



# LOAD RATED GRADE 316 STAINLESS STEEL FITTINGS

STAINLESS STEEL LOAD RATED COMPONENTS  
HEIGHT SAFETY FITTINGS



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Email: [bridge@bridco.com.au](mailto:bridge@bridco.com.au)  
[www.bridco.com.au](http://www.bridco.com.au)

Currently in stock are Load Rated forged shackles, quick links, eye bolts, & eye nuts.

Batch 'Proof Loading Certificates' are issued with all components containing relevant information regarding the production of the goods. All goods are marked with W.L.L and Batch No: The W.L.L are based on the batch proof test load ( at double W.L.L.) All proof loads are tested as point loads, not evenly distributed loads, this gives a truer result.

The ultimate break is well in advance of double the proof load. Due to the nature of stainless steel it is not always possible to give an accurate ultimate break load.

\*Please note: At time of print, there is no recognised Australian Standard for Stainless Steel Load Rated components. All products based on standards of similar nature.



This is an image of the 10mm BRIDCO LR shackle of 0.75 Tonne. The proof load for this shackle is 1.5 Tonne.











In our test this particular shackle broke at 5.72 Tonne. You can see the shackle has become elongated and the pin has actually pulled out of the body. This is the nature of stainless steel in that it has high strength but low yield, hence the proof load is well below the actual average break load.

SAMPLE TEST CERTIFICATE

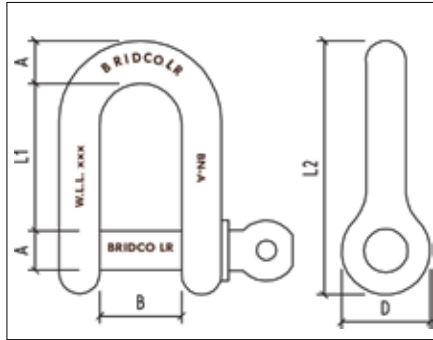


PRODUCT TEST CERTIFICATE			
CERTIFICATE NUMBER: PTC10001		DATE: 26/08/2013	
BRIDGE & COMPANY PTY LTD 37 TAREE STREET BURLINGHAM HEADS QLD 4220			
PRODUCT INFORMATION			
Product Code: SS-300F-1CLR	Manufacturer: KINZ		
Material/Grade: STAINLESS 316	Traceability Code: 10623		
Purchase Order: P010623	Quantity: 500		
TESTING INFORMATION			
W.L.L: 75T	MPF (M): 15		
BREAKING FORCE (M): 30	Result: PASS		
TESTING MACHINE			
Machine Manufacturer: Taler AB	Model No: DB 50T	Serial No: E11-060	Last Calibration Date: 19/07/13
SIGN OFF			
Remarks: This test certificate to be kept as long as the product is in use and a minimum of 13 years.			
Name: NATHAN BRIDGE	Position: SALES/TESTING		
Signature: <i>NB</i>	Date: 26/08/13		
<small>Please note: There are very few, if any, standards referring to the load testing of Stainless Steel wire or chain slings. All testing has been conducted to internal procedures which have been created using manufacturers recommendations and in-house research. A copy of these procedures are available on request.</small>			
<small>41 Taree Street, Burleigh, QLD 4220. Telephone (07) 55 935688 Fax (07) 55 935872 Email: info@slts.com.au</small>			
<b>Proof Loading &amp; Certifying of Stainless Steel Chain &amp; Wire Rope Assembly's</b>			

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## LOAD RATED DEE SHACKLES

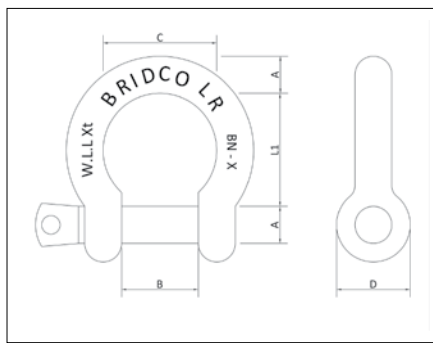


Offset Forged 316 Stainless Steel  
 Safety Factor – 4:1  
 Proof load – 2 x WLL

### LOAD RATED DEE SHACKLES AISI 316

CODE	A mm	B mm	D mm	L1 mm	WLL t
SS-360F-10LR	10.00	20.50	19.60	35.60	0.75
SS-360F-12LR	12.00	24.50	23.85	42.60	1.25
SS-360F-16LR	16.00	33.20	31.60	57.00	2.00

## LOAD RATED BOW SHACKLES



Offset Forged 316 Stainless Steel  
 Safety Factor – 6:1  
 Proof load – 2 x WLL

### BRIDCO LOAD RATED BOW SHACKLES AISI 316

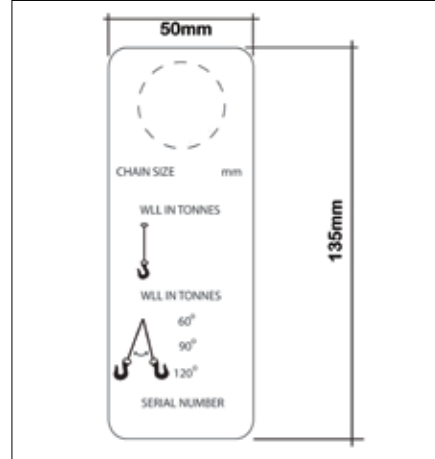
Code	A mm	B mm	C mm	D mm	L1 mm	WLL t
SS-370F-10LR	10.00	30.50	30.50	19.60	37.30	0.75
SS-370F-12LR	12.00	36.00	36.00	23.75	46.80	1.25
SS-370F-16LR	16.00	49.50	49.50	31.80	60.70	2.00
SS-370F-19LR	19.00	57.00	57.00	38.10	75.00	2.50



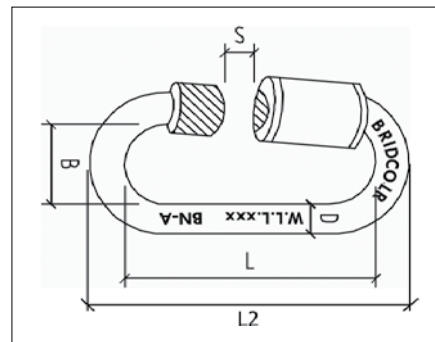
## TEST TAGS

### Blank Test Tags AISI 316

CODE	DESCRIPTION
SS-IDTAGBLANK	Stainless steel I.D tag W.L.L. Serial no: Cert no:



## QUICK LINKS



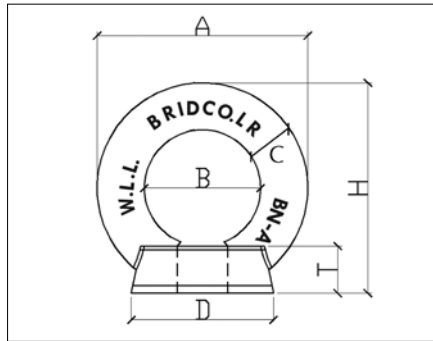
### BRIDCO LOAD RATED BOW SHACKLES AISI 316

Code	B mm	D mm	L mm	L2 mm	S mm	WLL t
SS-7350-08LR	17.90	8.05	85.05	73.80	9.15	0.75
SS-7350-10LR	21.10	9.80	70.85	89.75	13.20	1.50



6mm, 8mm, 10mm & 13mm Medium Link Grade 316 Proof Coil Chain

# LOAD RATED EYE NUTS



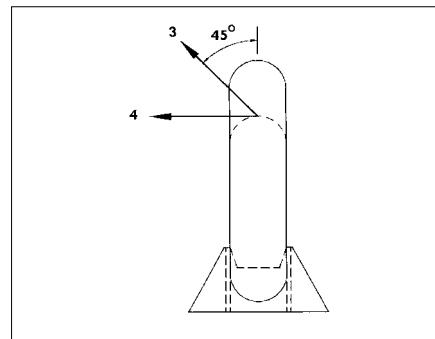
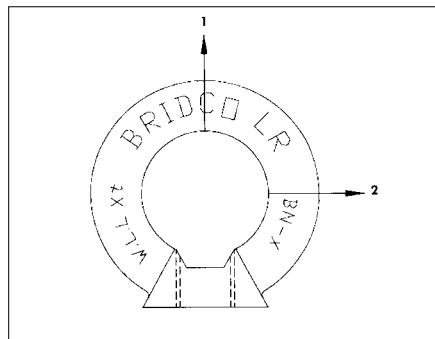
Drop Forged 316 Stainless Steel

## LOAD RATED EYE NUTS AISI 316

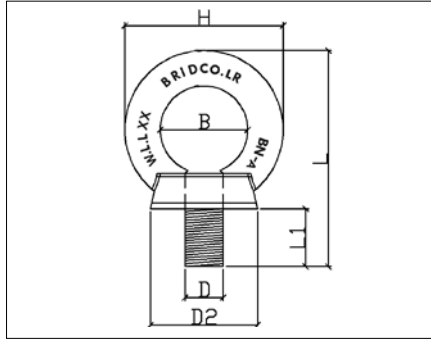
CODE	A mm	B mm	C mm	D mm	H mm	T mm	WORKING LOAD LIMIT
SS-582-12LR	53.70	30.00	12.00	29.10	55.7	12.00	1.25t
SS-582-16LR	62.90	35.20	15.00	34.20	64.9	13.80	2.00t
SS-582-20LR	71.6	40.00	15.75	39.50	75.00	15.15	2.75t

## LOAD RATED DETAILS FOR SS-582 EYE NUT

CODE	1	2	3	4
	W.L.L. (t)	W.L.L. (t)	W.L.L. (t)	W.L.L. (t)
SS-582-12LR	1.25	0.90	0.25	0.20
SS-582-16LR	2.00	1.00	0.35	0.25
SS-582-20LR	2.75	1.50	0.50	0.40



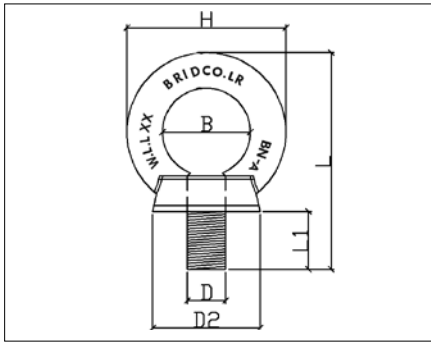
# LOAD RATED EYE BOLTS



Drop Forged 316 Stainless Steel

## LOAD RATED EYE BOLTS AISI 316

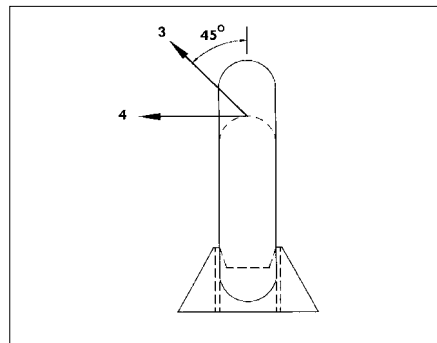
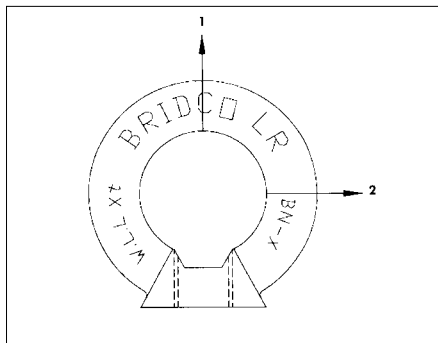
CODE	A mm	C mm	D mm	D2 mm	H mm	L mm	L1 mm	WORKING LOAD LIMIT
SS-580-12LR	30.00	12.00	M12	29.70	53.75	73.70	19.35	1.25t
SS-580-16LR	35.40	14.00	M16	34.50	62.70	89.50	26.00	2.00t



Drop Forged 316 Stainless Steel

## LOAD RATED EYE BOLTS AISI 316

CODE	A mm	C mm	D mm	D2 mm	H mm	L mm	L1 mm	WORKING LOAD LIMIT
SS-580-12120LR	30.00	12.00	M12	29.70	53.75	73.70	19.35	1.25t
SS-580-16120LR	35.40	14.00	M16	34.45	62.70	89.50	26.00	2.00t
SS-580-20120LR	39.0	15.00	M20	39.90	70.90	194.20	120	2.75t



## LOAD RATED DETAILS FOR SS-582 EYE BOLT

CODE	1	2	3	4
	W.L.L. (t)	W.L.L. (t)	W.L.L. (t)	W.L.L. (t)
SS-580-12LR	1.25	0.90	0.25	0.20
SS-580-16LR	2.00	1.00	0.35	0.25
SS-580-12120LR	1.25	0.90	0.25	0.20
SS-580-16120LR	2.00	1.00	0.35	0.25

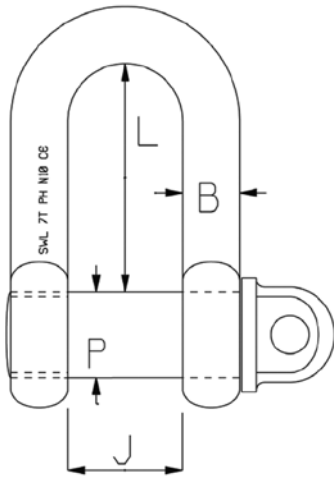


**PETERSEN**  
STAINLESS RIGGING LTD

Every shackle is proof tested to 2 x WLL and certified at our manufacturing facility in the North East of England. All shackles are manufactured in accordance with the Machine Directive 2006/42/EC. Inspection certificate BS EN 10204 3.1b is available on request. High quality finish and excellent polish.

### HIGH TENSILE STAINLESS STEEL D SHACKLES

Manufactured from 17/4PH precipitation hardening martensitic stainless steel. Excellent for general lifting applications – high tensile properties while avoiding work hardening. Corrosion resistance similar to 18/8 grade steels.



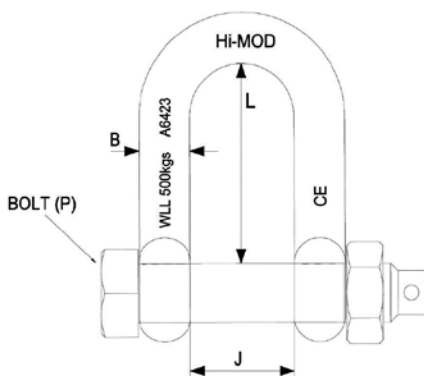
TYPE A

#### DIMENSIONS & WLL

WLL (t)	Pin Dia (P)	Body Dia (B)	Jaw Gap (J)	Length (L)
7.0	22.2	19.00	38.00	76.10

### HIGH CORROSION RESISTANCE STAINLESS STEEL D SHACKLES WITH SAFETY PIN

Manufactured from Stainless Steel EN10088 1.4404 (Marine Grade 316L). Excellent for lifting applications where a high level of corrosion resistance is required. Factor of safety 6:1. Special design of bolt ensures the nut is positioned correctly allowing sufficient room for cotter pin.



D SHACKLE

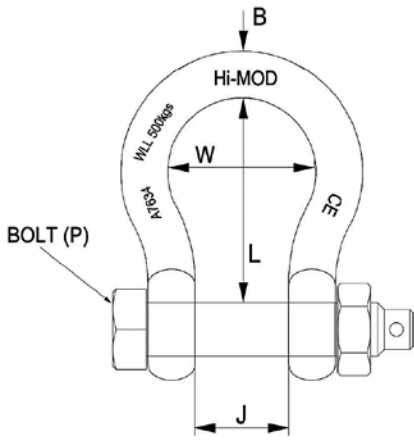


PIN

#### DIMENSIONS & WLL

WLL (t)	Bolt Size (P)	Body Dia (B)	Jaw Gap (J)	Length (L)
5.0	M27 Bolt	25.4	50.0	100.0





BOW SHACKLE

PIN

## HIGH CORROSION RESISTANCE STAINLESS STEEL BOW SHACKLES WITH SAFETY PIN

Manufactured from Stainless Steel EN10088 1.4401/4 (Marine Grade 316L). Excellent for lifting applications where a high level of corrosion resistance is required. Factor of safety 6:1. Special design of bolt ensures the nut is positioned correctly allowing sufficient room for cotter pin.

### DIMENSIONS & WLL

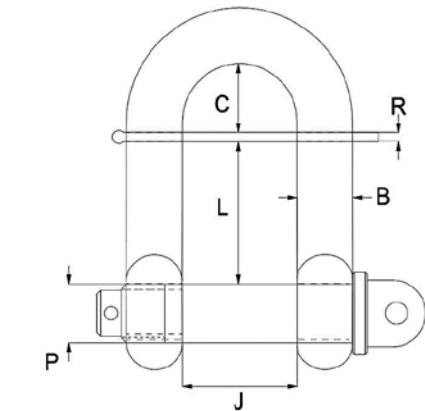
WLL (t)	Bolt Size (P)	Body Dia (B)	Inside Bow (W)	Jaw Gap (J)	Length (L)
0.4	M8 Bolt	8.0	25.0	16.0	35.0
0.6	M10 Bolt	9.5	28.0	19.0	38.0
0.8	M12 Bolt	11.5	33.0	22.0	46.0
1.0	M12 Bolt	12.7	38.0	26.0	52.0
1.5	M16 Bolt	14.3	43.0	29.0	60.0
2.5	M20 Bolt	16.0	50.0	32.0	68.0
3.0	M22 Bolt	19.0	58.0	38.0	76.0
4.0	M24 Bolt	22.0	66.0	44.0	88.0

## HIGH CORROSION RESISTANCE STAINLESS STEEL CHAIN LINK D SHACKLES

Manufactured from Stainless Steel EN10088 1.4404 (Marine Grade 316L). Excellent for lifting applications where a high level of corrosion resistance is required. Factor of safety 6:1. Unique design enabling the shackle to be made captive to the chain sling without the need of welding. The special brace pin allows the shackle to be permanently attached to the chain on-site. This results in the shackle becoming part of the chain assembly. The extended load pin is fitted with a split pin to ensure that the load pin remains in position even under vibration.

### DIMENSIONS & WLL

WLL (t)	Pin Dia (P)	Body Dia (B)	Jaw Gap (J)	Inside L	R	C
1.0	12.5	9.5	20.0	25.0	2.0	15.0
2.0	19.0	16.0	32.0	40.0	3.0	22.0
3.2	22.0	19.0	38.0	45.0	4.0	28.0

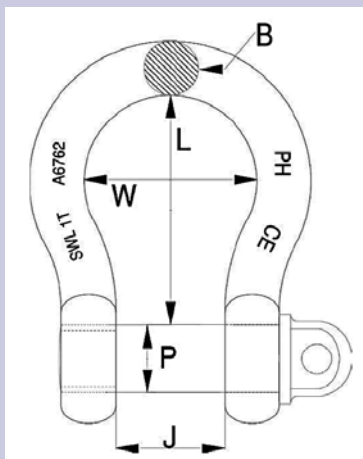


CHAIN LINK SHACKLE, BRACE & SAFETY PIN

We carry a range of other styles not shown in this catalogue including the shackles shown below. Contact us for more shackle options.

## HIGH TENSILE RESISTANCE STAINLESS STEEL BOW SHACKLES

Manufactured from 17/4PH precipitation hardening martensitic stainless steel. Excellent for general lifting applications – high tensile properties while avoiding work hardening. Corrosion resistance similar to 18/8 grade steels.



TYPE A



TYPE AL



TYPE B



TYPE E

\*Mechanically assembled chain slings

\* Welded chain slings

\* Stainless steel chain

\* Anchor Chain

\*Conveyer Chain

\* Master Links

\* Dee shackles

\* Clevis Shackles

\* Pump Lifting Chains

\* Swivel Load Hooks

\* Clevis Hooks

\* Eye Hooks

\* Eye Bolts

Industries may include:

Chemical, Food, Water &

Wastewater Engineering,

Environmental Technology,

Power Plant Engineering,

Mining, Naval & Military,

Nautical, Mechanical and

Plant Engineering, Sewerage,

Construction.

**GRADE 50 – GRADE 60, 316L  
 LOAD RATED STAINLESS STEEL**

Cromox is an innovation in the field of Stainless Steel Lifting Components, offering real advantages in terms of resistance, in particular with respect to aggressive materials. The new brand, Cromox, stands for innovative quality products made by Ketten Wälde. This new development reflects on many years of experience and intensive research.

Cromox materials have been specially selected. Cromox chain is produced using Grade 50 and Grade 60 stainless steel, which offers excellent chemical and mechanical advantages, resulting in better corrosion resistance and more favourable mechanical properties.

Cromox is available from selected distributors of Bridco products throughout Australia.





*Stainless Lifting & Testing Services Pty Ltd*

Stainless Lifting & Testing Services Pty Ltd provides batch testing, material analysis and complete all in house testing for Bridco.

## IN HOUSE TESTING

### TESTING WIRE ROPE & CHAIN SLINGS

Stainless Lifting & Testing Services Pty Ltd, have specialised equipment in the form of a 50t Talurit test bench with an effective length of 8m, which can be doubled when using chain or wire. This is primarily used for the certification of CROMOX Grade 50 stainless steel chain assemblies, but other services are available such as individual proof loading of standard Bridco stainless steel products, testing of stainless steel wire rope slings & product batch testing on request. Tested products will be tagged displaying the appropriate information. Destruction tests with graphs displaying Force/Time can also be performed should the requirement arise.

NOTE: The testing is not recognised by a 3rd party (ie NATA) due to the fact there are no current standards specifically referring to stainless steel products other than Grade 50 chain (AS4797). All testing is based on in-house research & development, supplier recommendations or based on standards of a similar nature. All testing equipment is regularly calibrated by an approved laboratory.



### SPECTROMETER ANALYSIS

Stainless Lifting & Testing Services Pty Ltd, have a state of the art machine capable of actively measuring and identifying different grades of stainless steel. Test results are registered on an analysis report which provides detailed information on grade limits and material percentages. Our staff are specially trained in the use of the spectrometer and material analysis.

Batch testing is also available on request for products purchased from Bridco, this must be done prior to despatch to ensure all items are from the same batch.





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