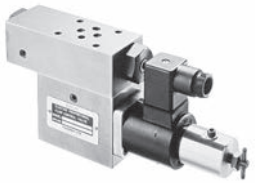
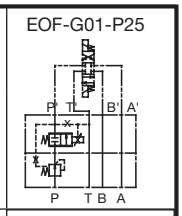
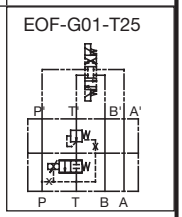
Modular Type Electro-hydraulic Proportional Flow Control Valve

0.3 to 25ℓ/min
21MPa







Features

An electro-hydraulic proportional restrictor valve and pressure compensation valve are combined into a modular configuration, available as one of two types: the meter in control EOF-G01-P and meter out control EOF-G01-T.

The pressure fluctuations have little influence on the setting flow rate making this valve perfect for electro-hydraulic proportional control of small hydraulic systems used for machine tool APC and ATC high-speed shockless control, remote control, etc.

Specifications

Item \ Model No.	EOF-G01-$\frac{P}{T}$ 25-11
Maximum Operating Pressure MPa{kgf/cm²}	21{214}
Flow Rate Control Range ℓ/min	0.3 to 25
Flow Rate Control Port	EOF-G01-P : P port EOF-G01-T : T Port
T Port Allowable Back Pressure MPa{kgf/cm²}	2.5 {25.5} max.
Hysteresis %	3 max. (Note 1)
Response Speed S	0.05
Rated Current mA	800
Coil Resistance Ω	20 (20°C)
Weight kg	3.7

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

Explanation of model No.

EOF – G 01 – P 25 – 11

- 11 — Design number
- 25 — Rated flow rate
- P — Control port: P, T
- 01 — Nominal diameter 01
- G — Mounting method G: Gasket type
- EOF — Modular type electro-hydraulic proportional flow control 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. The position of the air vent can change by loosening the lock screw and rotating the cover.

2 Manual flow rate 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, the flow rate can be adjusted by rotating the manual adjustment screw. Rotate clockwise (rightward) to increase flow rate.
Normally, this adjusting screw should be returned completely to its original position and secured with the lock nut.

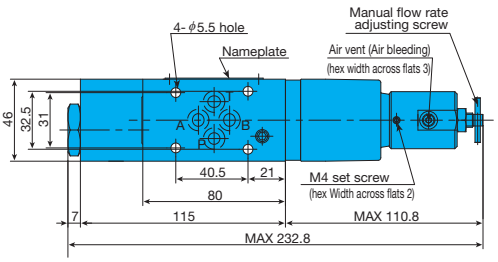
3 T Port Back Pressure
Since this valve has an internal drain system, make sure that valve T port back pressure is no greater than 2.5MPa {25.5kgf/cm²}.

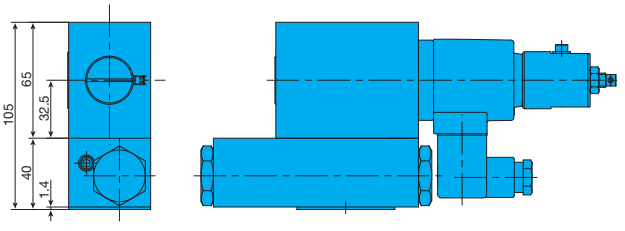
4 Use an operating fluid that conforms to the both of the following. Oil temperature: –20 to 70°C Kinematic Viscosity: 12 to 400mm²/s. The recommended kinematic viscosity range is 15 to 60mm²/s.

5 O-ring Plate Orientation
① The port nearest the nameplate surface is the P port.
② The port with a mounting pitch width of 31 (narrow pitch width) is the A port.
③ The cutout on the O-ring plate is on the A port side.

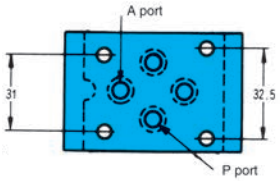
Installation Dimension Drawings

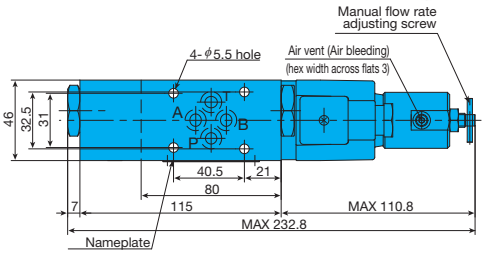
EOF-G01-P25-11

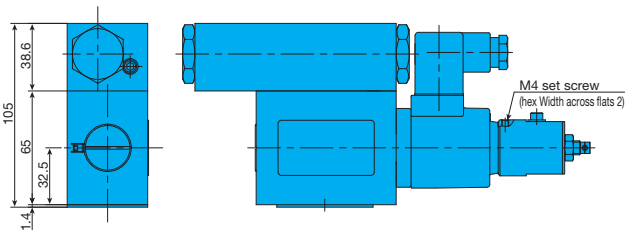




EOF-G01-T25-11



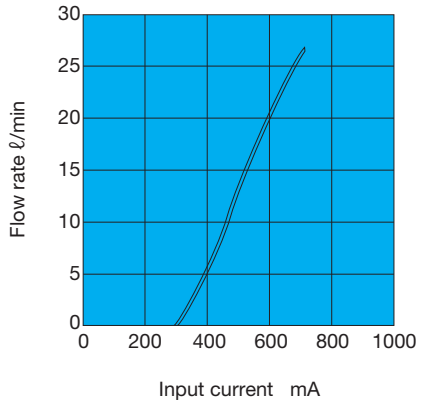




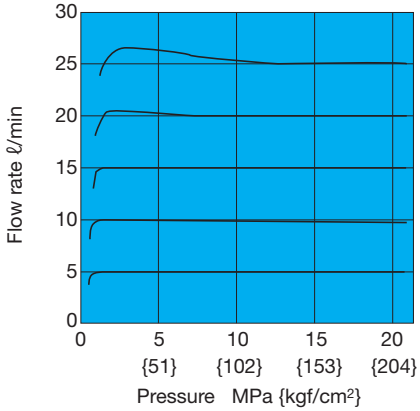
Performance Curves

Hydraulic Operating Fluid Kinematic Viscosity 32mm²/s

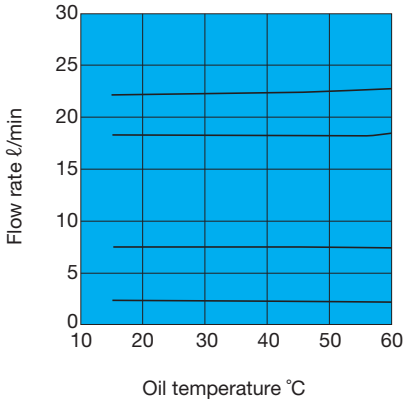
Input Current - Flow Rate Characteristics



Pressure - Flow Rate Characteristics

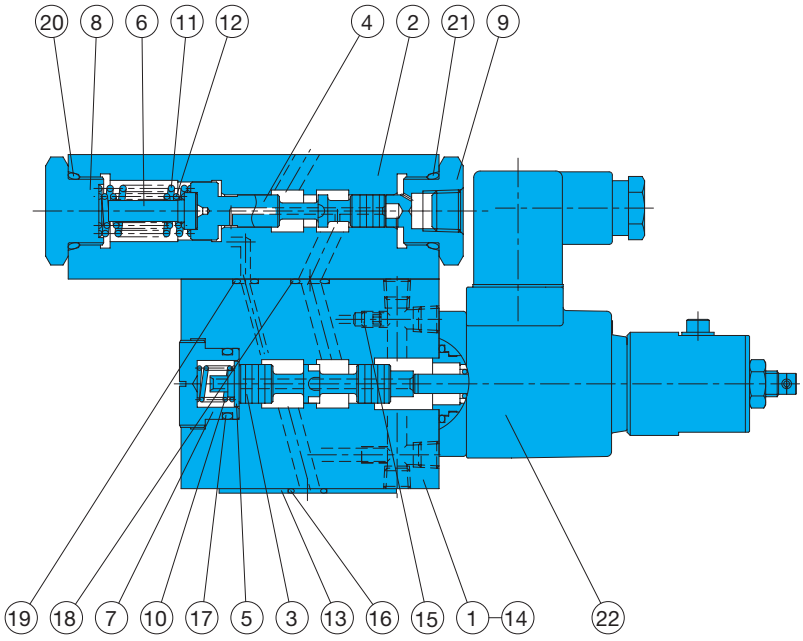


Oil Temperature Characteristics



Cross-sectional Drawing

EOF-G01-T25



Part No.	Part Name
1	Body
2	Body
3	Spool
4	Piston
5	Retainer
6	Retainer
7	Plug
8	Plug
9	Plug
10	Spring
11	Spring
12	Spring
13	Plate
14	Screw
15	Screw
16	O-ring
17	O-ring
18	O-ring
19	O-ring
20	O-ring
21	O-ring
22	Proportional solenoid

Note) Coil model number JD64-D2

Seal Part List (Kit Model Number JMS-G01)

Part No.	Part Name	Part Number	Q'ty
16	O-ring	AS568-012(NBR-90)	4
17	O-ring	NBR-90 P18	1
18	O-ring	NBR-90 P9	4
19	O-ring	NBR-90 P5	1
20	O-ring	NBR-90 P20	1
21	O-ring	NBR-90 P20	1

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

Manual adjustment section