Model	Numbe
113	3B33

ICP® PRESSURE SENSOR

Revision: E

ECN #: 40791

[3]

Deufermen	ENGLICH	CI
Performance	<u>ENGLISH</u>	<u>SI</u>
Measurement Range(for ±5V output)	10 kpsi	68,950 kPa
Sensitivity(± 10 %)	0.5 mV/psi	0.073 mV/kPa
Maximum Pressure	15 kpsi	103,420 kPa
Resolution	50 mpsi	.345 kPa
Resonant Frequency	≥ 400 kHz	≥ 400 kHz
Rise Time(Reflected)	≤ 1.5 µ sec	≤ 1.5 µ sec
Low Frequency Response	1.0 Hz	1.0 Hz
Non-Linearity	≤ 1.0 % FS	≤ 1.0 % FS
Environmental		
Acceleration Sensitivity	≤ 0.002 psi/g	$\leq 0.0014 \text{ kPa/(m/s}^2)$
Temperature Range(Operating)	-100 to +275 °F	-73 to +135 °C
Temperature Coefficient of Sensitivity	≤ 0.1 %/°F	≤ 0.18 %/°C
Maximum Flash Temperature	3000 °F	1650 °C
Maximum Vibration	2000 g pk	19,614 m/s² pk
Maximum Shock	20,000 g pk	196,140 m/s ² pk
Electrical		
Output Polarity(Positive Pressure)	Positive	Positive
Discharge Time Constant(at room temp)	.5 to 1.0 sec	.5 to 1.0 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 Geometry	Compression	Compression
Sensing Element	Quartz	Quartz
Housing Material	Invar	Invar
Diaphragm	Invar	Invar
Sealing	Welded Hermetic	Welded Hermetic
Electrical Connector	10-32 Coaxial Jack	10-32 Coaxial Jack
Weight	0.2 oz	6.0 gm



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 Group, Inc.

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

Coating Emralon Emralon Electrical Isolation 10⁸ Ohm 10⁸ Ohm

Supplied Accessory: Model 065A08 Isolation ring 0.250"OD x 0.218" ID x 0.027" thk anodized aluminum (3)

Supplied Accessory: Model 065A22 Isolation Seal, .250" OD x .218" ID x .015", Torlon or Vespel (3)

H - Hermetic Seal [3]

Welded Hermetic Sealing Welded Hermetic

J - Ground Isolated [3][4]

N - Negative Output Polarity

W - Water Resistant Cable [5][3] Supplied Accessory: Model 060A03 Clamp nut, 5/16-24-2A thd, 1/4" hex, stainless steel (1)

WM - Water Resistant Cable [5][3]

Supplied Accessory: Model 060A05 Clamp nut M7 x 0.75-6g thd (1)

NOTES:

- [1] Zero-based, least-squares, straight line method.
- [2] See PCB Declaration of Conformance PS023 for details.
- [3] For sensor mounted in thread adaptor, see adaptor installation drawing for supplied
- [4] Used with optional mounting adaptor.
- [5] 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)

Entered: AP	Engineer: MJK	Sales: KWW	Approved: BAM	Spec Number:
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Phone: 716-684-0001 Fax: 716-684-0987 E-Mail: info@pcb.com