

Model Number  
260M36

# 3-COMPONENT ICP® FORCE SENSOR

Revision: D  
ECN #: 39304

Performance	ENGLISH	SI	
Sensitivity(± 20 %)(z axis)	490 mV/lb	110 mV/N	[1][2]
Sensitivity(± 20 %)(x or y axis)	490 mV/lb	110 mV/N	[1][2]
Measurement Range(z axis)	10.1 lb	45 N	
Measurement Range(x or y axis)	10.1 lb	45 N	
Maximum Force(z axis)	13.5 lb	60 N	
Maximum Force(x or y axis)	13.5 lb	60 N	
Maximum Moment(z axis)	14 ft-lb	18.98 Nm	
Maximum Moment(x or y axis)	13 ft-lb	17.63 Nm	
Broadband Resolution(z axis)	≤0.0003 lb-rms	≤0.0013 N-rms	[3]
Broadband Resolution(x or y axis)	≤0.0003 lb-rms	≤0.0013 N-rms	[3]
Upper Frequency Limit	90 kHz	90 kHz	
Low Frequency Response(-5 %)(z-axis)	0.01 Hz	0.01 Hz	
Low Frequency Response(-5 %)(x or y axis)	0.001 Hz	0.001 Hz	
Non-Linearity	≤ 1 % FS	≤ 1 % FS	[4]
Cross Talk(between x and y axis)	± 3 %	± 3 %	
Cross Talk(between (x or y axis) and z axis)	± 5 %	± 5 %	
<b>Environmental</b>			
Temperature Range	-65 to +250 °F	-54 to +121 °C	
<b>Electrical</b>			
Full Scale Output(Z Direction)	± 2.5 VDC	± 2.5 VDC	
Full Scale Output(X and Y Direction)	± 5 VDC	± 5 VDC	
Discharge Time Constant(z axis)	≥ 25 sec	≥ 25 sec	
Discharge Time Constant(x or y axis)	≥ 50 sec	≥ 50 sec	
Excitation Voltage(all channels)	20 to 30 VDC	20 to 30 VDC	
Constant Current Excitation(all channels)	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	
Spectral Noise(1 Hz)(X & Y)	300 µlb/√Hz	1350 µN/√Hz	
Spectral Noise(10 Hz)(X & Y)	150 µlb/√Hz	670 µN/√Hz	
Spectral Noise(100 Hz)(X & Y)	50 µlb/√Hz	230 µN/√Hz	
Spectral Noise(1 kHz)(X & Y)	2.3 µlb/√Hz	10 µN/√Hz	
Spectral Noise(10 kHz)(X & Y)	0.7 µlb/√Hz	3 µN/√Hz	
Spectral Noise(1 Hz)(Z)	150 µlb/√Hz	670 µN/√Hz	
Spectral Noise(10 Hz)(Z)	55 µlb/√Hz	250 µN/√Hz	
Spectral Noise(100 Hz)(Z)	20 µlb/√Hz	90 µN/√Hz	
Spectral Noise(1 kHz)(Z)	2.3 µlb/√Hz	10 µN/√Hz	
Spectral Noise(10 kHz)(Z)	0.7 µlb/√Hz	3 µN/√Hz	
Output Polarity	Positive	Positive	
<b>Physical</b>			
Preload Torque	56 in-lb	6.3 Nm	[5][6]
Stiffness(z axis)	10 lb/µin	1.75 kN/µm	[3]
Stiffness(x or y axis)	4 lb/µin	0.7 kN/µm	[3]
Size (Height x Length x Width x Bolt Diameter x ID x Sensing Surface)	0.390 in x 1.075 in x 0.95 in x 0.205 in x 0.319 in x 0.680 in	9.90 mm x 27.3 mm x 24.1 mm x 5.21 mm x 8.10 mm x 17.27 mm	
Weight	0.927 oz	26.28 gm	
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Hermetic	Hermetic	
Electrical Connector	4-Pin	4-Pin	
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.

**NOTES:**

- [1] Sensitivities are for listed preload. Sensitivities may vary ±5% depending on preload used.
- [2] Sensitivities are dependent upon supplied bolt.
- [3] Typical.
- [4] Zero-based, least-squares, straight line method.
- [5] Perform in steps of 2.5 in-lbs (28 N cm) to protect electronics (40 V max).
- [6] Apply thin layer of lithium grease to sliding surfaces (washer, nut, threads).
- [7] See PCB Declaration of Conformance PS023 for details.

**SUPPLIED ACCESSORIES:**

- Model 082B02 Anti-Friction Washer (1)
- Model 083A10 Pilot Bushing (1)
- Model M081A70 Mounting Stud (1)

Entered: <i>JH</i>	Engineer: <i>BAM</i>	Sales: <i>RWM</i>	Approved: <i>[Signature]</i>	Spec Number:
Date: <i>5/24/12</i>	Date: <i>5/18/12</i>	Date: <i>5-18-12</i>	Date: <i>5/18/12</i>	35960



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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