

Low Cost Pressure Transmitter P - 50V

VOLTAGE OUTPUT

Description

Green Sensor P-50 series offers combined repeatability and hysteresis errors that are typically below 0.03% of full scale.

Long term minimization of these errors is maintained after millions of full scale overpressure cycles, making electronic set point virtually drift-free.

Use of ceramic materials in the sensing element and its mounting provides excellent resistance to most liquids and chemicals. Ruggedness and reliability are also enhanced by a stainless steel housing to resist corrosion. Pressure sealing for media compatibility is provided by selection of O-ring seals.

Green Sensor ceramic sensing element contains an integral, reliable, solid state, custom hybrid circuit signal conditioner. This circuit provides temperature compensation for a stable output through use of computer-controlled laser trimming of hybrid circuit components.

Unit - to - unit uniformity is assured with no adjustment or recalibration required by the user.

Key to the high performance of the P-50 Pressure transmitter is Variable strain gage sensing element with programmable ASIC and hybrid circuit for reliable signal conditioning and maximum electronic integration.



Feature

- ⊙ Dry & Wet Media
- ⊙ Superior Long Term Stability : $\pm 0.25\%$
- ⊙ Temperature Compensated Over Wide Range
- ⊙ Linear Amplified Output
- ⊙ EMI/RFI Protection[Enhanced]
- ⊙ Excellent Repeatability & Hysteresis
- ⊙ Many OEM Option
- ⊙ Output Proportional to pressure 0.5 - 4.5V

Applications

- ⊙ Process Control
- ⊙ Petrochemical
- ⊙ Transmissions
- ⊙ Water Management
- ⊙ Air Conditioning and Refrigeration
- ⊙ Pump and Compressors
- ⊙ Engine Monitoring and Test Equipment
- ⊙ Agricultural Technology
- ⊙ Environmental control Systems
- ⊙ Level / Depth Instrumentation

URL <http://www.greensensor.com>

E-Mail : gssc@greensensor.com

Address : 803-203BL, Buchum-Technopark 192, Yakdae-Dong, Wonmi-Gu, Buchun-City, Kyonggi-Do, Korea

Green Sensor

TEL : +82-32-817-0464

FAX : +82-32-817-0465

SPECIFICATIONS

Technical Data

| | |
|------------------------------|-----------------|
| Non-Linearity | ± 0.1% |
| Hysteresis and Repeatability | ± 0.03% typical |
| Temperature Error | |
| Zero, -20°C to +100°C | ± 0.1% per 10°C |
| Span, -20°C to +100°C | ± 0.1% per 10°C |
| Operating Temperature | 0°C to +60°C |
| Stability[1 year] | ± 0.1% per 10°C |

Measuring Ranges

[Custom Ranges and Compound Ranges Available]

| Gauge Pressure | Unit | OverPressure | Burst |
|-----------------------------------|--------------------|--------------|----------|
| 0.05, 0.1, 0.2, 0.5, 1, 2, 4, 6 | kg/cm ² | 3 × F.S. | 5 × F.S. |
| 10, 15, 20, 35, 50, 100, 250, 350 | kg/cm ² | 2 × F.S. | 3 × F.S. |
| Absolute Pressure | | | |
| 0.05, 0.1, 0.2, 0.5, 1, 2, 4, 6 | kg/cm ² | 3 × F.S. | 5 × F.S. |
| 10, 15, 20, 35, 50, | kg/cm ² | 2 × F.S. | 3 × F.S. |

Electrical

| | |
|------------------------------------|-----------------------------------|
| Supply Voltage | DC 8 ~ 30V |
| Output signals | 0.5 to 4.5V / 0 ~ 5V [3 - wire] |
| Load Resistance | 1kΩ Min. |
| RFI and Reverse Polarity Protected | |

Wiring

| | |
|--------|------------|
| RED | Supply S+ |
| GREEN | Output |
| BLACK | Supply S- |
| SHIELD | CASE EARTH |

DIMENSIONS(mm)



A(Nipple) : 11.5 B(Hexagon) : 9.0 C(Body) : 14.7
 D(Connector-F) : 22.6 E(connector-M) : 7.33
 F(Wire Length) : 300
 G(Circumference) : 25.9

HOW TO ORDER

P - 50 V - A - A - B - 1 - 1

| Range(kg/cm ²) | Output Signal | Process Connector | Seal Material | Reference |
|----------------------------|---------------|-------------------|--------------------|-------------|
| 0 ~ 1 | 1. 0.5 ~ 4.5V | 1. 1/8" PT | B. Buna-N | A. Absolute |
| 0 ~ 2 | 2. 0 ~ 5V | 2. 1/4" PT | E. Ethylene | G. Gauge |
| 0 ~ 4 | 3. Other | 3. Others | F. Fluoro-Silicone | |
| 0 ~ 6 | | | N. Neoprene | |
| 0 ~ 10 | | | V. Viton | |
| 0 ~ 15 | | | Z. Others | |
| 0 ~ 20 | | | | |
| 0 ~ 35 | | | | |
| 0 ~ 50 | | | | |
| 0 ~ 100 | | | | |
| Other Range - Z | | | | |