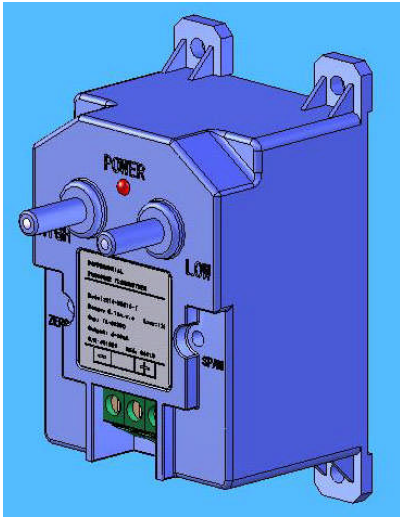


Series 211 – Installation and Operation Manual



**1. INTRODUCTION**

The Series 211 Differential Pressure Transmitter can accurately measure positive, negative, or differential pressure. The Series 211 is not position sensitive and can be mounted in any orientation without compromising accuracy. The compact, lightweight design makes installation simple and easy.

**1.1 Model Numbers**

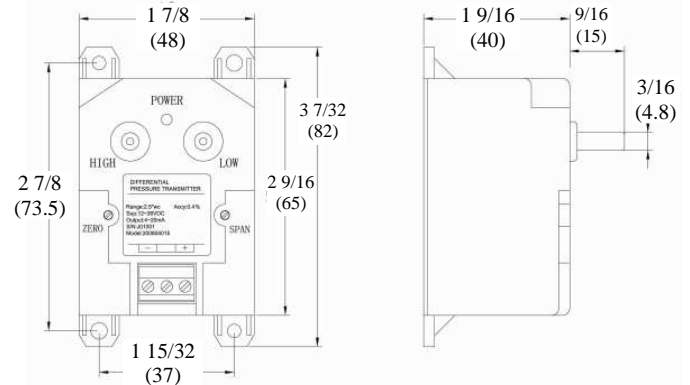
Model	Range	Accuracy
211-D001I-1	0-1 in w.c.	1.0%
211-D002I-1	0-2 in w.c.	1.0%
211-D004I-1	0-4 in w.c.	1.0%
211-D006I-2	0-6 in w.c.	0.5%
211-D006I-3	0-6 in w.c.	0.25%
211-D010I-2	0-10 in w.c.	0.5%
211-D010I-3	0-10 in w.c.	0.25%
211-D020I-2	0-20 in w.c.	0.5%
211-D020I-3	0-20 in w.c.	0.25%
211-D040I-2	0-40 in w.c.	0.5%
211-D040I-3	0-40 in w.c.	0.25%
211-D005P-2	0-5 PSI	0.5%
211-D005P-3	0-5 PSI	0.25%
211-D010P-2	0-10 PSI	0.5%
211-D010P-3	0-10 PSI	0.25%
211-D015P-2	0-15 PSI	0.5%
211-D015P-3	0-15 PSI	0.25%
211-Z001I-1	0.5-0-0.5 in w.c.	1.0%
211-Z002I-1	1-0-1 in w.c.	1.0%
211-Z004I-1	2-0-2 in w.c.	1.0%
211-Z010I-2	5-0-5 in w.c.	0.5%
211-Z010I-3	5-0-5 in w.c.	0.25%

Other ranges available upon request.

**1.2 Specifications**

- Maximum Pressure:** Ranges  $\leq$  5 PSI – Max 15 PSI  
Ranges  $>$  5 PSI – Max 30 PSI
- Media compatibility:** Air and compatible non combustible, non corrosive gasses
- Accuracy:** Ranges  $\leq$  4" w.c. 1.0%  
Ranges  $\geq$  5" w.c. 0.5% or 0.25%
- Temperature Ranges:**  
  - Compensated:** 15° to 120°F (-10° to 50°C)
  - Operating:** -10° to 155°F (-25° to 70°C)
- Thermal Effect:** +/- 0.028% FS/°F
- Stability:** +/- 0.25% FS/year
- Output Signal:** 4-20 mA, 2-wire
- Loop Resistance:** 250  $\Omega$  @ 24 VDC
- Power Supply:** 12-30 VDC
- Housing Material:** ABS Plastic
- Electrical Connections:** screw terminals
- Process Connection:** Push on connection for 1/8" I.D. tubing

**1.3 Dimensional Drawings**



**2. INSTALLATION**

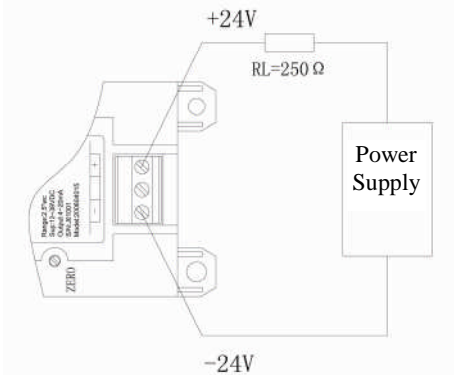
**2.1 Mounting**

The Series 211 should be mounted in a clean, dry location free from excess vibration. The transmitter can be mounted in any orientation and should be attached by using the 4 holes provided on the housing.

**2.2 Pressure Connection**

Two push on pressure connections are located on the front of the unit, labeled "High" and "Low". For best results, connect 1/8" I.D. push on tubing to the pressure connections. For differential pressure measurement, the higher pressure should be connected to the "High" pressure port. For positive pressure, the "Low" pressure port should be left vented to atmospheric pressure. For negative pressure measurement, the "High" pressure port should be vented to atmospheric pressure.

### 2.3 Electrical Connections



### 3. CALIBRATION

The Series 211 is factory calibrated and should not require calibration out of the box. Periodically, it may be necessary to recalibrate the gauge to maintain the accuracy of the product. To “zero” the gauge, remove the pressure connections from both pressure ports and adjust the zero potentiometer until the output is 4 mA. To “span” the gauge, apply the full scale pressure to the High pressure port and adjust the span potentiometer until the output is 20 mA.

To properly calibrate the product, it is necessary to have an accurate pressure standard. If you do not have one available or would like calibration traceable to NIST, please contact Sensocon.

### 4. LIMITED WARRANTY

#### **LIMITED WARRANTY**

SENSOCON warrants its products to be free from defects in materials and workmanship for a period of one (1) year from the date of shipment, subject to the following terms and conditions: Without charge, SENSOCON will repair, replace, or refund the purchase price at SENSOCON’s option products found to be defective in materials or workmanship within the warranty period; provided that:

- i. the product has not been subjected to abuse, neglect, accident, incorrect wiring not our own, improper installation or servicing, or use in violation of labels or instructions provided by SENSOCON;
- ii. the product has not been repaired or altered by anyone except SENSOCON;
- iii. the maximum ratings label and serial number or date code have not been removed, defaced, or otherwise changed;
- iv. examination discloses, in the judgment of SENSOCON, the defect in materials or workmanship developed under normal installation, use and service; and
- v. SENSOCON is notified in advance of and the product is returned to SENSOCON transportation prepaid before expiration of the warranty period.

THIS EXPRESS LIMITED WARRANTY IS IN LIEU OF AND EXCLUDES ALL OTHER REPRESENTATIONS MADE BY ADVERTISEMENTS OR BY AGENTS AND ALL OTHER WARRANTIES, BOTH EXPRESS AND IMPLIED. THERE ARE NO IMPLIED WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE FOR GOODS COVERED HEREUNDER.