

Modular Type Electro-hydraulic Proportional Reducing Valve

30 ℓ /min
0.3 to 14MPa

Features

This valve incorporates the ease-of-use principles of the modular valve into an electro-hydraulic proportional reducing valve to provide reduction

control of hydraulic system pressure in proportion to input current. This valve is perfect for a small-scale hydraulic system, such as those used

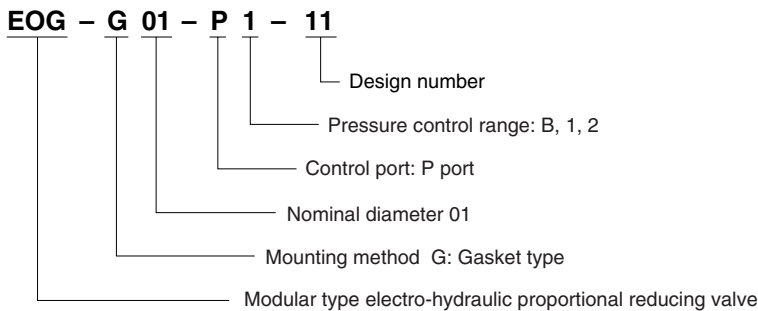
for continuous proportional control of lathe chuck pressure. A relief function ensures outstanding pressure response characteristics.

Specifications

| Item | Model No. | EOG-G01-P*-11 |
|--|-----------|---|
| Maximum Operating Pressure MPa(kgf/cm ²) | | 25(255) |
| Maximum Flow Rate ℓ /min | | 30 |
| Pressure Control Range MPa(kgf/cm ²) | | B : 0.3 to 2.5(3.1 to 25.5) 1 : 0.4 to 7 { 4 to 71 } 2 : 0.6 to 14 { 6 to 143 } |
| T Port Allowable Back Pressure MPa(kgf/cm ²) | | 2.5(25.5)max |
| Rated Current mA | | 850 |
| Coil Resistance Ω | | 20 (20°C) |
| Hysteresis % | | 3 max. (Note 1) |
| Weight kg | | 3.6 |

Note) Value when a Nachi-Fujikoshi special amplifier is used (with dithering).

Understanding Model Numbers



● Handling

1 Air Bleeding

To enable proper pressure control, loosen the air vent when starting up the pump in order to bleed any air from the pump, and fill the inside of the solenoid with hydraulic operating fluid.

2 Manual Pressure Adjusting Screw

For the initial adjustment or when there is no input current to the valve due to an electrical problem or some other reason, valve pressure can be increased by rotating the manual adjustment screw clockwise (rightward). Normally, the manual adjusting screw should be rotated back fully to the left (counterclockwise) and secured with the lock nut.

3 Minimum Control Pressure

Since this valve has an internal drain system, T port back pressure has an effect on minimum control pressure.

4 Load Capacity

Make load capacity (valve OUT side capacity) at least 0.5 ℓ .

5 Use an operating fluid that conforms to the both of the following.

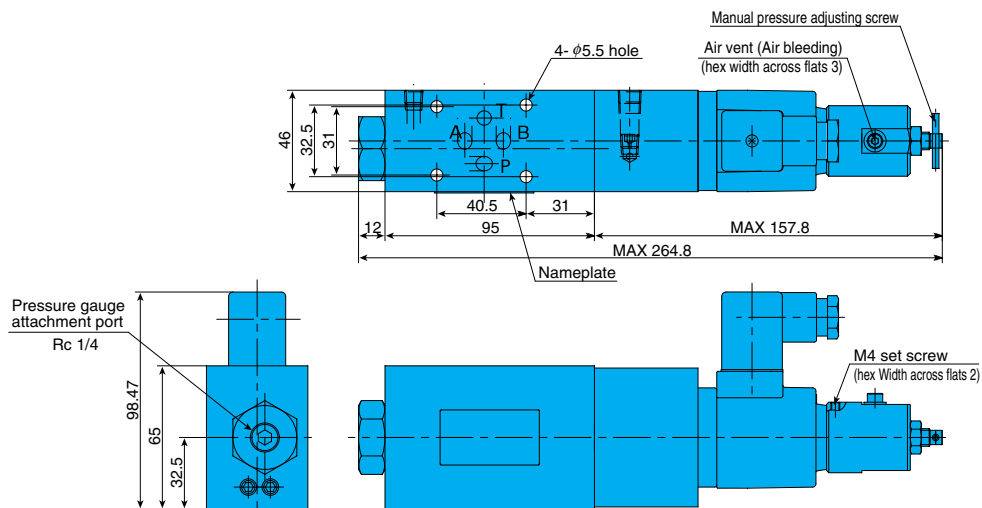
Oil temperature : -20 to 70°C

Viscosity : 12 to 400mm²/s

The recommended viscosity range is 15 to 60mm²/s.

Installation Dimension Drawings

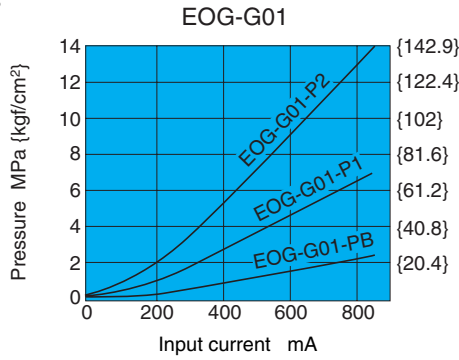
EOG-G01-P*-11



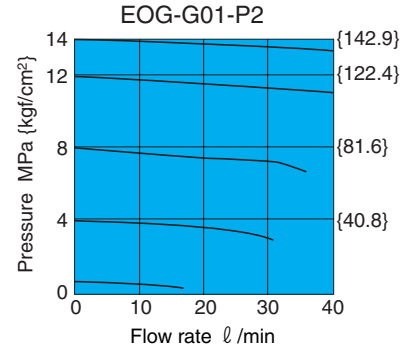
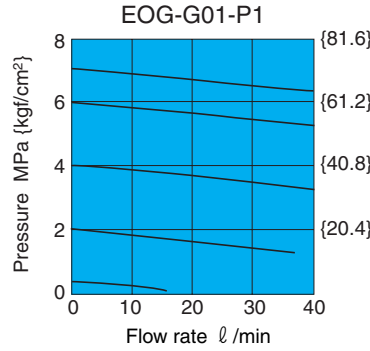
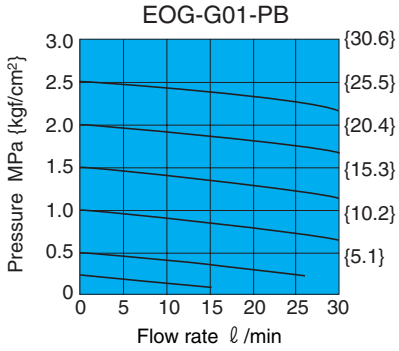
Performance Curves

Hydraulic Operating Fluid Viscosity 32mm²/s

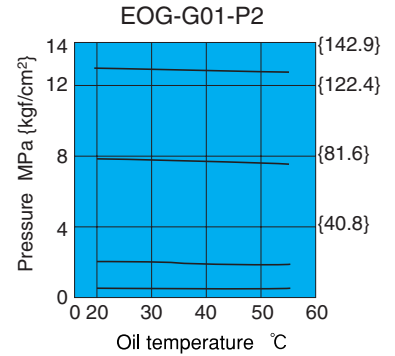
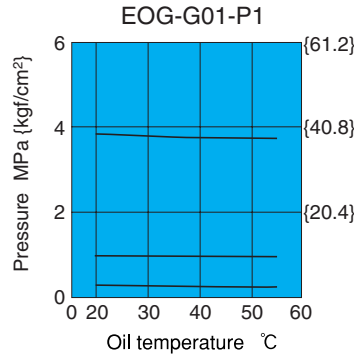
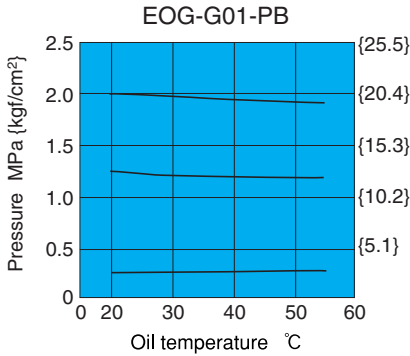
Input Current - Pressure Characteristics



Flow Rate - Pressure Characteristics

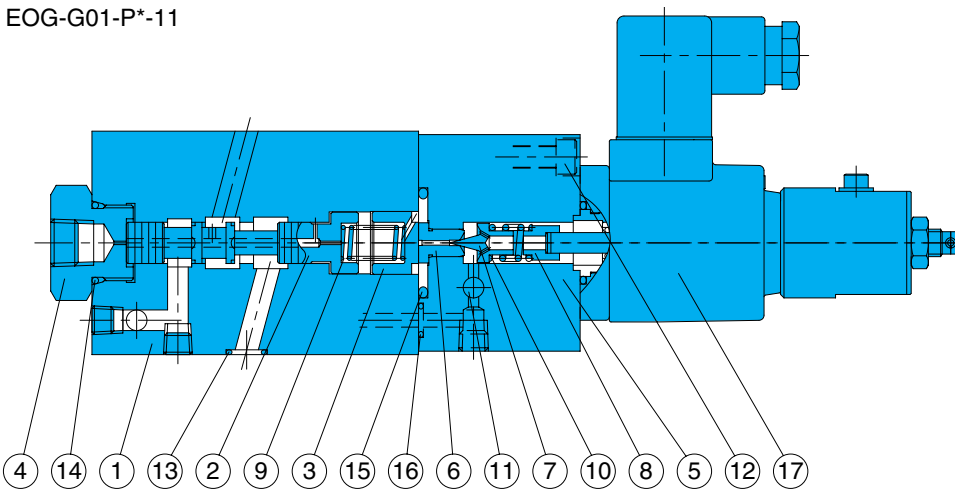


Fluid Temperature Characteristics



Cross-sectional Drawing

EOG-G01-P*-11



Part No. | Part Name

- 1 Body
- 2 Spool
- 3 Retainer
- 4 Plug
- 5 Cover
- 6 Seat
- 7 Poppet
- 8 Retainer
- 9 Spring
- 10 Spring
- 11 Choke
- 12 Screw
- 13 O-ring
- 14 O-ring
- 15 O-ring
- 16 O-ring
- 17 Proportional solenoid

Note) Coil model number JD64-D2

Seal Part List (Kit Model Number JBS-G01)

| Part No. | Part Name | Part Number | Q'ty |
|----------|-----------|-------------|------|
| 13 | O-ring | 1B-P9 | 4 |
| 14 | O-ring | 1B-P20 | 1 |
| 15 | O-ring | 1B-P26 | 1 |
| 16 | O-ring | 1B-P7 | 1 |

Note) O-ring 1B-** refers to JIS B2401 1B-**.

Manual adjustment section

