



Counter Balance Modular Valve

10.5 to 79 gpm
2030 psi

Features

This modular valve is used to control actuator back pressure and for other pressure control valve applications.

Pressure adjustment is possible across a wide range, from 36 to 2030 psi

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
OCQ-G01-A11-20 A12	1/8	3625	10.5	115 to 1000 500 to 2030	2.4	ISO 4401-03-02-0-94
OCQ-G01-B11-20 B12				115 to 1000 500 to 2030	2.4	
OCQ-G03-A1A-J50 A1C A1E	3/8	3625	21	36 to 123 123 to 500 500 to 2030	7.7	ISO 4401-05-04-0-94
OCQ-G03-B1A-J50 B1C B1E				36 to 123 123 to 500 500 to 2030	7.7	
OQH-G04-A1A-10 A1C A1E	1/2	5075	79	36 to 123 72 to 500 290 to 2030	17.6	ISO 4401-07-06-0-94
OQH-G04-B1A-10 B1C B1E				36 to 123 72 to 500 290 to 2030	17.6	

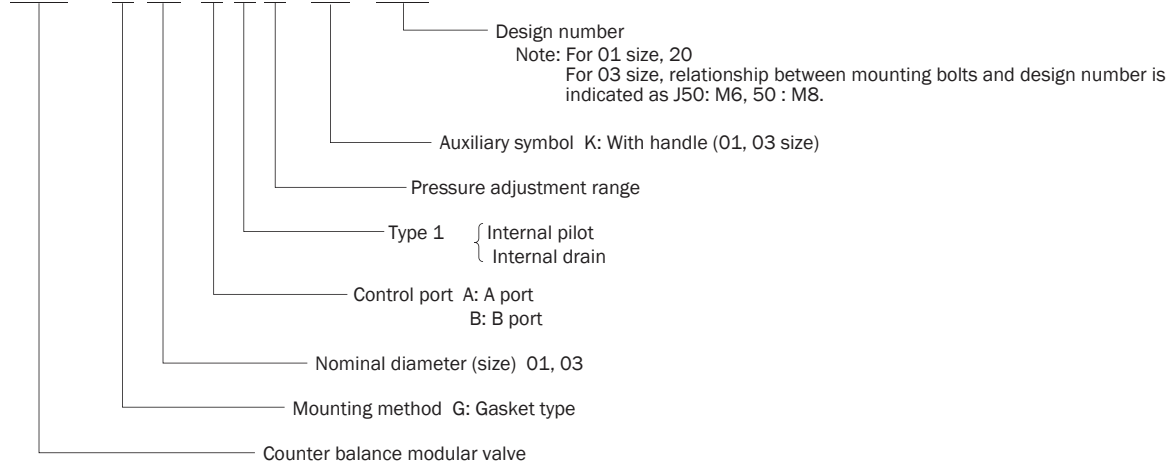
• Handling

- The pressure adjustment range is expressed in terms of cracking pressure.
- Run tank port piping directly to the tank, and ensure that back pressure is as small as possible.
- Note that a sub plate and installation bolts are not included. See pages H4 and F87-89 if these items are required.
- O4 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

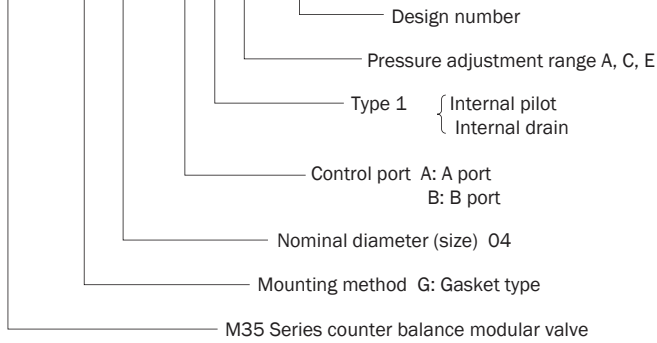
OCQ - G 03 - B 1 A - (K) - J50



Understanding Model Numbers

O4 size

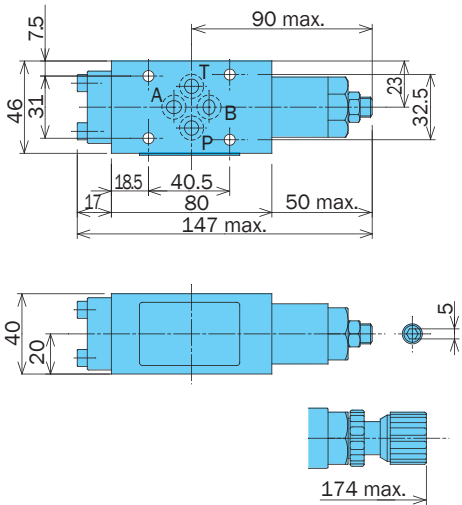
OQH - G 04 - B 1 A - 10



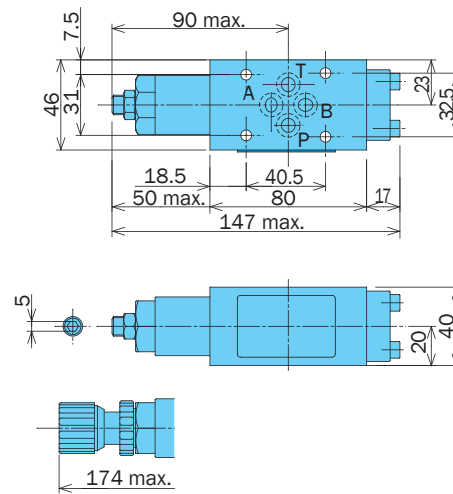
Installation Dimension Drawings

Note: Pressure is increased by clockwise (rightward) rotation of the adjusting screw (bolt), and decreased by counterclockwise (leftward) rotation.

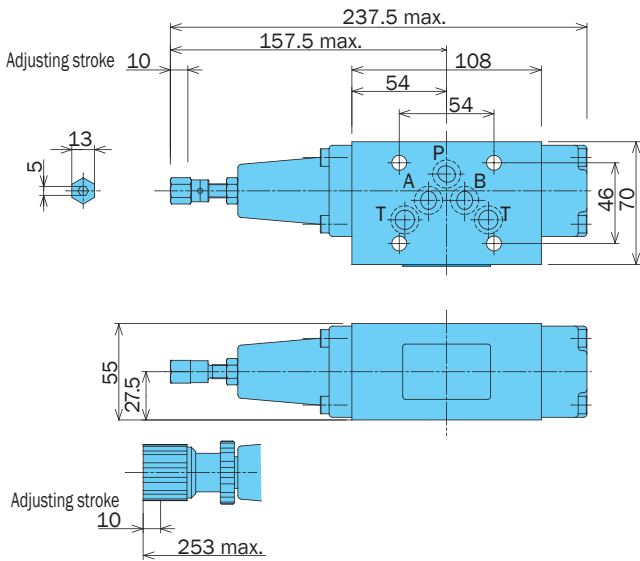
OCQ-G01-A1*-20



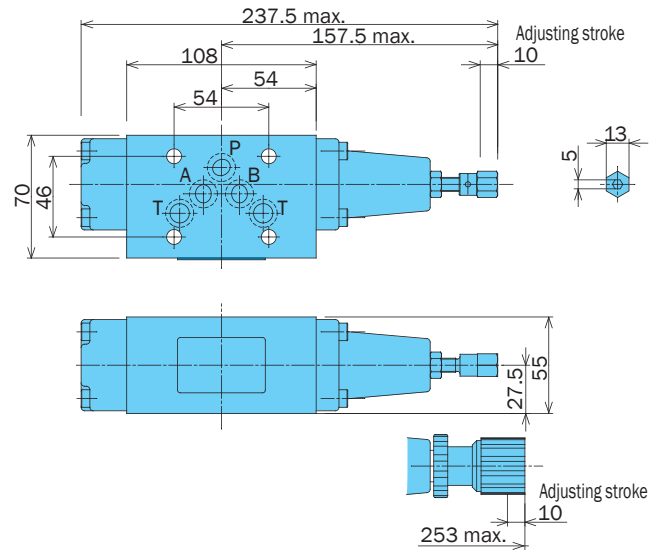
OCQ-G01-B1*-20



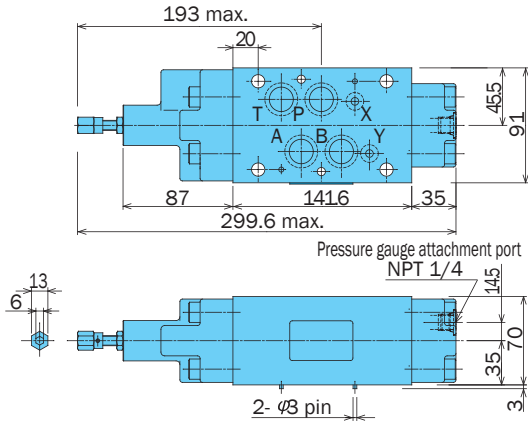
OCQ-G03-A1*-J50



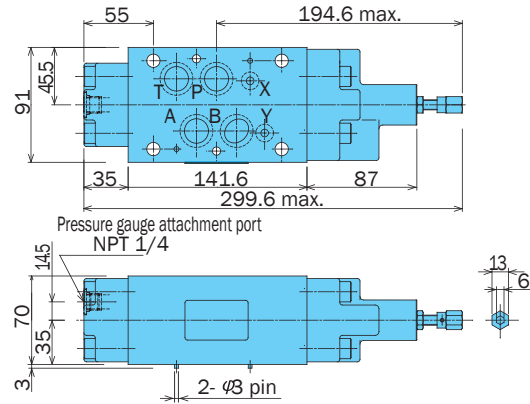
OCQ-G03-B1*-J50



OQH-G04-A1*-10



OQH-G04-B1*-10

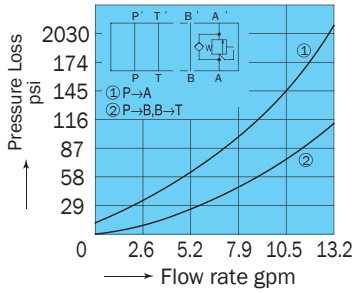


Performance Curves

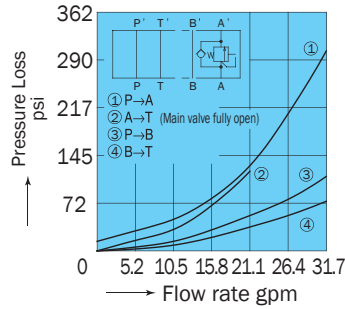
Hydraulic Operating Fluid Viscosity 32 centistokes

Pressure Loss Characteristics

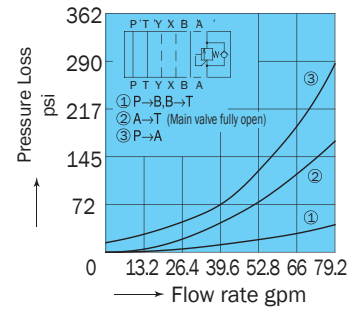
OCQ-G01-A1*-20



OCQ-G03-A1A-J50

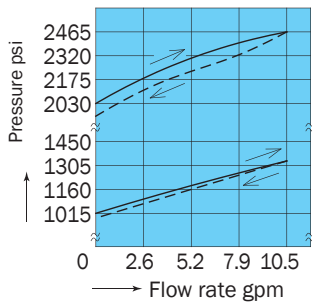


OQH-G04-B1A-10

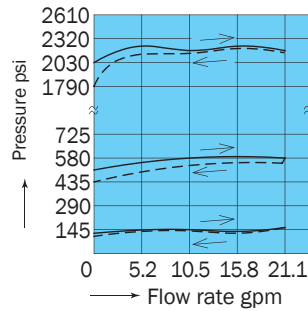


Pressure - Flow Rate Characteristics

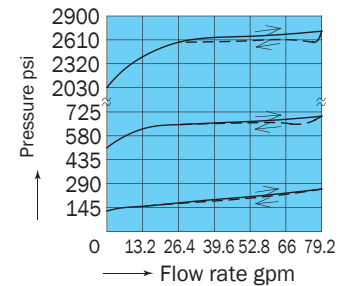
OCQ-G01-A1*
B1* -20



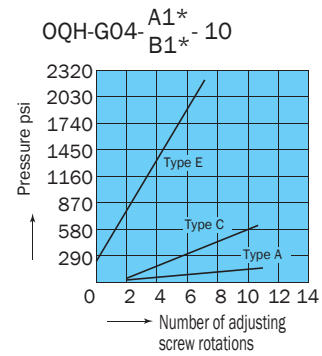
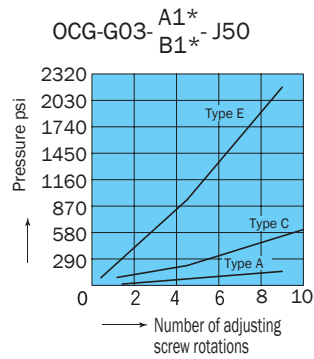
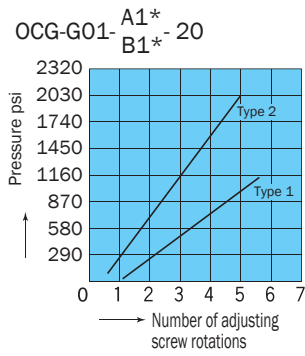
OCQ-G03-A1*-J50



OQH-G04-A1
B1 *-10

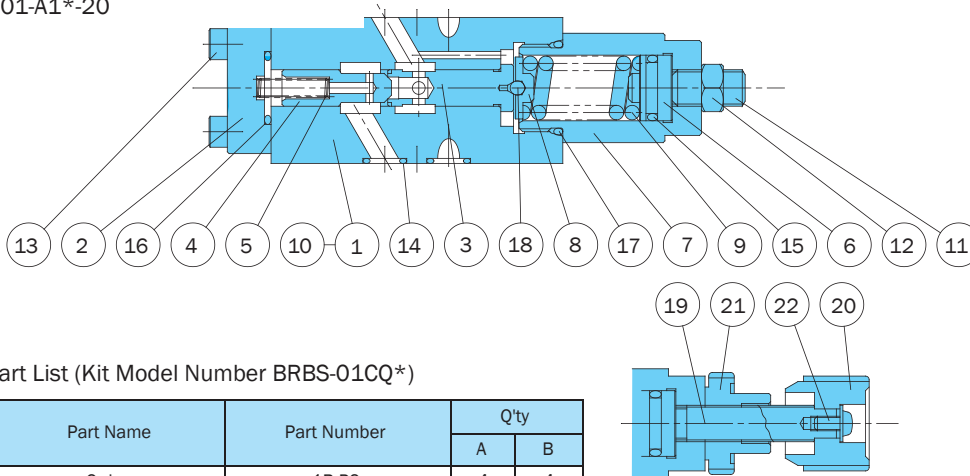


Number of Adjusting Screw Rotations - Pressure Characteristics



Cross-sectional Drawing

OCQ-G01-A1*-20



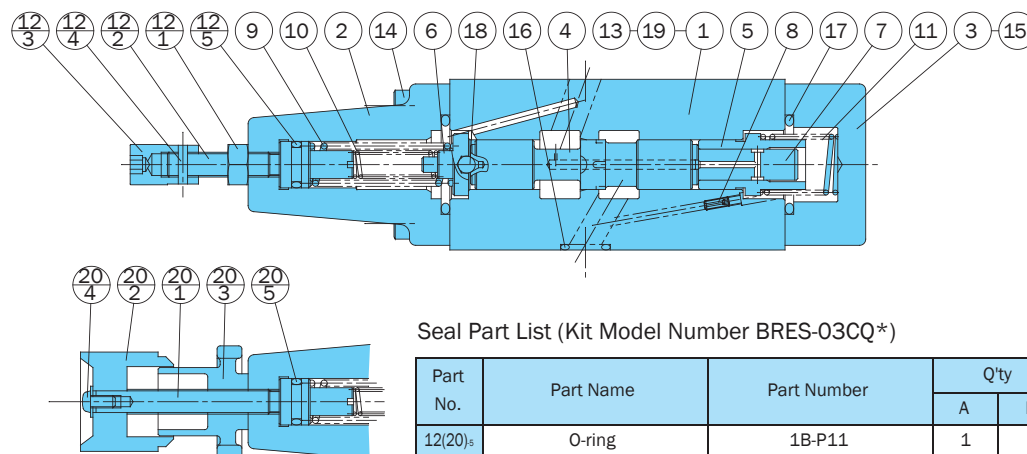
Seal Part List (Kit Model Number BRBS-01CQ*)

Part No.	Part Name	Part Number	Q'ty	
			A	B
14	O-ring	1B-P9	4	4
15	O-ring	1B-P14	1	1
16	O-ring	1B-P16	1	1
17	O-ring	1B-P22	1	1

Part No.	Part Name
1	Body
2	Cover
3	Spool
4	Poppet
5	Spring
6	Plunger
7	Retainer
8	Guide
9	Spring
10	Plate
11	Screw
12	Nut
13	Screw
14	O-ring
15	O-ring
16	O-ring
17	O-ring
18	Ball
19	Screw
20	Knob
21	Nut
22	Screw

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

OCQ-G03-A1*-J50



Seal Part List (Kit Model Number BRES-03CQ*)

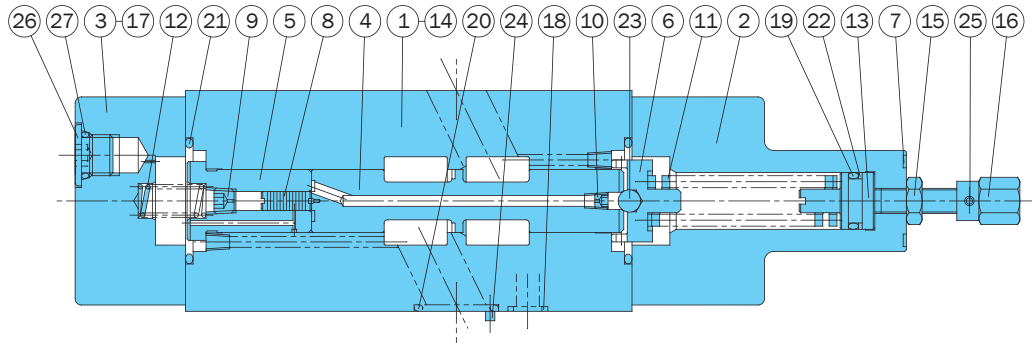
Part No.	Part Name	Part Number	Q'ty	
			A	B
12(20) _s	O-ring	1B-P11	1	1
16	O-ring	AS568-014(Hs90)	5	5
17	O-ring	1B-P26	2	2

Part No.	Part Name
1	Body
2	Cover
3	Cover
4	Spool
5	Sleeve
6	Guide
7	Plunger
8	Choke
9	Spring
10	Spring
11	Spring
12	Screw kit
12 ₁	Screw
12 ₂	Nut
12 ₃	Nut
12 ₄	Pin
12 ₅	O-ring
13	Plate
14	Screw
15	Screw
16	O-ring
17	O-ring
18	Ball
19	Pin
20	Handle kit
20 ₁	Screw
20 ₂	Knob
20 ₃	Nut
20 ₄	Screw
20 ₅	O-ring

Note: The 10 spring is not included with pressure adjustment Type A.

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

OQH-G04-B1*-10



Part No.	Part Name
1	Body
2	Cover
3	Cover
4	Spool
5	Sleeve
6	Guide
7	Plate
8	Plunger
9	Choke
10	Choke
11	Spring
12	Spring
13	Screw
14	Plate
15	Nut
16	Nut
17	Screw
18	O-ring
19	O-ring
20	O-ring
21	O-ring
22	Backup ring
23	Ball
24	Pin
25	Pin
26	Plug
27	O-ring

Seal Part List (Kit Model Number BRKS-04CQ*)

Part No.	Part Name	Part Number	Q'ty	
			A	B
18	O-ring	AS568-012(Hs90)	2	2
19	O-ring	1B-P14	1	1
20	O-ring	AS568-118(Hs90)	4	4
21	O-ring	1B-G35	2	2
22	Backup ring	T2-P14	1	1
27	O-ring	1B-P11	1	1

Note: The illustration shows the configuration for pressure adjustment ranges Type C and Type E. For Type A, there is no #8 piston or #10 choke.

- Note: 1. O-ring 1A/B-** refers to JIS B2401-1A/B.
 2. Backup ring indicates JIS 2407-T2-**.
 3. Specify A or B for the asterisk (*) in the kit model number.