

## **MSI Load Pin Sensors**



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 176 or online at www.ricelake.com/questionnaires. For further assistance, contact an MSI overhead weighing specialist.

## **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)



## **MSI Load Pin Questionnaire**

| Company:                                 |                                  |           |                                      |                                |                              |             |  |
|--|----------------------------------|-----------|--------------------------------------|--------------------------------|------------------------------|-------------|--|
| Phone:                                   |                                  |           |                                      |                                |                              |             |  |
|  |                                  | I OAD PIN | CRITICAL DIN                         | AFNSIONS                       |                              |             |  |
|  |                                  |           | 1                                    |                                |                              |             |  |
| [  | _                                | ∗B → •    | $-G \rightarrow -A \rightarrow -C -$ | -                              |                              |             |  |
|  |                                  |           |                                      |                                |                              |             |  |
| Ĺ  |                                  | F P2      | P2                                   | —E →<br>Clearance              | <b>↑</b>                     |             |  |
|  |                                  |           | G OR SHEAVE                          | clearance                      |                              |             |  |
|  | ╵╷╽└┚╶╒╴                         |           |                                      |                                |                              |             |  |
|  |                                  |           |                                      |                                |                              |             |  |
|  |                                  | €         |                                      | D                              |                              |             |  |
|  | j L                              |           |                                      |                                |                              |             |  |
|  |                                  |           | Ļ                                    |                                |                              |             |  |
|  | dard Load                        |           | Р                                    |                                | Sheave/Pulley                |             |  |
| Wire                                     | g Clevis Pin for<br>Rope Sockets |           |                                      | _                              | Load Pins<br>Equalizer/Idler |             |  |
| De                                       | ead-Ends                         |           | $\checkmark$                         | N                              |                              |             |  |
| A=Width                                  | B=Width                          | C=Width   | D=Diameter                           | E=Clearance                    | F=Clearance                  | G=Width     |  |
|  |                                  |           |                                      |                                |                              |             |  |
| inch                                     |                                  | inch      | inch                                 | inch                           | inch                         | inc         |  |
| NOTE: Minimum cl                         | earance between A ar             |           |                                      |                                |                              |             |  |
|  |                                  |           | OAD PIN DAT                          | A                              |                              |             |  |
| Lube port:  Yes No # of exits            |                                  |           | exits Accuracy                       | Accuracy requirement:          |                              |             |  |
| Hoist capacity:                          |                                  |           |                                      |                                |                              |             |  |
| Parts of wire rope:                      |                                  |           |                                      | requirement:                   |                              |             |  |
| Sensor capacity:tons                     |                                  |           | ons Material                         | Material testing requirements: |                              |             |  |
| Safety factor: □3:1 □5:1 □7:1 □10:1      |                                  |           | 10:1 Load vec                        | ctor orientation/              | /alignment:                  |             |  |
| Application: _                           |                                  |           | □•                                   | ← □→                           | · □ <b>↑</b>                 | $\Box \Psi$ |  |
|  |                                  |           |                                      |                                |                              |             |  |
|  |                                  | CAB       | LE CONNECTI                          | ONS                            |                              |             |  |
|  |                                  |           | Soncor's                             | cable longth                   |                              | foot        |  |
| End-mounte                               | d cable:                         |           | Jensor s                             | s cable length                 |                              | ieei        |  |
| End-mounte                               | deennector                       |           | Comme                                | nts:                           |                              |             |  |
|  | a connector:                     |           |                                      |                                |                              |             |  |
|  |                                  |           | _A<br>                               |                                |                              |             |  |
| (standard)                               |                                  | $\frown$  |                                      |                                |                              |             |  |
|  | d cable:                         |           |                                      |                                |                              |             |  |
| (standard)                               | d cable:                         |           | <br>¬                                |                                |                              |             |  |
| (standard)<br>Side-mounte                | ed cable:                        |           |                                      |                                |                              |             |  |
| (standard)<br>Side-mounte<br>Side-mounte | ed connector:                    |           |                                      |                                |                              |             |  |
| (standard)<br>Side-mounte                | ed connector:                    |           |                                      |                                |                              |             |  |