



## Applications

Shackles are used in lifting operations and static systems as removable links to connect (steel) wire rope, chain and other fittings. Screw pin shackles are used mainly for non-permanent applications. Safety bolt shackles are used for long-term or permanent applications or where the load may slide on the pin causing rotation of the pin.

Chain- or dee shackles are mainly used on one-leg systems whereas anchor- or bow shackles are mainly used on multi-leg systems.

## Range

Van Beest offers a wide range of bow and dee shackles for a wide variety of applications. The range stretches from WLL 0.33 t to 1550 t. This provides our customers with a very extensive range to choose a shackle that suits their application best. Most of the shackles are directly available from stock. Furthermore, shackles can be supplied to many standards such as the US Federal Specification RR-C-271, EN 13889, British Standard 3032, DIN 82101, DIN 82016 etc. Additionally we offer a wide range of general commercial shackles, which are not suitable for lifting but merely for fixing purposes.

## Design

All Van Beest shackles have a specific design for a specific application.

Some examples are:

- Green Pin® Super shackles which are made out of grade 8 steel. They are designed to be used in confined spaces. The higher material strength is used to reduce the physical dimensions of the product whilst maintaining its WLL and functionality of the product;
- Green Pin® Polar shackles are for use in extreme climatic conditions with material properties guaranteed up to temperatures of -40°C;
- Green Pin® Sling shackles are designed to provide a better radius to the sling it lifts. A bigger radius increases the life span of the sling significantly;
- Another example of functional design is a shackle pin with a square sunken hole. Because of the flat head there is less risk of the shackle getting caught in a net or a line.

These are all examples of highly functional designs, to optimize the use of the Van Beest shackles in daily use.

Shackles used for lifting applications are generally marked with:

- Working Load Limit ■ e.g. WLL 25 T
- manufacturer's symbol ■ e.g. GP
- traceability code ■ e.g. HA indicating a particular batch
- steel grade ■ e.g. 4, 6, 8
- CE conformity code (Conformité Européenne) ■ CE

Van Beest Green Pin® shackles meet all relevant requirements of the Machinery Directive 2006/42/EC and its latest amendments.

## Finish

Shackles supplied by Van Beest can be hot dipped galvanized, electro-galvanized, painted or self coloured, depending on the type of shackle and its application.

You can find the finish of each type of shackle in the product section further on.

## Certification

Upon request at time of order, all load rated shackles can be supplied with any of the following documents or certificates:

Free of Charge:

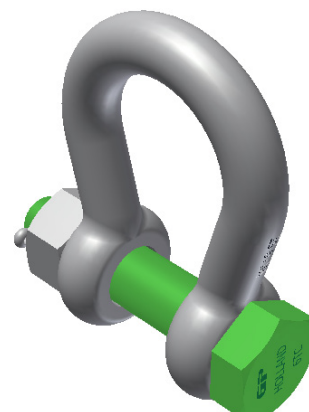
2.1 2.2 3.1 MTC<sup>a</sup> DNV 2.7-1<sup>a</sup> DNV 2.7-1<sup>b</sup> DNV 2.22 CE

With additional Charges:

MTC<sup>b</sup> MPI<sup>a</sup> MPI<sup>b</sup> US<sup>a</sup> US<sup>b</sup> BL

On request the proof load test certificates can be supplied surveyed by an official classification society, such as LROS, DNV GL, BV, ABS or any other officially certified inspection body.

Please verify your certification requirements with Van Beest at time of order.





Green Pin® standard shackles and Green Pin® Polar shackles are DNV type approved. These shackles carry two DNV type approval certificates that show compliance with:

- DNV 2.7-1 Offshore Containers
- EN 12079-2 Offshore containers and associated lifting sets
- EN 13889 Forged steel shackles for general lifting purposes
- IMO/MSC Circular 860
- US Federal Specification RR-C-271
- DNV Standard for Certification No. 2.7-3 Portable Offshore Units
- DNV Standard for Certification No. 2.22 Lifting Appliances

The certificates S-7593 and S-7925 confirm that Green Pin® standard shackles and Green Pin® Polar shackles meet the requirements set in the latest version of the above mentioned DNV standards.

## Testing

Generally load rated products are Proofload tested, and certificates can be supplied upon request. For specific information on certificates we refer to the separate paragraph on certification.

Green Pin® shackles are Proofload tested at the following loads:

| working load<br>limit | Green Pin®<br>standard shackles<br>polar shackles<br>heavy duty shackles<br>proof load | Green Pin®<br>super shackles<br>proof load | Green Pin®<br>sling shackles<br>proof load |
|-----------------------|----------------------------------------------------------------------------------------|--------------------------------------------|--------------------------------------------|
| t                     | t                                                                                      | t                                          | t                                          |
| 0.33                  | 0.66                                                                                   |                                            |                                            |
| 0.5                   | 1                                                                                      |                                            |                                            |
| 0.75                  | 1.5                                                                                    |                                            |                                            |
| 1                     | 2                                                                                      |                                            |                                            |
| 1.5                   | 3                                                                                      |                                            |                                            |
| 2                     | 4                                                                                      |                                            |                                            |
| 3.25                  | 6.5                                                                                    |                                            |                                            |
| 3.3                   |                                                                                        | 6.6                                        |                                            |
| 4.75                  | 9.5                                                                                    |                                            |                                            |
| 5                     |                                                                                        | 10                                         |                                            |
| 6.5                   | 13                                                                                     |                                            |                                            |
| 7                     |                                                                                        | 14                                         | 14                                         |
| 8.5                   | 17                                                                                     |                                            |                                            |
| 9.5                   | 19                                                                                     | 19                                         |                                            |
| 12                    | 24                                                                                     |                                            |                                            |
| 12.5                  |                                                                                        | 25                                         | 25                                         |
| 13.5                  | 27                                                                                     |                                            |                                            |
| 15                    |                                                                                        | 30                                         |                                            |
| 17                    | 34                                                                                     |                                            |                                            |
| 18                    |                                                                                        | 36                                         | 36                                         |
| 21                    |                                                                                        | 42                                         |                                            |
| 25                    | 50                                                                                     |                                            |                                            |
| 30                    |                                                                                        | 60                                         | 60                                         |
| 35                    | 70                                                                                     |                                            |                                            |
| 40                    |                                                                                        | 80                                         | 80                                         |
| 42.5                  | 85                                                                                     |                                            |                                            |
| 55                    | 110                                                                                    | 110                                        | 110                                        |
| 75                    |                                                                                        |                                            | 112.5                                      |
| 85                    | 170                                                                                    | 170                                        |                                            |
| 120                   | 180                                                                                    | 240                                        |                                            |
| 125                   |                                                                                        |                                            | 187.5                                      |
| 150                   | 225                                                                                    | 225                                        | 225                                        |
| 175                   |                                                                                        | 262.5                                      |                                            |
| 200                   | 300                                                                                    |                                            | 300                                        |
| 250                   | 375                                                                                    |                                            | 375                                        |
| 300                   | 450                                                                                    |                                            | 450                                        |
| 400                   | 600                                                                                    |                                            | 532                                        |
| 500                   | 750                                                                                    |                                            | 665                                        |
| 600                   | 900                                                                                    |                                            | 798                                        |
| 700                   | 1050                                                                                   |                                            | 931                                        |
| 800                   | 1200                                                                                   |                                            | 1064                                       |
| 900                   | 1350                                                                                   |                                            | 1197                                       |
| 1000                  | 1500                                                                                   |                                            | 1330                                       |
| 1250                  | 1875                                                                                   |                                            | 1663                                       |
| 1500                  | 2250                                                                                   |                                            |                                            |
| 1550                  |                                                                                        |                                            | 2061.5                                     |

## Instructions for use

Select the correct type and WLL of shackle and WLL for the particular application. If extreme circumstances or shock loading may occur, this must be well taken into account when selecting the correct shackle. Please note that commercial shackles are not to be used for lifting applications.

Shackles should be inspected before use to ensure that:

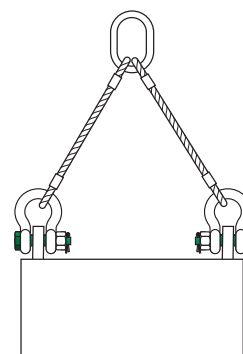
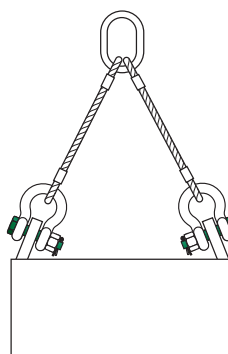
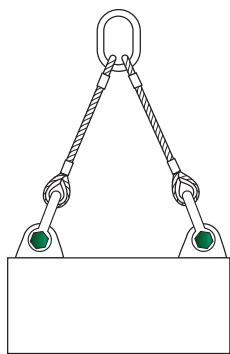
- all markings are legible;
- the body and pin are both of the same brand and type;
- the body and pin are both of the correct size;
- never use a safety bolt type shackle without using a securing pin;
- the pin, nut, cotter pin, or any other locking system cannot vibrate out of position;
- the threads of the pin and the body are undamaged;
- the body and the pin are not distorted or unduly worn;
- the body and pin are free from nicks, gouges, cracks and corrosion;
- shackles may not be heat treated as this may affect their WLL;
- never modify, repair or reshape a shackle by machining, welding, heating or bending as this will affect the WLL.

## Assembly

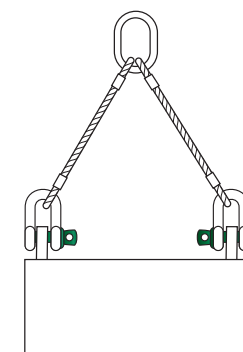
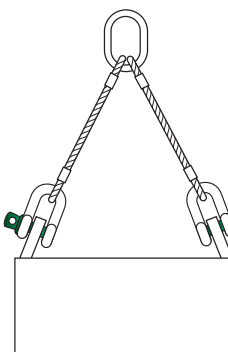
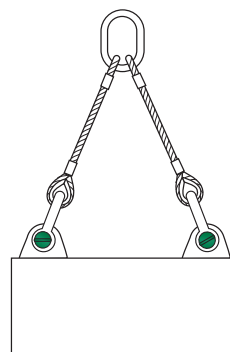
Ensure that the pin is correctly screwed into the shackle eye: tighten it hand-tight, then secure it using a wrench or other suitable tool so that the collar of the pin is fully seated against the shackle eye. Ensure that the pin is of the correct length so that it penetrates the full depth of the threaded eye and the collar of the pin seats against the surface of the shackle eye.

Incorrect seating of the pin may be caused by a bent pin, too tight fitting thread or misalignment of the pin holes. Do not use the shackle under these circumstances. Never replace a shackle pin except with one of the same brand, type, make and size to ensure the shackle maintains its original WLL.

Make sure that the shackle is supporting the load correctly, i.e. along the axis of the shackle body centerline. Avoid bending loads, unstable loads and overloads.



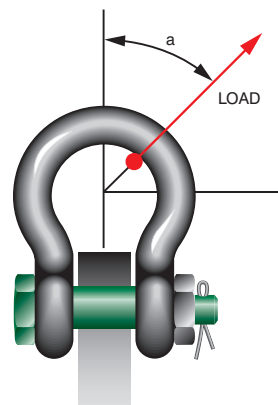
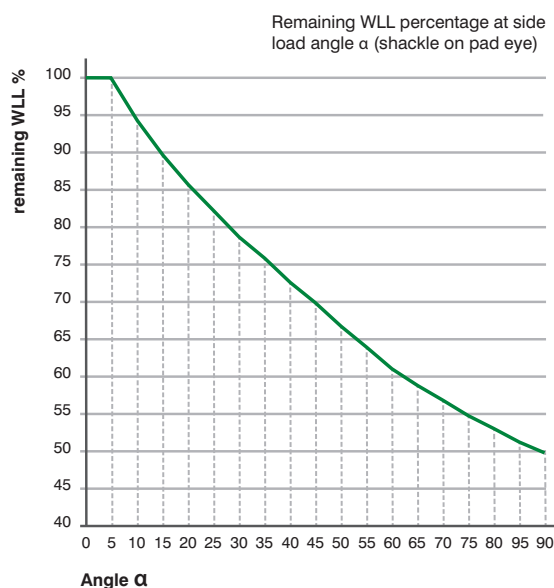
ONLY WITH REDUCED WLL



ONLY WITH REDUCED WLL

## Side loads

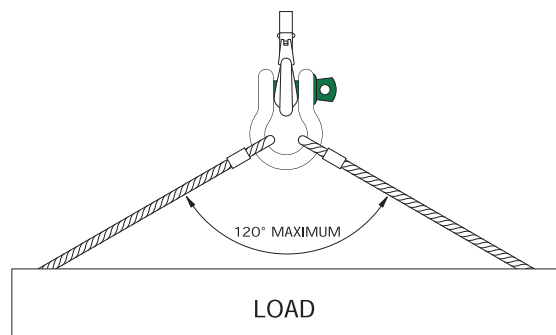
Side loads should be avoided, as the products are not designed for this purpose. If side loads cannot be avoided, the WLL of the shackle must be reduced:



This graph is valid for all Green Pin® shackles, except P-6033 (Sling shackles). If you want to apply a side load on a Green Pin® Sling shackle, please contact Van Beest.

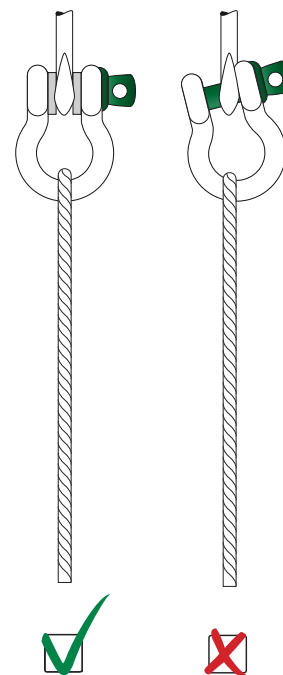
In-line lifting is considered to be a load perpendicular to the pin and in the plane of the bow. The load angles in the graph represent the deviating angles from in-line loading.

When connecting shackles to multi-leg slings, consider the effect of the angle between the legs of the sling. As the angle increases, so does the load in the sling leg and consequently in any shackle attached to that leg.



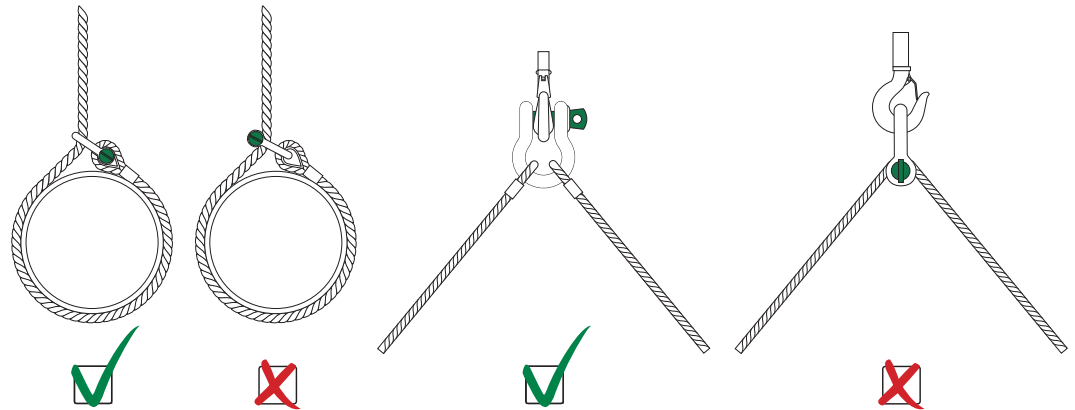
When a shackle is used to connect two slings to the hook of a lifting device, a bow type shackle must be used. The slings must be connected to the shackle body, and the shackle pin must be placed in the hook. The angle between the slings should not exceed 120°. If symmetrically loaded the shackle may be used to the full WLL.

To avoid eccentric loading of the shackle a loose spacer may be used on either end of the shackle pin. Do not reduce the width between the shackle jaws by welding washers or spacers to the inside of the shackle eyes or by narrowing the jaws, as this will affect the WLL of the shackle.



When a shackle is attached to the top block of a set of wire rope blocks the load on this shackle is increased by the value of the hoisting effect.

Avoid applications where the load moves over the shackle pin; the pin may rotate and possibly be unscrewed. If moving of the load cannot be avoided, or when the shackle is to be left in place for a prolonged period or where maximum pin security is required, use a shackle with a safety bolt, nut and cotter pin.



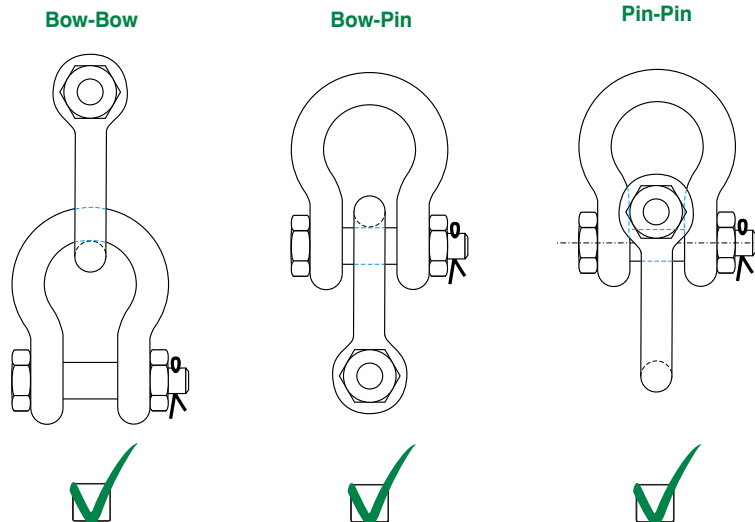
Shackles should not be immersed in acidic solutions or exposed to acidic fumes or other chemicals that are potentially harmful for the shackle.

## Point loading

Shackles are used in lifting- and static systems as removable links to connect (steel) wire rope, chain and other fittings. Most of the times the load bearing component that connects to a shackle is of a rounded shape. Point loading of shackles during lifting operations is allowed but the minimum dimension of the rounded component to be lifted should be equal to or bigger than the bow size of the shackle being used. The maximum load of the configuration is limited by the component with the lowest WLL.

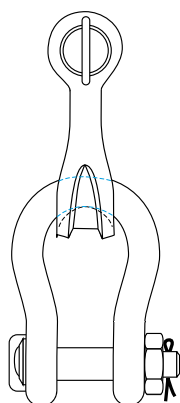
Increasing the contact area by using bigger diameters and/or pad eyes can be an advantage. Sharp edges should be avoided.

Green Pin® shackles can also be used in below configurations. The maximum load of the configuration is limited by the component with the lowest WLL.

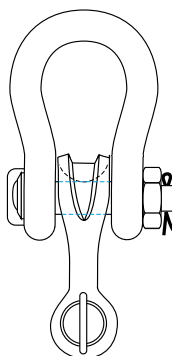


The crown of a Green Pin® Sling shackle is wider than that of a standard shackle, thus creating a bigger bearing surface. This improves the lifetime of the sling. Green Pin® Sling shackles can also be used in bellow configurations. The maximum load of the configuration is limited by the component with the lowest WLL.

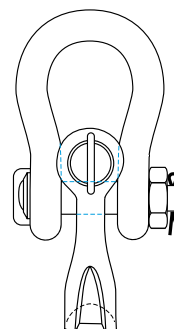
**Bow-Bow**



**Bow-Pin**



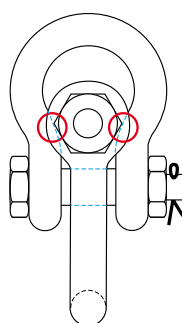
**Pin-Pin**



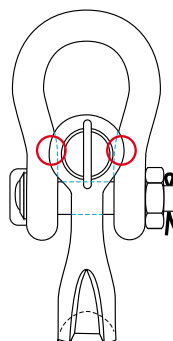
## Pin- Pin configuration:

When the shackle eyes touch and the pins do not bear properly, the configuration should not be used.

**Pin-Pin**



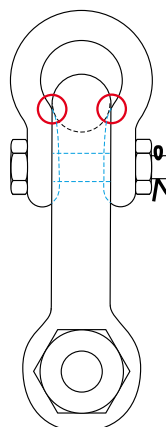
**Pin-Pin**



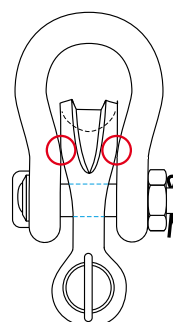
## Bow- Pin configuration:

When the shackle body of the inner shackle touches the shackle eyes of the outer shackle and pin do not bear properly, the configuration should not be used.

**Bow-Pin**



**Bow-Pin**



## Temperature

If extreme temperature situations occur, the following load reductions must be taken into account:

| Temperature | Reduction for elevated temperatures<br>New Working Load Limit |
|-------------|---------------------------------------------------------------|
| up to 200°C | 100% of original Working Load Limit                           |
| 200 - 300°C | 90% of original Working Load Limit                            |
| 300 - 400°C | 75% of original Working Load Limit                            |
| > 400°C     | not allowed                                                   |

The rating of shackles to EN 13889 assumes the absence of exceptionally hazardous conditions. Exceptionally hazardous conditions include offshore activities, the lifting of persons and the lifting of potentially dangerous loads such as molten metals, corrosive materials or fissile materials. In such cases a competent person should assess the degree of hazard and the WLL should be reduced accordingly.

## Inspection

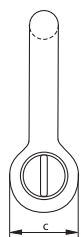
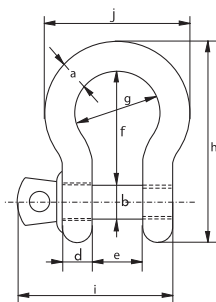
Shackles must be regularly inspected in accordance with the safety standards given in the country of use. This is required because the products in use may be affected by wear, misuse, overloading etc. which may lead to deformation and alteration of the material structure.  
Inspection should take place at least every six months and more frequently when the shackles are used in severe operating conditions.



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G-4161



## Green Pin® Standard Shackles

### bow shackles with screw collar pin

- **Material** : bow and pin high tensile steel, Grade 6, quenched and tempered
- **Safety Factor** : MBL equals 6 x WLL
- **Standard** : EN 13889 and  
meets performance requirements of US Fed. Spec. RR-C-271 Type IVA Class 2, Grade A from 2 t and upward these shackles comply with ASME B30.26
- **Finish** : hot dipped galvanized
- **Temperature Range** : -40°C up to +200°C
- **Certification** : **2.1** **2.2** **3.1** **MTC<sup>a</sup>** **DNV 2.7-1<sup>a</sup>** \* **DNV 2.7-1<sup>b</sup>** \* **DNV 2.22** **CE**

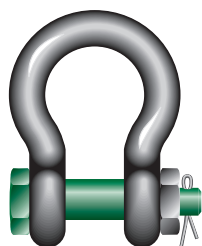
| working load limit | diameter bow | diameter pin | diameter eye | width eye | width inside | length inside | width bow | length | length bolt | width | weight each |
|--------------------|--------------|--------------|--------------|-----------|--------------|---------------|-----------|--------|-------------|-------|-------------|
| t                  | a mm         | b mm         | c mm         | d mm      | e mm         | f mm          | g mm      | h mm   | i mm        | j mm  | kg          |
| 0.33               | 5            | 6            | 12           | 5         | 9.5          | 22            | 16        | 36     | 29.5        | 26    | 0.02        |
| 0.5                | 7            | 8            | 16.5         | 7         | 12           | 29            | 20        | 48.5   | 38          | 34    | 0.05        |
| 0.75               | 9            | 10           | 20           | 9         | 13.5         | 32            | 22        | 56     | 46.5        | 40    | 0.1         |
| 1                  | 10           | 11           | 22.5         | 10        | 17           | 36.5          | 26        | 63.5   | 54          | 46    | 0.14        |
| 1.5                | 11           | 13           | 26.5         | 11        | 19           | 43            | 29        | 74     | 59.5        | 51    | 0.19        |
| 2                  | 13.5         | 16           | 34           | 13        | 22           | 51            | 32        | 89     | 73          | 58    | 0.36        |
| 3.25               | 16           | 19           | 40           | 16        | 27           | 64            | 43        | 110    | 89          | 75    | 0.63        |
| 4.75               | 19           | 22           | 46           | 19        | 31           | 76            | 51        | 129    | 103         | 89    | 1.01        |
| 6.5                | 22           | 25           | 52           | 22        | 36           | 83            | 58        | 144    | 119         | 102   | 1.5         |
| 8.5                | 25           | 28           | 59           | 25        | 43           | 95            | 68        | 164    | 137         | 118   | 2.21        |
| 9.5                | 28           | 32           | 66           | 28        | 47           | 108           | 75        | 185    | 153         | 131   | 3.16        |
| 12                 | 32           | 35           | 72           | 32        | 51           | 115           | 83        | 201    | 170         | 147   | 4.31        |
| 13.5               | 35           | 38           | 80           | 35        | 57           | 133           | 92        | 227    | 186         | 162   | 5.55        |
| 17                 | 38           | 42           | 88           | 38        | 60           | 146           | 99        | 249    | 203         | 175   | 7.43        |
| 25                 | 45           | 50           | 103          | 45        | 74           | 178           | 126       | 300    | 243         | 216   | 12.84       |
| 35                 | 50           | 57           | 111          | 50        | 83           | 197           | 138       | 331    | 272         | 238   | 18.15       |
| 42.5               | 57           | 65           | 130          | 57        | 95           | 222           | 160       | 377    | 310         | 274   | 26.29       |
| 55                 | 65           | 70           | 145          | 65        | 105          | 260           | 180       | 433    | 344         | 310   | 37.6        |

In inch

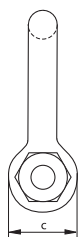
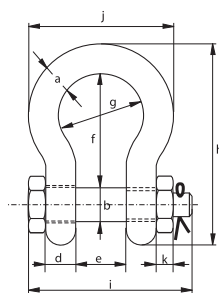
| working load limit | diameter bow    | diameter pin     | diameter eye      | width eye         | width inside      | length inside     | width bow         | length             | length bolt        | width              | weight each |
|--------------------|-----------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|-------------|
| t                  | inch            | inch             | inch              | inch              | inch              | inch              | inch              | inch               | inch               | inch               | lbs         |
| 0.33               | $\frac{3}{16}$  | $\frac{1}{4}$    | $\frac{1}{2}$     | $\frac{3}{16}$    | $\frac{3}{8}$     | $\frac{7}{8}$     | $\frac{5}{8}$     | $1 \frac{13}{32}$  | $1 \frac{5}{32}$   | $1 \frac{1}{32}$   | 0.05        |
| 0.5                | $\frac{1}{4}$   | $\frac{5}{16}$   | $\frac{21}{32}$   | $\frac{9}{32}$    | $\frac{15}{32}$   | $1 \frac{5}{32}$  | $\frac{25}{32}$   | $1 \frac{29}{32}$  | $1 \frac{1}{2}$    | $1 \frac{11}{32}$  | 0.11        |
| 0.75               | $\frac{5}{16}$  | $\frac{3}{8}$    | $\frac{25}{32}$   | $\frac{11}{32}$   | $\frac{17}{32}$   | $1 \frac{1}{4}$   | $\frac{7}{8}$     | $2 \frac{7}{32}$   | $1 \frac{27}{32}$  | $1 \frac{9}{16}$   | 0.22        |
| 1                  | $\frac{3}{8}$   | $\frac{7}{16}$   | $\frac{7}{8}$     | $\frac{13}{32}$   | $\frac{21}{32}$   | $1 \frac{7}{16}$  | $1 \frac{1}{32}$  | $2 \frac{1}{2}$    | $2 \frac{1}{8}$    | $1 \frac{13}{16}$  | 0.3         |
| 1.5                | $\frac{7}{16}$  | $\frac{1}{2}$    | $1 \frac{1}{32}$  | $\frac{7}{16}$    | $\frac{3}{4}$     | $1 \frac{11}{16}$ | $1 \frac{5}{32}$  | $2 \frac{29}{32}$  | $2 \frac{11}{32}$  | 2                  | 0.42        |
| 2                  | $\frac{1}{2}$   | $\frac{5}{8}$    | $1 \frac{11}{32}$ | $\frac{1}{2}$     | $\frac{7}{8}$     | 2                 | $1 \frac{1}{4}$   | $3 \frac{1}{2}$    | $2 \frac{7}{8}$    | $2 \frac{9}{32}$   | 0.79        |
| 3.25               | $\frac{5}{8}$   | $\frac{3}{4}$    | $1 \frac{9}{16}$  | $\frac{5}{8}$     | $1 \frac{1}{16}$  | $2 \frac{17}{32}$ | $1 \frac{11}{16}$ | $4 \frac{11}{32}$  | $3 \frac{1}{2}$    | $2 \frac{15}{16}$  | 1.38        |
| 4.75               | $\frac{3}{4}$   | $\frac{7}{8}$    | $1 \frac{13}{16}$ | $\frac{3}{4}$     | $1 \frac{7}{32}$  | 3                 | 2                 | $5 \frac{3}{32}$   | $4 \frac{1}{16}$   | $3 \frac{1}{2}$    | 2.22        |
| 6.5                | $\frac{7}{8}$   | 1                | $2 \frac{1}{16}$  | $\frac{7}{8}$     | $1 \frac{13}{32}$ | $3 \frac{9}{32}$  | $2 \frac{9}{32}$  | $6 \frac{15}{32}$  | $4 \frac{11}{16}$  | $4 \frac{1}{32}$   | 3.31        |
| 8.5                | 1               | $1 \frac{1}{8}$  | $2 \frac{5}{16}$  | $\frac{31}{32}$   | $1 \frac{11}{16}$ | $3 \frac{3}{4}$   | $2 \frac{11}{16}$ | $7 \frac{15}{32}$  | $5 \frac{13}{32}$  | $4 \frac{21}{32}$  | 4.86        |
| 9.5                | $1 \frac{1}{8}$ | $1 \frac{1}{4}$  | $2 \frac{19}{32}$ | $1 \frac{3}{32}$  | $1 \frac{27}{32}$ | $4 \frac{1}{4}$   | $2 \frac{15}{16}$ | $7 \frac{9}{32}$   | $6 \frac{1}{32}$   | $5 \frac{5}{32}$   | 6.97        |
| 12                 | $1 \frac{1}{4}$ | $1 \frac{3}{4}$  | $2 \frac{27}{32}$ | $1 \frac{1}{4}$   | 2                 | $4 \frac{17}{32}$ | $3 \frac{9}{32}$  | $7 \frac{29}{32}$  | $6 \frac{11}{16}$  | $5 \frac{25}{32}$  | 9.49        |
| 13.5               | $1 \frac{3}{8}$ | $1 \frac{1}{2}$  | $3 \frac{5}{32}$  | $1 \frac{3}{8}$   | $2 \frac{1}{4}$   | 5                 | $3 \frac{5}{8}$   | $8 \frac{15}{16}$  | $7 \frac{5}{16}$   | $6 \frac{3}{8}$    | 12.24       |
| 17                 | $1 \frac{1}{2}$ | $1 \frac{5}{8}$  | $3 \frac{15}{32}$ | $1 \frac{1}{2}$   | $2 \frac{3}{8}$   | $5 \frac{3}{4}$   | $3 \frac{29}{32}$ | $9 \frac{13}{16}$  | 8                  | $6 \frac{7}{8}$    | 16.37       |
| 25                 | $1 \frac{3}{4}$ | 2                | $4 \frac{1}{16}$  | $1 \frac{25}{32}$ | $2 \frac{29}{32}$ | 7                 | $4 \frac{31}{32}$ | $11 \frac{13}{16}$ | $9 \frac{9}{16}$   | $8 \frac{1}{2}$    | 28.31       |
| 35                 | 2               | $2 \frac{1}{4}$  | $4 \frac{3}{8}$   | $1 \frac{31}{32}$ | $3 \frac{9}{32}$  | $7 \frac{3}{4}$   | $5 \frac{7}{16}$  | $13 \frac{1}{32}$  | $10 \frac{23}{32}$ | $9 \frac{3}{8}$    | 40.01       |
| 42.5               | $2 \frac{1}{4}$ | $2 \frac{9}{16}$ | $5 \frac{1}{8}$   | $2 \frac{1}{4}$   | $3 \frac{3}{4}$   | $8 \frac{3}{4}$   | $6 \frac{5}{16}$  | $14 \frac{27}{32}$ | $12 \frac{7}{32}$  | $10 \frac{25}{32}$ | 57.96       |
| 55                 | $2 \frac{1}{2}$ | $2 \frac{3}{4}$  | $5 \frac{23}{32}$ | $2 \frac{9}{16}$  | $4 \frac{1}{8}$   | $10 \frac{1}{4}$  | $7 \frac{3}{32}$  | $17 \frac{1}{16}$  | $13 \frac{17}{32}$ | $12 \frac{7}{32}$  | 82.89       |

RFID CAD

\* For shackles  $\geq$  WLL 2 t



G-4163



## Green Pin® Standard Shackles

### bow shackles with safety bolt

- **Material** : bow and pin high tensile steel, Grade 6, quenched and tempered
- **Safety Factor** : MBL equals 6 x WLL
- **Standard** : EN 13889 and  
meets performance requirements of US Fed. Spec. RR-C-271 Type IVA Class 3, Grade A from 2 t and upward these shackles comply with ASME B30.26
- **Finish** : hot dipped galvanized
- **Temperature Range** : -40°C up to +200°C
- **Certification** : 2.1 2.2 3.1 MTC<sup>a</sup> DNV 2.7-1<sup>a</sup> \* DNV 2.7-1<sup>b</sup> \* DNV 2.22 CE

| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>eye | width<br>inside | length<br>inside | width<br>bow | length  | length<br>bolt | width   | thickness<br>nut | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|--------------|-----------------|------------------|--------------|---------|----------------|---------|------------------|----------------|
| t                        | a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm      | e<br>mm         | f<br>mm          | g<br>mm      | h<br>mm | i<br>mm        | j<br>mm | k<br>mm          | kg             |
| 0.5                      | 7               | 8               | 16.5            | 7            | 12              | 29               | 20           | 48.5    | 42             | 34      | 4                | 0.06           |
| 0.75                     | 9               | 10              | 20              | 9            | 13.5            | 32               | 22           | 56      | 50             | 40      | 5                | 0.11           |
| 1                        | 10              | 11              | 22.5            | 10           | 17              | 36.5             | 26           | 63.5    | 60             | 46      | 8                | 0.16           |
| 1.5                      | 11              | 13              | 26.5            | 11           | 19              | 43               | 29           | 74      | 67             | 51      | 11               | 0.22           |
| 2                        | 13.5            | 16              | 34              | 13           | 22              | 51               | 32           | 89      | 82             | 58      | 13               | 0.42           |
| 3.25                     | 16              | 19              | 40              | 16           | 27              | 64               | 43           | 110     | 98             | 75      | 17               | 0.74           |
| 4.75                     | 19              | 22              | 46              | 19           | 31              | 76               | 51           | 129     | 114            | 89      | 19               | 1.18           |
| 6.5                      | 22              | 25              | 52              | 22           | 36              | 83               | 58           | 144     | 130            | 102     | 22               | 1.77           |
| 8.5                      | 25              | 28              | 59              | 25           | 43              | 95               | 68           | 164     | 150            | 118     | 25               | 2.58           |
| 9.5                      | 28              | 32              | 66              | 28           | 47              | 108              | 75           | 185     | 166            | 131     | 27               | 3.66           |
| 12                       | 32              | 35              | 72              | 32           | 51              | 115              | 83           | 201     | 178            | 147     | 30               | 4.91           |
| 13.5                     | 35              | 38              | 80              | 35           | 57              | 133              | 92           | 227     | 197            | 162     | 33               | 6.54           |
| 17                       | 38              | 42              | 88              | 38           | 60              | 146              | 99           | 249     | 202            | 175     | 39               | 8.19           |
| 25                       | 45              | 50              | 103             | 45           | 74              | 178              | 126          | 300     | 249            | 216     | 43               | 14.22          |
| 35                       | 50              | 57              | 111             | 50           | 83              | 197              | 138          | 331     | 269            | 238     | 48               | 19.53          |
| 42.5                     | 57              | 65              | 130             | 57           | 95              | 222              | 160          | 377     | 301            | 274     | 54               | 28.33          |
| 55                       | 65              | 70              | 145             | 65           | 105             | 260              | 180          | 433     | 330            | 310     | 62               | 39.59          |
| 85                       | 75              | 83              | 162             | 73           | 127             | 329              | 190          | 527     | 380            | 340     | 71               | 62             |

In inch

| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>eye | width<br>inside | length<br>inside | width<br>bow | length    | length<br>bolt | width     | thickness<br>nut | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|--------------|-----------------|------------------|--------------|-----------|----------------|-----------|------------------|----------------|
| t                        | a<br>inch       | b<br>inch       | c<br>inch       | d<br>inch    | e<br>inch       | f<br>inch        | g<br>inch    | h<br>inch | i<br>inch      | j<br>inch | k<br>inch        | lbs            |
| 0.5                      | 1/4             | 5/16            | 21/32           | 9/32         | 15/32           | 1 5/32           | 25/32        | 1 29/32   | 1 21/32        | 1 11/32   | 5/32             | 0.13           |
| 0.75                     | 5/16            | 3/8             | 25/32           | 11/32        | 17/32           | 1 1/4            | 7/8          | 2 7/32    | 1 31/32        | 1 9/16    | 3/16             | 0.25           |
| 1                        | 3/8             | 7/16            | 7/8             | 13/32        | 21/32           | 1 7/16           | 1 1/32       | 2 1/2     | 2 3/8          | 1 13/16   | 5/16             | 0.34           |
| 1.5                      | 7/16            | 1/2             | 1 1/32          | 7/16         | 3/4             | 1 11/16          | 1 5/32       | 2 29/32   | 2 5/8          | 2         | 7/16             | 0.48           |
| 2                        | 1/2             | 5/8             | 1 11/32         | 1/2          | 7/8             | 2                | 1 1/4        | 3 1/2     | 3 7/32         | 2 9/32    | 1/2              | 0.92           |
| 3.25                     | 5/8             | 3/4             | 1 9/16          | 5/8          | 1 1/16          | 2 17/32          | 1 11/16      | 4 11/32   | 3 27/32        | 2 15/16   | 21/32            | 1.62           |
| 4.75                     | 3/4             | 7/8             | 1 13/16         | 3/4          | 1 7/32          | 3                | 2            | 5 3/32    | 4 1/2          | 3 1/2     | 3/4              | 2.59           |
| 6.5                      | 7/8             | 1               | 2 1/16          | 7/8          | 1 13/32         | 3 9/32           | 2 9/32       | 5 21/32   | 5 1/8          | 4 1/32    | 7/8              | 3.9            |
| 8.5                      | 1               | 1 1/8           | 2 5/16          | 31/32        | 1 11/16         | 3 3/4            | 2 11/16      | 6 15/32   | 5 29/32        | 4 21/32   | 31/32            | 5.69           |
| 9.5                      | 1 1/8           | 1 1/4           | 2 19/32         | 1 3/32       | 1 27/32         | 4 1/4            | 2 15/16      | 7 9/32    | 6 17/32        | 5 5/32    | 1 1/16           | 8.06           |
| 12                       | 1 1/4           | 1 3/8           | 2 27/32         | 1 1/4        | 2               | 4 17/32          | 3 9/32       | 7 29/32   | 7              | 5 25/32   | 1 3/16           | 10.81          |
| 13.5                     | 1 3/8           | 1 1/2           | 3 5/32          | 1 3/8        | 2 1/4           | 5 1/4            | 3 5/8        | 8 15/16   | 7 3/4          | 6 3/8     | 1 5/16           | 14.42          |
| 17                       | 1 1/2           | 1 5/8           | 3 15/32         | 1 1/2        | 2 3/8           | 5 3/4            | 3 29/32      | 9 13/16   | 7 15/16        | 6 7/8     | 3/4              | 18.06          |
| 25                       | 1 3/4           | 2               | 4 1/16          | 1 25/32      | 2 29/32         | 7                | 4 31/32      | 11 13/16  | 9 13/16        | 8 1/2     | 29/32            | 31.34          |
| 35                       | 2               | 2 1/4           | 4 3/8           | 1 31/32      | 3 9/32          | 7 3/4            | 5 7/16       | 13 1/32   | 10 19/32       | 9 3/8     | 1 1/32           | 43.77          |
| 42.5                     | 2 1/4           | 2 9/16          | 5 1/8           | 2 1/4        | 3 3/4           | 8 3/4            | 6 5/16       | 14 27/32  | 11 27/32       | 10 23/32  | 1 5/32           | 62.46          |
| 55                       | 2 1/2           | 2 3/4           | 5 23/32         | 2 9/16       | 4 1/8           | 10 1/4           | 7 3/32       | 17 1/16   | 13             | 12 7/32   | 1 1/4            | 87.27          |
| 85                       | 3               | 3 1/4           | 6 3/8           | 2 7/8        | 5               | 12 15/16         | 7 15/32      | 20 3/4    | 14 31/32       | 13 3/8    | 1 17/32          | 136.69         |

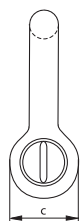
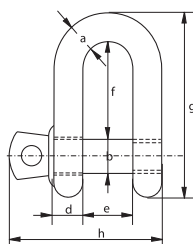
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\* For shackles ≥ WLL 2 t



G-4151



## Green Pin® Standard Shackles

### dee shackles with screw collar pin

- **Material** : bow and pin high tensile steel, Grade 6, quenched and tempered
- **Safety Factor** : MBL equals 6 x WLL
- **Standard** : EN 13889, ASME B30.26 and  
meets performance requirements of US Fed. Spec. RR-C-271 Type IVB Class 3, Grade A
- **Finish** : hot dipped galvanized
- **Temperature Range** : -40°C up to +200°C
- **Certification** : 2.1 2.2 3.1 MTC<sup>a</sup> DNV 2.7-1<sup>a</sup> \* DNV 2.7-1<sup>b</sup> \* DNV 2.22 CE

| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>eye | width<br>inside | length<br>inside | length  | length<br>bolt | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|--------------|-----------------|------------------|---------|----------------|----------------|
| t                        | a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm      | e<br>mm         | f<br>mm          | g<br>mm | h<br>mm        | kg             |
| 0.33                     | 5               | 6               | 12              | 5            | 9.5             | 19               | 33      | 29.5           | 0.02           |
| 0.5                      | 7               | 8               | 16.5            | 7            | 12              | 22               | 41.5    | 38             | 0.05           |
| 0.75                     | 9               | 10              | 20              | 9            | 13.5            | 26               | 50      | 46.5           | 0.09           |
| 1                        | 10              | 11              | 22.5            | 10           | 17              | 32               | 59      | 54             | 0.14           |
| 1.5                      | 11              | 13              | 26.5            | 11           | 19              | 37               | 68      | 59.5           | 0.19           |
| 2                        | 13.5            | 16              | 34              | 13           | 22              | 43               | 81      | 73             | 0.32           |
| 3.25                     | 16              | 19              | 40              | 16           | 27              | 51               | 97      | 89             | 0.54           |
| 4.75                     | 19              | 22              | 46              | 19           | 31              | 59               | 112     | 103            | 0.87           |
| 6.5                      | 22              | 25              | 52              | 22           | 36              | 73               | 134     | 119            | 1.34           |
| 8.5                      | 25              | 28              | 59              | 25           | 43              | 85               | 154     | 137            | 2.08           |
| 9.5                      | 28              | 32              | 66              | 28           | 47              | 90               | 167     | 153            | 2.77           |
| 12                       | 32              | 35              | 72              | 32           | 51              | 94               | 180     | 170            | 3.72           |
| 13.5                     | 35              | 38              | 80              | 35           | 57              | 115              | 209     | 186            | 5.14           |
| 17                       | 38              | 42              | 88              | 38           | 60              | 127              | 230     | 203            | 6.85           |
| 25                       | 45              | 50              | 103             | 45           | 74              | 149              | 271     | 243            | 11.45          |
| 35                       | 50              | 57              | 111             | 50           | 83              | 171              | 305     | 272            | 16.86          |
| 42.5                     | 57              | 65              | 130             | 57           | 95              | 190              | 345     | 310            | 24.61          |
| 55                       | 65              | 70              | 145             | 65           | 105             | 203              | 376     | 344            | 32.65          |

In inch

| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>eye | width<br>inside | length<br>inside | length    | length<br>bolt | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|--------------|-----------------|------------------|-----------|----------------|----------------|
| t                        | a<br>inch       | b<br>inch       | c<br>inch       | d<br>inch    | e<br>inch       | f<br>inch        | g<br>inch | h<br>inch      | lbs            |
| 0.33                     | 3/16            | 1/4             | 15/32           | 3/16         | 3/8             | 3/4              | 1 5/16    | 1 5/32         | 0.04           |
| 0.5                      | 1/4             | 5/16            | 21/32           | 9/32         | 15/32           | 7/8              | 1 5/8     | 1 1/2          | 0.11           |
| 0.75                     | 5/16            | 3/8             | 25/32           | 11/32        | 17/32           | 1 1/32           | 1 31/32   | 1 27/32        | 0.2            |
| 1                        | 3/8             | 7/16            | 7/8             | 13/32        | 21/32           | 1 1/4            | 2 5/16    | 2 1/8          | 0.3            |
| 1.5                      | 7/16            | 1/2             | 1 1/32          | 7/16         | 3/4             | 1 15/32          | 2 11/16   | 2 11/32        | 0.42           |
| 2                        | 1/2             | 5/8             | 1 11/32         | 1/2          | 7/8             | 1 11/16          | 3 3/16    | 2 7/8          | 0.7            |
| 3.25                     | 5/8             | 3/4             | 1 9/16          | 5/8          | 1 1/16          | 2                | 3 13/16   | 3 1/2          | 1.19           |
| 4.75                     | 3/4             | 7/8             | 1 13/16         | 3/4          | 1 7/32          | 2 5/16           | 4 12/32   | 4 1/16         | 1.92           |
| 6.5                      | 7/8             | 1               | 2 1/16          | 7/8          | 1 13/32         | 2 7/8            | 5 9/32    | 4 11/16        | 2.95           |
| 8.5                      | 1               | 1 1/8           | 2 5/16          | 31/32        | 1 11/16         | 3 11/32          | 6 1/16    | 5 13/32        | 4.59           |
| 9.5                      | 1 1/8           | 1 1/4           | 2 19/32         | 1 3/32       | 1 27/32         | 3 17/32          | 6 9/16    | 6 1/32         | 6.1            |
| 12                       | 1 1/4           | 1 3/8           | 2 27/32         | 1 1/4        | 2               | 3 11/16          | 7 3/32    | 6 11/16        | 8.2            |
| 13.5                     | 1 3/8           | 1 1/2           | 3 5/32          | 1 3/8        | 2 1/4           | 4 17/32          | 8 7/32    | 7 5/16         | 11.33          |
| 17                       | 1 1/2           | 1 5/8           | 3 15/32         | 1 1/2        | 2 3/8           | 5                | 9 1/16    | 8              | 15.1           |
| 25                       | 1 3/4           | 2               | 4 1/16          | 1 25/32      | 2 29/32         | 5 7/8            | 10 21/32  | 9 9/16         | 25.23          |
| 35                       | 2               | 2 1/4           | 4 3/8           | 1 31/32      | 3 9/32          | 6 23/32          | 12        | 10 23/32       | 37.17          |
| 42.5                     | 2 1/4           | 2 9/16          | 5 1/8           | 2 1/4        | 3 3/4           | 7 15/32          | 13 19/32  | 12 7/32        | 54.26          |
| 55                       | 2 1/2           | 2 3/4           | 5 23/32         | 2 9/16       | 4 1/8           | 8                | 14 13/16  | 13 17/32       | 71.98          |

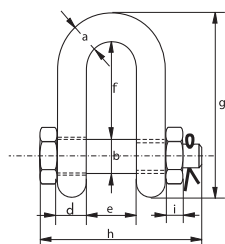
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\* For shackles ≥ WLL 2 t



G-4153



## Green Pin® Standard Shackles

### dee shackles with safety bolt

- **Material** : bow and pin high tensile steel, Grade 6, quenched and tempered
- **Safety Factor** : MBL equals 6 x WLL
- **Standard** : EN 13889, ASME B30.26 and  
meets performance requirements of US Fed. Spec. RR-C-271 Type IVB Class 3, Grade A
- **Temperature Range** : -40°C up to +200°C
- **Certification** : 2.1 2.2 3.1 MTC<sup>a</sup> DNV 2.7-1<sup>a</sup> \* DNV 2.7-1<sup>b</sup> \* DNV 2.22 CE

| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>eye | width<br>inside | length<br>inside | length  | length<br>bolt | thickness<br>nut | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|--------------|-----------------|------------------|---------|----------------|------------------|----------------|
| t                        | a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm      | e<br>mm         | f<br>mm          | g<br>mm | h<br>mm        | i<br>mm          | kg             |
| 2                        | 13.5            | 16              | 34              | 13           | 22              | 43               | 81      | 82             | 13               | 0.39           |
| 3.25                     | 16              | 19              | 40              | 16           | 27              | 51               | 97      | 98             | 17               | 0.67           |
| 4.75                     | 19              | 22              | 46              | 19           | 31              | 59               | 112     | 114            | 19               | 1.08           |
| 6.5                      | 22              | 25              | 52              | 22           | 36              | 73               | 134     | 130            | 22               | 1.66           |
| 8.5                      | 25              | 28              | 59              | 25           | 43              | 85               | 154     | 150            | 25               | 2.46           |
| 9.5                      | 28              | 32              | 66              | 28           | 47              | 90               | 167     | 166            | 27               | 3.4            |
| 12                       | 32              | 35              | 72              | 32           | 51              | 94               | 180     | 178            | 30               | 4.51           |
| 13.5                     | 35              | 38              | 80              | 35           | 57              | 115              | 209     | 197            | 33               | 6.1            |
| 17                       | 38              | 42              | 88              | 38           | 60              | 127              | 230     | 202            | 19               | 7.63           |
| 25                       | 45              | 50              | 103             | 45           | 74              | 149              | 271     | 249            | 23               | 12.88          |
| 35                       | 50              | 57              | 111             | 50           | 83              | 171              | 305     | 269            | 26               | 17.35          |
| 42.5                     | 57              | 65              | 130             | 57           | 95              | 190              | 345     | 301            | 29               | 25.94          |
| 55                       | 65              | 70              | 145             | 65           | 105             | 203              | 376     | 330            | 32               | 35.33          |
| 85                       | 75              | 83              | 162             | 73           | 127             | 229              | 427     | 380            | 39               | 52.97          |

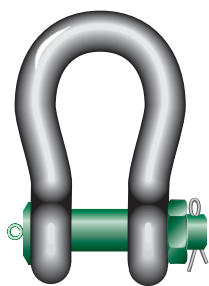
In inch

| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>eye | width<br>inside | length<br>inside | length    | length<br>bolt | thickness<br>nut | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|--------------|-----------------|------------------|-----------|----------------|------------------|----------------|
| t                        | a<br>inch       | b<br>inch       | c<br>inch       | d<br>inch    | e<br>inch       | f<br>inch        | g<br>inch | h<br>inch      | i<br>inch        | lbs            |
| 2                        | 1/2             | 5/8             | 1 11/32         | 1/2          | 7/8             | 1 11/16          | 3 3/16    | 3 7/32         | 1/2              | 0.85           |
| 3.25                     | 5/8             | 3/4             | 1 9/16          | 5/8          | 1 1/16          | 2                | 3 13/16   | 3 27/32        | 21/32            | 1.48           |
| 4.75                     | 3/4             | 7/8             | 1 13/16         | 3/4          | 1 7/32          | 2 5/16           | 4 13/32   | 4 1/2          | 3/4              | 2.39           |
| 6.5                      | 7/8             | 1               | 2 1/16          | 7/8          | 1 13/32         | 2 7/8            | 5 9/32    | 5 1/8          | 7/8              | 3.66           |
| 8.5                      | 1               | 1 1/8           | 2 5/16          | 31/32        | 1 11/16         | 3 11/32          | 6 1/16    | 5 29/32        | 31/32            | 5.42           |
| 9.5                      | 1 1/8           | 1 1/4           | 2 19/32         | 1 3/32       | 1 27/32         | 3 17/32          | 6 9/16    | 6 17/32        | 1 1/16           | 7.5            |
| 12                       | 1 1/4           | 1 3/8           | 2 27/32         | 1 1/4        | 2               | 3 11/16          | 7 3/32    | 7              | 1 3/16           | 9.95           |
| 13.5                     | 1 3/8           | 1 1/2           | 3 5/32          | 1 3/8        | 2 1/4           | 4 17/32          | 8 7/32    | 7 3/4          | 1 5/16           | 13.45          |
| 17                       | 1 1/2           | 1 5/8           | 3 15/32         | 1 1/2        | 2 3/8           | 5                | 9 1/16    | 7 15/16        | 3/4              | 16.82          |
| 25                       | 1 3/4           | 2               | 4 1/16          | 1 25/32      | 2 29/32         | 5 7/8            | 10 21/32  | 9 13/16        | 29/32            | 28.4           |
| 35                       | 2               | 2 1/4           | 4 3/8           | 1 31/32      | 3 9/32          | 6 23/32          | 12        | 10 19/32       | 1 1/32           | 38.25          |
| 42.5                     | 2 1/4           | 2 9/16          | 5 1/8           | 2 1/4        | 3 3/4           | 7 15/32          | 13 19/32  | 11 27/32       | 1 5/32           | 57.19          |
| 55                       | 2 1/2           | 2 3/4           | 5 23/32         | 2 9/16       | 4 1/8           | 8                | 14 13/16  | 13             | 1 1/4            | 77.89          |
| 85                       | 3               | 3 1/4           | 6 3/8           | 2 7/8        | 5               | 9 1/32           | 16 13/16  | 14 31/32       | 1 17/32          | 116.77         |

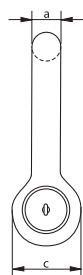
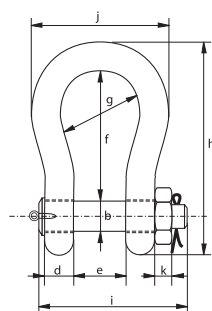
RFID CAD



\* For shackles ≥ WLL 2 t



P-6036



## Green Pin® Heavy Duty Shackles

### bow shackles with safety bolt

- **Material** : bow and pin alloy steel, Grade 8 quenched and tempered
- **Safety Factor** : MBL equals 5 x WLL
- **Finish** : shackle bow painted silver, pin painted green (120 tons shackle is hot dipped galvanized)
- **Certification** : 2.1 2.2 3.1 MTC<sup>a</sup> MTC<sup>b</sup> \* LROS \* MPI<sup>a</sup> US<sup>a</sup> CE

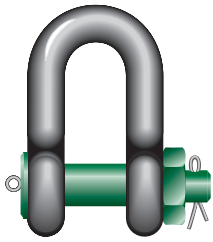
| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>eye | width<br>inside | length<br>inside | width<br>bow | length  | length<br>bolt | width   | thickness<br>nut | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|--------------|-----------------|------------------|--------------|---------|----------------|---------|------------------|----------------|
| t                        | a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm      | e<br>mm         | f<br>mm          | g<br>mm      | h<br>mm | i<br>mm        | j<br>mm | k<br>mm          | kg             |
| 120                      | 95              | 95              | 208             | 91           | 147             | 400              | 238          | 647     | 440            | 428     | 50               | 110            |
| 150                      | 105             | 108             | 238             | 102          | 169             | 410              | 275          | 688     | 490            | 485     | 60               | 160            |
| 200                      | 120             | 130             | 279             | 113          | 179             | 513              | 290          | 838     | 520            | 530     | 60               | 235            |
| 250                      | 130             | 140             | 299             | 118          | 205             | 554              | 305          | 904     | 560            | 565     | 65               | 285            |
| 300                      | 140             | 150             | 325             | 123          | 205             | 618              | 305          | 996     | 575            | 585     | 70               | 340            |
| 400                      | 170             | 175             | 376             | 164          | 231             | 668              | 325          | 1114    | 690            | 665     | 70               | 560            |
| 500                      | 180             | 185             | 398             | 164          | 256             | 718              | 350          | 1190    | 720            | 710     | 70               | 685            |
| 600                      | 200             | 205             | 444             | 189          | 282             | 718              | 375          | 1243    | 810            | 775     | 70               | 880            |
| 700                      | 210             | 215             | 454             | 204          | 308             | 718              | 400          | 1263    | 870            | 820     | 70               | 980            |
| 800                      | 210             | 220             | 464             | 204          | 308             | 718              | 400          | 1270    | 870            | 820     | 70               | 1100           |
| 900                      | 220             | 230             | 485             | 215          | 328             | 718              | 420          | 1296    | 920            | 860     | 70               | 1280           |
| 1000                     | 240             | 240             | 515             | 215          | 349             | 718              | 420          | 1336    | 940            | 900     | 70               | 1460           |
| 1250                     | 260             | 270             | 585             | 230          | 369             | 768              | 450          | 1456    | 1025           | 970     | 70               | 1990           |
| 1500                     | 280             | 290             | 625             | 230          | 369             | 818              | 450          | 1556    | 1025           | 1010    | 70               | 2400           |

In inch

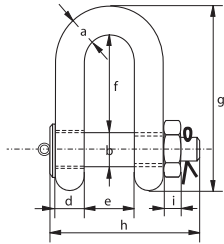
| working<br>load<br>limit | diameter<br>bow                 | diameter<br>pin                  | diameter<br>eye                  | width<br>eye                    | width<br>inside                  | length<br>inside                 | width<br>bow                     | length                           | length<br>bolt                   | width                            | thickness<br>nut                | weight<br>each |
|--------------------------|---------------------------------|----------------------------------|----------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|---------------------------------|----------------|
| t                        | a<br>inch                       | b<br>inch                        | c<br>inch                        | d<br>inch                       | e<br>inch                        | f<br>inch                        | g<br>inch                        | h<br>inch                        | i<br>inch                        | j<br>inch                        | k<br>inch                       | lbs            |
| 120                      | 3 <sup>3</sup> / <sub>4</sub>   | 3 <sup>3</sup> / <sub>4</sub>    | 8 <sup>3</sup> / <sub>16</sub>   | 3 <sup>19</sup> / <sub>32</sub> | 5 <sup>25</sup> / <sub>32</sub>  | 15 <sup>3</sup> / <sub>4</sub>   | 9 <sup>3</sup> / <sub>8</sub>    | 25 <sup>15</sup> / <sub>32</sub> | 17 <sup>5</sup> / <sub>16</sub>  | 16 <sup>27</sup> / <sub>32</sub> | 1 <sup>31</sup> / <sub>32</sub> | 243            |
| 150                      | 4 <sup>1</sup> / <sub>8</sub>   | 4 <sup>1</sup> / <sub>4</sub>    | 9 <sup>3</sup> / <sub>8</sub>    | 4 <sup>1</sup> / <sub>32</sub>  | 6 <sup>21</sup> / <sub>32</sub>  | 16 <sup>5</sup> / <sub>32</sub>  | 10 <sup>13</sup> / <sub>16</sub> | 27 <sup>3</sup> / <sub>32</sub>  | 19 <sup>9</sup> / <sub>32</sub>  | 19 <sup>3</sup> / <sub>32</sub>  | 2 <sup>3</sup> / <sub>8</sub>   | 353            |
| 200                      | 4 <sup>23</sup> / <sub>32</sub> | 5 <sup>1</sup> / <sub>8</sub>    | 10 <sup>31</sup> / <sub>32</sub> | 4 <sup>7</sup> / <sub>16</sub>  | 7 <sup>1</sup> / <sub>16</sub>   | 20 <sup>3</sup> / <sub>16</sub>  | 11 <sup>13</sup> / <sub>32</sub> | 33                               | 20 <sup>15</sup> / <sub>32</sub> | 20 <sup>7</sup> / <sub>8</sub>   | 2 <sup>3</sup> / <sub>8</sub>   | 518            |
| 250                      | 5 <sup>1</sup> / <sub>8</sub>   | 5 <sup>1</sup> / <sub>2</sub>    | 11 <sup>25</sup> / <sub>32</sub> | 4 <sup>21</sup> / <sub>32</sub> | 8 <sup>1</sup> / <sub>16</sub>   | 21 <sup>13</sup> / <sub>16</sub> | 12                               | 35 <sup>19</sup> / <sub>32</sub> | 22 <sup>1</sup> / <sub>16</sub>  | 22 <sup>1</sup> / <sub>4</sub>   | 2 <sup>9</sup> / <sub>16</sub>  | 628            |
| 300                      | 5 <sup>1</sup> / <sub>2</sub>   | 5 <sup>29</sup> / <sub>32</sub>  | 12 <sup>25</sup> / <sub>32</sub> | 4 <sup>27</sup> / <sub>32</sub> | 8 <sup>1</sup> / <sub>16</sub>   | 24 <sup>11</sup> / <sub>32</sub> | 12                               | 39 <sup>7</sup> / <sub>32</sub>  | 22 <sup>5</sup> / <sub>8</sub>   | 23 <sup>1</sup> / <sub>2</sub>   | 2 <sup>3</sup> / <sub>4</sub>   | 750            |
| 400                      | 6 <sup>11</sup> / <sub>16</sub> | 6 <sup>7</sup> / <sub>8</sub>    | 14 <sup>13</sup> / <sub>16</sub> | 6 <sup>15</sup> / <sub>32</sub> | 9 <sup>3</sup> / <sub>32</sub>   | 26 <sup>5</sup> / <sub>16</sub>  | 12 <sup>25</sup> / <sub>32</sub> | 43 <sup>27</sup> / <sub>32</sub> | 27 <sup>5</sup> / <sub>32</sub>  | 26 <sup>3</sup> / <sub>16</sub>  | 2 <sup>3</sup> / <sub>4</sub>   | 1235           |
| 500                      | 7 <sup>3</sup> / <sub>32</sub>  | 7 <sup>9</sup> / <sub>32</sub>   | 15 <sup>21</sup> / <sub>32</sub> | 6 <sup>15</sup> / <sub>32</sub> | 10 <sup>3</sup> / <sub>32</sub>  | 28 <sup>9</sup> / <sub>32</sub>  | 13 <sup>25</sup> / <sub>32</sub> | 46 <sup>27</sup> / <sub>32</sub> | 28 <sup>11</sup> / <sub>32</sub> | 27 <sup>15</sup> / <sub>16</sub> | 2 <sup>3</sup> / <sub>4</sub>   | 1510           |
| 600                      | 7 <sup>7</sup> / <sub>8</sub>   | 8 <sup>1</sup> / <sub>16</sub>   | 17 <sup>15</sup> / <sub>32</sub> | 7 <sup>7</sup> / <sub>16</sub>  | 11 <sup>3</sup> / <sub>32</sub>  | 28 <sup>9</sup> / <sub>32</sub>  | 14 <sup>3</sup> / <sub>4</sub>   | 48 <sup>15</sup> / <sub>16</sub> | 31 <sup>7</sup> / <sub>8</sub>   | 30 <sup>1</sup> / <sub>2</sub>   | 2 <sup>3</sup> / <sub>4</sub>   | 1940           |
| 700                      | 8 <sup>9</sup> / <sub>32</sub>  | 8 <sup>15</sup> / <sub>32</sub>  | 17 <sup>7</sup> / <sub>8</sub>   | 8 <sup>1</sup> / <sub>32</sub>  | 12 <sup>1</sup> / <sub>8</sub>   | 28 <sup>9</sup> / <sub>32</sub>  | 15 <sup>3</sup> / <sub>4</sub>   | 49 <sup>23</sup> / <sub>32</sub> | 34 <sup>1</sup> / <sub>4</sub>   | 32 <sup>9</sup> / <sub>32</sub>  | 2 <sup>3</sup> / <sub>4</sub>   | 2161           |
| 800                      | 8 <sup>9</sup> / <sub>32</sub>  | 8 <sup>21</sup> / <sub>32</sub>  | 18 <sup>9</sup> / <sub>32</sub>  | 8 <sup>1</sup> / <sub>32</sub>  | 12 <sup>1</sup> / <sub>8</sub>   | 28 <sup>9</sup> / <sub>32</sub>  | 15 <sup>3</sup> / <sub>4</sub>   | 50                               | 34 <sup>1</sup> / <sub>4</sub>   | 32 <sup>9</sup> / <sub>32</sub>  | 2 <sup>3</sup> / <sub>4</sub>   | 2425           |
| 900                      | 8 <sup>21</sup> / <sub>32</sub> | 9 <sup>1</sup> / <sub>16</sub>   | 19 <sup>3</sup> / <sub>32</sub>  | 8 <sup>15</sup> / <sub>32</sub> | 12 <sup>29</sup> / <sub>32</sub> | 28 <sup>9</sup> / <sub>32</sub>  | 16 <sup>17</sup> / <sub>32</sub> | 51 <sup>1</sup> / <sub>32</sub>  | 36 <sup>7</sup> / <sub>32</sub>  | 33 <sup>27</sup> / <sub>32</sub> | 2 <sup>3</sup> / <sub>4</sub>   | 2822           |
| 1000                     | 9 <sup>7</sup> / <sub>16</sub>  | 9 <sup>7</sup> / <sub>16</sub>   | 20 <sup>9</sup> / <sub>32</sub>  | 8 <sup>15</sup> / <sub>32</sub> | 13 <sup>3</sup> / <sub>4</sub>   | 28 <sup>9</sup> / <sub>32</sub>  | 16 <sup>17</sup> / <sub>32</sub> | 52 <sup>19</sup> / <sub>32</sub> | 37                               | 35 <sup>7</sup> / <sub>16</sub>  | 2 <sup>3</sup> / <sub>4</sub>   | 3219           |
| 1250                     | 10 <sup>1</sup> / <sub>4</sub>  | 10 <sup>5</sup> / <sub>8</sub>   | 23 <sup>1</sup> / <sub>32</sub>  | 9 <sup>1</sup> / <sub>16</sub>  | 14 <sup>17</sup> / <sub>32</sub> | 30 <sup>1</sup> / <sub>4</sub>   | 17 <sup>23</sup> / <sub>32</sub> | 57 <sup>5</sup> / <sub>16</sub>  | 40 <sup>11</sup> / <sub>32</sub> | 38 <sup>3</sup> / <sub>16</sub>  | 2 <sup>3</sup> / <sub>4</sub>   | 4387           |
| 1500                     | 11 <sup>1</sup> / <sub>32</sub> | 11 <sup>13</sup> / <sub>32</sub> | 24 <sup>19</sup> / <sub>32</sub> | 9 <sup>1</sup> / <sub>16</sub>  | 14 <sup>17</sup> / <sub>32</sub> | 32 <sup>7</sup> / <sub>32</sub>  | 17 <sup>23</sup> / <sub>32</sub> | 61 <sup>1</sup> / <sub>4</sub>   | 40 <sup>11</sup> / <sub>32</sub> | 39 <sup>3</sup> / <sub>4</sub>   | 2 <sup>3</sup> / <sub>4</sub>   | 5291           |

RFID CAD

\* For shackles ≥ WLL 150 t



G-6038



## Green Pin® Heavy Duty Shackles

### dee shackles with safety bolt

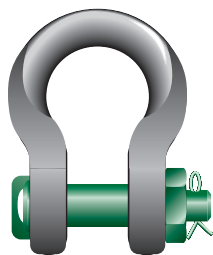
- **Material** : bow and pin alloy steel, Grade 8, quenched and tempered
- **Safety Factor** : MBL equals 5 x WLL
- **Finish** : hot dipped galvanized
- **Certification** : **2.1** **2.2** **3.1** **MTC** <sup>a</sup> **MPI** <sup>a</sup> **US** <sup>a</sup> **CE**

| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>eye | width<br>inside | length<br>inside | length | length<br>bolt | thickness<br>nut | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|--------------|-----------------|------------------|--------|----------------|------------------|----------------|
| t                        | a               | b               | c               | d            | e               | f                | g      | h              | i                | kg             |
| 120                      | 95              | 95              | 208             | 95           | 147             | 274              | 521    | 440            | 50               | 110            |

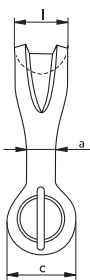
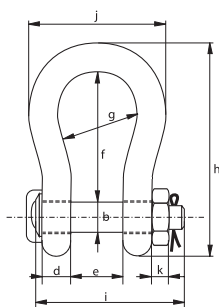
In inch

| working<br>load<br>limit | diameter<br>bow               | diameter<br>pin               | diameter<br>eye                | width<br>eye                  | width<br>inside                 | length<br>inside                 | length                         | length<br>bolt                  | thickness<br>nut                | weight<br>each |
|--------------------------|-------------------------------|-------------------------------|--------------------------------|-------------------------------|---------------------------------|----------------------------------|--------------------------------|---------------------------------|---------------------------------|----------------|
| t                        | a                             | b                             | c                              | d                             | e                               | f                                | g                              | h                               | inch                            | lbs            |
| 120                      | 3 <sup>3</sup> / <sub>4</sub> | 3 <sup>3</sup> / <sub>4</sub> | 8 <sup>3</sup> / <sub>16</sub> | 3 <sup>3</sup> / <sub>4</sub> | 5 <sup>25</sup> / <sub>32</sub> | 10 <sup>25</sup> / <sub>32</sub> | 20 <sup>1</sup> / <sub>2</sub> | 17 <sup>5</sup> / <sub>16</sub> | 1 <sup>31</sup> / <sub>32</sub> | 243            |

RFID CAD



P-6033



## Green Pin® Sling Shackles

### bow shackles with safety bolt

- **Material** : bow and pin alloy steel, Grade 8, quenched and tempered
- **Safety Factor** : MBL equals 5 x WLL
- **Finish** : shackle bow painted silver, pin painted green
- **Temperature Range** : -20 °C up to +200 °C
- **Certification** : 2.1 2.2 3.1 MTC<sup>b</sup> \* LROS \* MPI<sup>b</sup> \* US<sup>b</sup> \* CE

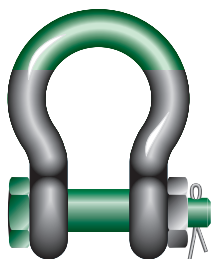
| working<br>load<br>limit | diameter<br>body | diameter<br>pin | diameter<br>eye | width<br>eye | width<br>inside | length<br>inside | width<br>bow | length | length<br>bolt | width | thickness<br>nut | bearing<br>surface | weight<br>each |
|--------------------------|------------------|-----------------|-----------------|--------------|-----------------|------------------|--------------|--------|----------------|-------|------------------|--------------------|----------------|
| t                        | a                | b               | c               | d            | e               | f                | g            | h      | i              | j     | k                | l                  | kg             |
| mm                       | mm               | mm              | mm              | mm           | mm              | mm               | mm           | mm     | mm             | mm    | mm               | mm                 |                |
| 7                        | 22               | 22              | 46              | 19           | 32              | 96               | 64           | 153    | 115            | 110   | 19               | 41                 | 2              |
| 12.5                     | 28               | 28              | 61              | 25           | 44              | 121              | 82           | 197    | 151            | 146   | 24               | 54                 | 4              |
| 18                       | 35               | 35              | 69              | 30           | 54              | 148              | 102          | 239    | 175            | 180   | 29               | 64                 | 7              |
| 30                       | 40               | 42              | 90              | 35           | 69              | 165              | 126          | 279    | 211            | 200   | 34               | 79                 | 13             |
| 40                       | 55               | 51              | 109             | 45           | 84              | 199              | 140          | 331    | 252            | 235   | 38               | 97                 | 21             |
| 55                       | 60               | 57              | 115             | 55           | 90              | 240              | 160          | 389    | 299            | 270   | 45               | 100                | 30             |
| 75                       | 68               | 70              | 125             | 54           | 110             | 290              | 185          | 473    | 327            | 317   | 54               | 120                | 48             |
| 125                      | 85               | 80              | 154             | 85           | 137             | 366              | 220          | 583    | 426            | 390   | 64               | 150                | 92             |
| 150                      | 94               | 95              | 179             | 89           | 147             | 391              | 253          | 645    | 435            | 434   | 50               | 170                | 140            |
| 200                      | 110              | 105             | 199             | 100          | 158             | 481              | 280          | 759    | 470            | 482   | 50               | 205                | 205            |
| 250                      | 126              | 120             | 227             | 110          | 179             | 542              | 300          | 859    | 519            | 530   | 60               | 240                | 264            |
| 300                      | 135              | 134             | 245             | 122          | 195             | 601              | 350          | 947    | 575            | 620   | 70               | 265                | 360            |
| 400                      | 160              | 160             | 293             | 145          | 231             | 576              | 370          | 985    | 675            | 690   | 80               | 320                | 580            |
| 500                      | 170              | 180             | 328             | 160          | 263             | 681              | 450          | 1131   | 748            | 790   | 90               | 339                | 780            |
| 600                      | 190              | 200             | 348             | 170          | 289             | 741              | 490          | 1234   | 809            | 865   | 100              | 370                | 980            |
| 700                      | 200              | 215             | 392             | 190          | 315             | 751              | 540          | 1284   | 879            | 901   | 100              | 400                | 1360           |
| 800                      | 218              | 230             | 420             | 200          | 342             | 851              | 554          | 1426   | 942            | 947   | 110              | 420                | 1430           |
| 900                      | 242              | 255             | 466             | 220          | 368             | 851              | 580          | 1488   | 1023           | 1023  | 120              | 440                | 1650           |
| 1000                     | 260              | 270             | 490             | 240          | 399             | 851              | 614          | 1532   | 1103           | 1107  | 120              | 460                | 2970           |
| 1250                     | 285              | 300             | 510             | 260          | 452             | 931              | 650          | 1666   | 1227           | 1182  | 150              | 530                | 3700           |
| 1550                     | 285              | 320             | 550             | 280          | 483             | 950              | 680          | 1710   | 1300           | 1253  | 150              | 560                | 4000           |

In inch

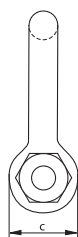
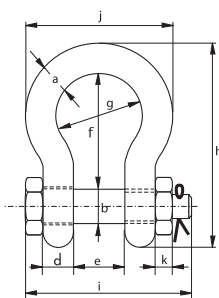
| working<br>load<br>limit | diameter<br>body | diameter<br>pin   | diameter<br>eye   | width<br>eye     | width<br>inside   | length<br>inside  | width<br>bow      | length            | length<br>bolt    | width             | thickness<br>nut | bearing<br>surface | weight<br>each |
|--------------------------|------------------|-------------------|-------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|------------------|--------------------|----------------|
| t                        | a                | b                 | c                 | d                | e                 | f                 | g                 | h                 | i                 | j                 | k                | l                  | lbs            |
| inch                     | inch             | inch              | inch              | inch             | inch              | inch              | inch              | inch              | inch              | inch              | inch             | inch               |                |
| 7                        | $\frac{7}{8}$    | $\frac{7}{8}$     | $1\frac{13}{16}$  | $\frac{3}{4}$    | $1\frac{9}{32}$   | $3\frac{25}{32}$  | $2\frac{17}{32}$  | 6                 | $4\frac{17}{32}$  | $4\frac{5}{16}$   | $\frac{3}{4}$    | $1\frac{5}{16}$    | 4.41           |
| 12.5                     | $1\frac{1}{8}$   | $1\frac{1}{8}$    | $2\frac{3}{8}$    | 1                | $1\frac{3}{4}$    | $4\frac{3}{4}$    | $3\frac{1}{4}$    | $7\frac{3}{4}$    | $5\frac{15}{16}$  | $5\frac{3}{4}$    | $\frac{15}{16}$  | $2\frac{1}{8}$     | 8.82           |
| 18                       | $1\frac{3}{8}$   | $1\frac{3}{8}$    | $2\frac{23}{32}$  | $1\frac{3}{16}$  | $2\frac{1}{8}$    | $5\frac{13}{16}$  | $4\frac{1}{2}$    | $9\frac{13}{32}$  | $6\frac{7}{8}$    | $7\frac{3}{32}$   | $1\frac{5}{32}$  | $2\frac{17}{32}$   | 18             |
| 30                       | $1\frac{9}{16}$  | $1\frac{21}{32}$  | $3\frac{17}{32}$  | $1\frac{3}{8}$   | $2\frac{23}{32}$  | $6\frac{1}{2}$    | $4\frac{31}{32}$  | $10\frac{31}{32}$ | $8\frac{5}{16}$   | $7\frac{7}{8}$    | $1\frac{11}{32}$ | $3\frac{1}{8}$     | 29             |
| 40                       | $2\frac{5}{32}$  | 2                 | $4\frac{9}{32}$   | $1\frac{25}{32}$ | $3\frac{5}{16}$   | $7\frac{27}{32}$  | $5\frac{1}{2}$    | $13\frac{1}{32}$  | $9\frac{29}{32}$  | $9\frac{1}{4}$    | $1\frac{1}{2}$   | $3\frac{13}{16}$   | 46             |
| 55                       | $2\frac{3}{8}$   | $2\frac{1}{4}$    | $4\frac{17}{32}$  | $2\frac{5}{32}$  | $3\frac{17}{32}$  | $9\frac{7}{16}$   | $6\frac{5}{16}$   | $15\frac{5}{16}$  | $11\frac{25}{32}$ | $10\frac{5}{8}$   | $1\frac{25}{32}$ | $3\frac{15}{16}$   | 66             |
| 75                       | $2\frac{11}{16}$ | $2\frac{3}{4}$    | $4\frac{29}{32}$  | $2\frac{1}{8}$   | $4\frac{11}{32}$  | $11\frac{13}{32}$ | $7\frac{9}{32}$   | $18\frac{5}{8}$   | $12\frac{7}{8}$   | $12\frac{15}{32}$ | $2\frac{1}{8}$   | $4\frac{23}{32}$   | 106            |
| 125                      | $3\frac{11}{32}$ | $3\frac{5}{32}$   | $6\frac{1}{16}$   | $3\frac{11}{32}$ | $5\frac{13}{32}$  | $14\frac{13}{32}$ | $8\frac{21}{32}$  | $22\frac{15}{16}$ | $16\frac{25}{32}$ | $15\frac{11}{32}$ | $2\frac{17}{32}$ | $5\frac{29}{32}$   | 203            |
| 150                      | $3\frac{11}{16}$ | $3\frac{3}{4}$    | $7\frac{1}{16}$   | $3\frac{1}{2}$   | $5\frac{25}{32}$  | $15\frac{13}{32}$ | $9\frac{31}{32}$  | $25\frac{13}{32}$ | $17\frac{1}{8}$   | $17\frac{3}{32}$  | $1\frac{31}{32}$ | $6\frac{11}{16}$   | 309            |
| 200                      | $4\frac{11}{32}$ | $4\frac{1}{8}$    | $7\frac{27}{32}$  | $3\frac{15}{16}$ | $6\frac{7}{32}$   | $18\frac{15}{16}$ | $11\frac{1}{32}$  | $29\frac{7}{8}$   | $18\frac{1}{2}$   | $18\frac{31}{32}$ | $1\frac{31}{32}$ | $8\frac{1}{16}$    | 452            |
| 250                      | $4\frac{31}{32}$ | $4\frac{23}{32}$  | $8\frac{15}{16}$  | $4\frac{11}{32}$ | $7\frac{1}{16}$   | $21\frac{11}{32}$ | $11\frac{13}{16}$ | $33\frac{13}{16}$ | $20\frac{7}{16}$  | $20\frac{7}{8}$   | $2\frac{3}{8}$   | $9\frac{7}{16}$    | 582            |
| 300                      | $5\frac{5}{16}$  | $5\frac{9}{32}$   | $9\frac{21}{32}$  | $4\frac{13}{16}$ | $7\frac{11}{16}$  | $23\frac{21}{32}$ | $13\frac{25}{32}$ | $37\frac{9}{32}$  | $22\frac{5}{8}$   | $24\frac{13}{32}$ | $2\frac{3}{4}$   | $10\frac{7}{16}$   | 794            |
| 400                      | $6\frac{5}{16}$  | $6\frac{5}{16}$   | $11\frac{17}{32}$ | $5\frac{23}{32}$ | $9\frac{9}{32}$   | $22\frac{11}{16}$ | $14\frac{9}{16}$  | $38\frac{25}{32}$ | $26\frac{9}{16}$  | $27\frac{5}{32}$  | $3\frac{5}{32}$  | $12\frac{19}{32}$  | 1279           |
| 500                      | $6\frac{11}{16}$ | $7\frac{3}{32}$   | $12\frac{29}{32}$ | $6\frac{5}{16}$  | $10\frac{11}{32}$ | $26\frac{13}{16}$ | $17\frac{23}{32}$ | $44\frac{17}{32}$ | $29\frac{7}{16}$  | $31\frac{3}{32}$  | $3\frac{17}{32}$ | $13\frac{11}{32}$  | 1720           |
| 600                      | $7\frac{15}{32}$ | $7\frac{7}{8}$    | $13\frac{11}{16}$ | $6\frac{11}{16}$ | $11\frac{3}{8}$   | $29\frac{3}{16}$  | $19\frac{9}{32}$  | $48\frac{19}{32}$ | $31\frac{27}{32}$ | $34\frac{1}{16}$  | $3\frac{15}{16}$ | $14\frac{9}{16}$   | 2161           |
| 700                      | $7\frac{7}{8}$   | $8\frac{15}{32}$  | $15\frac{7}{16}$  | $7\frac{15}{32}$ | $12\frac{13}{32}$ | $29\frac{9}{16}$  | $21\frac{1}{4}$   | $50\frac{9}{16}$  | $34\frac{19}{32}$ | $35\frac{15}{32}$ | $3\frac{15}{16}$ | $15\frac{3}{4}$    | 2998           |
| 800                      | $8\frac{19}{32}$ | $9\frac{1}{16}$   | $16\frac{17}{32}$ | $7\frac{7}{8}$   | $13\frac{15}{32}$ | $33\frac{1}{2}$   | $21\frac{13}{16}$ | $56\frac{5}{32}$  | $37\frac{3}{32}$  | $37\frac{9}{32}$  | $4\frac{11}{32}$ | $16\frac{17}{32}$  | 3153           |
| 900                      | $9\frac{17}{32}$ | $10\frac{1}{32}$  | $18\frac{11}{32}$ | $8\frac{21}{32}$ | $14\frac{1}{2}$   | $33\frac{1}{2}$   | $22\frac{27}{32}$ | $58\frac{19}{32}$ | $40\frac{9}{32}$  | $40\frac{9}{32}$  | $4\frac{23}{32}$ | $17\frac{5}{16}$   | 3638           |
| 1000                     | $10\frac{1}{4}$  | $10\frac{5}{8}$   | $19\frac{9}{32}$  | $9\frac{7}{16}$  | $15\frac{23}{32}$ | $33\frac{1}{2}$   | $24\frac{3}{16}$  | $60\frac{5}{16}$  | $43\frac{7}{16}$  | $43\frac{19}{32}$ | $4\frac{23}{32}$ | $18\frac{1}{8}$    | 6548           |
| 1250                     | $11\frac{7}{32}$ | $11\frac{13}{16}$ | $20\frac{3}{32}$  | $10\frac{1}{4}$  | $17\frac{25}{32}$ | $36\frac{21}{32}$ | $25\frac{19}{32}$ | $65\frac{19}{32}$ | $48\frac{5}{16}$  | $46\frac{17}{32}$ | $5\frac{29}{32}$ | $20\frac{7}{8}$    | 8157           |
| 1550                     | $11\frac{7}{32}$ | $12\frac{19}{32}$ | $21\frac{21}{32}$ | $11\frac{1}{32}$ | $19\frac{1}{32}$  | $37\frac{13}{32}$ | $26\frac{25}{32}$ | $67\frac{5}{16}$  | $51\frac{3}{16}$  | $49\frac{11}{32}$ | $5\frac{29}{32}$ | $22\frac{1}{16}$   | 8818           |

RFID CAD

\* For shackles  $\geq$  WLL 75 t



G-5263



## Green Pin® Super Shackles

### bow shackles with safety bolt

- **Material** : bow and pin alloy steel, Grade 8, quenched and tempered
- **Safety Factor** : MBL equals 5 x WLL
- **Standard** : ASME B30.26 and  
meets performance requirements of US Fed. Spec. RR-C-271 Type IVA Class 3, Grade B
- **Finish** : hot dipped galvanized (175 ton shackle is painted)
- **Temperature Range** : -20 °C up to +200 °C
- **Certification** : 2.1 2.2 3.1 MTC<sup>a</sup> CE

| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>eye | width<br>inside | length<br>inside | width<br>bow | length  | length<br>bolt | width   | thickness<br>nut | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|--------------|-----------------|------------------|--------------|---------|----------------|---------|------------------|----------------|
| t                        | a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm      | e<br>mm         | f<br>mm          | g<br>mm      | h<br>mm | i<br>mm        | j<br>mm | k<br>mm          | kg             |
| 3.3                      | 13.5            | 16              | 34              | 13           | 22              | 51               | 32           | 89      | 82             | 58      | 13               | 0.40           |
| 5                        | 16              | 19              | 40              | 16           | 27              | 64               | 43           | 110     | 98             | 75      | 17               | 0.73           |
| 7                        | 19              | 22              | 46              | 19           | 31              | 76               | 51           | 129     | 114            | 89      | 19               | 1.19           |
| 9.5                      | 22              | 25              | 52              | 22           | 36              | 83               | 58           | 144     | 130            | 102     | 22               | 1.73           |
| 12.5                     | 25              | 28              | 59              | 25           | 43              | 95               | 68           | 164     | 150            | 118     | 25               | 2.56           |
| 15                       | 28              | 32              | 66              | 28           | 47              | 108              | 75           | 185     | 166            | 131     | 27               | 3.6            |
| 18                       | 32              | 35              | 72              | 32           | 51              | 115              | 83           | 201     | 178            | 147     | 30               | 4.95           |
| 21                       | 35              | 38              | 80              | 35           | 57              | 133              | 92           | 227     | 197            | 162     | 33               | 6.62           |
| 30                       | 38              | 42              | 88              | 38           | 60              | 146              | 99           | 249     | 217            | 175     | 34               | 8.11           |
| 40                       | 45              | 50              | 103             | 45           | 74              | 178              | 126          | 300     | 260            | 216     | 40               | 15             |
| 55                       | 57              | 57              | 117             | 57           | 83              | 197              | 138          | 341     | 303            | 252     | 46               | 23             |
| 85                       | 70              | 70              | 143             | 70           | 105             | 260              | 180          | 437     | 363            | 320     | 56               | 44             |
| 120                      | 83              | 83              | 162             | 83           | 127             | 329              | 190          | 535     | 425            | 356     | 66               | 72             |
| 150*                     | 95              | 95              | 208             | 91           | 147             | 400              | 238          | 647     | 511            | 428     | 50               | 112            |
| 175*                     | 105             | 108             | 238             | 102          | 169             | 410              | 275          | 688     | 561            | 485     | 60               | 160            |

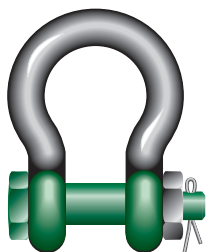
\* = round headed bolt

In inch

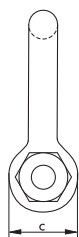
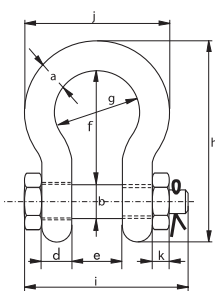
| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>eye | width<br>inside | length<br>inside | width<br>bow | length    | length<br>bolt | width     | thickness<br>nut | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|--------------|-----------------|------------------|--------------|-----------|----------------|-----------|------------------|----------------|
| t                        | a<br>inch       | b<br>inch       | c<br>inch       | d<br>inch    | e<br>inch       | f<br>inch        | g<br>inch    | h<br>inch | i<br>inch      | j<br>inch | k<br>inch        | lbs            |
| 3.3                      | 1/2             | 5/8             | 1 11/32         | 1/2          | 7/8             | 2                | 1 1/4        | 3 1/2     | 3 7/32         | 2 9/32    | 1/2              | 0.88           |
| 5                        | 5/8             | 3/4             | 1 9/16          | 5/8          | 1 1/16          | 2 17/32          | 1 11/16      | 4 11/32   | 3 27/32        | 2 15/16   | 21/32            | 1.61           |
| 7                        | 3/4             | 7/8             | 1 13/16         | 3/4          | 1 7/32          | 3                | 2            | 5 3/32    | 4 1/2          | 3 1/2     | 3/4              | 2.62           |
| 9.5                      | 7/8             | 1               | 2 1/16          | 7/8          | 1 13/32         | 3 9/32           | 2 9/32       | 5 21/32   | 5 1/8          | 4 1/32    | 7/8              | 3.81           |
| 12.5                     | 1               | 1 1/8           | 2 5/16          | 31/32        | 1 11/16         | 3 3/4            | 2 11/16      | 6 15/32   | 5 29/32        | 4 21/32   | 31/32            | 5.64           |
| 15                       | 1 1/8           | 1 1/4           | 2 19/32         | 1 3/32       | 1 27/32         | 4 1/4            | 2 15/16      | 7 9/32    | 6 17/32        | 5 5/32    | 1 1/16           | 7.94           |
| 18                       | 1 1/4           | 1 3/8           | 2 27/32         | 1 1/4        | 2               | 4 17/32          | 3 9/32       | 7 29/32   | 7              | 5 25/32   | 1 3/16           | 10.91          |
| 21                       | 1 3/8           | 1 1/2           | 3 5/32          | 1 3/8        | 2 1/4           | 5 1/4            | 3 5/8        | 8 15/16   | 7 3/4          | 6 3/8     | 1 5/16           | 14.59          |
| 30                       | 1 1/2           | 1 5/8           | 3 15/32         | 1 1/2        | 2 3/8           | 5 3/4            | 3 29/32      | 9 13/16   | 8 17/32        | 6 7/8     | 1 5/16           | 17.88          |
| 40                       | 1 3/4           | 2               | 4 1/16          | 1 25/32      | 2 29/32         | 7                | 4 31/32      | 11 13/16  | 10 1/4         | 8 1/2     | 1 9/16           | 33.07          |
| 55                       | 2               | 2 1/4           | 4 19/32         | 2 1/4        | 3 9/32          | 7 3/4            | 5 7/16       | 13 7/16   | 11 15/16       | 9 29/32   | 1 25/32          | 50.71          |
| 85                       | 2 1/2           | 2 3/4           | 5 5/8           | 2 3/4        | 4 1/8           | 10 1/4           | 7 3/32       | 17 7/32   | 14 9/32        | 12 19/32  | 2 7/32           | 97             |
| 120                      | 3               | 3 1/4           | 6 3/8           | 3 9/32       | 5               | 12 15/16         | 7 15/32      | 21 1/16   | 16 23/32       | 14 1/32   | 2 5/8            | 158.73         |
| 150*                     | 3 3/4           | 3 3/4           | 8 3/16          | 3 19/32      | 5 25/32         | 15 3/4           | 9 3/8        | 25 15/32  | 20 1/8         | 16 27/32  | 1 31/32          | 246.92         |
| 175*                     | 4               | 4 1/4           | 9 3/8           | 4 1/32       | 6 21/32         | 16 5/32          | 10 13/16     | 27 3/32   | 22 3/32        | 19 3/32   | 2 3/8            | 352.74         |

\* = round headed bolt

RFID CAD



G-5163



## Green Pin® Polar Shackles

bow shackles with safety bolt, for use under extreme climatic conditions

- **Material** : bow and pin alloy steel, Grade 8, quenched and tempered
- **Safety Factor** : MBL equals 8 x WLL  
for shackles with WLL 55 and 85 tons the MBL equals 6 x WLL
- **Standard** : EN 13889, ASME B30.26 and  
meets performance requirements of US Fed. Spec. RR-C-271 Type IVA Class 3, Grade A
- **Finish** : hot dipped galvanized
- **Temperature Range** : -60°C up to +200°C
- **Certification** : **2.1** **2.2** **3.1** **MTC<sup>a</sup>** **DNV 2.7-1<sup>a</sup>** **DNV 2.7-1<sup>b</sup>** **DNV 2.22** **CE**

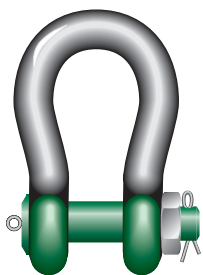
| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>eye | width<br>inside | length<br>inside | width<br>bow | length<br>bow | length<br>bolt | width   | thickness<br>nut | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|--------------|-----------------|------------------|--------------|---------------|----------------|---------|------------------|----------------|
| t                        | a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm      | e<br>mm         | f<br>mm          | g<br>mm      | h<br>mm       | i<br>mm        | j<br>mm | k<br>mm          | kg             |
| 2                        | 13.5            | 16              | 34              | 13           | 22              | 51               | 32           | 89            | 82             | 58      | 13               | 0.42           |
| 3.25                     | 16              | 19              | 40              | 16           | 27              | 64               | 43           | 110           | 98             | 75      | 17               | 0.74           |
| 4.75                     | 19              | 22              | 46              | 19           | 31              | 76               | 51           | 129           | 114            | 89      | 19               | 1.18           |
| 6.5                      | 22              | 25              | 52              | 22           | 36              | 83               | 58           | 144           | 130            | 102     | 22               | 1.77           |
| 8.5                      | 25              | 28              | 59              | 25           | 43              | 95               | 68           | 164           | 150            | 118     | 25               | 2.58           |
| 9.5                      | 28              | 32              | 66              | 28           | 47              | 108              | 75           | 185           | 166            | 131     | 27               | 3.66           |
| 12                       | 32              | 35              | 72              | 32           | 51              | 115              | 83           | 201           | 178            | 147     | 30               | 4.91           |
| 13.5                     | 35              | 38              | 80              | 35           | 57              | 133              | 92           | 227           | 197            | 162     | 33               | 6.54           |
| 17                       | 38              | 42              | 88              | 38           | 60              | 146              | 99           | 249           | 202            | 175     | 39               | 8.19           |
| 25                       | 45              | 50              | 103             | 45           | 74              | 178              | 126          | 300           | 249            | 216     | 43               | 14.22          |
| 35                       | 50              | 57              | 116             | 50           | 83              | 197              | 138          | 334           | 269            | 238     | 49               | 19.85          |
| 42.5                     | 57              | 65              | 130             | 57           | 95              | 222              | 160          | 377           | 301            | 274     | 55               | 28.33          |
| 55                       | 65              | 70              | 145             | 65           | 105             | 260              | 180          | 433           | 330            | 310     | 63               | 39.59          |
| 85                       | 75              | 83              | 162             | 73           | 127             | 329              | 190          | 527           | 380            | 340     | 73               | 62             |

In inch

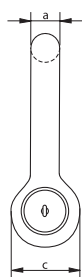
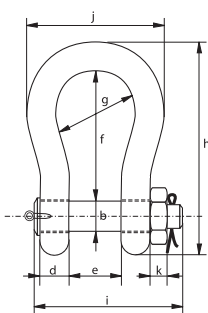
| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>eye | width<br>inside | length<br>inside | width<br>bow | length<br>bow | length<br>bolt | width     | thickness<br>nut | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|--------------|-----------------|------------------|--------------|---------------|----------------|-----------|------------------|----------------|
| t                        | a<br>inch       | b<br>inch       | c<br>inch       | d<br>inch    | e<br>inch       | f<br>inch        | g<br>inch    | h<br>inch     | i<br>inch      | j<br>inch | k<br>inch        | lbs            |
| 2                        | 1/2             | 5/8             | 1 11/32         | 1/2          | 7/8             | 2                | 1 1/4        | 3 1/2         | 3 7/32         | 2 9/32    | 1/2              | 0.92           |
| 3.25                     | 5/8             | 3/4             | 1 9/16          | 5/8          | 1 1/16          | 2 17/32          | 1 11/16      | 4 11/32       | 3 27/32        | 2 15/16   | 21/32            | 1.62           |
| 4.75                     | 3/4             | 7/8             | 1 13/16         | 3/4          | 1 7/32          | 3                | 2            | 5 3/32        | 4 1/2          | 3 1/2     | 3/4              | 2.59           |
| 6.5                      | 7/8             | 1               | 2 1/16          | 7/8          | 1 13/32         | 3 9/32           | 2 9/32       | 5 21/32       | 5 1/8          | 4 1/32    | 7/8              | 3.9            |
| 8.5                      | 1               | 1 1/8           | 2 5/16          | 31/32        | 1 11/16         | 3 3/4            | 2 11/16      | 6 15/32       | 5 29/32        | 4 21/32   | 31/32            | 5.69           |
| 9.5                      | 1 1/8           | 1 1/4           | 2 19/32         | 1 3/32       | 1 27/32         | 4 1/4            | 2 15/16      | 7 9/32        | 6 17/32        | 5 5/32    | 1 1/16           | 8.06           |
| 12                       | 1 1/4           | 1 3/8           | 2 27/32         | 1 1/4        | 2               | 4 17/32          | 3 9/32       | 7 29/32       | 7              | 5 25/32   | 1 3/16           | 10.81          |
| 13.5                     | 1 3/8           | 1 1/2           | 3 5/32          | 1 3/8        | 2 1/4           | 5 1/4            | 3 5/8        | 8 15/16       | 7 3/4          | 6 3/8     | 1 5/16           | 14.42          |
| 17                       | 1 1/2           | 1 5/8           | 3 15/32         | 1 1/2        | 2 3/8           | 5 3/4            | 3 29/32      | 9 13/16       | 7 15/16        | 6 7/8     | 3/4              | 18.06          |
| 25                       | 1 3/4           | 2               | 4 1/16          | 1 25/32      | 2 29/32         | 7                | 4 31/32      | 11 13/16      | 9 13/16        | 8 1/2     | 29/32            | 31.34          |
| 35                       | 2               | 2 1/4           | 4 9/16          | 1 31/32      | 3 9/32          | 7 3/4            | 5 7/16       | 13 5/32       | 10 19/32       | 9 3/8     | 1 1/32           | 43.77          |
| 42.5                     | 2 1/4           | 2 9/16          | 5 1/8           | 2 1/4        | 3 3/4           | 8 3/4            | 6 5/16       | 14 27/32      | 11 27/32       | 10 25/32  | 1 5/32           | 62.46          |
| 55                       | 2 1/2           | 2 3/4           | 5 23/32         | 2 9/16       | 4 1/8           | 10 1/4           | 7 3/32       | 17 1/16       | 13             | 12 7/32   | 1 1/4            | 87.27          |
| 85                       | 3               | 3 1/4           | 6 3/8           | 2 7/8        | 5               | 12 15/16         | 7 15/32      | 20 3/4        | 14 31/32       | 13 3/8    | 1 17/32          | 136.69         |

RFID CAD





P-6031



## Green Pin® Heavy Duty Polar Shackles

bow shackles with safety bolt, for use under extreme climatic conditions

- **Material** : bow and pin alloy steel, Grade 8, quenched and tempered
- **Safety Factor** : MBL equals 5 x WLL
- **Finish** : shackle bow painted silver, pin painted green (120 tons shackle is hot dipped galvanized)
- **Temperature Range** : -40 °C up to +200 °C
- **Certification** : 2.1 2.2 3.1 MTC<sup>a</sup> MTC<sup>b</sup> \* LROS \* MPI<sup>a</sup> US<sup>a</sup> CE

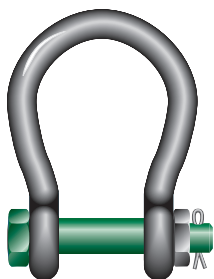
| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>eye | width<br>inside | length<br>inside | width<br>bow | length | length<br>bolt | width | thickness<br>nut | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|--------------|-----------------|------------------|--------------|--------|----------------|-------|------------------|----------------|
| t                        | a               | b               | c               | d            | e               | f                | g            | h      | i              | j     | k                | kg             |
| mm                       | mm              | mm              | mm              | mm           | mm              | mm               | mm           | mm     | mm             | mm    | mm               |                |
| 120                      | 95              | 95              | 208             | 91           | 147             | 400              | 238          | 647    | 440            | 428   | 50               | 110            |
| 150                      | 105             | 108             | 238             | 102          | 169             | 410              | 275          | 688    | 490            | 485   | 60               | 160            |
| 200                      | 120             | 130             | 279             | 113          | 179             | 513              | 290          | 838    | 520            | 530   | 60               | 235            |
| 250                      | 130             | 140             | 299             | 118          | 205             | 554              | 305          | 904    | 560            | 565   | 65               | 285            |
| 300                      | 140             | 150             | 325             | 123          | 205             | 618              | 305          | 996    | 575            | 585   | 70               | 340            |
| 400                      | 170             | 175             | 376             | 164          | 231             | 668              | 325          | 1114   | 690            | 665   | 70               | 560            |
| 500                      | 180             | 185             | 398             | 164          | 256             | 718              | 350          | 1190   | 720            | 710   | 70               | 685            |
| 600                      | 200             | 205             | 444             | 189          | 282             | 718              | 375          | 1243   | 810            | 775   | 70               | 880            |
| 700                      | 210             | 215             | 454             | 204          | 308             | 718              | 400          | 1263   | 870            | 820   | 70               | 980            |
| 800                      | 210             | 220             | 464             | 204          | 308             | 718              | 400          | 1270   | 870            | 820   | 70               | 1100           |
| 900                      | 220             | 230             | 485             | 215          | 328             | 718              | 420          | 1296   | 920            | 860   | 70               | 1280           |
| 1000                     | 240             | 240             | 515             | 215          | 349             | 718              | 420          | 1336   | 940            | 900   | 70               | 1460           |
| 1250                     | 260             | 270             | 585             | 230          | 369             | 768              | 450          | 1456   | 1025           | 970   | 70               | 1990           |
| 1500                     | 280             | 290             | 625             | 230          | 369             | 818              | 450          | 1556   | 1025           | 1010  | 70               | 2400           |

In inch

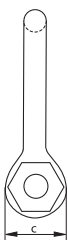
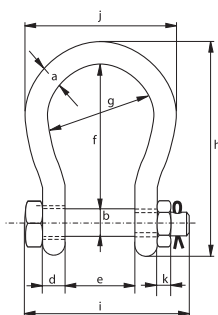
| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>eye | width<br>inside | length<br>inside | width<br>bow | length   | length<br>bolt | width    | thickness<br>nut | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|--------------|-----------------|------------------|--------------|----------|----------------|----------|------------------|----------------|
| t                        | a               | b               | c               | d            | e               | f                | g            | h        | i              | j        | k                | lbs            |
| inch                     | inch            | inch            | inch            | inch         | inch            | inch             | inch         | inch     | inch           | inch     | inch             |                |
| 120                      | 3 3/4           | 3 3/4           | 8 3/16          | 3 19/32      | 5 25/32         | 15 3/4           | 9 3/8        | 25 15/32 | 17 5/16        | 16 27/32 | 1 31/32          | 243            |
| 150                      | 4 1/8           | 4 1/4           | 9 3/8           | 4 1/32       | 6 21/32         | 16 5/32          | 10 13/16     | 27 3/32  | 19 9/32        | 19 3/32  | 2 3/8            | 353            |
| 200                      | 4 23/32         | 5 1/8           | 10 31/32        | 4 7/16       | 7 1/16          | 20 3/16          | 11 13/32     | 33       | 20 15/32       | 20 7/8   | 2 3/8            | 518            |
| 250                      | 5 1/8           | 5 1/2           | 11 25/32        | 4 21/32      | 8 1/16          | 21 13/16         | 12           | 35 19/32 | 22 1/16        | 22 1/4   | 2 9/16           | 628            |
| 300                      | 5 1/2           | 5 29/32         | 12 25/32        | 4 27/32      | 8 1/16          | 24 11/32         | 12           | 39 7/32  | 22 5/8         | 23 1/32  | 2 3/4            | 750            |
| 400                      | 6 11/16         | 6 7/8           | 14 13/16        | 6 15/32      | 9 3/32          | 26 5/16          | 12 25/32     | 43 27/32 | 27 5/32        | 26 3/16  | 2 3/4            | 1235           |
| 500                      | 7 3/32          | 7 9/32          | 15 21/32        | 6 15/32      | 10 3/32         | 28 9/32          | 13 25/32     | 46 27/32 | 28 11/32       | 27 15/16 | 2 3/4            | 1510           |
| 600                      | 7 7/8           | 8 1/16          | 17 15/32        | 7 7/16       | 11 3/32         | 28 9/32          | 14 3/4       | 48 15/16 | 31 7/8         | 30 1/2   | 2 3/4            | 1940           |
| 700                      | 8 9/32          | 8 15/32         | 17 7/8          | 8 1/32       | 12 1/8          | 28 9/32          | 15 3/4       | 49 23/32 | 34 1/4         | 32 9/32  | 2 3/4            | 2161           |
| 800                      | 8 9/32          | 8 21/32         | 18 9/32         | 8 1/32       | 12 1/8          | 28 9/32          | 15 3/4       | 50       | 34 1/4         | 32 9/32  | 2 3/4            | 2425           |
| 900                      | 8 21/32         | 9 1/16          | 19 3/32         | 8 15/32      | 12 29/32        | 28 9/32          | 16 17/32     | 51 1/32  | 36 7/32        | 33 27/32 | 2 3/4            | 2822           |
| 1000                     | 9 7/16          | 9 7/16          | 20 9/32         | 8 15/32      | 13 3/4          | 28 9/32          | 16 17/32     | 52 19/32 | 37             | 35 7/16  | 2 3/4            | 3219           |
| 1250                     | 10 1/4          | 10 5/8          | 23 1/32         | 9 1/16       | 14 17/32        | 30 1/4           | 17 23/32     | 57 5/16  | 40 11/32       | 38 3/16  | 2 3/4            | 4387           |
| 1500                     | 11 1/32         | 11 13/32        | 24 19/32        | 9 1/16       | 14 17/32        | 32 7/32          | 17 23/32     | 61 1/4   | 40 11/32       | 39 3/4   | 2 3/4            | 5291           |

RFID CAD

\* For shackles ≥ WLL 150 t



G-4263



## Green Pin® Wide Mouth Shackles

### bow shackles with safety bolt

- **Material** : bow and pin alloy steel, Grade 8, quenched and tempered
- **Safety Factor** : MBL equals 6 x WLL
- **Finish** : hot dipped galvanized
- **Temperature Range** : -20 °C up to +200 °C
- **Certification** : 2.1 2.2 3.1 MTC<sup>a</sup> CE

| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>eye | width<br>inside | length<br>inside | width<br>bow | length  | length<br>bolt | width   | thickness<br>nut | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|--------------|-----------------|------------------|--------------|---------|----------------|---------|------------------|----------------|
| t                        | a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm      | e<br>mm         | f<br>mm          | g<br>mm      | h<br>mm | i<br>mm        | j<br>mm | k<br>mm          | kg             |
| 4.75                     | 22              | 25              | 52              | 22           | 63              | 112              | 88           | 173     | 157            | 132     | 22               | 2.08           |
| 6.5                      | 25              | 28              | 59              | 25           | 75              | 135              | 105          | 204     | 183            | 155     | 25               | 3.14           |
| 8.5                      | 28              | 32              | 66              | 28           | 82              | 148              | 115          | 225     | 205            | 171     | 27               | 4.36           |
| 9.5                      | 32              | 35              | 72              | 32           | 90              | 162              | 126          | 248     | 224            | 190     | 30               | 5.95           |
| 12                       | 35              | 38              | 79              | 35           | 100             | 180              | 140          | 274     | 245            | 210     | 33               | 7.87           |
| 16                       | 38              | 42              | 88              | 38           | 106             | 216              | 159          | 319     | 248            | 235     | 19               | 12.5           |
| 25                       | 45              | 50              | 103             | 45           | 127             | 248              | 175          | 370     | 296            | 265     | 23               | 16.7           |
| 30                       | 50              | 57              | 118             | 50           | 146             | 273              | 207          | 411     | 332            | 307     | 26               | 25             |
| 55                       | 65              | 70              | 145             | 65           | 165             | 314              | 213          | 487     | 391            | 343     | 32               | 45             |
| 75                       | 83              | 83              | 164             | 83           | 184             | 330              | 254          | 537     | 460            | 420     | 39               | 70             |

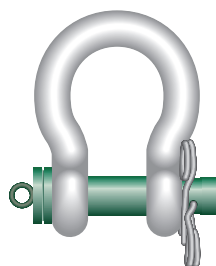
In inch

| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye  | width<br>eye     | width<br>inside  | length<br>inside | width<br>bow     | length            | length<br>bolt    | width             | thickness<br>nut | weight<br>each |
|--------------------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|------------------|----------------|
| t                        | a<br>inch       | b<br>inch       | c<br>inch        | d<br>inch        | e<br>inch        | f<br>inch        | g<br>inch        | h<br>inch         | i<br>inch         | j<br>inch         | k<br>inch        | lbs            |
| 4.75                     | $\frac{7}{8}$   | 1               | $2\frac{1}{16}$  | $\frac{7}{8}$    | $2\frac{15}{32}$ | $4\frac{13}{32}$ | $3\frac{15}{32}$ | $6\frac{13}{16}$  | $6\frac{3}{16}$   | $5\frac{3}{16}$   | $\frac{7}{8}$    | 4.59           |
| 6.5                      | 1               | $1\frac{1}{8}$  | $2\frac{5}{16}$  | $\frac{31}{32}$  | $2\frac{15}{16}$ | $5\frac{5}{16}$  | $4\frac{1}{8}$   | $8\frac{1}{32}$   | $7\frac{7}{32}$   | $6\frac{3}{32}$   | $\frac{31}{32}$  | 6.92           |
| 8.5                      | $1\frac{1}{8}$  | $1\frac{1}{4}$  | $2\frac{19}{32}$ | $1\frac{3}{32}$  | $3\frac{7}{32}$  | $5\frac{13}{16}$ | $4\frac{17}{32}$ | $8\frac{27}{32}$  | $8\frac{1}{16}$   | $6\frac{23}{32}$  | $1\frac{1}{16}$  | 9.61           |
| 9.5                      | $1\frac{3}{8}$  | $1\frac{3}{8}$  | $2\frac{27}{32}$ | $1\frac{1}{4}$   | $3\frac{17}{32}$ | $6\frac{3}{8}$   | $4\frac{31}{32}$ | $9\frac{3}{4}$    | $8\frac{13}{16}$  | $7\frac{15}{32}$  | $1\frac{3}{16}$  | 13.12          |
| 12                       | $1\frac{3}{8}$  | $1\frac{1}{2}$  | $3\frac{1}{8}$   | $1\frac{3}{8}$   | $3\frac{15}{16}$ | $7\frac{3}{32}$  | $5\frac{1}{2}$   | $10\frac{25}{32}$ | $9\frac{21}{32}$  | $8\frac{9}{32}$   | $1\frac{5}{16}$  | 17.35          |
| 16                       | $1\frac{1}{2}$  | $1\frac{5}{8}$  | $3\frac{15}{32}$ | $1\frac{1}{2}$   | $4\frac{3}{16}$  | $8\frac{1}{2}$   | $6\frac{1}{4}$   | $12\frac{9}{16}$  | $9\frac{3}{4}$    | $9\frac{1}{4}$    | $\frac{3}{4}$    | 27.56          |
| 25                       | $1\frac{3}{4}$  | 2               | $4\frac{1}{16}$  | $1\frac{25}{32}$ | 5                | $9\frac{3}{4}$   | $6\frac{7}{8}$   | $14\frac{9}{16}$  | $11\frac{21}{32}$ | $10\frac{7}{16}$  | $\frac{29}{32}$  | 36.82          |
| 30                       | 2               | $2\frac{1}{4}$  | $4\frac{21}{32}$ | $1\frac{31}{32}$ | $5\frac{3}{4}$   | $10\frac{3}{4}$  | $8\frac{5}{32}$  | $16\frac{3}{16}$  | $13\frac{1}{16}$  | $12\frac{3}{32}$  | $1\frac{1}{32}$  | 55.12          |
| 55                       | $2\frac{1}{2}$  | $2\frac{3}{4}$  | $5\frac{23}{32}$ | $2\frac{9}{16}$  | $6\frac{1}{2}$   | $12\frac{3}{8}$  | $8\frac{3}{8}$   | $19\frac{3}{16}$  | $15\frac{13}{32}$ | $13\frac{1}{2}$   | $1\frac{1}{4}$   | 105.82         |
| 75                       | $3\frac{1}{4}$  | $3\frac{1}{4}$  | $6\frac{15}{32}$ | $3\frac{9}{32}$  | $7\frac{1}{4}$   | 13               | 10               | $21\frac{5}{32}$  | $18\frac{1}{8}$   | $16\frac{17}{32}$ | $1\frac{17}{32}$ | 154.32         |

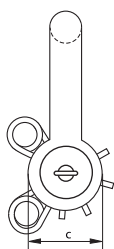
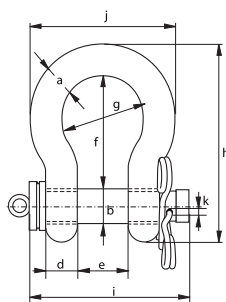
RFID CAD



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P-5363



## Green Pin® ROV Release

### release shackles with spring pins

- **Material** : bow and pin alloy steel, Grade 8, Polar quality, quenched and tempered
- **Safety factor** : MBL equals 5 x WLL
- **Finish** : body painted white, pin painted green
- **Temperature Range** : -60°C up to +200°C
- **Certification** : 2.1 2.2 3.1 MTC<sup>a</sup> CE
- **Note** : for in-line use only.  
supplied without wires; design your own wiring plan

| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>eye | width<br>inside | length<br>inside | width<br>bow | length  | length<br>bolt | width   | diameter | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|--------------|-----------------|------------------|--------------|---------|----------------|---------|----------|----------------|
| t                        | a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm      | e<br>mm         | f<br>mm          | g<br>mm      | h<br>mm | i<br>mm        | j<br>mm | k<br>mm  | kg             |
| 6.5                      | 22              | 25              | 52              | 22           | 36              | 83               | 58           | 144     | 130            | 102     | 5.5      | 1.7            |
| 9.5                      | 28              | 32              | 66              | 28           | 47              | 108              | 75           | 185     | 166            | 131     | 6.5      | 3.4            |
| 12                       | 32              | 35              | 72              | 32           | 51              | 115              | 83           | 201     | 184            | 147     | 6.5      | 4.7            |
| 17                       | 38              | 42              | 88              | 38           | 60              | 146              | 99           | 249     | 202            | 175     | 6.5      | 8              |
| 25                       | 45              | 50              | 103             | 45           | 74              | 178              | 126          | 300     | 243            | 216     | 8.5      | 13.6           |
| 35                       | 50              | 57              | 116             | 50           | 83              | 197              | 138          | 334     | 269            | 238     | 8.5      | 19.1           |
| 42.5                     | 57              | 65              | 130             | 57           | 95              | 222              | 160          | 377     | 301            | 274     | 8.5      | 28.3           |
| 55                       | 65              | 70              | 145             | 65           | 105             | 260              | 180          | 433     | 329            | 310     | 8.5      | 38             |
| 85                       | 75              | 83              | 162             | 75           | 127             | 329              | 190          | 527     | 375            | 340     | 8.5      | 60             |

In inch

| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye  | width<br>eye     | width<br>inside  | length<br>inside  | width<br>bow     | length            | length<br>bolt    | width             | diameter        | weight<br>each |
|--------------------------|-----------------|-----------------|------------------|------------------|------------------|-------------------|------------------|-------------------|-------------------|-------------------|-----------------|----------------|
| t                        | a<br>inch       | b<br>inch       | c<br>inch        | d<br>inch        | e<br>inch        | f<br>inch         | g<br>inch        | h<br>inch         | i<br>inch         | j<br>inch         | k<br>inch       | lbs            |
| 6.5                      | $\frac{7}{8}$   | 1               | $2\frac{1}{32}$  | $\frac{7}{8}$    | $1\frac{7}{16}$  | $3\frac{9}{32}$   | $2\frac{9}{32}$  | $5\frac{11}{16}$  | $5\frac{1}{8}$    | 4                 | $\frac{7}{32}$  | 3.75           |
| 9.5                      | $1\frac{1}{8}$  | $1\frac{1}{4}$  | $2\frac{19}{32}$ | $1\frac{1}{8}$   | $1\frac{7}{8}$   | $4\frac{1}{4}$    | $2\frac{15}{16}$ | $7\frac{9}{32}$   | $6\frac{17}{32}$  | $5\frac{5}{32}$   | $\frac{1}{4}$   | 7.5            |
| 12                       | $1\frac{1}{4}$  | $1\frac{3}{8}$  | $2\frac{13}{16}$ | $1\frac{9}{32}$  | 2                | $4\frac{17}{32}$  | $3\frac{9}{32}$  | $7\frac{29}{32}$  | $7\frac{1}{4}$    | $5\frac{25}{32}$  | $\frac{1}{4}$   | 10.36          |
| 17                       | $1\frac{1}{2}$  | $1\frac{5}{8}$  | $3\frac{1}{2}$   | $1\frac{17}{32}$ | $2\frac{11}{32}$ | $5\frac{3}{4}$    | $3\frac{29}{32}$ | $9\frac{13}{16}$  | $7\frac{15}{16}$  | $6\frac{7}{8}$    | $\frac{1}{4}$   | 17.64          |
| 25                       | $1\frac{3}{4}$  | 2               | $4\frac{1}{32}$  | $1\frac{25}{32}$ | $2\frac{29}{32}$ | 7                 | $4\frac{15}{16}$ | $11\frac{13}{16}$ | $9\frac{19}{32}$  | $8\frac{17}{32}$  | $\frac{11}{32}$ | 30.0           |
| 35                       | 2               | $2\frac{1}{4}$  | $4\frac{9}{16}$  | $1\frac{31}{32}$ | $3\frac{9}{32}$  | $7\frac{3}{4}$    | $5\frac{7}{16}$  | $13\frac{5}{32}$  | $10\frac{19}{32}$ | $9\frac{3}{8}$    | $\frac{11}{32}$ | 42.1           |
| 42.5                     | $2\frac{1}{4}$  | $2\frac{9}{16}$ | $5\frac{1}{8}$   | $2\frac{1}{4}$   | $3\frac{3}{4}$   | $8\frac{3}{4}$    | $6\frac{9}{32}$  | $14\frac{13}{16}$ | $11\frac{7}{8}$   | $10\frac{25}{32}$ | $\frac{11}{32}$ | 62.4           |
| 55                       | $2\frac{1}{2}$  | $2\frac{3}{4}$  | $5\frac{23}{32}$ | $2\frac{9}{16}$  | $4\frac{1}{8}$   | $10\frac{1}{4}$   | $7\frac{3}{32}$  | $17\frac{3}{32}$  | $12\frac{15}{16}$ | $12\frac{3}{16}$  | $\frac{11}{32}$ | 83.8           |
| 85                       | 3               | $3\frac{1}{4}$  | $6\frac{11}{32}$ | $2\frac{15}{16}$ | 5                | $12\frac{15}{16}$ | $7\frac{1}{2}$   | $20\frac{3}{4}$   | $14\frac{3}{4}$   | $13\frac{3}{8}$   | $\frac{11}{32}$ | 132.3          |

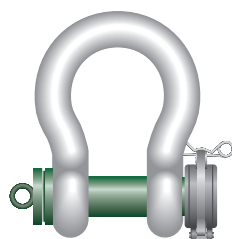
CAD INFO



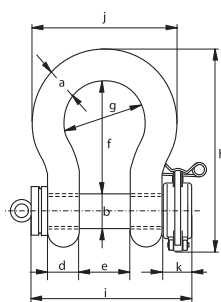
## Green Pin® ROV Shackles

### release shackles with locking clamp

- **Material** : bow and pin alloy steel, Grade 8, Polar quality, quenched and tempered
- **Safety Factor** : MBL equals 6 x WLL  
for shackles with WLL 120 t and up the MBL equals 5x WLL
- **Finish** : body painted white, pin painted green
- **Temperature Range** : -60°C up to +200°C
- **Certification** : 2.1 2.2 3.1 MTC<sup>a</sup> CE
- **Note** : supplied without wires; design your own wiring plan



P-5365



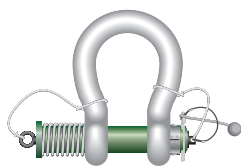
| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>eye | width<br>inside | length<br>inside | width<br>bow | length  | length<br>bolt | width   | width<br>locking<br>clamp | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|--------------|-----------------|------------------|--------------|---------|----------------|---------|---------------------------|----------------|
| t                        | a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm      | e<br>mm         | f<br>mm          | g<br>mm      | h<br>mm | i<br>mm        | j<br>mm | k<br>mm                   | kg             |
| 6.5                      | 22              | 25              | 52              | 22           | 36              | 83               | 58           | 164     | 140            | 102     | 45                        | 2.27           |
| 9.5                      | 28              | 32              | 66              | 28           | 47              | 108              | 75           | 200     | 172            | 131     | 48                        | 4.25           |
| 12                       | 32              | 35              | 72              | 32           | 51              | 115              | 83           | 213     | 184            | 147     | 48                        | 5.36           |
| 17                       | 38              | 42              | 88              | 38           | 60              | 146              | 99           | 266     | 209            | 175     | 48                        | 9.27           |
| 25                       | 45              | 50              | 103             | 45           | 74              | 178              | 126          | 309     | 243            | 216     | 48                        | 14.62          |
| 35                       | 50              | 57              | 116             | 50           | 83              | 197              | 138          | 350     | 269            | 238     | 48                        | 20.75          |
| 42.5                     | 57              | 65              | 130             | 57           | 95              | 222              | 160          | 377     | 301            | 274     | 48                        | 28.33          |
| 55                       | 65              | 70              | 145             | 65           | 105             | 260              | 180          | 440     | 329            | 310     | 48                        | 41             |
| 85                       | 75              | 83              | 162             | 75           | 127             | 329              | 190          | 527     | 375            | 340     | 48                        | 61             |
| 120                      | 95              | 95              | 208             | 91           | 147             | 400              | 238          | 647     | 440            | 428     | 60                        | 110            |
| 150                      | 105             | 108             | 238             | 102          | 169             | 410              | 275          | 688     | 490            | 485     | 60                        | 160            |
| 200                      | 120             | 130             | 279             | 113          | 179             | 513              | 290          | 838     | 520            | 530     | 60                        | 235            |
| 250                      | 130             | 140             | 299             | 118          | 205             | 554              | 305          | 904     | 560            | 565     | 60                        | 285            |

In inch

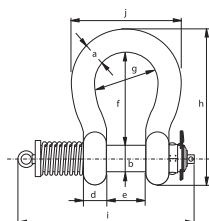
| working<br>load<br>limit | diameter<br>bow  | diameter<br>pin | diameter<br>eye   | width<br>eye     | width<br>inside  | length<br>inside  | width<br>bow      | length            | length<br>bolt    | width             | width<br>locking<br>clamp | weight<br>each |
|--------------------------|------------------|-----------------|-------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------------|----------------|
| t                        | a<br>inch        | b<br>inch       | c<br>inch         | d<br>inch        | e<br>inch        | f<br>inch         | g<br>inch         | h<br>inch         | i<br>inch         | j<br>inch         | k<br>inch                 | lbs            |
| 6.5                      | $\frac{7}{8}$    | 1               | $2\frac{1}{32}$   | $\frac{7}{8}$    | $1\frac{7}{16}$  | $3\frac{9}{32}$   | $2\frac{9}{32}$   | $6\frac{7}{16}$   | $5\frac{17}{32}$  | 4                 | $1\frac{25}{32}$          | 5.00           |
| 9.5                      | $1\frac{1}{8}$   | $1\frac{1}{4}$  | $2\frac{19}{32}$  | $1\frac{1}{8}$   | $1\frac{7}{8}$   | $4\frac{1}{4}$    | $2\frac{15}{16}$  | $7\frac{7}{8}$    | $6\frac{3}{4}$    | $5\frac{5}{32}$   | $1\frac{29}{32}$          | 9.37           |
| 12                       | $1\frac{1}{4}$   | $1\frac{3}{8}$  | $2\frac{13}{16}$  | $1\frac{9}{32}$  | 2                | $4\frac{17}{32}$  | $3\frac{9}{32}$   | $8\frac{3}{8}$    | $7\frac{1}{4}$    | $5\frac{25}{32}$  | $1\frac{29}{32}$          | 11.82          |
| 17                       | $1\frac{1}{2}$   | $1\frac{5}{8}$  | $3\frac{1}{2}$    | $1\frac{17}{32}$ | $2\frac{11}{32}$ | $5\frac{3}{4}$    | $3\frac{29}{32}$  | $10\frac{1}{2}$   | $8\frac{1}{4}$    | $6\frac{7}{8}$    | $1\frac{29}{32}$          | 20.44          |
| 25                       | $1\frac{3}{4}$   | 2               | $4\frac{1}{32}$   | $1\frac{25}{32}$ | $2\frac{29}{32}$ | 7                 | $4\frac{15}{16}$  | $12\frac{5}{32}$  | $9\frac{19}{32}$  | $8\frac{17}{32}$  | $1\frac{29}{32}$          | 32.23          |
| 35                       | 2                | $2\frac{1}{4}$  | $4\frac{9}{16}$   | $1\frac{31}{32}$ | $3\frac{9}{32}$  | $7\frac{3}{4}$    | $5\frac{7}{16}$   | $13\frac{25}{32}$ | $10\frac{19}{32}$ | $9\frac{3}{8}$    | $1\frac{29}{32}$          | 45.75          |
| 42.5                     | $2\frac{1}{4}$   | $2\frac{9}{16}$ | $5\frac{1}{8}$    | $2\frac{1}{4}$   | $3\frac{3}{4}$   | $8\frac{3}{4}$    | $6\frac{9}{32}$   | $14\frac{13}{16}$ | $11\frac{7}{8}$   | $10\frac{25}{32}$ | $1\frac{29}{32}$          | 62.5           |
| 55                       | $2\frac{1}{2}$   | $2\frac{3}{4}$  | $5\frac{23}{32}$  | $2\frac{9}{16}$  | $4\frac{1}{8}$   | $10\frac{1}{4}$   | $7\frac{3}{32}$   | $17\frac{11}{32}$ | $12\frac{15}{16}$ | $12\frac{3}{16}$  | $1\frac{29}{32}$          | 90.4           |
| 85                       | 3                | $3\frac{1}{4}$  | $6\frac{11}{32}$  | $2\frac{15}{16}$ | 5                | $12\frac{15}{16}$ | $7\frac{1}{2}$    | $20\frac{3}{4}$   | $14\frac{3}{4}$   | $13\frac{3}{8}$   | $1\frac{29}{32}$          | 134.5          |
| 120                      | $3\frac{3}{4}$   | $3\frac{3}{4}$  | $8\frac{3}{16}$   | $3\frac{19}{32}$ | $5\frac{25}{32}$ | $15\frac{3}{4}$   | $9\frac{3}{8}$    | $25\frac{1}{2}$   | $17\frac{11}{32}$ | $16\frac{7}{8}$   | $2\frac{11}{32}$          | 243            |
| 150                      | $4\frac{1}{8}$   | $4\frac{1}{4}$  | $9\frac{3}{8}$    | 4                | $6\frac{5}{8}$   | $16\frac{5}{32}$  | $10\frac{13}{16}$ | $27\frac{3}{32}$  | $19\frac{5}{16}$  | $19\frac{1}{8}$   | $2\frac{11}{32}$          | 353            |
| 200                      | $4\frac{23}{32}$ | $5\frac{1}{8}$  | 11                | $4\frac{7}{16}$  | $7\frac{1}{32}$  | $20\frac{3}{16}$  | $11\frac{7}{16}$  | 33                | $20\frac{1}{2}$   | $20\frac{7}{8}$   | $2\frac{11}{32}$          | 518            |
| 250                      | $5\frac{1}{8}$   | $5\frac{1}{2}$  | $11\frac{25}{32}$ | $4\frac{5}{8}$   | $8\frac{3}{32}$  | $21\frac{13}{16}$ | 12                | $35\frac{19}{32}$ | $22\frac{1}{32}$  | $22\frac{1}{4}$   | $2\frac{11}{32}$          | 628            |

CAD INFO





P-5367



## Green Pin® ROV Shackles

### spring release shackles

- **Material** : bow and pin alloy steel, Grade 8, Polar quality, quenched and tempered
- **Safety factor** : MBL equals 5 x WLL
- **Finish** : body painted white, pin painted green
- **Temperature Range** : -40°C up to +200°C
- **Certification** : 2.1 2.2 3.1 MTC<sup>a</sup> CE
- **Note** : for in-line use only.  
this shackle is assembled with wire rope slings and monkey's fist  
for size starting from WLL 42.5 up to and including 150 t a special compression  
tool (sold separately) is required to assemble the shackle.

| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>eye | width<br>inside | length<br>inside | width<br>bow | length  | length<br>bolt | width   | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|--------------|-----------------|------------------|--------------|---------|----------------|---------|----------------|
| t                        | a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm      | e<br>mm         | f<br>mm          | g<br>mm      | h<br>mm | i<br>mm        | j<br>mm | kg             |
| 12                       | 32              | 35              | 72              | 32           | 51              | 115              | 83           | 201     | 291            | 147     | 5.24           |
| 13.5                     | 35              | 38              | 80              | 35           | 57              | 133              | 92           | 227     | 301            | 162     | 7              |
| 17                       | 38              | 42              | 88              | 38           | 60              | 146              | 99           | 249     | 360            | 175     | 9.25           |
| 25                       | 45              | 50              | 103             | 45           | 74              | 178              | 126          | 300     | 370            | 216     | 15.5           |
| 35                       | 50              | 57              | 116             | 50           | 83              | 197              | 138          | 334     | 400            | 238     | 20.4           |
| 42.5                     | 57              | 65              | 130             | 57           | 95              | 222              | 160          | 377     | 460            | 274     | 39             |
| 55                       | 65              | 70              | 145             | 65           | 105             | 260              | 180          | 433     | 490            | 310     | 42             |
| 85                       | 75              | 83              | 162             | 75           | 127             | 329              | 190          | 527     | 587            | 340     | 67             |
| 120                      | 95              | 95              | 208             | 91           | 147             | 399              | 238          | 646     | 687            | 428     | 123            |
| 150                      | 105             | 108             | 238             | 102          | 169             | 410              | 275          | 688     | 727            | 485     | 168            |

In inch

| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>eye | width<br>inside | length<br>inside | width<br>bow | length   | length<br>bolt | width    | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|--------------|-----------------|------------------|--------------|----------|----------------|----------|----------------|
| t                        | inch            | inch            | inch            | inch         | inch            | inch             | inch         | inch     | inch           | inch     | lbs            |
| 12                       | 1 1/4           | 1 3/8           | 2 13/16         | 1 9/32       | 2               | 4 17/32          | 3 9/32       | 7 29/32  | 11 1/2         | 5 25/32  | 11.55          |
| 13.5                     | 1 3/8           | 1 1/2           | 3 5/32          | 1 3/8        | 2 1/4           | 5 1/4            | 3 5/8        | 8 15/16  | 11 7/8         | 6 11/32  | 15.43          |
| 17                       | 1 1/2           | 1 5/8           | 3 1/2           | 1 17/32      | 2 11/32         | 5 3/4            | 3 29/32      | 9 13/16  | 14 5/32        | 6 7/8    | 20.39          |
| 25                       | 1 3/4           | 2               | 4 1/32          | 1 25/32      | 2 29/32         | 7                | 4 15/16      | 11 13/16 | 14 9/16        | 8 17/32  | 34.2           |
| 35                       | 2               | 2 1/4           | 4 9/16          | 1 31/32      | 3 9/32          | 7 3/4            | 5 7/16       | 13 5/32  | 15 3/4         | 9 3/8    | 45             |
| 42.5                     | 2 1/4           | 2 9/16          | 5 1/8           | 2 1/4        | 3 3/4           | 8 3/4            | 6 9/32       | 14 13/16 | 18 1/8         | 10 25/32 | 86             |
| 55                       | 2 1/2           | 2 3/4           | 5 23/32         | 2 9/16       | 4 1/8           | 10 1/4           | 7 3/32       | 17 3/32  | 19 5/16        | 12 3/16  | 92.6           |
| 85                       | 3               | 3 1/4           | 6 11/32         | 2 15/16      | 5               | 12 15/16         | 7 1/2        | 20 3/4   | 23 1/8         | 13 3/8   | 147.7          |
| 120                      | 3 3/4           | 3 3/4           | 8 3/16          | 3 19/32      | 5 25/32         | 15 23/32         | 9 3/8        | 25 7/16  | 27 1/32        | 16 7/8   | 271            |
| 150                      | 4 1/8           | 4 1/4           | 9 3/8           | 4            | 6 5/8           | 16 5/32          | 10 13/16     | 27 3/32  | 28 19/32       | 19 1/8   | 370            |

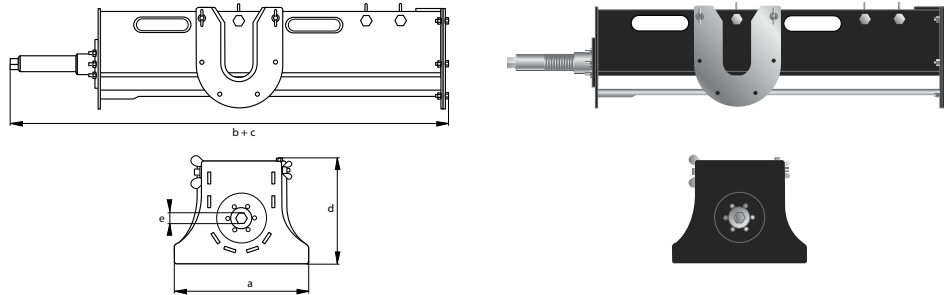
CAD INFO



## Compression Tool for ROV spring release shackles

- **Material** : mild steel
- **Finish** : black painted
- **Note** : required for ROV spring release shackle (type P-5367), for sizes WLL 42.5 t and up
- **Certification** : 2.1

P-5368



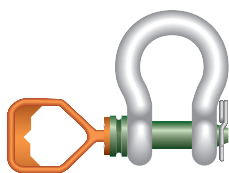
| for<br>shackle<br>WLL | diameter<br>bow | diameter<br>pin | width   | length<br>closed<br>position | length<br>opened<br>position | height  | width   | weight<br>each |
|-----------------------|-----------------|-----------------|---------|------------------------------|------------------------------|---------|---------|----------------|
| t                     | a<br>mm         | b<br>mm         | a<br>mm | b<br>mm                      | c<br>mm                      | d<br>mm | e<br>mm | kg             |
| 42.5                  | 57              | 65              |         |                              |                              |         |         |                |
| 55                    | 65              | 70              | 300     | 1000                         | 1500                         | 225     | 24      | 34             |
| 85                    | 75              | 83              |         |                              |                              |         |         |                |
| 120                   | 95              | 95              | 340     | 1100                         | 1750                         | 285     | 24      | 42             |
| 150                   | 105             | 108             |         |                              |                              |         |         |                |

In inch

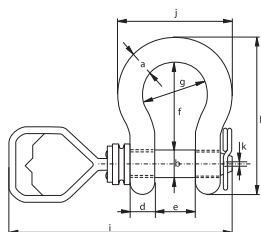
| for<br>shackle<br>WLL | diameter<br>bow | diameter<br>pin | width     | length<br>closed<br>position | length<br>opened<br>position | height    | width     | weight<br>each |
|-----------------------|-----------------|-----------------|-----------|------------------------------|------------------------------|-----------|-----------|----------------|
| t                     | a<br>inch       | b<br>inch       | a<br>inch | b<br>inch                    | c<br>inch                    | d<br>inch | e<br>inch | lbs            |
| 42.5                  | 2 1/4           | 2 9/16          |           |                              |                              |           |           |                |
| 55                    | 2 1/2           | 2 3/4           | 11 13/16  | 39 3/8                       | 59 1/16                      | 8 7/8     | 15/16     | 75             |
| 85                    | 3               | 3 1/4           |           |                              |                              |           |           |                |
| 120                   | 3 3/4           | 3 3/4           | 13 3/8    | 43 5/16                      | 68 29/32                     | 11 1/4    | 15/16     | 92.6           |
| 150                   | 4 1/8           | 4 1/4           |           |                              |                              |           |           |                |



Watch the DEMO on our **You Tube** channel



P-5361D



## Green Pin® ROV Shackles

### release & retrieve shackles with tapered pin and D-handle

- **Material** : bow and pin alloy steel, Grade 8, Polar quality, quenched and tempered
- **Safety factor** : MBL equals 5 x WLL
- **Finish** : body painted white, pin painted green
- **Temperature Range** : -60°C up to +200°C
- **Certification** : 2.1 2.2 3.1 MTC<sup>a</sup> CE
- **Note** : supplied without wires; design your own wiring plan

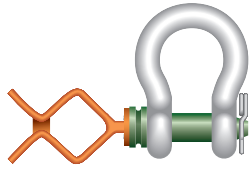
| working load limit | diameter bow | diameter pin | diameter eye | width eye | width inside | length inside | width bow | length | length bolt | width | diameter | weight each |
|--------------------|--------------|--------------|--------------|-----------|--------------|---------------|-----------|--------|-------------|-------|----------|-------------|
| tons               | a            | b            | c            | d         | e            | f             | g         | h      | i           | j     | k        | kg          |
| 6.5                | 22           | 25           | 52           | 22        | 36           | 83            | 58        | 144    | 345         | 102   | 3.5      | 1.50        |
| 9.5                | 28           | 32           | 66           | 28        | 47           | 108           | 75        | 185    | 381         | 131   | 5.5      | 3.16        |
| 12                 | 32           | 35           | 72           | 32        | 51           | 115           | 83        | 201    | 393         | 147   | 6.5      | 4.31        |
| 17                 | 38           | 42           | 88           | 38        | 60           | 146           | 99        | 249    | 417         | 175   | 8.5      | 7.43        |
| 25                 | 45           | 50           | 103          | 45        | 74           | 178           | 126       | 300    | 464         | 216   | 8.5      | 12.84       |
| 35                 | 50           | 57           | 111          | 50        | 83           | 197           | 138       | 331    | 484         | 238   | 8.5      | 18.15       |
| 42.5               | 57           | 65           | 130          | 57        | 95           | 222           | 160       | 377    | 516         | 274   | 7.5      | 26.29       |
| 55                 | 65           | 70           | 145          | 65        | 105          | 260           | 180       | 433    | 545         | 310   | 7.5      | 37.60       |

In inch

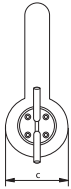
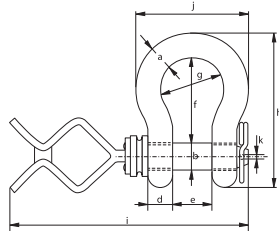
| working load limit | diameter bow | diameter pin | diameter eye | width eye | width inside | length inside | width bow | length   | length bolt | width    | diameter | weight each |
|--------------------|--------------|--------------|--------------|-----------|--------------|---------------|-----------|----------|-------------|----------|----------|-------------|
| tons               | a            | b            | c            | d         | e            | f             | g         | h        | i           | j        | k        | kg          |
| 6.5                | 7/8          | 1            | 2 1/16       | 7/8       | 1 7/16       | 3 9/32        | 2 9/32    | 5 21/32  | 13 19/32    | 4 1/32   | 1/8      | 3.31        |
| 9.5                | 1 1/8        | 1 1/4        | 2 19/32      | 1 1/8     | 1 7/8        | 4 1/4         | 2 15/16   | 7 9/32   | 15          | 5 5/32   | 7/32     | 6.97        |
| 12                 | 1 1/4        | 1 3/8        | 2 27/32      | 1 9/32    | 2            | 4 17/32       | 3 9/32    | 7 29/32  | 15 15/32    | 5 25/32  | 1/4      | 9.49        |
| 17                 | 1 1/2        | 1 5/8        | 3 15/32      | 1 17/32   | 2 11/32      | 5 3/4         | 3 29/32   | 9 13/16  | 16 13/32    | 6 7/8    | 11/32    | 16.37       |
| 25                 | 1 3/4        | 2            | 4 1/16       | 1 25/32   | 2 29/32      | 7             | 4 15/16   | 11 13/16 | 18 9/32     | 8 1/2    | 11/32    | 28.31       |
| 35                 | 2            | 2 1/4        | 4 3/8        | 1 31/32   | 3 9/32       | 7 3/4         | 5 7/16    | 13 1/32  | 19 1/16     | 9 3/8    | 11/32    | 40.01       |
| 42.5               | 2 1/4        | 2 9/16       | 5 1/8        | 2 1/4     | 3 3/4        | 8 3/4         | 6 9/32    | 14 27/32 | 20 5/16     | 10 25/32 | 9/32     | 57.96       |
| 55                 | 2 1/2        | 2 3/4        | 5 23/32      | 2 9/16    | 4 1/8        | 10 1/4        | 7 9/32    | 17 1/16  | 21 15/32    | 12 7/32  | 9/32     | 82.89       |

INFO





P-5361F



## Green Pin® ROV Shackles

### release & retrieve shackles with tapered pin and fishtail-handle

- **Material** : bow and pin alloy steel, Grade 8, Polar quality, quenched and tempered
- **Safety factor** : MBL equals 5 x WLL
- **Finish** : body painted white, pin painted green
- **Temperature Range** : -60°C up to +200°C
- **Certification** : 2.1 2.2 3.1 MTC<sup>a</sup> CE
- **Note** : supplied without wires; design your own wiring plan

| working load limit | diameter bow | diameter pin | diameter eye | width eye | width inside | length inside | width bow | length bow | length bolt | width | diameter | weight each |
|--------------------|--------------|--------------|--------------|-----------|--------------|---------------|-----------|------------|-------------|-------|----------|-------------|
| tons               | a            | b            | c            | d         | e            | f             | g         | h          | i           | j     | k        | kg          |
| 6.5                | 22           | 25           | 52           | 22        | 36           | 83            | 58        | 144        | 419         | 102   | 3.5      | 1.50        |
| 9.5                | 28           | 32           | 66           | 28        | 47           | 108           | 75        | 185        | 455         | 131   | 5.5      | 3.16        |
| 12                 | 32           | 35           | 72           | 32        | 51           | 115           | 83        | 201        | 467         | 147   | 6.5      | 4.31        |
| 17                 | 38           | 42           | 88           | 38        | 60           | 146           | 99        | 249        | 491         | 175   | 8.5      | 7.43        |
| 25                 | 45           | 50           | 103          | 45        | 74           | 178           | 126       | 300        | 538         | 216   | 8.5      | 12.84       |
| 35                 | 50           | 57           | 111          | 50        | 83           | 197           | 138       | 331        | 558         | 238   | 8.5      | 18.15       |
| 42.5               | 57           | 65           | 130          | 57        | 95           | 222           | 160       | 377        | 590         | 274   | 7.5      | 26.29       |
| 55                 | 65           | 70           | 145          | 65        | 105          | 260           | 180       | 433        | 619         | 310   | 7.5      | 37.60       |

In inch

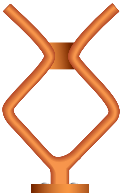
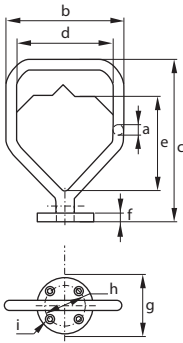
| working load limit | diameter bow | diameter pin | diameter eye | width eye | width inside | length inside | width bow | length bow | length bolt | width    | diameter | weight each |
|--------------------|--------------|--------------|--------------|-----------|--------------|---------------|-----------|------------|-------------|----------|----------|-------------|
| tons               | a            | b            | c            | d         | e            | f             | g         | h          | i           | j        | k        | kg          |
| 6.5                | 7/8          | 1            | 2 1/16       | 7/8       | 1 7/16       | 3 9/32        | 2 9/32    | 5 21/32    | 16 1/2      | 4 1/32   | 1/8      | 3.31        |
| 9.5                | 1 1/8        | 1 1/4        | 2 19/32      | 1 1/8     | 1 7/8        | 4 1/4         | 2 15/16   | 7 9/32     | 17 29/32    | 5 5/32   | 7/32     | 6.97        |
| 12                 | 1 1/4        | 1 3/8        | 2 27/32      | 1 9/32    | 2            | 4 17/32       | 3 9/32    | 7 29/32    | 18 3/8      | 5 25/32  | 1/4      | 9.49        |
| 17                 | 1 1/2        | 1 5/8        | 3 15/32      | 1 17/32   | 2 11/32      | 5 3/4         | 3 29/32   | 9 13/16    | 19 11/32    | 6 7/8    | 11/32    | 16.37       |
| 25                 | 1 3/4        | 2            | 4 1/16       | 1 25/32   | 2 29/32      | 7             | 4 15/16   | 11 13/16   | 21 3/16     | 8 1/2    | 11/32    | 28.31       |
| 35                 | 2            | 2 1/4        | 4 3/8        | 1 31/32   | 3 9/32       | 7 3/4         | 5 7/16    | 13 1/32    | 21 31/32    | 9 3/8    | 11/32    | 40.01       |
| 42.5               | 2 1/4        | 2 9/16       | 5 1/8        | 2 1/4     | 3 3/4        | 8 3/4         | 6 9/32    | 14 27/32   | 23 7/32     | 10 25/32 | 9/32     | 57.96       |
| 55                 | 2 1/2        | 2 3/4        | 5 23/32      | 2 9/16    | 4 1/8        | 10 1/4        | 7 9/32    | 17 1/16    | 24 3/8      | 12 7/32  | 9/32     | 82.89       |

INFO

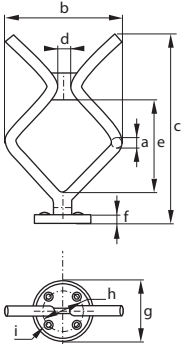




P-5396D



P-5396F



Green Pin® D-handle

- Material : casted steel
- Finish : painted orange
- Certification : 2.1

| diameter | width | length | width | length inside | thickness | diameter | diameter | diameter | weight each |
|----------|-------|--------|-------|---------------|-----------|----------|----------|----------|-------------|
| a        | b     | c      | d     | e             | f         | g        | h        | i        | kg          |
| mm       | mm    | mm     | mm    | mm            | mm        | mm       | mm       | mm       |             |
| 19       | 153   | 215    | 115   | 110           | 10        | 70       | 48       | 8.5      | 1.70        |

In inch

| diameter | width  | length  | width   | length inside | thickness | diameter | diameter | diameter | weight each |
|----------|--------|---------|---------|---------------|-----------|----------|----------|----------|-------------|
| a        | b      | c       | d       | e             | f         | g        | h        | i        | kg          |
| mm       | mm     | mm      | mm      | mm            | mm        | mm       | mm       | mm       |             |
| 3/4      | 6 1/32 | 8 15/32 | 4 17/32 | 4 11/32       | 13/32     | 2 3/4    | 1 7/8    | 11/32    | 3.75        |

Green Pin® Fishtail-handle

- Material : casted steel
- Finish : painted orange
- Certification : 2.1

| diameter | width | length | width | length inside | thickness | diameter | diameter | diameter | weight each |
|----------|-------|--------|-------|---------------|-----------|----------|----------|----------|-------------|
| a        | b     | c      | d     | e             | f         | g        | h        | i        | kg          |
| mm       | mm    | mm     | mm    | mm            | mm        | mm       | mm       | mm       |             |
| 19       | 178   | 289    | 21    | 133           | 10        | 70       | 48       | 8.5      | 1.92        |

In inch

| diameter | width | length | width | length inside | thickness | diameter | diameter | diameter | weight each |
|----------|-------|--------|-------|---------------|-----------|----------|----------|----------|-------------|
| a        | b     | c      | d     | e             | f         | g        | h        | i        | kg          |
| mm       | mm    | mm     | mm    | mm            | mm        | mm       | mm       | mm       |             |
| 3/4      | 7     | 11 3/8 | 13/16 | 5 1/4         | 13/32     | 2 3/4    | 1 7/8    | 11/32    | 4.23        |



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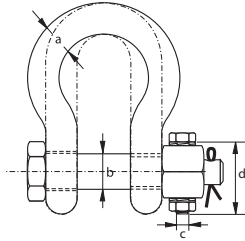
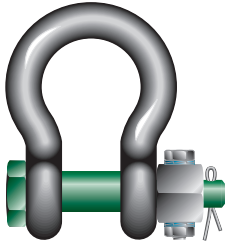
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## Green Pin® Fixed Nut Shackles

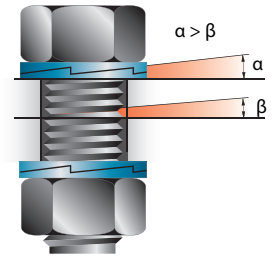
Shackles can also be used in more permanent constructions.

These can be subject to dynamic loads and/or extreme vibrations. In such applications there is a risk that, over time, the nut starts moving over the thread. To avoid this risk we offer our range of Green Pin® Fixed Nut Shackles.

Green Pin® Standard, Polar and Super shackles can be equipped with an extra AISI 316 securing bolt which is drilled through the nut and shackle pin.

This securing bolt is fastened with two sets of Nord-Lock® washers and a securing nut. This will keep the shackle nut in position. The Nord-Lock wedge-locking washers lock when subjected to extreme vibration or dynamic loads.

Green Pin® Fixed Nut Shackles are available on request.



### Green Pin® Fixed Nut Shackles

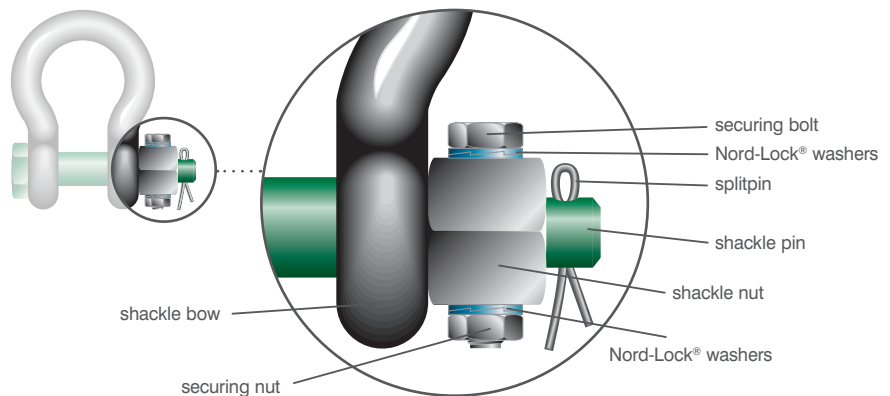
G-4143 - Green Pin® Fixed Nut Standard Shackles, bow shackles with safety bolt and fixed nut

G-4133 - Green Pin® Fixed Nut Standard Shackles, dee shackles with safety bolt and fixed nut

G-5143 - Green Pin® Fixed Nut Polar Shackles, bow shackles with safety bolt and fixed nut

G-5243 - Green Pin® Fixed Nut Super Shackles, bow shackles with safety bolt and fixed nut

| G-4143<br>Safety bow<br>WLL | G-4133<br>Safety dee<br>WLL | G-5143<br>Polar<br>WLL | G-5243<br>Super<br>WLL | diameter<br>body | diameter<br>pin | securing<br>bolt<br>thread | securing<br>bolt<br>length | torque |
|-----------------------------|-----------------------------|------------------------|------------------------|------------------|-----------------|----------------------------|----------------------------|--------|
| t                           | t                           | t                      | t                      | a<br>mm          | b<br>mm         | c<br>mm                    | d<br>mm                    | Nm     |
| 2                           | 2                           | 2                      | 3.3                    | 13.5             | 16              | M6                         | 35                         | 9.2    |
| 3.25                        | 3.25                        | 3.25                   | 5                      | 16               | 19              | M6                         | 40                         | 9.2    |
| 4.75                        | 4.75                        | 4.75                   | 7                      | 19               | 22              | M6                         | 45                         | 9.2    |
| 6.5                         | 6.5                         | 6.5                    | 9.5                    | 22               | 25              | M8                         | 50                         | 22     |
| 8.5                         | 8.5                         | 8.5                    | 12.5                   | 25               | 28              | M8                         | 55                         | 22     |
| 9.5                         | 9.5                         | 9.5                    | 15                     | 28               | 32              | M10                        | 60                         | 43     |
| 12                          | 12                          | 12                     | 18                     | 32               | 35              | M10                        | 65                         | 43     |
| 13.5                        | 13.5                        | 13.5                   | 21                     | 35               | 38              | M10                        | 70                         | 43     |
| 17                          | 17                          | 17                     | 30                     | 38               | 42              | M8                         | 75                         | 22     |
| 25                          | 25                          | 25                     | 40                     | 45               | 50              | M8                         | 90                         | 22     |
| 35                          | 35                          | 35                     | 55                     | 50               | 57              | M10                        | 100                        | 43     |
|                             |                             |                        |                        | 57               | 57              | M10                        | 100                        | 43     |
| 42.5                        | 42.5                        | 42.5                   |                        | 57               | 65              | M12                        | 110                        | 75     |
| 55                          | 55                          | 55                     |                        | 65               | 70              | M12                        | 120                        | 75     |
|                             |                             |                        | 85                     | 70               | 70              | M12                        | 120                        | 75     |
| 85                          | 85                          | 85                     |                        | 75               | 83              | M12                        | 140                        | 75     |
|                             |                             |                        | 120                    | 83               | 83              | M12                        | 140                        | 75     |



## Green Pin® Shackles with RFID

All lifting equipment requires regular inspection. Tracking and filing reports on paper can be a time consuming task. Van Beest now offers a solution with an easily accessible RFID (Radio Frequency Identification) chip in our range of Green Pin® Shackles.

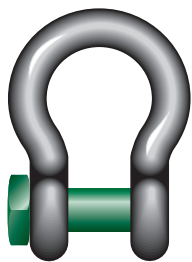
This RFID chip responds to a radio-signal that is transmitted by a reader. Each chip has a unique number and this number links the individual shackle to a record in an inspection management system.

The chips are impact resistant and durable and they are countersunk into the end of the shackle pin. The chips are NFC (Near Field Communication) compatible, allowing users to scan, identify and track the shackles with the latest generation of NFC compatible smartphones.

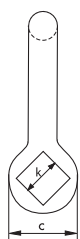
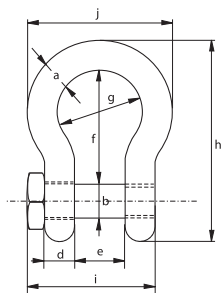
Van Beest offers the option of RFID implementation in all Green Pin® shackles with a minimum pin diameter of 28mm.



**RF Protocol** : ISO 15693  
**Operating Frequency** : HF – 13.56 MHz



G-4164



## Green Pin® Trawling Shackles

### bow shackles with square headed screw pin

- **Material** : bow and pin high tensile steel, Grade 6, quenched and tempered
- **Safety Factor** : MBL equals 6 x WLL
- **Standard** : EN 13889 and  
meets performance requirements of US Fed. Spec. RR-C-271, Grade A
- **Finish** : hot dipped galvanized
- **Certification** : 2.1 2.2 3.1 MTC<sup>a</sup> CE

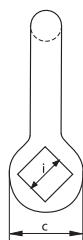
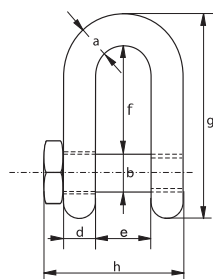
| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>eye | width<br>inside | length<br>inside | width<br>bow | length | length<br>bolt | width | width<br>bolt<br>head | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|--------------|-----------------|------------------|--------------|--------|----------------|-------|-----------------------|----------------|
| t                        | a               | b               | c               | d            | e               | f                | g            | h      | i              | j     | k                     | kg             |
| mm                       | mm              | mm              | mm              | mm           | mm              | mm               | mm           | mm     | mm             | mm    | mm                    | mm             |
| 2                        | 13.5            | 16              | 34              | 13           | 22              | 51               | 32           | 89     | 57.5           | 58    | 22                    | 0.34           |
| 3.25                     | 16              | 19              | 40              | 16           | 27              | 64               | 43           | 110    | 71             | 75    | 27                    | 0.63           |
| 4.75                     | 19              | 22              | 46              | 19           | 31              | 76               | 51           | 129    | 82             | 89    | 32                    | 1              |
| 6.5                      | 22              | 25              | 52              | 22           | 36              | 83               | 58           | 144    | 93             | 102   | 32                    | 1.44           |
| 8.5                      | 25              | 28              | 59              | 25           | 43              | 95               | 68           | 164    | 108            | 118   | 36                    | 2.21           |
| 9.5                      | 28              | 32              | 66              | 28           | 47              | 108              | 75           | 185    | 120            | 131   | 41                    | 3.18           |
| 12                       | 32              | 35              | 72              | 32           | 51              | 115              | 83           | 201    | 137            | 147   | 50                    | 4.32           |
| 13.5                     | 35              | 38              | 80              | 35           | 57              | 133              | 92           | 227    | 149            | 162   | 50                    | 5.67           |
| 17                       | 38              | 42              | 88              | 38           | 60              | 146              | 99           | 249    | 164            | 175   | 60                    | 7.36           |
| 25                       | 45              | 50              | 103             | 45           | 74              | 178              | 126          | 300    | 192            | 216   | 60                    | 12.38          |

In inch

| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye  | width<br>eye     | width<br>inside  | length<br>inside | width<br>bow     | length            | length<br>bolt   | width            | width<br>bolt<br>head | weight<br>each |
|--------------------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|-------------------|------------------|------------------|-----------------------|----------------|
| t                        | a               | b               | c                | d                | e                | f                | g                | h                 | i                | j                | k                     | lbs            |
| inch                     | inch            | inch            | inch             | inch             | inch             | inch             | inch             | inch              | inch             | inch             | inch                  | inch           |
| 2                        | $\frac{1}{2}$   | $\frac{5}{8}$   | $1\frac{11}{32}$ | $\frac{1}{2}$    | $\frac{7}{8}$    | 2                | $1\frac{1}{4}$   | $3\frac{1}{2}$    | $2\frac{1}{4}$   | $2\frac{9}{32}$  | $\frac{7}{8}$         | 0.75           |
| 3.25                     | $\frac{5}{8}$   | $\frac{3}{4}$   | $1\frac{9}{16}$  | $\frac{5}{8}$    | $1\frac{1}{16}$  | $2\frac{17}{32}$ | $1\frac{11}{16}$ | $4\frac{11}{32}$  | $2\frac{25}{32}$ | $2\frac{15}{16}$ | $1\frac{1}{16}$       | 1.39           |
| 4.75                     | $\frac{3}{4}$   | $\frac{7}{8}$   | $1\frac{13}{16}$ | $\frac{3}{4}$    | $1\frac{7}{32}$  | 3                | 2                | $5\frac{3}{32}$   | $3\frac{7}{32}$  | $3\frac{1}{2}$   | $1\frac{1}{4}$        | 2.21           |
| 6.5                      | $\frac{7}{8}$   | 1               | $2\frac{1}{16}$  | $\frac{7}{8}$    | $1\frac{13}{32}$ | $3\frac{9}{32}$  | $2\frac{9}{32}$  | $5\frac{21}{32}$  | $3\frac{21}{32}$ | $4\frac{1}{32}$  | $1\frac{1}{4}$        | 3.17           |
| 8.5                      | 1               | $1\frac{1}{8}$  | $2\frac{5}{16}$  | $\frac{31}{32}$  | $1\frac{11}{16}$ | $3\frac{3}{4}$   | $2\frac{11}{16}$ | $6\frac{15}{32}$  | $4\frac{1}{4}$   | $4\frac{21}{32}$ | $1\frac{13}{32}$      | 4.86           |
| 9.5                      | $1\frac{1}{8}$  | $1\frac{1}{4}$  | $2\frac{19}{32}$ | $1\frac{3}{32}$  | $1\frac{27}{32}$ | $4\frac{1}{4}$   | $2\frac{15}{16}$ | $7\frac{9}{32}$   | $4\frac{23}{32}$ | $5\frac{5}{32}$  | $1\frac{5}{8}$        | 7.01           |
| 12                       | $1\frac{1}{4}$  | $1\frac{3}{8}$  | $2\frac{27}{32}$ | $1\frac{1}{4}$   | 2                | $4\frac{17}{32}$ | $3\frac{9}{32}$  | $7\frac{29}{32}$  | $5\frac{13}{32}$ | $5\frac{25}{32}$ | $1\frac{31}{32}$      | 9.52           |
| 13.5                     | $1\frac{3}{8}$  | $1\frac{1}{2}$  | $3\frac{5}{32}$  | $1\frac{3}{8}$   | $2\frac{1}{4}$   | $5\frac{1}{4}$   | $3\frac{5}{8}$   | $8\frac{15}{16}$  | $5\frac{7}{8}$   | $6\frac{3}{8}$   | $1\frac{31}{32}$      | 12.49          |
| 17                       | $1\frac{1}{2}$  | $1\frac{5}{8}$  | $3\frac{15}{32}$ | $1\frac{1}{2}$   | $2\frac{3}{8}$   | $5\frac{3}{4}$   | $3\frac{29}{32}$ | $9\frac{13}{16}$  | $6\frac{15}{32}$ | $6\frac{7}{8}$   | $2\frac{3}{8}$        | 16.23          |
| 25                       | $1\frac{3}{4}$  | 2               | $4\frac{1}{16}$  | $1\frac{25}{32}$ | $2\frac{29}{32}$ | 7                | $4\frac{31}{32}$ | $11\frac{13}{26}$ | $7\frac{9}{16}$  | $8\frac{1}{2}$   | $2\frac{3}{8}$        | 27.29          |



G-4154



## Green Pin® Trawling Shackles

### dee shackles with square headed screw pin

- **Material** : bow and pin high tensile steel, Grade 6, quenched and tempered
- **Safety Factor** : MBL equals 6 x WLL
- **Standard** : EN 13889 and  
meets performance requirements of US Fed. Spec. RR-C-271, Grade A
- **Finish** : hot dipped galvanized
- **Certification** : 2.1 2.2 3.1 MTC<sup>a</sup> CE

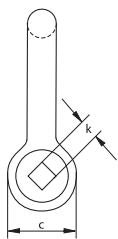
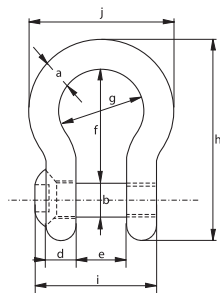
| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>eye | width<br>inside | length<br>inside | length  | length<br>bolt | width<br>bolt<br>head | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|--------------|-----------------|------------------|---------|----------------|-----------------------|----------------|
| t                        | a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm      | e<br>mm         | f<br>mm          | g<br>mm | h<br>mm        | i<br>mm               | kg             |
| 2                        | 13.5            | 16              | 34              | 13           | 22              | 43               | 81      | 57.5           | 22                    | 0.32           |
| 3.25                     | 16              | 19              | 40              | 16           | 27              | 51               | 97      | 71             | 27                    | 0.58           |
| 4.75                     | 19              | 22              | 46              | 19           | 31              | 59               | 112     | 82             | 32                    | 0.92           |
| 6.5                      | 22              | 25              | 52              | 22           | 36              | 73               | 134     | 93             | 32                    | 1.33           |
| 8.5                      | 25              | 28              | 59              | 25           | 43              | 85               | 154     | 108            | 36                    | 2.03           |
| 9.5                      | 28              | 32              | 66              | 28           | 47              | 90               | 167     | 120            | 41                    | 2.88           |
| 12                       | 32              | 35              | 72              | 32           | 51              | 94               | 180     | 137            | 50                    | 3.96           |
| 13.5                     | 35              | 38              | 80              | 35           | 57              | 115              | 209     | 149            | 50                    | 5.24           |
| 17                       | 38              | 42              | 88              | 38           | 60              | 127              | 230     | 164            | 60                    | 6.8            |
| 25                       | 45              | 50              | 103             | 45           | 74              | 149              | 271     | 192            | 60                    | 11.22          |

In inch

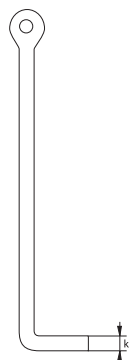
| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye  | width<br>eye     | width<br>inside  | length<br>inside | length            | length<br>bolt   | width<br>bolt<br>head | weight<br>each |
|--------------------------|-----------------|-----------------|------------------|------------------|------------------|------------------|-------------------|------------------|-----------------------|----------------|
| t                        | a<br>inch       | b<br>inch       | c<br>inch        | d<br>inch        | e<br>inch        | f<br>inch        | g<br>inch         | h<br>inch        | i<br>inch             | lbs            |
| 2                        | $\frac{1}{2}$   | $\frac{5}{8}$   | $1\frac{11}{32}$ | $\frac{1}{2}$    | $\frac{7}{8}$    | $1\frac{11}{16}$ | $3\frac{3}{16}$   | $2\frac{1}{4}$   | $\frac{7}{8}$         | 0.7            |
| 3.25                     | $\frac{5}{8}$   | $\frac{3}{4}$   | $1\frac{9}{16}$  | $\frac{5}{8}$    | $1\frac{1}{16}$  | 2                | $3\frac{13}{16}$  | $2\frac{25}{32}$ | $1\frac{1}{16}$       | 1.28           |
| 4.75                     | $\frac{3}{4}$   | $\frac{7}{8}$   | $1\frac{13}{16}$ | $\frac{3}{4}$    | $1\frac{7}{32}$  | $2\frac{5}{16}$  | $4\frac{13}{32}$  | $3\frac{7}{32}$  | $1\frac{1}{4}$        | 2.03           |
| 6.5                      | $\frac{7}{8}$   | 1               | $2\frac{1}{16}$  | $\frac{7}{8}$    | $1\frac{13}{32}$ | $2\frac{7}{8}$   | $5\frac{9}{32}$   | $3\frac{21}{32}$ | $1\frac{1}{4}$        | 2.93           |
| 8.5                      | 1               | $1\frac{1}{8}$  | $2\frac{5}{16}$  | $\frac{31}{32}$  | $1\frac{11}{16}$ | $3\frac{11}{32}$ | $6\frac{1}{16}$   | $4\frac{1}{4}$   | $1\frac{13}{32}$      | 4.48           |
| 9.5                      | $1\frac{1}{8}$  | $1\frac{1}{4}$  | $2\frac{19}{32}$ | $1\frac{3}{32}$  | $1\frac{27}{32}$ | $3\frac{17}{32}$ | $6\frac{9}{16}$   | $4\frac{23}{32}$ | $1\frac{5}{8}$        | 6.35           |
| 12                       | $1\frac{1}{4}$  | $1\frac{3}{8}$  | $2\frac{27}{32}$ | $1\frac{1}{4}$   | 2                | $3\frac{11}{16}$ | $7\frac{3}{32}$   | $5\frac{13}{32}$ | $1\frac{31}{32}$      | 8.72           |
| 13.5                     | $1\frac{3}{8}$  | $1\frac{1}{2}$  | $3\frac{5}{32}$  | $1\frac{3}{8}$   | $2\frac{1}{4}$   | $4\frac{17}{32}$ | $8\frac{7}{32}$   | $5\frac{7}{8}$   | $1\frac{31}{32}$      | 11.56          |
| 17                       | $1\frac{1}{2}$  | $1\frac{5}{8}$  | $3\frac{15}{32}$ | $1\frac{1}{2}$   | $2\frac{3}{8}$   | 5                | $9\frac{1}{16}$   | $6\frac{15}{32}$ | $2\frac{3}{8}$        | 15             |
| 25                       | $1\frac{3}{4}$  | 2               | $4\frac{1}{16}$  | $1\frac{25}{32}$ | $2\frac{29}{32}$ | $5\frac{7}{8}$   | $10\frac{21}{32}$ | $7\frac{9}{16}$  | $2\frac{3}{8}$        | 24.74          |



G-4169



P-4170



## Green Pin® Sunken Hole Shackles

### bow shackles with square sunken hole screw pin

- **Material** : bow and pin high tensile steel, Grade 6, quenched and tempered
- **Safety Factor** : MBL equals 6 x WLL
- **Standard** : EN 13889 and  
meets performance requirements of US Fed. Spec. RR-C-271, Grade A
- **Finish** : hot dipped galvanized
- **Certification** : 2.1 2.2 3.1 MTC<sup>a</sup> CE
- **Note** : key for unscrewing the pin must be ordered separately

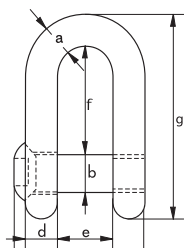
| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>eye | width<br>inside | length<br>inside | width<br>bow | length  | length<br>bolt | width   | size<br>hole | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|--------------|-----------------|------------------|--------------|---------|----------------|---------|--------------|----------------|
| t                        | a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm      | e<br>mm         | f<br>mm          | g<br>mm      | h<br>mm | i<br>mm        | j<br>mm | k<br>mm      | kg             |
| 2                        | 13.5            | 16              | 34              | 13           | 22              | 51               | 32           | 89      | 51             | 58      | 11           | 0.31           |
| 3.25                     | 16              | 19              | 40              | 16           | 27              | 64               | 43           | 110     | 63             | 75      | 11           | 0.56           |
| 4.75                     | 19              | 22              | 46              | 19           | 31              | 76               | 51           | 129     | 74             | 89      | 11           | 0.98           |
| 6.5                      | 22              | 25              | 52              | 22           | 36              | 83               | 58           | 144     | 85             | 102     | 13           | 1.46           |
| 8.5                      | 25              | 28              | 59              | 25           | 43              | 95               | 68           | 164     | 99             | 118     | 13           | 2.18           |
| 9.5                      | 28              | 32              | 66              | 28           | 47              | 108              | 75           | 185     | 110            | 131     | 17           | 3.06           |
| 12                       | 32              | 35              | 72              | 32           | 51              | 115              | 83           | 201     | 122            | 147     | 17           | 4.24           |
| 13.5                     | 35              | 38              | 80              | 35           | 57              | 133              | 92           | 227     | 135            | 162     | 17           | 5.59           |
| 17                       | 38              | 42              | 88              | 38           | 60              | 146              | 99           | 249     | 145            | 175     | 17           | 7.37           |

In inch

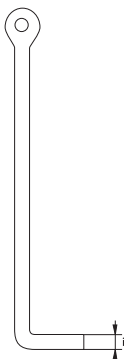
| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>eye | width<br>inside | length<br>inside | width<br>bow | length    | length<br>bolt | width     | size<br>hole | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|--------------|-----------------|------------------|--------------|-----------|----------------|-----------|--------------|----------------|
| t<br>inch                | a<br>inch       | b<br>inch       | c<br>inch       | d<br>inch    | e<br>inch       | f<br>inch        | g<br>inch    | h<br>inch | i<br>inch      | j<br>inch | k<br>inch    | lbs            |
| 2                        | 1/2             | 5/8             | 1 11/32         | 1/2          | 7/8             | 2                | 1 1/4        | 3 1/2     | 2              | 2 9/32    | 7/16         | 0.68           |
| 3.25                     | 5/8             | 3/4             | 1 9/16          | 5/8          | 1 1/16          | 2 17/32          | 1 11/16      | 4 11/32   | 2 15/32        | 2 15/16   | 7/16         | 1.23           |
| 4.75                     | 3/4             | 7/8             | 1 13/16         | 3/4          | 1 7/32          | 3                | 2            | 5 3/32    | 2 29/32        | 3 1/2     | 7/16         | 2.16           |
| 6.5                      | 7/8             | 1               | 2 1/16          | 7/8          | 1 13/32         | 3 9/32           | 2 9/32       | 5 21/32   | 3 11/32        | 4 1/32    | 1/2          | 3.22           |
| 8.5                      | 1               | 1 1/8           | 2 5/16          | 31/32        | 1 11/16         | 3 3/4            | 2 11/16      | 6 15/32   | 3 29/32        | 4 21/32   | 1/2          | 4.81           |
| 9.5                      | 1 1/8           | 1 1/4           | 2 19/32         | 1 3/32       | 1 27/32         | 4 1/4            | 2 15/16      | 7 9/32    | 4 11/32        | 5 5/32    | 21/32        | 6.75           |
| 12                       | 1 1/4           | 1 3/8           | 2 27/32         | 1 1/4        | 2               | 4 17/32          | 3 9/32       | 7 29/32   | 4 13/16        | 5 25/32   | 21/32        | 9.35           |
| 13.5                     | 1 3/8           | 1 1/2           | 3 5/32          | 1 3/8        | 2 1/4           | 5 1/4            | 3 5/8        | 8 15/16   | 5 5/16         | 6 3/8     | 21/32        | 12.32          |
| 17                       | 1 1/2           | 1 5/8           | 3 15/32         | 1 1/2        | 2 3/8           | 5 3/4            | 3 29/32      | 9 13/16   | 5 23/32        | 6 7/8     | 21/32        | 16.25          |



G-4159



P-4170



## Green Pin® Sunken Hole Shackles

### dee shackles with square sunken hole screw pin

- **Material** : bow and pin high tensile steel, Grade 6, quenched and tempered
- **Safety Factor** : MBL equals 6 x WLL
- **Standard** : EN 13889 and  
meets performance requirements of US Fed. Spec. RR-C-271, Grade A
- **Finish** : hot dipped galvanized
- **Certification** : 2.1 2.2 3.1 MTC<sup>a</sup> CE
- **Note** : key for unscrewing the pin must be ordered separately

| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>eye | width<br>inside | length<br>inside | length  | length<br>bolt | size<br>hole | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|--------------|-----------------|------------------|---------|----------------|--------------|----------------|
| t                        | a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm      | e<br>mm         | f<br>mm          | g<br>mm | h<br>mm        | i<br>mm      | kg             |
| 2                        | 13.5            | 16              | 34              | 13           | 22              | 43               | 81      | 51             | 11           | 0.34           |
| 3.25                     | 16              | 19              | 40              | 16           | 27              | 51               | 97      | 63             | 11           | 0.6            |
| 4.75                     | 19              | 22              | 46              | 19           | 31              | 59               | 112     | 74             | 11           | 0.98           |
| 6.5                      | 22              | 25              | 52              | 22           | 36              | 73               | 134     | 85             | 13           | 1.26           |
| 8.5                      | 25              | 28              | 59              | 25           | 43              | 85               | 154     | 99             | 13           | 2.14           |
| 9.5                      | 28              | 32              | 66              | 28           | 47              | 90               | 167     | 110            | 17           | 3.05           |
| 12                       | 32              | 35              | 72              | 32           | 51              | 94               | 180     | 122            | 17           | 3.56           |
| 13.5                     | 35              | 38              | 80              | 35           | 57              | 115              | 209     | 135            | 17           | 5.17           |
| 17                       | 38              | 42              | 88              | 38           | 60              | 127              | 230     | 145            | 17           | 6.84           |

In inch

| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>eye | width<br>inside | length<br>inside | length    | length<br>bolt | size<br>hole | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|--------------|-----------------|------------------|-----------|----------------|--------------|----------------|
| t                        | a<br>inch       | b<br>inch       | c<br>inch       | d<br>inch    | e<br>inch       | f<br>inch        | g<br>inch | h<br>inch      | i<br>inch    | lbs            |
| 2                        | 1/2             | 5/8             | 1 11/32         | 1/2          | 7/8             | 1 11/16          | 3 3/16    | 2              | 7/16         | 0.75           |
| 3.25                     | 5/8             | 3/4             | 1 9/16          | 5/8          | 1 1/16          | 2                | 3 13/16   | 2 15/32        | 7/16         | 1.33           |
| 4.75                     | 3/4             | 7/8             | 1 13/16         | 3/4          | 1 7/32          | 2 5/16           | 4 13/32   | 2 29/32        | 7/16         | 2.15           |
| 6.5                      | 7/8             | 1               | 2 1/16          | 7/8          | 1 13/32         | 2 7/8            | 5 9/32    | 3 11/32        | 1/2          | 2.77           |
| 8.5                      | 1               | 1 1/8           | 2 5/16          | 31/32        | 1 11/16         | 3 11/32          | 6 1/16    | 3 29/32        | 1/2          | 4.72           |
| 9.5                      | 1 1/8           | 1 1/4           | 2 19/32         | 1 3/32       | 1 27/32         | 3 17/32          | 6 9/16    | 4 11/32        | 21/32        | 6.72           |
| 12                       | 1 1/4           | 1 3/8           | 2 27/32         | 1 1/4        | 2               | 3 11/16          | 7 3/32    | 4 13/16        | 21/32        | 7.84           |
| 13.5                     | 1 3/8           | 1 1/2           | 3 5/32          | 1 3/8        | 2 1/4           | 4 17/32          | 8 7/32    | 5 5/16         | 21/32        | 11.4           |
| 17                       | 1 1/2           | 1 5/8           | 3 15/32         | 1 1/2        | 2 3/8           | 5                | 9 1/16    | 5 23/32        | 21/32        | 15.08          |

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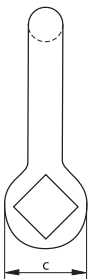
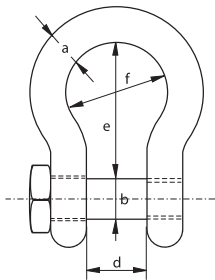
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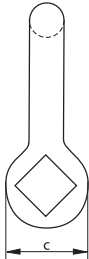
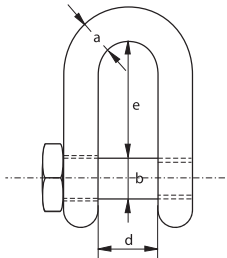
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P-3764



P-3754



## Fishing Shackles

### bow shackles with square head screw pin

- **Material** : mild steel
- **Safety factor** : MBL equals 5 x WLL
- **Finish** : painted blue
- **Certification** : 2.1 2.2

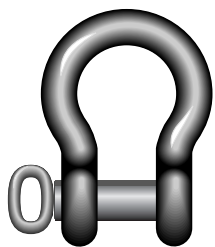
| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>inside | length<br>inside | width<br>bow | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|-----------------|------------------|--------------|----------------|
| tons                     | a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm         | e<br>mm          | f<br>mm      | kg             |
| 1.5                      | 13              | 16              | 32              | 25              | 48               | 36           | 0.37           |
| 2.5                      | 16              | 20              | 40              | 32              | 64               | 48           | 0.71           |
| 3                        | 20              | 22              | 48              | 38              | 79               | 60           | 1.24           |
| 4                        | 22              | 25              | 53              | 44              | 87               | 66           | 1.68           |
| 5                        | 25              | 28              | 60              | 51              | 100              | 75           | 2.42           |
| 6.5                      | 28              | 32              | 67              | 56              | 114              | 86           | 3.42           |
| 8                        | 32              | 36              | 71              | 64              | 126              | 96           | 4.85           |
| 9                        | 36              | 38              | 76              | 70              | 140              | 105          | 6.32           |

## Fishing Shackles

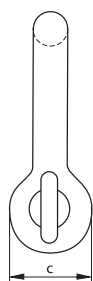
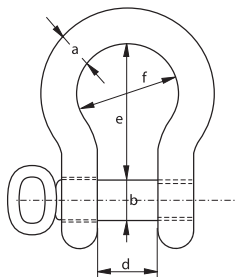
### dee shackles with square head screw pin

- **Material** : mild steel
- **Safety factor** : MBL equals 5 x WLL
- **Finish** : painted blue
- **Certification** : 2.1 2.2

| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>inside | length<br>inside | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|-----------------|------------------|----------------|
| tons                     | a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm         | e<br>mm          | kg             |
| 1.5                      | 13              | 16              | 32              | 25              | 48               | 0.36           |
| 2.5                      | 16              | 20              | 40              | 32              | 64               | 0.69           |
| 3                        | 20              | 22              | 48              | 38              | 75               | 1.18           |
| 4                        | 22              | 25              | 53              | 44              | 83               | 1.61           |
| 5                        | 25              | 28              | 60              | 51              | 100              | 2.35           |
| 6.5                      | 28              | 32              | 67              | 56              | 104              | 3.22           |
| 8                        | 32              | 36              | 71              | 64              | 120              | 4.63           |
| 9                        | 36              | 38              | 76              | 70              | 131              | 5.96           |



S-1165



## Mooring Shackles

### bow shackles with screw pin

- **Material** : mild steel, untreated, Grade 3
- **Finish** : self coloured
- **Note** : not to be used for lifting applications
- **Certification** : 2.1

| diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>inside | length<br>inside | width<br>bow | weight<br>each |
|-----------------|-----------------|-----------------|-----------------|------------------|--------------|----------------|
| a               | b               | c               | d               | e                | f            |                |
| mm              | mm              | mm              | mm              | mm               | mm           | kg             |
| 32              | 32              | 74              | 64              | 134              | 96           | 4.2            |
| 38              | 38              | 89              | 76              | 160              | 114          | 7.8            |
| 45              | 45              | 104             | 90              | 189              | 135          | 12.5           |
| 50              | 50              | 111             | 100             | 210              | 155          | 17.4           |
| 65              | 65              | 145             | 130             | 273              | 195          | 35.6           |

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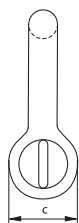
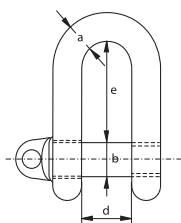
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S-3351  
G-3351



## Shackles generally to DIN 82101 type A

### dee shackles with screw collar pin

- **Material** : bow and pin high tensile steel, Grade 4
- **Safety Factor** : MBL equals 5 x WLL
- **Standard** : generally to DIN 82101 type A
- **Finish** : hot dipped galvanized or self coloured
- **Certification** : 2.1 2.2 CE
- **Note** : shackle no. 0.1 is electro-galvanized and will not have any markings as it is too small

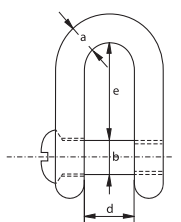
| no.  | working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>inside | length<br>inside | weight<br>each |
|------|--------------------------|-----------------|-----------------|-----------------|-----------------|------------------|----------------|
|      | t                        | a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm         | e<br>mm          | kg             |
| 0.1  | 0.1                      | 5               | 5               | 10              | 7               | 15.5             | 0.02           |
| 0.16 | 0.16                     | 6               | 6               | 12              | 8               | 18               | 0.02           |
| 0.25 | 0.25                     | 8               | 8               | 16              | 11              | 24               | 0.05           |
| 0.4  | 0.4                      | 10              | 10              | 20              | 14              | 30               | 0.1            |
| 0.6  | 0.63                     | 12              | 12              | 24              | 17              | 36               | 0.18           |
| 1    | 1                        | 13              | 16              | 32              | 21              | 49               | 0.3            |
| 1.6  | 1.6                      | 16              | 20              | 40              | 27              | 61               | 0.57           |
| 2    | 2                        | 20              | 22              | 44              | 30              | 67               | 0.98           |
| 2.5  | 2.5                      | 22              | 24              | 48              | 33              | 73               | 1.3            |
| 3    | 3.15                     | 25              | 27              | 54              | 38              | 83.5             | 1.85           |
| 4    | 4                        | 28              | 30              | 60              | 42              | 91               | 2.53           |
| 5    | 5                        | 32              | 36              | 72              | 47              | 111              | 4              |
| 6    | 6.3                      | 36              | 39              | 78              | 53              | 119.5            | 5.3            |
| 8    | 8                        | 41              | 45              | 90              | 60              | 139.5            | 7.9            |
| 10   | 10                       | 44              | 48              | 96              | 66              | 147              | 10             |
| 12   | 12                       | 49              | 52              | 104             | 73              | 158              | 13.5           |
| 16   | 16                       | 55              | 60              | 120             | 81              | 185              | 19.2           |
| 20   | 20                       | 61              | 68              | 136             | 90              | 211              | 28             |
| 25   | 25                       | 67              | 72              | 144             | 100             | 221              | 34             |

## Shackles generally to DIN 82101 type B

### dee shackles with counter sunk screw pin

- **Material** : bow and pin high tensile steel, Grade 4
- **Safety Factor** : MBL equals 5 x WLL
- **Standard** : generally to DIN 82101 type B
- **Finish** : hot dipped galvanized or self coloured
- **Certification** : 2.1 2.2 CE
- **Note** : shackle no. 0.1 is electro-galvanized and will not have any markings as it is too small

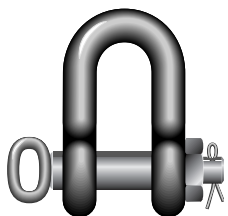
| no.  | working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>inside | length<br>inside | weight<br>each |
|------|--------------------------|-----------------|-----------------|-----------------|-----------------|------------------|----------------|
|      | t                        | a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm         | e<br>mm          | kg             |
| 0.1  | 0.1                      | 5               | 5               | 10              | 7               | 15.5             | 0.01           |
| 0.16 | 0.16                     | 6               | 6               | 12              | 8               | 18               | 0.02           |
| 0.25 | 0.25                     | 8               | 8               | 16              | 11              | 24               | 0.05           |
| 0.4  | 0.4                      | 10              | 10              | 20              | 14              | 30               | 0.09           |
| 0.6  | 0.63                     | 12              | 12              | 24              | 17              | 36               | 0.17           |
| 1    | 1                        | 13              | 16              | 32              | 21              | 49               | 0.29           |
| 1.6  | 1.6                      | 16              | 20              | 40              | 27              | 61               | 0.54           |
| 2    | 2                        | 20              | 22              | 44              | 30              | 67               | 0.98           |
| 2.5  | 2.5                      | 22              | 24              | 48              | 33              | 73               | 1.23           |
| 3    | 3.15                     | 25              | 27              | 54              | 38              | 83.5             | 1.8            |
| 4    | 4                        | 28              | 30              | 60              | 42              | 91               | 2.6            |
| 5    | 5                        | 32              | 36              | 72              | 47              | 111              | 3.8            |
| 6    | 6.3                      | 36              | 39              | 78              | 53              | 119.5            | 5.2            |
| 8    | 8                        | 41              | 45              | 90              | 60              | 139.5            | 7.6            |
| 10   | 10                       | 44              | 48              | 96              | 66              | 147              | 9.7            |



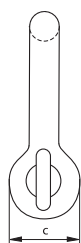
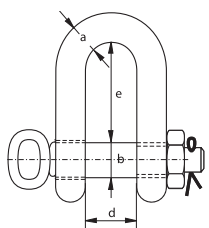
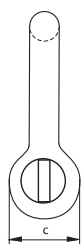
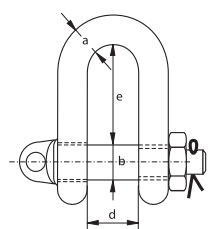
## Shackles generally to DIN 82101 type C

### dee shackles with safety bolt

- **Material** : bow and pin high tensile steel, Grade 4
- **Safety Factor** : MBL equals 5 x WLL
- **Standard** : generally to DIN 82101 type C
- **Finish** : hot dipped galvanized or self coloured
- **Certification** : 2.1 2.2 CE
- **Note** : with screw collar pin : up to size no. 25  
with hand-grip : from size no. 32



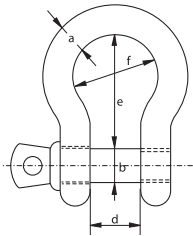
S-3356  
G-3356



| no. | working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>inside | length<br>inside | weight<br>each |
|-----|--------------------------|-----------------|-----------------|-----------------|-----------------|------------------|----------------|
|     | t                        | a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm         | e<br>mm          | kg             |
| 0.4 | 0.4                      | 10              | 10              | 20              | 14              | 30               | 0.11           |
| 0.6 | 0.63                     | 12              | 12              | 24              | 17              | 36               | 0.2            |
| 1   | 1                        | 13              | 16              | 32              | 21              | 49               | 0.37           |
| 1.6 | 1.6                      | 16              | 20              | 40              | 27              | 61               | 0.69           |
| 2   | 2                        | 20              | 22              | 44              | 30              | 67               | 1.13           |
| 2.5 | 2.5                      | 22              | 24              | 48              | 33              | 73               | 1.5            |
| 3   | 3.15                     | 25              | 27              | 54              | 38              | 83.5             | 2.15           |
| 4   | 4                        | 28              | 30              | 60              | 42              | 91               | 2.93           |
| 5   | 5                        | 32              | 36              | 72              | 47              | 111              | 4.7            |
| 6   | 6.3                      | 36              | 39              | 78              | 53              | 119.5            | 6.33           |
| 8   | 8                        | 41              | 45              | 90              | 60              | 139.5            | 8.6            |
| 10  | 10                       | 44              | 48              | 96              | 66              | 147              | 10.8           |
| 12  | 12.5                     | 49              | 52              | 104             | 73              | 158              | 14.4           |
| 16  | 16                       | 55              | 60              | 120             | 81              | 185              | 20.5           |
| 20  | 20                       | 61              | 68              | 136             | 90              | 211              | 27.9           |
| 25  | 25                       | 67              | 72              | 144             | 100             | 221              | 36             |
| 32  | 32                       | 74              | 80              | 160             | 110             | 246              | 49             |
| 40  | 40                       | 75              | 90              | 180             | 125             | 276              | 70             |
| 50  | 50                       | 88              | 100             | 200             | 140             | 307              | 100            |
| 63  | 63                       | 96              | 110             | 220             | 155             | 339              | 140            |
| 80  | 80                       | 110             | 125             | 250             | 175             | 385.5            | 200            |
| 100 | 100                      | 125             | 140             | 280             | 200             | 430              | 280            |



G-3161



## Yellow Pin Shackles

### bow shackles with screw collar pin

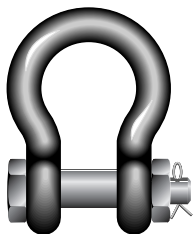
- **Material** : bow and pin high tensile steel, Grade 6
- **Standard** : generally to US Fed. Spec. RR-C-271
- **Finish** : hot dipped galvanized
- **Certification** : 2.1 2.2 CE
- **Note** : import quality

| working load limit | diameter bow | diameter pin | diameter eye | width inside | length inside | width bow | weight each |
|--------------------|--------------|--------------|--------------|--------------|---------------|-----------|-------------|
| t                  | a mm         | b mm         | c mm         | d mm         | e mm          | f mm      | kg          |
| 0.33               | 5            | 6            | 14           | 9.5          | 22            | 15        | 0.03        |
| 0.5                | 6            | 8            | 16           | 12           | 29            | 20        | 0.05        |
| 0.75               | 8            | 10           | 19           | 13.5         | 31            | 21        | 0.08        |
| 1                  | 10           | 11           | 23           | 17           | 37            | 26        | 0.14        |
| 1.5                | 11           | 13           | 27           | 19           | 43            | 29        | 0.2         |
| 2                  | 13           | 16           | 30           | 20           | 48            | 33        | 0.33        |
| 3.25               | 16           | 19           | 38           | 27           | 60            | 43        | 0.62        |
| 4.75               | 19           | 22           | 46           | 32           | 71            | 50        | 1.07        |
| 6.5                | 22           | 25           | 53           | 36           | 84            | 58        | 1.62        |
| 8.5                | 25           | 28           | 61           | 43           | 95            | 68        | 2.28        |
| 9.5                | 28           | 32           | 68           | 46           | 108           | 74        | 3.36        |
| 12                 | 32           | 35           | 76           | 51           | 119           | 82        | 4.31        |
| 13.5               | 35           | 38           | 84           | 57           | 133           | 92        | 6.14        |
| 17                 | 38           | 42           | 92           | 60           | 146           | 98        | 7.81        |
| 25                 | 45           | 50           | 106          | 73           | 177           | 127       | 12.61       |

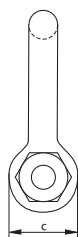
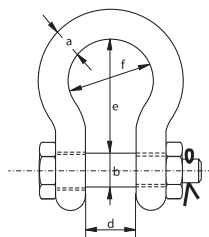
## Yellow Pin Shackles

### bow shackles with safety bolt

- **Material** : bow and pin high tensile steel, Grade 6
- **Standard** : generally to US Fed. Spec. RR-C-271
- **Finish** : hot dipped galvanized
- **Certification** : 2.1 2.2 CE
- **Note** : import quality



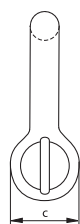
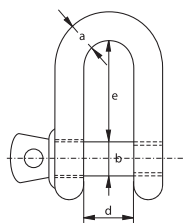
G-3163



| working load limit | diameter bow | diameter pin | diameter eye | width inside | length inside | width bow | weight each |
|--------------------|--------------|--------------|--------------|--------------|---------------|-----------|-------------|
| t                  | a mm         | b mm         | c mm         | d mm         | e mm          | f mm      | kg          |
| 2                  | 13           | 16           | 30           | 20           | 48            | 33        | 0.36        |
| 3.25               | 16           | 19           | 38           | 27           | 60            | 43        | 0.7         |
| 4.75               | 19           | 22           | 46           | 32           | 71            | 50        | 1.1         |
| 6.5                | 22           | 25           | 53           | 36           | 84            | 58        | 1.61        |
| 8.5                | 25           | 28           | 61           | 43           | 95            | 68        | 2.42        |
| 9.5                | 28           | 32           | 68           | 46           | 108           | 74        | 3.35        |
| 12                 | 32           | 35           | 76           | 51           | 119           | 82        | 5.32        |
| 13.5               | 35           | 38           | 84           | 57           | 133           | 92        | 7.19        |
| 17                 | 38           | 42           | 92           | 60           | 146           | 98        | 9.44        |
| 25                 | 45           | 50           | 106          | 73           | 177           | 127       | 13.8        |



G-3151



## Yellow Pin Shackles

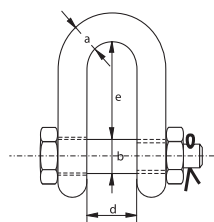
### dee shackles with screw collar pin

- **Material** : bow and pin high tensile steel, Grade 6
- **Standard** : generally to US Fed. Spec. RR-C-271
- **Finish** : hot dipped galvanized
- **Certification** : 2.1 2.2 CE
- **Note** : import quality

| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>inside | length<br>inside | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|-----------------|------------------|----------------|
| t                        | a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm         | e<br>mm          | kg             |
| 0.33                     | 5               | 6               | 12              | 9.5             | 19               | 0.03           |
| 0.5                      | 6               | 8               | 16              | 12              | 22               | 0.04           |
| 0.75                     | 8               | 10              | 19              | 13.5            | 26               | 0.08           |
| 1                        | 10              | 11              | 23              | 17              | 32               | 0.13           |
| 1.5                      | 11              | 13              | 27              | 19              | 37               | 0.2            |
| 2                        | 13              | 16              | 30              | 20              | 41               | 0.28           |
| 3.25                     | 16              | 19              | 38              | 27              | 51               | 0.57           |
| 4.75                     | 19              | 22              | 46              | 32              | 60               | 1.19           |
| 6.5                      | 22              | 25              | 53              | 36              | 71               | 1.43           |
| 8.5                      | 25              | 28              | 61              | 43              | 81               | 2.16           |
| 9.5                      | 28              | 32              | 68              | 46              | 90               | 3.06           |
| 12                       | 32              | 35              | 76              | 51              | 100              | 4.11           |
| 13.5                     | 35              | 38              | 84              | 57              | 111              | 5.28           |
| 17                       | 38              | 42              | 92              | 60              | 122              | 6.69           |
| 25                       | 45              | 50              | 106             | 73              | 146              | 12.14          |



G-3153



## Yellow Pin Shackles

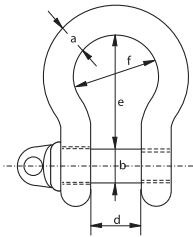
### dee shackles with safety bolt

- **Material** : bow and pin high tensile steel, Grade 6
- **Standard** : generally to US Fed. Spec. RR-C-271
- **Finish** : hot dipped galvanized
- **Certification** : 2.1 2.2 CE
- **Note** : import quality

| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>inside | length<br>inside | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|-----------------|------------------|----------------|
| t                        | a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm         | e<br>mm          | kg             |
| 2                        | 13              | 16              | 30              | 20              | 41               | 0.33           |
| 3.25                     | 16              | 19              | 38              | 27              | 51               | 0.62           |
| 4.75                     | 19              | 22              | 46              | 32              | 60               | 1.02           |
| 6.5                      | 22              | 25              | 53              | 36              | 71               | 1.49           |
| 8.5                      | 25              | 28              | 61              | 43              | 81               | 2.26           |
| 9.5                      | 28              | 32              | 68              | 46              | 90               | 3.2            |
| 12                       | 32              | 35              | 76              | 51              | 100              | 4.91           |
| 13.5                     | 35              | 38              | 84              | 57              | 111              | 5.84           |
| 17                       | 38              | 42              | 92              | 60              | 122              | 8.4            |
| 25                       | 45              | 50              | 106             | 73              | 146              | 11.9           |



S-2761  
E-2761  
G-2761



Shackles generally to B.S. 3032 table 3

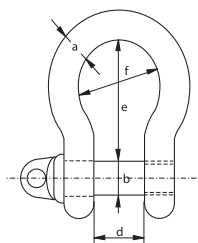
large bow shackles with screw collar pin

- **Material** : bow and pin alloy steel, EN14a
- **Safety Factor** : MBL equals 4 x WLL
- **Standard** : generally to B.S. 3032 table 3
- **Finish** : hot dipped galvanized, electro-galvanized or self coloured
- **Certification** : 2.1 2.2 CE

| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>inside | length<br>inside | width<br>bow | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|-----------------|------------------|--------------|----------------|
| t                        | a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm         | e<br>mm          | f<br>mm      | kg             |
| 0.15                     | 6               | 10              | 19              | 13              | 28               | 19           | 0.12           |
| 0.45                     | 10              | 13              | 25              | 16              | 41               | 25           | 0.18           |
| 0.75                     | 13              | 16              | 32              | 22              | 54               | 32           | 0.37           |
| 1.25                     | 16              | 19              | 38              | 28              | 70               | 41           | 0.72           |
| 2                        | 19              | 22              | 44              | 35              | 86               | 51           | 1.20           |
| 2.75                     | 22              | 25              | 51              | 41              | 98               | 57           | 1.85           |
| 3.75                     | 25              | 28              | 57              | 44              | 108              | 64           | 2.61           |
| 4.75                     | 28              | 32              | 63              | 51              | 124              | 73           | 3.78           |
| 5.75                     | 32              | 35              | 70              | 57              | 137              | 83           | 5.17           |
| 7.25                     | 35              | 38              | 76              | 63              | 152              | 89           | 6.46           |
| 8.5                      | 38              | 44              | 89              | 70              | 168              | 98           | 8.34           |
| 9.5                      | 42              | 48              | 94              | 76              | 187              | 111          | 11.1           |
| 11.5                     | 44              | 51              | 102             | 86              | 206              | 121          | 14.5           |
| 13                       | 48              | 54              | 108             | 92              | 222              | 130          | 17.8           |
| 15                       | 51              | 57              | 114             | 98              | 238              | 140          | 25.5           |
| 18.5                     | 57              | 63              | 127             | 105             | 257              | 152          | 34.4           |
| 20                       | 60              | 67              | 133             | 111             | 273              | 162          | 36.8           |
| 25                       | 67              | 73              | 146             | 121             | 302              | 178          | 45             |
| 30                       | 73              | 79              | 159             | 133             | 330              | 197          | 62.2           |
| 35                       | 79              | 86              | 171             | 146             | 359              | 213          | 81.8           |
| 40                       | 86              | 92              | 184             | 159             | 387              | 229          | 95             |
| 50                       | 95              | 102             | 203             | 171             | 429              | 254          | 131            |
| 65                       | 108             | 117             | 235             | 197             | 483              | 286          | 194            |
| 80                       | 117             | 127             | 254             | 216             | 533              | 308          | 274            |



S-2765  
E-2765  
G-2765



## Shackles generally to B.S. 3032 table 4

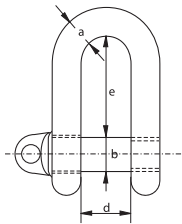
### small bow shackles with screw collar pin

- **Material** : bow and pin alloy steel, EN14a
- **Safety Factor** : MBL equals 4 x WLL
- **Standard** : generally to B.S. 3032 table 4
- **Finish** : hot dipped galvanized, electro-galvanized or self coloured
- **Certification** : 2.1 2.2 CE

| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>inside | length<br>inside | width<br>bow | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|-----------------|------------------|--------------|----------------|
| t                        | a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm         | e<br>mm          | f<br>mm      | kg             |
| 0.2                      | 6               | 10              | 19              | 13              | 25               | 16           | 0.11           |
| 0.5                      | 10              | 13              | 25              | 16              | 38               | 22           | 0.17           |
| 1                        | 13              | 16              | 32              | 22              | 51               | 29           | 0.35           |
| 1.5                      | 16              | 19              | 38              | 28              | 64               | 38           | 0.66           |
| 2                        | 19              | 22              | 44              | 35              | 76               | 44           | 1.06           |
| 3                        | 22              | 25              | 51              | 38              | 89               | 51           | 1.68           |
| 4                        | 25              | 28              | 57              | 44              | 102              | 60           | 2.47           |
| 5                        | 28              | 32              | 63              | 51              | 114              | 67           | 3.48           |
| 6.25                     | 32              | 35              | 70              | 57              | 127              | 76           | 4.79           |
| 7.5                      | 35              | 38              | 76              | 60              | 140              | 83           | 5.95           |
| 9.25                     | 38              | 44              | 89              | 67              | 152              | 89           | 7.55           |
| 10.5                     | 41              | 48              | 95              | 73              | 165              | 98           | 9.79           |
| 12.5                     | 44              | 51              | 102             | 79              | 178              | 105          | 12.5           |
| 14.25                    | 48              | 54              | 108             | 86              | 191              | 114          | 15.3           |
| 16.5                     | 51              | 57              | 114             | 92              | 203              | 121          | 21.8           |
| 18.5                     | 54              | 60              | 121             | 95              | 216              | 127          | 28.9           |
| 20                       | 57              | 63              | 127             | 105             | 229              | 137          | 30.9           |
| 25                       | 63              | 70              | 140             | 114             | 254              | 152          | 37.8           |
| 30                       | 70              | 79              | 159             | 127             | 279              | 168          | 52.6           |
| 35                       | 76              | 86              | 171             | 137             | 305              | 184          | 69.5           |
| 40                       | 79              | 89              | 178             | 143             | 318              | 191          | 78.1           |
| 50                       | 89              | 98              | 203             | 159             | 356              | 213          | 109            |
| 65                       | 102             | 114             | 229             | 184             | 406              | 244          | 163            |
| 80                       | 114             | 127             | 254             | 206             | 457              | 273          | 235            |



S-2751  
E-2751  
G-2751



Shackles generally to B.S. 3032 table 2

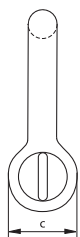
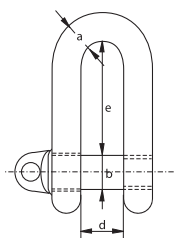
large dee shackles with screw collar pin

- **Material** : bow and pin alloy steel, EN14a
- **Safety Factor** : MBL equals 4 x WLL
- **Standard** : generally to B.S. 3032 table 2
- **Finish** : hot dipped galvanized, electro-galvanized or self coloured
- **Certification** : 2.1 2.2 CE

| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>inside | length<br>inside | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|-----------------|------------------|----------------|
| t                        | a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm         | e<br>mm          | kg             |
| 0.25                     | 6               | 10              | 19              | 13              | 25               | 0.11           |
| 0.5                      | 10              | 13              | 25              | 19              | 38               | 0.17           |
| 0.75                     | 13              | 16              | 32              | 28              | 54               | 0.35           |
| 1.5                      | 16              | 19              | 38              | 32              | 64               | 0.66           |
| 2                        | 19              | 22              | 44              | 38              | 73               | 1.02           |
| 3                        | 22              | 25              | 51              | 44              | 83               | 1.57           |
| 3.75                     | 25              | 28              | 57              | 51              | 95               | 2.3            |
| 5                        | 28              | 32              | 64              | 54              | 105              | 3.2            |
| 6                        | 32              | 35              | 70              | 60              | 114              | 4.3            |
| 7                        | 35              | 38              | 76              | 67              | 127              | 5.4            |
| 9.5                      | 38              | 45              | 83              | 70              | 137              | 6.8            |
| 11.25                    | 42              | 48              | 89              | 76              | 146              | 8.7            |
| 13                       | 44              | 51              | 95              | 83              | 156              | 11             |
| 14.25                    | 48              | 54              | 108             | 92              | 178              | 14.3           |
| 16.25                    | 51              | 57              | 114             | 98              | 187              | 20             |
| 18                       | 54              | 60              | 121             | 105             | 197              | 26.4           |
| 20                       | 57              | 64              | 127             | 108             | 210              | 28.3           |
| 25                       | 64              | 73              | 146             | 121             | 235              | 35             |
| 30                       | 70              | 79              | 159             | 133             | 260              | 49             |
| 35                       | 76              | 86              | 171             | 146             | 279              | 63.6           |
| 40                       | 79              | 89              | 178             | 149             | 292              | 71.7           |
| 50                       | 89              | 102             | 203             | 171             | 330              | 101            |
| 65                       | 102             | 114             | 229             | 191             | 375              | 151            |
| 80                       | 114             | 127             | 254             | 219             | 419              | 215            |



S-2755  
E-2755  
G-2755



## Shackles generally to B.S. 3032 table 1

### small dee shackles with screw collar pin

- **Material** : bow and pin alloy steel, EN14a
- **Safety Factor** : MBL equals 4 x WLL
- **Standard** : generally to B.S. 3032 table 1
- **Finish** : hot dipped galvanized, electro-galvanized or self coloured
- **Certification** : 2.1 2.2 CE

| working<br>load<br>limit | diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>inside | length<br>inside | weight<br>each |
|--------------------------|-----------------|-----------------|-----------------|-----------------|------------------|----------------|
| t                        | a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm         | e<br>mm          | kg             |
| 0.3                      | 6               | 10              | 19              | 9.5             | 22               | 0.1            |
| 0.6                      | 10              | 13              | 25              | 16              | 35               | 0.16           |
| 1                        | 13              | 16              | 32              | 22              | 48               | 0.31           |
| 1.75                     | 16              | 19              | 38              | 25              | 57               | 0.59           |
| 2.5                      | 19              | 22              | 44              | 32              | 70               | 0.98           |
| 3.5                      | 22              | 25              | 51              | 35              | 83               | 1.55           |
| 4.5                      | 25              | 28              | 57              | 38              | 92               | 2.2            |
| 5.5                      | 28              | 32              | 64              | 44              | 105              | 3.1            |
| 7                        | 32              | 35              | 70              | 48              | 114              | 4.2            |
| 8                        | 35              | 38              | 83              | 54              | 127              | 5.1            |
| 10.75                    | 38              | 45              | 89              | 60              | 140              | 6.6            |
| 13                       | 42              | 48              | 95              | 64              | 149              | 8.1            |
| 14.75                    | 44              | 51              | 102             | 70              | 162              | 10.5           |
| 16.75                    | 48              | 54              | 108             | 73              | 171              | 13.3           |
| 19                       | 51              | 57              | 114             | 76              | 184              | 19.2           |
| 20                       | 54              | 60              | 121             | 83              | 197              | 22.4           |
| 25                       | 60              | 70              | 140             | 92              | 219              | 25.3           |
| 30                       | 64              | 73              | 146             | 98              | 229              | 31.5           |
| 35                       | 70              | 79              | 159             | 108             | 254              | 47             |
| 40                       | 73              | 83              | 165             | 111             | 264              | 60.2           |
| 50                       | 83              | 95              | 190             | 127             | 298              | 68.5           |
| 65                       | 92              | 108             | 216             | 140             | 333              | 98             |
| 80                       | 102             | 117             | 235             | 156             | 368              | 147            |

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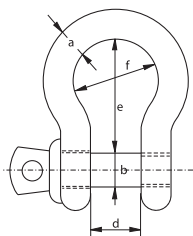
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S-1161  
E-1161



## Commercial Shackles

### bow shackles with screw collar pin

- **Material** : mild steel, untreated, Grade 3
- **Finish** : electro-galvanized or self coloured
- **Certification** : 2.1
- **Note** : not to be used for lifting applications

| diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>inside | length<br>inside | width<br>bow | weight<br>per<br>100 pcs |
|-----------------|-----------------|-----------------|-----------------|------------------|--------------|--------------------------|
| a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm         | e<br>mm          | f<br>mm      | kg                       |
| 5               | 5               | 10              | 10              | 20               | 15           | 1.4                      |
| 6               | 6               | 12              | 12              | 24               | 18           | 2.4                      |
| 8               | 8               | 16              | 16              | 32               | 24           | 5.4                      |
| 10              | 10              | 20              | 20              | 40               | 30           | 10.6                     |
| 11              | 11              | 22              | 22              | 44               | 33           | 16.4                     |
| 12              | 12              | 24              | 24              | 48               | 36           | 19.4                     |
| 14              | 14              | 28              | 28              | 56               | 42           | 44                       |
| 16              | 16              | 32              | 32              | 64               | 48           | 44.2                     |
| 19              | 19              | 38              | 38              | 76               | 57           | 82.8                     |
| 22              | 22              | 44              | 44              | 88               | 66           | 116                      |
| 25              | 25              | 50              | 50              | 100              | 75           | 168                      |
| 28              | 28              | 56              | 56              | 112              | 84           | 232                      |
| 32              | 32              | 64              | 64              | 128              | 96           | 382                      |
| 38              | 38              | 76              | 76              | 152              | 114          | 623                      |
| 45              | 45              | 90              | 90              | 180              | 135          | 1120                     |
| 50              | 50              | 100             | 100             | 200              | 150          | 1536                     |
| 57              | 57              | 114             | 114             | 228              | 171          | 2276                     |
| 65              | 65              | 130             | 130             | 260              | 195          | 3375                     |

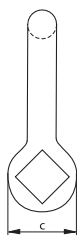
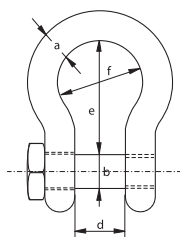
## Commercial Shackles

### bow shackles with square head screw pin

- **Material** : mild steel, untreated, Grade 3
- **Finish** : self coloured
- **Certification** : 2.1
- **Note** : not to be used for lifting applications

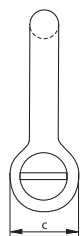
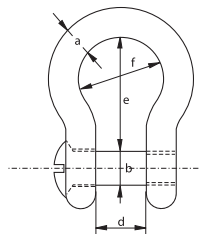
| diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>inside | length<br>inside | width<br>bow | weight<br>per<br>100 pcs |
|-----------------|-----------------|-----------------|-----------------|------------------|--------------|--------------------------|
| a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm         | e<br>mm          | f<br>mm      | kg                       |
| 6               | 6               | 12              | 12              | 24               | 18           | 2.7                      |
| 8               | 8               | 16              | 16              | 32               | 24           | 6.4                      |
| 10              | 10              | 20              | 20              | 40               | 30           | 12.5                     |
| 11              | 11              | 22              | 22              | 44               | 33           | 16.6                     |
| 12              | 12              | 24              | 24              | 48               | 36           | 21.6                     |
| 14              | 14              | 28              | 28              | 56               | 42           | 34.3                     |
| 16              | 16              | 32              | 32              | 64               | 48           | 51.2                     |
| 19              | 19              | 38              | 38              | 76               | 57           | 100                      |
| 22              | 22              | 44              | 44              | 88               | 66           | 133                      |
| 25              | 25              | 50              | 50              | 100              | 75           | 195                      |
| 28              | 28              | 56              | 56              | 112              | 84           | 275                      |
| 32              | 32              | 64              | 64              | 128              | 96           | 410                      |
| 38              | 38              | 76              | 76              | 152              | 114          | 686                      |

S-1164





S-1162  
E-1162



## Commercial Shackles

### bow shackles with counter sunk screw pin

- **Material** : mild steel, untreated, Grade 3
- **Finish** : electro-galvanized or self coloured
- **Certification** : 2.1
- **Note** : not to be used for lifting applications

| diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>inside | length<br>inside | width<br>bow | weight<br>per<br>100 pcs |
|-----------------|-----------------|-----------------|-----------------|------------------|--------------|--------------------------|
| a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm         | e<br>mm          | f<br>mm      | kg                       |
| 8               | 8               | 16              | 16              | 32               | 24           | 6                        |
| 10              | 10              | 20              | 20              | 40               | 30           | 11.6                     |
| 11              | 11              | 22              | 22              | 44               | 33           | 15.5                     |
| 12              | 12              | 24              | 24              | 48               | 36           | 20.1                     |
| 14              | 14              | 28              | 28              | 56               | 42           | 31.9                     |
| 16              | 16              | 32              | 32              | 64               | 48           | 47.6                     |
| 19              | 19              | 38              | 38              | 76               | 57           | 93.1                     |
| 22              | 22              | 44              | 44              | 88               | 66           | 124                      |
| 25              | 25              | 50              | 50              | 100              | 75           | 182                      |

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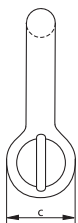
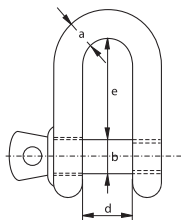
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S-1151  
E-1151



## Commercial Shackles

### dee shackles with screw collar pin

- **Material** : mild steel, untreated, Grade 3
- **Finish** : electro-galvanized or self coloured
- **Certification** : 2.1
- **Note** : not to be used for lifting applications

| diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>inside | length<br>inside | weight<br>per<br>100 pcs |
|-----------------|-----------------|-----------------|-----------------|------------------|--------------------------|
| a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm         | e<br>mm          | kg                       |
| 5               | 5               | 10              | 10              | 20               | 1.4                      |
| 6               | 6               | 12              | 12              | 24               | 2.2                      |
| 8               | 8               | 16              | 16              | 32               | 5.2                      |
| 10              | 10              | 20              | 20              | 40               | 11.8                     |
| 11              | 11              | 22              | 22              | 44               | 14                       |
| 12              | 12              | 24              | 24              | 48               | 20.5                     |
| 14              | 14              | 28              | 28              | 56               | 29.4                     |
| 16              | 16              | 32              | 32              | 64               | 42.6                     |
| 19              | 19              | 38              | 38              | 76               | 72.6                     |
| 22              | 22              | 44              | 44              | 88               | 108                      |
| 25              | 25              | 50              | 50              | 100              | 185                      |
| 28              | 28              | 56              | 56              | 112              | 226                      |
| 32              | 32              | 64              | 64              | 128              | 358                      |
| 38              | 38              | 76              | 76              | 152              | 602                      |
| 45              | 45              | 90              | 90              | 180              | 1080                     |
| 50              | 50              | 100             | 100             | 200              | 1480                     |
| 57              | 57              | 114             | 114             | 228              | 2192                     |
| 65              | 65              | 130             | 130             | 260              | 3252                     |

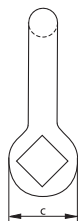
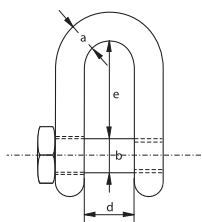
## Commercial Shackles

### dee shackles with square head screw pin

- **Material** : mild steel, untreated, Grade 3
- **Finish** : self coloured
- **Certification** : 2.1
- **Note** : not to be used for lifting applications

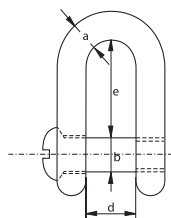
| diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>inside | length<br>inside | weight<br>per<br>100 pcs |
|-----------------|-----------------|-----------------|-----------------|------------------|--------------------------|
| a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm         | e<br>mm          | kg                       |
| 6               | 6               | 12              | 12              | 24               | 2.6                      |
| 8               | 8               | 16              | 16              | 32               | 6.17                     |
| 10              | 10              | 20              | 20              | 40               | 12                       |
| 11              | 11              | 22              | 22              | 44               | 16                       |
| 12              | 12              | 24              | 24              | 48               | 20.8                     |
| 14              | 14              | 28              | 28              | 56               | 33.1                     |
| 16              | 16              | 32              | 32              | 64               | 49.4                     |
| 19              | 19              | 38              | 38              | 76               | 96.4                     |
| 22              | 22              | 44              | 44              | 88               | 128                      |
| 25              | 25              | 50              | 50              | 100              | 188                      |
| 28              | 28              | 56              | 56              | 112              | 265                      |
| 32              | 32              | 64              | 64              | 128              | 395                      |
| 38              | 38              | 76              | 76              | 152              | 661                      |

S-1154





S-1152  
E-1152



## Commercial Shackles

### dee shackles with counter sunk screw pin

- **Material** : mild steel, untreated, Grade 3
- **Finish** : electro-galvanized or self coloured
- **Certification** : 2.1
- **Note** : not to be used for lifting applications

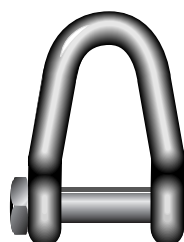
| diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>inside | length<br>inside | weight<br>per<br>100 pcs |
|-----------------|-----------------|-----------------|-----------------|------------------|--------------------------|
| a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm         | e<br>mm          | kg                       |
| 8               | 8               | 16              | 16              | 32               | 5.72                     |
| 10              | 10              | 20              | 20              | 40               | 9.6                      |
| 11              | 11              | 22              | 22              | 44               | 14.9                     |
| 12              | 12              | 24              | 24              | 48               | 19.3                     |
| 14              | 14              | 28              | 28              | 56               | 30.7                     |
| 16              | 16              | 32              | 32              | 64               | 45.8                     |
| 19              | 19              | 38              | 38              | 76               | 89.5                     |
| 22              | 22              | 44              | 44              | 88               | 119                      |
| 25              | 25              | 50              | 50              | 100              | 175                      |

## Commercial Shackles

### danlino V shackles with square head screw pin

- **Material** : mild steel, untreated, Grade 3
- **Finish** : self coloured
- **Certification** : 2.1
- **Note** : not to be used for lifting applications

| diameter<br>bow | diameter<br>pin | diameter<br>eye | width<br>inside | length<br>inside | weight<br>per<br>100 pcs |
|-----------------|-----------------|-----------------|-----------------|------------------|--------------------------|
| a<br>mm         | b<br>mm         | c<br>mm         | d<br>mm         | e<br>mm          | kg                       |
| 32              | 32              | 64              | 78              | 120              | 470                      |



S-1170

