

Model Number 208C01	<b>ICP® FORCE SENSOR</b>	Revision: K ECN #: 45224
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<b>Performance</b>	<b>ENGLISH</b>	<b>SI</b>	
Sensitivity(± 15 %)	500 mV/lb	112,410 mV/kN	
Measurement Range(Compression)	10 lb	0.04448 kN	
Measurement Range(Tension)	10 lb	0.04448 kN	
Maximum Static Force(Compression)	60 lb	0.27 kN	
Maximum Static Force(Tension)	60 lb	0.27 kN	
Broadband Resolution(1 to 10,000 Hz)	0.0001 lb-rms	0.00045 N-rms	[2]
Low Frequency Response(-5 %)	0.01 Hz	0.01 Hz	[3]
Upper Frequency Limit	36,000 Hz	36,000 Hz	[4]
Non-Linearity	≤ 1 % FS	≤ 1 % FS	[5]
<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)	≥ 50 sec	≥ 50 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	[1]
Spectral Noise(1 Hz)	0.000126 lb/√Hz	0.000562 N/√Hz	[2]
Spectral Noise(10 Hz)	0.000042 lb/√Hz	0.000189 N/√Hz	[2]
Spectral Noise(100 Hz)	0.000015 lb/√Hz	0.000067 N/√Hz	[2]
Spectral Noise(1000 Hz)	0.000005 lb/√Hz	0.000023 N/√Hz	[2]
Output Polarity(Compression)	Positive	Positive	
<b>Physical</b>			
Stiffness	6 lb/μin	1.05 kN/μm	[2]
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	10-32 Female	

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]Sensor contains protected electronics which may cause long 'turn-on' times.
[2]Typical.
[3]Calculated from discharge time constant.
[4]Estimated using rigid body dynamics calculations.
[5]Zero-based, least-squares, straight line method.
[6]See PCB Declaration of Conformance PS023 for details.

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: LK	Engineer: MJK	Sales: KWW	Approved: APB	Spec Number:
Date: 3/29/2016	Date: 3/29/2016	Date: 3/29/2016	Date: 3/29/2016	8625



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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