

Web Slings

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Synthetic Chain Slings

Wire Rope Slings

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**Secure Solutions** 

# SHACKLES & TURNBUCKLES





**Green Pin**® traces its origin back to 1922: in that year Dirk van Beest started to manufacture the shackles that would later be branded Green Pin®. He did so at the home of the Dutch dredging industry; Sliedrecht – close to the Port of Rotterdam. Dirk van Beest – a diligent, hardworking man – was passionate in creating 100%

failsafe products in combination with his full-service attitude. With his focus the company was able to grow quickly, in tandem with the international growth of the Dutch dredging and maritime industry. Today, Green Pin® is still part of the family-owned Van Beest Group, which is still headquartered in Sliedrecht in The Netherlands and has branches in the United States (Houston and Chicago), France, Germany and Norway. Through its parent company, Green Pin® is a member of various industry organizations such as LEEA and AWRF, and offers a wide range of rigging and lifting products.





### Green Pin®

Green Pin® is the leading brand for premium quality lifting and lashing equipment including shackles, turnbuckles, hooks and fibre link chain.

What makes it the leading brand? Only Green Pin® combines innovative, high quality products with industry leading availability and comprehensive, worldwide support. This unique combination means that with Green Pin® products you are always ready to get the job done. You are Green to Go. Discover the benefits of using Green Pin® below.

# Green To Quality: Work Easier With Green Pin® Products That Are Produced To Perfection.

To ensure reliability and quality, Green Pin® products tick all the boxes:

- Developed with a clear view of what the customer needs. When cost effectiveness was at the top of our customers' agendas, we developed the Green Pin® Power Sling® Shackle which saves users up to 20% on wire rope costs, more than any competing product.
- Raw materials come from high quality suppliers who guarantee full traceability. Our steel, for example, is sourced from leading, fully certified European mills. And our Tycan® high performance chain is manufactured from 100% Dyneema®
- Automated production facilities, reduce the margins of error compared to other production methods (see the Green Pin® production process at <a href="https://www.greenpin.com/why-green-pin">www.greenpin.com/why-green-pin</a>
- Many products conform to leading standards and can be supplied with certifications from class societies such as DNV GL and Lloyd's.

### **Green To Speed:**

### Order Green Pin® Products From Stock Worldwide

Producing a good, reliable product is simply not good enough. Customers must be able to obtain the right products just when they need it: the success of the project depends on it. To ensure that success, Green Pin® offers unrivalled availability of its products:

- The wide Green Pin® assortment has an industry leading stock availability of 99%.
- Over 900 distributors in more than 90 countries stock GP products. All were carefully selected for their sling making expertise, the value-added services they provide and their stockholding capacity.
- For highly specialized products which a distributor does not have in stock, we airfreight it to a destination airport of choice within a maximum of 72 hours (\*NZ/Aust) from one of our three distribution centres (Houston, Chicago and The Netherlands).

### Green to Service: Rely on the best equipment and support. Guaranteed.

Green Pin® products are made to meet the demands of the most complex lifting projects in the world. Such projects usually require product information of the utmost precision which often leads to more in depth questions about the characteristics and application of Green Pin® products. Green Pin® therefore offers:

- CAD-drawings and technical documentation that are distinguished by their precision and accuracy.
- A Technical Help desk that provides comprehensive answers swiftly.
- Technical Training providing insights into the benefits of products and the different ways to apply them









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Tie Down Accessories

Towing & Recovery

Rope & Cordage

### The Green Pin® Difference

### **Producing Shackles Through Upset-Forging**

Van Beest Green Pin® Shackles are manufactured using an upset forging process which produces no drop forge flashing marks which may damage attaching slings.

### The Benefits of Hot Upset Forging

- Inherent strength retained by containing metal grain flow produces greater breaking strength
- No stress areas created where material size needs to be reduced.
- No brittleness or porosity concerns (sometimes prevalent in the casting process).
- No concern of fractures at weld joints (as could occur on fabrications).













### Save your slings

Van Beest® shackles have embossed information vs. raised sharp lettering which is ideal for synthetic lifting slings. These shackles also have a super smooth galvanized finished along and completely round body due to the upset forging process.





**Embossed** 

Lettering





### **Green Pin® Shackles**









### **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 nonpermanent applications. Safety bolt and fixed nut 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.

### Ranges

Green Pin® offers a wide range of bow and Dee shackles for a variety of applications. The range stretches from WLL 0.33t to 3000t. 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 etc. Additionally we offer a wide range of general commercial shackles, which are not suitable for lifting but merely for fixing purposes. Van Beest offers a wide range of other shackles to complement the Green Pin® assortment.

### Design

### All Green Pin® 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;
- Green Pin Polar® Shackles are for use in extreme climatic conditions with material properties guaranteed up to temperatures of  $\underline{-60^{\circ}C}$ ;
- Green Pin Power 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 a 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 Green Pin ® 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 Green Pin® Shackles meet all relevant requirements of the Machinery Directive 2006/42/EC and its latest amendments.

### **Finish**

Shackles supplied by Green Pin® can be hot dipped galvanized, electrogalvanized, painted or self colored, 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.



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Pipe & Hose

Assemblies

ie Down cessories

Towing & Recovery

> Rope & Cordage





### 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:

 $2.1\ 2.2\ 3.1\ MTC$  a DNV GL  $2.7\text{-}1\ a$  DNV GL  $2.7\text{-}1\ b$  DNV GL  $0.377\ DNV$  GL  $0.378\ CE$  ABS PDA ABS MA

### With additional Charges:

MTC b MPI a MPI b US a US b DNV GL CG3 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 Green Pin® at the time of order.

Green Pin® Bow Shackles, Green Pin® Dee Shackles and Green Pin Polar® Shackles are DNV GL type approved. These shackles carry two DNV GL type approval certificates that show compliance with:

- DNV GL-ST-E271-2.71 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 GL-ST-E273 Portable Offshore Units
- DNV GL Standard No. 0378 Offshore and Platform Lifting Appliances

The certificates TASO00011V and TASO0001H7 confirm that Green Pin® standard shackles and Green Pin Polar® Shackles meet the requirements set in the latest version of the above mentioned DNV GL standards. The Green Pin Power Sling® Shackles are DNV GL type approved. This DNV GL type approval certificate is in compliance with:

- DNV GL Standard for Certification No. 0377 Standard for Shipboard Lifting Appliances
- DNV GL Standard for Certification No. 0378 Offshore and Platform Lifting Appliances

The TASOOOO18M certificate confirms that Green Pin Power Sling® Shackles meet the requirements stated in the latest version of the above-mentioned DNV standards.

Green Pin® Shackles G-4161, G-4163, G-4151, G-4153, G-5163, G-5261 and G-5263 are ABS Type Approved. The shackles have a Product Design Assessment Approval and a Manufacturer Assessment Approval Certificate. The shackles are type approved to be used as lifting gear or to be used as lifting device.

### Green Pin® Shackles with RFID

All lifting equipment requires regular inspection. Tracking and filing reports on paper can be a time consuming task. Green Pin® 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 smart phones.

Green Pin® 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





# Lift it up, Tie it down, Pull it around =

# Standard Shackles Available at Super Slings

G-4161 Green Pin® Bow Shackle SC 0.33t - 65t

GPGHBB



G-4163 Green Pin® Bow Shackle BN 0.5t - 85t

**GPGHMB** 



G-4263 Green Pin®
Big mouth® Bow Shackle BN
4.75t - 75t
ASGHMB

5t O

G-5261 Green Pin®
Super® Bow Shackle SC
3.3t - 12.5t
SUGHBB

G-5263 Green Pin® Super® Bow Shackle BN 3.3t - 175t SUGHMB G-4553 Green Pin®
Big mouth® Dee Shackle BN
4.6t - 15.5t
LDGDMB

G-5163 Green Pin®
Polar® Bow Shackle BN
2t - 85t
POGHMB

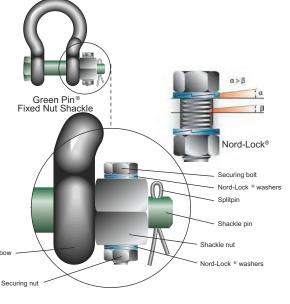
G-6033 Green Pin® Sling Shackle BN 7t - 1,550t SLGPF

P-5461 Green Pin® Web Sling Shackle SC 3.25t - 8.5t POPWBB



### 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 may start to move over the thread. We offer our range of Green Pin® Fixed Nut Shackles to avoid this risk. Green Pin® Standard, Polar® and Super® shackles can be equipped with an extra AISI 316 securing bolt that 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.



### Instructions for Use

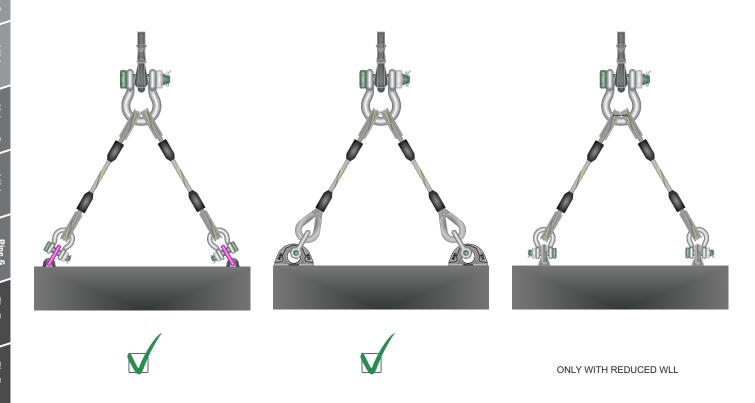
Select the correct type and WLL of the shackle for the particular application. If extreme circumstances or shock loading may occur, this must be taken into account when selecting the correct shackle.

### Shackles should be inspected before use to ensure that:

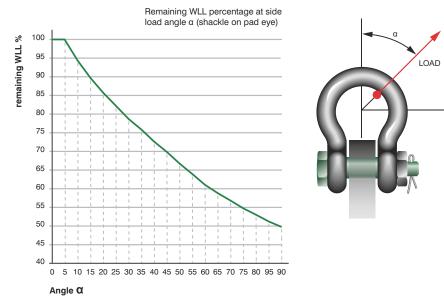
- all markings are legible;
- the body and pin are both of the same brand and type;
- the body and pin are both of the correct size;
- never use a safety bolt type shackle without using a securing pin;
- the pin, nut, cotter pin, or any other locking system cannot vibrate out of position;
- the threads 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 touches the surface of the shackle eye. Incorrect positioning 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.



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:



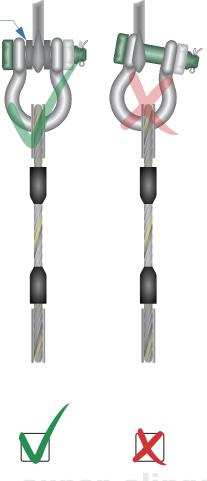
This graph is valid for almost all Green Pin® shackles, except for ROV Shackles (P-5363 and P-5367). These shackles are for in-line use only. The graph is also not valid for Green Pin® Sling Shackles (P-6033 and P-6013) and Green Pin Power Sling® Shackles (P-6043). If you want to apply a side load on a Green Pin® Sling Shackle or a Green Pin Power 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.

Spacer



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.

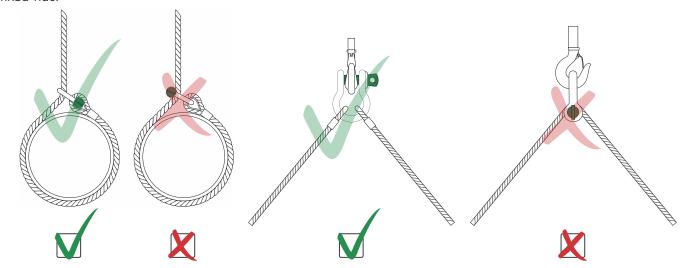
To avoid eccentric loading of the shackle a loose spacer may be used on either end of the shackle pin. Do not reduce the width between the shackle jaws by welding washers or spacers to the inside of the shackle eyes or by narrowing the jaws, as this will affect the WLL of the shackle.





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.

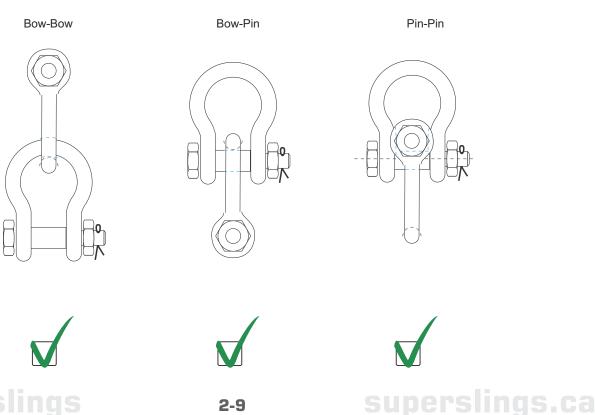
Avoid applications where the load moves over the shackle pin; the pin may rotate and possibly be unscrewed. If moving of the load cannot be avoided, or when the shackle is to be left in place for a prolonged period or where maximum pin security is required, use a shackle with a safety bolt, nut and cotter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



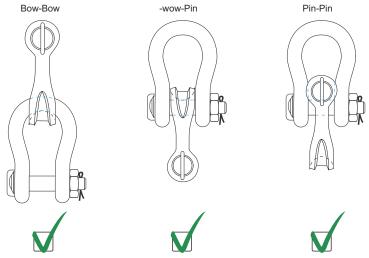
Shackles should not be immersed in acidic solutions or exposed to acidic fumes or other chemicals that are potentially harmful for the shackle.

### 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.

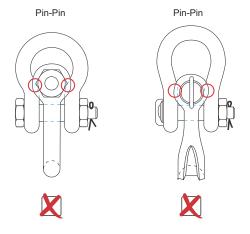


The crown of a Green Pin® Sling Shackle (P-6033) is wider than that of a standard shackle, thus creating a bigger bearing surface. This improves the lifetime of the sling. Green Pin® Sling shackles can also be used in below configurations. The maximum load of the configuration is limited by the component with the lowest WLL. For information about point loading of the Green Pin Power Sling® Shackle (P-6043) please contact sales@superslings.ca



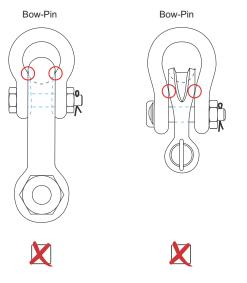
### Pin- Pin configuration

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



### **Bow- Pin configuration**

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



### **Temperature**

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

Temperature	Reduction for elevated temperatures 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	NOW 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.

### **CAD** drawings

Green Pin® products are used in a wide variety of applications; from a simple lift to move an item from A to B in a workplace, to very complex lifting systems for offshore applications. In the latter case, engineers use computer programs like AutoCAD to develop a 2D or 3D specification of the entire system. For standard products engineers normally use a CAD drawing library. The use of these kinds of libraries saves considerable design time and costs. And of course it prevents mistakes that may occur whilst copying data from a product catalogue into the design program.

To help engineers, Green Pin® has made CAD drawings available in various formats on the Green Pin® website (<a href="www.greenpin.com">www.greenpin.com</a>). These drawings can be integrated in almost every design program. Further details can be obtained through our website: <a href="www.greenpin.com/cad">www.greenpin.com/cad</a>

CAD In the product chapters the CAD icon indicates that cad drawings are available.

### RFID

**RFID** Green Pin<sup>®</sup> offers an identification solution with an easily accessible Radio Frequency Identification (RFID) chip in our range of Green PIN ® Shackles. The RFID icon in the product chapters indicates that the products can be equipped with a countersunk RFID chip.

### **More Information**

For some products we provide detailed technical information on our website. In the product chapters the INFO icon indicates there is extra information on this product available at <a href="www.superslings.ca">www.superslings.ca</a> or <a href="www.greenpin.com/FAQ">www.greenpin.com/FAQ</a>





### Green Pin® Bow Shackle SC - G-4161

### Standard bow shackle with screw collar pin

Product details









Product code: G-4161

Material: bow and pin high tensile steel, Grade 6, quenched and tempered

Safety factor: MBL equals 6 x WLL Finish: hot dipped galvanized Temp. range:  $-40^{\circ}$ C up to  $+200^{\circ}$ C

EN 13889 and meets performance requirements of US Fed. Spec. RR-C-271, Type IVA, Certification:

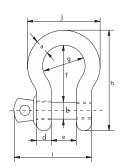
Class 3, Grade A. From 2 t and upward these shackles comply with ASME B30.26

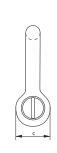
### Description

The Green Pin® Bow Shackle SC is a bow shackle with a screw collar pin. The screw pin enables quick (dis)assembly which makes the shackle perfect for rigging activities in which assembly and disassembly occur relatively frequently. The Green Pin® Bow Shackle SC can be used for both one-leg and multi-leg systems. Due to the galvanization of the shackle its long-term durability is assured. The shackle's design reduces the wear of (wire) rope as the screw thread is hidden in a chamber. Particularly important for use offshore, the Green Pin® Bow Shackle SC conforms to a wide range of certifications from class societies such as DNV GL. The shackle is available in a range with a working load limit from 0.33 up to 65 ton.



CAD REID





### **Highlights**

- Screw pin for quick (dis)assembly
- Galvanization assures long-term durability
- Suitable for both one-leg and multi-leg systems
- Conforms to wide range of certifications (e.g. DNV GL)
- Superior stock availability of 99%

### **WARNING: NEVER EXCEED WORKING LOAD LIMIT!**

Failure to follow instructions can result in serious property damage, injury or death! For more information please see the shackle warning information found in the hardware section of this catalogue

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Item No.	WLL					IMENSI	ONS [in.]					Net weight
	Tonne	Α	В	С	D	E	F	G	н	ı	J	lbs
GPGHBB05	0.33	0.20	0.24	0.47	0.20	0.37	0.87	0.63	1.42	1.16	1.02	0.04
GPGHBB06	0.50	0.28	0.31	0.65	0.28	0.47	1.14	0.79	1.91	1.50	1.34	0.11
GPGHBB08	0.75	0.35	0.39	0.79	0.35	0.53	1.26	0.87	2.20	1.83	1.57	0.22
GPGHBB10	1.00	0.39	0.43	0.89	0.39	0.67	1.44	1.02	2.50	2.13	1.81	0.31
GPGHBB11	1.50	0.43	0.51	1.04	0.43	0.75	1.69	1.14	2.91	2.34	2.01	0.42
GPGHBB13	2.00	0.53	0.63	1.34	0.51	0.87	2.01	1.26	3.50	2.87	2.28	0.79
GPGHBB16	3.25	0.63	0.75	1.57	0.63	1.06	2.52	1.69	4.33	3.50	2.95	1.39
GPGHBB19	4.75	0.75	0.87	1.81	0.75	1.22	2.99	2.01	5.08	4.06	3.50	2.23
GPGHBB22	6.50	0.87	0.98	2.05	0.87	1.42	3.27	2.28	5.67	4.69	4.02	3.31
GPGHBB25	8.50	0.98	1.10	2.32	0.98	1.69	3.74	2.68	6.46	5.39	4.65	4.87
GPGHBB28	9.50	1.10	1.26	2.60	1.10	1.85	4.25	2.95	7.28	6.02	5.16	6.97
GPGHBB32	12.00	1.26	1.38	2.83	1.26	2.01	4.53	3.27	7.91	6.69	5.79	9.50
GPGHBB35	13.50	1.38	1.50	3.15	1.38	2.24	5.24	3.62	8.94	7.32	6.38	12.30
GPGHBB38	17.00	1.50	1.65	3.46	1.50	2.36	5.75	3.90	9.80	7.99	6.89	16.38
GPGHBB45	25.00	1.77	1.97	4.06	1.77	2.91	7.01	4.96	11.81	9.57	8.50	27.56
GPGHBB50	35.00	1.97	2.24	4.37	1.97	3.27	7.76	5.43	13.03	10.71	9.37	37.92
GPGHBB57	42.50	2.24	2.56	5.12	2.24	3.74	8.74	6.30	14.84	12.20	10.79	57.98
GPGHBB65	55.00	2.56	2.76	5.71	2.56	4.13	10.24	7.09	17.05	13.54	12.21	82.89

# Years of Secure Solutions

# Green Pin® Bow Shackle BN - G-4163 Standard bow shackle with safety bolt

Product details

DNV-GL





Product code: G-4163

Material: bow and pin high tensile steel, Grade 6, quenched and tempered

Safety factor: MBL equals  $6 \times \text{WLL}$ Finish: hot dipped galvanized Temp. range:  $-40^{\circ}\text{C}$  up to  $+200^{\circ}\text{C}$ 

Certification: 2.1 | 2.2 | 3.1 | MTCa | DNV-GL 2.7-1a | DNV-GL 2.7-1b | DNV-GL ST-0378

CE | ABS | 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

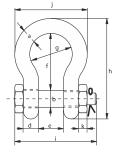
### Description

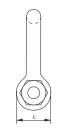
The Green Pin® Bow Shackle BN is a bow shackle with a safety bolt. The shackle offers a double safety (split pin and safety bolt) which prevents accidental unscrewing of the pin. Long-term durability is assured due to the galvanization of the Green Pin® Bow Shackle BN. Of course, the Green Pin® Bow Shackle BN conforms to a wide range of certifications from class societies such as DNV GL. The Green Pin® Bow Shackle BN is suitable for both one-leg and multi-leg systems and is available in a range with a working load limit from 0.5 up to 85 ton.

### **Highlights**

- Double safety (cotter pin & safety bolt)
- · Galvanization assures long-term durability
- Suitable for both one-leg and multi-leg systems
- Conforms to wide range of certifications (e.g. DNV GL)
- Superior stock availability of 99%







### CAD REID

### **WARNING: NEVER EXCEED WORKING LOAD LIMIT!**

Failure to follow instructions can result in serious property damage, injury or death! For more information please see the shackle warning information found in the hardware section of this catalogue

CAD REID							W	arning infoi	rmation fo	und in the l	hardware s	section of t	this cata	
Item No	<b>)</b> .	WLL				ا	DIMENS	SIONS (i	n.l					Net weight
i		Tonne	A	В	C	D	E	F	G	Н	ı	J	K	lbs
GPGHMB	06	0.50	0.28	0.31	0.65	0.28	0.47	1.14	0.79	1.91	1.65	1.34	0.16	0.13
GPGHMB	80	0.75	0.35	0.39	0.79	0.35	0.53	1.26	0.87	2.20	1.97	1.57	0.20	0.24
GPGHMB	10	1.00	0.39	0.43	0.89	0.39	0.67	1.44	1.02	2.50	2.36	1.81	0.31	0.35
GPGHMB	11	1.50	0.43	0.51	1.04	0.43	0.75	1.69	1.14	2.91	2.64	2.01	0.43	0.49
GPGHMB	13	2.00	0.53	0.63	1.34	0.51	0.87	2.01	1.26	3.50	3.23	2.28	0.51	0.93
GPGHMB	16	3.25	0.63	0.75	1.57	0.63	1.06	2.52	1.69	4.33	3.86	2.95	0.67	1.63
GPGHMB	19	4.75	0.75	0.87	1.81	0.75	1.22	2.99	2.01	5.08	4.49	3.50	0.75	2.60
GPGHMB	22	6.50	0.87	0.98	2.05	0.87	1.42	3.27	2.28	5.67	5.12	4.02	0.87	3.90
GPGHMB	25	8.50	0.98	1.10	2.32	0.98	1.69	3.74	2.68	6.46	5.91	4.65	0.98	5.69
GPGHMB	28	9.50	1.10	1.26	2.60	1.10	1.85	4.25	2.95	7.28	6.54	5.16	1.06	8.07
GPGHMB	32	12.00	1.26	1.38	2.83	1.26	2.01	4.53	3.27	7.91	7.01	5.79	1.18	10.82
GPGHMB	35	13.50	1.38	1.50	3.15	1.38	2.24	5.24	3.62	8.94	7.76	6.38	1.30	14.42
GPGHMB	38	17.00	1.50	1.65	3.46	1.50	2.36	5.75	3.90	9.80	7.95	6.89	0.75	18.06
GPGHMB	45 2	25.00	1.77	1.97	4.06	1.77	2.91	7.01	4.96	11.81	9.80	8.50	0.91	30.86
GPGHMB	50 3	35.00	1.97	2.24	4.37	1.97	3.27	7.76	5.43	13.03	10.59	9.37	1.02	41.45
GPGHMB	57	42.50	2.24	2.56	5.12	2.24	3.74	8.74	6.30	14.84	11.85	10.79	1.14	62.39
GPGHMB	65 !	55.00	2.56	2.76	5.71	2.56	4.13	10.24	7.09	17.05	12.99	12.20	1.26	87.30
GPGHMB	75 8	85.00	2.95	3.27	6.42	2.87	5.00	12.95	7.48	20.75	14.96	13.39	1.54	136.69

### Green Pin Super® Bow Shackle SC - G-5261

### Grade 8 bow shackle with screw pin

Product details

Product code G-5261

Material bow and pin alloy steel, Grade 8, quenched and tempered

Safety factor MBL equals  $5 \times WLL$ Finish hot dipped galvanized Temp. range  $-20^{\circ}C$  up to  $+200^{\circ}C$ 

Certification 2.1 | 2.2 | 3.1 | MTCa | CE | ABS

Standard ASME B30.26 and meets performance requirements of US Fed. Spec. RR-C-271

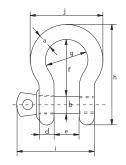
Type IVA Class 2, Grade B

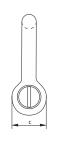
### **Description**

The Green Pin Super® Bow Shackle SC is a grade 8 bow shackle with screw pin. The screw pin enables quick (dis)assembly which makes the shackle perfect for rigging activities in which assembly and disassembly occur relatively frequently. Handling of the Green Pin Super® Bow Shackle SC is easier due to its smaller size and weight (with an equal working load limit when compared to non-Super products). Furthermore, the long-term durability of the shackle is assured as a result of its galvanization. Wear and tear of the counter components such as wire rope is also minimized because the chamber in the shackle eye hides the screw thread. The Green Pin Super®Bow Shackle SC is available in a range with a working load limit from 3.3 up to 12.5t.



CAD RFID





### **Highlights**

- Easier handling due to smaller size and weight (with equal WLL)
- Screw pin for quick (dis)assembly
- Galvanization assures long-term durability
- Superior stock availability of 99%
- Reliable Green Pin® quality and support

### **WARNING: NEVER EXCEED WORKING LOAD LIMIT!**

Failure to follow instructions can result in serious property damage, injury or death! For more information please see the shackle warning information found in the hardware section of this catalogue

Item No.	WLL		DIMENSIONS (in.)									
	tonne	A	В	C	D	E	F	G	H	I	J	lbs
SUGHBB13	3.30	0.53	0.63	1.34	0.51	0.87	2.01	1.26	3.50	2.87	2.28	0.79
SUGHBB16	5.00	0.63	0.75	1.57	0.63	1.06	2.52	1.69	4.33	3.50	2.95	1.39
SUGHBB19	7.00	0.75	0.87	1.81	0.75	1.22	2.99	2.01	5.08	4.06	3.50	2.23
SUGHBB22	9.50	0.87	0.98	2.05	0.87	1.42	3.27	2.28	5.67	4.69	4.02	3.31
SUGHBB25	12.50	0.98	1.10	2.32	0.98	1.69	3.74	2.68	6.46	5.39	4.65	4.87



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Web Slings

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### Green Pin Super® Bow Shackle BN - G-5263

### Grade 8 bow shackle with safety bolt

Product details

Product code G-5263

Material bow and pin alloy steel, Grade 8, quenched and tempered

Safety factor MBL equals 5 x WLL

Finish hot dipped galvanized (175 ton shackle is painted)

Temp. range  $-20^{\circ}$ C up to  $+200^{\circ}$ C

2.1 | 2.2 | 3.1 | MTCa | CE | ABS Certification

Standard ASME B30.26 and meets performance requirements of

US Fed. Spec. RR-C-271 Type IVA Class 3, Grade B

Note Shackles with WLL 150 t and 175 t have a round headed bolt

The Green Pin Super® Bow Shackle BN is a grade 8 bow shackle with a safety bolt. Handling of the Green Pin Super® Bow Shackle BN is easier due to the smaller size and weight (with an equal working load limit when compared to non-Super products). The shackle also offers a double safety (split pin and safety bolt) which prevents accidental unscrewing of the pin. Furthermore, the long-term durability of the shackle is assured as a result of its galvanization. Wear and tear of the counter components such as wire rope is also minimized as the chamber in the shackle eye hides the screw thread. The Green Pin Super® Bow Shackle BN is available in a range with a working load limit from 3.3 up to 175t (note: sizes 150t and 175t have a round headed bolt).

### **Highlights**

- Easier handling due to smaller size and weight (with equal WLL)
- Double safety (cotter pin & safety bolt)
- Galvanization assures long-term durability
- Conforms to wide range of certifications (e.g. DNV GL)
- Superior stock availability of 99%

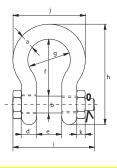
### **WARNING: NEVER EXCEED WORKING LOAD LIMIT!**

Failure to follow instructions can result in serious property damage. injury or death! For more information please see the shackle warning information found in the hardware section of this catalogue

Item No.	WLL					DIME	NSIONS	in.1					Net weight
	Tonne	A	В	C	D	E	F	G	Н	I	J	K	LBS
SUGHMB13	3.30	0.53	0.63	1.34	0.51	0.87	2.01	1.26	3.50	3.23	2.28	0.51	0.88
SUGHMB16	5.00	0.63	0.75	1.57	0.63	1.06	2.52	1.69	4.33	3.86	2.95	0.67	1.61
SUGHMB19	7.00	0.75	0.87	1.81	0.75	1.22	2.99	2.01	5.08	4.49	3.50	0.75	2.62
SUGHMB22	9.50	0.87	0.98	2.05	0.87	1.42	3.27	2.28	5.67	5.12	4.02	0.87	3.81
SUGHMB25	12.50	0.98	1.10	2.32	0.98	1.69	3.74	2.68	6.46	5.91	4.65	0.98	5.64
SUGHMB28	15.00	1.10	1.26	2.60	1.10	1.85	4.25	2.95	7.28	6.54	5.16	1.06	7.94
SUGHMB32	18.00	1.26	1.38	2.83	1.26	2.01	4.53	3.27	7.91	7.01	5.79	1.18	10.91
SUGHMB35	21.00	1.38	1.50	3.15	1.38	2.24	5.24	3.62	8.94	7.76	6.38	1.30	14.59
SUGHMB38	30.00	1.50	1.65	3.46	1.50	2.36	5.75	3.90	9.80	8.54	6.89	1.34	17.88
SUGHMB45	40.00	1.77	1.97	4.06	1.77	2.91	7.01	4.96	11.81	10.24	8.50	1.57	32.63
SUGHMB57	55.00	2.24	2.24	4.61	2.24	3.27	7.76	5.43	13.43	11.93	9.92	1.81	53.35
SUGHMB70	85.00	2.76	2.76	5.63	2.76	4.13	10.24	7.09	17.20	14.29	12.60	2.20	99.43
SUGHMB83	120.00	3.27	3.27	6.38	3.27	5.00	12.95	7.48	21.06	16.73	14.02	2.60	158.73









### Green Pin Polar® Bow Shackle BN - G-5163

Grade 8 bow shackle with safety bolt for use under low temperatures





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

Finish hot dipped galvanized Temp. range  $-60^{\circ}C$  up to  $+200^{\circ}C$ 

Certification 2.1 | 2.2 | 3.1 | MTCa | DNV-GL 2.7-1a | DNV-GL 2.7-1b | DNV-GL ST-0378

CE | ABS

Standard EN 13889, ASME B30.26 and meets performance requirements of US Fed.

Spec. RR-C-271 Type IVA Class 3, Grade A

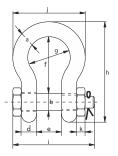
### **Description**

The Green Pin Polar® Bow Shackle BN is a bow shackle with a safety bolt that has been optimized for use in low temperatures. The shackle can be used in extreme climatic conditions; down to -60°C (-76°F). The shackle offers a double safety (split pin and safety bolt) which prevents accidental unscrewing of the pin. Long-term durability is assured due to the galvanization of the Green Pin Polar® Bow Shackle BN. Of course, the Green Pin Polar® Bow Shackle BN conforms to a wide range of certifications from class societies such as DNV GL. The Green Pin Polar® Bow Shackle BN is suitable for both one-leg and multi-leg systems and is available in a range with a working load limit from 0.5 up to 85 ton.

### Highlights

- Perfect for use in low-temperature situations (down to -60 °C/-76°F)
- Safety bolt: perfect for when rotation of the pin is a risk
- Conforms to wide range of certifications (e.g. DNV)
- Superior stock availability of 99%
- Suitable for both one-leg and multi-leg systems

CAD RFID





### WARNING: NEVER EXCEED WORKING LOAD LIMIT!

Failure to follow instructions can result in serious property damage, injury or death! For more information please see the shackle warning information found in the hardware section of this catalogue

Item No.	WLL					DIME	NSIONS	Cin.1					Net weight
	Tonne	A	В	С	D	E	F	G	Н	ı	J	K	LBS
POGHMB13	2.00	0.53	0.63	1.34	0.51	0.87	2.01	1.26	3.50	3.23	2.28	0.51	0.93
POGHMB16	3.25	0.63	0.75	1.57	0.63	1.06	2.52	1.69	4.33	3.86	2.95	0.67	1.63
POGHMB19	4.75	0.75	0.87	1.81	0.75	1.22	2.99	2.01	5.08	4.49	3.50	0.75	2.60
POGHMB22	6.50	0.87	0.98	2.05	0.87	1.42	3.27	2.28	5.67	5.12	4.02	0.87	3.90
POGHMB25	8.50	0.98	1.10	2.32	0.98	1.69	3.74	2.68	6.46	5.91	4.65	0.98	5.69
POGHMB28	9.50	1.10	1.26	2.60	1.10	1.85	4.25	2.95	7.28	6.54	5.16	1.06	8.07
POGHMB32	12.00	1.26	1.38	2.83	1.26	2.01	4.53	3.27	7.91	7.01	5.79	1.18	10.82
POGHMB35	13.50	1.38	1.50	3.15	1.38	2.24	5.24	3.62	8.94	7.76	6.38	1.30	14.42
POGHMB38	17.00	1.50	1.65	3.46	1.50	2.36	5.75	3.90	9.80	7.95	6.89	0.75	18.06
POGHMB45	25.00	1.77	1.97	4.06	1.77	2.91	7.01	4.96	11.81	9.80	8.50	0.91	31.31
POGHMB50	35.00	1.97	2.24	4.57	1.97	3.27	7.76	5.43	13.15	10.59	9.37	1.02	43.87
POGHMB57	42.50	2.24	2.56	5.12	2.24	3.74	8.74	6.30	14.84	11.85	10.79	1.14	62.39
POGHMB65	55.00	2.56	2.76	5.71	2.56	4.13	10.24	7.09	17.05	12.99	12.20	1.26	87.30

super slings

# Green Pin® Sling Shackle BN - P-6033

# Years of Secure Solutions

### High load capacity bow shackle with safety bolt

Product details

Product code P-6033

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

(7 up to 55 ton shackles are hot dipped galvanized)

Temp. range  $-20^{\circ}\text{C}$  up to  $+200^{\circ}\text{C}$ 

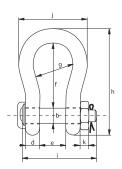
Certification 2.1 | 2.2 | 3.1 | MTCb | LROS | MPlb | Usb | CE

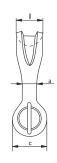
### Description

The Green Pin® Sling Shackle BN is a high load capacity bow shackle with a safety bolt and a fixed nut. The Sling Shackle BN is an excellent choice for heavy lifting projects due to the shape of the shackle crown. Compared to the standard Green Pin® Heavy Duty Shackles, Sling Shackles have an increased bow radius to improve your sling's resistance to wear and tear and enable you to use a lighter wire rope to lift the same heavy load. This means that by using the Green Pin® Sling Shackle BN you can save on wire rope costs (however, the Green Pin® Power Sling shackle offers even bigger savings). The shackle also offers a double safety (split pin and safety bolt) which prevents accidental unscrewing of the pin. Of course, galvanization of the Green Pin® Sling Shackle BN ensures long-term durability. A wide range of certifications is also available: Green Pin® Sling Shackles BN of 75 tons and higher include a Lloyd's proof load test certificate for example. The Green Pin® Sling Shackle BN is available in a range with a working load limit from 7 up to 1550 tons.



CAD RFID





### **Highlights**

- Saves on cost of wire/synthetic rope due to less wear
- Excellent choice for heavy lifting projects
- Double safety (cotter pin & safety bolt)
- Superior stock availability of 99%
- Conforms to wide range of certifications (e.g. DNV GL)

### **WARNING: NEVER EXCEED WORKING LOAD LIMIT!**

Failure to follow instructions can result in serious property damage, injury or death! For more information please see the shackle warning information found in the hardware section of this catalogue

Item No.	WLL					D	IMENSI	ONS (ir	ı.l					Net weight
	Tonne	A	В	C	D	E	F	G	Н	ı	C	K	L	LBS
SLGPF0007	7	0.87	0.87	1.81	0.75	1.26	3.78	2.52	6.02	4.53	4.33	0.75	1.61	4.34
SLGPF0012	12.5	1.10	1.10	2.40	0.98	1.73	4.76	3.23	7.76	5.94	5.75	0.94	2.13	9.41
SLGPF0018	18	1.38	1.38	2.72	1.18	2.13	5.83	4.02	9.41	6.89	7.09	1.14	2.52	15.10
SLGPF0030	30	1.57	1.65	3.54	1.38	2.72	6.50	4.96	10.98	8.31	7.87	1.34	3.11	27.56
SLGPF0040	40	2.17	2.01	4.29	1.77	3.31	7.83	5.51	13.03	9.92	9.25	1.50	3.82	44.75
SLGPF0055	55	2.36	2.24	4.53	2.17	3.54	9.45	6.30	15.31	11.77	10.63	1.77	3.94	67.02
SLGPF0075	75	2.68	2.76	4.92	2.13	4.33	11.42	7.28	18.62	12.87	12.48	2.13	4.72	99.21
SLGPF0125	125	3.35	3.15	6.06	3.35	5.39	14.41	8.66	22.95	16.77	15.35	2.52	5.91	202.83
SLGPF0150	150	3.70	3.74	7.05	3.50	5.79	15.39	9.96	25.39	17.13	17.09	1.97	6.69	308.65
SLGPF0200	200	4.33	4.13	7.83	3.94	6.22	18.94	11.02	29.88	18.50	18.98	1.97	8.07	451.9
SLGPF0250	250	4.96	4.72	8.94	4.33	7.05	21.34	11.81	33.82	20.43	20.87	2.36	9.45	582.0
SLGPF0300	300	5.31	5.28	9.65	4.80	7.68	23.66	13.78	37.28	22.64	24.41	2.76	10.43	793.7
SLGPF0400	400	6.30	6.30	11.54	5.71	9.09	22.68	14.57	38.78	26.57	27.17	3.15	12.60	1279
SLGPF0500	500	6.69	7.09	12.91	6.30	10.35	26.81	17.72	44.53	29.45	31.10	3.54	13.35	1720

### Green Pin BigMouth® Bow Shackle BN

### Grade 8 bow shackle with safety bolt

Product details

Web Slings

Shackles & Turnbuckles

Hoists &

Tie Down

Product code G-4263

bow and pin alloy steel, Grade 8, quenched and tempered Material

Safety factor MBL equals 6 x WLL Finish hot dipped galvanized Temp. range -20°C up to +200°C Certification 2.1, 2.2, 3.1, MTCa, CE

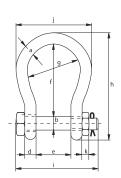


### **Description**

The Green Pin Big mouth® Bow Shackle BN is a grade 8 shackle with a safety bolt and a wider shackle mouth. The wider shackle mouth enables you to connect the shackle to a connecting point (e.g. a pad eye) which is wider than usual. The shackle also offers a double safety (split pin and safety bolt) which prevents accidental unscrewing of the pin. Long-term durability is assured due to the galvanization of the Green Pin Big mouth® Bow Shackle BN. Of course, the Green Pin Big mouth® Bow Shackle BN conforms to a range of certifications. The shackle is suitable for both one-leg and multi-leg systems and is available in a range with a working load limit from 4.75 up to 75 ton.



CAD RFID





### **Highlights**

- Perfect for use with wide connecting points due to wide shackle mouth
- Ideal for towing operations
- Galvanization assures long-term durability
- Suitable for both one-leg and multi-leg systems
- Superior stock availability of 99%

### **WARNING: NEVER EXCEED WORKING LOAD LIMIT!**

Failure to follow instructions can result in serious property damage, injury or death! For more information please see the shackle warning information found in the hardware section of this catalogue

Item No.	WLL	DIMENSIONS (in.)											Net weight
	Tonne	A	В	С	D	E	F	G	Н	ı	C	K	LBS
ASGHMB22	4.75	0.87	0.98	2.05	0.87	2.48	4.41	3.46	6.81	6.18	5.20	0.87	4.59
ASGHMB25	6.50	0.98	1.10	2.32	0.98	2.95	5.31	4.13	8.03	7.20	6.10	0.98	6.92
ASGHMB28	8.50	1.10	1.26	2.60	1.10	3.23	5.83	4.53	8.86	8.07	6.73	1.06	9.61
ASGHMB32	9.50	1.26	1.38	2.83	1.26	3.54	6.38	4.96	9.76	8.82	7.48	1.18	13.12
ASGHMB35	12.00	1.38	1.50	3.11	1.38	3.94	7.09	5.51	10.79	9.65	8.27	1.30	17.35
ASGHMB38	16.00	1.50	1.65	3.46	1.50	4.17	8.50	6.26	12.56	9.76	9.25	0.75	22.49
ASGHMB45	25.00	1.77	1.97	4.06	1.77	5.00	9.76	6.89	14.57	11.65	10.43	0.91	36.82
ASGHMB50	30.00	1.97	2.24	4.65	1.97	5.75	10.75	8.15	16.18	13.07	12.09	1.02	55.12
ASGHMB65	55.00	2.56	2.76	5.71	2.56	6.50	12.36	8.39	19.17	15.39	13.50	1.26	99.21
ASGHMB83	75.00	3.27	3.27	6.46	3.27	7.24	12.99	10.00	21.14	18.11	16.54	1.54	154.32

### Green Pin Big mouth® Bow Shackle BN - G-4553

### Grade 8 bow shackle with safety bolt

Product details

Product code G-4553

Material bow and pin alloy steel, Grade 8, quenched and tempered

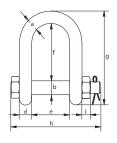
Safety factor MBL equals 5 x WLL Finish hot dipped galvanized Temp. range -20°C up to +200°C

Certification 2.1 | 2.2 | 3.1 | MTCa | CE

### Description

The Green Pin Big mouth® Dee Shackle BN is ideal for use in situations where a lifting point is out of reach for a standard shackle. The Big mouth® Dee Shackle BN has a wider inside width and a longer inside length enabling you to connect the shackle to non-typical lifting points. Such lifting points are for example often found in the steel sheet pile wall industry. The lifting points on the pile walls are usually set at a depth at which only a Green Pin Big mouth® Dee Shackle BN can be used to complete the job. The Green Pin Big mouth® Dee Shackle BN is fitted with a safety bolt. Long-term durability is assured due to the galvanization of the Green Pin Big mouth® Dee Shackle BN. The shackle conforms to a range of certifications. The Green Pin Big mouth® Dee Shackle BN is suitable for both one-leg and multi-leg systems and is available in a range with a working load limit from 4.6 up to 15.5 ton.







### **Highlights**

- Longer inside length
- · Perfect for lifting steel sheet pile walls
- Galvanization assures long-term durability
- Double safety (cotter pin & safety bolt)
- · Suitable for one-leg systems only

### **WARNING: NEVER EXCEED WORKING LOAD LIMIT!**

Failure to follow instructions can result in serious property damage, injury or death! For more information please see the shackle warning information found in the hardware section of this catalogue

Item No.	WLL				DIM	ENSIONS	lin.l				Net weight
	Tonne	Α	В	C	D	E	F	G	Н	ı	LBS
LDGDMB19	4.60	0.75	0.87	1.81	0.75	2.76	4.57	6.65	4.25	0.75	3.31
LDGDMB25	8.60	0.98	1.10	2.32	0.98	3.27	5.51	8.19	8.19	0.98	6.90
LDGDMB38	15.50	1.50	1.65	3.46	1.50	4.53	7.01	11.06	10.12	0.75	20.77

### Shackle for synthetic web slings with screw collar pin

Product details

Product code P-5461

Material alloy steel, Grade 8, quenched and tempered

Safety factor MBL equals 6 x WLL

Finish painted green

Temp. range  $-40^{\circ}$ C up to  $+200^{\circ}$ C

Standard EN 1677-1





Round Slings

Web

Synthetic Chain Slings

Wire Rope Slings

kles Slin

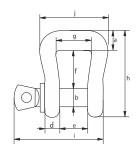
Links

# super slings

### Description

The Green Pin® Web Sling Shackle SC is the ideal shackle for lifting with synthetic round and flat web slings. The optimal bearing surface of the shackle crown means the load on the web sling is distributed evenly. As a result, damage to the web sling is minimized and its lifespan extended. Wear of the web sling is also minimized as a result of the smooth finish of the shackle. Furthermore, because the load is distributed evenly on the web sling compared to a standard shackle, it is not necessary to reduce the load (WLL) on the web sling. The risk of damage to the web sling that touches the pin is also significantly reduced because the screw thread is completely hidden into the shackle eye. The product is suitable for web slings made according to EU and US standards. The shackle is available in a range with a working load limit from 3.25 up to 8.5 ton.







### **Highlights**

- · Shackle crown optimized for web sling
- · Extends lifespan of web sling
- Smooth finish
- No WLL reduction on the web sling required
- Chamber in the shackle eye hides the screw thread and reduces wear

### **WARNING: NEVER EXCEED WORKING LOAD LIMIT!**

Failure to follow instructions can result in serious property damage, injury or death! For more information please see the shackle warning information found in the hardware section of this catalogue

Item No.	WLL					IMENSI	ONS [in.]					Net weight
	Tonne	Α	В	C	D	E	F	G	Н	ı	J	LBS
POPWBB16	3.25	0.79	0.75	1.57	0.63	1.06	1.50	1.38	3.43	3.50	2.68	1.46
POPWBB19	4.75	0.94	0.87	1.81	0.75	1.22	1.89	1.81	4.17	4.06	3.35	2.43
POPWBB22	6.50	1.06	0.98	2.05	0.87	1.42	2.83	2.44	5.41	4.69	4.27	3.95
POPWBB25	8.50	1.22	1.10	2.32	0.98	1.69	3.29	3.11	6.22	5.39	5.26	6.04

### More Green Pin® Shackles Available upon request



### Green Pin® Theatre Shackle SC - G-4161T Matte black bow shackle with screw collar pin

No sheen or light reflections due to black matte finish

Screw pin for quick (dis)assembly

Specially developed for entertainment venues

Chamber in the shackle eye hides the screw thread and reduces wear

Reliable Green Pin® quality and support

### Green Pin® Fishing Bow Shackle FP - G-4169

Bow shackle with square sunken hole screw pin (flush pin)

· No protruding parts so does not damage nets

Assembled with sunken hole key

Galvanization assures long-term durability

Suitable for both one-leg and multi-leg systems

Chamber in the shackle eye hides the screw thread and reduces wear

### Green Pin® Fishing Dee Shackle FP - G-4159

Dee shackle with square sunken hole screw pin (flush pin)

No protruding parts so does not damage nets

Assembled with sunken hole key

Galvanization assures long-term durability

Suitable for one-leg systems only

Chamber in the shackle eye hides the screw thread and reduces wear

### Green Pin® Spring Pin ROV Shackle - P-5363

Release ROV shackle (grade 8) with spring pins

Excellent choice for ROV release operations

Two spring pins to ensure additional safety

White coating optimizes visibility under water

Superior stock availability of 99%

Developed specifically for sub-sea applications

### Green Pin Power Sling® Shackle BN - P-6043

High load capacity, grade 8 shackle with safety bolt

Saves up to 20% on cost of wire rope

Improves safety thanks to multiple handling points and RFID-tracking

Unique Green Pin® design (patent pending)

Best choice for heavy lifting projects

Superior stock availability of 99%

### Green Pin® Heavy Duty Bow Shackle BN - P-6036

High load capacity bow shackle with safety bolt

Good choice for heavy lifting projects

Suitable for both one-leg and multi-leg systems

Superior stock availability of 99%

Conforms to wide range of certifications

Safety bolt: perfect for when rotation of the pin is a risk

### Green Pin Polar® Heavy Duty Bow Shackle BN - P-6031

Perfect for use in low-temperature situations

- Good choice for heavy lifting projects
- Conforms to wide range of certifications
- Suitable for both one-leg and multi-leg systems





Years of Secure Solutions

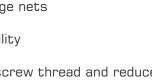


Capacities

2t - 17t

**Capacities** 

2t - 17t







6.5t - 85t



**Capacities** 

125t - 1,250t











Capacities 120t - 1,500t



High load capacity, grade 8 bow shackle with safety bolt **Capacities** for use under low temperatures 120t - 1,500t



### **GOLD PIN SHACKLE WARNINGS AND INFORMATION**

IT IS VERY IMPORTANT TO READ AND UNDERSTAND ALL INFORMATION SHOWN BEFORE USING A SHACKLE







Bolt Type Anchor Shackles



Screw Pin Chain Shackles



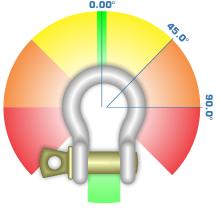


### FAILURE TO OBSERVE THESE WARNINGS MAY RESULT IN SERIOUS INJURY OR DEATH!

- ALWAYS inspect shackles before use. Check for wear, damage, bent or elongation of the body or pin, spreading of the shackle legs also check to see if there is any damage to the threads.
- NEVER replace shackle pins with a competitors pin
- NEVER replace a shackle pin with a bolt pin, the load will bend the pin
- NEVER exceed 120° included angle. Use Bolt Type and/or Screw Pin Shackles ONLY.
- NEVER re-use shackles or pins which are visibly deformed
- NEVER use shackles which are worn in the crown or pin by more than 10% of the original diameter
- NEVER use screw pin shackles if the pin can roll under the load bolt type shackles with cotter pin are recommended for these applications
- NEVER proof test shackles beyond 2 times the working load limit (WLL)
- NEVER modify, repair or reshape a shackle by welding, heating or bending as this will affect the working load limit (WLL)
- NEVER allow a shackle to be pulled at an angle; this will cause the legs to open. The pin should be packed with washers to center the shackle
- · NEVER shock load
- ALWAYS make sure that the shackle being used is large enough to avoid pinching or bunching when used with synthetic slings
- ALWAYS make sure that the diameter of the shackle is greater than the wire rope diameter if there is no thimble in the eye
- ALWAYS mouse screw pin shackles when used in long term or high vibration applications
- ALWAYS make sure that the shackle properly supports the load.
- · It is very important to read and understand all information shown before using a shackle
- Working Load Limits (WLL) are based on shackles in new condition and are subject to downward adjustment in case of side loading:

Side Load Capacit	y Reduction Chart
Angle of Side Load	Capacity
O° from Vertical Line	100 % of the WLL
45° from Vertical Line	70 % of the WLL
90° from Vertical Line	50 % of the WLL

\*For Screw Pin and bolt type bow shackles only



super slings

Sling Protection

Web

Kound

synthetic nain Slings

Chain S

Slings

Slings

**Turnbuckles** 

Links

Points

Hoists & Blocks

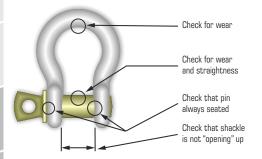
Rope & Cordage

### **GOLD PIN SHACKLE WARNINGS AND INFORMATION**

IT IS VERY IMPORTANT TO READ AND UNDERSTAND ALL INFORMATION SHOWN BEFORE USING A SHACKLE

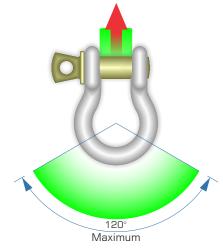






### Shackle inspection

Check for wear, damage, bent or elongation of the body or pin, spreading of the shackle legs also check to see if there is any damage to the threads.

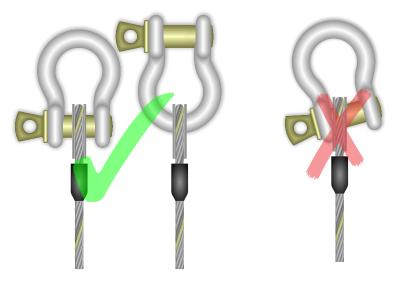


### Symmetrical loading

Shackles symmetrically loaded with two leg slings having a maximum included angle of 120° can be utilized to full Working Load Limit (WLL). Only bolt type with cotter pin and screw pin shackles should be used for this application.

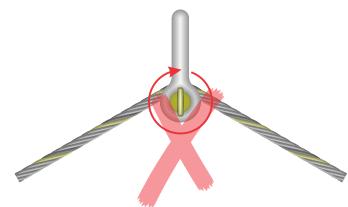
### **Eccentric shackle loads**

To prevent an angular lift with a shackle, pack the pin. This will center the load preventing the legs from spreading and the shackle from failing



### Rolling of the pin

If the load shifts the sling can unscrew the shackle pin. For long term applications or where the load can cause the pin to rotate, bolt type shackles with cotter pin should be used.



### Mousing of a screw pin shackle

Mousing is a secondary securement method used to secure screw pin from rotation or loosening. Annealed iron wire is looped through the hole in collar of pin and around adjacent leg of shackle body with wire ends securely twisted together. Multiple wraps are required for securement where the load may slide on the shackle pin.



### **Gold Pin Screw Pin Anchor Shackle**

### Grade 8 bow shackle with safety bolt

Product details:

- Meet the performance requirements of U.S. Fed. Spec. RR-C-271D, Type 4A,
- Grade A, Class 2
- Heat treated carbon steel bows, quenched and tempered with Alloy pins
- · Hot dipped galvanized
- Metallic coating of shackle pins allows for closer thread tolerances than possible for shackles with an extra layer of paint
- Design factor 6:1

### **Description**

# requirements of ASME B30.26

'Golden Pin' shackles bodies are embossed with: • Alloy Pin I.D., WLL (HS)

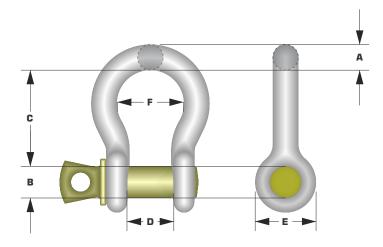
- Vanguard
- WLL (working load limit)
- Size
- Trace Code





### To assure total traceability and to exceed the 'Golden Pin' shackles pins are stamped with:

- Vanguard I.D. (VGD®)
- Yellow chromated for instant recognition
- Trace Code



Item No.	WLL			DIMENSI	ONS (in.	.1		Net weight
	tonne	A	В	C	D	E	F	LBS
75-1018357	0.33	3/16	1/4	0.93	0.39	0.59	0.64	0.06
75-1018375	0.50	1/4	5/16	1.14	0.49	0.70	0.75	0.12
75-1018393	0.75	5/16	3/8	1.23	0.53	0.83	0.80	0.18
75-1018419	1.00	3/8	7/16	1.41	0.69	0.98	1.01	0.32
75-1018437	1.50	7/16	1/2	1.70	0.72	1.06	1.13	0.45
75-1018455	2.00	1/2	5/8	1.83	0.83	1.18	1.25	0.68
75-1018473	3.25	5/8	3/4	2.36	1.06	1.55	1.67	1.36
75-1018491	4.75	3/4	7/8	2.76	1.24	1.78	1.98	2.24
75-1018516	6.50	7/8	1	3.29	1.42	2.09	2.25	3.50
75-1018534	8.50	1	1-1/8	3.69	1.75	2.35	2.66	5.00
75-1018552	9.50	1-1/8	1-1/4	4.23	1.80	2.71	2.79	7.65
75-1018570	12.00	1-1/4	1-3/8	4.63	2.12	3.01	3.15	10.40
75-1018598	13.50	1-3/8	1-1/2	5.17	2.30	3.32	3.60	13.80
75-1018614	17.00	1-1/2	1-5/8	5.67	2.39	3.63	3.85	17.90
75-1018632	25.00	1-3/4	2	7.06	2.96	4.23	4.99	27.90
75-1018650	35.00	2	2-1/4	7.75	3.31	5.11	5.59	42.70
75-1018678	55.00	2-1/2	2-3/4	10.25	4.00	5.75	7.00	85.00

If the pin, after a 1/4 turn, remains hard to remove, there ia a good chance that the shackle has been overloaded beyond the designed working load limit (WLL) and it, therefore, must be discarded.

### **WARNING: NEVER EXCEED WORKING LOAD LIMIT!**

Failure to follow instructions can result in serious property damage, iniury or death!

~For more information please see the shackle warning information found in the hardware section of this catalogue



Tie Down Assemblies

Tie Down Accessories,

super slings

# Gold Pin Bolt Type Anchor Shackle

### Grade A bow shackle with safety bolt

Product details:

- · Meet the performance requirements of U.S. Fed. Spec. RR-C-271D, Type 4A, Grade A, Class 3
- Heat treated carbon steel bows, quenched and tempered with Alloy pins
- Hot dipped galvanized
- Metallic coating of shackle pins allows for closer thread tolerances than possible for shackles with an extra layer of paint
- Recommended for long term service installation as well as for applications where there is the possibility that the pin can rotate under load
- Design factor 6:1

### **Description**

### To assure total traceability and to exceed the 'Golden Pin' shackles pins are stamped with: requirements of ASME B30.26

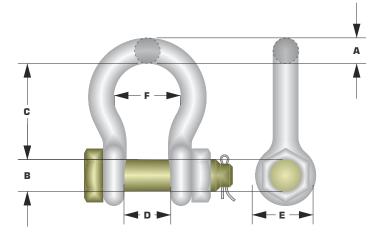
'Golden Pin' shackles bodies are embossed with: • Alloy Pin I.D., WLL (HS)

- Vanguard
- WLL (working load limit)
- Size
- Trace Code





- Vanguard I.D. (VGD®)
- Yellow chromated for instant recognition
- Trace Code



	Item No.	WLL	DIMENSIONS [in.]										
		tonne	Α	В	C	D	E	F	LBS				
	75-1019466	0.50	1/4	5/16	1.14	0.50	0.67	0.77	0.13				
	75-1019468	0.75	5/16	3/8	1.22	0.54	0.83	0.83	0.21				
	75-1019470	1.00	3/8	7/16	1.41	0.66	1.00	0.99	0.36				
	75-1019471	1.50	7/16	1/2	1.72	0.75	1.03	1.12	0.47				
	75-1019472	2.00	1/2	5/8	1.87	0.84	1.19	1.16	0.80				
	75-1019490	3.25	5/8	3/4	2.38	1.06	1.58	1.68	1.61				
	75-1019515	4.75	3/4	7/8	2.82	1.27	1.80	1.99	2.45				
	75-1019533	6.50	7/8	1	3.33	1.44	2.09	2.27	3.85				
	75-1019551	8.50	1	1-1/8	3.75	1.72	2.38	2.68	5.65				
	75-1019579	9.50	1-1/8	1-1/4	4.21	1.89	2.72	2.91	8.52				
	75-1019597	12.00	1-1/4	1-3/8	4.67	2.24	2.98	3.20	11.10				
	75-1019613	13.50	1-3/8	1-1/2	5.25	2.51	3.32	3.62	14.88				
	75-1019631	17.00	1-1/2	1-5/8	5.70	2.68	3.60	3.82	19.30				
	75-1019659	25.00	1-3/4	2	7.00	3.07	4.24	4.65	30.45				
	75-1019677	35.00	2	2-1/4	7.85	3.25	5.05	5.77	46.63				

### NOTE:

t If the pin, after a 1/4 turn, remains hard to remove, there ia a good chance that the shackle has been overloaded beyond the designed working load limit (WLL) and it, therefore, must be discarded.

### **WARNING: NEVER EXCEED WORKING LOAD LIMIT!**

— Failure to follow instructions can result in serious property damage, injury or death!

~For more information please see the shackle warning information found in the hardware section of this catalogue

### **Applications**

Turnbuckles are used for rigging or tensioning wires, ropes, rods etc. They are designed for in-line rigging, tensioning or lashing. Green Pin® Turnbuckles (G-6313, G-6323, G-6333, G-6311, G-6312, G-6315 and G-6314) can be used in lifting applications. The closed body rigging screws (G-6343, G-6340 and G-6345) can also be used in lifting applications.

### Ranges

Green Pin® offers a wide range of turnbuckles:

- Load rated Green Pin® turnbuckles;
- Open body rigging screws generally to DIN 1480;
- Rigging screws with welding ends;
- Closed body rigging screws;
- Special turnbuckles for lashing (hamburgers).

Van Beest offers a wide range of other turnbuckles to complement the Green Pin® assortment.

### Design

Green Pin® turnbuckles are manufactured to ASTM F1145-92 (formerly U.S. Fed. Spec. FF-T-791). They are drop forged and available with the following end fittings: eye/eye, hook/hook, hook/eye, jaw/jaw and jaw/eye. All fittings are interchangeable. Locking nuts are supplied with all sizes.

### All Green Pin® turnbuckles are generally marked with:

- Working Load Limit e.g. 2.36 t
- manufacturer's symbol e.g. GP
- thread diameter e.g. 3/4"
- traceability code e.g. A1
- thread L (left-handed) and R (right-handed)

Rigging screws generally to DIN 1480 are available with welding ends and in hook/eye, eye/eye, hook/hook and jaw/jaw combinations. Closed body rigging screws are available in jaw/jaw, jaw/eye and eye/eye combinations.

### **Finish**

Load rated Green Pin® turnbuckles and closed body rigging screws are hot dipped galvanized. Rigging screws to DIN 1480 are electro galvanized. Lashing turnbuckles are self colored.

### **Certification**

Specific details of certificate availability can be found on each product page. Please verify your certification requirements at the time of order.



super slings

Web

ound lings

Synthetic Chain Slings

Slings

urnbuckles

rs -

Blocks

Devices

Hose Restraints

Assemblies

Tie Down \ccessories

Towing & Recovery

> Kope & Cordage

### Instructions for Use

Turnbuckles must be used for in-line applications only. Special attention should be paid to prevent overloading. During tensioning, avoid forces on the turnbuckle that may lead to deformation. Should a turnbuckle start to deform, the tension should be decreased immediately and any deformed parts should be replaced. Should extreme circumstances or shock loading, possibly occur during use, this must be taken into account when selecting the correct products to be used for the application.

For the rigging of wires, ropes, rods etc., Green Pin® turnbuckles are recommended to be used. The WLL should be applied in in-line lifting only and overloading is not permitted. Nor should side loads be applied, as the products have not been designed for this purpose.

Open body rigging screws are used for tensioning wires and ropes for less demanding applications (for example rope railings).

Turnbuckles 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 steel structure.

### Safe use of Turnbuckles

Turnbuckles should be inspected before use to ensure that:

- all markings are legible;
- the threads of the body and the end fittings are of the same type;
- the pin, nut, cotter pin, or any other locking system cannot vibrate out of position;
- the threads of the body and the end fittings are undamaged;
- the body and end fittings are not distorted or unduly worn;
- the body and end fittings are free from nicks, gouges and cracks.

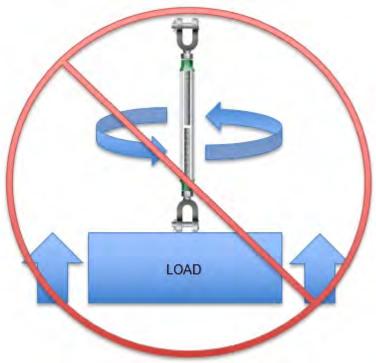
Make sure that the end fittings are correctly screwed into the body. Always use the locking nuts provided to prevent the turnbuckles from unscrewing. Never replace an end fitting by anything other than one designed for the purpose, otherwise the turnbuckle may not be suitable for the loads imposed.

Green Pin® Turnbuckles G-6311, G-6312, G-6313, G-6314, G-6315, G-6323 and G-6333 are suitable for lifting applications. These items have a Proof Load equal to 2 x WLL and Minimum Breaking Load equals to 5x WLL. Of course the "Instructions for use", as we publish them in our catalogue should be respected at all times.

Note: It is not permitted to adjust the length of the turnbuckle under full load. Tensioning below the WLL is permitted. It is advisable first to adjust roughly the length of

then load the turnbuckles to a certain tensior not exceed the full capacity (WLL).

Note: that it is not permitted to lift a load by tensioning (rotating the body) the turnbuckle, as shown in the pictur below:



### **VGD JAW & JAW FORGED TURNBUCKLES WITH LOCKNUTS**

### Jaw & Jaw Turnbuckle w/ Locknut

Product details

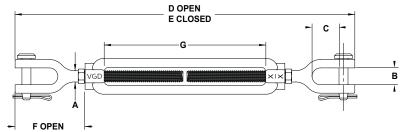
Material drop forged alloy steel, Grade 8, quenched and tempered

Design factor MBL equals 5 x WLL Finish hot dipped galvanized

Meeting the requirements of U.S. Fed. Spec. FF-T-791B Type 1, Standard

Form 1 (open body)

- Permanently embossed with R, L, VGD© and size for traceability to meet ASME B30.26
- Hexagon heads forged into bodies permit fast and easy adjustments
- · Forged carbon steel, bodies heat treated by normalizing, end-fitting quenched & tempered
- Hot dipped galvanized
- UNC Threads
- Design factor proof load 2.5:1, ultimate load 5:1



Item Code		Net Weight	WLL					
Item No.	A & G	В	C	D	E	F	lbs	lbs
75-1032493	1/4 X 4	0.54	0.68	12.01	7.89	1.79	0.36	500
75-1032518	5/16 X 4-1/2	0.59	0.91	13.92	9.41	2.13	0.52	800
75-1032536	3/8 X 6	0.74	1.04	17.63	11.38	2.52	0.81	1,200
75-1032554	1/2 X 6	0.65	1.08	19.09	13.19	2.71	1.56	2,200
75-1032572	1/2 X 9	0.61	1.10	23.95	15.95	2.65	1.74	2,200
75-1032590	1/2 X 12	0.66	1.07	30.90	19.00	2.72	2.40	2,200
75-1032616	5/8 X 6	0.77	1.46	22.13	14.89	3.43	2.72	3,500
75-1032634	5/8 X 9	0.95	1.46	27.20	18.31	3.70	3.43	3,500
75-1032652	5/8 X 12	0.77	1.42	32.99	21.26	3.70	3.91	3,500
75-1032670	3/4 X 6	1.05	1.61	22.75	16.75	4.23	4.11	5,200
75-1032698	3/4 X 9	1.01	1.76	28.50	19.50	4.19	5.46	5,200
75-1032714	3/4 X 12	1.02	1.75	34.75	22.75	4.29	6.43	5,200
75-1032732	3/4 X 18	0.90	1.61	49.29	29.53	4.56	8.07	5,200
75-1032750	7/8 X 12	1.24	2.01	36.25	24.62	5.00	8.14	7,200
75-1032778	7/8 X 18	1.23	1.75	50.17	30.30	4.86	10.78	7,200
75-1032796	1 X 6	1.26	2.14	30.43	20.50	5.74	10.18	10,000
75-1032812	1 X 12	1.40	2.19	38.00	26.50	5.84	12.52	10,000
75-1032830	1 X 18	1.21	2.07	51.00	33.00	6.01	15.14	10,000
75-1032858	1 X 24	1.31	2.07	64.06	38.06	5.53	18.08	10,000
75-1032876	1-1/4 X 12	2.03	2.94	41.75	30.50	7.50	20.59	15,200
75-1032894	1-1/4 X 18	2.08	2.95	54.00	37.50	8.25	24.68	15,200
75-1032910	1-1/4 X 24	1.84	2.82	63.93	39.93	8.09	29.80	15,200
75-1032938	1-1/2 X 12	2.19	2.93	43.62	32.68	7.97	30.69	21,400
75-1032956	1-1/2 X 18	2.08	2.80	56.30	38.58	8.38	36.75	21,400
75-1032974	1-1/2 X 24	2.34	3.10	69.00	45.00	8.88	40.67	21,400

### **WARNING: NEVER EXCEED WORKING LOAD LIMITS!**

FAILURE TO OBSERVE these warnings may result in serious injury or death! • Turnbuckles are designed for straight (in-line) pulls only•

**NEVER** re-use turnbuckles showing signs of deformation or damaged threads



Web Slings

super slings

# Green Pin® JJ Turnbuckle BN - G-6323

Green

Years of Secure Solutions

Turnbuckle with jaw-jaw end-fitting and safety bolt, generally to ASTM F1145-92

Product details

Product code G-6323

Material drop forged high tensile steel SAE 1035 or 1045

Safety factor MBL equals 5 x WLL Finish hot dipped galvanized

Certification 2.1 | 2.2 | 3.1 | MTCa | CE

Standard generally to ASTM F1145-92, formerly U.S. Federal Specification FF-T-791b

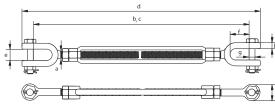
### **Description**

CAD RFID

The Green Pin® JJ Turnbuckle BN is a turnbuckle with jaw-jaw end-fitting used for both lifting and lashing. The turnbuckle also offers a double safety (cotter pin and safety bolt) which prevents accidental unscrewing and a safety bolt, generally to ASTM F1145-92. One of the unique features of Green Pin® Turnbuckles such as this one is that they can be of the pin. The Green Pin® JJ Turnbuckle BN is available in a range with a diameter thread of 1/2" (take up of 12") up to 1 3/4" (take up of 18").

### **WARNING: NEVER EXCEED WORKING LOAD LIMIT!**

Failure to follow instructions can result in serious property damage, injury or death! For more information please see the turnbuckle warning information found in the hardware section of this catalogue



### **Highlights**

- · Can be used for both lifting and lashing
- Double safety (cotter pin & safety bolt)
- · Reliable Green Pin® quality and support



Item code	WLL	take up		DIMENSIONS (in.)									
	Tonne	(INCH)	Α	В	С	D	E	F	G	н	ı	weight LBS	
SSGPGG1006	0.54	6	3/8	10.75	16.10	11.97	0.47	0.83	0.28	0.35	0.83	1.21	
SSGPGG1206	1.00	6	1/2	11.97	17.13	13.50	0.63	1.02	0.39	0.43	0.98	2.14	
SSGPGG1209	1.00	9	1/2	14.92	23.15	16.46	0.63	1.02	0.39	0.43	0.98	2.54	
SSGPGG1212	1.00	12	1/2	17.91	29.13	19.45	0.63	1.02	0.39	0.43	0.98	3.04	
SSGPGG1606	1.59	6	5/8	13.62	18.46	15.98	0.71	1.26	0.51	0.55	1.30	3.86	
SSGPGG1609	1.59	9)	5/8	16.57	24.49	18.90	0.71	1.26	0.51	0.55	1.30	4.72	
SSGPGG1612	1.59	12	5/8	19.61	30.47	21.93	0.71	1.26	0.51	0.55	1.30	5.36	
SSGPMBGG1906	2.36	6	3/4	14.53	19.17	17.28	0.94	1.50	0.63	0.63	1.61	5.95	
SSGPMBGG1909	2.36	9	3/4	17.48	25.20	20.24	0.94	1.50	0.63	0.63	1.61	7.12	
SSGPMBGG1912	2.36	12	3/4	20.47	31.18	23.23	0.94	1.50	0.63	0.63	1.61	7.87	
SSGPMBGG1918	2.36	18	3/4	26.38	43.15	29.13	0.94	1.50	0.63	0.63	1.61	10.03	
SSGPMBGG2212	3.27	12	7/8	22.09	32.52	25.12	1.06	1.65	0.75	0.75	1.89	11.51	
SSGPMBGG2218	3.27	18	7/8	28.07	44.57	31.10	1.06	1.65	0.75	0.75	1.89	14.46	
SSGPMBGG2506	4.54	6	1	17.60	21.81	20.94	1.22	1.97	0.87	0.79	2.13	12.21	
SSGPMBGG2512	4.54	12	1	23.54	33.82	26.89	1.22	1.97	0.87	0.79	2.13	14.77	
SSGPMBGG2518	4.54	18	1	29.53	45.98	32.87	1.22	1.97	0.87	0.79	2.13	18.98	
SSGPMBGG2524	4.50	24	1	35.55	57.87	38.90	1.22	1.97	0.87	0.79	2.13	19.56	
SSGPMBGG3212	6.90	12	1 1/4	25.31	36.06	29.45	1.73	2.80	1.10	1.02	2.68	26.24	
SSGPMBGG3218	6.90	18	1 1/4	31.69	48.43	35.83	1.73	2.80	1.10	1.02	2.68	29.98	
SSGPMBGG3224	6.90	24	1 1/4	37.95	60.67	42.09	1.73	2.80	1.10	1.02	2.68	31.31	
SSGPMBGG3812	9.71	12	1 1/2	26.57	37.09	31.73	2.05	2.80	1.38	1.10	3.15	40.79	
SSGPMBGG3818	9.71	18	1 1/2	32.48	48.98	37.64	2.05	2.80	1.38	1.10	3.15	42.55	
SSGPMBGG3824	9.71	24	1 1/2	38.58	61.06	43.74	2.05	2.80	1.38	1.10	3.15	48.50	
SSGPMBGG4518	12.70	18	1 3/4	36.93	51.81	42.99	2.36	3.39	1.61	1.30	3.54	63.93	
SSGPMBGG4524	12.70	24	1 3/4	42.87	63.82	48.94	2.36	3.39	1.61	1.30	3.54	72.75	
SSGPMBGG5024	16.80	24	2	45.39	65.87	52.68	2.48	3.66	1.97	1.57	4.21	110.23	
SSGPMBGG6424	27.20	24	2 1/2	49.41	72.09	58.27	2.95	4.49	2.24	1.61	5.63	194.01	
SSGPMBGG6924	34.00	24	2 3/4	53.07	74.09	63.15	3.54	4.33	2.76	1.61	6.22	240.30	

### **VGD EYE & EYE FORGED TURNBUCKLES WITH LOCKNUTS**

### Eye & Eye Turnbuckle w/ Locknut

Product details

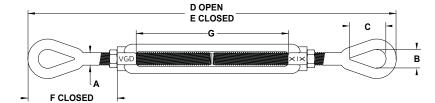
Material drop forged alloy steel, Grade 8, quenched and tempered

Design factor MBL equals 5 x WLL Finish hot dipped galvanized

Meeting the requirements of U.S. Fed. Spec. FF-T-791B Type 1, Standard

Form 1 (open body)

- Permanently embossed with R, L, VGD© and size for traceability to meet ASME B30.26
- Hexagon heads forged into bodies permit fast and easy adjustments
- · Forged carbon steel, bodies heat treated by normalizing, end-fitting quenched & tempered
- Hot dipped galvanized
- UNC Threads
- Design factor proof load 2.5:1, ultimate load 5:1



Item Code	Diameter & Take Up			Net Weight	WLL			
Eye & Eye	A & G	В	С	D open	E Closed	F Closed	lbs	lbs
75-1031252	1/4 x 4	0.32	075	12.18	8.83	1.78	0.26	500
75-1031270	5/16 x 4-1/2	0.43	0.90	14.09	9.67	2.11	0.45	800
75-1031298	3/8 x 6	0.52	0.93	18.10	12.20	2.57	0.76	1,200
75-1031314	1/2 x 6	0.72	1.13	19.57	14.22	3.36	1.54	2,200
75-1031332	1/2 x 9	0.69	1.44	26.90	16.90	3.27	1.13	2,200
75-1031350	1/2 x 12	0.72	1.40	31.85	20.00	3.26	2.14	2,200
75-1031378	5/8 x 6	0.81	1.43	22.00	16.00	3.79	3.28	3,500
75-1031396	5/8 x 9	0.86	1.71	28.66	19.69	4.21	2.83	3,500
75-1031412	5/8 x 12	0.88	1.74	34.93	21.69	3.90	3.42	3,500
75-1031430	3/4 x 6	0.96	1.81	23.66	17.72	4.67	4.61	5,200
75-1031458	3/4 x 9	1.00	2.07	31.10	20.64	4.70	4.61	5,200
75-1031476	3/4 x 12	1.00	2.09	37.10	23.66	4.69	5.48	5,200
75-1031494	3/4 x 18	0.94	2.10	47.40	30.39	4.97	7.19	5,200
75-1031519	7/8 x 12	1.26	2.07	38.56	24.80	5.11	7.22	7,200
75-1031537	7/8 x 18	1.25	2.38	50.57	30.82	5.10	9.95	7,200
75-1031573	1 x 12	1.45	2.38	41.97	27.80	6.37	11.50	10,000
75-1031591	1 x 18	1.35	3.01	51.20	34.60	6.75	14.00	10,000
75-1031617	1 x 24	1.41	3.00	64.29	41.73	7.46	17.25	10,000
75-1031635	1-1/4 x 12	1.76	3.49	43.18	31.10	8.10	19.00	15,200
75-1031653	1-1/4 x 18	1.81	3.56	57.07	36.56	7.72	23.00	15,200
75-1031699	1-1/2 x 12	2.14	4.13	45.28	35.04	9.55	27.50	21,400
75-1031715	1-1/2 x 18	2.12	4.07	60.01	39.00	8.63	31.00	21,400
75-1031733	1-1/2 x 24	2.12	4.06	72.00	45.00	8.62	37.50	21,400

### **WARNING: NEVER EXCEED WORKING LOAD LIMITS!**

FAILURE TO OBSERVE these warnings may result in serious injury or death! • Turnbuckles are designed for straight (in-line) pulls only •

**NEVER** re-use turnbuckles showing signs of deformation or damaged threads



super slings

CAD REID

### Green Pin® EE Turnbuckle - G-6311

### Turnbuckle with eye-eye end-fitting, generally to ASTM F1145-92

Product details

Product code G-6323

Material drop forged high tensile steel SAE 1035 or 1045

Safety factor MBL equals 5 x WLL Finish hot dipped galvanized

Certification 2.1 | 2.2 | 3.1 | MTCa | CE

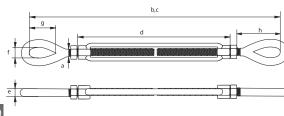
Standard generally to ASTM F1145-92, formerly U.S. Federal Specification FF-T-791b



The Green Pin® EE Turnbuckle is a turnbuckle with eye-eye end-fittings, generally to ASTM F1145-92. One of the unique features of Green Pin® Turnbuckles such as this one is that they can be used for both lifting and lashing. Galvanization of the Green Pin® EE Turnbuckle ensures its long-term durability. The turnbuckle is available in a range with a diameter thread 3/8" (take up of 6") up to 2 3/4" (take up of 24").

### **WARNING: NEVER EXCEED WORKING LOAD LIMIT!**

Failure to follow instructions can result in serious property damage, injury or death! For more information please see the turnbuckle warning information found in the hardware section of this catalogue



### Highlights

- · Can be used for both lifting and lashing
- Galvanization assures long-term durability
- Superior stock availability of 99%
- · Reliable Green Pin® quality and support



CAD REID											Net			
Item code	WLL	take up		DIMENSIONS (in.)										
	Tonne	INCH	Α	В	C	D	Е	F	G	Н	LBS			
SSGP001006	0.54	6	3/8	11.50	16.85	7.20	0.39	0.51	1.14	1.93	1.06			
SSGP001206	1.00	6	1/2	12.80	17.91	7.60	0.47	0.71	1.42	2.28	1.79			
SSGP001209	1.00	9	1/2	15.75	23.94	10.63	0.47	0.71	1.42	2.24	2.36			
SSGP001212	1.00	12	1/2	18.74	29.92	13.62	0.47	0.71	1.42	2.24	2.84			
SSGP001606	1.59	6	5/8	14.96	19.80	7.99	0.55	0.83	1.77	3.11	2.93			
SSGP001609	1.59	9	5/8	17.91	25.83	11.02	0.55	0.83	1.77	3.07	3.55			
SSGP001612	1.59	12	5/8	20.91	31.81	14.02	0.55	0.83	1.77	3.07	4.32			
SSGP001906	2.36	6	3/4	16.26	20.94	8.43	0.67	1.02	2.13	3.50	4.48			
SSGP001909	2.36	9	3/4	19.29	26.97	11.46	0.67	1.02	2.13	3.50	5.45			
SSGP001912	2.36	12	3/4	22.20	32.95	14.45	0.67	1.02	2.13	3.46	6.39			
SSGP001918	2.36	18	3/4	28.27	45.00	20.43	0.67	1.02	2.13	3.50	8.69			
SSGP002212	3.27	12	7/8	23.78	34.25	14.84	0.79	1.26	2.40	3.98	9.50			
SSGP002218	3.27	18	7/8	29.76	46.22	20.83	0.79	1.26	2.40	3.98	12.15			
SSGP002506	4.54	6	1	19.61	23.78	9.21	0.94	1.46	2.99	4.65	9.33			
SSGP002512	4.54	12	1	25.55	35.79	15.24	0.94	1.46	2.99	4.61	12.68			
SSGP002518	4.54	18	1	31.54	47.83	21.22	0.94	1.46	2.99	4.61	16.03			
SSGP002524	4.50	24	1	37.48	59.76	27.24	0.94	1.46	2.99	4.57	17.20			
SSGP003212	6.90	12	1 1/4	28.03	38.78	15.16	1.14	1.85	3.58	5.71	20.46			
SSGP003218	6.90	18	1 1/4	33.94	50.67	21.14	1.14	1.85	3.58	5.67	24.47			
SSGP003224	6.90	24	1 1/4	39.96	62.68	27.17	1.14	1.85	3.58	5.67	26.68			
SSGP003812	9.71	12	1 1/2	29.76	40.28	15.79	1.26	2.17	4.17	6.14	27.78			
SSGP003818	9.71	18	1 1/2	36.06	52.56	21.77	1.26	2.17	4.17	6.30	34.83			
SSGP003824	9.71	24	1 1/2	41.93	64.41	27.80	1.26	2.17	4.17	6.22	38.14			
SSGP004518	12.70	18	1 3/4	40.16	54.96	22.72	1.50	2.40	4.72	7.76	52.69			
SSGP004524	12.70	24	1 3/4	46.10	67.05	28.74	1.50	2.40	4.72	7.72	58.86			
SSGP005024	16.80	24	2	49.76	70.24	29.45	1.81	2.72	5.79	9.06	84.44			
SSGP006424	27.20	24	2 1/2	56.30	76.14	31.57	2.01	3.15	6.50	10.79	143.30			