



■ Operational Description

Strain Gage Transducer Accepts Unregulated Input

The PSI-5000 offers pressure ranges of vacuum to 10,000 psi, gage or absolute, all stainless steel construction, high burst pressure, and high accuracy of $\pm 0.25\%$ F.S. (B.F.S.L.).

The sensor consists of silicon piezoresistive strain gages arranged in a wheatstone bridge configuration and mounted on a flat diaphragm. The output is conditioned for 5 V output for all ranges (1 to 6 V and 10 V optional).

The highly accurate sensor and electronics are packaged in a stainless steel housing for use in most environments, yet still provides access to zero and span adjustments.

■ Applications

The PSI-5000 is the economical answer for all applications requiring high accuracy over a wide range of pressures. The unit's small size (3 oz.), integrated electronics, wide operating temperature range (-40 to 180°F), exceptional reliability, durability, and long life, make the PSI-5000 the perfect instrument for most static and dynamic pressure measurements where a high level output signal is desired.



pressure products

PSI-5000

High Level Output Pressure Transducer

- Low cost
- Accuracy (linearity, hysteresis, repeatability): $\pm 0.25\%$ F.S. (B.F.S.L.)
- Hybrid compensation circuit for reliability
- Compact size and very low weight (3 oz.)
- Zero and span adjustments
- High overpressure capability

- True 0-5 or 0-10 VDC, can cross zero
- CE approved

■ Options

- Special fittings, outputs and metric ranges available on request
- For custom designs or special applications, consult factory
- Color coded cable "pigtail"
- $\pm 0.10\%$ F.S.

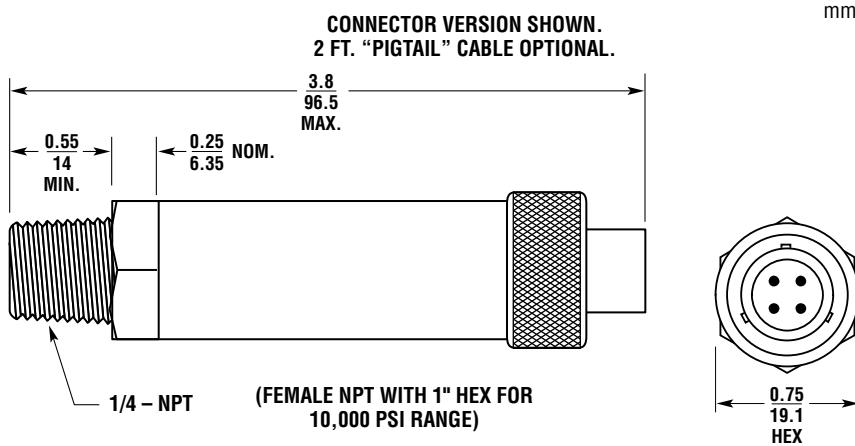


PSI-5000 – High Level Output Pressure Transducer

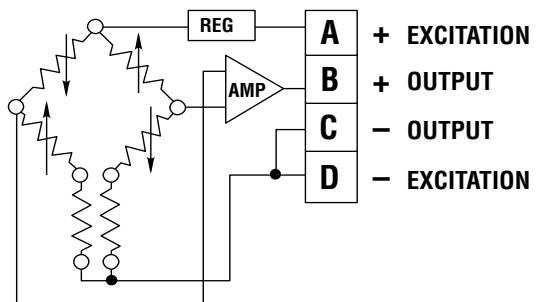
■ Specifications

| PERFORMANCE | |
|---|--|
| Standard Pressure Ranges: | Vacuum to 10,000 psi gage or absolute |
| Overpressure: | 2x full scale |
| Burst Pressure: | 10x full scale or 20,000 psi (whichever is less) |
| Accuracy (linearity, hysteresis, and repeatability): | $\pm 0.25\%$ of full scale (B.F.S.L.) |
| Thermal Zero Shift: | $\pm 0.01\%$ F.S./°F |
| Thermal Sensitivity Shift: | $\pm 0.01\%$ F.S./°F |
| Zero Balance: | $\pm 1\%$ of full scale |
| Life: | 10 million cycles minimum |
| ENVIRONMENTAL | |
| Compensated Temperature: | 0 to 130°F |
| Storage Temperature: | -40 to 180°F |
| Operating Temperature: | -40 to 180°F |
| Humidity: | 0 to 90% relative |
| ELECTRICAL | |
| Excitation: | 8.5 to 33 VDC |
| Input Current: | 10 mA max. |
| Output: | 0.000 to 5.000 VDC ± 0.050 VDC |
| Output/Input: | Non-isolated, 3 wire |
| Resolution: | Infinite |
| Protection: | Reversed polarity |
| PHYSICAL | |
| Weight: | 3 oz. |
| Wetted Materials: | SS15-5 or 17-4 P.H. |
| Media: | Compatible with 15-5 or 17-4 SS |
| Connector: | Electrical receptacle: Bendix PT1H-8-4 P or equivalent |
| Mating Connector: | Bendix PT06A-8-4S (SR) or equivalent (not supplied) |
| Cavity Volume: | 0.05 ³ in. |

■ Dimensions



■ Circuit Diagram



pressure products

■ Ordering Information

| | | | |
|------------------------|---|---|---|
| PSI-5000* | - | - | - |
| Model Number | | | |
| Pressure Range | | | |
| Please specify in psi | | | |
| Pressure | | | |
| G Gage pressure | | | |
| A Absolute pressure | | | |
| Temperature | | | |
| 1 Standard temperature | | | |
| 2 -40 to 180°F Option | | | |

* psi-10,000 with 0-10 V output option

Excitation 13.5 V to 33 VDC



For the Latest Information

Try Our Fax Back System at **1/916/431-6544**

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