

Performance	ENGLISH	SI	
Sensitivity ($\pm 15\%$)	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 kHz	36 kHz	[4]
Non-Linearity	$\leq 1\%$ FS	$\leq 1\%$ FS	[5]
Environmental			
Temperature Range	-65 to +250 °F	-54 to +121 °C	
Temperature Coefficient of Sensitivity	$\leq 0.05\%/^{\circ}\text{F}$	$\leq 0.09\%/^{\circ}\text{C}$	
Electrical			
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)	0.0000126 lb/ $\sqrt{\text{Hz}}$	0.0000562 N/ $\sqrt{\text{Hz}}$	[2]
Spectral Noise (10 Hz)	0.0000042 lb/ $\sqrt{\text{Hz}}$	0.0000189 N/ $\sqrt{\text{Hz}}$	[2]
Spectral Noise (100 Hz)	0.0000015 lb/ $\sqrt{\text{Hz}}$	0.0000067 N/ $\sqrt{\text{Hz}}$	[2]
Spectral Noise (1 kHz)	0.0000005 lb/ $\sqrt{\text{Hz}}$	0.0000023 N/ $\sqrt{\text{Hz}}$	[2]
Output Polarity (Compression)	Positive	Positive	
Physical			
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	
Mounting Torque (Recommended)	16 to 20 in-lb	181 to 226 N-cm	



[6]

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

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: BLS	Engineer: MQK	Sales: MFG	Approved: DIMS	Spec Number:
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