

Model Number M1408-M119-02ADB	FATIGUE RATED LOW PROFILE LOAD CELL, DUAL BRIDGE	Revision: A ECN #: 43840
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	<u>ENGLISH</u>	<u>SI</u>	
Performance			
Measurement Range(100 x 10 ⁶ cycles)	50 klb	222 kN	[5][6]
Sensitivity(± 10 %)	2.0 mV/V	2.0 mV/V	[7][1]
Non-Linearity	≤ 0.05 % FS	≤ 0.05 % FS	
Hysteresis	≤ 0.05 % FS	≤ 0.05 % FS	
Non-Repeatability	≤ 0.02 %RO	≤ 0.02 %RO	
Eccentric Load Sensitivity	0.1 %/in	0.1 %/25.4mm	
Resonant Frequency	18 kHz	18 kHz	
Side Load Sensitivity	0.1 %/in	0.1 %/25.4mm	
Creep(in 20 minutes)	0.025 %	0.025 %	
Static Error Band	≤ 0.05 % FS	≤ 0.05 % FS	[5]
Environmental			
Overload Limit	150 klb	667 kN	
Load Limit(Side Force, F _X or F _Y)	50 klb	222 kN	[3]
Load Limit(Bending Moment, M _X or M _Y)	50k in-lb	5649 Nm	[3]
Load Limit(Axial Torque, M _Z)	50k in-lb	5649 Nm	[3]
Temperature Range(Operating)	-65 to +200 °F	-54 to +93 °C	
Temperature Range(Compensated)	+15 to +115 °F	-9 to +46 °C	
Temperature Effect on Output(Maximum)	± 0.0008 %Reading/°F	± 0.0018 %Reading/°C	[4]
Temperature Effect on Zero Balance(Maximum)	± 0.0008 %FS/°F	± 0.0018 %FS/°C	[4]
Electrical			
Bridge Resistance	350 Ohm	350 Ohm	[1]
Excitation Voltage(Recommended)	10 VDC	10 VDC	[2]
Insulation Resistance	>5k GOhm	>5k GOhm	
Zero Balance	≤ 1 %RO	≤ 1 %RO	
Output Polarity	+Tension	+Tension	
Physical			
Size (Diameter x Height)	8.00 in x 4.50 in	203.20 mm x 114.30 mm	[8]
Weight	54 lb	25.5 kg	
Mounting Thread	No English Equivalent	M42 x 2.0	
Sensing Element	Strain Gage	Strain Gage	
Mounting Torque	2600 in-lb	294 Nm	
Deflection at Full Scale Capacity	0.001 in	0.025 mm	
Electrical Connector	MS3102A-14S-2P (2)	MS3102A-14S-2P (2)	

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.

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.

NOTES:

[1]Nominal.
 [2]Calibrated at 10 VDC, usable 5 to 20 VDC or VAC RMS.
 [3]Singularly applied, i.e. no other extraneous loads.
 [4]Over compensated operating temperature range.
 [5]FS - Full Scale.
 [6]Calibrated in tension and compression.
 [7]RO - Rated Output.
 [8]See Outline Drawing 60728 for Complete Dimensions.

Entered: AP	Engineer: PE	Sales: RWM	Approved: JSD	Spec Number:
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PCB Load & Torque, Inc.
24350 Indoplex Circle
Farmington Hills, MI 48335
UNITED STATES
Phone: 866-684-7107
Fax: 716-684-0987
E-Mail: ltinfo@pcbloadtorque.com
Web site:
<http://www.pcbloadtorque.com>