

Proportional Valves

PSV08-34-05

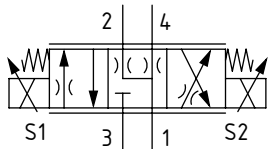
Proportional Directional Valve, 4-way, 3-position, Spool Type, Non-Compensated

240 bar [3500 psi] • 12 l/min [3.2 US gpm]

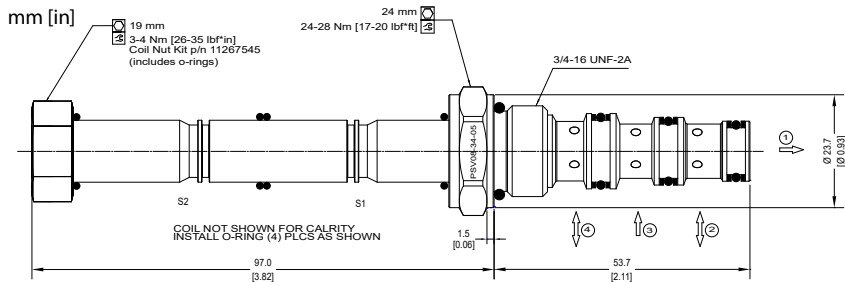
DESCRIPTION AND OPERATION

This is a 4-way, 3-position, spool type, non-compensated proportional directional valve. In its de-energized condition, port 3 is blocked, while ports 2 and 4 are open to port 1. Increasing the current to the bottom coil will cause the spool to move, proportionally opening flow from port 3 to 2 with return flow passing from port 4 to 1. Increasing the current to the top coil will proportionally open flow from port 3 to 4 with return flow passing from port 2 to 1. Using this as a variable orifice in conjunction with a compensator, the valve will provide compensated flow to an actuator in both directions. Port 1 should be used as the tank port with a maximum back pressure of 150 bar. For applications with unequal flows, the highest flow should be connected to Port 2. For optimal performance, install with the solenoid valve below the tank oil level in the horizontal or inverted position, reducing the chance for trapped air in the valve.

SCHEMATIC



DIMENSIONS

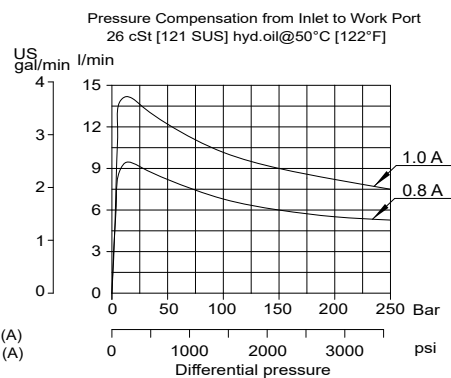
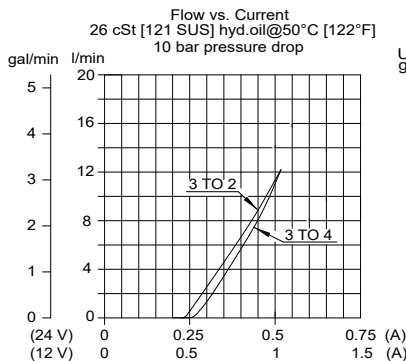


PERFORMANCE DATA

Rated pressure*	240 bar [3500 psi]
Rated flow @ 10 bar [145 psi]	12 l/min [3.2 US gpm]
Leakage	160 ml/min [10 in ³] at 210 bar [3000 psi]
Maximum Hysteresis	5%
Threshold current	0.5 A [12 VDC coil] 0.25 A [24 VDC coil]
Maximum control current	1.0 A [12 VDC coil] 0.5 A [24 VDC coil]
Coil Options	M13, R13
Weight	0.55 kg [1.21 lb]
Cavity	SDC08-4

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

PERFORMANCE CURVES



MODEL CODE

PSV08 - 34 - 05 - 12D - DE - 12 - B - 00

Coil Voltage

Standard Coil Code	Robust Coil Code	Coil Voltage
00	R00	No Coil, nut included*
12D	R12D	12 VDC
24D	R24D	24 VDC

*Steel coil nut and o-rings (p/n 11267545)

Connector Type

Standard Coil Code	Robust Coil Code	Connector Type
00	R00	No Coil
AJ		Amp Junior
AS	AS	AMP SuperSeal 1.5
DE	DE	Deutsch
FL	FL	Flying Leads
DN		DIN 43650

Rated Flow @ 10 bar [145 psi]

Code	Flow
4	4 l/min [1 US gp]
12	12 l/min [3.2 US gpm]

Housing

Code	Ports & Material	Housing Model Code
00	No Housing	
4S	#4 SAE, AL	CP08-4-4S
6S	#6 SAE, AL	CP08-4-6S
56S	#6 SAE, Steel	CP08-4-56S
L2B	1/4 BSP, AL	SDC08-4-L2B
S3B	3/8 BSP, Steel	CP08-4-S3B

* Aluminum bodies are to be used for pressures less than 210 bar [3000 psi].
* Additional housings available

Seal Option

Code	Seal Kit
B - Buna	354003319
V - Viton	354003919