

WIKA 9767070TCAL

WIKA 9767070 Industrial Pressure Gauge

USER MANUAL

1. Introduction

This user manual provides essential information for the safe and effective operation, installation, and maintenance of your WIKA 9767070 Industrial Pressure Gauge. Please read this manual thoroughly before using the device and retain it for future reference.

2. Product Overview

The WIKA 9767070 Industrial Pressure Gauge is designed for precise measurement of pressure in various industrial applications. It features copper alloy wetted parts for corrosion resistance and a durable stainless steel case. This liquid/refillable gauge is suitable for gaseous or liquid samples, including those found in hydraulics and compressors.



Figure 2.1: Front view of the WIKA 9767070 Industrial Pressure Gauge. The dial clearly displays pressure readings in PSI, ranging from 0 to 160, with a prominent needle indicating the current pressure. The WIKA logo is visible at the bottom of the dial.







Figure 2.2: Side view of the WIKA 9767070 Industrial Pressure Gauge. This view highlights the robust stainless steel casing and the brass 1/4" Male NPT bottom mount connection, which is used for installation into the system.

Key Features:

- Copper alloy wetted parts for high corrosion resistance against salty liquids.
- Circular dial enclosed in a stainless steel case for corrosion resistance.
- Pressure ranges from 15 psi to 15,000 psi (Note: This specific model's range is 0-160 psi).
- Display accuracy ranges from ± 1 percent of span to ± 2.5 percent of span.
- Male NPT connection with 1/8", 1/4", or 1/2" rate (This model features 1/4" NPT Male Bottom Mount).

3. Safety Information

Always adhere to the following safety precautions to prevent injury or damage to the pressure gauge and associated equipment:

- Ensure the pressure gauge's maximum operating pressure is suitable for your application. Do not exceed the specified range.
- Verify compatibility of wetted parts (copper alloy) with the media being measured to prevent corrosion and failure.
- Install the gauge securely using appropriate tools. Do not overtighten the connection.
- Protect the gauge from excessive vibration, shock, and extreme temperatures outside its operating range.
- In case of damage or malfunction, do not attempt to repair the gauge yourself. Contact qualified personnel or WIKA support.
- Wear appropriate personal protective equipment (PPE) when handling and installing pressure gauges, especially when dealing with pressurized systems.

4. Setup and Installation

Proper installation is crucial for accurate readings and longevity of the pressure gauge.

1. **Unpacking:** Carefully remove the pressure gauge from its packaging. Inspect for any visible damage.
2. **Connection Type:** This model features a 1/4" Male NPT Bottom Mount connection. Ensure your system has a compatible female NPT port.
3. **Thread Sealant:** Apply a suitable thread sealant (e.g., PTFE tape or pipe dope) to the male NPT threads of the gauge. Ensure the sealant does not enter the gauge's inlet.
4. **Mounting:** Screw the gauge into the female NPT port. Use a wrench on the hex flats of the connection. *Do not* use the gauge case or bezel to tighten, as this can damage the internal mechanism.
5. **Orientation:** Orient the gauge so the dial is easily readable.
6. **System Pressurization:** Slowly pressurize the system after installation, checking for any leaks at the connection point.

5. Operating Instructions

The WIKA 9767070 pressure gauge provides a direct reading of system pressure.

- **Reading the Dial:** The gauge displays pressure in pounds per square inch (psi). The needle indicates the current pressure against the graduated scale.
- **Pressure Range:** This specific model has a range of 0-160 psi. Ensure the operating pressure of your system remains within this range.
- **Overpressure Protection:** While the gauge is designed for its specified range, continuous operation at or near the maximum pressure is not recommended for optimal lifespan. Avoid sudden pressure spikes beyond the gauge's maximum rating.
- **Liquid Filling:** This is a liquid/refillable gauge. The liquid (typically glycerin or silicone) dampens pulsations and vibrations, protecting the internal mechanism and improving readability. The liquid level should be maintained as per manufacturer guidelines.

6. Maintenance

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

- **Cleaning:** Clean the exterior of the gauge with a soft, damp cloth. Do not use abrasive cleaners or solvents that could damage the casing or dial.
- **Inspection:** Periodically inspect the gauge for any signs of damage, such as cracks in the casing, bent needle, or leaks at the connection.
- **Liquid Level Check:** For liquid-filled gauges, periodically check the liquid level. If the liquid level is significantly low or if the liquid appears cloudy or discolored, it may indicate a leak or contamination. Consult WIKA for refilling procedures or service.
- **Calibration:** Pressure gauges should be calibrated periodically by qualified personnel to ensure continued accuracy. The frequency of calibration depends on the application's requirements and industry standards.

7. Troubleshooting

Refer to the following table for common issues and their potential solutions:

Problem	Possible Cause	Solution
No pressure reading / Needle stuck at zero	No pressure in the system; Clogged connection; Damaged internal mechanism.	Verify system pressure; Check for obstructions in the connection line; If damaged, replace the gauge.
Inaccurate reading	Gauge out of calibration; Overpressure exposure; Temperature effects; Vibration.	Recalibrate the gauge; Ensure operating within specified range; Protect from extreme temperatures/vibration.
Liquid leakage from casing	Seal failure; Casing damage.	Contact WIKA support for repair or replacement. Do not attempt to seal yourself.
Needle fluctuates excessively	System pulsations; Low liquid fill level (for liquid-filled gauges).	Install a snubber or pulsation dampener; Check and replenish liquid fill if necessary (contact WIKA).

If the problem persists after attempting these solutions, contact WIKA Instrument Corporation for further assistance.

8. Specifications

The following are the technical specifications for the WIKA 9767070 Industrial Pressure Gauge (Model: 9767070TCAL):

- **Brand:** WIKA

- **Model Number:** 9767070TCAL
- **Pressure Range:** 0-160 psi
- **Accuracy:** $\pm 2/1/2\%$ of span (ASME Grade A)
- **Wetted Parts Material:** Copper Alloy
- **Case Material:** Stainless Steel
- **Dial Size:** 2-1/2 inches
- **Connection Type:** 1/4" Male NPT Bottom Mount
- **Type:** Liquid/Refillable
- **Item Weight:** 0.52 Pounds (approx. 8.32 ounces)
- **Manufacturer:** WIKA Instrument Corporation

9. Warranty and Support

WIKA Instrument Corporation manufactures high-quality measurement instruments. For specific warranty information regarding your WIKA 9767070 Industrial Pressure Gauge, please refer to the documentation included with your purchase or visit the official WIKA website.

For technical support, service, or inquiries about parts and accessories, please contact WIKA Instrument Corporation directly. Contact details can typically be found on their official website or product packaging.

Manufacturer: WIKA Instrument Corporation

