

Load Cell With Overload Protection

Models F50, F100

- 50 lbf and 100 lbf capacity
- Overload protection to 5000 lbf
- Highly accurate
- Temperature compensated
- Rugged construction

Description

Michigan Scientific's *Load Cell With Overload Protection* is ideal for compressive loading applications that require both high resolution measurements up to 50 lbf or 100 lbf and overload protection up to 5,000 lbf. These load cells are typically used in manufacturing operations where large overload forces exist. For example, they are used to monitor bearing pre-loads in machines that set bearing pre-loads for large inertia parts. Both the *F50* and *F100* models provide one channel of data.

The *F50* and *F100* models are made of high grade aluminum material which provides excellent resistance to corrosion and environmental conditions. Weatherproofing is available for applications operating in severe environmental conditions. Temperature compensation of the transducers ensures stable output throughout a wide temperature range. In addition, the transducers are configured for easy adaptation to a variety of applications.



Specifications

	F50	F100
Maximum Load Capacity	5,000 lbf (22 kN)	5000 lbf (22 kN)
Full Scale Load	50 lbf (220 N)	100 lbf (450 N)
Full Scale Output	2.0 mV/V ± 0.5 %	
Sensor	4 arm strain gauge bridge	
Nonlinearity	0.1 % of full scale output	
Hysteresis	0.1 % of full scale output	
Temperature Range, Compensated*	75 °F to 200 °F (24 °C to 93 °C)	
Temperature Effect on Zero	0.0015 % reading/°F (0.0027 % reading/°C)	
Temperature Range, Useable	-40 °F to 250 °F (-40 °C to 121 °C)	
Excitation Voltage, Maximum	10 Vdc or Vdc rms	
Insulation Resistance, Bridge/Case	Exceeds 20 K MΩ	
Output Connector	PT02A-10-6P	
Mating Connector	1PT06E-10-6S (SR)	
* Contact factory for other compensated ranges		

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Charlevoix, MI 49720
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03-7-22
Rev. A

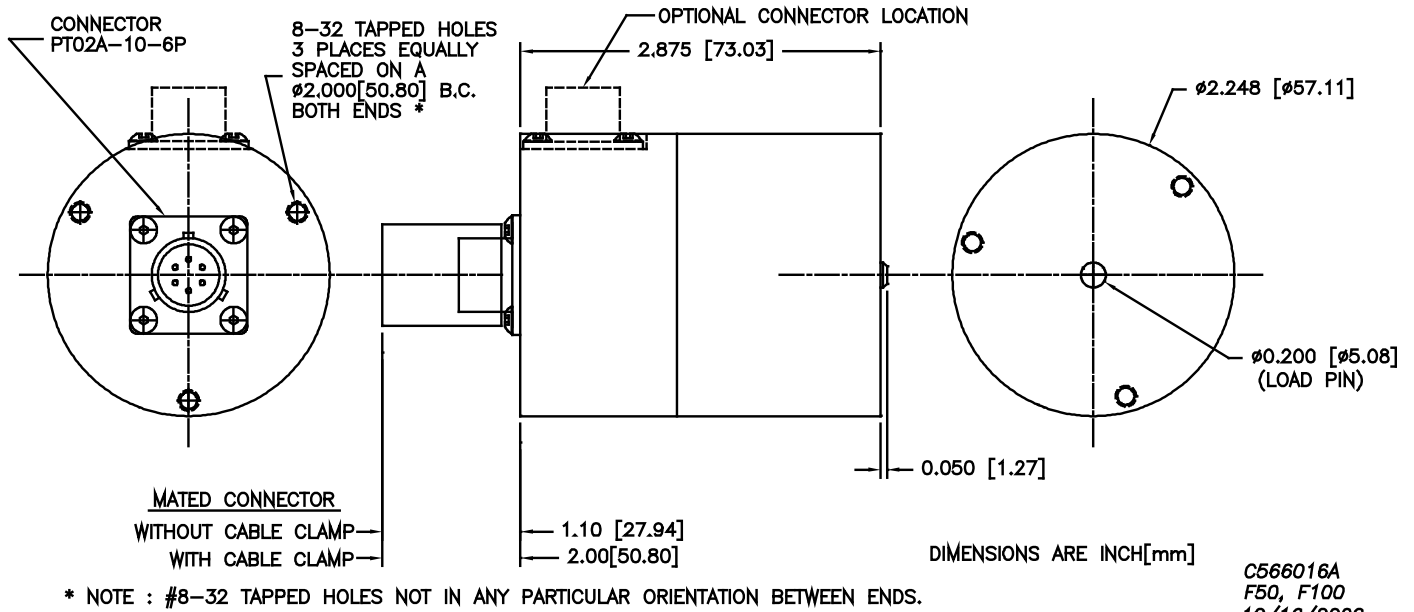
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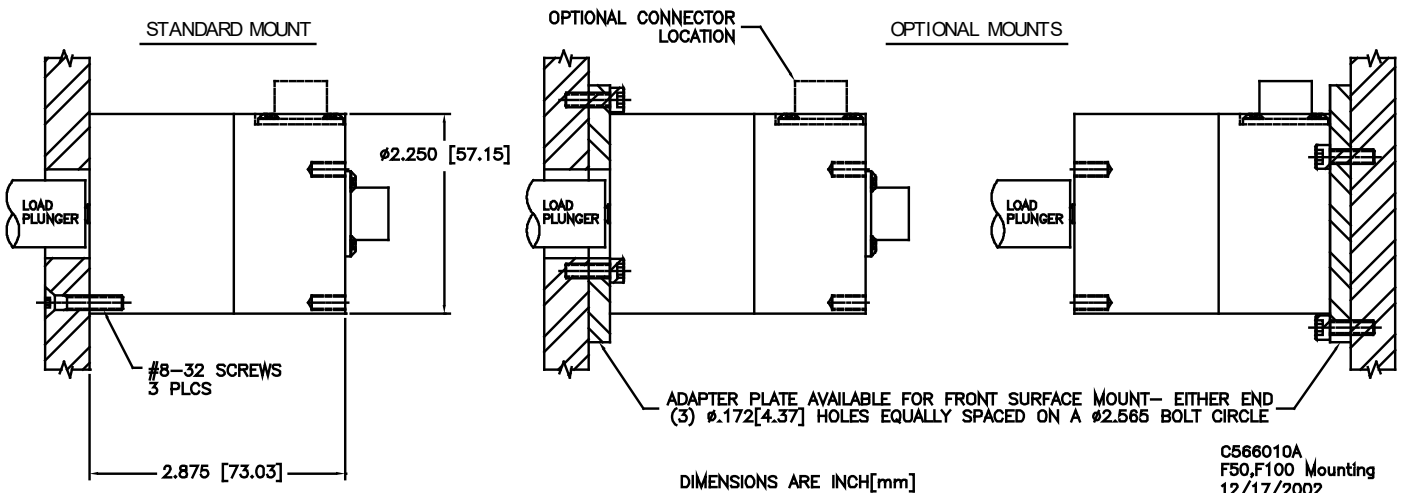
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Milford, MI 48381
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Load Cell With Overload Protection

F50 and F100 Configuration



Mounting Options



Ordering Options

Location of connector must be specified when ordering.
Adapter plate is not included.

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