Model Number					
208002					

ICP® FORCE SENSOR

Revision: K ECN #: 46791

Performance	ENGLISH	<u>SI</u>					
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		0.4448 kN		0.4448 kN	
Maximum Static Force(Compression)	600 lb	2.669 kN		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					
Low Frequency Response(-5 %)	0.001 Hz	0.001 Hz					
Upper Frequency Limit	36 kHz	36 kHz [
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					
Spectral Noise(10 Hz)	0.0000276 lb/√Hz	0.000123 N√Hz [
Spectral Noise(100 Hz)	0.0000096 lb/√Hz	0.0000427 N/√Hz [´					
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		10-32 Coaxial Jack 10-32 Coaxial Jack			
Electrical Connection Position	Side Side		Side Side		Side		
Mounting Thread	10-32 Female	10-32 Female					



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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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

TLD - TEDS Capable of Digital Memory and Communication Compliant with IEEE 1451.4 Output Bias Voltage 8 to 15 VDC 8 to 15 VDC

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: DK	Sales: RM	Approved: BAM	Spec Number:
Date: 5/11/2017	Date: 5/11/2017	Date: 5/11/2017	Date: 5/11/2017	8467



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