

Series 104 – Installation and Operation Manual



1. INTRODUCTION

The Series 104 Differential Pressure Switch is a low-cost easy to use switch for very low pressure applications. The switch can monitor positive, negative, or differential pressure and with an easy to adjust set point knob makes field set up and adjustment hassle free.

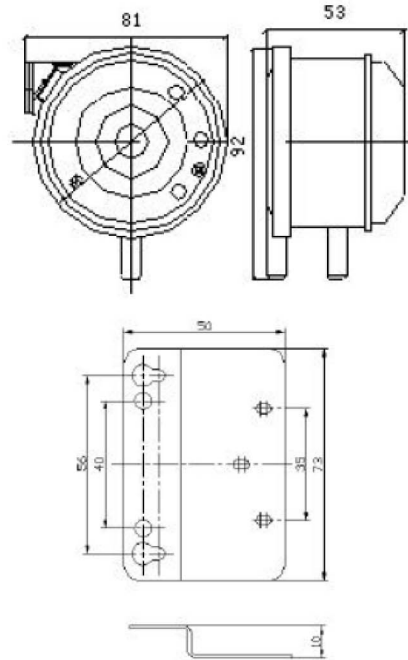
1.1 Model Numbers

Model	Range
104-0	20-300 Pa (0.08-1.2 in w.c.)
104-1	30-300 Pa (0.12-1.2 in w.c.)
104-2	50-500 Pa (0.2-2.0 in w.c.)
104-3	200-1000 Pa (0.8-4.0 in w.c.)

1.2 Specifications

- Maximum Pressure:** 1000 Pa (4" w.c.)
- Media compatibility:** Air and compatible non combustible, non corrosive gasses
- Temperature Limits:** 5° to 140°F (-15° to 60°C)
- Electrical Rating:** 2A @ 250 V
- Electrical Connections:** screw terminals
- Process Connection:** 3/16" I.D. flexible tubing
- Enclosure Rating:** NEMA 13 (IP 54)
- Repeatability:** 2%
- Deadband:** approximately 10% of max set point

1.3 Dimensional Drawings

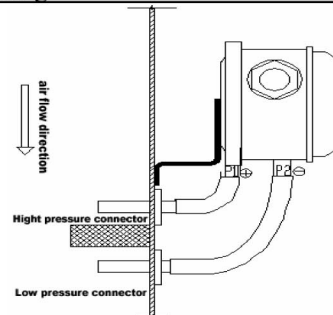


2. INSTALLATION

Upon receipt inspect the instrument for the intended pressure range.

The Series 104 should be mounted in a location free from excess vibration where the temperature will be within the specified limits. The switch should be mounted with the diaphragm in the vertical position. In humid areas where condensation is possible, the pressure connection should be pointed downward.

2.1 Mounting



- Connect the Z bracket and the switch with 3 provided screws. The bracket can be located in any position as long as the switch remains in the vertical position.
- If desired, the included static pressure sensors can be installed through a wall or panel to sense the pressure on the other side.
- Use the provided tubing to connect the static pressure sensors to the pressure connections on the switch.

2.2 Pressure Connection

Two push on pressure connections are located on the front of the unit, labeled P1 + and P2 -. For best results, connect 3/16" I.D. push on tubing to the pressure connections. For differential pressure measurement, the higher pressure should be connected to the P1 pressure port and the lower pressure to the P2 pressure port. For positive pressure, the P2 pressure port should be left vented to atmospheric pressure. For negative pressure measurement, the P1 pressure port should be vented to atmospheric pressure.

2.3 Electrical Connections

NC: Normally closed
NO: Normally open
COM: Common

3. Maintenance

No special maintenance is required.

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.

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