



Standard Features

- Designed and manufactured to each integrated solution. Machined from 17-4 stainless steel for safety, strength and corrosion resistance.

(Contact MSI for application consultation)

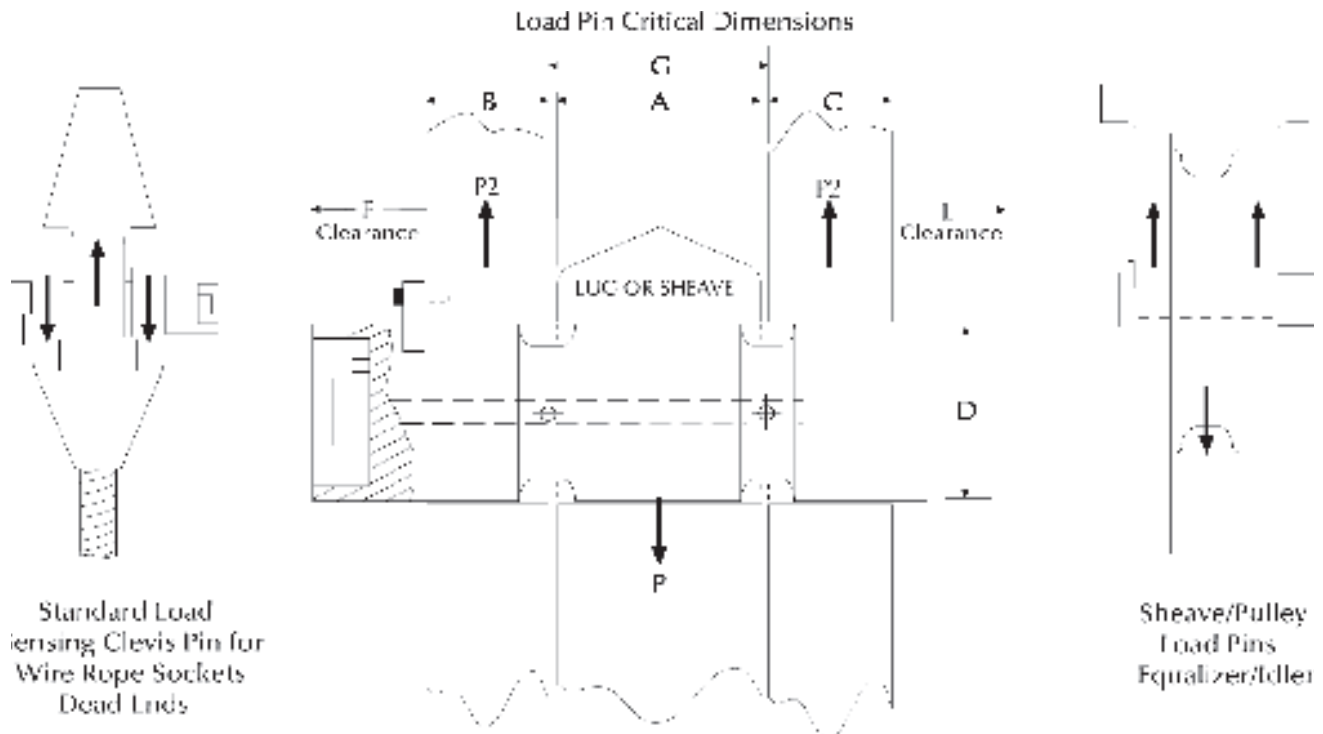
For most overhead weighing applications, traditional scales are an ideal solution. However, applications with limited to no headroom require specialty equipment beyond even reduced-height or low-profile crane scales.

One such solution is an MSI load pin sensor. A load pin sensor is a type of load cell that directly replaces clevis, pivot, normal shaft or equalizer pins. Load pin sensors are designed to be permanently installed, so they can continuously monitor vertical or horizontal tension. An integrated load pin provides load monitoring and overload protection without impacting headroom to promote safety and to prevent costly equipment damage.

Rice Lake's industry leading engineers design and manufacture custom load pin sensors for any application. Every load pin is constructed from stainless steel for safety, strength (minimum 5:1) and corrosion resistance.

To receive a quote for a load pin sensor, complete the load pin questionnaire on page 187 or online at www.ricelake.com/questionnaires. For further assistance, contact an MSI overhead weighing specialist.

MSI Load Pin Questionnaire



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	<input type="checkbox"/> No <input type="checkbox"/> Yes _____ # of exits
Hoist Capacity	_____ Tons
Parts of Wire Rope	_____ Tons
Sensor Capacity	_____ Tons
Factor of Safety	<input type="checkbox"/> 3:1 <input type="checkbox"/> 5:1 <input type="checkbox"/> 7:1 <input type="checkbox"/> 10:1
Application	_____
Accuracy Requirement	_____
Temperature Requirement	_____
Required Output	_____
Material Testing Requirement	_____
Load Vector Orientation/Alignment	<input type="checkbox"/> ← <input type="checkbox"/> → <input type="checkbox"/> ↓ <input type="checkbox"/> ↑
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 _____	

RICE LAKE
LOAD CELLS

RICE LAKE
WEIGHING SYSTEMS

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Specifications subject to change without notice.

MSI Tension Link

Load Cell



Standard Features

- Integrates between a crane block and lifting equipment to provide force measurement for lifted items. This ideal integration for cranes features a 7:1 safety factor for compliance with industrial and military safety requirements.

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

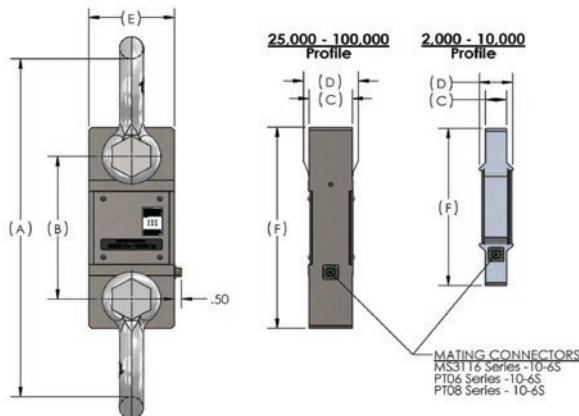
Contact factory for higher capacities

Options/Accessories

Part #	Description	Price
165978	Load cell to MSI-7001 interface cable, 6.5 ft	\$330.00
165979	Load cell to MSI-7001 interface cable, 10 ft	\$350.00
165990	Load cell to MSI-7001 interface cable, 25 ft	\$440.00
134505	Load cell mating cable to bare wires, 10 ft	\$185.00

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



RICE LAKE
LOAD CELLS



Standard Features

- A durable solution for measuring wire rope tension and preventing overloads for cranes and hoists. Available in two envelopes for accommodating the most common wire ropes. Weight-based setpoints can provide the operator alerts and safety shut-offs based on unsafe load conditions.

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

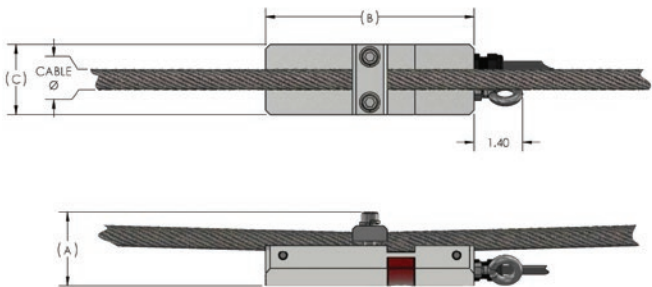
Part #	Description	Price
179080	Load Cell Assembly Clamp-On for 3/8 to 1/2 in wire rope	\$750.00
179082	Load Cell Assembly Clamp-On for 9/16 to 3/4 in wire rope	\$890.00
188816	Kit with SCT-2200 for 3/8 to 1/2 in wire rope	\$1,330.00
188817	Kit with SCT-2200 for 9/16 to 3/4 in wire rope	\$1,470.00

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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LOAD CELLS

This image shows a full page of blank graph paper. The grid consists of small, uniform squares formed by thin, light gray lines. There are no margins, text, or other markings on the page.