Flow Control Valves

PFR15-10

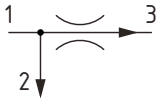
Flow Control, Fixed, Pressure Compensated, Priority Type

350 bar [5000 psi] • 38 l/min [10 US gpm]

DESCRIPTION AND OPERATION

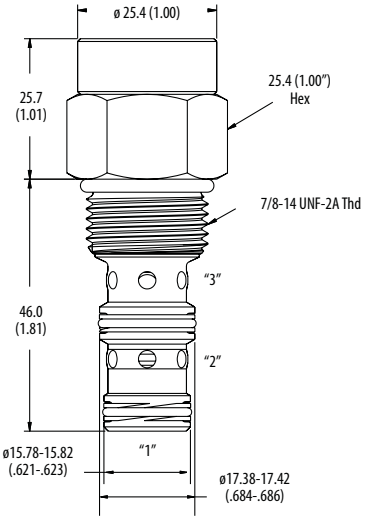
This is a fixed, priority type, pressure compensated flow control valve, where the flow from port 3 will remain constant regardless of the pressure difference across the valve, while excess flow passes from port 1 to 2. Flow enters at port 1 and passes across a fixed orifice in the spool, which creates 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]



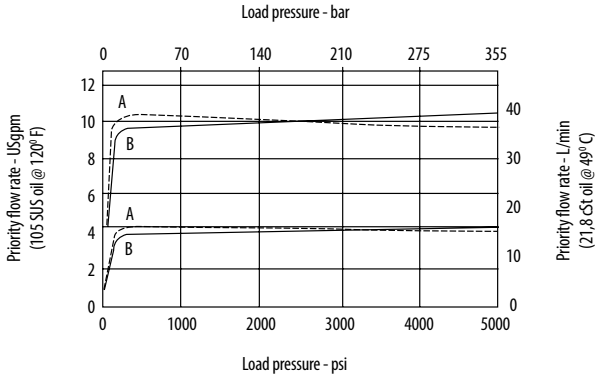
Installation Torque:
A - 47-54 Nm [35-40 ft. lbs]
S - 68-75 Nm [50-55 ft. lbs]

PERFORMANCE DATA

Rated pressure	**350 bar [5000 psi]**
Rated flow	**38 l/min [10 US gpm]**
Max inlet flow	64 l/min [17 US gpm]
Flow range	0.4-38 l/min [0.1-10 US gpm]
Flow accuracy	0.4-1.9 l/min [0.1-0.49 US gpm] ±40% 2.0-38 l/min [0.5-10 US gpm] ±15%
Weight	0.13 kg [0.28 lb]
Cavity	SDC10-3

PERFORMANCE CURVES

Flow Compensation



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

MODEL CODE

PFR15 - 10 - V - F - S - 2G - 1.0

Seal Option

Code	Seal Kit
Omit-Buna - N	565804
V-Viton	889599

Adjustment Option

F - Fixed

Housing Material

Omit - No housing
S - Steel
A - Aluminium

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 Heavy duty	Steel
0	No housing		
2G	1/4" BSP	876705	
3G	3/8" BSP	876714	
6H	#6 SAE	876704	
8H	#8 SAE	876711	
2G	1/4" BSP		02-175127
3G	3/8 BSP		02-175128
6T	#6 SAE		02-175124
8T	#8 SAE		02-175125

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