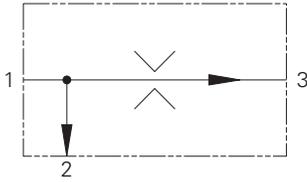


PFR11-16 - Flow Regulator

Fixed, priority type, pressure compensated
Up to 114 L/min (30 USgpm) • 350 bar (5000 psi)



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

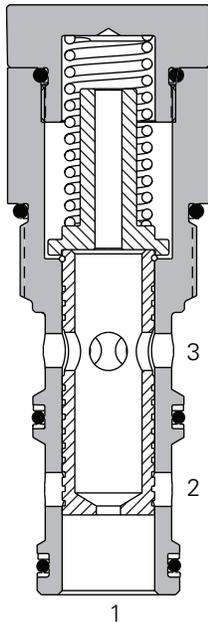
movement of the spool regulates the flow by opening the radial valve ports to the bypass port and closing the regulated flow ports.

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.

Sectional View



Performance Data

Ratings and Specifications

Performance data is typical with fluid at 21,8 cSt (105 SUS) and 49° C (120° F)

Typical Application pressure (all ports)	350 bar (5000 psi)
Cartridge fatigue pressure (infinite life)	350 bar (5000 psi)
Rated flow	Maximum inlet flow 151 L/min (40 USgpm) Maximum regulated flow 114 L/min (30 USgpm)
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 priority flow rate accuracy under standard test conditions and within the above ranges	
Temperature range	-40° to 120°C (-40° to 248°F)
Cavity	C-16-3
Fluids	All general purpose hydraulic fluids such as: MIL-H-5606, SAE 10, SAE 20, etc.
Filtration	18/16/13
Standard housing materials	Aluminum or Steel
Weight cartridge only	0,38 kg (0.84 lb.)
Seal kit	565811 (Buna-N), 889610 (Viton™)

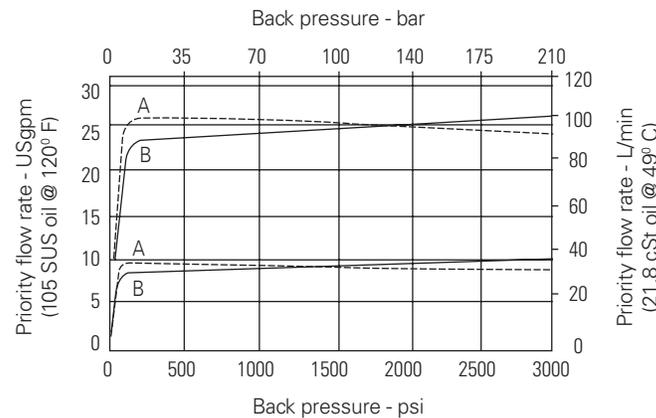
Viton is a registered trademark of E.I. DuPont

Description

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.

Typical Flow Regulation



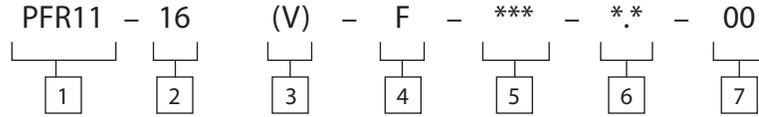
A - Port 3, priority (regulated outlet) pressurized.
B - Port 2, (bypass outlet) pressurized.

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

PFR11-16 - Flow Regulator

Fixed, priority type, pressure compensated
Up to 114 L/min (30 USgpm) • 350 bar (5000 psi)

Model Code



1 Function
PFR11 - Priority flow regulator

2 Size
16 - 16 Size

3 Seals
Blank - Buna-N
V - Viton®

4 Adjustment
F - Fixed orifice

5 Port Size

Code	Port Size	Housing Number - Body Only		
		Aluminium Light Duty	Aluminum Fatigue rated	Steel
A12T	SAE 12	566152		
A10H	SAE 10		876721	
A12H	SAE 12		876723	
A4G	1/2" BSPP		876720	
A6G	3/4" BSPP		876722	
S4G	1/2" BSPP			02-175131
S6G	3/4" BSPP			02-175132
S10T	SAE 10			02-175129
S12T	SAE 12			02-175130

See section J for housing details.

6 Factory set flow rate
(Specify in USgpm)
Range 1,9-76 L/min
(0.5-20 USgpm)

7 Special features
00 - None

(Only required if valve has special features, omitted if "00.")

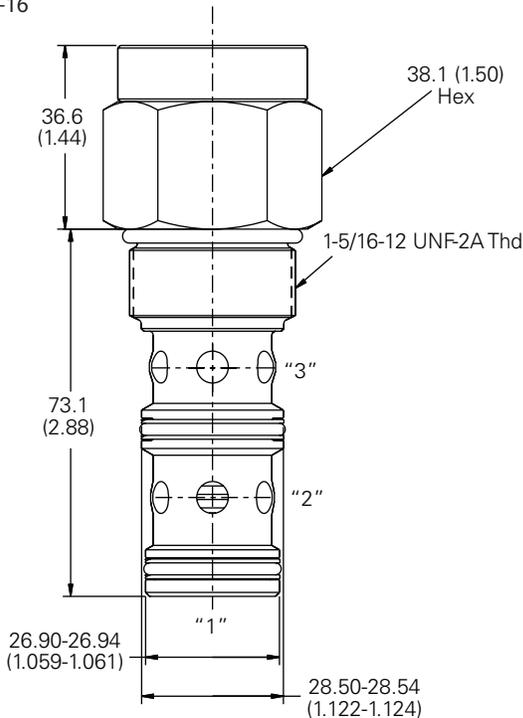
Dimensions

mm (inch)

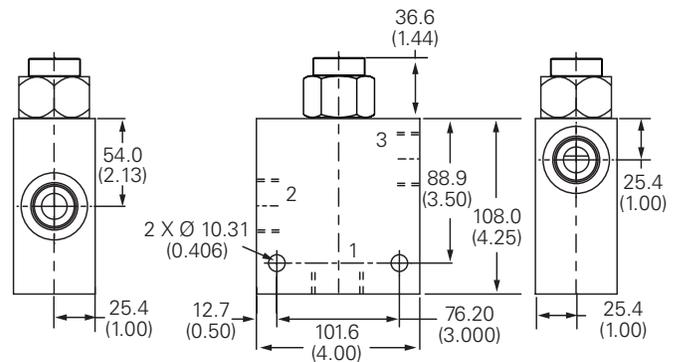
Note: Torque cartridge in aluminum housing to 108-122 Nm (80-90 ft. lbs)

Note: Torque cartridge in steel housing to 136-149.6 Nm (100-110 ft. lbs)

Cartridge Only
Basic Code
PFR11-16



Installation Drawing (Steel)



WARNING

Aluminum housings can be used for pressures up to 210 bar (3000 psi) Steel housings must be used for operating pressures above 210 bar (3000 psi).