

# Liquid X<sup>®</sup>

## Isolated diaphragm solenoid valve

### FEATURES

- 3-way universal (pressure to any port) or 2-way normally closed
- Offers dual elastomer options for performance and reliability in a range of liquid and gas media
- Reduces overall system size with its efficient packaging and 12mm design; ideal for manifold mounting
- Provides low internal unswept volume
- Ensures secure electrical termination to standard female connectors with friction-locked (latching) electrical connection
- Offers installation flexibility with the manifold sub-base; option of fluid connectors on single or multiple station assemblies



### MEDIA COMPATIBILITY

Liquids and gases

### WETTED MATERIALS

Elastomer: EPDM or FFKM  
Body: PEEK

### ELECTRICAL

Power max. 2 W

Voltage 12 or 24 V<sub>DC</sub> ± 5%  
(other options available)

Electrical connections\* 2.54 mm pitch male pins  
Friction-locked design receives  
standard female connector

\* Options: 18" lead assembly, splash guard for wet environment

### PHYSICAL PROPERTIES

Operating environment 0 to 55 °C

Storage temperature -40 to 70 °C

Length 29.5 mm (1.16 in)

Width 12 mm (0.47 in)

Height 39.9 mm (1.57 in)

Porting manifold mount with gasket

Manifold options 10-32 UNF, 1/4-28 UNF  
fluid connectors available on  
single or multiple station manifolds

Weight 25 g (0.86 oz)

Internal volume 32 µL (to manifold interface)

Liquid X is a registered trademark of Parker Hannifin Corporation.

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### PERFORMANCE CHARACTERISTICS

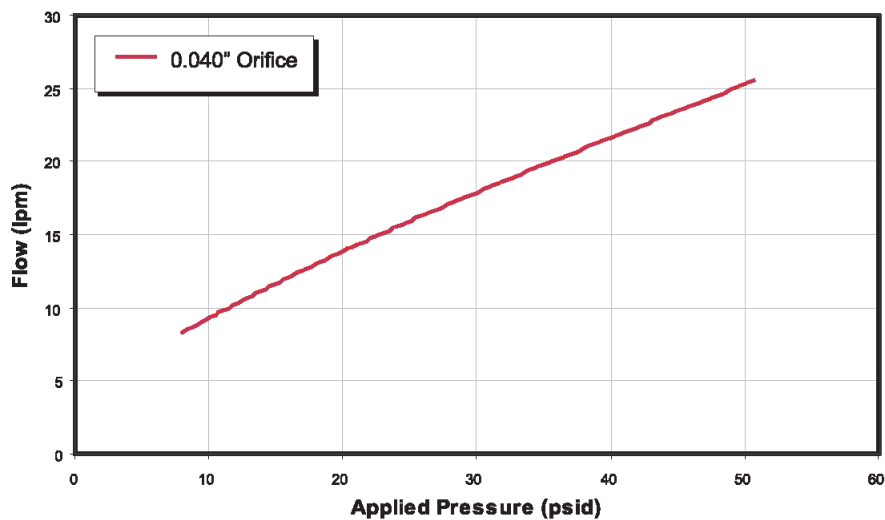
Part no.	Pressure	Minimum flow <sup>1</sup>	Orifice size	Leak rate <sup>1</sup>	Life cycles	Response
LQX...	Vacuum...50 psig	18 lpm air @ 50 psi 500 sccm water @ 50 psi	0.040" (1.02 mm)	≤0.016 sccm (@ 50 psi air)	10 million (meeting all specifications)	<20 msec cycling

**Note:**

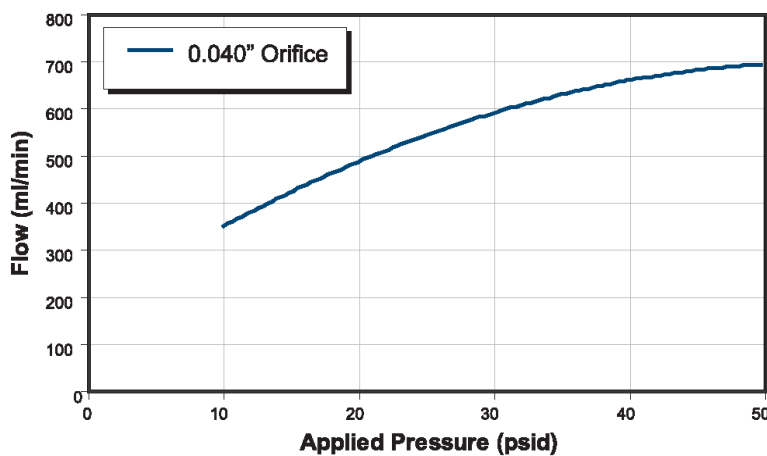
<sup>1</sup> sccm denotes Standard Cubic Centimeters per Minute. It is a unit for the flow rate at standard conditions of temperature and pressure.

### FLOW CURVES

**Liquid X Typical Air Flow**



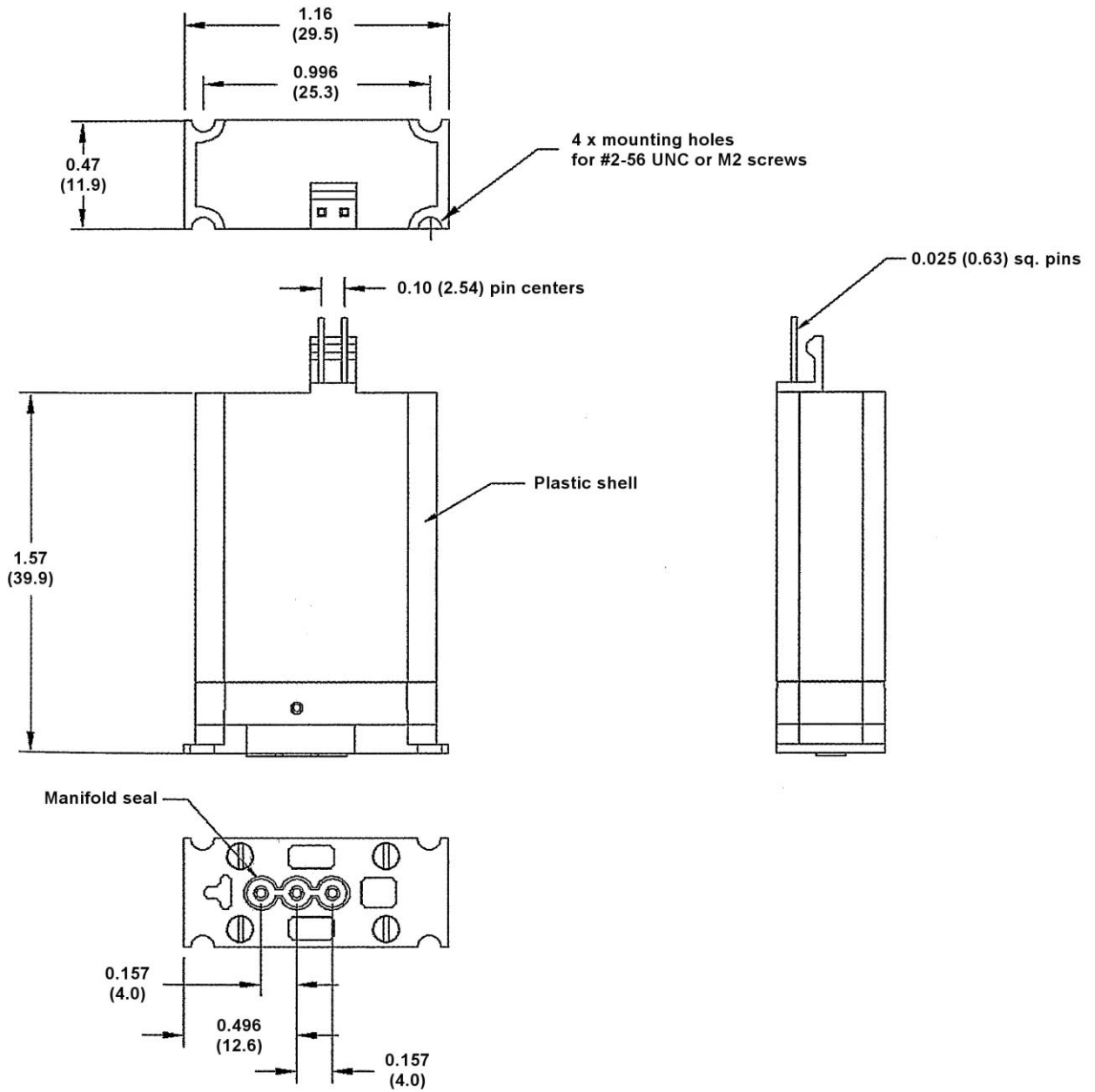
**Liquid X Typical Water Flow**



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### OUTLINE DRAWING

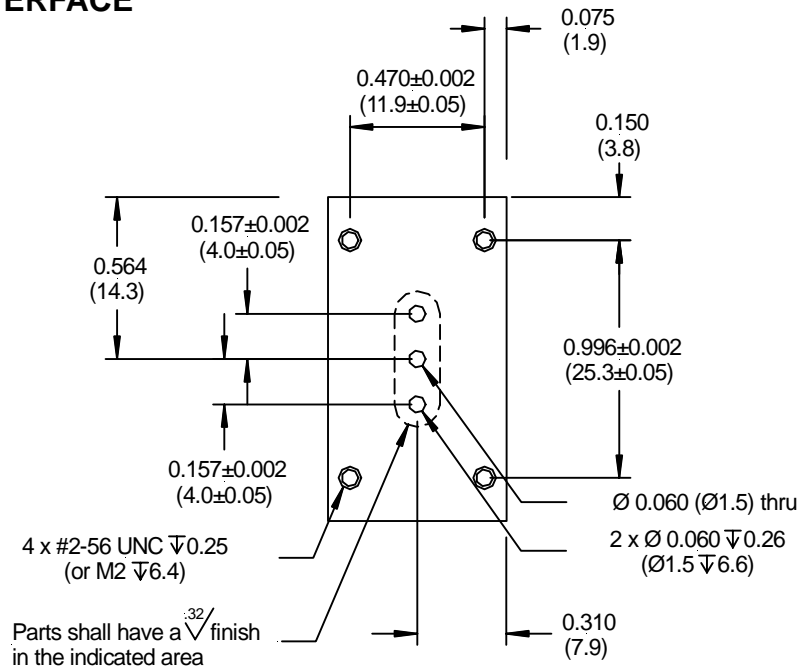


dimensions in inches (mm)

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### MANIFOLD INTERFACE



dimensions in inches (mm)

### ORDERING INFORMATION

Options	Series	Configuration		Voltage		Elastomer		Mounting style		Custom/Accessories	
	LQX	NC	2 way N.C.	12:	12 V <sub>DC</sub>	FF:	FFKM	FS:	face seal	000:	2-pin connector
		3W	3 way	24:	24 V <sub>DC</sub>	EP:	EPDM	48:	1/4-28 ports	001:	flying leads, 18"

Sample order no:	LQX	3W	12	FF	FS	000
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### Accessories (please order separately using the following order numbers)

Liquid X accessories	
0020056250BSO:	2-56 x 1/4" stainless steel button socket head cap screw
LQX0001290001:	12" lead wire assembly
LQX0002012003:	3-way single station manifold (PEEK with 10-32 UNF female threaded ports)

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