

Model Number

102M205

ICP® PRESSURE SENSOR

Revision: D

ECN #: 21060

Performance

	ENGLISH	SI	
Measurement Range (for ± 5V output)	100 psi	689.5 kPa	[1]
Useful Overrange (for ± 10V output)	200 psi	1379 kPa	
Sensitivity (± 10 mV/psi)	50 mV/psi	7.25 mV/kPa	
Maximum Pressure	500 psi	3 448 kPa	
Resolution	2 mpsi	0 0138 kPa	
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	[2]

Environmental

Acceleration Sensitivity	≤ 0.002 psi/g	≤ 0 0014 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	1 649 °C	
Maximum Vibration	2000 g pk	19 614 m/s ² 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)	≥ 1 sec	≥ 1 sec	
Excitation Voltage	20 to 30 VDC	20 to 30 VDC	
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	Quartz	Quartz	
Housing Material	17-4 Stainless Steel	17-4 Stainless Steel	[3]
Diaphragm	316L Stainless Steel	316L Stainless Steel	
Sealing	Welded Hermetic	Welded Hermetic	
Electrical Connector	10-32 Coaxial Jack	10-32 Coaxial Jack	
Weight	0.4 oz	11 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.

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**NOTES:**

[1] For +10 volt output, minimum 24 VDC supply voltage required. Negative 10 volt output may be limited by output bias.

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

[3] Diaphragm with ablative coating.

[4] 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)

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[4]

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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