Proportional Valves
PSV12-NO
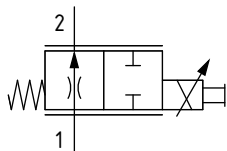
Proportional Flow Control Valve, Spool Type, Normally Open, Direct Acting, Non-Compensated
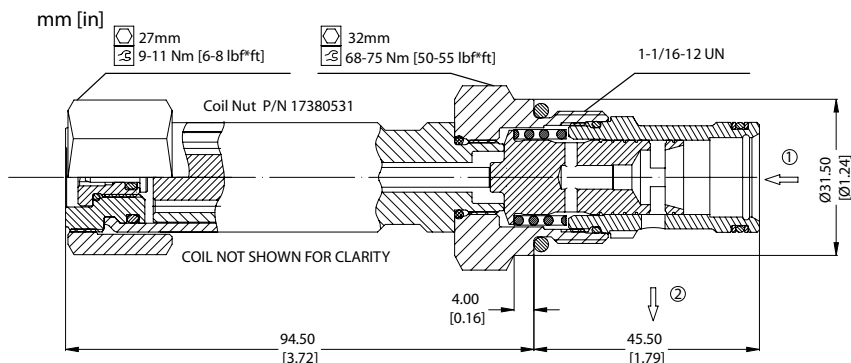**260 bar [3800 psi] • 100 l/min [26 US gpm]**

Danfoss

■ DESCRIPTION AND OPERATION

This is a 2-way, spool type, normally open, non-compensated proportional flow control valve. In the de-energized condition, flow can pass in either direction. Energizing the coil will proportionally close port 1 to 2. Used in conjunction with a compensator, the valve will act as the control orifice for a pressure compensated flow regulator.
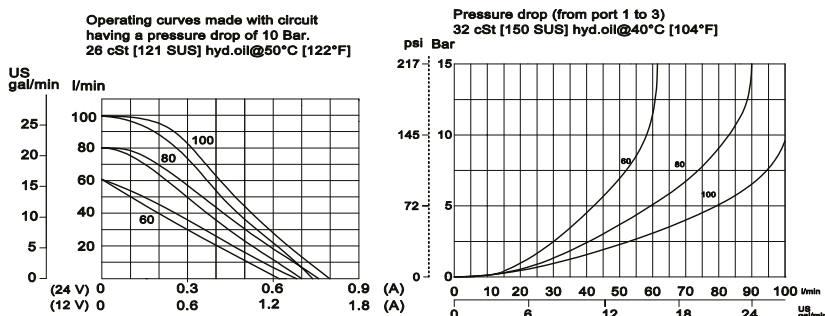
■ SCHEMATIC

■ DIMENSIONS

mm [in]

27mm 9-11 Nm [6-8 lbf*ft]
32mm 68-75 Nm [50-55 lbf*ft]
1-1/16-12 UN
Coil Nut P/N 17380531
COIL NOT SHOWN FOR CLARITY
Ø31.50 [Ø1.24]
4.00 [0.16]
94.50 [3.72]
45.50 [1.79]

■ PERFORMANCE DATA

Rated pressure*	**260 bar [3800 psi]**
Rated flow @10 bar [145 psi]	**100 l/min [26 US gpm]**
Leakage	420 ml/min [25.6 in³/min] @rated pressure
Maximum Hysteresis	5%
Threshold current	0.3 A [12 VDC coil] 0.15 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	0.76 kg [1.68 lb]
Cavity	SDC12-2

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

■ PERFORMANCE CURVES

Operating curves made with circuit having a pressure drop of 10 Bar. 26 cSt [121 SUS] hyd.oil@50°C [122°F]

Pressure drop (from port 1 to 3) 32 cSt [150 SUS] hyd.oil@40°C [104°F]

■ MODEL CODE

PSV12 - NO - 100 - 12D - DE - SPS - B - 10S

Rated flow at 10 bar [145 psi]

Code	Flow
60	60 l/min [16 US gpm]
80	80 l/min [21 US gpm]
100	100 l/min [26 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
Omit	No housing	
10S	AL, #10 SAE	CP12-2-10S
12S	AL, #12 SAE	CP12-2-12S
DG4B	AL, 1/2 BSP	SDC12-2-DG4B
DG6B	AL, 3/8 BSP	SDC12-2-DG6B

* 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