



**OPERATION**

This is a proportional, non-compensated, 3 position 4 way, directional flow control solenoid valve, with float-center spool.

**APPLICATION NOTES**

These cartridge valves are typically applied to provide bi-directional, proportional control of hydraulic cylinders and motors. In applications requiring load-holding, PO checks or counterbalance valves can be added to provide a low leakage solution. For load-independent flow control, apply with a pressure compensator, such as CP700-4 (see Example Circuit). 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.

Note: For optimal performance install with the solenoid valve below the tank oil level in the horizontal position, reducing the chance for trapped air in the valve.



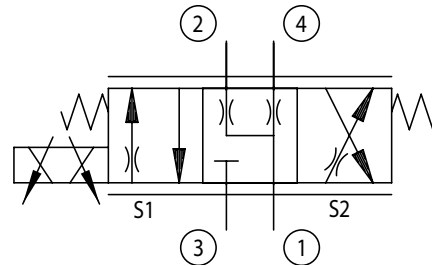
Shown with Standard Coils, Deutsch connectors

**SPECIFICATIONS**

<b>Rated Pressure*</b>	240 bar [3500 psi]
<b>Maximum Rated Flow at 10 bar [145 psi]</b>	12 l/min [3.2 US gal/min]
<b>Weight including coil</b>	0.55 kg [1.21 lbs]
<b>Threshold current</b>	0.5 A (12 VDC coil) 0.25 A (24 VDC coil)
<b>Maximum control current</b>	1.0 A (12 VDC coil) 0.5 A (24 VDC coil)
<b>Cavity</b>	SDC08-4
<b>Standard Coil</b>	M13 20 Watt
<b>Robust Coil</b>	R13 16 Watt Robust Nut P/N <b>173800539</b> (no coil O-rings needed)

\* Rated Pressure based on NFPA fatigue test standards (at 1 Million Cycles).

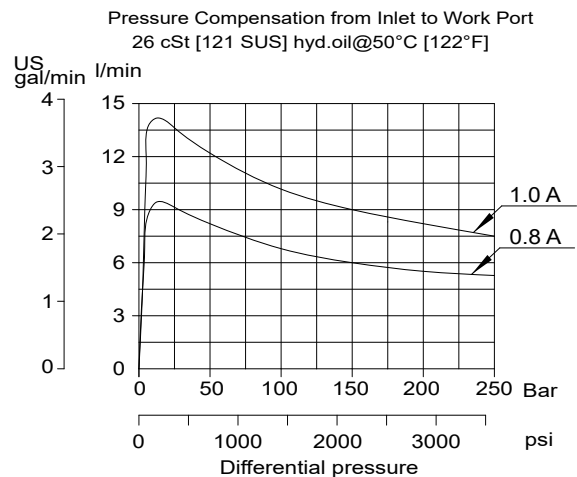
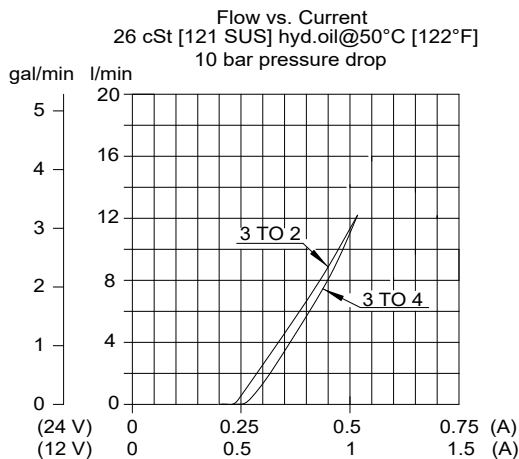
**SCHEMATIC**



Proportional Valves  
PSV08-34-05

**THEORETICAL PERFORMANCE**

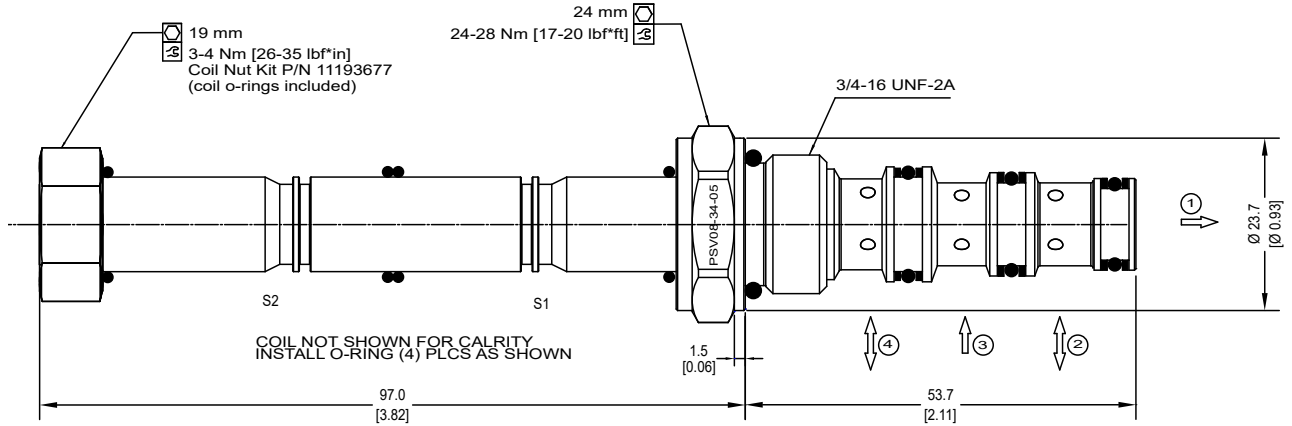
Operating curves with M13 coil and steel nut



**DIMENSIONS**

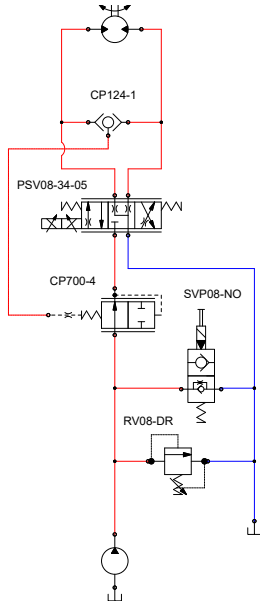
mm [in]

Cross-sectional view

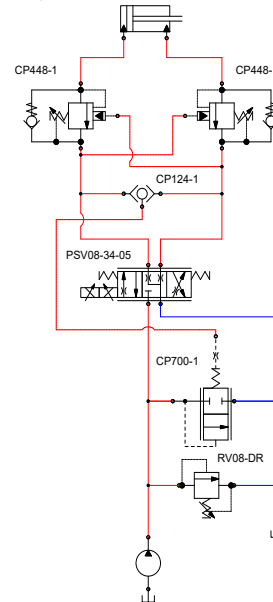


**EXAMPLE CIRCUITS**

Pressure Compensated Bi-directional Proportional Motor Control



Double Acting Cylinder with Proportional Speed Control



**ORDERING INFORMATION**

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

Proportional Solenoid Valve  
08-Size, 3 position, 4 way

Coil Voltage		
Description	Standard Coil Code	Robust Coil Code
No Coil	00	R00
12 VDC	12D	R12D
24 VDC	24D	R24D

Coil Termination				
Description	Standard Coil Code	IP Rating	Robust Coil Code	IP Rating
No Coil	00	-	00	-
Flying Lead	FL	IP65	FL	IP69K
Deutsch	DE	IP69K	DE	IP69K
AMP SuperSeal 1.5	AS	IP67	AS	IP69K
DIN 43650	DN	IP65	-	-

Housings

Code	Ports & Material	Body Nomenclature
00	Cartridge only	No Body
4S	#4 SAE, AL	CP08-4-4S
6S	#6 SAE, AL	CP08-4-6S
S6S	#6 SAE, Steel	CP08-4-S6S
L2B	1/4 BSP, AL	SDC08-4-L2B
S3B	3/8 BSP, Steel	CP08-4-S3B

Seals

Code	Material	Seal kit
B	BUNA	354003319
V	VITON	354003919