



# P61 Pressure Sensor

## Product Overview

The Pressure/Temperature MediaSensor™ (P61) family of bulk micromachined, absolute, and sealed pressure transducers and transmitters are for both harsh and benign media with superior accuracy.



## Typical Applications

- Refrigeration
- HVAC
- Fuel Cells
- Process Controls
- Agriculture
- Pumps
- Hydraulics
- Pneumatics

## Technical Specifications

Maximum Pressure

**3,000 PSI**

Accuracy

**< ± 1.00% FS**

Maximum Operating Temp.

**105 °C**

Output Type	0.5 - 4.5 V	1 - 5 V	4 - 20 mA
Accuracy 100-750 PSI (at 22 °C)	< ± 0.50% FS	< ± 0.50% FS	< ± 0.50% FS
Accuracy 751-3,000 PSI (at 22 °C)	< ± 1.00% FS	< ± 1.00% FS	< ± 1.00% FS
Temperature Error (-40 °C to 105 °C)	< ± 1.00% FS	< ± 1.00% FS	< ± 1.00% FS
Zero Pressure Offset	0.50 V	1.0 V	4.0 mA
Full Scale Output (at Pressure FS)	4.50 V	5.0 V	20.0 mA
Operating Temperature	-40 °C to 105 °C	-40 °C to 105 °C	-40 °C to 105 °C
Storage Temperature	-40 °C to 105 °C	-40 °C to 105 °C	-40 °C to 105 °C
Proof Pressure	3X FS	3X FS	3X FS
Burst Pressure (lesser of the two)	10X FS or 15,000 PSI	10X FS or 15,000 PSI	10X FS or 15,000 PSI

Output Type	0.5 - 4.5 V	1 - 5 V	4 - 20 mA
Supply Voltage	5 ± 0.5 Volts	8 to 30 Volts	8 to 30 Volts
Current Draw	< 6 mA	< 3 mA	Not Applicable
Output Type	0.45 mA max (sink or source)	0.45 mA max (sink or source)	Not Applicable
Response Time (Pressure/Output)	< 1 ms	< 1 ms	< 1 ms

Parameter	Value	Units
Pressure/Temperature Cycles	$> 10 \times 10^6$	Cycles
Thermal Shock	250	Cycles
Vibration	4	Hours
EMC Compatibility	10	V/m
Humidity	250	Hours
Weight	$\leq 0.3$	Grams

## Chemical Compatibilities

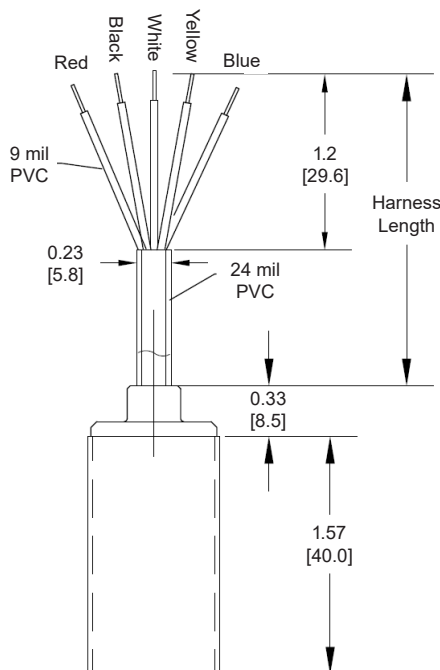
Any gas or liquid compatible with 304L and 316L stainless steel. (Including but not limited to motor oil, diesel, hydraulic fluid, brake fluid, water, wastewater, hydrogen, nitrogen, and air.) Designed to be used in media isolated mediums.

## Agency Approvals & Certifications

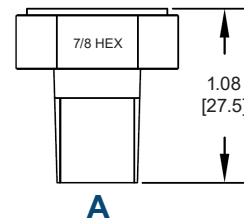


## Dimensional Drawings

**Harness**



**Ports**



Wire Color	0.5-4.5 V	20 mA
Red	$V_{in} (5+/-0.1)$	$V_{in} (8-30)$
Black	GND	NA
White	$V_{out}$	GND
Yellow	Thermistor	Thermistor
Blue	Thermistor	Thermistor

Measurement Units	
0.00	= Inches
[00.0]	= Millimeters

# P61 MediaSensor™ Ordering System

P61 - 500 - A - A - 16 - 4.5 V - A

## Family

## Full Scale

Pressure (100 - 3,000 PSI)

## Pressure Type

A = Absolute (100 - 3,000 PSI)

S = Sealed Gauge (100 - 3,000 PSI)

## Port Configuration

### 304L

A

### Hex

7/8"

### Port

1/4 NPT

## Harness

**24 Gauge Harness** (Inner PVC: 16 mil)

- I12 = 12"
- I18 = 18"
- I24 = 24"
- I36 = 36"
- I72 = 72"

\*Other lengths available - contact factory.  
MOQ's will apply.

## Output Options

**4.5 V** = 0.5 - 4.5 V (5 V input only)

**5 V** = 1 - 5 V (8 to 30 V input only)

**20 mA** = 4 - 20 mA (8 to 30 V input only)

## Temperature Options (NTC Thermistor)

- |   |   |                   |
|---|---|-------------------|
| A | = | 10 kohm at 25 °C  |
| B | = | 100 kohm at 25 °C |
| C | = | 5 kohm at 25 °C   |

# Contact

## *SSI Technologies, LLC*

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SSI Technologies, LLC is an Amphenol Advanced Sensors company.



*SSI Technologies, LLC*  
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## Warranty

**LIMITED WARRANTY:** All SSI products are warranted against defective materials and workmanship for a period of one (1) year from the date of delivery to the original purchaser. Any product that is found to be defective within the one year period will be replaced at the discretion of SSI. **THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE, PERFORMANCE, OR OTHERWISE.** SSI is not an expert in the customer's technical field and therefore does not warrant the suitability of its products for the applications selected by the customer. SSI accepts no responsibility for misuse, misapplication or unauthorized modification of its products.

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**Note:** Specs are subject to change without notice.

# Mouser Electronics

Authorized Distributor

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## Amphenol:

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