

LPM SERIES FIXED VOLUME SOLENOID DISPENSE PUMP

The Lee Company's LPM Series Solenoid Pump is a chemically inert, positive displacement dispense pump that provides accurate and repeatable dispense volumes in a small, lightweight package. In response to the increasing demand of the medical and scientific industries, this pump was designed to offer greater design flexibility at a significant cost savings compared to other alternatives.

Requiring a simple square wave electrical signal, the pump aspirates fluid when energized and dispenses fluid when de-energized. The normally closed design with integrated check valves prevents siphoning when the pump is de-energized.

The LPM Pump features a revolutionary port head design that allows for tubed connections or manifold mounting. This enables the designer to test the fluidic system using connections to soft tubing, and then once the system design has been finalized, the same pump can be manifold mounted using standard O-rings. The electrical interface of the pump also includes an end cap design with integrated retention capability for many standard AMP connectors. The Lee Company offers standard lead-wire connectors in different lengths for ease of use.

Performance parameters can be optimized to meet specific application requirements. Contact your Lee Sales Engineer for additional technical assistance and application information.

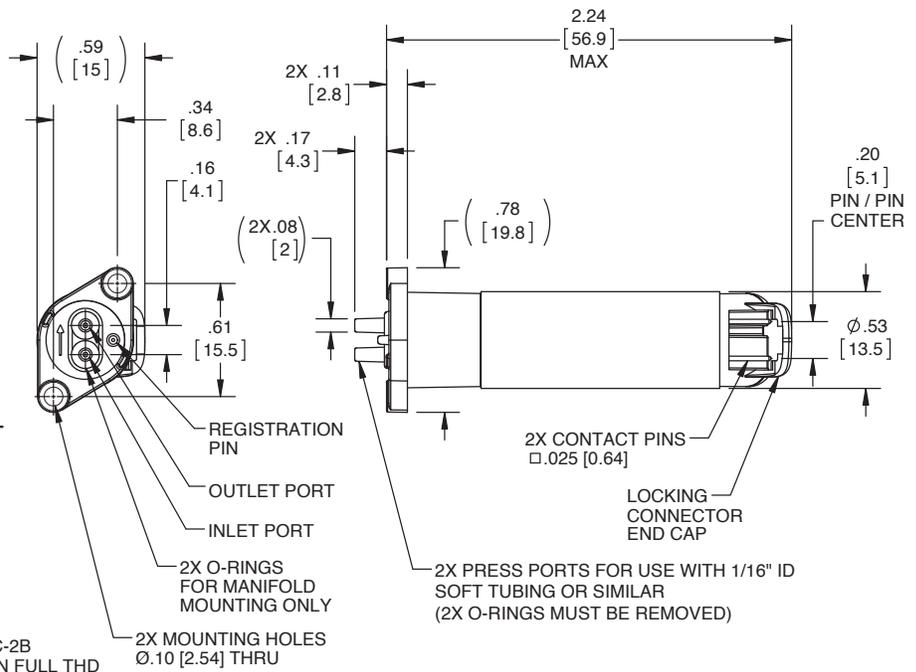
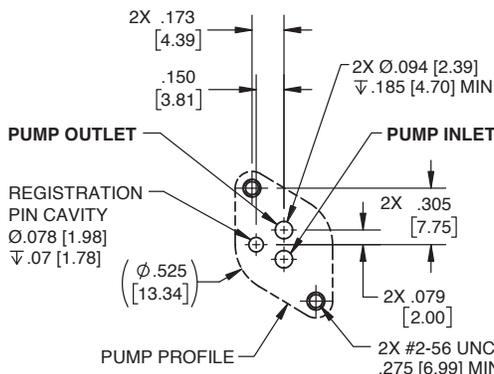


- Chemically inert
- Self-priming
- High dispense accuracy and repeatability
- Operating frequency: 5 Hz
- Maximum case pressure: 5 psig
- Total head pressure range: +/- 60 in. H₂O
- Fluidic interface: 1/16" soft tubing or manifold mount
- Cycle life: 10 million cycles (min.)

PART NUMBER	DISPENSE VOLUME (μL)	DISPENSE ACCURACY (%)	POWER CONSUMPTION (W)	VOLTAGE (Vdc)	WETTED MATERIALS ¹
LPMA1250110L	10	± 15	1.5	12	PEEK/FKM
LPMA2450110L	10	± 15	1.5	24	PEEK/FKM
LPMA1251110L	10	± 15	1.5	12	PEEK/EPDM
LPMA2451110L	10	± 15	1.5	24	PEEK/EPDM
LPMA1250625L	25	± 6	2.0	12	PEEK/FKM
LPMA2450625L	25	± 6	2.0	24	PEEK/FKM
LPMA1251625L	25	± 6	2.0	12	PEEK/EPDM
LPMA2451625L	25	± 6	2.0	24	PEEK/EPDM

NOTE: (1) Other wetted materials available upon request.

MANIFOLD MOUNTING BOSS



Reference Drawing Number LSIX1001470A for Mounting Details.

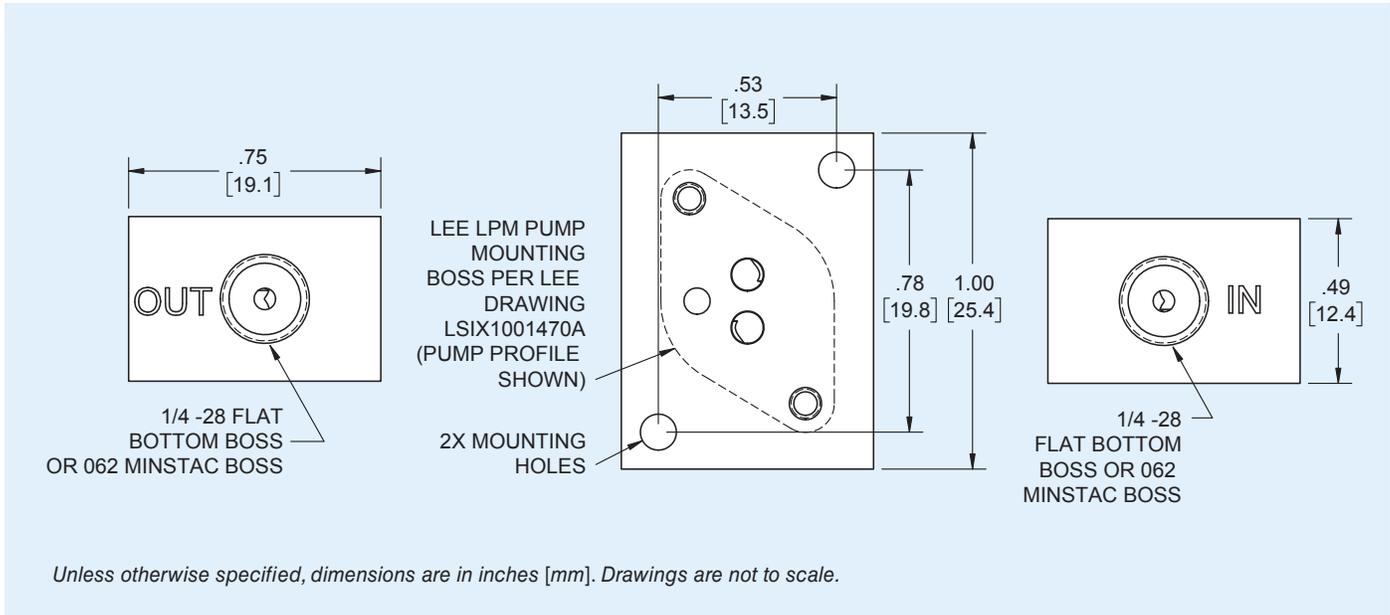
Unless otherwise specified, dimensions are in inches [mm]. Drawings are not to scale.

STANDARD SINGLE PLACE MANIFOLD ADAPTER

Manifold adapters are ideal for design prototyping. They allow the fluidic system to be designed, built up and tested, all prior to manifold construction. The same LPM Series Pump can then be used in the manifold system.

PART NUMBER	PORT CONNECTION	MATERIAL
LSMX0517510B	062 MINSTAC	PEEK
LSMX0517520B	062 MINSTAC	PMMA
LSMX0517410B	1/4-28 FBB	PEEK
LSMX0517420B	1/4-28 FBB	PMMA

NOTE: The above part numbers are for the manifold adapters and mounting screws only. Pumps are sold separately.



ACCESSORIES

PART NUMBER	DESCRIPTION
LSWX0504300A	Lead-Wire Connector Assembly, 6"
LSWX0606700A	Lead-Wire Connector Assembly, 24"
LSWX0508600A	O-rings (FKM)
LSWX0508610A	O-rings (EPDM)

The LPM Series Solenoid Dispense Pump is just one part of The Lee Company's complete line of precision fluid control products that includes miniature solenoid valves, micro dispense solenoid valves, check valves, precision calibrated orifices, safety screens, nozzles and other precision fluid handling components. The Lee Company's extensive research facilities and experienced teams

of engineers keep the company at the forefront of fluid handling technology. In addition, The Lee Company maintains a worldwide sales network of graduate engineers ready to assist you in solving your fluid control problems. For more information, contact a Lee Sales Engineer today, or visit www.theleeco.com.