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Title: 125E1LW Solenoid Valves

ISO Date: April 10, 2006

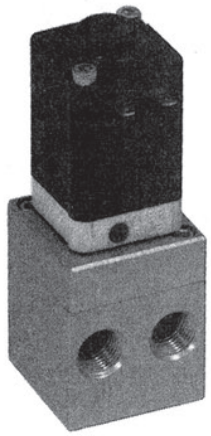
Don't Take Chances
Compressed air is an extremely powerful medium. Always take maximum precautions when handling any component of a compressed air system. **Never** attempt to construct, replace, operate or service any component of a compressed air system unless you have been specifically and properly trained to do so. **Always** disconnect the supply air, and exhaust the air system before attempting to remove or service a component of that system. Failure to heed these warnings could result in SERIOUS, EVEN FATAL, PERSONAL INJURY.

Design And Specifications
The design and specifications and other product information contained in this catalog is for general reference purposes based upon customary and usual manufacturing standards and product applications. However, it is difficult to predict or to anticipate the functioning or suitability of the product for any particular application or use. Therefore, nothing herein shall be deemed a representation or warranty of the product design or specifications and Buyer shall have the responsibility for investigating and testing the product in any particular application or use and all risks attendant in such use.

Humphrey Products Company
1-800-477-8707
Kalamazoo, MI 49003
www.humphrey-products.com

NEW *Humphrey* 125E1LW Electric Air Valves

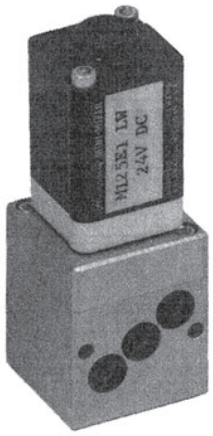
Humphrey 125E1LW electric air valves are a new group of solenoid valves combining the advantages of the unique double diaphragm poppet design with low-power operation. These single-solenoid, 3-way valves require no lubrication and feature manual override and either quick-connect electrical spade terminals or the optional Code 39 plug-in electrical connector. 125E1LW valves may be mounted using side or base mount, in-line, with body mounting holes, or manifold mounted on 2- through 10-station manifolds.



125E1LW-81
Model 125E1LW is a single-solenoid, 3-way, normally closed valve.

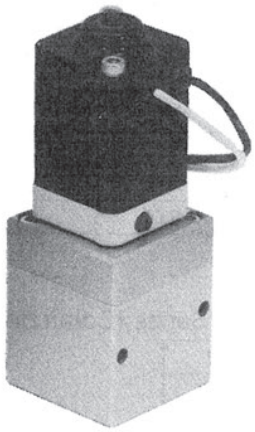
Model 125E1LW-81 is identical to the 125E1LW but features a rotating locking manual override.

Model 125AE1LW is identical to 125E1LW but is normally closed or normally open for valved pressures in the range of 0 to 125 psig.



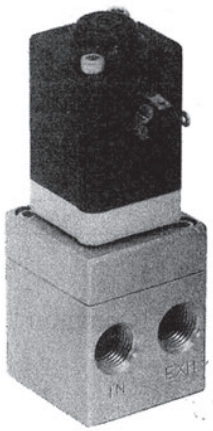
M125E1LW
Model M125E1LW is a version of the 125E1LW valve for mounting on manifolds.

Model M125AE1LW is a version of the 125AE1LW valve for mounting on manifolds.

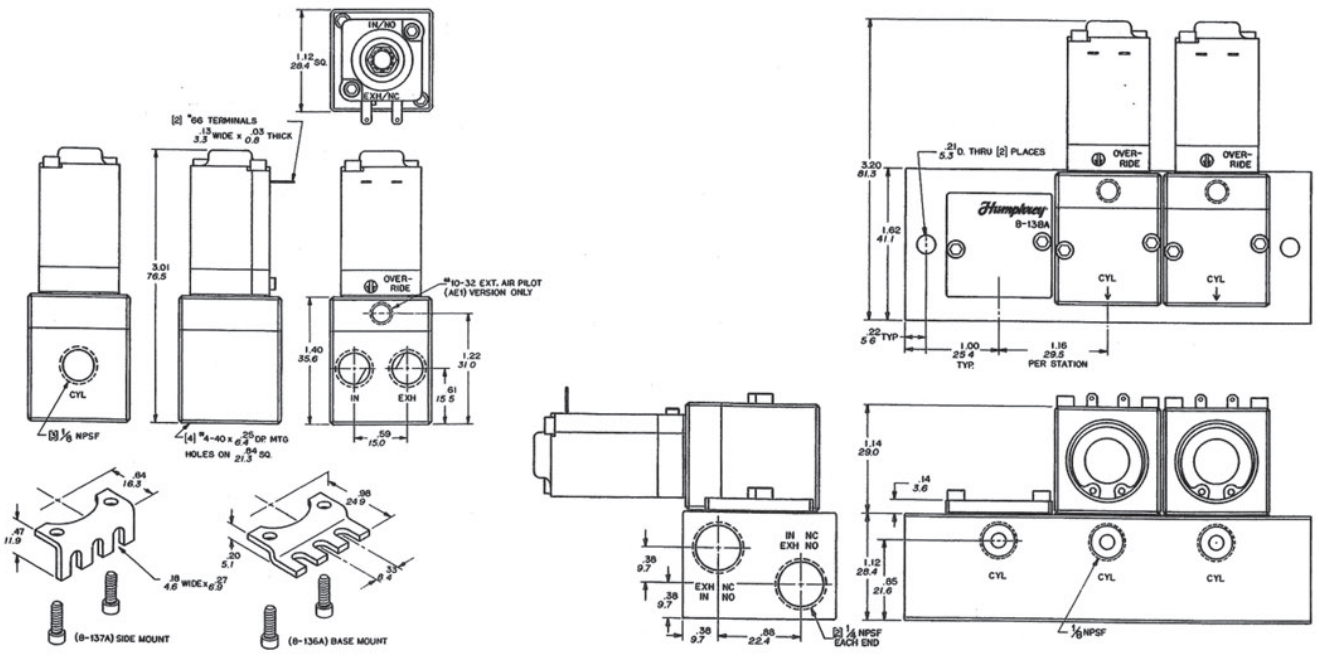


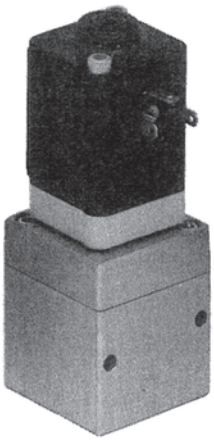
M125E1LW-38-81
M125E1LW-38-81 is a version of 125E1LW for mounting on M Series Manifolds. Code 38 features 18″ (457mm) 22AWG stranded wire, extending from the coil for electrical connection. Longer, non-standard 72″ (1830mm) leads are available as special order. Consult factory. Code 81 is a rotating locking manual override.

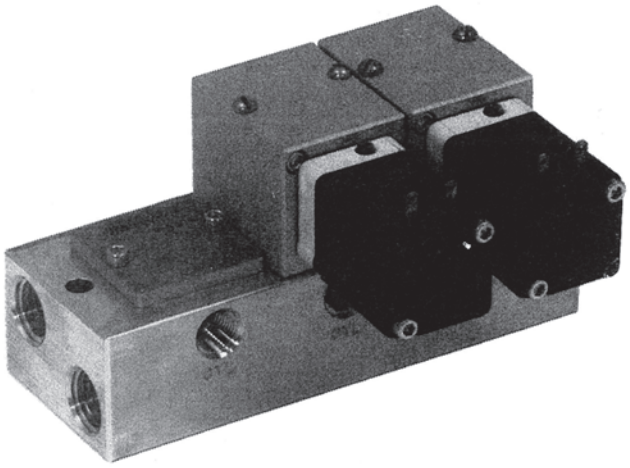
This valve is available with either option supplied separately.

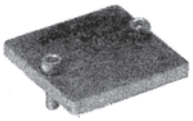


125E1LW-39
Model 125E1LW-39 is identical to 125E1LW. Code 39 is an optional plug-in (DIN) electrical connector.









8-138A Block-Off Plate
For suspending use of any station or providing for future addition of valves.

8-137A Side Mount
For use as a valve mounting bracket.

8-136A Mounting Base
For use as a valve mounting base.

M125E1LW-39
Model M125E1LW-39 is identical to 125E1LW-39 for mounting on M Series Manifolds.

M Series Manifolds

Manifolds permit centralized location of control valves, simplify plumbing, and reduce installation and maintenance costs. Valves and manifold can be sub-assembled and placed in the end-product as a complete, unitized control unit, thereby saving the time and labor involved in installing valves individually.

M series Manifolds are available in models for one through twelve stations (M1 - M12) and accept any combination of 125E1LW prefix-M valves. The sturdy, one-piece extruded aluminum unit features a common inlet with a common captured exhaust. Captured exhaust is desirable when the exhausting medium must be piped away to avoid contamination of the ambient area, as in clean rooms.

Valves may be mounted in either of two positions, and the position of the electrical connection may be changed by either reversing the valve on the manifold or by rotating the molded coil.

Specifications

MEDIA:
Compressed Air (Consult factory for others)

PRESSURE RANGE:
125E1: 30 to 100 psig (2.1 to 7.0 bars)
125AE1: 0 to 125 psig (0 to 8.6 bars) (body), 30 to 100 psig (2.1 to 7.0 bars) (pilot)
External pilot pressure (AE1LW): Equal to valved pressure, 30 psig (2.1 bars) Minimum
VA125AE1: 0 to 29.5" Hg (body), 0 to 100 psig (0 to 7.0 bars) (pilot)

TEMPERATURE RANGE:
–0 to 150°F (–17.8 to 65.6°C)

OPERATING SPEEDS:
To 600 CPM

MATERIALS:
Aluminum, Brass, Stainless Steel, Epoxy Molded Coil, Zytel, Zinc Plated Steel, Buna N

LUBRICATION . . . . . Not required

FILTRATION . . . . . Recommended, 40 Microns Minimum

Air Flow to Atmosphere

Weight

MODEL	25 PSIG CFM	(1.7 BARS) LPM	125 PSIG CFM	(8.6 BARS) LPM	ACTUAL LBS	KGS
125E1LW	3.0	84.9	13.0	367.9	0.30	0.14

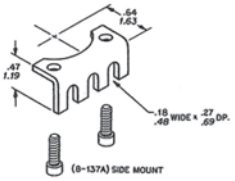
Electrical Specifications

MODEL	VOLTAGE	COIL NUMBER	WATTS	AMPS	OHMS	HEAT RISE (°C)	ON TIME SECONDS	OFF TIME SECONDS
125E1LW	24 DC	46-601	0.5	0.021	1152	11.3	0.005	0.006
	120 AC	46-600	1.0	0.012	5832	16.8	0.005	0.020

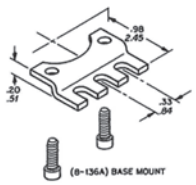
See Electric Air Valves Introduction, Continuous Duty Coils, for additional voltages.

Fill/Exhaust Times (Seconds)

	SUPPLY PRESSURE							
	At 50 psig (3.5 bars)				At 100 psig (7.0 bars)			
	Chamber Fill 0-40 psig (0-2.8 bars)		Exhaust 50-10 psig (3.5-.7 bars)		Chamber Fill 0-80 psig (0-5.5 bars)		Exhaust 100-20 psig (7.0-1.4 bars)	
	10 Cubic Inches (164cc)		100 Cubic Inches (1640cc)		10 Cubic Inches (164cc)		100 Cubic Inches (1640cc)	
MODEL	FILL	EXHAUST	FILL	EXHAUST	FILL	EXHAUST	FILL	EXHAUST
125E1LW	0.152	0.132	1.360	1.190	0.144	0.152	1.280	1.300



(8-137A) SIDE MOUNT



(8-136A) BASE MOUNT

Options for 125E1LW electric air valves

■ Fluoroelastomer diaphragms for main body only for resistance to mild chemicals.

125LW Series
1/8-inch ports, 2-way, 3-way

125LW VALVES

		2 Way	3 Way	Norm. Closed	Norm. Open "NO"	w/Out Mount. Base	With Mount. Base	Spade Terminals	Flying Leads (18")	DIN Con-nector	FKM** Seals Body Only	Voltage SVDC, 12VCD, 24VDC, 24VAC/50/60, 120VAC/50/60 240VAC/50/60
Option Code					NO				38	39	w/VAI	Specify Voltage
Model 125E1LW	*	STD	STD	NA	STD	OS	STD	SP	SP	SP		N/C
125AE1LW	*	STD	STD	N/C	STD	OS	STD	SP	SP	SP		N/C
VA125AE1LW	*	STD	STD	NA	STD	OS	STD	SP	SP	SP		N/C
M125E1LW	*	STD	STD	NA	NA	NA	STD	SP	SP	SP		N/C
M125AE1LW	*	STD	STD	N/C	NA	NA	STD	SP	SP	SP		N/C
VAM125AE1LW	*	STD	STD	NA	NA	NA	STD	SP	SP	SP		N/C

*Plug one port **Fluoroelastomer
NOTE: Only M/125AE1LW valves are available normally open. Specify "NO."

MANIFOLDS

Model	
M1	**M7**
M2	**M8**
M3	**M9**
M4	**M10**
M5	**M11**
M6	**M12**

M1=1 station. M7=7 stations; etc.

ACCESSORIES

Model	Description
8-136A	Mounting Base (In-Line).
8-137A	Side Mount (In-Line).
8-138A	Block-Off Plate (M Series).
HS-2	DIN Connector for use with Code 39 valves.
HS-2L	DIN Connector with Light (DC Only) for use with Code 39 valves.

NOTE: Valves, Manifolds, and Accessories are shipped detached, ready to be mounted according to specific application requirements.

HOW TO ORDER

Starting with Model Number specify options in order from left to right.

Example: To Order Model 125E1LW-38-81 24VDC

3-Way Operation	(125E1LW)
18" Flying Leads	(125E1LW-38)
Locking Manual Override	(125E1LW-38-81)
Voltage 24VDC	(125E1LW-38-81 24VDC)

Remember: Option Codes marked STD and NA are not used as part of the Model Number when ordering. N/C indicates no charge but Option Code must be included in the Model Number. OS indicates that Option must be ordered separately and is not used as part of the Model Number.

N/C=No charge
NA =Not available
OS =Order separately, additional charge for this option

STD=Standard
SP=Specify, additional charge for this option