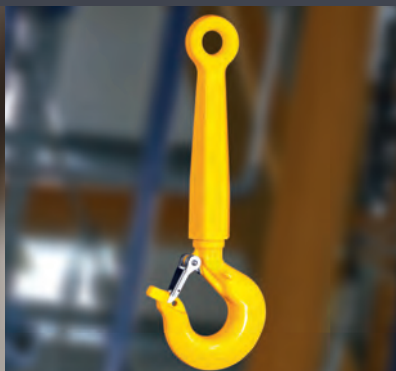




OFFSHORE

Version 2.2



MANAGEMENT SYSTEM CERTIFICATE

Certificate No:
204578-2016-AQE-GBR-UKAS

Initial certification date:
08 August 2007

Valid:
08 August 2016 - 08 August 2019

This is to certify that the management system of

William Hackett Holdings Ltd

William Hackett Chain Products Ltd
Maypole Fields, Cradley, Halesowen, West Midlands, B63 3QE, United Kingdom

William Hackett Lifting Products Limited
Oak Drive, Lionheart Enterprise Park, Alnwick, Northumberland, NE66 2EU

has been found to conform to the Management System standards:

ISO 9001:2015/ ISO 14001:2015

This certificate is valid for the following scope:

Manufacture and supply of welded and mechanically joined chained assemblies and lashing assemblies. Manufacture and supply of lifting and hoisting equipment, fittings and accessories. Manufacture and supply of agricultural equipment.

Place and date:
London, 30 January 2017



For the issuing office:
**DNV GL Business Assurance UK Limited,
Palace House, 3 Cathedral Street, SE1 9DE,
London, United Kingdom**

R. Redmond

Richard Redmond
Management Representative

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.
ACCREDITED UNIT: DNV GL Business Assurance UK Limited, Palace House, 3 Cathedral Street, London SE1 9DE. dnvgl@dnv.com
TEL: +44(0) 207 357 6069, assurance.dnvgl.com

All of the business activities of William Hackett are controlled within a quality management system certified in accordance with ISO 9001.

William Hackett has developed market leading product traceability and certification systems to ensure the complete fulfilment of all customer quality requirements.

William Hackett is proud to be a Lifting Equipment Engineers Association Full Member.

Please consider the environment when it comes to disposing of this brochure.

Please recycle when you are finished with this item. For more information please visit: www.recycle-more.co.uk

Contents

HA Master Links	2
HA Quad Assemblies	3
DNV Welded Chain Slings	4
DNV Type Approved Shackles	6
DA Grade 6 Shackle	8
DA Grade 8 Shackle	9
DA Swivel Self Locking Hook	10
SS-C4 / CP-C4 Anti-Corrosion Topside and Subsea Chain Block	11
Design Features	12
Specifications and Dimensions	13
Anti-Corrosion Push, Geared and Combined Chain Blocks and Trollies	14
ROV Subsea Chain Block	17
Design Features	18
Specifications and Dimensions	19
SS-L5 Topside and Subsea Lever Hoist	21
Design Features	22
Exploded Diagram and Parts List	24
Specifications and Dimensions	26
William Hackett C4 Chain Block	27
Design Features	28
Exploded Diagram and Parts List	30
Specifications and Dimensions	32
Hackett Combined Chain Block and Trollies, and Push and Geared Trollies	33
WH-BC Fixed Jaw Super Clamp	36
Hackett Hand Winch	38
William Hackett L4 Lever Hoists	39
Design Features	40
Exploded Diagram and Parts List	42
Specifications and Dimensions	44
ATEX Hoisting Range	45
ATEX Chain Block	46
ATEX Lever Hoist	47
ATEX Trollies	48
ATEX Combined Chain Block and Trollies	50
Offshore and Subsea Equipment	51
Forged Alloy Wide Body Shackle	52
ROV Anchor Shackle	53
ROV Anchor Shackle with Fishtail Handle and Safety Pin	54
ROV Anchor Shackle with D Handle and Safety Pin	55
ROV Eye Sling Hook	56
ROV Shank Hook	57
Swivel Hoist Ring Metric Thread - type 231	58
Swivel Hoist Ring UNC Thread - type 232	59
Swivel Hoist Ring with Alloy Steel Washer - Metric - type 203	60
Swivel Hoist Ring with Alloy Steel washer - UNC - type 204	61
Lifting Points metric thread	62
Lifting Points UNC thread	63
Yoke Snatch Block with captive shackle	64
Spelter Wire Rope Sockets	66
Contact Angular Swivels	68
Terms and Conditions	72

PRODUCT SUPPORT: William Hackett is fully committed to providing its customers with technical and service support through the product lifecycle, including the availability of spares and replacement components.

All statements, technical information, advice and recommendations contained within this brochure are believed to be reliable, although no guarantee is given as to their accuracy and/or completeness. The user of our products must determine the suitability of the products for their own particular purpose, either alone or in combination with other products and shall assume all risk and liability in connection with those decisions. Whilst every effort has been made to ensure accuracy in relation to the content of tables, the information contained does not form any part of any contract.

© William Hackett 2017

Master Links and Quad Assemblies

HA Master Links Type Approval No. S-7732

Certified to DNV2.7-1, DNV2.7-3, EN12079-2, EN1677-4



MPF = Manufacturing Proof Force = $2.5 \times 9.81 \times \text{Working Load Limit (kN)}$ (min.)

BF = Break Force = WLL x Factor of Safety

WLL = Working Load Limit (tonne) @ 45° to vertical

Factor of Safety = 5 : 1

Embossing - As per Description column and Batch Number

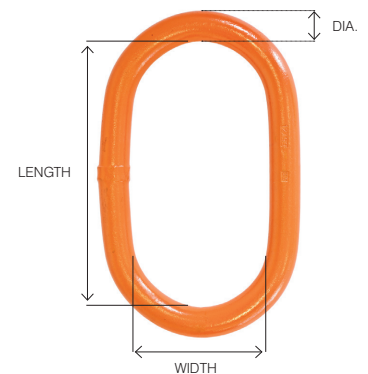
Manufactured in accordance with EN1677-4

Design air temperature -40° min. Average impact energy (charpy) 42 Joules up to 50mm diameter

DNV type approval No. S-7732

Operational temperature range is -40° C to + 200°C

*Certified on a batch basis to the requirements of DNV 2.7-1



Description	Diameter mm	Width mm	Length mm	WLL tonnes	Mass kg
HA16ML	16	75	150	4.1	0.7
HA22MS	22	90	162	8.83	1.5
HA22ML	22	140	270	5.8	2.3
HA25ML	25.5	140	270	8.83	2.7
HA28MS	28	110	200	14.5	3.0
HA28ML	28	140	270	14.5	3.8
HA32ML	32	140	270	17.1	5.1
HA36ML	36	140	270	23.0	6.5
HA40ML	40	155	280	28.1	8.5
HA45ML	45	175	320	38.3	12.2
HA50ML	50	195	350	45.0	16.6
HA60ML	60	220	410	65.0	29.2
HA70ML	70	250	450	85.0	44.3
HA90ML*	90	300	500	150.0	86.0
HA120ML*	120	410	610	250.0	197.0

Description	Diameter inches	Width inches	Length inches	WLL ton	Mass lbs.
HA16ML	5/8	2.95	5.91	4.5	1.54
HA22MS	7/8	3.54	6.38	9.7	3.31
HA22ML	7/8	5.51	10.63	6.4	5.07
HA25ML	1	5.51	10.63	9.7	7.28
HA28MS	1-1/8	4.33	7.87	16.0	6.61
HA28ML	1-1/8	5.51	10.63	16.0	8.38
HA32ML	1-1/4	5.51	10.63	18.8	11.24
HA36ML	1-7/16	5.51	10.63	25.4	14.33
HA40ML	1-9/16	6.10	11.02	31.0	18.74
HA45ML	1-3/4	6.89	12.60	42.2	26.90
HA50ML	2	7.68	13.78	49.6	36.60
HA60ML	2-3/8	8.66	16.14	71.6	64.37
HA70ML	2-3/4	9.84	17.72	93.7	97.66
HA90ML*	3-5/8	11.81	19.69	165.3	189.60
HA120ML*	4-3/4	16.14	24.02	275.6	434.31

Master Links and Quad Assemblies

HA Quad Assemblies Type Approval No. S-7732

Certified to DNV2.7-1, DNV2.7-3, EN12079-2, EN1677-4



MPF = Manufacturing Proof Force = $2.5 \times 9.81 \times \text{Working Load Limit (kN)}$ (min.)

BF = Break Force = WLL x Factor of Safety

WLL = Working Load Limit (tonne) @ 45° to vertical

Factor of Safety = 5 : 1

Embossing - As per Description column and Batch Number

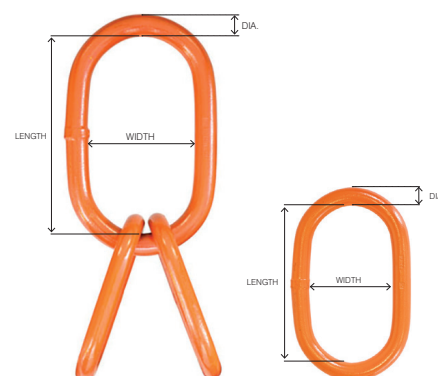
Manufactured in accordance with EN1677-4

Design air temperature -40° min. Average impact energy (charpy) 42 Joules up to 50mm diameter

DNV type approval No. S-7732

Operational temperature range is -40° C to + 200°C

*Certified on a batch basis to the requirements of DNV 2.7-1



MASTER LINK			
Description	Dia. mm	Width mm	Length mm
HA16QA	16.0	75	150
HA22QA	22.0	90	162
HA23QA	22.0	140	270
HA25QA	25.5	140	270
HA26QA	28.0	140	270
HA28QA	28.0	110	200
HA32QA	32.0	140	270
HA36QA	36.0	140	270
HA40QA	40.0	155	280
HA45QA	45.0	175	320
HA50QA	50.0	195	350
HA60QA	60.0	220	410
HA70QA	70.0	250	450
HA90QA*	90.0	300	510

COUPLING LINK		
Dia. mm	Width mm	Length mm
14.5	60	125
20	70	140
16	75	150
20	70	140
20	70	140
22	70	140
25.5	102	190
28	100	190
32	140	270
36	140	270
40	130	260
50	195	350
60	220	410
70	200	400

ASSEMBLY	
WLL t	Mass kg
4.1	1.3
8.83	3.6
5.8	3.8
8.83	5.3
14.5	5.9
14.5	5.5
17.1	9.7
23.0	11.9
28.1	18.6
38.3	25.4
45.0	32.3
65.0	63.9
85.0	102.6
150.0	164.1

MASTER LINK			
Description	Dia. (in.)	Width (in.)	Length (in.)
HA16QA	5/8	2.95	5.91
HA22QA	7/8	3.54	6.38
HA23QA	7/8	5.51	10.63
HA25QA	1	5.51	10.63
HA26QA	1-1/8	5.51	10.63
HA28QA	1-1/8	4.33	7.87
HA32QA	1-1/4	5.51	10.63
HA36QA	1-7/16	5.51	10.63
HA40QA	1-9/16	6.10	11.02
HA45QA	1-3/4	6.89	12.60
HA50QA	2	7.68	13.78
HA60QA	2-3/8	8.66	16.14
HA70QA	2-3/4	9.84	17.72
HA90QA*	3-5/8	11.81	20.08

COUPLING LINK		
Dia. (in.)	Width (in.)	Length (in.)
9/16	2.36	4.92
3/4	2.76	5.51
5/8	2.95	5.91
3/4	2.76	5.51
3/4	2.76	5.51
7/8	2.76	5.51
1	4.01	7.48
1-1/8	3.94	7.48
1-1/4	5.51	10.63
1-7/16	5.51	10.63
1-9/16	5.12	10.24
2	7.68	13.78
2-3/8	8.66	16.14
2-3/4	7.87	15.75

ASSEMBLY	
WLL (ton)	Mass (lbs.)
4.5	2.86
9.7	7.83
6.4	8.45
9.7	11.66
16.0	12.96
16.0	12.16
18.8	21.27
25.4	26.18
31.0	40.92
42.2	55.9
49.6	71.1
71.6	140.6
93.7	225.7
165.3	360.0

Welded Chain Slings

DNV Welded Chain Slings

DNV type approval No. S-7731



- In accordance with:
DNV 2.7-1
DNV 2.7-3
EN 12079
EN 1677-4
- William Hackett supply welded chain slings that are widely used in lifting sets for offshore containers and they are type approved to DNV 2.7-1 under approval number S-7731.
- We will design and manufacture welded chain slings to suit specific container sizes and applications



Part Code	Description	Working Load Limit		10ft Container Leg Length		20ft Container Leg Length	
		30°	45°	30°	45°	30°	45°
W13.4.DNV	13mm x 4 Leg	13.5t	11.2t	3.8m	2.7m	6.5m	4.6m
W13.5.DNV	13mm x 5 Leg	13.5t	11.2t	3.8m	2.7m	6.5m	4.6m
W16.4.DNV	16mm x 4 Leg	20.5t	16.5t	3.8m	2.7m	6.5m	4.6m
W16.5.DNV	16mm x 5 Leg	20.5t	16.5t	3.8m	2.7m	6.5m	4.6m
W20.4.DNV	20mm x 4 Leg	32.0t	26.0t	3.8m	2.7m	6.5m	4.6m
W20.5.DNV	20mm x 5 Leg	32.0t	26.0t	3.8m	2.7m	6.5m	4.6m

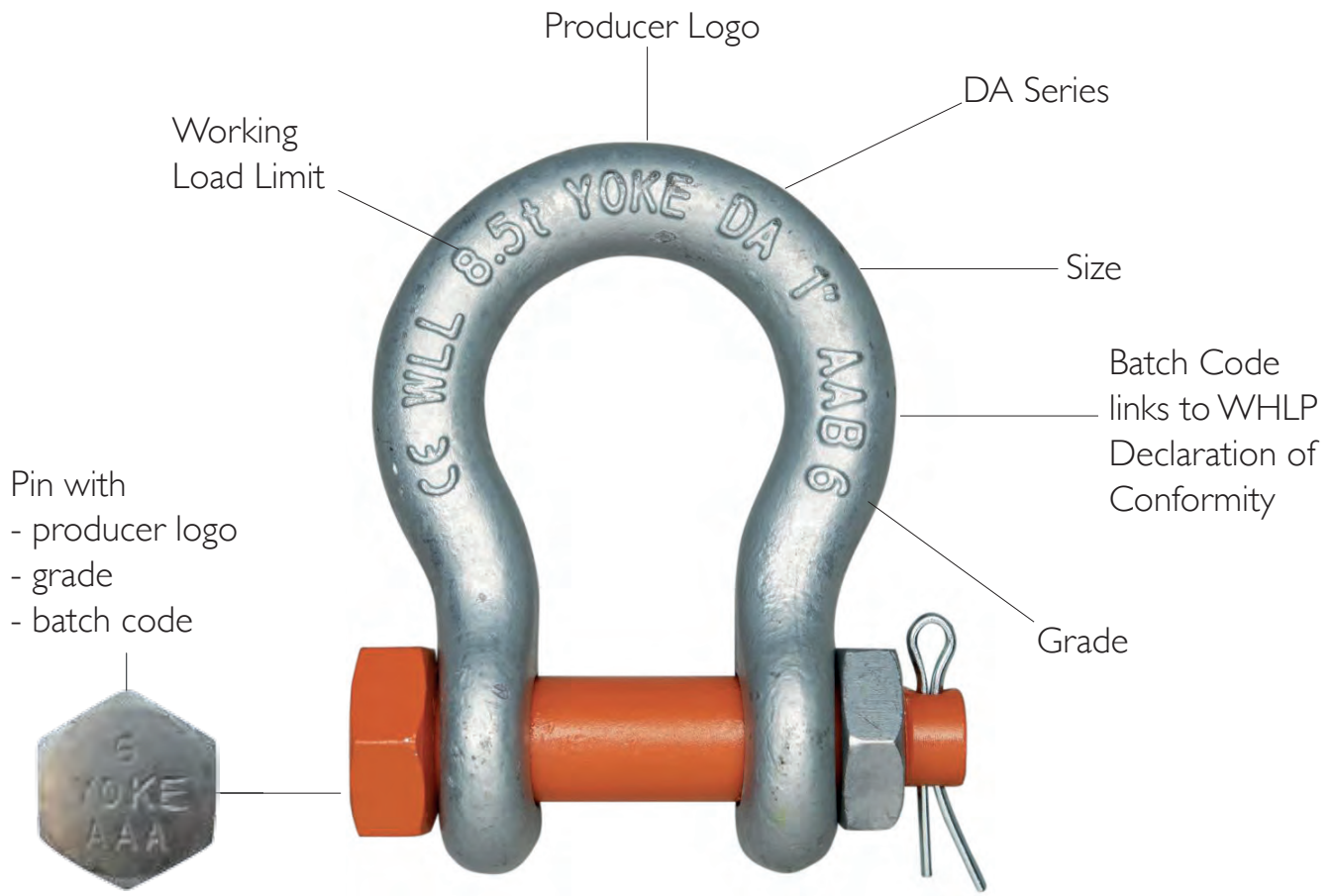
Welded Chain Slings

Container Rating Kg	Enhancement Factor	Minimum Required WLL tonnes	Recommended Chain Sling @ 30° to the vertical	Recommended Chain Sling @ 45° to the vertical
500		7.00	13mm diameter Double Leg (used as a pair) Four Leg Five Leg WLL 13.5 tonne	13mm diameter Double Leg (used as a pair) Four Leg Five Leg WLL 11.2 tonne
1000		7.00		
1500		7.00		
2000	3.500	7.00		
2500	2.880	7.20		
3000	2.600	7.80		
3500	2.403	8.41		
4000	2.207	8.83		
4500	1.962	8.83		
5000	1.766	8.83		
5500	1.766	9.71		
6000	1.766	10.59		
6500	1.733	11.26		
7000	1.700	11.90		
7500	1.666	12.50	16mm Diameter Double Leg (used as a pair) Four Leg Five Leg WLL 20.78 tonne	16mm diameter Double Leg (used as a pair) Four Leg Five Leg WLL 17.0 tonne
8000	1.633	13.07		
8500	1.600	13.60		
9000	1.567	14.10		
9500	1.534	14.57		
10000	1.501	15.01		
10500	1.479	15.53		
11000	1.457	16.02		
11500	1.435	16.50		
12000	1.413	16.95		
12500	1.391	17.38		
13000	1.368	17.79		
13500	1.346	18.18		
14000	1.324	18.54		
14500	1.302	18.88	20mm Diameter Double Leg (used as a pair) Four Leg Five Leg WLL 31.5 tonne	20mm diameter Double Leg (used as a pair) Four Leg Five Leg WLL 26.5 tonne
15000	1.280	19.20		
15500	1.267	19.64		
16000	1.254	20.06		
16500	1.240	20.47		
17000	1.227	20.86		
17500	1.214	21.24		
18000	1.201	21.61		
18500	1.188	21.97		
19000	1.174	22.31		
19500	1.616	22.64		
20000	1.148	22.96		
20500	1.143	23.44		
21000	1.139	23.92		
21500	1.135	24.39	22mm diameter Double Leg (used as a pair) Four Leg Five Leg WLL 31.5 tonne	22mm diameter Double Leg (used as a pair) Four Leg Five Leg WLL 31.5 tonne
22000	1.130	24.86		
22500	1.126	25.33		
23000	1.121	25.79		
23500	1.117	26.25		
24000	1.112	26.70		
24500	1.108	27.15		
25000	1.104	27.59		

DNV Type Approved Shackles

YOKE Offshore Container Lifting Shackles - Type Approval No. S-8059

Certified to DNV 2.7-1, DNVGL-ST-E273 Standard 2.7-3 Portable Offshore Units (2016), EN 13889, EN 12079-2



The Features of YOKE DA™ Offshore Container Lifting Shackles

YOKE DA™ Shackles are manufactured to meet the requirements of DNV 2.7-1 and DNV 2.7-3 for offshore container lifting to fulfill the need for the critical requirements of charpy impact, strength and ductility.

Lower Temperature Demand

YOKE DA™ Shackles are designed to withstand impacts in extreme environments up to maximum -40°C.

Higher Safety Factors

YOKE DA™ Shackles have a design factor of 6 for Grade 6 Shackles and a design factor of 8 for Grade 8 shackles to enable them to operate in the harshest environments.

DNV 2.7-1 Specified Test Certificate

Test certificate with material and manufacturing process specified in DNV 2.7-1 for complete traceability.

To perform in the harshest weather and roughest sea conditions, YOKE DA™ Shackles are specially designed, manufactured and tested for the operating in the offshore container industry.

DNV GL

Certificate No:
S-8059
File No:
911.53
Job Id:
262.1-016068-3

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Lifting set for Offshore containers and Portable Offshore Units

with type designation(s)

Bolt Pin Anchor Shackles - Type DA-808 - Design Temperature -40°C

Bolt Pin Anchor Shackles - Type DA-838 - Design Temperature -40°C

Issued to

Yoke Industrial Corp.

Taichung, Taiwan

is found to comply with

DNV 2.7-1 Offshore Containers (2013)

DNVGL-ST-E273 Standard 2.7-3 Portable offshore units (2016)

EN 12079-2 Offshore containers and associated lifting sets - Part 2: Lifting sets Design, manufacture and marking

EN 13889 Forged steel shackles for general lifting purposes - Dee shackles and Bow shackles - Grade 6 - Safety

IMO/MSC Circular 860

Application :

Shackles for Lifting Sets for Offshore Containers and Portable Offshore Units

This Certificate is valid until **2019-06-30**.

Issued at **Høvik** on **2017-05-26**

DNV GL local station: **Kaohsiung**

Approval Engineer: **Igor Antonijevic**



for **DNV GL**
Digitally Signed By: Hals,
Inger-Helene
Signing Date: 30.05.2017
Location: Høvik, Norway

Inger-Helene Hals
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed. If any person suffers loss or damage which is proven to have been caused by any negligent act or omission of the Society, then the Society shall pay compensation to such person for his proven direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question. The maximum compensation shall never exceed USD 2 million. In this provision the "Society" shall mean DNV GL AS as well as all its direct and indirect owners, affiliates, subsidiaries, directors, officers, employees, agents and any other person or entity acting on behalf of DNV GL AS.

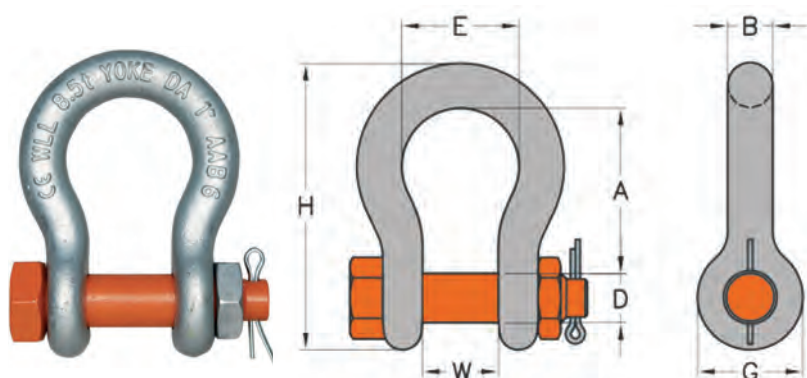
DNV Type Approved Shackles

DA 838 Grade 6 Shackle

DNV type approval No. S-8059



- Meets the following performance requirements:
DNV 2.7-1
DNV 2.7-3
EN 13889
EN 12079-2 Portable Offshore Containers
U.S. Fed. Spec. RR-C-271F Type IVA, Grade A, Class 3
ASME B30.26
- Hot dip galvanized
- 20,000 cycle fatigue rated to 1.5 x WLL
- Charpy test of 42 joules (31ft. lbs.) at -20°C
- Safety Pin type



Part Code	Size mm	WLL tonnes*	A mm	B mm	D mm	E mm	G mm	H mm	W mm	Mass Kg
DA-838-13	13	2.00	47	13	16	33	30	85	20	0.4
DA-838-16	16	3.25	61	16	19	43	38	106	27	0.7
DA-838-19	19	4.75	72	19	22	50	46	126	33	1.0
DA-838-22	22	6.50	86	22	26	58	53	148	38	1.7
DA-838-26	26	8.50	96	26	28	68	61	166	44	2.4
DA-838-28	28	9.50	111	28	32	74	68	190	46	3.4
DA-838-32	32	12.00	121	32	36	84	76	210	54	4.8
DA-838-36	36	13.50	134	36	38	92	84	232	59	6.5
DA-838-38	38	17.00	146	38	45	99	92	254	60	8.8
DA-838-45	45	25.00	178	47	51	127	106	313	73	17.5
DA-838-50	50	35.00	197	53	57	146	122	347	83	24.2
DA-838-64	64	**55.00	267	66.5	70	184	145	453	105	43.5
DA-838-76	76	**85.00	330	76	82.5	200	165	546	127	81
DA-838-89	89	**120.00	372	92	95.5	229	203	626	133	120
DA-838-100	100	**150.00	368	104	108	254	229	653	140	153

*2t to 35t are type approved of DNV 2.7-1. Minimum Ultimate Load is 6 times the Working Load Limit.

**55t to 150t meet all requirements of DNV 2.7-1. Minimum Ultimate Load is 6 times the Working Load Limit.

Part Code	Size inch	WLL tonnes*	A inch	B inch	D inch	E inch	G inch	H inch	W inch	Mass lbs
DA-838-13	1/2	2.00	1.85	0.52	0.63	1.30	1.18	3.34	0.79	0.9
DA-838-16	5/8	3.25	2.40	0.63	0.75	1.70	1.50	4.17	1.06	1.5
DA-838-19	3/4	4.75	2.83	0.75	0.87	1.97	1.81	5.04	1.30	2.2
DA-838-22	7/8	6.50	3.39	0.87	1.02	2.28	2.09	5.91	1.50	3.7
DA-838-26	1	8.50	3.78	1.02	1.10	2.68	2.40	6.57	1.73	5.3
DA-838-28	1-1/8	9.50	4.37	1.10	1.26	2.91	2.68	7.52	1.81	7.5
DA-838-32	1-1/4	12.00	4.76	1.26	1.42	3.30	2.99	8.07	2.12	10.6
DA-838-36	1-3/8	13.50	5.28	1.42	1.50	3.62	3.31	9.13	2.32	14.3
DA-838-38	1-1/2	17.00	5.57	1.50	1.77	3.90	3.62	10.00	2.36	19.4
DA-838-45	1-3/4	25.00	7.00	1.85	2.00	5.00	4.17	12.32	2.87	38.5
DA-838-50	2	35.00	7.76	2.09	2.24	5.75	4.80	13.66	3.27	53.2
DA-838-64	2-1/2	**55.00	10.51	2.62	2.76	7.24	5.71	17.83	4.13	95.7
DA-838-76	3	**85.00	12.99	2.99	3.25	7.87	6.50	21.50	5.00	178.2
DA-838-89	3-1/2	**120.00	14.65	3.62	3.76	9.02	7.99	24.65	5.24	264
DA-838-100	4	**150.00	14.49	4.09	4.25	10.00	9.02	25.71	5.51	336.6

*2t to 35t are type approved of DNV 2.7-1. Minimum Ultimate Load is 6 times the Working Load Limit.

**55t to 150t meet all requirements of DNV 2.7-1. Minimum Ultimate Load is 6 times the Working Load Limit.

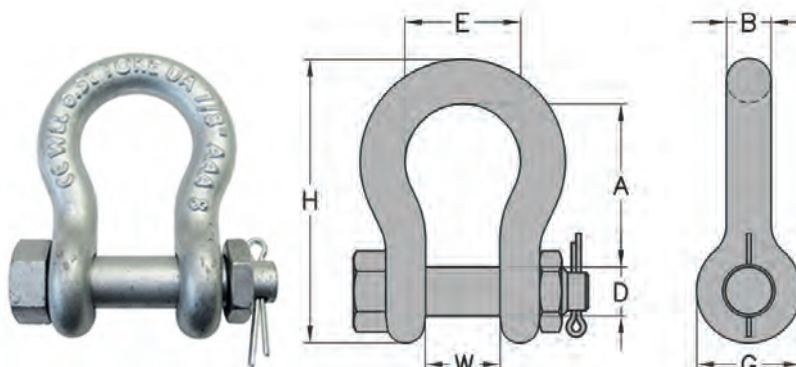
DNV Type Approved Shackles

DA 808 Grade 8 Shackle

DNV type approval No. S-8059



- Meets the following performance requirements:
DNV 2.7-1
DNV 2.7-3
EN 13889
EN 12079-2 Portable Offshore Containers
U.S. Fed. Spec. RR-C-271F Type IVA, Grade A, Class 3
ASME B30.26
- Hot dip galvanized
- 20,000 cycle fatigue rated to 1.5 x WLL
- Charpy test of 42 joules (31ft. lbs.) at -40°C
- Safety Pin type



Part Code	Size mm	WLL tonnes*	A mm	B mm	D mm	E mm	G mm	H mm	W mm	Mass Kg
DA-808-13	13	2.00	47	13	16	33	30	85	20	0.4
DA-808-16	16	3.25	61	16	19	43	38	106	27	0.7
DA-808-19	19	4.75	72	19	22	50	46	126	33	1.0
DA-808-22	22	6.50	86	22	26	58	53	148	38	1.7
DA-808-26	26	8.50	96	26	28	68	61	166	44	2.4
DA-808-28	28	9.50	111	28	32	74	68	190	46	3.4
DA-808-32	32	12.00	121	32	36	84	76	210	54	4.8
DA-808-36	36	13.50	134	36	38	92	84	232	59	6.5
DA-808-38	38	17.00	146	38	45	99	92	254	60	8.8
DA-808-45	45	25.00	178	47	51	127	106	313	73	17.5
DA-808-50	50	35.00	197	53	57	146	122	347	83	24.2
DA-808-64	64	**85.00	267	66.5	70	184	145	453	105	43.5
DA-808-76	76	**120.00	330	76	82.5	200	165	546	127	81
DA-808-89	89	**150.00	372	92	95.5	229	203	626	133	120
DA-808-100	100	**175.00	368	104	108	254	229	653	140	153

*2t to 35t are type approved of DNV 2.7-1. Minimum Ultimate Load is 8 times the Working Load Limit.

**85t to 175t meet all requirements of DNV 2.7-1. Minimum Ultimate Load is 5.4 times the Working Load Limit.

Part Code	Size inch	WLL tonnes*	A inch	B inch	D inch	E inch	G inch	H inch	W inch	Mass lbs
DA-808-13	1/2	2.00	1.85	0.52	0.63	1.30	1.18	3.34	0.79	0.9
DA-808-16	5/8	3.25	2.40	0.63	0.75	1.70	1.50	4.17	1.06	1.5
DA-808-19	3/4	4.75	2.83	0.75	0.87	1.97	1.81	5.04	1.30	2.2
DA-808-22	7/8	6.50	3.39	0.87	1.02	2.28	2.09	5.91	1.50	3.7
DA-808-26	1	8.50	3.78	1.02	1.10	2.68	2.40	6.57	1.73	5.3
DA-808-28	1-1/8	9.50	4.37	1.10	1.26	2.91	2.68	7.52	1.81	7.5
DA-808-32	1-1/4	12.00	4.76	1.26	1.42	3.30	2.99	8.07	2.12	10.6
DA-808-36	1-3/8	13.50	5.28	1.42	1.50	3.62	3.31	9.13	2.32	14.3
DA-808-38	1-1/2	17.00	5.57	1.50	1.77	3.90	3.62	10.00	2.36	19.4
DA-808-45	1-3/4	25.00	7.00	1.85	2.00	5.00	4.17	12.32	2.87	38.5
DA-808-50	2	35.00	7.76	2.09	2.24	5.75	4.80	13.66	3.27	53.2
DA-808-64	2-1/2	**85.00	10.51	2.62	2.76	7.24	5.71	17.83	4.13	95.7
DA-808-76	3	**120.00	12.99	2.99	3.25	7.87	6.50	21.50	5.00	178.2
DA-808-89	3-1/2	**150.00	14.65	3.62	3.76	9.02	7.99	24.65	5.24	264
DA-808-100	4	**175.00	14.49	4.09	4.25	10.00	9.02	25.71	5.51	336.6

*2t to 35t are type approved of DNV 2.7-1. Minimum Ultimate Load is 8 times the Working Load Limit.

**85t to 175t meet all requirements of DNV 2.7-1. Minimum Ultimate Load is 5.4 times the Working Load Limit.

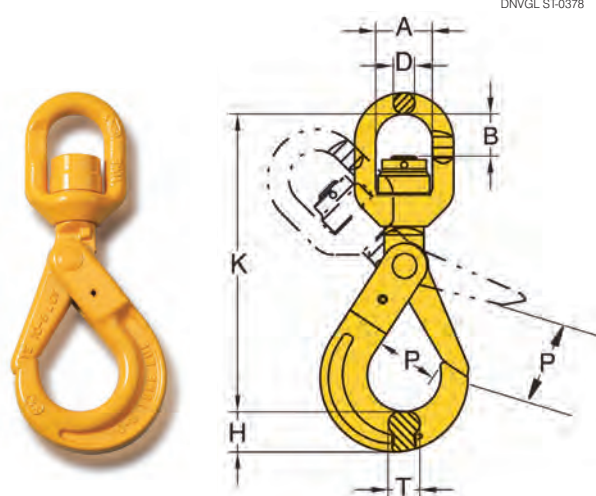
Offshore Swivel Self Locking Hook

DA Swivel Self Locking Hook

DNVGL type approval No. TAS000011K



- Material: Forged alloy steel, quenched and tempered.
Charpy test of 42 joules (31ft. lbs.) at -40°C
- Designed with recessed trigger and ball bearing.
- Tested and manufactured in accordance with EN1677-3.
- In accordance with DNVGL - ST - 0378
- Complies with NORSOK R-002: 2017
- The recessed trigger ensures the locking mechanism is protected against inadvertent opening due to entanglement with any obstruction during lifting.
- Replacement Trigger kit assemblies are available with spring, roll pin and trigger included.
- With Ball Bearing, which performs full swivel under load.



Part Code	WLL tonnes 5 : 1	WLL tonnes 4 : 1	A mm	B mm	D mm	H mm	K mm	P mm	T mm	Mass Kg
DA-027N-13W	5.3	6.7	61	50	23	39	283	51	30	5.0
DA-027N-16W	8.0	10	74	82	25	49	361	60	36	6.0
DA-027N-20	12.8	16	74	82	25	65	387	70	53	13.0
DA-027N-22	15.2	19	97	95	33	63	457	80	49	20.0
DA-027N-26	21.2	26.5	123	115	42	69	535	99	56	32.7
DA-027N-32*	26.2	32.8	123	115	42	81	583	120	63	38.5

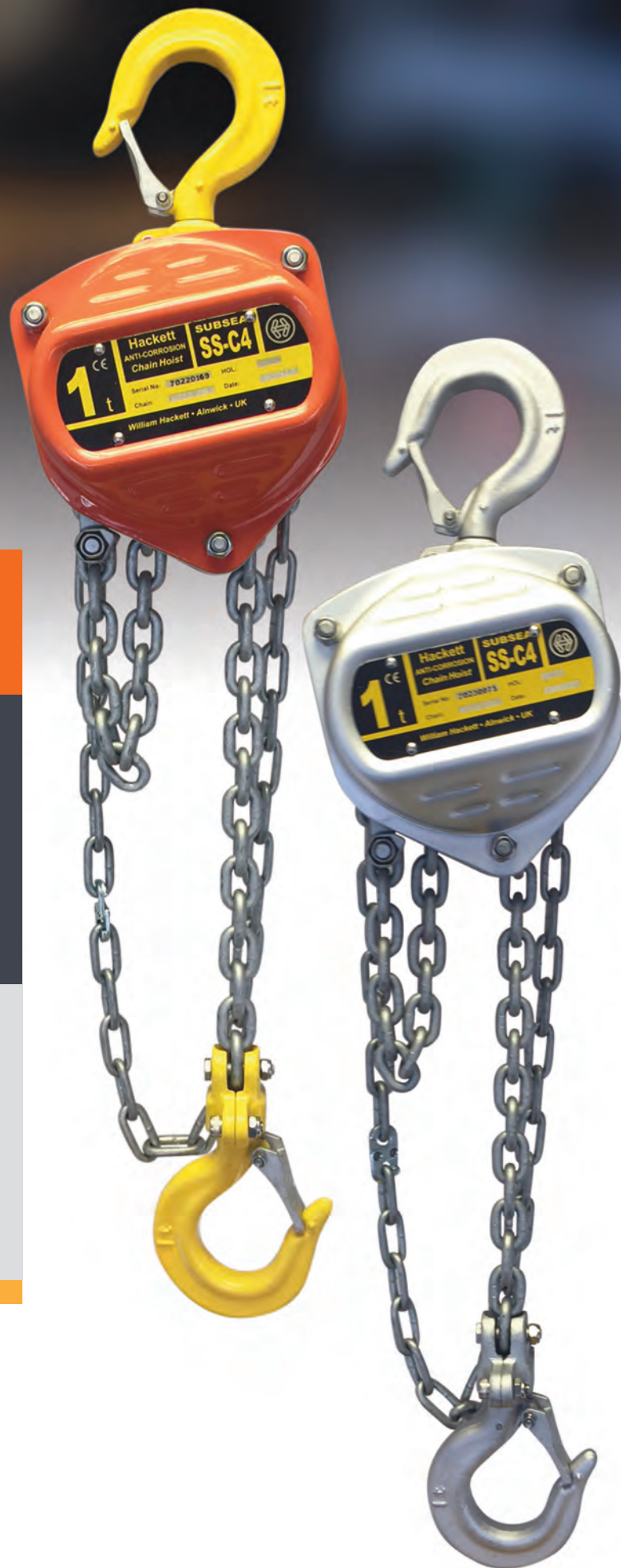
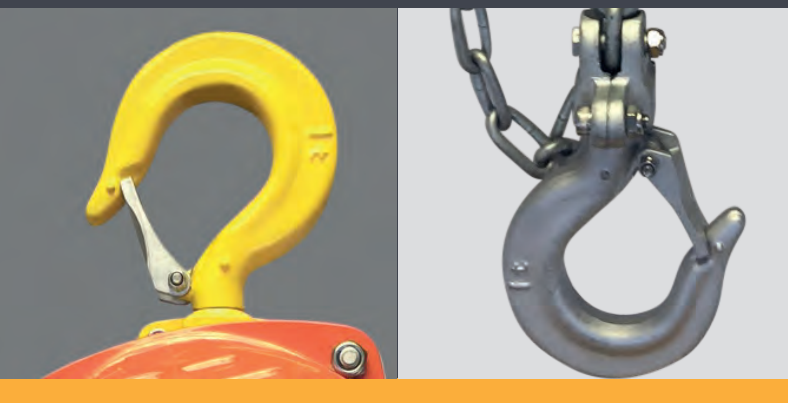
Part Code	WLL tonnes 5 : 1	WLL tonnes 4 : 1	A inch	B inch	D inch	H inch	K inch	P inch	T inch	Mass lbs.
DA-027N-13W	5.3	6.7	2.40	1.97	0.91	1.54	11.14	2.01	1.18	11.0
DA-027N-16W	8.0	10	2.91	3.23	0.98	1.93	14.21	2.36	1.42	13.0
DA-027N-20	12.8	16	2.91	3.23	0.98	2.56	15.24	2.76	2.09	29.0
DA-027N-22	15.2	19	3.82	3.74	1.30	2.48	17.99	3.15	1.93	44.0
DA-027N-26	21.2	26.5	4.84	4.53	1.65	2.72	21.06	3.90	2.20	72.0
DA-027N-32*	26.2	32.8	4.84	4.53	1.65	3.19	22.95	4.72	2.48	85.0

*DA-027N-32 is not covered by DNV GL type approval TAS000011K but is manufactured in accordance with the requirements of this type approval.



William Hackett

SS-C4 / CP-C4
ANTI-CORROSION
TOPSIDE AND SUBSEA
CHAIN BLOCKS



SS-C4 / CP-C4 Anti-Corrosion Chain Hoist

The Hackett SS-C4 / CP-C4 Anti-Corrosion Topside and Subsea chain blocks meet and exceed the requirements of international standards
British Standard BS EN13157:2004 + A1:2009
American Standard ASME B30.16-2012
Australian Standard AS1418.2-1997,
South African Standard SANS 1594:2007.
NORSOK R-002: 2017

William Hackett has taken its extensive knowledge of corrosion protection acquired in the supply of specialist topside and subsea hoisting range to the offshore sector and translated this technology to the newly developed second generation range of Hackett SS-C4 and CP-C4 anti corrosion topside and subsea chain blocks. These hoists can be supplied in the following configurations

- Single hook suspension unit
- Low headroom combined chain block and push travel trolley
- Low headroom combined chain block and geared travel trolley

All the above hoist configurations can also be supplied with the following options

- Calibrated Grade T (8) load chain to BS EN818-7 zinc plated with zinc plated hand chain
- Calibrated Grade T (8) load chain to BS EN818-7 DT9 corrosion coated and hand chain Dacromet corrosion coated.
- Calibrated Grade S (6) 316L stainless steel load chain, hand chain and bottom hook (stainless steel bottom hooks are only available for 500kg and 1 tonne units)
- Overload protection option available.

Features

- 500hrs + Protection against salt spray tests according to ASTM B117
- Twin pawls as standard
- Heavy duty forged safety catches
- Stainless steel fixing used throughout the hoist
- Hook housing is bolt connected using cap head screws and nyloc nuts
- All hoist components corrosion protected
- Load chain meets the requirements of European standards EN818-7
- Compact and robust design for easy handling

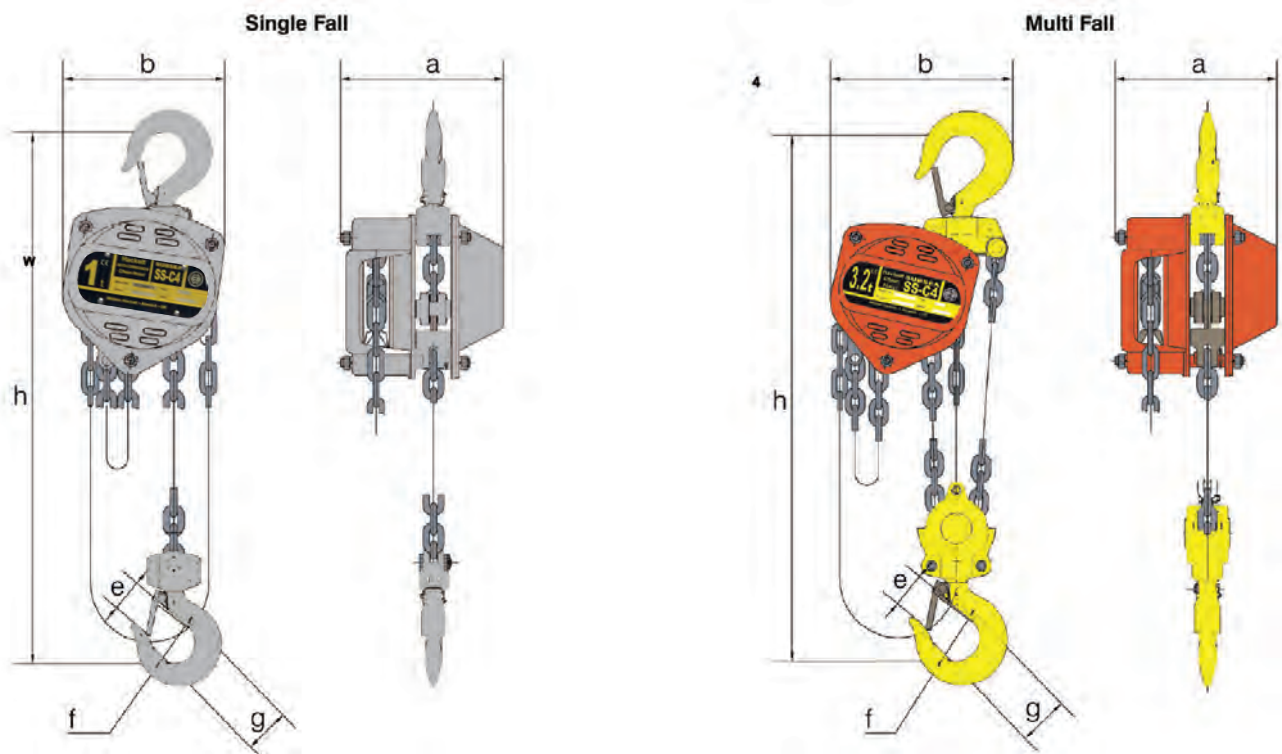


Performance and Testing

The Hackett SS-C4 / CP-C4 Chain Blocks have been fully tried and tested to include:

- Minimum Breaking Load - a minimum of 4 x the WLL
- The load chain anchor / end stop tested to at least 2.5 x the WLL with no restriction of either the brake or gears
- All Hoists 100% proof tested at 1.5 x the Working Load Limit
- Light load of 2% of Working Load Limit

SS-C4 / CP-C4 Anti-Corrosion Chain Hoist



Part Code	WLL tonnes	No of Falls	Load Chain Size mm	Stand. Lift m	a mm	b mm	e mm	f mm	g mm	h mm	Mass Kg	Extra Weight per Mtr Kg
022.SS.050	0.5	1	5.0 x 15	3	125	130	27.5	32	37	280	7.8	0.54
022.SS.100	1.0	1	6.0 x 18	3	134	155	31.5	40	44	306	11.1	0.80
022.SS.200	2.0	1	8.0 x 24	3	157	185	36.5	46	52	445	16.8	1.4
022.SS.3D00	3.2	2	8.0 x 24	3	157	235	43.5	52	62	520	24.2	2.8
022.SS.500	5.0	2	10.0 x 30	3	180	262	51	60	77	600	39.8	4.4
022.SS.1000	10.0	4	10.0 x 30	3	180	406	53	85	-	760	89.7	8.8
022.SS.1500	15.0	6	10.0 x 30	3	210	406	80	100	-	1000	91.1	13.2
022.SS.2000	20.0	8	10.0 x 30	3	225	550	80	110	-	1150	197	17.6

Anti-Corrosion WH-PT Push Trolley

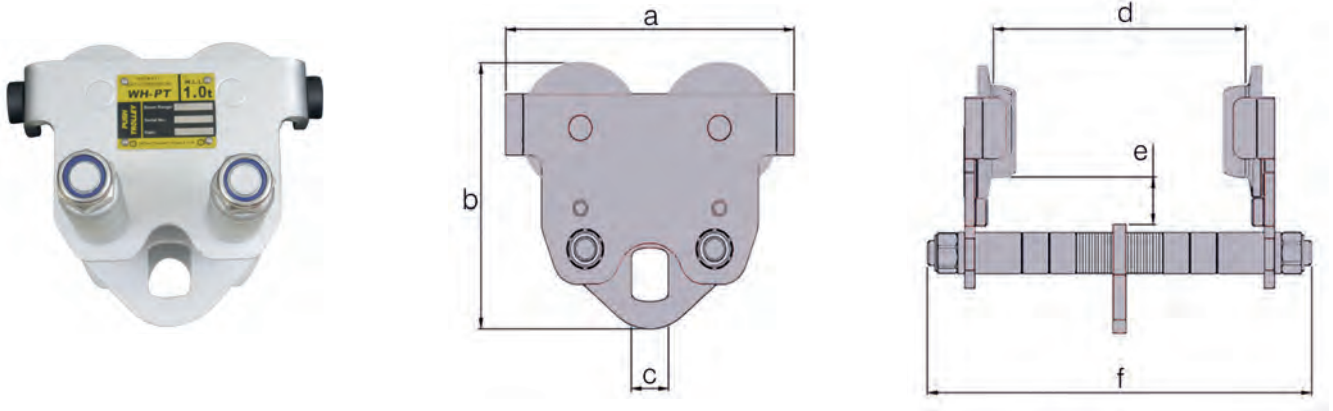
The William Hackett Anti-Corrosion WH-PT Push Travel Trolleys meet and exceed the requirements of international standard and British Standard BS EN 13157:2004 + A1:2009.

This high quality trolley range is precision engineered in capacities from 500Kg to 5 tonne.

Enabling exact positioning or easy traversing of large loads incorporating Manual hoists, the Hackett series push trolley can be supplied to suit various track widths with Beam Range 1 and the extended Beam Range 2.

The runners (trolley wheels) are precision machined and they rotate on maintenance sealed ball bearings.

All Hackett push trolleys are fitted with anti-jump bars and rubber end stops as standard.



Part Code	WLL tonnes	Min. Radius of Curve m	a mm	b mm	c mm	d mm	e mm	f mm	Beam Range 1 mm	Beam Range 2 mm	Mass kg
044.050.CP	0.5	0.8	200	166	22	203	34.0	289	50-203	-	6.5
044.100.CP	1.0	0.9	232	196	30	203	34.6	309	64-203	64-305	10.0
044.200.CP	2.0	1.0	260	226	37	203	34.5	318	88-203	88-305	15.5
044.300.CP	3.0	1.2	280	264	42	203	34.5	342	100-203	100-305	26.5
044.500.CP	5.0	1.3	312	271	50	203	34.2	362	114-203	114-305	36.0

Anti-Corrosion WH-GT Geared Trolley

The William Hackett Anti-Corrosion WH-GT Geared Travel Trolleys meet and exceed the requirements of international standard and British Standard BS EN 13157:2004 + A1:2009.

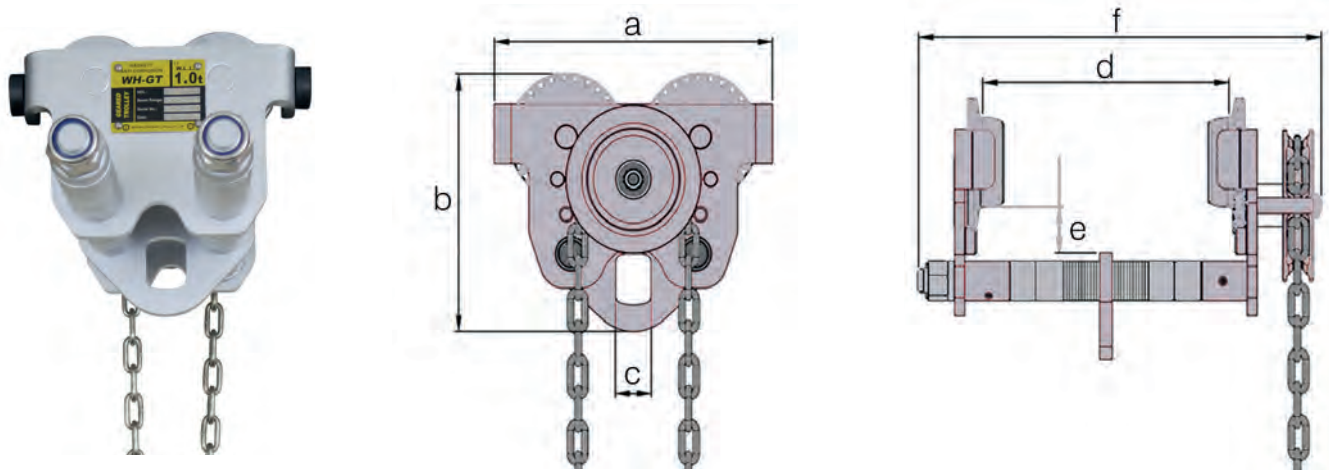
This high quality trolley range is precision engineered in capacities from 500Kg to 5 tonne.

Enabling exact positioning or easy traversing of large loads incorporating Manual hoists, the Hackett series geared trolley can be supplied to suit various track widths with Beam Range 1 and the extended Beam Range 2.

It has been designed so that the bottom of the hand chain loop is 500mm from ground level.

The runners (trolley wheels) are precision machined and they rotate on maintenance sealed ball bearings.

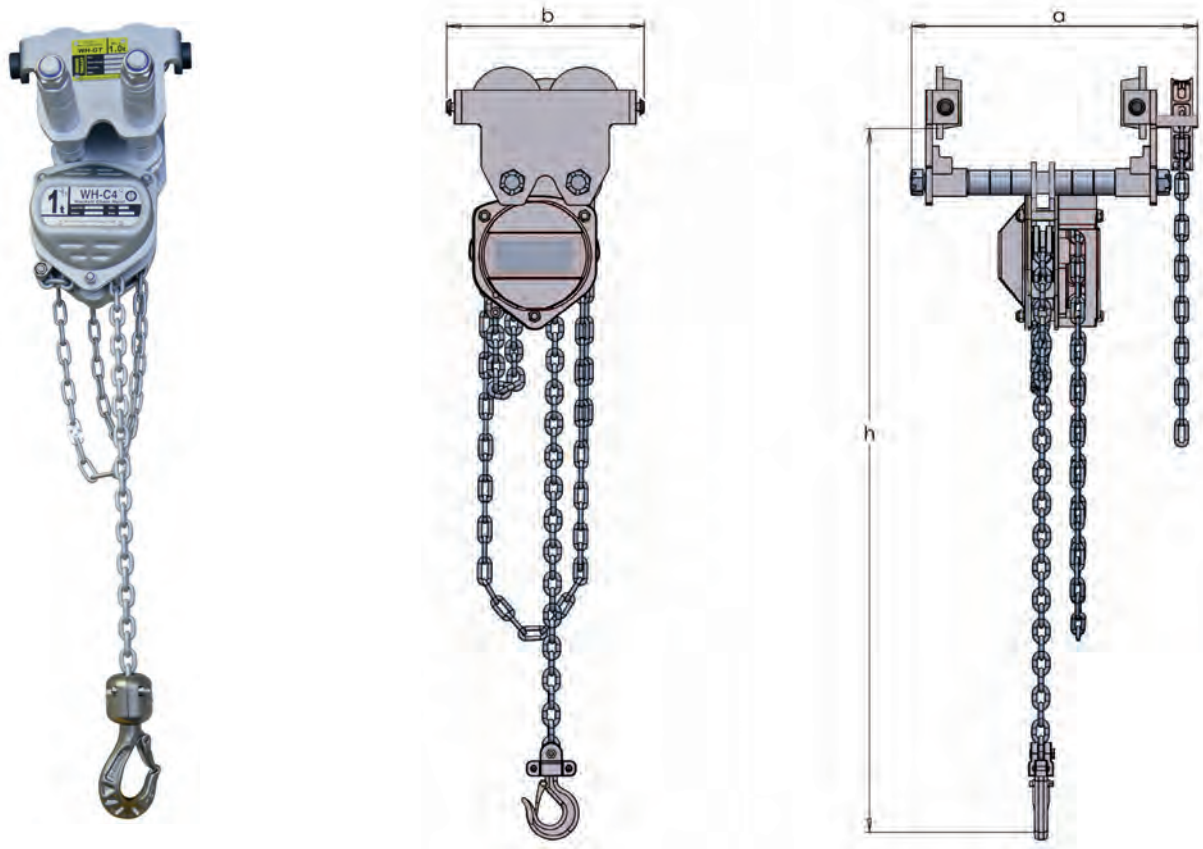
All Hackett geared trolleys are fitted with anti-jump bars rubber end stops as standard.



Part Code	WLL tonnes	Min. Radius of Curve m	a mm	b mm	c mm	d mm	e mm	f mm	Beam Range 1 mm	Beam Range 2 mm	Mass kg
055.050.CP	0.5	0.8	200	166	22	203	34.0	320	50-203	-	7.1
055.100.CP	1.0	0.9	232	196	30	203	34.6	333.2	64-203	64-305	13.5
055.200.CP	2.0	1.0	260	226	37	203	34.5	342	88-203	88-305	19.0
055.300.CP	3.0	1.2	280	264	42	203	34.5	352	100-203	100-305	30.5
055.500.CP	5.0	1.3	312	271	50	203	34.2	370	114-203	114-305	38.6

Anti-Corrosion Combined Chain Blocks and Trolleys

The William Hackett Anti-Corrosion Combined Block and Trolleys meet and exceed the requirements of international standard and British Standard BS EN 13157:2004 + A1:2009.



Combined Chain Block and Push Travel Trolley

Part Code	WLL tonnes	No.of Falls	Beam Range 1 mm	Beam Range 2 mm	a mm	b mm	h mm	Mass kg
066.050.CP	0.5	1	50 - 203	-	289	200	295	15.0
066.100.CP	1.0	1	64 - 203	64 - 305	309	232	305	22.0
066.200.CP	2.0	1	88 - 203	88 - 305	318	260	437	34.0
066.3D00.CP	3.0	2	100 - 203	100 - 305	342	280	493	53.0
066.500.CP	5.0	3	114 - 203	114 - 305	362	312	573	80.0

*Weight based on 3 metre H.O.L. 3t and 5t Combined units use SS-C4 Chain Block

Combined Chain Block and Geared Travel Trolley

Part Code	WLL tonnes	No.of Falls	Beam Range 1 mm	Beam Range 2 mm	a mm	b mm	h mm	Mass kg Range 1
067.050.CP	0.5	1	50 - 203	-	289	200	295	15.6
067.100.CP	1.0	1	64 - 203	64 - 305	309	232	305	25.5
067.200.CP	2.0	1	88 - 203	88 - 305	318	260	437	37.5
067.3D00.CP	3.0	2	100 - 203	100 - 305	342	280	493	57.0
067.500.CP	5.0	3	114 - 203	114 - 305	362	312	573	83.0

3t and 5t Combined units use SS-C4 Chain Block



ROV SUBSEA CHAIN BLOCK



ROV Subsea Chain Block

The Hackett ROV compatible SS-C4 anti-corrosion subsea chain blocks meet and exceed the requirements of international standards

British Standard BS EN13157:2004 + A1:2009

American Standard ASME B30.16-2012

Australian Standard AS1418.2-1997

South African Standard SANS 1594:2007.

NORSOK R-002: 2017

William Hackett has taken its extensive knowledge of corrosion protection acquired in the supply of its specialist subsea range to the offshore sector and translated this technology to the newly developed second generation range of Hackett ROV SS-C4 anti-corrosion subsea chain blocks.

These hoists can be supplied in the following configurations

- Chain block working load limit capacities available: 3.2t, 5t, 10t, 15t and 20t multi fall units
- Single hook suspension unit
- Hot stab interface ISO 13628-8 3/8" BSP:1 Hot stab male receptacle.
- Fishtail direct drive interface
- D-link drive
- High performance waterproof grease giving superior rust and corrosion protection that will not separate, cake or wash out.
- Specialist subsea brake material
- Lightweight sturdy handles using 316L stainless steel.
- Operating temperature range -40°C to +55°C
- Stainless steel fixing and fasteners.
- 3D Models available.

All the above hoist configurations can also be supplied with the following options

- Calibrated Grade T (8) load chain to BS EN818-7 zinc plated
- Calibrated Grade T (8) load chain to BS EN818-7 DT9 corrosion coated
- Calibrated Grade S (6) 316L stainless steel load chain
- Complies with the Lifting Equipment Engineers Association 'Code of Practice for Selection, Management, Use, Maintenance and Examination of Hand Chain Blocks and Lever Hoists in The Offshore Environment including Subsea'. Doc. Ref. LEEA 033 dated July 2014.

Features

- 500hrs + protection against salt spray tests according to ASTM B117
- Twin pawls as standard - captivated internally to prevent damage
- Heavy duty forged safety catches
- Stainless steel fixing used throughout the hoist
- Hook housing is bolt connected using cap head screws and nyloc nuts
- All internal hoist components fully corrosion protected
- Compact and robust design for easy handling



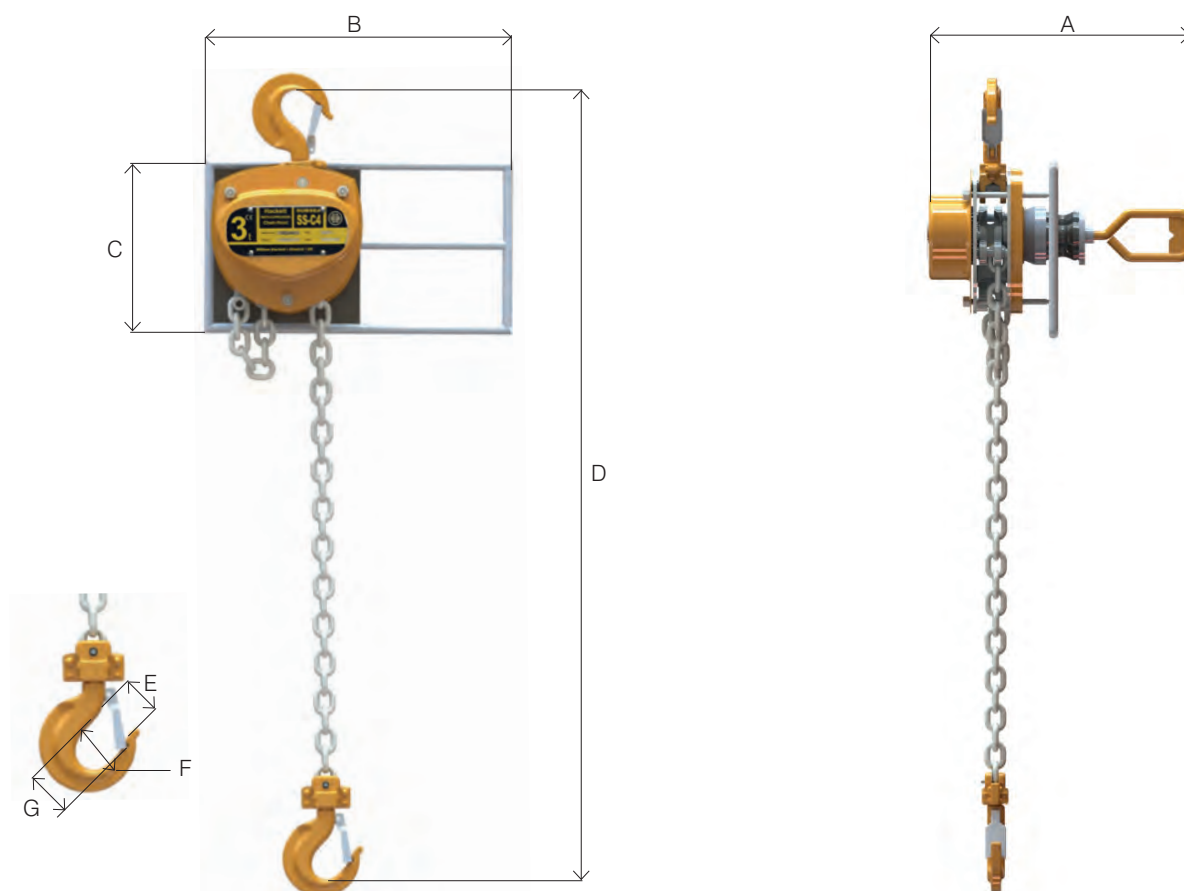
Performance and Testing

The Hackett ROV SS-C4 chain blocks have been fully tried and tested to include:

- Minimum Breaking Load - a minimum of 4 x the WLL
- The load chain anchor / end stop tested to at least 2.5 x the WLL with no restriction of either the brake or gears

ROV Subsea Chain Block

Specifications and Dimensions



Product Code	WLL tonnes	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Load Chain Dia. mm	Load Chain No, Falls	Max. Torque (Nm)	Rev /300mm travel	3m HOL weight out of water (Kg)	Extra Weight Per M kg
022.R.300.H1.P	3.2	384	516	292	520	43	48	61	10.0	1	45	54	61	2.2
022.R.300.F1.P	3.2	507	516	292	520	43	48	61	10.0	1	45	54	41	2.2
022.R.500.H1.P	5.0	384	516	292	600	51	60	77	10.0	2	45	108	67.5	4.4
022.R.500.F1.P	5.0	507	516	292	600	51	60	77	10.0	2	45	108	47.5	4.4
022.R.1000.H1.P	10.0	384	516	292	760	53	85	-	10.0	4	50	165	117	8.8
022.R.1000.F1.P	10.0	507	516	292	760	53	85	-	10.0	4	50	165	97	8.8
022.R.1500.H1.P	15.0	414	516	292	1000	80	100	-	10.0	6	50	330	118	13.2
022.R.1500.F1.P	15.0	537	516	292	1000	80	100	-	10.0	6	50	330	99	13.2
022.R.2000.H1.P	20.0	429	600	292	1150	80	110	-	10.0	8	55	430	225	17.6
022.R.2000.F1.P	20.0	552	600	292	1150	80	110	-	10.0	8	55	430	205	17.6

Standard HOL = 3 metres. H1 Hot Stab variants: add 186mm to dimension 'A' if debris stab is to be included.

ROV Subsea Chain Block

Fleeting advice

Safe use of Manual Chain Hoists at angles away from the vertical (0-45°).

The following guidance is for the safe use of manual chain hoists when being used away from the vertical (0°) and when lifting and moving a load in conjunction with additional manual chain hoists (fleeting/cross hauling). These lifting operations should be assessed by a competent person.

- Top Hook Suspension - the suspension point must be the correct size to admit the top hook and allow it to rest correctly in the bowl of the hook. It must have sufficient clearance to allow the top hook to articulate within it.
- The suspension point must have a safe working load equal to or greater than the load to be lifted.
- Bottom Hook Attachment - the attachment point onto the load must be of the correct size to admit the bottom hook and allow it to rest correctly in the bowl of the hook, and to articulate within it.
- Make sure that the load chain is free from any twists or knotting and in respect of multi-fall manual chain hoists that the bottom hook has not been capsized.
- When using a manual hoist at any angle away from the vertical in a lifting operation in conjunction with additional manual chain hoists make sure that:
 - Both top and bottom hooks are correctly loaded in the saddle of the hook.
 - Both the top and bottom hooks are free to rotate on their attachment points and do not become trapped or jammed causing stress points on the hook or hook housing.
 - Both the top and bottom attachment points are designed to work at angles away from the vertical.
 - Check the area around the load and assess if the load will move between hoists during the lifting operation.
- Ensure that both the top hook, bottom hook, chain hoist carcass and load chain are all in line.
- When using multiple manual chain hoists to lift and move a single load, the load should not exceed the SWL of any individual manual hoist being used for that lift.

Important: Make sure hoist has an adequate length of load chain to raise or lower the load in a safe manner. Do not attempt to lower hoist beyond its limit.

Hydraulic hot stab male receptacle

The William Hackett hot stab hydraulic interface assemblies are manufactured to customer specifications in our UK factory. The system incorporates a dual port type A receptacle, either ISO standard and API optional specification which are fitted with check valves to prevent ingress of water and loss of hydraulic fluid. The hot stab assemblies, valves and piping are manufactured from Grade 316 stainless steel. All materials certified to BS EN 10204 3.1.

- Framework handle 316 Stainless Steel
- Compliant with BS ISO 13626-8:2002 and BS ISO 13628-1:2005.



Selection for specific underwater lifting application

The harsh conditions experienced at subsea worksites undoubtedly have an adverse effect on any chain hoist used in that environment. The salt water conditions accelerate corrosion within the unit, the immersion in water may wash grease from internal parts and particles suspended in the water can affect the ability of the brake to hold the load. The Hackett ROV SS-C4 chain hoist is manufactured with specifically designed features to cope with these extreme operating conditions.



SS-L5 TOPSIDE AND SUBSEA LEVER HOIST



Salt Water Immersion Test
Verification
Report A0359376.02, Rev.1.

Hackett SS-L5 Topping and Subsea Lever Hoist



The William Hackett second generation SS-L5 topside and subsea lever hoist has been the first lever hoist to be awarded by DNVGL 'Saltwater Immersion test verification, Report No. A0359376.02, Rev.1. The report verifies that the SS-L5 type lever hoist could be safely used over a 21 day single immersion and a 31 day multi immersion period. The design features, testing and guidance for use, maintenance and storage of the SS-L5 has also been developed in line with:

- BP document DEV-AAD-SS-SD-BP-0545 'specification and compliance requirements for lever hoists used subsea on BP projects.'
- IMCA DO28 Rev. 1 'Guidance on the use of chain lever hoists in the offshore subsea environment'
- IMCA Document SEL-019:2007, Guidance for Lifting Operations

The SS-L5 also meets and exceeds the requirements of international standards

British and European Standard BS EN13157: 2004 + A1: 2009

American Standard ASME B30.21-2014

Australian Standard AS 1418.2-1997

South African SANS 1636:2-2007.

NORSOK R-002: 2017.

Lever hoists can be used within an operating temperature range of -40°C to +55°C.

The design and specification of the William Hackett SS-L5 lever hoist includes:

- **WORKING LOAD LIMIT RANGE:** 800kg to 20 tonnes.
- **LIGHT LOAD CAPABILITY:** the SS-L5 is tested and certified at 2% of the lever hoist rated capacity.
- **DABS (DUAL ANTI-LOCK BRAKE SYSTEM):** allows the load chain to be adjusted in freewheel mode without locking the brake.
- **CONSTRUCTION AND DESIGN:** minimises ingress of contaminants to the internal mechanism and brake surfaces.
- **STAINLESS STEEL PAWL SPRINGS:** secured internally to reduce risk of damage.
- **STAINLESS STEEL FIXINGS:** All internal springs are stainless steel, circlips securing the pawls onto the pawl stands, stainless steel nyloc nuts and socket head cap screw are used to secure all hook housing
- **SINTERED/FUSED FRICTION MATERIAL:** directly onto the ratchet gear. Grooves in the friction material enable water to be dispelled from the friction surface more effectively during subsea operations.
- **LOAD CHAIN:** in accordance with BS EN818-7 Grade T(8)
- **CORROSION PROTECTED:** The complete brake mechanism is corrosion protected including the pinion shaft, disc hub, change gear, ratchet gear, pawls, pawl stands and load sheave. In addition the load chain guide, stay bolt and chain



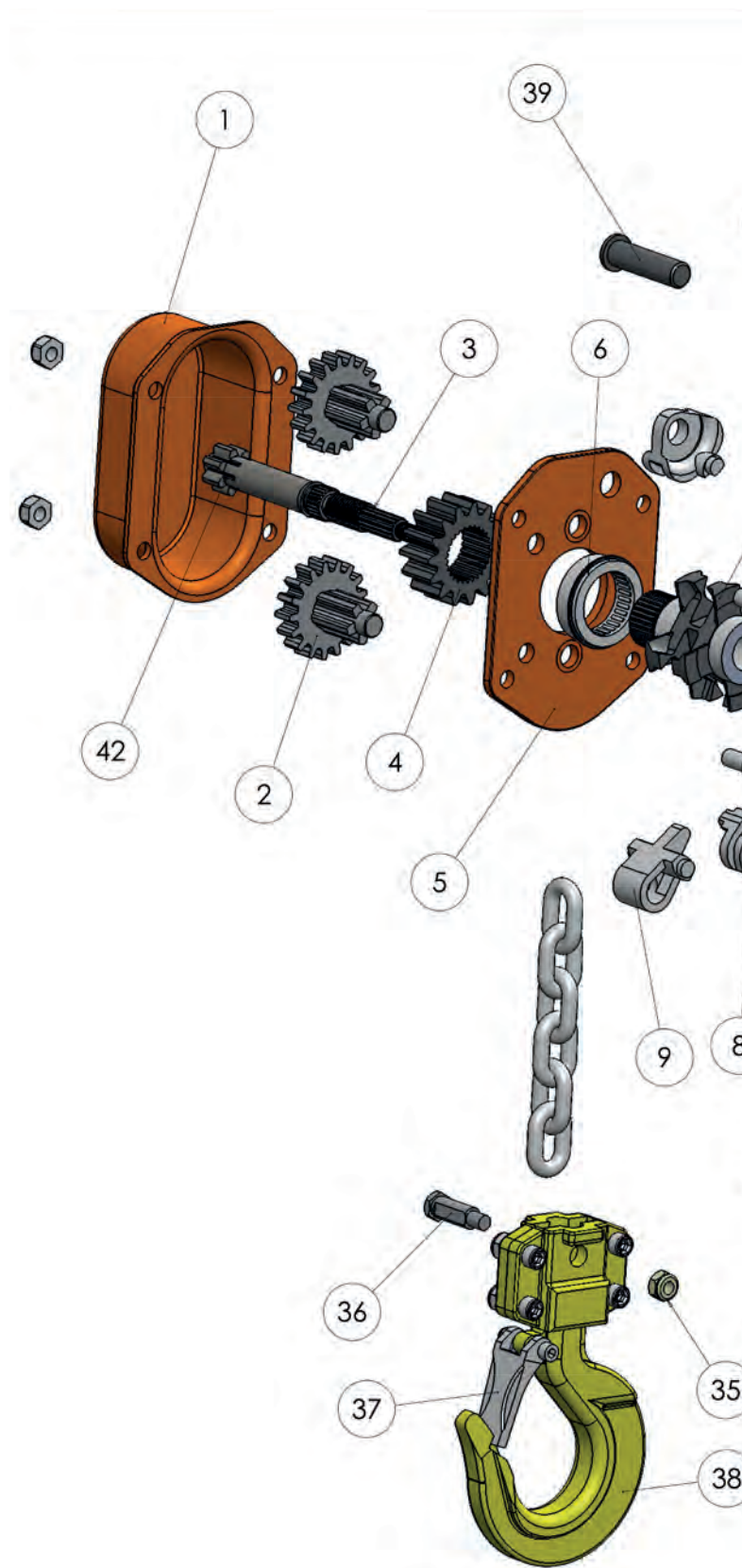
stripper are also corrosion protected.

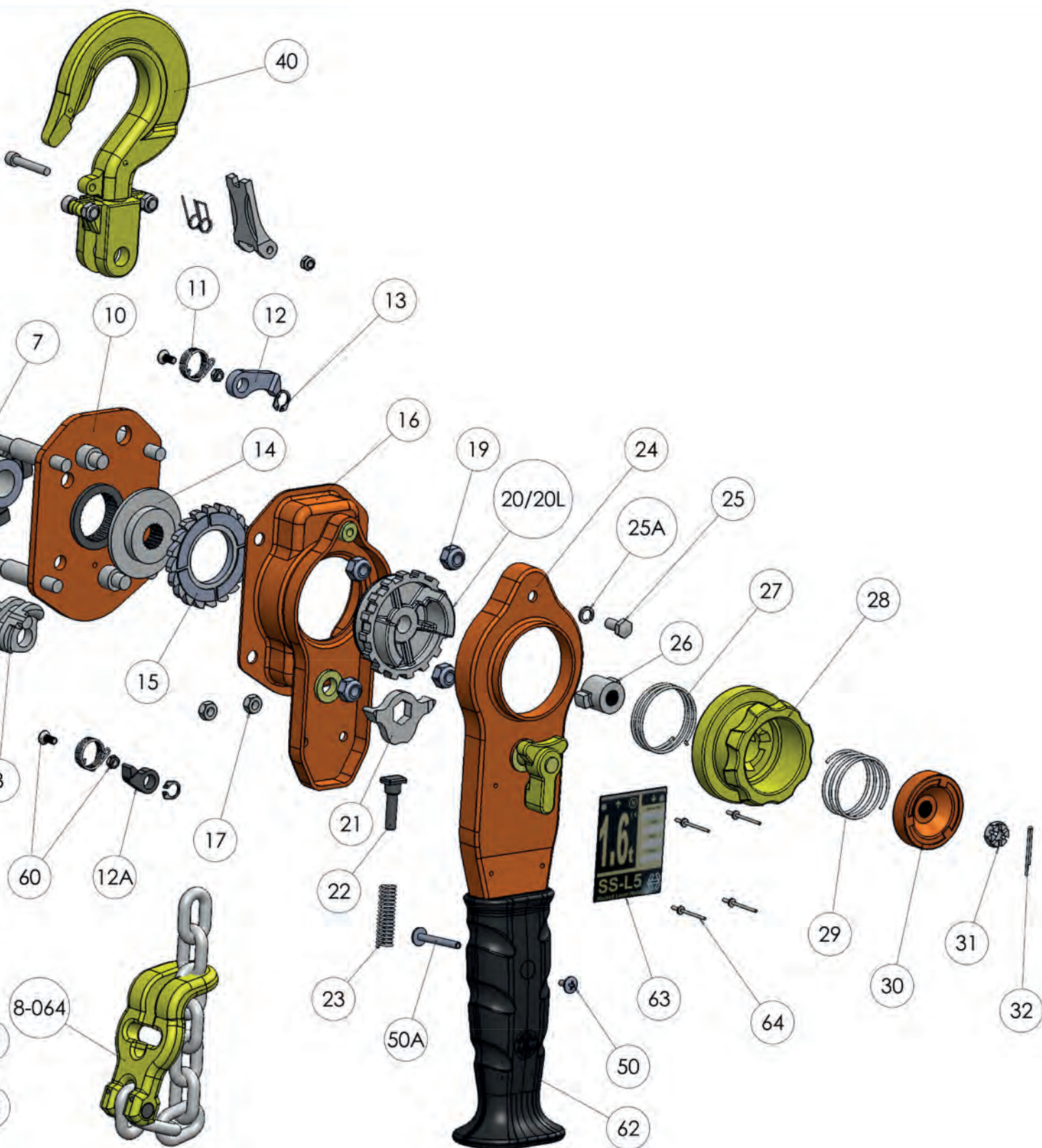
- **HIGH PERFORMANCE WATERPROOF GREASE:** used throughout the hoist enhancing the corrosion protection.
- **ADJUSTABLE TRAVELLING END STOP:** the uniquely designed traveling end stop allows the operator to position the end stop at any point along the slack section of the load chain. When the lever hoist is in a final rigged position the traveling end stop can be positioned adjacent to the SS-L5 lever hoist body. This has the function of preventing payout of the chain for whatever reason when the lever hoist is operated again
- **OVERLOAD LIMITER:** available as an option upon request

Hackett SS-L5 Topside and Subsea Lever Hoist

Exploded Diagram and Parts List

Part Code	Part Name
SSL5.01	Gear Cover
SSL5.02	Pinion Gear (pair)
SSL5.03	Pinion Shaft
SSL5.04	Load Gear
SSL5.05	Gear Side Plate Assembly
SSL5.06	Bearing
SSL5.07	Load Sheave
SSL5.08	Chain Guide
SSL5.09	Chain Stripper
SSL5.10	Lever Side Plate Assembly
SSL5.11	Stainless Steel Pawl Spring
SSL5.12	Pawl - standard
SSL5.12A	Pawl - Offset
SSL5.13	Stainless Steel Circlip
SSL5.14	Disc Hub
SSL5.15	Ratchet Gear c/w Friction Discs
SSL5.16	Brake Cover Assembly
SSL5.17	Lever Side Plate Nyloc Nut (M6)
SSL5.19	Lever Hoist Cover Nyloc Nut (M8)
SSL5.20	Change Gear
SSL5.20L	Load Limiter
SSL5.21	Change Over Pawl
SSL5.22	Change Over Stand
SSL5.23	Change Over Spring
SSL5.24	Handle Assembly
SSL5.25	Screw
SSL5.25A	Spring Washer
SSL5.26	Cam
SSL5.27	Stainless Steel Twisting Spring 1
SSL5.28	Grip Ring
SSL5.29	Stainless Steel Twisting Spring 2
SSL5.30	Spring Housing
SSL5.31	Castle Nut
SSL5.32	Split Pin
SSL5.35	Chain Fixing Pin Nyloc Nut
SSL5.36	Bottom Hook Chain End Fixing Pin
SSL5.37	Latch Kit
SSL5.38	Bottom Hook Assembly
SSL5.39	Top Hook Pin
SSL5.40	Top Hook Assembly
SSL5.42	Pinion Shaft Washer
SSL5.47	Top Hook Chain Fixing Pin 6.3t, and 10t
SSL5.50	Rubber Handle Nut
SSL5.50A	Rubber Handle Bolt
SSL5.60	Stainless Steel Countersunk Screw & Nut
8-064	Travelling End Stop
SSL5.62	Rubber Handle with Enlarged Pommel
SSL5.63	Label
SSL5.64	Label Rivets

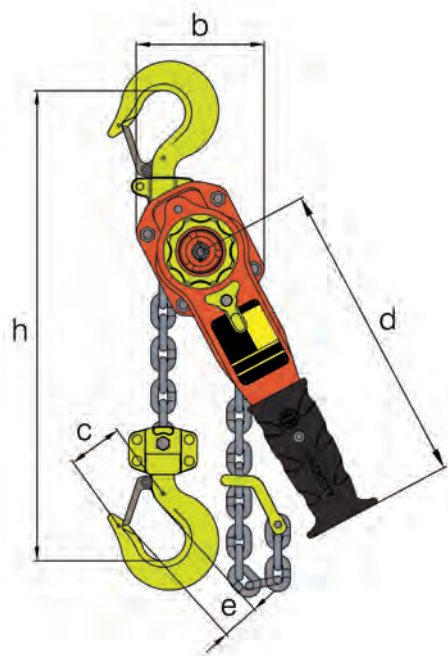




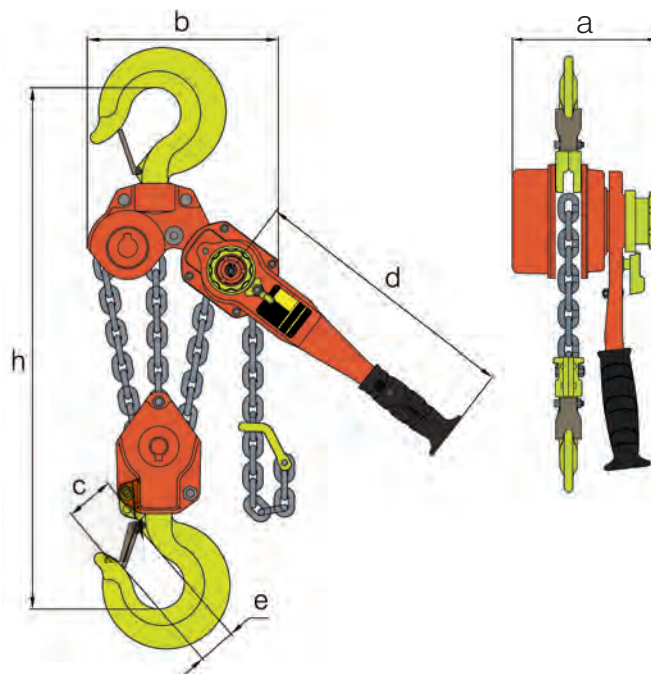
Hackett SS-L5 Topside and Subsea Lever Hoist

Specifications and Dimensions

Single Fall



Multi Fall



Part Code	WLL tonnes	No. of Falls	Load Chain mm	Standard Lift m	a mm	b mm	c mm	d mm	e mm	h mm	Mass kg	Extra Weight per M kg
034.SS.083	0.8	1	5.6 x 15.7	3	146	119	42	245	27	280	6.9	0.7
034.SS.163	1.6	1	7.1 x 19.9	3	164	126	54.5	265	36	335	9.0	1.1
034.SS.323	3.2	1	10 x 28	3	196	159	60.5	415	42	395	17.0	2.2
034.SS.633	6.3	2	10 x 28	3	196	218	85.5	415	52.5	540	33.0	4.4
034.SS.1003	10.0	3	10 x 28	3	196	298	-	415	59	680	50.0	6.6
034.SS.1503	15.0	6	10 x 28	3	196	420	-	415	80	1000	90.0	13.2
034.SS.2003	20.0	8	10 x 28	3	196	480	-	415	80	1150	195.0	17.6



William Hackett

WH-C4 CHAIN BLOCK



WH-C4 Chain Block



WH-C4 Chain Block

The Hackett WH-C4 chain block meets and exceeds the requirements of international standards
British Standard BS EN13157:2004 + A1:2009
American Standard ASME B30.16-2012
Australian Standard AS1418.2-1997,
South African Standard SANS 1594:2007.
NORSOK R-002: 2017.

Chain blocks can be used within an operating temperature range of -40°C to +55°C.

The design and specification of the William Hackett WH-C4 chain block includes:

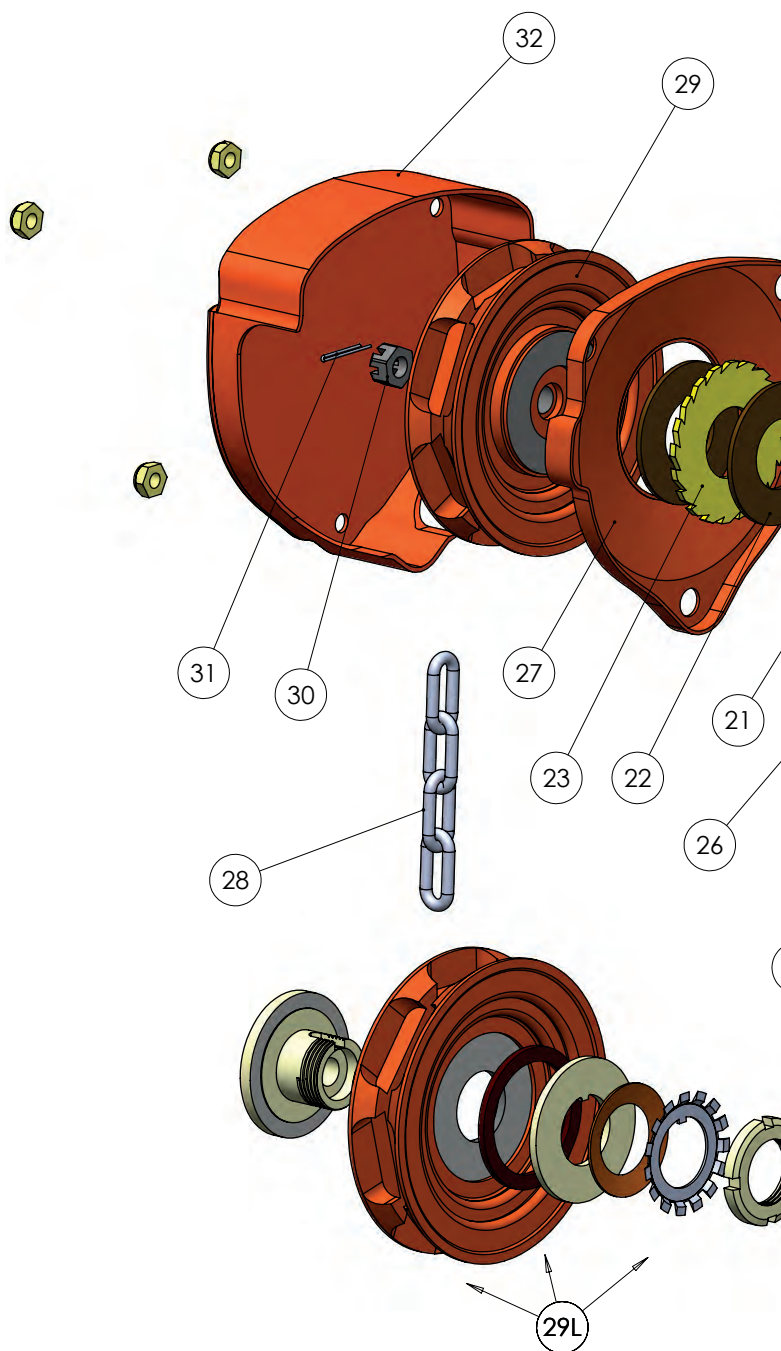
- **WORKING LOAD LIMIT RANGE:** 500kg to 50 tonnes.
- **LIGHT LOAD CAPABILITY:** the WH-C4 is tested and certified at 2% of the chain block rated capacity.
- **TWIN PAWL** double safety; fitted as standard.
- **SAFETY LATCHES:** WH-C4 chain block top and bottom hooks are fitted with heavy duty cast steel latches. The latch and hook tip are integrated creating a strong and robust hook closure.
- **OVERLOAD INDICATOR MARKS:** WH-C4 chain block top and bottom hooks have, as part of the hook forging, overload indicator marks either side of the hook throat. By measuring the distance between the indicator marks, the hook can be quickly and easily checked to see if any stretch has occurred due to misuse or overloading.
- **HAND CHAIN JOINER:** unique hand chain joiner is used as a quick and secure method of joining the hand chain without the need to cut, bend, open and close a link of existing hand chain.
- **HOOK HOUSING:** WH-C4 chain block top and bottom hook housing are secured with socket head cap screws/hex head bolts and nyloc insert locking nuts.
- **FLEETING/CROSS HAULING:** WH-C4 chain blocks are tested and certified for fleeting or cross hauling applications up to 45° from the vertical without deration.
- **LOAD CHAIN:** WH-C4 chain blocks are fitted with load chain that fully complies with international standards BS EN818-7 Grade T (8).
- **OVERLOAD LIMITER:** available as an option upon request.

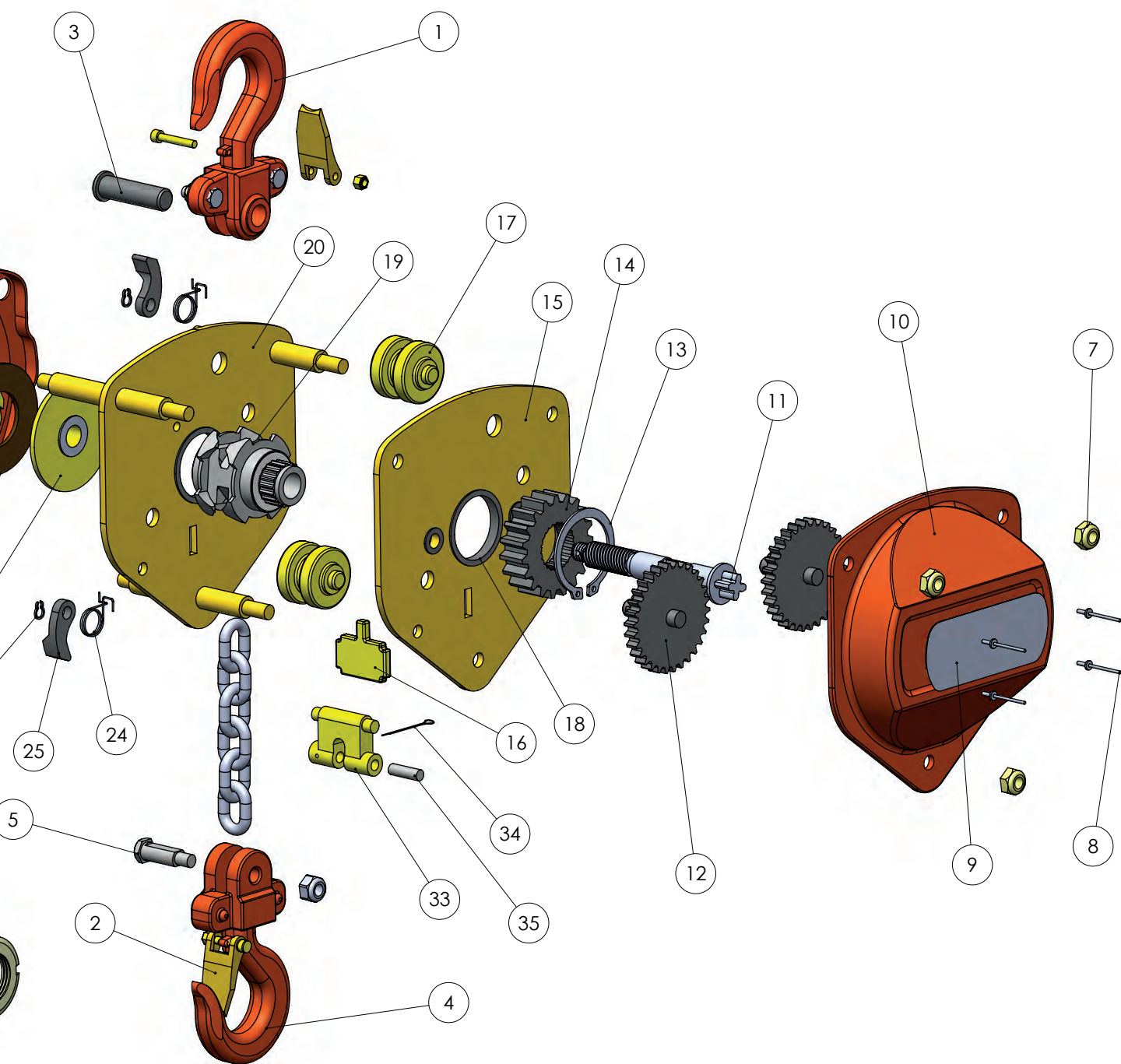


WH-C4 Chain Block

Exploded Diagram and Parts List

Part Code	Part Name
C4.01	Top Hook Assembly
C4.02	Latch Kit
C4.03	Top Hook Pin
C4.04	Bottom Hook Assembly
C4.05	Chain Fixing Pin
C4.07	Nut
C4.08	Label Rivets
C4.09	Label
C4.10	Gear Cover Assembly
C4.11	Pinion Shaft
C4.12	Pinion Gear (pair)
C4.13	Snap Ring
C4.14	Load Gear
C4.15	Gear Side Plate
C4.16	Stripper
C4.17	Guide Roller
C4.18	Caged Roller Bearings
C4.19	Load Sheave
C4.20	Wheel Side Plate Assembly
C4.21	Disc Hub
C4.22	Friction Disc (pair)
C4.23	Ratchet Gear
C4.24	Pawl Spring
C4.25	Pawl
C4.26	Snap Ring
C4.27	Brake Cover
C4.28	Hand Chain
C4.29	Hand Chain Wheel
C4.29L	Overload Limiter Assembly
C4.30	Pinion Nut
C4.31	Cotter Pin
C4.32	Hand Wheel Cover
C4.33	Chain Anchor Plate
C4.34	Split Pin
C4.35	Chain Anchor Pin
C4.36	Top Hook Pin and Lock Nut

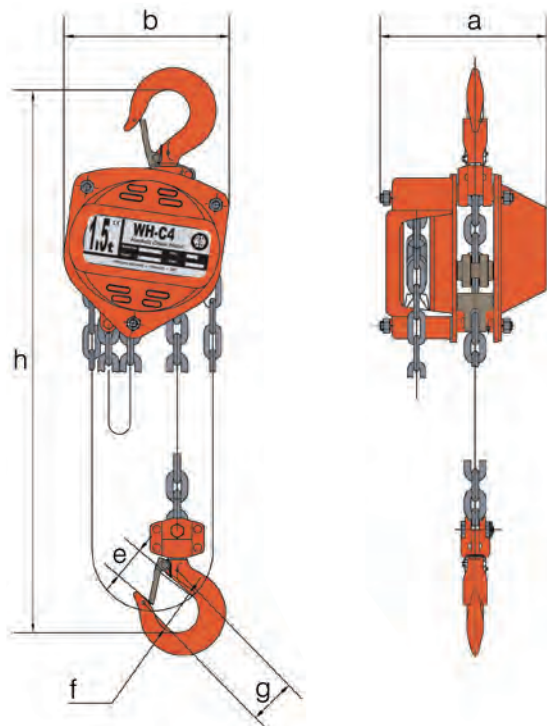




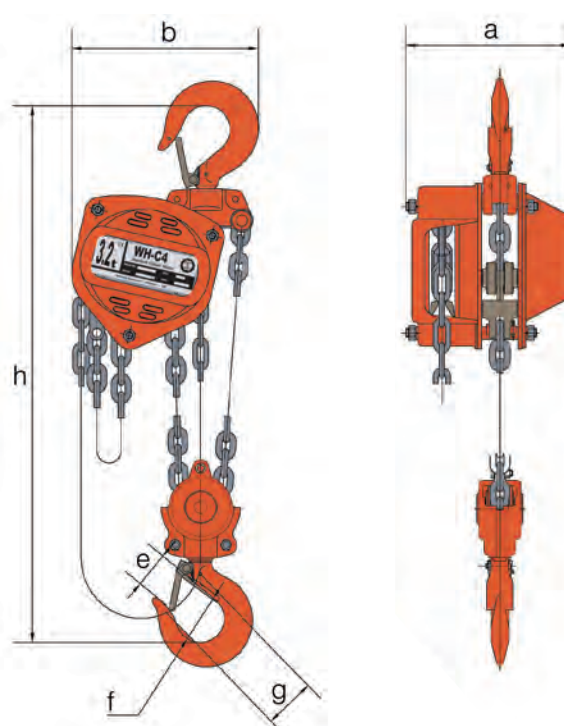
WH-C4 Chain Block

Specifications and Dimensions

Single Fall



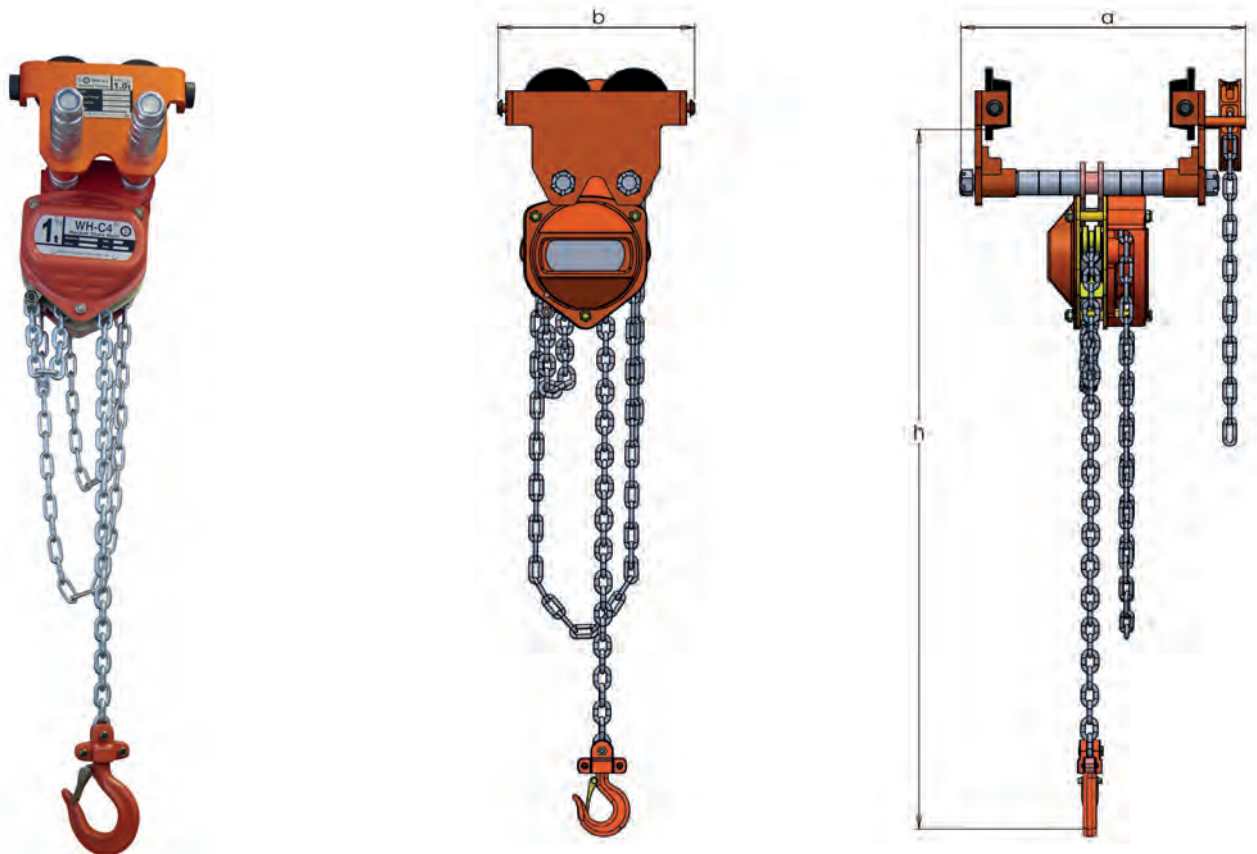
Multi Fall



Part Code	WLL tonnes	No. of Falls	Load Chain mm	Hand Chain mm	Standard Lift m	a mm	b mm	e mm	f mm	g mm	h mm	Mass kg	Extra Weight per M kg
022.050	0.5	1	5 x 15	5 x 25	3	125	130	27.5	32	37	280	7.8	0.54
022.100	1	1	6 x 18	5 x 25	3	134	155	31.5	40	44	306	11.1	0.80
022.150	1.5	1	8 x 24	5 x 25	3	151	173	32.5	42	48	368	15.8	1.4
022.200	2	1	8 x 24	5 x 25	3	157	185	36.5	46	52	445	16.8	1.4
022.3D00	3.2	2	8 x 24	5 x 25	3	157	235	42.5	52	62	520	24.2	2.8
022.500	5	2	10 x 30	5 x 25	3	180	262	51	60	77	600	39.8	4.4
022/1000	10	4	10 x 30	5 x 25	3	180	365	53	85	-	760	89.7	8.8
022/1500	15	6	10 x 30	5 x 25	3	210	406	80	100	-	1000	91.1	13.2
022/2000	20	8	10 x 30	5 x 25	3	225	550	80	110	-	1150	197	17.6
024/3000	30	12	10 x 28	5 x 25	3	360	680	80	110	-	1250	301	26.4
024/5000	50	20	10 x 28	5 x 25	3	585	832	133	170	-	1700	465	44.0

Combined Chain Blocks and Trolleys

The William Hackett Combined Block and Trolleys meet and exceed the requirements of international standard and British Standard BS EN 13157:2004 + A1:2009.



Combined Chain Block and Push Travel Trolley

Part Code	WLL tonnes	No.of Falls	Beam Range 1 mm	Beam Range 2 mm	a mm	b mm	h mm	Mass kg
066.050	0.5	1	50 - 203	-	289	200	295	15.0
066.100	1.0	1	64 - 203	64 - 305	309	232	305	22.0
066.200	2.0	1	88 - 203	88 - 305	318	260	437	34.0
066.300	3.0	2	100 - 203	100 - 305	342	280	493	53.0
066.500	5.0	2	114 - 203	114 - 305	362	312	573	80.0

Combined Chain Block and Geared Travel Trolley

Part Code	WLL tonnes	No.of Falls	Beam Range 1 mm	Beam Range 2 mm	a mm	b mm	h mm	Mass kg Range 1
067.050	0.5	1	50 - 203	-	289	200	295	15.6
067.100	1.0	1	64 - 203	64 - 305	309	232	305	25.5
067.200	2.0	1	88 - 203	88 - 305	318	260	437	37.5
067.300	3.0	2	100 - 203	100 - 305	342	280	493	57.0
067.500	5.0	2	114 - 203	114 - 305	362	312	573	83.0

Hackett WH-PT Push Trolley

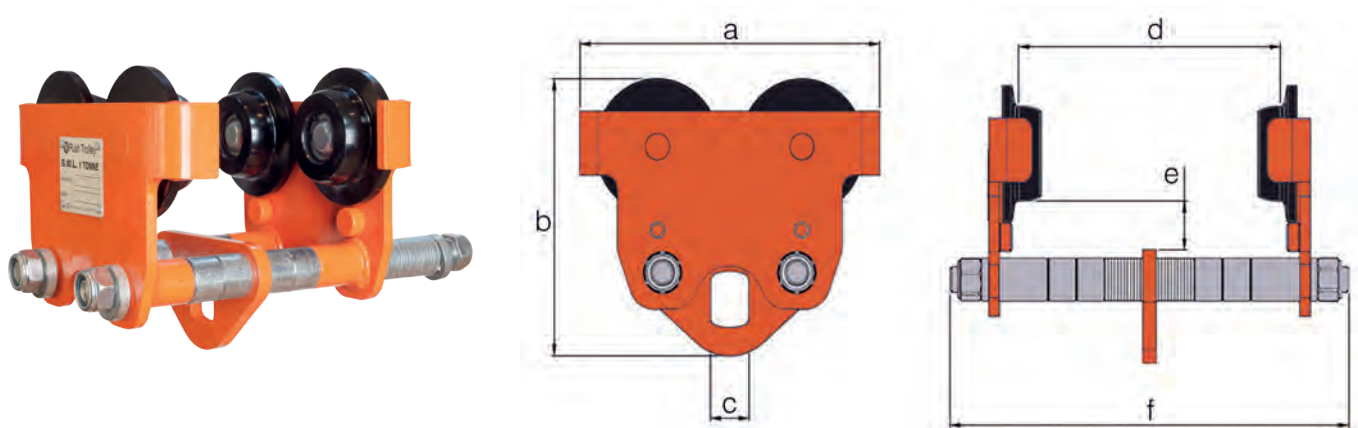
The William Hackett WH-PT Push Travel Trolleys meet and exceed the requirements of international standard and British Standard BS EN 13157:2004 + A1:2009.

This high quality trolley range is precision engineered in capacities from 500Kg to 10t.

Enabling exact positioning or easy traversing of large loads incorporating Manual hoists, the Hackett series push trolley can be supplied to suit various track widths with Beam Range 1 and the extended Beam Range 2.

The runners (trolley wheels) are precision machined and they rotate on maintenance sealed ball bearings.

All Hackett push trolleys are fitted with anti-jump bars and rubber end stops as standard.



Part Code	WLL tonnes	Min. Radius of Curve m	a mm	b mm	c mm	d mm	e mm	f mm	Beam Range 1 mm	Beam Range 2 mm	Mass kg
044.050	0.5	0.8	200	166	22	203	34.0	289	50-203	-	6.5
044.100	1.0	0.9	232	196	30	203	34.6	309	64-203	64-305	10.0
044.200	2.0	1.0	260	226	37	203	34.5	318	88-203	88-305	15.5
044.300	3.0	1.2	280	264	42	203	34.5	342	100-203	100-305	26.5
044.500	5.0	1.3	312	271	50	203	34.2	362	114-203	114-305	36.0
044.1000	10.0	2.0	376	342	58	203	37.1	380	124-203	124-305	59.0

Hackett WH-GT Geared Trolley

The William Hackett WH-GT Geared Travel Trolleys meet and exceed the requirements of international standard and British Standard BS EN 13157:2004 + A1:2009.

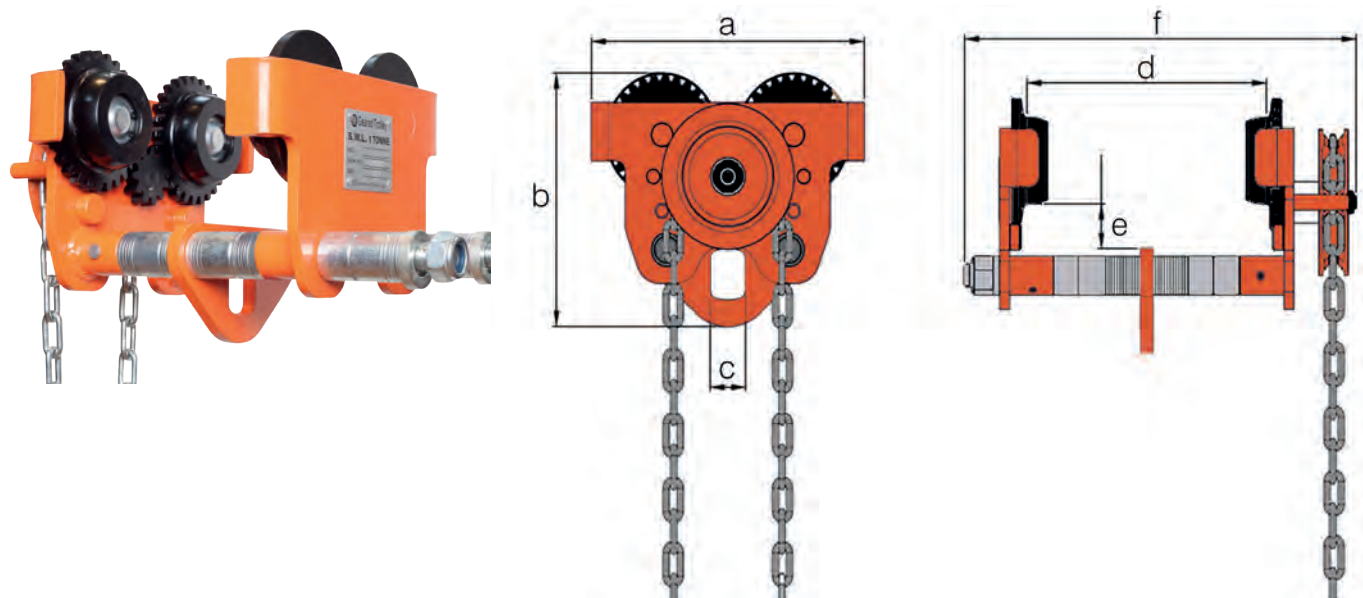
This high quality trolley range is precision engineered in capacities from 500Kg to 10 tonne.

Enabling exact positioning or easy traversing of large loads incorporating Manual hoists, the Hackett series geared trolley can be supplied to suit various track widths with Beam Range 1 and the extended Beam Range 2.

It has been designed so that the bottom of the hand chain loop is 500mm from ground level.

The runners (trolley wheels) are precision machined and they rotate on maintenance sealed ball bearings.

All Hackett geared trolleys are fitted with anti-jump bars rubber end stops as standard.



Part Code	WLL tonnes	Min. Radius of Curve m	a mm	b mm	c mm	d mm	e mm	f mm	Beam Range 1 mm	Beam Range 2 mm	Mass kg
055.050	0.5	0.8	200	166	22	203	34.0	320	50-203	-	7.1
055.100	1.0	0.9	232	196	30	203	34.6	333.2	64-203	64-305	13.5
055.200	2.0	1.0	260	226	37	203	34.5	342	88-203	88-305	19.0
055.300	3.0	1.2	280	264	42	203	34.5	352	100-203	100-305	30.5
055.500	5.0	1.3	312	271	50	203	34.2	370	114-203	114-305	38.6
055.1000	10.0	2.0	376	342	58	203	37.1	391.2	124-203	124-203	70.0

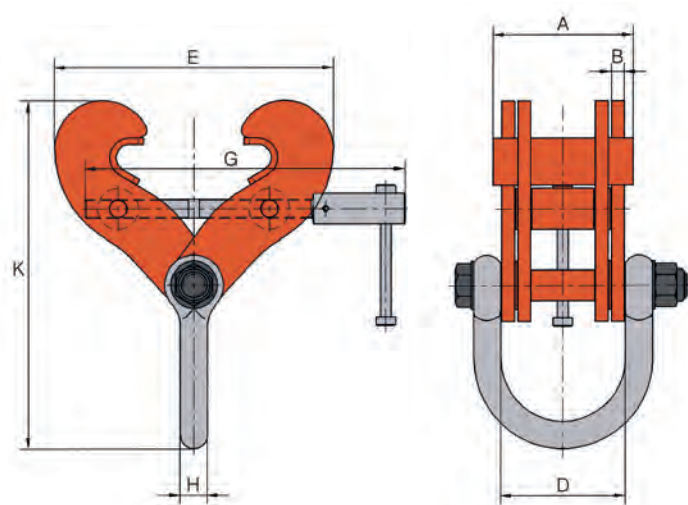
WH-BC Fixed Jaw Super Clamp

Fixed Jaw Super Clamp

Manufactured in accordance with BS EN13155: 2003 + A2: 2009 - Cranes - Safety – Non Fixed Load Lifting Attachments.

The WH-BC fixed jaw super clamp is fitted with a 'gussett' in both jaws of the beam clamp maximising contact between the beam and beam clamp increasing the grip of the beam clamp. A shackle is fitted to the bottom of the beam clamp allowing an easy connection of the hoist to be attached.

This fixed jaw super clamp can be used to an angle of 45° to the vertical. When the angle is moved away from the vertical the working load limit of the beam clamp needs to be reduced. Please refer to the table opposite - reduction in working load limits when side loads are applied.



Part Code	Model No.	WLL tonnes	Beam Range mm	A mm	B mm	D mm	E max	E min	G mm	K max	K min	H mm	Mass kg
027.200	WH-BC2	2.0	76-190	130	3	90	254	133	275	263	223	20	4.0
027.300	WH-BC3	3.0	76-190	130	12	102	275	166	275	289	251	20	8.0
027.300.E	WH-BC3A	3.0	127-350	130	12	102	438	228	560	375	294	20	11.5
027.400	WH-BC4	4.0	150-254	130	10	112	371	185	410	369	308	25	11.0
027.500	WH-BC5	5.0	76-190	130	12	116	306	191	295	338	300	25	10.0
027.500.E	WH-BC5W	5.0	150-305	130	12	116	422	264	410	413	360	25	15.0
027.600	WH-BC6	6.0	203-457	140	12	116	608	267	560	511	402	25	18.8
027/1000	WH-BC10	10.0	203-457	140	20	118	608	267	560	530	421	32	28.0
027/1500	WH-BC15	15.0	203-457	170	20	116.5	648	400	660	684	608	40	49.5
027/1500.E	WH-BC15W	15.0	406-610	170	20	116.5	800	600	810	812	706	40	58.5

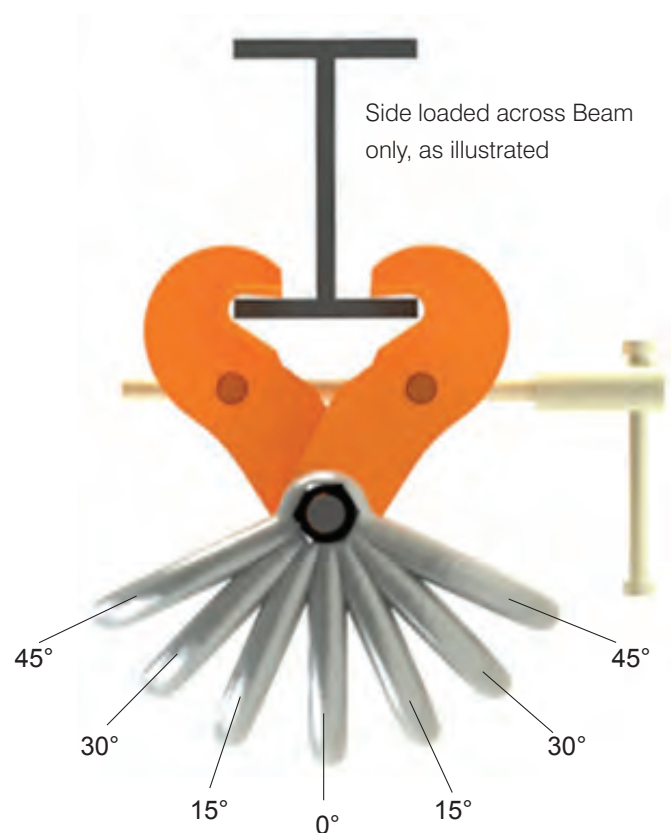
The working load limits below and derations have been established specifically for most William Hackett clamps and only apply in overhead beam attachment i.e: DO NOT apply if clamps are to be used for lifting beams.

The tables apply to our clamps only (selected models) and we strongly advise that stress calculations should be carried out (by the user's engineering department) for all support steelwork.

WARNING: All clamps must be correctly applied to the beam by a competent person and fully hand tightened. If in doubt, contact the manufacturer for their recommendations.

NOTE: Clamp model WH-BC2 (027.200) is not suitable for any side loading as it is of lightweight design.

Although we are confident that our beam clamps could operate at 90 degrees without any reduction in efficiency, William Hackett do not recommend this type of use in application, there will be a significant overturning moment generated on the beam flange and this could result in the actual supporting structure being permanently deformed and or damaged. If clamps are used in any other way than that indicated above WH will not accept any liability and would strongly recommend that this unsafe practice is not adopted.

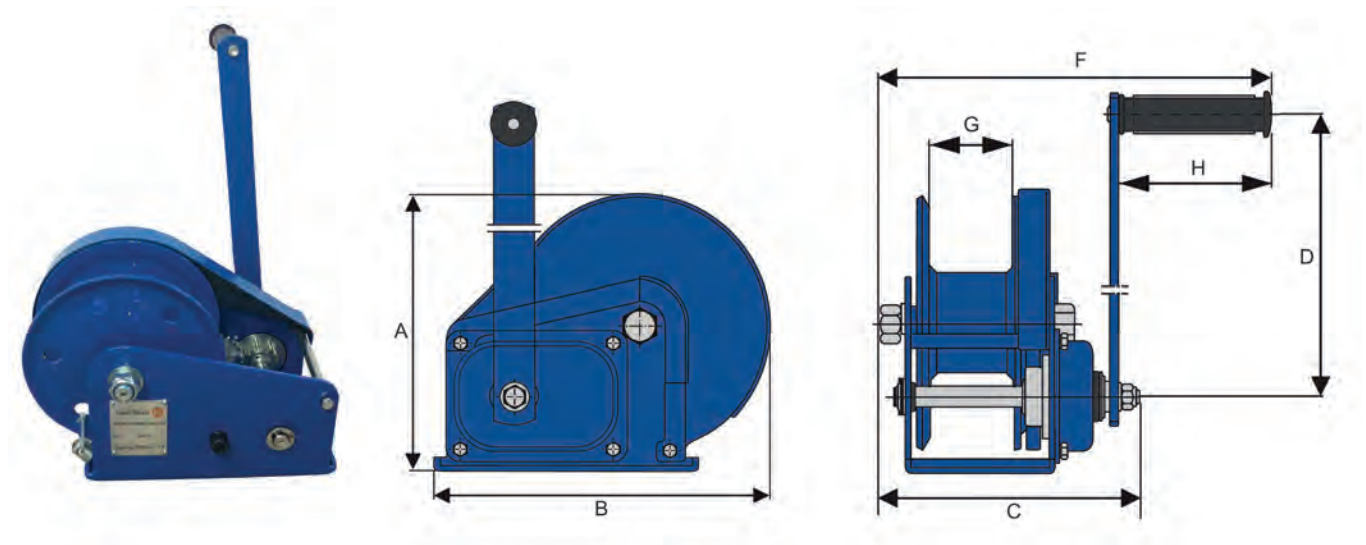


Reduction in Working Load Limits when Side Loads are Applied

Angle From Vertical	0°	0° to 15°	15° to 30°	30° to 45°
Reduction Factor	Nil	17%	34%	50%
Models	WLL	WLL	WLL	WLL
027.200	2 tonne	N/A	N/A	N/A
027.300, 027.300.E	3 tonne	2.5 tonne	2 tonne	1.5 tonne
027.400	4 tonne	3.3 tonne	2.6 tonne	2 tonne
027.500, 027.500.E	5 tonne	4.1 tonne	3.3 tonne	2.5 tonne
027.600	6 tonne	5 tonne	4 tonne	3 tonne
027/1000	10 tonne	8.3 tonne	6.5 tonne	5 tonne
027/1500, 027/1500.E	15 tonne	12.4 tonne	10 tonne	7.5 tonne

Hand Winch

- The positive action brake on the Hackett hand winch can hold the load in any position.
- The brake is sealed in a strong steel cover to protect from dust and rain.
- It is compact, light weight and is of rugged construction.
- The winch should only be used for pulling.
- A notable feature of the Hackett hand winch brake system is that it is fitted with two pawls to provide extra safety under all operating conditions.

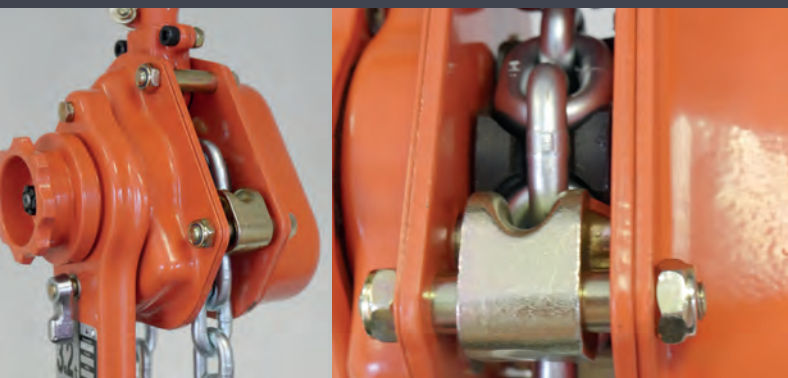


Part Code	A mm	B mm	C mm	D mm	F mm	G mm	H mm	Mass kg
011.120	156	184	157	208	273	51	110	3.7
011.180	203	246	190	319	288	60	110	8.1
011.260	216	294	209	319	307	63	110	10.3

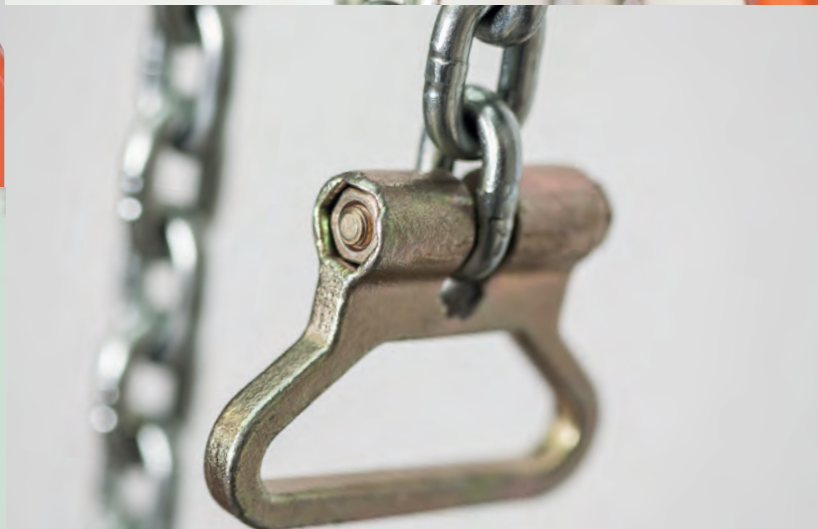
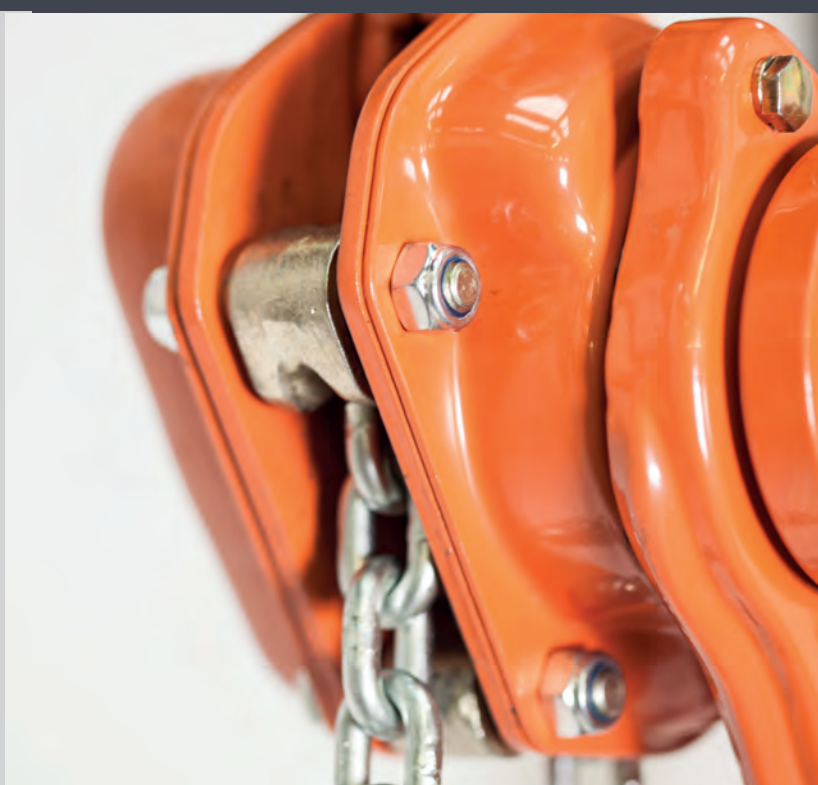
Part Code	011.120	011.180	011.260
Pulling Capacity (lb / kg)	1200lb / 550kg	1800lb / 800kg	2600lb / 1180kg
Hand Operated Strength (N)	180	190	190
Transmission/Gear Ratio	4.2 : 1	5 : 1	10 : 1
Rope Diameter	Ø 5mm	Ø 7mm	Ø 8mm
Rope Capacity (m)	25	25	20



WH-L4 LEVER HOIST



WH-L4 Lever Hoist



WH-L4 Lever Hoist

The Hackett WH-L4 lever hoist meets and exceeds the requirements of international standards

British and European Standard BS EN13157:2004 + A1:2009

American Standard ASME B30.21-2014

Australian Standard AS1418.2-1997

South African Standard SANS 1636:2-2007.

NORSOK R-002: 2017.

Lever hoists can be used within an operating temperature range of -40°C to +55°C.

The design and specification of the William Hackett WH-L4 lever hoist includes:

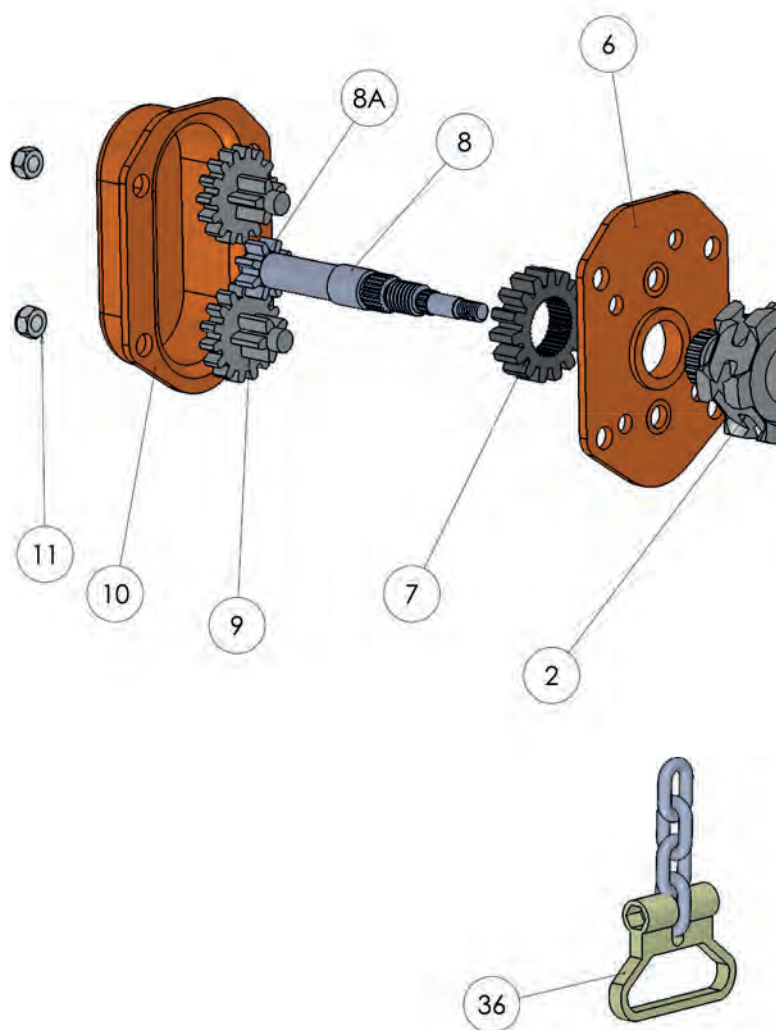
- **WORKING LOAD LIMIT RANGE:** 800kg to 20 tonnes.
- **LIGHT LOAD CAPABILITY:** the WH-L4 is tested and certified at 2% of the lever hoist rated capacity.
- **TWIN PAWL** double safety; fitted as standard.
- **SAFETY LATCHES:** WH-L4 lever hoist top and bottom hooks are fitted with heavy duty cast steel latches. The latch and hook tips are integrated creating a strong and robust hook closure.
- **OVERLOAD INDICATOR MARKS:** WH-L4 lever hoist top and bottom hooks have, as part of the hook forging, overload indicator marks either side of the hook throat. By measuring the distance between the indicator marks, the hook can be quickly and easily checked to see if any stretch has occurred due to misuse or overloading.
- **HOOK HOUSING:** WH-L4 lever hoist top and bottom hook housings are secured with socket head cap screws/hex head bolts and nyloc locking nuts.
- **FLEETING/CROSS HAULING:** WH-L4 lever hoists are tested and certified for fleeting or cross hauling applications up to 45° from the vertical without deration.
- **LOAD CHAIN:** WH-L4 lever hoists are fitted with load chain that fully complies with international standards BS EN818-7 Grade T (8).
- **TRAVELLING END STOP:** available as an option upon request. The travelling end stop can be fitted as a replacement to the standard end stop. The travelling end stop allows the user, when a WH-L4 lever hoist is in position, to move the end stop along the slack chain and position adjacent to the body of the lever hoist. This has the benefits of shortening the slack chain, and stopping any potential 'run' of load chain through the hoist when the operator comes to use it again.

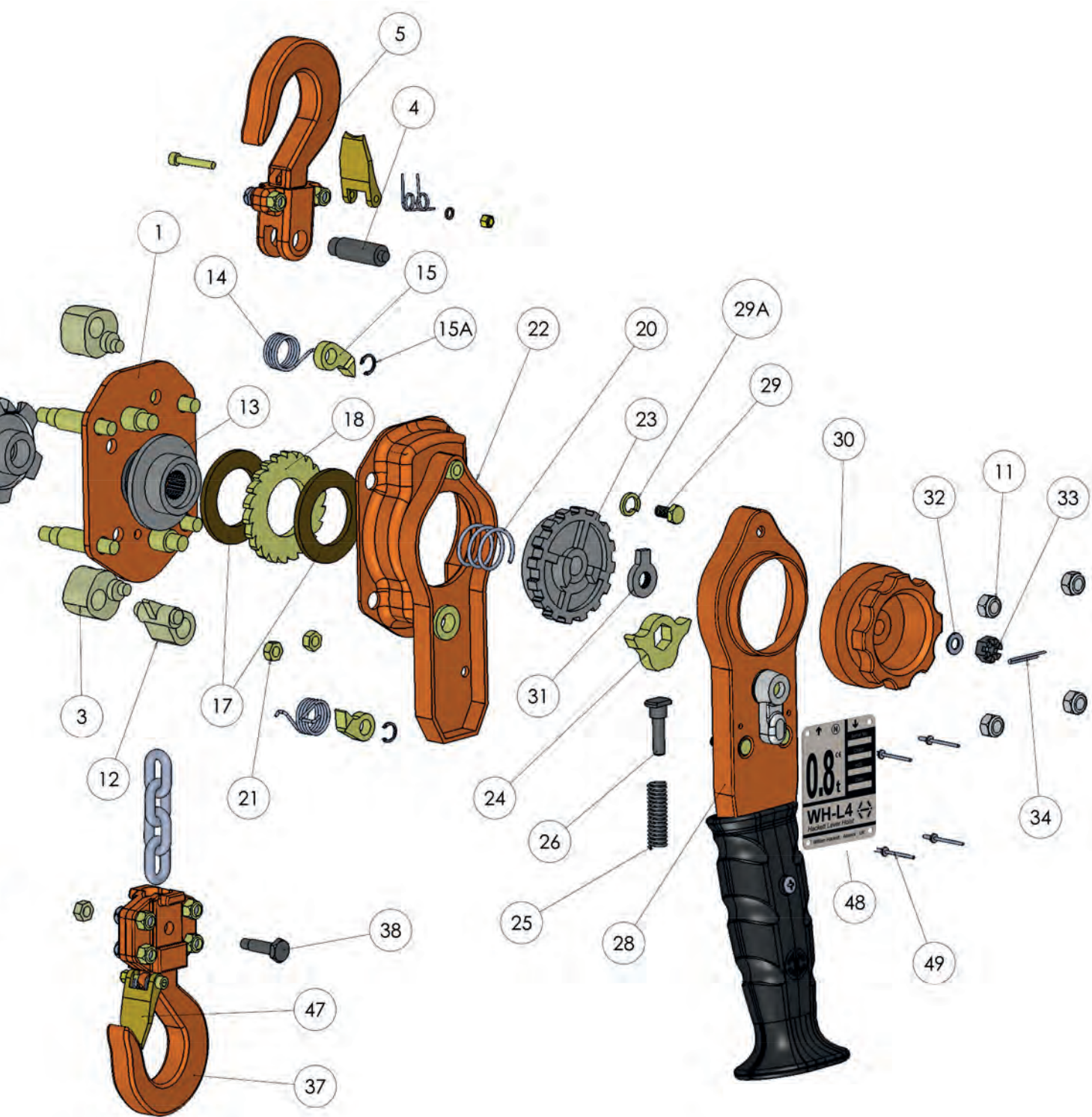


WH-L4 Lever Hoist

Exploded Diagram and Parts List

Part Code	Part Name
L4.01	Left Side Plate Assembly
L4.02	Load Sheave
L4.03	Chain Guide
L4.04	Top Hook Shaft
L4.05	Top Hook Assembly
L4.06	Right Side Plate Assembly
L4.07	Load Gear
L4.08	Pinion Shaft
L4.08a	Pinion Shaft Washer
L4.09	Pinion Gear (pair)
L4.10	Gear Cover
L4.11	Nut
L4.12	Chain Stripper
L4.13	Disc Hub
L4.14	Pawl Spring
L4.15	Pawl
L4.15a	Circlip
L4.17	Friction Disc (pair)
L4.18	Ratchet Gear
L4.20	Spring
L4.21	Lock Nut
L4.22	Handle Cover Assembly
L4.23	Change Gear
L4.24	Change Over Pawl
L4.25	Change Over Spring
L4.26	Change Over Stand
L4.28	Lever Handle Assembly
L4.29	Screw
L4.29A	Spring Washer
L4.30	Grip Ring
L4.31	Stop Cam
L4.32	Washer
L4.33	Castle Nut
L4.34	Split Pin
L4.36	Square Type End Stop
L4.37	Bottom Hook Assembly
L4.38	Chain Fixing Pin
L4.47	Latch Kit
L4.48	Label
L4.49	Label Rivets

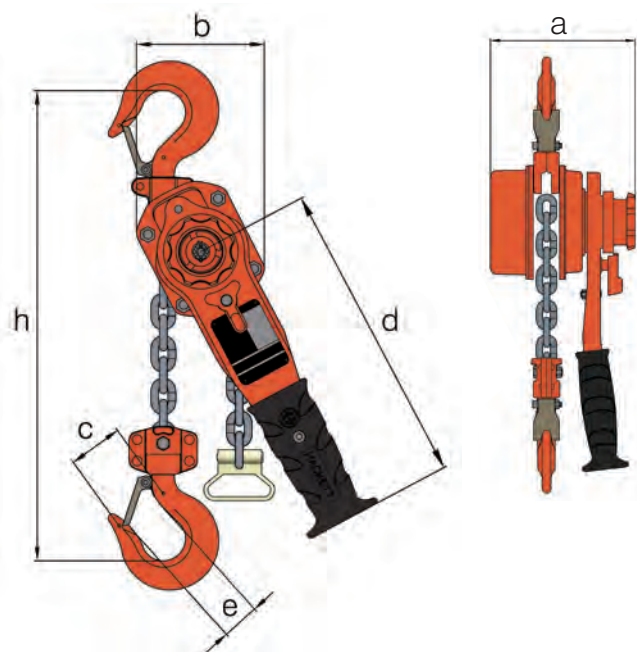




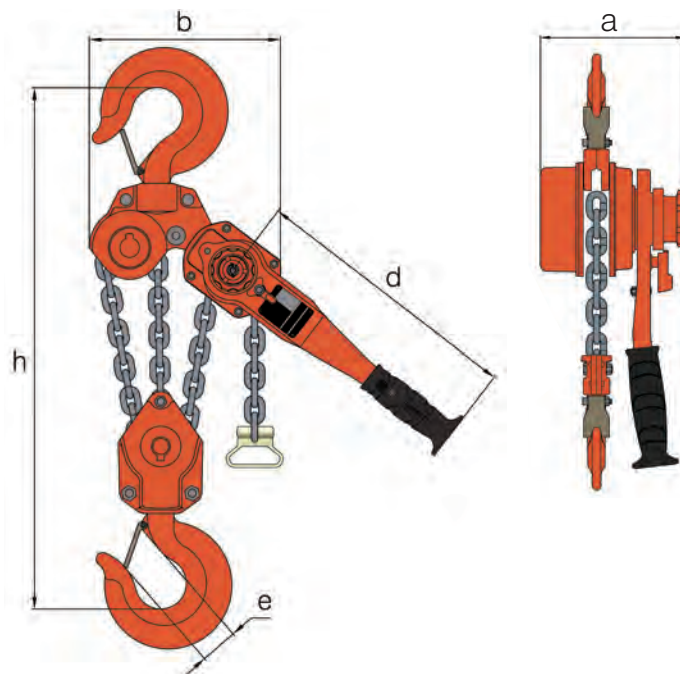
WH-L4 Lever Hoist

Specifications and Dimensions

Single Fall



Multi Fall



Part Code	WLL tonnes	No. of Falls	Load Chain mm	Standard Lift (m)	a mm	b mm	c mm	d mm	e mm	h mm	Mass kg	Extra Weight per M kg
033.075	0.8	1	5.6 x 17	1.5	148	121	37.5	265	28	280	6.2	0.7
033.150	1.6	1	7.1 x 21	1.5	165.5	141	47	415	33	350	9.6	1.1
033.300	3.2	1	10 x 30	1.5	194.5	178	62.5	415	42.5	420	15.5	1.7
033.600	6.3	2	10 x 30	1.5	194.5	228	78	415	51	570	27	3.5
033.900	9.0	3	10 x 30	1.5	194.5	310	-	415	56	680	38.3	5.2
033/1500	15.0	6	10 x 30	1.5	194.5	420	-	415	80	1000	90	13.8
033/2000	20.0	8	10 x 30	1.5	194.5	480	-	415	80	1150	195	19.2



William Hackett

ATEX HOISTING RANGE

Ex II 2G c IIC T4

Ex II c IIIC T135°C



ATEX Hoisting Range

ATEX Chain Block

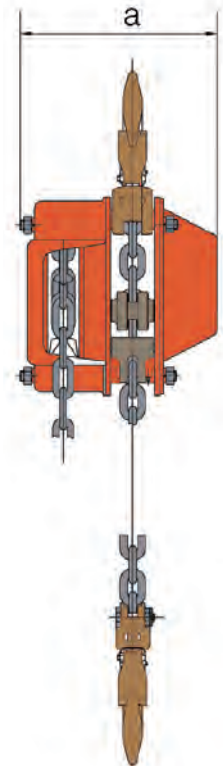
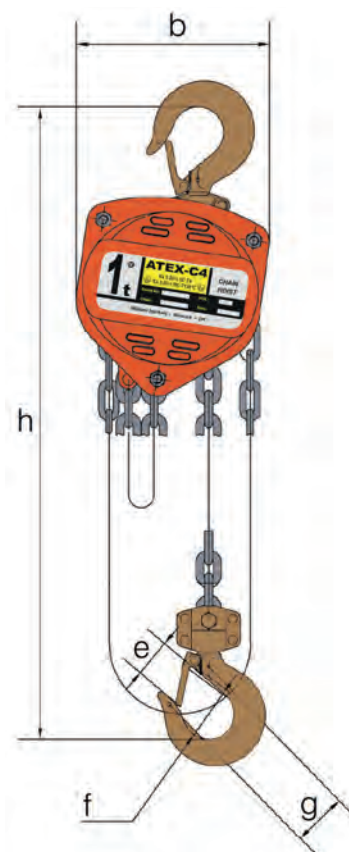
In accordance with: ATEX Directive 2014 / 34 / EU and Machinery Directive 2006 / 42 / EC

The Hackett ATEX chain blocks meet and exceed the requirements of international standards:

British Standard BS EN13157:2004 + A1:2009; American Standard ASME B30.16-2012;

Australian Standard AS1418.2-1997; South African Standard SANS 1594:2007; NORSOK R-002: 2017.

- ATEX anti-spark chain block for use in hazardous environments
- Specific internal components corrosion protected
- Copper plated parts include top and bottom hook assemblies, chain end anchor, chain stripper, roller guides and handwheel
- Fitted with stainless steel handchain material 316L
- Supplied with EN818-7 zinc plated loadchain as standard with an option for stainless steel Grade 6 loadchain upon application
- Body cover epoxy powder coated
- Capacity 500 Kg - 5 tonne
- Other sizes available upon request
- Twin pawl double safety; fitted as standard



Part Code	WLL tonnes	No. of Falls	Load Chain mm	Hand Chain mm	Stand. Lift m	a mm	b mm	e mm	f mm	g mm	h mm	Mass kg	Extra Weight per m kg
022.ATEX.050	0.5	1	5 x 15	5 x 25	3	125	130	27.5	32	37	280	8.1	1.4
022.ATEX.100	1	1	6 x 18	5 x 25	3	134	155	31.5	40	44	306	11.5	1.7
022.ATEX.200	2	1	8 x 24	5 x 25	3	157	185	36.5	46	52	445	16.8	2.3
022.ATEX.3D00	3.2	2	8 x 24	5 x 25	3	157	235	42.5	52	62	520	24.2	3.7
022.ATEX.500	5	2	10 x 30	5 x 25	3	180	262	51.0	60	77	600	39.8	5.3

ATEX Hoisting Range

ATEX Lever Hoist

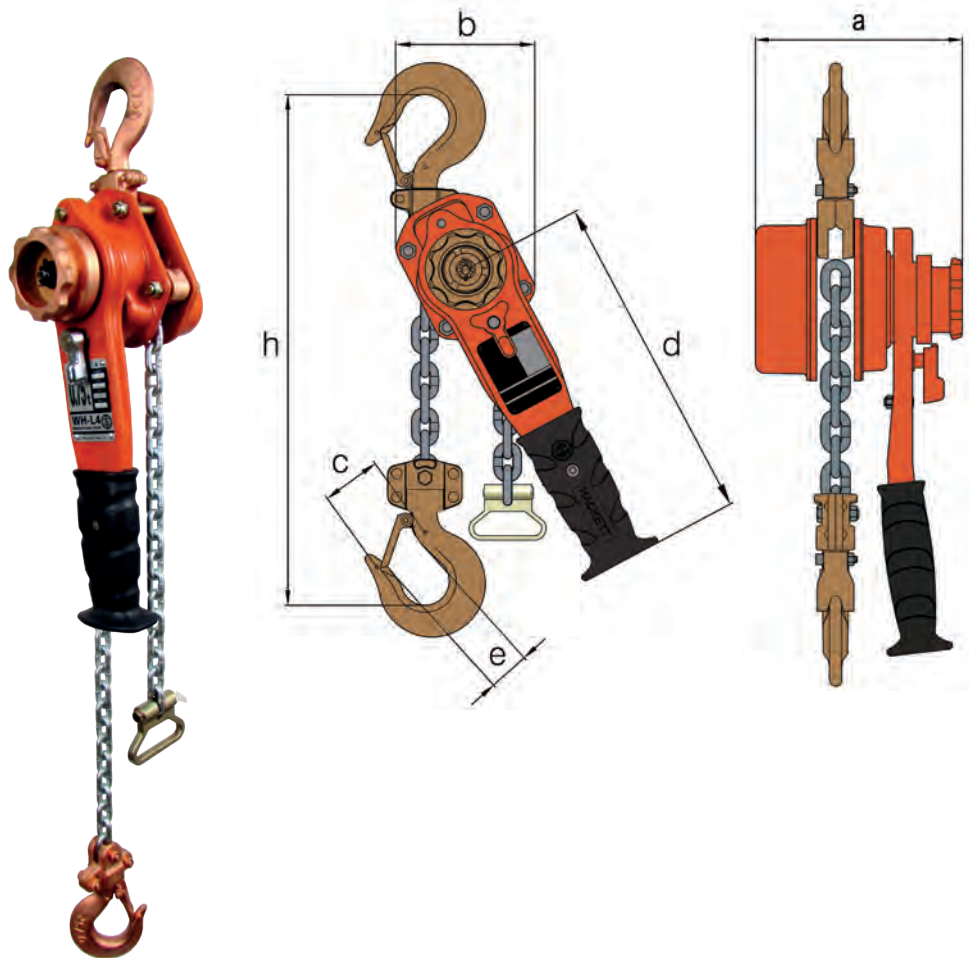
In accordance with: ATEX Directive 2014 / 34 / EU and Machinery Directive 2006 / 42 / EC

The Hackett ATEX Lever Hoists meet and exceed the requirements of international standards:

British Standard BS EN13157:2004 + A1:2009; American Standard ASME B30.21-2012

Australian Standard AS1418.2-1997; South African Standard SANS 1636:2007; NORSOK R-002: 2017

- ATEX anti-spark lever hoist for use in hazardous environments
- Specific internal components corrosion protected
- Copper plated parts include top and bottom hook assemblies, loadchain guides, grip rings and chain stripper
- Supplied with EN818-7 zinc plated loadchain as standard with an option for stainless steel Grade 6 loadchain upon application
- Body cover epoxy powder coated
- Capacity 800 Kg - 3.2 tonne
- Other sizes available upon request
- Twin pawl double safety; fitted as standard



Part Code	WLL tonnes	No. of Falls	Load Chain mm	Stand. Lift (m)	a mm	b mm	c mm	d mm	e mm	h mm	Mass kg	Extra Weight per m kg
033.ATEX.075	0.8	1	5.6 x 17	1.5	148	121	40	265	28	280	6.2	0.7
033.ATEX.150	1.6	1	7.1 x 21	1.5	165.5	141	47	415	33	350	9.6	1.1
033.ATEX.300	3.2	1	10 x 30	1.5	194.5	178	62.5	415	42.5	420	15.5	1.7

ATEX Hoisting Range

ATEX Push Trolley

In accordance with: ATEX Directive 2014 / 34 / EU and Machinery Directive 2006 / 42 / EC

The William Hackett ATEX Push Travel Trolleys meet and exceed the requirements of international standard and British Standard BS EN 13157:2004 + A1:2009.

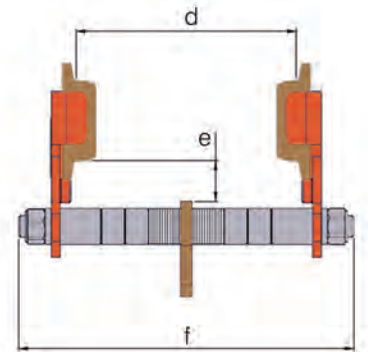
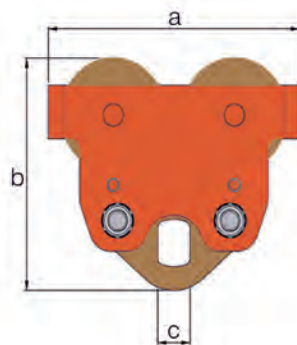
This high quality trolley range is precision engineered in capacities from 500Kg to 2 tonne.

Enabling exact positioning or easy traversing of large loads incorporating Manual hoists, the Hackett series push trolley can be supplied to suit various track widths with Beam Range 1 and the extended Beam Range 2.

The runners (trolley wheels) are precision machined and they rotate on maintenance sealed ball bearings.


All Hackett push trolleys are fitted with anti-jump bars and rubber end stops as standard.

- Fitted with solid bronze wheels
- Copper plated hanging plate
- Fitted with rubber end stops
- Other sizes available upon request



Part Code	WLL tonnes	Min. Radius of Curve m	a mm	b mm	c mm	d mm	e mm	f mm	Beam Range 1 mm	Beam Range 2 mm	Mass kg
044.ATEX.050	0.5	0.8	200	166	22	203	34.0	289	50-203	-	6.5
044.ATEX.100	1.0	0.9	232	196	30	203	34.6	309	64-203	64-305	10.0
044.ATEX.200	2.0	1.0	260	226	37	203	34.5	318	88-203	88-305	15.5

Ex II 2 GD c IIC T4 IIIC T135°C

II	2	GD	c	IIC	T4	IIIC	T135°C	
							T135°C	Dust Temperature Class: Maximum external surface temperature 135°C
							IIIC	Groups of Dust: Protected for group IIIC which includes groups IIIA & IIIB
							T4	Gas Temperature Class: Maximum external surface temperature 135°C
							IIC	Gas Explosion Group: Protected for group IIC which includes groups IIA & IIB
							c	Protection type: Design safety
							GD	Ex Atmosphere: Gas and Dust
							2	Category: High Safety
							II	Equipment Group: surface industries

ATEX Hoisting Range

ATEX Geared Trolley

In accordance with: ATEX Directive 2014 / 34 / EU and Machinery Directive 2006 / 42 / EC

The William Hackett ATEX Geared Travel Trolleys meet and exceed the requirements of international standard and British Standard BS EN 13157:2004 + A1:2009.

This high quality trolley range is precision engineered in capacities from 500Kg to 2 tonne.

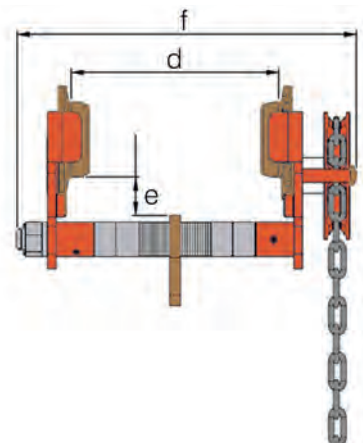
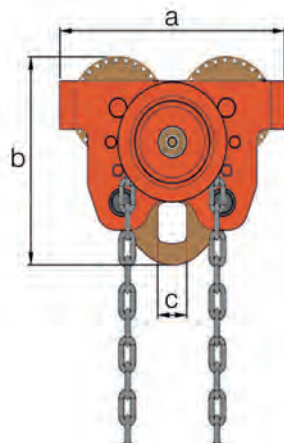
Enabling exact positioning or easy traversing of large loads incorporating Manual hoists, the Hackett series geared trolley can be supplied to suit various track widths with Beam Range 1 and the extended Beam Range 2.

It has been designed so that the bottom of the hand chain loop is 500mm from ground level.

The runners (trolley wheels) are precision machined and they rotate on maintenance sealed ball bearings.


All Hackett geared trolleys are fitted with anti-jump bars rubber end stops as standard.

- Fitted with solid bronze wheels
- Copper plated hanging plate
- Fitted with rubber end stops
- Hand wheel copper plated
- Fitted with stainless steel handchain material 316L
- Other sizes available upon request



Part Code	WLL tonnes	Min. Radius of Curve m	a mm	b mm	c mm	d mm	e mm	f mm	Beam Range 1 mm	Beam Range 2 mm	Mass kg
055.ATEX.050	0.5	0.8	200	166	22	203	34.0	320	50-203	-	7.1
055.ATEX.100	1.0	0.9	232	196	30	203	34.6	333.2	64-203	64-305	13.5
055.ATEX.200	2.0	1.0	260	226	37	203	34.5	342	88-203	88-305	19.0

Ex II 2 GD c IIC T4 IIIC T135°C

II	2	GD	c	IIC	T4	IIIC	T135°C	
							T135°C	Dust Temperature Class: Maximum external surface temperature 135°C
							IIIC	Groups of Dust: Protected for group IIIC which includes groups IIIA & IIIB
							T4	Gas Temperature Class: Maximum external surface temperature 135°C
							IIC	Gas Explosion Group: Protected for group IIC which includes groups IIA & IIB
							c	Protection type: Design safety
							GD	Ex Atmosphere: Gas and Dust
							2	Category: High Safety
							II	Equipment Group: surface industries

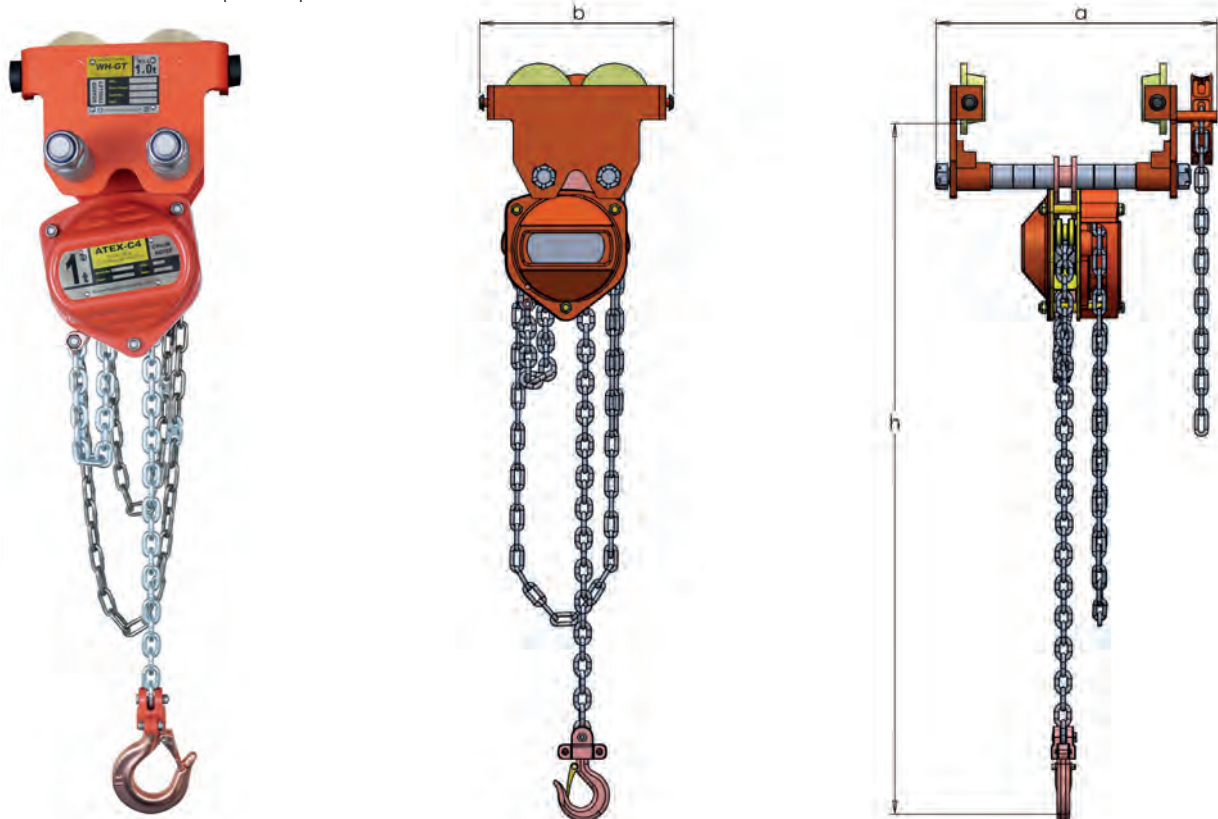
ATEX Hoisting Range

ATEX Combined Chain Block and Trollies

In accordance with: ATEX Directive 2014 / 34 / EU and Machinery Directive 2006 / 42 / EC

The William Hackett ATEX Combined Block and Trollies meet and exceed the requirements of international standard and British Standard BS EN 13157:2004 + A1:2009.

- ATEX anti-spark combined chain block and trollies for use in hazardous environments
- Specific internal components corrosion protected
- Fitted with stainless steel handchain material 316L
- Supplied with EN818-7 zinc plated loadchain as standard with an option for stainless steel Grade 6 loadchain upon application
- Capacity 500 Kg - 2 tonne
- Other sizes available upon request



ATEX Combined Chain Block and Push Trolley

Part Code	WLL tonnes	No.of Falls	Beam Range 1 mm	Beam Range 2 mm	a mm	b mm	h mm	Mass kg Range 1
066.ATEX.050	0.5	1	50 - 203	-	289	200	314	15.0
066.ATEX.100	1.0	1	64 - 203	64 - 305	309	232	340	22.0
066.ATEX.200	2.0	1	88 - 203	88 -305	318	260	400	34.0

ATEX Combined Chain Block and Geared Travel Trolley

Part Code	WLL tonnes	No.of Falls	Beam Range 1 mm	Beam Range 2 mm	a mm	b mm	h mm	Mass kg Range 1
067.ATEX.050	0.5	1	50 - 203	-	320	200	314	15.6
067.ATEX.100	1.0	1	64 - 203	64 - 305	333	232	340	25.5
067.ATEX.200	1.5	1	88 - 203	88 -305	342	260	400	37.5



OFFSHORE AND SUBSEA EQUIPMENT



Offshore and Subsea Equipment

Forged Alloy Wide Body Shackle with Bolt Pin

- Shackles are forged alloy steel with alloy pin.
- Size and the Working Load Limit permanently shown on each shackle.
- All shackles with Batch Code which links to Test Certificate and quality traceability.
- 100% magnaflux crack detection during manufacturing.
- 20,000 cycle fatigue rated to 1.5 times Working Load Limit
- Minimum Ultimate Load is 5 times the Working Load Limit.
- Maximum Proof Load is 2 times the Working Load Limit.
- * 8-809-19/26 See Figure 1
- ** 8-809-32/38 See Figure 2



*

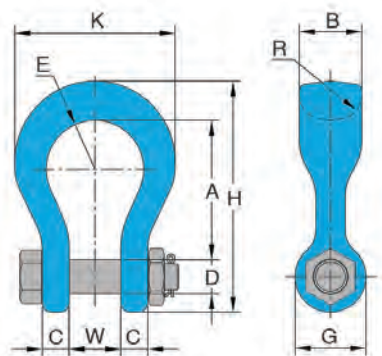


Fig. 1

**

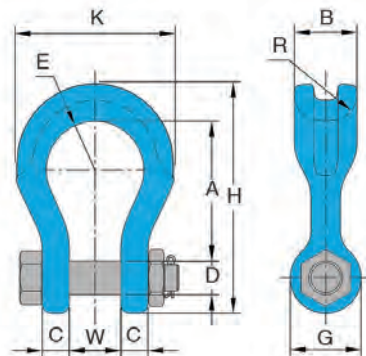


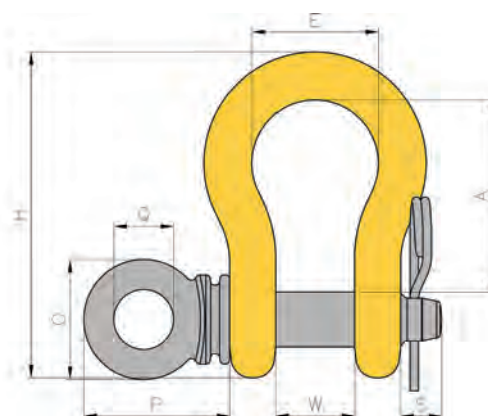
Fig. 2

Part Code	Nom. Size mm	WLL tonnes	A mm	B mm	C mm	D mm	E mm	G mm	H mm	K mm	R mm	W mm	Mass Kg
8-809-19	19	7.0	91	41	18	22	32	46	150	104	32	33	1.7
8-809-26	26	12.5	118	54	23	29	41	61	194	140	35	44	3.8
8-809-32	32	18.0	148	64	30	36	51	68	238	172	38	54	6.7
8-809-38	38	30.0	176	80	35	45	64	89	289	216	45	60	12.5

Part Code	Nom. Size inch	WLL tonnes	A inch	B inch	C inch	D inch	E inch	G inch	H inch	K inch	R inch	W inch	Mass lbs.
8-809-19	3/4	7.0	3.58	1.61	0.70	0.87	1.26	1.81	5.90	4.09	1.26	1.30	3.7
8-809-26	1	12.5	4.64	2.12	0.91	1.14	1.61	2.40	7.64	5.51	1.38	1.73	8.4
8-809-32	1-1/4	18.0	5.83	2.52	1.18	1.42	2.00	2.68	9.37	6.77	1.50	2.13	14.7
8-809-38	1-1/2	30.0	6.93	3.15	1.38	1.77	2.50	3.50	11.38	8.50	1.77	2.36	27.5

ROV Anchor Shackle with Safety Pin

- YOKE ROV shackles are designed specifically for ROV application.
- YOKE ROV shackles are manufactured with the highest quality steel available.
- YOKE ROV shackles are individually stamped with the safe working load.
- Shackles painted yellow for superior visibility and shackle pins are galvanised.
- Minimum Ultimate Load is 5 times the Working Load Limit.
- Maximum Proof Load is 2 times the Working Load Limit.



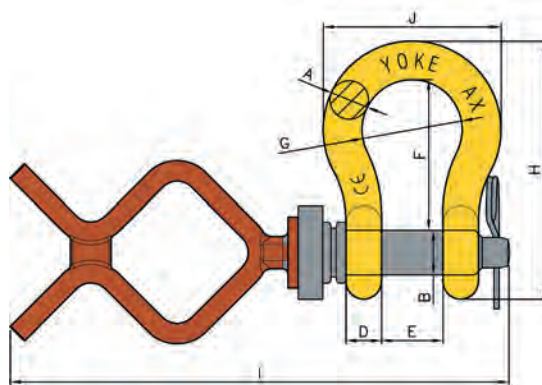
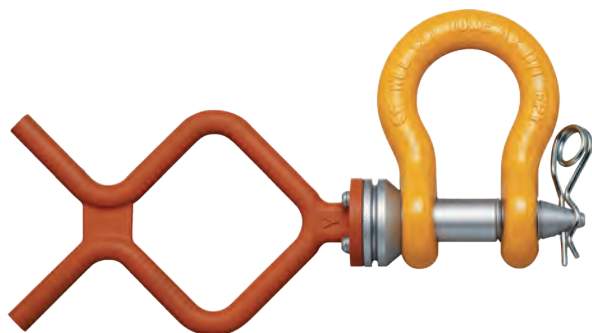
Part Code	Size	WLL tonnes	A mm	E mm	H mm	O mm	P mm	Q mm	S mm	T mm	W mm	Mass Kg
8-911-22	22	6.5	86	58	148	50	63	30	19	10	38	1.8
8-911-26	26	8.5	96	69	166	50	65	30	20	10	44	2.5
8-911-28	28	9.5	111	74	190	70	88	35	21	12	46	3.6
8-911-32	32	12.0	121	84	210	70	88	35	25	12	54	4.8
8-911-36	36	13.5	134	92	232	75	96	40	27	15	59	6.8
8-911-38	38	17.0	146	99	254	75	98	40	27	15	60	8.3
8-911-45	45	25.0	178	127	313	90	114	50	30	20	73	16.6
8-911-50	50	35.0	197	146	347	106	132	60	30	20	83	23.4

Part Code	Size inch	WLL tonnes	A inch	E inch	H inch	O inch	P inch	Q inch	S inch	T inch	W inch	Mass lbs.
8-911-22	7/8	6.5	3.39	2.28	5.91	1.96	2.48	1.18	0.74	0.39	1.50	4.0
8-911-26	1	8.5	3.78	2.68	6.57	1.96	2.55	1.18	0.78	0.39	1.73	5.5
8-911-28	1-1/8	9.5	4.37	2.91	7.52	2.75	3.46	1.38	0.82	0.47	1.81	7.9
8-911-32	1-1/4	12.0	4.76	3.30	8.07	2.75	3.46	1.38	0.98	0.47	2.12	10.6
8-911-36	1-3/8	13.5	5.28	3.62	9.13	2.95	3.77	1.57	1.06	0.59	2.32	15.0
8-911-38	1-1/2	17.0	5.75	3.90	10.00	2.95	3.85	1.57	1.06	0.59	2.36	18.3
8-911-45	1-3/4	25.0	7.00	5.00	12.32	3.54	4.48	1.97	1.18	0.78	2.87	36.5
8-911-50	2	35.0	7.76	5.75	13.66	4.17	5.19	2.36	1.18	0.78	3.27	51.5

Offshore and Subsea Equipment

ROV Anchor Shackle with Fishtail Handle and Safety Pin

- YOKE ROV shackles with the addition of shackle pins with a fishtail interface.
- The ROV shackle range can be offered from 6.5t to 35t
- Working Load Limit clearly embossed on every shackle
- Shackles painted yellow for superior visibility and shackle pins are galvanised
- Minimum Ultimate Load is 5 times the Working Load Limit
- Maximum Proof Load is 2 times the Working Load Limit

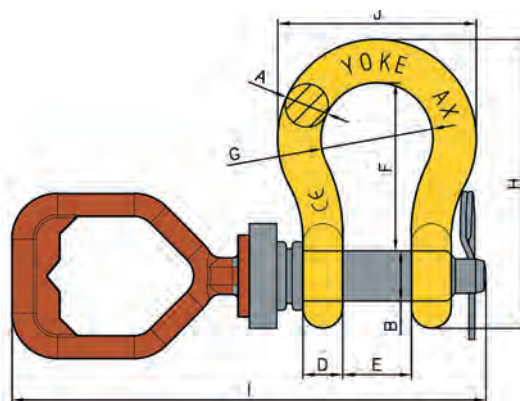
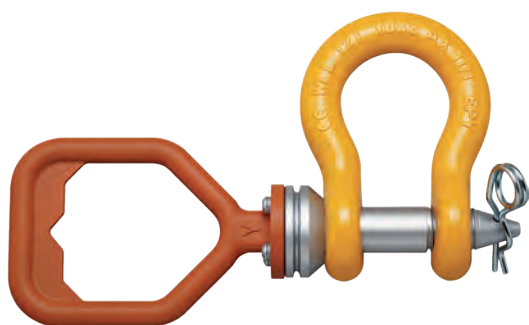


Part Code	Size mm	WLL tonnes	Breaking Force tonnes	A mm	B mm	C mm	D mm	E mm	G mm	H mm	I mm	J mm	Mass Kg
8-941-22	22	6.5	32.5	22	26	53	21.5	38	58	148	420	102	1.5
8-941-26	26	8.5	42.5	26	28	61	23	44	68	166	429	120	2.7
8-941-28	28	9.5	47.5	28	32	68	27	46	74	190	454	130	3.2
8-941-32	32	12.0	60.0	32	36	76	29.5	54	84	210	467	148	4.3
8-941-36	36	13.5	67.5	36	38	84	32	59	92	232	477	164	5.4
8-941-38	38	17.0	85.0	38	45	92	35	60.5	97	254	489	175	7.4
8-941-45	45	25.0	125.0	45	50	106	44	73	127	313	536	221	12.8
8-941-50	50	35.0	175.0	50	57	122	50.8	83.5	146	347.5	560	247.7	18.2

Part Code	Size inches	WLL tonnes	Breaking Force tonnes	A inch	B inch	C inch	D inch	E inch	G inch	H inch	I inch	J inch	Mass lbs.
8-941-22	7/8	6.5	32.5	0.9	1.0	2.1	0.8	1.5	2.3	5.8	16.5	4.0	3.3
8-941-26	1	8.5	42.5	1.0	1.1	2.4	0.9	1.7	2.7	6.5	16.9	4.7	5.9
8-941-28	1-1/8	9.5	47.5	1.1	1.3	2.7	1.1	1.8	2.9	7.5	17.9	5.1	7.0
8-941-32	1-1/4	12.0	60.0	1.3	1.4	3.0	1.2	2.1	3.3	8.3	18.4	5.8	9.5
8-941-36	1-7/16	13.5	67.5	1.4	1.5	3.3	1.3	2.3	3.6	9.1	18.8	6.5	11.9
8-941-38	1-1/2	17.0	85.0	1.5	1.8	3.6	1.4	2.4	3.8	10.0	19.3	6.9	16.3
8-941-45	1-3/4	25.0	125.0	1.8	2.0	4.2	1.7	2.9	5.0	12.3	21.1	8.7	28.2
8-941-50	2	35.0	175.0	2.0	2.2	4.8	2.0	3.3	5.7	13.7	22.0	9.8	40.0

ROV Anchor Shackle with D-handle and Safety Pin

- YOKE ROV shackles with the addition of shackle pins with a D-link interface.
- The ROV shackle range can be offered from 6.5t to 35t
- Working Load Limit clearly embossed on every shackle
- Shackles painted yellow for superior visibility and shackle pins are galvanised
- Minimum Ultimate Load is 5 times the Working Load Limit
- Maximum Proof Load is 2 times the Working Load Limit



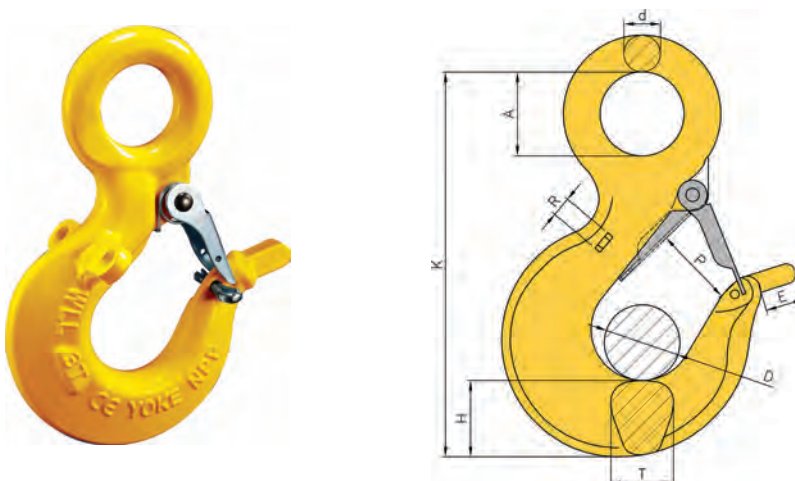
Part Code	Size mm	WLL tonnes	Breaking Force tonnes	A mm	B mm	C mm	D mm	E mm	G mm	H mm	I mm	J mm	Mass Kg
8-951-22	22	6.5	32.5	22	26	53	21.5	38	58	148	346	102	1.5
8-951-26	26	8.5	42.5	26	28	61	23	44	68	166	355	120	2.6
8-951-28	28	9.5	47.5	28	32	68	27	46	74	190	380	130	3.2
8-951-32	32	12.0	60.0	32	36	76	29.5	54	84	210	393	148	4.2
8-951-36	36	13.5	67.5	36	38	84	32	59	92	232	403	164	5.3
8-951-38	38	17.0	85.0	38	45	92	35	60.5	97	254	415	175	7.3
8-951-45	45	25.0	125.0	45	50	106	44	73	127	313	462	221	12.7
8-951-50	50	35.0	175.0	50	57	122	50.8	83.5	146	347.5	486	247.7	18.1

Part Code	Size inches	WLL tonnes	Breaking Force tonnes	A inch	B inch	C inch	D inch	E inch	G inch	H inch	I inch	J inch	Mass lbs.
8-951-22	7/8	6.5	32.5	0.9	1.0	2.1	0.8	1.5	2.3	5.8	13.6	4.0	3.3
8-951-26	1	8.5	42.5	1.0	1.1	2.4	0.9	1.7	2.7	6.5	14.0	4.7	5.7
8-951-28	1-1/8	9.5	47.5	1.1	1.3	2.7	1.1	1.8	2.9	7.5	15.0	5.1	7.0
8-951-32	1-1/4	12.0	60.0	1.3	1.4	3.0	1.2	2.1	3.3	8.3	15.5	5.8	9.2
8-951-36	1-7/16	13.5	67.5	1.4	1.5	3.3	1.3	2.3	3.6	9.1	15.9	6.5	11.7
8-951-38	1-1/2	17.0	85.0	1.5	1.8	3.6	1.4	2.4	3.8	10.0	16.3	6.9	16.1
8-951-45	1-3/4	25.0	125.0	1.8	2.0	4.2	1.7	2.9	5.0	12.3	18.2	8.7	27.9
8-951-50	2	35.0	175.0	2.0	2.2	4.8	2.0	3.3	5.7	13.7	19.1	9.8	39.8

Offshore and Subsea Equipment

ROV Eye Sling Hook

- YOKE ROV Eye Sling Hooks are designed specifically for ROV application.
- YOKE ROV Eye Sling Hooks are manufactured with the highest quality steel available.
- YOKE ROV Eye Sling Hooks are individually stamped with the safe working load.
- Eye Sling Hooks are painted yellow for superior visibility.
- Minimum Ultimate Load is 4 times the Working Load Limit.
- Maximum Proof Load is 2 times the Working Load Limit.

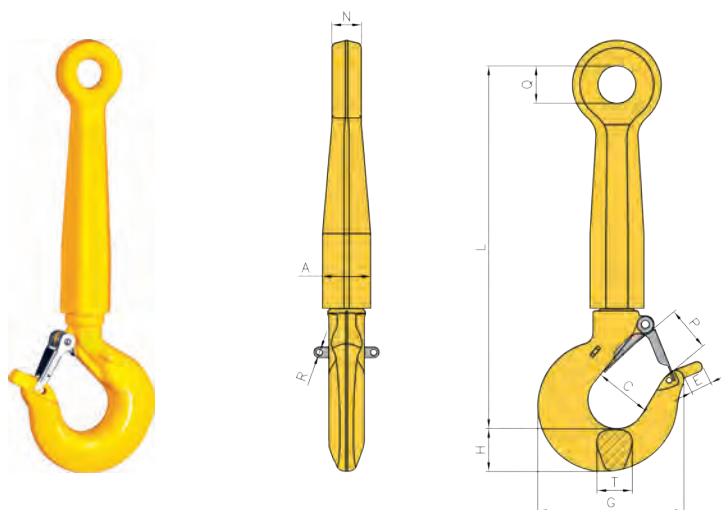


Part Code	WLL tonnes	A mm	D mm	d mm	E mm	H mm	K mm	P mm	R mm	T mm	Mass Kg
8-921-03	3.0	32	25	15	20	29	122	25	8	24	1.0
8-921-05	5.4	40	31	18	20	37	149	31	8	31	2.1
8-921-07	7.0	51	39	24	20	46	192	39	8	37	4.0
8-921-11	11.0	62	57	28	30	58	232	57	8	48	7.0
8-921-15	15.0	72	62	32	30	66	256	62	8	56	9.4
8-921-22	22.0	90	81	40	50	77	318	81	10	68	18.6
8-921-30	30.0	90	83	45	50	92	357	83	10	76	31.2

Part Code	WLL tonnes	A inch	D inch	d inch	E inch	H inch	K inch	P inch	R inch	T inch	Mass lbs.
8-921-03	3.0	1.26	0.98	0.59	0.78	1.14	4.80	0.98	0.31	0.95	2.2
8-921-05	5.0	1.57	1.22	0.71	0.78	1.46	5.87	1.22	0.31	1.22	4.6
8-921-07	7.0	2.00	1.54	0.95	0.78	1.82	7.56	1.54	0.31	1.46	8.8
8-921-11	11.0	2.44	2.24	1.10	1.18	2.28	9.13	2.24	0.31	1.89	15.4
8-921-15	15.0	2.84	2.44	1.26	1.18	2.60	10.10	2.44	0.31	2.20	20.7
8-921-22	22.0	3.54	3.19	1.57	1.96	3.01	12.50	3.19	0.39	2.68	40.9
8-921-30	30.0	3.54	3.27	1.77	1.96	3.62	14.10	3.27	0.39	2.99	68.6

ROV Shank Hook

- YOKE ROV Shank Hooks are designed specifically for ROV application.
- YOKE ROV Shank Hooks are manufactured with the highest quality steel available.
- YOKE ROV Shank Hooks are individually stamped with the safe working load.
- Shank Hooks are painted yellow for superior visibility.
- Minimum Ultimate Load is 4 times the Working Load Limit.
- Maximum Proof Load is 2 times the Working Load Limit.



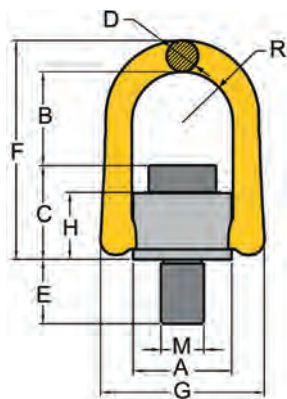
Part Code	WLL tonnes	A mm	C mm	E mm	G mm	H mm	L mm	N mm	P mm	Q mm	R mm	T mm	Mass Kg
8-931-05	5.4	55	38	20	130	37	404	28	32	32	8	33	6.0
8-931-08	8.0	55	49	20	166	46	427	28	39	32	8	42	7.6
8-931-11	11.5	65	62	30	196	58	569	40	57	50	8	48	13.9
8-931-16	16.0	65	65	30	221	66	586	40	62	50	8	56	15.9
8-931-22	22.0	85	71	50	277	77	685	52	81	65	10	68	31.0
8-931-32	31.5	85	87	50	353	92	728	52	88	65	10	76	44.6

Part Code	WLL tonnes	A inch	C inch	E inch	G inch	H inch	L inch	N inch	P inch	Q inch	R inch	T inch	Mass lbs.
8-931-05	5.4	2.16	1.53	0.78	5.12	1.46	15.90	1.10	1.26	1.25	0.31	1.31	13.2
8-931-08	8.0	2.16	1.94	0.78	6.54	1.82	16.81	1.10	1.54	1.25	0.31	1.66	16.7
8-931-11	11.5	2.56	2.46	1.18	7.72	2.28	22.40	1.57	2.24	1.96	0.31	1.88	30.6
8-931-16	16.0	2.56	2.59	1.18	8.70	2.60	23.07	1.57	2.44	1.96	0.31	2.19	35.0
8-931-22	22.0	3.35	2.81	1.96	10.91	3.01	26.96	2.04	3.19	2.55	0.39	2.69	68.2
8-931-32	31.5	3.35	3.44	1.96	13.90	3.62	28.66	2.04	3.46	2.55	0.39	3.00	98.1

Load Attachment Products

Swivel Hoist Ring Metric Thread - type 231

- 360° rotation with 180° pivot function
- Bolts are metric thread (ASME / ANSI B18.3.1M), specification is a grade 10.9 alloy socket head screw per DIN EN ISO 4762
- Proof load is 2.5 x Working Load Limit and certified according to EN1677-1
- 100% magnaflux crack detection

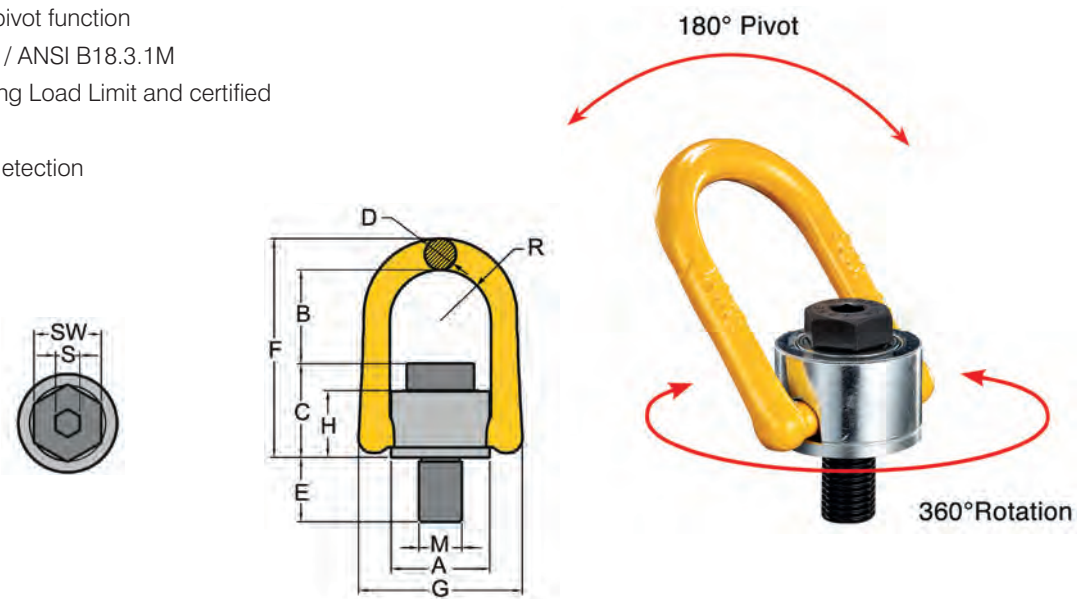


Part Code	WLL tonnes 5:1	WLL tonnes 4:1	Torque in Nm	M Thread	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	R mm	S mm	SW mm	Mass Kg
8-231-005	0.4	0.5	30	M8	33	42	28	11	12	80	58	23	17	6	13	0.3
8-231-007	0.56	0.7	60	M10	33	41	29	11	15	80	58	23	17	6	17	0.3
8-231-010	0.8	1.0	100	M12	33	40	31	11	18	80	58	23	17	8	19	0.3
8-231-020	1.6	2.0	150	M16	51	54	46	17	24	117	90	36	27	10	24	0.9
8-231-025	2.0	2.5	200	M18	62	78	57	20	27	153	108	44	34	12	30	1.9
8-231-030	2.4	3.0	250	M20	50	52	49	17	30	117	90	36	27	12	30	1.0
8-231-050	4.0	5.0	400	M24	72	81	59	22	36	162	125	44	37	14	36	2.6
8-231-078	6.25	7.8	500	M30	87	94	81	30	48	205	148	62	46	17	46	5.0
8-231-125	10.0	12.5	1000	M36	110	112	98	38	54	246	188	75	57	22	55	9.6
8-231-156	12.5	15.6	1500	M42	110	101	109	38	63	246	188	83	57	24	65	10.9
8-231-200	16.0	20.0	2000	M48	110	97	113	38	72	246	188	83	57	27	75	11.6
8-231-220	17.6	22.0	2100	M56	123	113	123	38	84	273	202	91	64	-	85	15.0
8-231-225	18.0	22.5	2200	M64	123	112	124	38	96	273	202	91	64	-	95	16.3

Load Attachment Products

Swivel Hoist Ring UNC Thread - type 232

- 360° rotation with 180° pivot function
- Bolts comply with ASME / ANSI B18.3.1M
- Proof load is 2.5 x Working Load Limit and certified according to EN1677-1
- 100% magnaflux crack detection

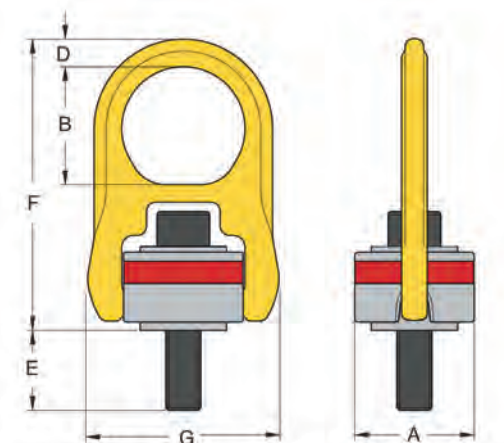


Part Code	WLL lbs	Torque in ft. lbs	M Thread	A inch	B inch	C inch	D inch	E inch	F inch	G inch	H inch	R inch	S inch	SW inch	Mass lbs
8-232-010	1700	73	1/2 - 13 UNC	1.31	1.57	1.20	0.41	0.81	3.17	2.28	0.90	0.67	5/16	3/4	1.8
8-232-020	3500	110	5/8 - 11 UNC	1.97	2.13	1.81	0.65	1.13	4.61	3.54	1.42	1.06	3/8	15/16	2.0
8-232-030	5300	185	3/4 - 10 UNC	1.97	2.07	1.89	0.65	1.54	4.61	3.54	1.42	1.06	1/2	1-1/8	2.2
8-232-038	6700	221	7/8 - 9 UNC	2.56	2.99	2.28	0.79	1.42	6.02	4.25	1.73	1.34	5/8	1-5/16	4.3
8-232-050	8800	295	1 - 8 UNC	2.81	3.17	2.34	0.98	1.61	6.38	4.92	1.73	1.46	5/8	1-1/2	5.7
8-232-078	13700	368	1-1/4 - 7 UNC	3.43	3.66	3.23	1.18	2.09	8.07	5.83	2.44	1.79	7/8	1-7/8	11.0
8-232-125	22000	585	1-1/2 - 6 UNC	4.29	4.38	3.87	1.42	2.40	9.92	7.40	3.07	2.22	1-1/4	2-1/4	21.2
8-232-200	35200	1476	2 - 4.5 UNC	4.61	3.80	4.46	1.42	3.00	9.93	7.71	3.35	2.38	1-1/4	3	25.6

Load Attachment Products

Swivel Hoist Ring with alloy steel washer - Metric - type 203

- Yoke Hoist Rings will turn 360° and pivot 180° allowing the adjustment in pull direction.
- Yoke Hoist Rings retain 100% of the rated capacity @ 90°.
- Proof Loading individually to 2.5 times Working Load Limit and certified.
- Extended shank length available on request.
- Bolt Grade 12.9

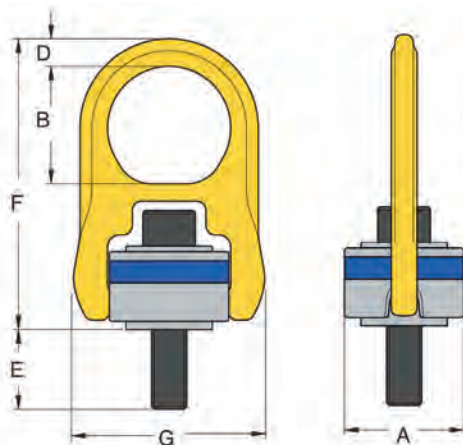


Part Code	WLL tonnes 5 : 1	WLL tonnes 4 : 1	Thread Size	E mm	A mm	B mm	D mm	F mm	G mm	Torque Nm	Mass Kg
8-203-004	0.40	0.50	M8	17.0	40	41	9	102	65	10	0.4
8-203-005	0.45	0.55	M10	11.0	40	41	9	102	65	16	0.5
8-203-010	1.05	1.30	M12	15.0	65	64	15	158	105	38	1.7
8-203-019	1.90	2.40	M16	20.0	65	64	15	158	105	81	1.8
8-203-021	2.15	2.70	M20	25.0	65	64	15	158	105	136	1.9
8-203-042	4.20	5.25	M24	26.0	85	79	19	204	134	312	4.2
8-203-070	7.00	8.75	M30	81.0	100	100	25	241	160	637	6.6
8-203-110	11.00	13.75	M36	76.0	120	111	30	286	194	1005	15.0
8-203-125	12.50	15.60	M42	95.0	120	111	30	286	220	1005	16.0
8-203-135	13.50	16.90	M48	105.0	120	111	30	286	220	1350	16.0

Load Attachment Products

Swivel Hoist Ring with alloy steel washer - UNC - type 204

- Yoke Hoist Rings will turn 360° and pivot 180° allowing the adjustment in pull direction.
- Yoke Hoist Rings retain 100% of the rated capacity @ 90°.
- Proof Loading individually to 2.5 times Working Load Limit and certified.
- Extended shank length available on request.
- Bolt Grade ASTM A574

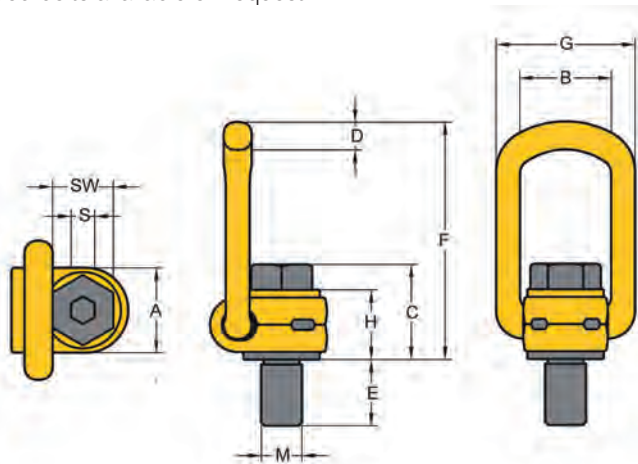


Part Code	WLL lbs	Torque Ft - lbs	Bolt Size	E inch	A inch	B inch	D inch	F inch	G inch	Mass lbs.
8-204-004	800	7	5/16 - 18 UNC	0.71	1.57	1.61	0.35	4.02	2.56	0.9
8-204-005	1000	12	3/8 - 16 UNC	0.71	1.57	1.61	0.35	4.02	2.56	0.9
8-204-010	2500	28	1/2 - 13 UNC	0.75	2.56	2.32	0.59	6.26	4.13	3.7
8-204-019	4000	60	5/8 - 11 UNC	0.74	2.56	2.32	0.59	6.26	4.13	4.0
8-204-021	5000	100	3/4 - 10 UNC	1.24	2.56	2.87	0.59	6.26	4.13	4.0
8-204-042	8000	160	7/8 - 9 UNC	1.43	3.35	2.87	0.87	8.03	5.28	9.3
8-204-045	10000	230	1 - 8 UNC	1.36	3.35	2.87	0.87	8.03	5.28	9.5
8-204-070	15000	470	1-1/4 - 7 UNC	2.22	3.95	3.15	1.00	8.58	6.30	14.5
8-204-125	24000	800	1-1/2 - 6 UNC	3.15	4.72	4.29	1.38	12.09	8.66	35.2
8-204-135	30000	1100	2 - 4.5 UNC	3.17	4.72	4.29	1.38	12.09	8.66	35.2

Load Attachment Products

Lifting Point Metric Thread

- Lifting Points are suitable for 360° with a 90° pivot function
- Bolts are metric thread (ASME/ANSI B18.3.1M), specification is a grade 10.9 alloy socket head screw per DIN EN ISO 4762
- Proof Load tested individually to 2.5 times Working Load Limit
- Rated at 100% WLL at 90° angle
- Extended bolts available on request

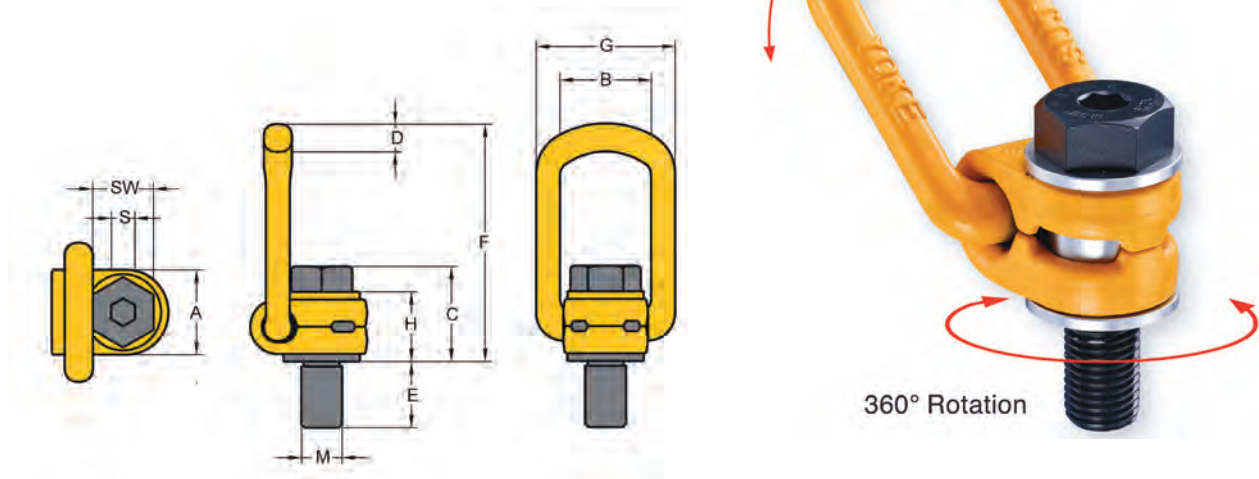


Part Code	WLL tonnes	M Thread	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	S mm	SW mm	Torque in Nm	Mass Kg
8-211-003	0.3	M8	30	35	35	10	11	85	55	29	6	13	30	0.2
8-211-006	0.63	M10	30	35	36	10	16	85	55	29	6	17	60	0.3
8-211-010	1.0	M12	33	37	44	14	18	98	57	36	8	19	100	0.5
8-211-012	1.2	M14	33	37	45	14	21	98	57	36	10	22	120	0.5
8-211-015	1.5	M16	33	37	46	14	24	98	57	36	10	24	150	0.5
8-211-020	2.0	M18	50	54	57	17	26	140	82	44	12	30	200	1.3
8-211-025	2.5	M20	50	54	57	17	30	140	82	44	12	30	250	1.3
8-211-040	4.0	M24	50	54	59	17	36	140	82	44	14	36	400	1.4
8-211-042	4.0	M27	60	65	79	23	38	170	99	62	17	41	400	2.8
8-211-050	5.0	M30	60	65	81	23	48	170	99	62	17	46	500	3.1
8-211-070	7.0	M36	60	65	88	23	54	178	99	65	22	55	700	3.3
8-211-080	8.0	M36	77	85	101	27	62	225	124	78	22	55	800	5.8
8-211-100	10.0	M42	77	85	104	27	72	225	124	78	24	65	1000	6.3
8-211-150	15.0	M42	95	104	112	36	63	256	158	86	24	65	1500	10.9
8-211-200	20.0	M48	95	104	120	36	72	259	158	90	27	75	2000	11.6

Load Attachment Products

Lifting Point UNC Thread

- Lifting Points are suitable for 360° with a 90° pivot function
- Bolts comply with ASME/ANSI B18.3.1M
- Proof Load tested individually to 2.5 times Working Load Limit
- Rated at 100% WLL at 90° angle
- Extended bolts available on request



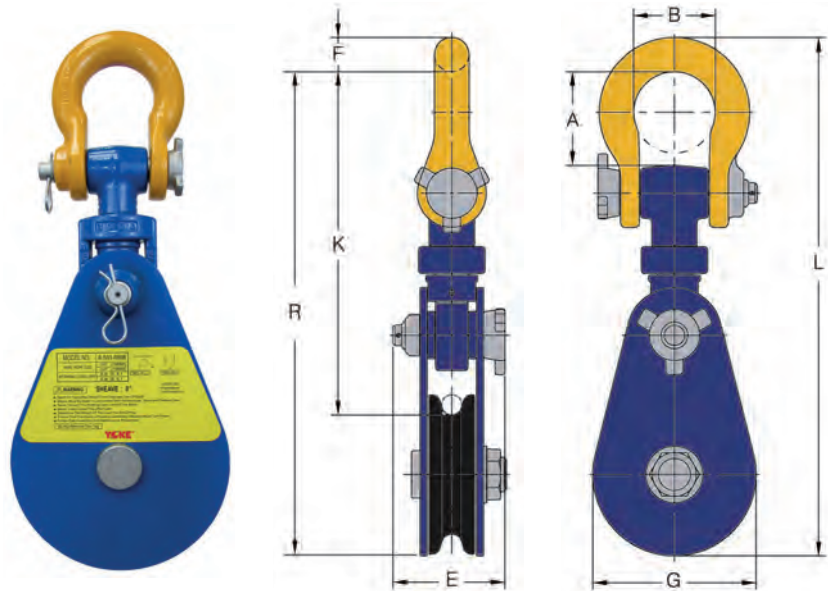
Part Code	WLL lbs.	M Thread	A inch	B inch	C inch	D inch	E inch	F inch	G inch	H inch	S inch	SW inch	Torque in ft. lbs.	Mass lbs.
8-212-010	2200	1/2 - 13 UNC	1.30	1.46	1.73	0.53	0.75	3.86	2.24	1.42	5/16	3/4	73	1.1
8-212-015	3300	5/8 - 11 UNC	1.30	1.46	1.81	0.53	0.94	3.86	2.24	1.42	3/8	15/16	110	1.1
8-212-020	5500	3/4 - 10 UNC	1.97	2.13	2.20	0.65	1.10	5.51	3.23	1.73	1/2	1-1/8	185	2.9
8-212-025	5500	7/8 - 9 UNC	1.97	2.13	2.28	0.65	1.10	5.51	3.23	1.73	5/8	1-5/16	221	2.9
8-212-040	8800	1 - 8 UNC	1.97	2.13	2.34	0.65	1.61	5.51	3.23	1.73	5/8	1-1/2	295	3.1
8-212-050	11000	1-1/4 - 7 UNC	2.36	2.56	3.23	0.89	1.61	6.69	3.90	2.44	7/8	1-7/8	368	6.8
8-212-080	17000	1-1/2 - 6 UNC	3.03	3.35	4.01	1.04	2.25	8.86	4.88	3.07	1	2-1/4	585	12.8
8-212-150	33000	1-3/4 - 5 UNC	3.74	4.09	4.48	1.42	2.63	10.08	6.22	3.39	1	2-5/8	1107	24.0
8-212-200	44000	2 - 4.5 UNC	3.74	4.09	4.76	1.42	3.00	10.20	6.22	3.54	1-1/4	3	1476	25.5

Yoke Snatch Block

Yoke Snatch Block with captive shackle

Meets or exceeds the requirements specified in ASME B30.26 - 2010.

- Yoke Snatch Blocks are manufactured from the highest quality tensile steel.
- Snatch Blocks are supplied with bronze bushings and grease fitting for ease of use and extended shelf life.
- Designed with a safety factor 4:1.
- Available in sizes 2 tonnes to 20 tonnes

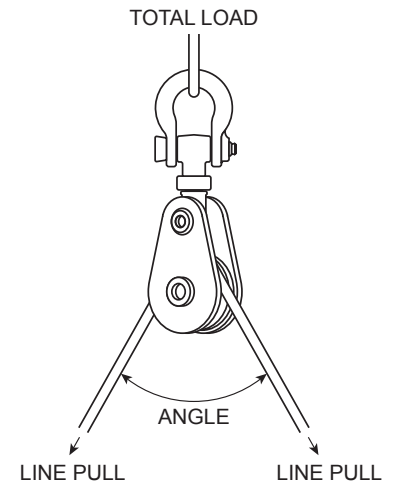


Part Code	WLL tonnes	Sheave Dia inch	Wire Rope Size mm	A mm	B mm	E mm	F mm	G mm	K mm	L mm	R mm	Mass kg
8-501-02	2.0	3	8-10	35	30	64	11	75	150	228	217	3.8
8-501-04	4.0	4.5	10-13	64	50	79	19	107	243	356	336	6.2
8-501-08	8.0	6	16-19	87	76	104	32	152	320	484	452	13.2
8-501-0808	8.0	8	16-19	87	76	104	32	220	333	558	526	18.2
8-541-12	12.0	6	19-22	78	80	134	44	167	359	540	496	24.8
8-541-15	15.0	8	19-22	78	80	134	44	220	355	589	545	29.6
8-541-1510	15.0	10	19-22	78	80	134	44	280	423	714	670	42.7
8-501-1512	15.0	12	19-22	78	80	134	44	330	428	770	726	52.8
8-551-20	20.0	8	25-29	109	93	150	55	216	433	671	616	41.6
8-551-2010	20.0	10	25-29	109	93	150	55	280	481	778	723	52.4
8-551-2012-29	20.0	12	25-29	109	93	150	55	330	485	883	778	62.8

Loads on Blocks

Angle Factor Multipliers

Angle	Factor	Angle	Factor
0	2.00	100	1.29
10	1.99	110	1.15
20	1.97	120	1.00
30	1.93	130	0.84
40	1.87	135	0.76
45	1.84	140	0.68
50	1.81	150	0.52
60	1.73	160	0.35
70	1.64	170	0.17
80	1.53	180	0.00
90	1.41	-	-



The Working Load Limit (WLL) for Yoke Group blocks indicates the maximum load that should be exerted on the block and its connecting fitting. This total load value may be different from the weight being lifted or pulled by a hoisting system. It is necessary to determine the total load being imposed on each block in the system to properly determine the rated capacity block to be used. A single sheave block used to change load line direction can be subjected to total loads greatly different from the weight being lifted or pulled. The total load value varies with the angle between the incoming and departing lines to the block. The following chart indicates the factor to be multiplied by the line pull to obtain the total load on the block.

Sheave Size and Wire Rope Strength

Ratio A	Strength Efficiency Compared to Catalogue Strength in %	Ratio A	Strength Efficiency Compared to Catalogue Strength in %
40	95	8	83
30	93	6	79
20	91	4	75
15	89	2	65
10	86	1	50

Ratio A = Sheave Diameter ÷ Rope Diameter

Strength Efficiency

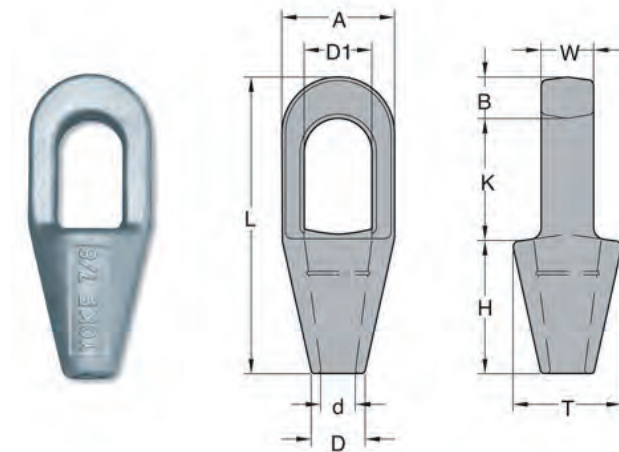
Bending wire rope reduces its strength. To account for the effect of bend radius on wire rope strength when selecting a sheave, use the table above

Ratio B	Relative Fatigue Bending Life	Ratio B	Relative Fatigue Bending Life
30	10.0	16	2.1
25	6.6	14	1.5
20	3.8	12	1.1
18	2.9	-	-

Spelter Wire Rope Sockets

Forged Closed Spelter Wire Rope Socket

- YOKE Spelter Sockets are forged from special bar quality carbon steel with the finest hardness control and when properly applied have an efficiency rating of 100% based on the catalogue strength of wire rope.
- Socket size 1/4" through 3/4" use one groove, 7/8" through 1-1/2" use 2 grooves.
- Closed Spelter Sockets meet the performance requirements of Federal Specification RR-S-550E. Type B.

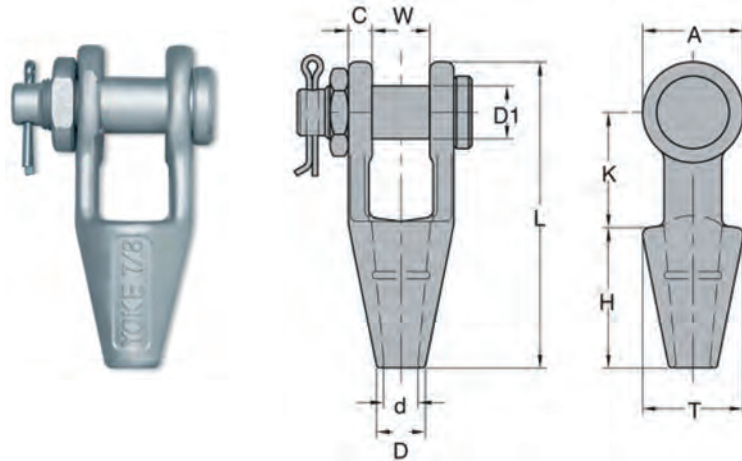


Part Code	Rope Dia. mm	Structural Strand Dia. mm	A mm	B mm	D mm	D1 mm	d mm	H mm	K mm	L mm	T mm	W mm	Mass kg
8-735-G06	6-7	-	38	13	18	22	11	57	44	114	38	13	0.3
8-735-G10	8-10	-	43	16	21	25	13	57	51	124	43	18	0.4
8-735-G13	11-13	-	51	18	25	30	14	64	57	138	50	22	0.7
8-735-G16	14-16	13	67	21	28	36	18	76	64	160	63	25	1.2
8-735-G19	18-20	14-16	76	27	32	41	21	89	76	192	70	32	2.0
8-735-G22	22-23	18-20	92	32	38	48	24	101	89	222	88	38	3.6
8-735-G26	24-26	22-23	104	35	45	58	29	114	102	251	96	45	4.9
8-735-G28	28-30	24-25	114	38	51	65	32	127	114	279	105	50	7.2
8-735-G36	32-35	26-28	135	41	57	71	38	140	127	308	121	57	10.5
8-735-G38	36-39	30-32	135	49	70	81	41	152	152	354	133	64	14.3

Part Code	Rope Dia. inch	Structural Strand Dia. inch	A inch	B inch	D inch	D1 inch	d inch	H inch	K inch	L inch	T inch	W inch	Mass lbs.
8-735-G06	1/4	-	1.50	0.50	0.71	0.88	0.43	2.25	1.73	4.50	1.50	0.50	0.7
8-735-G10	5/16 - 3/8	-	1.69	0.62	0.83	0.98	0.50	2.25	2.00	4.88	1.70	0.71	0.9
8-735-G13	7/16 - 1/2	-	2.00	0.71	0.98	1.19	0.55	2.52	2.25	5.43	1.96	0.87	1.5
8-735-G16	9/16 - 5/8	1/2	2.63	0.83	1.12	1.41	0.71	3.00	2.52	6.31	2.50	0.98	2.6
8-735-G19	3/4	9/16 - 5/8	3.00	1.06	1.26	1.61	0.81	3.50	3.00	7.58	2.75	1.26	4.4
8-735-G22	7/8	11/16 - 3/4	3.63	1.26	1.50	1.89	0.94	3.98	3.50	8.75	3.46	1.50	7.9
8-735-G26	1	13/16 - 7/8	4.13	1.38	1.77	2.28	1.14	4.50	4.02	9.88	3.78	1.77	10.8
8-735-G28	1-1/8	15/16 - 1	4.50	1.50	2.00	2.56	1.26	5.00	4.50	10.98	4.12	2.00	15.8
8-735-G36	1-1/4 - 1-3/8	1-1/16 - 1-1/8	5.31	1.63	2.25	2.80	1.50	5.50	5.00	12.31	4.75	2.25	23.1
8-735-G38	1-1/2	1-3/16 - 1-1/4	5.31	1.93	2.75	3.19	1.63	6.00	6.00	13.94	5.25	2.52	31.5

Forged Open Spelter Wire Rope Socket

- YOKE Spelter Sockets are forged from special bar quality carbon steel with the finest hardness control and when properly applied have an efficiency rating of 100% based on the catalogue strength of wire rope.
- Socket size 1/4" through 3/4" use one groove, 7/8" through 1-1/2" use 2 grooves.
- Open Spelter Sockets meet the performance requirements of Federal Specification RR-S-550D. Type A.



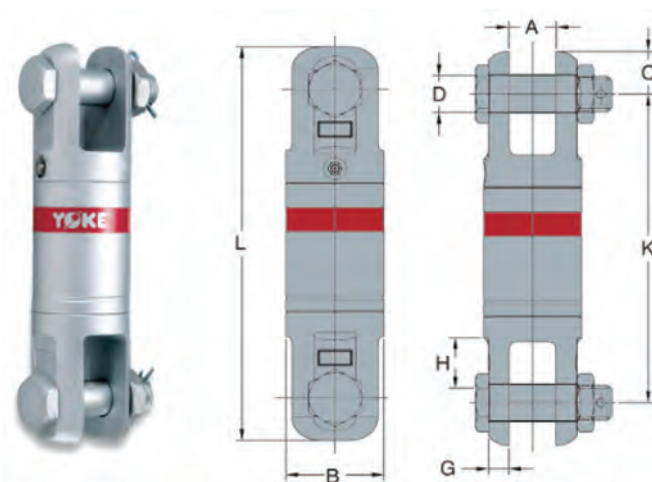
Part Code	Rope Dia. mm	Structural Strand Dia. mm	A mm	C mm	D mm	D1 mm	d mm	H mm	K mm	L mm	T mm	W mm	Mass kg
8-733-G06	6-7	-	33	9	18	17	11	57	40	115	39	23	0.7
8-733-G10	8-10	-	38	11	21	20	13	57	45	123	44	21	0.9
8-733-G13	11-13	-	48	13	25	25	15	63	54	142	50	25	1.6
8-733-G16	14-16	13	58	14	29	30	18	76	64	172	57	32	2.2
8-733-G19	18-20	14-16	67	16	32	35	22	92	76	202	67	38	3.4
8-733-G22	22-23	18-20	80	20	38	41	24	102	89	235	85	45	5.4
8-733-G26	24-26	22-23	96	23	44	51	29	114	102	268	95	52	8.5
8-733-G28	28-30	24-25	105	25	51	56	32	127	117	300	105	57	11.6
8-733-G36	32-35	26-28	121	29	57	62	38	140	127	335	120	64	16.0
8-733-G38	36-39	30-32	137	30	70	70	41	152	152	384	133	76	24.0

Part Code	Rope Dia. inch	Structural Strand Dia. inch	A inch	C inch	D inch	D1 inch	d inch	H inch	K inch	L inch	T inch	W inch	Mass lbs.
8-733-G06	1/4	-	1.31	0.35	0.71	0.67	0.43	2.25	1.56	4.65	1.54	0.91	1.5
8-733-G10	5/16 - 3/8	-	1.50	0.44	0.83	0.79	0.51	2.25	1.77	4.84	1.73	0.83	2.0
8-733-G13	7/16 - 1/2	-	1.91	0.50	0.98	0.98	0.56	2.48	2.13	5.62	1.96	1.00	3.5
8-733-G16	9/16 - 5/8	1/2	2.28	0.55	1.14	1.19	0.70	2.99	2.52	6.77	2.25	1.26	4.9
8-733-G19	3/4	9/16 - 5/8	2.64	0.62	1.26	1.38	0.81	3.62	3.00	7.96	2.64	1.50	7.5
8-733-G22	7/8	11/16 - 3/4	3.17	0.80	1.50	1.63	0.94	4.02	3.50	9.25	3.35	1.77	11.9
8-733-G26	1	13/16 - 7/8	3.78	0.91	1.75	2.00	1.14	4.48	4.02	10.55	3.75	2.05	18.7
8-733-G28	1-1/8	15/16 - 1	4.12	1.00	2.00	2.25	1.26	5.00	4.62	11.81	4.12	2.25	25.6
8-733-G36	1-1/4 - 1-3/8	1-1/16 - 1-1/8	4.75	1.14	2.25	2.50	1.50	5.51	5.00	13.20	4.72	2.52	35.2
8-733-G38	1-1/2	1-3/16 - 1-1/4	5.38	1.19	2.75	2.75	1.63	5.98	5.98	15.12	5.25	2.99	52.9

Contact Angular Swivels

Yoke Jaw + Jaw Angular Swivel

- Yoke Angular Swivels are manufactured using the highest grade of material available.
- They are zinc plated for corrosion resistance and longer life. Angular Swivels are designed for low starting torque and high rotation speed, they are manufactured with grease fittings for superior performance.
- All Angular Swivels are 100% magnaflux crack detected. Designed with a safety factor 5:1



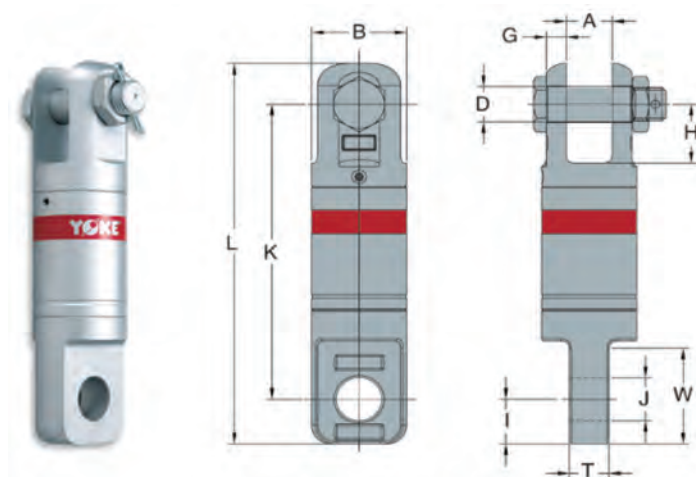
Part Code	Wire Line Size mm	WLL tonnes	A mm	B mm	C mm	D mm	G mm	H mm	K mm	L mm	Mass kg
8-303-0075	6	0.75	15	32	13	10	6	22	103	128	0.5
8-303-015	10	1.5	18	40	20	13	8	26	112	152	0.9
8-303-03	13	3.0	23	51	25	19	10	32	158	208	2.3
8-303-05	16	5.0	32	64	31	22	14	37	200	261	4.4
8-303-085	19	8.5	40	76	34	30	14	54	252	320	7.6
8-303-10	22	10.0	42	102	48	38	25	54	316	412	19.5
8-303-15	25	15.0	48	108	52	38	25	57	316	420	21.7
8-303-25	32	25.0	62	132	65	51	30	70	374	503	39.5

Part Code	Wire Line Size inch	WLL tonnes	A inch	B inch	C inch	D inch	G inch	H inch	K inch	L inch	Mass lbs.
8-303-0075	1/4	0.75	0.60	1.30	0.50	0.40	0.20	0.90	4.10	5.00	1.1
8-303-015	3/8	1.5	0.70	1.60	0.80	0.50	0.30	1.00	4.40	6.00	2.0
8-303-03	1/2	3.0	0.90	2.00	1.00	0.80	0.40	1.30	6.20	8.20	5.1
8-303-05	5/8	5.0	1.30	2.50	1.20	0.90	0.60	1.50	8.00	10.30	9.7
8-303-085	3/4	8.5	1.60	3.00	1.30	1.20	0.60	2.10	10.00	12.60	16.8
8-303-10	7/8	10.0	1.70	4.00	1.90	1.50	1.00	2.10	12.40	16.20	43.0
8-303-15	1	15.0	1.90	4.30	2.00	1.50	1.00	2.20	12.40	16.50	47.8
8-303-25	1-1/4	25.0	2.40	5.20	2.60	2.00	1.20	2.80	14.70	20.00	87.0

Contact Angular Swivels

Yoke Jaw + Eye Angular Swivel

- Yoke Angular Swivels are manufactured using the highest grade of material available.
- They are zinc plated for corrosion resistance and longer life. Angular Swivels are designed for low starting torque and high rotation speed, they are manufactured with grease fittings for superior performance.
- All Angular Swivels are 100% magnaflux crack detected. Designed with a safety factor 5:1



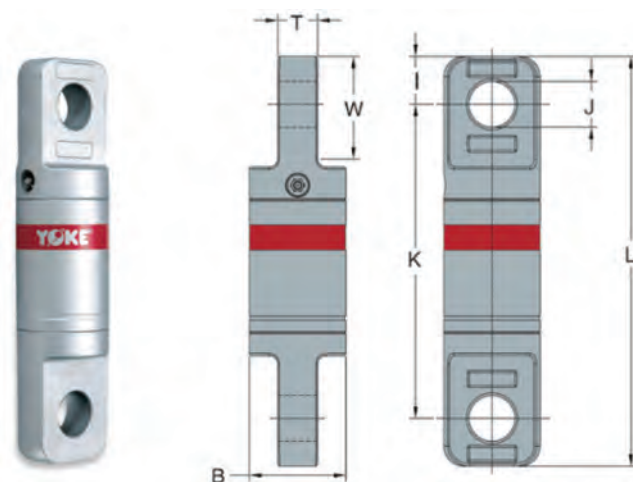
Part Code	Wire Line Size mm	WLL tonnes	A mm	B mm	D mm	G mm	H mm	I mm	J mm	K mm	L mm	T mm	W mm	Mass kg
8-304-0075	6	0.75	15	32	10	6	22	18	19	103	134	12	37	0.5
8-304-015	10	1.5	18	40	13	7	26	22	23	115	156	15	43	0.9
8-304-03	13	3	23	51	19	10	32	28	27	158	211	20	51	2.2
8-304-05	16	5	32	64	22	14	37	33	33	205	269	26	59	4.4
8-304-085	19	8.5	40	76	30	14	54	38	37	250	322	32	82	7.4
8-304-10	22	10	42	102	38	25	54	52	44	312	412	42	90	17.5
8-304-15	25	15	48	108	38	25	57	64	54	317	434	49	110	21.6
8-304-25	32	25	62	132	51	30	70	70	66	390	524	60	130	39.7

Part Code	Wire Line Size inch	WLL tonnes	A inch	B inch	D inch	G inch	H inch	I inch	J inch	K inch	L inch	T inch	W inch	Mass lbs.
8-304-0075	1/4	0.75	0.60	1.30	0.40	0.20	0.90	0.70	0.80	4.10	5.30	0.50	1.50	1.1
8-304-015	3/8	1.5	0.70	1.60	0.50	0.30	1.00	0.90	0.90	4.50	6.10	0.60	1.70	2.0
8-304-03	1/2	3.0	0.90	2.00	0.80	0.40	1.30	1.10	1.10	6.20	8.30	0.80	2.00	4.8
8-304-05	5/8	5.0	1.30	2.50	0.90	0.60	1.50	1.30	1.30	8.10	10.60	1.00	2.30	9.7
8-304-085	3/4	8.5	1.60	3.00	1.20	0.60	2.10	1.50	1.50	9.80	12.70	1.30	3.20	16.3
8-304-10	7/8	10.0	1.70	4.00	1.50	1.00	2.10	2.00	1.70	12.30	16.20	1.70	3.50	39.0
8-304-15	1	15.0	1.90	4.30	1.50	1.00	2.20	2.50	2.10	12.50	17.10	1.90	4.30	47.6
8-304-25	1-1/4	25.0	2.40	5.20	2.00	1.20	2.80	2.80	2.60	15.40	20.60	2.40	5.10	87.3

Contact Angular Swivels

Yoke Eye + Eye Angular Swivel

- Yoke Angular Swivels are manufactured using the highest grade of material available.
- They are zinc plated for corrosion resistance and longer life. Angular Swivels are designed for low starting torque and high rotation speed, they are manufactured with grease fittings for superior performance.
- All Angular Swivels are 100% magnaflux crack detected. Designed with a safety factor 5:1



Part Code	Wire Line Size mm	WLL tonnes	B mm	I mm	J mm	K mm	L mm	T mm	W mm	Mass kg
8-306-0075	6	0.75	32	18	19	103	139	12	37	0.5
8-306-015	10	1.5	40	22	23	117	160	15	43	0.9
8-306-03	13	3.0	51	28	27	158	214	20	51	2.1
8-306-05	16	5.0	64	33	33	210	276	26	59	4.4
8-306-085	19	8.5	76	38	37	249	325	32	82	7.3
8-306-10	22	10.0	102	52	44	310	413	42	90	17.0
8-306-15	25	15.0	108	64	54	316	443	49	110	21.0
8-306-25	32	25.0	132	70	66	407	547	60	130	39.0

Part Code	Wire Line Size inch	WLL tonnes	B inch	I inch	J inch	K inch	L inch	T inch	W inch	Mass lbs.
8-306-0075	1/4	0.75	1.30	0.70	0.70	4.10	5.50	0.50	1.50	1.1
8-306-015	3/8	1.5	1.60	0.90	0.90	4.60	6.30	0.60	1.70	2.0
8-306-03	1/2	3.0	2.00	1.10	1.10	6.20	8.40	0.80	2.00	4.6
8-306-05	5/8	5.0	2.50	1.30	1.30	8.30	10.90	1.00	2.30	9.7
8-306-085	3/4	8.5	3.00	1.50	1.50	9.80	12.80	1.30	3.20	16.1
8-306-10	7/8	10.0	4.00	2.10	2.00	12.20	16.30	1.70	3.50	37.4
8-306-15	1	15.0	4.30	2.50	2.50	12.40	17.40	1.90	4.30	46.3
8-306-25	1-1/4	25.0	5.20	2.80	2.80	16.00	21.50	2.40	5.10	86.0

William Hackett Sling App

The first ever **free sling app** for Chain slings

Compatible on the following mobile devices: Apple, Android and Windows
Web app also available.

How it works:

- Create a free account and log in
- Select number of legs
- Input the weight of the load to be lifted
- Input the leg length or state the distance between the lifting points to let the app work out leg length and head room required.
- Select the termination fittings
- View your sling and hit submit quote.
- Your quote will then be emailed to you instantly with a spec sheet attached

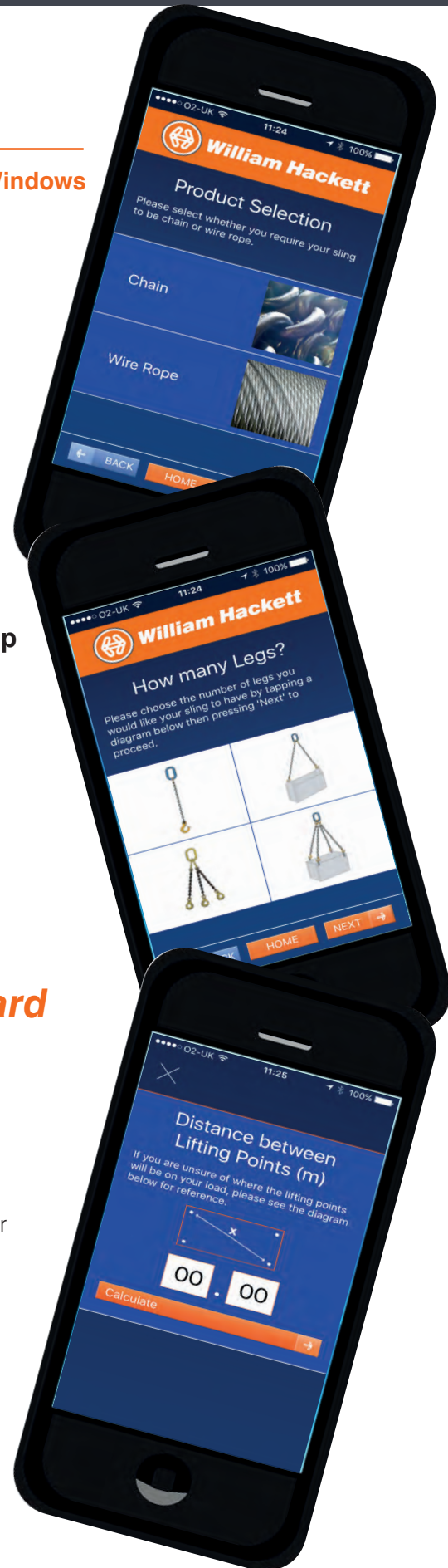
Check out our web app at:
whackett.hippocreative.com/login.php

**Get the quote sent
straight to your
email address with
the spec sheet
attached and forward
it on to your client
within minutes!**

Unsure of sling leg length required for lifting operation? Let the app use the trigonometry to work out the correct leg length.

To put this Web App on your website free of charge, please contact Josh on 01665 604200.

A personalised branded version of this App can be created but a charge will be applicable.



Terms and Conditions

1. DEFINITIONS & INTERPRETATION

1.1 In these conditions:

- "Buyer"** means the person, firm or company who purchases Goods from the Company.
"Company" shall mean either William Hackett Chain Products Limited (a company registered in England & Wales under number 09679024 or William Hackett Lifting Products Limited (a company registered in England & Wales under number 09679580 or both those companies as may be required pursuant to the terms of a Contract, and notwithstanding that each of those companies use the brand name of "William Hackett").
"Conditions" means the terms and conditions applied by the Company for the conduct of its business and sale of Goods and as recorded herein or otherwise amended and for the time being in force or otherwise as may be amended in accordance with Condition 2.3
"Contract" means any contract between the Company and the Buyer for the sale and purchase of Goods incorporating these Conditions or otherwise such terms as may have been agreed between the parties and recorded in writing.
"Delivery Point" means the place specified by the Buyer or the Company where delivery or collection of Goods is to be made pursuant to condition 4 herein.
"Goods" means any goods and/or services (including any part or parts of them), which the Company provides or supplies to the Buyer in accordance with a Contract.
- 1.2 A reference to a law is a reference to it as it is in force for the time being taking account of any amendment, extension, application or re-enactment and includes any subordinate legislation for the time being in force made under it.
- 1.3 Words in the singular include the plural and in the plural include the singular.
- 1.4 A reference to one gender includes a reference to the other gender.
- 1.5 Section and condition headings do not affect the interpretation of these Conditions.

2. APPLICATION OF THESE CONDITIONS

- 2.1 Subject to any variation under Condition 2.3, a Contract shall be on these Conditions to the exclusion of all other terms and conditions (including any terms or conditions which the Buyer purports to apply under any purchase order, confirmation of order, specification or other document).
- 2.2 No terms or conditions endorsed on, delivered with or contained in the Buyer's purchase order, confirmation of order, specification, correspondence or other document shall form part of a Contract simply as a result of such document being referred to in such Contract.
- 2.3 These Conditions apply to all the Company's sales and business transactions, and any variation to these Conditions and any representations about the Goods shall have no effect unless expressly agreed in writing and signed by a director of the Company. The Buyer acknowledges that it has not relied on any statement, promise or representation made or given by or on behalf of the Company which is not set out in the Contract. Nothing in this Condition shall exclude or limit the Company's liability for fraudulent misrepresentation.
- 2.4 Each purchase order or acceptance by the Buyer of a quotation issued by the Company for the supply of Goods shall be deemed to be an offer by the Buyer to purchase such Goods subject to these Conditions or otherwise in accordance with a Contract.
- 2.5 Where the Buyer places a purchase order verbally the Company will issue an electronic confirmation of such order and the Buyer shall be bound by the transaction detailed therein. The onus shall be on the Buyer to verify that the information provided by the Company accords with the Buyer's requirements.

3. DESCRIPTION OF GOODS AND INSTRUCTIONS FOR USE

- 3.1 The description of Goods shall be as set out in the Company's published catalogue or other literature for the time being in force, quotation or acknowledgement of order.
- 3.2 All samples, drawings, descriptive matter, specifications and advertising issued by the Company and any descriptions or illustrations contained in the Company's catalogues or brochures are issued or published for the sole purpose of giving an approximate idea of the Goods described in them. Such samples or other information shall not form part of a Contract and unless otherwise agreed any supply of Goods is not a sale by sample.
- 3.3 The Company shall provide instructions for use, periodic inspection and maintenance of Goods. Such information may be delivered in hard copy together with Goods and / or may be made available in electronic format issued by e-mail or as a download option from its website. The Company does not warrant the integrity or accuracy of product design, performance, use, or periodic inspection or maintenance information provided by its suppliers or other third parties.
- 3.4 Where the Buyer intends to incorporate Goods supplied by the Company into a product or system to be assembled or manufactured by the Buyer or customers of the Buyer, it shall be the responsibility of the Buyer to determine the suitability of such Goods for the intended purpose.

4. FREE SAMPLES

- 4.1 Where the Company issues samples of Goods free of charge, such Goods shall be for inspection only and not for use or re-sale by the Buyer, and such samples shall remain the property of and be returned to the Company upon demand.
- 4.2 Where the Company provides Goods on a sale or return basis, such Goods shall not be used or re-sold by the Buyer and shall remain the property of the Company until such time as the Buyer has accepted and made payment for the Goods or otherwise confirmed that it wishes to purchase the Goods under its credit arrangements with the Company.

5. COLLECTION AND DELIVERY

- 5.1 Unless otherwise agreed in writing by the Company, delivery of Goods shall take place when such Goods are collected by or delivered to a place specified by order of the Buyer.
- 5.2 Unless otherwise agreed in writing by the Company, any dates specified by the Company for delivery of the Goods are intended to be an estimate and time for delivery shall not be made of the essence by notice. If no dates are so specified, delivery shall be within a reasonable time.
- 5.3 Where no delivery date is specified by the Buyer and agreed to in writing by the Company, subject to the other provisions of these Conditions the Company shall not be liable for any direct, indirect or consequential loss (all three of which terms include, without limitation, pure economic loss, loss of profits, loss of business, depletion of goodwill and similar loss), costs, damages, charges or expenses caused directly or indirectly by any delay in the delivery of Goods (even if caused by the Company's negligence), nor shall any delay entitle the Buyer to terminate or rescind a Contract unless such delay exceeds 60 days.
- 5.4 The Buyer shall provide at the delivery point and at its expense adequate and appropriate equipment and competent manual labour for the safe handling and unloading Goods.
- 5.5 The Company may deliver Goods by separate instalments. Each separate instalment shall be invoiced and paid for in accordance with the provisions of a Contract.

- 5.6 Subject to Conditions 12 and 13, each instalment shall be a separate Contract and no cancellation or termination of any one Contract relating to an instalment shall entitle the Buyer to repudiate or cancel any other Contract or instalment.

6. NON-DELIVERY

- 6.1 The quantity of any consignment of Goods as recorded by the Company on dispatch from the Company's place of business shall be conclusive evidence of the quantity received by the Buyer on delivery unless the Buyer can provide conclusive evidence proving the contrary.
- 6.2 The Company shall not be liable for any non-delivery of Goods (even if caused by the Company's negligence) unless the Buyer gives written notice to the Company of the non delivery within 3 days of the date when the Goods would in the ordinary course of events have been received.
- 6.3 Unless a Contract requires otherwise, Goods shall be delivered by carriers engaged by the Company, however, the Company shall not warrant the performance of any carrier so employed. Without prejudice to the provisions of Conditions 6.2, 6.4 and 6.5, in the event of non-delivery of Goods within a reasonable time or at a time specified in a Contract, and if so required by the Buyer, the Company shall arrange recovery of and re-stock such Goods.
- 6.4 The Company's liability for non-delivery of Goods within a reasonable time or at a time specified in a Contract shall be limited to replacing such Goods within a reasonable time or issuing a credit note at the pro rata Contract price or rate against any invoice raised for the Goods.
- 6.5 The Buyer's entitlement to compensation for non-delivery of Goods within a reasonable time or at a time specified in a Contract shall be limited to the value of any compensation which the carrier is obliged to provide pursuant to its standard terms and conditions of trading.
- 6.6 If the Company incurs a loss or additional expense as a consequence of any abortive delivery, re-stocking and storage, or re-delivery of Goods due to the unwillingness or inability of the Buyer to accept delivery of such Goods, the Company shall be entitled to recover such loss or expense from the Buyer.

7. RISK / TITLE

- 7.1 Goods shall be at the risk of the Buyer from the time of delivery or collection.
- 7.2 Ownership of Goods shall not pass to the Buyer until the Company has received in full (in cash or cleared funds) all sums due to it in respect of such Goods.
- 7.3 Until ownership of Goods has passed to the Buyer, the Buyer shall:
- (a) hold such Goods on a fiduciary basis as the Company's bailee;
 - (b) store such Goods (at no cost to the Company) separately from all other goods of the Buyer or any third party in such a way that they remain readily identifiable as the Company's property;
 - (c) not destroy, deface or obscure any identifying mark or packaging on or relating to such Goods; and
 - (d) maintain such Goods in satisfactory condition and keep them insured on the Company's behalf for their full value and replacement cost against all risks to the reasonable satisfaction of the Company. On request the Buyer shall produce the policy or other evidence of insurance to the Company.
- 7.4 The Buyer's right to possession of Goods shall terminate immediately if:
- (a) the Buyer has a bankruptcy order made against him or makes an arrangement or composition with his creditors, or otherwise takes the benefit of any statutory provision for the time being in force for the relief of insolvent debtors, or (being a body corporate) convenes a meeting of creditors (whether formal or informal), or enters into liquidation (whether voluntary or compulsory) except a solvent voluntary liquidation for the purpose only of reconstruction or amalgamation, or has a receiver and/or manager, administrator or administrative receiver appointed of its undertaking or any part thereof, or documents are filed with the court for the appointment of an administrator of the Buyer or notice of intention to appoint an administrator is given by the Buyer or its directors or by a qualifying floating charge holder (as defined in paragraph 14 of Schedule B1 to the Insolvency Act 1986), or a resolution is passed or a petition presented to any court for the winding up of the Buyer or for the granting of an administration order in respect of the Buyer, or any proceedings are commenced relating to the insolvency or possible insolvency of the Buyer; or
 - (b) the Buyer suffers or allows any execution, whether legal or equitable, to be levied on his/its property or obtained against him/it, or fails to observe or perform any of his/its obligations under a Contract or any other agreement between the Company and the Buyer, or is unable to pay its debts within the meaning of section 123 of the Insolvency Act 1986 or the Buyer ceases to trade; or
 - (c) the Buyer encumbers or in any way charges any of such Goods.
- 7.5 The Company shall be entitled to recover payment for Goods notwithstanding that ownership of any of such Goods has not passed from the Company to the Buyer.
- 7.6 The Buyer grants the Company, its agents and employees an irrevocable licence at any time to enter any premises where Goods are or may be stored in order to inspect them, or, where the Buyer's right to possession has terminated, to recover them.
- 7.7 Where the Company is unable to determine whether any goods are Goods in respect of which the Buyer's right to possession has terminated, the Buyer shall be deemed to have sold all Goods of the kind sold by the Company to the Buyer in the order in which they were invoiced to the Buyer.
- 7.8 On termination of the Contract, howsoever caused, the Company's (but not the Buyer's) rights contained in this Condition 7 shall remain in effect.

8. PRICE

- 8.1 Subject to Condition 8.2 and unless it shall be a term of a Contract or otherwise agreed by the Company in writing, the price for Goods:
- (a) shall be the price set out in the Company's price list published for the time being in force; and
 - (b) be exclusive of any value added tax and all costs or charges in relation to carriage, handling at point of delivery, export and import duties, and insurance, all of which amounts the Buyer shall pay in addition to the published price when it is due to pay for such Goods.

- 8.2 The Company shall be entitled to alter and increase the price of Goods to be supplied under a Contract where:
- (a) the cost of its raw materials or suppliers charges increase beyond the Company's control; or
 - (b) the cost of delivery or charges levied by carriers increase beyond the Company's control; or
 - (c) any increase in export or import duties occur; or
 - (d) the Buyer reduces the scope or quantity of the Goods it has agreed to purchase under a Contract.

9. PAYMENT

- 9.1 Unless different payment terms have been agreed pursuant to a Contract, the payment terms under this Condition 9. shall apply.
- 9.2 Subject to Condition 9.5, payment of the price for Goods is due in pounds sterling or US dollars or euros (as cited in any Contract or quotation issued by the Company), and shall be payable:
- (a) where a credit facility has been granted by the Company, within 30 days from the end of the month in which such Goods are invoiced; or
 - (b) by pre-payment before collection by or delivery to the Buyer.
- 9.3 Goods may be invoiced at any time after collection or delivery.
- 9.4 Time for payment shall be of the essence.
- 9.5 No payment shall be deemed to have been received until the Company or its bank has received cleared funds.
- 9.6 All payments payable to the Company under a Contract shall become due immediately on its termination despite any other provision.
- 9.7 The Buyer shall make all payments due under a Contract in full without any deduction whether by way of set-off, counterclaim, discount, abatement or otherwise unless the Buyer has a valid court order requiring an amount equal to such deduction to be paid by the Company to the Buyer.
- 9.8 If the Buyer fails to pay for Goods within 30 days from the end of the month in which Goods are invoiced, the Company may suspend delivery of any Goods ordered by the Buyer under a Contract or any other agreement between the Company and the Buyer.

10. QUALITY

- 10.1 Where the Company is not the manufacturer of Goods supplied to the Buyer, the Company shall use reasonable endeavour to transfer to the Buyer the benefit of any warranty or guarantee given to the Company or provided by the original supplier or manufacturer of such Goods.
- 10.2 Subject to the Buyer's compliance with any instructions for use, periodic inspection and maintenance of the Goods and the other provisions of these Conditions, the Company warrants that on delivery Goods shall be in accordance with the product and the performance specifications published or distributed by the Company, of merchantable quality, and for a period of six months from the date of delivery Goods shall:
- (a) be of satisfactory quality within the meaning of the Sale of Goods Act 1979; and
 - (b) be reasonably fit for any specified purpose for which such Goods are being sold and purchased provided always that the Buyer had made known that purpose to the Company in writing and the Company has confirmed in writing that it is reasonable for the Buyer to rely on the capability of such Goods based upon the skill and judgement of the Company.
- 10.3 The Company shall not be liable for a breach of any of the warranties in Condition 10.2 unless:
- (a) the Buyer gives written notice of the defect to the Company, and, if the defect is as a result of damage in transit to the carrier, within 7 days of the time when the Buyer discovers or ought to have discovered such defect; and
 - (b) the Company is given a reasonable opportunity after receiving the notice of examining such Goods.
- 10.4 The Company shall not be liable for a breach of any of the warranties in Condition 10.2 if:
- (a) the Buyer makes any further use of such Goods after giving such notice; or
 - (b) the defect arises because the Buyer failed to comply with any statutory requirements or follow the Company's oral or written instructions or manufacturers' requirements and recommendations as to the storage, installation, commissioning, use, periodic inspection or maintenance of the Goods or (if there are none) good trade practice; or
 - (c) the Buyer alters or repairs such Goods without the written consent of the Company; or
 - (d) the Buyer exceeds the use, performance and other parameters in respect of the Goods set out in the declaration of conformity or manufacturer's certificate issued by the Company.
- 10.5 Subject to Conditions 10.3 and 10.4, if any of the Goods do not conform with any of the warranties in Condition 10.2 the Company shall at its option, repair or replace such Goods (or the defective part) or refund the price of such Goods at the pro rata Contract rate provided that, if the Company so requests, the Buyer shall return the Goods or the part of such Goods which is defective to the Company.
- 10.6 If the Company complies with Condition 10.5 it shall have no further liability for a breach of any of the warranties in Condition 10.2 in respect of such Goods.

11. PRODUCT AND PACKAGING WASTE PROCESSING AND DISPOSAL

- 11.1 The Company and the Buyer shall each be responsible for compliance with any statutory requirements applicable in the country or location to which Goods shall be produced, delivered, stored or used for product and waste packaging, recycling, recovery and disposal.

12. VARIATIONS

- 12.1 The Buyer shall be entitled to amend a purchase order providing such amendment shall be made and accepted by the Company in writing, and subject to the Buyer compensating the Company for any additional cost it may incur or be entitled to charge as a consequence of implementing such variation.
- 12.2 The Company may vary a purchase order if for any reason it is unable to supply Goods provided always that the Company shall have the opportunity to supply alternate Goods of equal quality and capability as the Goods originally ordered by the Buyer.

13. CANCELLATION OF CONTRACTS

- 13.1 Without prejudice to any other provision of these Conditions or any rights available to the parties, the Buyer and the Company shall each have the right to cancel a Contract in whole or in part by giving written notice to the other whereupon all work under such Contract (or the cancelled part) shall be discontinued.
- 13.2 Where a Contract is cancelled by the Buyer, the Buyer shall pay to the Company all reasonable and proportionate costs as it may have incurred in performing such Contract to the point of cancellation, including the value of Goods previously supplied, work done and services performed under the Contract.
- 13.3 Where a Contract is cancelled by the Company by virtue of its inability to provide Goods, the Company shall be entitled to invoke the provisions of Condition 12.2 or otherwise the Company shall be under no obligation to compensate the Buyer for any loss or expense arising out of such cancellation.

14. LIMITATION OF LIABILITY

- 14.1 The Company's liability for accidental death or accidental personal injury and accidental loss or accidental damage to material property shall be limited to £1,000,000 per claim or series of claims arising out of one event in respect of such loss, and the Buyer shall be responsible for making its own arrangements for the insurance of any excess loss beyond the prescribed limit.
- 14.2 Subject to Conditions 5, 6 and 10, the following provisions set out the entire financial liability of the Company (including any liability for the acts or omissions of its employees, agents and subcontractors) to the Buyer in respect of:
- (a) any breach of these Conditions;
 - (b) any use made or resale by the Buyer of any Goods, or of any product incorporating any of such Goods; and
 - (c) any representation, statement or tortious act or omission including negligence arising under or in connection with a Contract.
- 14.3 All warranties, conditions and other terms implied by statute or common law (save for the conditions implied by section 12 of the Sale of Goods Act 1979) shall, to the fullest extent permitted by law, be excluded from a Contract.
- 14.4 Nothing in these Conditions excludes or limits the liability of the Company:
- (a) for death or personal injury caused by the Company's negligence; or
 - (b) for any matter which it would be illegal for the Company to exclude or attempt to exclude its liability;
 - (c) for fraud or fraudulent misrepresentation.
- 14.5 Subject to Conditions 14.3 and 14.4, the Company's total liability in contract, tort (including negligence or breach of statutory duty), misrepresentation, restitution or otherwise, arising in connection with the performance or contemplated performance of a Contract shall be limited to £1,000,000.

15. INTELLECTUAL PROPERTY

- 15.1 All designs, inventions, patents, know how, new technology, improvements and all similar matters made, designed or developed by or on behalf of the Company pertaining to Goods or other aspects of a Contract shall be the property of the Company or its suppliers as the case may be.
- 15.2 All material, drawings, patterns, gauges, samples, specifications or other technical data prepared by or on behalf of the Company shall be and shall at all times remain the sole property of the Company or its suppliers as the case may be.

16. ASSIGNMENT

- 16.1 The Company may assign the Contract or any part of it to any person, firm or company.
- 16.2 The Buyer shall not be entitled to assign the Contract or any part of it without the prior written consent of the Company.

17. FORCE MAJEURE

- 17.1 The Company reserves the right to defer the date of delivery of Goods or to cancel a Contract or reduce the volume of Goods ordered by the Buyer (without liability to the Buyer), if it is prevented from or delayed in the carrying on of its business due to circumstances beyond the reasonable control of the Company including, without limitation, acts of God, governmental actions, war or national emergency, acts of terrorism, protests, riot, civil commotion, fire, explosion, flood, epidemic, lock-outs, strikes or other labour disputes (whether or not relating to either party's workforce), or restraints or delays affecting carriers or inability or delay in obtaining supplies of adequate or suitable materials, provided that, if the event in question continues for a continuous period in excess of 60 days, the Buyer shall be entitled to give notice in writing to the Company to terminate such Contract.

18. GENERAL

- 18.1 Each right or remedy of the Company under a Contract is without prejudice to any other right or remedy of the Company whether under such Contract or not.
- 18.2 If any provision of a Contract is found by any court, tribunal or administrative body of competent jurisdiction to be wholly or partly illegal, invalid, void, voidable, unenforceable or unreasonable it shall to the extent of such illegality, invalidity, voidness, voidability, unenforceability or unreasonableness be deemed severable and the remaining provisions of such Contract and the remainder of such provision shall continue in full force and effect.
- 18.3 Failure or delay by the Company in enforcing or partially enforcing any provision of a Contract shall not be construed as a waiver of any of its rights under such Contract.
- 18.4 Any waiver by the Company of any breach of, or any default under, any provision of a Contract by the Buyer shall not be deemed a waiver of any subsequent breach or default and shall in no way affect the other terms of such Contract.
- 18.5 The parties to a Contract do not intend that any term of such Contract shall be enforceable by virtue of the Contracts (Rights of Third Parties) Act 1999 by any person that is not a party to it.
- 18.6 The formation, existence, construction, performance, validity and all aspects of any Contract shall be governed by English law and the parties shall submit to the exclusive jurisdiction of the English courts.



William Hackett

e: info@williamhackett.co.uk

www.williamhackett.co.uk

t: 01665 604200 f: 01665 604204

William Hackett Lifting Products Limited

Oak Drive, Lionheart Enterprise Park
Alnwick, Northumberland
United Kingdom
NE66 2EU

William Hackett Chain Products Limited

Maypole Fields, Cradley
Halesowen, West Midlands
United Kingdom
B63 2QE