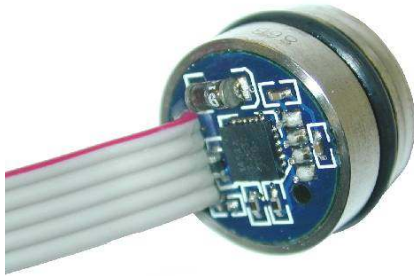


86A



(Image displays Absolute type)

- 316L SS Pressure Sensor
- Small Profile
- 0.5 - 4.5V High Level Output
- Gage, Absolute
- ASIC Calibrated

DESCRIPTION

The 86A is a small profile, media compatible, piezoresistive silicon pressure sensor packaged in a 316L stainless steel housing. The 86A is designed for o-ring mounting. The sensing package utilizes silicone oil to transfer pressure from the 316L stainless steel diaphragm to the sensing element.

The 86A is designed for high performance, low pressure applications. A custom ASIC is used for temperature compensation, offset correction, and provides an amplified output of 0.5 to 4.5V.

For a similar sensor with a plastic threaded fitting, refer to the LM pressure transducer.

FEATURES

- O-Ring Mount
- -40°C to +125°C Operating Temperature Range
- ±0.25% Pressure Non Linearity
- Up to ±3.0% Total Error Band
- Solid State Reliability

APPLICATIONS

- Level Controls
- Tank Level Measurement
- OEM Equipment
- Corrosive Fluids and Gas Measurement Systems
- Sealed Systems
- Manifold Pressure Measurement
- Barometric Pressure Measurement
- Submersible Depth Monitoring

STANDARD RANGES

Range	psig	psia	Range	Barg	Bara
0 to 1	•		0 to .07	•	
0 to 2	•		0 to .14	•	
0 to 5	•		0 to .35	•	
0 to 15	•	•	0 to 1	•	•
0 to 30	•	•	0 to 2	•	•
0 to 50	•	•	0 to 5	•	•
0 to 100	•	•	0 to 7	•	•
0 to 150	•	•	0 to 10	•	•

PERFORMANCE SPECIFICATIONS

Supply Voltage: 5.0Vdc

Ambient Temperature: 25°C (unless otherwise specified)

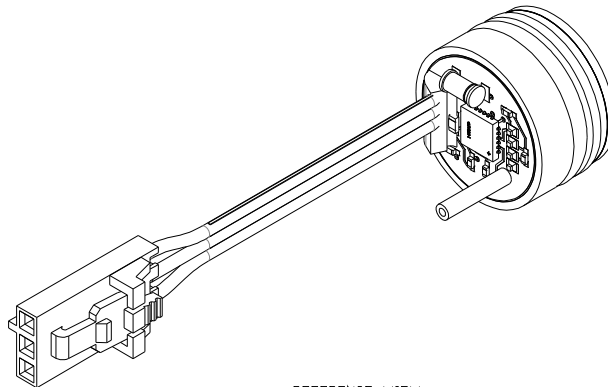
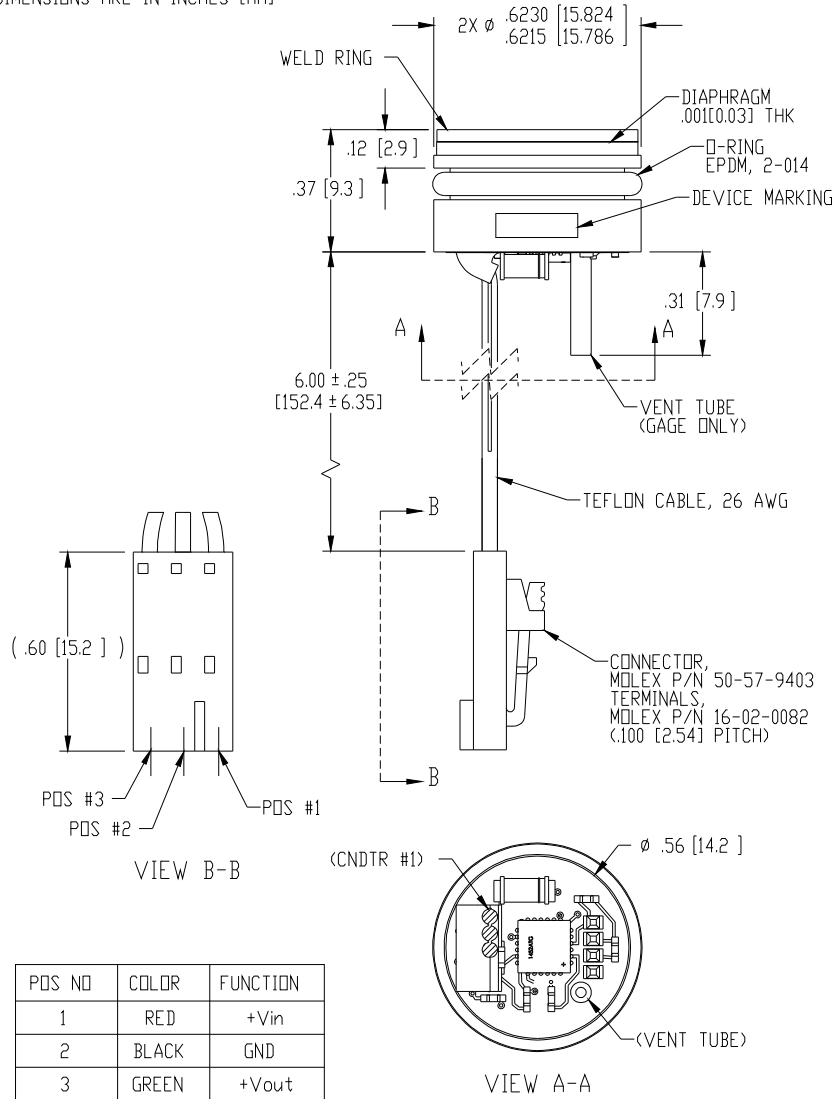
PARAMETERS	MIN	TYP	MAX	UNITS	NOTES
Span		4.0		V	
Zero Pressure Output		0.5		V	
Pressure Non Linearity	-0.25		0.25	%Span	1
Pressure Hysteresis	-0.15		0.15	%Span	
Repeatability		±0.05		%Span	
Temperature Error – Span	-1.0		1.0	%Span	2
Temperature Error – Offset	-1.0		1.0	%Span	2
Accuracy (combined linearity, hysteresis, & repeatability)	-0.5		0.5	%Span	1
Total Error Band (includes calibration errors above & temperature effects over the compensated range)		5psi: ±5% MAX >5psi: ±3% MAX		%Span	
Long Term Stability – Span and Offset		±0.1		%Span	
Supply Voltage	4.75	5.00	5.25	V	3
Insulation Resistance (50Vdc)	50			MΩ	4
Pressure Overload			2.5X	Rated	
Pressure Burst			5X	Rated	5
Compensated Temperature	0		+105	°C	
Operating Temperature	-40		+125	°C	
Storage Temperature	-40		+150	°C	
Media – Pressure Port		Liquids and Gases compatible with 316L Stainless Steel and EPDM (O-Ring)			

Notes

1. Best fit straight line.
2. Over the compensated temperature range with respect to 25°C.
3. Guarantees output/input ratiometricity.
4. Between case and sensing element.
5. The maximum pressure that can be applied to a transducer without rupture of either the sensing element or transducer.

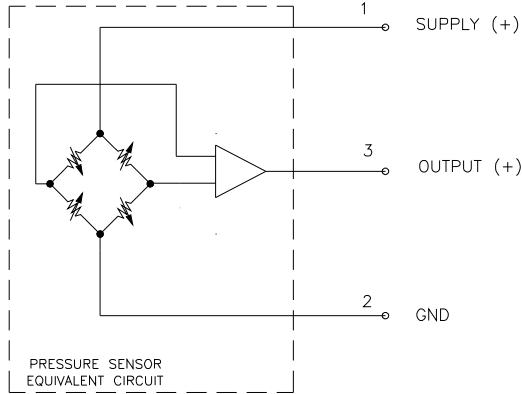
DIMENSIONS

DIMENSIONS ARE IN INCHES [mm]



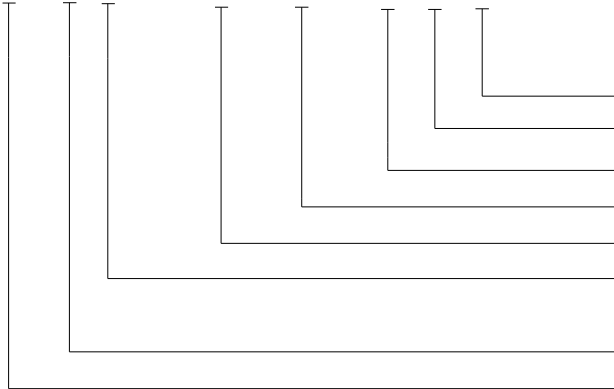
REFERENCE VIEW
(GAGE DEVICE SHOWN)

CONNECTIONS



ORDERING INFORMATION

86A 3 R - 00000 0 - 150P G



- Pressure Unit (G = Gage, A = Absolute)
- Units (P = psi, B = Bar)
- Pressure Range
- Port Type (0 = Standard, X = Special)
- Custom P/N (00000 = Standard Product)
- Connection (R = 6" Ribbon Cable, C = 6" Ribbon Cable with Connector, X = Special Connection)
- Output (3 = 0.5 to 4.5V, X = Special Output)
- Model

NORTH AMERICA

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45738 Northport Loop West
Fremont, CA 94538
Tel: 1-800-767-1888
Fax: 1-510-498-1578
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Fax: +33 (0) 134 81 03 59
Sales: pfg.cs.emea@meas-spec.com

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