

*Manufacturers of Process
Controls and Instrumentation*

Instruction Manual

Model: *TWI-PH1*

Function: *Two Wire Isolated pH Transmitter*

Input: ■ pH Probe

Output: ■ 4-20 mA

Serial #: _____

(If special or required)

For Technical Assistance And Questions Call
USA: (734) 677-0459 CANADA: (905) 660-5336

Restocking Policy

All product returned to Pribusin Inc. in prime condition (not damaged, scratched or defaced in any way) within seven (7) months from the original date of shipment is subject to a 50% restocking charge. All product must be accompanied by a Return Authorization number (RA number) which must be obtained from Pribusin Inc. prior to returning any product.

After seven (7) months from the original date of shipment, products cannot be returned for restocking.

Custom designed products, modified products or all non-standard products may not be returned for restocking.

Warranty Policy

Pribusin Inc. warrants equipment of its own manufacture to be free from defects in material and workmanship, under normal conditions of use and service, and will replace any component found to be defective, on its return to Pribusin Inc., transportation charges prepaid, within one year of its original purchase. Pribusin Inc. will extend the same warranty protection on equipment, peripherals and accessories which is extended to Pribusin Inc. by the original manufacturer. Pribusin Inc. also assumes noliability, expressed or implied, beyond its obligation to prelace any component involved. Such warranty is in lieu of all other warranties, expressed or implied.



Standard features:

- High Input to Output Isolation (800 VAC Test)
- Small Size - Fits Standard Explosion Proof Housing
- Industry Standard 4-20 mA Output
- Input Impedance > 10¹² Ohms
- Temperature Compensated by Thermistor
- Wide Operating Range (12 to 60 VDC)
- High Noise Rejection
- CSA and NRTL Approved (LR 51078)

Function:

The TWI-PH1 is an isolated two wire pH transmitter in a small, easy to install package. It has easily accessible screw terminals and is built in a rugged housing. A standard BNC connector allows direct plug-in of the pH probe.

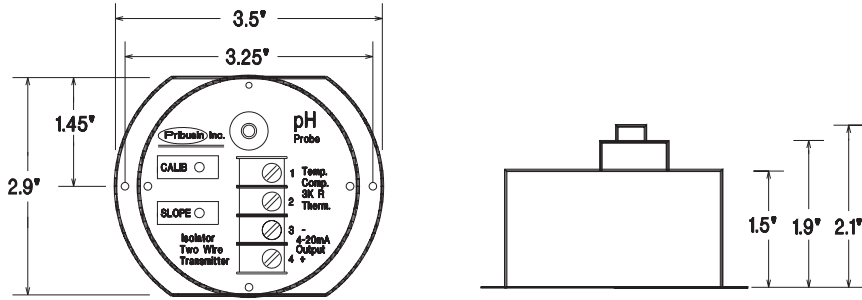
The TWI-PH1 consists of a pH signal conditioner complete with temperature compensation and an isolator. The temperature compensation is accomplished by means of a 3 KOhm thermistor. The isolated output prevents interaction between output signals if more than one pH transmitter is used in a system.

Specifications:

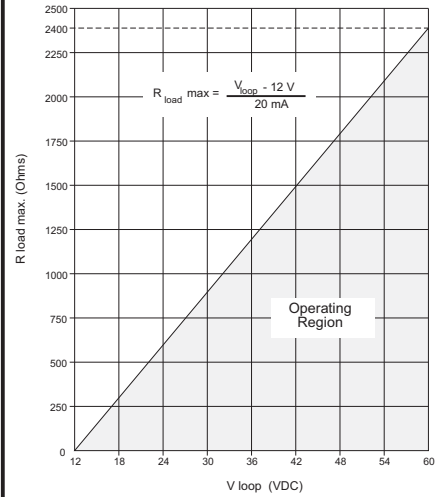
- Range: 0-14 pH
- Output: 4-20 mA
- Isolation: 800 VAC Test
- Operating Power: 12 to 60 VDC
- Accuracy: +/- 0.01 pH
- Temperature Compensation: 3 K Ohm thermistor (in pH probe)
- Connector: BNC (for pH probe)
- Operating Temperature: -20 Deg. C. to + 40 Deg. C.

TWI-PH1

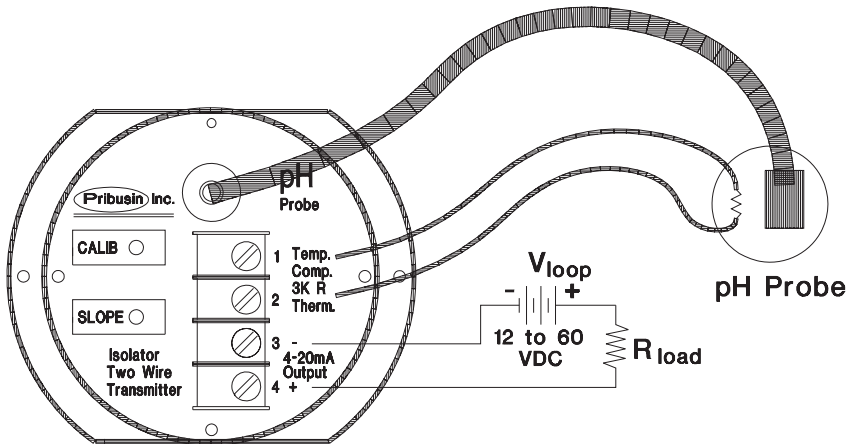
Dimensions:



Loop Characteristics:



Connection:



Manufactured By:

Pribusin Inc.

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USA:

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TWI-PH1 TRANSMITTER - CALIBRATION PROCEDURE

IMPORTANT: RINSE THE PROBE IN WATER AFTER EACH IMMERSION OR YOU WILL POLLUTE THE SOLUTIONS.

1. The calibration is by means of the Calibrate and Slope Pots.
2. The Temperature Compensation is by means of a 3 K Ohm Thermistor and measures the temperature of the sample.
3. Immerse the pH probe into a beaker or small vessel of 7 pH buffer.
4. Adjust the Calibrate Pot so that the output is 12mA (this corresponds to pH7).
5. Rinse the pH probe in water and immerse it into a beaker or small vessel of 10 pH buffer.
6. Adjust the Slope Pot so that the output is 15.43 mA (This corresponds to pH 10).
7. Repeat steps 3 to 6 until no further adjustments are required.
8. Rinse the pH probe in water and immerse it into a beaker or small vessel of 4 pH buffer.
9. The output should be 8.57 mA (This corresponds to pH 4).
10. Note the output = $(\text{pH}/14 \times 16) + 4 \text{ mA}$.
11. Note: If the pH probe does not have a 3 K Ohm Thermistor, a 3 K Ohm Resistor will simulate the probe at 25 Deg. C.

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