Model Number 208C03	ICP® FORCE SENSOR	Revision: K ECN #: 51420

Performance	ENGLISH	SI	
Sensitivity(± 15 %)	10 mV/lb	2,248 mV/kN	
Measurement Range(Compression)	500 lb	2.224 kN	
Measurement Range(Tension)	500 lb	2.224 kN	
Maximum Static Force(Compression)	3,000 lb	13.5 kN	
Maximum Static Force(Tension)	500 lb	2.224 kN	
Broadband Resolution(1 to 10,000 Hz)	0.005 lb-rms	0.02 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)	≥ 2,000 sec	≥ 2,000 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)	0.000211 lb/√Hz	0.000942 N/√Hz	[1]
Spectral Noise(10 Hz)	0.000109 lb/√Hz	0.000488 N√Hz	[1]
Spectral Noise(100 Hz)	0.0000387 lb/√Hz	0.000173 N/√Hz	[1]
Spectral Noise(1,000 Hz)	0.00000863 lb/√Hz	0.0000385 N/√Hz	[1]
Output Polarity(Compression)	Positive	Positive	
Physical			
Stiffness	6 lb/µin	1.05 kN/µm	[1]
Size (Hex x Sensing Surface x Height)	0.625 in x 0.500 in x 0.625 in	15.88 mm x 12.7 mm x 15.88 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	

CE[5]

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		
Electrical Connector	Sealed Cable	Sealed Cable
Electrical Connection Position	Side	Side

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: GP	Sales: BS	Approved: BAM	Spec Number:
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