

86 Compensated

PERFORMANCE SPECIFICATIONS

Supply Current: 1.5mA

Ambient Temperature: 25°C (unless otherwise specified)

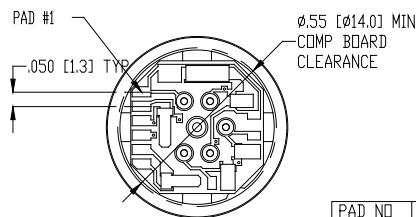
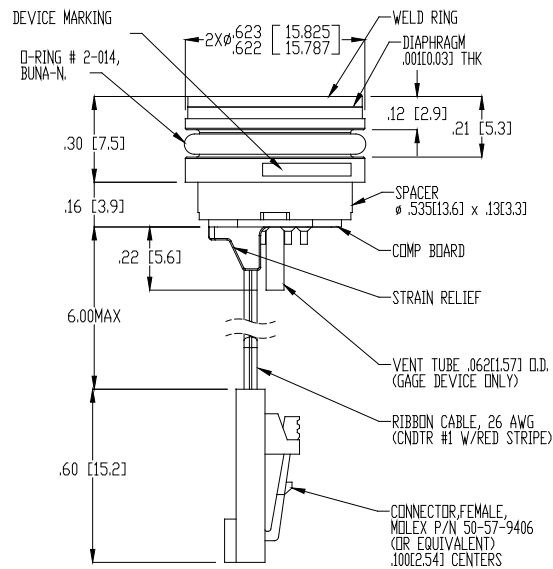
| PARAMETERS | 005PSI | | | ≥15PSI | | | UNITS | NOTES |
|-------------------------------|---|-------|------|--------|-------|------|------------|-------|
| | MIN | TYP | MAX | MIN | TYP | MAX | | |
| Span | 50 | 100 | 150 | 75 | 100 | 150 | mV | 1 |
| Zero Pressure Output | -2.0 | 0 | 2.0 | -1.0 | 0 | 1.0 | mV | 2 |
| Pressure Non Linearity | -0.2 | | 0.2 | -0.1 | | 0.1 | %Span | 3 |
| Pressure Hysteresis | -0.10 | ±0.02 | 0.10 | -0.05 | ±0.02 | 0.05 | %Span | |
| Repeatability | | ±0.02 | | | ±0.02 | | %Span | |
| Input Resistance | 2.5K | 5.0K | 6.5K | 2.0K | 3.5K | 5.8K | Ω | |
| Output Resistance | 4.0K | | 7.0K | 4.0K | | 6.0K | Ω | |
| Temperature Error – Span | -1.0 | | 1.0 | -0.75 | | 0.75 | %Span | 4 |
| Temperature Error – Offset | -1.5 | | 1.5 | -0.50 | | 0.50 | %Span | 4, 5 |
| Thermal Hysteresis – Span | -0.25 | ±0.05 | 0.25 | -0.25 | ±0.05 | 0.25 | %Span | 4 |
| Thermal Hysteresis – Offset | -0.25 | ±0.05 | 0.25 | -0.25 | ±0.05 | 0.25 | %Span | 4 |
| Long Term Stability – Span | | ±0.10 | | | ±0.10 | | %Span/Year | |
| Long Term Stability – Offset | | ±0.25 | | | ±0.10 | | %Span/Year | |
| Supply Current | 0.5 | 1.5 | 2.0 | 0.5 | 1.5 | 2.0 | mA | 6 |
| Output Load Resistance | 5M | | | 5M | | | Ω | 7 |
| Insulation Resistance (50Vdc) | 50M | | | 50M | | | Ω | 8 |
| Output Noise (10Hz to 1KHz) | | 1.0 | | | 1.0 | | μV p-p | |
| Response Time (10% to 90%) | | 0.1 | | | 0.1 | | ms | |
| Pressure Overload | | | 3X | | | 3X | Rated | |
| Pressure Burst | | | 4X | | | 4X | Rated | 9 |
| Compensated Temperature | 0 | | 50 | -20 | | +85 | °C | |
| Operating Temperature | -20 | | +70 | -40 | | +125 | °C | 10 |
| Storage Temperature | -50 | | +125 | -50 | | +125 | °C | 10 |
| Media – Pressure Port | Liquids and Gases compatible with 316/316L Stainless Steel | | | | | | | |
| Media – Reference Port | Compatible with Silicon, Pyrex, Gold, Fluorosilicone Rubber, and 316/316L Stainless Steel | | | | | | | |

Notes

- For amplified output circuits, 3.012V ±1% interchangeability with gain set resistor. See application schematic.
- Measured at vacuum for absolute (A) and at ambient for gage (G).
- Best fit straight line.
- Over the compensated temperature range with respect to 25°C.
- 15-psi range sensors have a temperature error of 0.75% (max) of zero from -20°C to +85°C.
- Guarantees output/input ratiometricity.
- Load resistance to reduce measurement errors due to output loading.
- Between case and sensing element.
- The maximum pressure that can be applied to a transducer without rupture of either the sensing element or transducer.
- Maximum temperature range for product with standard cable and connector is -20°C to +105°C.

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DIMENSIONS

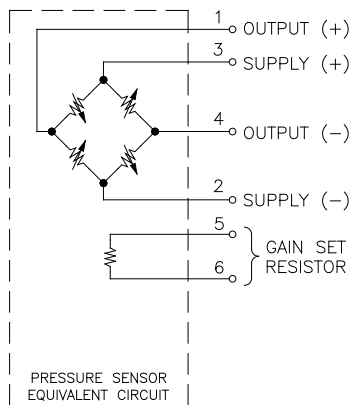


VIEW SHOWN W/O CABLE AND CONNECTOR FOR CLARITY

| PAD NO | FUNCTION |
|--------|-------------------|
| 1 | +OUT |
| 2 | -EX |
| 3 | +EX |
| 4 | -OUT |
| 5 | GAIN SET RESISTOR |
| 6 | |

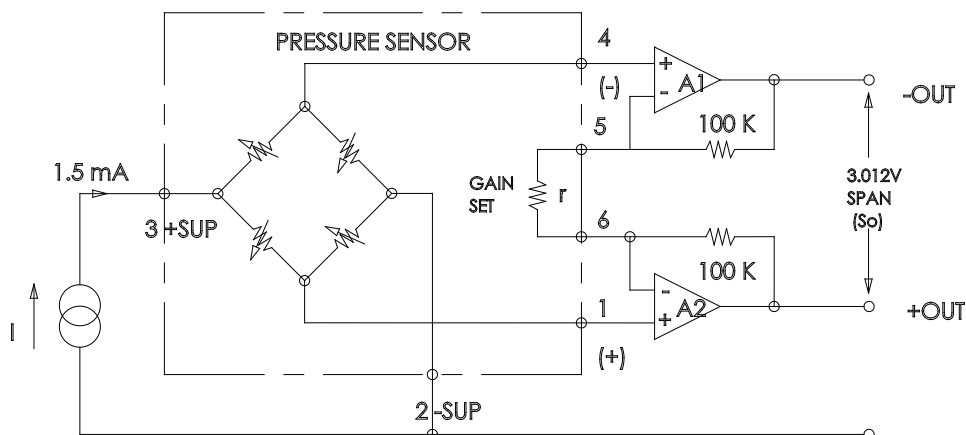
DIMENSIONS ARE IN INCHES [mm]

CONNECTIONS



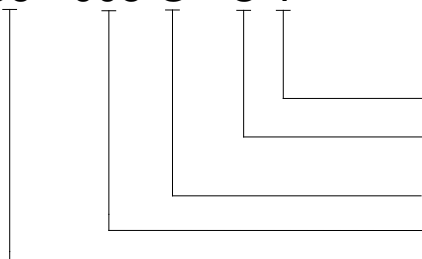
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APPLICATION SCHEMATIC



ORDERING INFORMATION

86 - 005 G - C T



Vent (T = Tube, Blank = No Tube)

Electrical (C = Ribbon Cable with Connector,
R = Ribbon Cable, P = Solder Pads)

Type (A = Absolute, G = Gage)

Pressure Range

Model

NORTH AMERICA

Measurement Specialties
45738 Northport Loop West
Fremont, CA 94538
Tel: 1-800-767-1888
Fax: 1-510-498-1578
Sales: pfg.cs.amer@meas-spec.com

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