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	Accuracy	Maximum Operating Temp.
3,000 PSI	< ± 1.00% FS	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

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Parameter	Value	Units
Pressure/Temperature Cycles	> 10 x 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

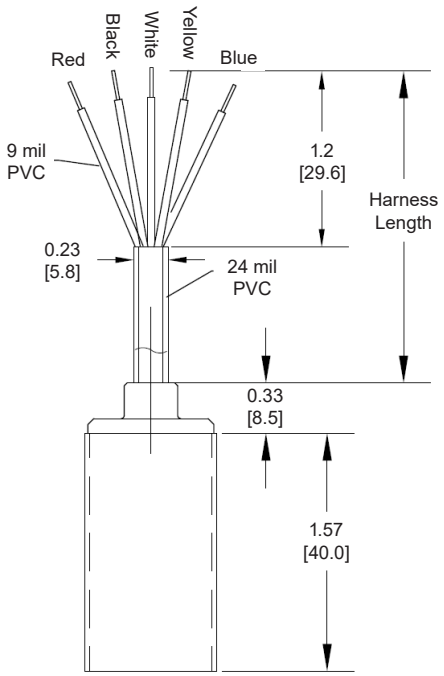
RoHS Compliant

IATF 16949:2016 Certified

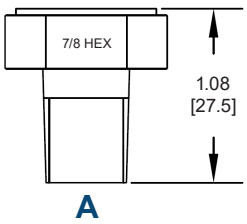
REACH Compliant

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	Hex	Port
A	7/8"	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

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Contact

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