

ASHCROFT 1009AWL

ASHCROFT 1009AWL Pressure Gauge User Manual

Model: 1009AWL | Range: 0 to 400 psi

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your ASHCROFT 1009AWL Pressure Gauge. This general-purpose pressure gauge is designed for reliable measurement within a 0 to 400 psi range, featuring a 2-1/2 inch dial and liquid-filled construction for enhanced performance and durability.

Please read this manual thoroughly before using the product to ensure safe and efficient operation.

2. SAFETY INFORMATION

- **Pressure Limits:** Do not exceed the maximum rated pressure of 400 psi. Over-pressurization can cause gauge failure and potential injury.
- **Installation:** Ensure the gauge is installed by qualified personnel using appropriate tools and sealing methods.
- **System Compatibility:** Verify that the gauge's wetted parts (Brass/Bronze) are compatible with the process media to prevent corrosion or damage.
- **Temperature Limits:** Operate the gauge within the specified temperature range of -20°F to 150°F. Extreme temperatures can affect accuracy and lifespan.
- **Handling:** Avoid dropping or subjecting the gauge to severe impact, as this can damage internal components.

3. PRODUCT OVERVIEW AND COMPONENTS

The ASHCROFT 1009AWL Pressure Gauge is constructed for durability and accurate readings. Key components include:

- **Dial:** 2-1/2 inch diameter, clearly marked with 0-400 psi scale.
- **Pointer:** Indicates the measured pressure.
- **Case:** Made from 304 Stainless Steel for corrosion resistance.
- **Lens:** Polycarbonate material for visibility and protection.

- **Connection:** 1/4 inch MNPT (Male National Pipe Taper) located at the bottom of the gauge.
- **Wetted Parts:** Brass/Bronze construction ensures compatibility with various media.
- **Liquid Filling:** Glycerin-filled for dampening pulsation and vibration, enhancing pointer stability and extending gauge life.



Figure 1: ASHCROFT 1009AWL Pressure Gauge. This image displays the front view of the pressure gauge, showing the 0-400 psi dial, the ASHCROFT brand logo, and the bottom-mounted 1/4 inch MNPT connection.

4. INSTALLATION AND SETUP

1. **Inspect Gauge:** Before installation, visually inspect the gauge for any signs of damage. Do not install a damaged gauge.
2. **Prepare Connection:** Ensure the system connection point is clean and free of debris.
3. **Apply Sealant:** Apply an appropriate thread sealant (e.g., PTFE tape or pipe dope) to the 1/4 inch MNPT threads of the gauge connection. Ensure sealant does not enter the gauge or system.
4. **Thread Gauge:** Carefully thread the gauge into the system connection by hand until finger-tight.
5. **Tighten:** Using a wrench on the wrench flats of the gauge connection (not the case), tighten the gauge until secure. Avoid over-tightening, which can damage the threads or the gauge.

6. **Verify Orientation:** Ensure the gauge dial is oriented for easy reading.
7. **System Pressurization:** Slowly pressurize the system and check for leaks at the connection point.

5. OPERATION

The ASHCROFT 1009AWL Pressure Gauge is designed for straightforward operation. Once properly installed, the gauge will continuously display the system pressure.

- **Reading the Gauge:** Observe the pointer's position on the dial. The primary scale is in psi (pounds per square inch), ranging from 0 to 400. The smallest graduation is 10 psi.
- **Operating Conditions:** Ensure the operating environment and process media remain within the gauge's specified temperature range of -20°F to 150°F.
- **Accuracy:** The gauge provides readings with an accuracy of +/-1.50% of full scale.
- **Pulsation:** The glycerin filling helps to dampen pointer fluctuation in systems with pulsation or vibration, providing a more stable reading.

6. MAINTENANCE

Regular maintenance ensures the longevity and accuracy of your pressure gauge.

- **Routine Inspection:** Periodically inspect the gauge for any physical damage, such as a cracked lens, bent pointer, or corroded case.
- **Cleanliness:** Keep the gauge lens clean to ensure clear visibility of the dial. Use a soft, damp cloth for cleaning; avoid abrasive cleaners.
- **Recalibration:** While ASHCROFT gauges are built for accuracy, prolonged use or exposure to harsh conditions may necessitate recalibration. Consult a qualified technician for recalibration services if accuracy is critical and suspected to be compromised.
- **Liquid Fill:** The glycerin fill is sealed. If the liquid level appears significantly low or cloudy, the gauge may require replacement or professional servicing.

7. TROUBLESHOOTING

Below are common issues and potential solutions for the ASHCROFT 1009AWL Pressure Gauge:

- **No Reading / Pointer Stuck:**
 - Verify that the system is pressurized.
 - Check for blockages in the connection line to the gauge.
 - Inspect for physical damage to the gauge.
- **Inaccurate Reading:**
 - Ensure the gauge is operating within its specified temperature range.
 - Confirm the gauge's range is appropriate for the system pressure.
 - Consider professional recalibration if accuracy is critical and other factors are ruled out.
- **Leak at Connection:**
 - Depressurize the system.
 - Re-apply thread sealant and re-tighten the connection.
 - Inspect threads for damage.

- **Liquid Fill Discoloration/Loss:**

- This may indicate a seal compromise or internal issue. The gauge may need replacement.

8. TECHNICAL SPECIFICATIONS

Model Series	1009AWL
Pressure Range	0 to 400 psi
Accuracy	+/-1.50% of full scale
Nominal Dial Size	2-1/2 inches
Connection Size	1/4 inch MNPT
Connection Location	Bottom
Case Material	304 Stainless Steel
Wetted Parts	Brass / Bronze
Lens Material	Polycarbonate
Liquid Filled	Yes (Glycerin)
Operating Temperature Range	-20°F to 150°F (-29°C to 66°C)
Product Dimensions (L x W x H)	4 x 3 x 1 inches
Item Weight	1 Pound
UPC	759426066021

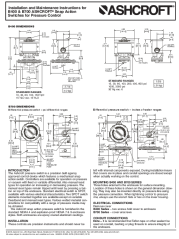


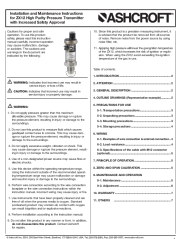
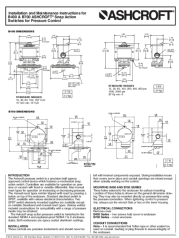
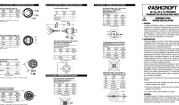
9. WARRANTY INFORMATION

The ASHCROFT 1009AWL Pressure Gauge comes with a **5-year manufacturer's warranty**. This warranty covers defects in materials and workmanship under normal use and service. For specific terms and conditions, please refer to the official ASHCROFT warranty statement or contact ASHCROFT customer support.

10. CUSTOMER SUPPORT

For technical assistance, troubleshooting beyond this manual, or warranty claims, please contact ASHCROFT customer support directly. Visit the official ASHCROFT website for contact details and additional resources.

ASHCROFT Official Website: www.ashcroft.com

	<p>Ashcroft B400 & B700 Snap Action Pressure Switch Installation and Maintenance Guide</p> <p>This guide provides essential information for the installation and maintenance of Ashcroft B400 and B700 series snap action pressure switches. It covers product overview, dimensions, mounting, electrical and conduit connections, setpoint adjustment procedures, and recommended practices for safe and reliable operation.</p>
	<p>Ashcroft Model 1130 & 1140 Differential Pressure Gauge/Switch Installation Instructions</p> <p>Installation instructions and technical details for Ashcroft Model 1130 and 1140 Differential Pressure Gauges with optional switches. Covers operating principles, installation, precautions, and switch wiring.</p>
	<p>Ashcroft S10 & S50 RTD and Thermocouple Installation and Maintenance Guide</p> <p>Provides detailed installation and maintenance instructions for Ashcroft S10 and S50 RTD and Thermocouple temperature sensors. Covers general precautions, storage, specific installation procedures for RTDs and thermocouples, and maintenance guidelines to ensure accurate measurements and longevity.</p>
	<p>Ashcroft ZX12 High Purity Pressure Transmitter: Installation and Maintenance Guide</p> <p>Comprehensive installation and maintenance instructions for the Ashcroft ZX12 High Purity Pressure Transmitter, covering safety precautions, wiring, operation, calibration, and warranty information.</p>
	<p>Ashcroft B400 & B700 Snap Action Pressure Switch Installation and Maintenance Guide</p> <p>Detailed installation and maintenance instructions for Ashcroft B400 and B700 series snap action pressure switches. Covers dimensions, electrical connections, setpoint adjustment, and mounting procedures for reliable pressure control.</p>
	<p>Ashcroft G2, G3, GV & T2 Pressure Transmitter Instruction Sheet</p> <p>Instruction sheet for Ashcroft G2, G3, GV, and T2 pressure transmitters, covering electrical terminations, wiring, installation, and safety warnings.</p>