Model Number 208C01	ICP® FORCE SENSOR			
Performance	ENGLISH	SI		Option
Sensitivity (±15 %)	500 mV/lb	112410 mV/kN		for sta
Measurement Range (Compression)	10 lb	0.04448 kN		N - N
Measurement Range (Tension)	10 lb	0.04448 kN		Out
Maximum Static Force (Compression)	60 lb	0.27 kN		W - V
Maximum Static Force (Tension)	60 lb	0.27 kN		
Broadband Resolution (1 to 10000 Hz)	0.0001 lb-rms	0.00045 N-rms	[2]	Note
Low Frequency Response (-5 %)	0.01 Hz	0.01 Hz	[3]	
Upper Frequency Limit	36 kHz	36 kHz	[4]	
Non-Linearity	≤1 % FS	≤1 % FS	[5]	
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)	≥50 sec	≥50 sec		
Excitation Voltage	18 to 30 VDC	18 to 30 VDC		Supp
Constant Current Excitation	2 to 20 mA	2 to 20 mA		A080
Output Impedance	≤100 Ohm	≤100 Ohm		081B
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	[1]	084A
Spectral Noise (1 Hz)	0.0000126 lb/√Hz	0.0000562 N/√Hz	[2]	M081
Spectral Noise (10 Hz)	0.0000042 lb/√Hz	0.0000189 N√Hz	[2]	
Spectral Noise (100 Hz)	0.0000015 lb/√Hz	0.0000066 N/√Hz	[2]	
Spectral Noise (1000 Hz)	0.0000005 lb/√Hz	0.0000023 N/√Hz	[2]	
Output Polarity (Compression)	Positive	Positive		
Physical				
Stiffness	6 lb/µin	1.05 kN/µm	[2]	
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		
5 . , , , ,				

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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)

Negative

Negative

W - Water Resistant Cable

Notes

- [1] Sensor contains protected electronics which may cause long 'turn-on" times.
- [2] Typical.
 [3] Calculated from discharge time constant.
- [4] Estimated using rigid body dynamics calculations.
- [5] Zero-based, least-squares, straight line method.
- [6] 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:
Date:	Date:	Date:	Date:	8625
05/01/2006	05/02/2006	05/03/2006	05/09/2006	



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