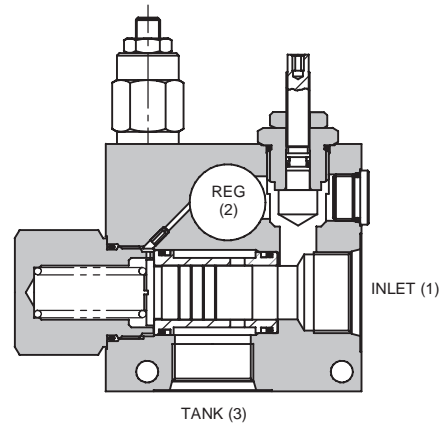
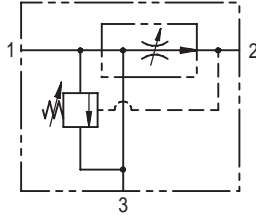




2FBAR SERIES PRESSURE COMPENSATED

FLOW REGULATOR - BYPASS STYLE WITH RELIEF

2FBAR SERIES



APPLICATION

2FBAR valves are three port bypass flow regulators with a built in relief to provide maximum pressure limitation for the hydraulic system. The flow (and actuator speed) will be largely independent of the load and the pressure conditions.

If used to regulate flow from a fixed supply, for example a standard gear or piston pump, the valve will pass the required flow and any surplus flow will be dumped to the tank line at working pressure. The supply pressure requirement will be approximately 7 bar (100 psi) higher than the system pressure, this being the operating pressure of the valve.

OPERATION

Inlet flow passes through the adjustable orifice and 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 and dumping excess flow. For correct valve function the pressure on the tank line **MUST** be lower than the minimum pressure on the regulated line.

If the system pressure exceeds the relief setting, then the pilot relief section in the spool opens and vents the spring chamber to the tank port, the resultant pressure imbalance on the spool causes it to move and open the inlet flow to the tank line. The valve will bypass enough flow to maintain the pressure setting giving control over both system flow and maximum pressure.

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

FEATURES

Line body construction with three flow ports allows direct connection into hydraulic systems. Leakproof adjust screw gives easy, accurate adjustment to required flow setting. Built in 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:		
	2FBAR25	55 l/min	(14 US GPM)
	2FBAR55	95 l/min	(25 US GPM)
	2FBAR95	150 l/min	(40 US GPM)
	2FBAR195	285 l/min	(70 US GPM)
Relief Setting	REGULATED:		
	2FBAR25	30 l/min	(8 US GPM)
	2FBAR55	55 l/min	(14 US GPM)
	2FBAR95	95 l/min	(25 US GPM)
	2FBAR195	195 l/min	(50 US GPM)
Max Pressure	100 bar (1450 psi)		
Material	210 bar (3000 psi)		
Body Material	All working parts hardened, ground steel		
Mounting Position	Standard aluminium (up to 210 bar*) Add suffix '377' for steel option		
Weight	Line mounted		
Seal Kit Number	2FBAR25	SK983 (Nitrile)	SK983V (Viton)
	2FBAR55	SK983 (Nitrile)	SK983V (Viton)
	2FBAR95	SK984 (Nitrile)	SK984V (Viton)
	2FBAR195	SK985 (Nitrile)	SK985V (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		

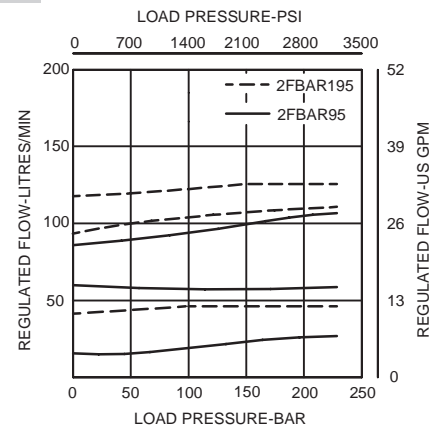
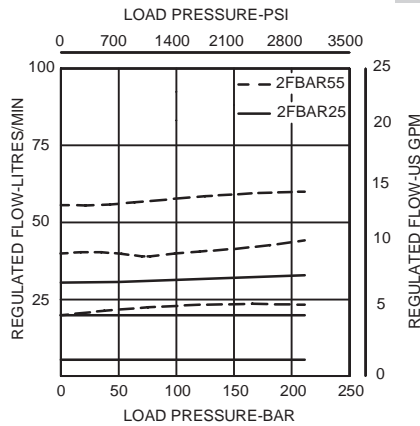
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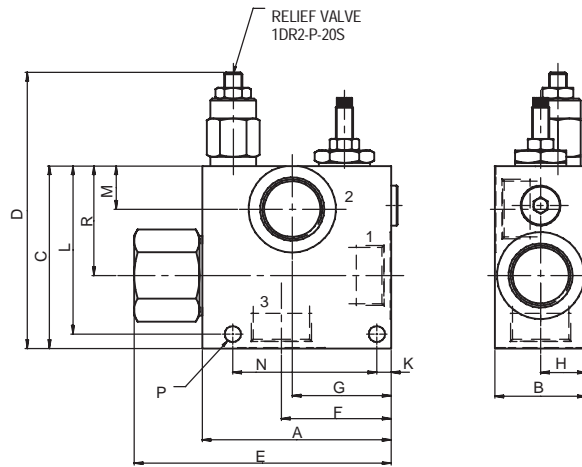
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Website: www.integratedhydraulics.com

PERFORMANCE



COMPLETE VALVE



9

Basic Code	Port Size	A	B	C	D	E	F	G	H	K	L	M	N	P	R
2FBAR25	3/8"	101.6	50.8	85	137	130	63	63	25.4	11.6	77	19	80	9	53
2FBAR55	1/2"	101.6	50.8	85	137	130	63	63	25.4	11.6	77	19	80	9	53
2FBAR95	3/4"	101.6	50.8	85	137	130	63	63	25.4	11.6	77	19	80	9	53
2FBAR195	1"	105	50.8	101.6	155	143	61	55	25.4	8.0	93.6	24	80	9	61

Where measurements are critical request certified drawings

ORDERING CODE EXAMPLE

2FBAR P 6W 95 S**

Basic Code

2FBAR = Complete Valve

Adjustment Means

P = Leakproof Screw Adjustment

R = Handknob Adjustment

D = Detent Adjustment (2FBAR95 only)

L = Lever Adjustment (2FBAR95 only)

(See page 9-102 for dimensions)

Port Sizes - Bodied Valves Only

3W = 3/8" BSP 6T = 3/8" SAE

4W = 1/2" BSP 8T = 1/2" SAE

6W = 3/4" BSP 12T = 3/4" SAE

8W = 1" BSP 16T = 1" SAE

Seals

S = Nitrile (For use with most industrial hydraulic oils)

SV = Viton (For high temperature and most special fluid applications)

Adjustable Flow Range

25 = 0- 30 litres/min - 2FBAR25

55 = 0- 55 litres/min - 2FBAR55

95 = 0- 95 litres/min - 2FBAR95

195 = 0-195 litres/min - 2FBAR195

We reserve the right to change specifications without notice