

LPD STEPPER DISPENSE PUMP

The Lee Company's new LPD Series Stepper Dispense Pump is a miniature, chemically inert, variable volume pump that offers consistent performance in a compact package. This new pump was designed to offer greater design flexibility and significant cost savings to the medical and scientific industries. Designed to be completely maintenance free, the LPD Series pump can be located wherever the fluidic requirements dictate, regardless of maintenance accessibility.

The pump is offered in both standard and high performance models. The high performance model incorporates a home sensor, encoder and backlash compensation for demanding applications. The standard performance model is available with a home sensor for most other applications.

The LPD Series pump can be customized to meet specific requirements of OEM applications. Contact your Lee Sales Engineer for additional technical assistance and application information.

Lee offers a pump driver kit for application development, Part Number LSKX0502150C.

- Standard and High Performance Models
- CV \leq 0.01% at total volume on high performance models
- Life:
 - Standard Performance: 2 million cycles
 - High Performance: 5 million cycles
- 50 μ L and 250 μ L full dispense volumes
- Speed: 4000 half steps/second
- Small Footprint
- Fluidic Interface: 1/4-28 Flat Bottom Boss
- Discharge Pressure: 60 psi max
- Minimum Dispense Resolution:
 - 50 μ L: 0.04 μ L /full step
 - 250 μ L: 0.2 μ L/full step
- Wetted Materials:
 - Piston: TZP
 - Port Head: PMMA or PEEK (special)
 - Seal: UHMW PE
- Integrated backlash compensation and encoder on high performance models

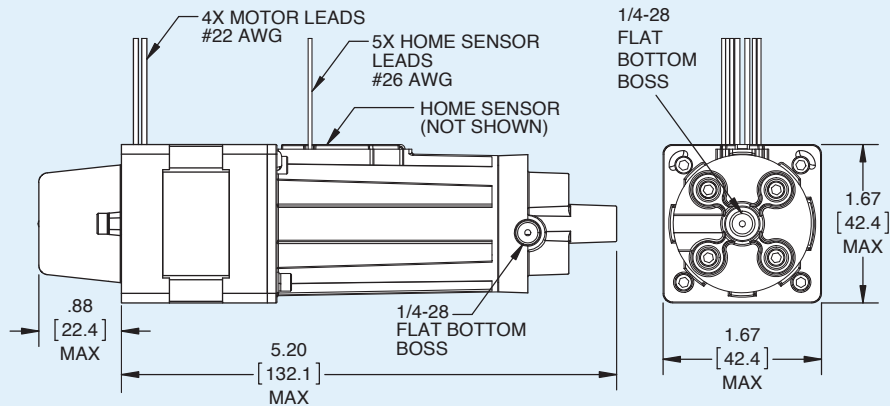


| | PART NUMBER | VOLUME (μ L) | PORT HEAD ¹ | CV ² | INACCURACY | HOME SENSOR | ENCODER | INTEGRATED BACKLASH COMPENSATION | LIFE CYCLES |
|----------------------|--------------|-------------------|------------------------|---|----------------------------|-------------|---------|----------------------------------|-------------|
| STANDARD PERFORMANCE | LPDA2720150L | 50 | PMMA | \leq 0.04% at total volume \leq 0.4% at 10% volume | \pm 0.6% at total volume | ✓ | | | 2 Million |
| | LPDA2750150L | 50 | PEEK | | | | | | |
| | LPDA2720125D | 250 | PMMA | | | | | | |
| | LPDA2750125D | 250 | PEEK | | | | | | |
| HIGH PERFORMANCE | LPDA1720350L | 50 | PMMA | \leq 0.01% at total volume \leq 0.1% at 10% volume | \pm 0.5% at total volume | ✓ | ✓ | ✓ | 5 Million |
| | LPDA1750350L | 50 | PEEK | | | | | | |
| | LPDA1720325D | 250 | PMMA | | | | | | |
| | LPDA1750325D | 250 | PEEK | | | | | | |

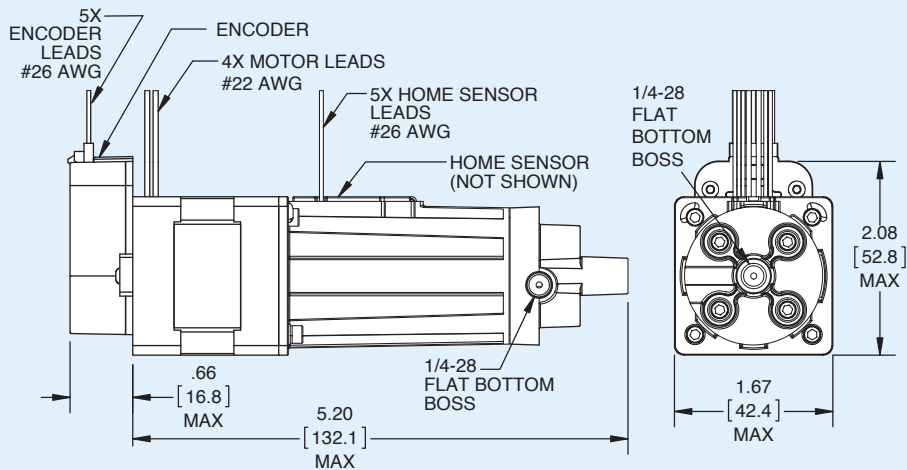
NOTE: (1) Molded PMMA port heads feature 1/4-28 flat bottom bosses. PEEK port heads are special order only.
 (2) CV specified across life of pump

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STANDARD PERFORMANCE



HIGH PERFORMANCE



NOTE: Mounting bracket not shown

The LPD Stepper 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 valves and nozzles, fixed and variable volume dispense pumps, integrated manifolds 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 control technology. In addition, Lee maintains an international network of sales 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.