

Model Number
116B

CHARGE OUTPUT PRESSURE SENSOR

Revision: W
ECN #: 54898

	ENGLISH	SI	
Performance			
Sensitivity(± 15 %)	6 pC/psi	0.870 pC/kPa	
Measurement Range	100 psi	690 kPa	
Maximum Pressure	3,500 psi	24,133 kPa	
Resonant Frequency	≥ 55 kHz	≥ 55 kHz	
Rise Time(Reflected)	≤ 9 μ sec	≤ 9 μ sec	
Non-Linearity	≤ 1 % FS	≤ 1 % FS	[1]
Environmental			
Acceleration Sensitivity	.004 psi/g	.0028 kPa/(m/s ²)	[2]
Temperature Range(Operating)	-400 to 650 °F	-240 to 345 °C	
Temperature Coefficient of Sensitivity	≤ .04 %/°F	≤ .072 %/°C	
Maximum Flash Temperature	3,000 °F	1,649 °C	
Maximum Vibration	500 g pk	4,900 m/s ² pk	
Maximum Shock	2,000 g pk	19,600 m/s ² pk	
Electrical			
Output Polarity(Positive Pressure)	Negative	Negative	
Capacitance	30 pF	30 pF	[2]
Insulation Resistance(at 650°F[345°C])	> 10 ⁹ Ohm	> 10 ⁹ Ohm	
Insulation Resistance(at room temp)	> 10 ¹¹ Ohm	> 10 ¹¹ Ohm	
Physical			
Sensing Element	Quartz	Quartz	
Housing Material	316L Stainless Steel	316L 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	.717 oz	20.3 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		
Electrical Isolation	(Case) 10 ⁸ Ohm	(Case) 10 ⁸ Ohm
Coating	Emralon	Emralon
Temperature Range	-65 to 275 °F	-54 to 135 °C

NOTES:

- [1]Zero-based, least-squares, straight line method.
- [2]Typical.
- [3]See PCB Declaration of Conformance PS158 for details.

SUPPLIED ACCESSORIES:

- Model 060A12 Clamp nut, 9/16-18-2A thd, 9/16" hex
- Model 060A14 Metric clamp nut, M14 x 1.25-6g thd, 14 mm hex, stainless steel (1)
- Model 065A37 Seal ring 0.497 OD x 0.437 ID x 0.025 thk Brass (3)
- Model PCS-1 Calibration of dynamic pressure sensors at 100% full scale, max 15 kpsi range.
- Model PCS-10 Single point sensitivity coefficient at sensor maximum operating temperature
- Model PCS-17 Electrostatic Actuator (ESA) frequency response from 20 Hz to 50 kHz
- Model PCS-24 Sensor sensitivity calibration with Pistonphone

Entered: ND	Engineer: AJA	Sales: MV	Approved: RPF	Spec Number:
Date: 05/31/2024	Date: 05/31/2024	Date: 05/31/2024	Date: 05/31/2024	116-2010-80



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.

PCB PIEZOTRONICS Phone: 716-684-0001
AN AMPHENOL COMPANY Fax: 716-684-0987
E-Mail: info@pcb.com

3425 Walden Avenue, Depew, NY 14043