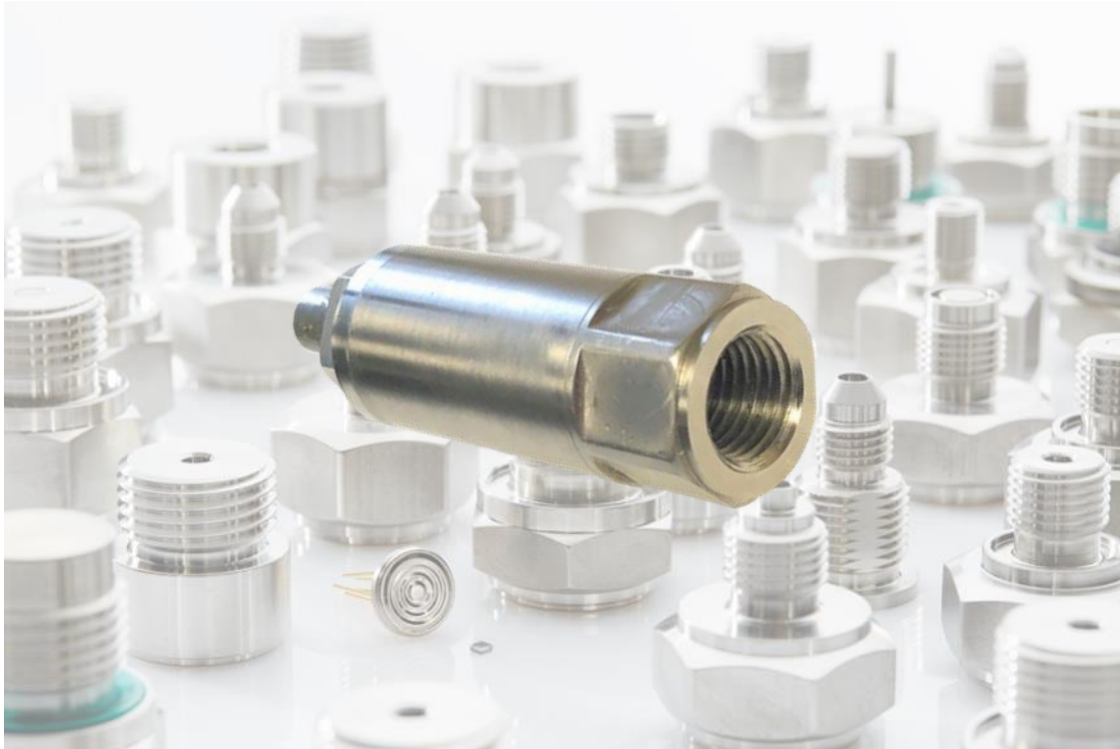


MINIATURE PRESSURE TRANSMITTER ML1000



PRODUCT OVERVIEW

The ML1000 Series is a digitally compensated miniature pressure transmitter providing a 4-20 mA, 2-wire output. The transmitter offers total static accuracies of $\leq 0.1\%FS$ including linearity, hysteresis, repeatability, zero and span setting errors. Included in this static accuracy are hysteresis and repeatability of typically 0.01% which provides outstanding precision.

This performance is achieved by selecting the very best piezoresistive silicon sensor technology which has been refined for more than 30 years. The ML1000 Series is suitable for static and dynamic pressure measurements with a frequency response of $<1ms$.

The modular construction provides a huge range of mechanical designs to suit specific applications as can be seen from the drawings on page 2. This is supported by fast delivery for all pressure ranges and standard options.

Process Measure Control

Features

- 4-20 mA
- 0-5 to 0-500 psi
- Fast Response $<1ms$
- $\leq 0.1\%$ Accuracy
- -40 to 250°F

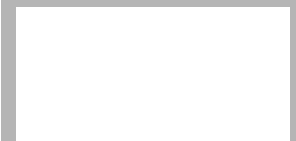
Applications

- Test & Measurement
- Industrial Process
- Test Benches

Contact

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Danbury, CT 06810 USA
sales@pmc1.com
Tel: 203-792-8686
Fax: 203-743-2051
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Represented by:



Specification

Measurement

Pressure ranges

Any range from 0-5 to 0-500 psi FS available, in any engineering units such as psi, Pa, in H₂O, bar.

Absolute from 0-5 to 0 -500 psia FS

Gauge from 0-5 to 0 - 500 psig FS

Consult factory for other ranges.

Proof Pressure

All ranges: 3 x FS

Consult factory for higher proof pressure

Burst Pressure

10 x FS

Operating Temperature Range

For 4-20 mA output: -40 to 250°F

Compensated Temperature Range

32 to 160°F (standard)

-40 to 250°F (option)

Storage Temperature Range

-40 to 250°F

Performance

Total Error Band (±typ/±max)

Standard:

≤0.5/0.8%: 32 to 160°F, all pressure ranges

Premium:

≤0.5/0.8%: -40 to +250°F, all pressure ranges

For higher temperatures, contact factory.

Total Error Band includes static accuracy and thermal effects overcompensated range.

Specification Continued

Accuracy

Combined linearity, hysteresis, repeatability, zero and span settings:

All ranges: ≤±0.1% FS

Consult factory for other accuracies.

Long Term Stability

<0.1% FS/yr

Under standard conditions

Supply Voltage

9-33 Vdc (for 4-20 mA output)

Influence of supply voltage < 0.05% FS

Reverse Polarity Protected

Load Resistance

Influence of load resistance < 0.05% FS

Output Signal

4-20 mA, 2-wires

Response Time:

<1ms (10 to 90%FS)

Insulation Resistance

> 50 megohms @ 500 Vdc (@ 68°F)

Construction

Material

All wetted parts are Stainless Steel 316L

Welded, hermetic construction when using appropriate electrical connector.

Process Connections

7/16 - 20 UNF male

1/4 NPT female

Other connections available . Consult factory.

Electrical Connection

M12 x 1 (Lumberg RSF4), 4 pins

6-pin bayonet per MIL-C-26482 (10-6)

DR25 or PTFE cable

Mating connectors not supplied as standard

Other connections available. Consult factory.

Specification Continued

Weight

1.6 oz (approximate not including cable)

Vibration

20g, 10 to 2000 Hz, 3 axis

Mechanical Shock

300g/6ms, 3 axis, half sine

Ordering Information

Please specify the following:

1. Model Number - ML1000
2. Electrical Connection
6-pin bayonet (10-6 layout)
4-pin M12x1 connector
Polyurethane cable
3. Pressure range, including eng. units, type
4. Compensated temperature range
5. Cable length
6. Any special feature:

Example ordering format:

ML1000 - M12 x 1 - 100 psia - Standard TEB

Options

PMC offers a wide range of options for these and other similar transmitters. Please consult the factory for any special requirements.

Examples include:

Electrical: i.e. RS485, HART etc.

Pressure snubber and bleed port

Special oil filling for food application etc.

PMC-STG, Inc. adopts a continuous development program which sometimes necessitates specification changes without notice.

MECHANICAL DETAILS (CONFIGURATION EXAMPLES)

Dimensions in inches

