Model Number 260A03	3-COMPONENT ICP® FORCE SENSOR	Revision: N ECN #: 27553

Performance	ENGLISH	SI	
Sensitivity(± 20 %)(z axis)	0.25 mV/lb	0.06 mV/N	[1][2]
Sensitivity(± 20 %)(x or y axis)	1.25 mV/lb	0.28 mV/N	[1][2]
Measurement Range(z axis)	10,000 lb	44.48 kN	
Measurement Range(x or y axis)	4000 lb	17.79 kN	
Maximum Force(z axis)	11,000 lb	48.93 kN	
Maximum Force(x or y axis)	4400 lb	19.57 kN	
Maximum Moment(z axis)	240 ft-lb	325.4 N-m	
Maximum Moment(x or y axis)	325 ft-lb	440.7 N-m	
Broadband Resolution(z axis)	0.05 lb-rms	0.222 N-rms	[3]
Broadband Resolution(x or y axis)	0.01 lb-rms	0.04 N-rms	[3]
Upper Frequency Limit	39 kHz	39 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	
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	
Spectral Noise(1 Hz)(X & Y)	0.003 lb/√Hz	0.0134 N/√Hz	
Spectral Noise(10 Hz)(X & Y)	0.001 lb/√Hz	0.00445 N/√Hz	
Spectral Noise(100 Hz)(X & Y)	0.0004 lb/√Hz	0.00178 N/√Hz	
Spectral Noise(1 kHz)(X & Y)	0.0001 lb/√Hz	0.000445 N/√Hz	
Spectral Noise(1 Hz)(Z)	0.02 lb/√Hz	0.089 N/√Hz	
Spectral Noise(10 Hz)(Z)	0.005 lb/√Hz	0.0222 N/√Hz	
Spectral Noise(100 Hz)(Z)	0.002 lb/√Hz	0.0089 N/√Hz	
Spectral Noise(1 kHz)(Z)	0.0005 lb/√Hz	0.00222 N/√Hz	
Output Polarity	Positive	Positive	
Physical			
Preload	40,000 lb	178 kN	[5]
Stiffness(z axis)	40 lb/µin	7 kN/µm	[3]
Stiffness(x or y axis)	15 lb/µin	2.6 kN/µm	[3]
Size (Height x Length x Width x Bolt Diameter x ID x Sensing Surface)	0.790 in x 2.25 in x 2.25 in x 1 in x 1.023 in x 1.800 in	20.07 mm x 57.1 mm x 57.1 mm x 25 mm x 25.98 mm x 45.72 mm	
Weight	9.56 oz	271 gm	
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Hermetic	Hermetic	
Electrical Connector	4-Pin	4-Pin	
Electrical Connection Position	Side	Side	

CE [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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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 M081A71 Mounting Stud (1) replaces Model 081A71

W - Water Resistant Cable
Electrical Connection Position Side Side

NOTES:

[1] Sensitivites are for listed preload. Sensitivites 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 081A71 Mounting Stud (1)
Model 082B06 Anti-Friction Washer (1)
Model 083A11 Pilot Bushing (1)

Entered BLS	Engineer: DHR	Sales: RWM	Approved RF	Spec Number:
Date: 10/23/07	Date: 10/22/07	Date: 10/22/07	Date: 10/22/07	7754

PCB PIEZOTRONICS™
FORCE / TORQUE DIVISION
3425 Walden Avenue, Depew, NY 14043

Phone: 716-684-0001
Fax: 716-684-8877
E-Mail: force@pcb.com