Model Number				
176A02				

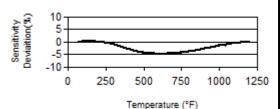
# **CHARGE OUTPUT PRESSURE SENSOR**

Revision: E ECN #: 46623

110/102			
Performance	ENGLISH	<u>SI</u>	
Sensitivity(+/-20 %)	6 pC/psi	87 pC/bar	
Measurement Range	725 psi	50 bar	
Maximum Pressure(Total)	2 kpsi	137.9 bar	
Resonant Frequency	≥ 100 kHz	≥ 100 kHz	
Transverse Resonance	>15 kHz	>15 kHz	
Frequency Response(± 5.0 %)	20 kHz	20 kHz	[2][3]
Non-Linearity	≤ 1 % FS	≤ 1 % FS	[4]
Environmental			
Acceleration Sensitivity	≤ 0.0036 psi/g	≤ .00025 bar/g	
Temperature Range(Continuous)	-94 to 1200 °F	-70 to 650 °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 Neutron Flux)	1E10 N/cm <sup>2</sup>	1E10 N/cm <sup>2</sup>	
Radiation Exposure Limit(Integrated Gamma Flux)	1E8 rad	1E8 rad	
Electrical			
Output Polarity	Differential	Differential	
Capacitance(with cable pin - pin)	150 pF	150 pF	[1]
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(1200°F/650°C)	≥ 50,000 Ohm	≥ 50,000 Ohm	
Insulation Resistance(1200°F/650°C)	≥ 100,000 Ohm	≥ 100,000 Ohm	
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	Hardline	Hardline	
Cable Length	10 ft	3 m	
Weight(with cable)	4.6 oz	130 gm	[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.

## **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 line method.
  [5] See PCB Declaration of Conformance PS058 for details.

### **SUPPLIED ACCESSORIES:**

Model 060A59 Mounting Adaptor, 20 mm Hex, M18 x 1.5 Threads (1)

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	57333



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