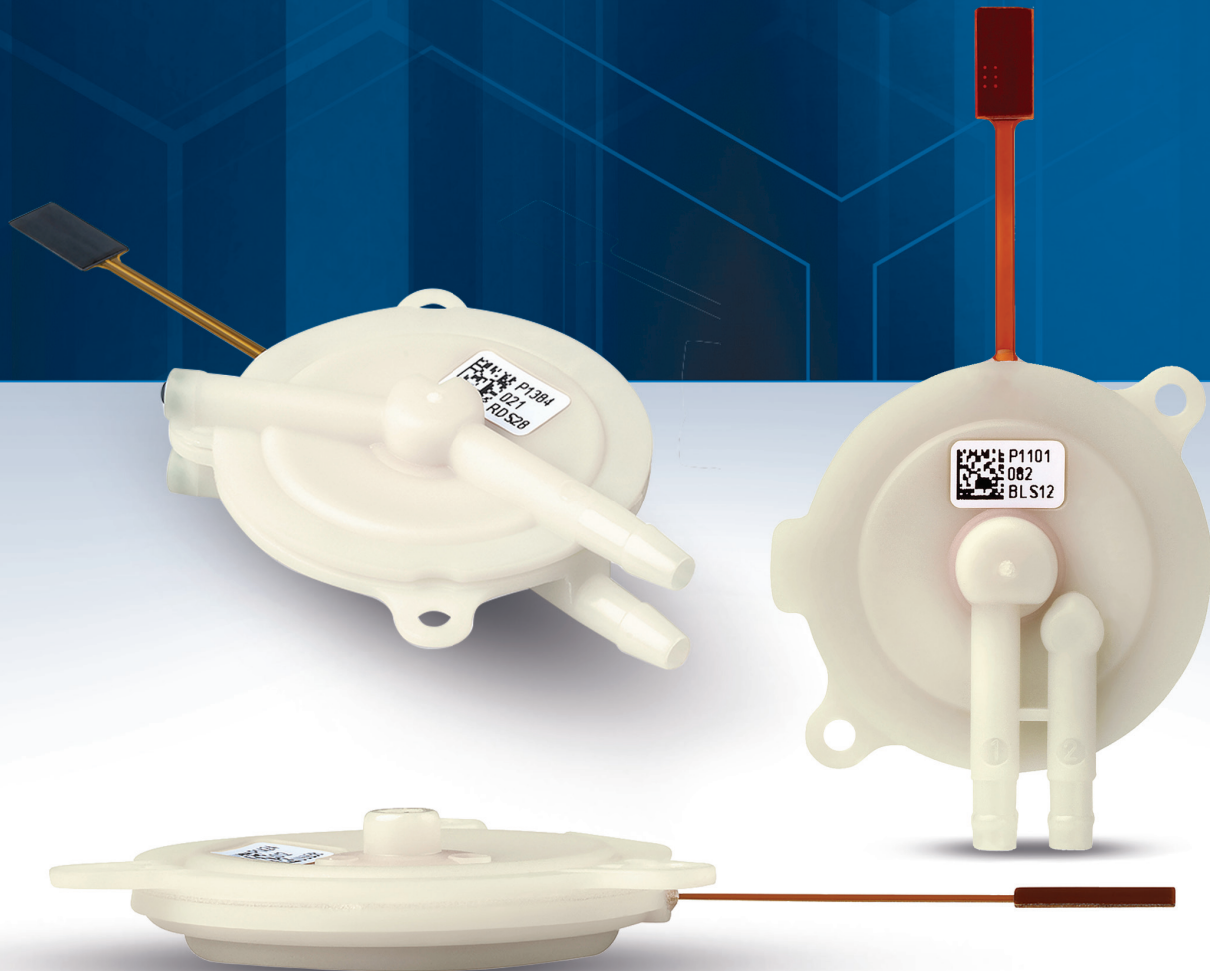


PIEZOELECTRIC DISC PUMPS

YOUR SPECS OUR EXPERTISE GREAT SOLUTIONS

FOR YOUR APPLICATION



PIEZOELECTRIC DISC PUMPS



Our new range of piezoelectric micropumps is enabling innovation across sectors from medical and life sciences to environmental and industrial. The micropumps deliver unrivaled pressure and flow, silent operation, rapid response time, precision, and ultra-smooth flow – all in a tiny package, promoting wearability, portability, and simplicity.

KEY FEATURES

- Silent, vibration-free operation
- Ultrafast, millisecond response
- Lightweight, compact form
- High precision controllability
- True pulsation-free flow
- Infinite turndown ratio
- Maintenance free
- RoHS compliant

TYPICAL APPLICATIONS

- Microfluidics
- Point-of-care diagnostics
- Breathomics
- Compression therapy
- Patient monitoring
- Gas detection & analysis
- Medical training simulators
- Inkjet pressure control

PRODUCT LINE	SUMMARY	STALL PRESSURE	FREE FLOW	STALL VACUUM
BL Series	Entry-level pumps striking a balance between performance and cost	300 mbar	1.65 l/min	200 mbar
XP Series	Highest performance and widest temperature range of -25°C to 55°C	400 mbar	2.00 l/min	300 mbar
LT Series	Long life models offering 17,000+ hours of continuous operation	270 mbar	1.20 l/min	220 mbar
HP Series	High differential pressure models	600 mbar	0.10 l/min	400 mbar
US Series	Slimline models with integrated filter	420 mbar	0.95 l/min	N/A

OPERATIONAL	
Pumping Medium	Air
Sound Level	<10 dB
Control Precision	< 0.1%
Turndown Ratio	Infinite

MECHANICAL	
Size	29 mm dia. x 11 mm (approx.)
Weight	5 g

DEVELOPMENT

The Lee Company is actively developing higher performance pump designs; if the performance listed above is not sufficient for your application, please contact us to discuss whether we have an alternative design that meets your requirements.

PRODUCT RANGE



SMART PUMP MODULE (SPM)

Pump with integrated drive electronics and pressure sensor feedback

HP SERIES



ULTRASLIM (US) SERIES



BL/XP/LT SERIES



EVALUATION KIT

The evaluation kit comes with everything necessary to start testing, including two pumps, electronics, and a PC application for configuration, control, and data logging. Evaluation kits are suitable for laboratory testing, proof of concept, and product prototyping.



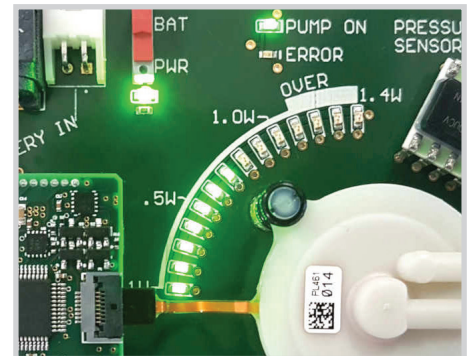
KIT CONTENTS

- Two disc pumps
- Driver board and mains PSU
- Accessories kit (tubing and fittings)
- USB flash drive with PC application for control, configuration, and documentation



CONTROL INTERFACES

- PC application
- USB-Serial interface
- Rotary dial
- 0-2.5 V analog in



CONTROL MODES

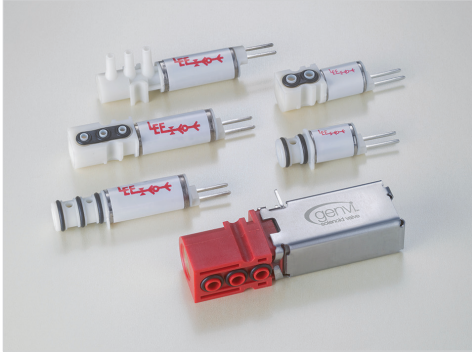
- Power control
- Closed-loop pressure control (positive and negative pressure)
- Bang-bang pressure control

The General Purpose Drive PCB and Smart Pump Module are available for driving disc pumps at production volumes.

FOR MORE INFORMATION, VISIT theleeco.com/discpumps

COMPLETE FLUID CONTROL

The Lee Company is wholly dedicated to high-precision fluid control. We offer a wide range of solutions, all engineered to deliver the highest levels of reliability and performance.



CONTROL SOLENOID VALVES

- 2-Way & 3-Way Designs
- Compact & Lightweight
- Conventional, Latching & Quiet Operation Models
- Low Power Consumption & Low Leakage
- Long Cycle Life



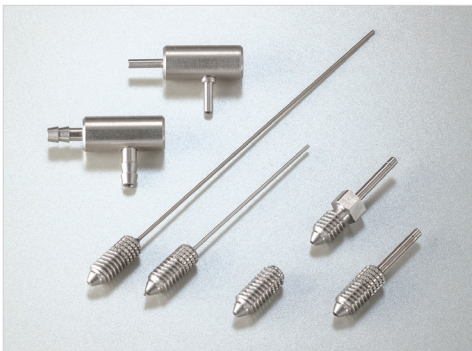
DISPENSE SOLENOID VALVES

- Dispense nL to mL Size Droplets
- Low Internal Volume
- Fast Response Time
- Multiple Seal Materials Available
- Long Cycle Life



ISOLATION SOLENOID VALVES

- 2-Way & 3-Way Designs
- Chemically Inert
- Diaphragm & Pinch Tube Models
- Low Internal Volume
- Multiple Seal Materials Available



NOZZLES

- Atomizing (Airless & Air Assisted) and Dispensing Designs
- Multiple Mounting Options
- Wide Range of Orifice Sizes
- Easy Integration with Lee Dispense Solenoid Valves



PRECISION DISPENSE PUMPS

- Self-Priming
- Maintenance-Free
- Wide Range of Dispense Volumes
- High Dispense Accuracy & Repeatability
- Long Cycle Life



MANIFOLD ASSEMBLY TECHNOLOGY

- Design Flexibility
- Wide Variety of Material Options & Techniques
- Integrated Components
- Reduced Assembly & Installation Costs
- Value-Added Solution, 100% Tested



2 Pettipaug Rd, Westbrook CT 06498-0424
860-399-6281 | 1-800-LEE-PLUG | theleeco.com

WESTBROOK • LONDON • PARIS • FRANKFURT • MILAN • STOCKHOLM