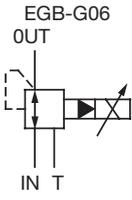
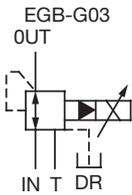


### Electro-hydraulic Proportional Relief and Reducing Valve

50 to 100ℓ/min  
0.3 to 25MPa



### Features

This valve combines a compact, high-performance electro-hydraulic pilot relief valve, and a reducing and relief valve for low-pressure control of pressure within a hydraulic system in proportion to input current.

Since this valve includes a relief function, OUT side pressure can be maintained at a virtually fixed level, even when the valve's OUT side is used as reaction force. This valve also provides outstanding response as pressure drops.

### Specifications

Item	Model No.	EGB-G03-*-11	EGB-G06-*-11
Maximum Operating Pressure MPa(kgf/cm <sup>2</sup> )		25(255)	
Maximum Flow Rate ℓ/min		50	100
Pressure Control Range MPa(kgf/cm <sup>2</sup> )		B:0.3 to 2.5(3.1 to 25.5)(Note 1) 1:0.7 to 7 {7.1 to 71 } 2:1.0 to 14 {10 to 143 } 3:1.5 to 21 {15.3 to 214 }	
Rated Current mA		800	
Coil Resistance Ω		20 (20°C)	
Hysteresis %		3 max. (Note 2)	
Weight kg		5.5	7.8

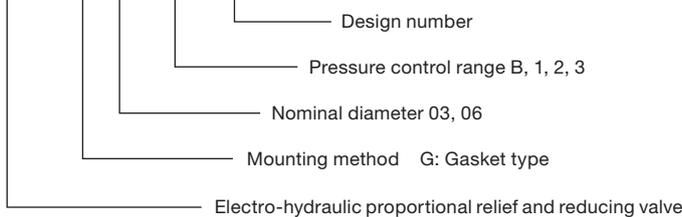
Note) 1. G03 type only Rated flow rate: 20ℓ/min  
2. Value when a Nachi-Fujikoshi special amplifier is used (with dithering).

#### ● Handling

- 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.
- DR Port Piping**  
When configuring piping, ensure that the DR port (T port for the G06 size) is filled with operating fluid.
- 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.
- Load Capacity**  
The G03 load capacity (valve OUT side volume) is at least 2ℓ, while the G06 load capacity is at least 5ℓ.
- Bundled Accessories (Valve Mounting Bolts)**

### Explanation of model No.

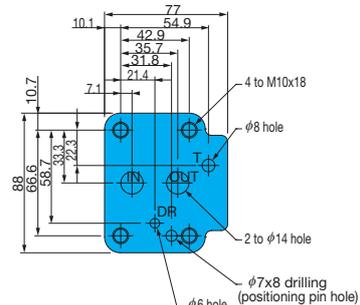
**EGB - G 03 - 2 - 11**



Model No.	Bolt Size	Q'ty	Tightening Torque N·m(kgf·cm)
EGB-G03	M10x75ℓ	4	45 to 55(460 to 560)
EGB-G06	M10x85ℓ	4	45 to 55(460 to 560)

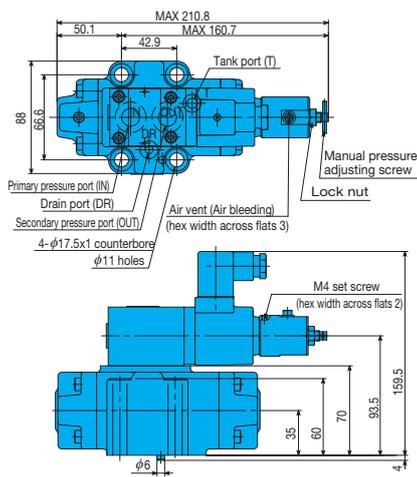
- Use an operating fluid that conforms to the both of the following. Oil temperature: -20 to 70°C Kinematic Viscosity: 12 to 400mm<sup>2</sup>/s. The recommended kinematic viscosity range is 15 to 60mm<sup>2</sup>/s.

#### Mounding Gasket Dimensions EGB-G03-\*-11

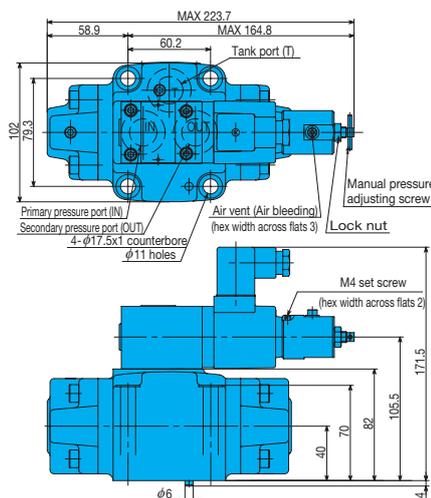


### Installation Dimension Drawings

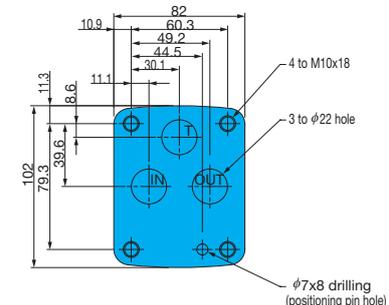
EGB-G03-\*-11



EGB-G06-\*-11



#### Mounding Gasket Dimensions EGB-G06-\*-11

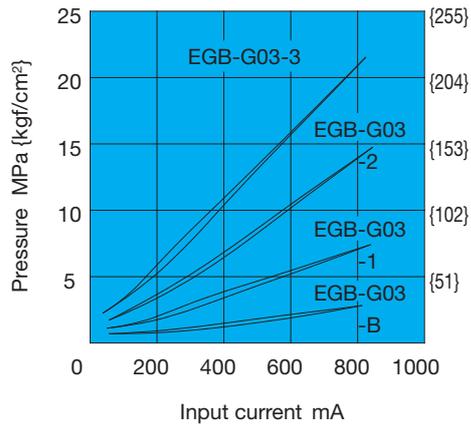


## Performance Curves

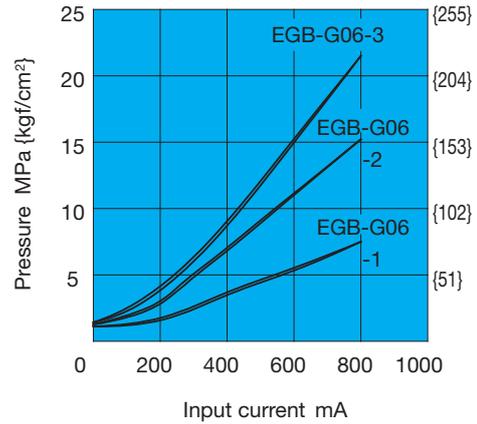
Hydraulic Operating Fluid Kinematic Viscosity 32mm<sup>2</sup>/s

Input Current – Pressure Characteristics

EGB-G03

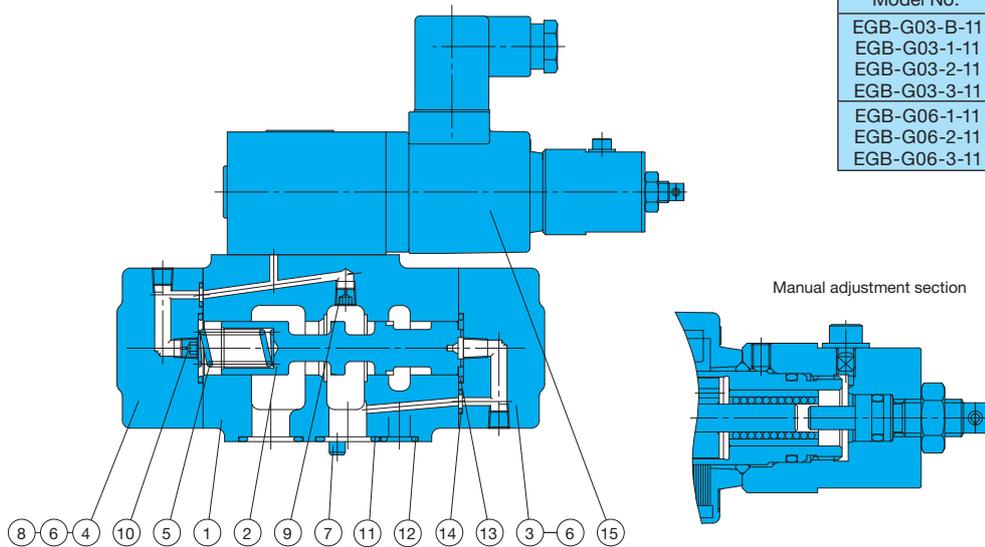


EGB-G06



## Cross-sectional Drawing

EGB-G\*\*-\*-11



EGB Valve Built-in Pilot Relief Valve List

Model No.	Built-in Pilot Relief Valve
EGB-G03-B-11	EPR-GO1-B-0000-12
EGB-G03-1-11	1-0013-12
EGB-G03-2-11	2-0012-12
EGB-G03-3-11	3-0011-12
EGB-G06-1-11	EPR-GO1-1-0013-12
EGB-G06-2-11	2-0012-12
EGB-G06-3-11	3-0012-12

Seal Part List (Kit Model Number JGS-\*\*)

Part No.	Part Name	EGB-G03-*-11		EGB-G06-*-11	
		Part Number	Q'ty	Part Number	Q'ty
11	O-ring	NBR-90 P20	2	NBR-90 P26	3
12	O-ring	NBR-90 P10A	2	-	-
13	O-ring	NBR-90 P22	2	NBR-90 G30	2
14	O-ring	NBR-90 P6	2	NBR-90 P6	2

- Note) 1. The materials and hardness of the O-ring conforms with JIS B2401.  
 2. For the \*\* part of the kit number, specify the valve size (G03, G06).  
 3. EPR-GO1 pilot valve seal is available separately. See page I-3 for more information.

Part No.	Part Name
1	Body
2	Piston
3	Cover
4	Cover
5	Spring
6	Screw
7	Pin
8	Pin
9	Choke
10	Choke
11	O-ring
12	O-ring
13	O-ring
14	O-ring
15	Pilot relief valve

Note) Coil model number JD64-D2