

Model Number

124A24

ICP[®] PRESSURE SENSOR SPECIFICATIONS

Revision: E

ECN #: 15285

Performance

	ENGLISH	SI	
Measurement Range (for ± 5 V output)	1 kpsi	6895 kPa	
Useful Overrange (for ± 10V output)	2 kpsi	13790 kPa	
Sensitivity (±15 %)	5.0 mV/psi	0.725 mV/kPa	
Maximum Pressure (static)	5 kpsi	34475 kPa	
Resolution	20 mpsi	0.14 kPa	
Resonant Frequency	≥15 kHz	≥ 15 kHz	
Rise Time (Reflected)	≤30 μ sec	≤30 μ sec	
Low Frequency Response (-5 %)	0.005 Hz	0.005 Hz	
Non-Linearity	≤1.0 % FS	≤1.0 % FS	[2]

Environmental

	ENGLISH	SI	
Acceleration Sensitivity	≤0.002 psi/g	≤ 0.0014 kPa/(m/s ²)	[1]
Temperature Range (Operating)	-100 to +250 °F	-73 to +121 °C	[1]
Temperature Coefficient of Sensitivity	≤0.03 %/°F	≤ 0.054 %/°C	
Maximum Flash Temperature	5000 °F	2760 °C	
Maximum Shock	10000 g pk	98070 m/s ² pk	

Electrical

	ENGLISH	SI	
Output Polarity (Positive Pressure)	Positive	Positive	
Discharge Time Constant (at room temp)	≥100 sec	≥100 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 ohms	≤100 ohms	
Output Bias Voltage	8 to 14 VDC	8 to 14 VDC	
Electrical Isolation	10 ⁸ ohms	10 ⁸ ohms	

Physical

	ENGLISH	SI	
Sensing Geometry	Compression	Compression	
Sensing Element	Quartz	Quartz	
Housing Material	Stainless Steel	Stainless Steel	
Diaphragm	Invar	Invar	
Sealing	Welded Hermetic	Welded Hermetic	
Electrical Connector	10-32 Coaxial Jack	10-32 Coaxial Jack	
Weight	3.9 oz	110 gm	
Cable Type	006 Ruggedized Low Noise	006 Ruggedized Low Noise	
Cable Length	4 ft	1.3 m	
Water Flow Rate (at 50 psi)	1.2 gal/min	1.2 gal/min	

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 065A16 Seal ring 0.624" OD x 0.553" ID x 0.060" thk brass (3) replaces Model 065A09

N - Negative Output Polarity**S - Stainless Steel Diaphragm**

Diaphragm 316L Stainless Steel 316L Stainless Steel

NOTES:

[1] Refers to operating temperature of the internal sensor without cooling.

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

[3] See PCB Declaration of Conformance PS023 for details.

SUPPLIED ACCESSORIES:

Model 065A09 Seal ring 0.560" OD x 0.500" ID x 0.060" thk brass (3)

Model 070A08 Cable adaptor (micro 10-32 jack to BNC jack) (1)

Entered: DJS | Engineer: BSA | Sales: DPC | Approved: WSH | Spec Number:

Date: 4/25/02 | Date: 4/26/02 | Date: 4/26/02 | Date: 4/26/02 | 5668



[3]

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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