



### Brake Modular Valve

20 to 30 ℓ /min  
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/cm<sup>2</sup>}

Pressure Adjustment Range:  
0.8 to 21, 25MPa  
{8.2 to 214, 255kgf/cm<sup>2</sup>}

#### Specifications

Model No.	Nominal Diameter (Size)	Maximum Working Pressure MPa{kgf/cm <sup>2</sup> }	Maximum Flow Rate ℓ /min	Pressure Adjustment Range MPa{kgf/cm <sup>2</sup> }	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 4401-03-02-0-94
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 4401-05-04-0-94
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	

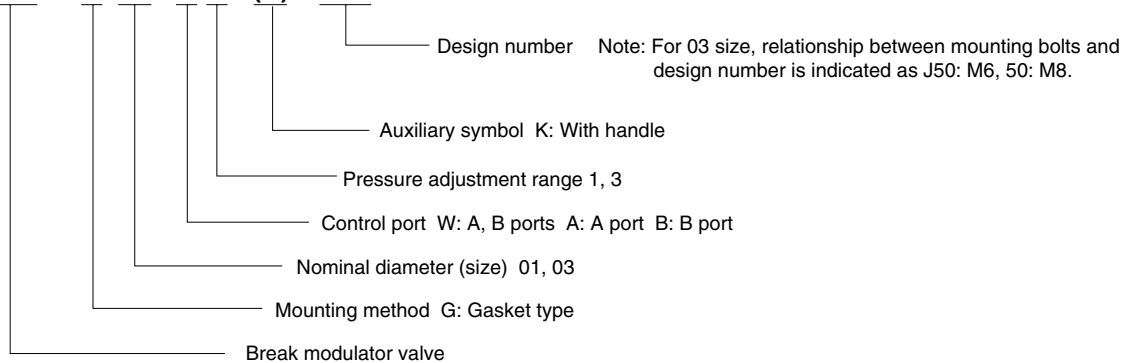
#### ● Handling

- 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.

#### Understanding Model Numbers

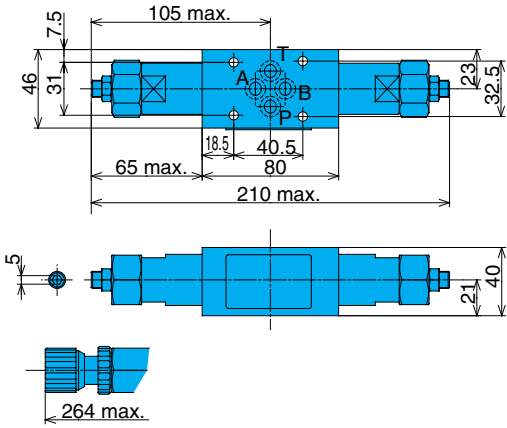
**ORO - G 03 - A 3 - (K) - J50**



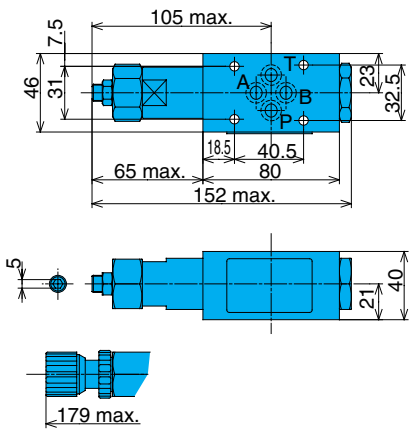
# Installation Dimension Drawings

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

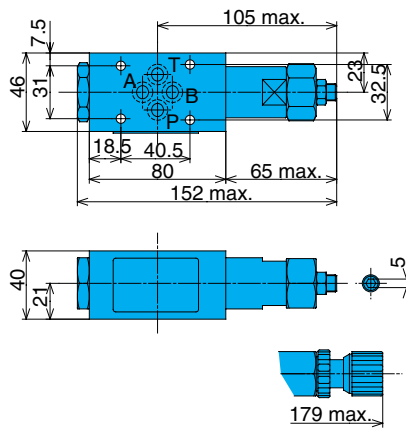
ORO-G01-W\*-20



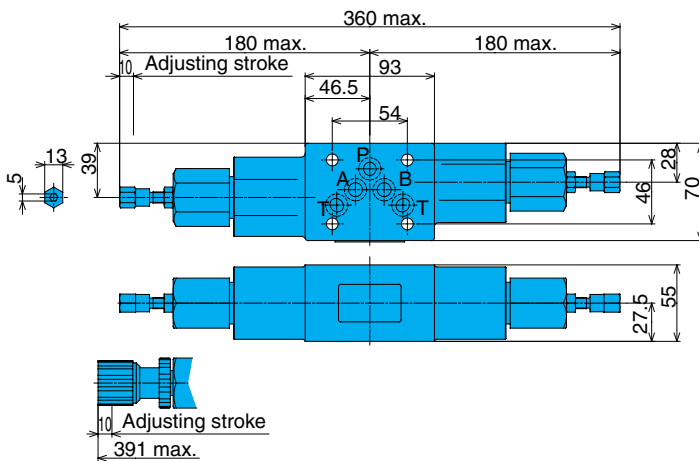
ORO-G01-A\*-20



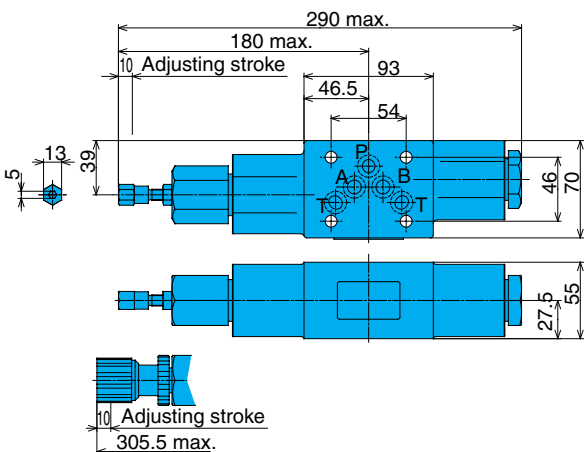
ORO-G01-B\*-20



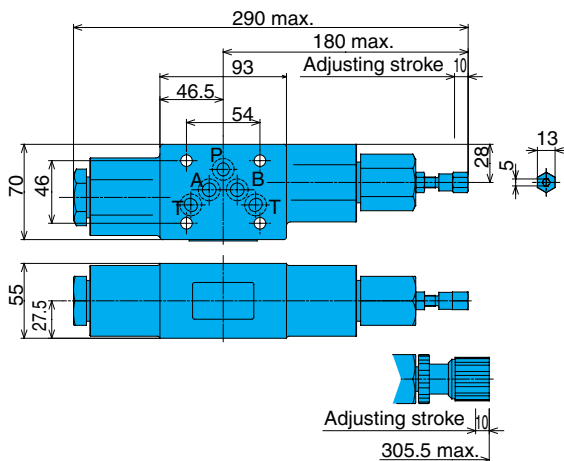
ORO-G03-W\*-J50



ORO-G03-A\*-J50



ORO-G03-B\*-J50



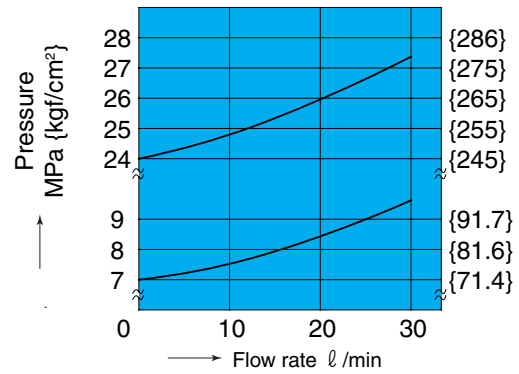
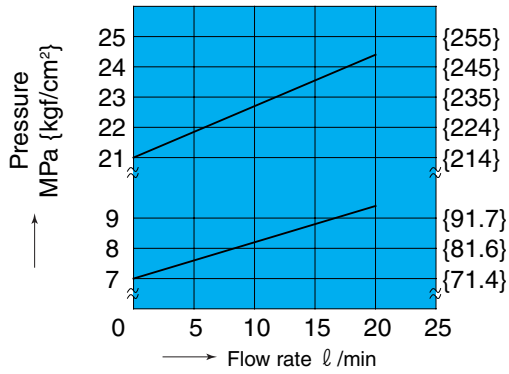
# Performance Curves

Differential Hydraulic Fluid Viscosity 32mm<sup>2</sup>/s

Pressure – Flow Rate Characteristics

ORO-G01-\*\*-20

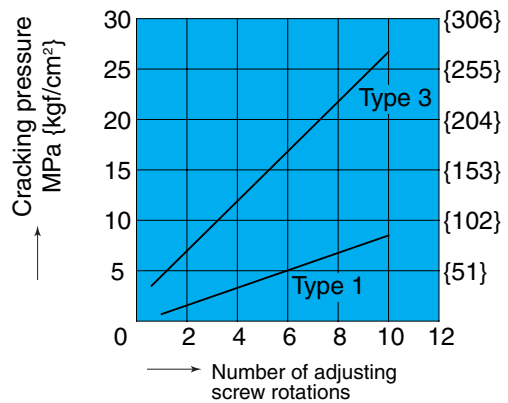
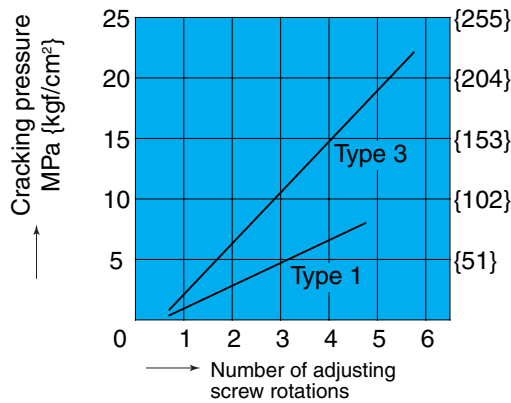
ORO-G03-\*\*-J50



Number of Adjusting Screw Rotations – Pressure Characteristics

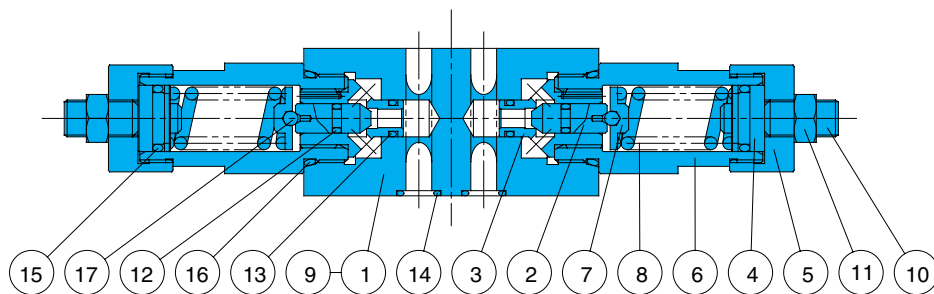
ORO-G01-\*\*-20

ORO-G03-\*\*-J50



# Cross-sectional Drawing

ORO-G01-W\*-20

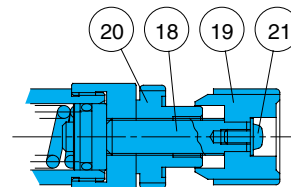


Part No.	Part Name
1	Body
2	Poppet
3	Seat
4	Plunger
5	Bushing
6	Retainer
7	Guide
8	Spring
9	Plate
10	Screw
11	Nut
12	O-ring
13	O-ring
14	O-ring
15	O-ring
16	O-ring
17	Ball
18	Screw
19	Knob
20	Nut
21	Screw

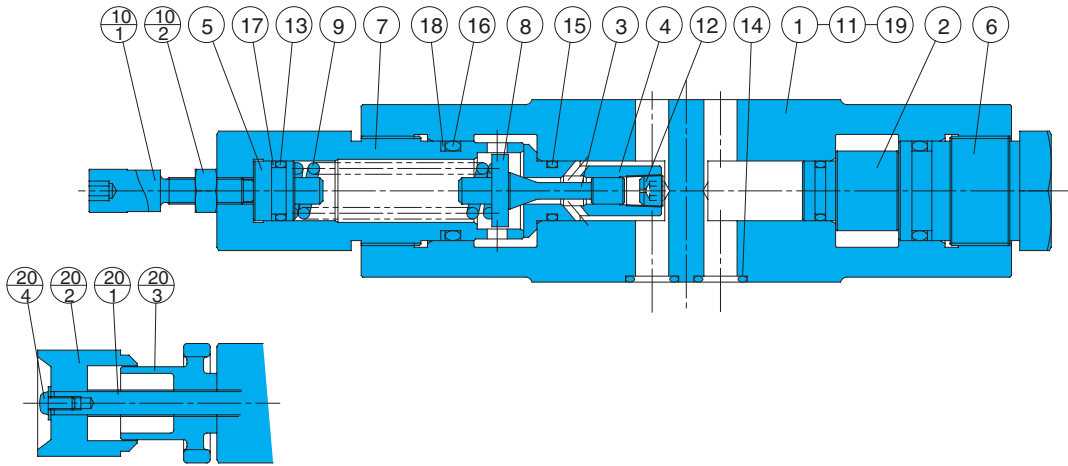
Seal Part List (Kit Model Number BRBS-01R0\*)

Part No.	Part Name	Part Number	Q'ty		
			W	A	B
12	O-ring	1A-P5	2	1	1
13	O-ring	1B-P7	2	2	2
14	O-ring	1B-P9	4	4	4
15	O-ring	1B-P14	2	1	1
16	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.



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	1A-P14	2	1	1
14	O-ring	AS568-014(Hs90)	5	5	5
15	O-ring	1B-P14	2	2	2
16	O-ring	1B-P24	2	2	2
17	Backup ring	T2-P14	2	1	1
18	Backup ring	T2-P24	2	2	2

- Note) 1. O-ring 1A/B-\*\* refers to JIS B2401-1A/B.  
 2. Backup ring indicates JIS B2407-T2-\*\*.  
 3. Specify W, A, or B for the asterisk (\*) in the kit model number.