


Model Number 201B01		ICP® FORCE SENSOR		Revision: C ECN #: 35154	
Performance	ENGLISH	SI		OPTIONAL VERSIONS	
Sensitivity(± 15 %)	500 mV/lb	112,405 mV/kN		Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.	
Measurement Range(Compression)	10 lb	0.04448 kN		N - Negative Output Polarity	
Maximum Static Force(Compression)	60 lb	0.267 kN		Output Polarity(Compression)	Negative Negative
Broadband Resolution(1 to 10,000 Hz)	0.0002 lb-rms	0.0008896 N-rms	[1]	W - Water Resistant Cable	
Low Frequency Response(-5 %)	0.01 Hz	0.01 Hz	[2]	Electrical Connector	Sealed Cable Sealed Cable
Upper Frequency Limit	90 kHz	90 kHz	[3]	Electrical Connection Position	Side Side
Non-Linearity	≤ 1 % FS	≤ 1 % FS	[4]		
Environmental				NOTES:	
Temperature Range	-65 to +250 °F	-54 to +121 °C		[1] Typical.	
Temperature Coefficient of Sensitivity	≤ 0.03 %/°F	≤ 0.054 %/°C		[2] Calculated from discharge time constant.	
Electrical				[3] Estimated using rigid body dynamics calculations.	
Discharge Time Constant(at room temp)	≥ 50 sec	≥ 50 sec		[4] Zero-based, least-squares, straight line method.	
Excitation Voltage	20 to 30 VDC	20 to 30 VDC		[5] See PCB Declaration of Conformance PS023 for details.	
Constant Current Excitation	2 to 20 mA	2 to 20 mA			
Output Impedance	≤ 100 ohm	≤ 100 ohm		SUPPLIED ACCESSORIES:	
Output Bias Voltage	8 to 14 VDC	8 to 14 VDC		Model 080A82 Assembly Lubricant (1)	
Output Polarity(Compression)	Positive	Positive		Model 081A11 Mounting Stud, 10-32 x 0.730, BeCu (1)	
Physical				Model 082B01 Anti-Friction Washer (1)	
Preload	60 lb	0.267 kN		Model 083B01 Pilot Bushing (1)	
Stiffness	12 lb/μin	2.1 kN/μm	[1]	Model M081A11 Mounting Stud, M5 x 0.8 x 0.730, BeCu (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 7.9 mm x 6 mm x 12.7 mm		Model M083B01 Pilot Bushing (1)	
Size (ID)(Hole Diameter)	0.251 in	6.38 mm			
Size (OD)(Sensor)	0.650 in	16.51 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			
				Entered: <i>DMW</i>	Engineer: <i>ngz</i>
				Sales: <i>YKW</i>	Approved: <i>EB</i>
				Date: <i>3/1/11</i>	Date: <i>3/1/11</i>
				Date: <i>3/1/11</i>	Date: <i>3/1/11</i>
					Spec Number: 201-2010-80
				PCB PIEZOTRONICS™	
[5]				FORCE / TORQUE DIVISION	
<i>All specifications are at room temperature unless otherwise specified.</i>				3425 Walden Avenue, Depew, NY 14043	
<i>In the interest of constant product improvement, we reserve the right to change specifications without notice.</i>				Phone: 716-684-0001	
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