

SECTION FIVE

Load rated Grade 316 stainless steel Fittings



	BRIDCO LR Dee shackles & Bow Shackles	107
	BRIDCO LR Test Tags & Quick Links	108
	BRIDCO LR Snap Hooks	109
	BRIDCO LR Proof Coil Chain	110
	BRIDCO LR Eye Nuts & Eye Bolts	111 – 112
	Petersen Shackles	113 – 116

BRIDGE & COMPANY PTY LTD

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Burleigh Heads QLD 4220
Telephone: (07) 55 935 688
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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.*

SAMPLE TEST CERTIFICATE



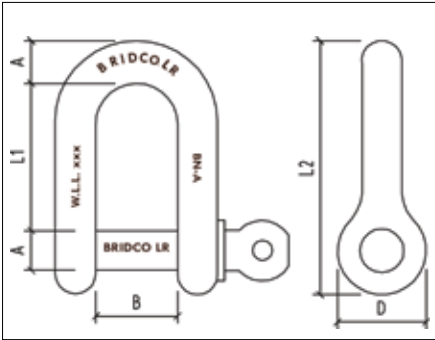
SLTS Stainless Lifting & Testing Services

PRODUCT TEST CERTIFICATE			
CERTIFICATE NUMBER: PTC10001		DATE: 26/08/2013	
BRIDGE & COMPANY PTY LTD 37 TAREE STREET BURLEIGH HEADS QLD 4220			
PRODUCT INFORMATION			
Product Code: SS-300F-1CLR		Manufacturer: KONZI	
Material/Grade: STAINLESS 316		Traceability Code: 10623	
Purchase Order: PO10623		Quantity: 500	
TESTING INFORMATION			
WLL: 0.75T		MPF (MN): 15	
BREAKING FORCE (MN): 30		Result: PASS	
TESTING MACHINE			
Machine Manufacturer: Teller AB	Model No: DB 50T	Serial No: E31-060	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 procedure which have been created using manufacturers recommendations and in-house research. A copy of these procedures are available on request.</small>			
41 Taree Street, Burleigh, QLD 4220. Telephone (07) 55 935688 Fax (07) 55 935872 Email: info@slts.com.au Proof Loading & Certifying of Stainless Steel Chain & Wire Rope Assembly's			



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

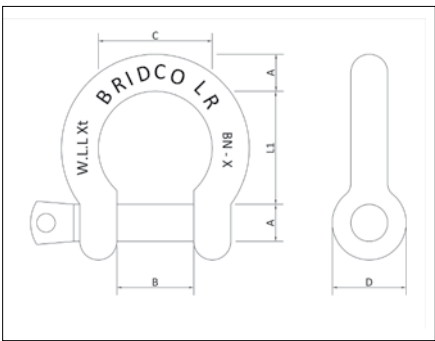
In our test this particular shackle broke at 5.72 Tonne. You can see the shackle has become elongated and the pin has actually pulled out of the body. This is the nature of stainless steel in that it has high strength but low yield, hence the proof load is well below the actual average break load.



Offset Forged 316
Stainless Steel
Safety Factor – 6:1
AISI 316

LOAD RATED DEE SHACKLE

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



Offset Forged 316
Stainless Steel
Safety Factor – 6:1
AISI 316

BRIDCO LOAD RATED BOW SHACKLES

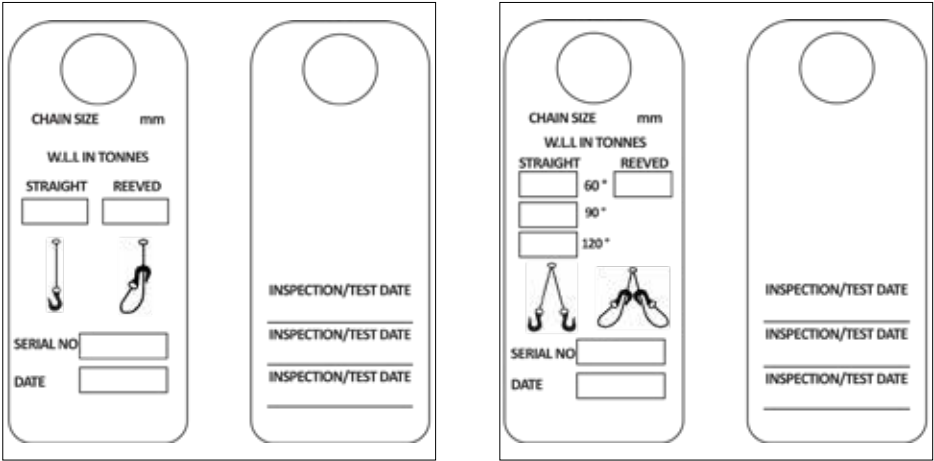
Code	A mm	B mm	C mm	D mm	L1 mm	WLL t
SS-370F-10LR	10.00	20.50	30.50	19.60	37.30	0.75
SS-370F-12LR	12.00	23.50	35.00	23.75	46.80	1.25
SS-370F-16LR	16.00	32.00	49.50	31.80	60.70	2.00
SS-370F-19LR	19.00	38.00	55.00	38.10	75.00	2.50



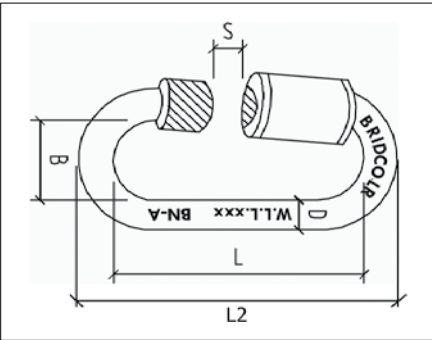
LOAD RATED DEE SHACKLES

Blank Test Tags AISI 316

CODE	DESCRIPTION	Size
SS-IDTAG-SL-BLANK	Stainless steel I.D tag Single Leg	113 x 48 x 2mm
SS-IDTAG-ML-BLANK	Stainless steel I.D tag Multi Leg	113 x 48 x 2mm



TEST TAGS & QUICK LINKS



Safety Factor – 4:1
AISI 316

BRIDCO LOAD RATED QUICK LINKS 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





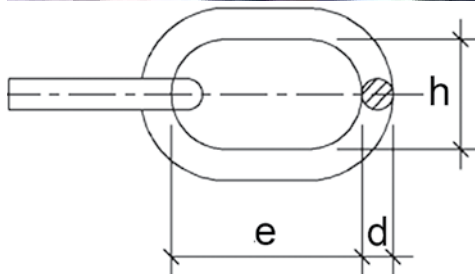
Offset Forged 316 Stainless Steel
Electro Polished for superior
corrosion resistance
Safety Factor – 5:1
AISI 316
**NOTE: Not recommended for
overhead lifting. Please refer to
the section 4 for cromox Grade 60
Hooks.**

LOAD RATED SPRING HOOK

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

SPRING HOOKS





STAINLESS STEEL PROOF COIL CHAIN

Features:

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

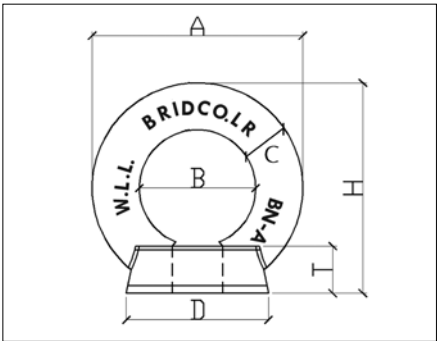
Suggested applications:

Shade Sails

Dragging chains

Other applications where commercial chain is not suitable.

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



Drop Forged 316 Stainless Steel
Safety Factor - 4:1
AISI 316

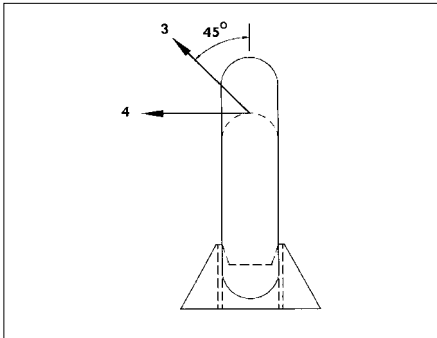
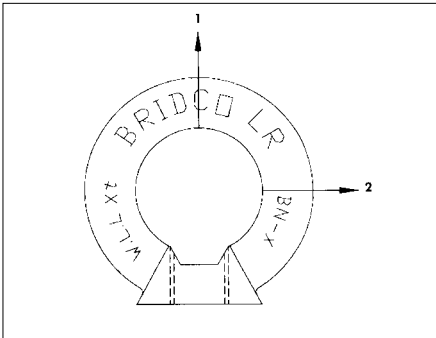
LOAD RATED EYE NUT

CODE	A mm	B mm	C mm	D mm	H mm	T mm	WORKING LOAD LIMIT DIRECT PULL
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

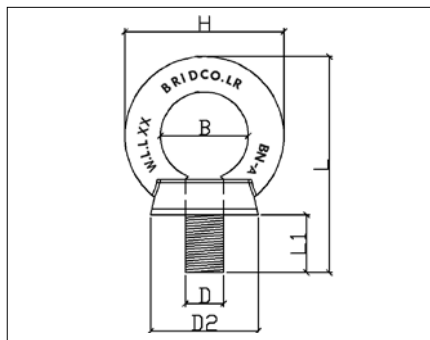
LOAD RATED DETAILS FOR SS-582 EYE NUT

CODE	1	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

THE ABOVE WLL'S ARE WITH THE COLLAR SEATED ON A FLAT SURFACE AND WITH THREADS FULLY ENGAGED.



LOAD RATED EYE NUTS



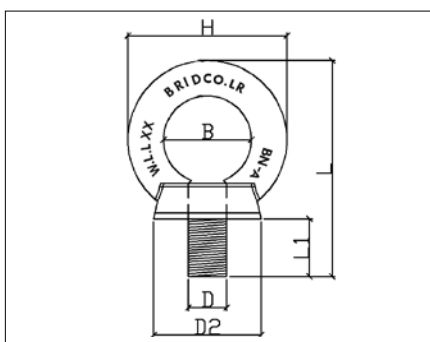
Drop Forged 316 Stainless Steel

Safety Factor - 4:1

AISI 316

LOAD RATED EYE BOLTS

CODE	B mm	C mm	D mm	D2 mm	H mm	L mm	L1 mm	WORKING LOAD LIMIT DIRECT PULL
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

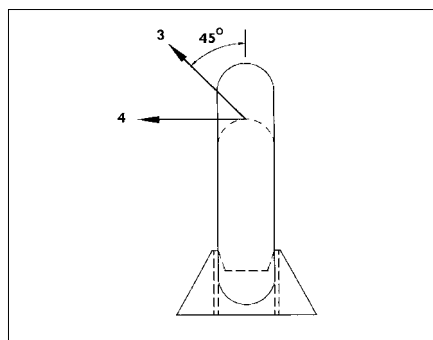
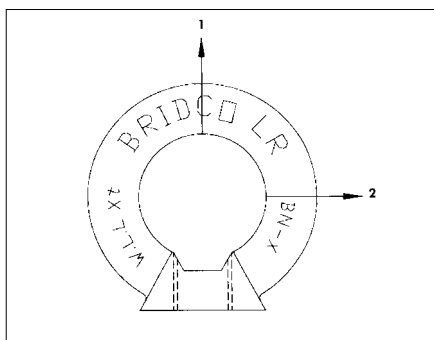


Drop Forged 316 Stainless Steel

Safety Factor - 4:1

AISI 316

EYE BOLTS

**LOAD RATED DETAILS FOR SS-580 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
SS-580-20120LR	2.75	1.50	0.50	0.40

THE ABOVE WLL'S ARE WITH THE COLLAR SEATED ON A FLAT SURFACE AND WITH THREADS FULLY ENGAGED.

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 Nyloc Nut (E Type-NY)
Special design of bolt ensures the nut is positioned correctly allowing sufficient room for the cotter pin

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

Typical Applications

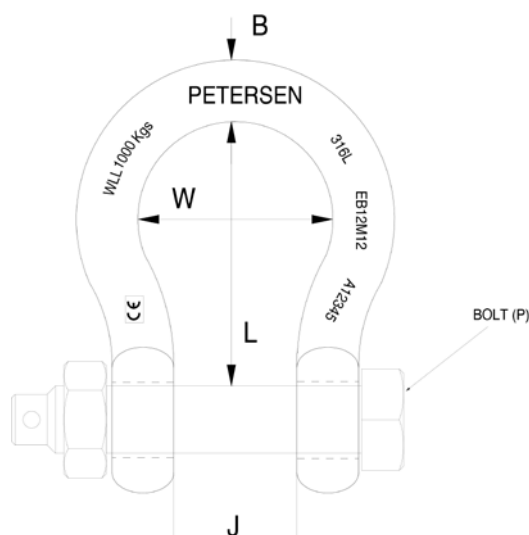
Water utility installations & other corrosive facilities
Pump chains and pump lifting
Chemical installations - Chlorine plants etc
General lifting in off-shore applications
General lifting and tethering in leisure marine applications
General lifting purposes



Bow Shackle



Pin



PETERSEN SHACKLES

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

*Not stocked. Available 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 Nyloc 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

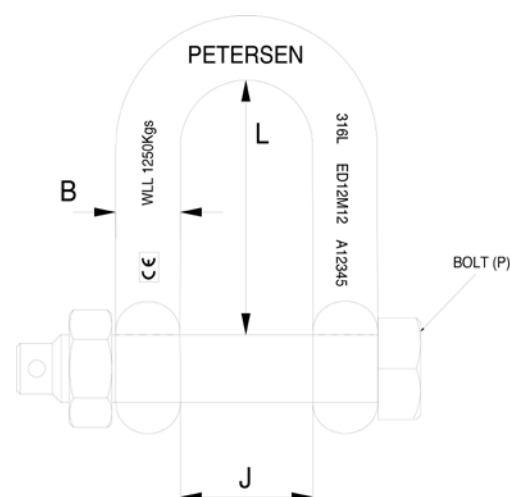
PETERSEN SHACKLES



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

*Not stocked. Available on Request.

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



PETERSEN
STAINLESS RIGGING LTD

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

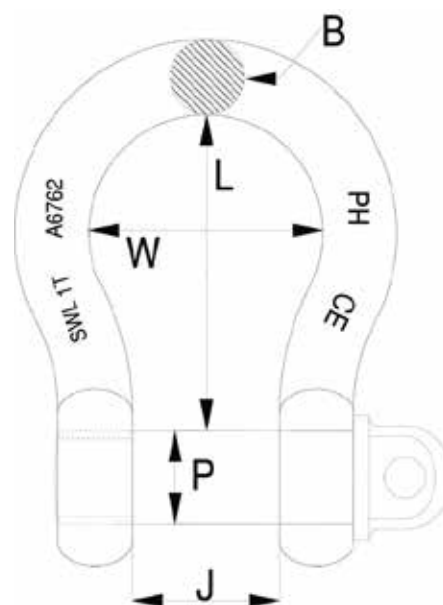
Manufactured using the latest technology in electrical upset forging



Type A Pin



Type AL Pin



PETERSEN SHACKLES

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

*Not stocked. Available on Request

High Tensile Stainless Steel Dee 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

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



Typical Applications

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

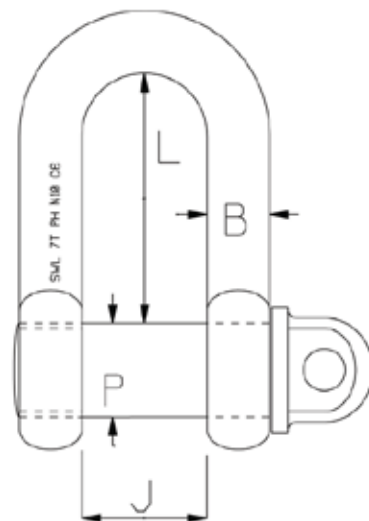
PETERSEN SHACKLES



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

*Not stocked. Available on Request