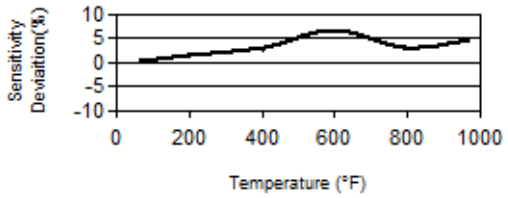
Model Number 176A05	CHARGE OUTPUT PRESSURE SENSOR	Revision: C ECN #: 54257

Performance	ENGLISH	SI	
Sensitivity(± 20 %)	65 pC/psi	942.7 pC/bar	
Measurement Range	75 psi	5.2 bar	
Maximum Pressure(Total)	1,450 psi	100 bar	
Resonant Frequency	> 40 kHz	> 40 kHz	
Transverse Resonance	≥ 8 kHz	≥ 8 kHz	
Frequency Response(+/- 5 %)	8 kHz	8 kHz	[1][2]
Non-Linearity	≤ 1 % FS	≤ 1 % FS	[3]
Environmental			
Acceleration Sensitivity	0.003 psi/g	.00021 bar/g	[4]
Acceleration Sensitivity	0.01 psi/g	.00069 bar/g	[5]
Temperature Range(Continuous)	-94 to 968 °F	-70 to 520 °C	
Temperature Range(Receptacle)	-76 to 500 °F	-60 to 260 °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)	650 pF	650 pF	[6]
Resistance(Pin-Pin)(Room Temp)	≥ 10^9 Ohm	≥ 10^9 Ohm	
Resistance(Pin-Case)(Room Temp)	≥ 10^{12} Ohm	≥ 10^{12} Ohm	
Resistance(Pin-Pin)(968°F/520°C)	≥ 50,000 Ohm	≥ 50,000 Ohm	
Resistance(Pin-Case)(968°F/520°C)	≥ 100,000 Ohm	≥ 100,000 Ohm	
Physical			
Sensing Element	Ceramic	Ceramic	
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)	9.35 oz	265 gm	

Typical Sensitivity Deviation vs Temperature



CE

UK CA [7]

Ex C SP US

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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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, straight line method.
[4]Nominal.
[5]Maximum.
[6]Typical.
[7]See PCB Declaration of Conformance PS058 for details.

Entered: ND	Engineer: RPF	Sales: DPC	Approved: RPF	Spec Number:
Date: 10/12/2023	Date: 10/12/2023	Date: 10/12/2023	Date: 10/12/2023	55187

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