

## Proportional Electro-Hydraulic Flow Control and Relief Valves

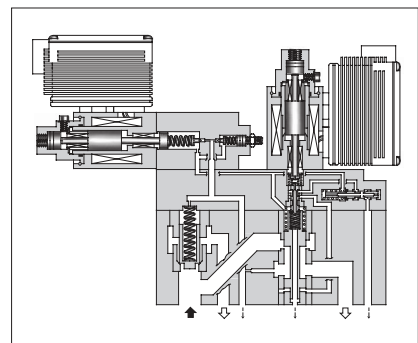
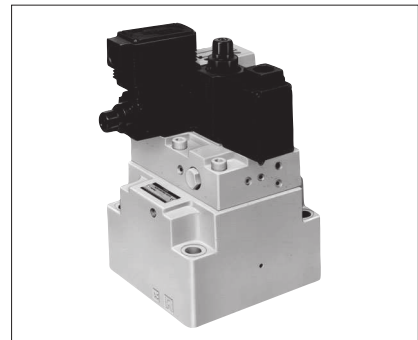
These are proportional electro-hydraulic flow control valves having functions for controlling the direct electric current of metre-in type and for pressure control.

They are energy-saving valves for supplying the minimum pressure and flow required to operate actuators.

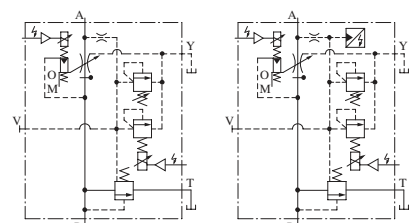
### Specifications

| Model Numbers                        |  | EHFBG-03- <sub>60</sub> / <sub>125</sub>                               | EHFBG-06-250                               | EHFBG-10-500                               |
|--------------------------------------|--|--|--|--|
| Description                          |  |  |  |  |
| Max. Operating Pressure MPa (PSI)    |  | 24.5 (3550)  | 24.5 (3550)                                | 24.5 (3550)                                |
| Max. Flow L/min (U.S.GPM)            |  | 60: 60 (15.8)<br>125: 125 (33)   | 250 (66)                                   | 500 (132)                                  |
| Metred Flow Capacity L/min (U.S.GPM) |  | 60: 1-60(.26-15.8)<br>125: 1-125(.26-33)                               | 2.5-250 (.66-66)                           | 5-500 (1.32-132)                           |
| Min. Pilot Pressure MPa (PSI)        |  | 1.5 (215)  | 1.5 (215)                                  | 1.5 (215)                                  |
| Pilot Flow L/min (U.S.GPM)           | at Normal  | 1 (.26)  | 1 (.26)                                    | 1 (.26)                                    |
|                                      | at Transition  | 3 (.79)  | 4 (1.06)                                   | 6 (1.59)                                   |
| Differential Pressure MPa (PSI)      |  | 0.6 (85)   | 0.7 (100)                                  | 0.9 (130)                                  |
| Flow Controls                        | Hysteresis   | 3% or less   |  |  |
|                                      | Repeatability  | 1%* or less  |  |  |
|                                      | Input Signal   | Max. Flow / 5 V DC   |  |  |
|                                      | Coil Resistance  | 10 Ω   |  |  |
|                                      | Supply Electric Power  | 24 V DC (21 to 28 V DC Included Ripple)                                |  |  |
|                                      | Input Impedance  | 10 kΩ  |  |  |
|                                      | Power Input (Max.)   | 28 W   |  |  |
| Pressure Controls                    | Pres. Adj. Range MPa (PSI)   | Adj. Range: C 1.2-15.7 (175-2275)<br>Adj. Range: H 1.4-24.5 (200-3550) | 1.4-15.7 (200-2275)<br>1.4-24.5 (200-3550) | 1.5-15.7 (215-2275)<br>1.5-24.5 (215-3550) |
|                                      | Hysteresis   | 2% or less   |  |  |
|                                      | Repeatability  | 1%* or less  |  |  |
|                                      | Coil Resistance  | 10 Ω   |  |  |
|                                      | Input Signal   | Max. Operating Pres. / 5 V DC  |  |  |
|                                      | Supply Electric Power  | 24 V DC (21 to 28 V DC Included Ripple)                                |  |  |
|                                      | Power Input (Max.)   | 28 W   |  |  |
| Output Signal                        | 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)                       |  |  |  |

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

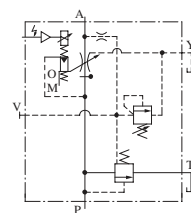


Graphic Symbols



Models with Proportional Pilot Relief Valve

Models with Proportional Relief Valve and Sensor



Models without Proportional Pilot Relief Valve



External Pilot Pres. Connection

### Model Number Designation

| F-   | EHFB   | G                     | -03        | -60                              | -C  | -E  | -S  | -50           |
|--|--|-----------------------|------------|----------------------------------|---|---|---|---------------|
| Special Seals  | Series Number  | Type of Mounting      | Valve Size | Max. Metred Flow L/min (U.S.GPM) | Pilot Relief Valve Pres. Adj. Range           | Pilot Connection of Flow Control          | Pressure Controls                           | Design Number |
| F: Special Seals for Phosphate Ester Type Fluid (Omit if not required) | EHFB: Proportional Electro-Hydraulic Flow Control and Relief Valve | G: Sub-plate Mounting | 03         | 60: 60 (15.8)<br>125: 125 (33)   | None: Without Proportional Pilot Relief Valve | None: Internal Pilot<br>E: External Pilot | None: Open-Loop<br>S: Open-Loop with Sensor | 50            |
|  |  |                       | 06         | 250: 250 (66)                    |   |   |   | 50            |
|  |  |                       | 10         | 500: 500 (132)                   | C, H: See Specifications                      |   |   | 50            |