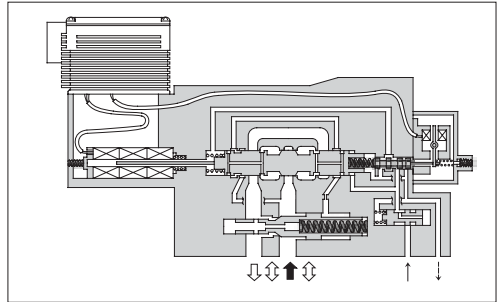
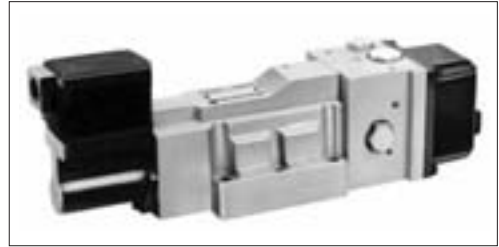


# High Response Type Proportional Electro-Hydraulic Directional and Flow Control Valves

These valves pursue the ultimate performance of proportional electro-hydraulic directional & flow control valves and make themselves to have high response features.

The closed-loop is composed in the valve inside by combination of a differential transformer (LVDT) and a power amplifier. Thus, high accuracy and reliability are provided.

In addition to control in the open-loop, these can be used for the closed-loop system as simplified servo valves.



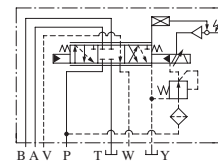
## Specifications

Model Numbers		EHDFG-04	EHDFG-06
Description			
Max. Operating Pres.	MPa (PSI)	15.7 (2280)	15.7 (2280)
Rated Flow	L/min (U.S.GPM)	130 (34.3)	280 (73.9)
Valve Pres. Difference: 1.5 MPa (215 PSI)			
Min. Required Pilot Pres.	MPa (PSI)	1.5 (215)	1.5 (215)
Min. Required Pilot Flow	at Normal	2 (.53)	2 (.53)
	at Transition	6 (1.59)	10 (2.64)
Max. Drain Line Back Pres.	MPa (PSI)	0.1 (15)	0.1 (15)
Hysteresis		1% or less	
Repeatability		1% * or less	
Frequency Response		55 Hz (-90 deg.)	45 Hz (-90 deg.)
Coil Resistance		30 Ω	30 Ω
Supply Electric Power		±24 V DC (±21 to ±28 V DC Included Ripple)	
Input Signal		Rated Flow / ±5 V DC	
Input Impedance		10 k Ω	10 k Ω
Power Input (Max.)		20 W	20 W
Alarm Signal Output (Open Collector)		Voltage: Max. 30 V DC Current: Max. 30 mA	
LVDT Output (Sensor Monitor)		±5 V DC / Rated Travel of Spool	
Ambient Temperature		0 - 50°C (32 - 122°F) (With Circulated Air)	

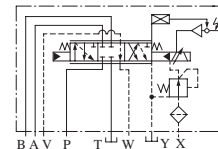
★ The repeatability of the valves is obtained by having it tested independently on the conditions similar to its original testing.

## Graphic Symbols

### Models without Pressure Compensator Valve

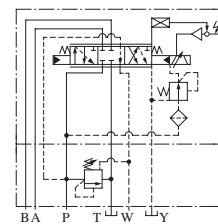


Internal Pilot



External Pilot

### Models with Pressure Compensator Valve



Internal Pilot

## Model Number Designation

F-	EHDF	G	-04	-130	-2	-E	-CB	-10
Special Seals	Series Number	Type of Mounting	Valve Size	Rated Flow L/min (U.S.GPM)	Spool Type★	Pilot Connection	Relief Type Pres. Compensator	Design Number
<b>F:</b> Special Seals for Phosphate Ester Type Fluid (Omit if not required)	<b>EHDF:</b> Proportional Electro-Hydraulic Directional and Flow Control Valve	<b>G:</b> Sub-plate Mounting	<b>04</b>	<b>130:</b> 130 (34.3)	<b>2</b>	<b>None:</b> Internal Pilot	<b>None:</b> Not Provided	<b>10</b>
			<b>06</b>	<b>280:</b> 280 (73.9)	<b>40</b>	<b>E:</b> External Pilot	<b>CB:</b> Provided	<b>10</b>

★ Spool type shown in the column is for the centre position.