Instruction Bulletin No. 203526

Model 876 Barometric Pressure Transducer

General Information

Your Gems transducer has been carefully calibrated before shipment to you and it should be handled with the same care given any precision instrument. Accuracy and dimensions are reported on the specifications bulletin for the transducer.

The label on the unit specifies the calibrated output voltages at the low end and the high end of its pressure range.

Ambient Conditions

Do not use in ambient conditions corrosive to the stainless steel housing or PVC jacketed cable, submerge in liquids, or subject to spray or vibration environment.

Electrical Connections:

Function	"Belden" Cable Lead (#8723 Grey Cable)
positive excitation	Red
positive output	Green
negative output	White
negative excitation	Black
case	Shield

Electrical

The electrical circuit is a 3-terminal circuit. Separate leads for negative output and negative excitation are provided for convenience in wiring but are internally commoned. Use of these leads also avoids errors in voltage readings caused by ground loops which can occur on 3 wire devices.

The pressure transducer should be operated with the shield connected either to the negative excitation wire or to the negative output wire. Failure to do this may result in unsatisfactory operation of the unit.

NOTE: The circuit is not protected against mis-wiring. Use extreme care in wiring the positive excitation voltage only to the red wire, and to ensure all four leads are correctly connected before applying power. REVERSED OR MISWIRED EXCITATION MAY CAUSE PERMANENT DAMAGE TO THE TRANSDUCER.

In some instances, use of long cables (several hundred feet long) may introduce enough cable capacitance into the output circuit to cause output oscillation. If encountered, this oscillation may be eliminated by connecting a 100 ohm resistor (1/8 watt or larger) in series to each of the output leads at the end of the 2 foot transducer cable. These series resistors add to the output resistance.

Calibration

This unit has been precision calibrated at the factory. It has been designed to be inherently stable; recalibration adjustments are not normally field accessible. If you do wish to perform a recalibration, and have access to a high accuracy primary pressure standard, call the factory for instructions on field access to the calibration adjustments.

RETURN POLICY

Returns are accepted on stock items up to 30 days from date of order. You must contact our Returns Department for a Return Authorization (RA) number. Return the goods - freight prepaid - in the original container and include original packing slip. C. O. D. returns are not accepted. Gems reserves the right to apply restocking charges.

Tel: 860-793-4357

Fax: 860-793-4563

Important Points

- Gems products must be maintained and installed in strict accordance with the National Electrical Code and the applicable Gems Product Instruction Bulletin that covers installation, operating and proper maintenance. Failure to observe this information may result in serious injury or damages.
- Please adhere to the pressure and temperature limitations shown throughout this bulletin. These limitations must not be exceeded. These pressures and temperatures take into consideration possible system surge pressures/temperatures and their frequencies.
- Selection of materials for compatibility with the media is critical to the life and operation of Gems products. Take care in the proper selection of materials of construction, testing is required.
- Our sensors have been designed to resist shock and vibration. However, shock and vibration should be minimized.
- Our sensors must not be field-repaired.
- Physical damage sustained by product may render it unserviceable.

SS2110 REV.A 01/03

Gems Sensors
One Cowles Road
Plainville, CT 06062-1198
Toll-Free: 1-800-378-1600