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

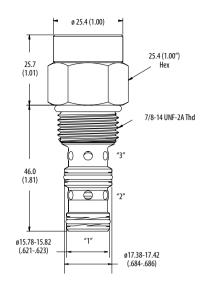


■ PERFORMANCE DATA

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		

DIMENSIONS

mm [in]



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

Priority flow rate - USgpm

105 SUS oil @ 120°F)

PERFORMANCE CURVES

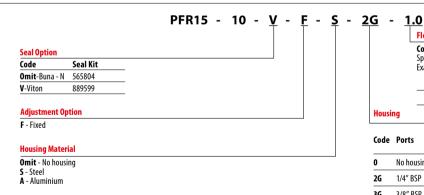
Flow Compensation

Load pressure - bar 140 355 12 Α 40 10 В 30 8 20 Α В 10 3000 5000 Load pressure - psi

Priority flow rate - L/min (21,8 cSt oil @ 49° C)

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

MODEL CODE



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	
3 G	3/8" BSP	876714	
6H	#6 SAE	876704	
8H	#8 SAE	876711	
2G	1/4" BSP		02-175127
3 G	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