

**Model Number**  
176A12

# CHARGE OUTPUT PRESSURE SENSOR

Revision: B  
ECN #: 54257

**Performance**

	ENGLISH	SI	
Measurement Range	725 psi	50 bar	
Maximum Pressure(Total)	5,200 psi	358.5 bar	
Resonant Frequency	≥ 100 kHz	≥ 100 kHz	
Transverse Resonance	> 15 kHz	> 15 kHz	
Frequency Response(± 5.0 %)	20,000 Hz	20,000 Hz	[1][2]
Non-Linearity	≤ 1 % FS	≤ 1 % FS	[3]

**Environmental**

	ENGLISH	SI	
Acceleration Sensitivity	≤ 0.0036 psi/g	≤ .00025 bar/g	
Temperature Range(Continuous)	-94 to 1,200 °F	-70 to 650 °C	
Temperature Range(Connector)	-76 to 250 °F	-60 to 121 °C	
Temperature Response	See Graph	See Graph	[4]
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>	

**Electrical**

	ENGLISH	SI	
Output Polarity	Differential	Differential	
Capacitance(with cable pin - pin)	150 pF	150 pF	[4]
Resistance(Pin-Pin)(Room Temp)	≥ 10 <sup>9</sup> Ohm	≥ 10 <sup>9</sup> Ohm	
Resistance(Pin-Case)(Room Temp)	≥ 10 <sup>9</sup> Ohm	≥ 10 <sup>9</sup> Ohm	
Resistance(Pin-Pin)(1200°F/650°C)	≥ 50,000 Ohm	≥ 50,000 Ohm	
Resistance(Pin-Case)(1200°F/650°C)	≥ 100,000 Ohm	≥ 100,000 Ohm	

**Physical**

	ENGLISH	SI	
Sensing Element	UHT-12™	UHT-12™	
Sensing Geometry	Compression	Compression	
Housing Material	Nickel Alloy	Nickel Alloy	
Sealing	Welded Hermetic	Welded Hermetic	
Electrical Connector	LEMO	LEMO	
Cable Type	Hardline	Hardline	
Cable Length	10 ft	3 m	
Weight(with cable)	4.6 oz	130 gm	[4]

**OPTIONAL VERSIONS**

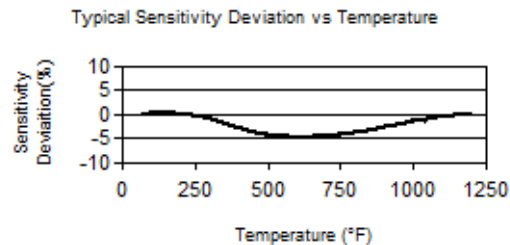
Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

**NOTES:**

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

**SUPPLIED ACCESSORIES:**

- Model 065A71 Seal, 0.4315" OD x 0.375" ID x .030" thk, 316L silver plated (1)
- Model 69862-01 Clamp Nut (1)



[5]



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: ND	Engineer: RPF	Sales: DPC	Approved: RPF	Spec Number:
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