Model Number **102M206**	**ICP® PRESSURE SENSOR**	Revision K ECN #: 31847

Performance	**ENGLISH**	**SI**	
Measurement Range (for ±5V output)	50 psi	344.8 kPa	
Sensitivity (±15 %)	100 mV/psi	14.503 mV/kPa	
Maximum Pressure	4 kpsi	27580 kPa	[8]
Resolution	1 mpsi	0.0069 kPa	[9]
Resonant Frequency	≥250 kHz	≥250 kHz	
Rise Time (Reflected)	≤2 µ sec	≤2 µ sec	
Low Frequency Response (-5 %)	0.5 Hz	0.5 Hz	
Non-Linearity	≤1.0 % FS	≤1.0 % FS	[10]
Environmental			
Acceleration Sensitivity	<0.002 psi/g	<0.0014 kPa/(m/s²)	
Temperature Range (Operating)	-65 to +250 °F	-54 to +121 °C	
Temperature Coefficient of Sensitivity	≤0.10 %/°F	≤0.18 %/°C	
Maximum Flash Temperature	3000 °F	1649 °C	
Maximum Shock	20000 g pk	196133 m/s² pk	
Hazardous Area Approval	ATEX	ATEX	[1][2][3]
Hazardous Area Approval	CSA (C-US) NRTL - Canadian Standards Association	CSA (C-US) NRTL - Canadian Standards Association	[4][5][6][7]
Electrical			
Output Polarity (Positive Pressure)	Positive	Positive	
Discharge Time Constant (at room temp)	≥1.0 sec	≥1.0 sec	
Excitation Voltage	20 to 28 VDC	20 to 28 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	<100 Ohm	<100 Ohm	
Output Bias Voltage	8 to 14 VDC	8 to 14 VDC	
Electrical Isolation	10^8 Ohm	10^8 Ohm	
Physical			
Sensing Geometry	Compression	Compression	
Sensing Element	Quartz	Quartz	
Housing Material	Stainless Steel	Stainless Steel	
Diaphragm	316L Stainless Steel	316L Stainless Steel	[11]
Sealing	Welded Hermetic	Welded Hermetic	
Electrical Connector	10-32 Coaxial Jack	10-32 Coaxial Jack	
Weight	0.6 oz	17.0 gm	

Optional Versions (Optional versions have identical specifications and accessories as listed for standard model except where noted below. More than one option maybe used.)

Notes

[1] Ex ia IIC T4.
[2] Ex nL IIC T4.
[3] Ex nA IIC T4.
[4] AEx nA IIC T4, DIV2 CL1 GR A-D
[5] Ex nL IIC T4, DIV2 CL1 GR A-D
[6] AEx ia IIC T4, DIV1 CL1 GR A-D
[7] Ex ia IIC T4, DIV1 CL1 GR A-D
[8] Due to high sensitivity, the static pressure should be applied and removed very slowly. Rate should prevent more than 10 Volt change in output until Output Bias Voltage returns to normal (approximately 15 times discharge time constant).
[9] Typical.
[10] Zero-based, least-squares, straight line method.
[11] Diaphragm with ablative coating.
[12] See PCB Declaration of Conformance PS059 for details.

Entered: LLH	Engineer: BAM	Sales: RWM	Approved: APB	Spec Number:
Date: 11/25/2009	Date: 11/14/2009	Date: 11/18/2009	Date: 11/18/2009	**4739**

[12]

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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