



## OPERATION

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

## APPLICATIONS

This is an electro-proportional directional control using a 3-Position, 4-Way design for directional control of hydraulic cylinders and motors. For load-independent flow control, apply with a pressure compensator, like CP700-4 (see Example Circuit). Port 1 should be used as the tank port, with a maximum back-pressure of 150 bar. The highest return flow coming from a cylinder should be connected to Port 2.

Use the available Comatrol Adapter Block (SDC10-4-D03 or SC10-4-D03-PC) to help test and replace proportional CETOP D03 - available in compensated or non-compensated. Select the robust coil for those extreme environmental conditions - voltage extremes, high temperature, shock & vibration, chemicals, and/or water ingestion.

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.

## SPECIFICATIONS

<b>Rated Pressure*</b>	250 bar [3600 psi]
<b>Maximum Rated Flow at 10 bar [145 psi]</b>	22 l/min [6 US gal/min]
<b>Weight including coil</b>	0.77 kg [1.7 lbs]
<b>Hysteresis</b>	4% maximum
<b>Threshold current</b>	0.5 A (12 VDC coil) 0.25 A (24 VDC coil)
<b>Maximum control current</b>	1.5 A (12 VDC coil) 0.8 A (24 VDC coil)
<b>Cavity</b>	SDC10-4
<b>Standard Coil</b>	M16 26 Watt
<b>Robust Coil</b>	R16 20 Watt Robust Nut P/N 173804910 (no coil O-rings needed)

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

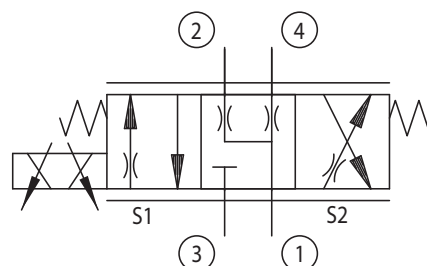


Shown with DIN connector,  
standard coil



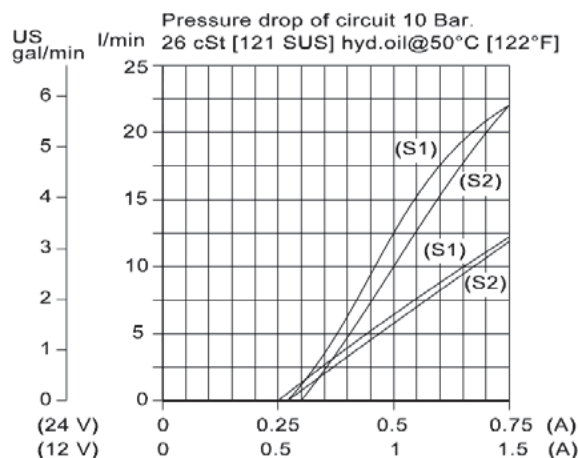
Shown with Robust Coil  
standard coil

## Schematic

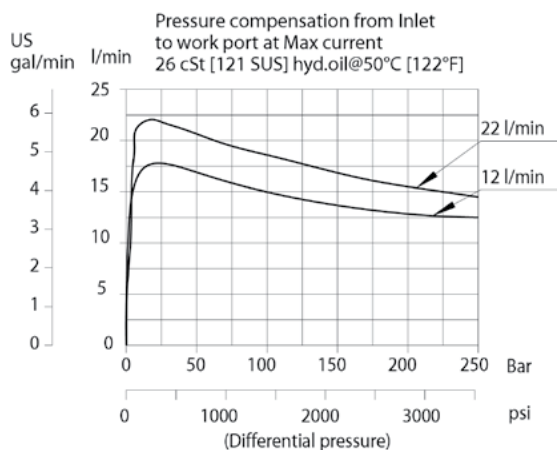
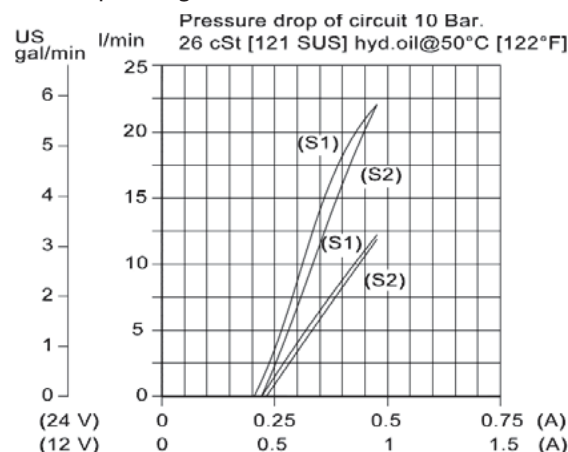


## Performance Curves

Operating curves with M16 coil and plastic nut



Operating curves with R16 coil and steel nut





# Proportional Valves Catalog

## Proportional Directional

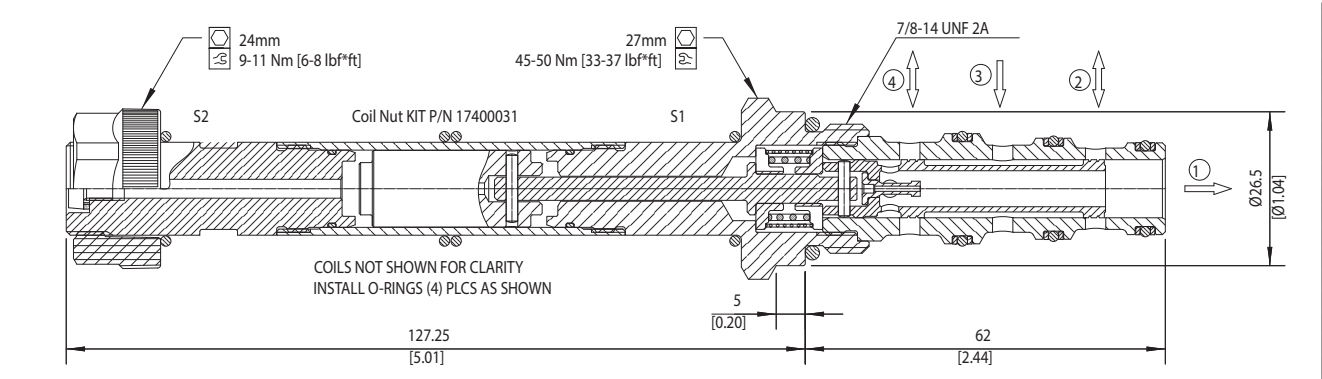
### PSV10-34-05



### DIMENSIONS

mm [in]

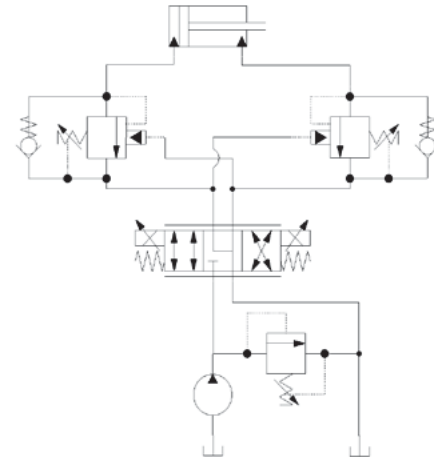
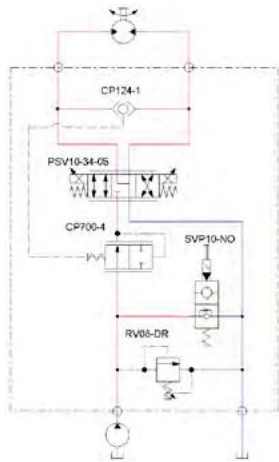
Cross-sectional view



### EXAMPLE CIRCUITS

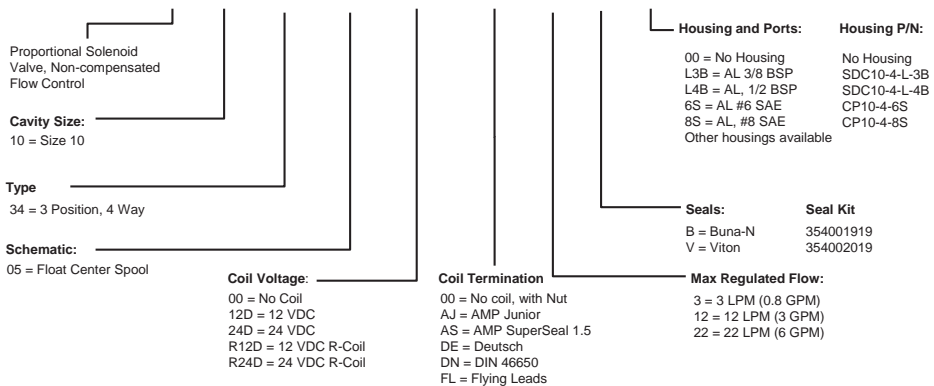
Compensated Bi-directional Proportional Flow Control

Double Acting Cylinder with Proportional Speed Control and Load Holding



### ORDERING INFORMATION

**PSV 10 - 34 - 05 - 12D - DE - 22 - B - 00**



Proportional Valves  
PSV10-34-05