Model Number 102A44		ICP®	PRESSUR	E SENSOR
Performance	ENGLISH	SI		
Measurement Range(for ±5V output)	50 psi	344.8 kPa		Optional versions
Sensitivity(± 15 %)	100 mV/psi	14.503 mV/kPa		
Maximum Pressure	4 kpsi	27,580 kPa	[1]	
Resolution	0.1 mpsi	0.00069 kPa	[2]	
Resonant Frequency	≥ 250 kHz	≥ 250 kHz		
Rise Time(Reflected)	≤ 2 µ sec	≤ 2 µ sec		
Low Frequency Response(- 5 %)	0.5 Hz	0.5 Hz		
Non-Linearity	≤ 1.0 % FS	≤ 1.0 % FS	[3]	
Environmental				
Acceleration Sensitivity	0.002 psi/g	0.0014 kPa/(m/s²)	[2]	
Temperature Range(Operating)	-65 to +250 °F	-54 to +121 ℃		
Temperature Coefficient of Sensitivity	≤ 0.03 %/°F	≤ 0.054 %/°C		
Maximum Flash Temperature	3,000 °F	1,649 ℃		
Maximum Vibration	2,000 g pk	19,600 m/s² pk		
Maximum Shock	20,000 g pk	196,000 m/s ² pk		
Hazardous Area Approval	See Manual	See Manual		
Electrical				
Output Polarity(Positive Pressure)	Positive	Positive		
Discharge Time Constant(at room temp) ≥ 1.0 sec	≥ 1.0 sec		
Excitation Voltage	20 to 28 VDC	20 to 28 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		
Electrical Isolation	10 ⁸ Ohm	10 ⁸ Ohm		
Physical				
Sensing Geometry	Compression	Compression		

Quartz

Stainless Steel

316L Stainless Steel

Welded Hermetic

10-32 Coaxial Jack

0.6 oz

Quartz

Stainless Steel

316L Stainless Steel

Welded Hermetic

10-32 Coaxial Jack

17.0 gm

[4]

OPTIONAL VERSIONS

Revision: E

ECN #: 54975

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

[1] Due to high sensitivity, the static pressure should be applied and removed very slowly. Rate should prevent more than 10 Volt change in output until Output Bias Voltage returns to normal (approximately 15 times discharge time constant).

[3]Zero-based, least-squares, straight line method.

[4] Diaphragm with ablative coating.

[5]See PCB Declaration of Conformance PS059 for details.

SUPPLIED ACCESSORIES:

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	38071



AN AMPHENOL COMPANY

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Sensing Element

Housing Material

Electrical Connector

Diaphragm

Sealing

Weight



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. ICP® is a registered trademark of PCB Piezotronics, Inc.