

DIRECTIONAL CONTROL VALVES

SV-50 SERIES

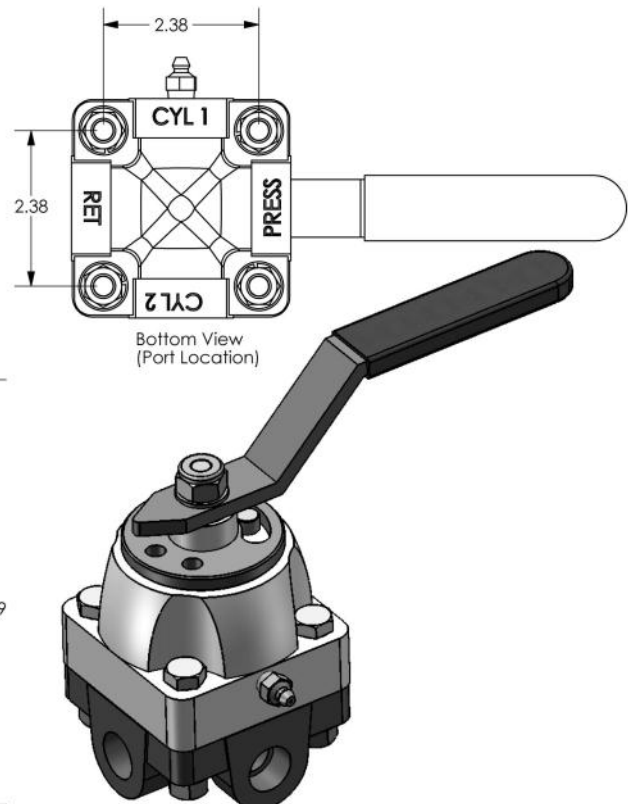
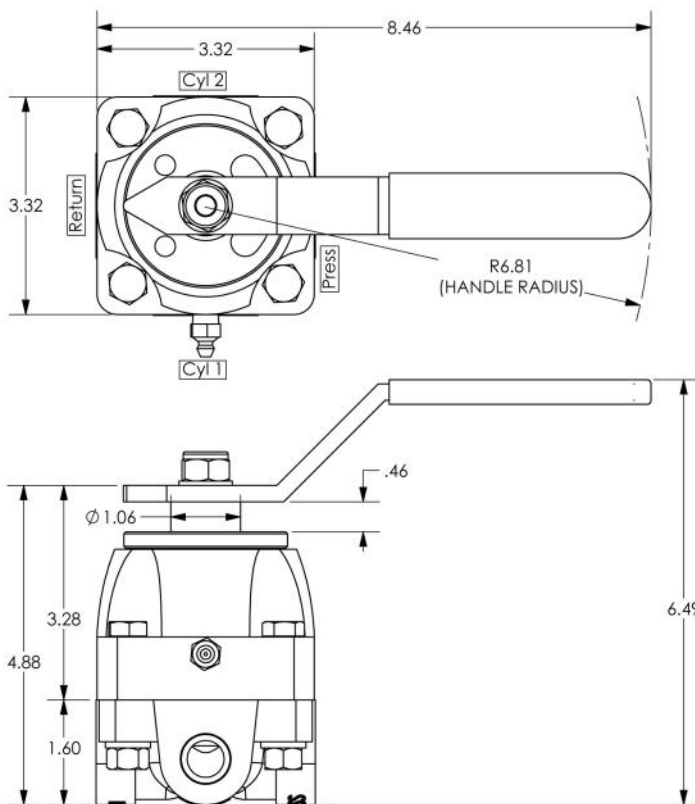


PacSeal Hydraulics rotary SV-50 series directional control valves direct fluid flow to desired ports, with optional configurations utilizing one or two cylinder ports.

Standard rotor configurations allow for interflow when shifting to be drained to tank through the constantly open return port. The block center rotor requires an additional case drain port on the housing since the return port is blocked in center position.

- ShearFlo® sealing technology ensures high cycle life for critical service applications even with contaminated fluids.

- Hardened stainless steel sealing elements are lapped and polished to exacting standards of finish and flatness which produces a leak proof, contaminant resistant metal-to-metal seal.
- The sealing elements are spring preloaded and pressure energized which maintains contact between the two sealing surfaces causing continuous lapping during use which eliminates small scratches.



(Continued from page 1)

OPTIONS AVAILABLE

Manual Operation

Detent positioned or spring centered

Pneumatic or Hydraulic Actuator Cylinder Operation

Installed on a standard manual valve or SVX integral actuator providing remote control with manual override operation. 2 or 3 position actuators available.

Body Porting Options

Inline/Side and bottom ported are threaded NPT or SAE.

Subplate & manifold mounted configurations have O-ring face seals for interfacing with a manifold.



Rotor Flow Pattern

Manipulator—either position operates a cylinder port with the opposite port drained to tank, center position cylinders drain to tank and pressure port blocked

Selector—either position operates a cylinder port with the opposite port drained to tank, center position pressure and cylinder ports blocked

Bypass—either position pressurizes a cylinder port with the opposite port blocked, center position pressure and cylinder ports blocked

Open Center—either position operates a cylinder port with the opposite port drained to tank, center position pressure port to tank, cylinder ports blocked.

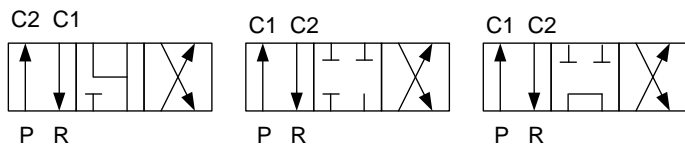
Block Center- either position operates a cylinder port with the opposite port drained to tank, all ports blocked in center position.

Detent Pattern

3-Position: Selector, Manipulator, Open-Center, Bypass

2-Position: Bypass, 90° (4 way)

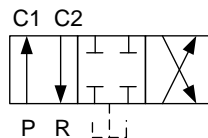
2-Position: 45° Right (CW) or Left (CCW) (3 way)



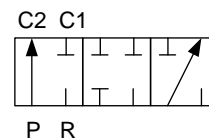
4-WAY 3-POS
MANIPULATOR
3 position detent

4-WAY 3-POS
SELECTOR
3 position detent

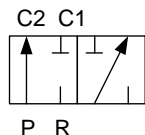
4-WAY 3-POS
OPEN CENTER
3 position detent



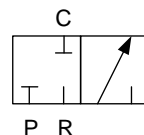
4-WAY 3-POS
BLOCK CENTER
3 position detent



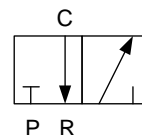
4-WAY 3-POS
BYPASS
3 position detent



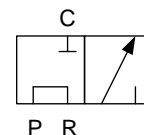
4-WAY 2-POS
BYPASS
90° detent



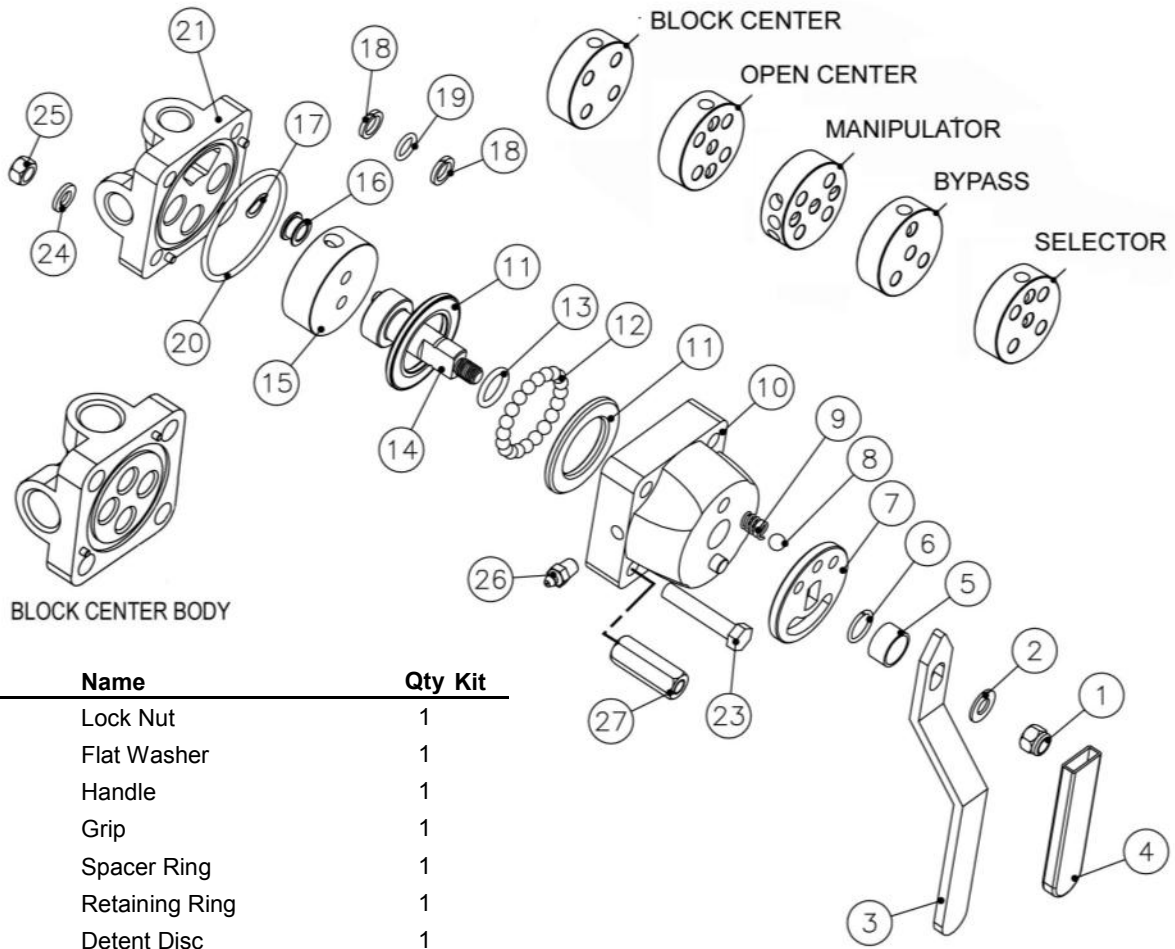
3-WAY 2-POS
SELECTOR
45° detent
(cw or ccw)



3-WAY 2-POS
MANIPULATOR
45° detent
(cw or ccw)



3-WAY 2-POS
OPEN CENTER
45° detent
(cw or ccw)



#	Part No	Name	Qty	Kit
1	50-0092	Lock Nut	1	
2	50-0107	Flat Washer	1	
3	40-0280	Handle	1	
4	40-0237	Grip	1	
5	40-0292	Spacer Ring	1	
6	40-0289	Retaining Ring	1	
7	40-0277	Detent Disc	1	
8	40-0049	Detent Ball	1	
9	40-0296	Detent Spring	1	
10	40-0353	Housing	1	
11	40-0227	Thrust Washer	2	d
12	40-0259	Ball Bearing	20	d
13	23-1125	O-Ring	1	a
14	40-0275	Shaft	1	
15	Tabulated	Rotor	1	c
16	40-0219	Seal Ring	3	b
17	40-0237	Wave Spring	3	b
18	23-1414	Back-Up Ring	6	a
19	23-1337	O-Ring	3	a
20	23-1415	O-Ring	1	a
21	40-1425	Body, 1/2" NPT	1	
23	50-0098	Bolt	4	
24	50-0103	Lock Washer	4	
25	50-0109	Hex Nut	4	
26	50-0179	Grease Fitting	1	
27	40-0114	Nut	4	

Kit contents:

- a: O-ring Kit
- b: Seal Kit, includes O-ring Kit
- c: Minor Repair Kit, includes Seal Kit
- d: Major Repair Kit, includes Minor Repair Kit

Part No.	Description
40-0262	Rotor, Selector
40-0264	Rotor, Bypass
40-0265	Rotor, Manipulator
40-0387	Rotor, Open Center
40-2246	Rotor, Block Center

Model Number Scheme

Basic Size	Port Size	Type of Ports	Pressure Rating	Port Location	Bolts
SV-50	3 3/8"	N NPT	3 3000 psi	I Inline/Side	S Standard/Short L Long P Panel Mount
	4 1/2"	S SAE			
		M Manifold	6 6000 psi	B Bottom	
		B Subplate			

Rotor Flow Pattern		Detent Shift Pattern	Handle	O-Ring Temp Rating
S	Selector	1 3 position 2 2 position 90° 3 2 position 45° cw 4 2 position 45° ccw	M Standard manual R Actuator Cylinder S Spring centered	N BUNA-N -30/+250 °F V Viton -15/+400 °F E EPR -70/+250 °F
O	Open Center			
A	Block Center			
M	Manipulator			
B	Bypass			

Example: SV50 1/2" NPT Selector (40-1528) Model Number :

SV50 4 N 3 I S S 1 M N

	SV-50	
PRODUCT	3/8"	1/2"
O-RING KIT	40-1851	
SEAL KIT	40-1538	
MINOR REPAIR KIT		
SELECTOR	40-1544	
MANIPULATOR	40-1619	
BYPASS	40-1776	
MAJOR REPAIR KIT		
SELECTOR	40-1543	
MANIPULATOR	40-1569	
BYPASS	40-1777	
VALVE ASSEMBLY		
SELECTOR	40-1530	40-1528
MANIPULATOR	40-1659	40-1658
BYPASS (2-POS)	40-1661	40-1660
SELECTOR (SPRING CTR)		40-1748
MANIPULATOR (SPRING CTR)		40-1747

RATINGS	
Standard Valve	
Port Size:	3/8" and 1/2"
Rated Flow:	30 gpm / 114 lpm
Cv:	3.2
Rated Pressure:	3000 / 6000 psi Liquid 207 / 414 bar Liquid 2000 / 4000 psi Gas 138 / 276 bar
Weight:	9.0 lb / 4 kg
Spring Centered Valve	
Port Size:	3/8" and 1/2"
Rated Flow:	30 gpm / 114 lpm
Cv:	3.2
Working Pressure:	3000 psi Liquid 207 bar Liquid 2000 psi Gas 138 bar
Weight:	9.0 lb / 4 kg

Standard configurations shown here; contact factory for other models and part numbers.