



# Radiolink plus



**Radiolink plus is designed to be rigged with Crosby standard shackles - DNV-GL type approved wireless tension load cell capable of weighing and dynamic load monitoring in capacities from 1t to 500t – from stock with an ATEX and IECEx version available for hazardous areas, zones 0, 1 & 2.**

## Two versions of the RLP are available:

- Long range 2.4GHz version providing industry-leading wireless range of 1000m or 3280ft to SP's SW-HHP handheld or software options.
- Bluetooth output and can be connected to any smart phone running our free HHP app on iOS or Android, at ranges up to 100m or 328ft.

Constructed from high-quality aerospace grade aluminium, the RLP features an advanced internal design structure. This design provides the product with an unrivalled strength to weight ratio. The use of a separate internal sealed enclosure administers the load cell's electronic components with IP67 or NEMA6 environmental protection, even with the battery cover plate missing. All these features makes it an industry-leading dynamometer, suitable for use in the harshest of environments.

The versatile RLP is able to provide an update rate of 3Hz and can be easily configured to run at industry-leading speeds of up to 200Hz, making it ideal for dynamic force measurement.



Decades of development into this product include many stand out features such as SP's unique strain gauging method that helps compensate for wire rope torque when the Radiolink is loaded. The Radiolink plus tension load cell can also be used in combination with Crosby | Straightpoint 'INSIGHT' high speed wireless data logging software allowing for simultaneous control, display and real time data logging of up to 126 Crosby | Straightpoint wireless load cells.

A full array of wireless accessories are also available including wireless score board, overload alarm and base station with analogue (4-20mA) or 2 relay or RS485 ASCII outputs.

## Features and benefits:

- Proprietary 2.4 GHz Wireless
- Remote On-Off from handheld display or software
- ATEX Zones 0, 1 & 2 available
- Design validated by F.E.A.
- 2-year warranty
- DNV-GL Type Approval
- Complies with ASME B30.26
- Bluetooth option is available and is supplied with a free HHP App for iOS and Android

### Accessories available for the handheld:

**Wall or Cab Mount Bracket**  
SP Crosby Part Nos. **SU3282 2789228**

**Rugged Rubber Boot**  
SP Crosby Part Nos. **SU4045 2789232**

Also available with hazardous area approval. Zones 0, 1 & 2



**ATEX / IECEx**

**Ex ia II C T4 Ga**

Certification numbers:

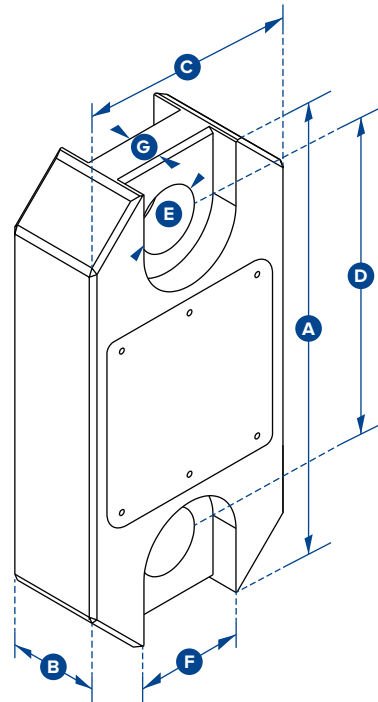
**RLP ATEX**

IECEx SIR 15.0071X / Sira 15ATEX2195X

**SW-HHP ATEX**

IECEx SIR 15.0072X / Sira 15ATEX2196X

**Add 'ATEX' to the part number  
when ordering ATEX/IECEx products.  
For example: RLP6T5-ATEX**



| Part Numbers   |                                                                                          |                 |                  |                               |                 |                 |                  |                  |                   |                   |                   |                   |                   |                    |
|----------------|------------------------------------------------------------------------------------------|-----------------|------------------|-------------------------------|-----------------|-----------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|
| SP             | RLP1T                                                                                    | RLP2T5          | RLP6T5           | RLP12T                        | RLP25T          | RLP35T          | RLP55T           | RLP75T           | RLP100T           | RLP150T           | RLP200T           | RLP250T           | RLP300T           | RLP500T            |
| Crosby         | 2789084                                                                                  | 2789089         | 2789094          | 2789082                       | 2789083         | 2789091         | 2789093          | 2789095          | 2789081           | 2789083           | 2789085           | 2789087           | 2789090           | 2789092            |
| Capacity       | 1,000kg<br>2200lb                                                                        | 2.5te<br>5500lb | 6.5te<br>14300lb | 12te<br>26000lb               | 25te<br>55000lb | 35te<br>77000lb | 55te<br>120000lb | 75te<br>165000lb | 100te<br>220000lb | 150te<br>330000lb | 200te<br>440000lb | 250te<br>550000lb | 300te<br>660000lb | 500te<br>1100000lb |
| Resolution     | 0.5kg<br>1lb                                                                             | 0.001te<br>2lb  | 0.001te<br>2lb   | 0.002te<br>5lb                | 0.005te<br>10lb | 0.005te<br>10lb | 0.01te<br>20lb   | 0.01te<br>20lb   | 0.05te<br>100lb   | 0.05te<br>100lb   | 0.1te<br>200lb    | 0.1te<br>200lb    | 0.1te<br>200lb    | 0.1te<br>200lb     |
| Units          | kg<br>lb                                                                                 | te<br>lb        | te<br>lb         | te<br>lb                      | te<br>lb        | te<br>lb        | te<br>lb         | te<br>lb         | te<br>lb          | te<br>lb          | te<br>lb          | te<br>lb          | te<br>lb          | te<br>lb           |
| Weight         | 1.5kg<br>3.3lb                                                                           | 1.5kg<br>3.3lb  | 2.4kg<br>5.3lb   | 3.7kg<br>8.2lb                | 5kg<br>11lb     | 8.6kg<br>19lb   | 13kg<br>28.7lb   | 16kg<br>35.3lb   | 34kg<br>75lb      | 46kg<br>101.4lb   | 82kg<br>180.8lb   | 82kg<br>180.8lb   | 118kg<br>260lb    | 193kg<br>425.5lb   |
| Safety Factor  | 12:1                                                                                     | 7:1             | 7:1              | 7:1                           | 5:1             | 5:1             | 5:1              | 5:1              | 5:1               | 4:1               | 5:1               | 4:1               | 5:1               | 5:1                |
| Battery Type   | Handheld 2 x AA / Load cell 4 x AA                                                       |                 |                  |                               |                 |                 |                  |                  |                   |                   |                   |                   |                   |                    |
| Battery Life   | Handheld - 40 hours / Load cell 1200 hours continuous (Load cell 500 hours if Bluetooth) |                 |                  |                               |                 |                 |                  |                  |                   |                   |                   |                   |                   |                    |
| Display Type   | 240 x 128 pixel Multi-line dot matrix with backlight                                     |                 |                  |                               |                 |                 |                  |                  |                   |                   |                   |                   |                   |                    |
| Operating Temp | -10°C to +50°C or 14°F to 122°F                                                          |                 |                  |                               |                 |                 |                  |                  |                   |                   |                   |                   |                   |                    |
| Accuracy       | ±0.1% of full scale                                                                      |                 |                  |                               |                 |                 |                  |                  |                   |                   |                   |                   |                   |                    |
| Frequency      | 2.4 GHz                                                                                  |                 |                  |                               |                 |                 |                  |                  |                   |                   |                   |                   |                   |                    |
| System Range   | 1000 metres or 3280 feet (100 metres or 328 feet if Bluetooth)                           |                 |                  |                               |                 |                 |                  |                  |                   |                   |                   |                   |                   |                    |
| Data Rate      | 3 Hz - up to 200 Hz can be ordered for dynamic load monitoring applications              |                 |                  |                               |                 |                 |                  |                  |                   |                   |                   |                   |                   |                    |
| Protection     | IP67 or NEMA6                                                                            |                 |                  |                               |                 |                 |                  |                  |                   |                   |                   |                   |                   |                    |
| Dimension A    | 204<br>8.03"                                                                             | 204<br>8.03"    | 249<br>9.80"     | 305<br>12.01"                 | 340<br>13.39"   | 393<br>15.47"   | 424<br>16.69"    | 470<br>18.50"    | 608<br>23.94"     | 670<br>26.38"     | 700<br>27.56"     | 700<br>27.56"     | 806<br>31.73"     | 930<br>36.61"      |
| Dimension B    | 43<br>1.69"                                                                              | 43<br>1.69"     | 43<br>1.69"      | 47<br>1.85"                   | 60<br>2.36"     | 75<br>2.95"     | 75<br>2.95"      | 75<br>2.95"      | 99<br>3.90"       | 99<br>3.90"       | 144<br>5.67"      | 144<br>5.67"      | 150<br>5.91"      | 150<br>5.91"       |
| Dimension C    | 104<br>4.09"                                                                             | 104<br>4.09"    | 113<br>4.45"     | 113<br>4.45"                  | 115<br>4.53"    | 126<br>4.96"    | 180<br>7.09"     | 202<br>7.95"     | 255<br>10.04"     | 303<br>11.93"     | 350<br>13.78"     | 350<br>13.78"     | 426<br>16.77"     | 570<br>22.44"      |
| Dimension D    | 146<br>5.75"                                                                             | 146<br>5.75"    | 165<br>6.50"     | 193<br>7.60"                  | 215<br>8.46"    | 225<br>8.86"    | 230<br>9.06"     | 260<br>10.24"    | 320<br>12.60"     | 360<br>14.17"     | 350<br>13.78"     | 350<br>13.78"     | 350<br>13.78"     | 450<br>17.72"      |
| Dimension ØE   | 24.5<br>0.96"                                                                            | 24.5<br>0.96"   | 38<br>1.50"      | 47.5<br>1.87"                 | 55<br>2.17"     | 60<br>2.36"     | 76<br>2.99"      | 76<br>2.99"      | 109<br>4.29"      | 109<br>4.29"      | 145<br>5.71"      | 145<br>5.71"      | 160<br>6.30"      | 200<br>7.87"       |
| Dimension F    | 48<br>1.89"                                                                              | 48<br>1.89"     | 65<br>2.60"      | Not relevant in this capacity |                 |                 |                  |                  |                   |                   |                   |                   |                   |                    |
| Dimension G    | 19<br>0.75"                                                                              | 19<br>0.75"     | 32<br>1.26"      |                               |                 |                 |                  |                  |                   |                   |                   |                   |                   |                    |
| Crosby Shackle | G2130                                                                                    |                 |                  |                               |                 |                 | G2140            |                  |                   |                   |                   |                   |                   | G2160              |
| Loading Pin Ø  | 19<br>3/4"                                                                               | 19<br>3/4"      | 25<br>1"         | 35<br>1 3/8"                  | 51<br>2"        | 57<br>2 1/4"    | 57<br>2 1/4"     | 70<br>2 3/4"     | 83<br>3 1/4"      | 95<br>3 3/4"      | 121<br>4 3/4"     | 127<br>5"         | 152<br>6"         | 180<br>7 1/8"      |

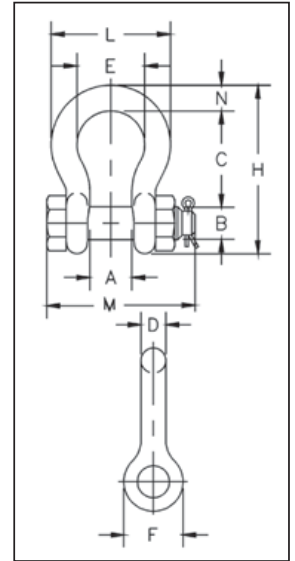
# Crosby® Bolt Type Shackles



## G-2130 / S-2130

Bolt Type Anchor shackles with thin head bolt - nut with cotter pin. Meets the performance requirements of Federal Specification RR-C 271G, Type IVA, Grade A, Class 3, except for those provisions required of the contractor. For additional information, see page 452.

- Capacities 1/3 thru 150 metric tons, grade 6.
- Working Load Limit and grade "6" permanently shown on every shackle.
- Forged – Quenched and Tempered, with alloy bolts.
- Hot Dip galvanized or self colored. (85, 120, and 150 metric ton shackles are all hot dip galvanized bows and the bolts are Dimetcoated® and painted red)
- Sizes 3/8 and below are mechanically galvanized.
- Fatigue rated (1/3t - 55t).
- Shackles 25t and larger are **RFID EQUIPPED**.
- Approved for use at -40° C (-40° F) to 204° C (400° F).
- Meets or exceeds all requirements of ASME B30.26.
- Shackles 85 metric tons and larger are individually proof tested to 2.0 times the working load limit.
- Type Approval certification in accordance with ABS 2016 Steel Vessel Rules ABS Guide for Certification of Lifting Appliances available. Certificates available when requested at time of order and may include additional charges.
- 3.1 Certification as standard available for charpy and statistical proof test from 3.25t up to 25 tons to DNV2.7-1 and EN13889.
- Crosby 3.25t through 25t G2130OC anchor shackles are type approved to DNV Certification Notes 2.7-1- Offshore Containers. These Crosby shackles are statistical proof and impact tested to 42 Joules (31 ft•lbf) min. avg. at -20° C (-4° F). The tests are conducted by Crosby and 3.1 test certification is available upon request. Refer to page 87 for Crosby COLD TUFF® shackles that meet the additional requirements of DNV rules for certification of lifting applications - Loose Gear.
- All other 2130 shackles can meet charpy requirements of 42 Joules (31 ft•lbf) avg at -20° C (-4° F) when requested at time of order.
- Look for the Red Pin® . . . the mark of genuine Crosby quality.



Shackles

Load Rated

Fatigue Rated



QUIC-CHECK®



MAXTOUGH®



**SEE APPLICATION INFORMATION**  
On Page 92 of the General Catalog  
Para Español: [www.thecrosbygroup.com](http://www.thecrosbygroup.com)

## G-2130 / S-2130 Bolt Type Anchor Shackles

| Nominal Size (in) | Working Load Limit (t)* | Stock No. |         |          | Weight Each (lb) | Dimensions (in) |      |       |      |       |      |       |       |       |      | Tolerance + / - |     |
|-------------------|-------------------------|-----------|---------|----------|------------------|-----------------|------|-------|------|-------|------|-------|-------|-------|------|-----------------|-----|
|                   |                         | G-2130    | S-2130  | G-2130OC |                  | A               | B    | C     | D    | E     | F    | H     | L     | M     | N    | C               | A   |
| 3/16              | 1/3 ‡                   | 1019464   | —       | —        | .06              | .38             | .25  | .88   | .19  | .60   | .56  | 1.47  | .98   | 1.29  | .19  | .06             | .06 |
| 1/4               | 1/2                     | 1019466   | —       | —        | .11              | .47             | .31  | 1.13  | .25  | .78   | .61  | 1.84  | 1.28  | 1.56  | .25  | .06             | .06 |
| 5/16              | 3/4                     | 1019468   | —       | —        | .22              | .53             | .38  | 1.22  | .31  | .84   | .75  | 2.09  | 1.47  | 1.82  | .31  | .06             | .06 |
| 3/8               | 1                       | 1019470   | —       | —        | .33              | .66             | .44  | 1.44  | .38  | 1.03  | .91  | 2.49  | 1.78  | 2.17  | .38  | .13             | .06 |
| 7/16              | 1-1/2                   | 1019471   | —       | —        | .49              | .75             | .50  | 1.69  | .44  | 1.16  | 1.06 | 2.91  | 2.03  | 2.51  | .44  | .13             | .06 |
| 1/2               | 2                       | 1019472   | 1019481 | —        | .79              | .81             | .64  | 1.88  | .50  | 1.31  | 1.19 | 3.28  | 2.31  | 2.80  | .50  | .13             | .06 |
| 5/8               | 3-1/4                   | 1019490   | 1019506 | 1262013  | 1.68             | 1.06            | .77  | 2.38  | .63  | 1.69  | 1.50 | 4.19  | 2.94  | 3.56  | .69  | .13             | .06 |
| 3/4               | 4-3/4                   | 1019515   | 1019524 | 1262022  | 2.72             | 1.25            | .89  | 2.81  | .75  | 2.00  | 1.81 | 4.97  | 3.50  | 4.15  | .81  | .25             | .06 |
| 7/8               | 6-1/2                   | 1019533   | 1019542 | 1262031  | 3.95             | 1.44            | 1.02 | 3.31  | .88  | 2.28  | 2.09 | 5.83  | 4.03  | 4.82  | .97  | .25             | .06 |
| 1                 | 8-1/2                   | 1019551   | 1019560 | 1262040  | 5.66             | 1.69            | 1.15 | 3.75  | 1.00 | 2.69  | 2.38 | 6.56  | 4.69  | 5.39  | 1.06 | .25             | .06 |
| 1-1/8             | 9-1/2                   | 1019579   | 1019588 | 1262059  | 8.27             | 1.81            | 1.25 | 4.25  | 1.13 | 2.91  | 2.69 | 7.47  | 5.16  | 5.90  | 1.25 | .25             | .06 |
| 1-1/4             | 12                      | 1019597   | 1019604 | 1262068  | 11.71            | 2.03            | 1.40 | 4.69  | 1.29 | 3.25  | 3.00 | 8.25  | 5.75  | 6.69  | 1.38 | .25             | .06 |
| 1-3/8             | 13-1/2                  | 1019613   | 1019622 | 1262077  | 15.83            | 2.25            | 1.53 | 5.25  | 1.42 | 3.63  | 3.31 | 9.16  | 6.38  | 7.21  | 1.50 | .25             | .13 |
| 1-1/2             | 17                      | 1019631   | 1019640 | 1262086  | 19.00            | 2.38            | 1.66 | 5.75  | 1.53 | 3.88  | 3.63 | 10.00 | 6.88  | 7.73  | 1.62 | .25             | .13 |
| 1-3/4             | 25                      | 1019659   | 1019668 | 1262095  | 33.91            | 2.88            | 2.04 | 7.00  | 1.84 | 5.00  | 4.19 | 12.34 | 8.80  | 9.68  | 2.25 | .25             | .13 |
| 2                 | 35                      | 1019677   | 1019686 | —        | 52.25            | 3.25            | 2.30 | 7.75  | 2.08 | 5.75  | 4.81 | 13.68 | 10.15 | 10.81 | 2.40 | .25             | .13 |
| 2-1/2             | 55                      | 1019695   | 1019702 | —        | 98.25            | 4.13            | 2.80 | 10.50 | 2.71 | 7.25  | 5.69 | 17.90 | 12.75 | 13.58 | 3.13 | .25             | .25 |
| 3                 | † 85                    | 1019711   | —       | —        | 154.00           | 5.00            | 3.30 | 13.00 | 3.12 | 7.88  | 6.50 | 21.50 | 14.62 | 15.13 | 3.62 | .25             | .25 |
| 3-1/2             | † 120 ‡                 | 1019739   | —       | —        | 265.00           | 5.25            | 3.76 | 14.63 | 3.62 | 9.00  | 8.00 | 24.88 | 17.02 | 17.00 | 4.38 | .25             | .25 |
| 4                 | † 150 ‡                 | 1019757   | —       | —        | 338.00           | 5.50            | 4.26 | 14.50 | 4.00 | 10.00 | 9.00 | 25.68 | 18.00 | 17.75 | 4.56 | .25             | .25 |

\* NOTE: Maximum Proof Load is 2 times the Working Load Limit. Minimum Ultimate Strength is 6 times the Working Load Limit. For Working Load Limit reduction due to side loading applications, see page 94. † Individually Proof Tested with certification. ‡ Furnished in Anchor style only and furnished with eyebolts for handling.