


Model Number M1631-01C		STRAIN GAGE LOAD CELL		Revision: D ECN #: 43825
Performance	ENGLISH	SI		OPTIONAL VERSIONS
Measurement Range	562 lb	2500 N	[5]	Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.
Sensitivity(± 10 %)	2 mV/V	2 mV/V	[6]	
Non-Linearity	≤ 0.15 % FS	≤ 0.15 % FS		
Hysteresis	≤ 0.15 % FS	≤ 0.15 % FS		
Non-Repeatability	≤ 0.05 %RO	≤ 0.05 %RO		
Resonant Frequency	2.2 kHz	2.2 kHz		
Creep(in 20 minutes)	≤ 0.08 %	≤ 0.08 %		
Environmental				NOTES:
Overload Limit	843 lb	3750 N		[1]Nominal.
Load Limit(Side Force, F _X or F _Y)	56.2 lb	250 N	[3]	[2]Calibrated at 10 VDC, usable 5 to 20 VDC or VAC RMS.
Load Limit(Bending Moment, M _X or M _Y)	112.4 in-lb	12.7 Nm	[3]	[3]Singularly applied, i.e. no other extraneous loads.
Load Limit(Axial Torque, M _Z)	112.4 in-lb	12.7 Nm	[3]	[4]Over compensated operating temperature range.
Temperature Range(Operating)	0 to +200 °F	-18 to +93 °C		[5]FS - Full Scale.
Temperature Range(Compensated)	+75 to +150 °F	+21 to +65 °C		[6]RO - Rated Output.
Temperature Effect on Output(Maximum)	± 0.002 %Reading/°F	± 0.0036 %Reading/°C	[4]	[7]See Outline Drawing 46141 for Complete Dimensions
Temperature Effect on Zero Balance(Maximum)	± 0.0015 %FS/°F	± 0.027 %FS/°C	[4]	
Electrical				
Bridge Resistance	350 Ohm	350 Ohm	[1]	
Excitation Voltage(Recommended)	10 VDC	10 VDC	[2]	Entered: AP Engineer: PE Sales: JC Approved: JSD Spec Number:
Insulation Resistance	>5x10 ⁹ Ohm	>5x10 ⁹ Ohm		Date: 2/16/2015 Date: 2/16/2015 Date: 2/16/2015 Date: 2/16/2015 46014
Zero Balance	≤ 1 % FS	≤ 1 % FS		
Output Polarity	+Tension	+Tension		
Physical				
Size (Length x Height x Width)	2.0 in x 3.0 in x 1.0 in	51.0 mm x 76.2 mm x 25.4 mm	[7]	PCB Load & Torque, Inc.
Weight	0.43 lb	195 g		24350 Indoplex Circle
Housing Material	Aluminum	Aluminum		Farmington Hills, MI 48335
Sensing Element	Strain Gage	Strain Gage		UNITED STATES
Deflection at Full Scale Capacity	0.0025 in	0.05 mm		Phone: 866-684-7107
Electrical Connector	10 ft - Integrated Cable	10 ft - Integrated Cable		Fax: 716-684-0987
Electrical Connection Position	Side	Side		E-Mail: ltinfo@pcbloadtorque.com
<i>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.</i>				
			 PCB LOAD & TORQUE A PCB GROUP COMPANY	
			Web site: http://www.pcbloadtorque.com	