



Brake Modular Valve

20 to 30ℓ/min
0.8 to 21, 25MPa

Features

- ① This modular pressure control valve prevents abnormal pressure when the actuator stops, enabling smooth stops.
- ② Wide ranging applicability Maximum operating pressure: 25MPa{255kgf/cm²}
- Pressure Adjustment Range: 0.8 to 21, 25MPa {8.2 to 214, 255kgf/cm²}

Specifications

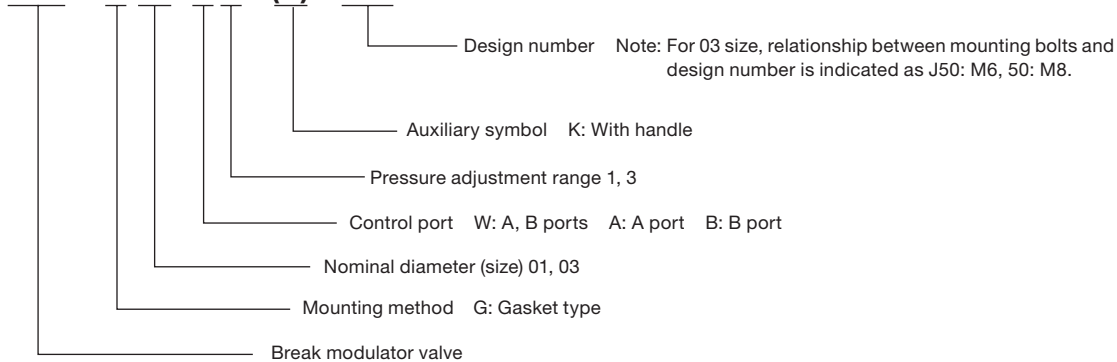
Model No.	Nominal Diameter (Size)	Maximum Working Pressure MPa{kgf/cm ² }	Maximum Flow Rate ℓ/min	Pressure Adjustment Range MPa{kgf/cm ² }	Weight kg	Gasket Surface Dimensions
ORO-G01-W1-20 W3	1/8	25 {255}	20	0.8 to 7 { 8.2 to 71.4 } 3.5 to 21 {35.7 to 214 }	1.5	ISO 4401-03-02-0-05
ORO-G01-A1-20 A3				0.8 to 7 { 8.2 to 71.4 } 3.5 to 21 {35.7 to 214 }	1.4	
ORO-G01-B1-20 B3				0.8 to 7 { 8.2 to 71.4 } 3.5 to 21 {35.7 to 214 }	1.4	
ORO-G03-W1-J50 W3	3/8	25 {255}	30	0.8 to 7 { 8.2 to 71.4 } 3.5 to 25 {35.7 to 255 }	4.8	ISO 4401-05-04-0-05
ORO-G03-A1-J50 A3				0.8 to 7 { 8.2 to 71.4 } 3.5 to 25 {35.7 to 255 }	4.0	
ORO-G03-B1-J50 B3				0.8 to 7 { 8.2 to 71.4 } 3.5 to 25 {35.7 to 255 }	4.0	

● Handling

- ① The pressure adjustment range is expressed using cracking pressure.
- ② For use as a safety valve, use a pressure override that is higher than the required circuit pressure.
- ③ Note that a sub plate and installation bolts are not included. See pages D-90 through D-95 if these items are required.

Explanation of model No.

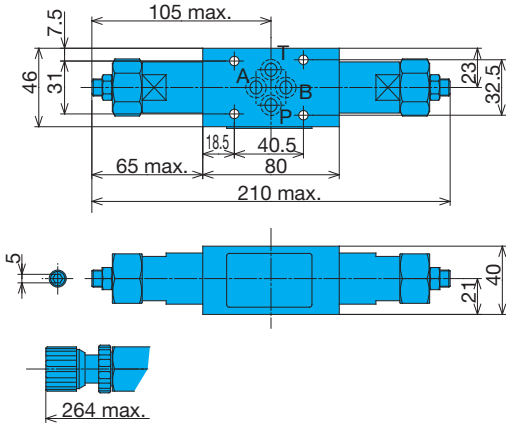
ORO - G 03 - A 3 - (K) - J50



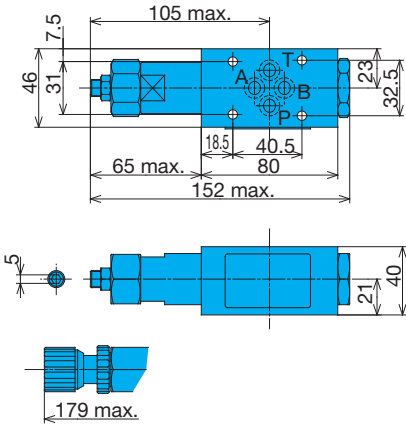
Installation Dimension Drawings

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

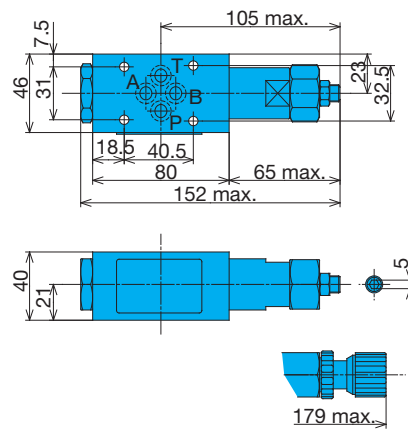
ORO-G01-W*-20



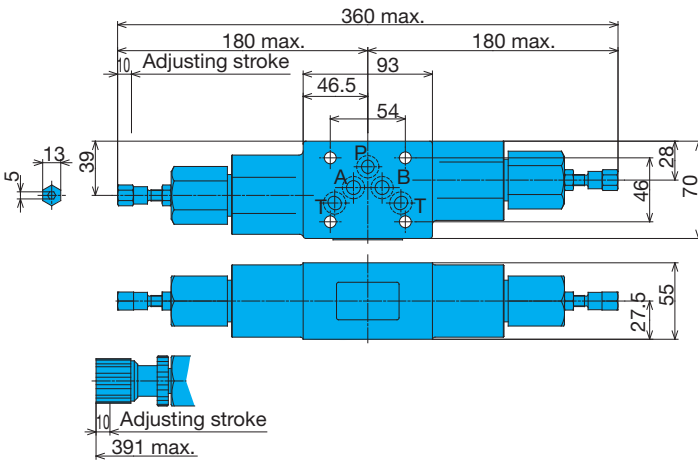
ORO-G01-A*-20



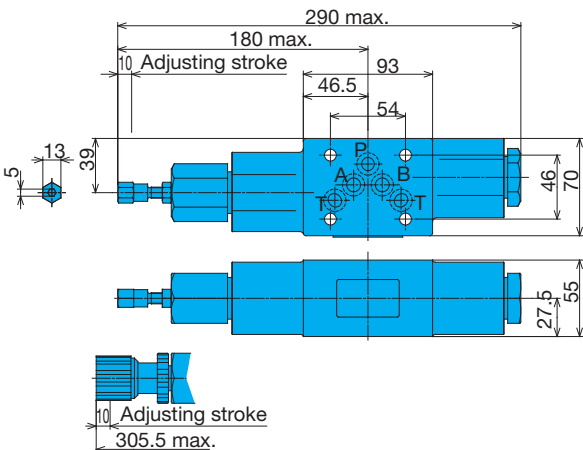
ORO-G01-B*-20



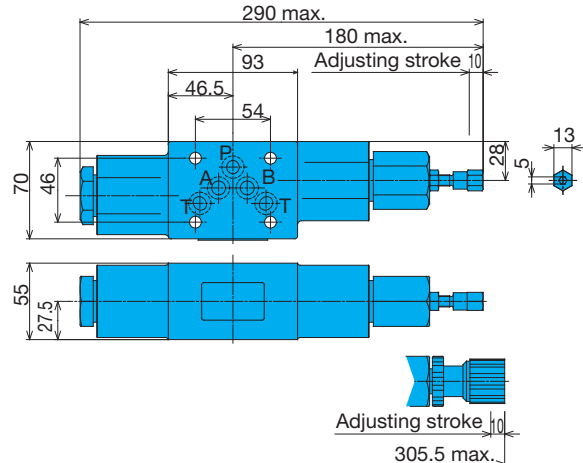
ORO-G03-W*-J50



ORO-G03-A*-J50



ORO-G03-B*-J50



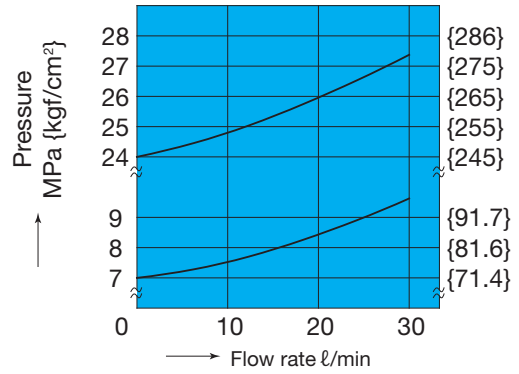
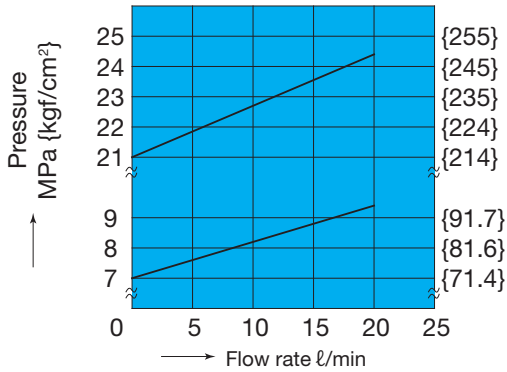
Performance Curves

Differential Hydraulic Fluid Kinematic Viscosity 32mm²/s

Pressure – Flow Rate Characteristics

ORO-G01-**-20

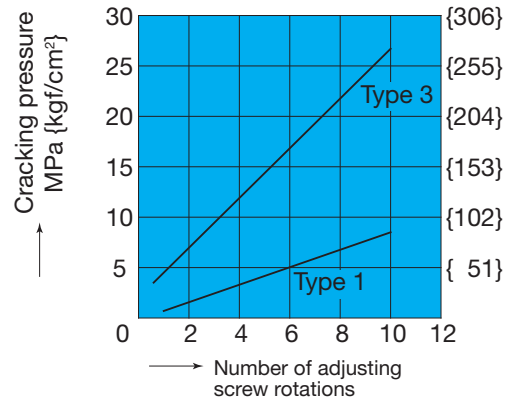
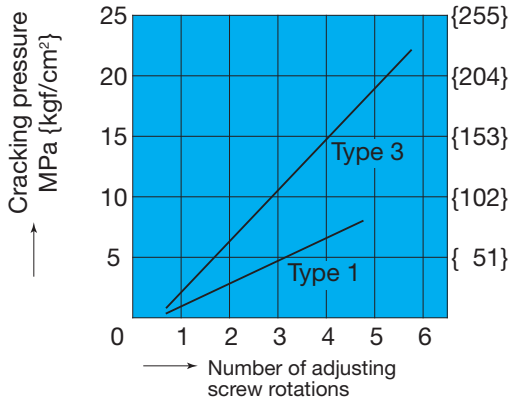
ORO-G03-**-J50



Number of Adjusting Screw Rotations – Pressure Characteristics

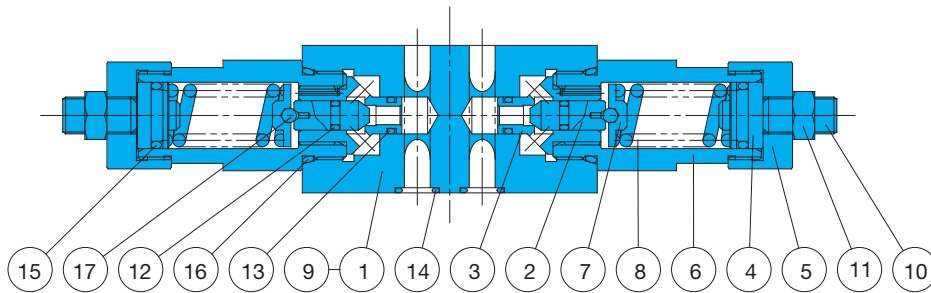
ORO-G01-**-20

ORO-G03-**-J50



Cross-sectional Drawings

ORO-G01-W*-20

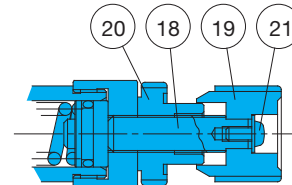


Part No.	Part Name
1	Body
2	Poppet
3	Seat
4	Plunger
5	Bushing
6	Retainer
7	Guide
8	Spring
9	Plate
10	Screw
11	Nut
12	O-ring
13	O-ring
14	O-ring
15	O-ring
16	O-ring
17	Ball
18	Screw
19	Knob
20	Nut
21	Screw

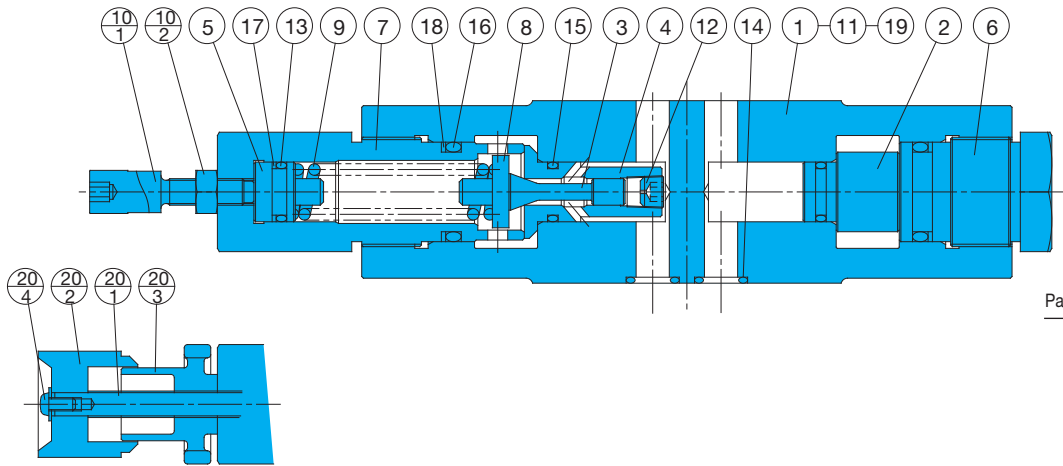
Seal Part List (Kit Model Number BRBS-01R0*-0A)

Part No.	Part Name	Part Number	Q'ty		
			W	A	B
12	O-ring	NBR-70-1 P5	2	1	1
13	O-ring	NBR-90 P7	2	2	2
14	O-ring	AS568-012(NBR-90)	4	4	4
15	O-ring	NBR-90 P14	2	1	1
16	O-ring	NBR-90 P22	2	2	2

Note) 1. The materials and hardness of the O-ring conform with JIS B2401.
 2. Specify W, A, or B for the asterisk (*) in the kit model number.



ORO-G03-A*-J50



Part No.	Part Name
1	Body
2	Plug
3	Poppet
4	Seat
5	Plunger
6	Bushing
7	Retainer
8	Guide
9	Spring
10	Screw kit
10.1	Screw
10.2	Nut
11	Plate
12	Orifice
13	O-ring
14	O-ring
15	O-ring
16	O-ring
17	Backup ring
18	Backup ring
19	Pin
20	Handle kit
20.1	Screw
20.2	Knob
20.3	Nut
20.4	Screw

Seal Part List (Kit Model Number BRES-03R0*)

Part No.	Part Name	Part Number	Q'ty		
			W	A	B
13	O-ring	NBR-70-1 P14	2	1	1
14	O-ring	AS568-014(NBR90)	5	5	5
15	O-ring	NBR-90 P14	2	2	2
16	O-ring	NBR-90 P24	2	2	2
17	Backup ring	T2-P14	2	1	1
18	Backup ring	T2-P24	2	2	2

- Note) 1. The materials and hardness of the O-ring conform with JIS B2401.
 2. Backup ring indicates JIS B2407-T2-**.
 3. Specify W, A, or B for the asterisk (*) in the kit model number.