



Model Number 113B24		ICP® PRESSURE SENSOR		Revision: F ECN #: 54949	
Performance		ENGLISH	SI	OPTIONAL VERSIONS	
Measurement Range(for ±5V output)	1 kpsi	6,895 kPa		Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.	
Useful Overrange(for ± 10V output)	2 kpsi	13,790 kPa	[1]	CA - Ablative Coating [5]	
Sensitivity(± 10 %)	5.0 mV/psi	0.725 mV/kPa		E - Emralon coating [6][7]	
Maximum Pressure	10 kpsi	68,950 kPa		Coating	
Resolution	5 mpsi	0.035 kPa	[2]	Electrical Isolation	
Resonant Frequency	≥ 500 kHz	≥ 500 kHz		Emralon	
Rise Time	≤ 1.0 μ sec	≤ 1.0 μ sec		10 ⁸ Ohm	
Low Frequency Response(- 5 %)	0.005 Hz	0.005 Hz		Emralon	
Non-Linearity	≤ 1.0 % FS	≤ 1.0 % FS	[3]	10 ⁸ Ohm	
Environmental				Supplied Accessory: Model 065A08 Isolation ring 0.250" OD x 0.218" ID x 0.027" thk anodized aluminum (3)	
Acceleration Sensitivity	0.002 psi/g	0.0014 kPa/(m/s ²)	[2]	Supplied Accessory: Model 065A22 Isolation Seal, .250" OD x .218" ID x .015", Torlon or Vespel (3)	
Temperature Range(Operating)	-100 to +275 °F	-73 to +135 °C		[7][5]	
Temperature Coefficient of Sensitivity	≤ 0.03 %/°F	≤ 0.054 %/°C		J - Ground Isolated	
Maximum Flash Temperature	3,000 °F	1,649 °C		Electrical Isolation(50 V)	
Maximum Vibration	2,000 g pk	19,600 m/s ² pk		10 ⁸ Ohm	
Maximum Shock	20,000 g pk	196,000 m/s ² pk		10 ⁸ Ohm	
Electrical				N - Negative Output Polarity [7]	
Output Polarity(Positive Pressure)	Positive	Positive		S - Stainless Steel Diaphragm	
Discharge Time Constant(at room temp)	≥ 100 sec	≥ 100 sec		Diaphragm	
Excitation Voltage	20 to 30 VDC	20 to 30 VDC		316L Stainless Steel	
Constant Current Excitation	2 to 20 mA	2 to 20 mA		316L Stainless Steel	
Output Impedance	< 100 Ohm	< 100 Ohm		[6][7]	
Output Bias Voltage	8 to 14 VDC	8 to 14 VDC		W - Water Resistant Cable	
Physical				Supplied Accessory: Model 060A03 Clamp nut, 5/16-24-2A thd, 1/4" hex, stainless steel (1)	
Sensing Geometry	Compression	Compression		[6][7]	
Sensing Element	Quartz	Quartz		WM - Water Resistant Cable	
Housing Material	17-4 Stainless Steel	17-4 Stainless Steel		Supplied Accessory: Model 060A05 Clamp nut M7 x 0.75-6g thd (1)	
Diaphragm	Invar	Invar		[6][7]	
Sealing	Welded Hermetic	Welded Hermetic			
Electrical Connector	10-32 Coaxial Jack	10-32 Coaxial Jack			
Weight(with clamp nut)	0.21 oz	6.0 gm			
NOTES:					
[1] For +10 volt output, minimum 24 VDC supply voltage required. Negative 10 volt output may be limited by output bias.					
[2] Typical.					
[3] Zero-based, least-squares, straight line method.					
[4] See PCB Declaration of Conformance PS023 for details.					
[5] Used with optional mounting adaptor.					
[6] Clamp nut installed prior to cable attachment					
[7] For sensor mounted in thread adaptor, see adaptor installation drawing for supplied accessories and pressure limitations.					
SUPPLIED ACCESSORIES:					
Model 060A03 Clamp nut, 5/16-24-2A thd, 1/4" hex, stainless steel (1)					
Model 060A05 Clamp nut M7 x 0.75-6g thd (1)					
Model 065A02 Seal ring, sensor flush mount, 0.248" OD x 0.219" ID x 0.015" thk, brass (3)					
Model 065A05 Seal sleeve sensor recess mount 0.248" OD x 0.221" ID x 0.240" thk 17-4 (1)					
Model PCS-1AZ Sensitivity calibration at 100% and 10% of sensor range					
Entered: ND	Engineer: AJA	Sales: RWM	Approved: RPF	Spec Number:	
Date: 06/26/2024	Date: 06/26/2024	Date: 06/26/2024	Date: 06/26/2024	40647	
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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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