Model Number
211B

CHARGE OUTPUT FORCE SENSOR

Revision: H ECN #: 48697

Performance	ENGLISH	<u>SI</u>	
Sensitivity(± 15 %)	18 pC/lb	4047 pC/kN	
Measurement Range(Compression)	≤ 5000 lb	≤ 22.24 kN	
Maximum Static Force(Compression)	8000 lb	35.59 kN	
Upper Frequency Limit	90 kHz	90 kHz	[2][3]
Non-Linearity	≤ 1 % FS	≤ 1 % FS	[4]
Environmental			
Temperature Range	-100 to +400 °F	-73 to +204 °C	
Temperature Coefficient of Sensitivity	≤ 0.02 %/°F	≤ 0.036 %/°C	
Electrical			
Capacitance	≥ 12 pF	≥ 12 pF	[1]
Insulation Resistance	≥ 1E12	≥ 1E12	
Output Polarity(Compression)	Negative	Negative	
Physical			
Preload	1000 lb	4.448 kN	
Stiffness	12 lb/µin	2.1 kN/µm	[1]
Size (Diameter x Height x Bolt Diameter x Sensing Surface)	0.650 in x 0.310 in x	16.5 mm x 7.88 mm x 6	
	0.25 in x 0.50 in	mm x 12.7 mm	
Size (ID)(Hole Diameter)	0.251 in	6.37 mm	
Size (OD)(Sensor)	0.650 in	16.5 mm	
Weight	0.35 oz	10 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	
n			



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.

P - Positive Output Polarity

Output Polarity(Compression) Positive Positive

W - Water Resistant Cable

Electrical Connector Molded Integral Cable Molded Integral Cable

Electrical Connection Position Side Side

NOTES:

- [1] Typical.
- [2] Estimated using rigid body dynamics calculations.
- [3] Low frequency response and system noise dependent on choice of external signal conditioning electronics.
- [4] Zero-based, least-squares, straight line method.
- [5] See PCB Declaration of Conformance PS158 for details.

SUPPLIED ACCESSORIES:

Model 080A82 Assembly Lubricant (1)

Model 081A11 Mounting Stud, 10-32 x 0.730, BeCu (1)

Model 082B01 Anti-Friction Washer (1)

Model 083B01 Pilot Bushing (1)

Model M081A11 Mounting Stud, M5 x 0.8 x 0.730, BeCu (1)

Model M083B01 Pilot Bushing (1)

Entered: LK	Engineer: RPF	Sales: RWM	Approved: BAM	Spec Number:
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