

Model Number
123A22

ICP® PRESSURE SENSOR

Revision: H
ECN #: 29109

	ENGLISH	SI	
Performance			
Measurement Range(for ± 3V output)	3 kpsi	20,685 kPa	
Sensitivity(± 15 %)	1.0 mV/psi	0.145 mV/kPa	
Maximum Pressure	5 kpsi	34,475 kPa	
Resolution	100 mpsi	0.689 kPa	[2]
Resonant Frequency	≥ 25 kHz	≥ 25 kHz	[3]
Rise Time(Reflected)	≤ 20 μ sec	≤ 20 μ sec	[3]
Low Frequency Response(-5 %)	0.001 Hz	0.001 Hz	
Non-Linearity	≤ 1.0 % FS	≤ 1.0 % FS	[4]
Environmental			
Acceleration Sensitivity	≤ 0.002 psi/g	≤ 0.0014 kPa/(m/s ²)	
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	10,000 °F	5538 °C	
Maximum Shock	10,000 g pk	98,070 m/s ² pk	
Electrical			
Output Polarity(Positive Pressure)	Positive	Positive	
Discharge Time Constant(at room temp)	≥ 500 sec	≥ 500 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 12 VDC	8 to 12 VDC	
Physical			
Housing Material	17-4 Stainless Steel	17-4 Stainless Steel	
Diaphragm	Invar	Invar	
Sealing	Epoxy	Epoxy	
Electrical Connector	Integral Cable	Integral Cable	
Weight	4.23 oz	120 gm	
Helium Flow Rate(at 1,500 psi)	40 scf/hr	1.13 m ³ /hr	
Cable Length	4 ft	1.2 m	
Water Flow Rate(at 50 psi)	1.2 gal/min	4.5 L/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.

NOTES:

- [1] Applies to internal amplifier, not to external housing.
- [2] Typical.
- [3] With helium flow.
- [4] Zero-based, least-squares, straight line method.
- [5] See PCB Declaration of Conformance PS023 for details.

SUPPLIED ACCESSORIES:

- Model 065A15 Seal, .624" OD x .553" ID x .080", brass (3)
- Model 070A08 Cable adaptor (micro 10-32 jack to BNC jack) (1)

Entered: <i>BLS</i>	Engineer: <i>RF</i>	Sales: <i>RWM</i>	Approved: <i>BM</i>	Spec Number:
Date: <i>7/16/08</i>	Date: <i>7/16/08</i>	Date: <i>7/16/08</i>	Date: <i>7/16/08</i>	5018



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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