

Model Number
176B02

CHARGE OUTPUT PRESSURE SENSOR

Revision: B
ECN #: 55057

Performance

	ENGLISH	SI	
Sensitivity(+/- 20%)	6 pC/psi	87 pC/bar	
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

Acceleration Sensitivity	0.0036 psi/g	.00025 bar/g	[4]
Acceleration Sensitivity	.002 psi/g	.00014 bar/g	[5]
Temperature Range(Continuous)	-94 to 1,400 °F	-70 to 760 °C	
Temperature Range(Connector)	-76 to 500 °F	-60 to 260 °C	
Temperature Response	See Graph	See Graph	[5]
Hazardous Area Approval	See Manual	See Manual	
Radiation Exposure Limit(Integrated Neutron Flux)	1E10 N/cm ²	1E10 N/cm ²	
Radiation Exposure Limit(Integrated Gamma Flux)	1E8 rad	1E8 rad	

Electrical

Output Polarity	Differential	Differential	
Capacitance(with cable pin - pin)	150 pF	150 pF	[5]
Resistance(Pin-Pin)(Room Temp)	≥ 10 ¹² Ohm	≥ 10 ¹² Ohm	
Resistance(Pin-Case)(Room Temp)	≥ 10 ¹² Ohm	≥ 10 ¹² Ohm	
Resistance(Pin-Pin)(1400°F/760°C)	≥ 50,000 Ohm	≥ 50,000 Ohm	
Resistance(Pin-Case)(1400°F/760°C)	≥ 100,000 Ohm	≥ 100,000 Ohm	
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	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	[5]

OPTIONAL VERSIONS

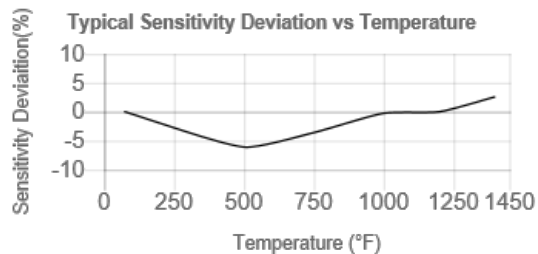
Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

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]Maximum.
- [5]Typical.
- [6]See PCB Declaration of Conformance PS058 for details.

SUPPLIED ACCESSORIES:

Model 060A59 Mounting Adaptor, 20 mm Hex, M18 x 1.5 Threads (1)
Model PCS-1 Calibration of dynamic pressure sensors at 100% full scale, max 15 kpsi range.



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.

Entered: ND	Engineer: AJA	Sales: MV	Approved: RPF	Spec Number:
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