



## Standard Features

- Internally gauged load pin
- Idler sheave or dead end pin preferred location
- Minimum 5:1 safety factor
- 17-4 stainless steel construction
- ±1% to 3% accuracy of hoist capacity
- -40 °F to 140 °F standard operating temperature (other temperature compensated ranges available)

**(Contact MSI for application consultation)**

A key component for MSI's integrated overhead weighing solutions is the Load Pin Sensor. Typically designed and manufactured specifically to each integrated solution, the MSI load pin is strictly industrial grade. Each load pin design is precision machined from 17-4 stainless steel for safety, strength and corrosion resistance.

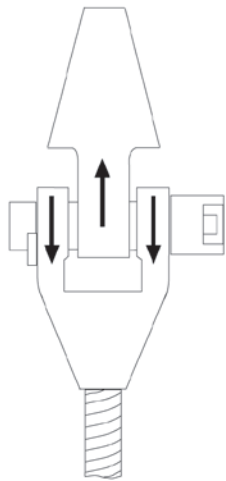
Each strain gauge location is precisely calculated and correctly placed in the optimum concentrated stress area of each installation. This MSI applied engineering process ensures the most efficient and accurate performance for each specific installation.

MSI load pin designs apply only internally mounted strain gauges for complete protection from the outside environment.

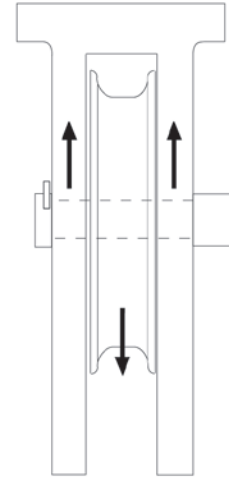
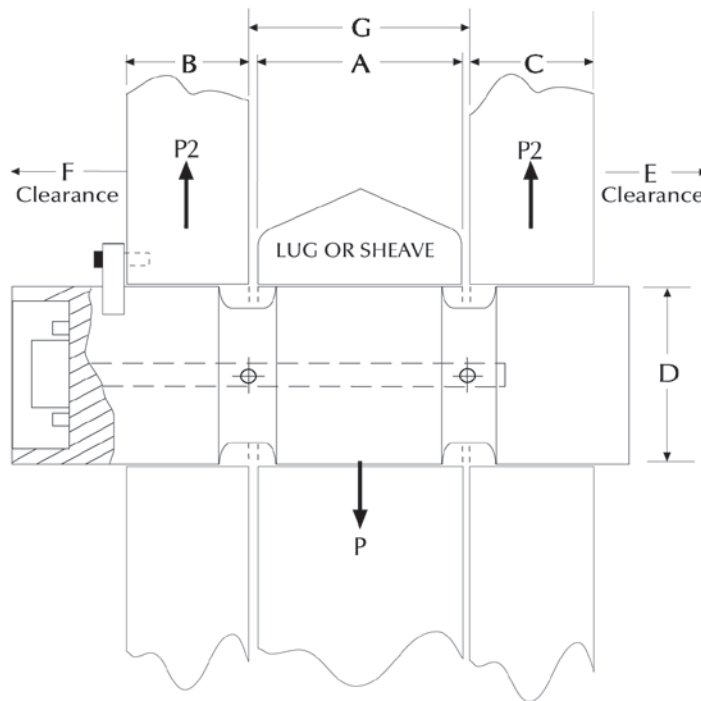
**To receive a quotation for a load pin sensor to meet your application requirements, complete the load pin questionnaire also on the next page or online at [www.ricelake.com](http://www.ricelake.com), or contact an MSI overhead weighing specialist for further application assistance.**

# MSI Load Pin Questionnaire

## Load Pin Critical Dimensions



Standard Load Sensing Clevis Pin for Wire Rope Sockets Dead-Ends




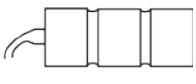








Sheave/Pulley Load Pins Equalizer/Idler

### Load Pin Data

A=Width \_\_\_\_\_ Inch  
 B=Width \_\_\_\_\_ Inch  
 C=Width \_\_\_\_\_ Inch  
 D=Pin Diameter \_\_\_\_\_ Inch  
 E=Clearance \_\_\_\_\_ Inch  
 F=Clearance \_\_\_\_\_ Inch  
 G=Width \_\_\_\_\_ Inch  
 Lube Port  No  Yes \_\_\_\_\_ # of exits  
 Hoist Capacity \_\_\_\_\_ Tons  
 Parts of Wire Rope \_\_\_\_\_  
 Sensor Capacity \_\_\_\_\_ Tons  
 Factor of Safety 3:1 5:1 7:1 10:1  
 Application \_\_\_\_\_  
 Accuracy Requirement \_\_\_\_\_  
 Temperature Requirement \_\_\_\_\_  
 Required Output \_\_\_\_\_  
 Material Testing Requirement \_\_\_\_\_  
 Load Vector Orientation/Alignment ← → ↙ ↘  
 Name \_\_\_\_\_  
 Company \_\_\_\_\_  
 Phone \_\_\_\_\_

Note: Minimum clearance between "A" and "G" = 0.0625 inch.

### Cable Connections

End-Mounted Cable    
 End-Mounted Connector (standard)    
 Side-Mounted Cable    
 Side-Mounted Connector    
 Recessed Connector    
 Sensor's Cable Length \_\_\_\_\_ Feet  
 Comments \_\_\_\_\_  
 \_\_\_\_\_

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WEIGHING SYSTEMS

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Specifications subject to change without notice.

# MSI Tension Link Load Cell



## Standard Features

- 4340 steel construction
- Mil spec connector
- 7:1 safety factor

## Options

(Contact MSI for application consultation)

- Crosby® top and bottom shackles

## Specifications

**Input Resistance:**  
1,500 ohm

**Output Resistance:**  
2,000 ohm

**Full Scale Output:**  
0.8 mV/V

**Connector Pin Out:**  
A: EX +  
B: Sig +  
C: Sig -  
D: EX -

**Accuracy:**  
0.1% sensor accuracy

**Material:**  
4340 steel

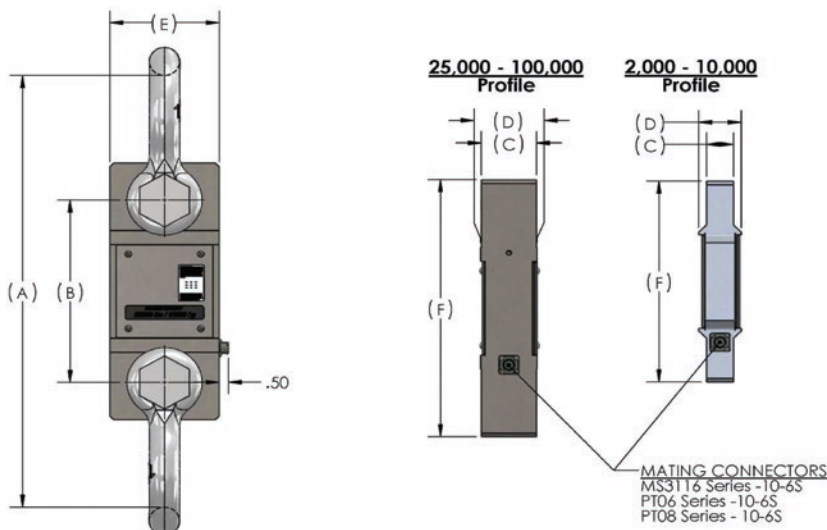
## Part Number/Price

Part #	Description	Price
181907	2K 7200 style load cell only	Consult
181908	5K 7200 style load cell only	Consult
181909	10K 7200 style load cell only	Consult
178093	25K 7200 style load cell only	Consult
178094	50K 7200 style load cell only	Consult
181910	100K 7200 style load cell only	Consult
134505	Mating cable assembly, 10 ft	\$175.00

Contact factory for higher capacities

## Dimensions

Capacity (lbs)	P/N	Load Cell Material	(A) Headroom Loss	(B) C-C Length	(C) Lug Thk	(D) Body Thk	(E) Body Width	(F) Body Length	Lug Hole	Crosby Shackle
2,000	181907	Aluminum	13.50 in	8.00 in	0.99 in	2.13 in	4.50 in	9.75 in	0.78 in	3-1/4 T 151357
5,000	181908	Aluminum	13.50 in	8.00 in	0.99 in	2.13 in	4.50 in	9.75 in	0.78 in	3-1/7 T 151357
10,000	181909	Aluminum	16.13 in	8.50 in	1.35 in	2.13 in	5.37 in	10.75 in	1.05 in	6-1/2 T 151355
25,000	178093	Steel	22.39 in	9.26 in	2.24 in	2.24 in	4.80 in	12.76 in	1.67 in	17 T 141992
50,000	178094	Steel	25.74 in	9.76 in	2.74 in	2.81 in	5.43 in	13.76 in	2.05 in	25 T 151356
100,000	181910	Steel	28.49 in	10.74 in	3.09 in	3.09 in	6.86 in	15.74 in	2.30 in	55 T 146336



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# MSI Clamp-On Load Cell



## Standard Features

- ETD 150 construction
- Accommodates up to 3/4 in wire rope size
- Larger diameter clamp-on available - call for pricing

## Options

(Contact MSI for application consultation)

- Custom sizes available on request
- Pair with an SCT transmitter for basic safety functions

## Specifications

**System Accuracy of Calibrated Capacity:**  
3 to 5%

**Material:**  
4340 steel, zinc plated

**Output Resistance:**  
350 ohm

**IP Rating:**  
IP68

**Cable Color Code:**  
Red +Excitation  
Black -Excitation  
Green +Signal  
White -Signal

**Cable Length:**  
20 ft integral cable with blunt end termination

## Part Number/Price

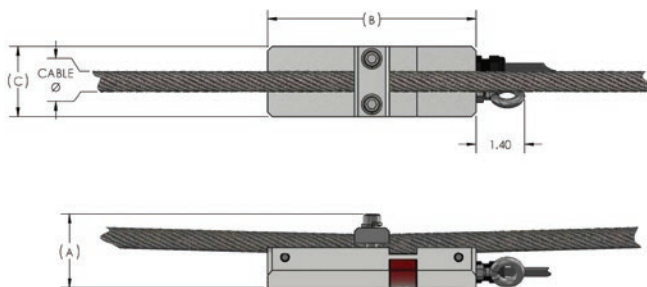
Part #	Description	Price
179080	Load Cell Assembly Clamp-On for 3/8 to 1/2 in wire rope	\$750.00
179082	Load Cell Assembly Clamp-On for 9/16 to 3/4 in wire rope	\$890.00
188816	Kit with SCT-2200 for 3/8 to 1/2 in wire rope	\$1,330.00
188817	Kit with SCT-2200 for 9/16 to 3/4 in wire rope	\$1,470.00

Larger diameter clamp ons available - call for pricing

## Dimensions

Cable Range	Part #	A	B	C
3/8 to 1/2	179080	Cable + 1.70	6.00	2.00
9/16 to 3/4	179082	Cable + 1.67	6.00	2.00

\*8mm cable can be used with PN 179080



Optional SCT-2200 transmitter

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