

Model Number 203B	ICP[®] FORCE SENSOR	Revision: E ECN #: 18876
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Performance	<u>ENGLISH</u>	<u>SI</u>
Sensitivity (± 15 %)	0.25 mV/lb	56.2 mV/kN
Measurement Range (Compression)	20,000 lb	88.96 kN
Maximum Static Force (Compression)	25,000 lb	111.2 kN
Broadband Resolution (1 to 10,000 Hz)	0.4 lb-rms	1.78 N-rms
Low Frequency Response (-5 %)	0.0003 Hz	0.0003 Hz
Upper Frequency Limit	60 kHz	60 kHz
Non-Linearity	≤ 1 % FS	≤ 1 % FS
Environmental		
Temperature Range	-65 to +250 °F	-54 to +121 °C
Temperature Coefficient of Sensitivity	≤ 0.11 %/°F	≤ 0.198 %/°C
Electrical		
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 ohms	≤ 100 ohms
Output Bias Voltage	8 to 14 VDC	8 to 14 VDC
Output Polarity (Compression)	Positive	Positive
Physical		
Preload	4000 lb	17.793 kN
Stiffness	23 lb/μin	4 kN/μm
Size (Diameter x Height x Bolt Diameter x Sensing Surface)	1.10 in x 0.430 in x .5 in x 0.888 in	27.9 mm x 10.9 mm x 12 mm x 22.6 mm
Size (ID) (Hole Diameter)	0.520 in	13.2 mm
Size (OD) (Sensor)	1.10 in	27.9 mm
Weight	1.3 oz	38 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.		
M - Metric Mount Supplied Accessory : Model M081A13 Mounting Stud, M10 x 1.00 x 1.100, BeCu (1) Supplied Accessory : Model M083B03 Pilot Bushing (1)		
N - Negative Output Polarity Output Polarity (Compression)	Negative	Negative
W - Water Resistant Cable Electrical Connector Electrical Connection Position	Sealed Cable Side	Sealed Cable 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 081A13 Mounting Stud, 3/8-24 x 1.100, BeCu (1)
 Model 082B03 Anti-friction washer (for Models 203B and 213B) (1)
 Model 083B03 Pilot Bushing (for Models 203B and 213B) (1)

ICP[®] Force				
Entered: <i>JLB</i>	Engineer: <i>JLB</i>	Sales: <i>JPM</i>	Approved: <i>JLB</i>	Spec Number:
Date: <i>12/9/03</i>	Date: <i>12/9/03</i>	Date: <i>12/9/03</i>	Date: <i>12/10/03</i>	1144



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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