

Honeywell L404F1102

Honeywell L404F1102 Pressuretrol Controller User Manual

Model: L404F1102

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of the Honeywell L404F1102 Pressuretrol Controller. This device is designed for industrial applications to control pressure within specified ranges. Adherence to these instructions is crucial for safe and efficient performance.

2. SAFETY INFORMATION

WARNING: Improper installation, adjustment, or operation could result in personal injury or equipment damage. This product must be installed and serviced by a qualified technician.

- Disconnect power supply before installation or servicing to prevent electrical shock or equipment damage.
- Ensure all wiring complies with local electrical codes and regulations.
- Do not exceed the specified pressure ratings of the device.
- Wear appropriate personal protective equipment (PPE) during installation and maintenance.
- This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

3. PRODUCT OVERVIEW

The Honeywell L404F1102 Pressuretrol Controller is a robust device used for regulating pressure in various industrial systems. It features adjustable main pressure and differential settings, allowing precise control over system operation.



Figure 1: Honeywell L404F1102 Pressuretrol Controller. The image displays the device from a top-front angle, showing the clear protective cover. Inside, the main pressure and differential pressure scales are visible on the left, marked in PSI and kPa. On the right, the electrical terminals are present. The Honeywell logo is visible on the lower left, and "PRESSUETROL" is printed on the right side of the internal mechanism.

Key Components:

- **Main Pressure Scale:** Located on the right side of the internal mechanism, labeled "MAIN". This scale indicates the primary pressure setpoint, with markings from 70 to 1000 kPa and 10 to 150 PSI.
- **Differential Pressure Scale:** Located on the left side of the internal mechanism, labeled "DIFF.". This scale indicates the pressure difference, with markings from 10 to 22 PSI and 80 to 160 kPa. A note "DIFF. IS SUBTRACTIVE" is present below this scale.
- **Adjustment Screws:** Used to set the main pressure and differential values.
- **Electrical Terminals:** Located on the right side, typically labeled for wiring connections (e.g., R, B, W).
- **Pressure Connection:** A brass fitting at the bottom of the unit for connecting to the pressure source.

4. SETUP AND INSTALLATION

Installation should only be performed by trained and qualified personnel. Ensure all local codes and

regulations are followed.

4.1 Mounting

- Mount the controller in a location free from excessive vibration, moisture, and corrosive atmospheres.
- Ensure adequate clearance for wiring and adjustments.
- The unit can be mounted in any position, but vertical mounting with the pressure connection pointing downwards is generally recommended to prevent debris accumulation.

4.2 Wiring

- **Before wiring, ensure the power supply is disconnected.**
- Connect electrical wiring to the terminals as per the system's electrical schematic. Refer to the specific wiring diagram provided with your system or by Honeywell for the L404F1102 model.
- Ensure all connections are secure and properly insulated.

4.3 Pressure Connection

- Connect the pressure line to the brass fitting at the bottom of the controller.
- Use appropriate sealing compounds or tape to ensure a leak-free connection.
- Do not overtighten the connection, as this may damage the fitting or the sensor.

5. OPERATING INSTRUCTIONS

The L404F1102 Pressuretrol Controller allows for adjustment of both the main pressure setpoint and the differential pressure.

5.1 Setting the Main Pressure

1. Remove the clear protective cover.
2. Locate the main pressure adjustment screw, typically associated with the "MAIN" scale.
3. Turn the adjustment screw clockwise to increase the setpoint or counter-clockwise to decrease it.
4. Align the indicator with the desired pressure value on the "MAIN" scale (PSI or kPa).

5.2 Setting the Differential Pressure

1. Locate the differential pressure adjustment screw, typically associated with the "DIFF." scale.
2. Turn the adjustment screw to align the indicator with the desired differential value on the "DIFF." scale (PSI or kPa).
3. Remember that "DIFF. IS SUBTRACTIVE," meaning the controller will switch off when the pressure drops by the differential amount from the main setpoint. For example, if the main setpoint is 100 PSI and the differential is 10 PSI, the controller will switch on at 100 PSI and switch off at 90 PSI.
4. Replace the clear protective cover after adjustments are complete.

6. MAINTENANCE

The Honeywell L404F1102 Pressuretrol Controller is designed for reliable operation with minimal maintenance. However, periodic inspection is recommended to ensure continued performance.

- **Annual Inspection:** Visually inspect the controller for any signs of physical damage, corrosion, or loose connections.

- **Cleaning:** Keep the exterior of the unit clean and free from dust and debris. Do not use abrasive cleaners or solvents.
- **Functional Check:** Periodically verify the setpoints and differential operation to ensure they are within the desired parameters.
- **Pressure Connection:** Check the pressure connection for leaks.

Any repairs or internal servicing should only be performed by authorized service personnel.

7. TROUBLESHOOTING

This section provides basic troubleshooting steps for common issues. For more complex problems, contact a qualified service technician.

Problem	Possible Cause	Solution
Controller not responding to pressure changes.	No power; incorrect wiring; clogged pressure line; faulty sensor.	Check power supply; verify wiring connections; inspect and clear pressure line; contact service for sensor replacement.
Inaccurate pressure readings.	Incorrect calibration; external interference; sensor drift.	Verify setpoints; ensure proper installation environment; contact service for calibration or replacement.
Controller cycles too frequently or infrequently.	Differential setting too narrow or too wide.	Adjust the differential pressure setting as required for your application.

8. SPECIFICATIONS

Attribute	Detail
Model Number	L404F1102
Product Type	Pressuretrol Controller
Manufacturer	Honeywell
Product Dimensions	10.13 x 9.25 x 5.38 inches; 2.05 Pounds
ASIN	B008HOSCV0

9. WARRANTY INFORMATION

For detailed warranty information regarding the Honeywell L404F1102 Pressuretrol Controller, please refer to the documentation provided at the time of purchase or contact Honeywell customer support directly. Warranty terms and conditions may vary based on region and purchase agreement.

10. CUSTOMER SUPPORT

If you require technical assistance, have questions about installation, or need to report a product issue, please contact Honeywell customer support. Visit the official Honeywell website for contact details and

support resources.

You can also visit the [Honeywell Store on Amazon](#) for additional product information.