Model Number
21/B

# **CHARGE OUTPUT FORCE SENSOR**

Revision: G

ECN #: 41735

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Performance	ENGLISH	<u>SI</u>	
Sensitivity(± 15 %)	18 pC/lb	4047 pC/kN	
Measurement Range(Compression)	≤ 40,000 lb	≤ 177.92 kN	
Maximum Static Force(Compression)	50,000 lb	222.4 kN	
Upper Frequency Limit	55,000 Hz	55,000 Hz	[2][3]
Non-Linearity	≤ 1.5 % FS	≤ 1.5 % FS	[4]
Environmental			
Temperature Range	-100 to +400 °F	-73 to +204 °C	
Temperature Coefficient of Sensitivity	≤ 0.03 %/°F	≤ 0.054 %/°C	
Electrical			
Capacitance	32 pF	32 pF	[1]
Insulation Resistance	≥ 1E12	≥ 1E12	
Physical			
Preload	8000 lb	35.585 kN	
Stiffness	29 lb/µin	5 kN/μm	[1]
Size (Diameter x Height x Bolt Diameter x Sensing Surface)	1.34 in x 0.470 in x	34 mm x 11.9 mm x 16	
	0.625 in x 1.10 in	mm x 28 mm	
Size (ID)(Hole Diameter)	0.660 in	16.76 mm	
Size (OD)(Sensor)	1.340 in	34 mm	
Weight	2 oz	57 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	
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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 082B04 Anti-friction washer (for Models 204C and 214B)
Supplied Accessory: Model M081A14 Mounting Stud, M14 x 1.25 x 1.400, BeCu

Supplied Accessory : Model M083B04 Pilot Bushing

### P - Positive Output Polarity

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.

#### SUPPLIED ACCESSORIES:

Model 080A82 Assembly Lubricant

Model 081A14 Mounting Stud,1/2-20 x 1.400, BeCu

Model 082B04 Anti-friction washer (for Models 204C and 214B)

Model 083B04 Pilot bushing (for Models 204C and 214B)

Entered: AP	Engineer: MJK	Sales: KWW	Approved: APB	Spec Number:
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Phone: 716-684-0001 Fax: 716-684-0987 E-Mail: info@pcb.com