

Model Number 176M09	<h1>CHARGE OUTPUT PRESSURE SENSOR</h1>	Revision: F ECN #: 46623
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	<u>ENGLISH</u>	<u>SI</u>	
Performance			
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	>50 kHz	>50 kHz	
Frequency Response	10 kHz	10 kHz	[2][3]
Non-Linearity	≤ 1 % FS	≤ 1 % FS	[4]
Environmental			
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 ²	1E10 N/cm ²	
Electrical			
Output Polarity(Differential)	Differential	Differential	
Capacitance(with cable pin - pin)	<165 pF	<165 pF	
Internal Resistance(room temp)	≥ 10 ¹² Ohm	≥ 10 ¹² Ohm	
Insulation Resistance(room temp)	≥ 10 ¹² Ohm	≥ 10 ¹² Ohm	
Internal Resistance(986°F/530°C)	≥ 50 kohm	≥ 50 kohm	
Insulation Resistance(986°F/530°C)	≥ 100 kohm	≥ 100 kohm	
Physical			
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 clamp nut & cable)	8.3 oz	235 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.

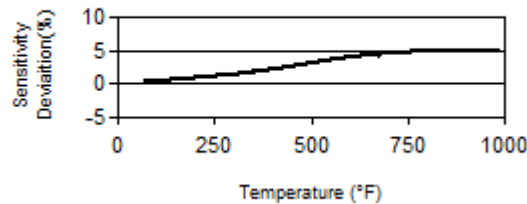
NOTES:

[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.

SUPPLIED ACCESSORIES:

Model 40890-01 Silver plated, ss, seal (6)
 Model 40902-01 Clamp nut (1)

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:
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PCB PIEZOTRONICS™
 3425 Walden Avenue, Depew, NY 14043

Phone: 716-684-0001
Fax: 716-684-0987
E-Mail: info@pcb.com