



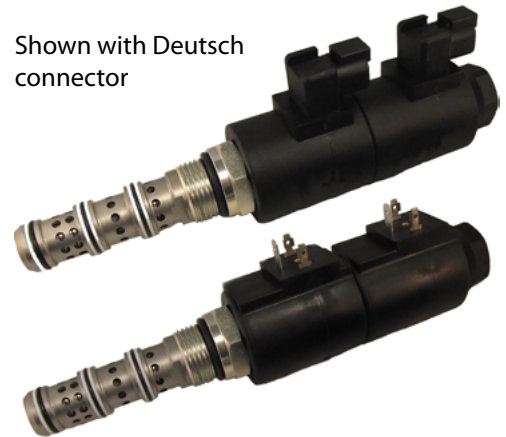
**OPERATION**

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

**APPLICATION NOTES**

These cartridge valves are typically applied to provide bi-directional, proportional control of hydraulic cylinders and motors where low leakage is not required. For load-independent flow control, apply with a pressure compensator, such as HLE10-OPO (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 Deutsch connector

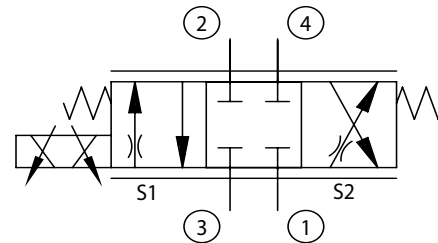
Shown with DIN connector

**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	<b>CP12-4</b>
Standard Coil	<b>M19 33 Watt</b>

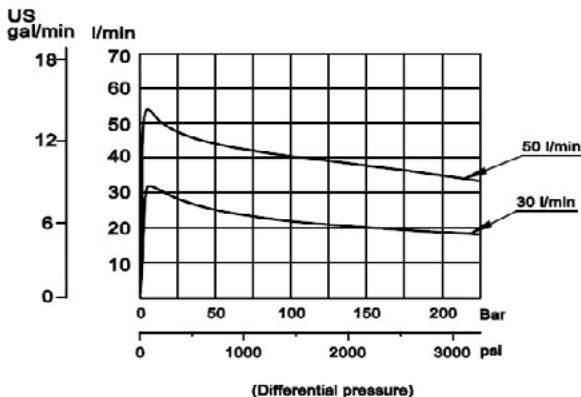
\* Rated Pressure based on NFPA fatigue test standards (at 1 Million Cycles).

**SCHEMATIC**



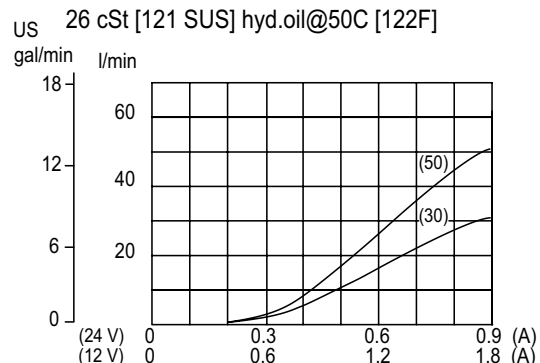
**THEORETICAL PERFORMANCE**

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



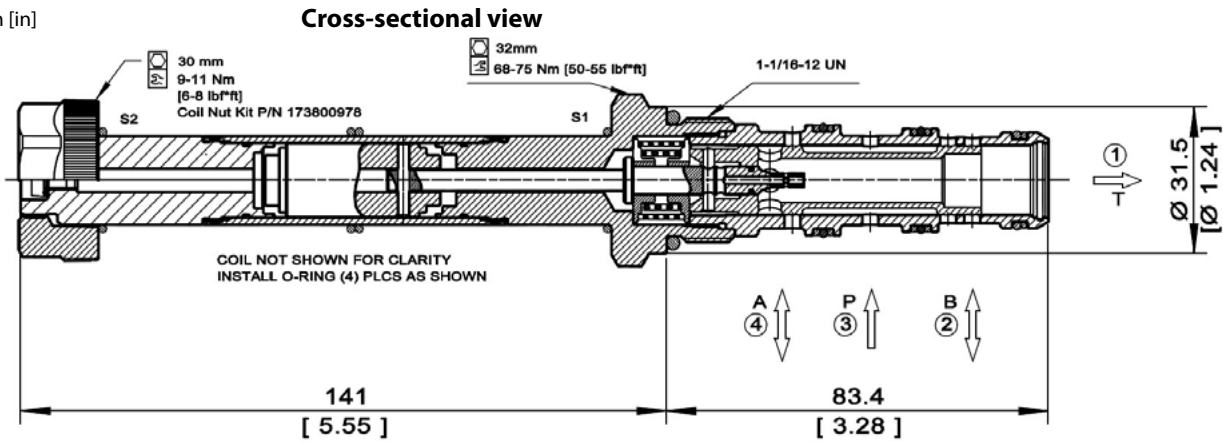
Operating curves with M19 coil and nut.

Curves made with a logic element set at 10 Bar.



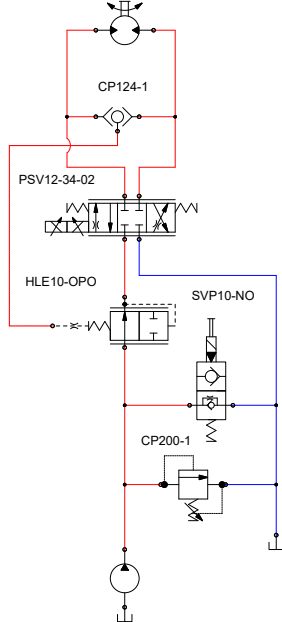
### DIMENSIONS

mm [in]

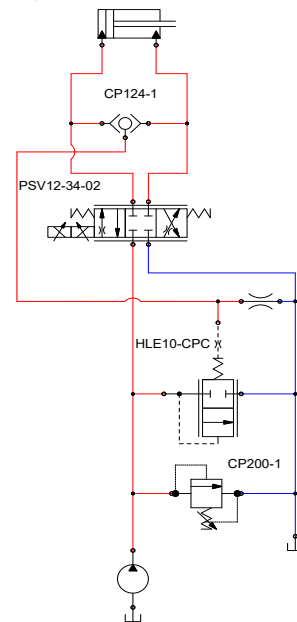


### EXAMPLE CIRCUITS

Pressure Compensated Bi-directional Proportional Motor Control



Double Acting Cylinder with Proportional Speed Control



### ORDERING INFORMATION

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

