

Temperature Compensated

- ▶ **Medical Instrumentation**
- ▶ **Calibration**
- ▶ **Process Control**
- ▶ **Factory Automation**
- ▶ **Air Flow Management**
- ▶ **Leak Detection**



- ▶ -20°C to +85°C Compensated Temperature Range
- ▶ $\pm 0.1\%$ Non-linearity
- ▶ $\pm 0.5\%$ Temperature Performance
- ▶ 1.0% Interchangeable Span (provided by current set resistor)
- ▶ Solid State Reliability
- ▶ Low Power

Range	psig	psid	psia
0 to 15	●	●	●
0 to 30	●	●	●
0 to 50	●	●	●
0 to 100	●	●	●

ALL DIMENSIONS IN INCHES [mm]

PERFORMANCE SPECIFICATIONS

Supply Voltage: See application schematic

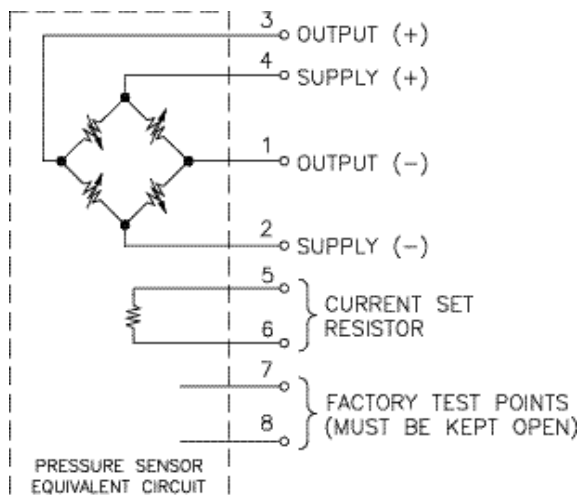
Ambient Temperature: 25°C (Unless otherwise specified)

PARAMETERS	MIN	TYP	MAX	UNITS	NOTES
Full Scale Output Span	49.5	50.0	50.5	mV	1, 3
Zero Pressure Output			2	±mV	3
Pressure Non-linearity		0.05	0.1	±% Span	2
Pressure Hysteresis		0.01	0.1	±% Span	
Input Resistance	2500	3500	4500	Ω	
Temperature Error – Span		0.3	0.5	±% Span	3, 4
Temperature Error – Zero		0.1	0.5	±% Span	3, 4
Temperature Coefficient – Resistance		0.145		%/°C	4
Thermal Hysteresis – Zero		0.05		±% Span	4
Short Term Stability of Offset		0.05		±% Span	14
Short Term Stability of Span		0.05		±% Span	14
Long Term Stability of Offset		0.1		±% Span	15
Long Term Stability of span		0.1		±% Span	15
Supply Current			2.0	mA	5
Response Time (10% to 90%)		1.0		msec	6
Output Noise		1.0		μV p-p	7
Output Load Resistance	5			MΩ	8
Insulation Resistance (50 VDC)	50			MΩ	
Pressure Overload			3X	Rated	9
Operating Temperature	-40°C to +125°C				
Storage Temperature	-50°C to +150°C				
Media	Non-corrosive Gases Compatible with Wetted Materials				10
Weight	3 Grams				

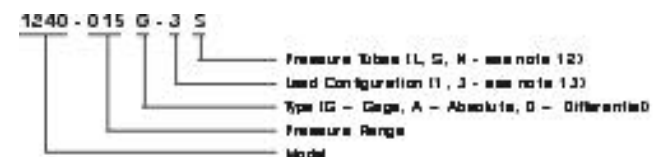
Notes

- Output span of unamplified sensor using current set resistor.
- Best Fit Straight Line.
- Compensation resistors are an integral part of the sensor package; no additional external resistors are required. Pins 7 and 8 must be kept open.
- Temperature range: -20 to +85°C in reference to 25°C.
- Guarantees input/output ratiometricity.
- For a zero-to-full scale pressure step change.
- 10 Hz to 1 kHz.
- Prevents increase of TC-Span due to output loading.
- 3X or 200 psi maximum, whichever is less.
- Wetted materials are glass, ceramic, silicon, RTV, nickel, and aluminum.
- Soldering of lead pins: 250°C for 5 seconds maximum.
- Tube length: L=470 ± 5 mil, S=300 ± 3 mil, N=no tube.
- Lead pins can either be in the same or the opposite direction as the pressure tube. See Connections/Dimensions drawing for lead configurations.
- Normalized offset bridge voltage: 7 days.
- 1 year.

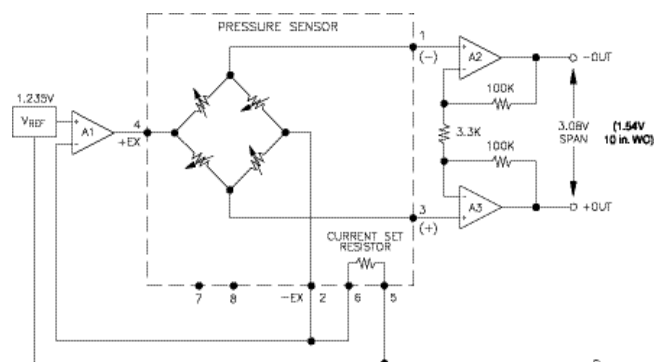
CONNECTIONS



ORDERING INFORMATION



APPLICATION SCHEMATIC



February 2001