Model Number ICP® PRESSURE SENSOR 102M 205 Performance **ENGLISH** SI Measurement Range(for ±5V output) 100 psi 689.5 kPa Useful Overrange(for ± 10V output) 200 psi 1,379 kPa [1] Sensitivity(± 10 mV/psi) 50 mV/psi 7.25 mV/kPa 500 psi Maximum Pressure 3 448 kPa 0.0028 kPa Resolution 0.4 psi [2] Resonant Frequency ≥ 250 kHz ≥ 250 kHz Rise Time ≤ 2 µ sec ≤ 2 µ sec Low Frequency Response (- 5 %) 0.50 Hz 0.50 Hz Non-Linearity ≤ 1 % FS ≤ 1 % FS [3] **Environmental** Acceleration Sensitivity 0.002 psi/g $0.0014 \text{ kPa/(m/s}^2)$ [2] Temperature Range(Operating) -100 to +275 °F -73 to +135 ℃ Temperature Coefficient of Sensitivity ≤ 0.03 %/°F ≤ .054 %/°C Maximum Flash Temperature 3.000 °F 1 649 ℃ $19,600 \text{ m/s}^2 \text{ pk}$ Maximum Vibration 2,000 g pk Maximum Shock 20,000 g pk 196,000 m/s² pk Electrical Output Polarity(Positive Pressure) Positive Positive Discharge Time Constant(at room temp) ≥ 1 sec ≥ 1 sec 20 to 30 VDC 20 to 30 VDC **Excitation Voltage** Constant Current Excitation 2 to 20 mA 2 to 20 mA Output Bias Voltage 8 to 14 VDC 8 to 14 VDC Physical Sensing Element Ouartz Ouartz Housing Material 17-4 Stainless Steel 17-4 Stainless Steel Diaphragm 316L Stainless Steel 316L Stainless Steel [4] Welded Hermetic Sealing Welded Hermetic

10-32 Coaxial Jack

0.4 oz

10-32 Coaxial Jack

11 am

OPTIONAL VERSIONS

Revision: F

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.

M - Metric Mount Supplied Accessory: Model 065A40 Seal ring 0.435" OD x 0.397" ID x 0.030" thk brass (3)

W - Water Resistant Cable

[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] Diaphragm with ablative coating.

[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-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	3931



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Electrical Connector

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.

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