

## OPERATION

This is a proportional, non-compensated, 3 position 4 way, directional flow control solenoid valve, with closed-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 CP701-4 (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 (CP12-4-D05 or CP12-4-D05-PC) to help test and replace proportional CETOP D05 - available in compensated or non-compensated.

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 Deutsch connector



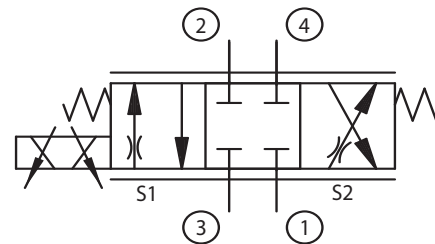
Shown with DIN connector

## SPECIFICATIONS

Rated Pressure*	260 bar [3770 psi]
Rated Flow at 10 bar [145 psi]	50 l/min [13 US gal/min]
Weight including coil	1.2 kg [2.64 lbs]
Hysteresis	<4%
Threshold current	0.25 A (12 VDC coil) 0.50 A (24 VDC coil)
Maximum control current	1.8 A (12 VDC coil) 0.9 A (24 VDC coil)
Cavity	CP12-4
Standard Coil	M19 33 Watt

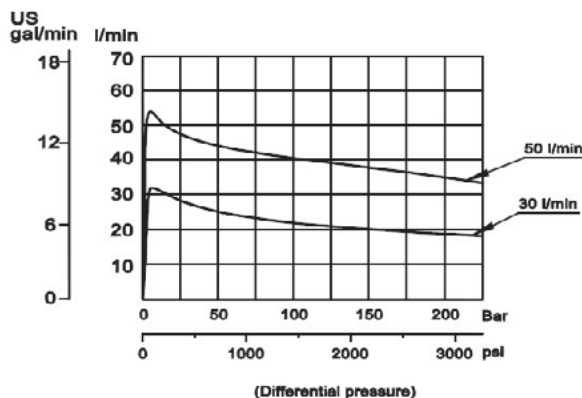
\* Rated Pressure based on NFPA fatigue test standards (at 1 Million Cycles).

## Schematic



## Performance Curves

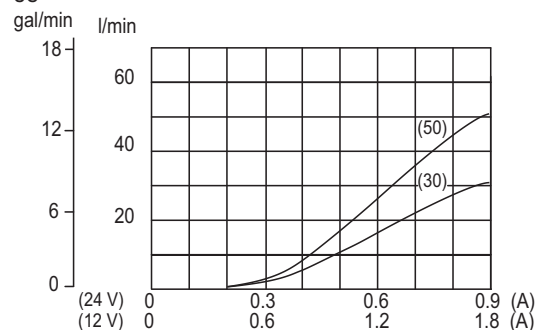
Pressure compensation from Inlet to work port at Max current.  
26 cSt [121 SUS] hyd.oil@50°C [122°F]



## Operating curves with M19 coil and nut.

Curves made with a logic element set at 10 Bar.

US 26 cSt [121 SUS] hyd.oil@50°C [122°F]



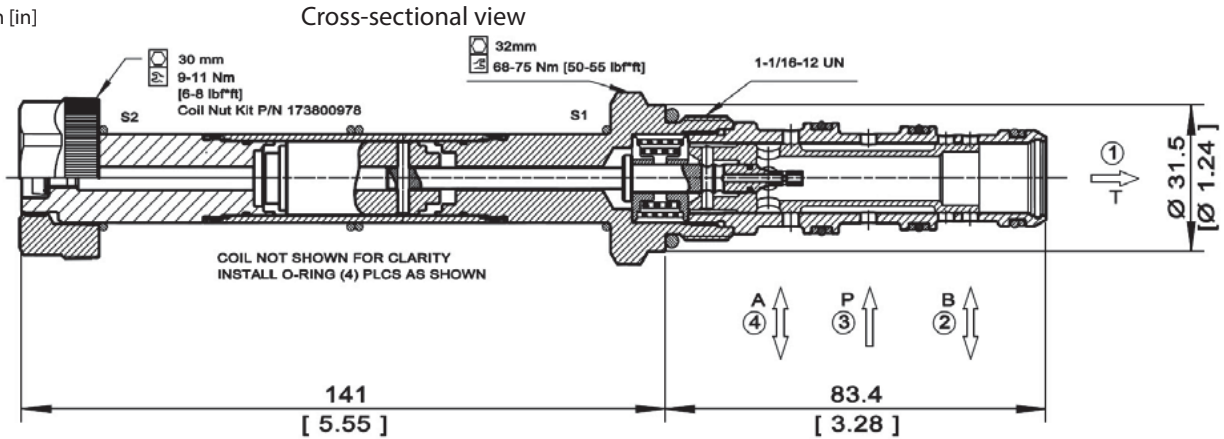


**Proportional Valves Catalog**  
 Proportional Directional  
 PSV12-34-02



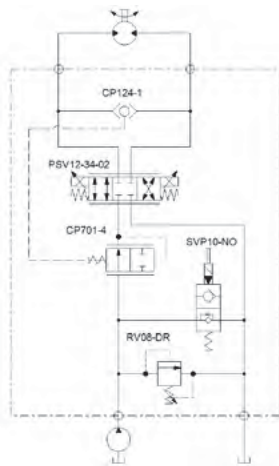
**DIMENSIONS**

mm [in]

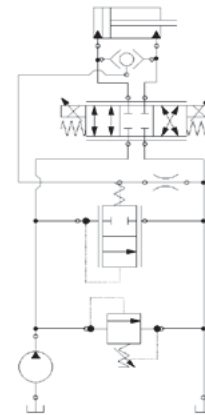


**EXAMPLE CIRCUITS**

Compensated Bi-directional Proportional Flow Control

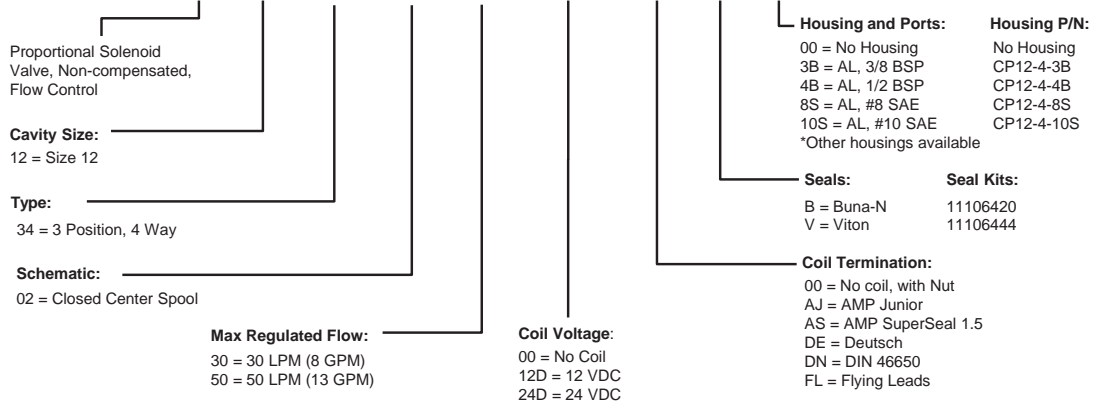


Double Acting Cylinder with Proportional Speed Control, Unloading Valve and Circuit Relief



**ORDERING INFORMATION**

**PSV 12 - 34 - 02 - 50 - 12D - DE - B - 00**



Proportional Valves  
PSV12-34-02