

Model Number 208C02	ICP® FORCE SENSOR	Revision: H ECN #: 34989
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	ENGLISH	SI	
Performance			
Sensitivity(± 15 %)	50 mV/lb	11,241 mV/kN	
Measurement Range(Compression)	100 lb	0.4448 kN	
Measurement Range(Tension)	100 lb	0.4448 kN	
Maximum Static Force(Compression)	600 lb	2.669 kN	
Maximum Static Force(Tension)	500 lb	2.224 kN	
Broadband Resolution(1 to 10,000 Hz)	0.001 lb-rms	0.004 N-rms	[1]
Low Frequency Response(-5 %)	0.001 Hz	0.001 Hz	[2]
Upper Frequency Limit	36 kHz	36 kHz	[3]
Non-Linearity	≤ 1 % FS	≤ 1 % FS	[4]
Environmental			
Temperature Range	-65 to +250 °F	-54 to +121 °C	
Temperature Coefficient of Sensitivity	≤ 0.05 %/°F	≤ 0.09 %/°C	
Electrical			
Discharge Time Constant(at room temp)	≥ 500 sec	≥ 500 sec	
Excitation Voltage	20 to 30 VDC	20 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 14 VDC	8 to 14 VDC	
Spectral Noise(1 Hz)	0.000135 lb/√Hz	0.000603 N/√Hz	[1]
Spectral Noise(10 Hz)	0.0000276 lb/√Hz	0.000123 N/√Hz	[1]
Spectral Noise(100 Hz)	0.0000096 lb/√Hz	0.0000427 N/√Hz	[1]
Spectral Noise(1 kHz)	0.0000021 lb/√Hz	0.0000095 N/√Hz	[1]
Output Polarity(Compression)	Positive	Positive	
Physical			
Stiffness	6 lb/μin	1.05 kN/μm	[1]
Size (Hex x Height x Sensing Surface)	0.625 in x 0.625 in x 0.500 in	15.88 mm x 15.88 mm x 12.7 mm	
Weight	0.80 oz	22.7 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	Not Applicable	
Mounting Torque(Recommended)	16 to 20 in-lb	181 to 226 N-cm	

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.		
N - Negative Output Polarity		
Output Polarity(Compression)	Negative	Negative
W - Water Resistant Cable		

NOTES:
 [1] Typical.
 [2] Calculated from discharge time constant.
 [3] Estimated using rigid body dynamics calculations.
 [4] Zero-based, least-squares, straight line method.

SUPPLIED ACCESSORIES:
 Model 080A81 Thread Locker (1)
 Model 081B05 Mounting Stud (10-32 to 10-32) (2)
 Model 084A03 Impact Cap (1)
 Model M081A62 Mounting stud, 10-32 to M6 x 1, BeCu with shoulder (2)

Entered: <i>yomw</i>	Engineer: <i>mgh</i>	Sales: <i>yomw</i>	Approved: <i>EB</i>	Spec Number:
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*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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