Flow Control Valves
PFR11-16

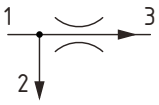
Flow Control, Fixed, Pressure Compensated, Priority Type

350 bar [5000 psi] • 114 l/min [30 US gpm]

DESCRIPTION AND OPERATION

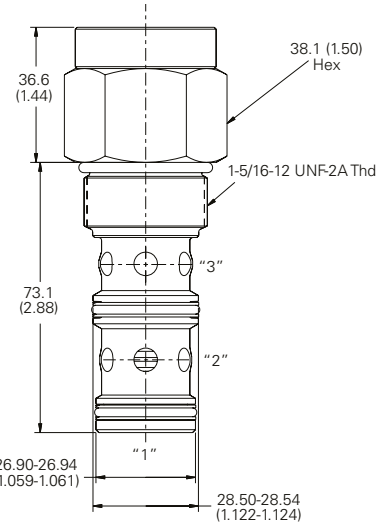
This is a fixed, priority type, pressure compensated flow control valve, where the flow from port 3 will remain constant regardless of the pressure difference across the valve, while excess flow passes from port 1 to 2. Flow enters at port 1 and passes across a fixed orifice in the spool, which creates a pressure drop. This causes the spool to move back against the spring, which then restricts the outlet flow. Port 1 then opens to port 2 to allow excess flow to pass. The regulated flow will always take priority and remains constant if the working pressure is higher in either port 2 or port 3.

SCHEMATIC



DIMENSIONS

mm [in]



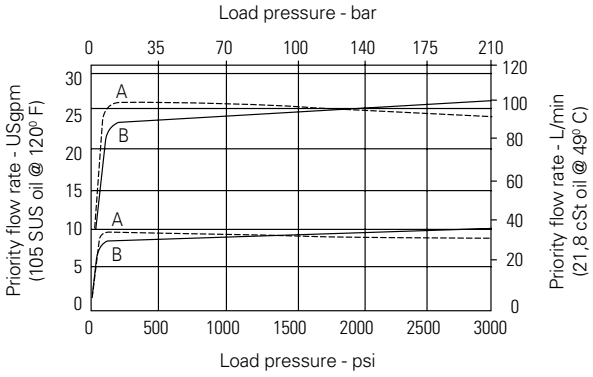
Installation torque
A - 108-122 Nm [80-90 ft. lbs]
S - 136-149.6 Nm [100-110 ft. lbs]

PERFORMANCE DATA

Rated pressure	**350 bar [5000 psi]**
Rated flow	**114 l/min [30 US gpm]**
Max inlet flow	151 l/min [40 US gpm]
Flow range	1.9- 114 l/min [0.5- 30 US gpm]
Flow accuracy	1.9-10.9 l/min [0.5-2.9 US gpm] ±15% 11.4-114 l/min [3-30 US gpm] ±10%
Weight	0.38 kg [0.84 lb]
Cavity	SDC16-3

PERFORMANCE CURVES

Flow Compensation



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

MODEL CODE

PFR11 - 16 - V - F - A - 12T - 1.0

Seal Option

Code	Seal Kit
Omit-Buna - N	565811
V-Viton	889610

Adjustment Option

F - Fixed

Housing Material

Omit - No housing
A - Aluminum
S - Steel

Flow Setting

Code - Flow in US gpm
Specity in 0.1 gpm increments within flow range
Example

Code	l/min	[US gpm]
1.0	4.0	1.0

Housing

Code	Ports	Aluminium Standard duty	Aluminium Heavy duty	Steel
0	No housing			
6B	3/4" BSP	02-175465		
12T	#12 SAE	566152		
10H	#10 SAE		876721	
12H	#12 SAE		876723	
4G	1/2" BSP		876720	
6G	3/4" BSP		876722	
4G	1/2" BSP			02-175131
6G	3/4" BSP			02-175132
10T	#10 SAE			02-175129
12T	#12 SAE			02-175130

* Aluminum bodies are to be used for pressures less than 210 bar [3000 psi].
* Additional housings available