

Proportional Valves

PFC10-RC

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

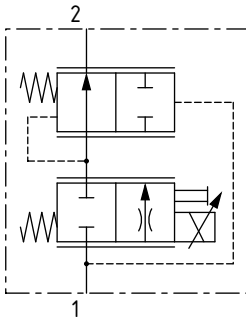
260 bar [3800 psi] • 30 l/min [8 US gpm]



DESCRIPTION AND OPERATION

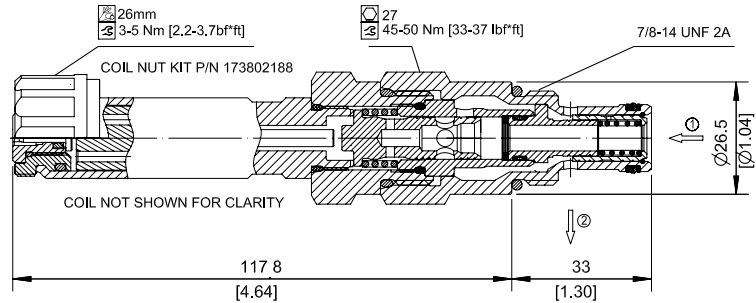
This is a 2-way, spool type, normally closed, restrictive type, pressure compensated proportional flow control valve. In the de-energized condition, flow is blocked in both directions. Energizing the coil will proportionally move the spool, opening a variable orifice from port 1 to 2. An internal compensating 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

mm [in]

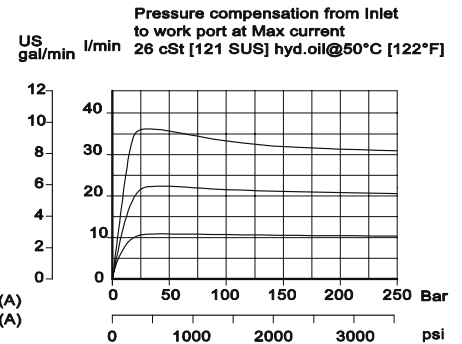
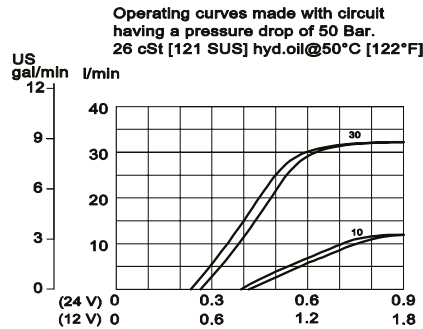


PERFORMANCE DATA

Rated pressure*	260 bar [3800 psi]
Max regulated flow	30 l/min [8 US gpm]
Leakage	420 ml/min [25.6 in ³ /min] @rated pressure
Maximum Hysteresis	8%
Threshold current	0.5 A [12 VDC coil] 0.25 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



MODEL CODE

PFC10- RC - 30 - 12D - DE - SPS - B - 6S

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	
6S	AL, #6 SAE	CP10-2-6S
8S	AL, #8 SAE	CP16-2-8S
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	35400401
V - Viton	35400341