

LM



- 316L SS Pressure Sensor with PVC Threads
- Small Profile
- 0.5 - 4.5V High Level Output
- Gage
- ASIC Calibrated

DESCRIPTION

The LM Series incorporates stainless steel and plastic isolation suitable for level sensing in water, other liquid and gas. The LM series uses a patent pending low cost stainless steel sensor in a PVC plastic fitting. The modular design is adaptable to an infinite number of plastic port variations. With high performance in a small form factor, the LM Series enables the miniaturization of high accuracy pressure and vacuum systems. The standard output is .5V to 4.5V with a 5V supply.

FEATURES

- Threaded Process Fitting
- -20°C to +85°C Operating Temperature Range
- ±1% Pressure Non Linearity
- ±3.0% Total Error Band
- Solid State Reliability

APPLICATIONS

- Irrigation
- RV and Marine Holding Tank Level
- Water Storage & Recycling Systems
- Small Tank Fluid Level
- Chillers & Evaporative Coolers

STANDARD RANGES

Range	psig	Range	Bar
0 to 1	•	0 to .07	•
0 to 2	•		
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	•

LM

## PERFORMANCE SPECIFICATIONS

Supply Voltage: 5.0Vdc

Ambient Temperature: 25°C (unless otherwise specified)

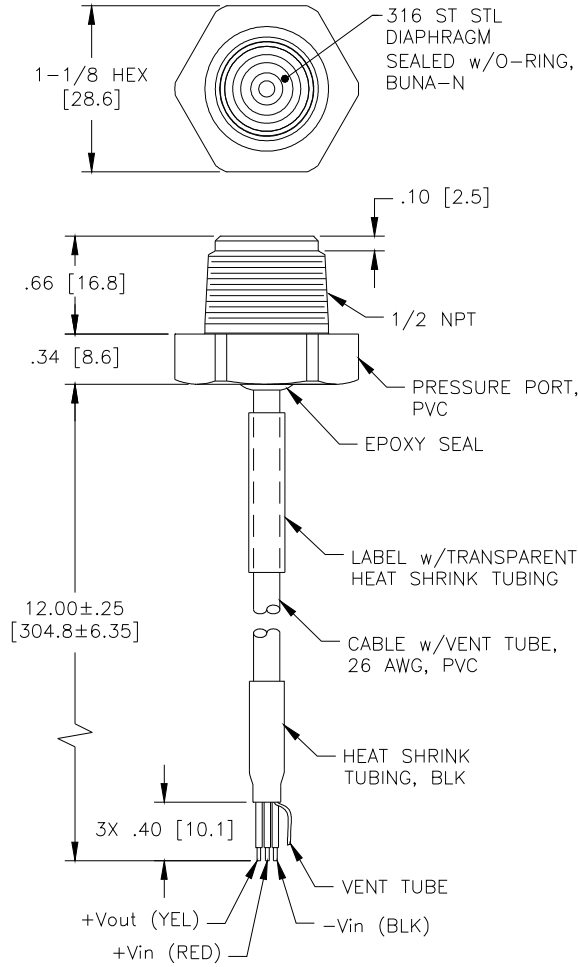
PARAMETERS	MIN	TYP	MAX	UNITS	NOTES
Full Scale Output		4.5		V	1
Zero Pressure Output		0.5		V	1
Pressure Non Linearity	-1	±0.25	1	%Span	2
Pressure Hysteresis	-0.1		0.1	%Span	
Repeatability		±0.02		%Span	
Accuracy (combined linearity, hysteresis, & repeatability)		±0.3		%Span	2
Temperature Error – Span	-1.5		1.5	%Span	3
Temperature Error – Zero	-1.5		1.5	%Span	3
Total Error Band (includes calibration errors above & temperature effects over the compensated range)			±3 (>5psi) ±5 (5psi) ±7 (<5psi)	%Span	
Supply Voltage	4.75	5.00	5.25	V	
Supply Current	2.0	2.5	3.0	mA	
Insulation Resistance (50Vdc)	50			MΩ	4
Pressure Overload			3X	Rated	5
Compensated Temperature	0		40	°C	
Operating Temperature	-20		+85	°C	
Weight			11	grams	
Media – Pressure Port	Liquids and Gases compatible with 316L Stainless Steel and Buna-N O-Ring				
Media – Reference Port	Compatible with Silicon, Pyrex, Gold, Epoxy, Fluorosilicone RTV, FR-4, and 316L Stainless Steel				

### Notes

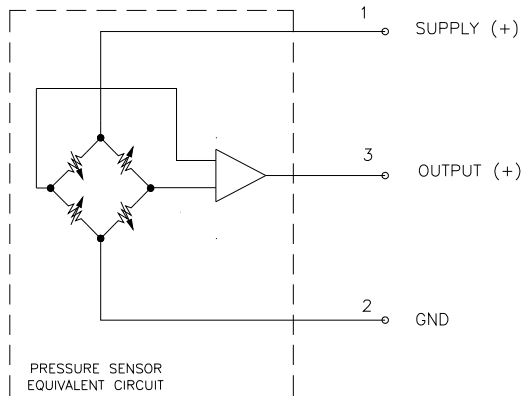
1. Ratiometric to supply voltage.
2. Best fit straight line.
3. Maximum temperature error between 0 °C and 40 °C with respect to 25 °C. ±2% maximum for devices below 5psi and .07Bar.
4. Between case and cable.
5. 3X maximum not to exceed 150 psi. 20 psi for 5 psi and lower.

DIMENSIONS

ALL DIMENSIONS IN INCHES [mm]

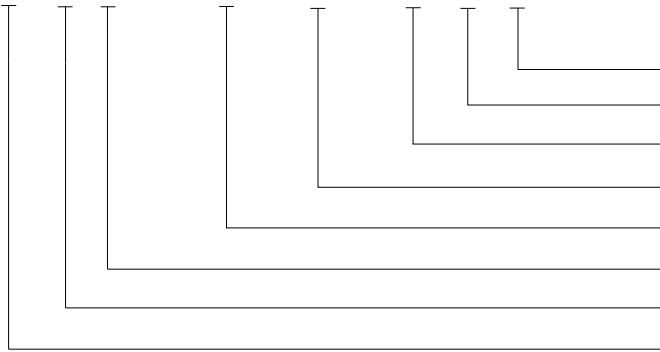


CONNECTIONS



ORDERING INFORMATION

LM 3 1 - 00000 F - 001P G



Type (G = Gage)  
 Units (P = psi, B = Bar)  
 Pressure Range  
 Pressure Port (F = 1/2NPT)  
 Specials (Reserved for Custom Designs)  
 Connection (1 = 12" Cable)  
 Output (3 = .5 - 4.5V Ratiometric)  
 Model

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.