



Flow Regulator Modular Valve



Flow Regulator Modular Valve

13.2 to 79 gpm
3625 to 5075 psi

Features

This modular valve is used to control actuator speed and for other flow control valve applications.

A wide range of models are available for A and B port control, A or B port control, and P or T port control.

Maximum Operating Pressure: 3625, 5075 psi

Specifications

Model No.	Nominal Diameter (Size)	Maximum Working Pressure psi	Maximum Flow Rate gpm	Pressure Adjustment Range psi	Weight lbs	Gasket Surface Dimensions
OY-G01-T-20	1/8	3625	50	-	2.2	ISO 4401-03-02-0-94
OCY-G01-P-20				5.7	2.2	
OCY-G01-W-X-20 A B				11.4	2.8	
OCY-G01-W-Y-20 A B				11.4	2.6	
OCY-G03-P-J50				2.8		
OCY-G03-W-X-J51 A B				2.6		
OCY-G03-W-Y-J51 A B	3/8	3625	100	5.7	6.4	ISO 4401-05-04-0-94
OCY-G03-W-X-J51 A B				14.3	6.8	
OCY-G03-W-Y-J51 A B				14.3	6.6	
OCY-G03-W-Y-J51 A B				14.3	6.8	
OCY-G03-W-Y-J51 A B				14.3	6.6	
OYH-G04-P-10	1/2	5075	300	5.7	10.3	ISO 4401-07-06-0-94
OYH-G04-W-X-10 A B				14.3	14.3	
OYH-G04-W-Y-10 A B				14.3	14.3	
OYH-G04-W-Y-10 A B				14.3	14.3	
OYH-G04-W-Y-10 A B				14.3	14.3	

- Handling
- In a 03 size application where control differential pressure is large, use of an H type makes adjustment easier.
 - Note that a sub plate and installation bolts are not included. See pages H4 and F87-89 if these items are required.
 - 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

01, 03 size

OCY - G 03 - W - (H) Y - (K) - J51

Design number

Note: For 01 size, 20

For 03 size, relationship between mounting bolts and design number is indicated as J50, J51: M6, 50, 51 : M8.

Auxiliary symbol K: With handle (01, 03 size only)

Control mechanism X: Meter-in Y: Meter-out

Control function None: Standard

H: High-differential pressure type (03 size only)

Control port W: A, B ports

A: A port P: P port

B: B port T: T port (01 size only)

Nominal diameter (size) 01, 03

Mounting method G: Gasket type

Flow regulator modular type

OCY: With check valve

OY : Without check valve (01 size T port control)

Understanding Model Numbers

04 size

OYH - G 04 - W - Y - 10

Design number

Control mechanism X: Meter-in Y: Meter-out

Control port P: P port

W: A, B ports

A: A port

B: B port

Nominal diameter (size) 04

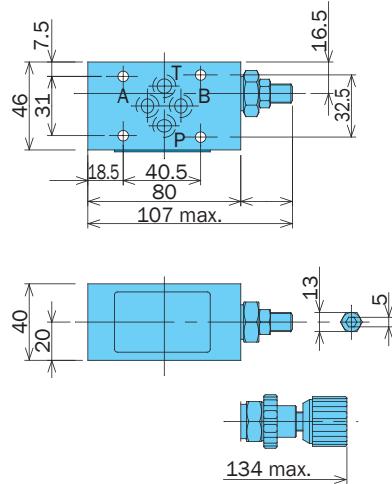
Mounting method G: Gasket type

M35 Series flow regulator modular valve

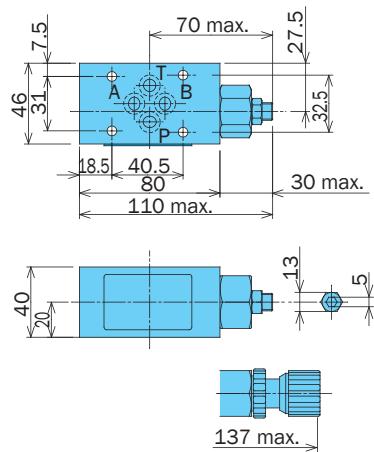
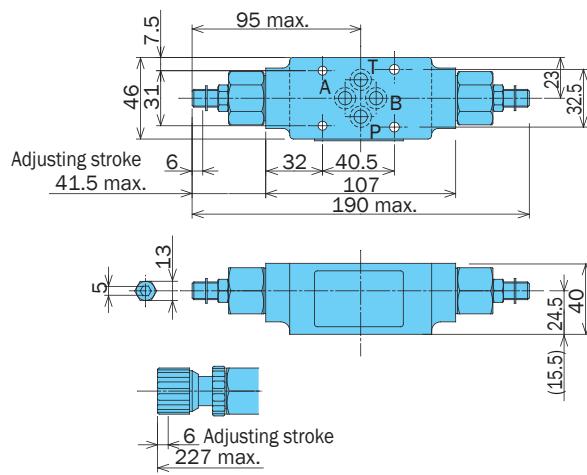
Installation Dimension Drawings

Note: The control flow rate is increased by counter clockwise (leftward) rotation of the adjusting screw.

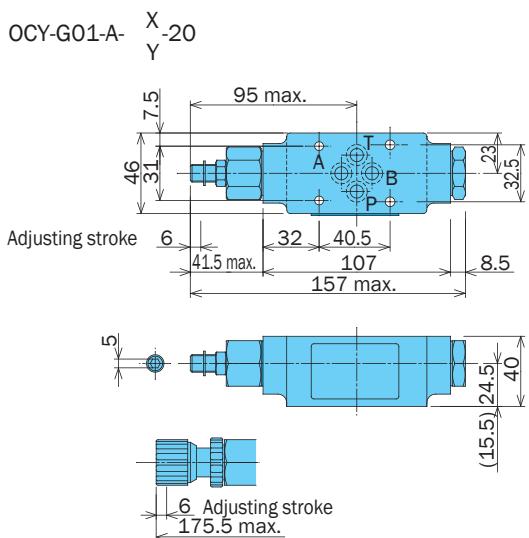
OY-G01-T-20



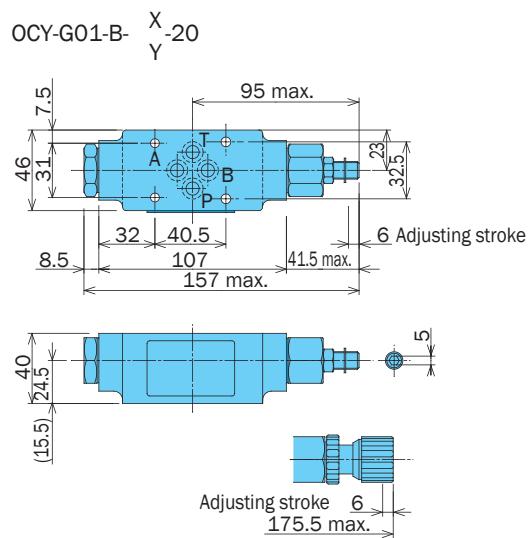
OCY-G01-P-20

OCY-G01-W-
X-20
Y

Note: Dimensions in the parentheses are for the OCY-G01-W-X-20.

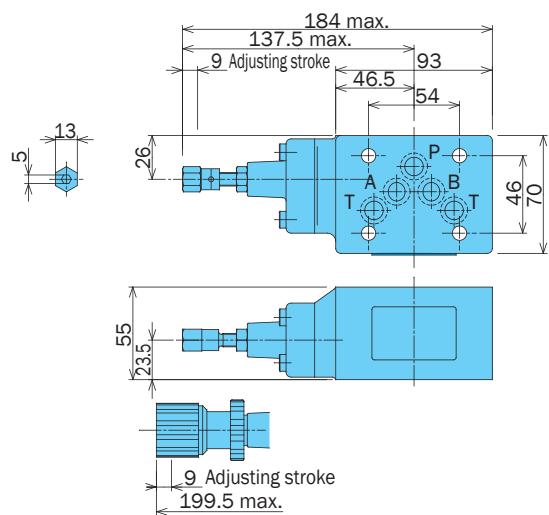


Note:
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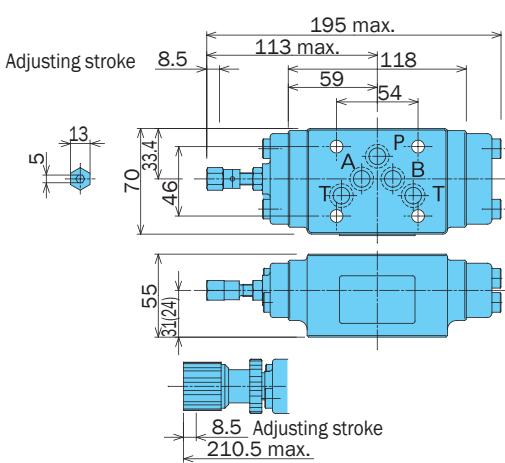


Note:
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OCY-G03-P-J50

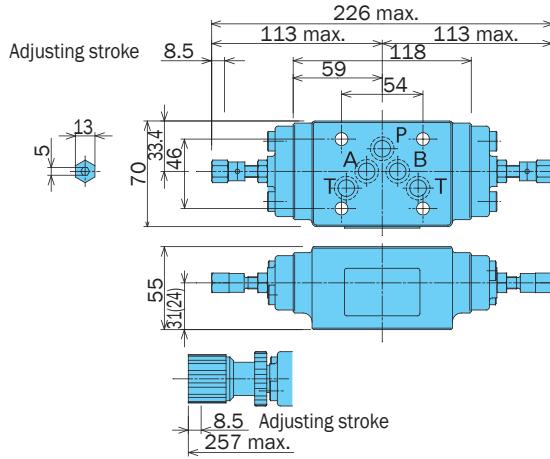


OCY-G03-A- X -J51
Y



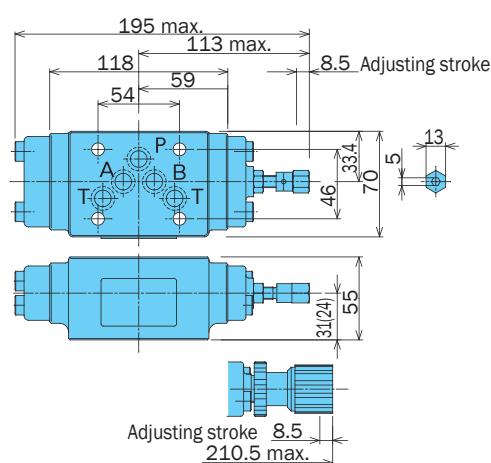
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OCY-G03-W- X -J51
Y



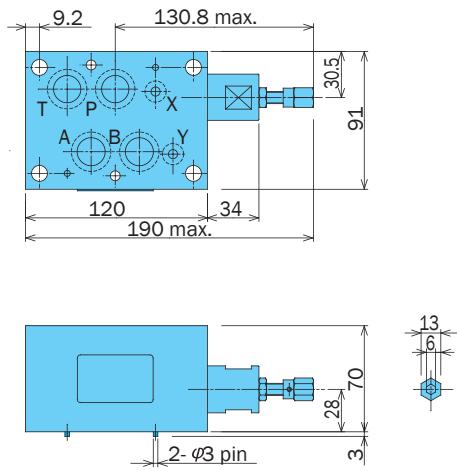
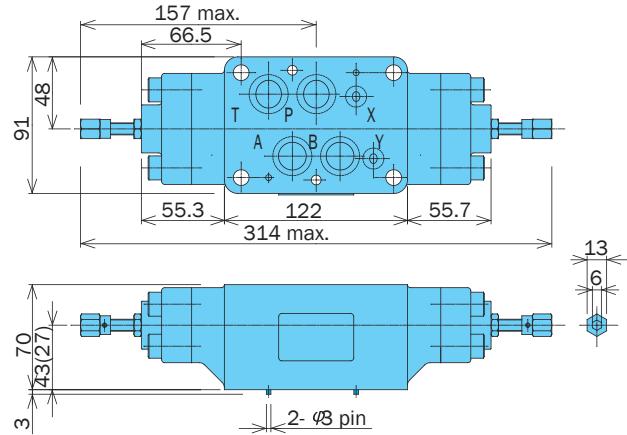
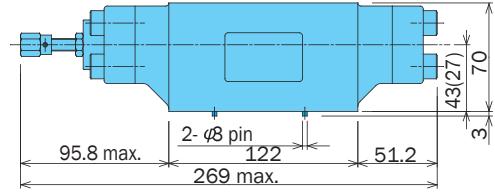
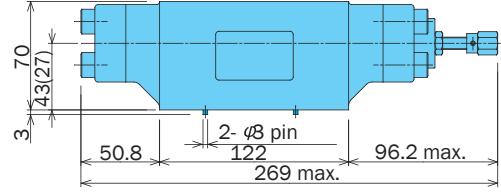
Note:
Dimensions in the parentheses are for the OCY-G03-W-X-J51.

OCY-G03-B- X -J51
Y



Note:
Dimensions in the parentheses are for the OCY-G03-B-X-J51.

OYH-G04-P-10

OYH-G04-W-X-10
Y-10OYH-G04-A-X-10
Y-10OYH-G04-B-X-10
Y-10

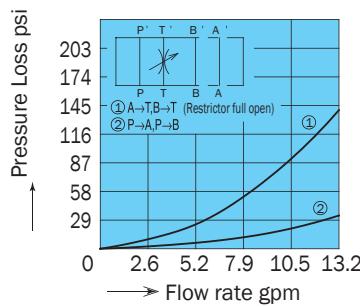
Note: Dimensions in the parentheses are for the OYH-G04-*X-10.

Performance Curves

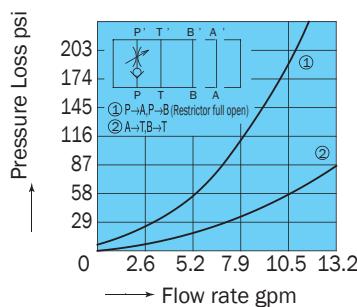
Hydraulic Operating Fluid Viscosity 32 centistokes

Pressure Loss Characteristics

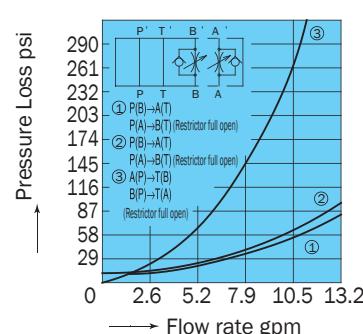
OY-G01-T-20



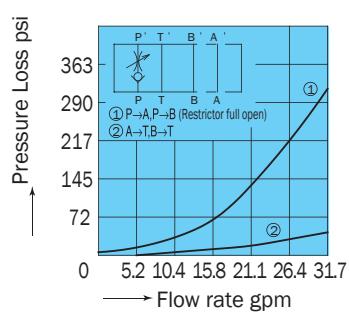
OCY-G01-P-20



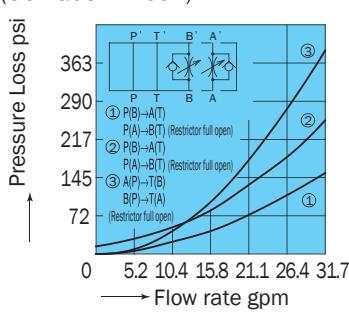
OCY-G01-W-Y-20
(OCY-G01-W-X-20)



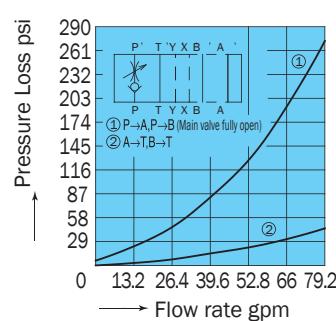
OCY-G03-P-J50



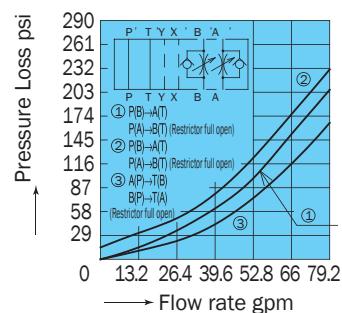
OCY-G03-W-Y-J51
(OCY-G03-W-X-J51)



OYH-G04-P-10

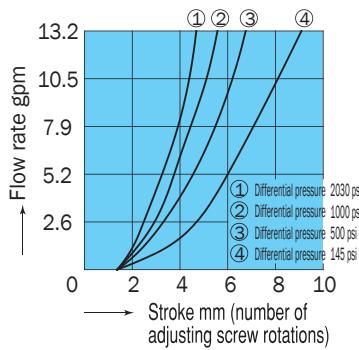


OYH-G04-W-Y-10
(OYH-G04-W-X-10)

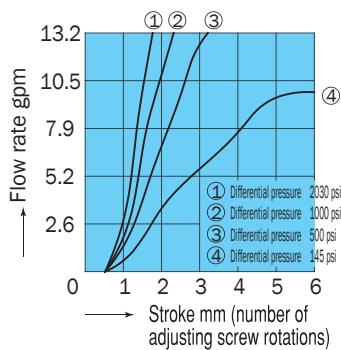


Stroke -- Flow Rate Characteristics

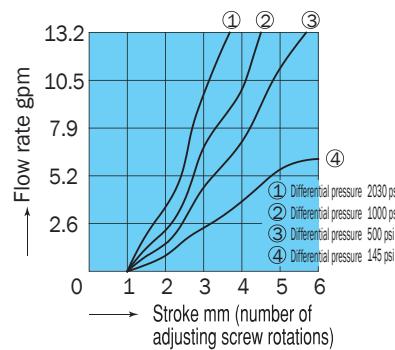
OY-G01-T-20



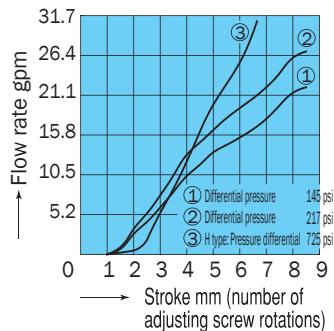
OCY-G01-P-20



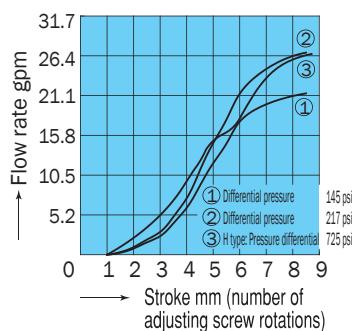
OCY-G01-*-*-20



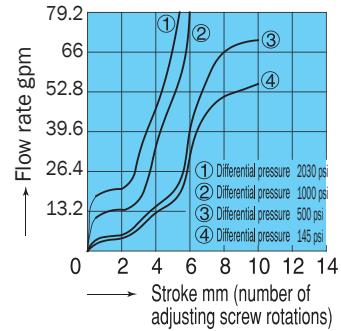
OCY-G03-P-(H)-J50



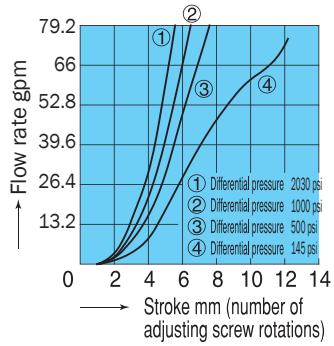
OCY-G03-W-(H)-Y-J51



OYH-G04-P-10

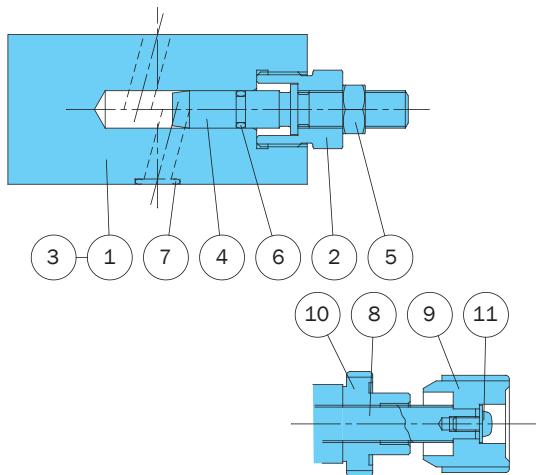


OYH-G04-W-Y-10



Cross-sectional Drawing

OY-G01-T-20

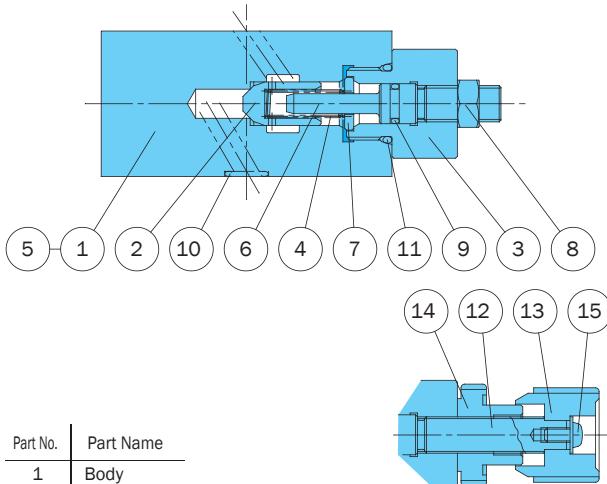


Seal Part List (Kit Model Number BFBS-01YT)

Part No.	Part Name	Part Number	Q'ty
T			
6	O-ring	1B-P7	1
7	O-ring	1B-P9	4

Note: O-ring 1A/B-** refers to JIS B2401-1A/B.

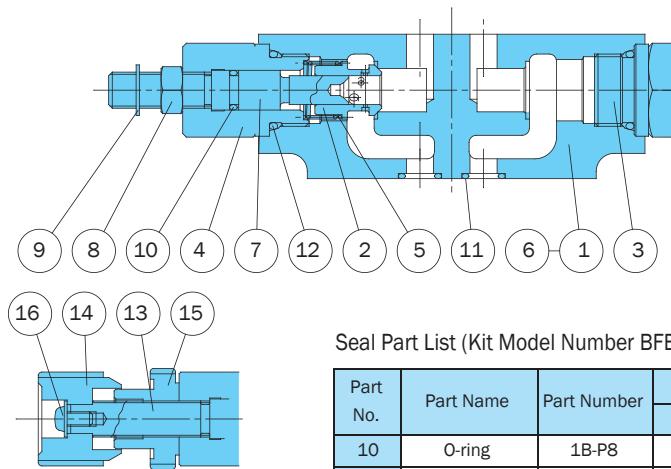
OCY-G01-P-20



Seal Part List (Kit Model Number BFBS-01CYP)

Part No.	Part Name	Part Number	Q'ty
T			
9	O-ring	1B-P8	1
10	O-ring	1B-P9	4
11	O-ring	1B-P18	1

Note: O-ring 1A/B-** refers to JIS B2401-1A/B.

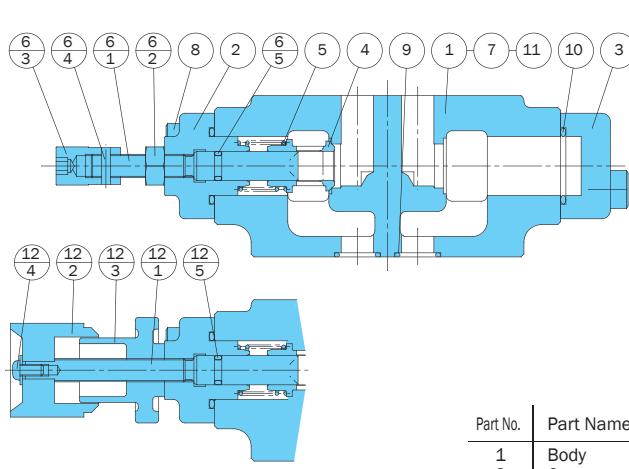
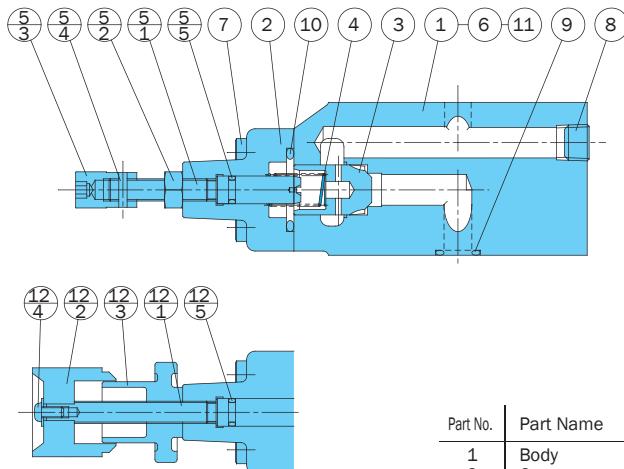


Seal Part List (Kit Model Number BFBS-01CY*)

Part No.	Part Name	Part Number	Q'ty		
			W	A	B
10	O-ring	1B-P8	2	1	1
11	O-ring	1B-P9	4	4	4
12	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.

Part No.	Part Name
1	Body
2	Throttle
3	Bushing
4	Retainer
5	Spring
6	Plate
7	Screw
8	Nut
9	E-ring
10	O-ring
11	O-ring
12	O-ring
13	Screw
14	Knob
15	Nut
16	Screw



Part No.	Part Name
1	Body
2	Cover
3	Throttle
4	Spring
5	Screw kit
5 ₁	Screw
5 ₂	Nut
5 ₃	Nut
5 ₄	Pin
5 ₅	O-ring
6	Plate
7	Screw
8	Plug
9	O-ring
10	O-ring
11	Pin
12	Handle kit
12 ₁	Screw
12 ₂	Knob
12 ₃	Nut
12 ₄	Screw
12 ₅	O-ring

Seal Part List (Kit Model Number BFES-03CYP)

Part No.	Part Name	Part Number	Q'ty	
			P	
5(12)- ₅	O-ring	1B-P7	1	
9	O-ring	AS568-014(Hs90)	5	
10	O-ring	1B-P24	1	

Note: O-ring 1A/B-** refers to JIS B2401-1A/B.

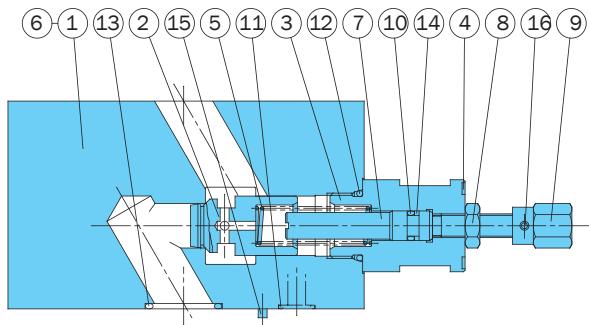
Seal Part List (Kit Model Number BFES-03CY*)

Part No.	Part Name	Part Number	Q'ty		
			W	A	B
6(12)- ₅	O-ring	1B-P7	2	1	1
9	O-ring	AS568-014(Hs90)	5	5	5
10	O-ring	1B-P22	2	2	2

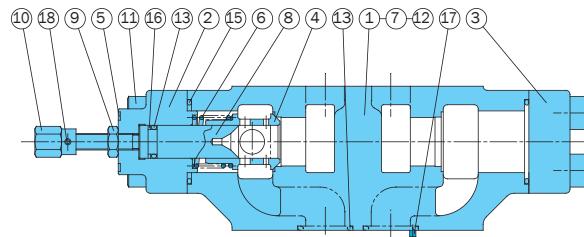
Note: 1. O-ring 1A/B-** refers to JIS B2401-1A/B.
2. Specify W, A, or B for the asterisk (*) in the kit model number.

Part No.	Part Name
1	Body
2	Cover
3	Cover
4	Throttle
5	Spring
6	Screw kit
6 ₁	Screw
6 ₂	Nut
6 ₃	Nut
6 ₄	Pin
6 ₅	O-ring
7	Plate
8	Screw
9	O-ring
10	O-ring
11	Pin
12	Handle kit
12 ₁	Screw
12 ₂	Knob
12 ₃	Nut
12 ₄	Screw
12 ₅	O-ring

OYH-G04-P-10



OYH-G04-A-Y-10



Seal Part List

(Kit Model Number BFKS-04CYP)

Part No.	Part Name	Part Number	Q'ty	P
10	O-ring	1B-P7	1	
11	O-ring	AS568-012(Hs90)	2	
12	O-ring	1B-P20	1	
13	O-ring	AS568-118(Hs90)	4	
14	Backup ring	T2-P7	1	

Note: 1. O-ring 1A/B-** refers to JIS B2401-1A/B.
2. Backup ring indicates JIS B 2407-T2-**.

Seal Part List

(Kit Model Number BFKS-04CY*)

Part No.	Part Name	Part Number	Q'ty		
			W	A	B
12	O-ring	AS568-012 (Hs90)	2	2	2
13	O-ring	1A-P12	2	1	1
14	O-ring	AS568-118 (Hs90)	4	4	4
15	O-ring	AS568-127 (Hs90)	2	2	2
16	Backup ring	T2-P12	2	1	1

Note: 1. O-ring 1A/B-** refers to JIS B2401-1A/B.

2. Backup ring indicates JIS B 2407-T2-**.

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

Part No.	Part Name
1	Body
2	Cover
3	Cover
4	Throttle
5	Plate
6	Spring
7	Plate
8	Screw
9	Nut
10	Nut
11	Screw
12	O-ring
13	O-ring
14	O-ring
15	O-ring
16	Backup ring
17	Pin
18	Pin