

# Load Cell With Overload Protection

## Models F50, F100

- 50 lb and 100 lb capacity
- Overload protection to 5000 lb
- 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 or 100 lb and overload protection up to 5000 lb. 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

	<b>F50</b>	<b>F100</b>
Maximum Load Capacity	5000 lbs (2300 kg)	5000 lbs (2300 kg)
Full Scale Load	50 lbs (23 kg)	100 lbs (45 kg)
Full Scale Output	2.0 mV/V $\pm$ 0.5%	
Sensor	4 arm strain gage bridge	
Nonlinearity	0.1% of full scale output	
Hysteresis	0.1% of full scale output	
Repeatability	0.05% of full scale output	
Zero Balance	Within $\pm$ 1.0% of rated output at zero load	
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	10V DC or AC rms	
Insulation Resistance, Bridge/Case	Exceeds 2000 M $\Omega$ @ 50VDC	
Output Connector	PT02A-10-6P	
Mating Connector	PT06E-10-6S (SR)	
* Contact factory for other compensated ranges		

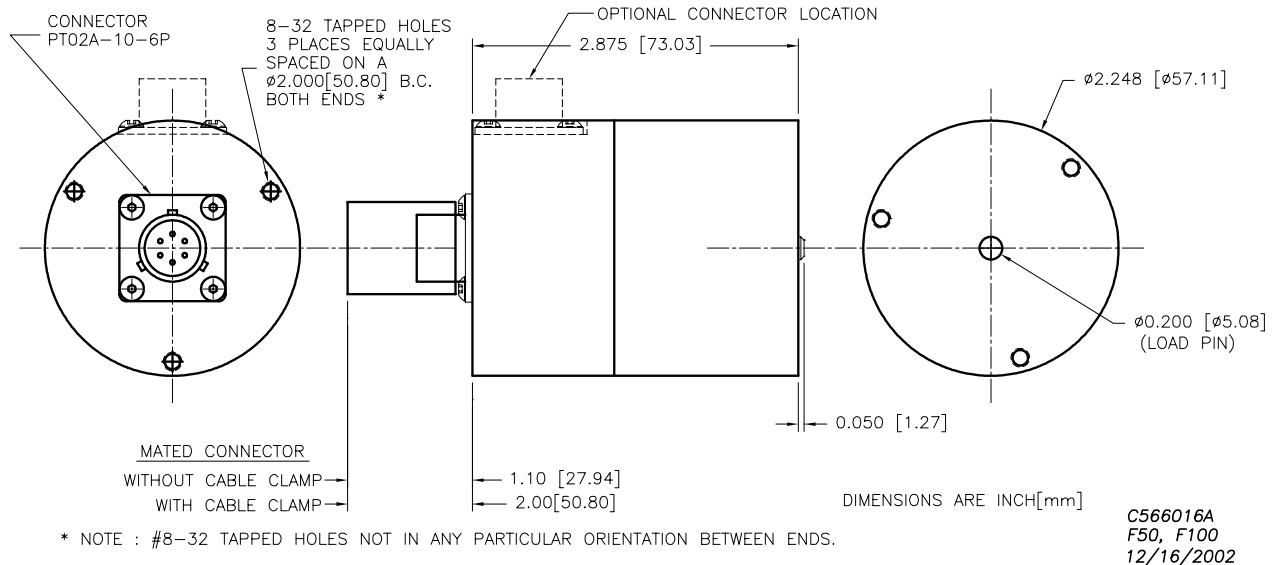
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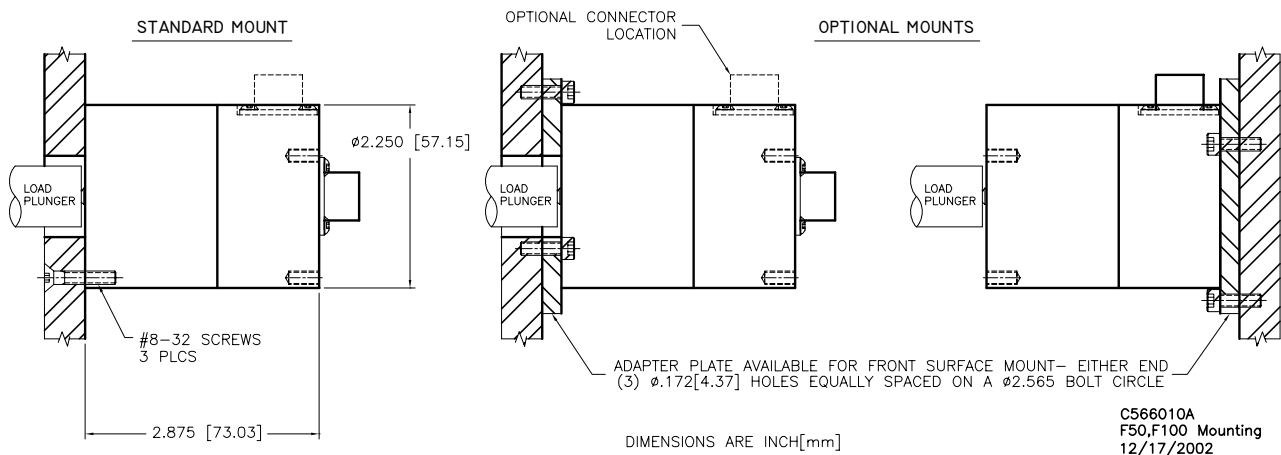
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# Load Cell With Overload Protection

## 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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