

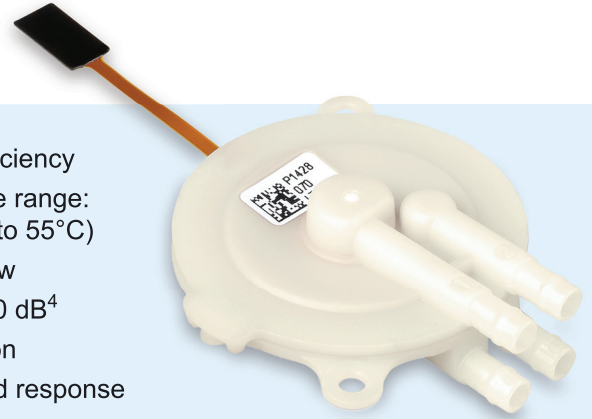
# XP SERIES DISC PUMP

The Lee Company's novel family of multi award-winning disc pumps generate pressure and vacuum in a small, silent, vibration-free form factor and are available with or without integrated electronics for added simplicity. The disc pump family is differentiated into various product series, with the XP Series offering the highest performing, most power efficient design and the widest operating temperature range. Designed for highly precise, ultra-smooth, gas and liquid<sup>6</sup> flow control, our ultrasonic piezoelectric micropumps deliver unrivalled pneumatic performance and enable innovation wherever precision control of small volumes is critical. Their applications span medical, scientific, and industrial sectors, including:

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

Our pumps are RoHS compliant, and their long life allows for maintenance-free system design. The Lee Company is actively developing higher performance R&D pump designs; if the performance listed herein is not sufficient for your application, please contact us to discuss your requirements.

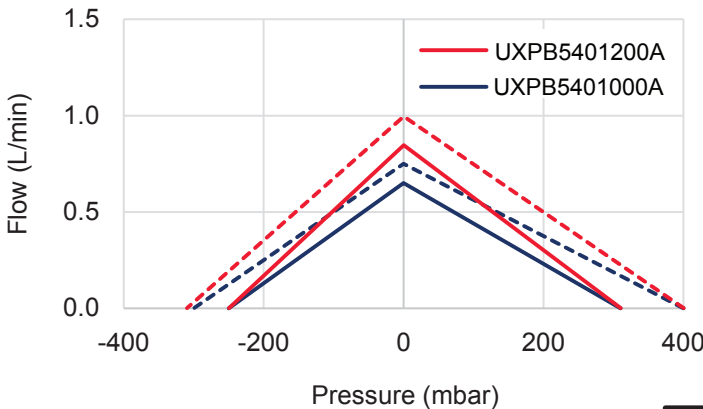
- Exceptional power efficiency
- Operating temperature range: 13°F to 104°F (-25°C to 55°C)
- True pulsation-free flow
- Silent: sound level <10 dB<sup>4</sup>
- Vibration-free operation
- Ultra-fast 1 millisecond response
- Lightweight: 5 g
- Compact size: 29 mm diameter
- Humidity range<sup>5</sup>: 0 to 95% RH
- Pumping medium<sup>6</sup>: air
- Control precision<sup>7</sup> less than 0.1%
- Infinite turndown ratio<sup>8</sup>



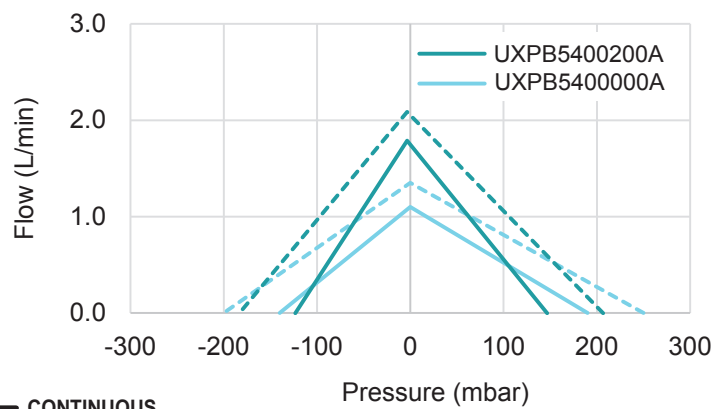
| PART NUMBER  | OPERATION                   | PRESSURE   | FLOW         | VACUUM     |
|--------------|-----------------------------|------------|--------------|------------|
| UXPB5401000A | Intermittent <sup>1,3</sup> | > 400 mbar | > 0.75 L/min | > 300 mbar |
|              | Continuous <sup>2,3</sup>   | < 310 mbar | > 0.65 L/min | > 250 mbar |
| UXPB5401200A | Intermittent <sup>1,3</sup> | > 400 mbar | > 0.96 L/min | > 295 mbar |
|              | Continuous <sup>2,3</sup>   | > 310 mbar | > 0.83 L/min | > 250 mbar |
| UXPB5400000A | Intermittent <sup>1,3</sup> | > 250 mbar | > 1.35 L/min | > 200 mbar |
|              | Continuous <sup>2,3</sup>   | > 190 mbar | > 1.10 L/min | >140 mbar  |
| UXPB5400200A | Intermittent <sup>1,3</sup> | > 210 mbar | > 2.00 L/min | > 180 mbar |
|              | Continuous <sup>2,3</sup>   | > 150 mbar | > 1.70 L/min | > 120 mbar |

For 4<sup>th</sup> letter in Part Number: B = pump only, C = pump mounted on Smart Pump Module (SPM).  
 For more information on the SPM, please see PDS 196.

## SERIES CONFIGURATION



## PARALLEL CONFIGURATION



See dimensional drawings on reverse.

— CONTINUOUS  
 - - - INTERMITTENT

