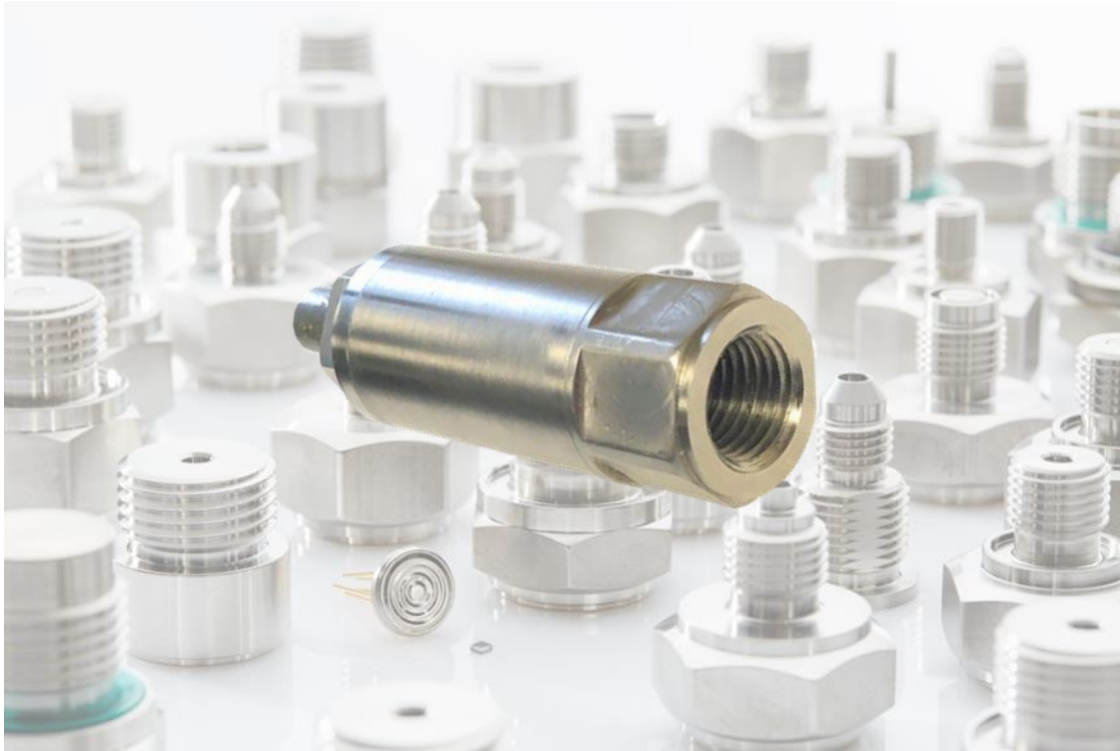




## MINIATURE PRESSURE TRANSMITTER ML1000



### 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

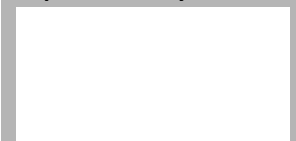
### Applications

- Test & Measurement
- Industrial Process
- Test Benches

### Contact

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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 H<sub>2</sub>O, 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 Engineering adopts a continuous development program which sometimes necessitates specification changes without notice

**MECHANICAL DETAILS (CONFIGURATION EXAMPLES)**

Dimensions in inches

