

Proportional Valves

PFC12-PC



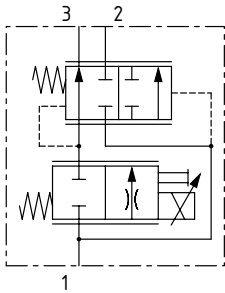
Proportional Flow Control Valve, Normally Closed, Priority Type, Pressure Compensated

260 bar [3800 psi] • 65 l/min [17 US gpm]

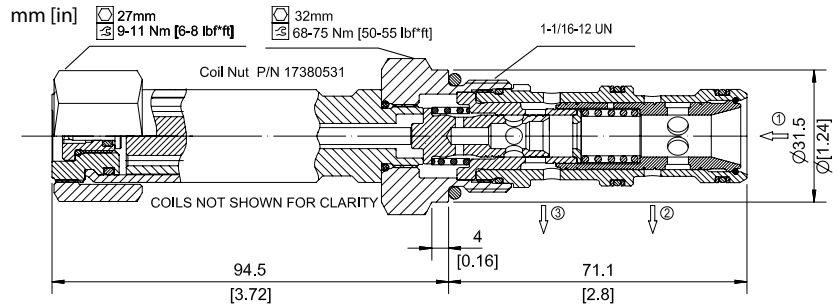
DESCRIPTION AND OPERATION

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

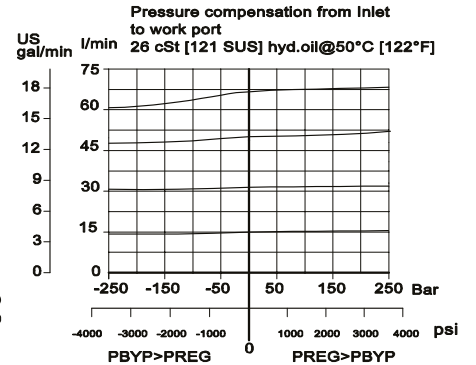
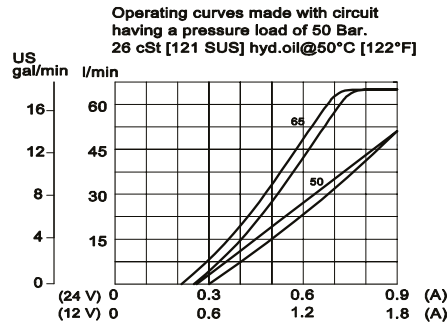


PERFORMANCE DATA

Rated pressure*	260 bar [3800 psi]
Max Regulated Flow	65 l/min [17 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	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- PC - 65 - 12D - DE - SPS - B - 00

Max Regulated Flow

Code	Flow
50	50 l/min [13 US gpm]
65	65 l/min [17 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