

PETER PAUL

SERIES EL 50 MINIATURE EXPLOSION PROOF VALVES (1.8 WATTS AC AND DC) SERIES ELL50 MINIATURE EXPLOSION PROOF VALVES (.85 WATTS DC)

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

APPLICATION:

General purpose or safety valves for pneumatic and hydraulic applications. The versatility of these valves is increased to include the handling of hot air, hot water, refrigerants and many other media, by the use of different inserts.

SPECIFICATIONS— OPERATING CONDITIONS

Media: Air and other common gases, common refrigerants except ammonia, city gas supplied by public utilities, Nos. 1 and 2 fuel oils, oils having viscosities not more than 40, SU at 100° F, steam, some hydraulic and water or other aqueous non-flammable liquids. Some media require special seal material - Consult Factory.

Valve Temperature Range: Standard Valves - 0°F (- 18°C) to 104°F (40°C) ambient; 0°F (- 18°C) to 150°F (65°C) media. Optional Valves - can tolerate much higher or much lower ambient and media temperatures. Consult factory for specifications.

Maximum Operating Pressure Differentials: See table listings

Burst Pressure: 4000 PSI

Leakage: Bubble tight for standard valves

Vacuum: To 5 Microns - Consult factory

ELECTRICAL CHARACTERISTICS

Coil Voltage: 5-120 V DC 12-240 V 60HZ. All standard voltages carried in stock. Other voltages readily produced on order.

Nominal Power:

EL50 1.8 watts AC and DC

ELL50 .85 watts DC

Coil Construction: Nonmolded coil, Molded with 24" leads. Molded coil potted inside housing. ALSO MOLDED CLASS H COIL.

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 table listings

Porting: 1/8 PTF

1/8 NTP - available (consult factory)

Housing: Explosionproof construction with 1/2 NPT conduit connection.

Available in stainless steel (consult factory)

Listings: Valves are U.L. Listed and CSA Certified for Hazardous Locations—Class I, Div 1, Group C and D - Class II, Div 1, Groups E, F, and G; Div 2 Groups A,B,C,D,E,F, and G.

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

Valve Weight: Only .65 lbs average

Repair Packs: Consult Factory

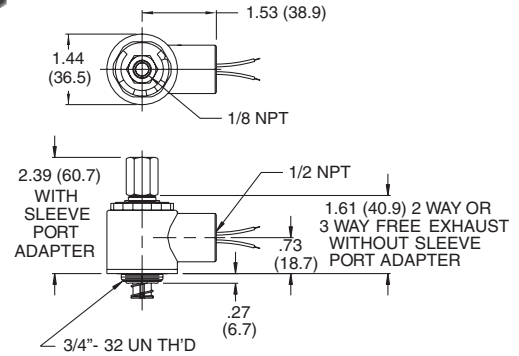
OPTIONS:

Metering, bottom orifice or cavity porting, built in muffler, universal mounting bracket, potted coil, Class H molded coil. Third wire ground available on request.

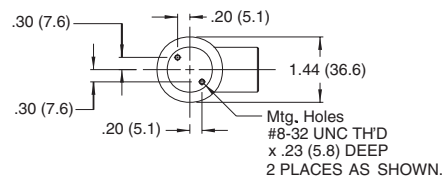
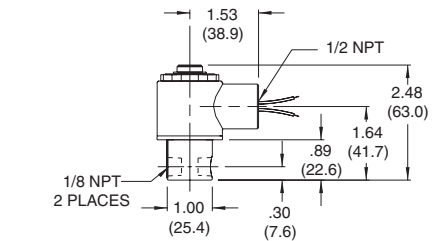
FOR FLOW CHARTS SEE PAGES 95-97

MINIATURE EXPLOSION-PROOF SOLENOID VALVE OPERATORS

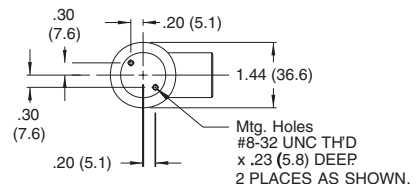
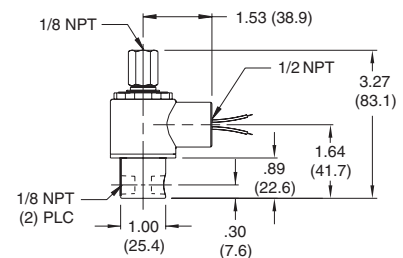
A complete line of valve operators for O.E.M. applications are offered for those who wish to incorporate them in their own product line. Full technical information and details are available from Peter Paul.



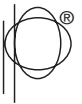
Operator



2 Way and 3-Way Normally Closed Exhaust to Atmosphere



3-Way Normally Closed Piped Exhaust



Series EL50

MODEL TYPE	FLOW CONFIGURATION	VALVE NO.	MAXIMUM OPERATING PRESSURE DIFFERENTIAL		ORIFICE SIZE		CV FACTOR	
			AC	DC	INLET	EXHAUST	INLET	EXHAUST
MODEL EL51 2 Way Normally Open **		EL51G8XCM	200	200		1/32		.020
		EL51H8XCM	120	120		3/64		.048
		EL51J8XCM	50	50		1/16		.075
MODEL EL52 2 Way Normally Closed		EL52G8DCM	120	120	1/32		.022	
		EL52H8DCM	80	80	3/64		.055	
		EL52J8DCM	50	50	1/16		.075	
MODEL EL53 3 Way Normally Closed Exhaust To Atmosphere		EL53GG8DCM	120	120	1/32	1/32	.022	.020
		EL53GH8DCM	120	120	1/32	3/64	.022	.048
		EL53HH8DCM	60	60	3/64	3/64	.055	.048
		EL53JJ8DCM	30	30	1/16	1/16	.075	.075
MODEL EL53 3 Way Normally Closed Piped Exhaust **		EL53GG8XCM	120	120	1/32	1/32	.055	.048
		EL53GH8XCM	120	120	1/32	3/64	.022	.048
		EL53HH8XCM	60	60	3/64	3/64	.055	.048
		EL53JJ8XCM	30	30	1/16	1/16	.075	.075

Series ELL50 Explosion Proof Valve Numbers

MODEL TYPE	FLOW CONFIGURATION	VALVE NO.	MAXIMUM OPERATING PRESSURE DIFFERENTIAL	ORIFICE SIZE		CV FACTOR	
			GAS ONLY	INLET	EXHAUST	INLET	EXHAUST
			DC				
MODEL ELL52 2 Way Normally Closed		ELL52G8DCCM	120	1/32		.022	
MODEL ELL53 3 Way Normally Closed Exhaust To Atmosphere		ELL53GG8DCCM	120	1/32	1/32	.022	.022
MODEL ELL53 3 Way Normally Closed Piped Exhaust		ELL53GG8XCCM	120	1/32	1/32	.022	.022

** Pressure rating may change due to the viscosity of the liquid - consult factory for de-rating.