ZEEGII 2088

ZEEGII Pressure Transmitter 2088 User Manual

Model: 2088 | Brand: ZEEGII

1. PRODUCT OVERVIEW

The ZEEGII 2088 Pressure Transmitter is a robust and reliable device designed for accurate pressure measurement in various industrial applications. It features a stainless steel probe, digital display, and provides a standard 4-20mA output signal. This manual provides essential information for the safe and effective installation, operation, and maintenance of your pressure transmitter.

Key Features:

- Advanced pressure sensors with highly sensitive, stable, and reliable components.
- Available in a variety of pressure ranges to meet diverse application needs.
- Lightweight, compact design for easy installation and operation.
- Suitable for a wide range of variable pressure conditions.
- Stainless steel material for the probe part, cast aluminum junction box.
- Digital display for clear pressure readings.

Figure 1: Main view of the ZEEGII 2088 Pressure Transmitter, showing the digital display and overall construction.

2. SAFETY INFORMATION

Read all instructions carefully before installing or operating the device. Failure to follow these instructions may result

in equipment damage, personal injury, or death.

- Ensure the power supply is disconnected before any installation or maintenance work.
- Verify that the pressure range of the transmitter matches the application requirements to prevent overload.
- Do not exceed the specified overload pressure (2 times full scale).
- Ensure proper grounding to prevent electrical hazards.
- Use appropriate personal protective equipment (PPE) during installation and maintenance.
- Avoid exposing the device to corrosive media unless explicitly stated as compatible.

3. SETUP AND INSTALLATION

Proper installation is crucial for the accurate and reliable operation of the pressure transmitter.

3.1 Electrical Connection

The transmitter requires a DC power supply. The default power supply is 24VDC, with an operating range of 12-36VDC. The output signal is 4-20mA.

Figure 2: Internal wiring terminals of the ZEEGII 2088 Pressure Transmitter. Connect +24V to the positive terminal and I (current output) to the signal terminal for 4-20mA output.

- Connect the positive lead of the 24VDC power supply to the "+24V" terminal.
- Connect the signal lead (for 4-20mA output) to the "I" terminal.
- Ensure all connections are secure and properly insulated.

3.2 Mechanical Connection

The pressure port is available in various thread types. Ensure the chosen thread type matches your system's connection point. Common options include M20×1.5, G1/2, G1/4, G3/8, and NPT1/4.

Figure 3: Side view of the ZEEGII 2088 Pressure Transmitter, highlighting the robust housing and the threaded pressure port at the bottom.

- Apply appropriate thread sealant to the pressure port threads if necessary.
- Carefully screw the transmitter into the process connection.
- Tighten the connection securely, but do not overtighten to avoid damaging the threads or the sensor.
- Ensure the measuring medium is compatible with 316L stainless steel.

4. OPERATING INSTRUCTIONS

Once installed and powered, the ZEEGII 2088 Pressure Transmitter will begin measuring pressure and outputting a

4-20mA signal proportional to the measured pressure.

- **Power On:** Apply the specified DC power (12-36VDC, default 24VDC) to the transmitter.
- **Pressure Measurement:** The digital display will show the current pressure reading.
- **Signal Output:** The 4-20mA current output will correspond to the measured pressure within the specified range (e.g., 4mA for 0 bar, 20mA for 0.6 bar for the 0-0.6bar model).
- **Response Time:** The device has a fast response time of 1ms.

5. MAINTENANCE

Regular maintenance helps ensure the longevity and accuracy of your pressure transmitter.

- **Cleaning:** Periodically clean the exterior of the transmitter with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- **Inspection:** Regularly inspect the electrical connections and pressure port for any signs of corrosion, damage, or leaks.
- **Calibration:** While the device offers long-term stability (±0.2%F.S/year), periodic calibration by qualified personnel is recommended to maintain optimal accuracy, especially in critical applications.
- **Environmental Conditions:** Ensure the operating environment remains within the specified temperature ranges (Compensation temperature: -10°C to +70°C; Medium temperature: -20°C to +85°C).

6. TROUBLESHOOTING

If you encounter issues with your pressure transmitter, refer to the following common troubleshooting steps:

- **No Display/No Output:**
  - Check the power supply voltage (12-36VDC).
  - Verify electrical connections are secure and correct.
  - Ensure no short circuits or open circuits in the wiring.

- **Inaccurate Readings:**
  - Confirm the pressure range of the transmitter matches the application.
  - Check for blockages in the pressure port or sensing element.
  - Ensure the medium temperature is within the specified range.
  - Consider professional calibration if accuracy issues persist.

- **Intermittent Output:**
  - Inspect wiring for loose connections or damage.
  - Check for electromagnetic interference (EMI) in the environment.

If the problem cannot be resolved using these steps, contact ZEEGII customer support or a qualified technician.

7. SPECIFICATIONS

Parameter	Value
Model	2088
Probe Material	Stainless Steel (316L compatible)

Parameter	Value
Junction Box Material	Cast Aluminum
Overload Pressure	2 times full scale
Measuring Medium	Air and liquid compatible with 316L stainless steel
Output Signal	4-20mA
Power Supply Voltage	24VDC default (12-36VDC)
Accuracy	±0.5%F.S
Long-term Stability	±0.2%F.S/year
Compensation Temperature	-10°C to +70°C
Medium Temperature	-20°C to +85°C
Storage Temperature	-40°C to +125°C
Response Time	1ms
Pressure Port Options	M20×1.5, G1/2, G1/4, G3/8, NPT1/4
Protection Level	IP65
Item Weight	2.2 pounds (approx. 1 kg)
Package Dimensions	1.18 x 0.79 x 0.39 inches (approx. 3 x 2 x 1 cm)

8. WARRANTY AND SUPPORT

For warranty information or technical support, please refer to the documentation provided with your purchase or contact ZEEGII customer service directly. Specific warranty terms may vary by region and retailer.

For further assistance, please visit the official ZEEGII website or contact your local distributor.