

Proportional Valves

PFC16-PC

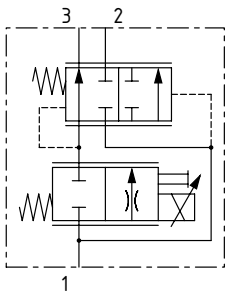
Proportional Flow Control Valve, Normally Closed, Priority Type, Pressure Compensated

260 bar [3800 psi] • 85 l/min [22.5 US gpm]

DESCRIPTION AND OPERATION

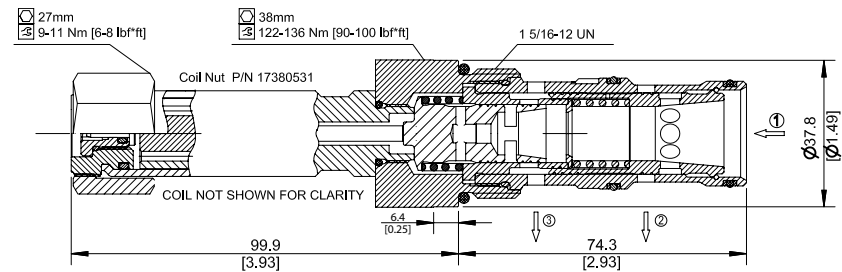
This is a 3-way, spool type, normally closed, priority type, pressure compensated proportional flow control valve. In the de-energized condition, flow is blocked from port 1 to the priority port 3 and all flow passes from port 1 to 2. Energizing the coil will proportionally move the spool, opening a variable orifice from port 1 to 3, while excess flow passes to port 2. An internal compensating spool ensures that the output flow at port 3 remains constant, regardless of changes in differential pressure between port 1 and 3 or pressure at the bypass port 2. Increasing the current to the coil will increase the priority outlet flow.

SCHEMATIC



DIMENSIONS

mm [in]

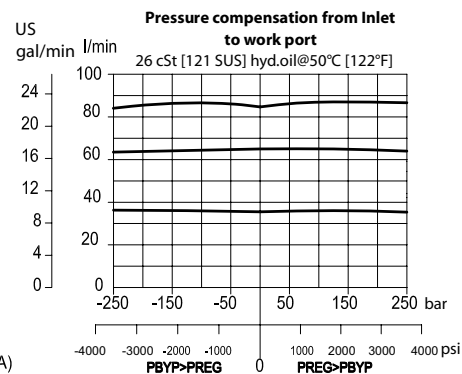
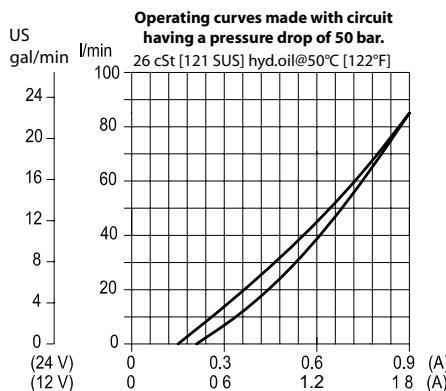


PERFORMANCE DATA

Rated pressure*	260 bar [3800 psi]
Max regulated flow	85 l/min [22.5 US gpm]
Leakage	420 ml/min [25.6 in ³ /min] @rated pressure
Maximum Hysteresis	8%
Threshold current	0.4 A [12 VDC coil] 0.2 A [24 VDC coil]
Maximum control current	1.8 A [12 VDC coil] 0.9 A [24 VDC coil]
Coil Options	D14E [35 Watt]
Weight	0.97 kg [2.14 lb]
Cavity	SDC16-3

*Rated pressure based on NFPA fatigue test standards (at 1 million cycles)

PERFORMANCE CURVES



MODEL CODE

PFC16 - PC - 85 - 12D - DN - SPS - B - 00

Max Regulated flow

Code	Flow
85	85 l/min (22.5 US gpm)

Coil Voltage

00 - No coil, nut included*

12D - 12 VDC

24D - 24 VDC

*Aluminum coil nut (p/n 17380531)

Connector Type

00 - No coil

AJ - AMP Junior

DE - Deutsch

DN - DIN 43650

Manual Override Option

Omit - Push Pin

SPS - Screw Type

Housing

Code	Ports & Material	Housing Model Code
00	No housing	
6B	AL, 3/4 BSP	SDC16-3-HE-6B
8B	AL, 1 BSP	SDC16-3-HE-8B
12S	AL, #12 SAE	CP16-3-12S
16S	AL, #16 SAE	CP16-3-16S

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

* Additional housings available

Seal Option

Code	Seal kit
B - Buna - N	354008919
V - Viton	354009019