



Model Number <b>209C11</b>	<b>ICP® FORCE SENSOR</b>		Revision: E ECN #: 25168
<b>Performance</b>	<b>ENGLISH</b>	<b>SI</b>	<b>OPTIONAL VERSIONS</b>
Sensitivity (± 15 %)	2200 mV/lb	494,604 mV/kN	Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.
Measurement Range (Compression)	2.2 lb	0.00979 kN	<b>M</b> - Metric Mount Supplied Accessory : Model M081A05 Mounting Stud 10-32 to M6 x 0.75 x 0.27" long BeCu (H900), no shoulder (1)
Measurement Range (Tension)	1.0 lb	0.00445 kN	
Maximum Static Force (Compression)	11 lb	0.0489 kN	
Maximum Static Force (Tension)	1.0 lb	0.00445 kN	<b>N</b> - Negative Output Polarity Output Polarity (Compression) Negative
Broadband Resolution (1 to 10,000 Hz)	0.00002 lb-rms	0.00009 N-rms	
Low Frequency Response (-5 %)	0.5 Hz	0.5 Hz	
Upper Frequency Limit	30 kHz	30 kHz	<b>W</b> - Water Resistant Cable Electrical Connector Sealed Cable Electrical Connection Position Side
<b>Environmental</b>			
Temperature Range	-65 to +250 °F	-54 to +121 °C	
Temperature Coefficient of Sensitivity	≤ 0.05 %/°F	≤ 0.09 %/°C	
<b>Electrical</b>			
Discharge Time Constant (at room temp)	≥ 1 sec	≥ 1 sec	
Excitation Voltage	18 to 30 VDC	18 to 30 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	≤ 100 ohm	≤ 100 ohm	
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	
Spectral Noise (1 Hz)	0.0000044 lb/√Hz	0.0000197 N/√Hz	[1]
Spectral Noise (10 Hz)	0.0000005 lb/√Hz	0.0000021 N/√Hz	[1]
Spectral Noise (100 Hz)	0.0000001 lb/√Hz	0.0000006 N/√Hz	[1]
Spectral Noise (1 kHz)	0.0000000 lb/√Hz	0.0000002 N/√Hz	[1]
Output Polarity (Compression)	Positive	Positive	
<b>Physical</b>			
Stiffness	2 lb/μin	0.35 kN/μm	[1]
Size (Hex x Height)	0.375 in x 0.83 in	9.53 mm x 21.08 mm	
Weight	0.29 oz	8.2 gm	
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Hermetic	Hermetic	
Electrical Connector	10-32 Coaxial Jack	10-32 Coaxial Jack	
Electrical Connection Position	Side	Side	
Mounting Thread	10-32 Female	No Metric Equivalent	
Mounting Torque (Recommended)	15 to 20	169 to 226	
<b>NOTES:</b>			
[1] Typical.			
[2] Calculated from discharge time constant.			
[3] Estimated using rigid body dynamics calculations.			
[4] See PCB Declaration of Conformance PS023 for details.			
<b>SUPPLIED ACCESSORIES:</b>			
Model 081A05 Mounting stud, 10-32 to 10-32 x 0.27" long, BeCu (H900), no shoulder (1)			
Model 084A38 Thermal boot (for Series 209) (1)			
Entered	Engineer:	Sales:	Approved:
Date:	Date:	Date:	Date:
			Spec Number:
			8891
			
[4]		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.		Phone: 716-684-0001 Fax: 716-684-8877 E-Mail: force@pcb.com	
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