

Model Number <b>201B05</b>	<b>ICP® FORCE SENSOR</b>	Revision: D ECN #: 35154
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	<u>ENGLISH</u>	<u>SI</u>
<b>Performance</b>		
Sensitivity(± 15 %)	1 mV/lb	224.8 mV/kN
Measurement Range(Compression)	5000 lb	22.24 kN
Maximum Static Force(Compression)	8000 lb	35.59 kN
Broadband Resolution(1 to 10,000 Hz)	0.10 lb-rms	0.4448 N-rms
Low Frequency Response(-5 %)	0.0003 Hz	0.0003 Hz
Upper Frequency Limit	90 kHz	90 kHz
Non-Linearity	≤ 1 % FS	≤ 1 % FS
<b>Environmental</b>		
Temperature Range	-65 to +250 °F	-54 to +121 °C
Temperature Coefficient of Sensitivity	≤ 0.03 %/°F	≤ 0.054 %/°C
<b>Electrical</b>		
Discharge Time Constant(at room temp)	≥ 2000 sec	≥ 2000 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
<b>Physical</b>		
Preload	1000 lb	4.448 kN
Stiffness	12 lb/μin	2.1 kN/μm
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
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

<b>OPTIONAL VERSIONS</b>		
Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.		
<b>N</b> - Negative Output Polarity		
Output Polarity(Compression)	Negative	Negative
<b>W</b> - 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>ysm</i>	Engineer: <i>ngx</i>	Sales: <i>ysm</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>	<b>201-2050-80</b>



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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