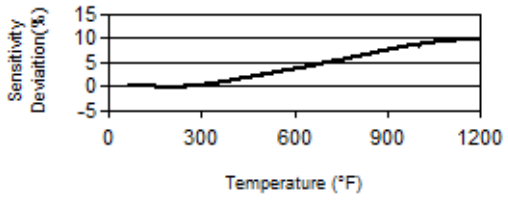
Model Number 176A13	CHARGE OUTPUT PRESSURE SENSOR	Revision: D ECN #: 55057

Performance	ENGLISH	SI	
Sensitivity(± 20 %)	16 pC/psi	232 pC/bar	
Measurement Range	290 psi	20 bar	
Maximum Pressure(Total)	5,000 psi	344.7 bar	
Resonant Frequency	≥ 50 kHz	≥ 50 kHz	
Transverse Resonance	10 kHz	10 kHz	[1]
Frequency Response(+/- 5 %)	10 kHz	10 kHz	[2][3]
Non-Linearity	≤ 1 % FS	≤ 1 % FS	[4]
Environmental			
Acceleration Sensitivity	0.003 psi/g	0.00021 bar/g	[1]
Acceleration Sensitivity	.007 psi/g	.00050 bar/g	[5]
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	
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/cm²	1E10 N/cm²	
Electrical			
Output Polarity	Differential	Differential	
Capacitance(with cable pin - pin)	153 pF	153 pF	[1]
Resistance(Pin-Pin)(Room Temp)	≥ 10^9 Ohm	≥ 10^9 Ohm	
Resistance(Pin-Case)(Room Temp)	≥ 10^9 Ohm	≥ 10^9 Ohm	
Resistance(Pin-Pin)(1200°F/650°C)	≥ 50 kohm	≥ 50 kohm	
Resistance(Pin-Case)(1200°F/650°C)	≥ 100 kohm	≥ 100 kohm	
Insulation Resistance	See Graph	See Graph	
Insulation Resistance	See Graph	See Graph	
Insulation Resistance	See Graph	See Graph	
Insulation Resistance	See Graph	See Graph	
Physical			
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	3.05 m	
Weight(with cable)	7.68 oz	217.7 gm	

Typical Sensitivity Deviation vs Temperature



[6]

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

SUPPLIED ACCESSORIES:

Model PCS-1 Calibration of dynamic pressure sensors at 100% full scale, max 15 kpsi range.

Entered: ND	Engineer: AJA	Sales: MV	Approved: RPF	Spec Number:
Date: 08/05/2024	Date: 08/05/2024	Date: 08/05/2024	Date: 08/05/2024	75369

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