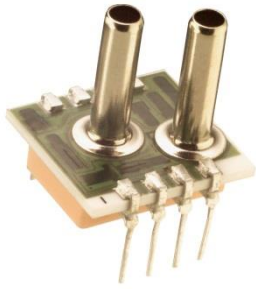


# 1210 1psi



- PC Board Mountable Pressure Sensor
- 0-100 mV Output
- Current Excitation
- Gage and Differential
- Temperature Compensated



## DESCRIPTION

The 1210 1psi is a temperature compensated, piezoresistive silicon pressure sensor packaged in a dual-in-line configuration. It is intended for cost sensitive applications where excellent performance and long-term stability are required.

Integral temperature compensation is provided over a range of 0-50°C using laser-trimmed resistors. An additional laser-trimmed resistor is included to normalize pressure sensitivity variations by programming the gain of an external differential amplifier. This provides sensitivity interchangeability of  $\pm 1\%$ .

Please refer to the 1210 standard datasheet for information on products with operating pressures greater than 1psi. For voltage excitation, please refer to the Model 1220.

## FEATURES

- Dual-in-Line Package
- 1.0% Interchangeable Span (provided by gain set resistor)
- $\pm 0.3\%$  Non Linearity
- Solid State Reliability

## APPLICATIONS

- Medical Instruments
- Airspeed Measurement
- Process Control
- Factory Automation
- Leak Detection

## STANDARD RANGES

Range	psid	psig	Port Styles
0 to 1	•	•	S, L, N, B*

\*Barb port styles are only available in lead configuration type 3. See Ordering Information.

## PERFORMANCE SPECIFICATIONS

Supply Current: 1.5 mA

Ambient Temperature: 25°C (unless otherwise specified)

PARAMETERS	PRESSURE RANGE 0 – 1 psi			UNITS	NOTES
	MIN	TYP	MAX		
Full Scale Output Span	50	100	150	mV	1
Zero Pressure Output (Offset)	-2.0		2.0	mV	
Pressure Non Linearity	-0.3		0.3	%Span	2
Pressure Hysteresis	-0.1	±0.01	0.1	%Span	
Input/Output Resistance	1800		6500	Ω	
Temperature Error – Span	-1.0	±0.5	1.0	%Span	3
Temperature Error – Zero	-1.0	±0.5	1.0	%Span	3
Thermal Hysteresis – Zero		±0.1		%Span	3
Long Term Stability (Offset & Span)		±0.2		%Span/year	
Supply Current	0.5	1.5	2.0	mA	4
Response Time (10% to 90%)		1.0		mSec	5
Output Noise		1.0		μV p-p	6
Output Load Resistance	2			MΩ	7
Insulation Resistance (50Vdc)	50			MΩ	
Pressure Overload			10	psi	
Operating Temperature	-40		+125	°C	
Storage Temperature	-50		+150	°C	
Media	Non-Corrosive Dry Gases Compatible with wetted materials				8
Weight	3 grams				

### Notes

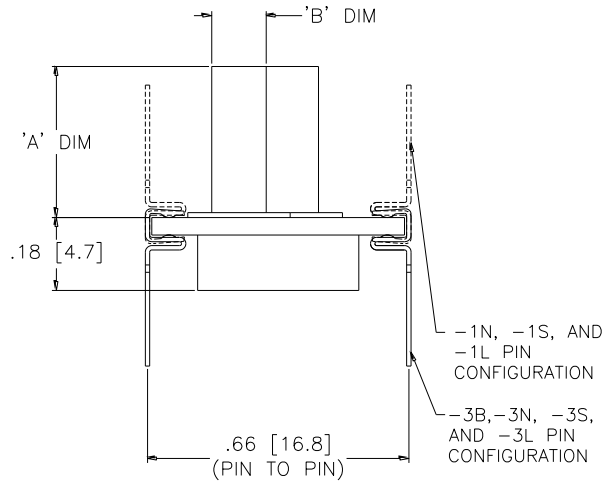
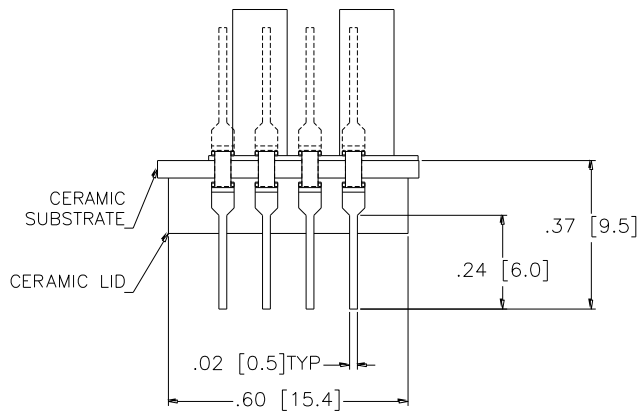
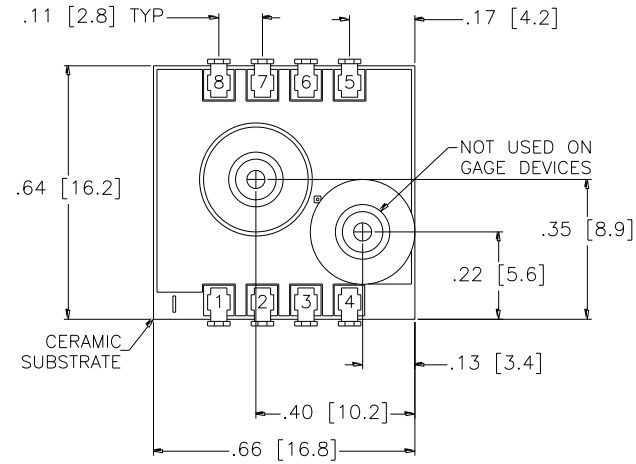
1. Output span of unamplified sensor.
2. Best fit straight line.
3. Temperature range: 0°C to 50°C with reference to 25°C.
4. Guarantees input/output ratiometricity for span.
5. For a zero-to-full scale pressure step change.
6. 10Hz to 1kHz.
7. Prevents increase of TC-Span due to output loading.
8. Wetted materials: glass, ceramic, silicon, fluorosilicone, nickel, gold and aluminum.

### Additional Notes

Soldering leads pins: 250°C for 5 seconds, maximum.

**DIMENSIONS (TUBE VERSION)**

DIMENSIONS IN INCHES [mm]



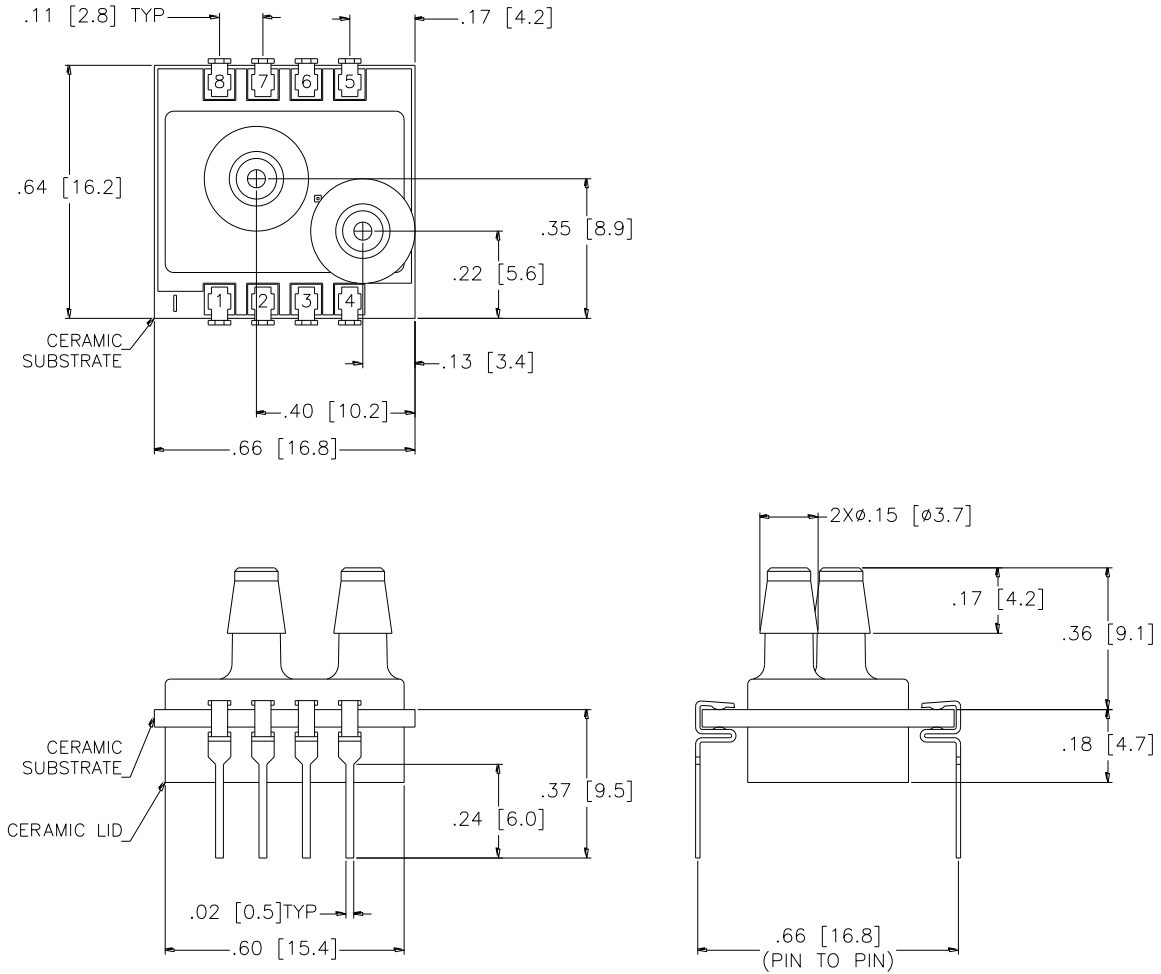
VENT TUBE DIMENSIONS		
MODEL	'A' DIM	'B' DIM
1N/3N	N/A	N/A
1L/3L	.490±.005 [12.45±0.13]	∅.127±.005 [∅3.23±0.13]
1S/3S	.325±.005 [8.26±0.13]	∅.125±.005 [∅3.18±0.13]

PAD NO	FUNCTION
1	-OUT
2	-EX
3	+OUT
4	+EX
5,6	GAIN
7,8	TEST

# 1210 1psi

## DIMENSIONS (BARB VERSION)

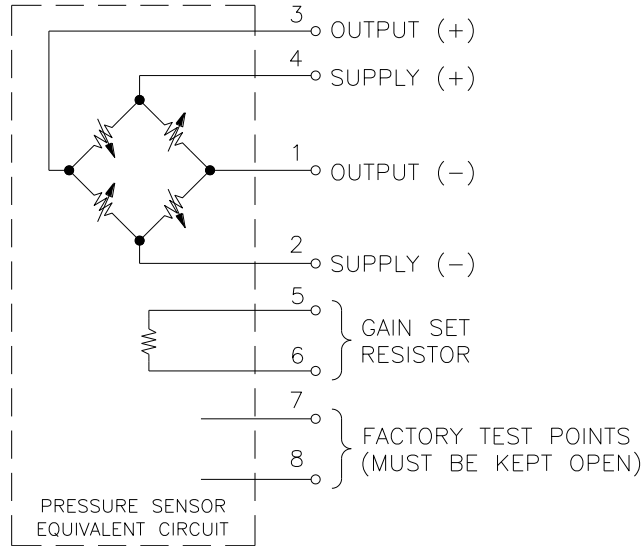
DIMENSIONS IN INCHES [mm]



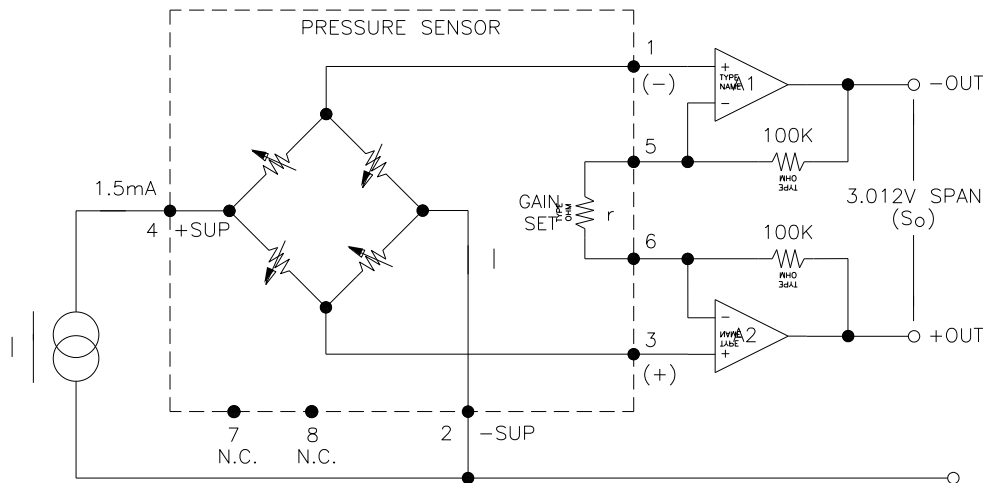
PAD NO	FUNCTION
1	-OUT
2	-EX
3	+OUT
4	+EX
5,6	GAIN
7,8	TEST

# 1210 1psi

## CONNECTIONS

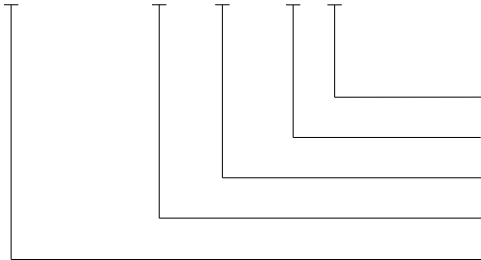


## APPLICATION SCHEMATIC



**ORDERING INFORMATION**

1210A - 001 G - 3 S



Vent (L = Long, S = Short, N = None, B = Barb)

Lead Configuration (1 = Same side as vent, 3 = Opposite side as vent)

Type (G= Gage, D = Differential)

Pressure Range

Model

\*Barb vent port style only available in lead configuration type 3.

**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](mailto:pfg.cs.amer@meas-spec.com)

**EUROPE**

Measurement Specialties  
(Europe), Ltd.  
26 Rue des Dames  
78340 Les Clayes-sous-Bois, France  
Tel: +33 (0) 130 79 33 00  
Fax: +33 (0) 134 81 03 59  
Sales: [pfg.cs.emea@meas-spec.com](mailto:pfg.cs.emea@meas-spec.com)

**ASIA**

Measurement Specialties  
(China), Ltd.  
No. 26 Langshan Road  
Shenzhen High-Tech Park (North)  
Nanshan District, Shenzhen 518057  
China  
Tel: +86 755 3330 5088  
Fax: +86 755 3330 5099  
Sales: [pfg.cs.asia@meas-spec.com](mailto:pfg.cs.asia@meas-spec.com)

The information in this sheet has been carefully reviewed and is believed to be accurate; however, no responsibility is assumed for inaccuracies. Furthermore, this information does not convey to the purchaser of such devices any license under the patent rights to the manufacturer. Measurement Specialties, Inc. reserves the right to make changes without further notice to any product herein. Measurement Specialties, Inc. makes no warranty, representation or guarantee regarding the suitability of its product for any particular purpose, nor does Measurement Specialties, Inc. assume any liability arising out of the application or use of any product or circuit and specifically disclaims any and all liability, including without limitation consequential or incidental damages. Typical parameters can and do vary in different applications. All operating parameters must be validated for each customer application by customer's technical experts. Measurement Specialties, Inc. does not convey any license under its patent rights nor the rights of others.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Board Mount Pressure Sensors](#) category:*

*Click to view products by [Measurement Specialties](#) manufacturer:*

Other Similar products are found below :

[80527-25.0H2-05](#) [80541-B00000150-01](#) [80541-B00000200-05](#) [80554-00700100-05](#) [80568-00300050-01](#) [81618-B00000040-01](#) [81739-B00000900-01](#) [81807-B00000020-01](#) [81808-B00000150-14](#) [82903-B00000020-01](#) [93.631.4253.0](#) [93.731.4353.0](#) [93.932.4553.0](#) [136PC150G2](#) [136PC15A1](#) [142PC95AW71](#) [142PC05DW70](#) [MPXV2202DPT1](#) [15PSI-G-4V](#) [1805-01A-L0N-B](#) [2000317-1](#) [26PCBKT](#) [26PCCFA6D26](#) [26PCCFS2G](#) [26PCCVA6D](#) [93.632.7353.0](#) [93.731.3653.0](#) [93.931.4853.0](#) [93.932.4853.0](#) [SCDA120-XSC05DC](#) [SP370-23-156-0](#) [185PC30DH](#) [192992-0059](#) [20INCH-G-MV-MINI](#) [26PCAFJ3G](#) [26PCAFS2G54](#) [26PCCEP5G24](#) [26PCJEU5G19](#) [30INCH-D1-MV-MINI](#) [ASCX15AN-90](#) [TSCSAAN001PDUCV](#) [DCAL401DN](#) [DCAL401GN](#) [XZ202798SSC](#) [XZ203676HSC](#) [SP370-25-116-0](#) [81717-00000050-05](#) [81794-B00001200-01](#) [HSCDLNN100PGAA5](#) [81618-B00000040-05](#)