



Pilot Operated Check Modular Valve

**13.2 to 79.2 gpm
3625 to 5075 psi**

Features

This modular valve is used to prevent actuator self-running and to maintain actuator position.

Maximum Operating Pressure: 3625, 5075 psi

Specifications

Model No.	Nominal Diameter (Size)	Maximum Working Pressure psi	Maximum Flow Rate gpm	Cracking pressure psi	Area Ratio			Weight lbs	Gasket Surface Dimensions
					Pilot Piston	Check Valve Seat	Needle Valve Seat		
OCP-G01-W1-21 W2	1/8	3625	13.2	29 72	1	0.37	--	2.6	ISO 4401-03-02-0-94
OCP-G01-A1-21 A2				29 72					
OCP-G01-B1-21 B2				29 72					
OCP-G01-W1-F-21 W2				29 72	1	0.51	0.06	2.6	
OCP-G01-A1-F-21 A2				29 72					
OCP-G01-B1-F-21 B2				29 72					
OCP-G03-W1-J50 W2	3/8	3625	26.4	29 72	1	0.49	0.07	7.9	ISO 4401-05-04-0-94
OCP-G03-A1-J50 A2				29 72					
OCP-G03-B1-J50 B2				29 72					
OCP-G03-W1-D-J50 W2				29 72	1	0.49	--		
OCP-G03-A1-D-J50 A2				29 72					
OCP-G03-B1-D-J50 B2				29 72					
OPH-G04-W1-10 W2	1/2	5075	79.2	29 72	1	0.50	0.07	14.9	ISO 4401-07-06-0-94
OPH-G04-A1-10 A2				29 72					
OPH-G04-B1-10 B2				29 72					
OPH-G04-W1-D-10 W2				29 72	1	0.50	--		
OPH-G04-A1-D-10 A2				29 72					
OPH-G04-B1-D-10 B2				29 72					

• Handling

- Note that when the 01 size has the auxiliary symbol "F," tank port back pressure can cause the small valve to open, making it impossible to maintain pressure.
- If tank port back pressure causes the small valve to open and make it impossible to maintain pressure with the

03, 04 size, use a direct type with auxiliary symbol "D."

- Minimum pilot pressure fluctuates with the input side pressure during reverse flow. Operate the valve so pressure is at least twice as high as the required pressure obtained using the minimum pilot pressure characteristics graph.

4 Note that a sub plate and installation bolts are not included. See pages H4 and F87-89 if these items are required.

5 04 series modular valves do not have an L (DR2) drain port, so they cannot be used in combination with pressure center type solenoid valves (D).

Understanding Model Numbers

OCP - G 03 - W 1 - (D) - J50

01, 03 size

Design number

Note: For 01 size, 21

For 03 size, relationship between mounting bolts and design number is indicated as J50: M6, 50 : M8.

Auxiliary symbol F: With shock-resistant mechanism (01 size only)

D: No small valve poppet (03 size only)

Cracking pressure 1: 29 psi 2: 72 psi

Control port W: A, B ports A: A port
B: B port

Nominal diameter (size) 01, 03

Mounting method G: Gasket type

Pilot operated check modular valve

OPH - G 04 - W 1 - (D) - 10

04 size

Design number

Auxiliary symbol D: No small valve poppet

Cracking pressure 1: 29 psi
2: 72 psi

Control port W: A, B ports A: A port B: B port

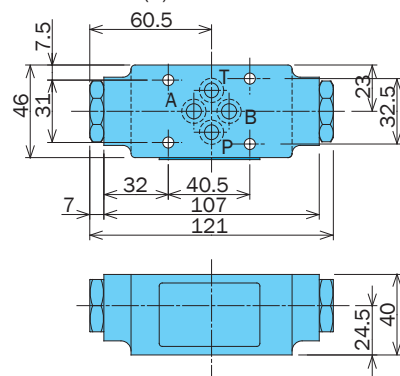
Nominal diameter (size) 04

Mounting method G: Gasket type

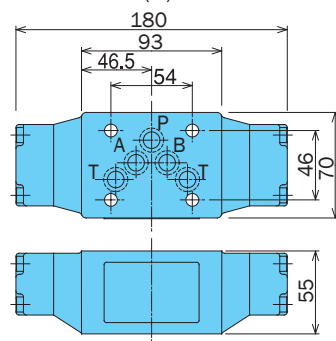
M35 Series pilot operated check modular valve

Installation Dimension Drawings

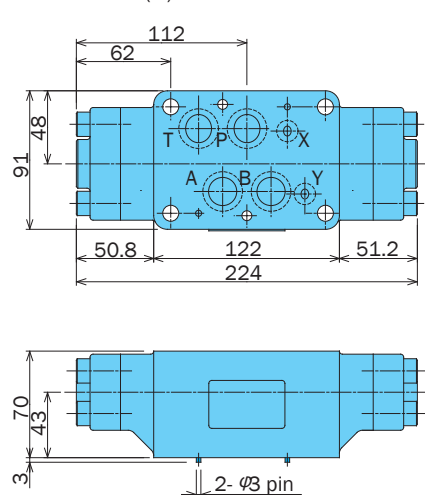
OCP-G01-**-(-F)-21



OCP-G03-**-(-D)-J50



OPH-G04-**-(-D)-10

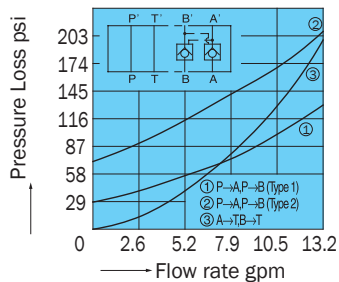


Specifications

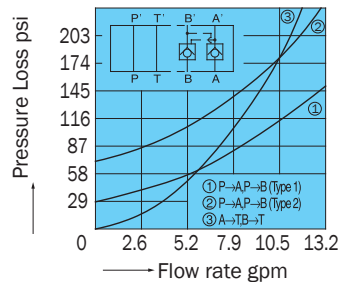
Hydraulic Operating Fluid Viscosity 32 centistokes

Pressure Loss Characteristics

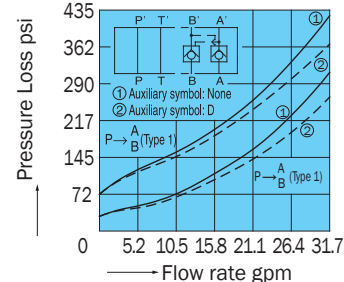
OCP-G01-W*-21



OCP-G01-W*-F-21

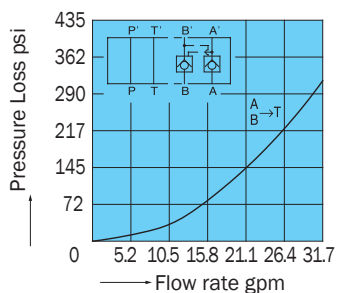


OCP-G03-W*-(D)-J50

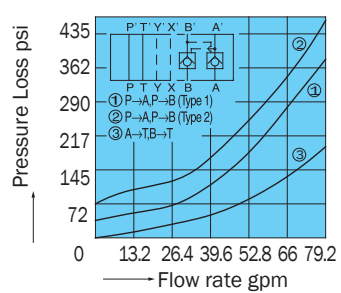


Pressure Loss Characteristics (Reverse Free Flow)

OCP-G03-W*-J50

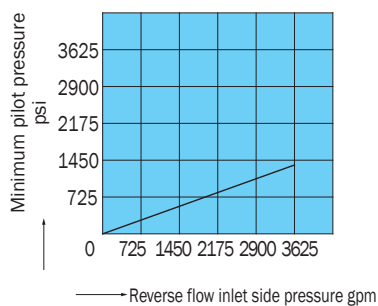


OPH-G04-W*-10

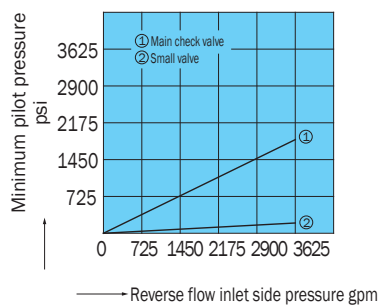


Minimum Pilot Pressure Characteristics

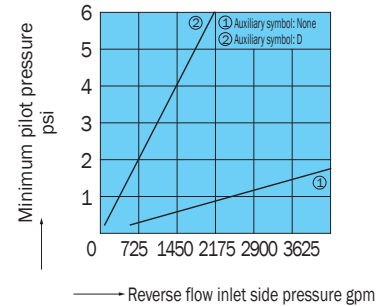
OCP-G01-W*-21



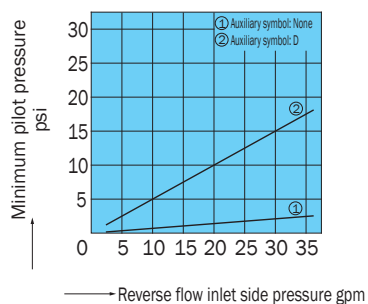
OCP-G01-W*-F-21



OCP-G03-W*-(D)-J50

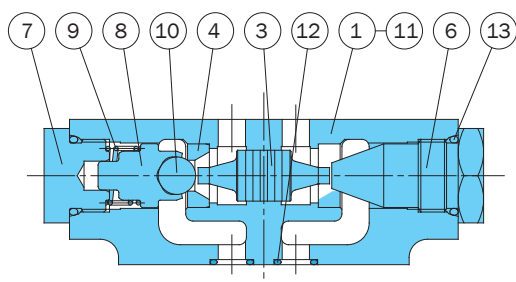


OPH-G04-W*-(D)-10

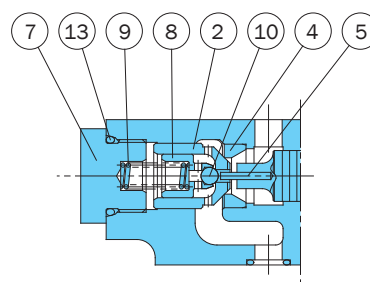


Cross-sectional Drawing

OCP-G01-A*-21



OCP-G01-A*-F-21



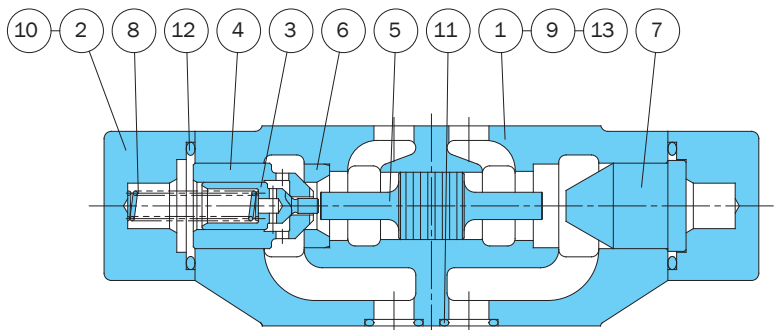
Part No.	Part Name
1	Body
2	Poppet
3	Piston
4	Seat
5	Rod
6	Bushing
7	Spring seat
8	Guide
9	Spring
10	Ball
11	Plate
12	O-ring
13	O-ring

Seal Part List (Kit Model Number BDBS-01CP)

Part No.	Part Name	Part Number	Q'ty		
			W	A	B
12	O-ring	1B-P9	4	4	4
13	O-ring	1B-P18	2	2	2

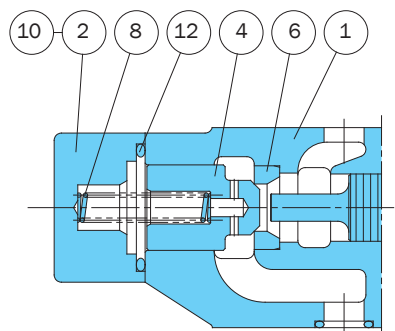
Note: 1.O-ring 1A/B-** refers to JIS B2401-1A/B.
2.Specify W, A, or B for the asterisk (*) in the kit model number.

OCP-G03-A*-J50



Part No.	Part Name
1	Body
2	Cover
3	Poppet
4	Poppet
5	Piston
6	Seat
7	Bushing
8	Spring
9	Plate
10	Screw
11	O-ring
12	O-ring
13	Pin

OCP-G03-**-D-J50

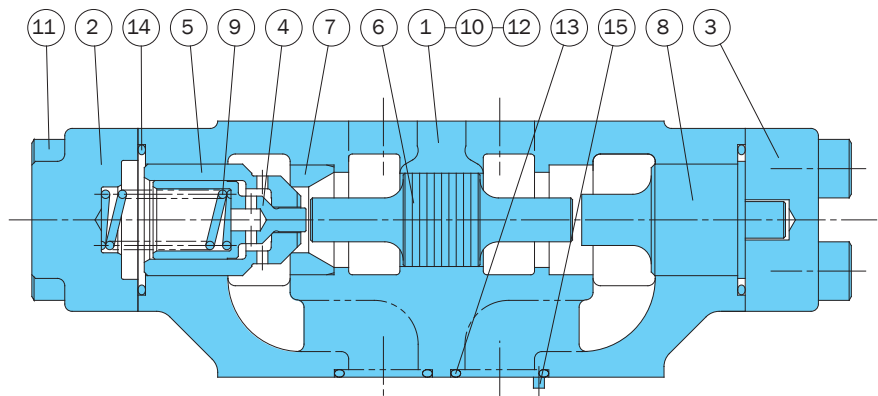


Seal Part List (Kit Model Number BDES-03CP*)

Part No.	Part Name	Part Number	Q'ty		
			W	A	B
11	O-ring	AS568-014(Hs90)	5	5	5
12	O-ring	1B-P29	2	2	2

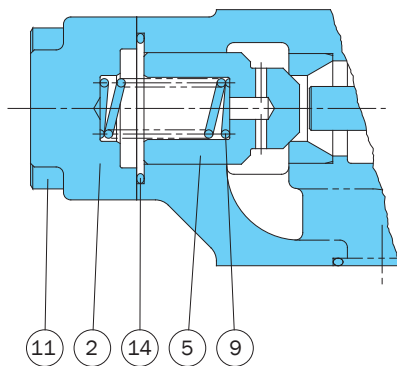
Note: 1. O-ring 1A/B-** refers to JIS B2401-1A/B.
2. Specify W, A, or B for the asterisk (*) in the kit model number.

OPH-G04-A*-10



Part No.	Part Name
1	Body
2	Cover
3	Cover
4	Poppet
5	Poppet
6	Piston
7	Seat
8	Bushing
9	Spring
10	Plate
11	Screw
12	O-ring
13	O-ring
14	O-ring
15	Pin

OPH-G04-**-D-10



Seal Part List (Kit Model Number BDKS-04CP*)

Part No.	Part Name	Part Number	Q'ty		
			W	A	B
12	O-ring	AS568-012(Hs90)	2	2	2
13	O-ring	AS568-118(Hs90)	4	4	4
14	O-ring	AS568-127(Hs90)	2	2	2

Note: 1.Specify W, A, or B for the asterisk (*) in the kit model number.