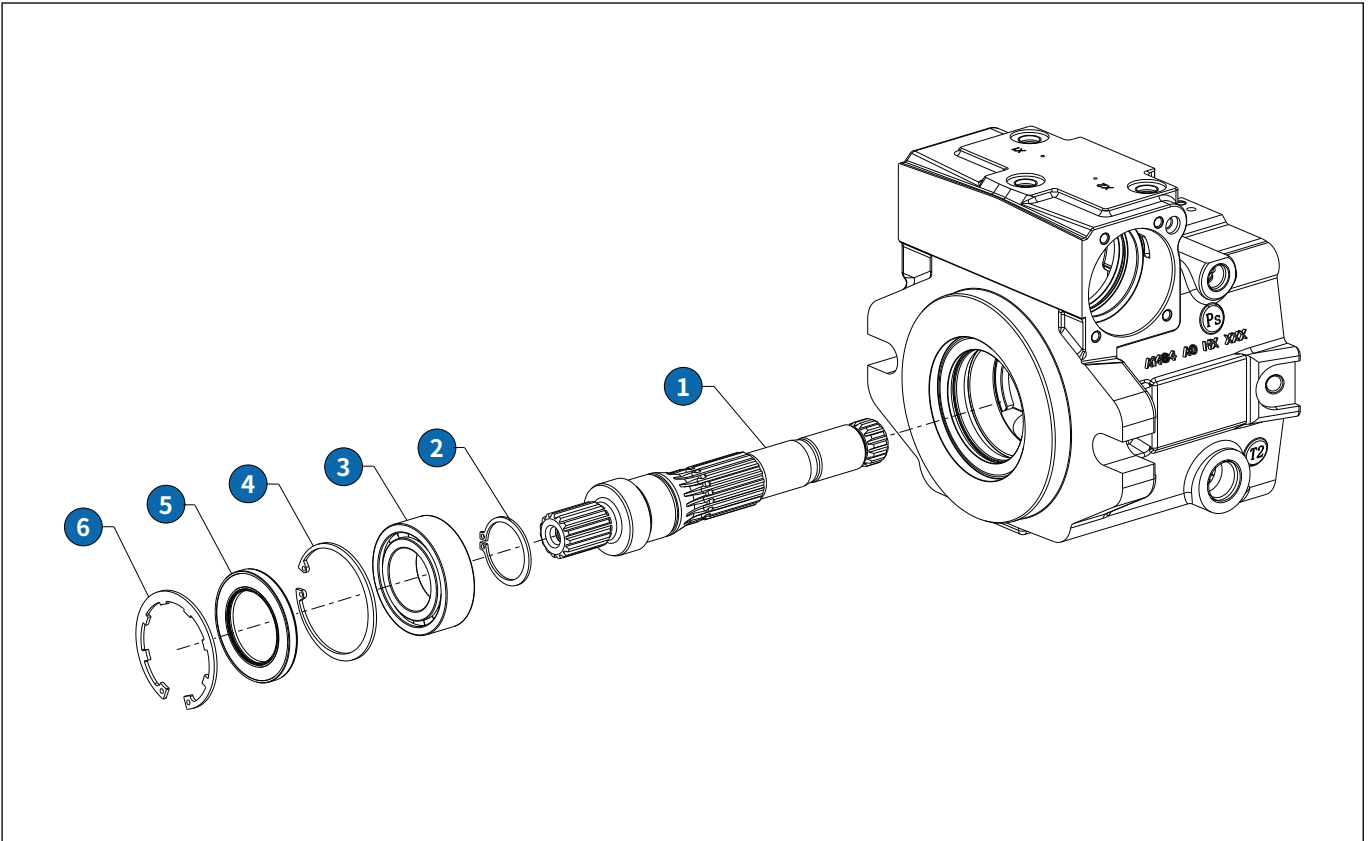
Oil port specification and sealing selection K				
Oil Port	Useage	Standard	Size	Max.pressure(bar)
A、 B	Working line	SAE J518	3/4"	450
	Threaded connection A/B	DIN 13	M10×1.5, depth 17	
S	Suction line	ISO 11926-1	1 5/16-12 UN-2B, depth 18	5
T1	Discharge line	ISO 11926-1	7/8-14 UNF-2B, depth 14	3
T2	Discharge line	ISO 11926-1	7/8-14 UNF-2B, depth 14	3
R	Vent port	ISO 11926-1	7/16-20 UNF-2B, depth 12	3
X1、 X2	Control chamber pressure tap	ISO 11926-1	7/16-20 UNF-2B, depth 12	30
G	Replenishment pressure	ISO 11926-1	7/16-20 UNF-2B, depth 12	30
Ps	Pilot pressure	ISO 11926-1	9/16-18 UNF-2B, depth 12	30
MA、 MB	Pressure at ports A and B	ISO 11926-1	7/16-20 UNF-2B, depth 12	450
MH	High-pressure measurement	ISO 11926-1	7/16-20 UNF-2B, depth 12	450
Fa	Replenishment pressure inlet	ISO 11926-1	3/4-16 UNF-2B, depth 16	40
Fa1	Replenishment pressure inlet (Filter may be fitted)	ISO 11926-1	3/4-16 UNF-2B, depth 16	40
Fe	Replenishment pressure outlet	ISO 11926-1	3/4-16 UNF-2B, depth 16	40
Fs	From filter to suction line (Cold start)	ISO 11926-1	3/4-16 UNF-2B, depth 16	40

List of mating plugs and seals					
Part Name	Material/Grade	Specification	Order No.	Drawing No.	Remarks
High-temperature plug	Plastic	1-5/16-12UN	110000038208	HP3G46-050013	
Hexagon socket plug	Steel	7/8-14UNF (with O-ring)	210000204865	Q/HL 102205-2010	
High-temperature plug	Plastic	7/8-14UNF	110000035106	HP3G46-050003 with gasket 7/8*14	
Return oil plug*	Steel	3/4-16UNF*14	210000353817	HLPV80-030005	Purchased together
O-ring*	Rubber	φ16.36*2.21	110000001205	φ16.36*2.21	
Plastic external plug (with gasket)	Plastic	9/16-18UNF	110000068927	9/16-18UNF	
Hexagon socket plug	Steel	9/16-18UNF (with O-ring)	210000204861	Q/HL 102205-2010	
Plug*	Steel	7/16-20UNF*11	210000293879	HLPV80-030006	Purchased together
O-ring*	Rubber	φ8.92*1.83	110000001197	904	
External plug (cross- head with gasket)	Plastic	7/16-20UNF	110000078020	7/16-20UNF	

Note: "*" indicates that this part must be purchased together with a plug or seal of the corresponding specification.

3.2.6 V40E47 Shaft Parts

· Order code B3: ANSI B92.1 1 in 15T 16/32 DP / · Order code B4: ANSI B92.1 1 1/4 in 14T 12/24 DP



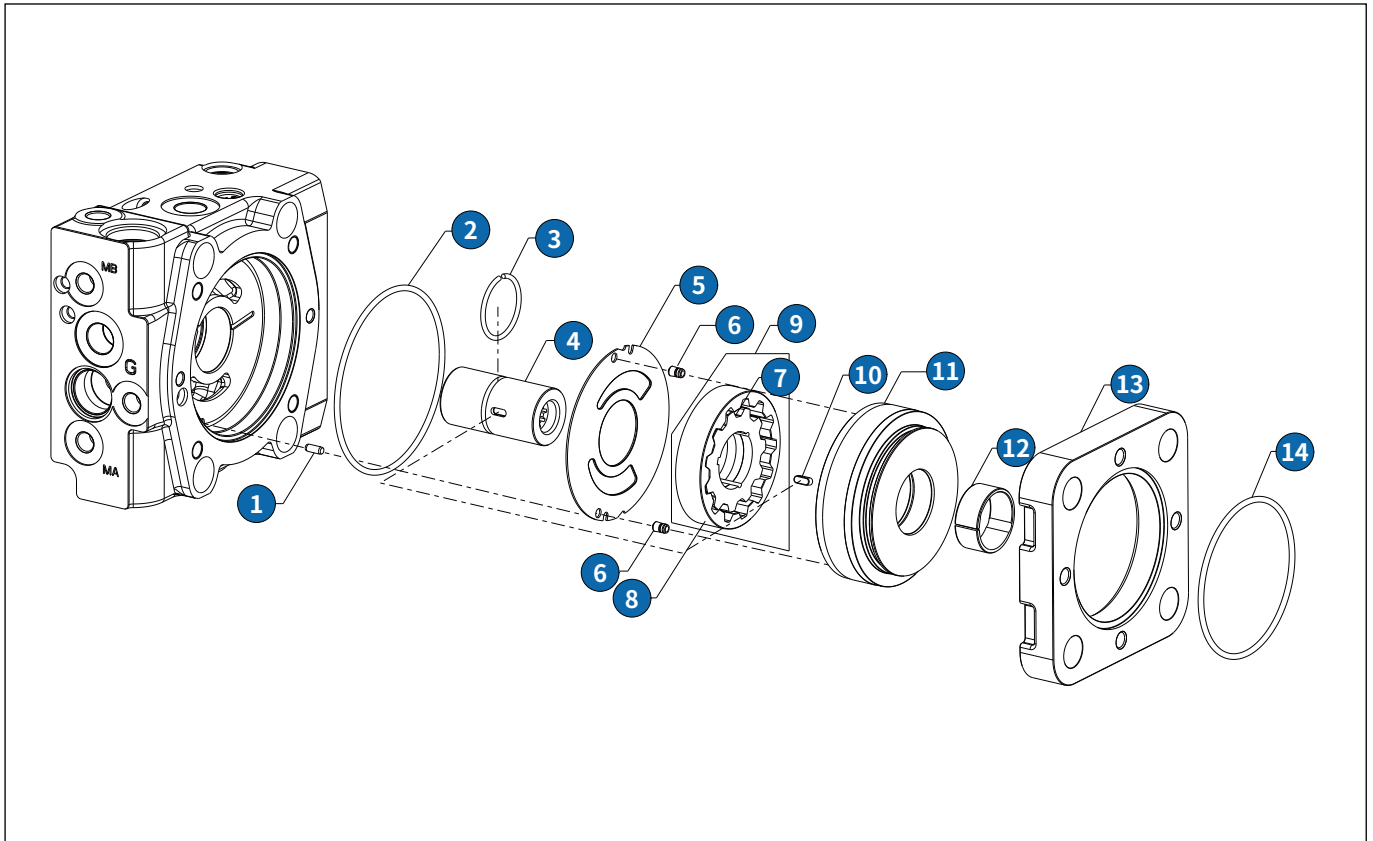
3.2.6 V40E47 Shaft Parts

Order code: B3/B4

Serial No.	Part Name	Specification	Order No.	QTY.per kit	Drawing No.
1	B3: Shaft	HP4VGT45-020001-15T	210000510252	1	HP4VGT45-020001-15T
	B4: Shaft	HP4VGT45-020001	210000479828	1	HP4VGT45-020001
2	Circlip for C-Shaft	CE-EX 35	210000293163	1	JIS B 2804
3	Bearing	$\phi 35 * \phi 62 * 20$	210000782501	1	E-NUP35*62*20V
4	Elastic retaining rings for bores	$\phi 62$	210000239169	1	DIN 472
5	Shaft dust seal	TCZ $\phi 40 * \phi 62 * 9 / 10.3$	110000056015	1	YY-20-11-011-029-A
6	Toothed retaining rings for bores	$\phi 62$	210000436007	1	DIN 984

3.2.7 V40E47 Oil Booster Pump Parts

- Order code F0: With oil booster pump, displacement 8.6(cc/rev)
- Order code F2: With oil booster pump, displacement 11.6(cc/rev)
- Order code K: Please skip without oil booster pump



3.2.7 V40E47 Oil Booster Pump Parts

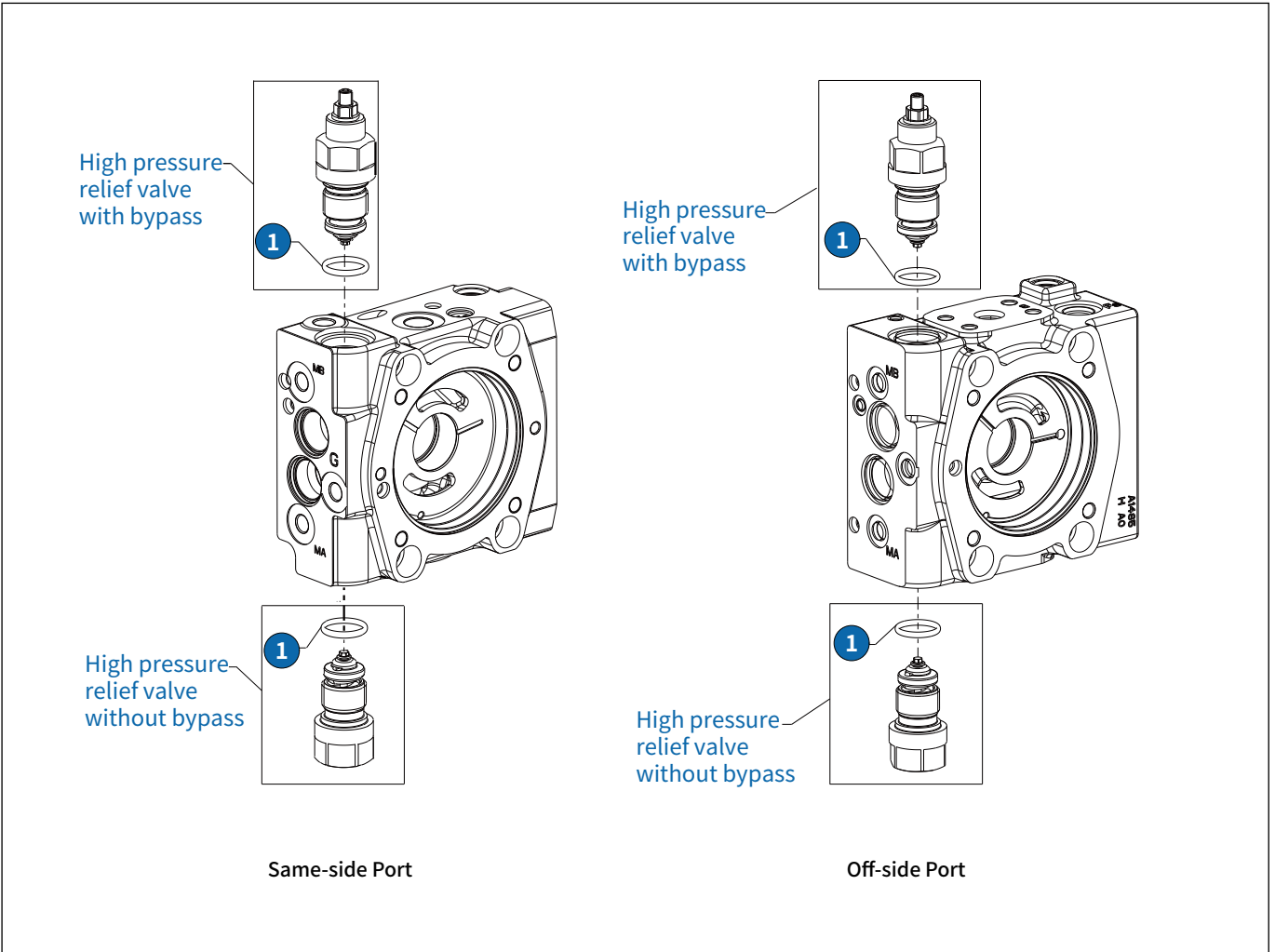
Order code: F0/F2

Serial No.	Part Name	Specification	Order No.	QTY.per kit	Drawing No.
1	Pin	HP4VG45-060002	210000510275	1	HP4VG45-060002
2	O-ring	φ99.4*3.1	110000000093	1	ORG100-N1
3	Wire retaining ring for shaft	φ32	210000379356	1	GB 895.2
4	F0: Coupling sleeve	V40E47-0710CPL-A9-A15	210000969972	1	V40E47-0710CPL-A9-A15
	F2: Coupling sleeve	HP4VG45-070003-9T-11	210000570434	1	HP4VG45-070003-9T-11
5	Side plate	HP4VG45-070002	210000509254	1	HP4VG45-070002
6	Spring pin	HP4VG100-060002	110000055517	2	HP4VG100-060002
7	F0: Inner rotor	HP4VG45-071001	210000509852	1	HP4VG45-071001
	F2: Inner rotor	HP4VG45-071001-11	210000539570	1	HP4VG45-071001-11
8	F0: Outer rotor	HP4VG45-071002	210000509853	1	HP4VG45-071002
	F2: Outer rotor	HP4VG45-071002-11	210000539572	1	HP4VG45-071002-11
9	F0: Rotor assembly	HP4VG45-071000	210000509156	1	HP4VG45-071000
	F2: Rotor assembly	HP4VG45-071000-11	210000539808	1	HP4VG45-071000-11
10	Flat key	HP4VG45-070004	210000509854	1	HP4VG45-070004
11	F0: Housing	HP4VG45-070001	210000509821	1	HP4VG45-070001
	F2: Housing	HP4VG45-070001-11	210000539813	1	HP4VG45-070001-11
12	Sliding sleeve	φ36*φ32*15	210000506271	1	K-SF1-473
13	F0: Adapter plate	HP4VG100-000001-A2	210000462293	1	HP4VG100-000001-A2
	F2: Adapter plate	V40E47-0510ADP-01	210001039536	1	V40E47-0510ADP-01
14	Flange A: O-ring	φ84.4*3.1	110000022868	1	G-85
	Flange B: O-ring	φ104.4*3.1	210000294134	1	G105

Note: Please refer to the coupling sleeve selection table for specific coupling sleeve codes; please refer to the adapter plate selection table for specific adapter plate codes.

3.2.8 V40E47 High Pressure Relief Valve Parts

- (Direct-acting highpressure relief valve, fixed setting) Order code 3: Without bypass
- (Direct-acting highpressure relief valve, fixed setting) Order code 5: With bypass



3.2.8 V40E47 High Pressure Relief Valve Parts

Order code: 3/5

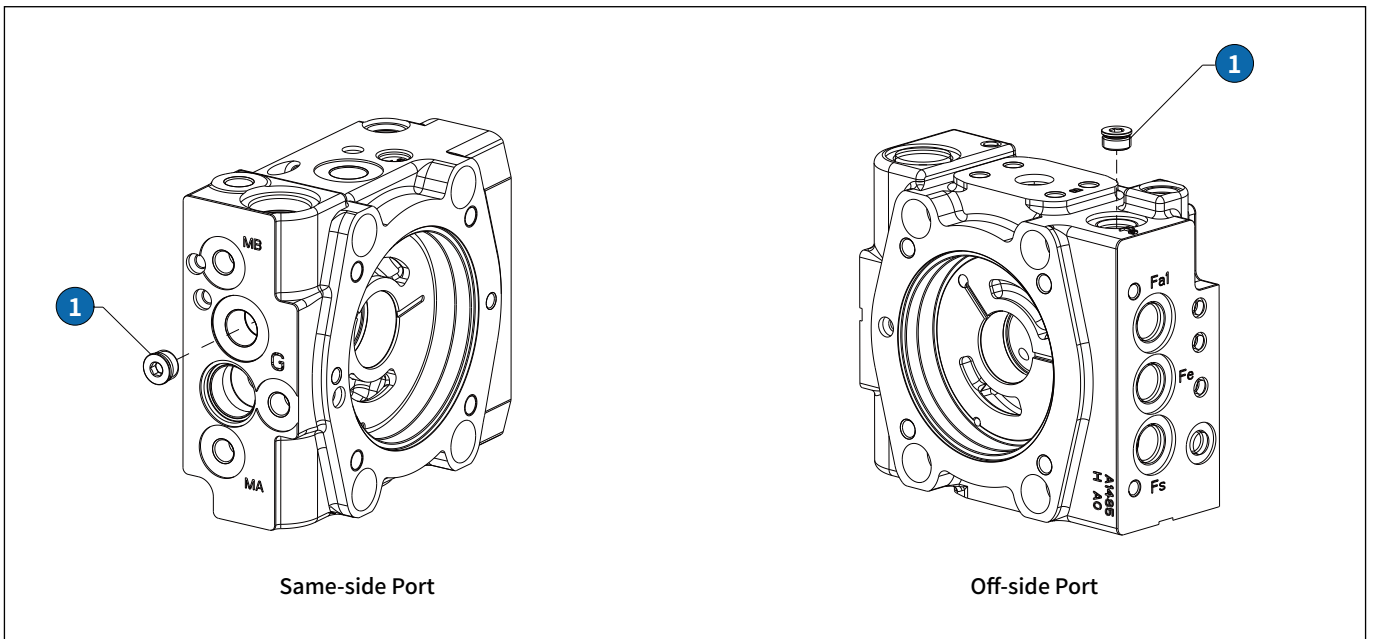
Part Name	Specification	Order No.	QTY.per kit	Drawing No.	High-pressure valve set pressure(bar)
High-pressure relief valve	175BAR	210000868198	1	V40E47-0660000-11	175
High-pressure relief valve*	175BAR	210000899112	1	V40E47-0660000-13	175
High-pressure relief valve*	210BAR	210000849757	1	V40E47-0660000-04	210
High-pressure relief valve	240BAR	210000931290	1	V40E47-0660000-14	240
High-pressure relief valve	250BAR	210000865950	1	V40E47-0660000-07	250
High-pressure relief valve*	250BAR	210000903717	1	V40E45-0660000-03	250
High-pressure relief valve	270BAR	210000842756	1	V40E47-0660000-01	270
High-pressure relief valve*	285BAR	210001027011	1	V40E47-0660000-15	285
High-pressure relief valve*	300BAR	210000803714	1	V40E45-0660000-02	300
High-pressure relief valve	300BAR	210000865946	1	V40E47-0660000-08	300
High-pressure relief valve	320BAR	210000865948	1	V40E47-0660000-09	320
High-pressure relief valve*	320BAR	210000791441	1	V40E45-0660000-01	320
High-pressure relief valve	330BAR	210000865952	1	V40E47-0660000-10	330
High-pressure relief valve*	350BAR	210000903712	1	V40E45-0660000-04	350
High-pressure relief valve	350BAR	210000767399	1	HP4VGT45-0A0000-1-G	350
High-pressure relief valve*	360BAR	210000849752	1	V40E47-0660000-05	360
High-pressure relief valve	380BAR	210000767409	1	HP4VGT45-0A0000-2-G	380
High-pressure relief valve*	380BAR	210000767411	1	HP4VGT45-0B0000-2-G	380
High-pressure relief valve*	400BAR	210000849764	1	V40E47-0660000-03	400
High-pressure relief valve	400BAR	210000882607	1	V40E47-0660000-12	400
High-pressure relief valve	420BAR	210000853866	1	V40E47-0660000-06	420
High-pressure relief valve*	420BAR	210000847528	1	V40E47-0660000-02	420

Note: “*” indicates that this high-pressure valve does not have a bypass function.

Serial No.	Part Name	Specification	Order No.	QTY.per kit	Drawing No.
1	O-ring	φ23.47*2.62	110000082542	1	OR2-119-N7

3.2.9 V40E47 Pressure Oil Filter Screw Plug Parts

- Order code Blank: External oil replenishment filter (without oil booster pump)
- Order code D: Filter in the oil booster pump pressure line (external filter circuit connection)



3.2.9 V40E47 Pressure Oil Filter Screw Plug Parts

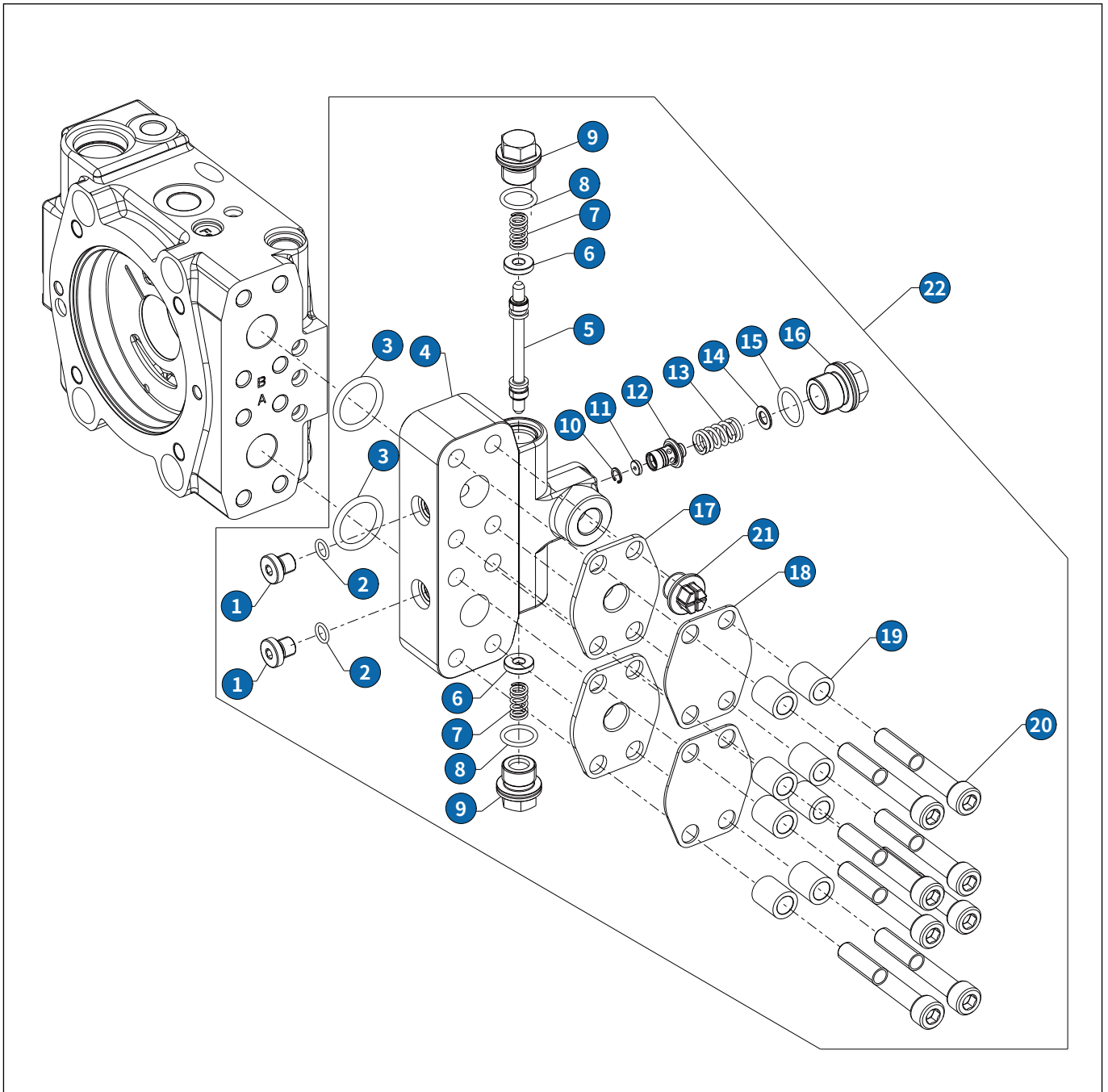
Order code: Blank/D

Serial No.	Part Name	Specification	Order No.	QTY.per kit	Drawing No.
1	Screw plug	M14*1.5	210000886393	1	V40E60-0500001

Note: When selecting oil replenishment filter type D or opting for no filter, a plug must be fitted.

3.2.10 V40E47 Flushing Valve Parts

- Order code 7: With flushing valve, flush flow rate 5 (L/min)
- Order code 2: With flushing valve, flush flow rate 10 (L/min)



3.2.10 V40E47 Flushing Valve Parts

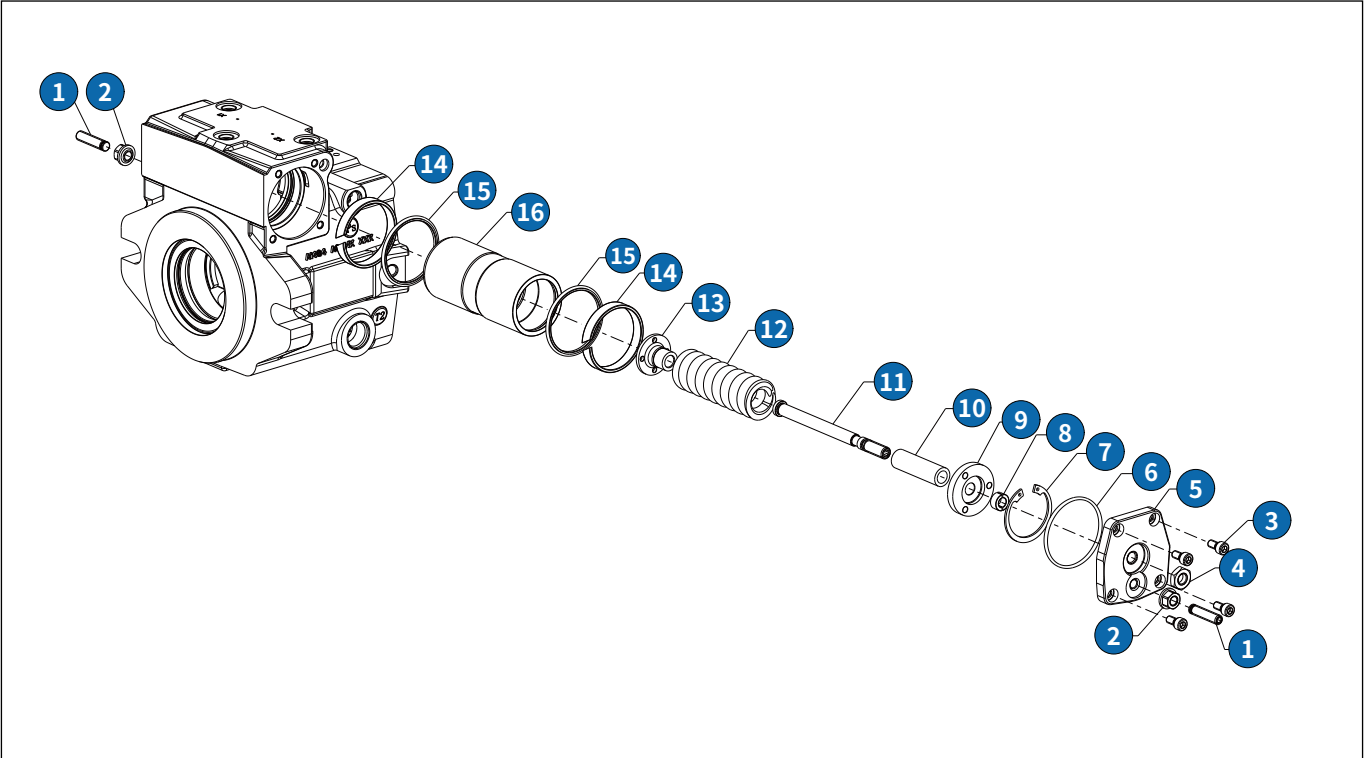
Order code: 7/2

Serial No.	Part Name	Specification	Order No.	QTY.per kit	Drawing No.
1	Plug	M10*1	210000294350	2	HLPV80-07000C
2	O-ring	φ8.1*1.6	110000110232	2	OR1600810-N7
3	O-ring	φ24.7*3.5	110000109132	2	ORP25-N7
4	Valve	HP4VG60A-070001	210000634593	1	HP4VG60A-070001
4	Valve	HP4VG60-070001	210000532033	1	HP4VG60-070001
5	Spool	HP4VG60-070002	210000532035	1	HP4VG60-070002
6	Gasket	HM6V60-022005	210000440667	2	HM6V60-022005
7	Spring	8.2/1.27*25/6	210000438080	2	HM6V60-022004
8	O-ring	φ15.3*2.2	110000051093	2	OR2201530
9	Threaded insert	HM6V60-022003	210000439291	2	HM6V60-022003
10	Circlip for C-Shaft	CE-IN 08	210000293315	1	JIS B 2804
11	7: Damping plate	φ8*φ1.3	210000439284	1	HM6V60-02200A
	2: Damping plate	φ8*φ2	210000492996	1	HM6V60-02200A-2-10
12	Spool	HP4VG60-070004	210000532097	1	HP4VG60-070004
13	Spring	11/1.8*32.4/6.75	210000438082	1	HM6V60-022008
14	Gasket	HM6V60-022007	210000439283	1	HM6V60-022007
15	O-ring	φ17.3*2.2	110000051087	1	OR12201730
16	Threaded insert	HM6V60-022006	210000439289	1	HM6V60-022006
17	Rubber gasket	50.8*23.8A	210000267292	2	Q/HL 102135.2-2020
18	Port cover	50.8*23.8A	210000348974	2	Q/HL 102130.2-2020
19	Gasket	HP4VG60-070006	HP4VG60-070006	8	HP4VG60-070006
20	Hexagon socket head cap screw	M10*70	210000205856	8	GB/T 70.1
21	Hexagon socket plug*	9/16-18UNF(With O-ring)	210000204861	1	Q/HL 102205-2010
	Plastic external plug [#]	M16*1.5	210000258352	1	GPN 736 M16*1.5
22	7: Flushing valve [#]	V40E60-06D0000-01	210001002103	1	V40E60-06D0000-01
	2: Flushing valve*	V40E60-06D0000	210000802369	1	V40E60-06D0000
	2: Flushing valve [#]	HP4VG60-070000	210000586040	1	HP4VG60-070000

Note: “*” indicates that the port size and seal type are K; “#” indicates that the port size and seal type are J.

3.2.11 V40E47 Piston Parts

• Order code: Piston parts are not subject to selection



3.2.11 V40E47 Piston Parts

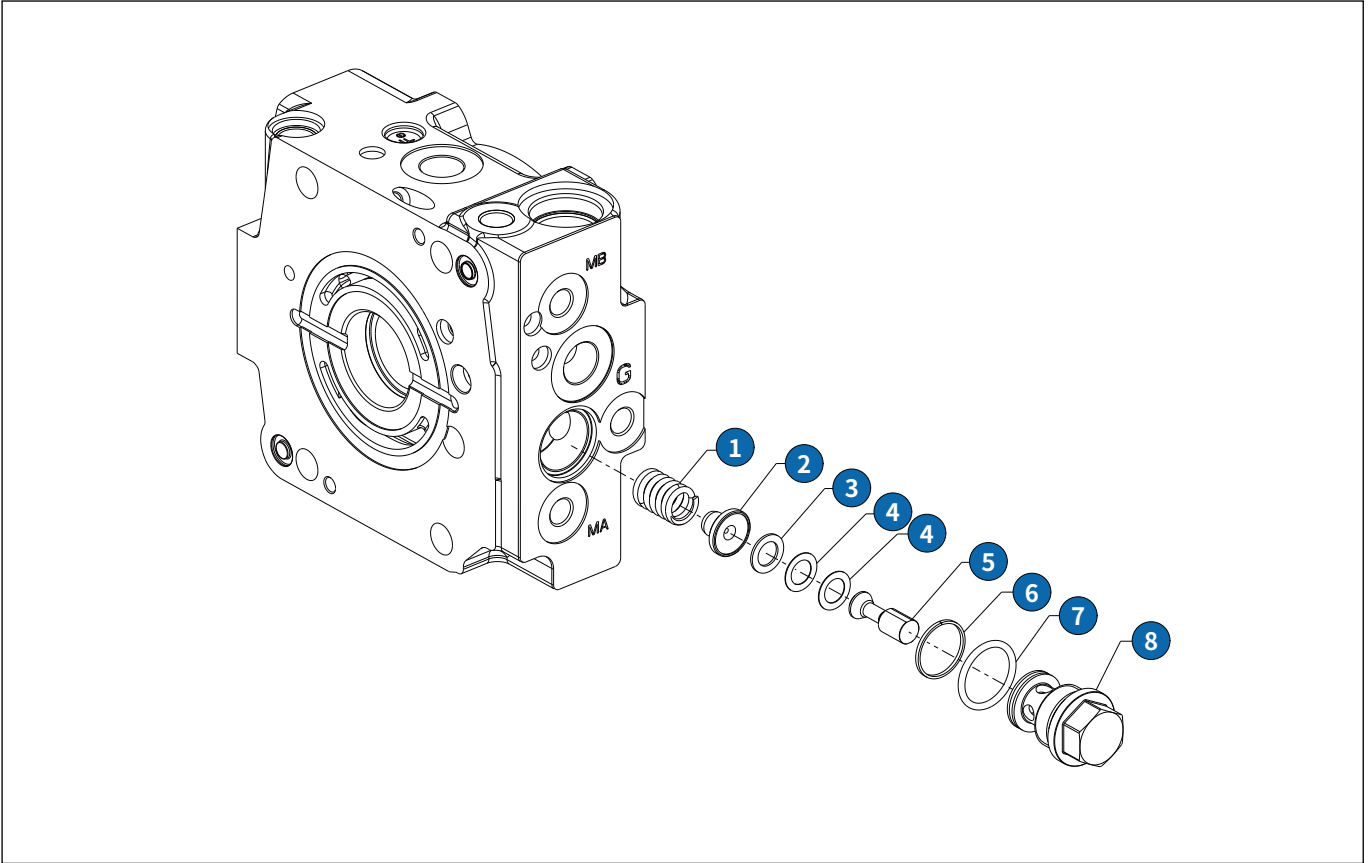
Order code: Piston parts are not subject to selection

Serial No.	Part Name	Specification	Order No.	QTY.per kit	Drawing No.
1	Adjusting screw	HP4VGT45-010003	210000479848	2	HP4VGT45-010003
2	Sealing lock nut	M8*1.25	210000377547	2	05310080230
3	Hexagon socket head cap screw	M6*12	210000206174	4	GB/T 70.1
4	Hexagon nut	HP4VGT45-010004	210000545189	1	HP4VGT45-010004
5	End cap	HP4VGT45-010002	210000479844	1	HP4VGT45-010002
6	O-ring	φ55.25*2.62	110000060544	1	OR2-139-N6
7	Retaining ring for holes	φ45	210000414689	1	DIN472
8	Semi-circular gasket	HP4VGT45-011007	210000479845	2	HP4VGT45-011007
9	Spring seat	HP4VGT45-011005	210000479838	1	HP4VGT45-011005
10	Limit sleeve	HP4VGT45-011006	210000479849	1	HP4VGT45-011006
11	Adjusting screw	HP4VGT45-011002	210000592204	1	HP4VGT45-011002
12	Spring	25.5/7.5*100/8.5	210000478188	1	HP4VGT45-011004
	Spring*	25.5/8*98.8/8	210000523469	1	HP4VGT45-011004-HD
13	Spring seat	HP4VGT45-011003	210000479842	1	HP4VGT45-011003
14	Guide ring	GR6900520	210000475498	2	GR6900520
15	Seal for rod	φ52*φ59.3*3.2	110000061941	2	SRS000520-P2N0
16	Piston	HP4VGT45-011001	210000479830	1	HP4VGT45-011001

Note: “**” indicates that this piston assembly is a dedicated version for DA control (selection A or B) with H3 hydraulic direct control.

3.2.12 V40E47 Low Pressure Valve Parts

• Order code: Low-pressure valve parts are not subject to selection



Order code: Low-pressure valve parts are not subject to selection

Serial No.	Part Name	Specification	Order No.	QTY.per kit	Drawing No.
1	Spring	13/2.4*27.0/5.0	210000378676	1	HP4VG60-041006
2	Spring seat	HP4VG60-041003	210000712717	1	HP4VG60-041003
3	Gasket	$\phi 16 * \phi 10 * 1.0$	210000378661	-	HP4VG60-041005
4	Gasket	$\phi 16 * \phi 10 * 0.3$	210000378664	-	HP4VG60-041004
5	Spool	HP4VG60-041002	210000729667	1	HP4VG60-041002
6	Seal ring	$\phi 22 * \phi 24 * 1.5$	210000382292	1	HP4VG60-041007
7	O-ring	$\phi 23.47 * 2.62$	110000082542	1	OR2-119-N7
8	Threaded insert	HP4VG60-041001	210000378651	1	HP4VG60-041001

Note: The pressure of the low-pressure valve can be adjusted by adding or removing gaskets (items 3 and 4).

3.2.13 V40E47 Coupling Sleeve Selection Table

		Through-shaft Drive	Rotation Parts and Oil Booster Pump	Specification	Order No.	Drawing No.
Coupling sleeve	Same-side port (Select port 1 for the working line)	Blank	F0	HP4VG45-070003	210000509822	HP4VG45-070003
		A1		HP4VG45-070003	210000509822	HP4VG45-070003
		A2		HP4VG45-070003-11T	210000596683	HP4VG45-070003-11T
		B1		HP4VG45-070003-13T	210000509820	HP4VG45-070003-13T
		B3		HP4VG45-070003-15T	210000581810	HP4VG45-070003-15T
	Off-side port (Select port 2 for the working line)	Blank		V40E47-0710CPL-A9-A15	210000969972	V40E47-0710CPL-A9-A15
		A1		V40E47-0710CPL-A9-A15	210000969972	V40E47-0710CPL-A9-A15
		A2		-	-	-
		B1		V40E47-0710CPL-A13-A15	210001033425	V40E47-0710CPL-A13-A15
		B3		V40E47-0710CPL-A15-A15	210001068208	V40E47-0710CPL-A15-A15
	Same-side port (Select port 1 for the working line)	Blank	F2	HP4VG45-070003-9T-11	210000570434	HP4VG45-070003-9T-11
		A1		HP4VG45-070003-9T-11	210000570434	HP4VG45-070003-9T-11
		A2		V40E47-0710CPL-A11-A15	210000849712	V40E47-0710CPL-A11-A15
		B1		HP4VG45-070003-13T-11	210000539567	HP4VG45-070003-13T-11
		B3		V40E47-0710CPL-A15	210000819198	V40E47-0710CPL-A15
	Off-side port (Select port 2 for the working line)	Blank		V40E47-0710CPL-A9-A15-01	210001112370	V40E47-0710CPL-A9-A15-01
		A1		V40E47-0710CPL-A9-A15-01	210001112370	V40E47-0710CPL-A9-A15-01
		A2		-	-	-
		B1		-	-	-
		B3		-	-	-

3.2.14 V40E47 Adapter Plate Selection Table

	Through-shaft Drive	Rotation Parts and Oil Booster Pump	Specification	Order No.	Drawing No.
Adapter plate	A	F0	HP4VG100-000001-A2	210000462293	HP4VG100-000001-A2
	B		V40E47-0720ADP	210000847526	V40E47-0720ADP
	A	F2	V40E47-0510ADP-01	210001039536	V40E47-0510ADP-01
	B		HP4VG45-000001-B1	210000539573	HP4VG45-000001-B1



Hengli hydraulic Co.,Ltd

ADD: No.99 Longqian Road, Wujin District,
Changzhou 213167, China

TEL: +86 400 101 8889

FAX: +86 519 8615 9988

E-mail: hengli@henglihydraulics.com

Hengli America

ADD: 580 Crossroads Parkway, Bolingbrook,
Illinois 60440

TEL: +01 630 995 3674

E-mail: sales@hengliamerica.com

Hengli Germany

ADD: Sperenberger Straße 13D-12277 Berlin,
Germany

TEL: +49 (30) 72088-0

E-mail: info@inlinehydraulik.com

Hengli Japan

ADD: 3F, VORT Shibapark II, 2-3-9 Shiba,
Minato-Ku, Tokyo, Japan 105-0014

TEL: +81 03 6809 1696/03 6809 6515

E-mail: daizheng@henglihydraulics.com

Hengli India

ADD: PAP-B-67/1, Bhamboli-Varale Chakan

MIDC Phase2,Pune 410505

TEL: +0091 98456 73856

E-mail: sudhindra.sabnis@henglihydraulics.com

Hengli Mexico

ADD: Parque Industrial Finsa.Lote 2B1.Santa Catarina,
Nuevo Leon, Mexico

TEL: +52 818 680 4103

E-mail: lauro.garza@henglihydraulics.com

Hengli Indonesia

ADD: B10,Kawasan Logistik Cakung, PT Alun Indah,
Jl Raya Bekasi KM 23.5, Cakung, Jakarta

TEL: +62 81114020059

E-mail: xitao@henglihydraulics.com

Hengli Brazil

ADD: Rua Bom Sucesso, 220 Corporativo 3001

Tatuape CEP 03305-000 São Paulo-SP

TEL: +55 1198383-3104

E-mail: racrosta@henglihydraulics.com

Hengli Hydraulics
No. HL 2026-03

The data indicated in this brochure is only used for the description of products.
Our products have been in continuous development and innovation. Application of the
information in this brochure is not limited to special condition or applicability in particular
industry. If there is any question, welcome to call to consult.



Please scan the QR code to
login our website for more
information.