Model Number 211B	CHARGE FORCE SENSOR	Revision: E ECN #: 15530

Performance	ENGLISH	SI	
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 (at room temp)	≥ 1E12 ohms	≥ 1E12 ohms	
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 0.25 in x 0.50 in	16.5 mm x 7.88 mm x 6 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	

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.

M - Metric Mount
Supplied Accessory : Model 080A82 Assembly Lubricant
Supplied Accessory : Model 082B01 Anti-Friction Washer
Supplied Accessory : Model M081A11 Mounting Stud, M5 x 0.8 x 0.730, BeCu
Supplied Accessory : Model M083B01 Pilot Bushing

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 condition electronics.
[4] Zero-based, least-squares, straight line method.

SUPPLIED ACCESSORIES:

Model 080A82 Assembly Lubricant
Model 081A11 Mounting Stud, 10-32 x 0.730, BeCu
Model 082B01 Anti-Friction Washer
Model 083B01 Pilot Bushing

Charge Force Sensor

Entered: JMM	Engineer: KAB	Sales: JJM	Approved: DMP	Spec Number:
Date: 6/25/03	Date: 6/25/03	Date: 6/25/03	Date: 6/25/03	211-2010-80

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