

Annual Certificate 2024

Rev. A

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This certificate is valid for products supplied during year 2024.
Please note: If any changes occur a new version will be issued.

The working load limit stated is the maximum working load limit allowed by Gunnebo Industries. The working load limit might be lower according to national regulations or national/international standards.

The manufacturing proof force specified is the proof force each individual component has been subjected to during manufacturing test process.

The minimum breaking force value is the minimum breaking force the component is prescribed to reach in an ultimate test.

Metric tonne (T) and Newton (N) is standard units and type tests have been performed using these units.

A952/ A952M-02 has been used to convert from metric tonne to pounds. Conversation factor 2204 has been used for conversation from tonne to pounds for sizes which is not included in A952/ A952M-02.

Gravity factor 9.81 has been used for calculation of force (Newton).

Our quality management system follows ISO 9001:2015.

This certificate is in conformity with EN 10204-3.1.

We certify that mentioned products have been tested in calibrated and approved testing machines and have been found free from defects.

User and assembling instructions are available at:

<http://www.gunneboindustries.com/Lifting/Technical-Information-test/User-instructions1/>

EC declaration of incorporation.

Products without CE-mark can be used as parts of a CE-marked lifting assembly.

The products must not be put into service until the full assembly has been declared in conformity with the provisions of 2006/42/EC.


EC declaration of conformity.

We declare that delivered CE-marked products conform to 2006/42/EC.

UKCA declaration of conformity.

UK declaration of conformity We declare that delivered UKCA marked products meet the requirement of the supply of Machinery (Safety) Regulations 2008 and section 6 of the Health and Safety at work etc. Act 1974.

Gunnebo Industries
2024-01-01



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Fredrik Sandberg
EMEA Product Engineering Manager

Components Grade 8

(G, G HDG, BL, OBK, BK, BK HDG, BKG, BKGC, BKL, BKL HDG, BKLK, BKH, EKN, EK, EGKN, OKE, LKN, LKNK, LKNG, OG, GKL, LK, SA, GSA, CEL, SKG, SKO, ESKN, SKN, SKLI, SKR, SKT)

Component size (mm)	Working Load Limit				Manufacturing Proof Force (kN)	Minimum Breaking Force (kN)
	SF 4:1		SF 5:1			
	Tonnes / Pounds	Tonnes / Pounds	Tonnes / Pounds	Tonnes / Pounds		
6	1.12	2 500	0.90	1 983	28.3	49.9
7/8	2.0	4 500	1.6	3 526	50.3	81
8	2.0	4 500	1.6	3 526	50.3	81
10	3.2	7 100	2.5	5 510	78.6	126
13	5.4	12 000	4.3	9 477	133	214
16	8.2	18 000	6.5	14 326	201	322
18/20	12.8	28 300	10.2	22 480	320	504
22	15.5	34 200	12.4	27 329	380	608
26	21.7	47 700	17.3	38 129	531	850
32	32.8	72 300	25.0	55 100	804	1 288

The values in this table fulfil the requirements in the following standards:

EN 1677-1:2008 (Components for slings: Forged steel components Grade 8).

ISO 8539:2009 (Forged lifting components for use with grade T(8) chain).

ASTM A952/A 952M-02 (Forged grade 80 and grade 100 steel lifting components and weld attachment links).

AS3776:2015 (Lifting components for Grade T(80) and V(100) chain slings).

AS3775:2014 (Chain Slings for Lifting Purposes- Grade T(80) and V(100)).

SANS 1595:2003 (Forged steel lifting hooks for use with steel chains of strength grade M(4), P(5), S(6), T(8) and V(10)).

Component Grade 8 Aero nautical
(SKT , SKNS, ESKNS, SKLI, SKG, SKO, SKR, GKL-7, G)

Component size (mm)	Working Load Limit				Manufacturing Proof Force (kN)	Minimum Breaking Force (kN)
	SF 4:1 Tonnes / Pounds		SF 5:1 Tonnes / Pounds			
GKL-7	1.6	3 500	1.2	2 644	42.3	63.4
7/8	2.0	4 500	1.6	3 526	50.3	81
10	3.2	7 100	2.6	5 700	88	131.5
13	5.4	12 000	4.3	9 477	141	214
16	8.2	18 000	6.5	14 326	201	322
18/20	12.8	28 300	10.2	22 480	320	504

The values in this table fulfil the requirements in the following standards:
EN 1677-1:2008 (Components for slings: Forged steel components Grade 8).
ISO 8539:2009 (Forged lifting components for use with grade T(8) chain).
ASTM A952/A 952M-02 (Forged grade 80 and grade 100 steel lifting components and weld attachment links).
AS3776:2015 (Lifting components for Grade T(80) and V(100) chain slings).
AS3775:2014 (Chain Slings for Lifting Purposes- Grade T(80) and V(100)).
SANS 1595:2003 (Forged steel lifting hooks for use with steel chains of strength grade M(4), P(5), S(6), T(8) and V(10)).

Components Grade 10

1 leg components (MG, CG, CL, OBK, GBK, GKC, LBK, LKBK, BK, BKD, BKG, BKT*, BKL, BKLK, BKGC, EGK, EGKN, GG, GG LP, GC, MIG, G, EK, EKN, OKE, LKN, LKNK, LKNG, OG, OGN, GT, CEL)

Component size (mm)	Working Load Limit SF 4:1				Working Load Limit SF 5:1				Manufacturing Proof Force (kN)	Minimum Breaking Force (kN)
	Grade 10 Gunnebo Tonnes / Pounds		Grade 10 ASTM Tonnes / Pounds		Grade 10 Gunnebo Tonnes / Pounds		Grade 10 ASTM Tonnes / Pounds			
6	1.5	3 306	1.5	3 306	1.2	2 645	1.2	2 645	37	59
7	2.0	4 500	2.0	4 500	1.6	3 500	1.6	3 500	50.3	81
7/8	2.6	5700	2.6	5 700	2.0	4 500	2.0	4 500	64	102
8	2.6	5700	2.6	5 700	2.0	4 500	2.0	4 500	64	102
10	4.0	8 800	4.0	8 800	3.2	7 100	3.2	7 100	100	158
13	6.8	15 000	6.8	15 000	5.4	12 000	5.4	12 000	166	268
16	10.3	22 600	10.3	22 600	8.2	18 000	8.2	18 000	253	402
20	16.0	35 300	16.0	35 300	12.8	28 300	12.8	28 300	393	630
22	20.0	44 080	20.0	44 080	16.0	35 300	16.0	35 300	491	785
26	27.3	60 169	27.3	60 169	21.8	48 047	21.8	48 047	670	1073
32	40.0	88 160	40.0	88 160	32.8	72 300	32.8	72 300	981	1610

The values in this table fulfil the requirements in the following standards:

EN 1677-1:2008 WLL +25% (Components for slings: Forged steel components Grade 8).

ASTM A952/A 952M-02 (Forged grade 80 and grade 100 steel lifting components and weld attachment links).

ASTM A906/A906M-02 (Grade 80 and grade 100 alloy steel chain slings for overhead lifting).

BG-Specification GS-MO15-05 (Principles for the testing and certification of chains and components).

*BKT: proof loading must be carried out after machining the shank. WLL, Safety factor, Minimum Breaking Load is valid only after proof loading and the smallest permitted shank dimension after machining is followed.

Components Grade 10 (400°C)
2 leg components (MGD, CGD, CLD)

Component size (mm)	Working Load Limit SF 4:1				Manufacturing Proof Force (kN)	Minimum Breaking Force (kN)
	0 - 45°		45 – 60°			
	Tonnes / Pounds	Tonnes / Pounds	Tonnes / Pounds	Tonnes / Pounds		
6	2.1	4 628	1.5	3 306	52	83
8	3.5	7 714	2.5	5 510	86	137
10	5.6	12 342	4.0	8 800	137	220
13	9.5	20 938	6.7	14 800	233	373
16	14.0	30 856	10.0	22 040	343	549

The requirements are based on Gunnebos specification for grade 10 and BG-Specification GS-MO15-05 (Principles for the testing and certification of chains and components)

Components Grade 10 (200°C)
2 leg components (MGD, CGD, CLD)

Component size (mm)	Working Load Limit SF 4:1						Manufacturing Proof Force (kN)	Minimum Breaking Force (kN)
	30°		45°		60°			
	Tonnes / Pounds	Tonnes / Pounds	Tonnes / Pounds	Tonnes / Pounds	Tonnes / Pounds	Tonnes / Pounds		
6	2.6	5 700	2.1	4 628	1.5	3 306	56,6	113
8	4.5	9 918	3.7	8 154	2.6	5 700	102	204
10	6.95	15 317	5.7	12 563	4.0	8 800	158	316
13	11.8	26 007	9.6	21 158	6.8	15 000	268	536
16	17.8	39 231	14.5	31 958	10.3	22 600	402	804

The values in this table fulfil the requirements in the following standards:

ASTM A952/A 952M-02 (Forged grade 80 and grade 100 steel lifting components and weld attachment links).

ASTM A906/A906M-02 (Grade 80 and grade 100 alloy steel chain slings for overhead lifting).

Observe that the given angle is from the vertical plane. Hence, not as in the above standard which gives the horizontal angle.

At other angles the load is reduced by the formula $WLL_{(vertical)} * \cos A$ (angle to vertical).

Universal Weld-On Hook (UKN)

Component size (Tonnes)	Working Load Limit		Manufacturing Proof Force (kN)	Minimum Breaking Force (kN)
	SF 5:1 Tonnes / Pounds			
UKN 0.75 T	0.75	1 653	22.5	37.5
UKN 1 T	1.0	2 204	30	50
UKN 2 T	2.0	4 500	60	100
UKN 3 T	3.0	6 612	90	150
UKN 4 T	4.0	8 800	120	200
UKN 5 T	5.0	11 020	150	250
UKN 8 T	8.0	17 632	240	400
UKN 10 T	10.0	22 040	300	500
UKN 15 T	15.0	33 060	450	750
UKN 20T	20.0	44 080	589	981

Type tested according to the requirements in the following standards:

EN 474-1 (Earth-moving machinery - Safety - Part 1: General requirements).

BG-Specification GS-MO 15-03 (Principles for the testing and certification of attachable hooks for earth moving machinery for lifting applications).

Container Hook Grade 10 (CH)

Component size	Working Load Limit				Manufacturing Proof Force (kN)	Minimum Breaking Force (kN)
	SF 5:1 Tonnes / Pounds		SF 4:1 Tonnes / Pounds			
CH-3 (left, right, straight)	10.0	22040	12.5	27550	307	491

Round Sling Hook Grade 10 (RH)

Component size (mm)	Working Load Limit		Manufacturing Proof Force (kN)	Minimum Breaking Force (kN)
	SF 4:1			
	Tonnes	Pounds		
RH-1	1.0	2 204	24.5	39.2
RH-2	2.0	4 500	49.1	78.4
RH-3	3.0	6 612	73.6	118
RH-5	5.0	11 020	123	196

Manufactured and tested according to 1677-2.

Master Links Grade 10 (M, MF, MT)

Master Link Type	Dim. (mm)	Working Load limit						Manufacturing Proof force (kN)	Minimum breaking force (kN)
		EN1677-4:2008 ISO 16798:2004			A-952/A952M-02 AS 3775.2-2014				
		SF 4:1 Tonnes / Pounds		SF 5:1 Tonnes / Pounds		SF 5:1 Tonnes / Pounds			
M / MF-6	11	1.5	3 306	1.5	3 306	1.5	3 306	36.8	74
M / MF86	14	2.5	5 510	2.5	5 510	3.2	7 100	62.8	157
M / MF-108	17	4.0	8 800	4.0	8 800	5.2	11 460	103	255
M-13	19	6.8	15 000	6.8	15 000	6.8	15 000	167	334
M / MF-1310	22	7.5	16 530	7.5	16 530	8.0	17 632	184	393
M / MF-1613	28	10.0	22 040	10.0	22 040	13.6	29 974	267	667
M-19	30	12.0	26 448	12.0	26 448	16.0	35 300	314	785
M / MF-2016	34	17.0	37 468	17.0	37 468	20.6	45 402	417	1 011
M / MF-2220	40	25.0	55 100	25.0	55 100	30.9	68 103	614	1 516
M-2622	42	28.0	61 712	28.0	61 712	32.0	70 528	687	1 570
M-32	45	33.0	72 732	33.0	72 732	38.6	85 074	810	1 894
M-3226	50	43.0	94 772	43.0	94 772	46.6	102 706	1055	2 286
M-3632	55	56.0	123 424	56.0	123 424	65.0	143 260	1373	3 188
M-4536	60	70.0	154 280	70.0	154 280	72.7	160 231	1717	3 566
M-90T	70	90.0	198 360	90.0	198 360	100.0	220 400	2208	4 905
M-125T	80	125.0	275 500	125.0	275 500	125.0	275 500	3066	6 132
MT-6	19/14	3.5	7 714	3.5	7 714	5.0	11 020	98.1	245
MT-8	22/17	5.2	11 461	5.2	11 461	8.0	17 632	157	393
MT-9	25/19	6.9	15 208	6.9	15 208	9.7	21 378	191	476
MT-10	30/22	11.5	25 346	11.5	25 346	16.0	35 300	314	785
MT-13	40/28	17.0	37 468	17.0	37 468	26.0	57 304	511	1 276
MT-16	50/32	28.0	61 712	28.0	61 712	35.0	77 140	687	1 717
MT-20	55/40	35.0	77 140	35.0	77 140	50.0	110 200	981	2 453
MT-22	60/45	53.0	116 812	53.0	116 812	75.0	165 300	1 472	3 679
MT-26	70/50	70.0	154 280	70.0	154 280	100.0	220 400	1 962	4 905
MT-32	80/55	90.0	198 360	90.0	198 360	125.0	275 500	2 453	6 132

WLL according to EN 1677-4:2008 WLL+25% and ISO 16798:2004 is valid for angles 0-45° to vertical.

WLL according to ASTM A952/A952M-02 and AS 3775.2-2014 is valid at 0° to vertical.

At other angles the load is reduced by the formula $WLL_{(vertical)} * \cos A_{(angle\ to\ vertical)}$.

ASME B30.26

Hot Dip Galvanized Master Links Grade 8 (MF HDG)

Master Link Type	Dim. (mm)	Working Load limit						Manufacturing Proof force (kN)	Minimum breaking force (kN)
		EN1677-4:2008 ISO 16798:2004				A-952/A952M-02 AS 3775.2-2014			
		SF 4:1 Tonnes / Pounds		SF 5:1 Tonnes / Pounds		SF 5:1 Tonnes / Pounds			
MF-86 HDG	14	2.0	4 500	2.0	4 500	2.5	5 510	49.1	123
MF-108 HDG	17	3.2	7 100	3.2	7 100	4.0	8 800	78.5	196
MF-1310 HDG	22	5.4	12 000	5.4	12 000	6.8	15 000	133	334
MF-1613 HDG	28	8.2	18 000	8.2	18 000	10.3	22 600	202	505

WLL according to EN 1677-4:2008 WLL and ISO 16798:2004 is valid for angles 0-45° to vertical.

WLL according to ASTM A952/A952M-02 and AS 3775.2-2014 is valid at 0° to vertical.

At other angles the load is reduced by the formula $WLL(\text{vertical}) * \cos A(\text{angle to vertical})$.

ASME B30.26

Master Links Grade 10 (MFX, MTX, MFH, MFHW, S)

Master Link Type	Dim. (mm)	Working Load limit						Manufacturing Proof force (kN)	Minimum breaking force (kN)
		EN1677-4:2008				A-952/A952M-02 AS 3775.2-2014			
		SF 4:1 Tonnes / Pounds		SF 5:1 Tonnes / Pounds		SF 5:1 Tonnes / Pounds			
MFX-108	25	4.25	9 367	4.25	9367	5.2	11 461	105	255
MFX-1310	28	7.5	16 530	7.5	16 530	8.0	17 632	184	392
MFX-1613	34	11.2	24 684	11.2	24 684	13.6	29 974	275	667
MFX-2016	38	16.0	35 300	16.0	35 300	20.6	45 402	404	1 010
MFH-1310	22	7.5	16 530	7.5	16 530	8.0	17 632	185	393
MFH-1613	28	10.0	22 040	10.0	22 040	13.6	29 974	268	667
MFH-2016	32	17.0	37 468	17.0	37 468	20.6	45 402	417	1 011
MFH-2220	40	28.0	61 712	28.0	61 712	30.9	68 104	687	1 570
MFHW-2220	40	28.0	61 712	28.0	61 712	28.0	61 712	687	1 570
S-16	32	19.9	43 859	19.9	43 859	--	--	488	976
S-22	45	37.6	82 870	37.6	82 870	--	--	922	1 844
S-26	50	49.7	109 539	49.7	109 539	--	--	1219	2 438
S-32	55	63.9	140 836	63.9	140 836	--	--	1567	3 134

WLL according to EN 1677-4:2008 WLL+ 25% is valid for angles 0-45° to vertical.

WLL according to ASTM A952/A952M-02 and AS 3775.2-2014 is valid at 0° to vertical.

At other angles the load is reduced by the formula $WLL(\text{vertical}) * \cos A(\text{angle to vertical})$.

ASME B30.26

Arctic Offshore Master Links Grade 8+ (M, MT)

Master Link Type Arctic	Dim. (mm)	Working Load limit						Manufacturing Proof Force (kN)	Minimum Breaking Force (kN)	
		DNV 2.7-1:2013			EN 1677-4 :2008		A-952/A952M -02			
		Tonnes / Pounds		Max container rating (Kg)	Tonnes / Pounds		Tonnes / Pounds			
M-9T-OS	25	9.3	20 497	4 500	9.3	20 497	9.3	20 497	228	456
M-12T-OS	28	12.5	27 550	7 500	12.5	27 550	12.5	27 550	307	613
M-18T-OS	32	18.5	40 774	13 500	18.5	40 774	18.5	40 774	454	909
M-24T-OS	36	24.0	52 896	21 000	24.0	52 896	24.0	52 896	589	1 177
M-30T-OS	40	30.5	67 222	25 000	30.5	67 222	30.5	67 222	748	1 496
M-40T-OS	45	40.0	88 160	N/A	40.0	88 160	40.0	88 160	981	1 962
M-50T-OS	50	50.0	110 200	N/A	50.0	110 200	50.0	110 200	1 226	2 453
M-65T-OS	55	65.0	143 260	N/A	65.0	143 260	65.0	143 260	1 594	3 188
M-90T-OS	70	90.0	198 360	N/A	90.0	198 360	90.0	198 360	2 207	4 415
M-125T-OS	80	125.0	275 500	N/A	125.0	275 500	125.0	275 500	3 066	6 131
MT-9T-OS	25/22	9.3	20 497	4 500	9.3	20 497	9.3	20 497	228	456
MT-12T-OS	28/25	12.5	27 550	7 500	12.5	27 550	12.5	27 550	307	613
MT-18T-OS	32/28	18.5	40 774	13 500	18.5	40 774	18.5	40 774	454	909
MT-24T-OS	36/32	24.0	52 896	21 000	24.0	52 896	24.0	52 896	589	1 177
MT-30T-OS	40/36	30.5	67 222	25 000	30.5	67 222	30.5	67 222	748	1 496
MT-40T-OS	45/40	40.0	88 160	N/A	40.0	88 160	40.0	88 160	981	1 962
MT-50T-OS	50/45	50.0	110 200	N/A	50.0	110 200	50.0	110 200	1 226	2 453
MT-65T-OS	55/50	65.0	143 260	N/A	65.0	143 260	65.0	143 260	1 594	3 188

WLL according to EN 1677-4:2008 is valid for angles 0-45° to vertical. WLL according to ASTM A952/A952M-02 and AS 3775.2-2014 is valid at 0° to vertical. At other angles the load is reduced by the formula $WLL(\text{vertical}) * \cos A(\text{angle to vertical})$. All sublinks have a WLL of min 75% of the top link. ASME B30.26. DNV Type approval: TAS00000TE.

Hot Dip Galvanized DNV approved Offshore Safety Hooks (BK, BKLK, BKD, BKDKD)

Component size (mm)	Working Load Limit				Manufacturing Proof Force (kN)	Minimum Breaking Force (kN)
	SF 5:1		SF 4:1			
	Tonnes / Pounds	Tonnes / Pounds	Tonnes / Pounds	Tonnes / Pounds		
13	5.4	12 000	6.7	14 800	166	264
16	8.2	18 000	10.3	22 600	253	404
20	12.8	28 300	16.0	35 300	393	630
22	16.0	35 300	20.0	44 080	491	785
26	21.6	47 700	27.3	60 169	670	1 073
32	26.2	57 745	32.8	72 300	804	1 288

The values in this table fulfil the requirements in the following standards:
 DNV GL-ST 0377:2016 (Standard for shipboard lifting appliances), DNV GL-ST 0378:2016 (Standard for offshore and platform lifting Appliances), EN 1677-3:2008 (Forged steel self-locking hooks – Grade 8).
 ASTM A952/A 952M-02 (Forged grade 80 and grade 100 steel lifting components and weld attachment links).
 ASTM A906/A906M-02 (Grade 80 and grade 100 alloy steel chain slings for overhead lifting). DNV GL Type approval: TAS00001Y5

Chain, Classic Grade 8

Chain size KL (mm)	Working Load limit		Manufacturing Proof Force (kN)	Minimum Breaking Force (kN)
	Tonnes / Pounds			
6	1.12	2 500	28.3	45.2
7	1.57	3 500	38.5	62
8	2.0	4 500	50.3	80.6
10	3.2	7 100	79.0	130
13	5.4	12 000	133	214
16	8.2	18 000	201	322
19	11.6	25 600	284	457
22	15.5	34 200	380	610
26	21.6	47 700	531	850
32	32.8	72 300	804	1 300

The values in this table fulfil the requirements in the following standards:
EN 818-2:2008, ISO 3076:2012, AS 2321:2014, ASTM A391/A391M-07 (2012).

Chain, Hot dip galvanized Grade 8

Chain size KLZ (mm)	Working Load limit		Manufacturing Proof Force		Minimum Breaking Force	
	Tonnes / Pounds		kN	lb	kN	
6	1.12	2 500	36.8	8 200	45.2	10 160
8	2.0	4 500	63	14 100	80.6	18 000
10	3.2	7 100	98	22 000	130	28 400
13	5.4	12 000	166	37 300	214	48 000
16	8.2	18 000	251	56 400	322	72 400

The values in this table fulfil the requirements in the following standards:
EN 818-2:2008, ISO 3076:2012, AS 2321:2014, ASTM A391/A391M-07 (2012).

Chain, GrabiQ Grade 10 (200°C)

Chain size KL (mm)	Working Load limit		Manufacturing Proof Force (kN)	Minimum Breaking Force (kN)
	Tonnes / Pounds			
6	1.5	3 306	36.8	58.9
7	1.95	4 300	48.0	77
8	2.6	5 700	63.0	102
10	4.0	8 800	98.0	158
13	6.8	15 000	166	268
16	10.3	22 600	251	402
20	16.0	35 300	393	630
22	20.0	44 080	491	785
26	27.0	59 500	664	1 062
32	40.0	88 160	1005	1 610

The values in this table fulfil the requirements in the following standard:
ASTM A973/A973M-07 (2012).

Chain, GrabiQ Grade 10 (400°C)

Chain size KL (mm)	Working Load limit Tonnes / Pounds		Manufacturing Proof Force (kN)	Minimum Breaking Force (kN)
6	1.5	3 306	36.8	58.9
8	2.5	5 500	63	102
10	4.0	8 800	98	158
13	6.7	14 800	166	268
16	10.0	22 040	251	402

The values in this table fulfil the requirements in the following standard:
EN 818-2: 2008 (WLL+ 25 % and material dimension Ø is +10%).

Rotating Eye Lifting Point (RELP)

Size	Working Load Limit SF 4:1				Manufacturing Proof Force (kN)	Minimum Breaking Force* (kN)
	Tonnes 90°	Tonnes 0° *	Pounds 90°	Pounds 0° *		
RELP-M8 RELP-5/16" UNC	0.3	0.7	661	1 543	17.2	27.4
RELP-M10 RELP-3/8" UNC	0.5	1.2	1 102	2 645	29.5	47
RELP-M12 RELP-1/2" UNC	0.8	2.0	1 763	4 408	49.1	78.4
RELP-M16 RELP-5/8" UNC	1.5	3.5	3 306	7 714	85.9	137
RELP-3/4" UNC	2.3	5.0	5 069	11 020	123	196
RELP-M20	2.4	6.1	5 290	13 444	150	239
RELP-7/8" UNC	2.9	6.1	6 392	13 444	150	239
RELP-M24 RELP-1" UNC	3.3	8.1	7 273	17 852	199	317
RELP-M30 RELP-1 1/4" UNC	4.6	12.1	10 138	26 668	297	474
RELP-M36 RELP-1 1/2" UNC	7.1	16.1	15 648	35 484	395	631
RELP-M42 RELP 1 3/4" UNC	9.1	24.0	20 056	52 896	589	941
RELP-M48 RELP 2" UNC	12.1	32.0	26 668	70 528	785	1255

* In case of 1-leg application where loading is limited to straight loading (no bending force).
in direction of the screw it is possible to use a higher WLL.
The manufacturing proof force is applied on critical load bearing parts of the products.
Bolt, nut and washer according to: ISO 898-1 Class 10.9.

Eye Lifting Point Grade 8 (ELP)

Size (mm)	Working Load Limit SF 4:1		Magnetic particle Inspection	Minimum Breaking Force (kN)
	Tonnes	Pounds		
ELP-M16	1.0	2 204	100%	39.3
ELP-M20	1.5	3 306	100%	58.9
ELP-M24	2.0	4 500	100%	78.5
ELP-M30	3.0	6 612	100%	118

In case of 1-leg application where loading is limited to straight loading (no bending force)
in direction of the thread it is possible to use ELP with four times higher WLL.

Rotating Lifting Point (RLP with standard or long bolt length)

Size	Working Load Limit SF 4:1				Manufacturing Proof Force (kN)	Minimum Breaking Force* (kN)
	Tonnes 90°	Tonnes 0° *	Pounds 90°	Pounds 0° *		
RLP-M8 RLP 5/16" UNC	0.4	0.8	881	1 763	19.7	31.3
RLP-M10	0.7	1.2	1 542	2 645	29.5	47
RLP 3/8" UNC	0.65	1.2	1 432	2 645	29.5	47
RLP-M12 RLP 1/2" UNC	1.2	2.0	2 644	4 500	49.1	78.4
RLP-M16 RLP 5/8" UNC	2.0	3.2	4 500	7 100	78.5	125
RLP 3/4" UNC	2.5	5.0	5 510	11 020	123	196
RLP-M20 RLP 7/8" UNC	2.8	5.6	6 171	12 342	138	219
RLP-M24 RLP 1" UNC	4.6	8.0	10 138	17 632	197	313
RLP-M30 RLP 1 1/4" UNC	6.0	12.0	13 224	26 448	295	470
RLP-M36 RLP 1 1/2" UNC	8.0	14.0	17 632	30 856	344	549
RLP-M42 RLP 1 3/4" UNC	14.0	16.0	30 856	35 300	393	627
RLP-M48 RLP 2" UNC	16.0	20.0	35 300	44 080	491	784

* In case of 1-leg application where loading is limited to straight loading (no bending force).
in direction of the screw it is possible to use RLP with higher WLL.
The manufacturing proof force is applied on critical load bearing parts of the products.
Bolt, nut and washer according to: ISO 898-1 Class 10.9.

Ball-Bearing Lifting Point (BLP)

Size	Working Load Limit SF 4:1				Manufacturing Proof Force (kN)	Minimum Breaking Force* (kN)
	Tonnes 90°	Tonnes 0° *	Pounds 90°	Pounds 0° *		
BLP-M8 BLP-5/16" UNC	0.3	0.6	661	1 322	14.8	23.5
BLP-M10	0.5	1.0	1 102	2 204	24.6	39.2
BLP-3/8" UNC	0.4	0.8	882	1 763	19.7	31.3
BLP-M12 BLP-1/2" UNC	0.75	1.5	1 653	3 306	36.8	58.8
BLP-M16 BLP-5/8" UNC	1.5	3.0	3 306	6 612	73.6	117
BLP-3/4" UNC	2.25	4.5	4 959	9 918	111	176
BLP-M20	2.5	5.0	5 510	11 020	123	196
BLP-7/8" UNC	3.0	6.0	6 612	13 224	148	235
BLP-M24 BLP-1" UNC	4.0	7.0	8 800	15 428	172	274
BLP-M30 BLP-1 1/4" UNC	6.0	12.0	13 224	26 448	295	470
BLP-M36 BLP-1 1/2" UNC	8.0	14.0	17 632	30 856	344	549
BLP-M42 BLP-1 3/4" UNC	10.0	16.0	22 040	35 300	393	627
BLP-M48 BLP-2" UNC	13.0	18.0	28 652	39 672	442	706

* In case of 1-leg application where loading is limited to straight loading (no bending force).
in direction of the screw it is possible to use a higher WLL.
The manufacturing proof force is applied on critical load bearing parts of the products.

Weldable Lifting Point (WLP)

Size	Working Load Limit SF 4:1		Magnetic Particle Inspection <u>Welding plate</u>	Manufacturing Proof Force <u>Link</u> kN	Minimum Breaking Force <u>Complete WLP</u> kN
	Tonnes	Pounds			
WLP-2.5T	2.5	5 510	100%	61.4	98.1
WLP-4T	4.0	8 800	100%	98.1	157
WLP-7T	7.0	15 428	100%	172	275
WLP-10T	10.0	22 040	100%	246	393
WLP-16T	16.0	35 300	100%	393	628

De-Centered Lifting Point (DLP with standard or long bolt length)

Size	Working Load Limit SF 4:1		Manufacturing Proof Force	Minimum Breaking Force
	Tonnes 0° - 90°	Pounds 0° - 90°	kN	kN
DLP-M8 DLP 5/16" UNC	0.35	771	8.6	13.7
DLP-M10 DLP 3/8" UNC	0.65	1 433	16	25.5
DLP-M12 DLP 1/2" UNC	1.0	2 204	24.6	39.2
DLP-M16 DLP 5/8" UNC	1.8	3 967	44.2	70.6
DLP-M16 DLP 3/4" UNC	1.6	3 526	39.3	62.7
DLP-M20 DLP 7/8" UNC	2.2	4 849	54	86.3
DLP-M20 DLP 7/8" UNC	2.6	5 700	63.8	102
DLP-M24 DLP 1" UNC	4.1	9 036	101	160
DLP-M30 DLP 1 1/4" UNC	5.0	11 020	123	196
DLP-M36 DLP 1 1/2" UNC	7.0	15 428	172	274
DLP-M42 DLP 1 3/4" UNC	15.0	33 060	368	588
DLP-M48 DLP 2" UNC	20.0	44 080	491	784

The manufacturing proof force is applied on critical load bearing parts of the products.
Bolt, nut and washer according to: ISO 898-1 Class 10.9.

Screw on Lifting Point (SLP)

Size	Working Load Limit		Magnetic Particle Inspection <i>Bracket</i>	Manufacturing Proof Force <i>Link</i> kN	Minimum Breaking Force <i>Complete SLP</i> kN
	SF 4:1				
	Tonnes	Pounds			
SLP-1T	1.0	2 204	100%	61.4	39.2
SLP 3T	3.0	6 612	100%	98.1	117
SLP 5T	5.0	11 020	100%	172	196