Model Number 208C03	ICP [®] FORCE			SENSOR	
Performance	ENGLISH	SI		Option	
Sensitivity (±15 %)	10 mV/lb	2248 mV/kN		for sta	
Measurement Range (Compression)	500 lb	2.224 kN		N - N	
Measurement Range (Tension)	500 lb	2.224 kN		Out	
Maximum Static Force (Compression)	3000 lb	13.5 kN		W - \	
Maximum Static Force (Tension)	500 lb	2.224 kN		Ele	
Broadband Resolution (1 to 10000 Hz)	0.005 lb-rms	0.02 N-rms	[1]	Ele	
Low Frequency Response (-5 %)	0.0003 Hz	0.0003 Hz	[2]	Note	
Upper Frequency Limit	36 kHz	36 kHz	[3]		
Non-Linearity	≤1 % FS	≤1 % FS	[4]		
Environmental					
Temperature Range	-65 to +250 °F	-54 to +121 °C			
Temperature Coefficient of Sensitivity	≤0.05 %/°F	≤0.09 %/°C			
Electrical					
Discharge Time Constant (at room temp)	≥2000 sec	≥2000 sec			
Excitation Voltage	20 to 30 VDC	20 to 30 VDC		Sup	
Constant Current Excitation	2 to 20 mA	2 to 20 mA		080	
Output Impedance	≤100 Ohm	≤100 Ohm		081E	
Output Bias Voltage	8 to 14 VDC	8 to 14 VDC		0844	
Spectral Noise (1 Hz)	0.000211 lb/√Hz	0.000942 N/√Hz	[1]	M08	
Spectral Noise (10 Hz)	0.000109 lb/√Hz	0.000488 N√Hz	[1]		
Spectral Noise (100 Hz)	0.0000387 lb/√Hz	0.000173 N/√Hz	[1]		
Spectral Noise (1000 Hz)	0.0000086 lb/√Hz	0.0000385 N/√Hz	[1]		
Output Polarity (Compression)	Positive	Positive			
Physical					
Stiffness	6 lb/µin	1.05 kN/µm	[1]		
Size (Hex x Height x Sensing Surface)	0.625 in x 0.625 in	15.88 mm x 15.88			
,	x 0.500 in	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			

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Optional Versions (Optional versions have identical specifications and accessories as listed for standard model except where noted below. More than one option maybe used.)

N - Negative Output Polarity

Output Polarity (Compression)

Electrical Connection Position

Negative

Negative

W - Water Resistant Cable

Electrical Connector

Sealed Cable Sealed Cable

Side Side

Notes

[1] Typical.

[2] Calculated from discharge time constant.

[3] Estimated using rigid body dynamics calculations.

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

[5] See PCB Declaration of Conformance PS023 for details.

Supplied Accessories

080A81 Thread Locker (1)

081B05 Mounting Stud (10-32 to 10-32) (2)

084A03 Impact Cap (1)

M081A62 Mounting stud, 10-32 to M6 x 1, BeCu with shoulder (2)



All specifications are at room temperature unless otherwise specified.

In the interest of constant product improvement, we reserve the right to change specifications without

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Entered: BLB	Engineer: MJK	Sales: MFG	Approved: BLB	Spec Number:
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05/01/2006	05/02/2006	05/03/2006	05/09/2006	



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