

**PETER PAUL**

# SERIES E50 MINIATURE EXPLOSION PROOF VALVES!

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 seals.

## 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 or 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 catalog listings

**Burst Pressure:** 5000 PSI

**Leakage:** Bubble tight for standard valves

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

## ELECTRICAL CHARACTERISTICS

**Coil Voltage:** 5.4 to 575 VAC 50-60 HZ. —3.0 to 300 VDC. All standard voltages (U.S. & Export) carried in stock. Special voltages readily produced on order.

Nominal Power:	A.C. VALVES		
	D.C. Valves	2 WNC Valves	3 Way & 2 WNO Valves
	7.2 Watts	4.0 Watts	5.6Watts

**Coil Construction:** Standard, Molded with 24" leads. For Non-molded construction consult Factory.

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

**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

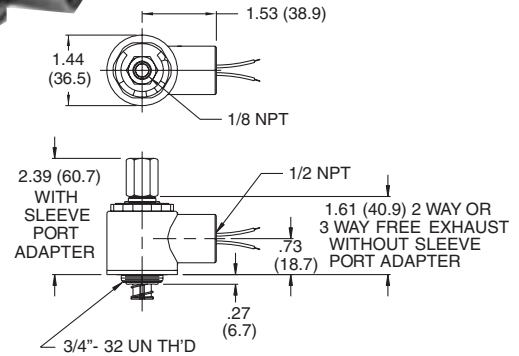
**OPTIONS:** Also available in all stainless steel construction

Metering, bottom orifice or cavity porting, manifold mount, built in muffler, universal mounting bracket, potted coil, Class H molded coil.

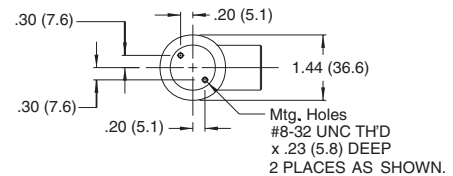
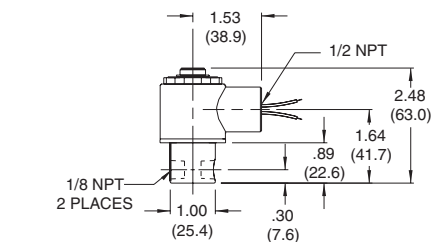
FOR FLOW CHARTS SEE PAGES 95-97

## MINIATURE EXPLOSION-PROOF SOLENOID VALVE OPERATORS

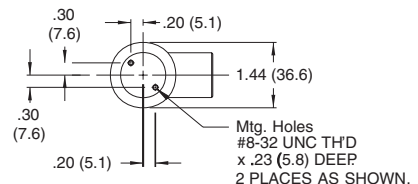
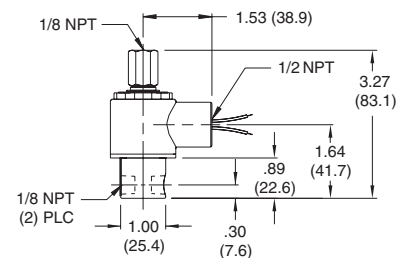
A complete line of valve operators for O.E.M. applications are offered for those who wish to incorporate them in their own product line. Full technical information and details are available from Peter Paul.



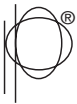
**Operator**



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



**3-Way Normally Closed Piped Exhaust**



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# SOLENOID VALVES . . .

MODEL TYPE	FLOW CONFIGURATION	VALVE NO.	MAXIMUM OPERATING PRESSURE DIFFERENTIAL		ORIFICE SIZE		CV FACTOR	
			AC	DC	INLET	EXHAUST	INLET	EXHAUST
<b>MODEL E51</b> <b>2 Way</b> <b>Normally</b> <b>Open</b> **	 	E51G8XCCM	400	200		1/32		.020
		E51H8XCCM	200	100		3/64		.048
		E51J8XCCM	125	60		1/16		.075
		E51K8XCCM	40	40		3/32		.150
<b>MODEL E52</b> <b>2 Way</b> <b>Normally</b> <b>Closed</b>	 	E52G8DCCM	500	250	1/32		.022	
		E52H8DCCM	400	150	3/64		.055	
		E52J8DCCM	200	100	1/16		.075	
		E52K8DCCM✓	100	45	3/32		.156	
		E52N8DCCM	75	25	1/8		.230	
<b>MODEL E53</b> <b>3 Way</b> <b>Normally</b> <b>Closed</b> <b>Exhaust To</b> <b>Atmosphere</b>	 	E53GG8DCCM	200	200	1/32	1/32	.022	.020
		E53HH8DCCM	150	150	3/64	3/64	.055	.048
		E53HJ8DCCM✓	150	150	3/64	1/16	.055	.075
		E53JJ8DCCM	100	100	1/16	1/16	.075	.075
		E53KJ8DCCM	60	60	3/32	1/16	.156	.075
		E53KK8DCCM	50	50	3/32	3/32	.156	.156
		E53NJ8DCCM	30	30	1/8	1/16	.230	.075
		E53NK8DCCM	30	30	1/8	3/32	.230	.156
<b>MODEL E53</b> <b>3 Way</b> <b>Normally</b> <b>Closed</b> <b>Piped</b> <b>Exhaust</b> **	 	E53GG8XCCM	200	200	1/32	1/32	.022	.020
		E53HH8XCCM	150	150	3/64	3/64	.055	.048
		E53HJ8XCCM✓	150	150	3/64	1/16	.055	.075
		E53JJ8XCCM	100	100	1/16	1/16	.075	.075
		E53KJ8XCCM	60	60	3/32	1/16	.156	.075
		E53KK8XCCM	50	50	3/32	3/32	.156	.156
		E53NJ8XCCM	30	30	1/8	1/16	.230	.075
		E53NK8XCCM	30	30	1/8	3/32	.230	.075
<b>MODEL E54</b> <b>3 Way</b> <b>Normally</b> <b>Open</b> **	 	E54GG8XCCM	150	150	1/32	1/32	.020	.022
		E54HH8XCCM✓	125	125	3/64	3/64	.048	.055
		E54JJ8XCCM	100	75	1/16	1/16	.075	.075
		E54JK8XCCM	75	45	1/16	3/32	.075	.156
		E54KK8XCCM	50	50	3/32	3/32	.156	.156
		E54JN8XCCM	50	30	1/16	1/8	.075	.230
		E54KN8XCCM	40	25	3/32	1/8	.156	.230
<b>MODEL E55</b> <b>3 Way</b> <b>Directional</b> <b>Control</b> **	 	E55GG8XCCM	300	200	1/32*	1/32	.022*	.020
		E55HH8XCCM	200	100	3/64*	3/64	.055*	.048
		E55JJ8XCCM	100	50	1/16*	1/16	.075*	.075
		E55KJ8XCCM✓	75	25	3/32*	1/16	.156*	.075
		E55KK8XCCM	75	40	3/32*	3/32	.156*	.156
		E55NJ8XCCM	65	20	1/8*	1/16	.230*	.075
		E55NK8XCCM	45	20	1/8*	3/32	.230*	.06
<b>MODEL E56</b> <b>3 Way</b> <b>Multi-Purpose</b> <b>Control</b> **	 	E56GG8XCCM	125	125	1/32*	1/32	.022*	.020
		E56HHXCCM	100	100	3/64*	3/64	.055*	.048
		E56JJ8XCCM	65	50	1/16*	1/16	.075*	.075
		E56KK8XCCM✓	25	25	3/32*	3/32	.156*	.156

\*Normally closed orifice - in these model numbers

For 3/32 sleeve orifice consult factory (not UL or CSA listed)

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

**NOTE: The above checked (✓) Valves are most popular based on sales and likely to be in Distributor stock.**