

Model Number

260A02

3-COMPONENT ICP® FORCE SENSOR

Revision: D

ECN #: 27553

Performance

	ENGLISH	SI	
Sensitivity(± 20 %)(z axis)	2.5 mV/lb	0.56 mV/N	[1][2]
Sensitivity(± 20 %)(x or y axis)	5 mV/lb	1.12 mV/N	[1][2]
Measurement Range(z axis)	1000 lb	4.45 kN	
Measurement Range(x or y axis)	1000 lb	4.45 kN	
Maximum Force(z axis)	1320 lb	5.87 kN	
Maximum Force(x or y axis)	1000 lb	4.45 kN	
Maximum Moment(z axis)	40 ft-lb	54.23 N-m	
Maximum Moment(x or y axis)	70 ft-lb	94.91 N-m	
Broadband Resolution(z axis)	0.006 lb-rms	0.027 N-rms	[3]
Broadband Resolution(x or y axis)	0.006 lb-rms	0.027 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 %	

Environmental

Temperature Range	-65 to +250 °F	-54 to +121 °C	
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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)	≥ 500 sec	≥ 500 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	10,000 lb	44.48 kN	[5]
Stiffness(z axis)	19 lb/μin	3.3 kN/μm	[3]
Stiffness(x or y axis)	6 lb/μin	1 kN/μm	[3]
Size (Height x Length x Width x Bolt Diameter x ID x Sensing Surface)	0.390 in x 1.35 in x 1.25 in x 0.512 in x 0.512 in x 0.920 in	9.90 mm x 34.3 mm x 31.8 mm x 13 mm x 13 mm x 23.37 mm	
Weight	1.59 oz	45 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 M081A74 Mounting Stud (1) replaces Model 081A74

W - Water Resistant Cable

Electrical Connection Position

Side

Side

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] See PCB Declaration of Conformance PS023 for details.

SUPPLIED ACCESSORIES:

Model 081A74 Pre-load bolt (for Models 260A02, 260A12, and 260A32) (1)
 Model 082M12 Anti-friction washer (for Models 260A02, 260A12, and 260A32) (1)
 Model 083A13 Pilot bushing (for Models 260A02, 260A12, and 260A32) (1)

Entered: BLS	Engineer: DMB	Sales: PLM	Approved: EF	Spec Number:
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[6]

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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