

Model Number 260A03	3-COMPONENT ICP® FORCE SENSOR			Revision N ECN #: 27553	
Performance		ENGLISH	SI	Optional Versions (Optional versions have identical specifications and accessories as listed for standard model except where noted below. More than one option maybe used.) M - Metric Mount Supplied Accessory: Model M081A71 Mounting Stud replaces Model 081A71 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 081A71 Mounting Stud (1) 082B06 Anti-Friction Washer (1) 083A11 Pilot Bushing (1)	
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)	10000 lb	44.48 kN			
Measurement Range (x or y axis)	4000 lb	17.79 kN			
Maximum Force (z axis)	11000 lb	48.93 kN			
Maximum Force (x or y axis)	4400 lb	19.57 kN			
Maximum Moment (z axis)	240 ft-lb	325.4 Nm			
Maximum Moment (x or y axis)	325 ft-lb	440.7 Nm			
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 (1000 Hz) (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 (1000 Hz) (Z)	0.0005 lb/√Hz	0.00222 N/√Hz			
Output Polarity	Positive	Positive			
Physical					
Preload	40000 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			
Entered: BLS	Engineer: RWM	Sales: RPF	Approved: BLS	Spec Number:	
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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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