

Model Number <b>176M12</b>	<b>CHARGE OUTPUT PRESSURE SENSOR</b>	Revision: F ECN #: 46623
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	<b>ENGLISH</b>	<b>SI</b>	
<b>Performance</b>			
Sensitivity(± 20 %)	17 pC/psi	247 pC/bar	
Measurement Range	20 psi	1.4 bar	
Maximum Pressure(Total)	400 psi	27.6 bar	
Resonant Frequency	>30 kHz	>30 kHz	
Transverse Resonance	≥ 3 kHz	≥ 3 kHz	
Frequency Response	1.5 kHz	1.5 kHz	[2][3]
Non-Linearity	≤ 1 % FS	≤ 1 % FS	[4]
<b>Environmental</b>			
Acceleration Sensitivity	≤ 0.01 psi/g	≤ .00069 bar/g	
Temperature Range(Continuous)	-94 to 986 °F	-70 to 530 °C	
Temperature Range(Receptacle)	-76 to 500 °F	-60 to 260 °C	
Temperature Response	See Graph	See Graph	[1]
Hazardous Area Approval	See Manual	See Manual	
Radiation Exposure Limit(Integrated Gamma Flux)	1E8 rad	1E8 rad	
Radiation Exposure Limit(Integrated Neutron Flux)	1E10 N/cm <sup>2</sup>	1E10 N/cm <sup>2</sup>	
<b>Electrical</b>			
Output Polarity(Differential)	Differential	Differential	
Capacitance(with cable pin - pin)	<165 pF	<165 pF	
Internal Resistance(room temp)	≥ 10 <sup>12</sup> Ohm	≥ 10 <sup>12</sup> Ohm	
Insulation Resistance(room temp)	≥ 10 <sup>12</sup> Ohm	≥ 10 <sup>12</sup> Ohm	
Internal Resistance(986°F/530°C)	≥ 50 kohm	≥ 50 kohm	
Insulation Resistance(986°F/530°C)	≥ 100 kohm	≥ 100 kohm	
<b>Physical</b>			
Sensing Element	UHT-12™	UHT-12™	
Sensing Geometry	Compression	Compression	
Housing Material	Nickel Alloy	Nickel Alloy	
Sealing	Welded Hermetic	Welded Hermetic	
Electrical Connector	7/16-27 2-Pin	7/16-27 2-Pin	
Cable Type	Overbraided Hardline	Overbraided Hardline	
Weight(with cable)	11.1 oz	315 gm	

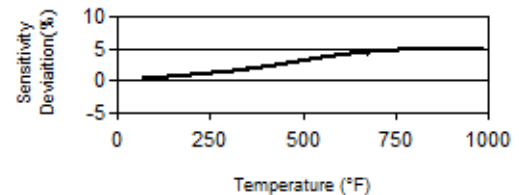
**OPTIONAL VERSIONS**

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] Typical.  
 [2] Low frequency response is determined by external signal conditioning electronics.  
 [3] Upper frequency response is calculated from Resonant Frequency.  
 [4] Zero-based, least-squares, straight line method.  
 [5] See PCB Declaration of Conformance PS058 for details.

Typical Sensitivity Deviation vs Temperature



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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Entered: LK	Engineer: GJR	Sales: JC	Approved: BAM	Spec Number:
Date: 3/30/2017	Date: 3/30/2017	Date: 3/30/2017	Date: 3/30/2017	<b>41205</b>

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