



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	≤ 0.3	Grams

Chemical Compatibilities

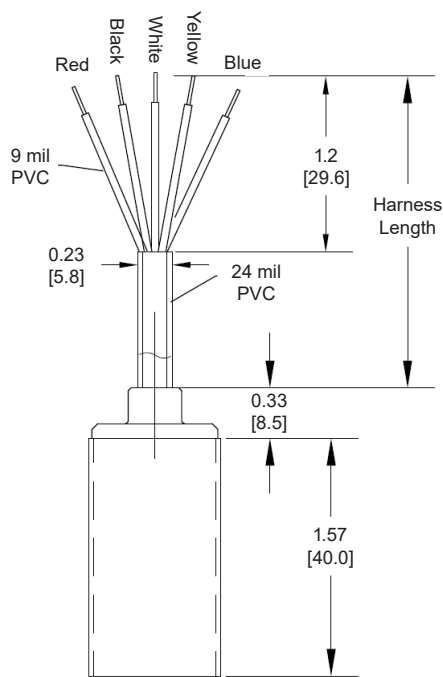
Any gas or liquid compatible with 304L and 316L stainless steel. (Including but not limited to motor oil, diesel, hydraulic fluid, brake fluid, water, wastewater, hydrogen, nitrogen, and air.) Designed to be used in media isolated mediums.

Agency Approvals & Certifications

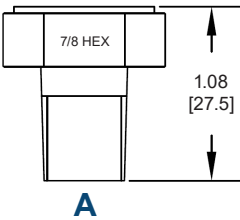


Dimensional Drawings

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 - I6 - 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)

- **112** = 12"
- **118** = 18"
- **124** = 24"
- **136** = 36"
- **172** = 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

3200 Palmer Drive, Janesville, WI 53546

ssi-sensors.com

1 (608) 757-2000



SSI Technologies, LLC is an Amphenol Advanced Sensors company.



SSI Technologies, LLC
— an Amphenol Company —

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.

LIMITATION OF LIABILITY: SSI's obligation under this limited warranty is strictly and exclusively limited to the repair or replacement free of charge of such articles as are found to be defective in material or workmanship on the condition that the purchaser gives prompt written notice to SSI of any claim to breach of warranty within the warranty period, and, if requested, returns the defective articles to SSI. SSI will not assume any expenses or liability for repairs made to its articles outside of its plant, without its prior written consent. SSI reserves the right to satisfy its warranty obligation in full, with respect to defective articles, by the payment to the purchaser of all sums paid by the purchaser to SSI for such articles. **IN NO EVENT SHALL SSI BE LIABLE FOR CLAIMS (BASED UPON BREACH OF EXPRESS OR IMPLIED WARRANTY, NEGLIGENCE OR OTHERWISE) FOR ANY DAMAGES, WHETHER DIRECT, IMMEDIATE, INCIDENTAL, FORESEEABLE, CONSEQUENTIAL, OR SPECIAL.**

Terms & Conditions

Please visit [<https://www.ssi-sensors.com/contact/supplier-portal>] for information regarding the SSI Technologies, LLC Terms & Conditions.

Note: Specs are subject to change without notice.