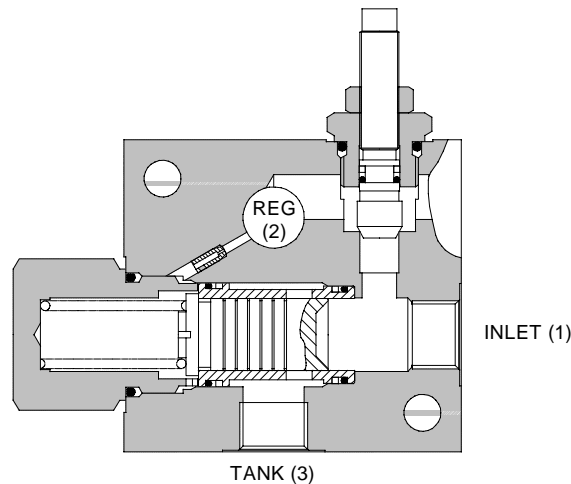
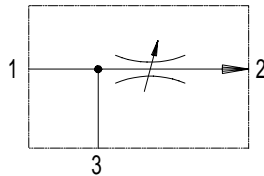




2FB SERIES PRESSURE COMPENSATED FLOW REGULATOR - BYPASS STYLE

2FB SERIES



APPLICATION

2FB valves are bypass flow regulators. 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 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.

The valve will pass flow in the return direction but this is restricted by the flow path through the control orifice. For correct valve function the pressure on the tank line MUST be lower than the minimum pressure on the regulated line.

FEATURES

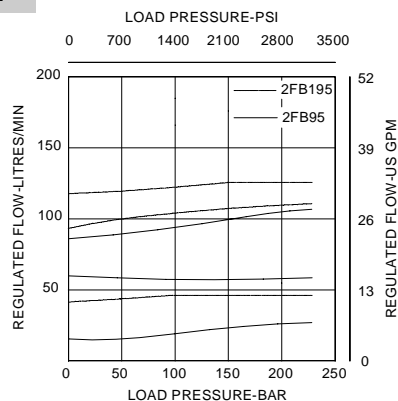
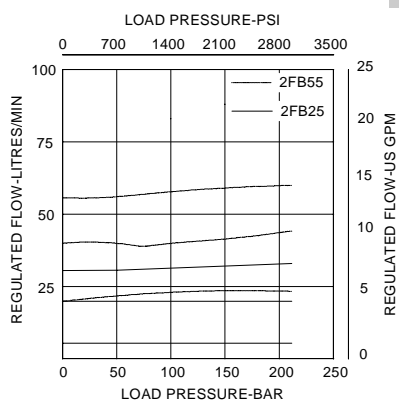
Line body construction with through flow ports allows direct connection into hydraulic systems. Leakproof adjust screw gives easy, accurate adjustment to required flow setting. Hardened and ground working parts give accurate flow control and long working life.

SPECIFICATIONS

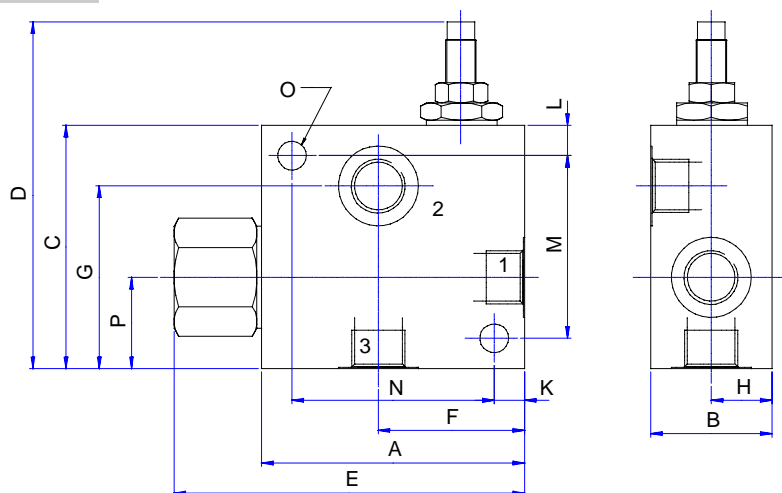
Figures based on: Oil Temp = 40°C Viscosity = 40 cSt

Rated Flow	INLET:	
	2FB25	55 litres/min (14 US GPM)
	2FB55	95 litres/min (25 US GPM)
	2FB95	150 litres/min (40 US GPM)
	2FB195	285 litres/min (70 US GPM)
	REGULATED:	
	2FB25	30 litres/min (8 US GPM)
	2FB55	55 litres/min (14 US GPM)
	2FB95	95 litres/min (25 US GPM)
	2FB195	195 litres/min (50 US GPM)
Max Pressure	210 bar (3000 psi)	
Material	All working parts hardened, ground and honed steel	
Body Material	Standard aluminium Add suffix '377' for steel option	
Mounting Position	Line mounted	
Weight	2FB25/2FB55	0.79 kg (1.74 lbs)
	2FB95	0.82 kg (1.80 lbs)
	2FB195	1.57 kg (3.46 lbs)
Seal Kit Number	2FB25/55	SK355 (Nitrile) SK355V (Viton)
	2FB95	SK661 (Nitrile) SK661V (Viton)
	2FB195	SK374 (Nitrile) SK374V (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	

PERFORMANCE



COMPLETE VALVE



Basic Code	Port Size	A	B	C	D	E	F	G	H	K	L	M	N	O	P
2FB25	3/8" BSP	82.5	38	76	111	110	46	57	19	9.5	9.5	57	63.5	9	28.5
2FB55	1/2" BSP	82.5	38	76	111	110	46	57	19	9.5	9.5	57	63.5	9	28.5
2FB95	3/4" BSP	95	38	76	111	123	57	57	19	16	9.5	57	70	10.5	30
2FB195	1" BSP	105	51	102	137	143	61	77.5	25.5	13	10	82.5	79	10.5	38

Where measurements are critical request certified drawings

ORDERING CODE EXAMPLE

2FB**

P

6W

95

S

Basic Code

Adjustment Means

P = Leakproof Screw Adjustment
R = Handknob Adjustment
D = Detent Adjustment
L = Lever Adjustment (2FB95 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

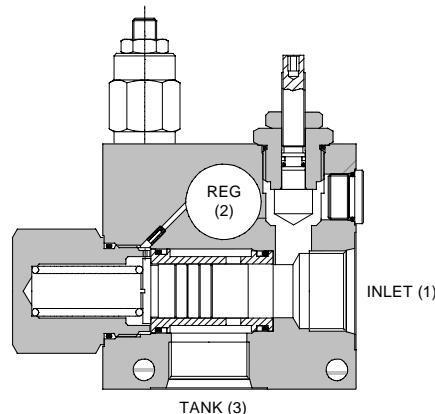
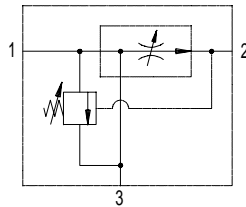
25 = 0- 30 litres/min - 2FB25
55 = 0- 55 litres/min - 2FB55
95 = 0- 95 litres/min - 2FB95
195 = 0-195 litres/min - 2FB195

We reserve the right to change specifications without notice



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 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.

FEATURES

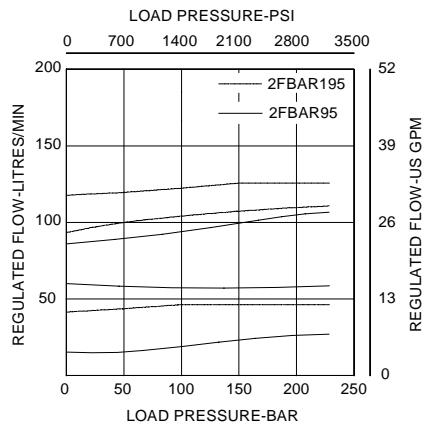
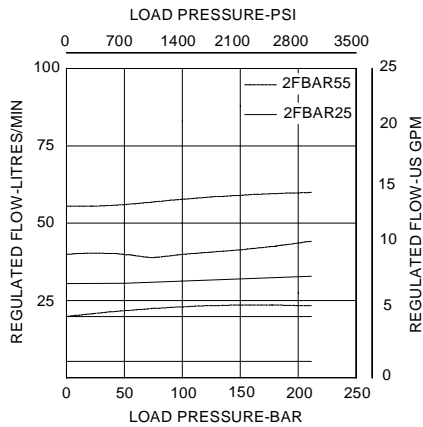
Line body construction with three flow ports allows direct connection into hydraulic systems. Leakproof adjust screw gives easy, accurate adjustment to required flow setting. Built in relief valve gives system protection. Hardened and ground working parts give accurate flow control and long working life.

SPECIFICATIONS

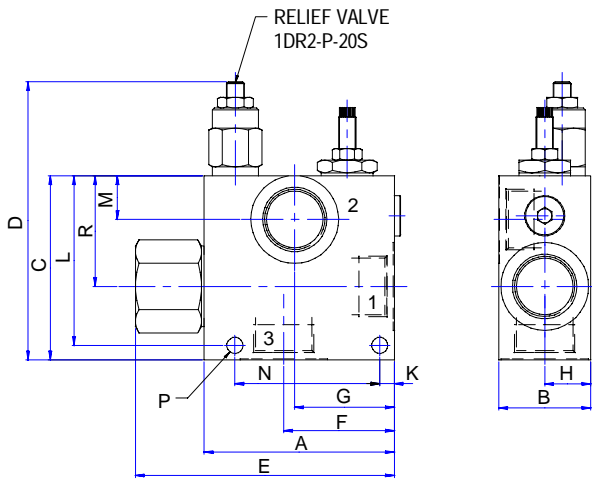
Figures based on: Oil Temp = 40°C Viscosity = 40 cSt

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)
		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)
Relief Setting		100 bar (1450 psi)	
Max Pressure		210 bar (3000 psi)	
Material		All working parts hardened, ground steel	
Body Material		Standard aluminium Add suffix '377' for steel option	
Mounting Position		Line mounted	
Weight		2FBAR25/2FBAR55	0.93 kg (2.04 lbs)
		2FBAR95	0.96 kg (2.10 lbs)
		2FBAR195	1.71 kg (3.76 lbs)
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	

PERFORMANCE



COMPLETE VALVE



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

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