

Model Number 211B	CHARGE FORCE SENSOR			Revision: E ECN #: 15530
Performance	ENGLISH	SI		
Sensitivity ($\pm 15\%$)	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	$\leq 1\%$ FS	$\leq 1\%$ FS	[4]	
Environmental				
Temperature Range	-100 to +400 °F	-73 to +204 °C		
Temperature Coefficient of Sensitivity	$\leq 0.02\%$ /°F	$\leq 0.036\%$ /°C		
Electrical				
Capacitance	12 pF	12 pF	[1]	
Insulation Resistance (at room temp)	$\geq 1E12$ ohms	$\geq 1E12$ ohms		
Output Polarity (Compression)	Negative	Negative		
Physical				
Preload	1000 lb	4.448 kN		
Stiffness	12 lb/ μ in	2.1 kN/ μ m	[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. ICP [®] is a registered trademark of PCB Group, Inc.				
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 Side	Molded Integral Cable 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: JM	Engineer: KAB	Sales: JSM	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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