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 non-permanent 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.

Range

Green Pin® offers a wide range of bow and dee shackles for a variety of applications. The range stretches from WLL 0.33 t to 3000 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, ISO 2415, 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. Please find below some examples of highly functional designs, to optimize the use of the Green Pin® shackles in daily use:

- Green Pin Super® Shackles which are made from 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 generally guaranteed up to temperatures of -60 °C;
- Green Pin Power Sling® Shackles are designed to provide a better bending efficiency for the sling. A larger 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.

How to recognize a genuine Green Pin® shackle?

- Marking in the shackle body and pin (from dia 13 mm and up)
- Steel grade (for example 6)
- CE conformity code
- Diameter bow (inch)
- Green Pin® logo (GP)
- Holland marking
- Working Load Limit (WLL in metric tonnes)
- Traceability code (2 letters)
- Green powder coated pin



Green Pin® Shackles meet all requirements of the Machinery Directive 2006/42/EC and its latest amendments.

Finish

Shackles supplied by Green Pin® are either 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 [a] | DNV 2.7-1 [a] | DNV 2.7-1 [b] | DNV 0377 | DNV 0378 | DNV NS 9415 | CE IIA | CE IIB | ABS PDA | ABS MA

With additional charges:

MTC [b] | MPI [a] | MPI [b] | US [a] | US [b] | DNV CG3 | BL

On request the proof load test certificates can be supplied surveyed by an official classification society, such as LROS, DNV, 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 type approved. These shackles carry two DNV type approval certificates that show compliance with:

- DNV-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 ST-E273 Portable Offshore Units
- DNV Standard No. 0378 Offshore and Platform Lifting Appliances
- ASME B30.26
- ISO 2415

The Green Pin Power Sling® Shackles are DNV type approved. This DNV type approval certificate is in compliance with:

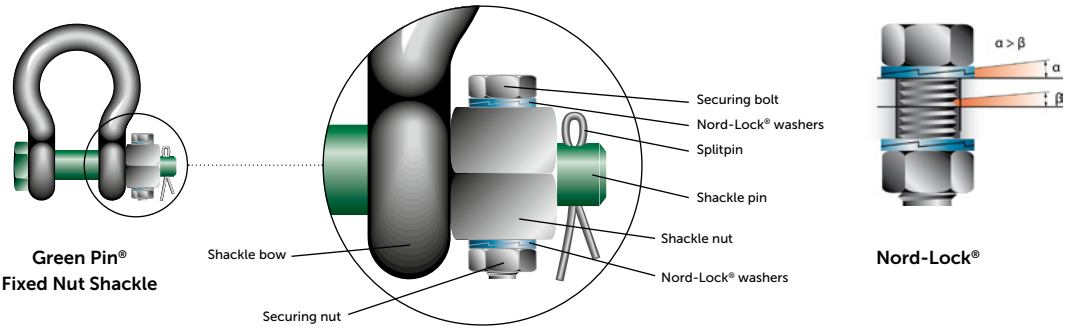
- DNV Standard for Certification No. 0377 Standard for Shipboard Lifting Appliances
- DNV Standard for Certification No. 0378 Offshore and Platform Lifting Appliances

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.

Type approval certificates can be found on **greenpin.com**.

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. All Green Pin® shackles with bolt and nut can be equipped with an extra AISI 316 securing bolt that is assembled 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 Shackle

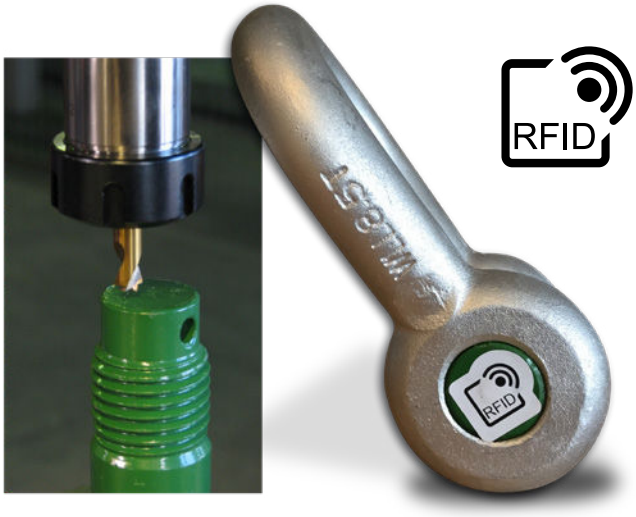
Nord-Lock®

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 smartphones.

Green Pin® offers the option of RFID implementation in all Green Pin® shackles. For detailed technical information please go to **www.greenpin.com/FAQ**.

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





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 (bow-pin configuration) at the following loads:

working load limit	Green Pin® Bow or Dee Shackles Polar® Shackles Heavy Duty Shackles BigMouth® Bow Shackle proof load	Green Pin Super® Shackles proof load	Green Pin® Sling Shackles proof load	Green Pin Power Sling® Shackle proof load	Green Pin® Web Sling Shackle proof load	Green Pin BigMouth® Dee Shackle proof load
t	t	t	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				8.13	
3.3		6.6				
4.6						9.2
4.75	9.5				11.88	
5		10				
6.5	13				16.25	
7		14	14			
8.5	17				21.25	
8.6						17.2
9.5	19	19				
12	24					
12.5		25	25			
13.5	27					
15		30				
15.5						31
16	32					
17	34					
18		36	36			
21		42				
25	50					
30	60	60	60			
35	70					
40		80	80			
42.5	85					
55	110	110	110			
75	150		150			
85	170	170				
120	240	240				
125			250	250		
150	300	300	300	300		
175		350				
200	400		300	400		
250	500		375	500		
300	600		450	600		
400	600		532	800		
500	750		750	1000		
600	900		900	900		
700	1050		931	1050		
800	1200		1064	1200		
900	1350		1350	1350		
1000	1500		1330	1500		
1250	1875		1663	1875		
1500	2250					
1550			2061.5	2325		

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. Please note that commercial shackles are not to be used for lifting applications.

Shackles should be inspected before use to ensure that:

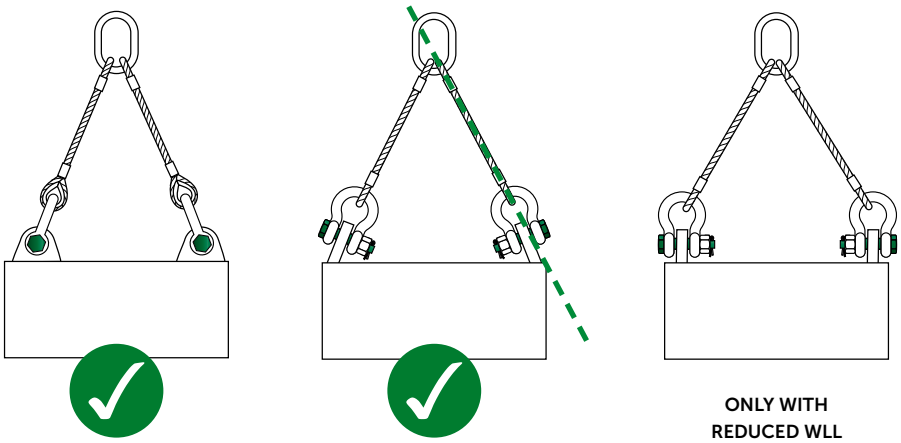
- all markings are legible;
- the body and pin are both of the same brand and type;
- the body and pin are both of the correct size;
- never use a safety bolt type shackle without using a securing pin;
- the pin, nut, cotter pin, or any other locking system cannot vibrate out of position;
- the threads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

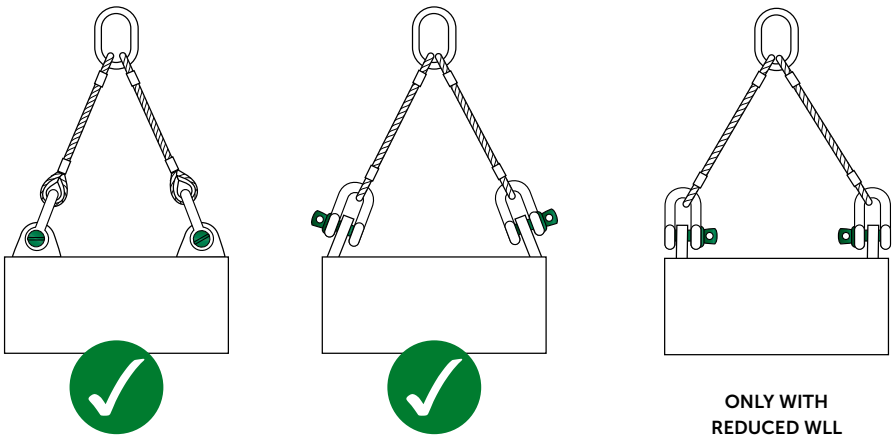
Ensure that the pin is correctly screwed into the shackle eye: tighten it hand-tight, then secure it using a wrench or other suitable tool so that the collar of the pin is fully seated against the shackle eye. Ensure that the pin is of the correct length so that it penetrates the full depth of the threaded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



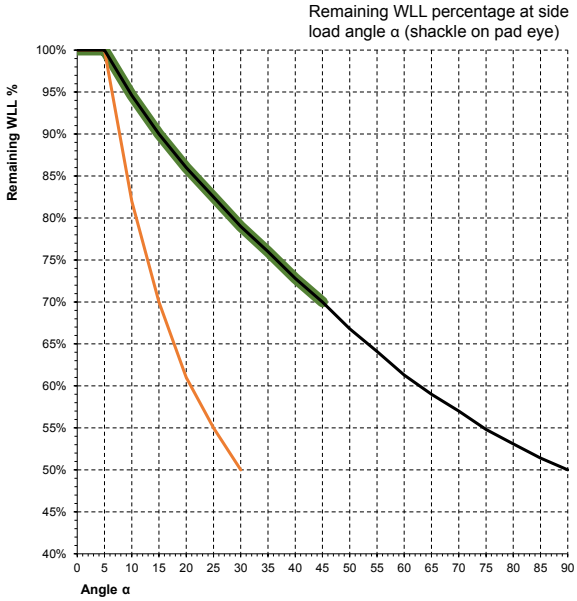
ONLY WITH
REDUCED WLL

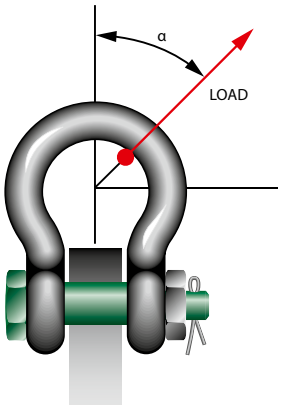


ONLY WITH
REDUCED WLL

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:



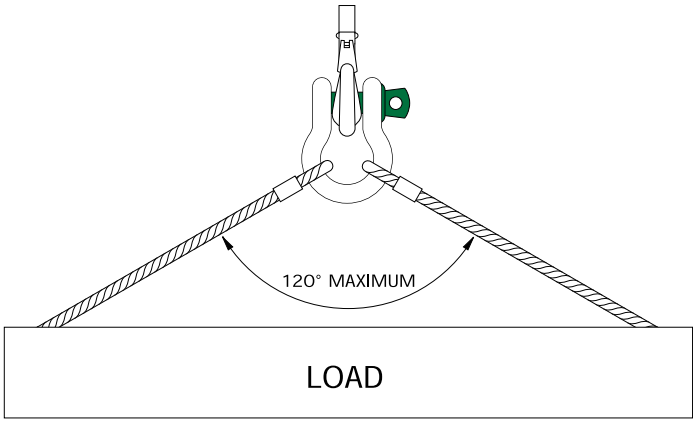


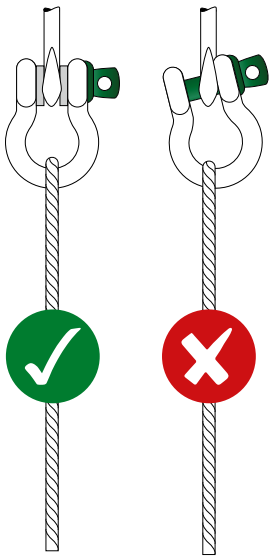
This black curve is valid for almost all Green Pin® shackles, except for ROV Shackles (P-5363 and P-5367) which are for in-line use only. The green curve is valid for Green Pin® Sling Shackles (P-6033, P-6013 and P-6065) and the orange curve is valid for the Green Pin Power Sling® Shackles (P-6043).

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

Maximum loading angle

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. It's not allowed to configure bow shackles with more than 2 legs. 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.

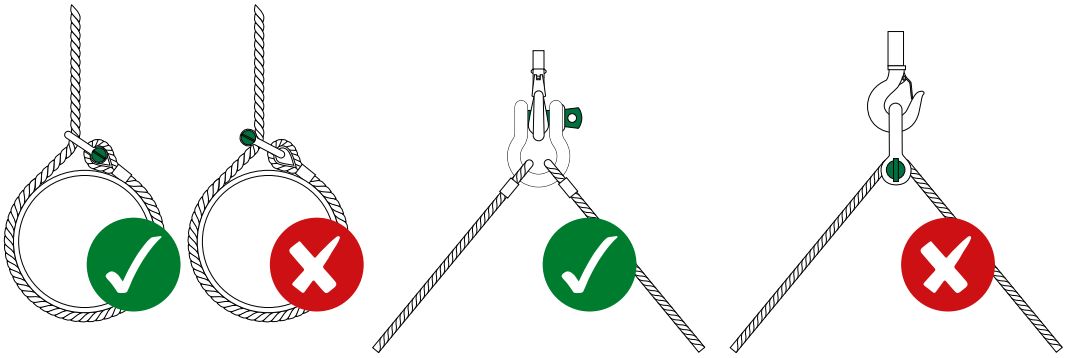
Avoiding eccentric loading

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.

Avoiding pin rotation

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.



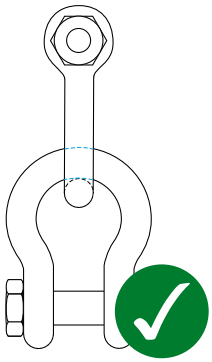
Chemicals

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

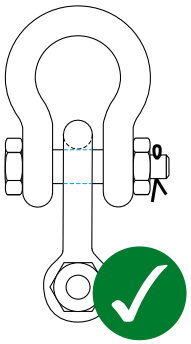
Point loading

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. 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 shall 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.

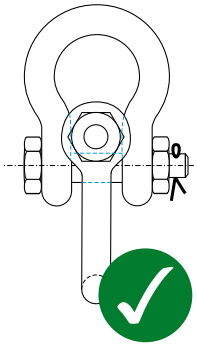
Bow-Bow



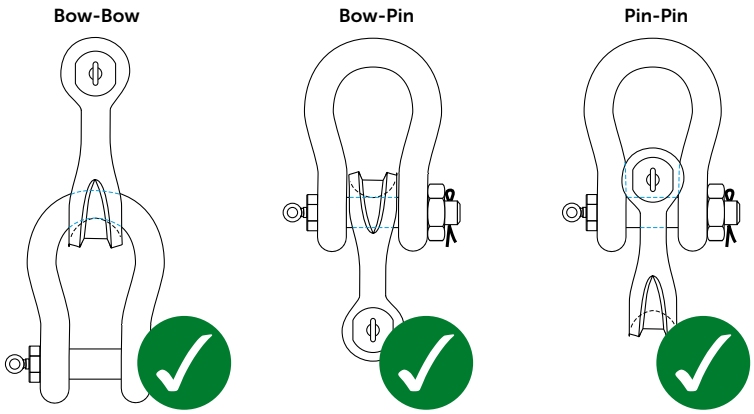
Bow-Pin



Pin-Pin

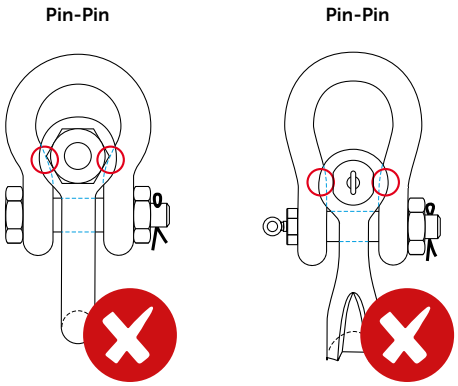


The crown of a Green Pin® Sling Shackle (P-6033) is wider than that of a standard shackle, thus creating a larger bearing surface. This improves the lifetime of the sling. Green Pin® Sling shackles can also be used in below configurations. The maximum load of the configuration is limited by the component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



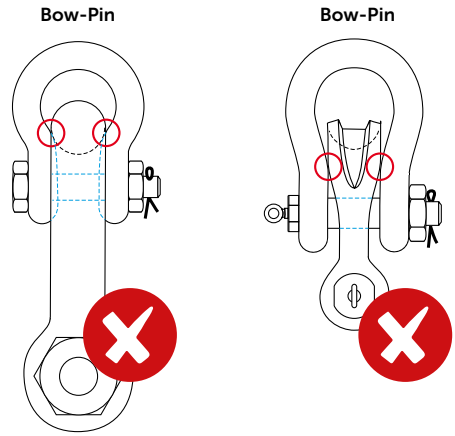
Pin- Pin configuration

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



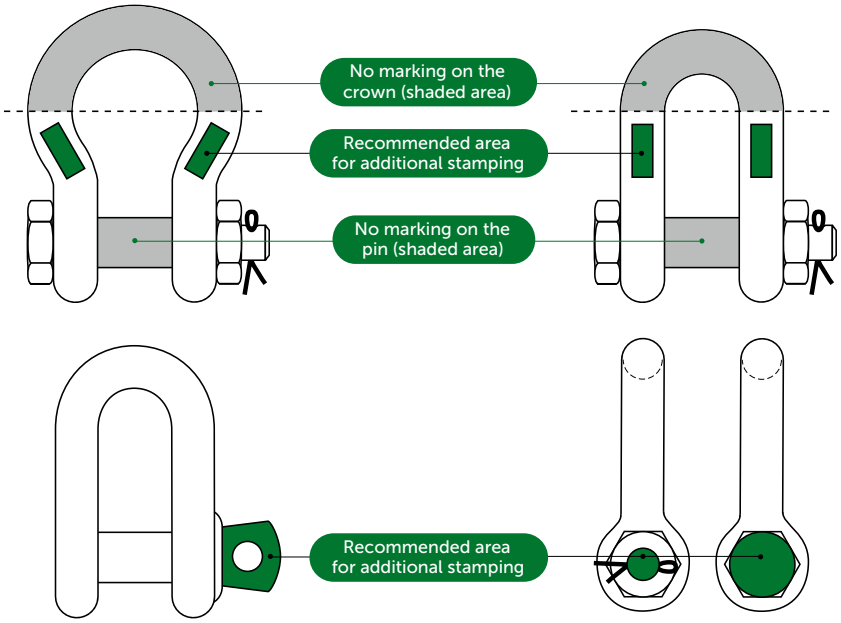
Contact Royal Van Beest, to check if a certain configuration is possible.

Additional markings

It is possible to add additional stamping on Green Pin® shackles, but make sure that you follow the recommendations below. If the recommendations are followed, the performance of the shackles is guaranteed.

- permanent identification marks or symbols are to be made by dot peen marking or with stamps having rounded profiles (low-stress stamps);
- laser markings are allowed as long as the heat of the laser does not influence in a negative way the material structure and properties. The laser marking must be legibly and indelibly marked in a place where the markings will not be removed by use;
- the number of marks on a shackle is to be kept to a minimum;
- the use of fractions and oblique strokes is to be avoided and a dot or hyphen is preferable to a dividing line;
- values of WLL are, generally, to be marked to one place of decimals (except for 0.25 and 0.75) up to 100 t and in integers thereafter. The word "tonnes" may be abbreviated to "t";
- recommended sizes of marks are
  - Diameter of the part to be marked > recommended size of the mark;
  - less than 12.5 mm > 3.0 mm;
  - 12.5 to 26 mm > 4.5 mm;
  - over 26 mm > 6.0 mm.

Typical arrangements of marks can be found in the following illustrations.



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	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 and regulations 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 (follow the local rules in the country of use) and more frequently when the shackles are used in severe operating conditions.


2017

Green Pin® Bow Shackle SC

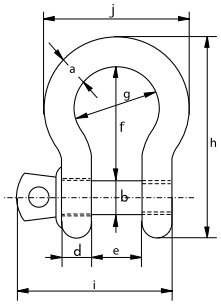
Standard bow shackle with screw collar pin

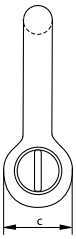
Scan for additional product details

- **Material:** bow and pin high tensile steel, grade 6, quenched and tempered
- **Safety Factor:** MBL equals 6 x WLL
- **Standard:** ISO 2415, 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 [a] DNV 0378 CE IIA ABS PDA ABS MA
- **Article code:** scan QR code to see article codes



G-4161





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	7	12	29	20	48	38	34	0.05
0.75	9	10	20	9	13.5	32	22	56	46.5	40	0.10
1	10	11	23	10	17	37	26	64	54	46	0.14
1.5	11	13	25	11	19	43	29	73	59.5	51	0.19
2	13.5	16	34	13	22	51	32	90	73	59	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	1.50
8.5	25	28	59	25	43	95	68	164	137	118	2.21
9.5	28	32	67	28	47	108	75	186	153	131	3.16
12	32	35	73	32	51	115	83	201	170	147	4.31
13.5	35	38	79	35	57	133	92	227	186	162	5.58
17	38	42	88	38	60	146	99	249	203	175	7.43
25	45	50	104	45	74	178	126	300	243	216	12.5
35	50	57	112	50	83	197	138	332	272	238	17.2
42.5	57	65	132	57	95	222	160	378	310	274	26.3
55	65	70	145	65	105	260	180	433	344	310	37.6

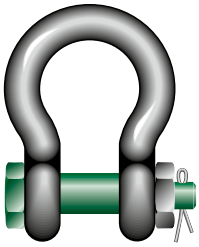
CAD RFID INFO

Green Pin® Bow Shackle BN

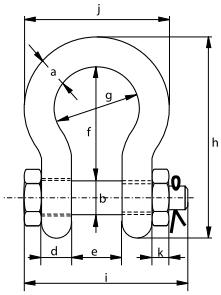
Standard bow shackle with safety bolt

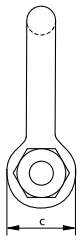
Scan for additional product details

- **Material:** bow and pin high tensile steel, grade 6, quenched and tempered
- **Safety Factor:** MBL equals 6 x WLL
- **Standard:** ISO 2415, 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 [a] | DNV 2.7-1 [a] * | DNV 2.7-1 [b] * | DNV 0378 | CE IIA | ABS PDA | ABS MA
- **Article code:** scan QR code to see article codes



G-4163





working load limit	diameter bow	diameter pin	diameter eye	width eye	width inside	length inside	width bow	length	length bolt	width	thickness nut	weight each
t	a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	i mm	j mm	k mm	kg
0.5	7	8	16	7	12	29	20	48	42	34	4	0.06
0.75	9	10	20	9	13.5	32	22	56	50	40	5	0.11
1	10	11	23	10	17	37	26	64	60	46	8	0.16
1.5	11	13	25	11	19	43	29	73	67	51	11	0.22
2	13.5	16	34	13	22	51	32	90	80	59	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	115	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	67	28	47	108	75	186	166	131	27	3.66
12	32	35	73	32	51	115	83	201	184	147	30	4.91
13.5	35	38	79	35	57	133	92	227	197	162	33	6.54
17	38	42	88	38	60	146	99	249	202	175	19	8.19
25	45	50	104	45	74	178	126	300	243	216	23	14
35	50	57	112	50	83	197	138	332	269	238	26	18.8
42.5	57	65	132	57	95	222	160	378	301	274	29	28.3
55	65	70	145	65	105	260	180	433	329	310	32	39.6
85	75	83	167	75	127	330	190	530	381	340	39	62

CAD | RFID | INFO

TYPE APPROVED PRODUCT DNV DNV.COM/AF

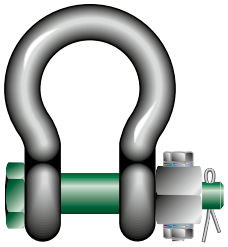
ABS TYPE APPROVED PRODUCT

* For shackles ≥ WLL 2 t

Green Pin® Bow Shackle FN

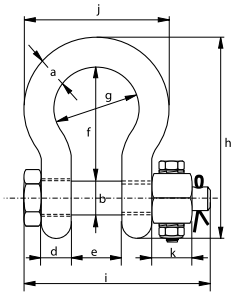
Standard bow shackle with safety bolt and fixed nut

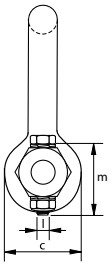
Scan for additional product details



- **Material:** bow and pin high tensile steel, grade 6, quenched and tempered
- **Safety Factor:** MBL equals 6 x WLL
- **Standard:** ISO 2415, 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 [a] | DNV 2.7-1 [a] | DNV 2.7-1 [b] | CE IIA
- **Article code:** scan QR code to see article codes

G-4143





working load limit	diameter bow	diameter pin	diameter eye	width eye	width inside	length inside	width bow	length	length bolt	width bow	thickness nut	securing bolt thread	securing bolt length	torque	weight each
t	a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	i mm	j mm	k mm	l mm	m mm	Nm	kg
2	13.5	16	34	13	22	51	32	90	80	59	13	M6	35	8.4	0.42
3.25	16	19	40	16	27	64	43	110	98	75	17	M6	40	8.4	0.74
4.75	19	22	46	19	31	76	51	129	115	89	19	M6	45	8.4	1.18
6.5	22	25	52	22	36	83	58	144	130	102	22	M8	50	20	1.77
8.5	25	28	59	25	43	95	68	164	150	118	25	M8	55	20	2.58
9.5	28	32	67	28	47	108	75	186	166	131	27	M10	60	39	3.66
12	32	35	73	32	51	115	83	201	184	147	30	M10	65	39	4.80
13.5	35	38	79	35	57	133	92	227	197	162	33	M10	70	39	6.54
17	38	42	88	38	60	146	99	249	202	175	19	M8	75	20	8.19
25	45	50	104	45	74	178	126	300	243	216	23	M8	90	20	14
35	50	57	112	50	83	197	138	332	269	238	26	M10	100	39	19.9
42.5	57	65	132	57	95	222	160	378	301	274	29	M12	110	68	28.3
55	65	70	145	65	105	260	180	433	329	310	32	M12	120	68	39.6
85	75	83	167	75	127	330	190	530	381	340	39	M12	140	68	62

CAD | RFID | INFO

TYPE APPROVED PRODUCT DNV DNV.COM/AF

Green Pin® Dee Shackle SC

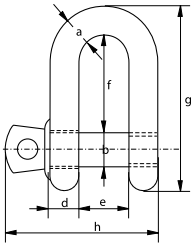
Standard dee shackle with screw collar pin

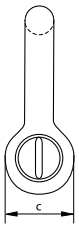
Scan for additional product details »



- **Material:** bow and pin high tensile steel, grade 6, quenched and tempered
- **Safety Factor:** MBL equals 6 x WLL
- **Standard:** ISO 2415, EN 13889 and meets performance requirements of US Fed. Spec. RR-C-271 Type IVB Class 2, grade A, from 2 t 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 [a] | DNV 0378 | CE IIA | ABS PDA | ABS MA
- **Article code:** scan QR code to see article codes

G-4151





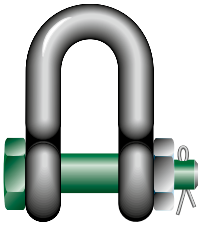
working load limit	diameter bow	diameter pin	diameter eye	width eye	width inside	length inside	length	length bolt	weight each
t	a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	kg
0.33	5	6	12	5	9.5	19	33	29.5	0.02
0.5	7	8	16	7	12	22.5	41.5	38	0.05
0.75	9	10	20	9	13.5	27	51	46.5	0.09
1	10	11	23	10	17	32	59	54	0.14
1.5	11	13	25	11	19	37	67	59.5	0.19
2	13.5	16	34	13	22	43	82	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	67	28	47	90	168	153	2.77
12	32	35	73	32	51	94	180	170	3.72
13.5	35	38	79	35	57	115	209	186	5.44
17	38	42	88	38	60	127	230	203	6.85
25	45	50	104	45	74	149	271	243	11.5
35	50	57	112	50	83	171	306	272	16.9
42.5	57	65	132	57	95	190	346	310	24.6
55	65	70	145	65	105	203	376	344	32.7

CAD | RFID | INFO

Green Pin® Dee Shackle BN

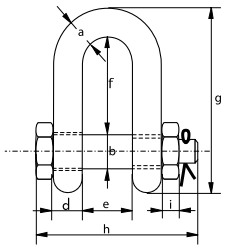
Standard dee shackle with safety bolt

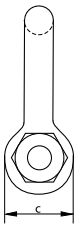
Scan for additional product details



- **Material:** bow and pin high tensile steel, grade 6, quenched and tempered
- **Safety Factor:** MBL equals 6 x WLL
- **Standard:** ISO 2415, 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 [a] | DNV 2.7-1 [a] * | DNV 2.7-1 [b] * | DNV 0378 | CE IIA | ABS PDA | ABS MA
- **Article code:** scan QR code to see article codes

G-4153





working load limit	diameter bow	diameter pin	diameter eye	width eye	width inside	length inside	length	length bolt	thickness nut	weight each
t	a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	i mm	kg
2	13.5	16	34	13	22	43	82	80	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	115	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	67	28	47	90	168	166	27	3.40
12	32	35	73	32	51	94	180	184	30	4.51
13.5	35	38	79	35	57	115	209	197	33	6.10
17	38	42	88	38	60	127	230	202	19	7.63
25	45	50	104	45	74	149	271	243	23	12.9
35	50	57	112	50	83	171	306	269	26	17.4
42.5	57	65	132	57	95	190	346	301	29	25.9
55	65	70	145	65	105	203	376	329	32	35.3
85	75	83	167	75	127	229	429	381	39	53

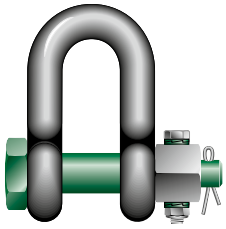
CAD | RFID | INFO

* For shackles ≥ WLL 2 t

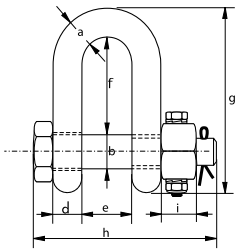
Green Pin® Dee Shackle FN

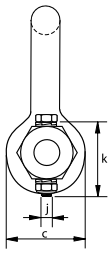
Standard dee shackle with safety bolt and fixed nut

Scan for additional product details »



G-4133





- **Material:** bow and pin high tensile steel, grade 6, quenched and tempered
- **Safety Factor:** MBL equals 6 x WLL
- **Standard:** ISO 2415, 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 [a] | DNV 2.7-1 [a] | DNV 2.7-1 [b] | CE IIA
- **Article code:** scan QR code to see article codes

working load limit	diameter bow	diameter pin	diameter eye	width eye	width inside	length inside	length	length bolt	thickness nut	securing bolt thread	securing bolt length	torque	weight each
t	a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	i mm	j mm	k mm	Nm	kg
2	13.5	16	34	13	22	43	82	80	13	M6	35	8.4	0.39
3.25	16	19	40	16	27	51	97	98	17	M6	40	8.4	0.67
4.75	19	22	46	19	31	59	112	115	19	M6	45	8.4	1.08
6.5	22	25	52	22	36	73	134	130	22	M8	50	20	1.66
8.5	25	28	59	25	43	85	154	150	25	M8	55	20	2.46
9.5	28	32	67	28	47	90	168	166	27	M10	60	39	3.40
12	32	35	73	32	51	94	180	184	30	M10	65	39	4.51
13.5	35	38	79	35	57	115	209	197	33	M10	70	39	6.10
17	38	42	88	38	60	127	230	202	19	M8	75	20	7.63
25	45	50	104	45	74	149	271	243	23	M8	90	20	13.3
35	50	57	112	50	83	171	306	269	26	M10	100	39	18.5
42.5	57	65	132	57	95	190	346	301	29	M12	110	68	25.9
55	65	70	145	65	105	203	376	329	32	M12	120	68	35.3
85	75	83	167	75	127	229	429	381	39	M12	140	68	53

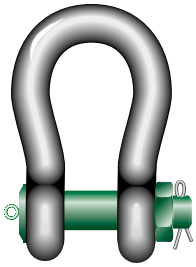
CAD | RFID | INFO

TYPE APPROVED PRODUCT DNV DNV.COM/AF

Green Pin® Heavy Duty Bow Shackle BN

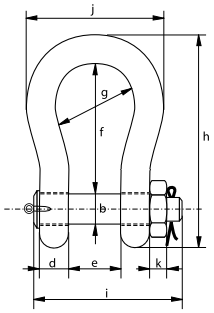
High load capacity bow shackle with safety bolt

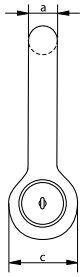
Scan for additional product details



P-6036

- **Material:** bow and pin alloy steel, grade 8 quenched and tempered
- **Safety Factor:** MBL equals 5 x WLL
- **Standard:** ASME B30.26
- **Finish:** shackle bow painted silver, pin painted green
- **Temperature range:** -40 °C up to +200 °C ≤ WLL 600 t
- **Certification:** 2.1 2.2 3.1 MTC[a] CE IIA **Optional**[***]: MTC[b] * LROS ** MPI[a] US[a]
- **Article code:** scan QR code to see article codes





working load limit	diameter bow	diameter pin	diameter eye	width eye	width inside	length inside	width bow	length	length bolt	width	thickness nut	weight pin	weight each
t	a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	i mm	j mm	k mm	kg	kg
120	95	95	204	95	147	400	238	644	453	428	50	28.1	114
150	105	108	235	105	169	410	275	686	496	485	50	39.2	155
200	120	130	270	120	179	513	290	833	564	530	71	69.2	235
250	130	140	284	130	205	554	305	896	614	565	71	85.5	295
300	140	150	308	140	205	618	305	987	644	585	81	102	366
400	170	175	376	164	231	669	325	1115	698	665	70	151	620
500	180	185	398	164	256	719	350	1191	728	710	70	173	720
600	200	205	444	189	282	719	375	1244	810	775	70	228	975
700	210	215	454	204	308	718	400	1263	870	820	70	265	1075
800	210	220	464	204	308	718	400	1270	870	820	70	276	1100
900	220	230	485	215	328	718	420	1296	920	860	70	319	1250
1000	240	240	515	215	349	718	420	1336	940	900	70	351	1460
1250	260	270	585	230	369	768	450	1456	1025	970	70	481	1940
1500	280	290	625	230	369	818	450	1556	1025	1010	70	556	2305

CAD RFID

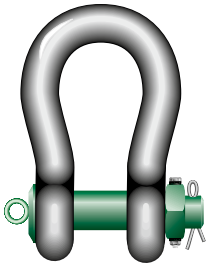
* Standard certification for shackles ≥ WLL 400 t
** For shackles ≥ WLL 120 t and ≤ WLL 600 t available with or without LROS.
For shackles ≥ WLL 700 t available with LROS
*** With additional charges

Green Pin® Heavy Duty Bow Shackle FN

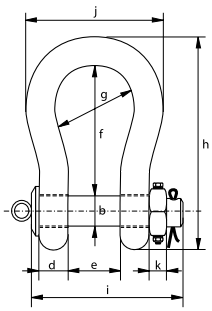
High load capacity bow shackle with safety bolt and fixed nut

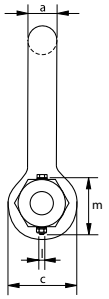
Scan for additional product details

- **Material:** bow and pin alloy steel, grade 8, quenched and tempered
- **Safety Factor:** MBL equals 5 x WLL
- **Standard:** ASME B30.26
- **Finish:** shackle bow painted silver, pin painted green
- **Temperature range:** -40 °C up to +200 °C
- **Certification:** 2.1 2.2 3.1 MTC [a] CE IIA **Optional*:** MTC [b] LROS MPI [a] US [a]
- **Article code:** scan QR code to see article codes



P-6016





working load limit	diameter bow	diameter pin	diameter eye	width eye	width inside	length inside	width bow	length	length bolt	width	thickness nut	securing bolt thread	securing bolt length	torque	weight pin	weight each
t	a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	i mm	j mm	k mm	l mm	m mm	Nm	kg	kg
120	95	95	204	95	147	400	238	644	453	428	50	M12	150	68	28.1	110
150	105	108	235	105	169	410	275	686	496	485	50	M12	160	68	39.2	155

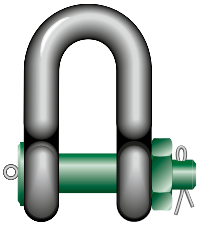
CAD RFID INFO

* With additional charges

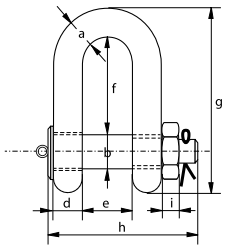
Green Pin® Heavy Duty Dee Shackle BN

High load capacity dee shackle with safety bolt

Scan for additional product details



P-6038





- **Material:** bow and pin alloy steel, grade 8 quenched and tempered
- **Safety Factor:** MBL equals 5 x WLL
- **Standard:** ASME B30.26
- **Finish:** painted
- **Temperature range:** -40 °C up to +200 °C
- **Certification:** 2.1 2.2 3.1 MTC [a] CE IIA **Optional***: MTC [b] LROS MPI [a] US [a]
- **Article code:** scan QR code to see article codes

working load limit	diameter bow	diameter pin	diameter eye	width eye	width inside	length inside	length	length bolt	thickness nut	weight pin	weight each
t	a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	i mm	kg	kg
120	95	95	204	95	147	274	520	440	50	28.1	110

CAD RFID

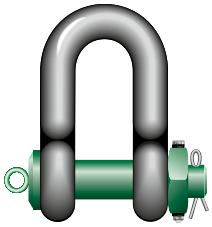
* With additional charges

Green Pin® Heavy Duty Dee Shackle FN

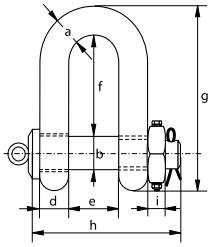
High load capacity dee shackle with safety bolt and fixed nut

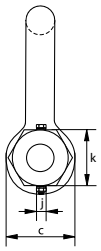
Scan for additional product details

- **Material:** bow and pin alloy steel, grade 8, quenched and tempered
- **Safety Factor:** MBL equals 5 x WLL
- **Standard:** ASME B30.26
- **Finish:** painted
- **Temperature range:** -40 °C up to +200 °C ≤ WLL 600 t
- **Certification:** 2.1 2.2 3.1 MTC [a] CE IIA **Optional*:** MTC [b] LROS MPI [a] US [a]
- **Article code:** scan QR code to see article codes



P-6018





working load limit	diameter bow	diameter pin	diameter eye	width eye	width inside	length inside	length	length bolt	thickness nut	securing bolt thread	securing bolt length	torque	weight pin	weight each
t	a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	i mm	j mm	k mm	Nm	kg	kg
120	95	95	204	95	147	274	520	440	50	M12	150	68	28.1	97

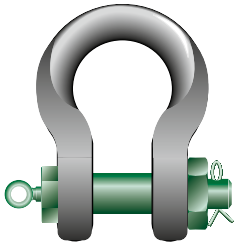
CAD RFID INFO

* With additional charges

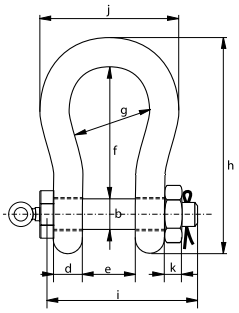
Green Pin® Sling Shackle BN

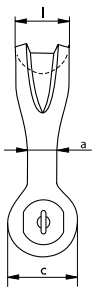
High load capacity bow shackle with safety bolt

Scan for additional product details



P-6033





- **Material:** bow and pin alloy steel, grade 8, quenched and tempered
- **Safety Factor:** MBL equals 5 x WLL
- **Standard:** ASME B30.26 ≤ WLL 600 t
- **Finish:** shackle bow painted silver, pin painted green (WLL 7 t up to 55 t shackles are hot dipped galvanized)
- **Temperature Range:** -40 °C up to +200 °C ≤ WLL 600 t; -20 °C up to +200 °C ≥ WLL 700 t
- **Certification:** 2.1 | 2.2 | 3.1 | MTC [a] | CE IIA **Optional*****: MTC [b] * | LROS ** | MPI [a] | US [b]
- **Article code:** scan QR code to see article codes

working load limit	diameter body	diameter pin	diameter eye	width eye	width inside	length inside	width bow	length	length bolt	width	thickness nut	bearing surface	weight pin	weight each
t	a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	i mm	j mm	k mm	l mm	kg	kg
7	22	22	46	19	32	96	64	153	115	110	19	41	0.99	1.97
12.5	28	28	61	25	44	120	82	197	151	146	24	54	1.82	4.27
18	35	35	69	30	54	148	102	239	171	180	29	64	2.35	6.85
30	40	42	90	35	69	165	126	279	207	200	34	79	4.23	12.5
40	55	51	109	45	84	199	140	331	252	235	38	97	4.32	20.3
55	60	57	115	55	90	240	160	389	294	270	45	100	4.6	30.4
75	68	70	126	54	110	290	185	473	317	331	40	120	11.4	45
125	85	80	156	85	137	366	220	583	413	390	40	150	18.6	92
150	94	95	181	89	147	391	253	648	445	449	50	170	27.3	140
200	110	105	201	100	158	481	280	759	480	500	50	205	36.9	205
250	126	120	229	110	179	542	300	860	535	552	60	240	54.3	264
300	136	134	246	134	195	601	350	946	590	620	70	265	79.4	360
400	160	160	295	145	231	576	370	995	687	710	80	320	127	583
500	170	180	330	160	263	681	450	1161	762	850	90	340	176	862
600	190	200	360	170	289	741	490	1264	827	930	100	370	234	1134
700	200	215	392	190	315	751	540	1284	879	901	100	400	290	1142
800	218	230	420	200	342	851	554	1426	942	947	110	420	350	1418
900	242	255	466	220	368	851	580	1488	1023	1023	120	440	464	1810
1000	260	270	490	240	399	851	614	1532	1103	1107	120	460	559	2385
1250	285	300	510	260	452	931	650	1666	1227	1182	150	530	782	3110
1550	285	320	550	280	483	950	680	1710	1300	1253	150	560	918	3655

CAD | RFID

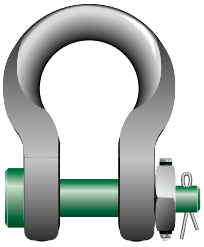
* Standard certification for shackles ≥ WLL 400 t
** For shackles ≥ WLL 75 t and ≤ WLL 600 t available with or without LROS. For shackles ≥ WLL 700 t available with LROS
*** With additional charges

Green Pin® Sling Shackle FN

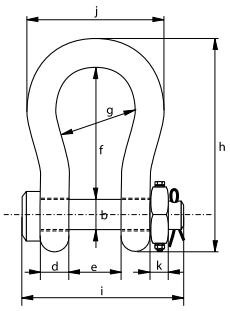
High load capacity bow shackle with safety bolt and fixed nut

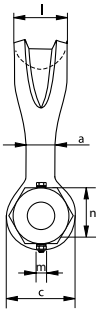
Scan for additional product details

- **Material:** bow and pin alloy steel, grade 8, quenched and tempered
- **Safety Factor:** MBL equals 5 x WLL
- **Standard:** ASME B30.26 ≤ WLL 600 t
- **Finish:** shackle bow painted silver, pin painted green (WLL 7 t up to 55 t shackles are hot dipped galvanized)
- **Temperature Range:** -40 °C up to +200 °C
- **Certification:** 2.1 2.2 3.1 MTC [a] CE IIA **Optional**[**]: MTC [b] LROS * MPI [a] US [b]
- **Article code:** scan QR code to see article codes



P-6013





working load limit	diameter body	diameter pin	diameter eye	width eye	width inside	length inside	width bow	length	length bolt	width	thickness nut	bearing surface	securing bolt thread	securing bolt length	torque	weight each
t	a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	i mm	j mm	k mm	l mm	m mm	n mm	Nm	kg
7	22	22	46	19	32	96	64	153	115	110	19	41	M6	45	8.4	1.97
12.5	28	28	61	25	44	120	82	197	151	146	24	54	M8	50	20	4.27
18	35	35	69	30	54	148	102	239	171	180	29	64	M10	65	39	6.85
30	40	42	90	35	69	165	126	279	207	200	34	79	M6	75	8.4	12.5
40	55	51	109	45	84	199	140	331	252	235	38	97	M8	90	20	20.3
55	60	57	115	55	90	240	160	389	294	270	45	100	M10	100	39	30.4
75	68	70	126	54	110	290	185	473	317	317	40	120	M12	120	68	45
125	85	80	156	85	137	366	220	583	413	390	40	150	M12	130	68	92
150	94	95	181	89	147	391	253	648	445	449	50	170	M12	140	68	140

CAD RFID INFO

* For shackles ≥ WLL 75 t and ≤ WLL 150 t available with or without LROS
** With additional charges

Green Pin Power Sling® Shackle BN

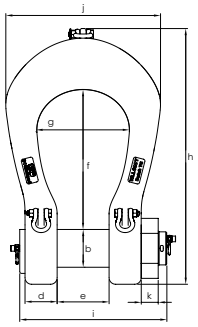
High load capacity, grade 8 shackle with safety bolt

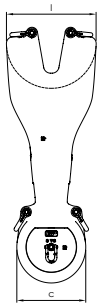
Scan for additional product details

- **Material:** bow and pin alloy steel, grade 8, quenched and tempered
- **Safety Factor:** MBL equals 5 x WLL
- **Standard:** ASME B30.26
- **Finish:** shackle bow painted silver, pin painted green
- **Temperature Range:** -40 °C up to +200 °C
- **Certification:** 2.1 | 2.2 | 3.1 | MTC [b] | DNV PL | MPI [b] | US [b] | DNV 0377 | DNV 0378 | CE IIA
- **Article code:** scan QR code to see article codes



P-6043





working load limit	diameter pin	diameter eye	width eye	width inside	length inside	width bow	length	length bolt	width	thickness nut	bearing surface	weight pin	weight each
t	b mm	c mm	d mm	e mm	f mm	g mm	h mm	i mm	j mm	k mm	l mm	kg	kg
125	81	165	89	134	365	220	632	382	370	36	205	17.3	97
150	95	182	90	144	390	250	703	408	420	42	248	26.1	134
200	105	204	100	154	480	276	838	446	474	47	290	35.4	196
250	120	238	110	174	540	300	938	503	513	60	314	54.8	273
300	134	260	121	189	600	350	1032	550	604	60	345	71.9	371
400	160	305	140	224	620	370	1123	635	653	70	392	114	562
500	180	340	152	255	680	450	1239	699	763	70	440	157	783
600	200	365	170	280	741	490	1354	768	818	70	475	212	1003
700	215	405	190	320	751	540	1415	849	893	70	512	271	1276
800	230	430	200	347	851	554	1547	904	917	70	536	328	1484
900	255	476	215	373	851	580	1599	963	972	70	560	426	1808
1000	270	500	232	405	851	614	1643	1030	1022	70	590	508	2132
1250	300	570	245	436	930	650	1813	1114	1144	70	670	673	2891
1550	320	590	270	469	950	680	1890	1220	1210	70	704	827	3517

CAD | RFID | INFO

TYPE APPROVED PRODUCT DNV DNV.COM/AF

Green Pin Super® Bow Shackle SC

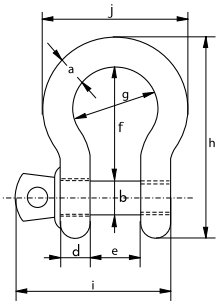
Grade 8 bow shackle with screw pin

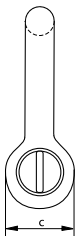
Scan for additional product details

- **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 2, grade B
- **Finish:** hot dipped galvanized
- **Temperature Range:** -20 °C up to +200 °C
- **Certification:** 2.1 2.2 3.1 MTC [a] CE IIA ABS PDA * ABS MA *
- **Article code:** scan QR code to see article codes



G-5261





working load limit	diameter body	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
3.3	13.5	16	34	13	22	51	32	90	73	59	0.36
5	16	19	40	16	27	64	43	110	89	75	0.63
7	19	22	46	19	31	76	51	129	103	89	1.01
9.5	22	25	52	22	36	83	58	144	119	102	1.50
12.5	25	28	59	25	43	95	68	164	137	118	2.21
15	28	32	67	28	47	108	75	186	153	131	3.16
18	32	35	73	32	51	115	83	201	170	147	4.31
21	35	38	79	35	57	133	92	227	186	162	5.58
30	38	42	88	38	60	146	99	249	203	175	7.43
40	45	50	104	45	74	178	126	300	243	216	12.5
55	57	57	119	57	83	197	138	341	286	252	17.2
85*	70	70	145	70	105	260	180	437	354	320	37.6

CAD RFID INFO

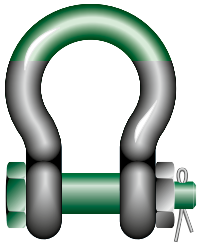
* Excluded from ABS Type Approval

Green Pin Super® Bow Shackle BN

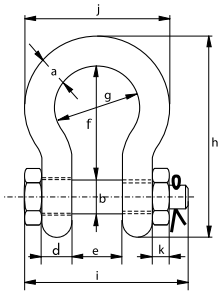
Grade 8 bow shackle with safety bolt

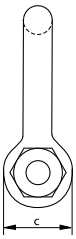
Scan for additional product details

- **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 (150 t and upward are painted)
- **Temperature Range:** -20 °C up to +200 °C
- **Certification:** 2.1 2.2 3.1 MTC [a] LROS * CE IIA ABS PDA * ABS MA *
- **Article code:** scan QR code to see article codes



G-5263





working load limit	diameter bow	diameter pin	diameter eye	width eye	width inside	length inside	width bow	length	length bolt	width	thickness nut	weight each
t	a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	i mm	j mm	k mm	kg
3.3	13.5	16	34	13	22	51	32	90	80	59	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	115	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	67	28	47	108	75	186	166	131	27	3.60
18	32	35	73	32	51	115	83	201	184	147	30	4.95
21	35	38	79	35	57	133	92	227	197	162	33	6.62
30	38	42	88	38	60	146	99	249	202	175	19	8.11
40	45	50	104	45	74	178	126	300	243	216	23	14.8
55	57	57	119	57	83	197	138	342	283	252	26	24.2
85	70	70	145	70	105	260	180	438	339	320	32	45.1
120	83	83	164	83	127	329	190	537	397	356	39	72
150*	95	95	204	95	147	400	238	644	453	428	50	112
175*	105	108	235	105	169	410	275	686	496	485	50	160

CAD RFID INFO

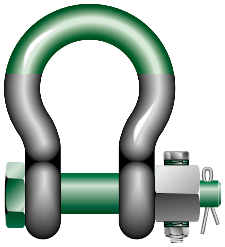
* For shackles WLL 150 t and WLL 175 t available with and without LROS
* With round headed bolt
* Excluded from ABS Type Approval

Green Pin Super® Bow Shackle FN

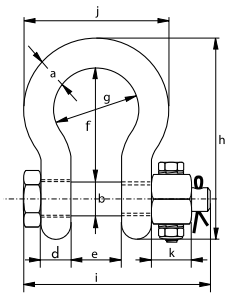
Grade 8 bow shackle with safety bolt and fixed nut

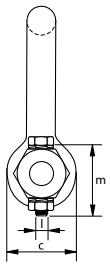
Scan for additional product details

- **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 (150 t and upward are painted)
- **Temperature Range:** -20 °C up to +200 °C
- **Certification:** 2.1 2.2 3.1 MTC [a] LROS * CE IIA
- **Article code:** scan QR code to see article codes



G-5243





working load limit	diameter bow	diameter pin	diameter eye	width eye	width inside	length inside	width bow	length	length bolt	width	thickness nut	securing bolt thread	securing bolt length	torque	weight each
t	a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	i mm	j mm	k mm	l mm	m mm	Nm	kg
3.3	13.5	16	34	13	22	51	32	90	80	59	13	M6	35	8.4	0.44
5	16	19	40	16	27	64	43	110	98	75	17	M6	40	8.4	0.79
7	19	22	46	19	31	76	51	129	115	89	19	M6	45	8.4	1.26
9.5	22	25	52	22	36	83	58	144	130	102	22	M8	50	20	1.88
12.5	25	28	59	25	43	95	68	164	150	118	25	M8	55	20	2.78
15	28	32	67	28	47	108	75	186	166	131	27	M10	60	39	3.87
18	32	35	73	32	51	115	83	201	184	147	30	M10	65	39	5.26
21	35	38	79	35	57	133	92	227	197	162	33	M10	70	39	6.94
30	38	42	88	38	60	146	99	249	202	175	19	M8	75	20	8.79
40	45	50	104	45	74	178	126	300	243	216	23	M8	90	20	15
55	57	57	119	57	83	197	138	342	283	252	26	M10	100	39	22
85	70	70	145	70	105	260	180	438	339	320	32	M12	120	68	42
120	83	83	164	83	127	330	190	537	397	356	39	M12	140	68	70
150*	95	95	204	95	147	400	238	644	453	428	50	M12	150	68	112
175*	105	108	235	105	169	410	275	686	496	485	50	M12	160	68	160

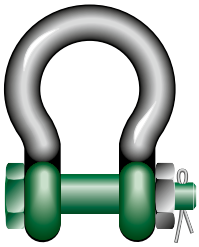
CAD RFID INFO

* For shackles WLL 150 t and WLL 175 t available with and without LROS
* With round headed bolt

Green Pin Polar® Bow Shackle BN

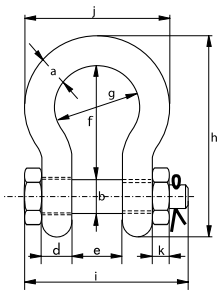
Grade 8 bow shackle with safety bolt for use under low temperatures

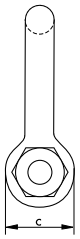
Scan for additional product details



G-5163

- **Material:** bow and pin alloy steel, grade 8, quenched and tempered
- **Safety Factor:** MBL equals 7 x WLL
  for shackles with WLL 55 t and 85 t the MBL equals 6 x WLL
- **Standard:** ISO 2415, 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 [a] | DNV 2.7-1 [a] | DNV 2.7-1 [b] | DNV 0378 | CE IIA | ABS PDA | ABS MA
- **Article code:** scan QR code to see article codes





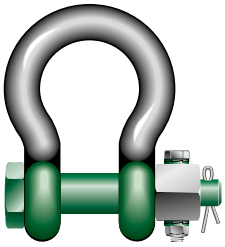
working load limit	diameter bow	diameter pin	diameter eye	width eye	width inside	length inside	width bow	length	length bolt	width	thickness nut	weight each
t	a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	i mm	j mm	k mm	kg
2	13.5	16	34	13	22	51	32	90	80	59	13	0.42
3.25	16	19	40	16	27	64	43	110	98	75	17	0.74
4.75	19	22	46	19	31	76	51	129	115	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	67	28	47	108	75	186	166	131	27	3.66
12	32	35	73	32	51	115	83	201	184	147	30	4.91
13.5	35	38	79	35	57	133	92	227	197	162	33	6.54
17	38	42	88	38	60	146	99	249	202	175	19	8.19
25	45	50	104	45	74	178	126	300	243	216	23	14.2
35	50	57	112	50	83	197	138	332	269	238	26	19.9
42.5	57	65	132	57	95	222	160	378	301	274	29	28.3
55	65	70	145	65	105	260	180	433	329	310	32	39.6
85	75	83	167	75	127	330	190	530	381	340	39	62

CAD | RFID | INFO

Green Pin Polar® Bow Shackle FN

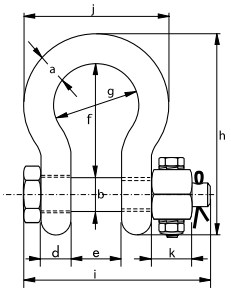
Grade 8 bow shackle with safety bolt and fixed nut for use under low temperatures

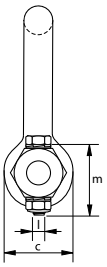
Scan for additional product details »



G-5143

- **Material:** bow and pin alloy steel, grade 8, quenched and tempered
- **Safety Factor:** MBL equals 7 x WLL
  for shackles with WLL 55 t and 85 t the MBL equals 6 x WLL
- **Standard:** ISO 2415, 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 [a] | DNV 2.7-1 [a] | DNV 2.7-1 [b] | CE IIA
- **Article code:** scan QR code to see article codes





working load limit	diameter bow	diameter pin	diameter eye	width eye	width inside	length inside	width bow	length	length bolt	width	thickness nut	securing bolt thread	securing bolt length	torque	weight each
t	a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	i mm	j mm	k mm	l mm	m mm	Nm	kg
2	13.5	16	34	13	22	51	32	90	80	59	13	M6	35	8.4	0.42
3.25	16	19	40	16	27	64	43	110	98	75	17	M6	40	8.4	0.74
4.75	19	22	46	19	31	76	51	129	115	89	19	M6	45	8.4	1.18
6.5	22	25	52	22	36	83	58	144	130	102	22	M8	50	20	1.77
8.5	25	28	59	25	43	95	68	164	150	118	25	M8	55	20	2.58
9.5	28	32	67	28	47	108	75	186	166	131	27	M10	60	39	3.66
12	32	35	73	32	51	115	83	201	184	147	30	M10	65	39	4.91
13.5	35	38	79	35	57	133	92	227	197	162	33	M10	70	39	6.54
17	38	42	88	38	60	146	99	249	202	175	19	M8	75	20	8.19
25	45	50	104	45	74	178	126	300	243	216	23	M8	90	20	14.2
35	50	57	112	50	83	197	138	332	269	238	26	M10	100	39	19.9
42.5	57	65	132	57	95	222	160	378	301	274	29	M12	110	68	28.3
55	65	70	145	65	105	260	180	433	329	310	32	M12	120	68	39.6
85	75	83	167	75	127	330	190	530	381	340	39	M12	140	68	62

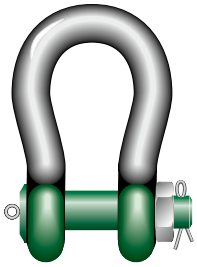
CAD | RFID | INFO

TYPE APPROVED PRODUCT DNV DNV.COM/AF

Green Pin Polar® Heavy Duty Bow Shackle BN

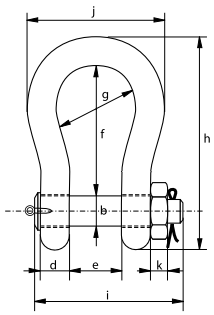
High load capacity, grade 8 bow shackle with safety bolt for use under low temperatures

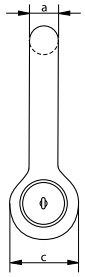
Scan for additional product details



P-6031

- **Material:** bow and pin alloy steel, grade 8, quenched and tempered
- **Safety Factor:** MBL equals 5 x WLL
- **Standard:** ASME B30.26
- **Finish:** shackle bow painted silver, pin painted green
- **Temperature Range:** -40 °C up to +200 °C
- **Certification:** 2.1 2.2 3.1 MTC [a] CE IIA **Optional**[***]: MTC [b] * LROS ** MPI [a] US [a]
- **Article code:** scan QR code to see article codes





working load limit	diameter bow	diameter pin	diameter eye	width eye	width inside	length inside	width bow	length	length bolt	width	thickness nut	weight pin	weight each
t	a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	i mm	j mm	k mm	kg	kg
120	95	95	204	95	147	400	238	644	453	428	50	28.1	110
150	105	108	235	105	169	410	275	686	496	485	50	39.2	160
200	120	130	270	120	179	513	290	833	564	530	71	69.2	235
250	130	140	284	130	205	554	305	896	614	565	71	85.5	285
300	140	150	308	140	205	618	305	987	644	585	81	102	368
400	170	175	376	164	231	668	325	1114	690	665	70	151	560
500	180	185	398	164	256	718	350	1190	720	710	70	173	716
600	200	205	444	189	282	718	375	1243	810	775	70	228	975
700	210	215	454	204	308	718	400	1263	870	820	70	265	1075
800	210	220	464	204	308	718	400	1270	870	820	70	276	1100
900	220	230	485	215	328	718	420	1296	920	860	70	319	1250
1000	240	240	515	215	349	718	420	1336	940	900	70	351	1460
1250	260	270	585	230	369	768	450	1456	1025	970	70	481	1940
1500	280	290	625	230	369	818	450	1556	1025	1010	70	556	2305

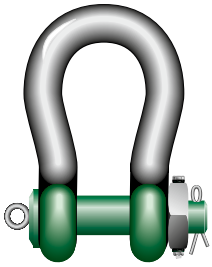
CAD RFID

* Standard certification for shackles ≥ WLL 400 t
** For shackles between WLL 120 t and WLL 600 t available with and without LROS. For shackles WLL 700 t and up available with LROS
*** With additional charges

Green Pin Polar® Heavy Duty Bow Shackle FN

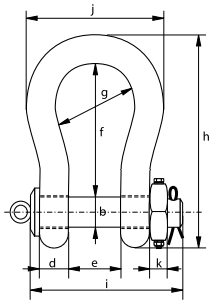
High load capacity, grade 8 bow shackle with safety bolt and fixed nut for use under low temperatures

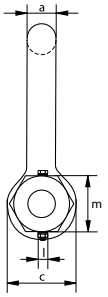
Scan for additional product details



P-6011

- **Material:** bow and pin alloy steel, grade 8, quenched and tempered
- **Safety Factor:** MBL equals 5 x WLL
- **Standard:** ASME B30.26
- **Finish:** shackle bow painted silver, pin painted green
- **Temperature range:** -40 °C up to +200 °C
- **Certification:** 2.1 2.2 3.1 MTC [a] LROS * CE IIA
- **Article code:** scan QR code to see article codes





working load limit	diameter bow	diameter pin	diameter eye	width eye	width inside	length inside	width bow	length	length bolt	width	thickness nut	securing bolt thread	securing bolt length	torque	weight pin	weight each
t	a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	i mm	j mm	k mm	l mm	m mm	Nm	kg	kg
120	95	95	204	95	147	400	238	644	453	428	50	M12	150	68	28.1	110
150	105	108	235	105	169	410	275	686	496	485	50	M12	160	68	39.2	160

CAD RFID INFO

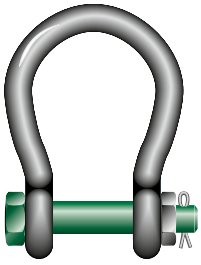
* For shackles ≥ WLL 120 t available with or without LROS

Green Pin BigMouth® Bow Shackle BN

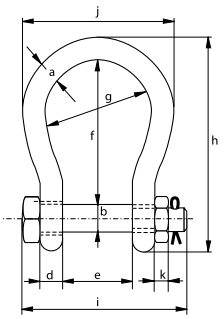
Grade 8 bow shackle with safety bolt and wider shackle mouth

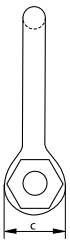
Scan for additional product details

- **Material:** bow and pin alloy steel, grade 8, quenched and tempered
- **Safety Factor:** MBL equals 6 x WLL
- **Standard:** ASME B30.26
- **Finish:** hot dipped galvanized
- **Temperature Range:** -20 °C up to +200 °C
- **Certification:** 2.1 2.2 3.1 MTC [a] CE IIA
- **Article code:** scan QR code to see article codes



G-4263





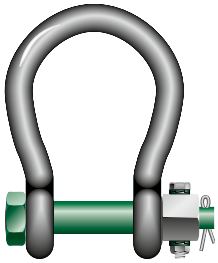
working load limit	diameter bow	diameter pin	diameter eye	width eye	width inside	length inside	width bow	length	length bolt	width	thickness nut	weight each
t	a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	i mm	j mm	k mm	kg
4.75	22	25	52	22	63	112	88	173	157	132	22	2.08
6.5	25	28	59	25	75	135	105	204	183	155	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	10.2
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	389	343	32	45
75	83	83	164	83	184	330	254	537	455	420	39	70

CAD RFID

Green Pin BigMouth® Bow Shackle FN

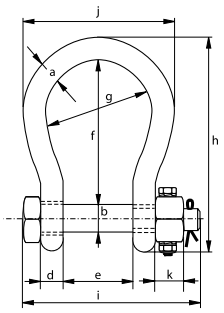
Grade 8 bow shackle with safety bolt, fixed nut and wider shackle mouth

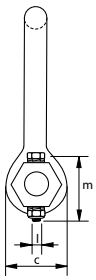
Scan for additional product details



G-4243

- **Material:** bow and pin alloy steel, grade 8, quenched and tempered
- **Safety Factor:** MBL equals 6 x WLL
- **Standard:** ASME B30.26
- **Finish:** hot dipped galvanized
- **Temperature range:** -20 °C up to +200 °C
- **Certification:** 2.1 2.2 3.1 MTC [a] CE IIA
- **Article code:** scan QR code to see article codes





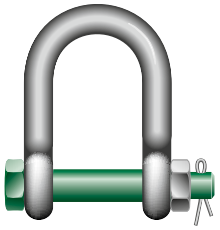
working load limit	diameter bow	diameter pin	diameter eye	width eye	width inside	length inside	width bow	length	length bolt	width	thickness nut	securing bolt thread	securing bolt length	torque	weight each
t	a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	i mm	j mm	k mm	l mm	m mm	Nm	kg
4.75	22	25	52	22	63	112	88	173	157	132	22	M8	50	20	2.08
6.5	25	28	59	25	75	135	105	204	183	155	25	M8	55	20	3.14
8.5	28	32	66	28	82	148	115	225	205	171	27	M10	60	39	4.36
9.5	32	35	72	32	90	162	126	248	224	190	30	M10	65	39	5.95
12	35	38	79	35	100	180	140	274	245	210	33	M10	70	39	7.87
16	38	42	88	38	106	216	159	319	248	235	19	M8	75	20	10.2
25	45	50	103	45	127	248	175	370	296	265	23	M8	90	20	16.7
30	50	57	118	50	146	273	207	411	332	307	26	M10	100	39	25
55	65	70	145	65	165	314	213	487	389	343	32	M12	120	68	45
75	83	83	164	83	184	330	254	537	455	420	39	M12	140	68	70

CAD RFID INFO

Green Pin BigMouth® Dee Shackle BN

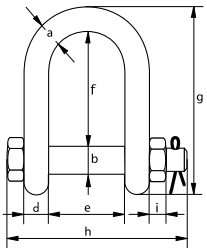
Dee shackle with a longer inside length, wider mouth and safety bolt

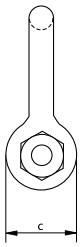
Scan for additional product details



- **Material:** bow and pin alloy steel, grade 8, quenched and tempered
- **Safety Factor:** MBL equals 5 x WLL
- **Standard:** ASME B30.26
- **Finish:** hot dipped galvanized
- **Temperature Range:** -20 °C up to +200 °C
- **Certification:** 2.1 2.2 3.1 MTC [a] CE IIA
- **Article code:** scan QR code to see article codes

G-4553





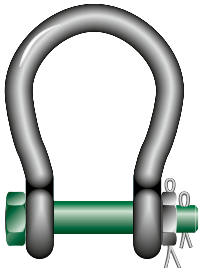
working load limit	diameter bow	diameter pin	diameter eye	width eye	width inside	length inside	length	length bolt	thickness nut	weight each
t	a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	i mm	kg
4.6	19	22	46	19	70	116	169	154	19	1.50
8.6	25	28	59	25	83	140	208	190	25	3.13
15.5	38	42	88	38	115	178	281	257	19	9.42

CAD

Green Pin BigMouth® Towing Shackle BN

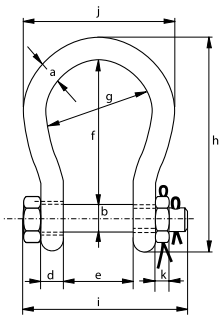
Grade 8 towing bow shackle with safety bolt and wider shackle mouth

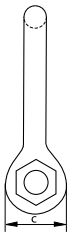
Scan for additional product details



G-4463

- **Material:** bow and pin alloy steel, grade 8, quenched and tempered
- **Finish:** hot dipped galvanized
- **Certification:** 2.1 2.2 3.1 CE IIA
- **Article code:** scan QR code to see article codes
- **Note:** for towing only, not for lifting applications





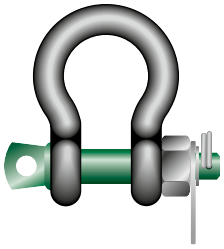
working load limit	diameter bow	diameter pin	diameter eye	width eye	width inside	length inside	width bow	length	length bolt	width	thickness nut	weight each
t	a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	i mm	j mm	k mm	kg
22	38	42	88	38	106	216	159	319	248	235	19	10.2
30	45	50	103	45	127	248	175	370	296	265	24	16.7
40	50	57	118	50	146	273	207	411	338	307	27	25
55	65	70	145	65	165	314	213	487	389	343	33	45
100	83	83	164	83	184	330	254	540	455	420	40	70

CAD

Green Pin® Catch Shackle BN

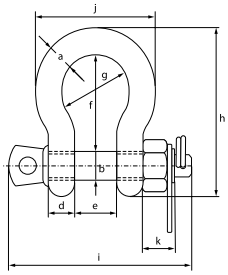
Standard bow shackle with safety bolt which enables all components to be tethered

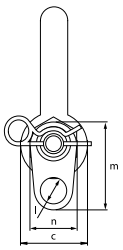
Scan for additional product details



G-4163H

- **Material:** bow and pin high tensile steel, grade 6, quenched and tempered
- **Safety Factor:** MBL equals 6 x WLL
- **Standard:** ISO 2415, EN 13889 and meets performance requirements of US Fed. Spec. RR-C-271, Type IVA, Class 3, Grade A and 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 [a] | DNV 2.7-1 [a] | DNV 2.7-1 [b] | CE IIA | ABS PDA | ABS MA
- **Article code:** scan QR code to see article codes
- **Note:** supplied without wires





working load limit	diameter bow	diameter pin	diameter eye	width eye	width inside	length inside	width bow	length	length bolt	width	thickness nut	diameter hole	height	width	weight each
t	a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	i mm	j mm	k mm	l mm	m mm	n mm	kg
2	13.5	16	34	13	22	51	32	89	102	58	19	15	48.4	27	0.47
3.25	16	19	40	16	27	64	43	110	122	75	23	15	53.7	31.8	0.81
4.75	19	22	46	19	31	76	51	129	143	89	26	15	60.1	36.5	1.32
6.5	22	25	52	22	36	83	58	144	160.5	102	29	15	65.5	41.3	1.92
8.5	25	28	59	25	43	95	68	164	183	118	32	15	70.5	46	2.77
9.5	28	32	66	28	47	108	75	185	201	131	34	15	74	50.8	3.91

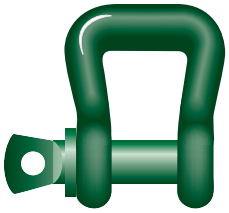
CAD | INFO

TYPE APPROVED PRODUCT DNV DNV.COM/AF

Scan for additional product details »

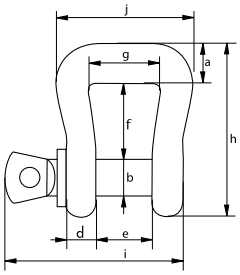
Green Pin® Web Sling Shackle SC

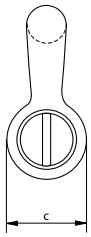
Shackle for synthetic web slings with screw collar pin



- **Material:** bow and pin alloy steel, grade 8, quenched and tempered
- **Safety Factor:** MBL equals 6 x WLL
- **Standard:** EN1677-1 and ASME B30.26
- **Finish:** painted green
- **Temperature Range:** -40 °C up to 200 °C
- **Certification:** 2.1 2.2 3.1 CE IIA
- **Article code:** scan QR code to see article codes

P-5461





working load limit	diameter bow	diameter pin	diameter eye	width eye	width inside	length inside	width inside	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
3.25	20	19	40	16	27	38	35	87	89	68	0.66
4.75	24	22	46	19	31	48	46	106	103	85	1.10
6.5	27	25	52	22	36	72	62	137.5	119	108.5	1.79
8.5	31	28	59	25	43	83.5	79	158	137	133.5	2.74

CAD

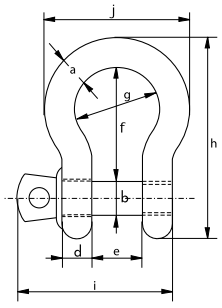
Green Pin® Theatre Shackle SC

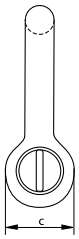
Matte black bow shackle with screw collar pin



- **Material:** bow and pin high tensile steel, grade 6, quenched and tempered
- **Safety Factor:** MBL equals 6 x WLL
- **Standard:** ISO 2415, 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:** black
- **Temperature Range:** -40 °C up to +200 °C
- **Certification:** 2.1 2.2 3.1 MTC [a] CE IIA
- **Article code:** scan QR code to see article codes

G-4161T





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	7	12	29	20	48	38	34	0.05
0.75	9	10	20	9	13.5	32	22	56	46.5	40	0.10
1	10	11	23	10	17	37	26	64	54	46	0.14
1.5	11	13	25	11	19	43	29	73	59.5	51	0.19
2	13.5	16	34	13	22	51	32	90	73	59	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	1.50
8.5	25	28	59	25	43	95	68	164	137	118	2.21

C

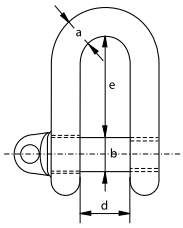
Shackles generally to DIN 82101 type A

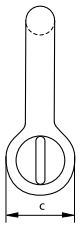
Dee shackle with screw collar pin



- **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 IIA
- **Note:** shackle no. 0.1 is electro-galvanized and will not have any markings as it is too small

S-3351
G-3351





no.	working load limit	diameter bow	diameter pin	diameter eye	width inside	length inside	weight each
	t	a mm	b mm	c mm	d mm	e 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	0.10
0.6	0.63	12	12	24	17	36	0.18
1	1	13	16	32	21	49	0.30
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	1.30
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	5.30
8	8	41	45	90	60	139.5	7.90
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

C

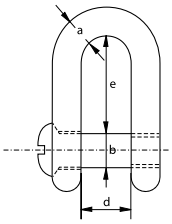
Shackles generally to DIN 82101 type B

Dee shackle 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 IIA
- **Note:** shackle no. 0.1 is electro-galvanized and will not have any markings as it is too small

S-3352
G-3352





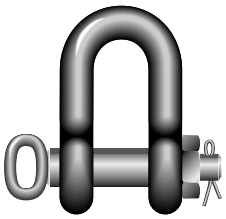
no.	working load limit	diameter bow	diameter pin	diameter eye	width inside	length inside	weight each
	t	a mm	b mm	c mm	d mm	e mm	kg
0.4	0.4	10	10	20	14	30	0.09
0.6	0.63	12	12	24	17	36	0.17
1	1	13	16	32	21	49	0.29
1.6	1.6	16	20	40	27	61	0.54
2	2	20	22	44	30	67	0.98
2.5	2.5	22	24	48	33	73	1.23
3	3.15	25	27	54	38	83.5	1.80
4	4	28	30	60	42	91	2.60
5	5	32	36	72	47	111	3.80
6	6.3	36	39	78	53	119.5	5.20
8	8	41	45	90	60	139.5	7.60
10	10	44	48	96	66	147	9.70

C

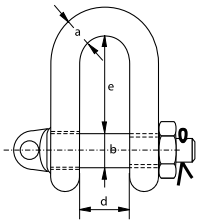
Shackles generally to DIN 82101 type C

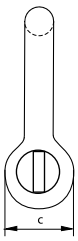
Dee shackle with safety bolt

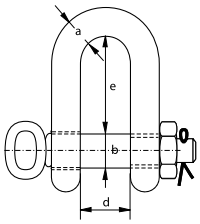


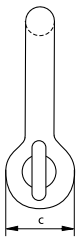


S-3356
G-3356









- **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 IIA
- **Note:** with screw collar pin : up to size no. 25
  with hand-grip : from size no. 32

no.	working load limit	diameter bow	diameter pin	diameter eye	width inside	length inside	weight each
	t	a mm	b mm	c mm	d mm	e mm	kg
0.4	0.4	10	10	20	14	30	0.11
0.6	0.63	12	12	24	17	36	0.20
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	1.50
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	4.70
6	6.3	36	39	78	53	119.5	6.33
8	8	41	45	90	60	139.5	8.60
10	10	44	48	96	66	147	10.8
12	12	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

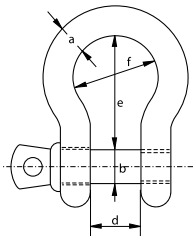
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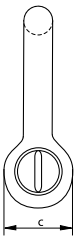
Yellow Pin Shackles

Bow shackle with screw collar pin



G-3161





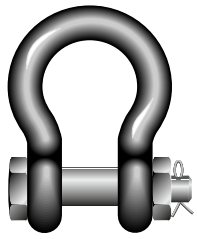
- **Material:** bow and pin high tensile steel, grade 6
- **Standard:** generally to US Fed. Spec. RR-C-271
- **Finish:** hot dipped galvanized
- **Certification:** 2.1 2.2 CE IIA
- **Note:** import quality

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	0.20
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	12.6

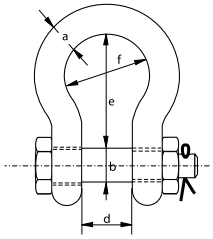
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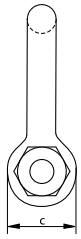
Yellow Pin Shackles

Bow shackle with safety bolt



G-3163





- **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 IIA
- **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
2	13	16	30	20	48	33	0.36
3.25	16	19	38	27	60	43	0.70
4.75	19	22	46	32	71	50	1.10
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

C

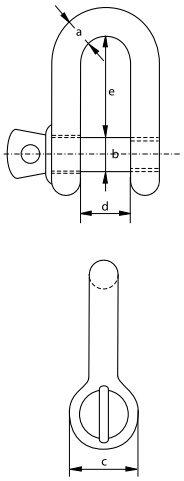
Yellow Pin Shackles

Dee shackle 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 IIA
- **Note:** import quality

G-3151

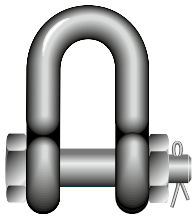


working load limit	diameter bow	diameter pin	diameter eye	width inside	length inside	weight each
t	a mm	b mm	c mm	d mm	e mm	kg
0.33	5	6	12	9,5	19	0.03
0.5	6	8	16	12	22	0.04
0.75	8	10	19	13,5	26	0.08
1	10	11	23	17	32	0.13
1.5	11	13	27	19	37	0.20
2	13	16	30	20	41	0.28
3.25	16	19	38	27	51	0.57
4.75	19	22	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	12.1

C

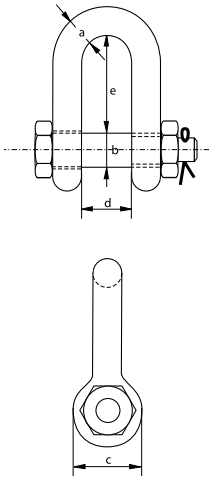
Yellow Pin Shackles

Dee shackle 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 IIA
- **Note:** import quality

G-3153

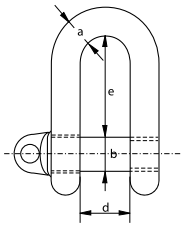


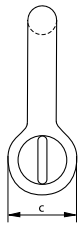
working load limit	diameter bow	diameter pin	diameter eye	width inside	length inside	weight each
t	a mm	b mm	c mm	d mm	e mm	kg
2	13	16	30	20	41	0.33
3.25	16	19	38	27	51	0.62
4.75	19	22	46	32	60	1.02
6.5	22	25	53	36	71	1.49
8.5	25	28	61	43	81	2.26
9.5	28	32	68	46	90	3.20
12	32	35	76	51	100	4.91
13.5	35	38	84	57	111	5.84
17	38	42	92	60	122	8.40
25	45	50	106	73	146	11.9

C



S-2751
G-2751





Shackles generally to B.S. 3032 table 2

Large dee shackle with screw collar pin

- **Material:** bow and pin alloy steel, EN 14a
- **Safety Factor:** MBL equals 4 x WLL
- **Standard:** generally to B.S. 3032 table 2
- **Finish:** hot dipped galvanized or self-coloured
- **Certification:** 2.1 2.2 CE IIA

working load limit	diameter bow	diameter pin	diameter eye	width inside	length inside	weight each
t	a mm	b mm	c mm	d mm	e 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	2.30
5	28	32	64	54	105	3.20
6	32	35	70	60	114	4.30
7	35	38	76	67	127	5.40
9.5	38	45	89	70	137	6.80
11.25	42	48	95	76	146	8.70
13	44	51	102	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

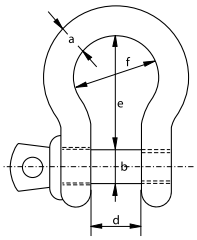
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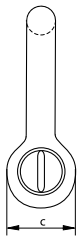
Commercial Shackles

Bow shackle with screw collar pin



E-1161





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

diameter bow	diameter pin	diameter eye	width inside	length inside	width bow	weight per 100 pcs
a mm	b mm	c mm	d mm	e mm	f mm	kg
5	5	10	10	20	15	1.40
6	6	12	12	24	18	2.40
8	8	16	16	32	24	5.40
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

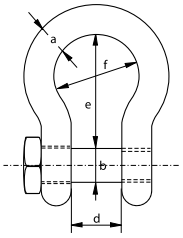
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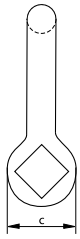
Commercial Shackles

Bow shackle with square head screw pin



S-1164





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

diameter bow	diameter pin	diameter eye	width inside	length inside	width bow	weight per 100 pcs
a mm	b mm	c mm	d mm	e mm	f mm	kg
6	6	12	12	24	18	2.70
8	8	16	16	32	24	6.40
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

C

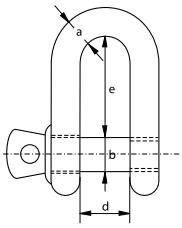
Commercial Shackles

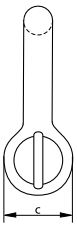
Dee shackle with screw collar pin

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



E-1151





diameter bow	diameter pin	diameter eye	width inside	length inside	weight per 100 pcs
a mm	b mm	c mm	d mm	e mm	kg
5	5	10	10	20	1.40
6	6	12	12	24	2.20
8	8	16	16	32	5.20
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

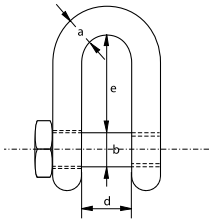
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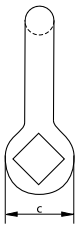
Commercial Shackles

Dee shackle with square head screw pin



S-1154





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

diameter bow	diameter pin	diameter eye	width inside	length inside	weight per 100 pcs
a mm	b mm	c mm	d mm	e mm	kg
6	6	12	12	24	2.60
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