Model Number	ICP® FORCE SENSOR	Revision: H ECN #: 45758
227C		

Performance	ENGLISH	SI	
Sensitivity(± 15 %)	0.10 mV/lb	22.48 mV/kN	
Measurement Range(Compression)	50,000 lb	222.4 kN	
Measurement Range(Tension)	30,000 lb	133.4 kN	
Maximum Static Force(Compression)	65,000 lb	289 kN	
Maximum Static Force(Tension)	37,500 lb	166.8 kN	
Broadband Resolution(1 to 10,000 Hz)	1 lb-rms	4.45 N-rms	[1]
Low Frequency Response(-5 %)	0.0003 Hz	0.0003 Hz	[2]
Upper Frequency Limit	4 kHz	4 kHz	[3]
Non-Linearity	≤ 1.5 % FS	≤ 1.5 % FS	[4]
Environmental			
Temperature Range	-65 to +250 °F	-54 to +121 °C	
Temperature Coefficient of Sensitivity	≤ 0.03 %/°F	≤ 0.054 %/°C	
Electrical			
Discharge Time Constant	≥ 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)	0.0871 lb/√Hz	0.389 N/√Hz	[1]
Spectral Noise(10 Hz)	0.0292 lb/√Hz	0.130 N√Hz	[1]
Spectral Noise(100 Hz)	0.00792 lb/√Hz	3.54 N/√Hz	[1]
Spectral Noise(1 kHz)	0.00240 lb/√Hz	0.0107 N/√Hz	[1]
Output Polarity(Compression)	Positive	Positive	
Physical			
Stiffness	29 lb/µin	5 kN/µm	[1]
Size (Diameter x Height)	2.95 in x 4.25 in	74.93 mm x 107.995 mm	
Weight	83 oz	2353 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	1 1/4 - 12 Female	1 1/4 - 12 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.

J - Ground Isolated

M - Metric Mount

N - Negative Output Polarity

Output Polarity(Compression)	Negative	Negative

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.

Entered: LK	Engineer: APB	Sales: KWW	Approved: APB	Spec Number:
Date: 7/28/2016	Date: 7/28/2016	Date: 7/28/2016	Date: 7/28/2016	7405

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