



### 01 Balanced Piston Type Pressure Reducing Modular Valve

40ℓ/min  
0.15 to 25MPa

#### Features

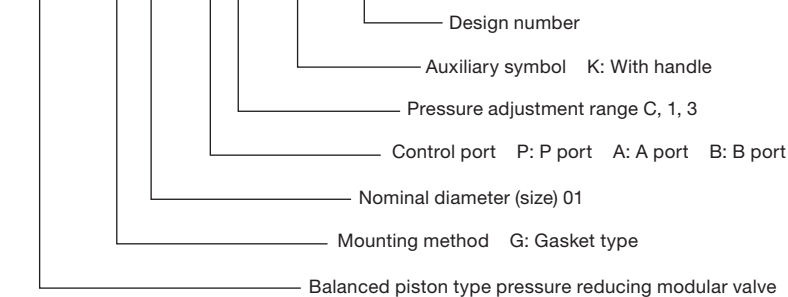
- ① This modular valve makes the pressure in part of the circuit lower than the main circuit.
- ② Even when pressure changes in the primary main circuit, the reduced secondary pressure is maintained at a constant level.
- ③ Compared with the direct type, this type of valve has outstanding Pressure-Flow Rate Characteristics, and a superior flow rate in the low pressure control range.
- ④ Maximum operating pressure: 25MPa {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 |
|---------------------------|-------------------------|--|-------------------------|---|-----------|---------------------------|
| OGB-G01-PC-20<br>P1<br>P3 | 1/8                     | 25<br>{255}  | 40                      | 0.15 to 3.5{ 1.5 to 35.7}                           | 1.9       | ISO 4401-03-02-05         |
| 0.8 to 7 { 8.2 to 71.4}   |                         |  |                         |   |           |                           |
| 3.5 to 21 {35.7 to 214}   |                         |  |                         |   |           |                           |
| OGB-G01-AC-20<br>A1<br>A3 |                         |  |                         | 0.15 to 3.5{ 1.5 to 35.7}                           | 1.9       |                           |
|                           |                         |  |                         | 0.8 to 7 { 8.2 to 71.4}                             |           |                           |
|                           |                         |  |                         | 3.5 to 21 {35.7 to 214}                             |           |                           |
| OGB-G01-BC-20<br>B1<br>B3 |                         |  |                         | 0.15 to 3.5{ 1.5 to 35.7}                           | 1.9       |                           |
|                           |                         |  |                         | 0.8 to 7 { 8.2 to 71.4}                             |           |                           |
|                           |                         |  |                         | 3.5 to 21 {35.7 to 214}                             |           |                           |

#### Explanation of model No.

OGB - G 01 - P 1 - (K) - 20



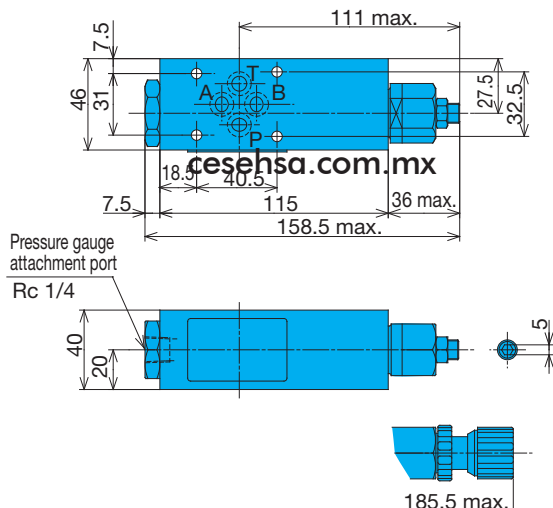
#### ● Handling

- ① See the Pressure-Flow Rate Characteristics for information about how the flow rate is controlled at low pressures.
- ② Note that a change in tank port back pressure causes a change in setting pressure.
- ③ Vent piping is not possible.
- ④ Note that a sub plate and installation bolts are not included. See pages D-90 through D-95 if these items are required.

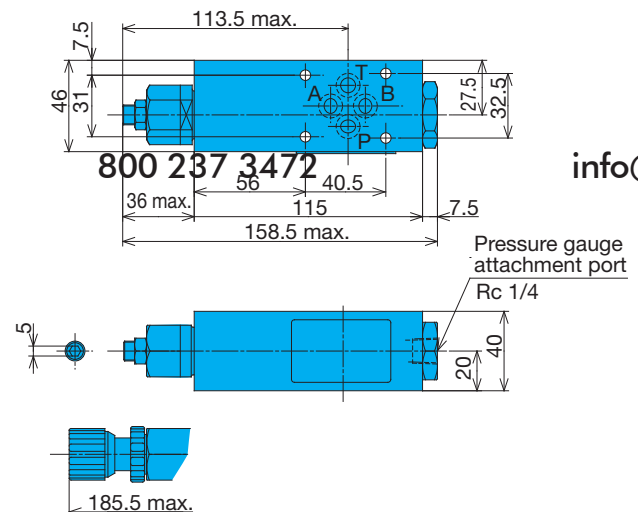
#### Installation Dimension Drawings

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

OGB-G01-P<sup>\*</sup>-20  
A



OGB-G01-B\*-20

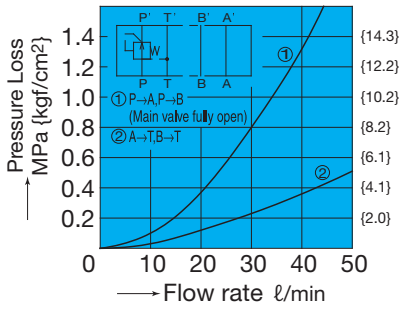


# Performance Curves

Hydraulic Operating Fluid Kinematic Viscosity 32mm<sup>2</sup>/s

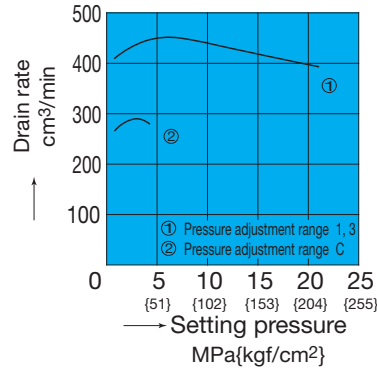
Pressure Loss Characteristics

OGB-G01-P\*-20



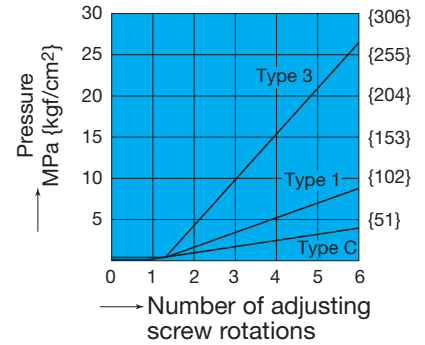
Pressure – Drain Rate Characteristics

OGB-G01-\*\*-20



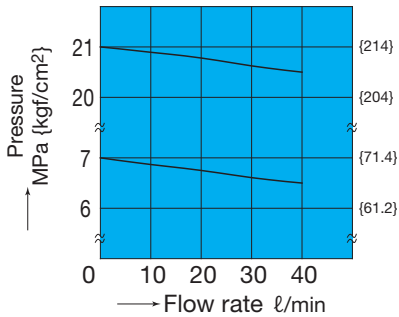
Number of Adjusting Screw Rotations – Pressure Characteristics

OGB-G01-P\*-20

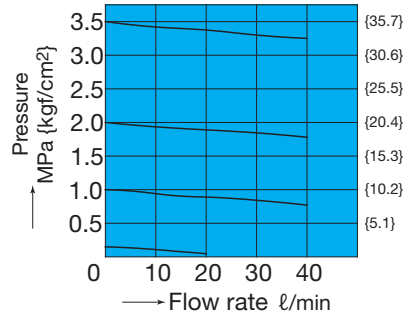


Pressure – Flow Rate Characteristics

OGB-G01-<sup>1</sup>/<sub>3</sub>-20

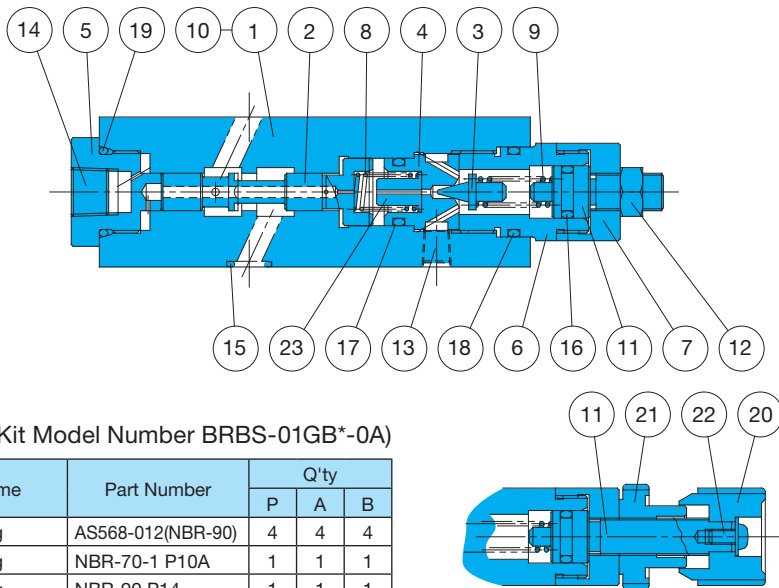


OGB-G01-\*C-20



# Cross-sectional Drawing

OGB-G01-P\*-20



| Part No. | Part Name |
|----------|-----------|
| 1        | Body      |
| 2        | Spool     |
| 3        | Poppet    |
| 4        | Seat      |
| 5        | Bushing   |
| 6        | Retainer  |
| 7        | Bushing   |
| 8        | Spring    |
| 9        | Spring    |
| 10       | Plate     |
| 11       | Screw     |
| 12       | Nut       |
| 13       | Plug      |
| 14       | Plug      |
| 15       | O-ring    |
| 16       | O-ring    |
| 17       | O-ring    |
| 18       | O-ring    |
| 19       | O-ring    |
| 20       | Knob      |
| 21       | Nut       |
| 22       | Screw     |
| 23       | Choke     |

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

| Part No. | Part Name | Part Number       | Q'ty |   |   |
|----------|-----------|-------------------|------|---|---|
|          |           |                   | P    | A | B |
| 15       | O-ring    | AS568-012(NBR-90) | 4    | 4 | 4 |
| 16       | O-ring    | NBR-70-1 P10A     | 1    | 1 | 1 |
| 17       | O-ring    | NBR-90 P14        | 1    | 1 | 1 |
| 18       | O-ring    | NBR-90 P20        | 1    | 1 | 1 |
| 19       | O-ring    | NBR-90 P20        | 1    | 1 | 1 |

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

D Modular Valve