

Model Number 208C05	ICP® FORCE SENSOR	Revision: H ECN #: 45224
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Performance	ENGLISH	SI	
Sensitivity(± 15 %)	1 mV/lb	224.82 mV/kN	
Measurement Range(Compression)	5000 lb	22.24 kN	
Measurement Range(Tension)	500 lb	2.224 kN	
Maximum Static Force(Compression)	8000 lb	35.59 kN	
Maximum Static Force(Tension)	500 lb	2.224 kN	
Broadband Resolution(1 to 10,000 Hz)	0.05 lb-rms	0.222 N-rms	[1]
Low Frequency Response(-5 %)	0.0003 Hz	0.0003 Hz	[2]
Upper Frequency Limit	36,000 Hz	36,000 Hz	[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)	≥ 2000 sec	≥ 2000 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)	0.00168 lb/√Hz	0.00750 N/√Hz	[1]
Spectral Noise(10 Hz)	0.00112 lb/√Hz	0.00501 N/√Hz	[1]
Spectral Noise(100 Hz)	0.000459 lb/√Hz	0.00205 N/√Hz	[1]
Spectral Noise(1000 Hz)	0.000133 lb/√Hz	0.000592 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	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]Typical.
 [2]Calculated from discharge time constant.
 [3]Estimated using rigid body dynamics calculations.
 [4]Zero-based, least-squares, straight line method.
 [5]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	8369



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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