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.

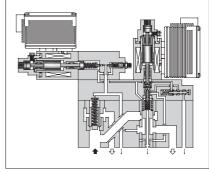
They are energy-saving valves for supplying the minimum pressure and flow required to operate actuators.

Specifications

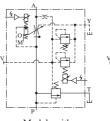
De	scription	fodel Numbers	EHFBG-03-60	EHFBG-06-250	EHFBG-10-500		
Max	x. Operating Press	sure MPa (PSI)	24.5 (3550)	24.5 (3550)	24.5 (3550)		
Max	x. Flow L/	min (U.S.GPM)	60: 60 (15.8) 125: 125 (33)	250 (66)	500 (132)		
Met	red Flow Capacit L/	y min (U.S.GPM)	60: 1-60(.26-15.8) 125: 1-125(.26-33)	2.5-250 (.66-66)	5-500 (1.32-132)		
Min	. Pilot Pressure	MPa (PSI)	1.5 (215)	1.5 (215)	1.5 (215)		
Pilot Flow at N		at Normal	1 (.26)	1 (.26)	1 (.26)		
L/	min (U.S.GPM)	at Transition	3 (.79)	4 (1.06)	6 (1.59)		
Diff	ferential Pressure	MPa (PSI)	0.6 (85)	0.7 (100)	0.9 (130)		
	Hysteresis		3% or less				
SI	Repeatability		1%★or less				
ntrc	Input Signal		Max. Flow / 5 V DC				
ပိ	Coil Resistance		10 Ω				
Flow Controls	Supply Electric	Power	24 V DC (21 to 28 V DC Included Ripple)				
江	Input Impedance	;	10 kΩ				
	Power Input (Ma	ix.)	28 W				
	Pres. Adj. Range MPa (PSI)	Adj. Range: C	1.2-15.7 (175-2275)	1.4-15.7 (200-2275)	1.5-15.7 (215-2275)		
		Adj. Range: H	1.4-24.5 (200-3550)	1.4-24.5 (200-3550)	1.5-24.5 (215-3550)		
Pressure Controls	Hysteresis		2% or less				
ont	Repeatability		1%* or less				
<u>5</u>	Coil Resistance		10 Ω				
mss	Input Signal		Max. Operating Pres. / 5 V DC				
Pre	Supply Electric	Power	24 V DC (21 to 28 V DC Included Ripple)				
	Input Impedance	<u>; </u>	10 kΩ				
	Power Input (Ma	ıx.)	28 W				
Out	put Signal		C : 5 V DC / 15.7 MPa (2275 PSI) H : 5 V DC / 24.5 MPa (3550 PSI)				
Am	bient Temperatur	e	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.

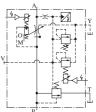




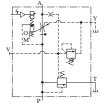
Graphic Symbols



Models with Proportional Pilot Relief Valve



Models with Proportional Pilot 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	EHFB: Proportional Electro- Hydraulic Flow Control and Relief Valve	G:	03	60 : 60 (15.8) 125 : 125 (33)	None: Without Propor-	None:	None:	50
Seals for Phosphate Ester Type		Sub-plate Mounting	06	250 : 250 (66)	tional Pilot Relief Valve	Internal Pilot E:	Open-Loop S:	50
Fluid (Omit if not required)			10	500 : 500 (132)	C, H : See Specifications	External Pilot	Open-Loop with Sensor	50



High Flow Series Proportional Electro-Hydraulic Flow Control and Relief Valves

This flow control and relief valve is a energy-saving valve that supplies the minimum pressure and flow necessary for actuator drive.

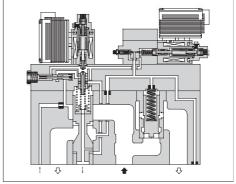
For the High Flow Series, double maximum flow rate [03 size: $125 \rightarrow 250 \text{ L/min}$ (33 \rightarrow 66 U.S.GPM), 06 size: $250 \rightarrow 500 \text{ L/min}$ (66 \rightarrow 132 U.S.GPM)] enables a smaller valve size than conventional products; compact-sized devices can be provided.



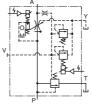
De	scription	Model Numbers	EHFBG-03-250	EHFBG-06-500		
Max	x. Operating Press	sure MPa (PSI)	24.5 (3550)	24.5 (3550)		
Max	x. Flow L/	min (U.S.GPM)	250 (66)	500 (132)		
Met	red Flow Capacit L/	y min (U.S.GPM)	2.5-250 (.66-66)	5-500 (1.32-132)		
Min	. Pilot Pressure	MPa (PSI)	1.5 (215)	1.5 (215)		
Pilot Flow at Normal			1 (.26)	1 (.26)		
L/	min (U.S.GPM)	at Transition	4 (1.06)	6 (1.59)		
Diff	ferential Pressure	MPa (PSI)	0.8 (115)	0.9 (130)		
	Hysteresis		3% or less			
SIS	Repeatability		1% [★] or less			
Flow Controls	Input Signal		Max. Flow / 5 V DC			
ပိ	Coil Resistance		10 Ω			
low	Supply Electric	Power	24 V DC (21 to 28 V DC Included Ripple)			
ĬT,	Input Impedance	;	10 kΩ			
	Power Input (Ma	ax.)	28 W			
	Pres. Adj. Range	Adj. Range: C	1.6-15.7 (230-2275)	1.5-15.7 (215-2275)		
	MPa (PSI)	Adj. Range: H	1.8-24.5 (260-3550)	1.5-24.5 (215-3550)		
SIS	Hysteresis		3% or less			
ntrc	Repeatability		1% [★] or less			
Co	Coil Resistance		10 Ω			
ure	Input Signal		Max. Operating Pres. / 5 V DC			
Pressure Controls	Supply Electric	Power	24 V DC (21 to 28 V DC Included Ripple)			
Pr	Input Impedance	÷	10 k Ω			
	Power Input (Ma	ax.)	28 W			
Out	put Signal		C: 5 V DC / 15.7 MPa (2275 PSI) H: 5 V DC / 24.5 MPa (3550 PSI)			
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.

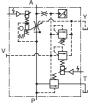




Graphic Symbols



Models with Proportional Pilot Relief Valve



Models with Proportional Pilot Relief Valve and Sensor



Models without Proportional Pilot Relief Valve



External Pilot Pres. Connection

Model Number Designation

F-	EHFB	G	-03	-250	-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	250 : 125 (66)	None: Without Proportional Pilot Relief Valve	None: Internal Pilot	None: Open-Loop	50
			06	500 : 500 (132)	C, H : See Specifications	E : External Pilot	Open-Loop with Sensor	50