

Model Number
201B03

ICP® FORCE SENSOR

Revision: D
ECN #: 35154

	<u>ENGLISH</u>	<u>SI</u>	
Performance			
Sensitivity(± 15 %)	10 mV/lb	2248 mV/kN	
Measurement Range(Compression)	500 lb	2.224 kN	
Maximum Static Force(Compression)	3000 lb	13.34 kN	
Broadband Resolution(1 to 10,000 Hz)	0.01 lb-rms	0.04448 N-rms	[1]
Low Frequency Response(-5 %)	0.002 Hz	0.002 Hz	[2]
Upper Frequency Limit	90 kHz	90 kHz	[3]
Non-Linearity	≤ 1 % FS	≤ 1 % FS	[4]
Environmental			
Temperature Range	-65 to +250 °F	-54 to +121 °C	
Temperature Coefficient of Sensitivity	≤ 0.03 %/°F	≤ 0.054 %/°C	
Electrical			
Discharge Time Constant(at room temp)	≥ 400 sec	≥ 400 sec	
Excitation Voltage	20 to 30 VDC	20 to 30 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	≤ 100 ohm	≤ 100 ohm	
Output Bias Voltage	8 to 14 VDC	8 to 14 VDC	
Output Polarity(Compression)	Positive	Positive	
Physical			
Preload	200 lb	0.89 kN	
Stiffness	12 lb/μin	2.1 kN/μm	[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 7.87 mm x 6 mm x 12.7 mm	
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	

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.

N - Negative Output Polarity		
Output Polarity(Compression)	Negative	Negative
W - Water Resistant Cable		
Electrical Connector	Sealed Cable	Sealed Cable
Electrical Connection Position	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:
 Model 080A82 Assembly Lubricant (1)
 Model 081A11 Mounting Stud, 10-32 x 0.730, BeCu (1)
 Model 082B01 Anti-Friction Washer (1)
 Model 083B01 Pilot Bushing (1)
 Model M081A11 Mounting Stud, M5 x 0.8 x 0.730, BeCu (1)
 Model M083B01 Pilot Bushing (1)

Entered: <i>romw</i>	Engineer: <i>max</i>	Sales: <i>ylw</i>	Approved: <i>EB</i>	Spec Number:
Date: <i>3/1/11</i>	Date: <i>3/1/11</i>	Date: <i>3/1/11</i>	Date: <i>3/1/11</i>	201-2030-80



[5]
 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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