

# Proportional Valves

## PFC10-RO

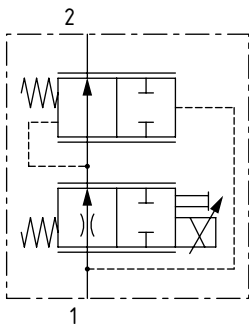
Proportional Flow Control Valve, Normally Open, Restrictive Type, Pressure Compensated

260 bar [3800 psi] • 30 l/min [8 US gpm]

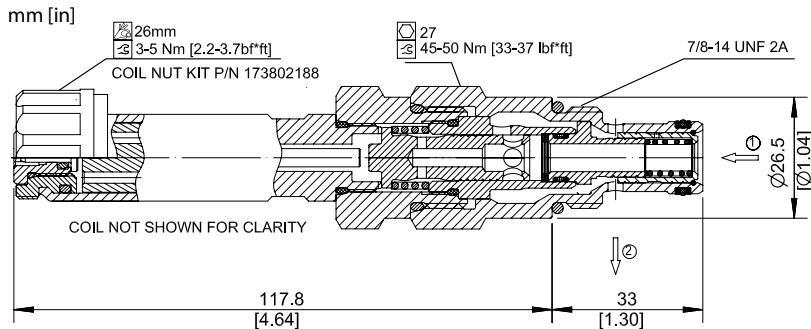
### DESCRIPTION AND OPERATION

This is a 2-way, spool type, normally open, restrictive type, pressure compensated proportional flow control valve. In the de-energized condition, maximum flow passes from port 1 to 2. Energizing the coil will proportionally move the spool, restricting flow out of port 2 through a variable orifice. An internal compensating spool ensures that the output flow at port 2 remains constant, regardless of changes in differential pressure. Increasing the current to the coil will increase the outlet flow.

### SCHEMATIC



### DIMENSIONS



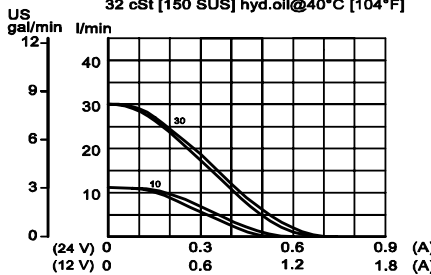
### PERFORMANCE DATA

Rated pressure*	260 bar [3800 psi]
Max Regulated Flow	30 l/min [8 US gpm]
Leakage	420 ml/min [25.6 in <sup>3</sup> /min] @rated pressure
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	M19P
Weight	0.65 kg [1.43 lb]
Cavity	SDC10-2

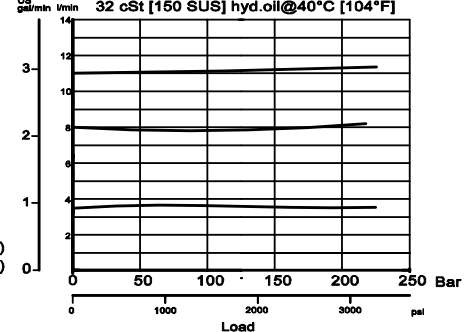
\*Rated pressure based on NFPA fatigue test standards (at 1 million cycles)

### PERFORMANCE CURVES

Operating curves made with circuit having a pressure drop of 50 Bar. 32 cSt [150 SUS] hyd.oil@40°C [104°F]



Pressure compensation from Inlet to work port 32 cSt [150 SUS] hyd.oil@40°C [104°F]



### MODEL CODE

PFC10 - RO - 30 - 12D - DE - SPS - B - 00

#### Max Regulated Flow

Code	Flow
10	10 l/min [2.6 US gpm]
30	30 l/min [8 US gpm]

#### Coil Voltage

00 - No coil, nut included\*  
12D - 12 VDC  
24D - 24 VDC

\*Standard Coil - Plastic coil nut and o-rings (p/n 173802188)

#### 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	
65	AL, #6 SAE	CP10-2-65
85	AL, #8 SAE	CP10-2-85
DG3B	AL, 3/8 BSP	SDC10-2-DG3B
DG4B	AL, 1/2 BSP	SDC10-2-DG4B

\* 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	354004019
V - Viton	354003419