Flow Control Valves

PFR12-16

Flow Control, Partially Adjustable, Pressure Compensated, Priority Type

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

■ DESCRIPTION AND OPERATION

This is a partially adjustable, 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 Flow Setting will always take priority and remains constant if the working pressure is higher in either port 2 or port 3.

SCHEMATIC

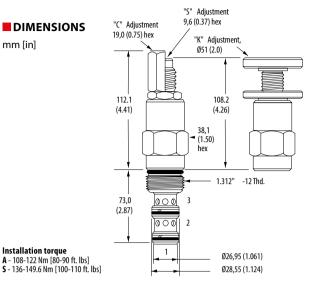


■ PERFORMANCE DATA

Rated pressure	350 bar [5000 psi]
Rated flow	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	0.43 kg [0.95 lb]
Cavity	SDC16-3

DIMENSIONS

mm [in]



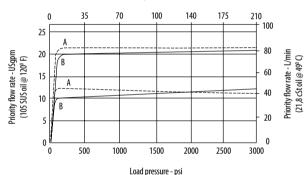
Danfoss

PERFORMANCE CURVES

Installation torque

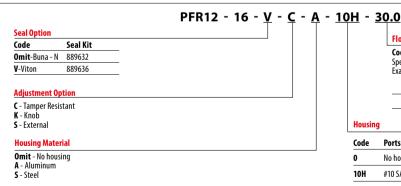
Flow Compensation

Load pressure - bar



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

MODEL CODE



Flow Setting

Code - Flow in US gpm

Specity in 0.1 gpm increments within flow range Example

30.0 114.0 30.0	Code	l/min	[US gpm]
	30.0	114.0	30.0

Housing

Code	Ports	Aluminium Heavy duty	Steel
0	No housing		
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