



Model Number 112A22		ICP® PRESSURE SENSOR		Revision: N ECN #: 54975
Performance		ENGLISH	SI	OPTIONAL VERSIONS
Measurement Range(for ±5V output)	50 psi	345 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)	100 psi	690 kPa	[1]	CA - Ablative Coating [5][6]
Sensitivity(± 15 %)	100 mV/psi	14.5 mV/kPa		E - Emralon coating [5] Coating Emralon Emralon
Maximum Pressure(step)	500 psi	3,450 kPa		Electrical Isolation 10 ⁸ Ohm 10 ⁸ Ohm
Maximum Pressure(Total)	15,000 psi	103,421 kPa		Supplied Accessory: Model 065A08 Isolation ring 0.250"OD x 0.218" ID x 0.027" thk anodized aluminum (3)
Resolution	0.1 mpsi	0.000689 kPa	[2]	Supplied Accessory: Model 065A22 Isolation Seal, .250" OD x .218" ID x .015", Torlon or Vespel (3) [5][6]
Resonant Frequency	≥ 250 kHz	≥ 250 kHz		J - Ground Isolated [5] Electrical Isolation(50 V) 10 ⁸ Ohm 10 ⁸ Ohm
Rise Time(Reflected)	≤ 2.0 μ sec	≤ 2.0 μ sec		N - Negative Output Polarity [5]
Low Frequency Response(- 5 %)	0.50 Hz	0.50 Hz		S - Stainless Steel Diaphragm [5][7]
Non-Linearity	≤ 1.0 % FS	≤ 1.0 % FS	[3]	W - Water Resistant Cable [5] Supplied Accessory: Model 060A03 Clamp nut, 5/16-24-2A thd, 1/4" hex, stainless steel (1)
Environmental				WM - Water Resistant Cable [5] Supplied Accessory: Model 060A05 Clamp nut M7 x 0.75-6g thd (1)
Acceleration Sensitivity	0.002 psi/g	0.0014 kPa/(m/s ²)	[2]	
Temperature Range(Operating)	-100 to +275 °F	-73 to +135 °C		
Temperature Coefficient of Sensitivity	≤ 0.03 %/°F	≤ 0.054 %/°C		
Maximum Flash Temperature	3,000 °F	1,650 °C		
Maximum Vibration	2,000 g pk	19,600 m/s ² pk		
Maximum Shock	20,000 g pk	196,000 m/s ² pk		
Electrical				
Output Polarity(Positive Pressure)	Positive	Positive		
Discharge Time Constant(at room temp)	≥ 1.0 sec	≥ 1.0 sec		
Excitation Voltage	22 to 30 VDC	22 to 30 VDC		
Constant Current Excitation	2 to 20 mA	2 to 20 mA		
Output Impedance	< 100 Ohm	< 100 Ohm		
Output Bias Voltage	8 to 14 VDC	8 to 14 VDC		
Physical				
Sensing Geometry	Compression	Compression		
Sensing Element	Quartz	Quartz		
Housing Material	17-4 Stainless Steel	17-4 Stainless Steel		
Diaphragm	Invar	Invar		
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]For sensor mounted in thread adaptor, see adaptor installation drawing for supplied accessories and pressure limitations.				
[6]Used with optional mounting adaptor.				
[7]Clamp nut installed prior to cable attachment				
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: 07/15/2024	Date: 07/15/2024	Date: 07/15/2024	Date: 07/15/2024	6476
		 Phone: 716-684-0001 Fax: 716-684-0987 E-Mail: info@pcb.com		
All specifications are at room temperature unless otherwise specified.		3425 Walden Avenue, Depew, NY 14043		
In the interest of constant product improvement, we reserve the right to change specifications without notice.				
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