

**PETER PAUL**

# SERIES 50 ELW (1.8 WATTS AC & DC) SERIES 50 ELLW (.50 WATTS DC) MINIATURE HAZARDOUS LOCATION VALVES!

Meet today's demands for economy of space and energy consumption.

## APPLICATION:

Peter Paul developed a UL approved, low watt, miniature hazardous location valve with minimal space and energy requirements in volatile environments. This valve is the smallest hazardous location solenoid, with the best ambient and high temperature ratings on the market. A NEMA 4 rating is standard. The Series 50 ELW miniature valve with encapsulated coil also serves as a general purpose valve for pneumatic and hydraulic conditions.

## SPECIFICATIONS—

### OPERATING CONDITIONS

**Media:** Air and other fluids, compatible with standard Buna seals. Hot water, steam, gasoline, oils, some hydraulic fluids, and many other media require special seal materials - Consult representative of factory.

**Valve Temperature Range:** Standard Valves - 0°F (-18°C) to 140°F (60°C) ambient; 0°F (-18°C) to 150°F (60°C) media. Optional Valves - can tolerate much higher or much lower ambient and media temperatures. Consult factory for specifications.

**Maximum Operating Pressure Differentials:** See catalog listings

**Burst Pressure:** 5000 PSI

**Leakage:** Bubble tight for standard valves

**Vacuum:** To 5 Microns - Consult factory

### ELECTRICAL CHARACTERISTICS

**Coil Voltage:** 24 to 277 VAC 50-60 HZ.-6 to 120 VDC. All standard voltages (U.S. & Export) carried in stock. Special voltages readily produced on order.

**Nominal Power:** **Series 50**

ELW 1.8 watts AC and DC

ELLW .50 watts DC only

**Coil Construction:** Standard, Molded with 24" leads.

**Typical Response Time on Air:** 4-16 Milliseconds

**Operating Speed:** Up to 600 CPM

**Duty Cycle:** Continuous or Intermittent

### MECHANICAL CHARACTERISTICS

**Material:** All interior parts are stainless steel

**Orifice Diameter:** See catalog listings

**Porting:** 1/8 NPT

**Housing:** Encapsulated construction with 1/2 NPT conduit connection and third wire ground.

**Listings:** Valves are U.L. Listed for Hazardous Locations—Class I, Div 1, Groups A, B, C and D - Class II, Div 1 Groups E, F, and G; Div 2 Groups A, B, C, D, E, F and G. "T" Rating as low as T5

**Life expectancy:** Millions of cycles, depending on application, lubrication, etc.

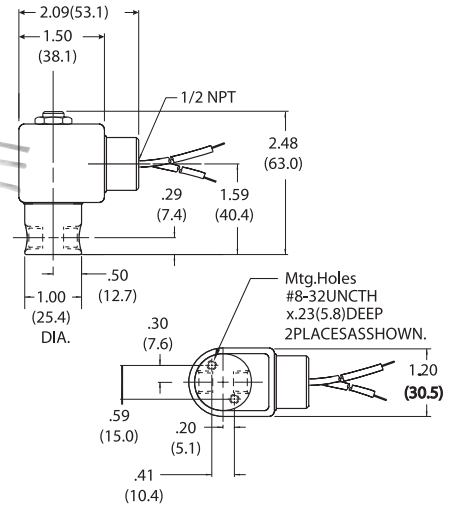
**Valve Weight:** Only .60 lbs average

**Repair Packs:** Consult Factory

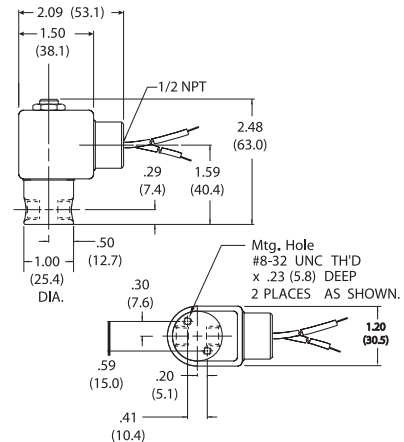
FOR FLOW CHARTS SEE PAGES 95-97

## MINIATURE EXPLOSIONPROOF SOLENOID VALVE OPERATORS

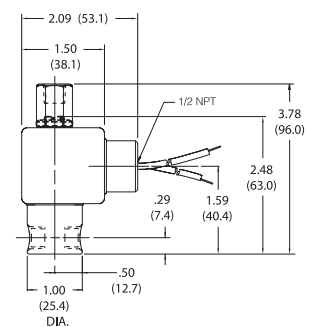
A complete line of valve operators for O.E.M. applications are offered for those who wish to incorporate them in their own product line. Full technical information and details are available from Peter Paul.



**2-Way Normally Closed**



**3-Way Normally Closed  
Exhaust to Atmosphere**



**3-Way Normally Closed Piped Exhaust**



# SOLENOID VALVES . . .

Table A	FLOW CONFIGURATION	VALVE NO.	SUFFIX	ELW 1.8 Watts		MAXIMUM OPERATING PRESSURE DIFFERENTIAL					
				ORIFICE SIZE		Gas		Liquid			
				Inlet	Exhaust	AC	DC	AC	DC		
<b>Model ELW51</b> 2 Way Normally Open	DE-ENERGIZED 	ENERGIZED 	ELW51G8XCCP ELW51H8XCCP (G or L) ELW51J8XCCP (G or L) ELW51V8XCCP (G or L) ELW51K8XCCP (G or L)		G 1/32 H 3/64 J 1/16 V 5/64 K 3/32	300 270 135 70 55	200 120 50 35 30	300 120 40 30 25	200 65 30 20 15		
	<b>Model ELW52</b> 2 Way Normally Closed	DE-ENERGIZED 	ENERGIZED 	ELW52G8DCCP ELW52H8DCCP ELW52J8DCCP ELW52V8DCCP ELW52K8DCCP ELW52N8DCCP ELW52O8DCCP	G 1/32 H 3/64 J 1/16 V 5/64 K 3/32 N 1/8 O 5/32	600 250 150 100 85 50 15	200 80 50 25 20 50 15	600 250 150 100 85 50 15	200 80 50 25 20 50 15		
		<b>Model ELW53</b> 3 Way Normally Closed Exhaust to Atmosphere	DE-ENERGIZED 	ENERGIZED 	ELW53GG8DCCP ELW53GH8DCCP (G or L) ELW53GJ8DCCP (G or L) ELW53GV8DCCP (G or L) ELW53GK8DCCP (G or L) ELW53HH8DCCP (G or L) ELW53HJ8DCCP (G or L) ELW53HV8DCCP (G or L) ELW53HK8DCCP (G or L) ELW53JJ8DCCP (G or L) ELW53JV8DCCP (G or L) ELW53JK8DCCP (G or L) ELW53VV8DCCP (G or L) ELW53VK8DCCP (G or L) ELW53KK8DCCP (G or L)	G 1/32 G 1/32 G 1/32 G 1/32 G 1/32 H 3/64 H 3/64 H 3/64 H 3/64 H 3/64 J 1/16 J 1/16 J 1/16 V 5/64 V 5/64 V 5/64 K 3/32 K 3/32	G 1/32 H 3/64 J 1/16 V 5/64 K 3/32 H 3/64 H 3/64 J 1/16 V 5/64 K 3/32 J 1/16 J 1/16 V 5/64 V 5/64 V 5/64 K 3/32 K 3/32	215 215 135 70 55 120 120 70 35 55 85 70 50 50 50 50 35	135 120 50 35 30 70 50 35 30 30 85 40 30 30 30 30 30 25 20	215 120 40 30 25 15 120 40 30 30 85 40 40 30 20 25 15 15 15	
			<b>Model ELW53</b> 3 Way Normally Closed Piped Exhaust	DE-ENERGIZED 	ENERGIZED 	ELW53GG8XCCP ELW53GH8XCCP (G or L) ELW53GJ8XCCP (G or L) ELW53GV8XCCP (G or L) ELW53GK8XCCP (G or L) ELW53HH8XCCP (G or L) ELW53HJ8XCCP (G or L) ELW53HV8XCCP (G or L) ELW53HK8XCCP (G or L) ELW53JJ8XCCP (G or L) ELW53JV8XCCP (G or L) ELW53JK8XCCP (G or L) ELW53VV8XCCP (G or L) ELW53VK8XCCP (G or L) ELW53KK8XCCP (G or L)	G 1/32 G 1/32 G 1/32 G 1/32 G 1/32 H 3/64 H 3/64 H 3/64 H 3/64 H 3/64 J 1/16 J 1/16 J 1/16 V 5/64 V 5/64 V 5/64 K 3/32 K 3/32	G 1/32 H 3/64 J 1/16 V 5/64 K 3/32 H 3/64 H 3/64 J 1/16 V 5/64 K 3/32 J 1/16 J 1/16 V 5/64 V 5/64 V 5/64 K 3/32 K 3/32	215 215 135 70 55 120 120 70 35 55 85 70 50 50 50 50 35	135 120 50 30 25 15 120 50 30 30 85 40 40 30 30 30 30 25 20	215 120 40 30 25 15 120 40 30 30 85 40 40 30 20 25 15 15 15

Table B	FLOW CONFIGURATION	VALVE NO.	ELLW .50 Watts		Gas Only
			Inlet	Exhaust	DC
<b>Model ELLW52</b> 2 Way Normally Closed		ELLW52G8DCCP	G 1/32		120
<b>Model ELLW53</b> 3 Way Normally Closed Exhaust to Atmosphere		ELLW53GG8DCCP	G 1/32	G 1/32	120
<b>Model ELLW53</b> 3 Way Normally Closed Piped Exhaust		ELLW53GG8XCCP	G 1/32	G 1/32	120