


Model Number <b>1631-01C</b>		<b>STRAIN GAGE LOAD CELL</b>		Revision: E ECN #: 43825
<b>Performance</b>	<b>ENGLISH</b>	<b>SI</b>		<b>OPTIONAL VERSIONS</b>
Measurement Range	500 lb	2224 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	≤ 0.05 % FS	≤ 0.05 % FS		
Hysteresis	≤ 0.03 % FS	≤ 0.03 % FS		
Non-Repeatability	≤ 0.02 %RO	≤ 0.02 %RO		
Resonant Frequency	2.2 kHz	2.2 kHz		
Creep(in 20 minutes)	≤ 0.08 %	≤ 0.08 %		
<b>Environmental</b>				<b>NOTES:</b>
Overload Limit	750 lb	3336 N		[1]Nominal.
Load Limit(Side Force, F <sub>X</sub> or F <sub>Y</sub> )	50 lb	222.4 N	[3]	[2]Calibrated at 10 VDC, usable 5 to 20 VDC or VAC RMS.
Load Limit(Bending Moment, M <sub>X</sub> or M <sub>Y</sub> )	100 in-lb	11.3 Nm	[3]	[3]Singularly applied, i.e. no other extraneous loads.
Load Limit(Axial Torque, M <sub>Z</sub> )	100 in-lb	11.3 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)	+70 to +170 °F	+21 to +77 °C		[6]RO - Rated Output.
Temperature Effect on Output(Maximum)	± 0.0008 %Reading/°F	± 0.0015 %Reading/°C	[4]	[7]See Outline Drawing 46138 for Complete Dimensions
Temperature Effect on Zero Balance(Maximum)	± 0.0015 %FS/°F	± 0.027 %FS/°C	[4]	
<b>Electrical</b>				
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 <sup>9</sup> Ohm	>5x10 <sup>9</sup> Ohm		Date: 2/16/2015    Date: 2/16/2015    Date: 2/16/2015    Date: 2/16/2015 <b>45997</b>
Zero Balance	± 1 % FS	± 1 % FS		
Output Polarity	+Tension	+Tension		
<b>Physical</b>				
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]	<b>PCB Load &amp; Torque, Inc.</b>
Weight	0.43 lb	195 g		<b>24350 Indoplex Circle</b>
Housing Material	Aluminum	Aluminum		<b>Farmington Hills, MI 48335</b>
Sensing Element	Strain Gage	Strain Gage		<b>UNITED STATES</b>
Deflection at Full Scale Capacity	0.0025 in	0.05 mm		<b>Phone: 866-684-7107</b>
Electrical Connector	10 ft - Integrated Cable	10 ft - Integrated Cable		<b>Fax: 716-684-0987</b>
Electrical Connection Position	Side	Side		<b>E-Mail: <a href="mailto:ltinfo@pcbloadtorque.com">ltinfo@pcbloadtorque.com</a></b>
<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>				
			 <b>PCB LOAD &amp; TORQUE</b> A PCB GROUP COMPANY	
			<b>Web site:</b> <a href="http://www.pcbloadtorque.com">http://www.pcbloadtorque.com</a>	