

LEFOO LF10-W1

LEFOO LF10-W Water Pump Pressure Switch Instruction Manual

Model: LF10-W1

- [Overview](#)
- [Safety](#)
- [Features](#)
- [Installation](#)
- [Operation](#)
- [Adjustment](#)
- [Maintenance](#)
- [Troubleshooting](#)
- [Specifications](#)
- [Support](#)

1. OVERVIEW

The LEFOO LF10-W series pressure switch is designed to provide reliable control for automatic water systems. It is commonly used as original equipment for water well pumps and pumping systems. This switch automatically activates the pump upon restoration of water supply, ensuring consistent water pressure. Its straightforward design facilitates ease of use for both professional installers and general users. The LF10-W pressure switch holds UL, TUV, CE, and CSA agency approvals, ensuring compliance with various safety and quality standards.



Figure 1: Front view of the LEFOO LF10-W Water Pump Pressure Switch, showing its compact black housing.

2. SAFETY INFORMATION

Read and understand all instructions before installing or operating this device. Failure to follow these instructions may result in electric shock, fire, serious injury, or death.

- **Electrical Hazard:** Disconnect power at the circuit breaker or fuse box before installing or servicing the pressure switch. Ensure the power source is locked out and tagged out to prevent accidental re-energization.
- **Qualified Personnel:** Installation and wiring should only be performed by a qualified electrician or licensed professional in accordance with all local and national electrical codes.
- **Proper Grounding:** Ensure the pressure switch and the pump system are properly grounded to prevent electrical shock.

- **Voltage and Amperage:** Verify that the voltage and amperage ratings of the pressure switch match the requirements of your pump system. Do not exceed the maximum electrical ratings of the switch.
- **Water Pressure:** Ensure the system pressure does not exceed the maximum rated pressure of the switch.
- **Environmental Conditions:** Install the switch in a dry location, protected from direct moisture, extreme temperatures, and corrosive environments.

3. PRODUCT FEATURES

- **Adjustable Pressure Settings:** Factory set to 30-50 PSI (cut-in: 30psi, cut-off: 50psi). Can be adjusted to 40-60 PSI or 60-80 PSI.
- **Standard Connection:** Features one 1/4 NPT female port for easy plumbing integration.
- **High Electrical Rating:** Suitable for 120VAC, 20A and 240VAC applications.
- **Contact Arrangement:** Normal Close (NC) contact configuration.
- **Stable Performance:** Designed for no drift pressure settings, ensuring consistent operation.
- **Certifications:** UL, TUV, CE, and CSA approved for safety and quality assurance.

4. INSTALLATION

Proper installation is crucial for the safe and effective operation of the pressure switch. Always ensure power is disconnected before beginning installation.

4.1 Plumbing Connection

1. Locate the 1/4 NPT female port on the bottom of the pressure switch.
2. Apply thread sealant (e.g., PTFE tape) to the male threads of the pipe or fitting that will connect to the switch.
3. Carefully thread the pressure switch onto the pipe or fitting. Do not overtighten, as this can damage the switch or the plumbing.
4. Ensure a watertight seal.



Figure 2: Bottom view of the pressure switch, highlighting the 1/4 NPT female port for plumbing connection and the 30-50 PSI label.

4.2 Electrical Wiring

All electrical wiring must comply with local and national electrical codes. Ensure power is OFF before wiring.

1. Open the cover of the pressure switch to expose the electrical terminals.
2. Identify the "LINE" terminals (for incoming power) and "MOTOR" terminals (for connecting to the pump motor). Refer to the wiring diagram on the product label.
3. Connect the incoming power supply wires to the "LINE" terminals.

4. Connect the pump motor wires to the "MOTOR" terminals.
5. Ensure all connections are secure and tight.
6. Properly ground the switch and the pump system.
7. Replace the cover securely after wiring is complete.



Figure 3: Internal view of the pressure switch, showing the "LINE" and "MOTOR" electrical terminals for wiring connections.



Figure 4: Angled internal view providing a clearer perspective of the wiring access points and terminal layout.

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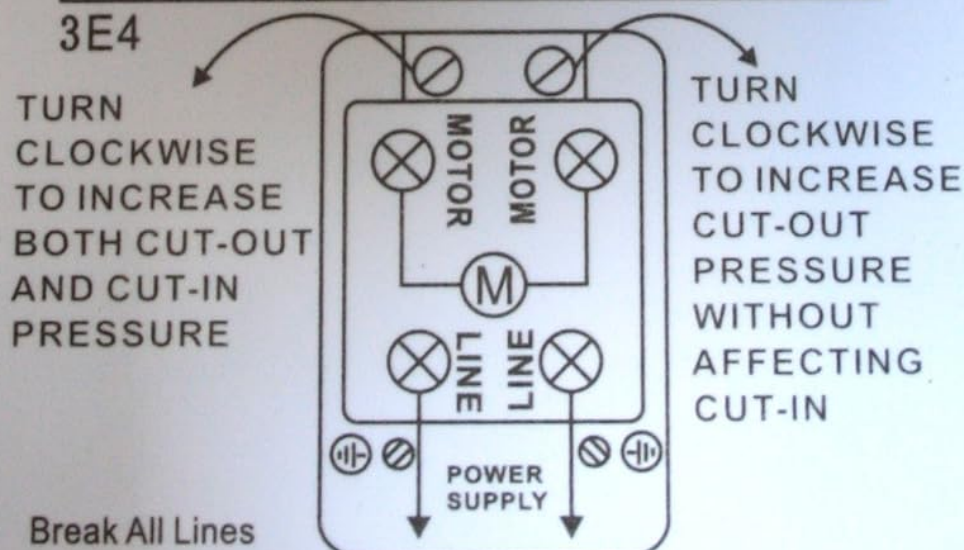
PRESSURE CONTROL

MODEL LF10-W

DPST

PRESSURE	MIN ON	MAX OFF	DIFFERENTIAL
PSI	30	100	20-35

2 POLE RATING					
1PH		3PH	DC		
120V	240V	240V	32V	120V	240V
20A	12A	9.6A	8.6A	3.1A	1.6A
3/2HP	2HP	3HP	1/4HP	1/4HP	1/4HP



UL® **CSA**®

E228961 220707

ON 30
(CUT-IN) PSI

OFF 50
(CUT-OUT) PSI

LEFOO INDUSTRIAL CO.,LTD.

Figure 5: Product label detailing the wiring diagram, electrical ratings, and pressure adjustment instructions.

5. OPERATION

Once properly installed and wired, the LEFOO LF10-W pressure switch operates automatically to maintain water pressure within your system.

- When the system pressure drops to the "cut-in" setting (e.g., 30 PSI), the switch closes its contacts, turning on the pump.
- The pump will run, increasing the system pressure.
- When the system pressure reaches the "cut-off" setting (e.g., 50 PSI), the switch opens its contacts, turning off the pump.
- This cycle repeats as water is used and pressure fluctuates, ensuring a consistent water supply.

6. PRESSURE ADJUSTMENT

The LF10-W pressure switch is factory set to 30-50 PSI. It can be adjusted to other common pressure ranges like 40-60 PSI or 60-80 PSI. Adjustments should be made with power disconnected and with caution.

Refer to the wiring diagram on the product label (Figure 5) for visual guidance on adjustment screws.

- **To Increase Both Cut-Out and Cut-In Pressure:** Locate the main adjustment screw (often larger). Turn this screw **clockwise** to increase both the cut-in and cut-off pressure settings simultaneously.
- **To Increase Cut-Out Pressure Without Affecting Cut-In:** Locate the differential adjustment screw (often smaller). Turn this screw **clockwise** to increase only the cut-off pressure, thereby increasing the pressure differential.

After making adjustments, restore power and observe the pump's cycling to ensure the desired pressure range is achieved. Repeat adjustments as necessary.

7. MAINTENANCE

The LEFOO LF10-W pressure switch is designed for long-term, reliable operation with minimal maintenance. However, periodic checks can help ensure optimal performance and longevity.

- **Visual Inspection:** Periodically inspect the switch for any signs of physical damage, corrosion, or loose connections. Ensure the housing is intact and free from cracks.
- **Electrical Connections:** With power disconnected, occasionally check the electrical terminals to ensure they remain tight and free from oxidation.
- **Cleanliness:** Keep the exterior of the switch clean and free from dust, dirt, or debris that could impede its operation or cause overheating.
- **Pressure Tank Check:** For systems with a pressure tank, regularly check the air charge in the tank. An improperly charged tank can cause the pressure switch to cycle excessively, leading to premature wear.

8. TROUBLESHOOTING

Before attempting any troubleshooting, ensure power to the pump system is disconnected at the main breaker.

Problem	Possible Cause	Solution
Pump does not start.	No power to the switch. Faulty wiring connection. Pressure switch contacts stuck open. Pump motor issue.	Check circuit breaker/fuse. Verify all electrical connections are secure. Inspect switch contacts for damage or debris (with power off). Consult a pump technician.
Pump runs continuously.	Pressure switch contacts stuck closed. System leak. Pump unable to build pressure. Pressure switch set too high.	Inspect switch contacts for damage or debris (with power off). Check for leaks in plumbing system. Inspect pump for issues (e.g., clogged impeller, worn parts). Adjust cut-off pressure setting (see Section 6).
Pump cycles too frequently (short cycling).	Low air charge in pressure tank. Small leak in system. Pressure switch differential too narrow.	Check and recharge pressure tank air. Locate and repair any leaks. Adjust differential pressure (see Section 6).
Inaccurate pressure readings.	Faulty pressure gauge. Debris in pressure sensing port.	Verify with a known accurate pressure gauge. Clean the pressure sensing port (with power off and system depressurized).

9. SPECIFICATIONS

Attribute	Value
Model Number	LF10-W1
Pressure Setting (Factory)	Cut-in: 30 PSI, Cut-off: 50 PSI

Attribute	Value
Adjustable Pressure Ranges	30-50 PSI, 40-60 PSI, 60-80 PSI
Port Connection	1/4 NPT Female
Electrical Rating (120VAC)	20 Amp
Electrical Rating (240VAC)	20 Amp
Contact Arrangement	Normal Close (NC)
Product Dimensions	3.7 x 3 x 2.6 inches
Item Weight	10.4 ounces
Certifications	UL, TUV, CE, CSA

10. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries regarding your LEFOO LF10-W pressure switch, please contact the manufacturer directly. Refer to the product packaging or the LEFOO official website for contact details.

Manufacturer: LEFOO

For further assistance, you may visit the [LEFOO Store on Amazon](#).

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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

Answered questions about this manual

How do I wire the power cord to the Lefoo LF-10-W pressure switch on my Wayne jet pump if there is no wiring diagram on the cover?

To wire your Lefoo LF-10-W pressure switch, you must distinguish between the incoming power (Line) and the pump motor (Motor) terminals. Since your motor wiring is already intact, you are looking for the two...

[Read full answer](#)

