

Humphrey®

L310 **Latching Solenoid Valve**



A privately owned US company since 1901.

www.humphrey-products.com

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L310 LATCHING SOLENOID VALVE

The L310 LATCHING SOLENOID VALVE SERIES is developed from the proven advanced Humphrey technology of the balanced-poppet direct-acting solenoid valve design. The latching technology is optimized for applications that demand low power consumption and low heat generation.

ENERGY SAVINGS

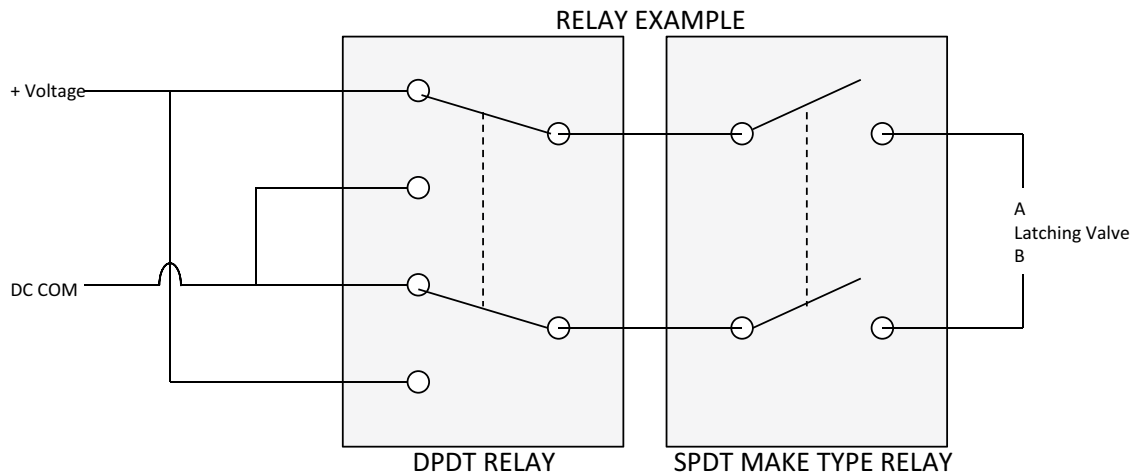
Standard single solenoid valves require electrical power while holding the valve in the energized position. A 50 millisecond pulse of the solenoid fully shifts the L310 from one position to the other. Power is removed and the latching function holds the solenoid and valve positioned, thereby offering significant energy savings. The valve remains in that position until another 50 millisecond electrical pulse, of opposite polarity, is applied. This is particularly beneficial in applications where a valve remains open for long periods of time, such as remote applications, where the valve is battery powered, or where continuous power supply is limited.

HEAT RISE MINIMIZED

Standard single solenoid valve designs generate heat while in the energized state. Since the L310 does not require energy to maintain the state, the heat rise is temporary and minimized. The L310 is ideal for applications where the effect of the temperature is a concern.

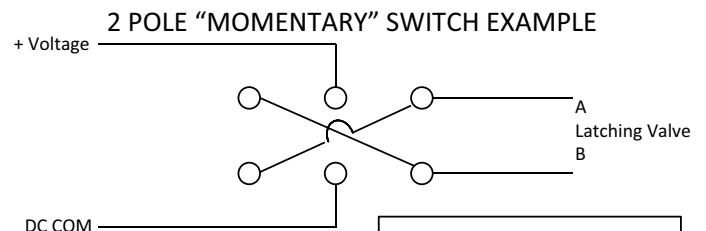
MULTIPLE PURPOSE

The L310 is of a balanced construction and therefore suitable for vacuum or pressures up to 80 PSIG, as normally closed or normally open function. Plug either the 1 or 3 port for 2-way service. Consult factory for diverter and selector functions. The L310 can be used on the 410M Manifold in conjunction with or without Humphrey's 310 and 410 series valves.



ELECTRICAL CONTROL

The L310 is a two-wire latching valve, therefore requiring the electrical current to flow in one direction to open the flow state and another direction to close the flow state. Either of these schematics will accomplish the function.



2 POLE SWITCH SOURCES:
NKK Switches: M2028
CW industries: GTB3B17
APEM: 647H

MECHANICAL SPECIFICATIONS

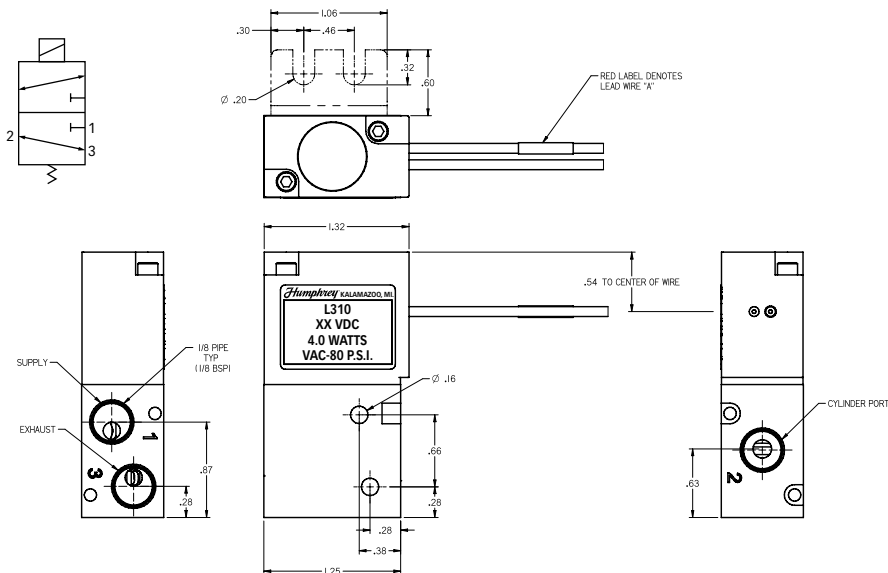
LEAD WIRE

DIN - 39

TERMINAL DESIGNATION



L310 DIMENSIONAL DRAWINGS AND SCHEMATIC



HOW TO ORDER

VALVE MODEL	ELECTRICAL ENTRY		ROTATED COIL OPTION		VOLTAGE CHOICES		REMARKS
	18" Lead Wires	DIN Connector	Standard Position	Rotate 180 Degrees			
L310	•	-39	•	-RC	12VDC	24VDC	2- or 3-port Latching Function, Direct-Acting Solenoid, 1/8 PIPE ports
• Standard Offering (no code necessary)					Order Example: L310-39-12VDC		

Valve Accessories



ACCESSORIES – VALVES

MODEL	DESCRIPTION	NOTES
8-288A	Mtg. Bracket	Accepts one L310 model valve.
130-31	1/8 PIPE Plug	Plug 1 or 3 port on L310 models for 2-way.
HS-2	DIN	Receptacle for L310 models.
HS-2LED-(voltage)	DIN w/LED light	

Manifolds and Accessories



MANIFOLDS

MODEL	DESCRIPTION	NOTES
410M	4-stn	1/4 PIPE, Supply and Exhaust ports each end.
	6-stn	
	8-stn	Also accepts 310 and 410 valve models.
	12-stn	

ACCESSORIES – MANIFOLDS

MODEL	DESCRIPTION	NOTES
DRC	DIN Rail Clip	Kit, includes (2) brackets and (2) screws.
130-15	1/4 PIPE Plug	Plug for manifold Supply and Exhaust ports.
410M-BOP	Block-Off Plate	Includes plate, (2) gaskets and (2) screws.
410M-VMK	Valve Mtg. Kit	Includes (2) brackets and (2) screws (replacement).

