



LOAD RATED GRADE 316 STAINLESS STEEL FITTINGS

STAINLESS STEEL LOAD RATED COMPONENTS
HEIGHT SAFETY FITTINGS



37 Taree Street Burleigh QLD 4220
Telephone: (07) 55 935 688 Fax: (07) 55 935 872
Email: bridge@bridco.com.au
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

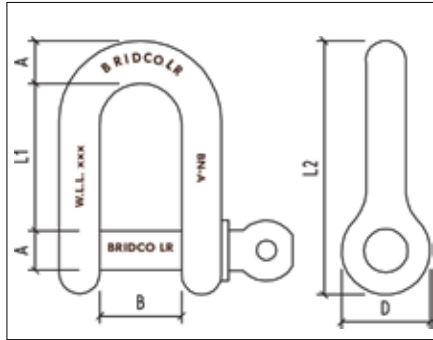


PRODUCT TEST CERTIFICATE			
CERTIFICATE NUMBER: PTC10001		DATE: 26/08/2013	
BRIDGE & COMPANY PTY LTD 37 TAREE STREET BURLINGHAM HEADS QLD 4220			
PRODUCT INFORMATION			
Product Code: SS-300F-1CLR	Manufacturer: KINZ		
Material/Grade: STAINLESS 316	Traceability Code: 10623		
Purchase Order: P010623	Quantity: 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>NBE</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 procedure 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, Burlingham, QLD 4220. Telephone (07) 55 935688 Fax (07) 55 935872 Email: info@slts.com.au</small>			
Proof Loading & Certifying of Stainless Steel Chain & Wire Rope Assembly's			

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LOAD RATED DEE SHACKLES

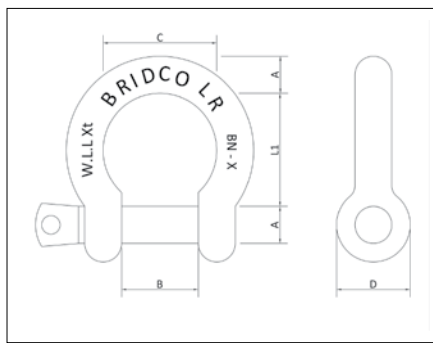


Offset Forged 316 Stainless Steel
Safety Factor – 4:1

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 – 4:1

BRIDCO LOAD RATED BOW SHACKLES AISI 316

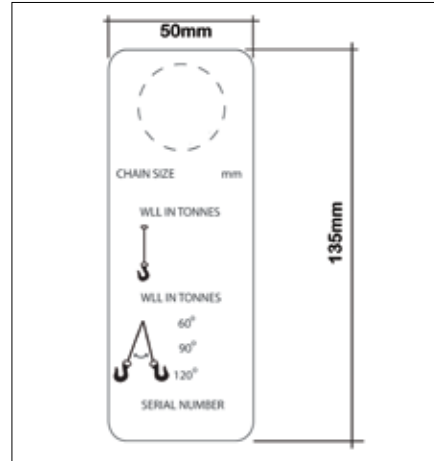
Code	A mm	B mm	C mm	D mm	L1 mm	WLL t
SS-370F-10LR	10.00	20.50	30.50	19.60	37.30	0.75
SS-370F-12LR	12.00	23.50	35.00	23.75	46.80	1.25
SS-370F-16LR	16.00	32.00	49.50	31.80	60.70	2.00
SS-370F-19LR	19.00	38.00	55.00	38.10	75.00	2.50



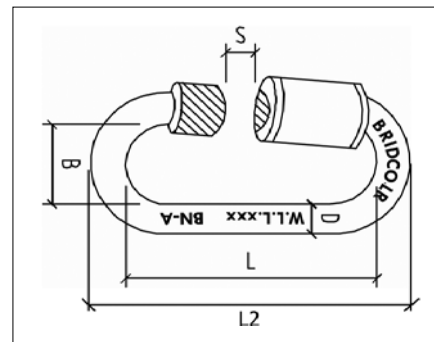
TEST TAGS

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	59.30	73.80	10.30	0.75
SS-7350-10LR	21.10	9.80	70.85	89.75	12.7	1.50



LOAD RATED SPRING HOOKS



Offset Forged 316 Stainless Steel
Electro Polished for superior
corrosion resistance
Safety Factor – 5:1

NOTE: Not recommended for
overhead lifting. Please refer to the
CROMOX Catalogue for Grade 60
Hooks.

LOAD RATED SPRING HOOK AISI 316

CODE	Size	Length	Gate Width	WLL (kg)	MBL (kg)
SS-2431X-08LR	8.0	80	16.0	290	1450
SS-2431X-10LR	10.00	100	22.0	570	2850
SS-2431X-12LR	12.00	120	28.0	720	3600



STAINLESS STEEL PROOF COIL CHAIN

Features:

Manufactured from AISI 316 Stainless Steel. Bridco PL chain is up 50% stronger than Commercial Stainless Steel Chain.

Chain has been subjected to a Proof Load half of the MBL

Sizes 1/4" to 1/2"

Chain stamped with batch number & test certificates are available for traceability & conformance purposes.

PROOF COIL CHAIN

Code	Proof Load (kN)	D (mm)	L (mm)	b (mm)	Drum Size
SS-CHPC-07	19.2	7	30.3	11.8	200M
SS-CHPC-08	25	8	31.9	13.9	200M
SS-CHPC-10	39.2	10	41.2	18.1	100M
SS-CHPC-13	66.3	13	50.1	20	50M

SHACKLES TO SUIT

Chain	Dee Shackle	Bow Shackle
SS-CHPC-07	SS-360F-10LR	SS-370F-10LR
SS-CHPC-08	SS-360F-10LR	SS-370F-10LR
SS-CHPC-10	SS-360F-12LR	SS-370F-12LR
SS-CPHC-13	SS-360F-16LR	SS-370F-16LR

Suggested applications:

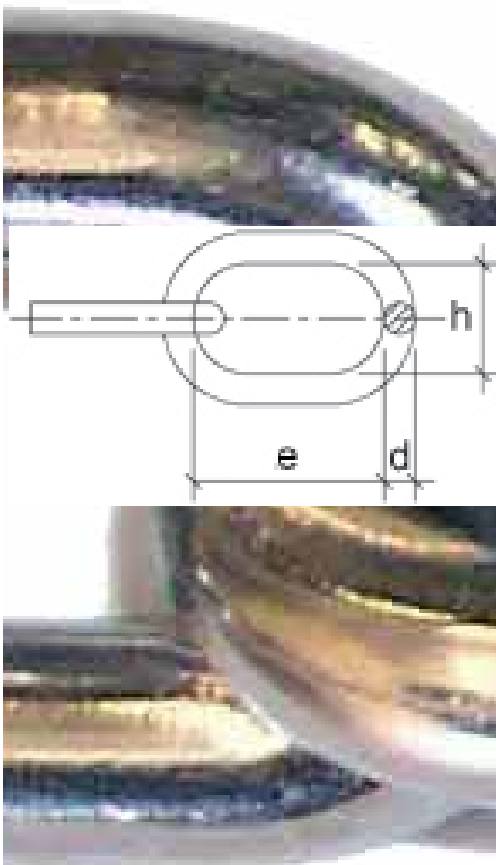
Static lashing chain

Shade Sails

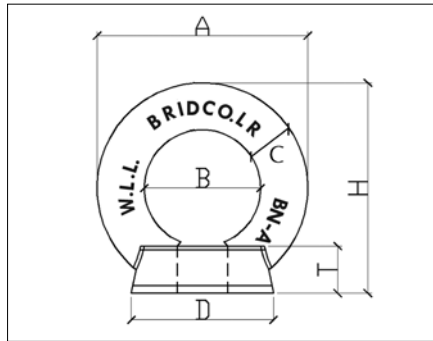
Dragging chains

Other applications where commercial chain is not suitable.

Note: Chain not rated for overhead liting applications and is not suitable for permanent immersion.



LOAD RATED EYE NUTS



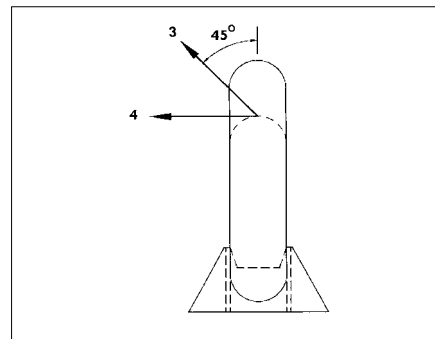
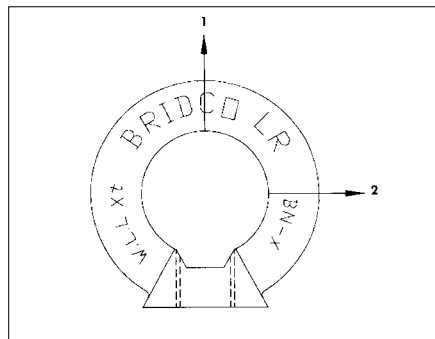
Drop Forged 316 Stainless Steel
Safety Factor - 4:1

LOAD RATED EYE NUTS AISI 316

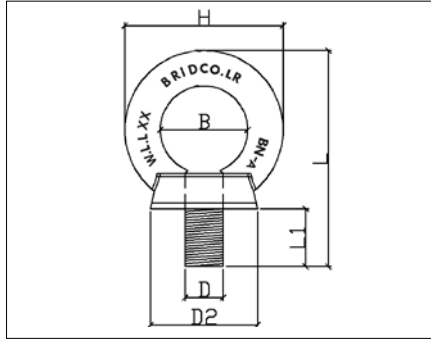
CODE	A mm	B mm	C mm	D mm	H mm	T mm	WORKING LOAD LIMIT
SS-582-12LR	53.70	30.00	12.00	29.10	55.70	12.00	1.25t
SS-582-16LR	62.90	35.20	15.00	34.20	64.90	13.80	2.00t
SS-582-20LR	71.60	40.00	15.75	39.50	75.00	15.15	2.75t

LOAD RATED DETAILS FOR SS-582 EYE NUT

CODE	1 W.L.L. (t)	2 W.L.L. (t)	3 W.L.L. (t)	4 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



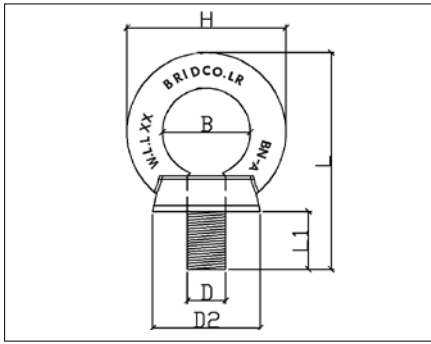
LOAD RATED EYE BOLTS



Drop Forged 316 Stainless Steel
Safety Factor - 4:1

LOAD RATED EYE BOLTS AISI 316

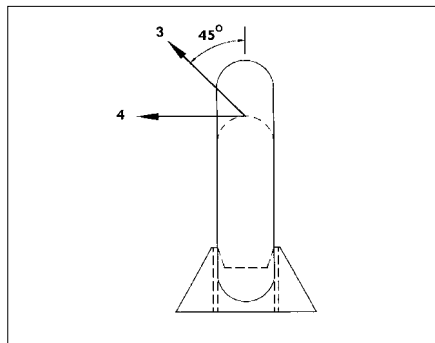
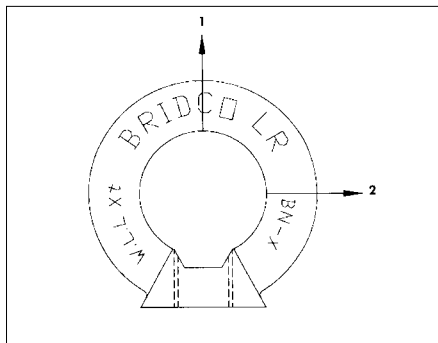
CODE	B mm	C mm	D mm	D2 mm	H mm	L mm	L1 mm	WORKING LOAD LIMIT
SS-580-12LR	30.00	12.00	M12	29.70	53.75	73.70	19.35	1.25t
SS-580-16LR	35.40	14.00	M16	34.50	62.70	89.50	26.00	2.00t



Drop Forged 316 Stainless Steel
Safety Factor - 4:1

LOAD RATED EYE BOLTS AISI 316

CODE	B 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	175.00	120	1.25t
SS-580-16120LR	35.40	14.00	M16	34.45	62.70	184.00	120	2.00t
SS-580-20120LR	39.0	15.00	M20	39.90	70.90	194.00	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

High Corrosion Resistance Stainless Steel Bow Shackles with Safety Pin

Product Features

Manufactured from Stainless Steel EN10088 1.4404 (Marine Grade 316)
 Excellent for lifting applications where a high level of corrosion resistance is required
 Factor of Safety 6:1
 Available with 2 pin types - E Type Safety Pin with Standard Nut (E Type) or Nylok Nut (E Type-NY)
 Special design of bolt ensures the nut is positioned correctly allowing sufficient room for the cotter pin

Typical Applications

Water utility installations & other corrosive facilities
 Pump chains and pump lifting
 Chemical installations - Chlorine plants etc
 General lifting in off-shore applications
 General lifting and tethering in leisure marine applications
 General lifting purposes

Quality Features

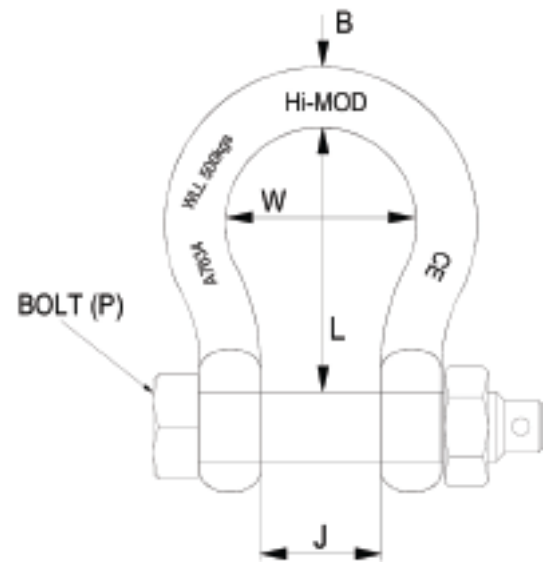
Every shackle is proof tested to 2 x WLL and certified at our manufacturing facility in the North East of England
 All shackles are manufactured in accordance with the Machine Directive 2006/42/EC Inspection certificate BS EN 10204 3.1b available on request
 High quality finish and excellent polish
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



Bow Shackle



Pin



DIMENSIONS & WLL

Part Number	WLL (t)	Bolt Size (P)	Body Dia (B)	Inside Bow (W)	Jaw Gap (J)	Length (L)	Weight (kg)
PE-EB8M8	0.4	M8 Bolt	8.0	25.0	16.0	35.0	0.081
PE-EB10M10	0.6	M10 Bolt	9.5	28.0	19.0	38.0	0.147
* EB11M12	0.8	M12 Bolt	11.5	33.0	22.0	46.0	0.221
PE-EB12M12	1.0	M12 Bolt	12.7	38.0	26.0	52.0	0.354
PE-EB14M16	1.5	M16 Bolt	14.3	43.0	29.0	60.0	0.635
PE-EB16M20	2.5	M20 Bolt	16.0	50.0	32.0	68.0	0.805
PE-EB19M22	3.0	M22 Bolt	19.0	58.0	38.0	76.0	1.25
PE-EB22M24	4.0	M24 Bolt	22.0	66.0	44.0	88.0	1.82
PE-EB24M27	4.5	M27 Bolt	25.4	76.0	50.0	100.0	2.70

*On Request



PETERSEN
STAINLESS RIGGING LTD

High Corrosion Resistance Stainless Steel Dee Shackles with Safety Pin

Product Features

Manufactured from Stainless Steel EN10088 1.4404 (Marine Grade 316)
Excellent for lifting applications where a high level of corrosion resistance is required

Factor of Safety 6:1

Available with 2 pin types - E Type Safety Pin with Standard Nut (E Type) or Nylok Nut (E Type-NY)

Special design of bolt ensures the nut is positioned correctly allowing sufficient room for the cotter pin

Typical Applications

Water utility installations & other corrosive facilities

Pump chains and pump lifting

Chemical installations - Chlorine plants etc

General lifting in off-shore applications

General lifting and tethering in leisure marine applications

General lifting purposes

Quality Features

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 available on request

High quality finish and excellent polish

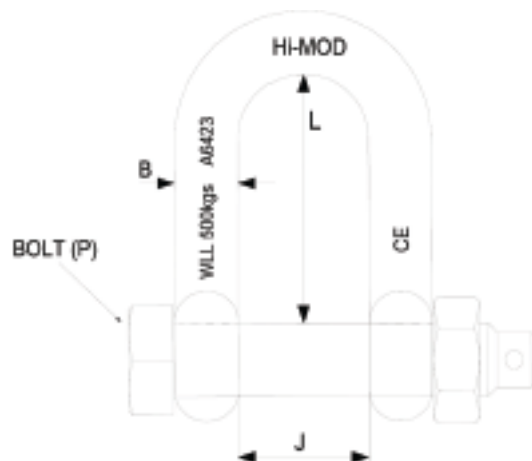
Manufactured using the latest technology in electrical upset forging



Dee Shackle



Pin



DIMENSIONS & WLL

Part Number	WLL (t)	Bolt Size (P)	Body Dia (B)	Jaw Gap (J)	Length (L)	Weight (kg)
* ED8M8	0.5	M8 Bolt	8.0	16.0	32.0	0.075
* ED10M10	0.8	M10 Bolt	9.5	19.0	38.0	0.136
* ED11M12	1.0	M12 Bolt	11.5	22.0	44.0	0.212
* ED12M12	1.25	M12 Bolt	12.7	26.0	52.0	0.331
* ED14M16	1.8	M16 Bolt	14.3	29.0	58.0	0.585
* ED16M20	2.8	M20 Bolt	16.0	32.0	64.0	0.760
* ED19M22	3.3	M22 Bolt	19.0	38.0	76.0	1.18
* ED22M24	4.5	M24 Bolt	22.0	44.0	88.0	1.75
PE-ED25M27	5.0	M27 Bolt	25.4	50.0	100.0	2.60

*On Request



PETERSEN
STAINLESS RIGGING LTD

High Tensile Stainless Steel Bow Shackles with Safety Pin

Product Features

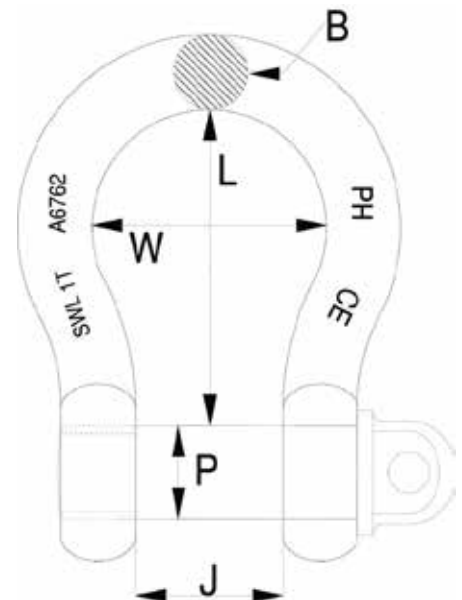
Manufactured from 17/4PH precipitation hardening martensitic stainless steel
 Excellent for general lifting applications - high tensile properties while avoiding work hardening
 Corrosion resistance similar to 18/8 grade steels
 Factor of Safety 6:1
 Available with 4 pin types - Standard Screw Collar Pin (A Type), Extended Screw Collar Pin (AL Type), Countersunk Head (B Type), E Type Safety Pin (E Type)
 Manufactured using the latest technology in electrical upset forging

Typical Applications

General lifting in off-shore applications
 General lifting and tethering in leisure marine applications
 General lifting purposes

Quality Features

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 available on request
 High quality finish and excellent polish
 Manufactured using the latest technology in electrical upset forging



Type A Pin



Type AL Pin

Part Number		DIMENSIONS & WLL						
Type A	Type AL	WLL (t)	Pin Dia(P)	Body Dia (B)	Inside Bow (W)	Jaw Gap (J)	Length (L)	Weight (kg)
* PHB008TA	PE-PHB008TAL	0.8	10.0	8.0	24.0	16.0	32.0	0.090
* PHB015TA	PE-PHB015TAL	1.5	12.7	10	30.0	20.0	40.0	0.158
* PHB025TA	PE-PHB025TAL	2.5	16.0	12.7	38.0	25.0	50.0	0.368
* PHB040TA	* PHB040TAL	4.0	19.0	16.0	48.0	32.0	64.0	0.578
* PHB055TA	* PHB055TAL	5.5	22.2	19.0	57.0	38.0	76.0	1.050
* PHB075TA	* PHB075TAL	7.5	25.4	22.2	66.0	44.0	88.0	1.995
* PHB090TA	* PHB090TAL	9.0	28.6	25.4	76.0	51.0	102.0	3.045
* PHB110TA	* PHB110TAL	11.0	31.8	28.6	86.0	57.0	114.0	3.255
* PHB130TA	* PHB130TAL	13.0	34.9	31.8	95.0	64.0	128.0	4.568
* PHB150TA	* PHB150TAL	15.0	38.0	34.9	105.0	70.0	140.0	5.565

*On Request



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High Tensile Stainless Steel Bow Shackles with Safety Pin

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 Excellent for general lifting applications - high tensile properties while avoiding work hardening
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 Manufactured using the latest technology in electrical upset forging

Typical Applications

General lifting in off-shore applications
 General lifting and tethering in leisure marine applications
 General lifting purposes

Quality Features

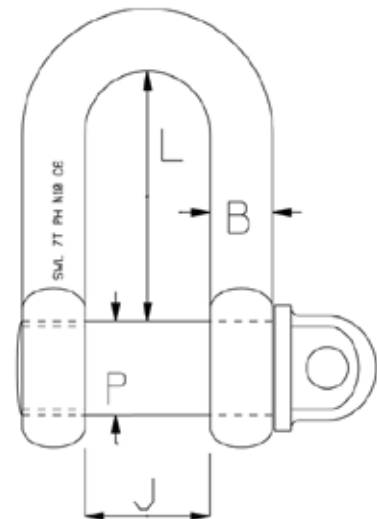
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 All shackles are manufactured in accordance with the Machine Directive 2006/42/EC Inspection certificate BS EN 10204 3.1b available on request
 High quality finish and excellent polish
 Manufactured using the latest technology in electrical upset forging



Type A Pin



Type AL Pin



Part Number		DIMENSIONS & WLL					
Type A	Type AL	WLL (t)	Pin Dia(P)	Body Dia (B)	Jaw Gap (J)	Length (L)	Weight (kg)
* PH1TA	* PH1TAL	1.0	10.0	8.0	16.0	32.0	0.085
* PH2TA	* PH2TAL	2.0	12.7	10	20.0	40.0	0.150
* PH3TA	* PH3TAL	3.0	16.0	12.7	25.0	50.0	0.350
PE-PH5TA	* PH5TAL	5.0	19.0	16.0	32.0	64.0	0.550
PE-PH7TA	* PH7TAL	7.0	22.2	19.0	38.0	76.0	1.000
PE-PH9TA	* PH9TAL	9.0	25.4	22.2	44.0	88.0	1.900
PE-PH11TA	* PH11TAL	11.0	28.6	25.4	51.0	102.0	2.900
PE-PH13TA	* PH13TAL	13.0	31.8	28.6	57.0	114.0	3.100
* PH15TA	* PH15TAL	15.0	34.9	31.8	64.0	128.0	4.350
* PH18TA	* PH18TAL	18.0	38.0	34.9	70.0	140.0	5.300

*On Request

- *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 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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