

Model Number 1102-01A		STRAIN GAGE LOAD CELL		Revision: G ECN #: 43815
Performance	ENGLISH	SI		OPTIONAL VERSIONS
Measurement Range	50 lb	222 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	≤ 0.05 % FS	≤ 0.05 % FS		
Non-Repeatability	≤ 0.02 % FS	≤ 0.02 % FS		
Eccentric Load Sensitivity	≤ 0.25 %/in	≤ 0.25 %/25.4mm		
Resonant Frequency	2.8 kHz	2.8 kHz		
Creep(in 20 minutes)	≤ .025 %	≤ .025 %		
Static Error Band	≤ .05 % FS	≤ .05 % FS		
Environmental				
Overload Limit	75 lb	334 N		[1]Nominal.
Load Limit(Side Force, F _X or F _Y)	50 lb	222 N	[3]	[2]Calibrated at 10 VDC, usable 5 to 20 VDC or VAC RMS.
Load Limit(Bending Moment, M _X or M _Y)	50 in-lb	5.6 Nm	[3]	[3]Singularly applied, i.e. no other extraneous loads.
Load Limit(Axial Torque, M _Z)	35 in-lb	4 Nm	[3]	[4]Over compensated operating temperature range.
Temperature Range(Operating)	-65 to +200 °F	-54 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)	± 0.0015 %Reading/°F	± 0.0027 %Reading/°C	[4]	[7]See Outline Drawing 51277 for Complete Dimensions
Temperature Effect on Zero Balance(Maximum)	± 0.0008 %FS/°F	± 0.0015 %FS/°C	[4]	
Electrical				OPTIONAL ACCESSORIES:
Bridge Resistance	700 Ohm	700 Ohm	[1]	Model 181-012A PT06A-10-6S(SR)
Excitation Voltage(Recommended)	10 VDC	10 VDC	[2]	Model 8311-01-10A CABLE
Insulation Resistance	>5x10 ⁹ Ohm	>5x10 ⁹ Ohm		
Zero Balance	≤ 1 % FS	≤ 1 % FS		
Output Polarity	+Tension	+Tension		
Physical				
Size (Diameter x Height)	2.75 in x 1.5 in	69.9 mm x 38.1 mm	[7]	
Weight	0.67 lb	304 g		
Mounting Thread	1/4-28 Female	No Metric Equivalent		
Housing Material	Painted Aluminum	Painted Aluminum		
Sensing Element	Strain Gage	Strain Gage		
Deflection at Full Scale Capacity	0.003 in	0.08 mm		
Electrical Connector	PT02E-10-6P	PT02E-10-6P		
<i>All specifications are at room temperature unless otherwise specified.</i>				
<i>In the interest of constant product improvement, we reserve the right to change specifications without notice.</i>				
Entered: AP		Engineer: PE	Sales: JC	Approved: JSD
Date: 2/17/2015		Date: 2/17/2015	Date: 2/17/2015	Date: 2/17/2015
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