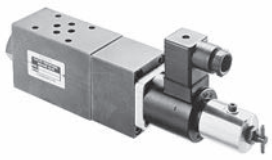
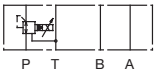
Modular Type Electro-hydraulic Proportional Reducing Valve

30ℓ/min
0.3 to 14MPa





Features

This valve incorporates the ease-ofuse 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/cm²}	25{255}
Maximum Flow Rate ℓ/min	30
Pressure Control Range MPa{kgf/cm²}	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/cm²}	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).

Explanation of model No.

EOG – G 01 – P 1 – 11

- 11 — Design number
- 1 — Pressure control range: B, 1, 2
- P — Control port: P port
- 01 — Nominal diameter 01
- G — Mounting method G: Gasket type
- EOG — Modular type electro-hydraulic proportional reducing valve

●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.

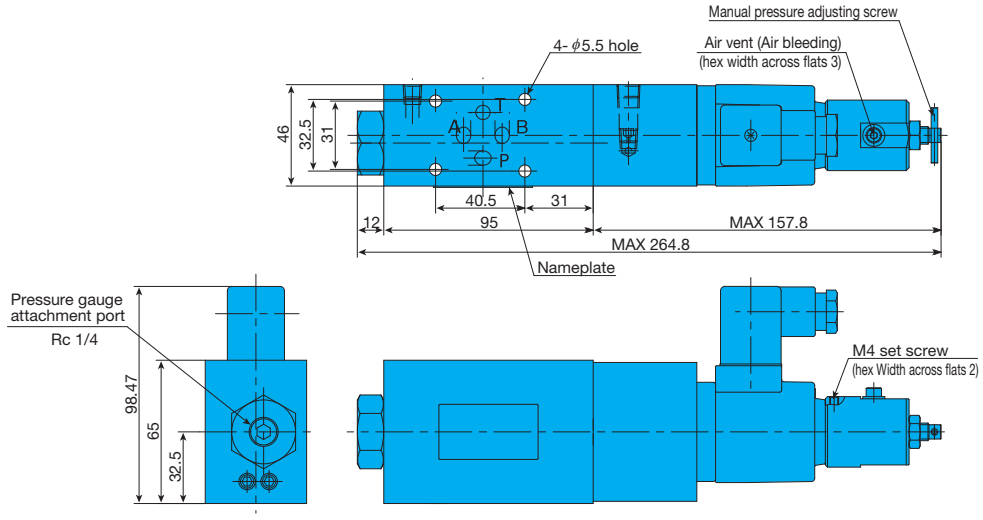
3 Minimum Control Pressure
Since this valve has an internal drain system, T port back pressure has an effect on minimum control pressure.

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

5 Use an operating fluid that conforms to the both of the following. Oil temperature : –20 to 70°C Kinematic Viscosity : 12 to 400mm²/s. The recommended kinematic viscosity range is 15 to 60mm²/s.

Installation Dimension Drawings

EOG-G01-P*-11

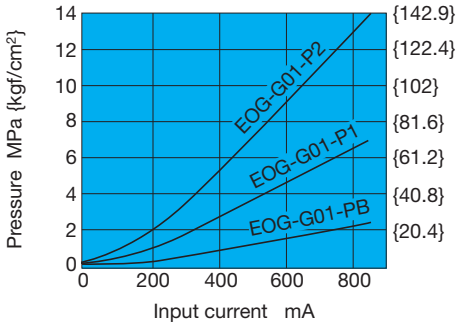


Performance Curves

Hydraulic Operating Fluid Kinematic Viscosity 32mm²/s

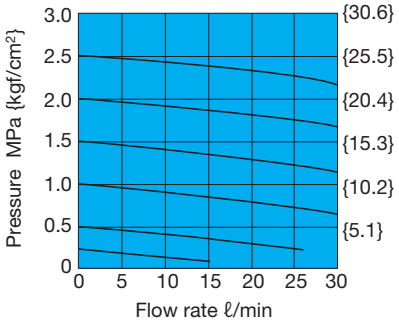
Input Current — Pressure Characteristics

EOG-G01

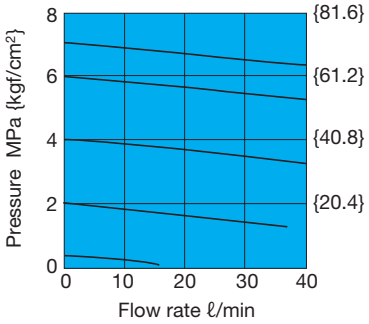


Flow Rate — Pressure Characteristics

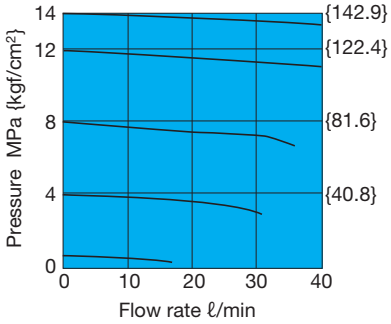
EOG-G01-PB



EOG-G01-P1

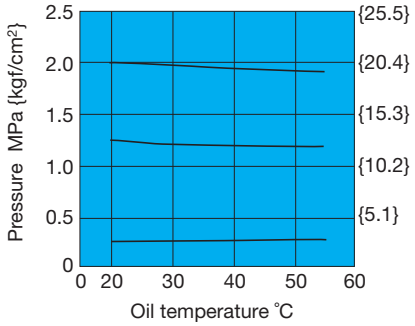


EOG-G01-P2

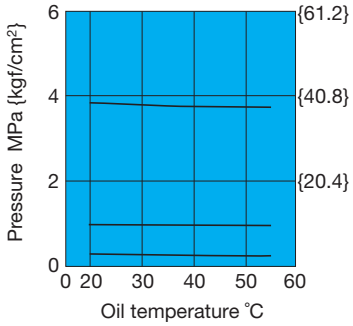


Oil Temperature Characteristics

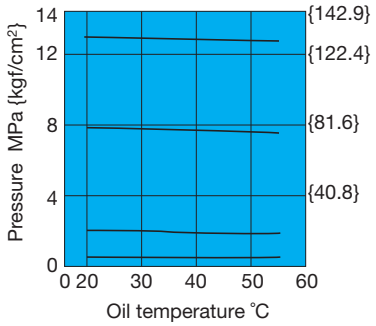
EOG-G01-PB



EOG-G01-P1

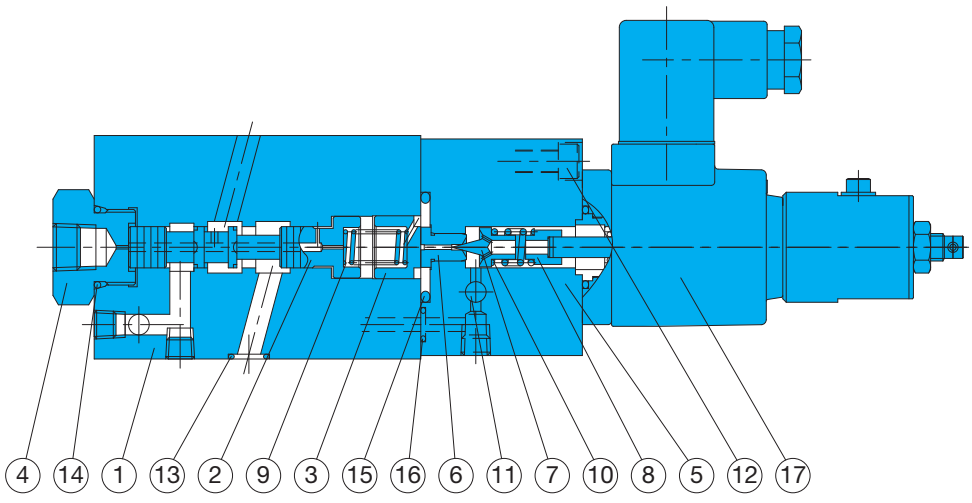


EOG-G01-P2



Cross-sectional Drawing

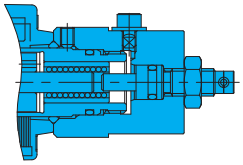
EOG-G01-P*-11



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

Manual adjustment section



Seal Part List (Kit Model Number JBS-G01)

Part No.	Part Name	Part Number	Q'ty
13	O-ring	AS568-012(NBR-90)	4
14	O-ring	NBR-90 P20	1
15	O-ring	NBR-90 P26	1
16	O-ring	NBR-90 P7	1

Note) The materials and hardness of the O-ring conforms with JIS B2401.