Flow Control Valves

PFR11-12

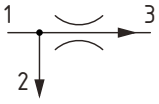
Flow Control, Fixed, Pressure Compensated, Priority Type

350 bar [5000 psi] • 76 l/min [20 US gpm]

DESCRIPTION AND OPERATION

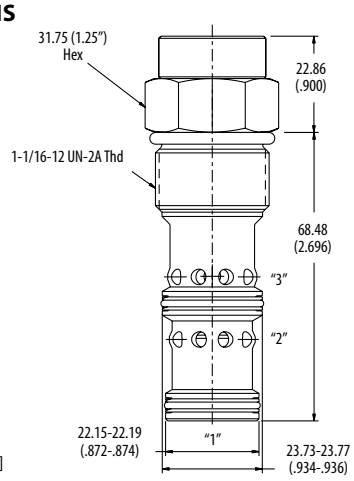
This is a fixed, priority type, pressure compensated flow control valve, where the flow from port 3 will remain constant regardless of the pressure difference across the valve, while excess flow passes from port 1 to 2. Flow enters at port 1 and passes across a fixed orifice in the spool, which creates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

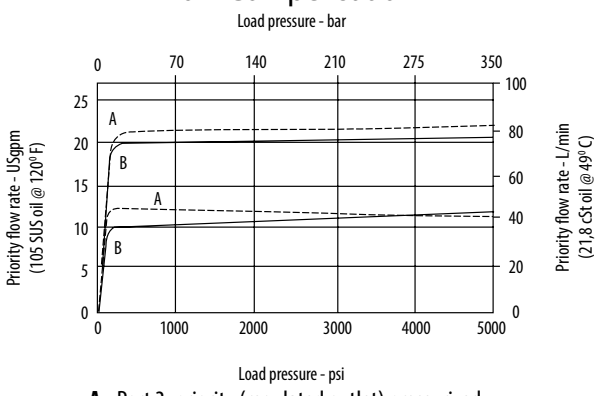


Installation torque
81-95 Nm [60-70 ft. lbs]
102-115 Nm [75-85 ft. lbs]

PERFORMANCE DATA

Rated pressure	**350 bar [5000 psi]**
Rated flow	**76 l/min [20 US gpm]**
Max inlet flow	114 l/min[30 US gpm]
Flow range	1.9-76 l/min [0.5-20 US gpm]
Flow accuracy	+/- 15%
Weight	0.25 kg [0.55 lb]
Cavity	C-12-3

PERFORMANCE CURVES



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

MODEL CODE

PFR11 - 12 - V - F - A - 4G - 20.0

Seal Option

Code	Seal Kit
Omit-Buna - N	9900171
V-Viton	9900172

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]
20.0	76.0	20.0

Housing

Code	Ports	Housing Model Code	
		Aluminium	**Steel**
0	No housing		
4G	1/2" BSP	02-161817	
6G	3/4" BSP	02-161816	
10H	#10 SAE	02-160642	
12H	#12 SAE	02-160646	
4G	1/2" BSP		02-169815
6G	3/4" BSP		02-169814
10T	#10 SAE		02-161070
12T	#12 SAE		02-169816

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