

# Proportional Valves

## PFC12-PO

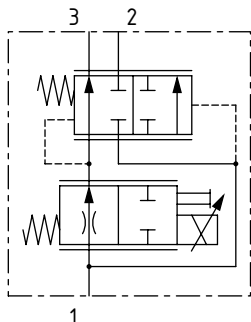
Proportional Flow Control Valve, Normally Open, Priority Type, Pressure Compensated

260 bar [3800 psi] • 70 l/min [18.5 US gpm]

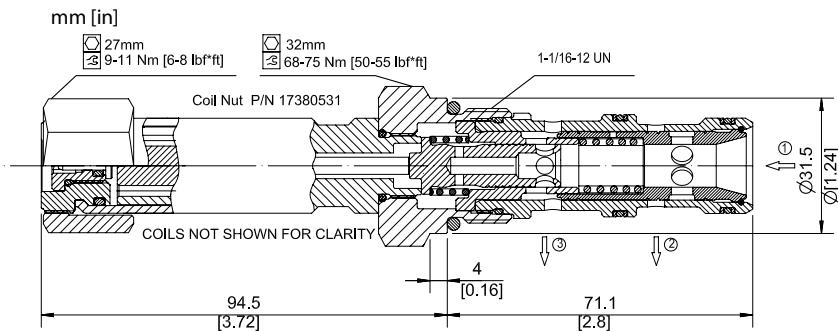
### DESCRIPTION AND OPERATION

This is a 3-way, spool type, normally open, priority type, pressure compensated proportional flow control valve. In the de-energized condition, port 1 is open to port 3 to the rated controlled flow and excess flow passes to port 2. Energizing the coil will proportionally move the spool, restricting flow through 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 decrease the priority outlet flow.

### SCHEMATIC



### DIMENSIONS

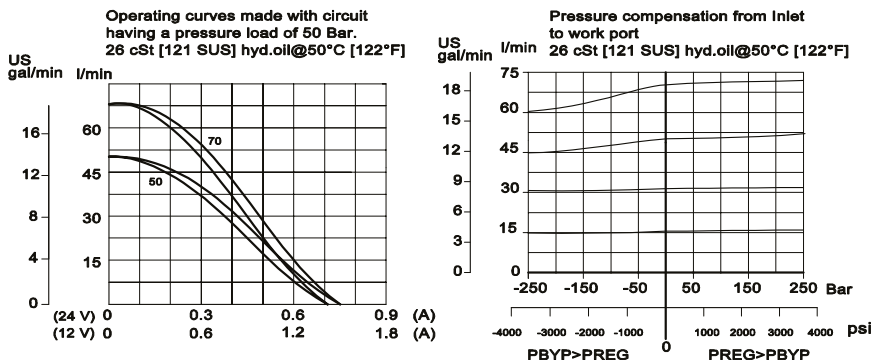


### PERFORMANCE DATA

Rated pressure*	260 bar [3800 psi]
Max Regulated flow	70 l/min [18.5 US gpm]
Leakage	420 ml/min [25.6 in <sup>3</sup> /min]
Maximum Hysteresis	8%
Threshold current	0.2 A [12 VDC coil] 0.1 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	0.81 kg [1.79 lb]
Cavity	SDC12-3

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

### PERFORMANCE CURVES



### MODEL CODE

PFC12 - PO - 70 - 12D - DN - SPS - B - 00

#### Max Regulated Flow

Code	Flow
50	50 l/min [13 US gpm]
70	70 l/min [18.5 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	
10S	AL, #10 SAE	CP12-3-10S
12S	AL, #12 SAE	CP12-3-12S
4B	AL, 1/2 BSP	SDC12-3-HE 1/2
6B	AL, 3/4 BSP	SDC12-3-HE 3/4

\*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	354008319
V - Viton	354008419