

Model Number <b>1403-11A</b>	<b>FATIGUE RATED LOW PROFILE LOAD CELL</b>	Revision: B ECN #: 43809
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	<b>ENGLISH</b>	<b>SI</b>	
<b>Performance</b>			
Measurement Range(100 x 10 <sup>6</sup> cycles)	250 lbf	1112 N	[6][7]
Sensitivity(± 10 %)(RO)	1.0 mV/V	1.0 mV/V	[3][1]
Non-Linearity	≤ 0.04 % FS	≤ 0.04 % FS	[6][8]
Hysteresis	≤ 0.03 % FS	≤ 0.03 % FS	[6][8]
Non-Repeatability	≤ 0.02 % RO	≤ 0.02 % RO	[3][8]
Eccentric Load Sensitivity	0.1 %/in	0.1 %/25.4mm	[8]
Resonant Frequency	2.4 kHz	2.4 kHz	
Side Load Sensitivity	0.1 %/in	0.1 %/25.4mm	[8]
Creep(in 20 minutes)	0.025 %	0.025 %	[8]
Static Error Band	≤ 0.03 % FS	≤ 0.03 % FS	[6][8]
<b>Environmental</b>			
Overload Limit	750 lbf	3336 N	
Load Limit(Side Force, F <sub>X</sub> or F <sub>Y</sub> )	500 lbf	2224 N	[4]
Load Limit(Bending Moment, M <sub>X</sub> or M <sub>Y</sub> )	500 lbf-in	56 Nm	[4]
Load Limit(Axial Torque, M <sub>Z</sub> )	500 lbf-in	56 Nm	[4]
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	[5]
Temperature Effect on Zero Balance(Maximum)	± 0.0008 %FS/°F	± 0.0018 %FS/°C	[5]
<b>Electrical</b>			
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	[3]
Output Polarity	+Tension	+Tension	
<b>Physical</b>			
Size (Diameter x Height)	4.12 in x 2.50 in	104.6 mm x 63.5 mm	[9]
Weight	6.4 lb	2.9 kg	
Mounting Thread	5/8 - 18 UNF-3B	No Metric Equivalent	
Housing Material	Painted Steel	Painted Steel	
Sensing Element	Strain Gage	Strain Gage	
Mounting Torque	200 lbf-in	23 Nm	
Deflection at Full Scale Capacity	0.0005 in	0.013 mm	
Electrical Connector	PT02E-10-6P	PT02E-10-6P	

**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.

**1403-11B** - PC04E-10-6P Connector

**1403-11C** - PT02E-12-8P Connector

**1403-11D** - PC01E-12-8P Connector

**NOTES:**

[1]Nominal.  
[2]Calibrated at 10 VDC, usable 5 to 20 VDC or VAC RMS.  
[3]RO - Rated Output.  
[4]Singularly applied, i.e. no other extraneous loads.  
[5]Over compensated operating temperature range.  
[6]FS - Full Scale.  
[7]Calibrated in tension and compression.  
[8]Performance specifications guaranteed with factory installed optional Tension Base 084A100  
[9]See Outline Drawing 49932 for Complete Dimensions

**OPTIONAL ACCESSORIES:**

Model 084A100 TENSION LOAD BASE W/ 5/8-18 UNF-3B THD  
Model 084A55 Pre-Tension Stud  
Model 084A90 Connector Shroud  
Model 181-012A PT06A-10-6S(SR)  
Model 8311-01-10A CABLE

Entered: AP	Engineer: PE	Sales: JC	Approved: JSD	Spec Number:
Date: 2/16/2015	Date: 2/16/2015	Date: 2/16/2015	Date: 2/16/2015	<b>56129</b>

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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