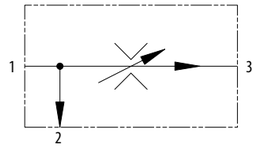
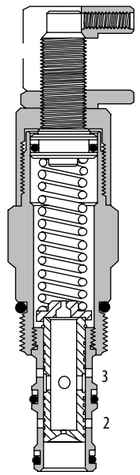
PFR2-16 - Flow regulator

Limited range adjustable, priority pressure compensated
114 L/min (30 USgpm) • 210 Bar (3000 psi)



Sectional view



Operation

Inlet flow passes through the fixed 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 valve will pass flow in the return direction but this is restricted by the flow path through the control orifice.

Features

Cartridge construction gives versatility of application. A valve may be fitted into a line body, a custom designed Hydraulic Integrated Circuit or directly into a cylinder or other actuator. Leakproof adjust screw gives easy, accurate adjustment to required flow setting. Hardened and ground working parts give accurate flow control and long working life.

Performance data

Ratings and specification

Performance data is typical with fluid at 21,8 cSt (105 SUS) and 49°C (120°F)	
Typical application pressure (all ports)	210 bar (3000 psi)
Cartridge fatigue pressure (infinite life)	210 bar (3000 psi)
Rated flow	Maximum inlet flow 151 L/min (40 USgpm) Maximum regulated flow 114 L/min (30 USgpm)
Temperature range	-40° to 120°C (-40° to 248°F))
Flow regulation accuracy	1,9–10,9 L/min (0.5–2.9 USgpm) ±15% 11,4–114 L/min (3–30 USgpm) ±10%
Factory set maximum flow rate accuracy under standard test conditions and within the above ranges	
Cavity	C–16–3
Fluids	All general purpose hydraulic fluids such as MIL-H-5606, SAE 10, SAE 20 etc.
Filtration	Cleanliness code 18/**16/13**
Standard housing material	Aluminum or Steel
Weight cartridge only	0,43 kg (0.95 lbs)
Seal kit	565811 (Buna-N) 889610 (Viton®)

Viton is a registered trademark of E.I. DuPont

Description

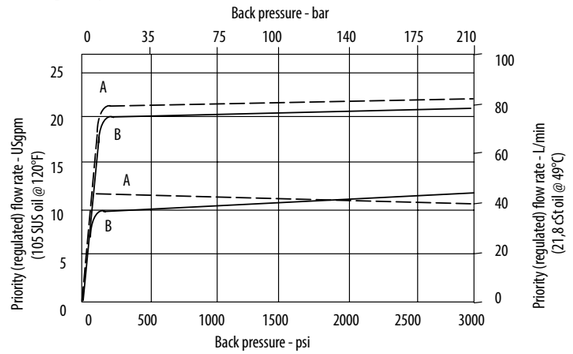
These valves are priority flow regulators. The flow (and actuator speed) will be largely independent of the load and the pressure conditions.

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 diverted to the bypass port. The bypass flow may be used for a secondary circuit whether the secondary pressure requirement is higher or lower than the regulated pressure.

The valve inlet pressure will be approximately 7 bar (100 psi) more than the regulated or bypass pressure, whichever is higher.

Typical flow regulation

Cartridge only



A - Port 3, priority (regulated) outlet pressurized
B - Port 2, bypass outlet pressurized

Notes: The flow adjustment is from the factory - set maximum flow rate down to 50% of that factory set flow rate.

Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

PFR2-16 - Flow regulator

Limited range adjustable, priority pressure compensated
114 L/min (30 USgpm) • 210 Bar (3000 psi)

Model code

PFR2 – 16 (V) – * – * – *.* – 00**
1 2 3 4 5 6 7

1 Function

PFR2 - Priority flow regulator

2 Size

16 - 16 size

3 Seals

Blank - Buna-N
V - Viton®

4 Adjustment

C - Cap
K - Knob
S - Screw

5 Port size

Code	Port size	Housing number	
		Aluminium light duty	Aluminum fatigue rated
0	Cartridge only	566152	–
12T	SAE 12	02-175465	–
6B	3/4" BSPP	–	876721
10H	SAE 10	–	876723
12H	SAE 12	–	876720
4G	1/2" BSPP	–	876722
6G	3/4" BSPP		

See section J for housing details.

6 Factory set flow rate

(Specify in USgpm)
Range 1,9–114 L/min
(0.5–30 USgpm)

7 Special features

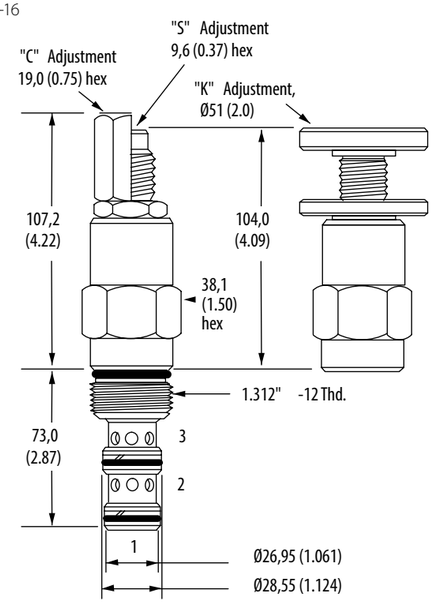
00 – None
(Only required if valve has special features, omitted if "00")
SS - 316 stainless steel external components

Dimensions

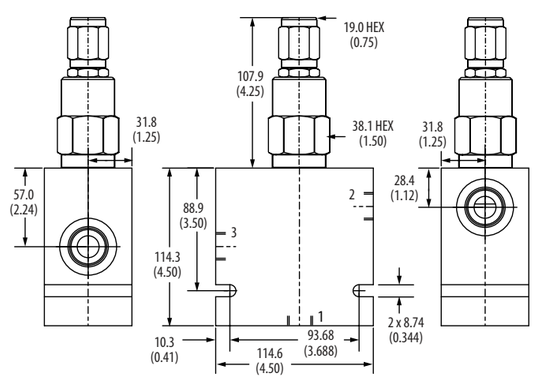
mm (inch)

Torque cartridge in aluminum housing to 108–122 Nm (80–90 ft lbs).

Cartridge only
Basic code
PFR2-16



Installation drawing



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.