Flow Control Valves

PFR12-12

Flow Control, Partially Adjustable, Pressure Compensated, Priority Type

350 bar [5000 psi] • 76 l/min [20 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 regulated flow will always take priority and remains constant if the working pressure is higher in either port 2 or port 3.

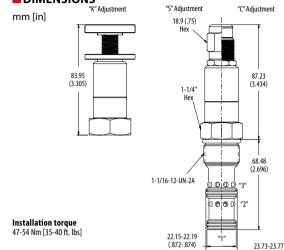
SCHEMATIC



PERFORMANCE DATA

Rated pressure	350 bar [5000 psi]
Rated flow	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	0.32 kg [0.70 lb]
Cavity	C-12-3

DIMENSIONS



Danfoss

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

PERFORMANCE CURVES

Flow Compensation

0 70 140 210 275 350 100 25 Priority flow rate - USgpm (105 SUS oil @ 120° F) 80 20 В 60 15 40 10 20 5 N 0 5000

Load pressure - psi

A - Port 3, priority (regulated outlet) pressurized

B - Port 2, (bypass outlet) pressurized.

MODEL CODE

