

Model Number
123A

CHARGE OUTPUT PRESSURE SENSOR

Revision: G
ECN #: 22945

	ENGLISH	SI	
Performance			
Sensitivity (± 20 %)	1.1 pC/psi	0.159 pC/kPa	
Measurement Range	3 kpsi	20,685 kPa	
Maximum Pressure	5 kpsi	34,475 kPa	
Resolution	20 mpsi	0.138 kPa	[1]
Resonant Frequency	≥ 25 kHz	≥ 25 kHz	[2]
Rise Time (Reflected)	≤ 20 μ sec	≤ 20 μ sec	[2]
Non-Linearity	≤ 1 % FS	≤ 1 % FS	[3]
Environmental			
Acceleration Sensitivity	≤ 0.002 psi/g	≤ 1.41E-3 kPa/(m/s ²)	
Temperature Range (Operating)	-450 to +500 °F	-268 to +260 °C	
Temperature Coefficient of Sensitivity	≤ 0.01 %/°F	≤ 0.018 %/°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)	Negative	Negative	
Capacitance	18 pF	18 pF	
Electrical Isolation	≥ 10 ⁸ ohm	≥ 10 ⁸ ohm	
Insulation Resistance (at room temp)	≥ 10 ¹² ohm	≥ 10 ¹² ohm	
Physical			
Sensing Element	Quartz	Quartz	
Sensing Geometry	Compression	Compression	
Housing Material	17-4 Stainless Steel	17-4 Stainless Steel	
Diaphragm	Invar	Invar	
Sealing	Epoxy	Epoxy	
Electrical Connector	Integral Cable	Integral Cable	
Cable Length	4 ft	1.2 m	
Helium Flow Rate (at 1,500 psi)	40 scf/hr	1.13 m ³ /hr	
Water Flow Rate (at 50 psi)	1.2 gal/min	4.5 L/min	
Weight	4.23 oz	120 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.

NOTES:
[1] Resolution dependent on range setting and cable length used in charge system.
[2] With helium flow.
[3] Zero-based, least-squares, straight line method.

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>Jmm</i>	Approved: <i>MEW</i>	Spec Number:
Date: <i>10-7-05</i>	Date: <i>10/10/05</i>	Date: <i>10/11/05</i>	Date: <i>10/18/05</i>	123-1010-80

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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