

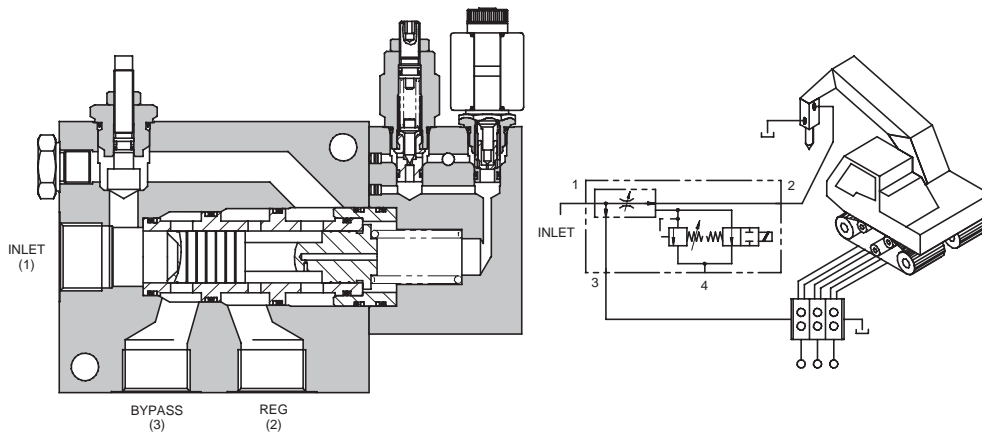


2FPH SERIES PRESSURE COMPENSATED FLOW

REGULATOR/DIVERTER - PRIORITY STYLE

2FPH SERIES

SOLENOID SWITCH



APPLICATION

The 2FPH series of priority flow regulator valves gives full control of regulated flow (see the 2FP series) plus remote selection of priority flow and adjustable pressure limitation of the regulated line.

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OPERATION

Inlet flow passes through the adjustable orifice and the radial holes in the spool/sleeve assembly then out of the regulated port. The pressure drop across the orifice is sensed at each end of the spool, producing a force which, at the required flow rate, overcomes the spring force. The resultant movement of the spool regulates the flow by opening the radial valve ports to the bypass port and closing the regulated flow ports. The solenoid valve vents the spring chamber to a drain line and in its NORMAL (de-energised) mode all inlet flow is diverted to the bypass port. The pre-set regulated flow is selected by energising the solenoid. The adjustable relief valve vents the spring chamber at the pre-set pressure and diverts the flow to the bypass port. It may be necessary to fit a 10 bar check valve in the bypass or regulated line to ensure the valve switches fully.

FEATURES

Line body construction with three ports allows direct connection into hydraulic systems. Leakproof adjust screw gives easy, accurate adjustment to required flow setting. Remote functional selection with solenoid operation. Adjustable relief valve gives system protection. Hardened and ground working parts give accurate flow control and long working life.

SPECIFICATIONS

Figures based on: Oil Temp = 40°C Viscosity = 40 cSt

Rated Flow	INLET:	
	2FPH55	95 litres/min (25 US GPM)
	2FPH95	150 litres/min (40 US GPM)
	2FPH195	380 litres/min (100 US GPM)
	REGULATED:	
	2FPH55	55 litres/min (14 US GPM)
	2FPH95	95 litres/min (25 US GPM)
	2FPH195	160 litres/min (42 US GPM)
Max Pressure	2FPH55	280 bar (4000 psi)
	2FPH95/2FPH195	350 bar (5000 psi)
Material	All working parts hardened and ground steel	
Body Material	2FPH55 Aluminium (up to 210 bar*) 2FPH95/2FPH195 Steel	
Mounting Position	Line mounted	
Weight	2FPH55	3.00 kg (6.60 lbs)
	2FPH95	3.50 kg (7.70 lbs)
	2FPH195	12.26 kg (27.00 lbs)
Seal Kit Number	2FPH55	SK267 (Nitrile) SK267V (Viton)
	2FPH95	SK547 (Nitrile) SK547V (Viton)
	2FPH195	SK258 (Nitrile) SK258V (Viton)
Recommended Filtration Level	BS5540/4 Class 18/13 (25 micron nominal)	
Operating Temp	-20°C to +90°C	
Nominal Viscosity Range	5 to 500 cSt	

*For applications above 210 bar please consult our technical department or use the steel body option.

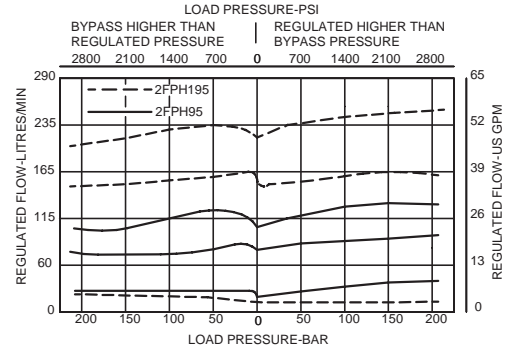
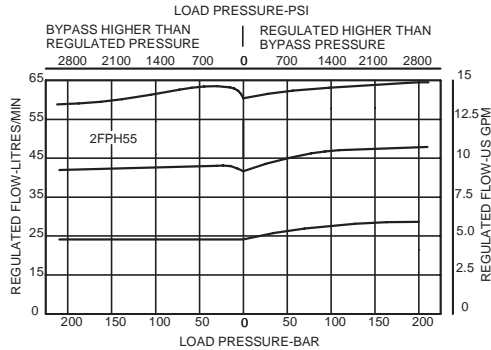
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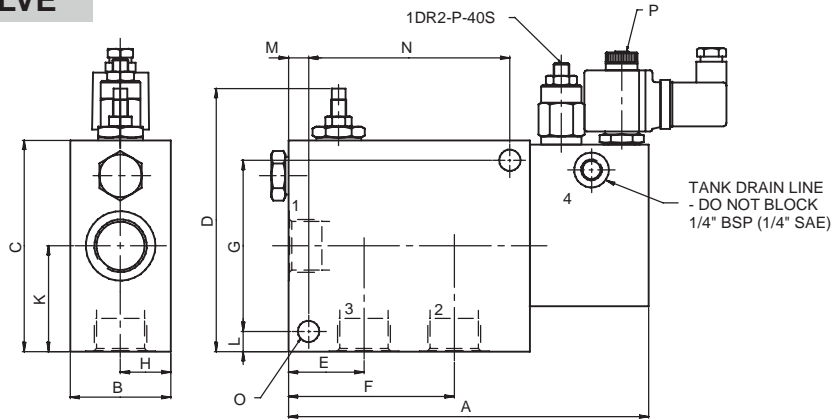
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PERFORMANCE



COMPLETE VALVE



Basic Code	Port Size	A	B	C	D	E	F	G	H	K	L	M	N	O	P	Std R/V Setting
2FPH55	1/2"	168	51	76	127	44.5	82.5	-	32	28.5	8.5	10	95	Ø8.5	SX203	280 bar
2FPH95	3/4"	232	63.5	76	127	58	102	58	39.5	32	10	10	136	Ø10.5	S207	200 bar
2FPH195	1"	227.5	63.5	133	168	47	104	108	32	67	13	13	127	Ø13.5	S207	280 bar

Where measurements are critical request certified drawings

ORDERING CODE EXAMPLE

2FPH P 6W 95 S H 24**

Basic Code _____

2FPH = Complete Valve

Adjustment Means _____

P = Leakproof Screw Adjustment
R = Handknob Adjustment
(See page 9-102 for dimensions)

Port Sizes - Bodied Valves Only _____

4W = 1/2" BSP 8T = 1/2" SAE
6W = 3/4" BSP 12T = 3/4" SAE
8W = 1" BSP 16T = 1" SAE

Adjustable Flow Range _____

55 = 0- 55 litres/min - 2FPH55
95 = 0- 95 litres/min - 2FPH95
195 = 0-195 litres/min - 2FPH195

Voltage

12 = 12VDC
24 = 24VDC
Other options available on request

Coil Termination

H = ISO4400 (plug included)
F = Flying Leads DC only
DM = Deutsch Moulded
Other terminations available on request

Seals

S = Nitrile (For use with most industrial hydraulic oils)
SV = Viton (For high temperature and most special fluid applications)

We reserve the right to change specifications without notice