INSTRUKART LEO2

INSTRUKART Keller LEO2 Digital Pressure Gauge User Manual
Model: LEO2

1. INTRODUCTION

The INSTRUKART Keller LEO2 Digital Pressure Gauge is a compact, battery-powered instrument designed for precise pressure measurement in various industrial applications, servicing, and calibration/testing. It features a highly accurate piezoresistive pressure cell, individually adjusted for optimal performance, ensuring a high level of accuracy. This manual provides essential information for the safe and effective use of your LEO2 Digital Pressure Gauge.

2. SAFETY INFORMATION

WARNING: Please read this manual carefully before operating the device. Failure to follow instructions may result in damage to the device or personal injury.

- Do not expose the device to extreme temperatures, humidity, or corrosive environments.
- Ensure the pressure connection is securely fastened before applying pressure.
- Do not exceed the specified pressure ranges.
- Replace batteries only with the recommended type (CR 2430) and ensure correct polarity.
- Do not attempt to disassemble or repair the device yourself. Refer servicing to qualified personnel.

3. PACKAGE CONTENTS

Verify that all items listed below are present in your package:

- 1 x Keller LEO2 Digital Pressure Gauge
- 1 x Instruction Manual
- 1 x G 1/4" Adapter

4. PRODUCT FEATURES

The Keller LEO2 Digital Pressure Gauge offers a range of advanced features for reliable pressure measurement:

- **Microprocessor-Controlled:** Ensures highly accurate and versatile pressure measurement.
- **Digital Indication:** Clear display of actual pressure, along with maximum (Max.) and minimum (Min.) pressure values recorded since the last reset.
- **Piezoresistive Pressure Transducer:** Equipped with an internal EEPROM for precise and stable readings.
- **Wide Pressure Ranges:** Available in various ranges, including 0 to 100 bar (resolution 1 mbar), -1 to 30 bar (resolution 10 mbar), 0 to 300 bar (resolution 100 mbar), and 0 to 700 bar (resolution 200 mbar).
- **Long Battery Life:** Provides up to 1000 hours of continuous operation using 3V CR 2430 batteries.
- **High Accuracy:** Less than 0.1 %FS (Full Scale).
- **Robust Design:** IP 65 protection rating, suitable for various industrial environments.
- **Compact Dimensions:** Measures 59 x 95 x 32 mm and weighs 125 g.
- **Standard Pressure Connection:** Features a 7/16"-20 UNF connection, with a G 1/4" adapter included for versatility.

5. PRODUCT OVERVIEW

Figure 1: Front view of the LEO2 Digital Pressure Gauge, displaying current and maximum pressure values.

Figure 2: Side view illustrating the robust pressure connection at the base of the gauge.

Figure 3: Front view of the gauge with the G 1/4" adapter securely attached.

Figure 4: Angled view highlighting the clear digital display and user interface buttons.

Figure 5: Rear view, indicating the location of the battery compartment for CR 2430 batteries.

Figure 6: The LEO2 gauge connected to a flexible hose, demonstrating its adaptability for various setups.

Figure 7: The LEO2 Digital Pressure Gauge neatly stored within its protective carrying case.

6. SETUP

6.1. Battery Installation

1. Locate the battery compartment cover at the rear of the device (refer to Figure 5).
2. Carefully open the cover.
3. Insert the 3V CR 2430 batteries, ensuring correct polarity as indicated inside the compartment.
4. Securely close the battery compartment cover.

6.2. Pressure Connection

1. The LEO2 features a 7/16"-20 UNF pressure connection. An adapter for G 1/4" is included for broader compatibility.
2. Attach the appropriate adapter (if needed) to the gauge's pressure connection.
3. Securely fasten the gauge (with or without adapter) to your pressure source. Ensure all connections are tight and leak-free. Use appropriate sealing materials (e.g., PTFE tape) if necessary to prevent leaks.

7. OPERATION

7.1. Power On/Off

The LEO2 Digital Pressure Gauge powers on automatically when any button is pressed. To conserve battery life, the device will automatically power off after a period of inactivity.

7.2. Display Readings

The gauge features a dual display:

- **Top Display:** Shows the current actual pressure reading.
- **Bottom Display:** Shows either the maximum (MAX) or minimum (MIN) pressure recorded since the last reset.

7.3. Selecting Display Mode (MAX/MIN)

Use the 'SELECT' button (typically on the left) to toggle between displaying the MAX and MIN pressure values on the bottom screen.

7.4. Resetting MAX/MIN Values

To clear the recorded MAX and MIN pressure values, press and hold the 'ENTER' button (typically on the

right) until the values reset.

8. MAINTENANCE

8.1. Battery Replacement

When the battery indicator appears on the display or the device fails to power on, it is time to replace the batteries. Refer to section 6.1 'Battery Installation' for detailed instructions.

8.2. Cleaning

Clean the exterior of the device with a soft, damp cloth. Do not use abrasive cleaners, solvents, or harsh chemicals, as these can damage the casing or display. Ensure no liquid enters the pressure connection or display area.

8.3. Storage

When not in use for extended periods, store the LEO2 Digital Pressure Gauge in its protective carrying case (refer to Figure 7) in a dry, cool place, away from direct sunlight, extreme temperatures, and corrosive substances.

9. TROUBLESHOOTING

If you encounter issues with your LEO2 Digital Pressure Gauge, refer to the following common troubleshooting steps:

- **No Display / Device Not Powering On:**

    - Check battery charge.
    - Ensure batteries are installed correctly with proper polarity.
    - Replace batteries with new CR 2430 cells if necessary.

- **Inaccurate Readings:**

    - Verify that the pressure connection is secure and free of leaks.
    - Ensure the device is operating within its specified temperature and pressure ranges.
    - Check for any physical damage to the sensor or connection.

- **Display Errors or Unresponsive Buttons:**

    - Try resetting the device by temporarily removing and then reinserting the batteries.
    - If the issue persists, contact customer support for further assistance.

10. SPECIFICATIONS

Feature	Specification
Brand	INSTRUKART
Model	LEO2
Product Dimensions	3.74 x 2.32 x 1.26 inches (59 x 95 x 32 mm)
Item Weight	125 Grams (4.41 ounces)

Feature	Specification
Material	Stainless Steel (for pressure connection)
Accuracy	< 0.1 %FS
Operating Temperature	-20 to 70 °C / 0 to 50 °C
Power Supply	3V batteries, Type CR 2430
Battery Life	1000 hours continuous operation
Protection Rating	IP 65
Pressure Connection	7/16"-20 UNF (Adapter G 1/4" included)
Pressure Ranges (Examples)	0 to 100 bar (Resolution: 1 mbar) -1 to 30 bar (Resolution: 10 mbar) 0 to 300 bar (Resolution: 100 mbar) 0 to 700 bar (Resolution: 200 mbar)

11. WARRANTY AND SUPPORT

For detailed warranty information, technical support, or service inquiries regarding your INSTRUKART Keller LEO2 Digital Pressure Gauge, please contact INSTRUKART customer service. Please retain your purchase receipt as proof of purchase for warranty claims.

Related Documents - LEO2

INSTRUKART

Digital High Pressure Pirani Gauge
DHPG 210 & DHPC 210S

Operation and Maintenance Manual

[Instrukart DHPG 210 & DHPC 210S Digital High Pressure Pirani Gauge Operation and Maintenance Manual](#)
This manual provides detailed operation and maintenance instructions for the Instrukart DHPG 210 and DHPC 210S Digital High Pressure Pirani Gauges. It covers product specifications, installation procedures, operating principles, circuit descriptions, and troubleshooting guidance.

	[KELLER LEO2-Ei Intrinsically Safe Digital Manometer for Hazardous Environments](#) This document provides comprehensive information on the KELLER LEO2-Ei Intrinsically Safe Digital Manometer, covering its features, operation, installation, battery replacement, and essential safety guidelines for use in potentially explosive atmospheres.
	[LEO2 Digital Charge Regulator with Auxiliary Outputs - Operating Instructions](#) Operating instructions for the LEO2 digital charge regulator with auxiliary outputs by Atersa Grupo Elecnor. This manual covers system regulation, alarms, auxiliary outputs, equipment protection, installation, programming, technical specifications, and warranty.
	[Airthings View Plus: Complete Indoor Air Quality Monitor - User Manual & Specs](#) Explore the Airthings View Plus, an advanced indoor air quality monitor designed for comprehensive home monitoring. It measures radon, PM2.5, CO2, VOCs, humidity, temperature, and air pressure, providing detailed insights via a customizable ePaper display, a mobile app, and an online dashboard. Learn about its smart home integrations, long battery life, and easy setup.
	**[Elitech RC-4/RC-4HA/RC-4HC Data Logger Quick Start Guide	Installation & Configuration](#)** Quick Start Guide for Elitech RC-4, RC-4HA, and RC-4HC data loggers. Learn how to install batteries, set up software, configure settings, start/stop logging, and troubleshoot common issues. Includes detailed technical specifications for temperature and humidity monitoring.