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› LEFOO LF16 Water Pump Pressure Switch 30-50psi User Manual

LEFOO LF16

LEFOO LF16 Water Pump Pressure Switch 30-50psi User Manual

Model: LF16

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of the LEFOO LF16 Water Pump Pressure Switch, designed for 30-50 PSI systems. This device is engineered to control well pump and sump pump systems by automatically starting and stopping the pump based on water line pressure, thereby preventing both low and high-pressure issues.

The LEFOO LF16 series switches are suitable for continuous measurement and control in automatic water systems, commonly found in pumps, well pumps, and other water supply setups.

2. SAFETY INFORMATION

WARNING: Hazardous Voltage. Disconnect power before removing cover.



Image: Warning label on the LEFOO LF16 pressure switch. This label indicates "DANGER / PELIGRO / DANGER" with symbols for hazardous voltage (disconnect power before removing cover) and excessive pressure (max rating 80 PSI / 552 KPa).

- Always ensure the main power supply to the pump system is disconnected before attempting any installation, maintenance, or adjustment procedures.
- Installation should be performed by a qualified individual familiar with electrical and plumbing systems.
- Do not exceed the maximum pressure rating of 80 PSI (552 KPa) for this device.
- Wear appropriate personal protective equipment (PPE) during installation and maintenance.

3. PRODUCT OVERVIEW

The LEFOO LF16 is a robust pressure switch designed for reliable control of water pump systems. It features a precision pressure sensing diaphragm and a snap-action switch mechanism to ensure accurate and consistent water pressure regulation.



Image: Top-front view of the LEFOO LF16 Water Pump Pressure Switch, showing the blue casing and the LEFOO branding.

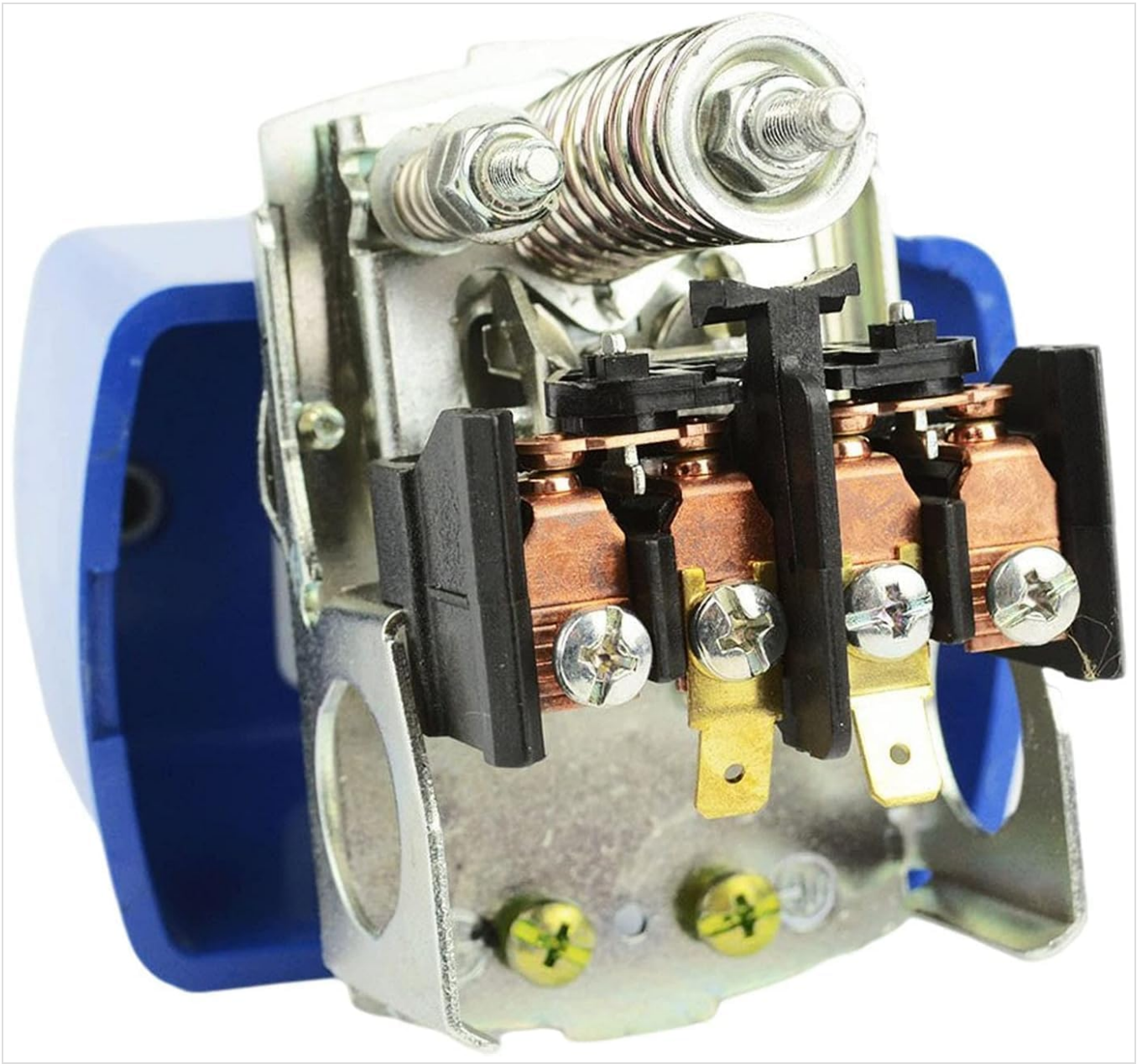


Image: Internal view of the LEFOO LF16 pressure switch with the cover removed, revealing the electrical contacts, springs, and adjustment mechanisms.

3.1 Key Features

- Adjustable pressure range: 30-50 PSI.
- Standard 1/4" NPT female threads for easy installation.
- Precision pressure sensing diaphragm for accurate control.
- Snap-action switch for reliable pump activation and deactivation.

4. SPECIFICATIONS

Feature	Detail
Model Number	LF16
Pressure Range	30-50 PSI
Connection Type	1/4" NPT Female Threaded

Feature	Detail
Operation Mode	ON-OFF
Contact Type	Normally Open
Circuit Type	Parallel
Voltage	120V AC (Compatible with 12V, 120V, 240V systems)
Item Dimensions (L x W x H)	3.9 x 2.76 x 4.49 inches
Item Weight	12 ounces
Color	Blue
Manufacturer	LEFOO Industrial Co.,Ltd

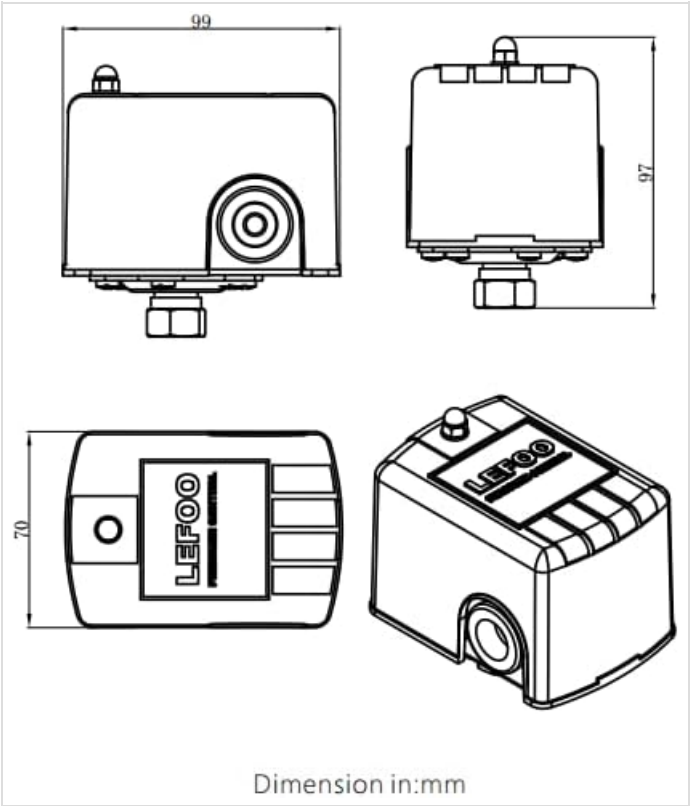


Image: Dimensional drawing of the LEFOO LF16 pressure switch, showing length, width, and height in millimeters.

5. SETUP AND INSTALLATION

Before beginning installation, ensure all power to the pump system is completely disconnected. This device is designed for easy installation with standard 1/4" NPT female threads.

5.1 Mechanical Installation

1. Locate the existing pressure switch or the designated connection point on your water pump system.
2. Apply thread sealant (e.g., PTFE tape) to the 1/4" NPT male threads of the pipe where the switch will be installed.
3. Carefully thread the LEFOO LF16 pressure switch onto the pipe connection. Tighten securely but do not overtighten to avoid damaging the threads or the switch.



Image: Bottom view of the LEFOO LF16 pressure switch, highlighting the 1/4 inch NPT threaded connection point for plumbing.

5.2 Electrical Wiring

The pressure switch acts like a standard light switch, controlling the hot wires to the pump. Ensure all neutral and ground

wires are properly connected and insulated within the switch cover.

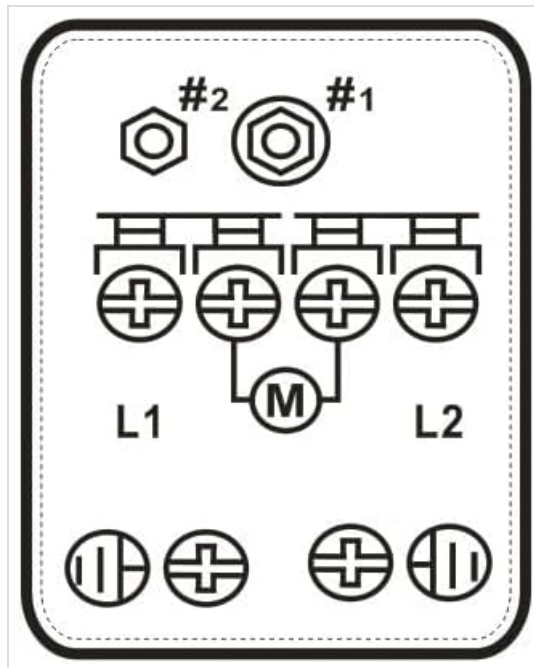


Image: Wiring diagram for the LEFOO LF16 pressure switch. It illustrates the L1 (Line 1), M (Motor/Load), and L2 (Line 2) terminals, along with ground connections, for various voltage configurations.

- **For 120V Systems:**

- Connect the incoming hot wire (typically black) from the power source to the **L1** terminal.
- Connect the hot wire (typically black) going to the water pump to the **M** terminal (motor/load).
- The **M** and **L2** terminals on the right side are not used for 120V.
- Connect all neutral wires (typically white) together with a wire nut and secure them inside the switch cover.
- Connect all ground wires (typically green or bare copper) together with a wire nut and secure them inside the switch cover.

- **For 240V Systems:**

- Connect the first incoming hot wire (e.g., red or black) from the power source to the **L1** terminal.
- Connect the first hot wire going to the water pump to the **M** terminal (motor/load) on the left side.
- Connect the second incoming hot wire (e.g., black or red) from the power source to the **L2** terminal.
- Connect the second hot wire going to the water pump to the **M** terminal (motor/load) on the right side.
- Connect all ground wires (typically green or bare copper) together with a wire nut and secure them inside the switch cover.

- **For 12V Systems:**

- Connect the positive (+) wire from the 12V power source to the **L1** terminal.
- Connect the positive (+) wire going to the water pump to the **M** terminal (motor/load) on the left side.
- The **M** and **L2** terminals on the right side are not used for 12V.
- Connect all negative (-) wires together with a wire nut and secure them inside the switch cover.

After wiring, ensure all connections are secure and replace the switch cover.

6. OPERATING INSTRUCTIONS AND ADJUSTMENT

The LEFOO LF16 pressure switch is pre-set to a 30-50 PSI range. This means the pump will activate when pressure

drops to 30 PSI (cut-in) and deactivate when it reaches 50 PSI (cut-off). Adjustments can be made to fine-tune these settings.

6.1 Pressure Adjustment

The switch has two adjustment screws: a large central screw for the main pressure range (cut-in) and a smaller, offset screw for the differential (cut-off). Always disconnect power before making adjustments.

1. **Disconnect Power:** Ensure the power supply to the pump is OFF.
2. **Remove Cover:** Carefully remove the blue protective cover.
3. **Adjusting Cut-in Pressure (Main Setting):**
 - The large central screw adjusts the overall pressure range, primarily affecting the cut-in pressure.
 - Turning this screw **clockwise** will **increase** both the cut-in and cut-off pressures, maintaining the differential.
 - Turning this screw **counter-clockwise** will **decrease** both the cut-in and cut-off pressures, maintaining the differential.
 - For example, if the switch is set to 30-50 PSI and you adjust the central screw to lower the cut-in to 20 PSI, the new range will be approximately 20-40 PSI.
4. **Adjusting Cut-off Pressure (Differential Setting):**
 - The smaller screw, typically offset to the upper left, adjusts the differential, which primarily affects the cut-off pressure relative to the cut-in.
 - Adjust this screw **AFTER** setting your desired cut-in pressure with the central screw.
 - Turning this screw **clockwise** will **increase** the cut-off pressure.
 - Turning this screw **counter-clockwise** will **decrease** the cut-off pressure.
 - A full turn of either screw typically changes the PSI by approximately 2.5 PSI.
5. **Test and Verify:** After making adjustments, replace the cover, restore power, and monitor the pump's operation and pressure gauge to ensure the desired cut-in and cut-off points are achieved. Repeat adjustments as necessary.

Your browser does not support the video tag.

Video: A short demonstration of the LEFOO LF16 pressure switch, showing its external appearance and the process of removing the cover to access internal components. This video provides a visual overview of the product's physical aspects.

7. MAINTENANCE

Regular maintenance helps ensure the longevity and reliable operation of your LEFOO LF16 pressure switch.

- **Periodic Inspection:** Annually inspect the switch for any signs of wear, corrosion, or damage to the casing and electrical connections.
- **Cleanliness:** Keep the area around the switch clean and free from debris, dust, or insects that could interfere with its operation.
- **Electrical Connections:** With power disconnected, periodically check electrical connections for tightness. Loose connections can lead to arcing and switch failure.
- **Pressure Verification:** Periodically verify the cut-in and cut-off pressures using a reliable pressure gauge to ensure the switch is operating within its set parameters.

8. TROUBLESHOOTING

This section addresses common issues you might encounter with your pressure switch.

Problem	Possible Cause	Solution
Pump runs continuously or cycles too frequently.	• Low air charge in pressure tank. • Leak in the plumbing system. • Pressure switch contacts are stuck or faulty. • Incorrect pressure settings.	• Check and recharge pressure tank air. • Inspect plumbing for leaks and repair. • Disconnect power, inspect switch contacts for debris or damage. Replace if necessary. • Adjust pressure settings as described in Section 6.1.
Pump does not start.	• No power to the switch/pump. • Pressure switch contacts are open or faulty. • Pump motor issue. • Pressure is above cut-in setting.	• Check circuit breaker and power supply. • Disconnect power, inspect switch contacts. Replace if necessary. • Consult pump manual or a qualified technician. • Verify system pressure.
Inaccurate pressure readings or inconsistent operation.	• Clogged pressure sensing port. • Faulty pressure gauge. • Switch diaphragm damage.	• Disconnect power, remove switch, and clean the sensing port. • Replace pressure gauge. • Replace the pressure switch.

9. WARRANTY AND SUPPORT

The LEFOO LF16 Water Pump Pressure Switch comes with a one-year warranty from the date of purchase. This warranty covers defects in materials and workmanship under normal use.

For warranty claims, technical support, or any operational issues, please contact LEFOO customer service. Keep your proof of purchase for warranty validation.

Contact Information: Please refer to the LEFOO official website or your purchase documentation for the most current contact details.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question