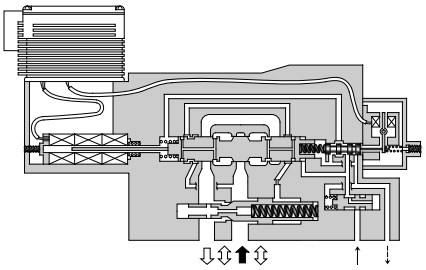
EH SERIES
High Response Type
Directional and Flow Control Valves
EHDFG-04/06 (1/2, 3/4)
Sub-plate Mounting

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.



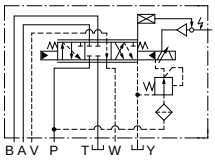
Specifications

Description \ Model Numbers		EHDFG-04	EHDFG-06
Max. Operating Pres. MPa (PSI)		15.7 (2275)	15.7 (2275)
Rated Flow L/min (U.S.GPM) Valve Pres. Difference: 1.5 MPa (215 PSI)		130 (34.3)	280 (73.9)
Min. Required Pilot Pres. MPa (PSI)		1.5 (215)	1.5 (215)
Min. Required Pilot Flow L/min (U.S.GPM)	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		Less than 1%	
Repeatability		Less than 1% ★	
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 kΩ	10 kΩ
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)	

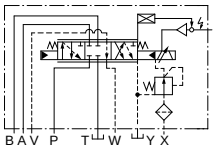
★ The repeatability of the valves is obtained by having it tested independently on the con-ditions similar to its original testing.

Graphic Symbols

● Models without Pressure Compensator Valve

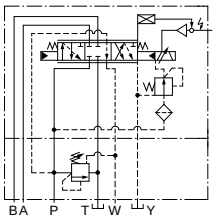


Internal Pilot



External Pilot

● Models with Pressure Compensator Valve



Internal Pilot

Model Number Designation

EHDFG	-04	-130	-2	-E	-D	-CB	-10
Series Number	Valve Size	Rated Flow L/min (U.S.GPM)	Spool Type ★	Pilot Connection	DPM	Relief Type Pres. Compensator	Design Number
EHDFG: Proportional Electro-Hydraulic Directional and Flow Control Valve (Sub-Plate Mounting)	**04**	**130:** 130 (34.3)	**2**	**None:** Internal Pilot	**None:** Without DPM	**None:** Not Provided	**10**
	06	**280:** 280 (73.9)	**40**	**E:** External Pilot	**D:** With DPM	**CB:** Provided	**10**

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

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