## Proportional Electro-Hydraulic Directional and Flow Control Valves

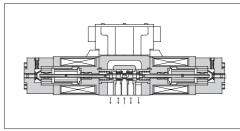
These valves incorporate two control functions - flow and direction - which simplify the hydraulic circuit composition and therefore the cost of the system is reduced.



## Specifications

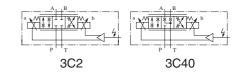
| Descrip   | Model Numbers tion  | EHDFG-01                                       | EHDFG-03         |  |  |
|---|---|--|------------------|--|--|
| Max. Op   | erating Pressure MPa (PSI)                                    | 24.5 (3550)                                    | 24.5 (3550)      |  |  |
| Max. Tai  | nk Line Back Pres. MPa (PSI)                                  | 7 (1020)                                       | 7 (1020)         |  |  |
| Rated Flow L/min (U.S.GPM) [Valve $\triangle P 6.9 \text{ MPa} (1000 \text{ PSI})]$ |   | 30 (7.92)                                      | 60 (15.9)        |  |  |
| Hysteresis  |   | 5% or less                                     |                  |  |  |
| Repeatability   |   | 1% <sup>★</sup> or less                        |                  |  |  |
| Frequency Response  |   | 20 Hz (-90 deg.)                               | 17 Hz (-90 deg.) |  |  |
| Coil Resistance   |   | 10.5 Ω   | 8.0 Ω            |  |  |
| Supply Electric Power   |   | 24 V DC<br>(21 to 28 V DC Included Ripple)     |                  |  |  |
| Input<br>Voltage  | By Controlling Variable Resistance (Using of Power from Amp.) | 1 - 2 kΩ Volume Range                          |                  |  |  |
|   | By Controlling Voltage (Using of Power outside Amp.)          | 05 V for SOL a<br>0 - +5 V for SOL b           |                  |  |  |
| Input Impedance   |   | 10 k Ω   | 10 kΩ            |  |  |
| Power Input (Max.)  |   | 40 W   | 45 W             |  |  |
| Ambient Temperature   |   | 0 - 50°C (32 - 122°F)<br>(With Circulated Air) |                  |  |  |

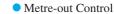
<sup>★</sup> The repeatability of the valves is obtained by having it tested independently on the conditions similar to its original testing.

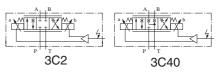


## Graphic Symbols

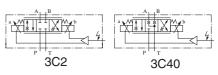
Metre-in • Metre-out Control











## ■ Model Number Designation

| F-  | EHDF   | G                   | -01        | -30                           | -3C2        | -E  | -30              |
|---|--|---------------------|------------|-------------------------------|-------------|---|------------------|
| Special<br>Seals  | Series Number                                  | Type of<br>Mounting | Valve Size | Rated Flow<br>L/min (U.S.GPM) | Spool Type* | Direction of Flow                               | Design<br>Number |
| F: Special Seals<br>for Phosphate<br>Ester Type<br>Fluid<br>(Omit if not<br>required) | Proportional Electro-<br>Hydraulic Directional | 1                   | 01         | <b>30</b> : 30 (7.92)         | 3C2 + 1     | XY: Metre-in Metre-out X: Metre-in Y: Metre-out | 30               |
|   |  |                     | 03         | <b>60</b> : 60 (15.9)         | 3C40        |   | 30               |

<sup>★</sup> Spool type shown in the column is for the centre position.