

LSLSL LH-85

LSLSL LH-85 Oilless Diaphragm Vacuum Pump Instruction Manual

Model: LH-85

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation, installation, and maintenance of the LSLSL LH-85 Oilless Diaphragm Vacuum Pump. Please read this manual thoroughly before operating the device to ensure proper function and to prevent damage or injury.

The LH series of diaphragm vacuum pumps are designed for continuous operation without oil, offering low noise and high efficiency. They are suitable for various laboratory applications requiring vacuum or pressure.

2. PRODUCT FEATURES

- Stable pressure, adjustable via a valve.
- Compact and portable design, saving laboratory space.
- Simple plug-and-play operation.
- Capable of continuous operation for up to 24 hours.
- Easy to maintain.

3. APPLICATIONS

The LSLSL LH-85 Oilless Diaphragm Vacuum Pump is suitable for a range of laboratory and chemical applications, including:

- Vacuum Filtration
- Drying Ovens
- Molecular Distillation
- Economical and ecologically sound alternative to water jet vacuum pumps

- Vacuum Concentration
- Gel Drying

4. SETUP INSTRUCTIONS

Follow these steps to set up your LH-85 vacuum pump:

1. **Unpacking:** Carefully remove the pump from its packaging. Inspect for any visible damage during transit.
2. **Placement:** Place the pump on a stable, level surface in a well-ventilated area. Ensure there is adequate space around the pump for air circulation.
3. **Connections:**
 - Connect the appropriate vacuum tubing to the pump's inlet port. Ensure all connections are secure and airtight to prevent vacuum leaks.
 - If using for pressure applications (on models with this dual function), connect tubing to the outlet port.
4. **Power Connection:** Ensure the power switch is in the 'OFF' position. Connect the power cord to the pump and then to a grounded electrical outlet with the correct voltage.



LH-85

Model	LH-85
Pumping Speed(L/min)	30
Ultimate Vacuum (Mbar)	>0.085 (150mbar)
Pressure (Psi)	—
Pump	1
Motor Power (W)	180
Size (L×W×H) (mm)	250×135×210
Weight	7.5
Diaphragm material	HNBR
Noise (dB)	<50
Function	Vacuum

Figure 1: LSLSL LH-85 Oilless Diaphragm Vacuum Pump. This image shows the compact design of the pump, including the integrated pressure gauge and handle for portability.

5. OPERATING INSTRUCTIONS

To operate the LSLSL LH-85 vacuum pump:

1. **Power On:** Flip the power switch to the 'ON' position. The pump will begin to operate.
2. **Vacuum/Pressure Adjustment:** If your model includes an adjustable valve, slowly turn the valve to achieve the desired vacuum level or pressure. Monitor the integrated gauge for readings.
3. **Monitoring:** Observe the pump's operation and the vacuum/pressure gauge to ensure it is functioning as expected for your application.
4. **Power Off:** When finished, turn the power switch to the 'OFF' position.
5. **Ventilation:** Allow the system to vent to atmospheric pressure before disconnecting any tubing.

6. MAINTENANCE

The LSLSL LH-85 Oilless Diaphragm Vacuum Pump is designed for low maintenance. Regular checks will ensure optimal performance and longevity.

- **Cleaning:** Keep the exterior of the pump clean and free from dust and chemical spills. Use a soft, damp cloth for cleaning. Do not use abrasive cleaners or solvents.
- **Air Vents:** Ensure the air vents are clear and unobstructed to prevent overheating.
- **Tubing and Connections:** Periodically inspect all tubing and connections for wear, cracks, or leaks. Replace damaged components immediately to maintain vacuum integrity.
- **Diaphragm Replacement:** While designed for durability, the diaphragm may eventually require replacement. Refer to the manufacturer's guidelines or contact support for diaphragm replacement procedures.
- **Storage:** When not in use for extended periods, store the pump in a clean, dry environment.

7. TROUBLESHOOTING

If you encounter issues with your LH-85 vacuum pump, refer to the following troubleshooting guide:

Problem	Possible Cause	Solution
Pump does not start	No power supply; Power switch off; Faulty power cord.	Check power connection and outlet; Ensure switch is ON; Replace power cord if damaged.
Low vacuum or no vacuum	Leaky connections; Damaged tubing; Clogged inlet filter; Worn diaphragm.	Check and tighten all connections; Replace damaged tubing; Clean or replace inlet filter; Contact support for diaphragm replacement.
Excessive noise or vibration	Pump not on a level surface; Internal component issue.	Ensure pump is on a stable, level surface; Contact support if noise persists.

Problem	Possible Cause	Solution
Pump overheats	Obstructed air vents; Prolonged operation in high ambient temperature.	Clear air vents; Ensure adequate ventilation; Allow pump to cool down.

If the problem persists after attempting these solutions, please contact LSLSL customer support for further assistance.

8. SPECIFICATIONS

The following table outlines the technical specifications for the LSLSL LH-85 Oilless Diaphragm Vacuum Pump:



Figure 2: Technical Specifications for LH-85. This image displays a table detailing the model, pumping speed, ultimate vacuum, motor power, dimensions, weight, diaphragm material, noise level, and function of the LH-85 pump.

Parameter	Value
-----------	-------

Parameter	Value
Model	LH-85
Pumping Speed (L/min)	30
Ultimate Vacuum (Mbar)	>0.085 (150mbar)
Pressure (Psi)	N/A (Vacuum Function)
Pump	1
Motor Power (W)	180
Size (L×W×H) (mm)	250×135×210
Weight (kg)	7.5
Diaphragm Material	HNBR
Noise (dB)	<50
Function	Vacuum

9. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please contact your vendor or the manufacturer directly. Keep your purchase receipt and product model number (LH-85) handy when contacting support.

Manufacturer: LSLSL

Model Number: 1005003058924452