

## ■ Proportional Electro-Hydraulic Relief Valves

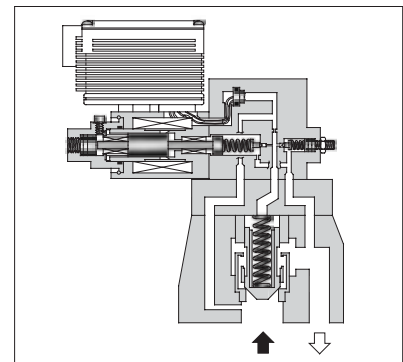
These valves, consist of a small size but high performance EH series electro-hydraulic proportional pilot relief valve and a low noise type relief valve. The valves control the system pressure proportionally through a controlled input voltage.

### ■ Specifications

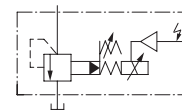
| Model Numbers                        | EHBG-03   | EHBG-06  | EHBG-10  |
|--------------------------------------|---|--|--|
| Description                          |   |  |  |
| Max. Operating Pres.                 | 24.5 MPa (3550 PSI)   |  |  |
| Max. Flow                            | 100 L/min<br>(26.4 U.S.GPM)   | 200 L/min<br>(52.8 U.S.GPM)  | 400 L/min<br>(106 U.S.GPM)   |
| Min. Flow                            | 3 L/min<br>(.79 U.S.GPM)  | 3 L/min<br>(.79 U.S.GPM)   | 3 L/min<br>(.79 U.S.GPM)   |
| Pressure Adjustment Range            | Refer to Model Number Designation   |  |  |
| Coil Resistance                      | 10 Ω  |  |  |
| Hysteresis                           | 2% (1%) * <sup>1</sup> or less  |  |  |
| Repeatability                        | 1% * <sup>2</sup> or less   |  |  |
| Frequency Response                   | C: 10 (22) Hz * <sup>1</sup><br>H: 10 (25) Hz * <sup>1</sup><br>(-90 degree)      | C: 11 (22) Hz * <sup>1</sup><br>H: 13 (24.5) Hz * <sup>1</sup><br>(-90 degree) | C: 7 (10.5) Hz * <sup>1</sup><br>H: 6 (14) Hz * <sup>1</sup><br>(-90 degree) |
| Supply Electric Power                | 24 V DC<br>(21 to 28 V DC Included Ripple)  |  |  |
| Power Input (Max.)                   | 28 W  |  |  |
| Input Signal                         | C: 15.7 MPa (2275 PSI) / 5 V DC<br>H: 24.5 MPa (3550 PSI) / 5 V DC (At Max. Flow) |  |  |
| Input Impedance                      | 10 kΩ   |  |  |
| Alarm Signal Output (Open Collector) | Voltage: Max. 30 V DC<br>Current: Max. 40 mA                                      |  |  |
| Pressure Signal Output               | C: 5 V DC / 15.7 MPa (2275 PSI)<br>H: 5 V DC / 24.5 MPa (3550 PSI)                |  |  |
| Ambient Temperature                  | 0 - 50°C (32 - 122°F)<br>(With Circulated Air)                                    |  |  |

\*1. The value in ( ) is for the closed-loop type.

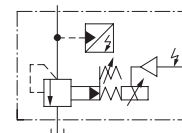
\*2. The repeatability of the valve is obtained by having it tested independently on the conditions similar to its original testing.



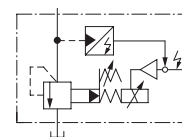
Graphic Symbols



Open-Loop Type



Open-Loop Type with Sensor



Closed-Loop Type

### ■ Model Number Designation

| F-   | EHB  | G                               | -03        | -C   | -S                        | -50                             |
|--|--|---------------------------------|------------|--|---------------------------|---------------------------------|
| Special Seals  | Series Number  | Type of Mounting                | Valve Size | Pres. Adj. Range MPa (PSI)   | Control Type              | Design Number                   |
| <b>F:</b><br>Special Seals for Phosphate Ester Type Fluid (Omit if not required) | <b>EHB:</b><br>Proportional Electro-Hydraulic Relief Valve | <b>G:</b><br>Sub-plate Mounting | <b>03</b>  | <b>C:</b> 0.6 [0.8] * <sup>1</sup> - 15.7 (85 [115] * <sup>1</sup> - 2275)<br><b>H:</b> 0.6 [0.8] * <sup>1</sup> - 24.5 (85 [115] * <sup>1</sup> - 3550)   | <b>None:</b><br>Open-Loop | <b>50</b>                       |
|  |  |                                 | <b>06</b>  | <b>C:</b> 0.9 [1.0] * <sup>1</sup> - 15.7 (130 [145] * <sup>1</sup> - 2275)<br><b>H:</b> 0.9 [1.0] * <sup>1</sup> - 24.5 (130 [145] * <sup>1</sup> - 3550) |                           | <b>S:</b> Open-Loop with Sensor |
|  |  |                                 | <b>10</b>  | <b>C:</b> 1.1 [1.4] * <sup>1</sup> - 15.7 (160 [205] * <sup>1</sup> - 2275)<br><b>H:</b> 1.1 [1.4] * <sup>1</sup> - 24.5 (160 [205] * <sup>1</sup> - 3550) | <b>L:</b> Closed-Loop     | <b>50</b>                       |

\* Each value of minimum adjustment pressure is of at 50% flow rate of the Max. Flow shown on the Specifications. The value in [ ] is for the closed-loop type.