
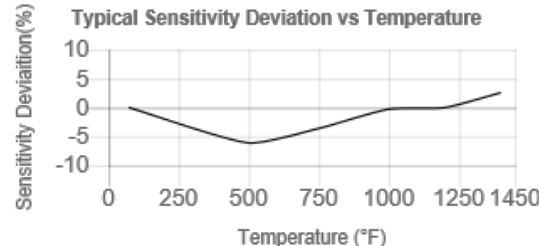


Model Number 176A31	CHARGE OUTPUT PRESSURE SENSOR			Revision: D ECN #: 55628		
<b>Performance</b> Sensitivity(+/- 20 %) Measurement Range Maximum Pressure(Total) Resonant Frequency Transverse Resonance Frequency Response(± 5 %) Non-Linearity		<b>ENGLISH</b> 6 pC/psi 3,000 psi 5,200 psi ≥ 100 kHz > 15 kHz 20 kHz ≤ 1 % FS		<b>SI</b> 87 pC/bar 206.8 bar 358.5 bar ≥ 100 kHz > 15 kHz 20 kHz ≤ 1 % FS	[1][2] [3]	
<b>Environmental</b> Maximum Shock(Axial) Acceleration Sensitivity Acceleration Sensitivity Temperature Range(Operating) Temperature Range(Connector ) Temperature Response Hazardous Area Approval Radiation Exposure Limit(Integrated Neutron Flux) Radiation Exposure Limit(Integrated Gamma Flux)		2,000 g pk 0.0036 psi/g .002 psi/g -94 to 1,400 °F -65 to 900 °F See Graph See Manual 1E10 N/cm² 1E8 rad		19,600 m/s² pk .00025 bar/g .00014 bar/g -70 to 760 °C -53.9 to 482.2 °C See Graph See Manual 1E10 N/cm² 1E8 rad	[4] [5] [6] [6]	
<b>Electrical</b> Output Polarity(Differential) Capacitance Resistance(Pin-Pin)(Room Temp) Resistance(Pin-Case)(Room Temp) Resistance(Pin-Pin)(1400°F/760°C) Resistance(Pin-Case)(1400°F/760°C)		Differential 70 pF ≥ 1E12 Ohm ≥ 1E12 Ohm ≥ 50,000 Ohm ≥ 100,000 Ohm		Differential 70 pF ≥ 1E12 Ohm ≥ 1E12 Ohm ≥ 50,000 Ohm ≥ 100,000 Ohm	[6]	
<b>Physical</b> Sensing Element Sensing Geometry Housing Material Sealing Electrical Connector Cable Type Cable Length Weight(with cable)		UHT-12™ Compression Nickel Alloy Welded Hermetic 7/16-27 2-PIN Hardline 3 ft 4.73 oz		UHT-12™ Compression Nickel Alloy Welded Hermetic 7/16-27 2-PIN Hardline 0.91 m 134 gm	[6]	
<b>OPTIONAL VERSIONS</b> Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.						
<b>NOTES:</b> [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]Half-sine pulse duration, 1 msec [5]Maximum. [6]Typical. [7]See PCB Declaration of Conformance PS058 for details.						
<b>SUPPLIED ACCESSORIES:</b> Model 72836-01 Silver Plated, Nickel Alloy, Seal. (3) Model PCS-1 Calibration of dynamic pressure sensors up to 100% range						
Entered: ND		Engineer: RPF		Sales: RWM	Approved: RPF	Spec Number:
Date: 04/02/2025		Date: 04/02/2025		Date: 04/02/2025	Date: 04/02/2025	72830
						<b>PCB PIEZOTRONICS</b> AN AMPHENOL COMPANY Phone: 716-684-0001 Fax: 716-684-0987 E-Mail: info@pcb.com 3425 Walden Avenue, Depew, NY 14043
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.						