

Model Number
260M21

3-COMPONENT ICP® FORCE SENSOR

Revision: D
ECN #: 53087

Performance	ENGLISH	SI	
Sensitivity(± 30 %)(Z Axis)	100 mV/lb	22.5 mV/N	[1][2]
Sensitivity(± 30 %)(X or Y Axis)	500 mV/lb	112 mV/N	[1][2]
Measurement Range(Z Axis)	25 lb	0.111 kN	
Measurement Range(X or Y Axis)	10 lb	0.044 kN	
Maximum Force	300 lb	1.334 kN	
Maximum Force(X or Y Axis)	60 lb	0.267 kN	
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)	0.00004 lb-rms	0.0002 N-rms	[3]
Upper Frequency Limit	90,000 Hz	90,000 Hz	
Low Frequency Response(- 5 %)(z-axis)	0.01 Hz	0.01 Hz	
Low Frequency Response(- 5 %)(x or y axis)	0.01 Hz	0.01 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 %	
Environmental			
Temperature Range	-65 to +250 °F	-54 to +121 °C	
Electrical			
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)	≥ 50 sec	≥ 50 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	
Output Polarity	Positive	Positive	
Physical			
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 0.68 in	9.9 mm x 27.3 mm x 24.1 mm x 5.21 mm x 8.1 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.

M - Metric Mount
Supplied Accessory: Model M081A70 Mounting Stud (1)

W - Water Resistant Cable

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]Preload should be at least 10 times the X and Y operating range used.
- [6]Perform in steps of 14 in-lbs (158 N cm) to protect electronics (40 V max)
- [7]See PCB Declaration of Conformance PS023 for details.

SUPPLIED ACCESSORIES:

- Model 081A70 Mounting Stud (1)
- Model 082B02 Anti-Friction Washer (1)
- Model 083A10 Pilot Bushing (1)
- Model FCS-10 Special calibration, no bolt effect, 260 series (1)
- Model M081A70 Mounting Stud (1)



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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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