

## P-50A

## **Compact Pressure Transducer**

## **Analog output**

- Pressure range 0.1~0.9MPa / 0.1~2.9MPa
- Output current 4~20mA
- **■** Superior Long term Stability
- **■** Temperature Compensated
- **Linear Amplified Output**
- **■** Excellent Repeatability & Hysteresis

P-50A series 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 Brass housing to resist corrosion pressure sealing for media compatibility is provided by selection of welding Sealing type. metal sensing element contains and integral, reliable, solid state, custom hybrid circuit signal conditioner. This circuit is digital interface can be used for a simple PC-controlled calibration procedure, in order to program a set of calibration coefficients into an onchip EEPROM and without the cost overhead associated with trimming by external devices or a laser.

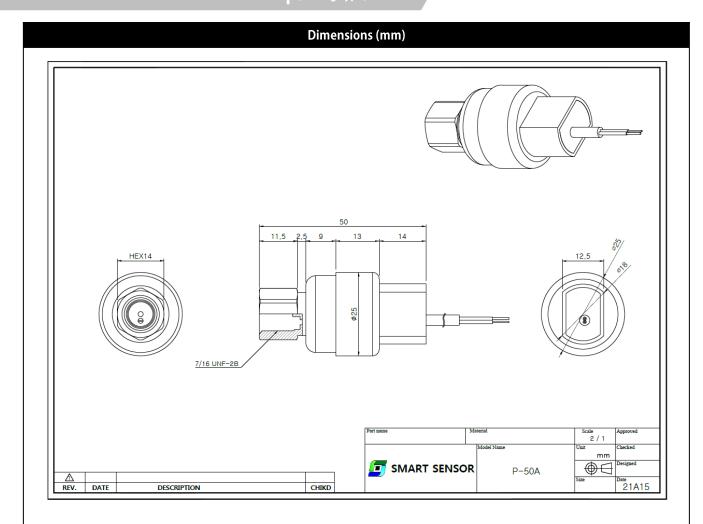


## TYPICAL APPLICATIONS

- ✓ System air conditioners
- ✓ Industrial refrigerators
- ✓ Air compressors

| General SPEC                        |   |              |  |
|-------------------------------------|---|--------------|--|
| Working Pressure Range              | - 0.1~0.9MPa  | - 0.1∼2.9MPa |  |
| Pressure Resistance                 | 5.25  | 7.5          |  |
| Burst Pressure                      | ≥17.5 x F.S.  | ≥25 x F.S.   |  |
| Output Current                      | 4~20mA  |              |  |
| Electric connection                 | Cable type  |              |  |
| Operating Temp. Range               | -40 to 80°C   |              |  |
| Compensated Temp. Range             | -20 to 80°C   |              |  |
| Total Error Accuracy [Typical/25°C] | ≤±0.5%F.S   |              |  |
| Total Error Accuracy [-40 to 80°C]  | ≤±0.8%F.S   |              |  |
| Hysteresis and repeatability        | ±0.1 %F.S [Typical] / ±0.3 %F.S [MAX]                             |              |  |
| Process connection                  | 7/16-20UNF-2B   |              |  |
| Body material                       | Brass   |              |  |
| Power Voltage                       | 10~30VDC  |              |  |
| Insulation resistance               | Greater than 100MΩ (500VDC)                                       |              |  |
| Electric strength                   | 500VAC (1minutes between case and all terminals tied)             |              |  |
| Enclosure                           | IP67  |              |  |
| Response time 10~90%                | ≤2ms  |              |  |
| Mechanical life cycle               | 5,000,000/cycle   |              |  |
| Circuit protection                  | Reverse polarity protected. (Power supply +/-)                    |              |  |
| Shock proof                         | 1000m/s² (6ms or less, X, Y, Z 3times for each at constant temp.) |              |  |
| Vibration proof                     | 200m/s² (10~2000Hz, X:4h, Y:2h, Z:2h at constant temp.)           |              |  |
| Weight                              | 55g (with cable 2M)   |              |  |

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| Wires    | PIN No. | Description     |
|----------|---------|-----------------|
| 2 wire - | RED     | POWER(+)        |
|          | BLACK   | POWER(-)        |
| Body     | Color   | Pressure Range  |
| Housing  | WHITE   | - 0.1~0.9 [MPa] |
|          | RED     | - 0.1~2.9 [MPa] |

