

■ Proportional Electro-Hydraulic Relieving and Reducing Valves

These valves consist of a small size but high performance electro-hydraulic proportional pilot relief valve and reducing valve with relief function. The valves control the system pressure proportionally through a controlled input voltage.

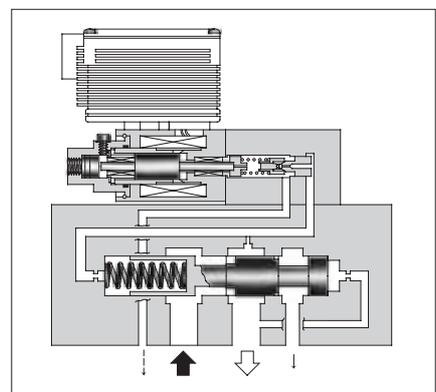
Moreover, a good response speed in reducing the pressure even at a large load capacity can be obtained with the relief function of the valves.



■ Specifications

| Model Numbers | EHRBG-06 | EHRBG-10 |
|---------------------------|---|--|
| Description | | |
| Max. Operating Pres. | 24.5 MPa (3550 PSI) | |
| Max. Flow | 100 L/min (26.4 U.S.GPM) | 250 L/min (66 U.S.GPM) |
| Max. Relieving Flow | 35 L/min ^{★1} (9.24 U.S.GPM) | 15 L/min ^{★1} (3.96 U.S.GPM) |
| Pressure Adjustment Range | Refer to Model Number Designation | |
| Coil Resistance | 10 Ω | |
| Hysteresis | 3% or less | |
| Repeatability | 1% ^{★2} or less | |
| Frequency Response | B: 4 Hz C: 3 Hz (-90 degree) H: 3 Hz | |
| Supply Electric Power | 24 V DC (21 to 28 V DC Included Ripple) | |
| Power Input (Max.) | 28 W | |
| Input Signal | B: 6.9 MPa (1000 PSI) / 5 V DC C: 13.7 MPa (2000 PSI) / 5 V DC H: 20.6 MPa (3000 PSI) / 5 V DC (at Flow Rate Zero) | |
| Input Impedance | 10 k Ω | |
| Pressure Signal Output | B: 5 V DC / 6.9 MPa (1000 PSI) C: 5 V DC / 13.7 MPa (2000 PSI) H: 5 V DC / 20.6 MPa (3000 PSI) | |
| Ambient Temperature | 0 - 50°C (32 - 122°F) (With Circulated Air) | |

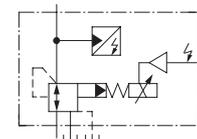
- ★1. The figures shown are those obtained where the differential pressure between the secondary pressure port and tank port is 14 MPa (2030 PSI).
- ★2. The repeatability of the valve is obtained by having it tested independently on the conditions similar to its original testing.



Graphic Symbols



Open-Loop Type



Open-Loop Type with Sensor

■ Model Number Designation

| F- | EHRB | G | -06 | -C | -S | -50 |
|--|---|---------------------------------|------------|--|-----------------------------|---------------|
| Special Seals | Series Number | Type of Mounting | Valve Size | Pres. Adj. Range MPa (PSI) | Control Type | Design Number |
| F: Special Seals for Phosphate Ester Type Fluid (Omit if not required) | EHRB: Proportional Electro-Hydraulic Relieving & Reducing Valve | G: Sub-plate Mounting | 06 | B: 0.8 - 6.9 (115 - 1000) C: 1.2 - 13.7 (175 - 2000) H: 1.5 - 20.6 (220 - 3000) | None: Open-Loop | 50 |
| | | | 10 | B: 0.9 - 6.9 (130 - 1000) C: 1.2 - 13.7 (175 - 2000) H: 1.5 - 20.6 (220 - 3000) | S: Open-Loop with Sensor | 50 |