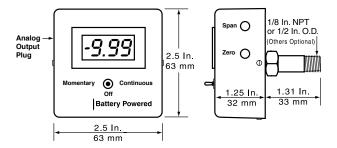
VACUUM RESEARCH

Differential Gauge Pressure with Built-in Silicon Sensor



Differential Pressure Gauge

Powered by either 90 to 240 VAC or 9 VDC battery, these Vacuum Research Differential Pressure instruments are compact instruments with pure silicon diaphragms that can measure air or gas pressure difference from atmosphere. A linear output signal suitable for computer, PLC, or security systems is built into all models. Response time is less than 400 milliseconds for full scale and instruments are available with either 1/8 inch NPT male thread or 1/2 inch O.D. tube stem. These instruments offer the precision and high resolution of digital electronics at very competitive prices.



- Output for Computer or Security System
- 9 Volt Battery or 90 to 240 VAC Power
- Sensor and Display in One Compact Package
- Measures Air or Gas Differential Pressure
- Rugged Digital Display; No Fragile Meters!
- Mount Directly with 1/8 NPT or 1/2 Inch Tube
- Optional Flanges Available: NW-16, VCR, 15 mm
- Momentary or Continuous Easy to Read Display
- No Transducer Cables Required

Specifications

Differential Pressure Ranges: ± 20 ln. H₂O, ± 20 mmHg, ± 15 PSI. **Calibration:** Air or any gas that is compatible with sensor materials.

Accuracy: Better than 1% of reading (± .02 in. H₂O, ± .02 mmHg, ± .015 PSI.)

Response Time: Less than 400 msec. for response to a step change.

Linearity: ± 0.15% Full Scale.

Sensitivity: ± .01 In. H₂O for 20 In. H₂O instruments

± .01 mmHg for 20 mmHg instruments

± .01 PSI for 15 PSI instruments

Maximum Pressure Without Damage: 5 times full scale.

System Connection: 1/8 NPT male thread or 1/2 inch O.D. tube are standard. Other terminations such as NW or VCR are available.

Analog Output for PLC or Computer: \pm 2 VDC for 20 In. H₂O and 20 mmHg instruments; \pm 1.5 VDC for 15 PSI instruments. 6 X 6 modular jack with 7 ft. (2 m) cable with spade lugs. Extensions may be added up to 10,000 ohms.

Materials in Contact with Process: 304 SS, Pyrex, ceramic, silicon, silicone, epoxy and nickel.

Sensor Internal Volume: Approximately 0.5 ml.

Power: Powered by standard 9 volt alkaline battery, or 90 to 240 V 50/60 Hz. **Battery Life:** In continuous display position battery operates up to 80 hours.

Momentary Display: Switch to display reading for approximately 100 seconds.

Continuous Display: Displays continuously until switch is turned Off.

Wattage: Less than 1 Watt.

Temperature Effects: When changes occur in ambient temperature between 0° and 50 °C, reading will change no more than ±0.05% per °C.

Operating Temperature: 0 to 50 $^{\circ}$ C (32 to 120 $^{\circ}$ F). Dimensions: 2.5 x 2.5 x 1.25 inches (63 x 63 x 32 mm).

Mounting: Sensor and display in one integrated package. Mount it directly on

your system, chamber, room, or filter.

Net Weight: Approximately 6 ounces (170 grams.)

Ordering Information

Differential Gauge Pressure with sensor and display integrated

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