Model Number 102B11		ICP® P	RESSURE	SENSOR
Performance	ENGLISH	SI		
Measurement Range(for ±5V output)	1 kpsi	6,895 kPa		Optional versions h
Useful Overrange(for ± 10V output)	2,000 psi	13,790 kPa	[1]	
Sensitivity	5.0 mV/psi	0.725 mV/kPa		M - Metric Mour
Maximum Pressure(step)	10,000 psi	69,000 kPa		Supplied Accesso
Maximum Pressure(Total)	15 kpsi	103,425 kPa	[2]	
Resolution	20 mpsi	0.138 kPa	[3]	
Resonant Frequency	≥ 250 kHz	≥ 250 kHz		
Rise Time(Reflected)	≤ 2.0 µ sec	≤ 2.0 µ sec		
Low Frequency Response(- 5 %)	0.25 Hz	0.25 Hz		
Non-Linearity	≤ 1.0 % FS	≤ 1.0 % FS	[4]	
Environmental				
Acceleration Sensitivity	0.002 psi/g	$0.0014 \text{kPa/(m/s}^2)$	[3]	
Temperature Range(Operating)	-400 to +212 °F	-240 to +100 °C		
Temperature Coefficient of Sensitivity	≤ 0.06 %/°F	≤ 0.108 %/°C		
Maximum Vibration	2,000 g pk	19,600 m/s² 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)	≥ 2.0 sec	≥ 2.0 sec		
Excitation Voltage	20 to 30 VDC	20 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 Element	Quartz	Quartz		
Housing Material	304L/316L Stainless Steel	304L/316L Stainless Stee	l	
Thread Adaptor Material	316L Stainless Steel	316L Stainless Steel		
Diaphragm	316L Stainless Steel	316L Stainless Steel		

Welded Hermetic

10-32 Coaxial Jack

.388 oz

Welded Hermetic

10-32 Coaxial Jack

11.00 gm

OPTIONAL VERSIONS

Revision: E

ECN #: 55146

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

M - Metric Mount Supplied Accessory: Model 065A34 Seal ring 0.435" OD x 0.397" ID x 0.030" Cu (3)

NOTES:

- [1]Excitation voltage >=28 volts required.
- [2] 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]Typical.
- [4]Zero-based, least-squares, straight line method.
- [5]See PCB Declaration of Conformance PS023 for details.

SUPPLIED ACCESSORIES:

Model 065A44 Seal ring 0.435" OD x 0.377" ID x 0.030" thk Cu (3)

Model PCS-10AA Single point sensitivity coefficient at sensor minimum operating temperature (-320°F / -196°C limit)

Model PCS-1AZ Sensitivity calibration at 100% and 10% of sensor range

Entered: ND	Engineer: RPF	Sales: RWM	Approved: RPF	Spec Number:
Date: 08/23/2024	Date: 08/23/2024	Date: 08/23/2024	Date: 08/23/2024	70581



AN AMPHENOL COMPANY

3425 Walden Avenue, Depew, NY 14043

CE UK

Sealing

Weight

Electrical Connector

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.