

Model Number  
**106B50**

# ICP® PRESSURE SENSOR

Revision: M  
ECN #: 29520

	ENGLISH	SI
<b>Performance</b>		
Measurement Range(for ±2.5V output)	5 psi	34.45 kPa
Sensitivity(± 15 %)	500 mV/psi	72.5 mV/kPa
Maximum Pressure(step)	100 psi	690 kPa
Maximum Pressure(static)	500 psi	3448 kPa
Resolution	0.07 mpsi	0.00048 kPa
Resonant Frequency	≥ 40 kHz	≥ 40 kHz
Rise Time	≤ 12 μ sec	≤ 12 μ sec
Low Frequency Response(-5 %)	0.5 Hz	0.5 Hz
Non-Linearity	≤ 1 % FS	≤ 1 % FS
<b>Environmental</b>		
Acceleration Sensitivity	≤ 0.002 psi/g	≤ 0.0014 kPa/(m/s <sup>2</sup> )
Temperature Range(Operating)	-65 to +250 °F	-54 to +121 °C
Temperature Coefficient of Sensitivity	≤ 0.03 %/°F	≤ 0.054 %/°C
Maximum Flash Temperature	3000 °F	1649 °C
Maximum Vibration	500 g pk	4903 m/s <sup>2</sup> pk
Maximum Shock	1000 g pk	9807 m/s <sup>2</sup> pk
<b>Electrical</b>		
Output Polarity(Positive Pressure)	Positive	Positive
Discharge Time Constant(at room temp)	≥ 1 sec	≥ 1 sec
Excitation Voltage	11 to 30 VDC	11 to 30 VDC
Constant Current Excitation	2 to 20 mA	2 to 20 mA
Output Impedance	≤ 100 ohm	≤ 100 ohm
Output Bias Voltage	3 to 8 VDC	3 to 8 VDC
<b>Physical</b>		
Sensing Element	Quartz	Quartz
Housing Material	17-4 Stainless Steel	17-4 Stainless Steel
Diaphragm	316L Stainless Steel	316L Stainless Steel
Sealing	Welded Hermetic	Welded Hermetic
Electrical Connector	10-32 Coaxial Jack	10-32 Coaxial Jack
Weight	1.13 oz	32 gm

**OPTIONAL VERSIONS**  
Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

**E - Emralon coating**  
Coating Emralon Emralon  
Electrical Isolation 10<sup>8</sup> ohm 10<sup>8</sup> ohm

**W - Water Resistant Cable** [3]  
Supplied Accessory : Model 060A11 Delrin clamp nut 3/4-16-2A thd 3/4" hex (1)

**WM - Water Resistant Cable** [3]  
Supplied Accessory : Model 060A13 Metric Delrin clamp nut M20 x 1.5-6g thd 20 mm hex (1)

**NOTES:**  
[1] Zero-based, least-squares, straight line method.  
[2] See PCB Declaration of Conformance PS023 for details.  
[3] Clamp nut installed prior to cable attachment

**SUPPLIED ACCESSORIES:**  
Model 060A11 Delrin clamp nut 3/4-16-2A thd 3/4" hex  
Model 060A13 Metric Delrin clamp nut M20 x 1.5-6g thd 20 mm hex (1)  
Model 065A36 Seal, .687" OD x .625" ID x .060", Derlin (3)

Entered: <i>BLS</i>	Engineer: <i>NJL</i>	Sales: <i>RWH</i>	Approved: <i>RF</i>	Spec Number:
Date: <i>10/17/08</i>	Date: <i>10/2/08</i>	Date: <i>10/3/08</i>	Date: <i>10/2/08</i>	<b>106-2500-80</b>



All specifications are at room temperature unless otherwise specified.  
In the interest of constant product improvement, we reserve the right to change specifications without notice.  
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