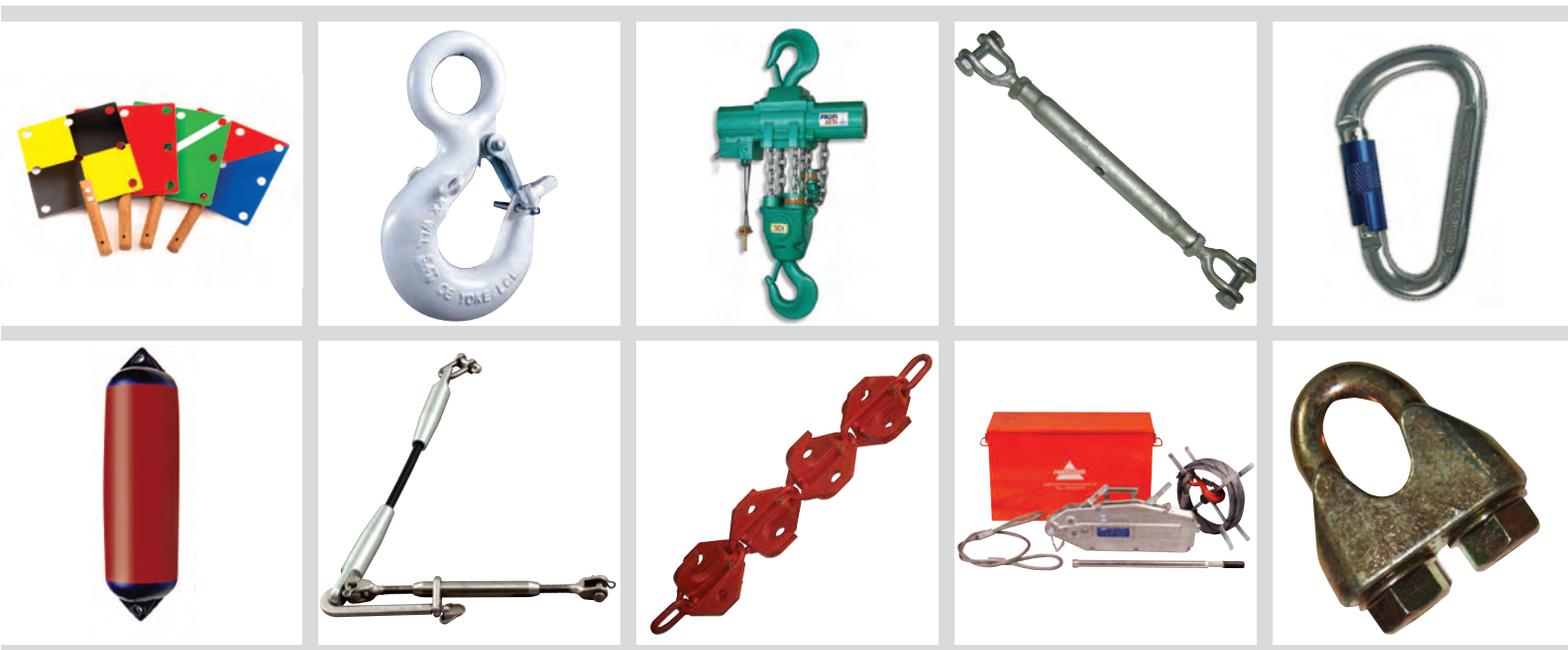


AM DEFENCE & MARINE
product catalogue



lifting equipment | ropes & rigging | height safety | marine | defence | subsea

ABOUT US

AM Defence & Marine provides specialist engineering services for lifting equipment, industrial doors and height safety access for a broad range of customers and delivers bespoke work and material packages to military customers and marine operators worldwide.

Founded in 1937 by brothers, William and Harold Austin, and inspired by the newly laid down factories act of the same year, the Austin family was developed into a specialist engineering company for the testing and inspecting of commercial lifting equipment.

AM Defence & Marine ethos is of delivering the highest levels of service through genuine customer focus, quality of engineering and materials, safety, flexibility and competitiveness.

Still owned and run by the Austin family, AM Defence & Marine reflects the expertise and heritage of 75 years' worth of service.



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LIFTING



BESPOKE LIFTING SOLUTIONS

This catalogue contains a range of supply equipment from AM Defence & Marine LTD. However, the list is by no means comprehensive or fully representative of the scope of work carried out by AM Defence & Marine.

For over seventy-five years we have provided a consultancy service for lifting and material handling problems. When proprietary equipment is not appropriate our in-house design department liaise with customers and project coordinators to develop a range of bespoke solutions.

From simple lifting frames, to large scale complex design projects and fabrications, our experienced team offer the highest standards of service through personalised consultation and specialist design solutions.

We aim to solve your lifting problems whilst causing least disruption, and providing clear visibility of your project throughout.

Mobile and fixed gantry systems

Full range of fixed & mobile gantry systems for indoor & outdoor use is available



“For over seventy-five years we have provided a consultancy service for lifting and material handling problems”

All of the above equipment can be installed, commissioned and tested by our highly skilled engineers.

Davits

A full range of davits are available with single part or split pillars.



Jib Cranes

Jib cranes are available in wall mounted or free standing configurations.



BESPOKE LIFTING SOLUTIONS

Design Process

During the initial enquiry stages our customer focused sales team determine your requirements and provide advice on the design process.

A relevant division specialist is assigned and will act as your project coordinator and single point of contact throughout the process, from initial design stages to project handover.

A site survey is carried out to review the exact circumstance of the application, on which the range of available options will depend.

A solution will be drawn up and presented to you in its preliminary stages. Your dedicated project coordinator will be happy to discuss any queries you may have and guide you through the quotation.

When you are ready to proceed, your project coordinator will confirm the project details and oversee the manufacturing, installation and testing of your application. At the final stage of handover you will receive information outlining the use and maintenance of you application and advice on statutory inspections. We will be happy to guide you through our on-going consultancy.

Cranes

The company are able to supply and install a full range of overhead and gantry cranes to suit any applications.

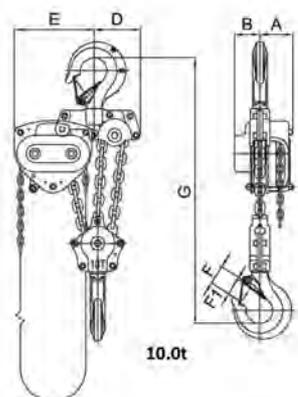
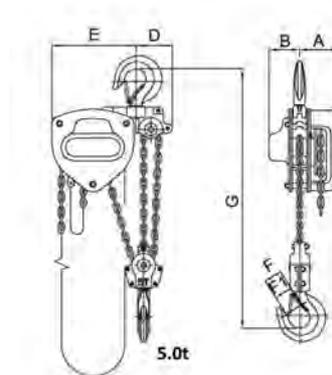
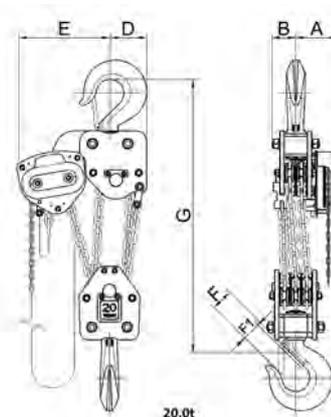
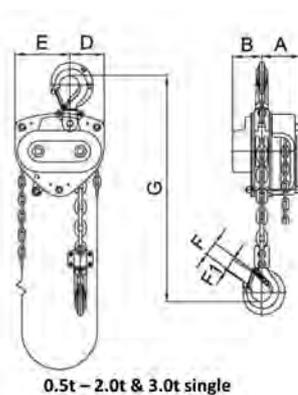
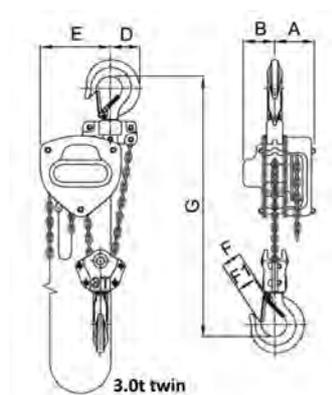


LIFTING

Tiger Chain Hoists

Main Features

- Range: 500kg – 20000kg
- Rugged steel body construction
- Lightweight and portable
- Double cover protection for brake chamber
- Drop forged & heat treated alloy hooks
- High quality alloy calibrated load chain
- Safe reliable twin pawl mechanical brake
- Guaranteed light load protection
- Heat treated alloy steel triple spur gears and pinion shaft
- Operating temperature of -50°C to +50°C
- Proof tested to 1.5 times rated capacity
- Can be chained to meet your exact requirements
- Individual spares readily available
- Factor of safety 5:1



Part No.	Capacity (tonne)	Effort (kg)	Dimensions							Load Chain		Standard HOL (m)	Mass kg std HOL
			A	B	D	E	F	F1	G	Diameter (mm)	No. of Falls		
VH0.53	0.5	21	89	67	50	80	30	26	305	Ø6.3	1	3	10.8
VH13	1.0	25	89	67	63	87	33	28	340	Ø6.3	1	3	12.0
VH1.53	1.5	32	93	73	75	105	38	34	385	Ø7.1	1	3	16.3
VH23	2.0	34	98	77	85	115	43	38	420	Ø8.0	1	3	20.6
VH33	3.0	38	109	84	98	157	43	38	550	Ø10.0	1	3	32.5
VH53	5.0	37	98	77	120	210	57	52	575	Ø8.0	3	3	39.0
VH103	10.0	40	109	84	153	263	60	54	660	Ø10.0	3	3	62.3
VH203	20.0	43	160	90	140	350	90	70	1050	Ø10.0	6	3	180.0

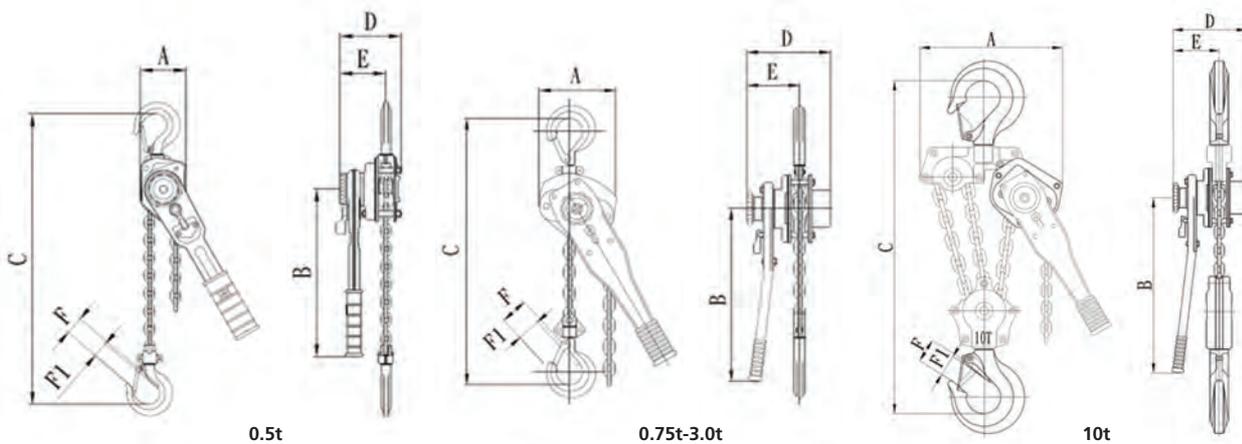
For other heights of lift please contact our sales office

LIFTING

Tiger Lever Hoist

Main Features

- Range: 250kg – 10000kg
- Rugged steel body construction
- Lightweight and portable
- 360 degree handle rotation
- Short stroke and low lever pulling effort
- Easy single-hand “freewheeling” operation
- Drop forged and heat treated alloy hooks
- High quality alloy calibrated load chain
- Safe reliable twin pawl mechanical brake
- Guaranteed light load protection
- Heat treated alloy steel triple spur gears and pinion shaft
- Heavy duty chain end stop
- Operating temperature of -50°C to +50°C
- Proof tested to 1.5 times rated capacity
- 1.5m height of lift as standard but can be chained to exact requirements
- Individual spares readily available



Part No.	Capacity (tonne)	Effort (kg)	Dimensions							Load Chain		Standard HOL (m)	Mass kg std HOL
			A	B	C	D	E	F	F1	Diameter (mm)	No. of Falls		
VHL0.25	0.25	30	60	156	245	82	63	27	22	ø4.0	1	1.0	TBA
VHL0.5	0.5	34	75	276	270	100	75	30	26	ø5.0	1	1.0	3.9
VHL0.75	0.75	22	128	240	275	158	99	30	26	ø6.3	1	1.5	7.2
VHL1.5	1.5	26	154	360	320	172	104	38	34	ø7.1	1	1.5	10.1
VHL3	3.0	38	182	360	400	195	108	43	38	ø10.0	1	1.5	18.0
VHL6	6.0	40	242	360	570	195	108	57	52	ø10.0	2	1.5	28.0
VHL10	10.0		370	360	630	195	108	71	56	ø10.0	3	1.5	42.4

LIFTING

Tiger Chain Hoists

This range of lever hoists and chain hoists can be uniquely transformed when fitted with the unique hook adaptor making them some of the most versatile manual lifting blocks available to the industry.

Once fitted with the hook adaptor the top and bottom hooks can be configured with any variation of standard clevis fittings giving a variety of methods for attaching the hoists within rigging applications, potentially reducing the amount of rigging equipment required.

The flexibility this gives to the hook is unprecedented, allowing the hook not just to rotate in the normal 360 degrees but also approximately 100 degrees from the vertical in each direction. The effect of which creates a knuckle type joint.

This joint removes shear modes from the hook yokes when a force is being applied to the hoist outside the normal vertical lift scenario. These hoists can be used to lift loads through various angles from the vertical and when transferring loads from one hoist to another.



Chain Hoists

Part No.	Capacity (tonne)	Size mm	No. of Falls	Mass kg 3 mtr
VH0.53F	0.5	6.3	1	10.8
VH13F	1.0	6.3	1	12
VH1.53F	1.5	7.1	1	16.3
VH23F	2.0	8	1	20.6
VH33F	3.0	10	1	34
VH53F	5.0	8	3	39
VH103F	10.0	10	3	62.3

Note: If 6m height of lift, change the no.3 to 6 in the part number e.g. VH16F.

For other heights of lift please contact our sales office.

Lever hoists

Part No.	Capacity (tonne)	Size mm	No. of Falls	Mass kg 3 mtr
VH0.75LF	0.75	6.3	1	7.2
VH1.5LF	1.5	7.1	1	10.2
VH3LF	3.0	10.0	1	18
VH6LF	6.0	10.0	2	18
VH10LF	10.0	10.0	3	42.4

LIFTING

Yale Electric Chain Hoists

A wide range of electric chain hoists are available with lug, hook or integral trolley suspensions, push, gear or electric travel and single or dual hoisting speeds.

Capacities range from 125kg to 10 tonnes, with units up to 3 tonnes available in 110v, 240v and 415v supply.

Motor protection up to IP 65 is available on most units and low voltage pendants are standard on all.

Ultra low headroom units are available if required.

All units can be fitted with radio remote control or crane pendant if required.



Part No.	Capacity (WLL) kg	Chain Size d x p mm	Hoist Speed m/min
YCPV 1-8	125/1	4 x 12.2	8
YCPV/F 1-8	125/1	4 x 12.2	8/2
YCPV 2-8	250/1	4 x 12.2	8
YCPV/F 2-8	250/1	4 x 12.2	8/2
YCPV 5-4	500/2	4 x 12.2	4
YCPV/F 5-4	500/2	4 x 12.2	4/1
YCPV 5-8	500/1	5 x 15.1	8
YCPV/F 5-8	500/1	5 x 15.1	8/2
YCPV/ 10-4	1000/2	5 x 15.1	4
YCPV/F 10-4	1000/2	5 x 15.1	4/1
YCPV 10-8	1000/1	7.1 x 20.5	8
YCPV/F 10-8	1000/1	7.1 x 20.5	8/2
YCPV 20-4	2000/2	7.1 x 20.5	4
YCPV/F 20-4	2000/2	7.1 x 20.5	4/1

Part No.			Y06900003	Y06900004	Y06900005	Y06900006	Y06900007	Y06900014	Y06900015
CPV/CPVF 1-8 CPV/CPVF 2-8 CPV/CPVF 5-4	}	Falls HOL	1 & 2 12m & 6m As std.	1 & 2 30m & 15m	1 & 2 50m & 25m	N/A	N/A	N/A	N/A
CPV/CPVF 5-8 CPV/CPVF 10-4	}	Falls HOL	1 & 2 10m & 5m As std.	1 & 2 20m & 10m	1 & 2 40m & 20m	N/A	N/A	N/A	N/A
CPV/CPVF 10-8 CPV/CPVF 20-4	}	Falls HOL	N/A	N/A	N/A	1 & 2 12m & 6m As std.	1 & 2 18m & 9m	1 & 2 24m & 12m	1 & 2 40m & 20m

Main Features

- Load sprocket & chain guide can easily be inspected or removed
- Main line connector for increased safety
- Duty cycle 50% ED for single speed
- Electromagnetic spring pressure brake holds the load safely even in the event of power failure
- Externally adjustable slip clutch is designed to guarantee a permanent connection between the load and brake
- Motor protected to IP55 against ingress of dust and water jets.
- Increased safety through 42v low voltage control

LIFTING

JDN Air Hoists

JDN Profi series air hoists are very robust and therefore suitable for tough working environments, even those with continuous duty cycles. A variety of trolleys are available to meet specific requirements.

All JDN hoists are suitable for use in hazardous areas (Zone 2 Ex3 GD11 BT4) and they can be ordered to suit areas with increased risk of explosions (Zone 1 Ex2 GD11 C T6)

The units can be fitted with sensitive infinitely variable speed control and are suitable for lube free operation.

Safe working loads from 1 tonne upwards are fitted with overload protection.



Part No.			ZJ 025 TS	ZJ 05 TS	ZJ1 TS	ZJ2 TS	ZJ3 TI	ZJ6 TI
Lifting Capacity		t	0.25	0.5	1	2	3	6
Number Of Chain Falls			1	1	1	2	1	2
Engine Output		kW	1.0	1.0	1.0	1.0	2.2	2.2
Air Pressure		bar	6	6	6	6	6	6
Lifting Speed At Full Load		m/min	20	10	5	2.5	3.5	1.7
Lifting Speed Without Full Load		m/min	44	22	11	2.5	7	3.5
Lowering Speed At Full Load		m/min	40	24	12	6	8.5	4.2
Air Consumption At Full Load	Lifting	m ³ /min	1.4	1.4	1.4	1.4	2.4	2.4
	Lowering	m ³ /min	1.2	1.2	1.2	1.2	3.1	3.1
Air Connection			G ¹ / ₂	G ³ / ₄	G ³ / ₄			
Hose Dimension (∅ Inside/∅ Outside)		mm	15/27	15/27	15/27	15/27	19/31	19/31
Weight At Standard Lift With Rope Control, Without Δ p		kg	21.5	24	27.5	34.5	67	88
Chain Dimension		mm	5x15	7x21	7x21	7x21	13x36	13x36
Weight Of 1m Chain		kg	0.54	1.0	1.0	1.0	3.8	3.8
Standard Lift		m	3	3	3	3	3	3
Length Of Control At Standard Lift		m	2	2	2	2	2	2

Part No.	ZJ10 TI	ZJ15 TI	ZJ20 TI	ZJ25 TI	ZJ37 TI	ZJ50 TS	ZJ50 TI	ZJ 100 TI
Lifting Capacity	10	15	20	25	37.5	50	50	100
Number Of Chain Falls	2	3	4	2	3	4	4	4
Engine Output	2.2	2.2	2.5	6.0	6.0	6.0	10	10
Air Pressure	6	6	6	6	6	6	6	6
Lifting Speed At Full Load	1	0.7	0.5	1.1	0.65	0.45	0.7	0.35
Lifting Speed Without Full Load	2.6	1.7	1.0	2.3	1.6	1.3	1.3	0.7
Lowering Speed At Full Load	3	2	1.3	1.9	1.5	1.4	1.5	0.8
Air Consumption At Full Load	2.4	2.4	2.9	5.5	5.5	5.5	11	11
	3.1	3.1	3.7	6.5	6.5	6.5	12	12
Air Connection	G ³ / ₄	G ³ / ₄	G ³ / ₄	G1	G1	G1	G 1 ¹ / ₂	G 1 ¹ / ₂
Hose Dimension (∅ Inside/∅ Outside)	19/31	19/31	19/31	25/39	25/39	25/39	35/51	35/51
Weight At Standard Lift With Rope Control, Without Δ p	125	190	285	498	880	885	940	2460
Chain Dimension	16x45	16x45	16x45	22x66	22x66	22x66	22x66	31.5x90
Weight Of 1m Chain	5.8	5.8	5.8	10.8	10.8	10.8	10.8	21.3
Standard Lift	3	3	3	3	3	3	3	3
Length Of Control At Standard Lift	2	2	2	2	2	2	2	2

LIFTING

Habegger HIT, Wire Rope Pulling Machines

Main Features

- Light alloy housing
- Anchorage bolts secured
- Overload protection by shear pin
- Exchangeable shear pins in jaw opening lever
- Case available

Technical Data	HIT-6	HIT-10	HIT-16	HIT-32
Rated Force (Pulling, Lifting, Lowering)	600kg	1000kg	1600kg	3200kg
Overload Protection At	900kg	1500kg	2400kg	4800kg
Weight Without Rope	4.2kg	6.5kg	12kg	21.5kg
Rope Diameter	6.4mm	8.4mm	11.2mm	16.2mm
Effective Rope Breaking Load	3000kg	5000kg	8000kg	16000kg
Rope Feed Per Double Stroke	30mm	55mm	60mm	30mm
Load on Lever At Rated Load	25kg	30kg	35kg	50kg

Wire rope configured with thimble, eye and load hook on one end and fused & tapered on the other. Other lengths and configurations available upon request.

Basic Equipment Of Wire Rope Hoist HIT-6	Part No.
Unit With Lever Tube, 10m Rope	T00600
Complete With Storage Case and 1m Strop	T00598
Unit With Lever Tube Without Rope	T00599

HIT-16	Part No.
Unit With Lever Tube, 20m Rope	T00800
Complete With Storage Case and 2m Strop	T00798
Unit With Lever Tube Without Rope	T00799

HIT-10	Part No.
Unit With Lever Tube, 20m Rope	T00700
Complete With Storage Case and 2m Strop	T00698
Unit With Lever Tube Without Rope	T00699

HIT-32	Part No.
Unit With Lever Tube, 10m Rope	T00900
Complete With Storage Case and 2m Strop	T00898
Unit With Lever Tube Without Rope	T00899



HIT-6



HIT-32

LIFTING

Habegger HIT, Wire Rope Pulling Machines (continued)

Wire Ropes

HIT-6

Length	Part No.
On Reel	
10m	T02611
15m	T02612
20m	T02613
25m	T02614
30m	T02615
40m	T02616
50m	T02617
60m	T02618
70m	T02619
80m	T02620
90m	T02621
100m	T02622
Without reel	
5m	T02601
10m	T02602
15m	T02603
20m	T02604

Diameter 6.4mm Diameter 8.4mm
 Weight 0.16 kg/m Weight 0.25 kg/m

HIT-10

Length	Part No.
On Reel	
10m	T01011
15m	T01012
20m	T01013
25m	T01014
30m	T01015
40m	T01016
50m	T01017
60m	T01018
70m	T01021
80m	T01022
90m	T01023
100m	T01024
Without reel	
5m	T01001
10m	T01002
15m	T01003
20m	T01004

HIT-16

Length	Part No.
On Reel	
10m	T01111
15m	T01112
20m	T01113
25m	T01114
30m	T01121
40m	T01122
50m	T01123
60m	T01124
70m	T01131
80m	T01132
90m	T01133
100m	T01134
Without reel	
5m	T01101
10m	T01102
15m	T01103
20m	T01104

Diameter 11.2mm
 Weight 0.41kg/m

HIT-32

Length	Part No.
On Reel	
10m	T01221
15m	T01222
20m	T01223
25m	T01224
30m	T01231
40m	T01232
50m	T01233
60m	T01241
70m	T01242
80m	T01243
90m	T01244
100m	T01245
Without reel	
5m	T01201
10m	T01202
15m	T01203
20m	T01204

Diameter 16.2mm
 Weight 08.6 kg/m

Habegger HIT, Wire Rope Pulling Machines

Main Features

- Light alloy housing
- Anchorage bolts secured
- Overload protection by shear pin
- Exchangeable shear pins in handle
- Expansion for hydraulic drive HIT-16 D32 ONLY
- With handle
- Lever tube can be pulled out HIT-16 A32 ONLY
- Storage case available



HIT-16



HIT-10

LIFTING

Habegger Hydraulic Drives

Habegger manual wire rope hoists HIT-16 and HIT-32 can easily be converted to hydraulic drive. The direction is changed by shifting the cylinder attachment from the forwards to the reverse lever. The hydraulic unit is separate. One or two units can be operated at the same time, depending on the hydraulic drive.

Technical Data	HIT-16 H	HIT-32 H
Dimensions	98 x 36 x 12cm	111 x 40 x 15cm
Rated Force	1600kg	3200kg
Speed Forward/Lift	1.2m/min	0.3m/min
Reverse/Lower	2.0m/min	1.2m/min
Weight Without Rope	20.7kg	30.9kg



Name	Part No.	Dimensions	Weight
Hydraulic Hoses With Quick Disconnect Connectors • Internal Ø 9.5mm • Pressure Max. 280 bar	T00450	3m	2.1kg
	T00451	5m	3.3kg
	T00452	10m	6.7kg
Hydraulic Oil In Canister BP Bartran HV 32 • Viscosity 3.5 °E/50°C	T00544	5l	5.0kg
	T00546	10l	10.0kg
Wooden Transport Crate For Hydraulic Group	T01589	63x56x65cm	23kg
Control Block For Existing Hydraulic Systems • 3/8" Connection • 5-12 l/min, 300/180 bar	01611		5kg

Hydraulic Power Packs

The hydraulic power packs are quick and easy to operate: Connect the hoses to the unit and the wire rope hoist, start the motor or engine, operate the lever on the control valve and rope pulling starts straight away. The double-action cylinder is automatically controlled by the changeover valve. A pressure relief valve protects the wire rope hoist against overload.

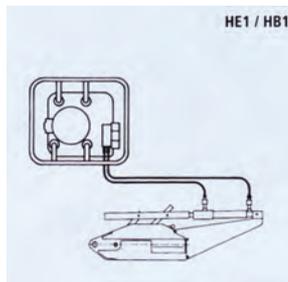
Type	With Electric Motor		With 4-Stroke Petrol Engine	
	THE 1	THE 2	THB1	THB2
Part No.	T00530	T00565	T00529	T00566
Connections For Equipment	1	2	1	2
Capacity	8.4 l/min	2x8.4 l/min	9.2 l/min	2x9.2 l/min
Pressure	160 bar	160 bar	160 bar	160 bar
Tank Content	13l	17l	13l	17l
Weight	50kg	60kg	46kg	60kg
Power	1.5kW	2.9kW	3.7kW	5.9kW



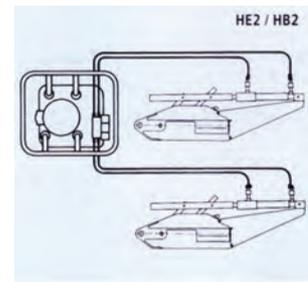
Hydraulic power pack HE with electric motor



Independent hydraulic power pack HB with petrol engine



Operation with 1 unit



Operation with 2 units

LIFTING

Habegger Power-Driven Rope Pulling Machines HIT-TRAC

Functional Principle

A wire rope of any length is directed around the driving wheel by the pressure and guiding roller, and pushed out again without any load on it. This driving wheel system is patented. Force is transmitted from the flanks of the driving wheel via the three-point rocker onto the rope that is looped around the driving sheave. The wire rope can be

quickly and easily inserted and removed at any point along its length. There is no longer any need to go to the trouble of threading it in from one end.

Overload Protection

A built-in protective device in the form of a sliding clutch or a thermal protection device protects your rope pulling machine from overloading. The limit switch automatically switches off the electric motor if the load is pulled against the housing. The rope pulling machine is securely anchored using straps and loops.

Habegger HIT-TRAC 8 E

A new super light power-driven rope pulling machine for lifting, pulling and lowering with unlimited rope length.

Technical Data	HIT-TRAC 8 E
Rated Force (Pulling, Lifting, Lowering)	800kg
Overload Protection Thru Current Limit	At Approx. 20% Overload
Rope Speed	1-6 m/min
Rope Length	Unlimited
Weight Incl. Engine	32kg
Rope Diameter	8.2mm
Effective Rope Breaking Load	50kN
Electric drive motor	230v
Power	1kW
Intermittent Duty	30%
Part No. Basic Version: HIT-TRAC 8E Without Rope	T06151

HIT-TRAC 16E is available with variable pulling speed, however this may only be purchased with the tubular frame.

HIT-TRAC 32E & 64E also available on request.

Habegger HIT-TRAC 16 E

The HIT-TRAC 16 E with electric motor lifts and lowers loads smoothly at the push of a button.

Technical Data	HIT-TRAC 16 E	
Rated Force (Pulling, Lifting, Lowering)	1600kg	
Overload Protection By Thermocouple		
Rope Speed	About 10m/min	
Rope Length	Unlimited	
Weight Incl. Engine	58kg	
Rope Diameter	8.2 11.2	
Effective Rope Breaking Load	50kN 80kN	
3-Phase AC Drive Motor	400V, 7,8 A	
Power	3kW	
Intermittent Duty	30%	
Basic Version Without Wire Rope	T07216/8	T07216/11
For Rope Diameter	8.2mm	11.2mm
With Variable Pulling Speed Only Available In Tubular Frame	Ø 8.2mm	Ø 11.2
Speed	2-8m/min	2-8m/min
Weight	80kg	80kg
Part No.	T07215/8	T07215/11



HIT-TRAC 8 E



HIT-TRAC 16 E

LIFTING

Habegger HIT-TRAC 8 B

A new super light power-driven rope pulling machine for lifting, pulling and lowering with unlimited rope length.

Technical Data	HIT-TRAC 8 B
Rated Force (Pulling, Lifting, Lowering)	800kg
Overload Protection Thru By Sliding Clutch	At Approx. 20% Overload
Rope Speed	About 10 m/min
Rope Length	Unlimited
Weight Incl. Engine	30kg
Rope Diameter	8.2mm
Effective Rope Breaking Load	50kN
Drive Motor	STIHL 260
Power	2.6kW
Part No. HIT-TRAC 8 B Without Rope	T06313

Wire Ropes

Diameter	8.2mm
Weight	0.25kg/m
Length	Part No.
On reel	
20m	T07298
30m	T07303
40m	T07304
50m	T07305
60m	TT07306
Without Reel	
10m	T07577
20m	T07579



HIT-TRAC 8 B

Habegger HIT-TRAC 16 B

High performance for heavier loads, with petrol engine. Loads can be lowered manually.

Technical Data	HIT-TRAC 16 B
Rated Force (Pulling, Lifting, Lowering)	1600kg
Overload Protection By Sliding Clutch	At Approx. 20% Overload
Rope Speed	Max. 10m/min
Rope Length	Unlimited
Weight Incl. Engine	44kg
Rope Diameter	8.2 11.2
Effective Rope Breaking Load	50kN 80kN
Drive Motor 2-stroke Engine	STIHL MS 660
Power	5.2kW
Basic Version Without Wire Rope	
For Rope Diameter	8.2mm 11.2mm
Weight	
Part No.	T07016/8 T07016/11
Carrying Handle	T07668

Only available with engine, since the engine is specially produced and converted for the HIT-TRAC 16 B



HIT-TRAC 16 B

LIFTING

Manual Winches

WG, Wall-mounted Wire Rope Winches

Capacities: 250kg - 5000kg

Heavy-duty wire rope winch suitable for use in areas where electricity isn't available or where electrical appliances can not be safely operated. Can also act as a reliable manual back-up for a powered appliance. Ideal for use in theatres, sports halls and a multitude of industrial applications.



Main Features

- 2 lifting speeds on 2000kg+ models.
- Compact design, robust fabricated steel frame, suitable for wall-mounting
- Machine-cut worm wheel & shaft, mounted bearings & worm gear drive
- Lots of optional extras available including multi-compartment drums, grooved drums, free drum-spooling, air motor and zinc-plated

Part No.		K30251003	K30252026	K30253006	K3025000	K30254002	K30255009	K30256013
Lifting Capacity - 1st Layer - Upper Layer	kg	250	500	1000	1500	2000	3000	5000
	kg	95	239	542	845	1129	1861	3165
Wire Rope Ø	mm	5*	6*	9*	10*	13*	16*	20*
Wire Rope Cap. - Upper Layer	m	63	77	55	49	46	52	40
Link Per Crank Rotation	mm	17	20	13	13	5.5/11**	5/10**	6/12**
Crank Effort -1st Layer	daN	5	9	14	21	12/20**	17/30**	34/61**
Weight	kg	13	16	26	28	60	78	115

*Recommended wire rope DIN 3060 FE-znK. **Low / high speed. • All winches are supplied without wire rope.

Manual Winches

Capacities: 125 - 2000 daN

Main Features

- Enclosed gear drive for protection of internal parts, even under tough working conditions
- Spur gears on roller bearings, rope drum on plain bearings
- Very compact design for easy and quick mounting onto walls, poles, towers etc
- Load pressure brake



Model	Lifting/ Pulling Cap. 1st Rope Layer daN	Lifting/ Pulling Cap. Top Rope Layer daN	Crank Effort 1st Rope Layer daN	Ratio	Recomm. Rope Diameter mm	Minimum Breaking Load of Wire Rope kN	Wire Rope Storage Max. mtr	Number of Rope Layers Max.	Weight Without Wire Rope kgs
KMWS 125	125	55	11	1:1	3	5.7	52	18	7.0
KMWS 300	300	120	7	1:7.4	5	15.9	26	9	10.0
KMWS 500	500	323	13	1:7.4	6	22.9	12	5	11.0
KMWS 1000	1000	684	15	1:17	9	51	27	5	28.0
KMWS 2000	2000	1712	24	1:25.7	13	106	7	2	32.0

*All winches are supplied without wire rope.

LIFTING

Beam Trolleys

Push travel and gear travel trolleys are available in capacities between 500kg and 20 tonnes. Push travel trolleys are not recommended at WLL exceeding 5000kg. Both the push travel and geared travel trolleys are available in two ranges to suit different beam sizes.

Push Travel

Part No.	Capacity (WLL) kg	Beam Width Range A	Weight Range A	Beam Width Range B	Weight Range B
V0.5P	500	50-220	8	160-300	10.6
V1P	1000	58-220	9	160-300	12
V2P	2000	66-220	16	160-300	19.3
V3P	3000	74-220	32	180-300	35.8
V5P	5000	90-220	48	180-300	52.2



Buffers and locking devices can be fitted to these trolleys if required.

Geared Travel

Part No.	Capacity (WLL) kg	Beam Width Range A	Weight Range A	Beam Width Range B	Weight Range B
V0.5G	500	50-220	9.7	160-300	12.6
V1G	1000	58-220	11.2	160-300	14.1
V2G	2000	66-220	18	160-300	21.3
V3G	3000	74-220	35.4	180-300	39.2
V5G	5000	90-220	51.8	180-300	56
V10G	10000	-	-	125-310	104
V20G	20000	-	-	125-300	230



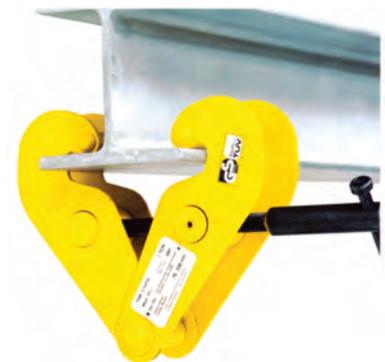
SC Standard Beam Clamps

The SC beam clamp provides a quick and versatile rigging point for hoisting equipment, pully blocks or loads and comes complete with a locking device.

The unit offers flexible applications, due to the wide adjustment range. The central threaded spindle allows easy attachment and a safe and secure grip to the beam range.

NB. THIS MODEL MUST NOT BE USED FOR LIFTING.

Part No.	Capacity (WWL) kg	Beam Width mm	Weight kg
YYC1	1000	75-230	3.8
YYC2	2000	75-230	4.6
YYC3	3000	80-320	9.2
YYC5	3000	90-320	11.0
YYC10	10000	90-320	17.2

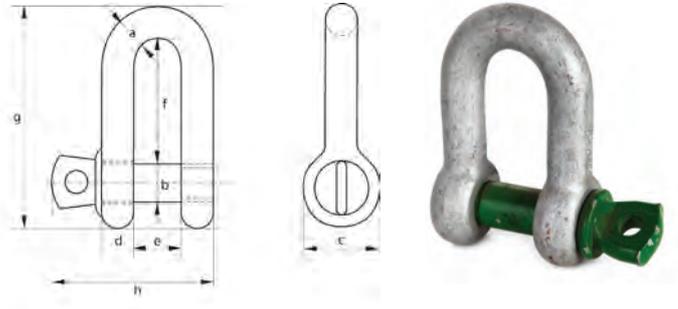


LIFTING

US Federal Pattern Dee Shackles

Main Features

- Material: bow and pin high tensile steel, Grade 6, quenched and tempered
- Safety Factor: MBL equals 6 x WLL
- Standard: EN 13889 and meets performance requirements of US Fed. Spec. RR-C-271 Type IVB Class 2, grade A
- Finish: Hot dipped galvanized
- Temperature Range: -20°C up to +200°C



Dee Shackles With Screw Collar Pin

Part No.	Working Load Limit	Diameter Bow	Diameter Pin	Diameter Eye	Width Eye	Width Inside	Length Inside	Length	Length Bolt	Weight Each
	Tons	a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	
SADO 0.33	0.33	5	6	12.5	5	9.5	19	38	31	0.02
SADO 0.5	0.5	7	8	17	7	12	22	47	40	0.05
SADO 0.75	0.75	9	10	21	9	13.5	26	56	49	0.09
SADO 1	1	10	11	23	10	17	32	66	56	0.14
SADO 1.5	1.5	11	13	26	11	19	37	74	68	0.19
SADO 2	2	13.5	16	34	13.5	22	43	85	76	0.32
SADO 3.25	3.25	16	19	40	16	27	51	105	93	0.54
SADO 4.75	4.75	19	22	47	19	31	59	125	107	0.87
SADO 6.5	6.5	22	25	53	22	36	73	144	123	1.34
SADO 8.5	8.5	25	28	60	25	43	85	161	141	2.08
SADO 9.5	9.5	28	32	67	28	47	90	179	158	2.77
SADO 12	12	32	35	74	32	51	94	199	176	3.72
SADO 13.5	13.5	35	38	80	35	57	115	220	192	5.14
SADO 17	17	38	42	89	38	60	127	239	208	6.85
SADO 25	25	45	50	104	45	74	149	283	250	11.45
SADO 35	35	50	57	111	50	83	171	333	281	16.86
SADO 42.5	42.5	57	65	134	57	95	190	360	321	24.61
SADO 55	55	65	70	145	65	105	203	399	355	32.65

Dee Shackles With Safety Bolt

Part No.	Working Load Limit	Diameter Bow	Diameter Pin	Diameter Eye	Width Eye	Width Inside	Length Inside	Length	Length Bolt	Thickness Nut	Weight Each
	Tons	a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	i mm	
SAD 2 S	2	13.5	16	34	13.5	22	43	85	83	13	0.39
SAD 3.25 S	3.25	16	19	40	16	27	51	105	99	17	0.67
SAD 4.75 S	4.75	19	22	47	19	31	59	125	115	20	1.08
SAD 6.5 S	6.5	22	25	53	22	36	73	144	131	23	1.66
SAD 8.5 S	8.5	25	28	60	25	43	85	161	151	25	2.46
SAD 9.5 S	9.5	28	32	67	28	47	90	179	167	28	3.4
SAD 12 S	12	32	35	74	32	51	94	199	179	31	4.51
SAD 13.5 S	13.5	35	38	80	35	57	115	220	198	34	6.1
SAD 17 S	17	38	42	89	38	60	127	239	202	19	7.63
SAD 25 S	25	45	50	104	45	74	149	283	244	24	13.25
SAD 35 S	35	50	57	111	50	83	171	333	270	27	18.53
SAD 42.5 S	42.5	57	65	134	57	95	190	360	302	30	25.94
SAD 55 S	55	65	70	145	65	105	203	399	330	33	35.33
SAD 85 S	85	75	83	163	75	127	229	455	376	40	52.97

LIFTING

US Federal Pattern Bow Shackles

Main Features

- Material: bow and pin high tensile steel, Grade 6, quenched and tempered
- Safety Factor: MBL equals 6 x WLL
- Standard: EN 13889 and meets performance requirements of US Fed. Spec. RR-C-271 Type IVA Class 2, grade A
- Finish: Hot dipped galvanized
- Temperature Range: -20°C up to +200°C



Bow Shackles With Screw Collar Pin

Part No.	Working Load Limit	Diameter Bow	Diameter Pin	Diameter Eye	Width Eye	Width Inside	Length Inside	Width Bow	Length	Length Bolt	Width	Weight Each
	Tons	a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	i mm	j mm	
SAB 0.33	0.33	5	6	12.5	5	9.5	22	16	41	31	28	0.02
SAB 0.5	0.5	7	8	17	7	12	29	20	54	40	37	0.05
SAB 0.75	0.75	9	10	21	9	13.5	32	22	61	49	42	0.1
SAB 1	1	10	11	23	10	17	36.5	26	71	56	49	0.14
SAB 1.5	1.5	11	13	36	11	19	43	29	80	68	54	0.19
SAB 2	2	13.5	16	34	13.5	22	51	32	91	76	63	0.36
SAB 3.25	3.25	16	19	40	16	27	64	43	114	93	79	0.63
SAB 4.75	4.75	19	22	47	19	31	76	51	136	107	94	1.01
SAB 6.5	6.5	22	25	53	22	36	83	58	157	123	107	1.5
SAB 8.5	8.5	25	28	60	25	43	95	68	176	141	124	2.21
SAB 9.5	9.5	28	32	67	28	47	108	75	197	158	137	3.16
SAB 12	12	32	35	74	32	51	115	83	218	176	154	4.31
SAB 13.5	13.5	35	38	80	35	57	133	92	240	192	170	5.55
SAB 17	17	38	42	89	38	60	146	99	262	208	183	7.43
SAB 25	25	45	50	104	45	74	178	126	314	250	226	12.84
SAB 35	35	50	57	111	50	83	197	138	358	281	250	18.15
SAB 42.5	42.5	57	65	134	57	95	222	160	414	321	287	26.29
SAB 55	55	65	70	145	65	105	260	180	463	355	329	37.6

Bow Shackles With Safety Bolt

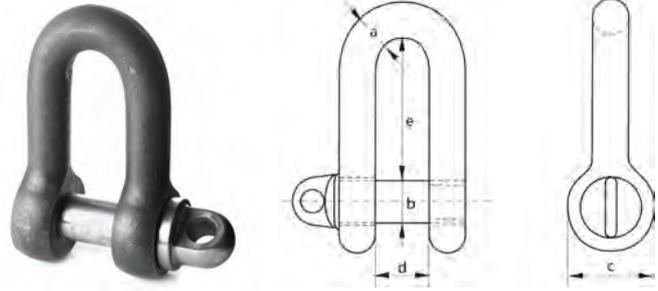
Part No.	Working Load Limit	Diameter Bow	Diameter Pin	Diameter Eye	Width Eye	Width Inside	Length Inside	Width Bow	Length	Length Bolt	Width	Thickness Nut	Weight Each
	Tons	a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	i mm	j mm	k mm	
SAB 0.5	0.5	7	8	17	7	12	29	20	54	43	37	4	0.06
SAB 0.75	0.75	9	10	21	9	13.5	32	22	61	51	42	5	0.11
SAB 1	1	10	11	23	10	17	36.5	26	71	61	49	8	0.16
SAB 1.5	1.5	11	13	26	11	19	43	29	80	68	54	11	0.22
SAB 2	2	13.5	16	34	13.5	22	51	32	91	83	63	13	0.42
SAB 3.25	3.25	16	19	40	16	27	64	43	114	99	79	17	0.74
SAB 4.75	4.75	19	22	47	19	31	76	51	136	115	94	20	1.18
SAB 6.5	6.5	22	25	53	22	36	83	58	157	131	107	23	1.77
SAB 8.5	8.5	25	28	60	25	43	95	68	176	151	124	25	2.58
SAB 9.5	9.5	28	32	67	28	47	108	75	197	167	137	28	3.66
SAB 12	12	32	35	74	32	51	115	83	218	179	154	31	4.91
SAB 13.5	13.5	35	38	80	35	57	133	92	240	198	170	34	6.54
SAB 17	17	38	42	89	38	60	146	99	262	202	183	19	8.19
SAB 25	25	45	50	104	45	74	178	126	314	244	226	24	14.22
SAB 35	35	50	57	111	50	83	197	138	358	270	250	27	19.85
SAB 42.5	42.5	57	65	134	57	95	222	160	414	302	287	30	28.33
SAB 55	55	65	70	145	65	105	260	180	463	330	329	33	39.59
SAB 85	85	75	83	163	75	127	329	190	556	376	355	40	62

LIFTING

BS3032 Type Shackles

Main Features

- Material: Bow and pin alloy steel, EN14a
- Safety Factor: MBL equals 4 x WLL
- Standard: Generally to BS3032
- Finish: Hot dipped galvanized, electro-galvanized or self coloured



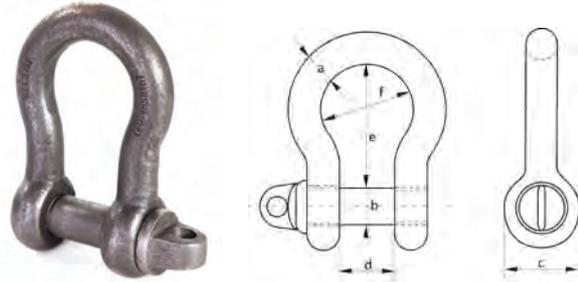
Small Dee Shackles With Screw Collar Pin

Part No.	Working Load Limit	Diameter Bow	Diameter Pin	Diameter Eye	Inside Width	Inside Length	Weight Each
	Tons	a mm	b mm	c mm	d mm	e mm	
SSD 0.3	0.6	6	10	19	9.5	22	0.1
SSD 0.6	0.6	10	13	25	16	35	0.16
SSD 1	1	13	16	32	22	48	0.31
SSD 1.75	1.75	16	19	38	25	57	0.59
SSD 2.5	2.5	19	22	44	32	70	0.98
SSD 3.5	3.5	22	25	51	35	83	1.55
SSD 4.5	4.5	25	28	57	38	92	2.2
SSD 5.5	5.5	28	32	64	44	105	3.1
SSD 7	7	32	35	70	48	114	4.2
SSD 8	8	35	38	83	54	127	5.1
SSD 10.75	10.75	38	45	89	60	140	6.6
SSD 13	13	42	48	95	64	149	8.1
SSD 14.75	14.75	44	51	102	70	162	10.5
SSD 16.75	16.75	48	54	108	73	171	13.3
SSD 19	19	51	57	114	76	184	19.2
SSD 20	20	54	60	121	83	197	22.4
SSD 25	25	60	70	140	92	219	25.3
SSD 30	30	64	73	146	98	229	31.5
SSD 35	35	70	79	159	108	254	47
SSD 40	40	73	83	165	111	264	60.2

Large Dee Shackles With Screw Collar Pin

Part No.	Working Load Limit	Diameter Bow	Diameter Pin	Diameter Eye	Inside Width	Inside Length	Weight Each
	Tons	a mm	b mm	c mm	d mm	e mm	
SLD 0.25	0.25	6	10	19	13	25	0.11
SLD 0.5	0.5	10	13	25	19	38	0.17
SLD 0.75	0.75	13	16	32	28	54	0.35
SLD 1.5	1.5	16	19	38	32	64	0.66
SLD 2	2	19	22	44	38	73	1.02
SLD 3	3	22	25	51	44	83	1.57
SLD 3.75	3.75	25	28	57	51	95	2.3
SLD 5	5	28	32	64	54	105	3.2
SLD 6	6	32	35	70	60	114	4.3
SLD 7	7	35	38	76	67	127	5.4
SLD 9.5	9.5	38	45	83	70	137	6.8
SLD 11.25	11.25	42	48	89	76	146	8.7
SLD 13	13	44	51	95	83	156	11
SLD 14.25	14.25	48	54	108	92	178	14.3
SLD 16.25	16.25	51	57	114	98	187	20
SLD 18	18	54	60	121	105	197	26.4
SLD 20	20	57	64	127	108	210	28.3
SLD 25	25	64	73	146	121	235	35
SLD 30	30	70	79	159	133	260	49
SLD 35	35	76	86	171	146	279	63.6
SLD 40	40	79	89	178	149	292	71.7

LIFTING



Large Bow Shackles With Screw Collar Pin

Part No.	Working Load Limit	Diameter Bow a mm	Diameter Pin b mm	Diameter Eye c mm	Inside Width d mm	Inside Length e mm	Width Bow f mm	Weight Each kg
	Tons							
SLB 0.15	0.15	6	10	19	13	28	19	0.12
SLB 0.45	0.45	10	13	25	16	41	25	0.18
SLB 0.75	0.75	13	16	32	22	54	32	0.37
SLB 1.25	1.25	16	19	38	28	70	41	0.72
SLB 2	2	19	22	44	35	86	51	1.20
SLB 2.75	2.75	22	25	51	41	98	57	1.85
SLB 3.75	3.75	25	28	57	44	108	64	2.61
SLB 4.75	4.75	28	32	63	51	124	73	3.78
SLB 5.75	5.75	32	35	70	57	137	83	5.17
SLB 7.25	7.25	35	38	76	63	152	89	6.46
SLB 8.5	8.5	38	44	89	70	168	98	8.34
SLB 9.5	9.5	42	48	94	76	187	111	11.1
SLB 11.5	11.5	44	51	102	86	206	121	14.5
SLB 13	13	48	54	108	92	222	130	17.8
SLB 15	15	51	57	114	98	238	140	25.5
SLB 18.5	18.5	57	63	127	105	257	152	34.4
SLB 20	20	60	67	133	111	273	162	36.8
SLB 25	25	67	73	146	121	302	178	45
SLB 30	30	73	79	159	133	330	197	62.2
SLB 35	35	79	86	171	146	359	213	81.8
SLB 40	40	86	92	184	159	387	229	95

Small Bow Shackles With Screw Collar Pin

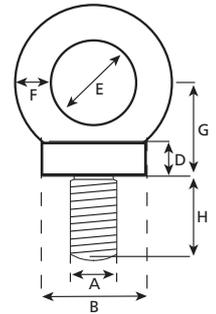
Part No.	Working Load Limit	Diameter Bow a mm	Diameter Pin b mm	Diameter Eye c mm	Inside Width d mm	Inside Length e mm	Width Bow f mm	Weight Each kg
	Tons							
SSB 0.2	0.2	6	10	19	13	25	16	0.11
SSB 0.5	0.5	10	13	25	16	38	22	0.17
SSB 1	1	13	16	32	22	51	29	0.35
SSB 1.5	1.5	16	19	38	28	64	38	0.66
SSB 2	2	19	22	44	35	76	44	1.06
SSB 3	3	22	25	51	38	89	51	1.68
SSB 4	4	25	28	57	44	102	60	2.47
SSB 5	5	28	32	63	51	114	67	3.48
SSB 6.25	6.25	32	35	70	57	127	76	4.79
SSB 7.5	7.5	35	38	76	60	140	83	5.95
SSB 9.25	9.25	38	44	89	67	152	89	7.55
SSB 10.5	10.5	41	48	95	73	165	98	9.79
SSB 12.5	12.5	44	51	102	79	178	105	12.5
SSB 14.25	14.25	48	54	108	86	191	114	15.3
SSB 16.5	16.5	51	57	114	92	203	121	21.8
SSB 18.5	18.5	54	60	121	95	216	127	28.9
SSB 20	20	57	63	127	105	229	137	30.9
SSB 25	25	63	70	140	114	254	152	37.8
SSB 30	30	70	79	159	127	279	168	52.6
SSB 35	35	76	86	171	137	305	184	69.5
SSB 40	40	79	89	178	143	318	191	78.1

LIFTING

Collared Eyebolts

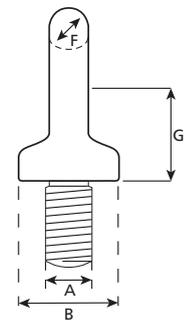
Self-Colour Drop Forged Collared Eyebolts (UNC) Proof Load Tested to BS4278

Part no.	Vertical WLL Tons	A Inches	B mm	D mm	E mm	F mm	G mm	H mm	Weight kg/Each
ET438UNC	0.25	3/8	22	7	15	9	20	17	0.06
ET412UNC	0.50	1/2	29	10	20	12	26	22	0.07
ET458UNC	0.90	5/8	36	12	24	14	32	28	0.14
ET434UNC	1.40	3/4	45	15	30	18	40	33	0.28
ET478UNC	2.00	7/8	52	17	35	21	46	39	0.60
ET41UNC	2.75	1	58	20	39	23	52	44	1.10
ET4118UNC	3.50	1 1/8	68	21	42	25	57	50	1.60



Self-Colour Drop Forged Collared Eyebolts (Metric Thread) Proof Load Tested to BS4278

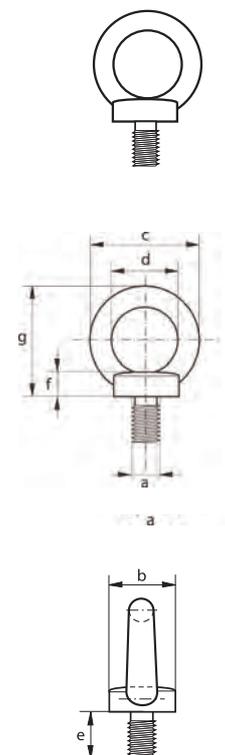
Part No.	Vertical WLL Tons	A Inches	B mm	D mm	E mm	F mm	G mm	H mm	Weight kg/Each
ET1M8	0.15	8	22	7	15	9	20	18	0.06
ET1M10	0.25	10	22	7	15	9	20	18	0.06
ET1M12	0.40	12	22	7	15	9	20	18	0.06
ET1M14	0.50	14	29	10	20	12	26	23	0.15
ET1M16	0.80	16	29	10	20	12	26	23	0.15
ET1M18	1.00	18	36	12	24	14	32	28	0.27
ET1M20	1.60	20	40	14	27	16	36	32	0.38
ET1M22	1.60	22	45	15	30	18	40	35	0.54
ET1M24	2.50	24	52	17	35	21	46	40	0.85
ET1M27	2.50	27	58	20	39	23	52	46	1.13
ET1M30	4.00	30	65	22	44	26	58	51	1.62
ET1M33	4.00	33	72	24	48	28	64	56	2.37
ET1M36	6.30	36	81	27	54	32	72	63	3.12



Eye Bolts Generally to DIN 580

- Material: Carbon steel. C15
- Safety factor: MBL equals 6 x WLL
- Standard: Generally to DIN 580
- Finish: Self coloured electro-galvanized
- Certification: Certificates can be supplied on request

Part No.	Working Load Limit	Diameter Thread	Diameter Base	Diameter Eye Outside	Diameter Eye Inside	Length	Thickness Base	Height	Weight Per 100 pcs
	Tons	a mm	b mm	c mm	d mm	e mm	f mm	g mm	kg
EDINM6	0.07	M 6	20	36	20	13	6	36	3
EDINM8	0.14	M 8	20	36	20	13	6	36	6
EDINM10	0.23	M 10	25	45	25	17	8	45	10.3
EDINM12	0.34	M 12	30	54	30	20.5	10	53	17.7
EDINM14	0.49	M 14	35	63	35	27	12	60	27.7
EDINM16	0.7	M 16	35	63	35	27	12	62	28
EDINM18	0.9	M 18	40	72	40	30	14	71	40.5
EDINM20	1.2	M 20	40	72	40	30	14	71	42.4
EDINM22	1.5	M 22	45	81	45	35	14	80	67.3
EDINM24	1.8	M 24	50	90	50	36	18	90	83.4
EDINM27	2.5	M 27	50	90	50	36	18	90	122
EDINM30	3.2	M 30	65	108	60	45	22	109	166
EDINM33	4.3	M 33	65	108	60	45	22	110	216
EDINM36	4.6	M 36	75	126	70	54	26	128	265
EDINM39	6.1	M 39	75	126	70	54	26	130	334
EDINM42	6.3	M 42	85	144	80	63	30	147	403
EDINM45	8	M 45	85	144	80	63	35	150	521
EDINM45	8.6	M 48	100	166	90	68	35	168	623

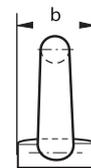
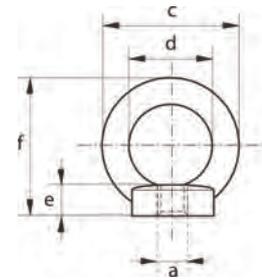


LIFTING

Eye Nuts

- Material: Carbon steel. C15
- Safety factor: MBL equals 6 x WLL
- Standard: Generally to DIN 582
- Finish: Self coloured electro-galvanized
- Certification: Certificates can be supplied on request

Part No.	Working Load Limit	Diameter Thread	Diameter Base	Diameter Eye Outside	Diameter Eye Inside	Thickness Base	Height	Weight Per 100 pcs
	Tons	a mm	b mm	c mm	d mm	e mm	f mm	kg
EEM6DIN	0.07	M 6	20	36	20	8.5	36	4.2
EEM8DIN	0.14	M 8	20	36	20	8.5	36	5.2
EEM10DIN	0.23	M 10	25	45	25	10	45	9.4
EEM12DIN	0.34	M 12	30	54	30	11	53	16
EEM14DIN	0.49	M 14	35	63	35	13	60	22
EEM16DIN	0.7	M 16	35	63	35	13	62	24
EEM20DIN	1.2	M 20	40	72	40	16	71	35.2
EEM22DIN	1.5	M 22	45	81	45	18	80	58.6
EEM24DIN	1.8	M 24	50	90	50	20	90	70.6
EEM27DIN	2.5	M 27	50	90	50	20	90	102
EEM30DIN	3.2	M 30	65	108	60	25	109	132
EEM33DIN	4.3	M 33	65	108	60	25	110	170
EEM36DIN	4.6	M 36	75	126	70	30	128	208
EEM39DIN	6.1	M 39	75	126	70	30	130	260
EEM42DIN	6.3	M 42	85	144	80	35	147	311
EEM45DIN	8	M 45	85	144	80	35	150	407
EEM48DIN	8.6	M 48	100	166	90	40	168	502



Weld on Deck Eye Plates

This range of weld on deck eye plates are approved for lifting. Each eye plate should be tested once the welding is complete and before first use.



Part No.	Proof Load Ton	Material Diameter	Diameter of Eye
IDP38	2	10	20
IDP12	3.5	12.5	25
IDP58	5.5	16	32
IDP34	7.5	19	38
IDP78	9.6	22	44
IDP1	13	25	50
IDP118	15.75	28	56
IDP114	20	32	64
IDP112	29	38	76
IDP134	38.25	44	89
IDP2	50	50	102

LIFTING

Fibre Slings

We are able to offer a full range of duplex webbing slings and roundslings. The charts show some of the popular sizes and lengths. All fibre slings are made to 7:1 Factor of Safety and have protected eyes.



Duplex Webbing Slings

EWL Length	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
WLL										
1000	WB11	WB12	WB13	WB14	WB15	WB16	WB17	WB18	WB19	WB110
2000	WB21	WB22	WB23	WB24	WB25	WB26	WB27	WB28	WB29	WB210
3000	WB31	WB32	WB33	WB34	WB35	WB36	WB37	WB38	WB39	WB310
4000	WB41	WB42	WB43	WB44	WB45	WB46	WB47	WB48	WB49	WB410
5000	WB51	WB52	WB53	WB54	WB55	WB56	WB57	WB58	WB59	WB510
6000	WB61	WB62	WB63	WB64	WB65	WB66	WB67	WB68	WB69	WB610
8000	WB81	WB82	WB83	WB84	WB85	WB86	WB87	WB88	WB89	WB810
10000	WB101	WB102	WB103	WB104	WB105	WB106	WB107	WB108	WB109	WB1010

Roundslings

EWL Length	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
WLL										
1000	WE11	WE12	WE13	WE14	WE15	WE16	WE17	WE18	WE19	WE110
2000	WE21	WE22	WE23	WE24	WE25	WE26	WE27	WE28	WE29	WE210
3000	WE31	WE32	WE33	WE34	WE35	WE36	WE37	WE38	WE39	WE310
4000	WE41	WE42	WE43	WE44	WE45	WE46	WE47	WE48	WE49	WE410
5000	WE51	WE52	WE53	WE54	WE55	WE56	WE57	WE58	WE59	WE510
6000	WE61	WE62	WE63	WE64	WE65	WE66	WE67	WE68	WE69	WE610
8000	WE81	WE82	WE83	WE84	WE85	WE86	WE87	WE88	WE89	WE810
10000	WE101	WE102	WE103	WE104	WE105	WE106	WE107	WE108	WE109	WE1010

WLL up to 100 tonnes available on request.

Working Load Limit (WLL) in kg for Roundslings and Webslings							
SAFETY COLOUR CODE 7:1 SAFETY FACTOR	Straight Lift	Choke Lift	Basket Lift			Multi-leg Slings	
			Parallel to 7°	7° to 45°	45° to 60°	0° to 45°	0° to 45°
Mode Factor	1.0	0.8	2.0	1.4	1.0	1.4	2.0
Violet	1000	900	2000	1400	1000	1400	2000
Green	2000	1600	4000	2800	2000	2800	4000
Yellow	3000	2400	6000	4200	3000	4200	6000
Grey	4000	3200	8000	5600	4000	5600	8000
Red	5000	4000	10000	7000	5000	7000	10000
Brown	6000	4900	12000	8400	6000	8100	12000
Blue	8000	6400	16000	11200	8000	11200	16000
Orange	10000	8000	20000	14000	10000	14000	20000
Orange	12000	9600	24000	16800	12000	16800	24000

Larger Capacity Webslings and Roundslings Up to 100 tonnes Are Available

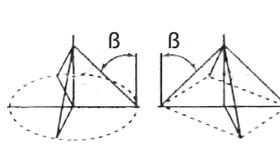
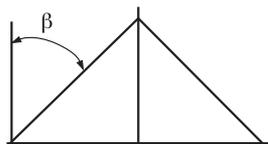
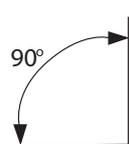
LIFTING

Wire Rope Slings

We are able to provide a full range of wire rope slings to suit customers requirements.

Shown below are the specific working load limits for the various sizes of rope as specified by BS EN 13414-1 2003, along with examples of some of the terminations available.

	One Leg Sling	Two Leg Sling		Three and Four Leg Sling		Endless Sling
Angle to the vertical	0°	0° to 45°	over 45° to 60°	0° to 45°	Over 45° to 60°	0°



Nominal Rope Diameter mm	Direct	Direct	Direct	Direct	Direct	Choke Hitch
	Working Load Limits tonne					
8	0.750	1.05	0.750	1.55	1.10	1.20
9	0.950	1.30	0.950	2.00	1.40	1.50
10	1.15	1.60	1.15	2.40	1.70	1.85
11	1.40	2.00	1.40	3.00	2.12	2.25
12	1.70	2.30	1.70	3.55	2.50	2.70
13	2.00	2.80	2.00	4.15	3.00	3.15
14	2.25	3.15	2.25	4.80	3.40	3.70
16	3.00	4.20	3.00	6.30	4.50	4.80
18	3.70	5.20	3.70	7.80	5.65	6.00
20	4.60	6.50	4.60	9.80	6.90	7.35
22	5.65	7.80	5.65	11.8	8.40	9.00
24	6.70	9.40	6.70	14.0	10.0	10.6
26	7.80	11.0	7.80	16.5	11.5	12.5
28	9.00	12.5	9.00	19.0	13.5	14.5
32	11.8	16.5	11.8	25.0	17.5	19.0
36	15.0	21.0	15.0	31.5	22.5	23.5
40	18.5	26.0	18.5	39.0	28.0	30.0
44	22.5	31.5	22.5	47.0	33.5	36.0
48	26.0	37.0	26.0	55.0	40.0	42.0
52	31.5	44.0	31.5	66.0	47.0	50.0
56	36.0	50.0	36.0	76.0	54.0	58.0
60	42.0	58.0	42.0	88.0	63.0	67.0
Leg Factor K	1	1.4	1	2.1	1.5	1.6

Ferrule Secured Hard Eye	Hand Spliced Soft Eye	At Upper End	At Lower End	At Lower End	(Bearing to Bearing)

Other rope constructions and diameters are available upon request.

LIFTING

Grade 'T' (8) Chain Slings

Hackett grade 'T' (8) alloy chain is manufactured specifically for use in chain slings for lifting purposes. The chain is heat treated for tensile strength and resistance to wear, whilst also allowing for shock absorption.

Single Leg Chain Slings

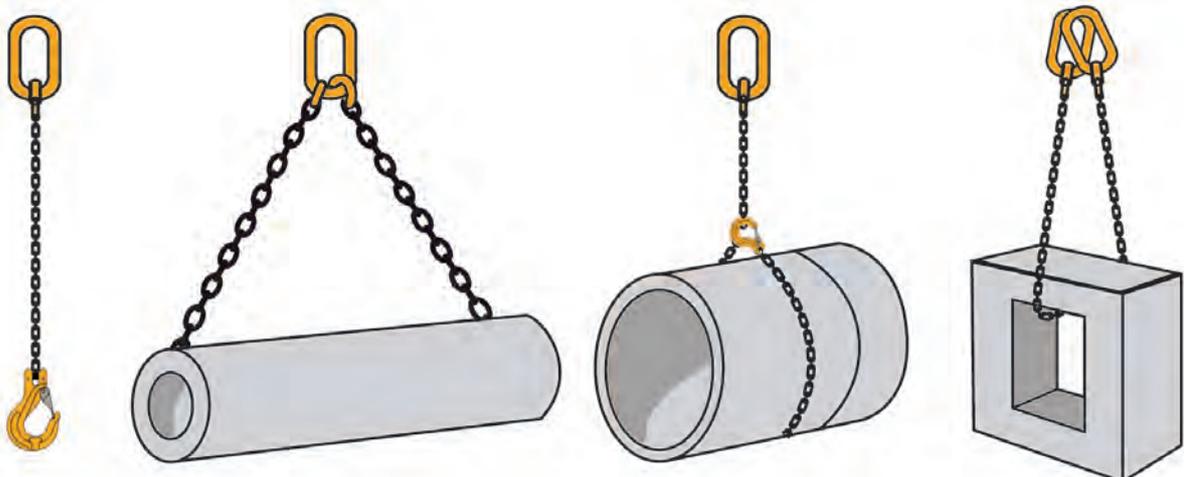
Chain Size mm	Straight Lift	Single Leg in Basket Hitch (Back Hooked Into top Link)	Choke Hitch	Basket Hitch
7mm	1.5	1.5	1.2	2.1
8mm	2.0	2.0	1.6	2.8
10mm	3.15	3.15	2.5	4.25
13mm	5.3	5.3	4.2	7.5
16mm	8.0	8.0	6.4	11.2
20mm	12.5	12.5	10.0	17.0
22mm	15.0	15.0	12.0	21.2
26mm	21.2	21.2	17.0	30.0
32mm	31.5	31.5	25.2	45.0

All loads shown in tonnes

Two Leg Chain Slings

Chain size mm	Straight Lift		Choke Hitch		Double Basket	
	0-45°	45-60°	0-45°	45-60°	0-45°	45-60°
7mm	2.1	1.5	2.1	1.5	1.6	1.2
8mm	2.8	2.0	2.8	2.0	2.2	1.6
10mm	4.25	3.15	4.25	3.15	3.4	2.5
13mm	7.5	5.3	7.5	5.3	6.0	4.2
16mm	11.2	8.0	11.2	8.0	9.0	6.4
20mm	17.0	12.5	17.0	12.5	13.6	10.0
22mm	21.2	15.0	21.2	15.0	17.0	12.0
26mm	30.0	21.2	30.0	21.2	24.0	17.0
32mm	45.0	31.5	45.0	31.5	36.0	25.0

All loads shown in tonnes

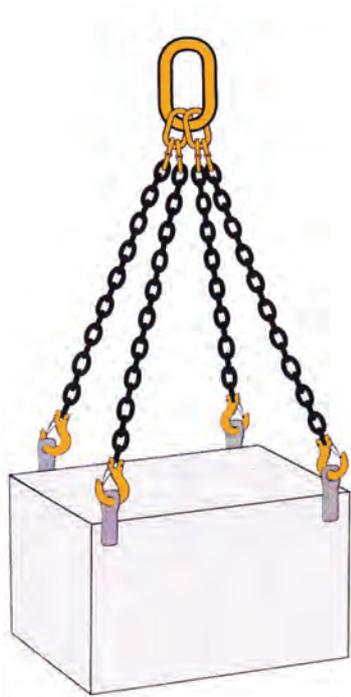


LIFTING

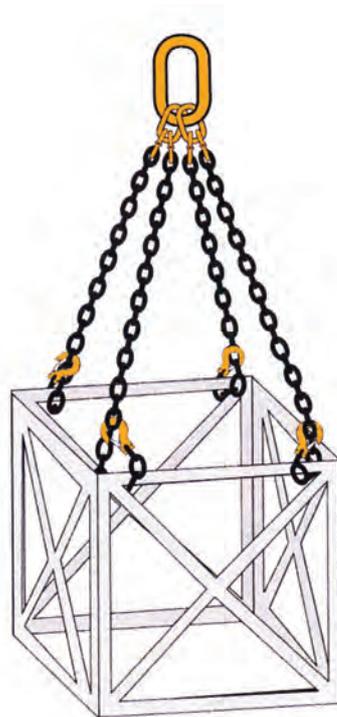
Grade 'T' (8) Chain Slings

Three & Four Leg Chain Slings

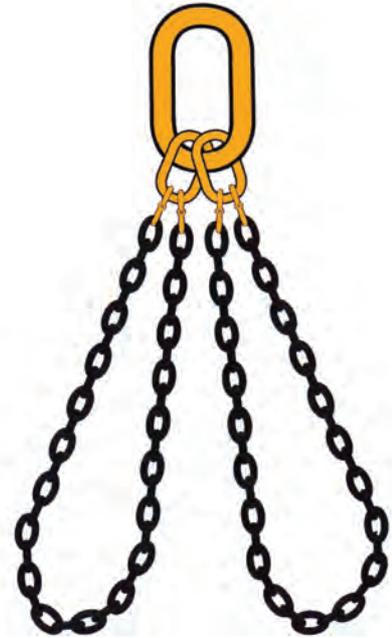
Chain Size mm	Straight Lift		Choke Hitch		Double Basket	
	0-45°	45-60°	0-45°	45-60°	0-45°	45-60°
7mm	3.1	2.2	2.5	1.7	3.1	2.2
8mm	4.2	3.0	3.3	2.4	4.2	3.0
10mm	6.7	4.75	5.3	3.8	6.7	4.75
13mm	11.2	8.0	8.9	6.4	11.2	8.0
16mm	17.0	11.8	13.6	9.4	17.0	11.8
20mm	26.5	19.0	21.2	15.2	26.5	19.0
22mm	31.5	22.4	25.2	17.9	31.5	22.4
26mm	45.0	31.5	36.0	25.2	45.0	31.5
32mm	67.0	47.5	53.6	38.0	67.0	47.5



Straight lift



Choke lift



Double basket

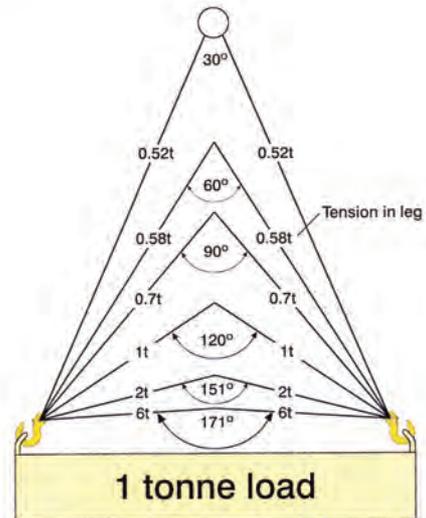
A full range of grade 10 chain slings is available upon request. These have 25% greater capacity than grade 'T' (8).

LIFTING

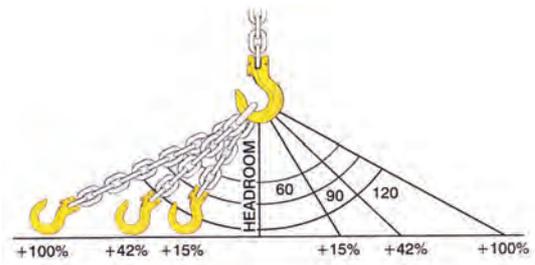
Chain Slings

In this catalogue the maximum working load limit for each size of chain is shown. These ratings are based on ideal conditions, however in practice, working conditions may vary widely. All lifting applications should be assessed by a competent person in order to establish the size and type of sling required.

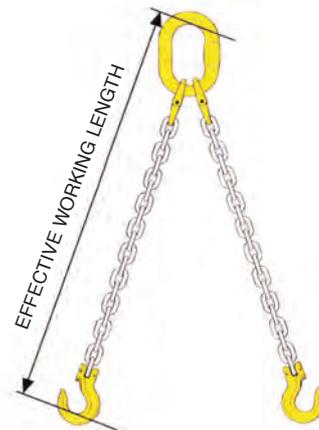
In the case of multi-leg slings, the angle between the legs is critical. The actual tension on each leg increases as shown in the diagram opposite. For this reason all general purpose chain slings are given a rating based upon use at a range of angles up to 45° to the vertical. A reduced rating is also given for use in the range of angles between $45-60^\circ$. Chain Slings should never be used at angles greater than 60° to the vertical.



The distance between the crane hook and the load is known as the 'head room'. If a specific head room is required, the 'effective working length (EWL)' of the chain sling must increase as the angle between the legs increases as shown.



The 'effective working length (EWL)' of a chain sling is the distance between bearing points of the upper and lower terminal fittings. This distance, commonly known as the 'bearing to bearing' should be quoted when ordering slings. Shortening clutches may be fitted to a sling, making the 'effective working length (EWL)' adjustable, hence increasing the versatility of the sling.



LIFTING

Chain Sling Terminations And Fittings



Eye Grab Hook



Clevis Grab Hook



Clevis C Hook



Reevable Egg Link



Clevis Sling Hook with Latch



Swivel Self Locking Hook with Ball Bearing



Clevis Shackle



Shortening Clutch with Half Link



Swivel Sling Hook with Ball Bearing



Clevis Self Locking Hook



Chain Connector

LIFTING

Stainless Steel Chain Slings

Applications

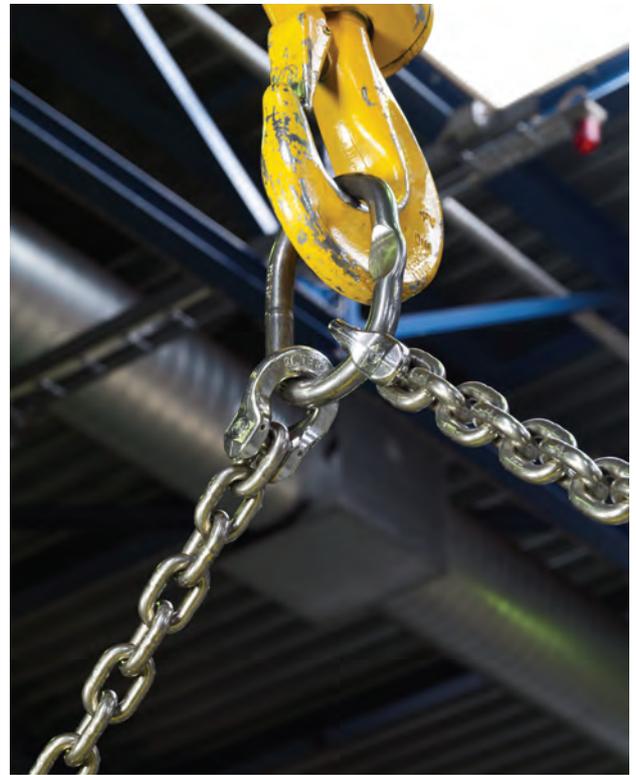
In circumstances where corrosion can cause problems, the use of stainless steel is recommended.

Range

We are able to offer a wide range of stainless steel items in order to assemble a complete sling from the top master link to the hooks. The range extends from up to 6mm to 13mm (7/32" to 1/2").

Design

Items supplied are all manufactured from stainless steel quality AISI 316 OR 316L. All stainless steel items have an equivalent in a grade 8 quality. The master links, eye hooks and eye nuts have a flat part to make assembly with the omega link easier.



Working Load Limit Table for Stainless Steel Chain Slings

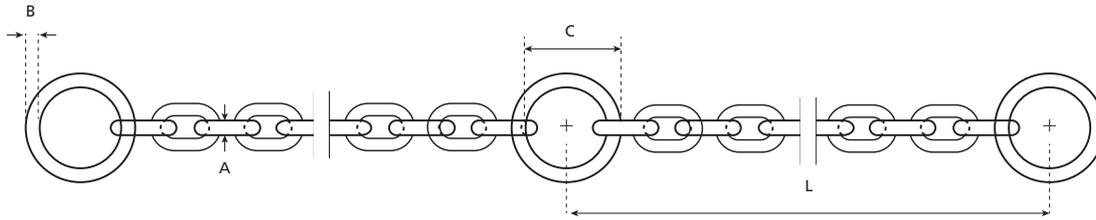
Chain Ø		90°	2 Leg Sling		3 or 4 Leg Sling		Endless Sling
			0° < β ≤ 45°	45° < β ≤ 60°	0° < β ≤ 45°	45° < β ≤ 60°	
inch	mm	90°	Mode Factor 1.4	Mode Factor 1.0	Mode Factor 2.1	Mode Factor 1.5	Mode Factor 1.6
7/32	6	0.70	1.00	0.70	1.47	1.05	1.12
5/16	8	1/20	1.70	1.20	2.50	1.80	1.92
3/8	10	1.60	2.25	1.60	3.36	2.40	2.58
1/2	13	2.70	3.80	2.70	5.70	4.05	4.32



LIFTING

Pump Lifting Chains

Fitted with index lifting points at each end and at 1 metre centres. All items are supplied tested and come complete with relevant certification. Larger sizes and alternative configurations are available upon request.

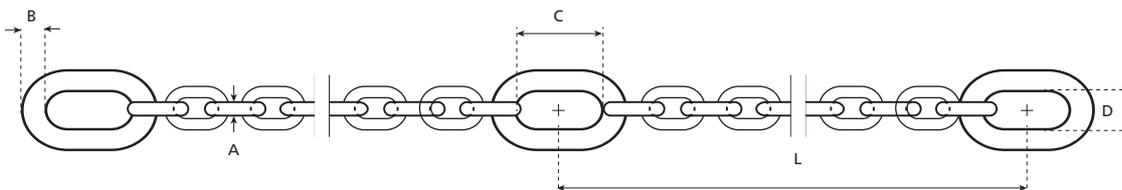


Material: 316 Stainless Steel. Finish: Polished

Part Code	Chain Size (mm)	Dimensions (mm)				WLL	Metre Per Drum	Weight Per M (kg)
		A	B	C	L			
GPL040	6	6.0	8.0	50.0	1000.0	400 kg	500	0.90
GPL063	7	7.0	10.0	50.0	1000.0	630 kg	400	1.12
GPL100	10	10.0	12.0	50.0	1000.0	1000 kg	200	2.50

Material: Gr. 40 High Tensile. Finish: Hot Dipped Galvanized

Part Code	Chain Size (mm)	Dimensions (mm)				WLL	Metre Per Drum	Weight Per M (kg)
		A	B	C	L			
GP2.030	6	6.0	10.0	50.0	1000.0	300 kg	500	1.10
GP2.050	8	8.0	12.5	50.0	1000.0	500 kg	300	1.76
GP2.100	10	10.0	20.0	75.0	1000.0	1000 kg	200	2.90



Material: 316 Stainless Steel. Finish: Polished

Part Code	Chain Size (mm)	Dimensions (mm)					WLL (t)	Metre Per Drum	Weight Per M (kg)
		A	B	C	D	L			
GPL150	12	12.0	16.0	140.0	75.0	1000.0	1.5	100	3.95
GPL200	16	16.0	20.0	140.0	75.0	1000.0	2.0	100	6.60
GPL300	16	16.0	22.0	140.0	75.0	1000.0	3.0	100	6.90
GPL400	20	20.0	27.0	140.0	75.0	1000.0	4.0	50	11.50

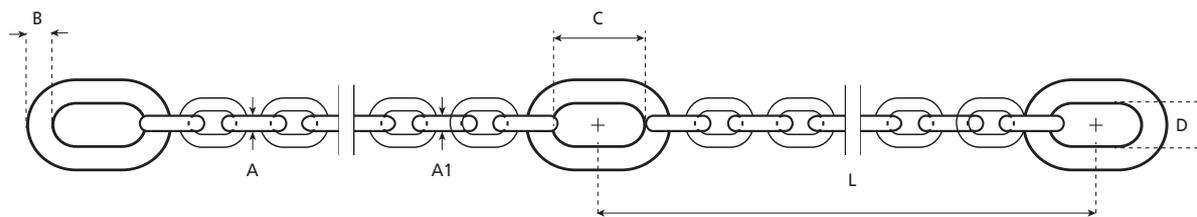
Material: Gr. 40 High Tensile. Finish: Hot Dipped Galvanized

Part Code	Chain Size (mm)	Dimensions (mm)					WLL (t)	Metre Per Drum	Weight Per M (kg)
		A	B	C	D	L			
GP2.200	13	13.0	20.0	140.0	75.0	1000.0	2.0	100	4.40
GP2.300	16	16.0	24.0	140.0	75.0	1000.0	3.0	100	6.70
GP2.450	20	20.0	27.0	140.0	75.0	1000.0	4.5	50	9.31
GP2.600	26	26.0	35.0	200.0	100.0	1000.0	6.0	50	17.50

LIFTING

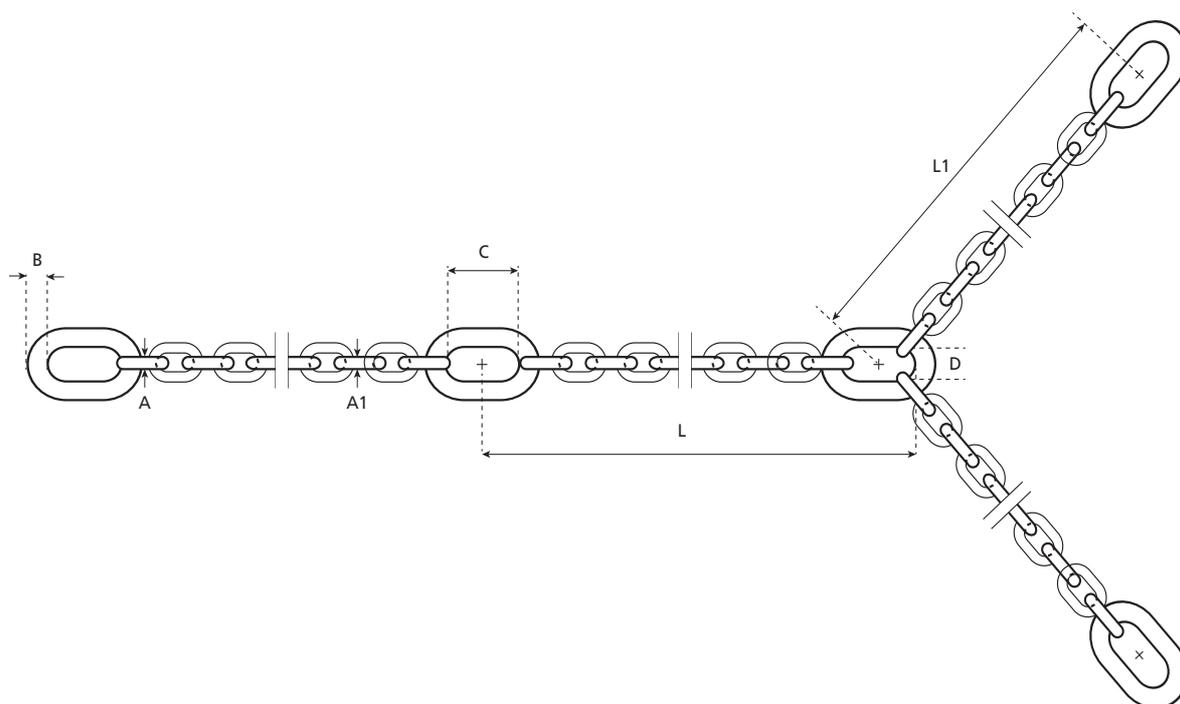
Pump Lifting Chains

Fitted with index lifting points at each end and at 1 metre centres. All items are supplied tested and complete with relevant certification - see our shackle section for list of compatible shackles. Larger sizes and alternative hole centres/configurations are available upon request.



Material: Grade 50 AISI 316L Stainless Steel. Finish: Polished

Part No.	Chain Size (mm)	Dimensions (mm)						WLL (t)	Weight Per M (kg)
		A	A1	B	C	D	L		
GPI5.030	4	5.0	4.0	8.0	36.0	17.0	1000.0	300 kg	0.40
GPI5.050	5	6.0	5.0	10.0	80.0	50.0	1000.0	500 kg	0.65
GPI5.075	6	8.0	6.0	13.0	110.0	60.0	1000.0	750 kg	0.85
GPI5.100	7	8.0	7.0	13.0	110.0	60.0	1000.0	1.00	1.20
GPI5.125	8	10.0	8.0	16.0	110.0	60.0	1000.0	1.25	1.50
GPI5.200	10	13.0	10.0	18.0	135.0	75.0	1000.0	2.00	2.50
GPI5.320	13	16.0	13.0	22.0	160.0	90.0	1000.0	3.20	4.20
GPI5.500	16	22.0	16.0	26.0	180.0	100.0	1000.0	5.00	6.10
GPI5.630	18	26.0	18.0	32.0	200.0	110.0	1000.0	6.30	7.80



LIFTING

JH 'Universal' Bottle Jacks

Lifting capacities: 2 - 50 tonnes

The JH bottle jack is ideal for general operations such as lifting, pushing, moving, and supporting all kinds of loads. These jacks can be used in either vertical or horizontal positions.

Part No.	Capacity kg	Closed Height mm	Stroke mm	Screw ext. mm	Weight kg
YHJH-2A	2000	181	115	50	2.7
YHJH-4A	4000	205	126	60	3.7
YHJH-6A	6000	219	130	75	4.7
YHJH-8A	8000	225	152	70	5.7
YHJH-12A	12000	240	153	80	8.0
YHJH-20A	20000	240	153	80	11.0
YHJH-30	30000	280	180	-	22.0
YHJH-50/2	50000	305	178	-	53.0



Yale Aluminium Jacks

Lifting capacities: 6.5 - 100 tonnes

Aluminium jacks combine lightweight with high lifting capacity. The use of high tensile aluminium alloy allows lifting capacities of up to 100 tonnes resulting in a very favourable 1.8 tonnes lifting capacity per 1kg weight ratio.

Operation of Yale hydraulic jacks is very simple. Jacks are supplied ready for use including hydraulic oil, operating lever, and where applicable carrying handle and lifting claw.

Main Features

- Extremely low weight
- Strokes from 75 to 305mm
- All jacks provided with an overload protection valve
- Hardened alloy steel saddle and sensitive lowering valve which is activated by the operating lever



Part No.	Capacity tonne	Max. Capacity of Lifting Claw tonne	Stroke mm	Closed Height mm	Base Plate Dimensions mm	Min. Height of Lifting Claw mm	Weight kg
Jacks with plain piston (standard type)							
YHAJS - 653	6.5	-	75	131	159 x 76	-	3.6
YHAJS - 104	10	-	115	182	171 x 76	-	6.3
YHAJH - 620	20	-	152	265	180 x 120	-	10.9
YHAJH - 1220	20	-	305	440	250 x 120	-	16.7
YHAJH - 630	30	-	152	265	200 x 140	-	15.4
YHAJH - 1230	30	-	305	452	275 x 140	-	23.4
YHAJH - 660	60	-	152	293	250 x 190	-	27.4
YHAJH - 1260	60	-	305	500	340 x 190	-	43.7
YHAJH - 6100	100	-	152	315	305 x 250	-	49.0
Jacks with lifting claw							
YHAJH - 620C	20	8	152	280	250 x 120	67	14.5
YHAJH - 1220C	20	8	305	452	250 x 120	67	22.2
YHAJH - 630C	30	12	152	284	275 x 140	72	20.3
YHAJH - 1230C	30	12	305	472	275 x 140	72	31.0
YHAJH - 660C	60	24	152	327	340 x 190	72	43.1
YHAJH - 1260C	60	24	305	533	340 x 190	72	64.9

*Aluminium jacks with safety lock nuts (screwed rams) are also available. Please contact our sales team for further details.

LIFTING

Steerman HTJ Hydraulic Toe Jacks

Steerman hydraulic toe jacks are ideal when working in very confined spaces. Typical uses include lifting and positioning of heavy machinery, fabricated steel structures, and general engineering applications. These jacks are also ideal for use with a set of Steerman skates.

Main Features

- Lifting capacity of 3, 6 or 10 tonnes, on the head and toe
- Extremely low entry height of the toe
- Operating lever rotates through 220°
- Large stable base area
- Carry handle for ease of handling
- Chrome plated ram and pump piston



Part No.	Claw Capacity kg	Head Capacity mm	Toe Height mm	Closed Height mm	Stroke kg	Weight
YHTJ-3	3000	3000	16	230	130	16.4
YHTJ-6	6000	6000	22	267	152	23.2
YHTJ-10	10000	10000	29	280	130	38.2

Steerman SCS Caterpillar Skates

Steerman Caterpillar Skates provide an economic and robust solution to many load moving and placement problems.

Main Features

- Carrying capacity of 20, 30 or 60 tonnes
- Professional build quality
- Modular concept allows linking of units
- Robust lockable steel container with nylon castors



Part No.	Capacity tonne	Weight kg
YSCS-20	20	50.0
YSCS-30	30	58.0
YSCS-60	60	92.0

LIFTING

SX/S 'Heavy Duty' Nylon Wheeled Skates

Part No.	Capacity of Complete System tonne	Colour and Quantity of Wheels	Size of Wheels mm	Turntable Diameter mm	Overall Height mm	Rear Width Adjustment mm	Boxed Weight Complete System kg
YSX10	10	Black x 16	82 x 48	180	102	252 to 1200	54
YSX15	15	Blue x 32	82 x 48	180	102	480 to 1500	76
YSX20	20	Black x 32	82 x 48	180	102	480 to 1500	76
YSX25	25	Blue x 48	82 x 48	180	110	720 to 1500	136
YSX30	30	Black x 48	82 x 48	180	110	720 to 1500	136
YS40	40	Blue x 48	115 x 54	350	170	800 to 2000	302
YS60	60	Black x 48	115 x 54	350	170	800 to 2000	302
YS80	80	Blue x 48	150 x 65	425	210	990 to 2000	525
YS100	100	Black x 48	150 x 65	425	210	990 to 2000	525



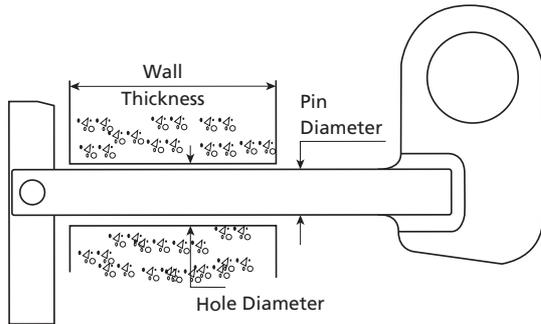
LIFTING

Quick Release Manhole Pipe Lifting Pins

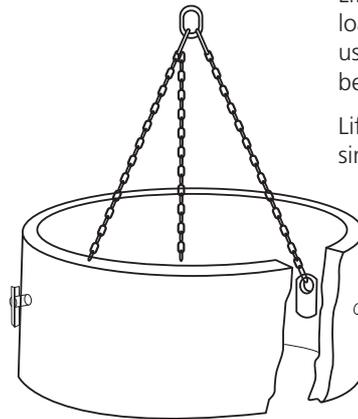
- Speeds lifting operations
- Safe and simple
- Complete with test certificate
- No threads to protect or nuts to safeguard
- 4 Standard sizes to suit most manhole pipes

25mm dia WLL	750 kg/pin
32mm dia WLL	1000 kg/pin
35mm dia WLL	1500 kg/pin
38mm dia WLL	2000 kg/pin

- Specials designed and made to order



Part No.	Dia of Pin	Max. Wall Thickness	WLL
KPLP25	25mm dia	120mm	750kg/pin
KPLP32	32mm dia	150mm	1000kg/pin
KPLP35	35mm dia	170mm	1500kg/pin
KPLP38	38mm dia	200mm	2000kg/pin



Lifting pins have been proof loaded and are approved for use with sling angles between 0 and 60 degrees.

Lifting pins must not be used singularly.

LIFTING POSITION
(Rotate 180° for quick release).

Plate Clamps

CZ 'Heavy Duty' Vertical Plate Clamps

Heavy Duty Plate Clamps with Safety Lock

Working Load Limit (WLL) 1000 - 30000kg

These clamps are primarily used for transporting sheet metal and steel plates in the vertical position, as well as lifting and rotating through 180°.

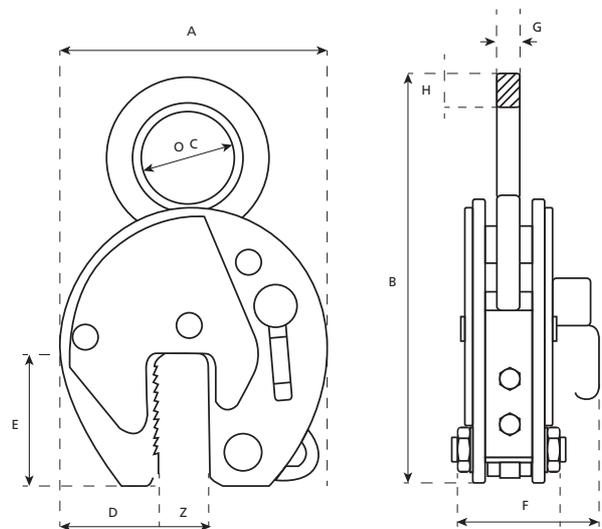
They can also be used for transporting steel constructions and profiles. It is recommended to use a pair of plate clamps in conjunction with a spreader beam for long materials which have a tendency to sag or flex.

Function

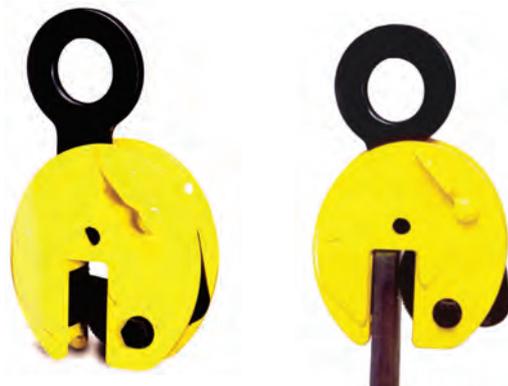
The jaw is opened and closed with the locking lever. The safety lock spring loads the cam jaw, preventing the clamp from opening even when there is no load.

Workmanship and Parts

These plate clamps are service-friendly, making it easy to exchange parts, which are readily available. Clamp repairs are available through the factory, or can be done by a competent person.



NB: The plate surface of the material must have a hardness level below HRC 30/Brinell 300.



LIFTING

CZ 'Heavy Duty' Vertical Plate Clamps (continued)

Part No.	WLL kg*	Jaw (Z) Capacity mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	Weight kg**
UCZ 1	100 - 1000	0 - 20	140	254	51	48	70	83	13	19	4
UCZ 1L	100 - 1000	20 - 40	161	260	51	48	70	83	20	19	5
UCZ 2	200 - 2000	0 - 32	197	323	67	68	93	110	20	20	11
UCZ 2L	200 - 2000	30 - 60	228	330	67	68	93	110	20	20	13
UCZ 3	300 - 3000	0 - 32	197	371	80	68	93	110	20	30	12
UCZ 3L	300 - 3000	30 - 60	228	390	80	68	93	110	20	30	15
UCZ 4	480 - 4000	0 - 32	197	371	80	68	93	129	20	30	12
UCZ 4L	480 - 4000	30 - 60	228	390	80	68	93	129	20	30	18
UCZ 6	720 - 6000	0 - 50	293	484	89	95	143	129	25	35	21
UCZ 6L	720 - 6000	50 - 100	362	524	89	95	143	129	25	35	28
UCZ 8	960 - 8000	0 - 50	293	492	89	95	143	129	25	42	26
UCZ 8L	960 - 8000	50 - 100	362	524	89	114	143	129	25	42	32
UCZ 10	1500 - 10000	0 - 50	293	545	110	95	143	139	25	45	30
UCZ 10L	1500 - 10000	50 - 100	362	545	110	114	143	139	25	45	37
UCZ 12	1800 - 12000	0 - 50	360	613	130	125	162	154	30	55	54
UCZ 12L	1800 - 12000	50 - 100	460	678	130	175	162	154	30	55	63
UCZ 15	3000 - 15000	0 - 50	360	613	130	125	162	204	45	55	75
UCZ 15L	3000 - 15000	50 - 100	460	678	130	175	162	204	45	55	88
UCZ 20	4000 - 20000	0 - 65	462	755	130	165	210	235	45	65	123
UCZ 20L	4000 - 20000	65 - 130	560	805	130	195	210	235	45	65	136
UCZ 30	6000 - 30000	0 - 65	462	732	60	165	210	295	65	-	195
UCZ 30L	6000 - 30000	65 - 130	560	797	60	195	210	295	65	-	295

PLEASE NOTE: Units are supplied as standard with a hook ring. Link fitting and chain are available on request as a special order. Also available with 'Sharp Leg' body shell or extra thick shell plates for dragging. Please contact sales team for further details and prices.

*Per clamp. **Weight per clamp with hook ring.

BA Bulb Bar Anchors

The BA bulb bar anchor has been designed for attachment to bulb profiles, often found in ship compartments and engine rooms, to provide a semi-permanent lifting point. The clamp can be quickly and easily attached via the screw type mechanism. The fabricated light weight design ensures a firm grip onto the bulb section. The unique large bow hook ring gives easy connection for all types of lifting machines.

Part No.	WLL kg*	Bulb hp mm	Weight kg*
UCBB0.75	750	80 - 160	3
UCBB1.5	1500	160 - 240	4
UCBB3	3000	240 - 320	5.5
UCBB6	6000	320 - 430	12.5



LIFTING

CH/HH 'Industry Standard', Horizontal Plate Clamps

Working load limit (WLL) 1000 - 10000kg

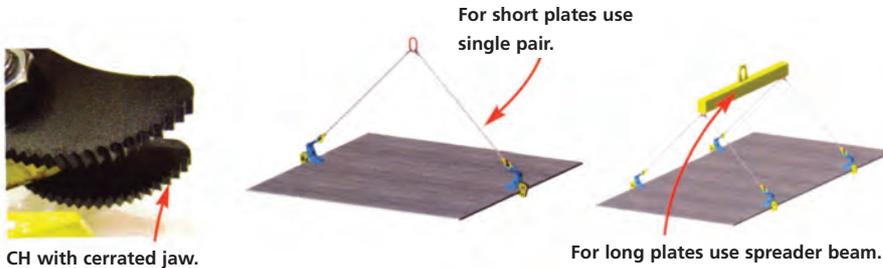
The CH horizontal plate clamps have been specifically designed to be used, in pairs, for the transportation of plate bundles as well as single plates with a minimum thickness of 5mm.

A pair of clamps used with a two legged chain sling are suitable for small plates. It is recommended to use two pairs in conjunction with a spreader beam for handling of larger plates. These units are supplied as standard with a smooth jaw. There is also the option of hardened steel teeth for special applications. Please contact our sales department for further details.

The HH horizontal plate clamps incorporate all of the features of the CH clamps, yet are manufactured from high strength steel giving them exceptionally low tare weights.

Workmanship and Parts

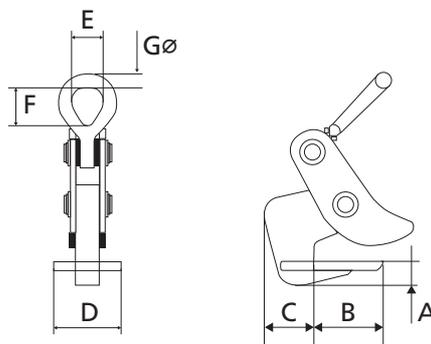
These plate clamps are service-friendly, making it easy to exchange parts, which are readily available. Clamp repairs are available through our workshop, or can be done by a competent person.



CH with serrated jaw.

Part No.	WLL kg	Jaw Capacity mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Weight kg**
UCH1	1000	5-32	15	82	60	100	32	44	13	8
UCH2	2000	5-32	30	82	60	100	50	73	18	11
UCH2L	2000	20-50	30	82	60	100	50	73	18	12
UCH4	4000	5-50	40	112	80	100	64	92	25	17
UCH4L	4000	50-100	40	112	80	100	64	92	25	23
UCH6	6000	5-75	55	172	100	130	90	130	35	46
UCH6L	6000	50-125	55	172	100	130	90	130	35	56
UCH8	8000	5-75	55	172	105	130	90	130	35	53
UCH8L	8000	50-125	55	172	105	130	90	130	35	60
UCH10	10000	5-100	65	215	120	150	114	114	35	95
UCH10L	10000	50-150	65	215	120	150	114	114	35	108
UHH8	8000	5-50	55	168	105	130	67	67	24	21
UHH8L	8000	50-100	55	168	105	130	67	67	24	28

*Per pair. **Weight per pair of clamps without chains.



NB: The angle between the chain/rope legs must not exceed 90° (45° from vertical).

NB: These units must not be used with endless chain slings.

LIFTING

TSD 'Standard' Screw Clamps

The TSD standard screw clamps offer many possible uses. They are designed to be used in conjunction with ratchet lever hoists to align steel structures or fabrications. They are ideally suited for the construction industry.

The unique design of the spindle makes it easy to attach to 'angle' plate. This is achieved by simply turning the handle which applies pressure to the plate holding it securely.

NB. The plate surface of the material to be lifted must not exceed a hardness level of HRC 30/Brinell 300.



Part No.	WLL kg*	Jaw Capacity mm	Weight kg*
UCPC1.5	1500	0-35	5
UCPC3	3000	0-35	8
UCPC5	5000	0-40	16
UCPC7.5	7500	0-40	19.5

*Per clamp. Please contact our sales team for full technical drawings.

TTB Big Bag Lifters

The TTB big bag lifters are designed to lift and transport large bags safely and securely. They are manufactured as a 4 point spreader beam in a fixed frame.

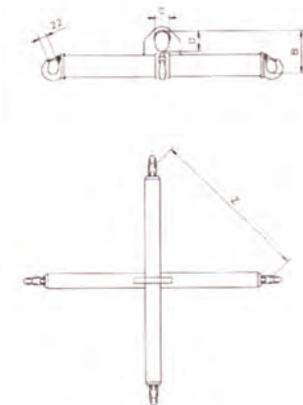
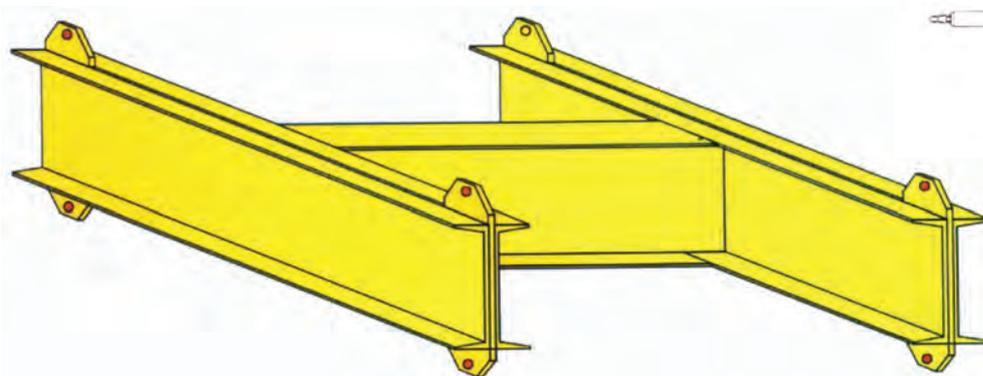
The construction incorporates 4 hooks with safety latches that allow fast loading and unloading of the bags.

Part No.	WLL kg*	Width (Z) mm	B mm	C mm	D mm	Weight kg
UTTB 1/1090	1000	750-800	210	60	110	27
UTTB 1/1320	1000	900-970	210	60	110	33
UTTB 2/1090	2000	750-800	240	75	135	42
UTTB 2/1320	2000	900-970	240	75	135	52



Spreader Beams & Lifting Beams

A full range of bespoke spreader beams and lifting beams are available in painted steel, galvanised or stainless steel finish. These can be rated for safe working loads from a few kilos to more than 100 tonnes. Please call our office for further information.

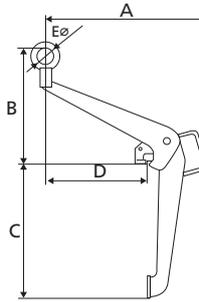


LIFTING

DCV500 Vertical Lift Drum Clamp

The DCV500 drum clamp has been designed to lift and transport steel drums in the vertical position. One clamp can be used to lift drums with or without their lids by gripping the rim of the drum.

Its lightweight and small overall design makes it ideal for picking up drums that sit tightly on pallets. The centre of gravity of the drum is below the lifting point during transportation. The DCV500 is also available with a 'lock on / open latch'. Please contact the sales team for further details.



Part No.	(WLL) kg	A mm	B mm	C mm	D mm	E mm	Weight kg
UDCV500	500	479	350	410	300	50	7

CR Single Rail Clamps

The CR rail clamps are designed to lift single rails securely and safely. The clamp is designed to fit most types of rail section sizes currently in use. A narrow profile enables attachment to an individual rail that is stacked side by side with other rails. The clamp is locked onto the rail-head via a lever operated spring mechanism. It is recommended to use clamps suspended from a lifting beam for long rail lengths.

Clamps can be supplied with a short length of chain and lifting eye as shown in the illustration. This MUST be specified at the time of order.

Part No.	No. of Rails	WLL kg	Weight kg
UCR1000	1	1000	13
UCR2000	1	2000	13



MR Fixed Multi Rail Grabs

The MR Multi-rail grabs have been designed to facilitate the fast bulk handling of a specific rail section (details to be advised at time of order).

Rails are locked onto the clamp by swivelling feet that locate under the rail-head and top clamp body. This rotates in a cam action pressing a hard rubber lined horizontal beam onto the top of the rail-head.

The rubber lined contact beam prevents marking or damage to the rail-head. Two clamps are recommended at centres of 50 to 60% of rail length for rails up to 20m long. For rails longer than 20m, three clamps at centre distance between outer clamps of 65 to 75% of rail length must be used. (NB; Clamp must be within rated WLL).

Rails to be lifted must be stacked with bottom flange toes touching. All rails must be of the same rail section size.

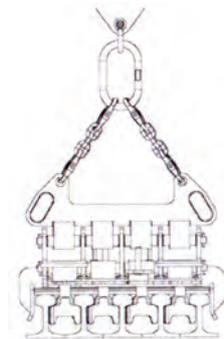


Image of multi-rail configuration

Part No.	No. of Rails	WLL kg	Weight kg
UMR3	3	5000	84
UMR4	4	5000	106
UMR5	5	5000	132
UMR6	6	6000	156
UMR7	7	7000	180
UMR8	8	8000	204
UMR10	10	10000	252
UMR12	12	12000	300



N.B. Please advise rail section when ordering.

LIFTING

TGB BLOCK GRABS

Working Load Limit (WLL) 200 - 1000kg

The TGB block grabs are designed to transport all materials with parallel surfaces that can withstand a clamping pressure twice as high as the load being lifted. The range offers jaw capacities from 0 to 1100mm. They are extremely easy and simple to use and make for safe lifting.

Options

- Available with automatic open / close device
- Jaws can be fitted with serrated teeth or rubber lined pads. Please specify at time of ordering

NB: When using the models fitted with rubber pads, it is important that the surfaces are dry, clean and free of oil and grease



Part No.	WLL kg	Jaw Capacity	Weight kg
UTBG 500S (T/R)	500	0 - 150	27
UTBG 1000S (T/R)	1000	50 - 250	50
UTBG 200L (T/R)	200	200 - 500	49
UTBG 300L (T/R)	300	400 - 500	52
UTBG 500L (T/R)	500	600 - 900	55
UTBG 1000L (T/R)	1000	800 - 1100	72

T= Supplied With Teeth. R= Supplied With Rubber.

Container Lifting Lugs

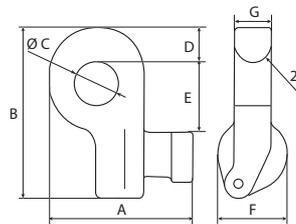
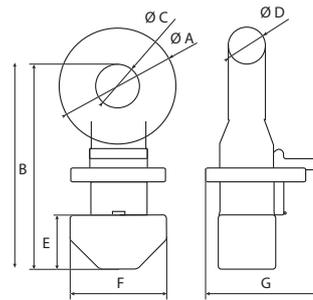
Container lifting lugs are supplied in sets of 4 and are available with a total capacity of up to 56 tonnes. The lugs serve as flexible lashing for the transportation of containers.

Different types of lugs are available dependant on whether top or bottom fastening is required.

CLT type is vertically mounted in the hole at the top of the container and is held in place by simply turning the lug 90°. This configuration allows for transportation via the use of a lifting frame in conjunction with cables, chains or slings.

CLB type is mounted horizontally to the side of the container at either the top or the bottom fixing holes. This model has a spring loaded bolt to prevent accidental release.

N.B NOT TO BE USED ON A 4 LEG CHAIN SLING.



Part No.	WLL kg	Type of Lifting	Top Angle Between Chains	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Weight kg*
CLB	32000 40000 50000	SIDE	50° 36° Vertical	152	181	45	37	73	75	40	18
CLT	56000	TOP	Vertical	123	217	45	39	57	101	121	28

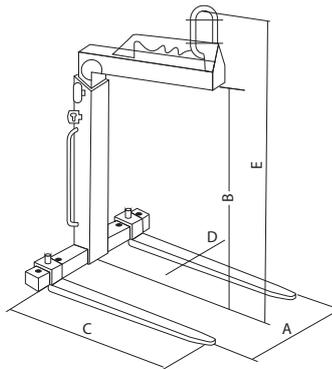
*Per set of 4

LIFTING

Crane Forks - MANUAL With Adjustable Tines, Adjustable Height and Manual Balancing System.

These TKG-VH crane forks are equipped with adjustable tines and adjustable height. The balancing system engages when the shackle is manually hooked into the appropriate notch.

- All crane forks comply to all current European Quality Standards
- Factor of safety 4:1
- Maintenance free
- For the transport of rings or coils, the fork tines are simply pushed together
- Easily adjustable tines for all pallet sizes
- Supplied with chain for securing the load

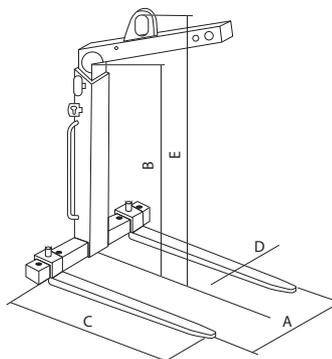


Part No.	WLL kg	Adjustment of Tines (A) mm	Useable Height (B) mm	Length of Tines (C) mm	Section of Tines (D) mm	Overall Height (E) mm	Weight kg
UTKG1.0vh	0 - 1000	350 - 900	1100 - 1600	1000	100 x 30	1390 - 1890	130
UTKG2.0vh	0 - 2000	400 - 900	1300 - 2000	1000	120 x 40	1640 - 2340	200
UTKG3.0vh	0 - 3000	450 - 900	1300 - 2000	1000	120 x 50	1670 - 2370	250
UTKG5.0vh	0 - 5000	500 - 1000	1300 - 2000	1000	150 x 60	1700 - 2400	370

Crane Forks - AUTOMATIC With Adjustable Tines, Height Adjustability and Self Weight Balancing Forks

These TKG-VH crane forks are equipped with adjustable tines, height adjustability & an automatic balancing system. Crane forks with automatic balancing tend to point their tines upward when being transported. This prevents the load from unintentionally slipping off the tines.

- All crane forks comply to all current European Quality Standards
- Factor of safety 4:1
- Maintenance free
- For the transport of rings or coils, the fork tines are simply pushed together
- Easily adjustable tines for all pallet sizes
- Supplied with chain for securing the load



Part No.	WLL kg	Adjustment of Tines (A) mm	Useable Height (B) mm	Length of Tines (C) mm	Section of Tines (D) mm	Overall Height (E) mm	Weight kg
UTKG1.0vhs	*200 - 1000	350 - 900	1100 - 1600	1000	100 x 30	1420 - 1920	140
UTKG2.0vhs	*400 - 2000	400 - 900	1300 - 2000	1000	120 x 40	1655 - 2355	220
UTKG3.0vhs	*600 - 3000	450 - 900	1300 - 2000	1000	120 x 50	1720 - 2420	280
UTKG5.0vhs	*1000 - 5000	500 - 1000	1300 - 2000	1000	150 x 60	1710 - 2410	380

*The automatic balancing system requires a minimum load of 20% of the crane forks working load limit.

LIFTING

Straightpoint Loadlink Plus

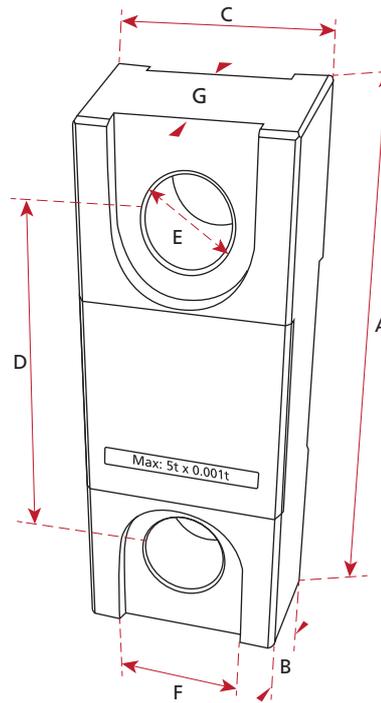
The original electronic force measurement device with integral display.

In production since 1979, this is the latest version of this world renowned product.

All LLPs have push button control for tare, units (kg, lbs, kN & tonnes), peak hold, pre set tare, audible setpoint alarm and overload counter.

Remote output is fitted as standard allowing connection to our range of accessories.

All models are supplied with a carry case.



Part No.	LLP250KG	LLP500KG	LLP1T	LLP2T5	LLP5T	LLP12T	LLP25T	LLP50T	LLP100T	LLP200T	LLP250T
Capacity	250kg	500kg	1000kg	2.5t	5t	12t	25t	50t	100t	200t	250t
Resolution	0.05kg	0.2kg	0.5kg	0.001t	0.001t	0.002t	0.005t	0.01t	0.05t	0.1t	0.1t
Units	t, kg, kN, lbs										
Weight	1.5kg	1.5kg	1.5kg	1.5kg	2.2kg	3.5kg	5.2kg	10.9kg	37kg	80kg	80kg
Safety Factor	50:1	25:1	12:1	5:1	5:1	5:1	5:1	5:1	4:1	5:1	4:1
Battery Type	9v PP3										
Battery Life	80 Hours Continuous										
Display Type	25mm LCD										
Op Temp	-10 To 50c										
Accuracy	± 0.3% Of Applied Load										
Protection	IP65										
Dimension A	204	204	204	204	249	305	340	424	608	690	690
Dimension B	43	43	43	43	43	47	60	75	99	150	150
Dimension C	101	101	101	101	101	101	110	163	255	305	305
Dimension D	146	146	146	146	165	193	215	230	320	350	350
Dimension E	24.5	24.5	24.5	24.5	38	47.5	55	76	108	125	125
Dimension F	47.5	47.5	47.5	47.5	66						
Dimension G	19	19	19	19	32						
Crosby Shackle	G210	G210	G210	G210	G210	G210	G210	G2140	G2140	G2140	G2140

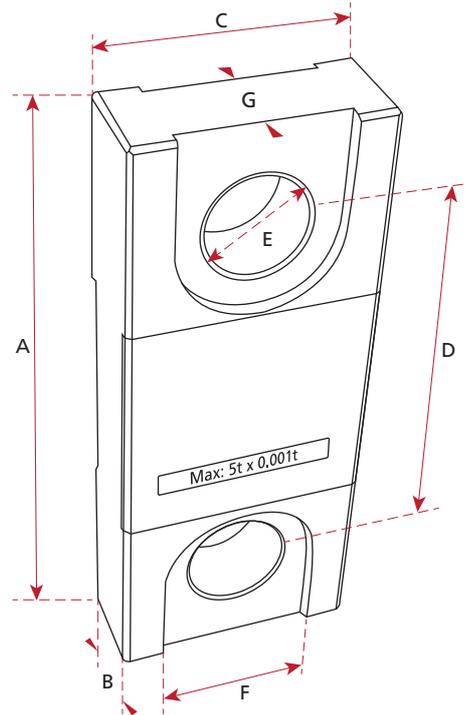
Prices and Specifications (mm)

LIFTING

Straightpoint Wirelink Plus

Non-indicating version of the Loadlink plus.

Supplied with ten metres of cable as standard, other lengths are available on request. Supplied with carry case. Requires connection to the Handheld Plus or use with optional analogue output detailed below.



Prices and Specifications (mm)	Part No.	LWLP2 50kg	LWLP 500kg	LWLP1T	LWLP2T5	LWLP5T	LWLP12T	LWLP25T	LWLP50T	LWLP 100T	LWLP 200T	LWLP 250T
	Capacity	250kg	500kg	1000kg	2.5t	5t	12t	25t	50t	100t	200t	250t
	Resolution	0.1kg	0.2kg	0.5kg	0.001t	0.001t	0.002t	0.005t	0.01t	0.05t	0.1t	0.1t
	Weight	1.5kg	1.5kg	1.5kg	1.5kg	2.2kg	3.5kg	5.2kg	10.9kg	37kg	80kg	80kg
	Safety Factor	50:1	25:1	12:1	5:1	5:1	5:1	5:1	5:1	4:1	5:1	4:1
	Protection						IP65					
	Op Temp						-10 to 50c					
	Accuracy						± 0.3% Of Applied Load					
	Dimension A	204	204	204	204	249	305	340	424	608	690	690
	Dimension B	43	43	43	43	43	47	60	75	99	150	150
	Dimension C	101	101	101	101	101	101	110	163	255	305	305
	Dimension D	146	146	146	146	165	193	215	230	320	350	350
	Dimension E	24.5	24.5	24.5	24.5	38	47.5	55	76	108	125	125
Dimension F	47.5	47.5	47.5	47.5	66							
Dimension G	19	19	19	19	32							
Crosby Shackle	G210	G210	G210	G210	G210	G210	G210	G2140	G2140	G2140	G2140	

Options					
Part No.	LICA1	LICA2	LICA3	LICA4	LICA5
Description	3 Wire 0-10v Analogue Output	3 Wire 0-5v Analogue Output	4 Wire ±10v Analogue Output	3 Wire 4-20mA Analogue Output	2 Wire 4-20mA Analogue Output

ROPES & RIGGING



ROPES

Rope and Rope Assemblies

A wide range of fibre, steel and stainless steel ropes are available in either long length or as made up assemblies using either hand or mechanical splices. Our trained riggers are able to offer a comprehensive array of splicing techniques in three, four, six, eight and twelve strand ropes, as well as braid lines and composite constructions.

Materials supplied include

Steel Ropes	Standard 6 strand construction with fibre or wire core Low rotational ropes for cranes and lifeboat falls Specialist ropes including those with plastic coated core
Stainless steel ropes	Standard 6 strand construction
Natural fibre ropes	Manila Hemp Sisal
Man made fibre ropes	Polypropylene, split film, yarn construction and staple spun Polyester Polyamide Polyethylene Polyolefin Kevlar HMPE

Rope Terminations

Steel ropes	Soft eye by mechanical or hand splice Thimble eye by mechanical or hand splice Stop end by mechanical splice Grommet by mechanical or hand splice Open or closed socket by resin or spelter fill Mechanically fitted terminals including fork, eye and threaded finish
Fibre ropes	Soft eye by mechanical or hand splice



ROPES

Wire Rope 6 x 36 IWRC

- Lay: Ordinary
- Lay direction: Right handed
- Finish: Galvanised or stainless steel
- Core: Wire
- Lubrication: Fully lubricated
- Uses: Ideal for general use, crane and winch applicatons

Diameter	Mass kg/100M	Minimum Breaking Force					
		Grade 1770		Grade 1960		Grade 1570 (AISI)	
		kN	kg	kN	kg	kN	kg
6,0	14,72	22,70	2.312	25,10	2.561	20,10	2.051
8,0	26,18	40,30	4.111	44,70	4.552	35,80	3.646
9,0	33,13	51,00	5.203	56,50	5.761	45,30	4.615
10,0	40,90	63,00	6.423	69,80	7.113	55,90	5.697
11,0	49,49	76,20	7.772	84,40	8.606	67,60	6.894
12,0	58,90	90,70	9.249	100,50	10.242	80,50	8.204
13,0	69,12	106,50	10.855	117,90	12.021	94,50	0.629
14,0	80,16	123,50	12.590	136,80	13.941	109,50	11.167
16,0	104,70	161,30	16.443	178,60	18.209	143,10	14.585
18,0	132,52	204,00	20.811	226,00	23.045	181,00	18.460
19,0	147,65	227,00	23.188	252,00	25.677	202,00	20.568
20,0	163,60	252,00	25.693	279,00	28.451	224,00	22.790
22,0	197,96	305,00	31.088	338,00	34.426	271,00	27.576
24,0	235,58	363,00	39.998	402,00	40.969	322,00	32.817
26,0	276,48	426,00	43.421	472,00	48.082	378,00	38.515
28,0	320,66	494,00	50.358	547,00	55.764	438,00	44.668
30,0	368,10	567,00	57.809	628,00	64.015	503,00	51.277
32,0	418,82	645,00	65.774	715,00	72.834	572,00	58.342
34,0	472,80	728,00	74.253	807,00	82.223	646,00	65.863
36,0	530,06	817,00	83.245	904,00	92.181	724,00	73.839
38,0	590,60	910,00	92.752	1.008,00	102.708	807,00	82.271
40,0	654,40	1.008,00	102.772	1.116,00	113.804	894,00	91.159
42,0	721,48	1.112,00	113.306	1.231,00	125.469	986,00	100.503
44,0	791,82	1.220,00	124.354	1.351,00	137.703	1.082,00	110.303
46,0	865,44	1.333,00	135.916	1.476,00	150.506	1.183,00	120.558
48,0	942,34	1.452,00	147.991	1.608,00	163.878	1.288,00	131.269
50,0	1.022,50	1.575,00	160.581	1.744,00	177.819	1.397,00	142.436
52,0	1.105,94	1.704,00	173.684	1.887,00	192.329	1.511,00	154.059

ROPES

Wire Rope 6 x 36 Fibre Core

- Lay: Ordinary
- Lay direction: Right handed
- Finish: Galvanised or stainless steel
- Core: Fibre
- Lubrication: Fully lubricated
- Uses: Ideal for applications where flexibility is needed, such as slings

Diameter	kg/100M	Minimum Breaking Force					
		Grade 1770		Grade 1960		Grade 1570 (AISI)	
		kN	kg	kN	kg	kN	kg
6,0	13,21	21,00	2.143	23,30	2.374	18,70	1.901
8,0	23,49	37,40	3.811	41,40	4.220	33,20	3.380
9,0	29,73	47,30	4.823	52,40	5.341	42,00	4.278
10,0	36,70	58,40	5.954	64,70	6.593	51,80	5.281
11,0	44,41	70,70	7.204	78,30	7.978	62,70	6.390
12,0	52,85	84,10	8.574	93,10	9.494	74,60	7.605
13,0	62,02	98,70	10.062	109,30	11.143	87,60	8.925
14,0	71,93	114,50	11.670	126,80	12.923	101,50	10.351
16,0	93,95	149,50	15.243	165,60	16.879	132,60	13.520
18,0	118,91	189,00	19.291	210,00	21.362	168,00	17.112
19,0	132,49	211,00	21.494	233,00	23.802	187,00	19.066
20,0	146,80	234,00	23.817	259,00	26.373	207,00	21.125
22,0	177,63	283,00	23.818	313,00	31.911	251,00	25.562
24,0	211,39	336,00	34.296	373,00	37.977	298,00	30.421
26,0	248,09	395,00	40.250	437,00	44.571	350,00	35.702
28,0	287,73	458,00	46.680	507,00	51.691	406,00	41.406
30,0	330,30	526,00	53.587	582,00	59.339	466,00	47.532
32,0	375,81	598,00	60.970	662,00	67.515	531,00	54.081
34,0	424,25	675,00	68.830	748,00	76.218	599,00	61.052
36,0	475,63	757,00	77.166	838,00	85.449	671,00	68.446
38,0	529,95	843,00	85.978	934,00	95.207	748,00	76.263
40,0	587,20	935,00	95.266	1.035,00	105.492	829,00	84.502
42,0	647,39	1.030,00	105.031	1.141,00	116.305	914,00	93.163
44,0	710,51	1.131,00	115.272	1.252,00	127.646	1.003,00	102.247
46,0	776,57	1.236,00	125.989	1.369,00	139.514	1.096,00	111.753
48,0	845,57	1.346,00	137.183	1.490,00	151.909	1.194,00	121.682
50,0	917,50	1.460,00	148.853	1.617,00	164.832	1.295,00	132.034
52,0	992,37	1.579,00	161.000	1.749,00	178.282	1.401,00	142.808

ROPES

Movspun

Movspun has the appearance and construction of old ropes made from natural fibres, but with the strength, abrasion and wear resistance of synthetic materials.

Main Features

- Smoothness and exceptional touch
- Good abrasion and wear resistance
- Floating, no water absorption
- Good UV resistance
- Flexible, non kinking and non rotating

Specific Gravity 0.91 (floats)

Melting Point: 165°C

Elongation at % of BS

25% 4.0%

50% 7.5%

Main Application

- Mooring lines
- Towing lines



Ropes are normally supplied in coils of 220m. Other lengths are available upon request.

Part No.	Diameter		Size	Weight		Breaking Load		
	mm	Inches	Inches	kg/100m	lbs/100ft	kgf	lbf	Knf
R28P8	28	1 ¹ / ₈	3 ¹ / ₂	34.0	22.8	10.700	23.589	104.9
R30P8	30	1 ¹ / ₄	3 ¹ / ₄	40.5	27.2	12.150	26.786	119.1
R32P8	32	1 ⁵ / ₁₆	4	46.0	30.9	13.650	30.093	133.8
R34P8	34	1 ³ / ₈	4 ¹ / ₄	52.3	35.1	15.350	33.840	150.4
R36P8	36	1 ¹ / ₂	4 ¹ / ₂	58.5	39.3	17.050	37.588	167.1
R38P8	38	1 ⁹ / ₁₆	4 ³ / ₄	65.3	43.8	18.950	41.777	185.7
R40P8	40	1 ⁵ / ₈	5	72.0	48.4	20.800	45.855	203.8
R44P8	44	1 ³ / ₄	5 ¹ / ₂	88.0	59.1	24.800	54.674	243.0
R48P8	48	2	6	104.0	69.9	29.200	64.374	286.2
R52P8	52	2 ¹ / ₈	6 ¹ / ₂	122.0	82.0	33.900	74.735	332.2
R56P8	56	2 ¹ / ₄	7	142.0	95.4	38.900	85.758	381.2
R60P8	60	2 ¹ / ₂	7 ¹ / ₂	163.0	109.5	44.200	97.443	433.2
R64P8	64	2 ⁵ / ₈	8	185.0	124.3	49.800	109.788	488.0
R68P8	68	2 ³ / ₄	8 ¹ / ₂	209.5	140.8	55.900	123.236	547.8

ROPES

Movspun Staple Rope

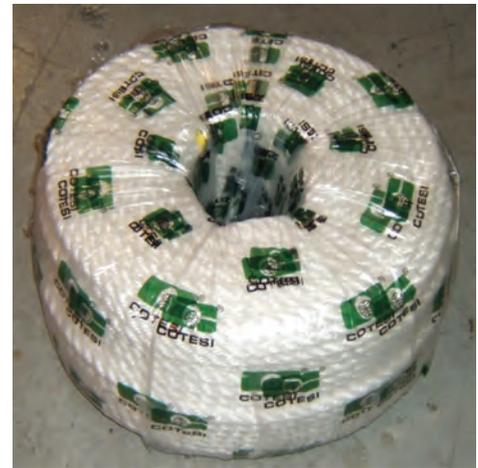
Movspun has the appearance and construction of old ropes made from natural fibres, but with the strength, abrasion and wear resistance of synthetic materials.

Main Features

- Excellent grip
- Good abrasion and wear resistance
- Floating, no water absorption
- Good UV resistance

Main Application

- General purpose rope



Part No.	Diameter	Weight per Coil	Breaking Load		
			kgf	lbf	Knf
R6P	6mm	3.70kg	600kg	1320	5.87
R8P	8mm	6.60kg	1060kg	2332	10.39
R10P	10mm	10.00kg	1560kg	3432	15.29
R12P	12mm	14.50kg	2200kg	4840	21.56
R14P	14mm	20.00kg	3050kg	6710	29.88
R16P	16mm	25.50kg	3770kg	8294	36.94
R18P	18mm	32.50kg	4800kg	10560	47.03
R20P	20mm	39.50kg	5800kg	12760	56.83
R22P	22mm	48.50kg	6960kg	15312	68.20
R24P	24mm	57.00kg	8130kg	17886	79.66
R28P	28mm	78.00kg	10700kg	23540	104.84
R32P	32mm	101.00kg	13450kg	29590	131.00
R36P	36mm	129.00kg	16900kg	37180	165.58
R40P	40mm	160.00kg	20500kg	45100	2008.62

ROPES

D-Tech Cotesi

Made from HMWPE fibres and protected by a self unique impregnation that improves its abrasion resistance. Cotesi D-tech ropes should be considered when high breaking strengths are required. D-tech is stronger than steel wire of the same weight and has proven to be a cost saving replacement for wire rope in several applications.

Main Features

- 1/7 of the weight of steel wire rope
- Torque free 12 strands braided construction
- Longer life compared to steel wire
- Low operational costs
- Low elongation
- Flexible, non kinking and non rotating
- Easy and safer handling
- Easy to splice

Specific Gravity 0.98 (floats)

Melting Point: 150°C

Elongation at % of BS

25%	0.9%
50%	1.6%

Main Applications

- Mooring lines
- Anchor lines
- Winch lines
- Towing and tug ropes



Ropes are normally supplied in coils of 220m. Other lengths are available upon request.

Part No.	Diameter		Size Circ.	Weight		Breaking Load		
	mm	Inches	Inches	kg/100m	lbs/100ft	kgf	lbf	Knf
R8HMPE	8	5/16	1	3.8	2.6	6.400	14.119	62.7
R10HMPE	10	3/8	1 1/8	6.1	4.1	10.200	22.487	100.0
R12HMPE	12	1/2	1 1/2	9.3	6.2	15.600	34.392	152.9
R14HMPE	14	9/16	1 3/4	12.5	8.4	20.700	45.635	202.9
R16HMPE	16	5/8	2	16.0	10.8	26.000	57.319	254.8
R18HMPE	18	3/4	2 1/4	20.7	13.9	33.300	73.413	326.3
R20HMPE	20	13/16	2 1/2	25.2	16.9	39.800	87.743	390.0
R22HMPE	22	7/8	2 3/4	30.5	20.5	47.500	104.781	465.5
R24HMPE	24	1	3	35.6	23.9	54.900	121.032	538.0
R26HMPE	26	1 1/32	3 1/4	41.0	27.6	62.400	137.566	611.5
R28HMPE	28	1 1/8	3 1/2	46.5	31.2	70.100	154.541	687.0
R30HMPE	30	1 1/4	3 3/4	51.5	34.6	76.900	169.533	753.6
R32HMPE	32	1 5/16	4	56.7	38.1	83.900	184.965	822.3
R34HMPE	34	1 3/8	4 1/4	62.0	41.7	90.900	200.397	890.8
R36HMPE	36	1 1/2	4 1/2	67.2	45.2	97.800	215.608	958.4
R38HMPE	38	1 9/16	4 3/4	73.0	49.1	105.400	232.365	1032.9
R40HMPE	40	1 5/8	5	79.3	53.3	113.800	250.882	1115.2
R44HMPE	44	1 3/4	5 1/2	94.3	63.4	133.700	294.753	1310.3
R48HMPE	48	2	6	111.9	75.2	156.800	345.679	1536.6
R52HMPE	52	2 1/8	6 1/2	132.2	88.8	183.100	403.660	1794.4
R56HMPE	56	2 1/4	7	153.6	103.2	210.200	463.404	2060.0
R60HMPE	60	2 1/2	7 1/2	176.4	118.5	238.500	525.794	2337.3
R64HMPE	64	2 5/8	8	200.7	134.9	268.100	591.049	2627.4
R68HMPE	68	2 3/4	8 1/2	226.5	152.2	299.000	659.171	2930.2

ROPES

Berthing Rope

An 8 strands plaited rope that combines polyester's high tenacity, abrasion and wear resistance with traditional PP spun. This very special blend along with its unique construction that perfectly combines these two fibres, gives this rope a superb handling and touch, highly appreciated by national marine defence fleets.

Main Features

- Superb handling and touch
- Good abrasion and wear resistance
- Low water absorption
- Flexible, non kinking and non rotating

Specific Gravity 1.16

Melting Point: 165°C/265°C

Elongation at % of BS

25%	3.5%
50%	7.9%

Main Applications

- Mooring lines
- Anchor lines



Ropes are normally supplied in coils of 220m. Other lengths are available upon request.

Part No.	Diameter		Size Circ.	Weight		Breaking Load		
	mm	Inches	Inches	kg/100m	lbs/100ft	kgf	lbf	Knf
R24P/P	24	1	3	34.0	22.8	7.000	15.432	68.6
R26P/P	26	1 ¹ / ₃₂	3 ¹ / ₄	40.7	27.3	8.400	18.519	82.5
R28P/P	28	1 ¹ / ₈	3 ¹ / ₂	47.3	31.8	9.750	21.495	95.6
R30P/P	30	1 ¹ / ₄	3 ³ / ₄	54.0	36.3	10.300	22.707	100.9
R32P/P	32	1 ⁵ / ₁₆	4	61.4	41.3	11.700	25.794	114.7
R34P/P	34	1 ³ / ₈	4 ¹ / ₄	68.7	46.2	13.100	28.880	128.4
R36P/P	36	1 ¹ / ₂	4 ¹ / ₂	76.0	51.1	14.500	31.966	142.1
R40P/P	40	1 ⁵ / ₈	5	95.0	63.8	18.100	39.903	177.4
R44P/P	44	1 ³ / ₄	5 ¹ / ₂	117.5	79.0	21.650	47.729	212.2
R46P/P	46	2	6	136.4	91.7	24.850	54.784	243.5
R52P/P	52	2 ¹ / ₈	6 ¹ / ₂	160.0	107.5	28.850	63.602	282.7
R56P/P	56	2 ¹ / ₄	7	185.0	124.3	33.000	72.751	323.4
R60P/P	60	2 ¹ / ₂	7 ¹ / ₂	212.0	142.5	37.450	82.562	367.0
R64P/P	64	2 ⁵ / ₈	8	242.0	162.6	42.300	93.254	414.5
R72P/P	72	3	9	306.0	205.6	52.700	116.182	516.5
R80P/P	80	3 ¹ / ₄	10	378.0	254.0	63.600	140.212	623.3
R88P/P	88	3 ⁵ / ₈	11	457.0	307.1	76.200	167.989	746.8
R96P/P	96	4	12	545.0	366.2	89.450	197.200	876.6
R104P/P	104	4 ¹ / ₄	13	640.0	430.1	102.353	225.639	1003.0
R112P/P	112	4 ⁵ / ₈	14	740.0	497.2	117.250	258.488	1149.1
R120P/P	120	5	15	850.0	571.2	133.400	294.092	1307.3
R128P/P	128	5 ¹ / ₄	16	967.0	647.8	147.200	324.515	1442.6
R136P/P	136	5 ¹ / ₂	17	1090.0	734.4	166.000	365.961	1626.8

ROPES

Polyamide

Polyamide ropes provide high breaking strength while its high elongation works as an excellent energy absorber. The ropes abrasion and heat resistant features are enhanced by the 8 strands plaited construction, even in wet conditions, while the quality of fibres insure a perfect twist and lay tension, reducing natural shrinkage in use.

Main Feature

- Excellent shock mitigation
- Good abrasion and wear resistance in wet conditions
- Good UV resistance
- Flexible, non kinking and non rotating

Specific Gravity 1.14

Melting Point: 260°

Elongation at % of BS

25%	11.0%
50%	18.0%

Main Application

- Mooring lines
- Towing lines
- Shock lines



Ropes are normally supplied in coils of 220m. Other lengths are available upon request.

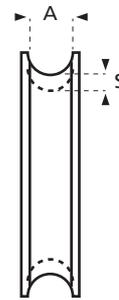
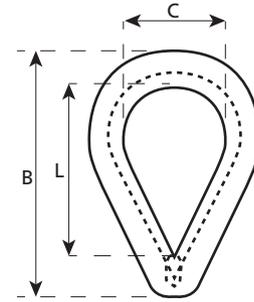
Part No.	Diameter		Size Circ.	Weight		Breaking Load		
	mm	Inches	Inches	kg/100m	lbs/100ft	kgf	lbf	Knf
R28PMID	28	1 ¹ / ₈	3 ¹ / ₂	48.5	32.6	15.200	33.510	149.0
R30PMID	30	1 ¹ / ₄	3 ³ / ₄	55.5	37.3	17.350	38.250	170.0
R32PMID	32	1 ⁵ / ₁₆	4	63.0	42.3	19.600	43.210	192.1
R34PMID	34	1 ³ / ₈	4 ¹ / ₄	71.5	48.0	22.050	48.611	216.1
R36PMID	36	1 ¹ / ₂	4 ¹ / ₂	80.0	53.8	24.500	54.012	240.1
R40PMID	40	1 ⁵ / ₈	5	99.0	66.5	30.000	66.138	294.0
R44PMID	44	1 ³ / ₄	5 ¹ / ₂	120.0	80.6	35.800	78.924	350.8
R48PMID	48	2	6	142.0	95.4	42.050	92.703	412.1
R52PMID	52	2 ¹ / ₈	6 ¹ / ₂	166.0	111.5	48.900	107.804	479.2
R56PMID	56	2 ¹ / ₄	7	193.0	129.7	56.100	123.677	549.8
R60PMID	60	2 ¹ / ₂	7 ¹ / ₂	221.0	148.5	64.000	141.093	627.2
R64PMID	64	2 ⁵ / ₈	8	252.0	169.3	72.350	159.502	709.0
R72PMID	72	3	9	319.0	214.4	90.500	199.515	886.9
R80PMID	80	3 ¹ / ₄	10	394.0	264.8	110.200	242.945	1080.0
R88PMID	88	3 ⁵ / ₈	11	477.0	320.5	132.650	292.438	1300.0
R96PMID	96	4	12	568.0	381.7	156.100	344.136	1529.8
R104PMID	104	4 ¹ / ₄	13	666.0	447.5	181.600	400.353	1779.7
R112PMID	112	4 ⁵ / ₈	14	772.0	518.8	209.150	461.089	2049.7
R120PMID	120	5	15	887.0	596.0	238.800	526.455	2340.2
R128PMID	128	5 ¹ / ₄	16	1010.0	678.7	270.400	596.120	2649.9
R136PMID	136	5 ¹ / ₂	17	1140.0	766.0	304.100	670.414	2980.2

ROPES

Thimbles

Galvanised BS 464 Thimbles

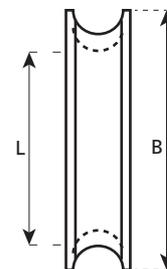
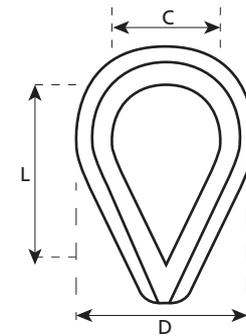
Part No.	Rope Dia	A mm	B mm	L mm	C mm	S mm	Weight kg/100
R6HT	1/4"	7	45	26	18	4	4.1
R8HT	5/16"	8	54	33	22	4	6.5
R10HT	3/8"	10	64	38	25	4.8	9.5
R12HT	1/2"	14	80	44	32	5.6	13
R16HT	5/8"	16	98	59	41	7.9	30
R19HT	3/4"	21	124	73	51	9.5	51.5
R22HT	7/8"	22	133	83	57	9.5	69
R25HT	1"	27	162	108	70	10.3	99.5
R28HT	1 1/8"	29	178	111	76	12.7	129
R31HT	1 1/4"	33	197	133	95	12.7	145
R35HT	1 3/8"	38	229	152	105	15.9	238
R38HT	1 1/2"	41	254	165	114	17.5	340
R41HT	1 5/8"	43	254	165	114	17.5	499
R44HT	1 3/4"	51	286	178	127	25.4	532
R52HT	2"	64	330	203	140	28.6	695



The thimbles detailed above will meet the performance requirements of the new Standard BS-EN-13411.

Heavy Duty Galvanised Thimbles meet the performance requirements of US Fed Spec FF-T-276-b Type 3

Part No.	Rope Dia Inches	B Inches	D Inches	L Inches	C Inches	Weight kg/100
R6HTHD	1/4"	2 ³ / ₁₆	1 ¹ / ₂	1 ⁵ / ₈	7 ⁷ / ₈	3.4
R8HTHD	5/16"	2 ¹ / ₂	1 ¹³ / ₁₆	1 ⁷ / ₈	1 ¹ / ₁₆	6.3
R10HTHD	3/8"	2 ⁷ / ₈	2 ¹ / ₈	2 ¹ / ₈	1 ¹ / ₈	11.3
R11HTHD	7/16"	3 ¹ / ₄	2 ³ / ₈	2 ³ / ₈	1 ¹ / ₄	16.2
R12HTHD	1/2"	3 ⁵ / ₈	2 ³ / ₄	2 ³ / ₄	1 ¹ / ₂	23
R14HTHD	9/16"	3 ⁵ / ₈	2 ¹¹ / ₁₆	2 ³ / ₄	1 ¹ / ₂	23
R16HTHD	5/8"	4 ¹ / ₄	3 ¹ / ₈	3 ¹ / ₄	1 ³ / ₄	33.8
R19HTHD	3/4"	5	3 ¹³ / ₁₆	3 ³ / ₄	2	66.2
R22HTHD	7/8"	5 ¹ / ₂	4 ¹ / ₄	4 ¹ / ₄	2 ¹ / ₄	83.3
R25HTHD	1"	6 ¹ / ₈	4 ¹⁵ / ₁₆	4 ¹ / ₂	2 ¹ / ₂	135
R30HTHD	1 1/8-1 1/4"	7	5 ⁷ / ₈	5 ¹ / ₈	2 ⁷ / ₈	184.5
R38HTHD	1 3/8-1 1/2"	9	7 ¹ / ₈	6 ¹ / ₂	3 ¹ / ₂	540
R41HTHD	1 5/8"	11 ¹ / ₄	8 ¹ / ₈	8	4	731.3
R44HTHD	1 3/4"	12 ¹³ / ₁₆	8 ¹ / ₂	9	4 ¹ / ₂	810
R50HTHD	1 7/8-2"	15 ¹ / ₈	10 ³ / ₈	12	6	1,170
R56HTHD	2 1/4"	17 ¹ / ₈	11 ⁷ / ₈	14	7	1,935

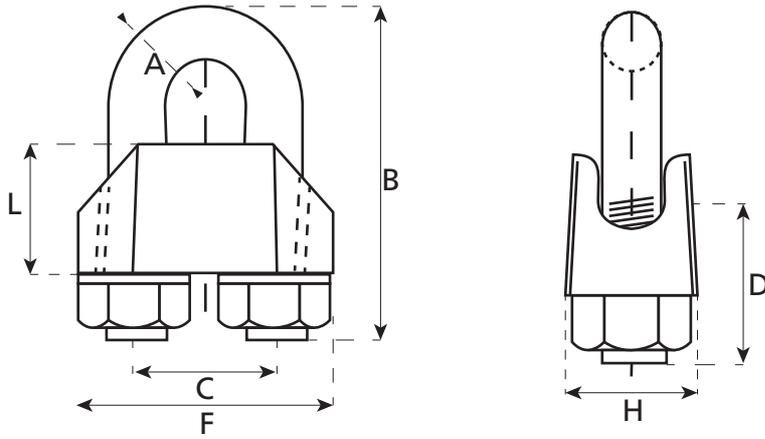


The thimbles detailed above will meet the performance requirements of the new Standard BS-EN-13411.

ROPES

Wire Rope Grip

Galvanised Wire Rope Grips meet the performance requirements of DIN 1142 & EN 13411 Pt5 Type A.



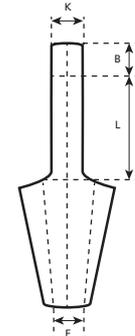
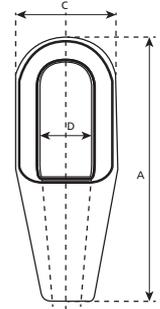
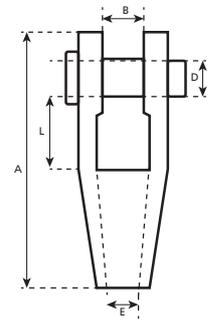
Part No.	Rope Dia mm	A mm	B mm	C mm	D mm	F mm	H mm	L mm	Weight kg/100
R5G	5	5	25	12	13	25	13	13	2.1
R65G	6.5	6	32	14	17	30	16	14	4
R8G	8	8	41	18	20	39	20	18	8.2
R10G	10	8	46	20	24	40	20	21	9.2
R12G	12	10	56	24	28	50	24	25	25
R13G	13	12	64	27	30	55	28	29	27.5
R14G	14	12	66	28	31	59	28	30	35
R16G	16	14	76	32	35	64	32	35	43
R19G	19	14	83	36	36	68	32	40	49
R22G	22	16	96	40	40	74	34	44	68
R26G	26	20	111	46	50	84	38	51	117
R30G	30	20	127	54	55	95	41	59	140
R34G	34	22	141	60	60	105	45	67	213
R40G	40	24	159	68	65	117	49	77	268

ROPES

Sockets

Open Spelter Sockets

Part No.	Working Load Limit Tons	Dia Wire Rope mm	Overall Length A mm	Inside Width B mm	Pin Dia D mm	Inside Length L mm	Opening E mm	Approx. Weight Per Piece kg
ICSS20	6.3	20-22	235	51	41	69	24	4.7
ICSS23	10	23-26	275	57	51	71	28	8
ICSS27	14	27-30	307	59	57	88	32	11
ICSS31	17	31-36	339	63	63	97	38	16
ICSS37	20	37-39	409	76	70	132	41	23
ICSS40	28	40-42	416	76	76	128	44	28
ICSS43	40	43-48	468	89	89	134	51	42
ICSS49	45	49-54	552	103	95	181	57	60
ICSS55	60	55-60	603	112	108	203	63	88
ICSS61	75	61-68	653	127	121	213	73	122
ICSS69	80	69-75	696	133	127	218	79	160
ICSS76	90	76-80	740	145	134	225	86	180

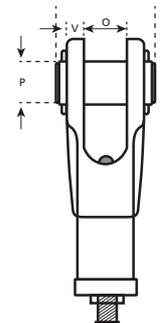


Closed Spelter Sockets

Part No.	Working Load Limit Tons	Dia Wire Rope mm	Overall Length A mm	Overall Width C mm	Inside Bow Width D mm	Inside Bow Length L mm	Thickness Bow B mm	Width Bow K mm	Opening E mm	Approx. Weight Per Piece kg
ICSS20	6	20-22	225	92	47	90	33	38	24	3.7
ICSS23	10	23-26	254	105	57	99	36	45	28	5.7
ICSS28	14	28	282	114	63	116	39	51	32	7.5
ICSS32	17.5	32-35	318	127	72	130	43	58	38	9.8
ICSS38	20	38	358	139	77	144	53	70	41	13
ICSS40	28	40	390	147	82	169	52	70	44	17
ICSS44	40	44-48	454	171	89	198	55	76	51	26
ICSS52	45	52-54	522	194	96	224	62	82	57	37
ICSS56	60	56-60	548	218	109	247	73	94	63	52.5
ICSS64	75	64-67	598	241	142	275	80	104	73	65
ICSS70	80	70-73	648	273	159	286	80	124	79	94
ICSS76	90	76-79	692	291	172	310	80	134	86	110

Painted Cast Steel Open Wedge Sockets (Untested)

Part No.	Model	Wire Dia mm	B mm	P mm	Q mm	V mm	Weight kg/Each
IOWS9	0.5	9-10	145	20	20	12	1.8
IOWS11	1	11-13	146	25	24	12	2.1
IOWS14	2	14-16	178	30	31	15	3.7
IOWS18	3	18-19	215	35	38	16	5.5
IOWS20	4	20-22	240	41	44	19	8.2
IOWS24	5	24-26	276	50	52	22	13.5
IOWS28	6	28	313	57	60	25	20.5
IOWS32	7	32	351	63	63	28	24.9
IOWS35	8	35	400	64	69	28	38
IOWS38	9	38	451	70	75	30	54.6



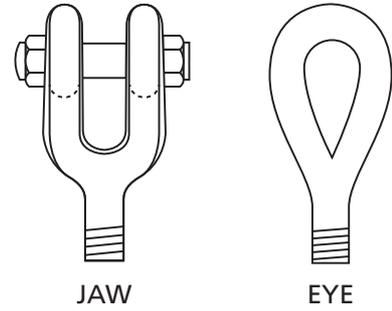
Prices for larger sizes are available on request

Testing available - at extra cost.

ROPES

Turnbuckles

Hot dip galvanised turnbuckles meet the performance requirements of US fed FFT-791 & ASTM F1145-92. Tested & certified.



Dia Thread Inch	Take-up Inch	WLL Tons	Jaw/Jaw Part No.	Eye/Eye Part no.
$\frac{3}{8}$	6	0.54	ITBW0501	ITBW0601
	6	1.00	ITBW0502	ITBW0602
$\frac{1}{2}$	9	1.00	ITBW0503	ITBW0603
	12	1.00	ITBW0504	ITBW0604
$\frac{5}{8}$	6	1.59	ITBW0505	ITBW0605
	9	1.59	ITBW0506	ITBW0606
	12	1.59	ITBW0507	ITBW0607
$\frac{3}{4}$	6	2.36	ITBW0508	ITBW0608
	9	2.36	ITBW0509	ITBW0609
	12	2.36	ITBW0510	ITBW0610
	18	2.36	ITBW0511	ITBW0611
	12	3.27	ITBW0512	ITBW0612
$\frac{7}{8}$	18	3.27	ITBW0513	ITBW0613
	6	4.54	ITBW0514	ITBW0614
1	12	4.54	ITBW0515	ITBW0615
	18	4.54	ITBW0516	ITBW0616
	24	4.54	ITBW0517	ITBW0617
	12	6.90	ITBW0518	ITBW0618
$1\frac{1}{4}$	18	6.90	ITBW0519	ITBW0619
	24	6.90	ITBW0520	ITBW0620
	12	9.71	ITBW0521	ITBW0621
$1\frac{1}{2}$	18	9.71	ITBW0522	ITBW0622
	24	9.71	ITBW0523	ITBW0623
	18	12.7	ITBW0524	ITBW0624
$1\frac{3}{4}$	24	12.7	ITBW0525	ITBW0625
	24	16.78	ITBW0526	ITBW0626
2	24	16.78	ITBW0526	ITBW0626
$2\frac{1}{2}$	24	27.22	ITBW0527	ITBW0627
$2\frac{3}{4}$	24	34.02	ITBW0528	ITBW0628

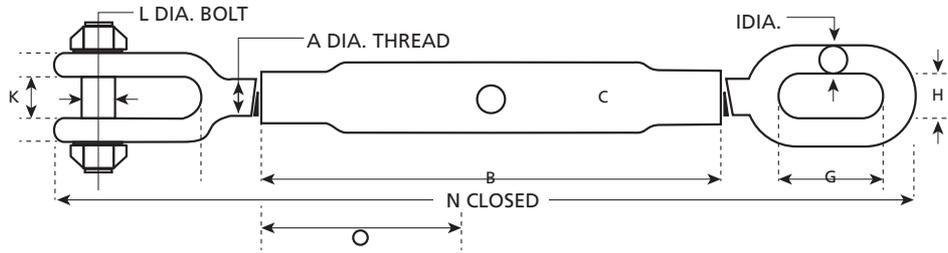
Note:- All turnbuckles are supplied with locknuts as standard.

Other combinations available, e.g. hook/hook & jaw/eye. Prices on request.



ROPES

Rigging Screws



Galvanised Rigging Screws Jaw/Jaw - Tested & Certified

Part No.	Size A Inches	B mm	K mm	L mm	N mm	Thread Length 0mm	WLL tonne	Weight kg/Each
IR514JJ	6mm (1/4)	100	7	5	184	54	0.20	0.16
IR5516JJ	8mm (5/16)	108	9	6	212	59	0.32	0.27
IR538JJ	10mm (3/8)	125	10.5	8	240	68	0.50	0.37
IR512JJ	12mm (1/2)	195	13	10	338	106	0.70	0.82
IR558JJ	16mm (5/8)	230	18	12	414	122	1.20	1.52
IR534JJ	20mm (3/4)	270	20	16	486	145	1.50	2.60
IR578JJ	22mm (7/8)	295	25	20	536	165	2.20	3.00
IR51JJ	24mm (1)	325	30	22	596	180	3.20	5.40
IR5114JJ	33mm (1 1/4)	370	38	25	756	220	4.80	12.00
IR5112JJ	39mm (1 1/2)	400	45	32	800	235	6.00	13.50

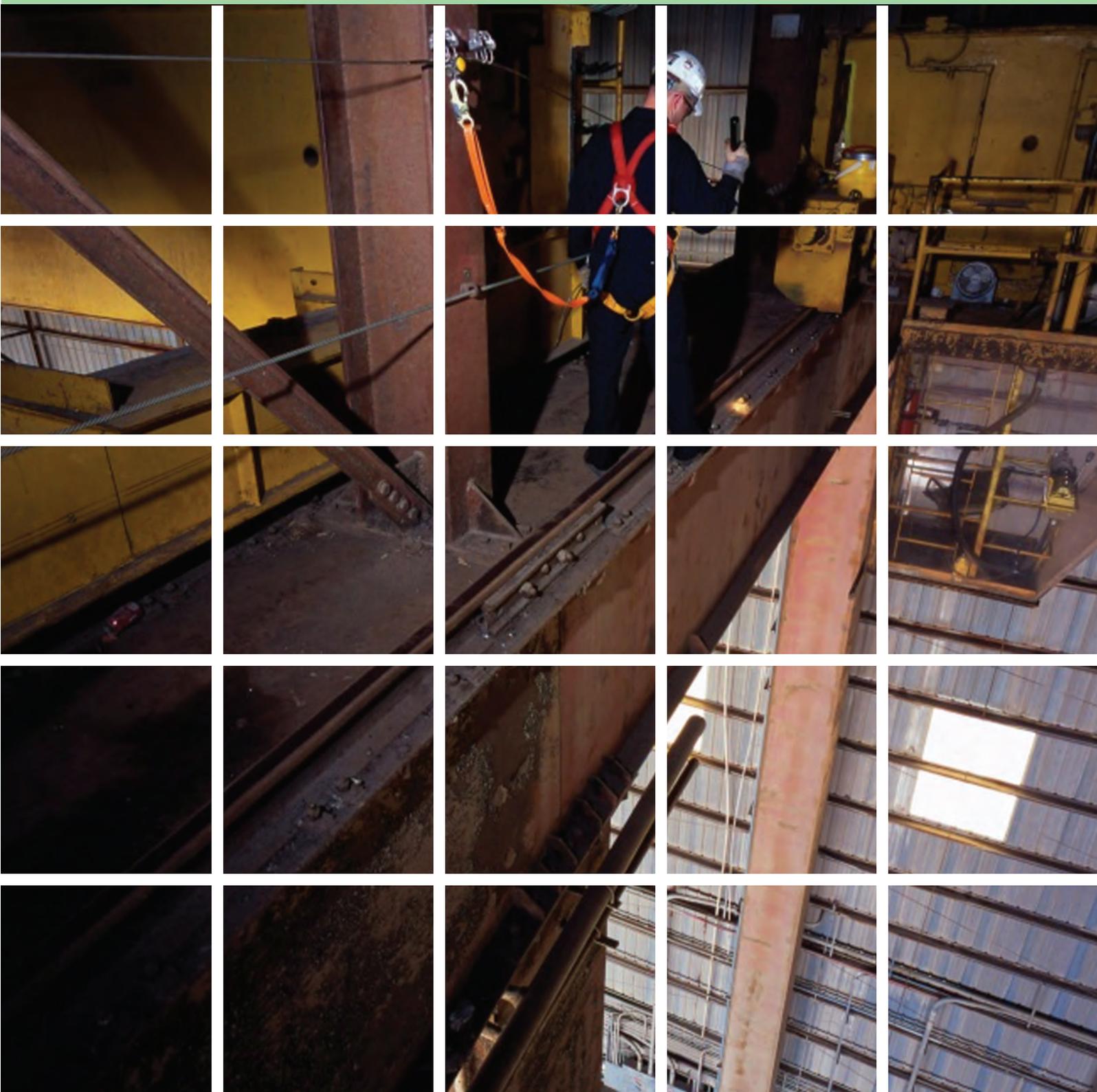
Galvanised Rigging Screws Eye/Eye - Tested & Certified

Part No.	Size A Inches	B mm	G mm	H mm	N mm	Thread Length 0mm	WLL tonne	Weight kg/Each
IR514EE	6mm (1/4)	100	11	11	168	54	0.20	0.14
IR5516EE	8mm (5/16)	108	12	12	182	59	0.32	0.20
IR538EE	10mm (3/8)	125	13	13	216	68	0.50	0.39
IR512EE	12mm (1/2)	195	30	15	336	106	0.70	0.66
IR558EE	16mm (5/8)	230	40	20	392	122	1.20	1.17
IR534EE	20mm (3/4)	270	50	24	474	145	1.50	1.71
IR578EE	22mm (7/8)	295	50	24	514	165	2.20	2.77
IR51EE	24mm (1)	325	56	28	568	180	3.20	3.03
IR5114EE	33mm (1 1/4)	370	70	35	700	220	4.80	7.50
IR5112EE	39mm (1 1/2)	400	80	40	770	235	6.00	12.50

Galvanised Rigging Screws Jaw/Eye - Tested & Certified

Part No.	Size A Inches	B mm	G mm	H mm	N mm	Thread Length 0mm	WLL tonne	Weight kg/Each
IR514JE	6mm (1/4)	100	11	11	176	54	0.20	0.14
IR5516JE	8mm (5/16)	108	12	12	197	59	0.32	0.23
IR538JE	10mm (3/8)	125	13	13	228	68	0.50	0.38
IR512JE	12mm (1/2)	195	30	15	336	106	0.70	0.55
IR558JE	16mm (5/8)	230	40	20	403	122	1.20	1.55
IR534JE	20mm (3/4)	270	50	24	480	145	1.50	2.10
IR578JE	22mm (7/8)	295	50	24	520	165	2.20	3.00
IR51JE	24mm (1)	325	56	28	582	180	3.20	4.02
IR5114JE	33mm (1 1/4)	370	70	35	728	220	4.80	8.90
IR5112JE	39mm (1 1/2)	400	80	40	785	235	6.00	13.50

HEIGHT SAFETY



HEIGHT SAFETY



Compliance Harnesses

The 'First' range of compliance harnesses satisfies the needs of general industry without compromising safety or quality. Best suited for construction, scaffolding, roofing and general industry, these lightweight harnesses provide an economical solution to complying with current legislation.

- Economical, practical and user friendly fall protection
- Polyester webbing for superior abrasion resistance and durability
- Lightweight, ergonomically designed chassis
- 3 points of adjustment at legs and chest
- Optional 5 points of adjustment at legs, torso and chest
- Large dorsal D-ring for easy connection and rescue
- Standard universal size
- Suitable for restraint and fall arrest



Size	First Rear Attachment Harness With 3 Point Adjustment	First Rear Attachment Harness With 5 Point Adjustment
Universal	OAB17510CE	OAB17530CE

Standard Harnesses



The 'Pro 2' range of harnesses provide premium safety, value and design without compromise. A wide range of models make the Pro 2 range suitable for most industries.

- Dependable, comfortable harnesses at an economical price
- Polyester webbing for superior abrasion resistance and durability
- Lightweight, ergonomically designed chassis for better fit and function
- 5 points of adjustment at legs, torso and chest across range
- Large dorsal D-ring for easy connection and rescue
- Optional front D-ring for climbing ladders and using rescue kits
- Built in fall indicators for easy inspection
- Information labels protected with a velcro wallet
- Suitable for fall arrest, fall restraint and positioning applications
- Conforms to EN360



Size	Pro 1 Point Rear Attachment Harness	Pro 2 Point Front & Rear Attachment Harness	Speareate Waist Belt For Work Positioning	Pro Rescue Harness With 2 Rear Attachments	Pro Flexa Harness With Elasticated Shoulders	Pro High Visibility Jacket Harness
S	OAB10112	OAB11312	OAB028125	OAB11312R	OAB12332	OAB11312HV
M/L	OAB10113	OAB11313	OAB028135	OAB11313R	OAB12333	OAB11313HV
XL	OAB10114	OAB11314	OAB028145	OAB11314R	OAB12334	OAB11314HV

HEIGHT SAFETY

Standard Comfort Harnesses

The 'Delta' range of harnesses offer exceptional quality, increased comfort and ease of donning. The Delta 2 is available in a wide range of models to suit any industry and the harsh environments associated.

- Ergonomically designed chassis for a superior fit with anti-tangle back pad for increased comfort and ease of donning
- High quality polyester webbing for superior abrasion resistance and durability
- 5 points of adjustment at legs, torso and chest across range
- Information labels and iTag protected with a velcro wallet
- Optional rescue harness for use with spreader beam (see accessories)
- Optional high temperature resistant Kevlar/Nomex harness
- Optional Arc Flash harness for use in electrical environments
- Suitable for fall arrest, fall restraint and positioning applications
- Complies with EN360



Size	Delta 2 Point Front & Rear Attachment Harness	Delta 2 Point Front & Rear Attachment Harness With Integrated Waist Belt	Delta Rescue 4 Point Harness with Shoulder Attachments For Use With Beam	Delta Kevlar/Nomex 1 Point Rear Attachment High Temperature Harness	Delta Arc Flash 3 Point Harness With Rear Attachment and Waist Belt
S	OKB11101289	OKB11101295	OKB11102235	-	O1101958
M	OKB11101288	OKB11101294	OKB11102236	OKB1K-P29	O1101959
L	OKB11101290	OKB11101296	OKB11102237	-	O1101960

High End Comfort Harnesses

The 'Exofit' range of harnesses provide premium quality, ease of donning and exceptional comfort decreasing worker fatigue. The Exofit is available in a wide range of models to suit any industry and the harsh environments associated.

- Ergonomically designed chassis for a superior fit with breathable mesh padding for exceptional comfort
- High quality polyester webbing for superior abrasion resistance and increased durability
- 5 points of adjustment at legs, torso and chest with quick connect buckles
- Front D-ring for climbing ladders and using rescue kits
- Information labels and iTag protected with a velcro wallet
- XP range fitted with removable padding to aid routine cleaning increasing product life
- Optional rescue harness for use with spreader beam (see accessories)
- Optional ATEX rated harness for use in explosive environments
- Suitable for fall arrest, fall restraint and positioning applications
- Complies with EN360



Size	Standard Exofit Harness	NEX Exofit Harness With Waist Belt	XP Rescue Harness With Shoulder Attachments For Use With Beam	ATEX Rated Exofit Harness	Exofit Derrick Harness for use With Aluminium Seat	Exofit Wind Energy 4 Point Harness With Waist Belt
S	OKB1EXO/S	O1113910	KB11101585	OKB11101391	OKB11111620	O1113215
M	OKB1EXO/M	O1113911	KB11101586	OKB11101392	OKB11111621	O1113216
L	OKB1EXO/L	O1113912	KB11101587	OKB11101390	OKB11111622	O1113217

HEIGHT SAFETY

Rope Access Harnesses

The Petzl Navaho is the harness of choice for any rope access or work positioning tasks. This harness offers the highest level of comfort for long durations with an extra wide waist belt and thicker padding in high pressure areas. Perforated foam and thermoformed supports are used to assure good ventilation, reduced weight and rigidity where required. Leg loops available with standard or quick connect buckles.

- Suitable for work positioning, fall restraint and fall arrest applications
- Ventral attachment point evenly distributes the load between the leg loops and waist belt
- Sternal and dorsal attachment points for fall arrest use
- Rear and side attachment points on the waist belt for restraint use
- Three equipment loops with protective sheath
- Complies with EN 361, EN 358 and EN 813



Size	Petzl Navaho Bod Standard Full Body Harness	Petzl Navaho Bod Fast With Quick Connect Buckles	Petzl Navaho Bod Fast Black With Quick Connect Buckles	Petzl Navaho Sit Pelvic Harness	Petzl Top Croll Chest Harness With Croll Device
M (1)	OC71000 1	OC710F0 1	OC710FN 1	OC79000 1	OC81C00 1
L (2)	OC71000 2	OC710F0 2	OC710FN 2	OC79000 2	OC81C00 2

Accessories

Part No.	Description
OAK053	Backpack
OAK043	Rope Bag, 500 x 300 mm
OKK09501403	Suspension Trauma Straps
OAB011	Dorsal Extension Strap For SRL Connection
OAK200	Waist Belt Securing Clips
05/2516	Lanyard Parking Points
OKF71201466	Spreader Bar For SALA Rescue Harnesses
OKB01150064	Exofit Aluminium Seat For Derrick Harness, Size S
OKB01150068	Exofit Aluminium Seat For Derrick Harness, Size L
OKB01150069	Exofit Aluminium Seat For Derrick Harness, Size XL
OS70	Petzl Podium Comfort Aluminium Seat For Work Position
OKK0L904	Tool Frog For Use With Harness



Backpack



Dorsal Strap



Trauma Straps

HEIGHT SAFETY

Fall Restraint Lanyards

Restraint lanyards are used to prevent the user from reaching a fall hazard and are preferable to fall arrest lanyards when used correctly. The anchor point must be located a suitable distance from the edge so that the lanyard restrains the user at least 0.5 m from any fall hazard. These lanyards do not have an integrated shock absorber and therefore must not be used where a user is liable to fall (doing so may cause serious injury).

- Protecta Pro lanyards for cost effective durability
- 1.25 m fixed length lanyard for use in MEWP's
- Adjustable lanyards for flexibility
- Trigger lanyards for greater adjustment
- Conforms to EN354

Part No.	Description	Length	Connectors
ORL1.25M ML2	Pro Restraint Webbing Lanyard	1.25 m	Karabiners
OAL423/5	Pro Restraint Rope Lanyard Adjustable	1.3 - 2 m	Karabiners
OAF777	Trigger Restraint Lanyard Adjustable	0.4 - 2 m	Snap Hooks
OAF777/1	Trigger Restraint Lanyard Adjustable	0.4 - 3 m	Snap Hooks
OAF777/2	Trigger Restraint Lanyard Adjustable	0.4 - 4 m	Snap Hooks
OLRL0.4	Ladder Restraint Lanyard	0.4 m	Scaffold Hook



ORL1.25M ML2



OAL423/5



OAF777

Fall Arrest Lanyards

Fall arrest lanyards are used to protect the user during a fall. They are designed to reduce the inertia applied to the users body to a maximum of 6kN in accordance with European Standards. All of the shock absorbers we supply have a maximum extension of 1.75 m therefore the ground clearance required must account for this extension. Fall arrest lanyards can also be used in restraint.

- Protecta Pro lanyards for cost effective durability
- Protecta First lanyards for entry level compliance
- SALA Wrapbax lanyards for choke hitch ability
- SALA Kevlar heat resistant lanyard for welding applications
- SALA Arc Flash lanyard for use in electrical environments
- Conforms to EN355

Part No.	Description	Length	Connectors
OAE529/1	Pro Fall Arrest Webbing Lanyard	1.5 m	Karabiners
OAE5220WAA	Pro Fall Arrest Webbing Lanyard	2 m	Karabiners
OAE529/61	Pro Fall Arrest Webbing Lanyard	1.5 m	Scaffold Hook
OAE5220WAF	Pro Fall Arrest Webbing Lanyard	2 m	Scaffold Hook
OAE5315WAF	Pro Twin Tail Fall Arrest Webbing Lanyard	1.5 m	Scaffold Hook
OAE5102	First Fall Arrest Webbing Lanyard	2 m	Karabiners
OAE5101	First Fall Arrest Webbing Lanyard	1.75 m	Scaffold Hook
OKE51221925	Wrapbax Fall Arrest Lanyard	1.8 m	Snap Hooks
OKE51222050	Wrapbax Twin Tail Fall Arrest Lanyard	1.8 m	Snap Hooks
OKE5175K	Kevlar Heat Resistant Fall Arrest Lanyard	1.7 m	No Connectors
O1220869	Arc Flash Fall Arrest Lanyard	2 m	Scaffold Hook



OAE5220WAA



OAE5315WAF



OKE51221925



O1220869

HEIGHT SAFETY

Connectors

Connectors are used to couple a harness, lanyard and anchor point to form a complete protection system. Available materials include zinc plated steel, stainless and aluminium with gate openings of 16 to 60 mm. Conforms to EN362.



OAJ501



OAJ530



OKJ5024

Part No.	Description	MBL	Opening
OAJ501	Karabiner Steel Screw Gate	22 kN	17 mm
OAJ598	Karabiner Stainless Screw Gate	22 kN	16 mm
OAJ530	Karabiner Aluminium Screw Gate	28 kN	17 mm
OAJ531	Karabiner Aluminium Twist Lock	28 kN	17 mm
OKJ5024	Karabiner Aluminium Twist Lock	28 kN	21 mm
OAJ593	Pear Shaped Karabiner Steel Twist Lock	25 kN	50 mm
OKJ50645	Snap Hook Swivel With Fall Indicator	22 kN	19 mm



OAJ593

Anchorage

Anchorage are used to connect the user's fall protection equipment to the supporting structure. Any item of fall protection equipment must be secured to a suitable anchorage conforming to EN795. This may be an installed system such as a lifeline for frequent use, or a temporary anchor attached to a suitable structure for infrequent use. The following devices are temporary anchors. Suitable for one user. Conforms to EN795.



Concrete Anchor



Webbing Anchor

Part No.	Description
OAM450/80	Anchor Sling Webbing, 22 kN, 0.8 m
OAM450/150	Anchor Sling Webbing, 22 kN, 1.5 m
OAM401G	Anchor Sling Wire Rope Galvanised, 15 kN, 1 m
OAM402G	Anchor Sling Wire Rope Galvanised, 15 kN, 2 m
OKM419	SALA Girder Loop Sling, 22 kN, 0.9 m
OKM421	SALA Girder Loop Sling, 22 kN, 2 m
O2104565	Anchor Point For Concrete, Expansion Anchor
OAM201	Anchor Point For Steel Structures, M12
O62217	Door Jam Anchor Bar, 550 To 1300 mm
O54369	Beam Anchor Trolley, 58 To 220 mm Beam Width
O97929	Beam Anchor Clamp Fixed, 58 to 220 mm Beam Width
OKM22104700	Beam Anchor Clamp Sliding, 89 to 355 mm Beam Width
O106697	Telescopic Attachment Pole For Reaching High Anchors, 6 m



Door Anchor



Beam Anchor

HEIGHT SAFETY

Rope Grab Lifelines

Rope grab lifelines can be used for work positioning and vertical fall protection applications. The Cobra device has dual settings that either allows free travel up and down the rope, locking off in the event of fall or operator control requiring release to travel down. Use the Cobra device with a shock absorber for vertical fall arrest applications. Conforms to EN353-2.

Part No.	Description	Length
OAC202/02	Cobra Rope Grab Device With Shock Absorber	0.3 m
OAC202/03	Cobra Rope Grab Device With Restraint Strap	0.3 m
OAC205	Cobra Rope Lifeline, Karabiner, 14mm dia	5 m
OAC210	Cobra Rope Lifeline, Karabiner, 14mm dia	10 m
OAC215	Cobra Rope Lifeline, Karabiner, 14mm dia	15 m
OAC220	Cobra Rope Lifeline, Karabiner, 14mm dia	20 m
OAC230	Cobra Rope Lifeline, Karabiner, 14mm dia	30 m
OAC240	Cobra Rope Lifeline, Karabiner, 14mm dia	40 m



Cobra Device



Rope Lifeline

Horizontal Temporary Lifelines

Temporary horizontal lifelines are used to provide infrequent protection along an edge. These are best used in restraint by positioning the lifelines at least 2m from the fall hazard but can be used in fall arrest as required. Care must be taken if used in fall arrest to ensure there is sufficient ground clearance for the span of lifeline used. Conforms to EN795.

Part No.	Description	Length
O1200106	PRO-Line Horizontal Webbing Lifeline With Tensioner	10 m
O1200107	PRO-Line Horizontal Webbing Lifeline With Tensioner	20 m
O7605061	SALA EZ-Line Retractable Horizontal Wire Rope Lifeline	18 m



PRO-Line



EZ-Line

Self Retracting Lifelines - Webbing

Self retracting lifelines are used to offer vertical fall protection when climbing structures or for providing protection from an edge. All SRLs should generally be positioned above the users head and work must be carried out within 15 degrees from the vertical. Webbing lifelines offer simple user friendly fall protection when a greater freedom of movement is required. All SRLs over 2m in length require annual servicing. Conforms to EN360.

Part No.	Description	Length
062002-00UK	ManSafe Mini Webbing SRL With Snap Hook	2 m
062102-00UK	ManSafe Mini Webbing SRL With Scaffold Hook	2 m
062004-00UK	ManSafe Webbing SRL	3.6 m
062007-00UK	ManSafe Webbing SRL	7 m
OKD1TALTWIN	SALA Talon Twin Tail Webbing Lanyard With Scaffold Hooks	2 m



HEIGHT SAFETY

Self Retracting Lifelines - Cable

The ManSafe SRL has been completely redesigned from the ground up. Its unique modular design and patented frictionless braking system reduces the annual servicing time and thus the overall cost of ownership. All internal components are non-ferrous and housed in a toughened nylon case to increase the units life and durability. Available with galvanised cable and ATEX rated stainless steel cable options. Requires annual servicing. Conforms to EN360.

Part No.	Description	Length
O62407-00	ManSafe SRL With Galvanised Cable	7 m
O62297-00	ManSafe SRL ATEX Rated With Stainless Cable	7 m
O62410-00	ManSafe SRL With Galvanised Cable	10 m
O62210-00	ManSafe SRL ATEX Rated With Stainless Cable	10 m
O62415-00	ManSafe SRL With Galvanised Cable	15 m
O62215-00	ManSafe SRL ATEX Rated With Stainless Cable	15 m



Self Retracting Lifelines - Sealed

The sealed marine self retracting lifelines have been specially designed for permanent installation into marine environments. They are fully sealed to the elements and manufactured from non ferrous materials to prevent corrosion. The rugged aluminium and stainless steel casing offers exceptional durability and overall longevity.

Part No.	Description	Length
O3400805	SALA Sealed SRL With Stainless Cable	9 m
O3400951	SALA Sealed SRL With Stainless Cable	15 m
OKD2PS25SS	SALA Sealed SRL With Stainless Cable	25 m
OKD2PS39SS	SALA Sealed SRL With Stainless Cable	39 m



Self Retracting Lifelines - Recovery

Recovery self retracting lifelines are used to rescue personnel in the event of an emergency. In addition they can also be used as a means of fall arrest protection. The lifelines can be used to either raise or lower a casualty who is suspended on the unit after fall or to recover a casualty from a confined space. The recovery device is for fall protection and emergency purposes only therefore it must be used in conjunction with another means of safe access/egress such as a personnel winch or ladder. Requires annual servicing. Conforms to EN360.

Part No.	Description	Length
OAD515	Protecta SRL With Recovery Handle	15 m
OKD2PS25RSS	SALA Sealed SRL With Recovery Handle	25 m
OKD2PS39RSS	SALA Sealed SRL With Recovery Handle	39 m
OAT0515	Bracket To Mount OAD515 to OAM100 Tripod	-
OKT23401123	Bracket For OKD2PS25RSS	-
OKT23401140	Bracket For OKD2PS39RSS	-
O8005050	Tripod Bracket For OKT23401123 & OKT23401140	-



HEIGHT SAFETY

Tripod Systems

Tripod systems are used to provide a suitable anchorage for accessing confined spaces. They can be used for both fall protection when access is via a ladder or for personnel suspension when used with a suitable winch and self retracting lifeline. Conforms to EN795.

Part No.	Description
OTRIPOD1	Tripod kit 1 – Comprising Tripod, 15m Recovery SRL, Rescue Harness and Bag
OTRIPOD2	Tripod kit 2 – Comprising Tripod, 15m Recovery SRL, 20m Winch, Rescue Harness and Bag
OAM100	Protecta Aluminium Tripod, SWL 500kg, 2.35m Height
OAT052/1	Pulley For OAM100 Tripod
OAK0100	Bag For OAM100 Tripod
OAT200/120	Winch For OAM100 Tripod With Bracket, SWL 136kg, HOL 20m
OAT0515	Bracket To Mount OAD515 Recovery SRL to OAM100 Tripod



Work Positioning Equipment

Work positioning can be a hazardous operation and as such, the equipment selected is of the greatest importance. For ease of use and peace of mind AM Defence & Marine recommend the SALA RPD unit as a main positioning line. This offers user friendly hoisting and lowering capabilities with an automatic locking system once in position. This should be used with a suitable backup line such as the Petzl ASAP device and a work positioning harness such as the Petzl Navaho or the SALA Derrick harness with work seat.

Part No.	Description
OKA1PRPD50	SALA 15m Rope Positioning Device. Used as a Main Line For Work Positioning. 3:1 Pulley System With Automatic Locking. Complete With Storage Bag.
OB71	Petzl ASAP Fall Arrest Backup Device For 10.5mm to 13mm Kernmantel Ropes.
OBCST11.155T1	Beal 15m Backup Kernmantel Rope With Sewn Termination. 11mm Dia.
OS70	Petzl Podium Comfort Aluminium Seat For Work Positioning.
OKH6BC100	SALA Plastic Bosuns Chair With Galvanised Lifting Eye.
OAG580	Climbing Helmet, White



Evacuation Systems

Descender units are used to provide emergency evacuation from work places such as dock side cranes or wind turbines. Once clipped onto a suitable anchorage, the user can attach their harness to the bottom hook and descend at a controlled speed to the ground. The standard R500 unit offers descent for 2 users whilst the rescue hub option allows for a casualty to be raised. Conforms to EN341 and EN1496.

Part No.	Description	Length
O3332010	SALA R500 Descent Unit, 2 Person	10 m
O3332020	SALA R500 Descent Unit, 2 Person	20 m
O3332030	SALA R500 Descent Unit, 2 Person	30 m
O3331010	SALA R500 Descent Unit With Rescue Hub, 2 Person	10 m
O3331020	SALA R500 Descent Unit With Rescue Hub, 2 Person	20 m
O3331030	SALA R500 Descent Unit With Rescue Hub, 2 Person	30 m
O8900019	Bag For R500	-



HEIGHT SAFETY

Rescue systems

Any work at height should be appropriately assessed to ensure all risks are minimised, but in the event that a fall cannot be prevented, a suitable rescue device should be close to hand. The Gotcha rescue kit has been specially designed to offer maximum flexibility and ease of use. It can be used to raise or lower a casualty and operates from a low or high anchor point. All users of this device must be suitably trained. Please contact our training department for further details. Conforms to EN1496.



Part No.	Description	Length
OGOTCHA50	Gotcha 50 Rescue Kit With Telescopic Pole	12.5 m
OGOTCHA100	Gotcha 100 Rescue Kit With Telescopic Pole	25 m
OGOTCHA150	Gotcha 150 Rescue Kit With Telescopic Pole	37.5 m

Rescue Accessories

Part No.	Description
OAG810	Rollgliss Rescue Stretcher, Fibre Glass
OAG501	Emergency Escape Nappy Harness
OAG502/1	Emergency Escape Sit Harness, Webbing
OAG703	Suspension Work Seat, Wooden With Non Slip Coating
OKH6BC100	Bosun's Chair
OAG580	Climbing Helmet With Chin Strap, White



Confined Space Equipment

A confined space is classed as "any place, including any chamber, tank, vat, silo, pit, trench, pipe, sewer, flue, well or other similar space in which, by virtue of it's enclosed nature, there arises a reasonably foreseeable specified risk". We can provide specialist advice on the safe entry and evacuation from these hazardous areas. One of our trained confined space technicians can attend your site to identify your confined spaces and advise on solutions and best practices in accordance with current legislation. We can provide engineered products to suit any application ie. fixed, freestanding and side entry davit systems, tripods, personnel riding and rescue winches, gas detection and breathing apparatus as well training on entering confined spaces.



HEIGHT SAFETY

Lifeline Systems



Lifeline systems provide an efficient and cost effective way of allowing unrestricted access to areas with a risk of falling.

We are able to design and install permanently fixed horizontal wire rope lifelines as well as rigid rail and non-penetrative systems to provide fall restraint and fall arrest protection for a multitude of applications. These systems can be installed onto flat and pitched roofs made up of steel profiled sheeting, steel and timber frames, reinforced concrete, ply wood, cavity brick walls and can be weathered with most membranes and felts. These systems can also be installed into aircraft hangar roofs, theatre rigging grids, overhead cranes etc and can be positioned at low level, waist height or overhead depending on the application.

The Latchways ManSafe system provides a total solution for all horizontal safety at height industrial applications. The system's versatility and ease of use makes it ideal for protecting workers as they go about their day-to-day activities such as maintenance, cleaning, access and inspection.



Lifeline Travellers

Part No.	Description
O85080-00	Latchways Transfastener For Use With Entry Gate



O85085-00	Latchways Removable Transfastener For Attachment Anywhere on The Lifeline
O85081-00	Latchways Low Friction Transfastener For Overhead Use
O85083-00	Latchways Load Carrying Transfastener For Overhead Use With SRL
O7240100	SALA Evolution Lifeline Traveller
OKN95S100	SALA Sayfglida Fixed Shuttle For Use With Entry Gate
OAN700	Protecta Ariana Traveller
OUG0800A	Uni-Line Traveller For 8 mm Cable

HEIGHT SAFETY

Testing

EN 795 governs the minimum requirements and testing methods for fall protection anchor devices. Under this standard, anchor devices are tested by subjecting them to a dynamic load of 100 kg – the equivalent of one person falling. The Latchways Constant Force post has been designed to support 3 users at any time and at any point and as such is tested to 300 kg.



In addition to EN 795, Latchways also undertake extensive testing of the complete roofing system to which the Constant Force post will be attached and, therefore, become part of. Latchways then seek approvals from the roof sheet/ covering manufacture giving the end user full confidence that the installed lifeline system will conform to all guarantees offered by the roofing manufacturer.

All installed lifelines are tested and certified by our fully trained engineers in accordance with current standards and the manufacturer's instructions. These lifelines then require an annual examination by a trained and competent engineer to ensure compliance with legislation.

Ladder systems

Vertical ladders have always posed a risk to the health and safety of users. There are many systems on the market to help reduce these risks and instil confidence in the persons climbing. We are able to provide various types of fall protection ladder systems from retrofit wire rope fall arrest systems to fully integrated fall protection ladders and loop ladders. Retrofit systems can provide a cost effective way of updating existing ladders to comply with current regulations. Please contact our sales department for more information. All ladder fall protection systems conform to BS EN 353.



Ladder System Travellers

Part No.	Description
3100L-00T	Latchways LadderLatch Traveller With Karabiner
3102L-00	Latchways TowerLatch Traveller With Webbing Strap and Karabiner
OKC11050234	SALA Railock Traveller With Shock Absorber and Karabiner
O6000377	SALA Railock 90 Traveller With Karabiner
06116507	SALA Ladsaf Traveller With Shock Absorber and Karabiner
06116507/A	SALA Ladsaf Traveller With Shock Absorber and Karabiner – ATEX Rated
OAC350	Protecta Cabloc Traveller With Karabiner
OAC350/4	Protecta Cabloc Traveller With Shock Absorber and Karabiner
O22697	Soll Glideloc Comfort Traveller With Karabiner



HEIGHT SAFETY

Mobile Anchors

There are some applications that do not suit permanently installed systems which is where the mobile anchor device can be an advantage. We can provide various types from advanced vacuum anchor systems for aircraft and general industry to weighted anchor systems for roof work. These systems can be easily transported to different sites or plant to provide a temporary attachment point when maintenance is either infrequent or constantly changing. They can also be used to provide a non-penetrative means of protection. All anchor points conform to EN795.

Counterweight Anchors

Mansafe counterweight anchors offer a non-penetrative solution for roof top protection. Their modular design makes them easily transportable and allows for adaption to most roof surfaces. They can be used on most roof surfaces up to an incline of 5 degrees. (Please contact our sales department for advice if using the anchor on an inclined roof. User instructions available on request)



Part No.	Description
O65640-00	Mansafe Counterweight Anchor, 300kg For Flat Single Ply Membrane, Concrete, Bitumen and Sanded Asphalt Roof Coverings. 1 User.
O65644-00	Mansafe Counterweight Anchor, 400kg For Flat Steel Profile and Asphalt Stone Chipping Roof Coverings. 1 User.

Vacuum Anchors

The SALA Mobi-Lok range offers a versatile means of protection for areas where installed systems are either impractical or not feasible. The primary pad is a self-contained vacuum anchor with a built-in compressed air cylinder that will suction down onto most non porous surfaces. The secondary pad daisy chains onto the primary pad to enable connection of a temporary lifeline. (Please contact our sales department for further advice. User instructions available on request).



Part No.	Description
O2200111	SALA Mobi-Lok General Industry Primary Pad With Bottle Attachment. 1 User.
O2200112	SALA Mobi-Lok General Industry Secondary Pad To Be Used With A Primary Pad. 1 User.
O2200126	SALA Mobi-Lok Aviation Industry Primary Pad With Bottle Attachment and Skydrol Resistant Rubber. 1 User.
O2200127	SALA Mobi-Lok Aviation Industry Secondary Pad With Skydrol Resistant Rubber. 1 User.
O2200048	Primary To Secondary Pad Air Hose 15m
O2200409	SALA 8m Horizontal Rope Lifeline For Use With Mobi-Loc

HEIGHT SAFETY

Anchor points

Anchor points are imperative when working at height. They provide the user with a secure attachment for their personal protective equipment. Single anchorage points are generally used for window cleaning, roof work, maintenance, rope access and climbing structures. They can be installed into reinforced concrete, brick cavity walls, steel and timber framed structures, steel profiled sheeting, ply wood etc. We are able to design and install these anchors to suit your application as well as carrying out the all important routine maintenance and testing. Please contact our sales department for more information. All anchor points conform to EN795.



Edge Barriers

Edge barriers are a way of providing collective fall protection eliminating the need for personal protective equipment and complex risk assessments. We can provide modular, free standing, non-penetrative systems as well as fixed systems for various industry applications. Pedestrian barriers, stairwell handrails and decorative balustrades can also be provided in a multitude of colours and finishes to suit the aesthetics of any building.



Walkway Systems

Walkway systems provide a cost effective means of access onto fragile roof surfaces and coupled with valley frames, provide collective fall protection. These systems can also be used to protect profiled roof sheets by evenly distributing the applied load and mark access / egress routes across the roof. We can provide recycled PVCu walkway systems with anti-slip surfaces that can be attached to the roof top to provide safe access for routine maintenance, plant inspection, roof light cleaning etc.



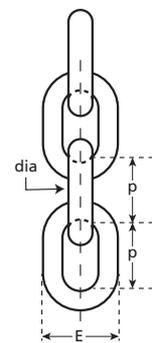
MARINE



MARINE

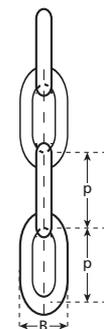
Stainless Steel Short Link Chain - Din 766 (Tested & Certified)

Chain Dia. mm	P mm	B mm	Weight kg/Mtr	WLL kg	GRADE 50 Part No.	WLL kg	GRADE 30 Part No.
4	16	14	0.32	315	CSS450	175	CSS430
5	18.5	17	0.50	490	CSS550	295	CSS530
6	18.5	20	0.75	700	CSS650	420	CSS630
8	24	26	1.35	1,260	CSS850	750	CSS830
10	28	34	2.25	1,960	CSS1050	1170	CSS1030



Stainless Steel Long Link Chain - Din 763 (Tested & Certified)

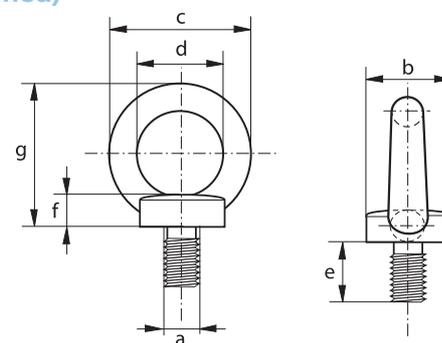
Chain Dia. mm	P mm	B mm	Weight kg/Mtr	WLL kg	GRADE 50 Part No.	WLL kg	GRADE 30 Part No.
4	32	16	0.27	210	CSL450	100	CSL430
6	42	24	0.63	470	CSL650	224	CSL630
8	52	32	1.10	840	CSL850	400	CSL830
10	65	40	1.75	1,310	CSL1050	630	CSL1030



Note: Smaller & larger diameters available upon request

Stainless Steel Eyebolts, Sizes Generally to DIN 580 (Tested & Certified)

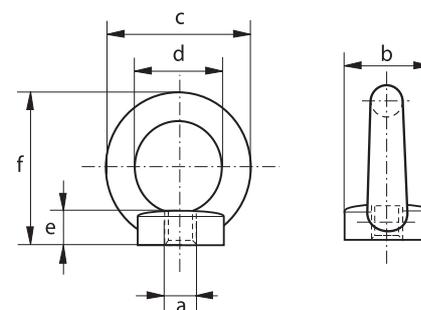
Part No.	Size D1 mm	Inside Dia. D4 mm	Length of L Shank	Height of Base E mm	Total Height H mm	Weight per 100 pcs kg
EDINSM6	6	16	13	6	34	3
EDINSM8	8	20	13	6	36	6
EDINSM10	10	25	17	8	45	10.3
EDINSM12	12	30	20.5	10	53	17.7
EDINSM16	16	35	27	12	62	28



Larger diameters available upon request

Stainless Steel Eyunuts, Sizes Generally to DIN 582 (Tested & Certified)

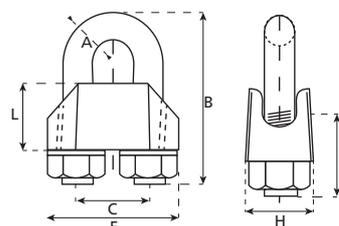
Part No.	Size D1 mm	Inside Dia. D4 mm	Height of Base E	Total Height H	Weight per 100 pcs kg
EEINSM16	6	20	8.5	34	4.2
EEINSM8	8	20	8.5	36	5.2
EEINSM10	10	25	10	45	9.4
EEINSM12	12	30	11	53	16
EEINSM16	16	35	13	62	24



Larger diameters available upon request

Stainless Steel Wire Rope Grips

Part No.	Wire Rope Dia. mm	Body Dia A mm	Overall Length of Bow B mm	C mm	Length of Thread D mm	Length of Base F mm	Thickness of Base H mm	Height of Base L mm	Weight per 1000 pcs/kg
R3GS	3	4	20	9	12	21	10	10	14
R5GS	5	5	24	11	13	23	11	10	15
R6GS	6.5	5	28	13	15	26	12	11	21
R8GS	8	6	34	16	19	30	14	15	41
R10GS	10	8	42	19	22	34	18	17	68
R13GS	13	10	55	24	30	42	23	21	130
R16GS	16	12	63	29	33	50	26	26	210
R19GS	19	12	75	32	38	54	29	30	280
R22GS	22	14	85	37	44	61	33	34	400



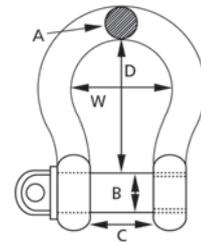
MARINE

Stainless Steel High Tensile Shackles- Type A Pin (Tested and Certified)

- Manufactured from 17/4PH precipitation hardening martensitic stainless steel
- Corrosion resistance approximating that of 18/8 grade steels. High tensile properties while avoiding work hardening
- Tested and certified to CE requirements

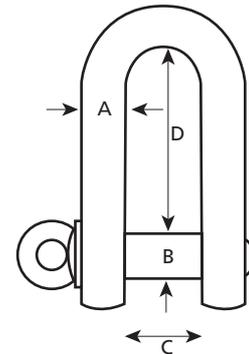
Bow Shackles

Part No.	B mm	A mm	C mm	W mm	D mm	WLL tons	Weight Each kg
SSSLRB0.8	10	8	16	24	32	0.8	0.1
SSSLRB1.5	12.7	10	20	30	40	1.5	0.2
SSSLRB2.5	16	12.7	25	38	50	2.5	0.4
SSSLRB4.0	19	16	32	48	64	4.0	0.6
SSSLRB5.5	22.2	19	38	57	76	5.5	1.1
SSSLRB7.5	25.4	22.2	44	66	88	7.5	2.0
SSSLRB9.0	28.6	25.4	51	76	102	9.0	3.1
SSSLRB11.0	31.8	28.6	57	86	114	11.0	3.3
SSSLRB13.0	34.9	31.8	64	95	127	13.0	4.6
SSSLRB15.0	38	34.9	70	105	140	15.0	5.6



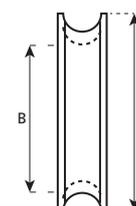
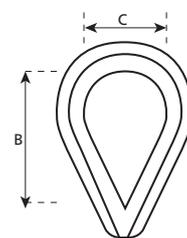
Dee Shackles

Part No.	WLL tons	A mm	B mm	C mm	D mm	Weight kg/Each
SSSLRD1	1	8	10	16	32	0.1
SSSLRD2	2	10	12.7	20	40	0.2
SSSLRD3	3	12.7	16	25	50	0.4
SSSLRD5	5	16	19	32	64	0.7
SSSLRD7	7	19	22.2	38	76	0.9
SSSLRD9	9	22.2	25.4	44	88	1.4
SSSLRD11	11	25.4	28.6	51	102	2.2
SSSLRD13	13	28.6	31.8	57	114	2.9
SSSLRD15	15	31.8	34.9	64	128	4.1



Stainless Steel Thimbles

Part No.	Rope Dia. mm	L mm	B mm	C mm	Weight kg/100
R2.5SST	2.5	21	14	8	0.2
R3SST	3	25	16	10	0.4
R4SST	4	28	19	11	0.5
R5SST	5	32	23	13	0.7
R6SST	6	39	25	15	1.0
R8SST	8	49	32	18	2.0
R10SST	10	55	37	23	4.3
R12SST	12	70	44	27	5.2
R16SST	16	85	63	35	14.9
R18SST	18	95	69	40	16.7
R20SST	20	115	77	46	28.3
R22SST	22	125	88	50	32.7
R24SST	24	135	96	58	51.0



MARINE

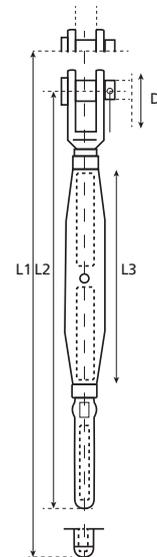
SS Terminals

Stainless Steel Rigging Screws

Closed Body - Jaw and Swage Terminal (Untested)

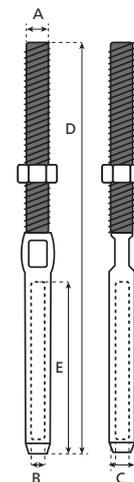
Part No.	Thread Dia. mm	Wire Size mm	D mm	A mm	L3 mm	L2 mm	L1 mm	Weight Each kg
KSSMTR6	6	3	6	7	95	185	255	0.07
KSSMTR8	8	4	8	8	105	205	305	0.12
KSSMTR10	10	5	10	10	122	235	360	0.22
KSSMTR12	12	6	12	14	145	290	420	0.41
KSSMTR16	16	8	16	16	190	370	450	0.94
KSSMTR20	20	10	19	20	209	415	580	1.75

Also available with Swage Terminal each end - Prices on request



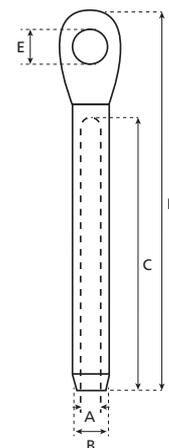
Stainless Steel Swage Studs (Untested)

Part No.	Thread Dia. a mm	Wire Size mm	b mm	c mm	d mm	e mm	Weight Each kg
KSSMTS6	6	3	3.3	6.3	100	39	0.03
KSSMTS8	8	4	4.3	7.5	117	45	0.05
KSSMTS10	10	5	5.3	9	130	51	0.08
KSSMTS12	12	6	6.3	12	162	64	0.15
KSSMTS16	16	8	8.3	16	195	76	0.23
KSSMTS20	20	10	10.3	18	230	89	0.59



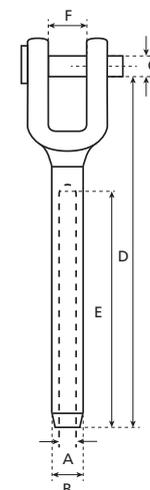
Stainless Steel Swage Eyes (Untested)

Part No.	Wire Size mm	a mm	b mm	c mm	d mm	e mm	Weight Each kg
KSSMTE3	3	3.3	6.5	36	55	8.0	0.02
KSSMTE4	4	4.3	7.5	39	61	14.0	0.03
KSSMTE5	5	5.3	9.0	50	76	12.5	0.04
KSSMTE6	6	6.3	12.5	62	90	12.5	0.09
KSSMTE8	8	8.3	16.0	85	110	14.5	0.18
KSSMTE10	10	10.3	17.5	90	132	16.4	0.24



Stainless Steel Swage Jaws (Untested)

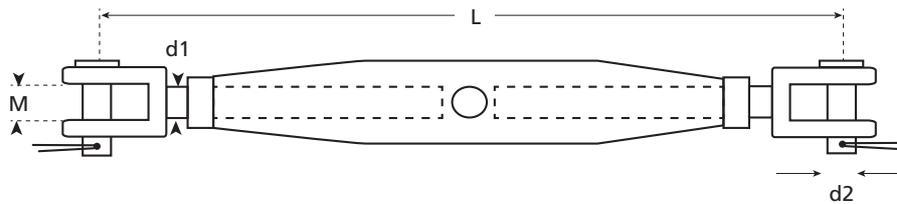
Part No.	Wire Size mm	a mm	b mm	c mm	d mm	e mm	f mm	Weight Each kg
KSSMTF3	3	3.3	6.3	5.2	65	32	7.5	0.02
KSSMTF4	4	4.3	7.5	6.2	77	40	10	0.05
KSSMTF5	5	5.3	9	8.7	88	57	12	0.07
KSSMTF6	6	6.6	12.5	9.7	106	63	14	0.14
KSSMTF8	8	8.3	16	14.6	145	85	16	0.22
KSSMTF10	10	10.5	17.8	16.5	150	89	17	0.52



MARINE

Stainless Steel Rigging Screws (With Closed Body, Stopnuts, Jaws) (Untested)

Part No.	Size d1	Max Length L mm	Min Length L mm	Bolt Dia. d2 mm	Inside Jaw M mm
IRSS5JJ	5	190	130	5	7
IRSS6JJ	6	210	140	6.5	7
IRSS8JJ	8	240	165	8	8
IRSS10JJ	10	270	190	9.5	10
IRSS12JJ	12	360	245	12.7	14
IRSS16JJ	16	450	310	12.7	16



Rescue Boat, Tender and Jet Ski Sling Assemblies

Following safety demands from the super yacht sector, we have developed a new range of rescue boat, tender and jet ski sling assemblies.

The rescue boat and tender slings are certified with a factor of safety of 10:1 and therefore are suitable for man riding applications. The jet ski slings are certified to a factor of safety of 5:1.

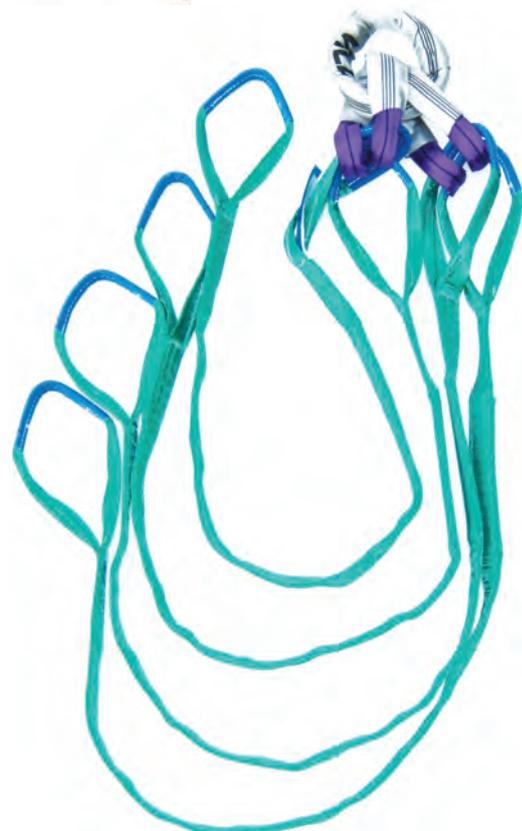
The slings are available with painted steel or self colour stainless steel master links, or with soft master links manufactured from webbing. These are designed so as not to cause damage to the boats when used with a quick release hook.

The slings legs can be manufactured from duplex belt slings or Dyneema (HMPE) type rope and fitted with stainless steel hooks.

We have developed a new stainless steel hook for use with Jet Ski lifting slings. This is capable of fitting through a 12mm eye on the machine and offer a 5:1 factor of safety.

All the above slings are made to the customer's specifications and are available in a wide range of lengths and working load limits. Specific coloured slings are available upon request and all slings can be supplied in a fabric storage bag which can be printed with the name of the vessel.

If you require a quotation please copy and complete the enquiry form shown on page 107 of this catalogue.



MARINE

Cargo Lashing Equipment

Lashing Grade 80 Clevis Sling Hook

Part No.	Size mm	Lashing Capacity kN
GSH7/8	7	40
GSH10	10	63
GSH13	13	100
GSH16	16	160



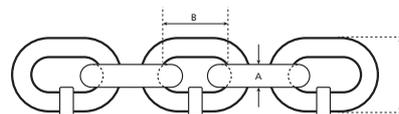
Lashing Grade 80 Clevis Grab Hook

Part No.	Size mm	Lashing Capacity kN
GGG7	7	40
GGG10	10	63
GGG13	13	100
GGG16	16	160



Lashing Grade 'T' (8) Chain BS EN 818-2

Part No.	Size mm	Lashing Capacity kN	A mm	B mm	C mm	Mass kg
GC7	7	40	8	24	29.6	1.5
GC10	10	63	10	30	37.0	2.2
GC13	13	100	13	39	48.1	3.8
GC16	16	160	16	48	59.2	5.8



Ratchet Load Binder

Part No.	Size mm	Lashing Capacity kN	Mass kg
ILB8R	8	40	1.5
ILB10R	10	63	2.2
ILB13R	13	100	3.8
ILB16R	16	160	5.8



Drop Forged Standard Lever Type Loadbinders

Part No.	Size mm	Lashing Capacity kN	Mass kg
ILB10	8	2.45	2.81
ILB13	10	4.175	5.08



MARINE

Cargo and Container Lashing

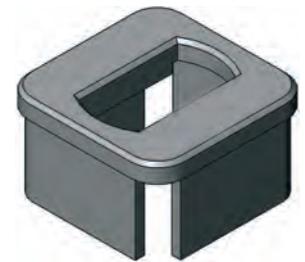
Ro Ro Lashing

We are able to offer a full range of Ro Ro lashing points including general purpose, elephants feet, lashing pots and lashing rings, all manufactured to high standards and with suitably rated minimum breaking loads.



Container Sockets

A range of container sockets are available in either raised or flush fitting format. These include single, double and quadruple sockets suitable for welding to decks.



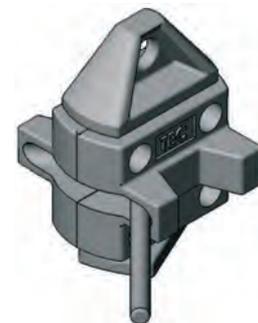
Lashing Fittings

To complement the range of lashing chains we are able to supply suitable terminations and components including elephants feet, turnbuckles, lever tensioners and bridge connectors.



Twist Locks

We are able to supply a full range of container twist locks including weld on, deck mounted units and intermediate options.



MARINE

Webbing Ratchet Lashing

Part No.	MBL tonne	End Fitting	Short Tail Length M	O/A Length M
WVC14	1	Claw	0.4	4
WVC18	1	Claw	0.4	8
WVC34	3	Claw	0.4	4
WVC38	3	Claw	0.4	8
WVC8	5	Claw Hook	0.4	8
WVC10	5	Claw Hook	0.4	10
WVD8	5	Delta Ring	0.4	8
WVD10	5	Delta Ring	0.4	10

Other lengths of end fitting are available on request



Stainless Steel Webbing Ratchet Lashing

Part No.	MBL tonne	End Fitting	Short Tail Length M	O/A Length M
WVCS14	1	Claw	0.4	4
WVCS18	1	Claw	0.4	8
WVCS2.54	2.5	Claw	0.4	4
WVCS2.5	2.5	Claw	0.4	8



Bouys



A Series Specifications

	A-0	A-1	A-2	A-3	A-4	A-5	A-6	A-7
SIZE (diameter & length)	8" x 11.5" 20,3 x 29,2cm	11" x 15" 27,9 x 38,1cm	14.5" x 19.5" 36,8 x 49,5cm	17" x 23" 43,2 x 58,4cm	20.5" x 27" 52,1 x 68,6cm	27" x 36" 68,6 x 91,4cm	34" x 44" 86,4 x 111,8cm	39" x 54" 99,1 x 137,2cm
EYE DIAMETER	0.6" 1,6cm	1.0" 2,5cm	1.125" 2,8cm	1.125" 2,8cm	1.125" 2,8cm	1.25" 3,0 cm	1.5" 3,8 cm	2.0" 5,0 cm
VOLUME (gallons/litres)	1.6 gal. 5.9L	3.5 gal. 13.2L	8.2 gal. 30.8L	14.5 gal. 54.9L	22.5 gal. 84.8L	47.6 gal. 179.6L	95.1 gal. 359.2L	161.6 gal. 610.1L
PIECES PER CARTON	20	10	10	10	10	5	3	2

Bouys sold in carton quantity.

MARINE

Fenders

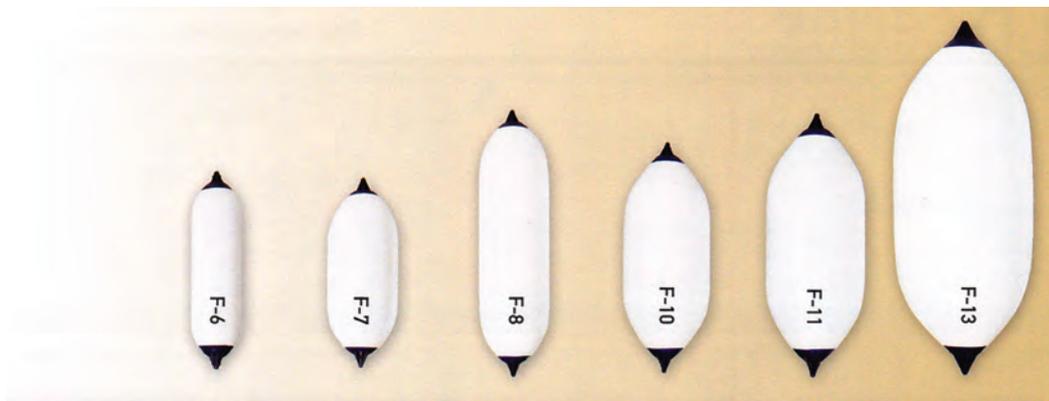
F Series Classic European fender

Specifications



	F-1	F-02	F-2	F-3	F-4	F-5
SIZE (diameter & length)	6" x 24" 15,2 x 61cm	7.5" x 26" 19,1 x 66cm	8.2" x 25" 20,8 x 63,5cm	8.2" x 30" 20,8 x 76,2cm	8.5" x 40.5" 21,6 x 102,9cm	11" x 30" 27,9 x 76,2cm
EYE DIAMETER	0.7" 1,8cm	0.7" 1,8cm	0.9" 2,2cm	0.9" 2,2cm	0.9" 2,2cm	1.0" 2,4cm
VOLUME (gallons/litres)	2.2 gal. 8.2L	3 gal. 11.3L	3.5 gal. 13.2L	5.3 gal. 20.0L	9.3 gal. 34.9L	11.9 gal. 44.9L
PIECES PER CARTON	10	10	10	10	5	5

Fenders sold in carton quantity



	F-6	F-7	F-8	F-10	F-11	F-13
SIZE (diameter & length)	11" x 42" 27,9 x 106,7cm	15" x 41" 38,1 x 104,1cm	15" x 58" 38,1 x 147,3cm	18" x 50" 45,7 x 127cm	21.2" x 57.5" 53,8 x 146,1cm	29" x 76.5" 73,7 x 194,3cm
EYE DIAMETER	1.0" 2,4cm	1.0" 2,4cm	1.0" 2,4cm	1.0" 2,4cm	1.1" 2,7cm	1.2" 3,0cm
VOLUME (gallons/litres)	19.8 gal. 74.8L	25.1 gal. 94.8L	39.6 gal. 149.7L	40.8 gal. 154.2L	63.7 gal. 240.4L	158.6 gal. 598.7L
PIECES PER CARTON	5	5	4	2	3	2

Fenders sold in carton quantity

Polyform Fender Colour Chart

	BLACK	BLUE	BURGUNDY	CLASSIC RED	COBALT	FOREST GREEN	GRAY	NAVY	ORANGE	PURPLE	SAND	TEAL	WHITE	YELLOW	GREEN	SATURN YELLOW	RED
G	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
NF	●	●	●	●	●	●							●				
HTM	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●
F	●	●	●		●	●	●	●			●		●				●

BOAT SIZE	FENDER SELECTION
Up to 10'	G-1, A-0
10' to 20'	G-2, G-3, NF-3, S-1, A-0
20' to 30'	G-4, G-5, NF-4, NF-5, HTM-1, HTM-2, F-1, F-02, F-2, F-3, A-1 G-6, HTM-3,
30' to 40'	HTM-4, F-4, F-5, F-6, A-2, LD-2
40' to 50'	HTM-4, F-6, A-3, LD-3
50' to 60'	F-7, F-8, A-4
60' to 70'	F-8, F-10, F-11, A-5
70' - Up	F-11, F-13, A-5, A-6, A-7

MARINE

Ladders and Nets

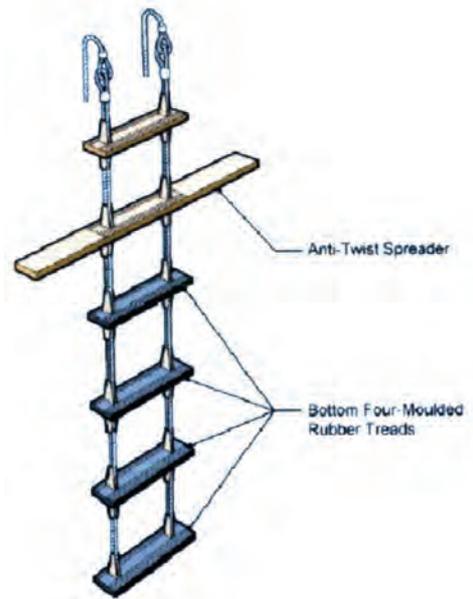
We are able to provide a wide range of rope ladders and nets for both marine and shore based use.

The range includes embarkation and pilots ladders with both rubber and wooden rungs.

We can also supply Jacobs ladders with either wire or fibre rope strings.

These can be manufactured to SOLAS and MED standards if required

We are also able to provide a range of rope nets for various applications. These include scramble nets for both marine and assault course uses, safety nets for ships guard rails, gangways and also for assault courses. These can be manufactured in a wide range of materials with different strengths and mesh sizes.



DEFENCE



DEFENCE

Metal Blocks, NATO Codified

We manufacture a full range of codified steel blocks in galvanised and painted colour finishes. In addition to this they are able to offer a wide range of malleable iron and gun metal blocks.

Some of the more popular stock numbers are listed below, however a more comprehensive range are available upon request.

NATO Stock No.	Type	Head Load
3940/99/5210663	Snatch	2 tonne
3940/99/5210660	Single	2 tonne
3940/99/5210664	Snatch	4 tonne
3940/99/5210661	Single	4 tonne
3940/99/5210665	Snatch	6 tonne
3940/99/5210662	Single	6 tonne
3940/99/4633850	Single	750kg
3940/99/4623860	Double	650kg
3940/99/4119644	Single Gunmetal	150kg
3940/99/4119645	Double Gunmetal	150kg
3940/99/4633880	Light Jackstay Traveller	270kg
3940/99/5394719	Heavy Jackstay Traveller	2 tonne
3940/99/5253989	Heavy Jackstay Traveller	2 tonne



SRBF Sheave Blocks, NATO Codified

We manufacture a full range of codified blocks in SRBF (Synthetic Resin Bonded Fibre), including Non-Magnetic blocks for mine hunting operations.

NATO Stock No.	Type	Head Load
3940/99/5212794	Snatch	1 tonne
3940/99/5212797	Single	1 tonne
3940/99/5212791	Double	1 tonne
3940/99/5212725	Treble	1 tonne
3940/99/5212795	Snatch	2 tonne
3940/99/5212798	Single	2 tonne
3940/99/5212792	Double	2 tonne
3940/99/5212726	Treble	2 tonne
3940/99/1906915	Snatch	4 tonne
3940/99/5212799	Single	4 tonne
3940/99/5212793	Double	4 tonne
3940/99/5212727	Treble	4 tonne
3940/99/5394691	Snatch Non Magnetic	2 tonne
3940/99/408/8255	Snatch Non Magnetic	4 tonne
3940/99/5250092	Stainless Steel Block	137kg



DEFENCE

RAS Equipment

We have a wide range of expertise in the supply of RAS/FAS (UNREP) equipment and packages to both defence departments and equipment manufacturers. We are able to supply a full range of traveller blocks, rigging ropes and equipment as well as signalling bats, wands, flags and light boxes.

All items can be made to NATO standards and marked with the appropriate stock numbers if required.

Some of the more common items are listed below, however for a full list of available equipment please contact our defence department office.



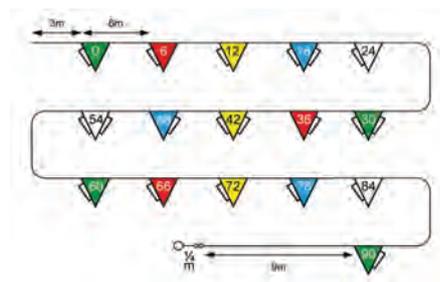
Light Jackstay Equipment, Supply & Receive

NATO Stock No.	Description
3940/99/4633880	Light Jackstay Traveller Block
3940/99/5212794	SRBF Sheave Block, Snatch
3940/99/5212799	SRBF Single Sheave Block, Single
4020/99/7765755	Light Jackstay
4020/99/7765756	In Haul Light Jackstay
4020/99/7765757	Out Haul Light Jackstay
Not Codified	Light Jackstay Test Weights 135kg i.a.w BR67 CH7
0263/99/4149747	Senhouse Slip Hook
0263/99/7216090	Straight Shackle, Screw Pin
0263/99/7216093	Straight Shackle, Screw Pin
6230/00/9264331	RAS Wand Complete With Conical Baton
6230/00/1110190	RAS Wand Filter/Red
6230/00/5048341	RAS Wand Filter/Green
6230/00/5048342	RAS Wand Filter/Amber
2090/99/7007240	RAS Bat Amber Green
2090/99/5614763	RAS Bat Red Green
Not Codified	RAS Distance Line C/W Flags i.a.w BR67 CH7
6260/01/1785559	Lightstick 6", Red
6260/01/1785560	Lightstick 6", Blue
Not Codified	RAS Bag PVC For Lightstores i.a.w BR67 CH7
6530/99/5204347	Lightweight Transfer Stretcher
6530/99/5204418	Mattress/Headrest For Stretcher
1730/99/1437470	Sling, Four Leg For Stretcher
6530/99/5223879	Five Point Casualty Harness
Not Codified	Quickstrop Personnel Recovery Strop
6145/99/1038301	Telephone Line
2040/99/9233869	Paunch Mat 4' 6" x 4' 10"
4020/99/5713024	Gunline 860mm x 2.5mm

DEFENCE

Heavy Jackstay Equipment, Supply

NATO Stock No.	Description
3940/99/5394719	Traveller, Heavy Jackstay
Not Codified	Outhaul, Heavy Jackstay (Made To Measure)
Not Codified	Inhaul, Heavy Jackstay (Made To Measure)
4030/99/0830622	Wire Rope Gripper
Not Codified	RAS Distance Line C/W Flags i.aw BR67 CH 7
6260/01/1785559	Lightstick 6", Red
6260/01/1755560	Lightstick 6", Blue
5808/99/0168832	Telephone Line
2090/99/5614763	RAS Signal Bat Red/Green
2090/99/7007240	RAS Signal Bat Amber/Green
6230/99/9264331	RAS Wand Complete With Conical Baton
Not codified	Temporary Guardrail
Not codified	Jackstay Control Line (Made To Measure)
4020/99/5713024	Gunline 860m x 2.5mm



Heavy Jackstay Equipment, Receive

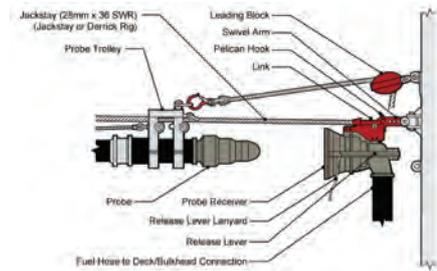
NATO Stock No.	Description
0263/99/4149835	Senhouse Slip, Heavy Jackstay
0263/99/7216096	Straight Shackle, Screw Pin
4030/99/8149390	Quick Release Devise (QRD)
3940/99/1906915	SRBF Snatch Block
Not Codified	Stray Lines (Made To Measure)
2040/99/9233869	Paunch Mat 4' 6" x 4' 10"
Not Codified	Axe
Not Codified	Chopping Block
Not Codified	Maul
2090/99/5614763	RAS Signal Bat Red/Green
2090/99/7007240	RAS Signal Bat Amber/Green
6230/99/9264331	RAS Wand Complete With Conical Baton
Not Codified	Temporary Guardrail



DEFENCE

Abeam Fuel Jackstay Equipment, Receive

NATO Stock No.	Description
2040/00/8585146	Probe Receiver Single
2040/01/1135688	Probe Receiver Double Left Hand
2040/01/1135687	Probe Receiver Double Right Hand
2040/01/1135686	Probe Receiver Double Left and Right Hand
Not Codified	Probe Receiver Hinged Cover Plate, Steel
2040/99/5257298	Probe Swivel Arm
2040/99/5257299	Probe Swivel Joint
Not Codified	Probe Release Lever Lanyard
2040/99/5257325	Adapter Link, Probe
4720/99/4493155	Fuel Hose 6" C/W Fittings Clamp 4.5m To DEFSTAN 22-94 Type 6
Not Codified	Probe Retaining Pendant C/W Shackle & Spring Hook
Not Codified	Remating Line C/W Hook (Length To Suite)
4030/99/5371659	NATO Long Link
4030/99/4149747	Senhouse Slip
0263/99/7216090	Straight Shackle, Screw Pin
Not Codified	Base Plate
Various	Jackstay Wire Rope With End Fitting
2090/99/9569007	RAS Commodity Bat Avcat/Lub Oil
2090/99/3211437	RAS Commodity Bat Dieso/Water
2090/99/5614763	RAS Signal Bat Red/Green
2090/99/7007240	RAS Signal Bat Amber/Green
6230/99/9264331	RAS Wand Complete With Conical Baton
Not Codified	Temporary Guardrail
Not Codified	Hose Steadying Tackle & Straps(Non Pat)
Not Codified	Stray Line
Not Codified	C Spanner
Not Codified	Axe
Not Codified	Maul
Not Codified	Chopping Block
Not Codified	Slip Rope, 28mm Sisal C/W 300mm Reduced Eye
Not Codified	RAS Signal Light Box

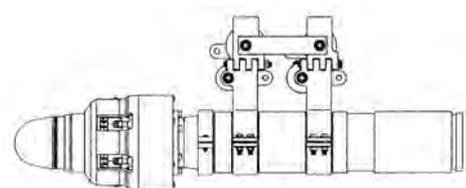


We are able to provide a wide range of equipment to NATO stock numbers or as commercial off the shelf alternatives, for a wide range of applications. The items shown in this catalogue represent a small part of our range of defence products. Please call for further details.

DEFENCE

RAS Tanker Equipment, Supply

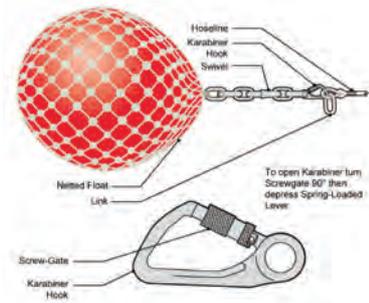
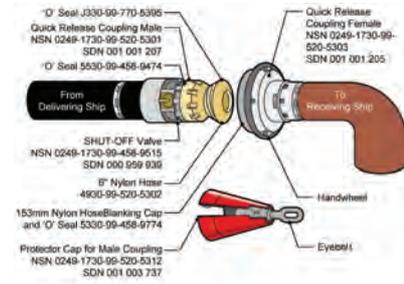
Part No.	Description
Probe Rig Outboard End	
2040/00/8505144	Single Probe Assembly With Carrier
2040/00/6299904	Double Probe Assembly With Carrier
4010/99/5238643	Stress Wire For Probe
4030/99/7216093	Shackle For Hoseline and Outhaul
4010/99/5238645	Recovery Wire 14mm Dia 6 x 36 SWR
4030/99/5434299	Shackle For Hose Trough
4030/99/7216089	Shackle For Stress Wire to Clamp
4010/99/5238646	Hose Pendant Wire Sling
4730/99/5257301	Adaptor, Hose to Probe
4730/99/4589480	Adaptor
2040/99/5318169	Trolley
2040/99/5257324	Split Clamp Inc Nut and Bolt
4730/99/4589463	Hose Trough Single
4730/99/4589454	Hose Trough Double
3940/99/5253989	Hose Trough Traveller Block
4300/99/0830622	Gripper for 28mm Wire Rope
Various	28mm Dia 6 x 36 Jackstay Wire
Jackstay Fuelling Outboard End	
4030/99/5434531	Shackle For Recovery Line To Hose Line
4730/99/4589480	Adaptor For Hose Clamp
4730/99/4589481	Single Hose Clamp
4930/99/7965836	Double Hose Clamp
4030/99/5434533	Shackle For Recovery Line To Hose Line
4010/99/5238649	Hose Line Pendant
5365/99/4149849	Ring
4030/99/7216093	Shackle
4720/99/4589499	Hose 153mm x 4.5m
4720/99/4589498	Hose 153mm x 9m
4730/99/4589515	Shut Off Valve For Outboard End
4930/99/5205301	QRC Coupling Male Mk2
5530/99/4589474	O Ring Seal Inner For QRC
4730/99/4589510	Coupling NATO B End
4930/99/5205312	Protective Cap
4930/99/5374200	Blanking Plate
Not codified	Hose Line, Made To Measure
Communications	
0561/99/1038301	Distance Line c/w Flags In Accordance With BR67 Ch 7
4020/99/5713024	Telephone Line
4020/99/5713024	Gunline 860m x 2.5mm
2090/99/5614763	RAS Signal Bat Red/Green
2090/99/7007240	RAS Signal Bat Amber/Green
6230/99/9264331	RAS Wand Complete With Conical Baton



DEFENCE

Astern Fueling Equipment, Supply And Receive

Part No.	Description
Not Codified	Roller Fairlead
4030/99/5370181	Eye Plate
4030/99/7709716	Roller Shackle
4730/99/4589483	Deck Elbow
4010/99/5238649	Hose Hanging Pendant
4030/99/4149747	Rigging Slip
4930/99/5205303	Quick Release Coupling (QRC)
4930/99/4589487	NATO Long Link
4730/99/4589509	Breakable Spool
4730/99/4589497	Adaptor Piece
4030/99/5051949	Breakable Spool Chisel
4020/99/5713107	Inhaul Rope
2050/99/7965833	Netted Float
Not codified	Hose Line
2090/99/9569007	RAS Commodity Bat Avcat/Lub Oil
2090/99/3211437	RAS Commodity Bat Dieso/Water
2090/99/5614763	RAS Signal Bat Red/Green
2090/99/7007240	RAS Signal Bat Amber/Green
6230/99/9264331	RAS Wand Complete With Conical Baton
Not Codified	Temporary Guardrail
2949/99/0532472	Creeper C/W Lanyard 4020/99/5713172 and Shackle
Not Codified	Axe
Not Codified	Chopping Block
Not Codified	Maul
2090/99/9233869	Paunch Mat 4' 6" x 4' 10"
Not Codified	Wooden Hand Spike
Not Codified	Creeper C/W Weighted Shackle



Guard Rails and Fittings

Part No.	Description
4020/99/6351268	Parafil Rope
4030/99/7572125	Aluminium End Fitting For Parafil Rope
4030/99/5396387	Stainless Steel Turnbuckle Without Slip Hook
4030/99/5396386	Stainless Steel Turnbuckle With Slip Hook
4030/99/5395777	Stainless Steel Shackle

For full details of guard rail stanchion and deck fittings please contact our office.



DEFENCE

Damage Control Equipment

Part No.	Description
2040/99/7878172	Damage Control Clamp 140mm 353mm
2040/99/7878173	Damage Control Clamp 190mm 403mm
2090/99/4559743	6mm Thick Steel Patch Pack With Strongbacks and Bolts
5440/99/5395810	Steel Telescopic Strut 1753mm Extending To 3124mm
5440/99/5395811	Steel Telescopic Strut 1016mm Extending To 1676mm
2040/99/3617439	GRP Splinter Box Large
2040/99/2154579	GRP Splinter Box Medium
2040/99/3394401	GRP Splinter Box Small
5510/99/4616285	Softwood Bung 10 - 20mm, 75mm long
5510/99/4616286	Softwood Bung 20 - 45mm, 150mm long
5510/99/4616287	Softwood Bung 45 - 70mm, 150mm long
5510/99/4616288	Softwood Bung 70 - 95mm, 150mm long
5510/99/4616289	Softwood Bung 95 - 145mm, 150mm long
5510/99/4616297	Softwood Wedge 150mm Long, 75mm Wide, 23mm Thick
5510/99/4616298	Softwood Wedge 250mm Long, 85mm Wide, 46mm Thick
Other Sizes of Wedges and Bungs Are Available In Either Softwood or Hardwood	
5120/99/9104410	Boilermakers Clamp 60mm
5120/99/9104411	Boilermakers Clamp 83mm
4730/99/4371081	Flange, Blank 11.5" for 5" Pipe
4730/99/4371082	Flange, Blank 10.5" for 4" Pipe
4730/99/4371083	Flange, Blank 9" for 3.5" Pipe
4730/99/4371084	Flange, Blank 8" for 3" Pipe
4730/99/4371085	Flange, Blank 7.5" for 2.5" Pipe
4730/99/4371086	Flange, Blank 6.5" for 2" Pipe
Other Sizes of Flanges and Clamps Are Available	
6230/99/4206947	Fluorescent Lantern, Rechargeable
6210/99/4128301	Festoon Lighting 26 Lamps at 1m Interval (45m Overall Length)
6210/99/4128302	Festoon Lighting 16 Lamps at 1m Interval 35m Overall Length)
6230/99/5237224	Right Angle Yellow Torch
6230/99/521/4855	Explosion Proof Torch With Key
5110/99/9105291	Riggers Knife
5110/99/4375839	Sheath For Riggers Knife 100mm
5120/99/9105444	Marlin Spike 9"
5180/99/7552103	Riggers Tool Set

A full range of rigging tools are available



SUBSEA



SUBSEA

Underwater Lifting Equipment

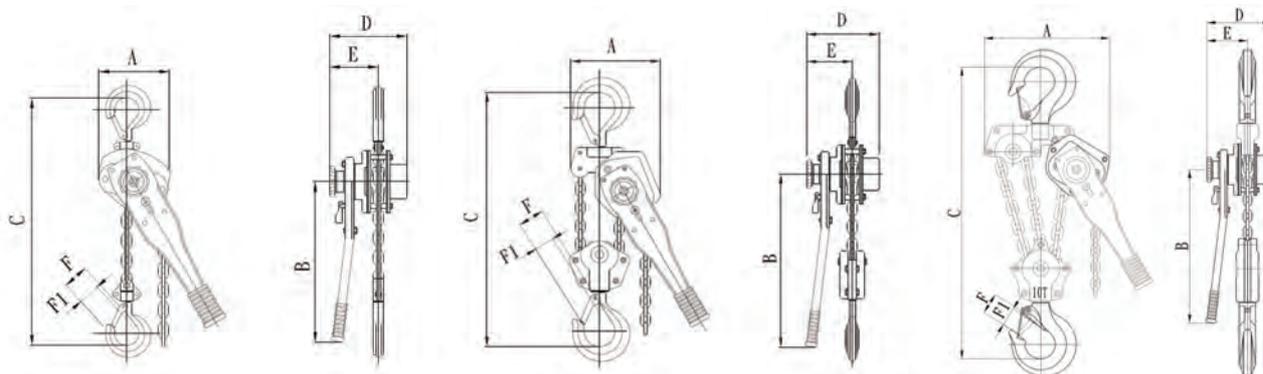
Main Features

- Range: 800kg – 10000kg
- Twin cam shaped pawl design
- Proven track record
- Double switch brake mechanism
- Marine specific friction discs
- Meets and exceeds IMCA DO28 Rev 1 guidance notes for offshore lever hoists
- Light load protection at 2% of the rated capacity
- Anti-corrosive protection to ensure reliable long term use
- External corrosion protection
- Adaptable to use both inverted and horizontally
- Brake chamber protection from outside contamination
- High performance premium grease
- Stainless steel fixings and fasteners
- -50°C to +50°C operating temperature range
- Overload protection
- Adjustable chain end anchorage



Chain Hoists

Part No.	Capacity tonne	Effort (kg)	Effort (kg) with ext'n Handle	Dimensions (mm)							Load Chain			Mass kg @ std HOL
				A	B	C	D	E	F	F1	Diameter (mm)	No. of Falls	Standard HOL (m)	
SS-0080	0.8	23		128	240	275	158	99	30	26	ø6.3	1	3	8.52
SS-0150	1.5	26		154	360	320	172	104	38	34	ø7.1	1	3	11.85
SS-0300	3.0	38	22	182	360	400	195	108	43	38	ø10.0	1	3	21.3
SS-0600	6.0	40	23.5	242	360	570	195	108	57	52	ø10.0	2	3	34.6
SS-1000	10.0	47	27.5	370	360	630	195	108	71	56	ø10.0	3	3	45.9

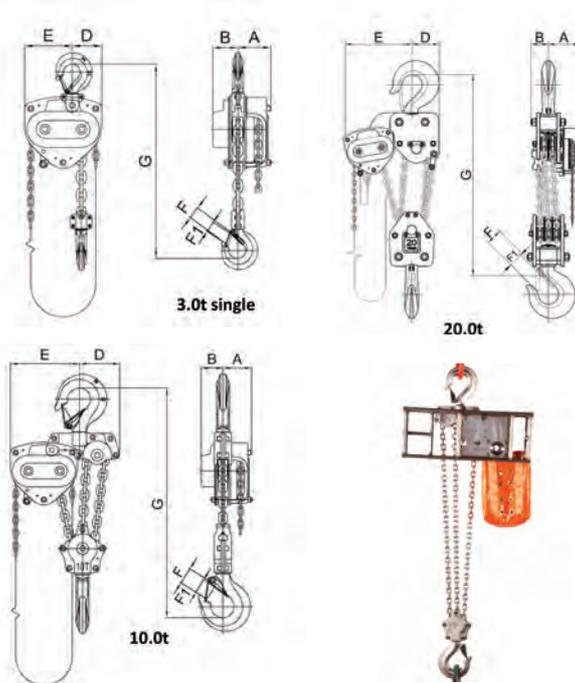
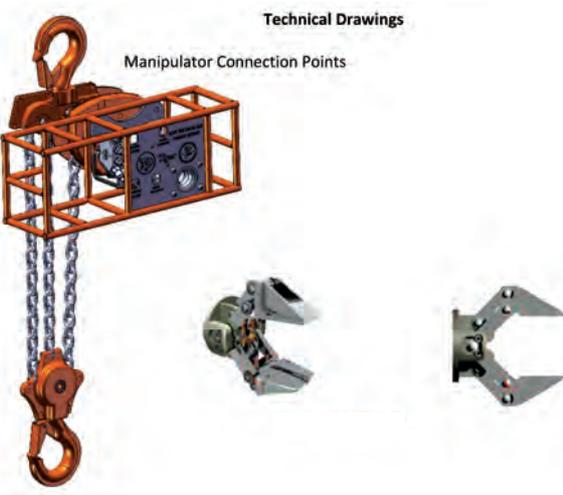


SUBSEA

Tiger ROV Chain Blocks

Main Features

- Available in 3.0t, 10.0t and 20.0t capacity
- Fully corrosion protected exclusively by NiTEC
- Three choices of interface:
 - Hydraulic hot stab connection type A dual port
 - Rotary torque receptacle classes 1,2 & 3
 - Manual fishtail direct drive
- Compliant with BS ISO 13628-8:2002 & of BS ISO 13628-1:2005
- Stainless steel 316 framework and handle
- Proven subsea brake components
- Heavy duty flexible chain bag c/w stainless steel mounting frame
- 4 point manipulator connection points
- Compact and light weight
- Balanced design for easy handling and installation
- Subsea suitable bearings for top and bottom hook load sheaves
- Marine specific friction discs
- Subsea brake design
- Bespoke chain lengths to meet exact customer requirements
- Full individual spares back up
- Each unit is fully tested and certified before delivery



Chain Hoists

Part No.	Capacity tonne	Effort (kg)	Dimensions (mm)							Load Chain			Mass kg @ std HOL
			A	B	D	E	F	F1	G	Diameter (mm)	No. of Falls	Standard HOL (m)	
CB-0300	3.0	38	109	84	98	157	43	38	550	ø10.0	1	3	32.5
CB-1000	10.0	40	109	84	153	263	60	54	660	ø10.0	3	3	62.3
CB-2000	20.0	43	160	90	140	350	90	70	1050	ø10.0	6	3	180.0

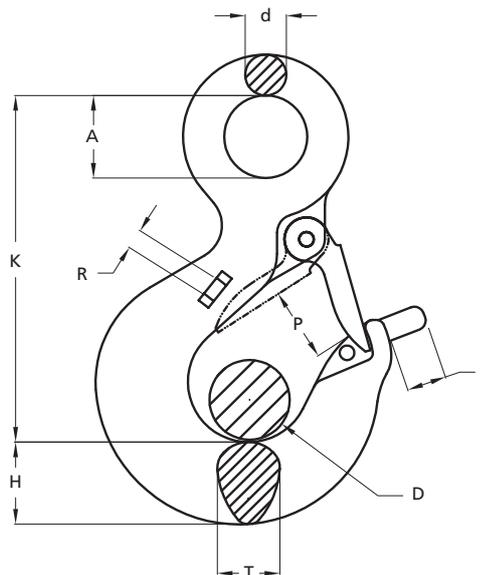
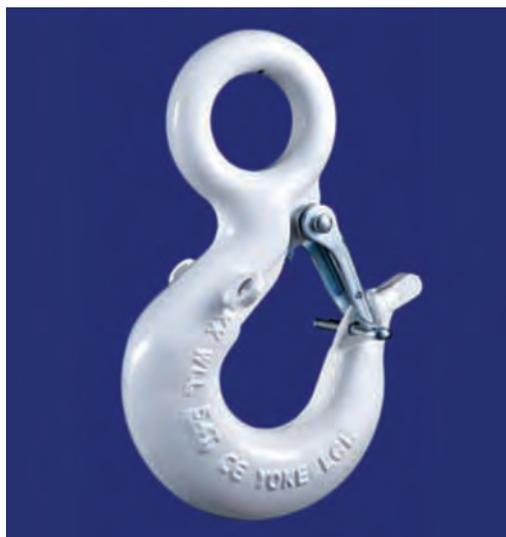
ROV Hoists

Part No.	Capacity tonne	Max Torque (Nm)	Revs per 300mm Travel	Mass Out of Water (kg) (Includes Chain Block @ std HOL)		
				Hot Stab	Torque Tool	Fishtail
CB-0300	3.0	45	55	60.5	57.5	53.5
CB-1000	10.0	50	165	90.3	87.3	83.3
CB-2000	20.0	55	340	208.0	205.0	201.0

SUBSEA

ROV Eye Sling Hook

- Designed specifically for ROV application
- Manufactured with the highest quality steel available
- Proof tested to 2 times the safe working load - test certs are provided
- Painted white to ensure ease of sight in water



Part No.	WLL tonne	Dimensions (mm)									Weight kg
		A	D	H	K	P	T	d	E	R	
B8-921-03	3.0	32	25	29	122	25	24	15	20	5	1.0
B8-921-05	5.0	40	31	37	149	31	31	18	20	8	2.1
B8-921-07	7.0	51	39	46	192	39	37	24	20	8	4.0
B8-921-11	11.0	62	57	58	232	57	48	28	30	5	7.0
B8-921-15	15.0	72	62	66	256	62	56	32	30	8	9.4
B8-921-22	22.0	90	81	77	318	81	68	40	50	10	18.6
B8-921-30	30.0	90	83	92	357	83	76	45	50	10	31.2

Minimum Breaking Load is 4 times the Working Load Limit
 Maximum Proof Load is 2 times the Working Load Limit

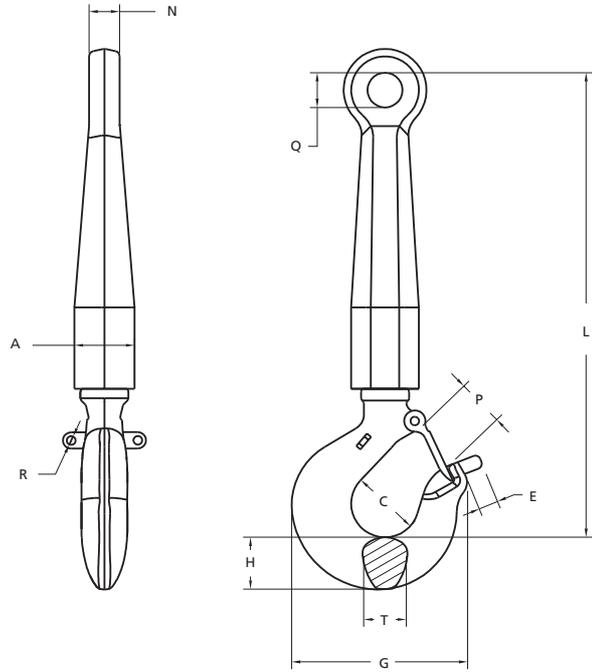
Part No.	WLL tonne	Dimensions (inch)									Weight lbs
		A	D	H	K	P	T	d	E	R	
B8-921-03	3.0	1.26	0.98	1.14	4.80	0.98	0.95	0.59	0.78	0.31	2.2
B8-921-05	5.0	1.57	1.22	1.46	5.87	1.22	1.22	0.71	0.78	0.31	4.6
B8-921-07	7.0	2.00	1.54	1.82	7.56	1.54	1.46	0.95	0.78	0.31	8.8
B8-921-11	11.0	2.44	2.24	2.28	9.13	2.24	1.89	1.10	1.18	0.31	15.6
B8-921-15	15.0	2.84	2.44	2.60	10.10	2.44	2.20	1.26	1.18	0.31	22.7
B8-921-22	22.0	3.54	3.19	3.01	12.50	3.19	2.68	1.57	1.96	0.39	40.9
B8-921-30	30.0	3.54	3.27	3.62	14.10	3.27	2.99	1.77	1.96	0.39	68.6

Minimum Breaking Load is 4 times the Working Load Limit
 Maximum Proof Load is 2 times the Working Load Limit

SUBSEA

ROV Shank Hook

- Designed specifically for ROV applications
- Manufactured with the highest quality steel available
- Individually stamped with the safe working load
- Proof tested to 2 times the safe working load - test certs are provided
- Painted white to ensure ease of sight in water



Part No.	WLL tonne	Dimensions (mm)											Weight kg
		A	N	C	T	P	G	R	E	H	Q	L	
B8-931-05	5.4	55	28	38	33	31	130	8	20	37	32	404	6.0
B8-931-08	8.0	55	28	49	42	39	166	5	20	46	32	427	7.6
B8-931-11	11.5	65	40	62	48	57	196	8	30	58	50	589	13.7
B8-931-16	16.0	65	40	65	56	62	221	8	30	66	50	586	16.2
B8-931-22	22.0	85	52	71	68	81	277	10	50	77	65	685	31.5
B8-931-32	31.5	85	52	87	76	83	353	10	30	92	65	728	44.6

Minimum Breaking Load is 4 times the Working Load Limit
 Maximum Proof Load is 2 times the Working Load Limit

Part No.	WLL tonne	Dimensions (inch)											Weight lbs
		A	N	C	T	P	G	R	E	H	Q	L	
B8-931-05	5.4	2.16	1.10	1.53	1.31	1.22	5.12	0.31	0.78	1.46	1.25	15.90	13.2
B8-931-08	8.0	2.16	1.10	1.94	1.66	1.54	6.54	0.31	0.78	1.82	1.25	16.81	16.8
B8-931-11	11.5	2.56	1.57	2.46	1.88	2.24	7.72	0.31	1.18	2.28	1.96	22.40	30.2
B8-931-16	16.0	2.56	1.57	2.59	2.19	2.44	8.70	0.31	1.18	2.60	1.96	23.07	35.7
B8-931-22	22.0	3.35	2.04	2.81	2.69	3.19	10.91	0.39	1.96	3.01	2.55	26.96	69.3
B8-931-32	31.5	3.35	2.04	3.44	3.00	3.27	13.90	0.39	1.96	3.62	2.55	26.98	98.3

Minimum Breaking Load is 4 times the Working Load Limit
 Maximum Proof Load is 2 times the Working Load Limit

SUBSEA

Rennie 9 tonnes

- Proof loaded to 18 tonnes
- Finish: Red oxide
- Drawing no. GMS321-1A
- Order Code: GRAPRENNELGE

Rennie 13 tonnes

- Proof loaded to 26 tonnes
- Finish: Red oxide
- Drawing no. GMS320-1A
- Order Code: GRAPRENNESG



Detrenching Grapnel

- Fitted with long prongs - 900mm deep
- Self weight: 1406kg
- Can be fitted with short prong as shown below
- For spare pins see below
- Drawing no. GMS310-1A
- Order Code: GRAPDETCR



Short Prong

- For use with detrenching grapnel
- Self weight: 210kg
- Drawing no. GMS310-3A
- Order Code: GRAPDEPRGSHORT



Shear Pins

- For use with detrenching grapnel
- Drawing no. GMS310-4A
- Order Code: GRAPDEPIN



SUBSEA

Flatfish (short)

- Finish: Red oxide
- Proof loaded to 26 tonnes
- Self weight: 310kg
- Drawing No. GMS330-1A
- Order Code: GRAPFLFSGCUT/SHORT

Flatfish (long)

- Finish: Red oxide
- Proof loaded to 26 tonnes
- Self weight: 325kg
- Drawing No. GMS331-1A
- Order Code: GRAPFLFSGCUT/LONG



Flatfish, Straight Blade

- Used with long and short Flatfish
- Finish: Plain oiled
- Supplied in sets of 4
- Drawing No. GMS334-1A
- Order Code: GRAPFLBLDARM



Flatfish, Curved Blade

- Used with long and short Flatfish
- Finish: Plain oiled
- Supplied in sets of 2
- Drawing no. GMS333-1A
- Order Code: GRAPFLBLDLWT

Flatfish Glove

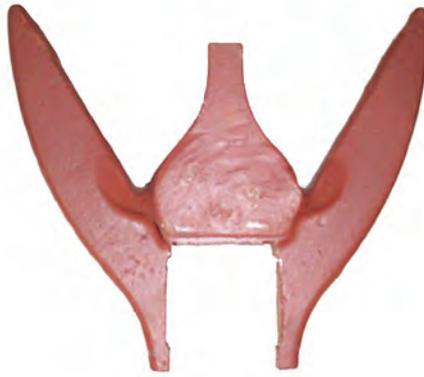
- Used with long and short Flatfish
- Finish: Cast Iron, plain
- Drawing no. GMS332-1A
- Order Code: GRAPFLGLVSMALL



SUBSEA

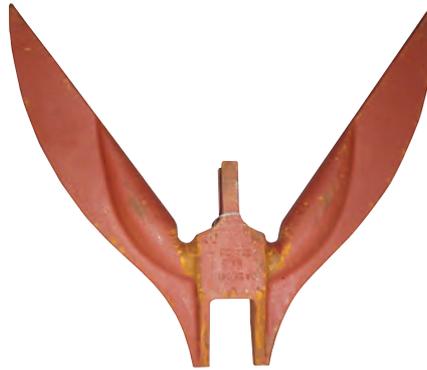
Small Sliding Prong

- Used in sliding prong grapnel assembly
- Finish: Red oxide
- Self weight: 14kg
- Drawing no. GMS341-1A
- Order Code: GRAPSLPRGA



Large Sliding Prong

- Used in sliding prong grapnel assembly
- Finish: Red oxide
- Self weight: 105kg
- Drawing no. GMS342-1A
- Order Code: GRAPSLPRGC



Spearpoint (Small)

- Finish: Red oxide
- Proof loaded to 15 tonnes/prong
- Self weight: 150kg
- Drawing no. GMS350-1A
- Order Code: GRAPSPEAR150



Spearpoint (Large)

- Finish: Red oxide
- Proof loaded to 15 tonnes/prong
- Self weight: 250kg
- Drawing no. GMS351-1A
- Order Code: GRAPSPEAR250

SUBSEA

Gifford 13 tonnes

- Assembly comprises 4 hooks with shackle each end
- Finish: Red oxide
- Proof loaded to 26 tonnes
- Self weight: 163kg
- Drawing no. GMS301-1A
- Order Code: GRAPGIFFDSG



Gifford 17 tonnes

- Assembly comprises 4 hooks
- Finish: Red oxide
- Proof loaded to 34 tonnes
- Self weight: 90kg
- Drawing no. GMS300-1A
- Order Code: GRAPGIFFDLGE



Shackles

- Available in 5 sizes
- 6.5t, 9.5t, 12t, 17t & 25t
- Finish: Plain oiled
- Drawing no. GMS500-1A
- Order Code:

6.5T	GEARSHDEECHI/6.5T
9.5T	GEARSHDEECHI/9.5T
12T	GEARSHDEECHI/12T
17T	GEARSHDEECHI/17T
25T	GEARSHDEECHI/25T



Chain Stopper

Grade 80 material

Finish: Plain oiled self colour

Small Chain Stopper	SWL 7.5 tonnes
Chain sizes	From 7mm to 32mm over 3.5m EWL
Order Code	STOPCHAIN7.5T/3.5M

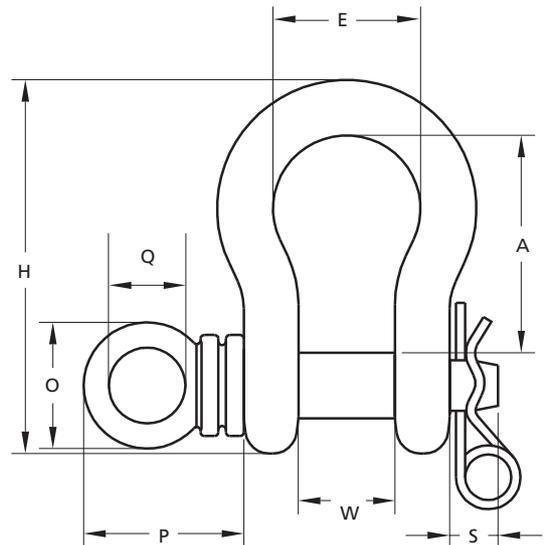
Large Chain Stopper	SWL 12 tonnes
Chain Sizes	From 13mm to 32mm over 4.5m EWL
Order Code	STOPCHAIN12T/4.5M



SUBSEA

ROV Anchor Shackle, with Safety Pin

- Designed specifically for ROV application
- Manufactured with the highest steel available
- Individually stamped with the safe working load
- Proof tested to 2 times the safe working load - test cards are provided
- Painted white to ensure ease of sight in water



Part No.	Nominal Size		WLL tonne	Dimensions (mm)									Weight kg
	Inch	mm		P	O	W	A	E	T	H	S		
B8-911-22	7/8	22	6.5	63	50	38	86	58	10	148	19	1.7	
B8-911-26	1	26	8.5	65	50	44	96	69	10	166	20	2.4	
B8-911-28	1-1/8	28	9.5	88	70	46	111	74	12	190	21	3.5	
B8-911-32	1-1/4	32	12.0	88	70	54	121	84	12	210	25	4.8	
B8-911-36	1-3/8	36	13.5	96	75	59	143	92	15	232	27	6.6	
B8-911-38	1-1/2	38	17.0	98	75	60	146	99	15	254	27	8.2	
B8-911-45	1-3/4	45	25.0	114	90	73	178	127	20	313	30	14.2	
B8-911-50	2	50	35.0	132	106	83	197	146	20	347	30	23.5	

Minimum Breaking Load is 5 times the Working Load Limit
 Maximum Proof Load is 2 times the Working Load Limit

Part No.	Nominal Size		WLL tonne	Dimensions (Inch)									Weight lbs
	Inch	mm		P	O	W	A	E	T	H	S		
B8-911-22	7/8	22	6.5	2.48	1.96	1.50	3.39	2.28	0.39	5.91	0.74	4.0	
B8-911-26	1	26	8.5	2.55	1.96	1.73	3.78	2.68	0.39	6.57	0.78	5.3	
B8-911-28	1-1/8	28	9.5	3.46	2.75	1.81	4.37	2.91	0.47	7.52	0.82	7.9	
B8-911-32	1-1/4	32	12.0	3.46	2.75	2.12	4.76	3.30	0.47	8.07	0.98	10.6	
B8-911-36	1-3/8	36	13.5	3.77	2.95	2.32	5.28	3.62	0.59	9.13	1.06	15.0	
B8-911-38	1-1/2	38	17.0	3.85	2.95	2.36	5.75	3.90	0.59	10.00	1.06	18.1	
B8-911-45	1-3/4	45	25.0	4.48	3.54	2.87	7.00	5.00	0.78	12.32	1.18	37.0	
B8-911-50	2	50	35.0	5.19	4.17	3.27	7.76	5.75	0.78	13.66	1.18	52.0	

Minimum Breaking Load is 5 times the Working Load Limit
 Maximum Proof Load is 2 times the Working Load Limit

SUBSEA

Mushroom Anchors

- Fitted with top bow shackle
- Finish: Black painted
- Drawing no. GMS510-1A
- Order Code:

100kg	ANCHMUSHM100
150kg	ANCHMUSHM150
250kg	ANCHMUSHM250
300kg	ANCHMUSHM300
500kg	ANCHMUSHM500



Danforth Anchors

- Self weight 750kg
- High hold power
- Proof load tested to 20298kg
- Finish: Black painted
- Drawing no. GMS370-1A
- Order Code: ANCHDANFH750KG



BTL Stopper

- Finish: Galvanised
- 8mm diameter wire rope
- Drawing no. GMS602-1A
- Order Code: STOPBTLES7



Thimble and Link

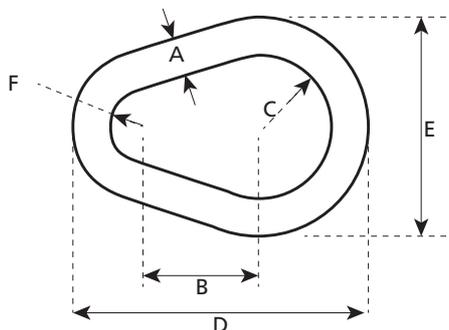
- Available in three sizes
 - Finish: Galvanised
 - Order code:
- | | |
|------|-----------------|
| 32mm | RFITLKTHBSPR/32 |
| 41mm | RFITLKTHB6X3/41 |
| 44mm | RFITLKTHBSPR/44 |



SUBSEA

Masterlink

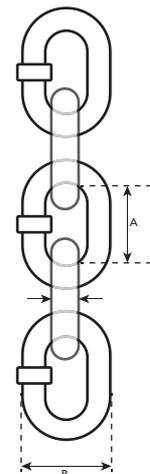
- Grade 8 alloy steel component
- High tensile strength and wear resistance
- Available from 2.4 to 40 tonnes



Part No.	WLL tonne	Dim in mm						Weight appr. kg
		A	B	C	D	E	F	
16.A.6	3.8	16	77	35	162	102	18	0.6
20.A.7	5.8	20	112	45	220	130	23	1.3
22.A.6	7.6	22	112	45	224	134	23	1.6
25.A.6	10	25	125	50	250	150	25	2.3
28.A.6	12.7	28	137	55	276	166	28	3.2
32.A.6	15.2	32	180	70	349	202	35	5.3
38.A.6	25	38	180	70	361	216	35	7.6

Chain

- Grade 8 alloy steel
- Simple to assemble with mechanical components
- High tensile strength and wear resistance



Nominal Size (d) Diameter mm	WLL tonne	Nominal Pitch (A)m	Dim in mm		Weight appr. kg/m
			Maximum External Width (B)	Minimum Internal Width	
13	5.4	39	66	18	3.7
16	8	48	72	22	5.6
20	12.5	60	82	27	7.8
22	15.5	66	105	30	11
26	21.6	78	105	35	15.2
32	32	96	105	43	23

SUBSEA

Cable Sheaves

Wide Sheave Snatch Block

- Side opening gate
- Safe Working Load 5 tonnes
- Finish: Painted
- Fitted with Bronze Bush
- Grease lubricated on sheave and head fitting
- Drawing no. GMS404-1A
- Order Code: GEARSHEAVSNTCH/5T



Standard Snatch Block

- Side opening gate
- Safe working load 5 tonnes
- Finish: Painted
- Fitted with Bronze Bush
- Grease lubricated on sheave and head fitting
- Drawing no. GMS403-1A
- Order Code: GEARSHEAVWIDE/5T

Under-run Sheave

- Safe working load 3 tonnes
- Finish: Red oxide
- Drawing no. GMS401-1A
- Order Code: GEARSHEAVUNDERUN



Under-run Sheave

- Side opening gate
- Safe Working Load 200kg
- Finish: Galvanised
- Fitted with Bronze Bush
- Drawing no. GMS402-1A
- Order Code: GEARSHEAVCABLE



SUBSEA

GMI Sheave Blocks

- Galvanised Malleable Iron
- Available for fibre and wire rope
- Fibre rope blocks fitted with either plain or SORB bearing
- Wire rope blocks fitted with SORB or ball bearing
- Red head fitting denotes wire rope block
- Hook or swivel oval eye as standard head fitting
- Available as single, double and treble sheave
- Alternative head fittings available



Block Size		For Rope dia mm	Safe Working Load (tonne)		
mm	Inch		Single	Double	Triple
76	3	12	0.2	0.4	0.5
102	4	16	0.4	0.9	1
127	5	18	0.5	1.1	1.5
152	6	24	1	2	2
177	7	26	1.1	1.3	2.4
203	8	28	1.2	2.6	3

Trolleys

- Fitted with polyurethane swivel castors for easy movement
- 2 castors fitted with foot brakes to hold the trolley in place
- Rubber lined 'V' section allows support of various sizes of repeaters
- 4 upper shackle points for lifting or tie down
- Drawing no. GMS101-1A
- Order Code: GENTROLRREPTR



- Fitted with polyurethane swivel castors for easy movement
- 2 castors fitted with foot brakes to hold the trolley in place
- Rubber lined 'V' section allows support of various sizes of repeaters
- Upper shackle points for lifting or tie down
- Drawing no. GMS102-1A
- Order Code: GENTROLBUNIT

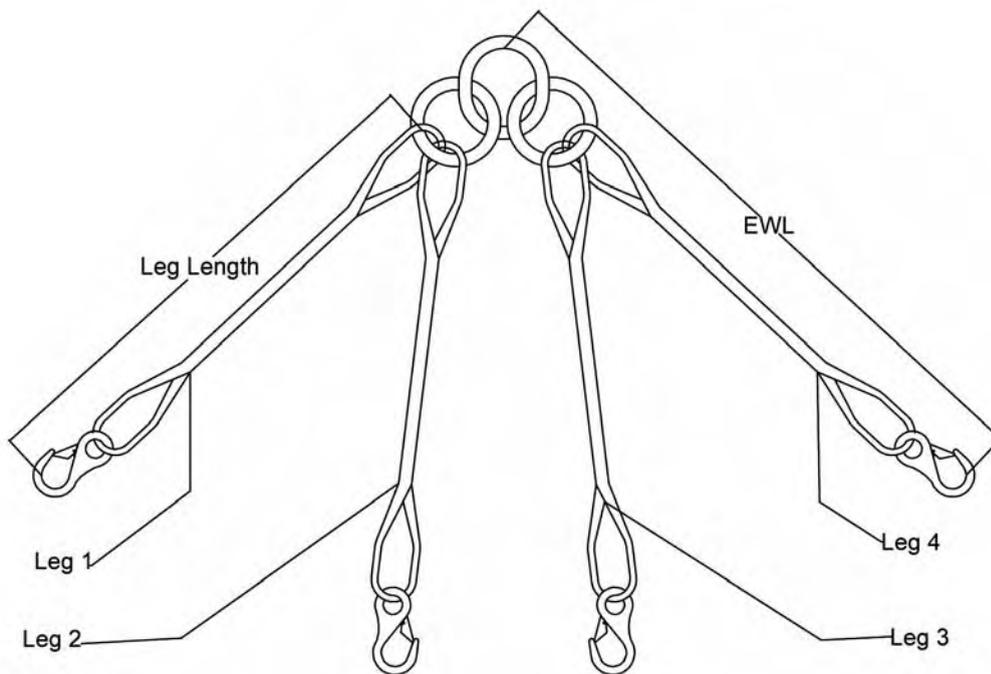


JETSKI / TENDER / RESCUE BOAT SLING ASSEMBLY ENQUIRY SHEET

Drawing Number:

Number of Legs		
	EWL	Leg Length
Leg 1		
Leg 2		
Leg 3		
Leg 4		

Is the sling to be used for man riding YES / NO	
Type of end fittings	Shackle / Hook
Working load limit	kg / tonne
Dimension of opening on crane hook	mm
Type of material for legs	Rope / Webbing
Type of masterlink	Stainless Steel / Webbing



Sketch of positions of deck attachment points with dimensions.

Sketch of deck fittings for sling attachment, with dimensions

To be signed prior to manufacture.

Approved by:

Date:



Email: sales@am-dmservices.co.uk

Fax: +44 (0) 1202 813330

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TERMS & CONDITIONS OF SALE

1. INTRODUCTION:

In these conditions of sale:

- a) "The Company" shall mean the appropriate AM Defence & Marine Ltd company, by which the Goods are sold or Services performed.
- b) "The Buyer" shall mean the person, firm or Company to whom "The Company" agrees to sell the Goods or to perform the Services as agreed.
- c) "The Goods" means every or any item which the Customer has agreed to buy from the Company under the Contract.
- d) The expression "liability whatever" shall include, without limitation, liability in tort (including negligence), liability in contract and liability for breach of statutory duty, including liability in each and every case for consequential loss (including loss of profit or economic loss) or damages of any kind howsoever caused or arising.
- e) "Services" shall mean any work or labour done or service rendered by the Company for or on behalf of the Buyer.

2. INCORPORATION OF CONDITIONS

All contracts of sale of Goods and contracts for the supply of services incorporate these Conditions so far as such Conditions are not varied by any special terms or Conditions agreed in writing between the parties, and any Terms and Conditions of the Buyer which are inconsistent with these Conditions shall have no effect. Any variation of the contract will become binding only if confirmed in writing by the Company.

3. DESCRIPTION AND SUITABILITY

- a) All descriptions and specifications contained in the Company's catalogues, brochures and other published matter are approximate only and do not form any part of any contract or collateral liability upon the part of the Company, being intended merely to present a general description of the Goods as described therein.
- b) All, if any, statements, recommendations and advice given (whether before or after the Contract) by the Company or its employees or agents to the Customer or its employees or agents as to any matter relating to the Goods are given without responsibility and shall not give rise to any liability whatever on the part of the Company unless reduced to writing.

4. PRICE

- a) The price for the Goods is that prevailing at the date of despatch of the Goods and all prices are subject to alteration from time to time without prior notice. Unless otherwise stated the price is exclusive of delivery charges, value added tax and any other tax, charge or duty which shall be payable by the Customer.
- b) A minimum charge of £50.00 will be made on all Contracts.

5. PAYMENT

- a) Time of payment shall be of the essence.
- b) Unless otherwise agreed in writing by the Company the price of the Goods is payable by the Customer on placing its order. Where the Company agrees that payment may be made at a later date payment is due within 30 days of the date of the Company's invoice. Where the Company has allowed credit to a Customer if, in the discretion of the Company, the financial condition of the Customer at any time does not justify credit, the Company may suspend further deliveries and require full or partial payment in advance without incurring any liability whatever to the Customer.
- c) The Company reserves the right to charge interest at the rate of 2% per month (or part thereof) on any late payment.

6. DELIVERY

- a) The Company shall endeavour to meet any agreed delivery date or dates but any such date or dates are an estimate only and the Company shall incur no liability whatever for any delay in delivery.
- b) The Company shall arrange delivery to the Customer's premises and delivery shall be deemed to take place upon arrival of the Goods at those premises. Signature of any delivery note by the Customer or its agent or employee or by any independent carrier shall be conclusive proof of delivery. (The Customer shall be responsible for unloading the Goods without causing delay to the carrier and the Company shall incur no liability whatever for damage caused to the Goods on the course of unloading).
- c) If the Customer refuses to take possession of the Goods on arrival at the premises, the Company shall be entitled to immediate payment of all outstanding sums and to store the Goods at the risk and expense of the Customer.
- d) If the Customer shall have failed to take possession of the Goods within one month of the Company seeking to deliver the Goods at the premises of the Customer, the Company shall be entitled to dispose of the Goods for such price and on such terms as it may determine.
- e) The Company shall be entitled to deliver the Goods by instalments. Each delivery shall constitute a separate Contract and failure by the Company to deliver any one or more of the instalments in accordance with the Conditions or any claim by the Customer in respect of any one or more instalments shall not entitle the Customer to treat the Contract as a whole as repudiated.
- f) The Customer shall inspect and test the Goods on delivery and shall notify the Company in writing and the carrier within 48 hours of delivery of any defect, damage or shortage failing which it shall be conclusively presumed that the Goods are not damaged or lost and are satisfactory in every respect and have been accepted by the Customer. If written notification is made as aforesaid and the Company is satisfied that the Goods were defective, damaged or lost prior to delivery, the Company shall within a reasonable time replace or at its option repair free of charge any defective, damaged or lost Goods.

7. RISK

Save as otherwise provided by condition 6c risk in the Goods passes to the Customer upon delivery.

8. RETENTION OF TITLE

The property in the Goods shall remain in the Company until the Customer has paid to the Company all sums owing in respect of the Goods or otherwise owing to the Company pursuant to the contract and all sums owing in respect of goods or otherwise owing to the Company pursuant to any other contract. Until such time:

- a) The Customer shall hold the Goods as fiduciary agent and bailee for the Company and shall store the Goods in such a way to enable them to be identified as the property of the Company.
- b) The Customer irrevocably grants to the Company the right for it and its agents at any time to enter any place where the Goods are or are thought to be and to take repossession of the same;
- c) The Customer shall insure the Goods against fire and theft and other usual risks and shall, if required to do so by the Company, prove to the Company that such insurance has been effected and cause notice of the Company's interest in the Goods to be noted on the relevant insurance policy, failing which the Company may in its discretion take out insurance for the Goods and charge the Customer therefore;

TERMS & CONDITIONS OF SALE

- d) If the Customer disposes of the Goods the Customer shall account to the Company with the proceeds of disposal (to the extent of sums owing to the Company) and shall keep such proceeds separate from any moneys of the Customer;
- e) If the Customer mixes the Goods with other goods the property in the resulting products ("the New Goods") shall belong to the Company and if the Customer disposes of the New Goods the Customer shall account to the Company with the proceeds of disposal (to the extent of sums owing to the Company) and shall keep such proceeds separate from any moneys of the Customer;
- f) The Customer irrevocably grants to the Company the right for it or its agents at any time to enter any place where the New Goods are or are thought to be and to take repossession of the same provided that if the Company shall dispose of the New Goods it shall account to the Customer with the proceeds of disposal after deducting any sums owing to the Company (including the costs of taking possession of, transporting, storing, insuring and disposing of the New Goods)

9. WARRANTY

- a) The Company warrants that the Goods will be free from defects in workmanship and material for twelve months from delivery and the Company will repair or at its option replace any Goods found to be defective within such period.
- b) Save as specified in condition 9a above all terms, warranties, conditions and representations whether written or oral, express or implied, statutory or otherwise are hereby excluded to the fullest extent permitted by law.

10. LIABILITY

Save as provided in condition 9a above and save for death or personal injury caused by its negligence the Company shall be under no liability whatever to the Customer in respect of or arising out of the Goods/Services or any defect in, failure of, or unsuitability or unfitness for any purpose of the Goods.

11. INDEMNITY

- a) The Customer shall indemnify the Company in full and on demand against any cost, claim, expense, loss or liability which the Company may suffer or incur directly or indirectly as a result of any act or omission of the Customer or its employees or agents in relation to the Goods or their use.
- b) If the Goods are manufactured to a design or specification supplied by the Customer or its agent the Customer shall indemnify the Company in full and on demand against any cost, claim, expense, loss or liability which the Company may suffer or incur as a direct or indirect result of using such design or specification.
- c) Customer's property in the Company's possession for whatever reason including inspection repair and test will be held at Customer's risk. The Company shall be under no liability for any loss or damage however arising, resulting from the use, processing or conversion of the Goods whether they be tested or not and the buyer will indemnify the Company in respect of any claim by a third party for loss or damage resulting aforesaid.

12. INTELLECTUAL PROPERTY

All manuals, specifications, patterns, models, drawings, plans, software, data or information concerning the Goods or their creation or development are strictly confidential and shall remain the sole property of the Company (whether or not commissioned by the Customer).

13. FORCE MAJEURE

The Company shall not be liable for any failure to perform or delay in performing its obligations hereunder where such failure or delay results from circumstances beyond its reasonable control

including without limitation act of God, war, riot, governmental action, labour disputes, shortages in material and delay in delivery to the Company of any goods or materials

14. INSOLVENCY AND DEFAULT OF THE CUSTOMER

If the Customer defaults in or commits any breach of any of its obligations to the Company or if the Customer enters into a deed of arrangement or commits an act of bankruptcy or compounds with his creditors or if a receiving order is made against him or (being a company) it shall pass a resolution or the court shall make an order that the Customer shall be wound up or if a receiver shall be appointed of any of its assets or undertaking or if an administration order is made in respect of the Customer or if circumstances shall arise which entitle the court or a creditor to appoint a receiver, manager or administrator or which entitle the court to make a winding up order against the Customer, or if the Customer takes or suffers any similar action in consequence of a debt due by the Customer to any person, the Company may stop any Goods in transit and suspend further deliveries of the Goods and further performance of the Contract and by notice in writing to the Customer forthwith determine the Contract without prejudice to the licence granted to the Company and its agents under condition 8b.

15. WAIVER

The omission to exercise or any delay in exercising any of its rights or remedies under the Contract shall not constitute a waiver of any such rights or remedies or any other rights or remedies by the Company and any waiver by the Company or any breach of the Contract by the Customer shall not constitute a waiver of any subsequent breach of the same or any other provision. No waiver shall be effective unless in writing signed by the Company.

16. VARIATION

No variation of the Conditions shall be binding unless agreed in writing and signed by the Customer and the Company.

17. ASSIGNMENT

The Customer shall not assign or purport to assign the Contract or any of its rights or obligations hereunder without the prior written consent of the Company.

18. RIGHTS CUMULATIVE

Any rights of the Company hereunder are without prejudice and in addition to any other claims, remedies or rights available to the Company.

19. ENTIRE AGREEMENT

The conditions save as may be expressly varied in writing set out the entire agreement between the Company and the Customer concerning the subject matter of the Contract and supersede any prior agreement or arrangement between them.

20. SEVERANCE

If any condition (or part thereof) of the conditions shall be found by a court or other body of competent jurisdiction to be unenforceable, the enforceability of the remaining conditions (and the remaining part of the condition concerned as the case may be) shall not in any way be affected.

21. GOVERNING LAW

The conditions shall be governed by and interpreted in all respects in accordance with the laws of England.

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