

# Proportional Valves

## PFC16-PO

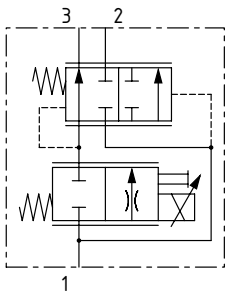
Proportional Flow Control Valve, Normally Open, Priority Type, Pressure Compensated

260 bar [3800 psi] • 90 l/min [24 US gpm]

### DESCRIPTION AND OPERATION

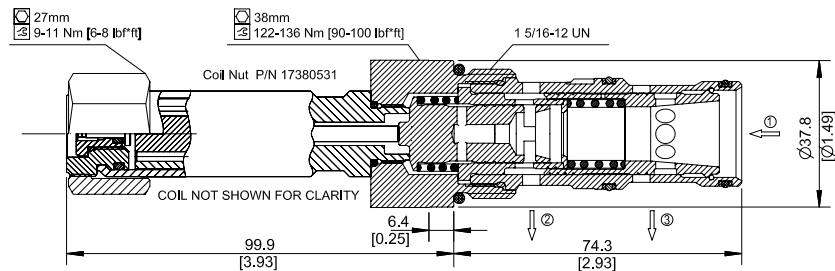
This is a 3-way, spool type, normally closed, priority type, pressure compensated proportional flow control valve. In the de-energized condition, flow is blocked from port 1 to the priority port 3 and all flow passes from port 1 to 2. Energizing the coil will proportionally move the spool, opening a 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]

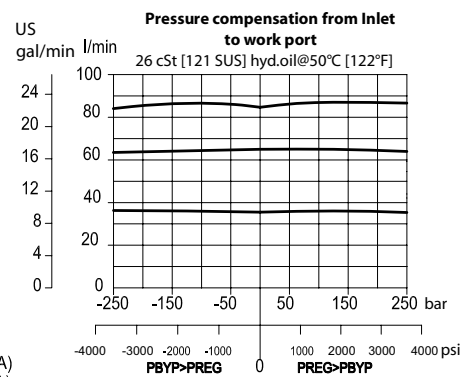
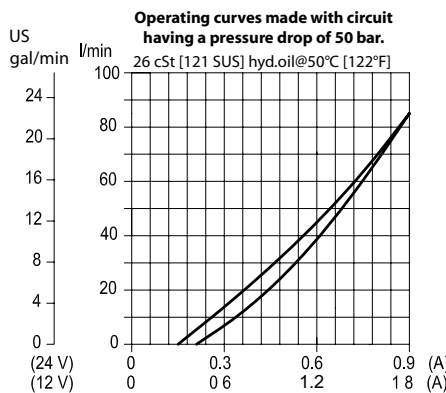


### PERFORMANCE DATA

Rated pressure*	260 bar [3800 psi]
Max regulated flow	90 l/min [24 US gpm]
Leakage	420 ml/min [25.6 in <sup>3</sup> /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 - PO - 90 - 12D - DE - SPS - B - 6B**

#### Max Regulated flow

Code	Flow
90	90 l/min [24 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-HE6B
8B	AL, 1 BSP	SDC16-3-HE8B
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