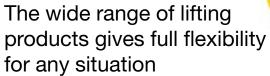
Gunnebo Lifting Classic











You can't beat the original

Think Gunnebo Lifting when selecting lifting chain and components. - Lifting is our business. As a result of over 200 years experience Gunnebo Lifting has become known for quality, superior design and innovative product development, down to the smallest component. The pride and confidence we have in our products are underlined by our rigorous quality system and the efforts put in to continually improve our processes as well as our products.

The link to the past is the future in lifting

Gunnebo Lifting today proudly carries the heritage of the innovative skills from the Swedish chain and lifting industry. Over the years a large number of Gunnebo Lifting innovations have broken new ground in the lifting gear industry. We promise and assures you that the development will continue to match your highest demands and specific needs.





Feel confident in every situation

We know how important it is to feel confident in every situation - we ensure that by having full control of the process from raw material to finished product. The close co-operation we have with our steel suppliers ensures that the raw material meets our stringent specification. We have our own chain factory as well as forging plants and machine shop for components and master links.

Safety is our highest priority

We are known as the No 1 quality manufacturer in the world, and the systematic quality control in every manufacturing stage from raw material to the finished product guarantees a high level of safety and long service life.



Quality Control	4
Safe use and maintenance	5
Connection systems	7
Chain & Components	8
Spare parts	9



Gunnebo Lifting – your partner in safe lifting

Chain and components are made from special quenched and tempered alloy steel, a guarantee for very high strength, low weight, high wear resistance and long life. All Lifting components are uniformly marked with equivalent chain size, grade, manufacturer's designation and name for positive identification.

It's easy to see the difference between a Gunnebo Lifting original component and copies, see the picture below for the characteristics of Gunnebo Lifting Components

Remember that it's not only the yellow color that symbolises a quality product. Be sure to get the original – be sure that you get a Gunnebo Lifting product!

The Classic system from Gunnebo Lifting is more than just another chain sling system. It is a total lifting concept for heavy lifting.

Our chain and components are designed to give more flexibility, more options to meet any lifting situation involving slings – whether it is chain, steel wire rope or soft slings.

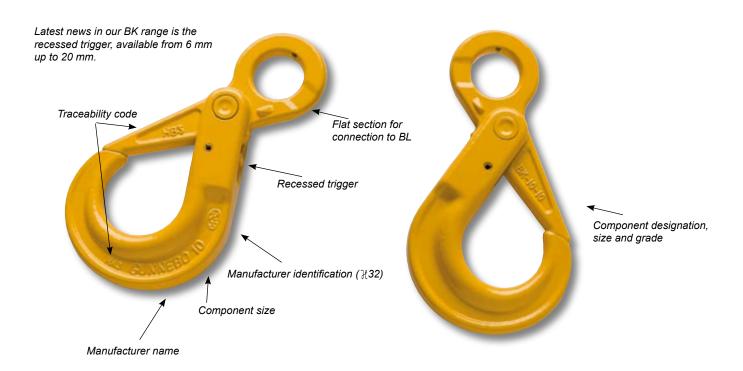




Photo: Unloading in the harbour of Karlshamn, Sweden



Feel confident in every situation Photo: Courtesy of the National ScienceFoundation, USA



Type testing

In order to prove the design, material, heat treatment and method of manufacture, each size of component and chain has been type tested in the finished condition in order to demonstrate that the component and chain have the required mechanical properties.

The following testing procedures are particularly relevant:

- Test for deformation

The Manufacturing Proof Force (MPF) for the relevant size of the component is applied and removed. The dimensions after proof loading shall not alter from the original dimensions within the tolerances prescribed in our specifications and in the international standards.

- Static tensile test

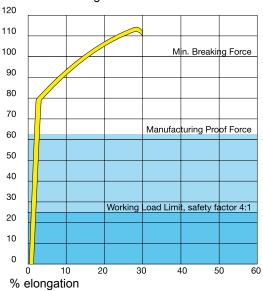
The Breaking Force (BF) for each component and size is verified. The verified value shall be at least equal to the Minimum Breaking Force (MBF) value. The MBF value is equal to the Working Load Limit (WLL) multiplied by the safety factor.

- Fatigue test

By fatigue testing in pulsator testing machines the toughest condition of service is simulated.

Stress/elongation diagram

Chain grade 8, type KL % of min. Breaking Force





CDC cameras for dimensional check of load pin

Manufacturing testing

During manufacture continuous process tests are carried out according to the requirements in our specifications and in the latest international standards. The following testing procedures are particularly relevant.

- Proof force

Each individual component and chain link is tested to the Manufacturing Proof Force (MPF) level before delivery. The MPF level is 2.5 times the WLL, equal to 62,5% of the Minimum Breaking Force.

Non destructive test / visual inspection

3% of every production batch of forged components are subject to magnetic particle or dye penetrating examination. Visual inspection is carried out on each chain link and each forged component to detect defects.

Static tensile test and ultimate elongation test During manufacture, samples are tested to verify the

Minimum Breaking Force (MBF) value and the total ultimate elongation for chain.

- Bending deflection

During manufacturing, of chain and master links, samples are taken and the minimum bend deflection is verified.

- Pin testing

100% of all load pins used in our products are tested. Dimensions are checked, material configuration are verified by magnetic eddy current coil.



Control System

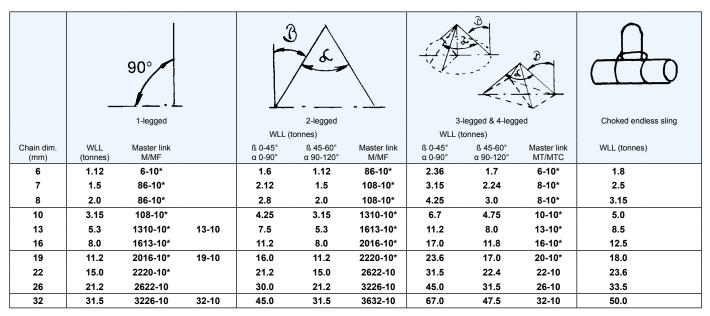


Every single component is proof loaded and visually inspected



Safe use and maintenance

Working load limits, acc. to EN 818-4:1996



^{*)} Available with flattened section for use with BL.

Extreme temperature conditions

The in service temperature effects the WLL as follows.

Temp. of sling (°C)	Reduction of WLL
-40 to 200	None
+200 to 300	10%
+300 to 400	25%

Upon return to normal temperature, the sling reverts to it's full capacity within the above temperature range. Chain slings should not be used above or below these temperatures.

Surface treatment

Note! Hot-dip galvanizing or plating is not allowed outside the control of the manufacturer.

Asymmetric loading conditions

For unequally loaded chain legs we recommend that the WLL are determined as follows

- · 2-leg slings calculated as the corresponding 1-leg sling
- 3 and 4-leg slings calculated as the corresponding 1-leg sling. (If it is certain that 2-legs are equally carrying the major part of the load, it can be calculated as the corresponding 2-leg sling)

Severe environment

Chain and components must not be used in alkaline (>pH10) or acidic conditions (<pH6).

Comprehensive and regular examination must be carried out when used in severe or corrosive inducing environments.

In uncertain situations consult your Gunnebo Lifting dealer.

General advice

- · Ensure that the sling is precisely as ordered.
- Ensure that the manufacturers certificate is in order.
- Ensure that the identification and the WLL on the ID-tag correspond to the information on the certificate. (The following ID-tag information is compulsory: WLL, Number of chain legs, nominal size (mm), individual ID mark, manufacturer, CE marking and year of manufacturing).
- · Ensure that all details of the chain sling are recorded.
- Ensure that the staff using the chain sling has received the appropriate information and training.

Protect yourself and others

- Before each use the chain sling should be checked for obvious damage or deterioration.
- Know the weight of the load, the centre of gravity and ensure it is ready to move and no obstacles will obstruct the lift.
- Check the conformity of the load with the WLL of the ID tag for the specific working configuration. Never use a sling without a legible valid ID tag!
- Prepare the landing site.
- Never overload a sling and avoid shock loading.
- · Never use an improper sling configuration.
- Never use a worn out or damaged sling.
- · Never ride on the load.
- · Never go under a suspended load.
- · Take into consideration that the load may swing or rotate.
- Watch your feet and fingers while loading / unloading.



Safe use and maintenance

Method of connection

A chain sling is usually attached to the load and the crane by means of terminal fittings such as hooks, links etc.

Chain should be without twists or knots, if the chain leg needs length adjustment use a shortening device. The lifting point should be seated well down in the terminal fitting, never on the point or wedged in the opening. The terminal fitting should be free to incline in any direction.



The chain may be passed under or through the load to form a choke hitch or basket hitch. The chain should be allowed to assume it's natural angle and should not be hammered down.

Where choke hitch is employed the WLL of the chain sling should be reduced by 20% (unless the LK choker hook is used)

Endless chain slings shall be rated in the same way as a 2-legged sling.

Sharp edges



Use edge protectors to prevent sharp edges from damaging the chain. If lifting over sharp edges reduce the working load with the following reduction factor.

Edge load	R >2 x chain Ø	R > chain Ø	R < chain Ø
Reduction factor	1.0	0.7	0.5

- The angle of the edge must not be below 900.
- Chain links shall be protected from being bent or deformed and from receiving cuts or gouges.
- Chain sling WLL is to be reduced when chain is rigged over an edge radius R less than two (2) x chain diameter (d).
- Reduced WLL equals chain sling WLL from identification tag x reduction factor.
- Slings shall be padded or protected from edges of their loads when the edge radius is less than 0,5 of the chain diameter(d).
- Slings shall be rigged to prevent chain from sliding over a load edge radius while lifting.
- Slings used in basket hitch shall have the loads balanced to prevent slipping.

When lifting with chain directly on lugs the lug diameter > 3x the pitch of the chain, otherwise the WLL must be reduced by 50%.

Assembly: G-link assembly:

- 1. Join the link halves.
- 2. Place the retaining bush between them.
- Insert the load pin and ensure that the load pin. snaps into place.

BL-link / Clevis assembly:

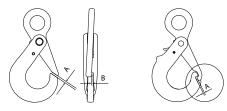
- 1. Assemble the component, chain and load pin.
- 2. Fit the retaining pins.
- 3. Make sure that the load pin are properly secured by the retaining pins.



Maintenance

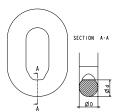
Periodic thorough examination must be carried out at least every 12 months or more frequently according to statutory regulations, type of use and past experience.

- 1. Overloaded chain slings must be taken out of service.
- Chain and components incl. load pins which has been damaged, deformed, elongated, bent or showing signs of cracks or gauges shall be replaced. Grind of small sharp cuts and burrs. Additional testing by magnetic particle inspection and/or proof loading at max. 2 x WLL may be carried out.
- 3. Check the function of latches, triggers and retaining pins / bushes, replace when necessary. Always use Gunnebo Lifting original spare parts.
- 4. Max. clearance between hook and latch. Note: For a Griplatch hook <u>measure the difference</u> between measure A with unloaded spring and measure A when the latch is pressed against the hook. Clearance B not applicable.



Size	Max. A (mm).	Max. B (mm).
6	2,2	3,5
7/8	2,7	4,5
10	3	6
13	3,3 4	7
16	4	9
18/20	5,5	10
22	6	11
26	6,5	12
28	7	13

5. The wear of the chain and component shall in no place exceed 10% of the original dimensions. The chain link wear - max. 10% - is defined as the reduction of the mean diameter measured in two directions.



$$\frac{d_1+d_2}{2}>0,9d_n$$

d_n = nominal diameter



Connection systems

G-coupling links

Gunnebo Lifting's G-links are universal. They can be used together with chain, master links, hooks and other lifting components as well as with steel wire ropes.

The G-links have a smooth surface to avoid snagging. The heavy duty retaining bush with its well protected stainless, square-sectioned spring ensures high reliability and safety.

Gunnebo Lifting G-links are available up to a WLL of 32 tonnes.



Berglok

Berglok chain couplings are foolproof, since they are designed to only match with the correct chain and components. The design prevents the coupling from snagging.

Berglok couplings are available up to a WLL of 11.5 tonnes.



Direct coupling to clevis-type fittings

Gunnebo Lifting's clevis fittings are designed to facilitate direct connection to chains without any intermediate coupling-links.

There are clevis fittings up to a WLL of 12.5 tonnes.



The SK system

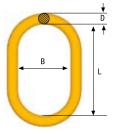
A range of specialised Grade 8 alloy steel components for safe and easy assembly of lifting slings based on chain, steel wire rope, webbing and roundslings. A system that easy make a combination between synthetic slings and chain.

The SK-system is available up to a WLL of 12.5 tonnes.





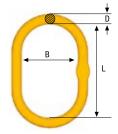
Master link, M



	WLL	(tonnes)		Dim. in mm		Weight appr.
Code	EN1677-4 ß 0–45°*	ASTM A962 SF 5:1	L	В	D	kgs
M-6-10	1.25	1.5	100	60	11	0.2
M-86-10	2.5	3.2	120	70	14	0.4
M-108-10	4	5.2	140	80	17	0.8
M-13-10	5.4	5.6	150	90	19	1.0
M-1310-10	7.5	8	160	95	22	1.5
M-1613-10	10	13.6	190	110	25	2.3
M-19-10	12	16	200	120	30	3.5
M-2016-10	17	20.6	240	140	34	5.3
M-2220-10	25	30.9	250	150	38	7
M-2622-10	28	32	250	150	40	8
M-32-10	33	38.6	300	180	45	12
M-3226-10	43	46.6	300	200	50	15
M-3632-10	56	65	350	200	55	21
M-4536-10	70	72.7	375	210	60	26
M-90T-10	90	100	450	250	70	43
M-100T-10	100	100	450	260	80	57
M-125T-10**	125	125	450	260	80	57



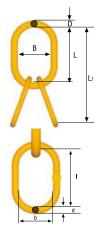
Master link, MF



	WLL ((tonnes)		Dim. in mm			
Code	EN1677-4 ß 0–45°*	ASTM A962 SF 5:1	L	В	D	kgs	
MF-6-10 ***	1.25	1.5	100	60	11	0.2	
MF-86-10 ***	2.5	3.2	120	70	14	0.4	
MF-108-10 ***	4	5.2	140	80	17	0.7	
MF-1310-10 ***	7.5	8.0	160	95	22	1.5	
MF-1613-10 ***	10	13.6	190	110	25	2.2	
MF-2016-10 ***	17	20.6	240	140	34	5.2	
MF-2220-10 ***	25	30.9	250	150	38	7	



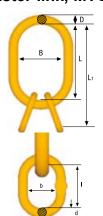
Master link, MT



	V	VLL (tonnes)		С	im. in mr	n				Weight
Code	EN1677-4 ß 0–45°*	ASTM A952 SF 5:1	L1	L	В	D	I	b	d	appr. kgs
MT-6-10 ***	3.5	5	270	150	90	19	120	70	14	1.8
MT-8-10 ***	5.2	8	300	160	95	22	140	80	17	3.0
MT-9-10	6.9	9.7	340	190	110	25	150	90	19	4.3
MT-10-10 ***	11.5	16	360	200	120	30	160	95	22	6.5
MT-13-10 ***	17	26	450	250	150	40	200	120	30	15
MT-16-10 ***	28	35	500	300	200	50	200	120	32	23
MT-20-10 ***	35	50	550	300	200	55	250	150	38	33
MT-22-10	53	75	610	350	200	60	260	140	45	46
MT-26-10	70	100	730	450	250	70	280	160	50	71
MT-32-10	90	125	750	450	260	80	280	160	55	91



Master link, MTC



	WLL	(tonnes)		Dim. in mm					Weight	
Code	EN1677-4 ß 0-45°*	ASTM A952 SF 5:1	L1	L	В	D	1	b	d	appr. kgs
MTC-6-10***	3.15		210	150	90	19	60	38	13	1.4
MTC-8-10 ***	5.2	-	230	160	95	22	70	46	16	2.1
MTC-10-10 ***	8.4	-	290	200	120	30	90	60	19	4.7
MTC-13-10 ***	14.1	-	380	240	140	34	140	65	25	9
MTC-16-10 ***	21.0	-	420	250	150	40	170	100	32	15

^{*} If used for chain, check for correspondling WLL values in the WLL table acc EN818-4. Safety factor 4:1

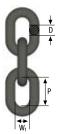
** Dimensions L and B not acc. to EN1677-4

*** With flattened section for use with BL





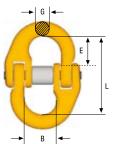
Chain KLB



0-4-	WLL		Dim. in mm		Weight appr.
Code	tonnes*	D	Р	W ₁	kgs/m
KLB-6-8E	1.12	6	18	8.5	0.8
KLB-7-8E	1.5	7	21	10	1.1
KLB-8-8E	2.0	8	24	11	1.4
KLB-10-8E	3.15	10	30	14	2.2
KLB-13-8E	5.3	13	39	18	3.7
KLB-16-8E	8.0	16	48	22	5.8
KLB-19-8E	11.2	19	57	26	7.8
KLB-22-8E	15.0	22	66	30	11.0
KLB-26-8E	21.2	26	78	35	14.3
KLB-32-8E	31.5	32	96	43	23.0



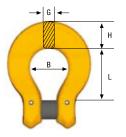
Coupling link G



Code	WLL	For chain		Dim. in mm					
Code	tonnes*	size mm	L	В	G	E	kgs		
G-6-8	1.12	6	44	15	8	16	0.1		
G-7/8-8	2.0	7, 8	56	18	9	22	0.2		
G-10-8	3.2	10	68	25	12	26	0.3		
G-13-8	5.4	13	89	29	15	33	0.7		
G-16-8	8.0	16	105	36	19	40	1.2		
G-18/20-8	12.5	19	125	43	22	47	1.9		
G-22-8	15.5	22	152	50	24	59	3.0		
G-26-8	21.6	26	160	58	29	61	4.6		
G-32-8	32.0	32	200	70	38	78	8.6		



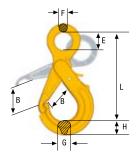
Berglok chain coupler BL



Code	WLL	For chain		Weight appr.			
	tonnes*	size mm	L	В	G	Н	kgs
BL-6-8	1.12	6	27	20	9	14	0.1
BL-7/8-8	2.0	7, 8	35	25	11	18	0.2
BL-10-8	3.2	10	45	32	14	22	0.4
BL-13-8	5.4	13	56	40	17	28	1.0
BL-16-8	8.0	16	68	50	22	35	1.4
BL-19-8	11.5	19	80	58	25	41	2.3



Safety hook OBK with grip latch



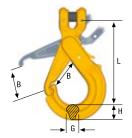
Code	WLL	For chain			Dim. in mm	1			Weight
	tonnes*	size mm	L	В	E	F	G	Н	appr. kgs
OBK-6-10	1.5	6	103	26	22	9	14	17	0.4
OBK-7/8-10	2.5	7, 8	139	37	28	10	20	22	0.8
OBK-10-10	4.0	10	170	47	34	13	22	29	1.3
OBK-13-10	6.7	13	206	53	44	15	28	37	2.6
OBK-16-10	10.0	16	251	67	56	19	29	45	4.4
OBK-18/20-8	12.5	19	293	73	60	22	37	48	7.5
OBK-22-8	15.5	22	335	87	70	24	40	57	10.0



^{*}Safety factor 4:1



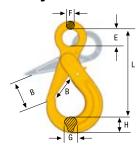
Safety hook GBK with grip latch



Code	WLL	For chain		Dim. i	n mm		Weight appr.
Code	tonnes*	size mm	L	В	G	Н	kgs
GBK-7/8-8	2.0	7, 8	119	37	20	22	0.8
GBK-10-8	3.2	10	151	47	22	29	1.4
GBK-13-8	5.4	13	172	54	27	35	2.3
GBK-16-8	8.0	16	204	68	29	43	4.0



Safety hook BK

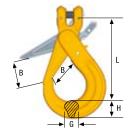


Code	WLL	For chain			Dim. i	in mm			Weight appr. kgs
Code	tonnes*	size mm	L	В	E	F	G	Н	
BK-6-10	1.5	6	109	29	22	10	15	21	0.5
BK-7/8-10	2.5	7, 8	137	37	28	11	17	25	0.9
BK-10-10	4.0	10	168	45	34	13	21	30	1.5
BK-13-10	6.7	13	207	54	44	16	30	39	2.8
BK-16-10	10.0	16	253	62	56	20	37	49	5.6
BK-18/20-10	16.0	19	290	68	60	22	44	64	8.3
BK-22-8	15.5	22	320	80	70	24	47	62	11.2
BK-26-8	21.6	26	345	100	80	25	50	68	14.5
BK-28-8	25.0	32	400	120	90	27	62	81	22.0



Size 6 - 18/20 with recessed trigger.

Safety hook BKG

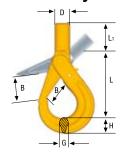


Code	WLL	For chain		Dim.	in mm		Weight appr.
	tonnes*	size mm	L	В	G	Н	kgs
BKG-7/8-8	2.0	7, 8	120	37	17	26	0.9
BKG-10-8	3.2	10	149	45	21	30	1.5
BKG-13-8	5.4	13	187	54	30	39	2.8
BKG-16-8	8.0	16	226	62	37	49	5.1
BKG-19/20-8	12.5	19	240	70	46	63	8.3



Size 6 - 18/20 with recessed trigger.

Shank safety hook BKT



0-4-	WLL	Dim. in mm							
Code	tonnes*	L	В	L1	D	dmin	G	Н	appr. kgs
BKT-6-10	1.5	90	29	36	20	11	15	21	0.5
BKT-7/8-10	2.5	111	37	47	24	13	17	25	0.9
BKT-10-10	4.0	133	45	51	29	16	21	30	1.5
BKT-13-10	6.7	170	54	65	34	20	30	39	2.8
BKT-16-10	10.0	202	62	76	37	25	37	49	5.4



Note! After matching of the shank, proof loading must be carried out.

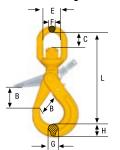
Size 6 - 18/20 with recessed trigger.

 $d_{\mbox{min}}$ = the smallest shank dimension after matching

^{*}Safety factor 4:1



Swivel safety hook BKL

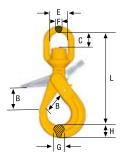


Code	WLL	For chain			D	im. in mi	m			Weight	
Code	tonnes*	size mm	L	В	С	E	F	G	Н	appr. kgs	
BKL-6-10	1.5	6	149	29	23	33	11	15	21	0.7	
BKL-7/8-10	2.5	7, 8	183	37	27	38	12	17	25	1.2	
BKL-10-10	4.0	10	218	45	36	42	15	21	30	2.0	
BKL-13-10	6.7	13	280	54	47	48	19	30	39	3.8	
BKL-16-10	10.0	16	343	62	57	61	22	37	49	7.1	
BKL-18/20-10	16.0	19	367	69	70	74	26	44	64	11.1	



Size 6 - 18/20 with recessed trigger.

Swivel safety hook with ball bearing BKLK

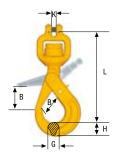


Code	WLL	For chain			D	im. in mr	n			Weight appr. kgs
	tonnes*	size mm	L	В	С	E	F	G	Н	
BKLK-6-10	1.5	6	150	29	24	33	11	15	21	0.7
BKLK-7/8-10	2.5	7, 8	184	37	27	38	12	17	25	1.1
BKLK-10-10	4.0	10	218	45	35	42	15	21	30	1.9
BKLK-13-10	6.7	13	281	54	45	48	19	30	39	3.8
BKLK-16-10	10.0	16	339	62	63	61	22	37	49	7.2
BKLK-18/20-10	16.0	19	367	69	59	74	26	44	64	11.3
BKLK-26-8	21.6	26	467	100	100	102	35	50	68	22.8



Size 6 - 18/20 with recessed trigger.

Clevis swivel safety hook with ball bearing BKH

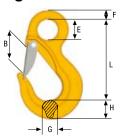


Codo	WLL	For chain			Dim. in mm			Weight
Code	tonnes*	size mm	L	В	K	G	Н	appr. kgs
BKH-6-8	1.12	6	145	28	6.8	15	21	0.7
BKH-7/8-8	2.0	7, 8	181	37	8.8	17	23	1.2

Size 6 - 7/8 with recessed trigger.



Sling hook EKN with latch



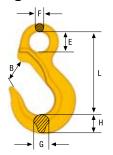
Code	WLL	For chain			Dim.	in mm			Weight
Code	tonnes*	size mm	L	В	E	F	G	Н	appr. kgs
EKN-6-10	1.5	6	94	24	22	10	17	20	0.4
EKN-7/8-10	2.5	7, 8	108	28	28	13	17	23	0.6
EKN-10-10	4.0	10	134	37	34	15	23	30	1.0
EKN-13-10	6.7	13	166	42	44	19	28	38	2.1
EKN-16-10	10.0	16	203	50	56	24	36	45	4.0
EKN-18/20-8	12.5	19	229	60	60	26	41	51	5.5
EKN-22-8	15.5	22	269	77	64	31	42	67	8.9
EKN-26-8	21.6	26	301	81	66	32	51	75	12.6
EKN-32-8	32.0	32	333	93	76	38	61	80	18.3



^{*}Safety factor 4:1



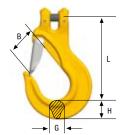
Sling hook EK



Code	WLL	For chain			Dim. in mm	1			Weight
Code	tonnes*	size mm	L	В	E	F	G	Н	appr. kgs
EK-6-10	1.5	6	94	29	22	10	17	20	0.3
EK-7/8-10	2.5	7, 8	108	32	28	13	17	23	0.5
EK-10-10	4.0	10	134	42	34	15	23	30	1.0
EK-13-10	6.7	13	166	49	44	19	28	38	2.0
EK-16-10	10.0	16	203	60	56	24	36	45	3.8
EK-18/20-8	12.5	19	229	69	60	26	41	51	5.3
EK-22-8	15.5	22	267	83	64	31	42	67	8.9
EK-26-8	21.6	26	301	95	66	32	51	75	12.1
EK-32-8	32.0	32	333	105	76	38	61	80	17.7



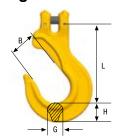
Sling hook EGKN with latch



Code	WLL	For chain		Dim. i	n mm		Weight appr.
	tonnes*	size mm	L	В	G	Н	kgs
EGKN-7/8-8	2.0	7, 8	95	29	17	22	0.5
EGKN-10-8	3.2	10	121	37	19	29	0.9
EGKN-13-8	5.4	13	147	42	27	36	2.0
EGKN-16-8	8.0	16	170	49	34	44	3.6
EGKN-19/20-8	12.5	19	212	60	43	51	6.0



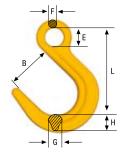
Sling hook EGK



Code	WLL	For chain		Dim. i	n mm		Weight appr.
Code	tonnes*	size mm	L	В	G	Н	kgs
EGK-7/8-8	2.0	7, 8	95	33	17	22	0.5
EGK-10-8	3.2	10	121	42	19	29	0.9
EGK-13-8	5.4	13	147	48	27	36	1.9
EGK-16-8	8.0	16	170	56	34	44	3.4
EGK-19/20-8	12.5	19	212	73	43	51	5.8



Foundry hook OKE

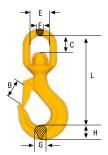


Code	WLL	For chain		[Dim. in mn	n			Weight
Code	tonnes*	size mm	L	В	E	F	G	Н	appr. kgs
OKE-7/8-10	2.5	7, 8	123	63	28	11.5	20	26	0.7
OKE-10-10	4.0	10	151	76	34	15	26	29	1.3
OKE-13-10	6.7	13	184	90	44	19	33	39	2.8
OKE-16-10	10.0	16	217	102	56	23	40	45	4.9
OKE-18/20-8	12.5	19	247	114	60	27	46	60	7.1
OKE-26-8	21.6	26	300	113	66	38	64	73	16.4
OKE-32-8	32.0	32	384	145	80	48	77	94	35





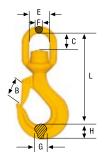
Swivel latch hook LKN



Codo	WLL	For chain		Dim. in mm						
Code	tonnes*	size mm	L	В	С	E	F	G	Н	appr. kgs
LKN-7/8-8	2.0	7, 8	155	29	28	36	12	18	23.5	0.9
LKN-10-8	3.2	10	192	36	37	42	15	23	30	1.5
LKN-13-8	5.4	13	238	40	47	48	19	28	35	3.0
LKN-16-8	8.0	16	295	53	62	61	22	33	44	5.1



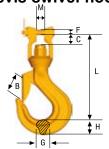
Swivel latch hook with ball bearing LKNK



0-4-	WLL	For chain	Dim. in mm							Weight
Code	tonnes*	size mm	L	В	С	E	F	G	Н	appr. kgs
LKNK-7/8-8	2.0	7, 8	156	29	28	35	12	18	21	0.9
LKNK-10-8	3.2	10	191	35	35	42	15	23	30	1.6
LKNK-13-8	5.4	13	238	40	47	48	19	28	35	3.1
LKNK-16-8	8.0	16	295	53	59	61	22	33	43	5.3



Clevis swivel hook LKNG

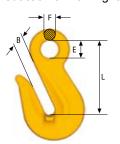


Code	WLL	For chain			D	im. in m	n			Weight
Code	tonnes*	size mm	L	В	С	F	G	Н	М	appr. kgs
LKNG-16-8	8.0	16	252	53	30	28	33	43	27	5.5



Grab hook OG Not for use with Berglok.

No reduction of working load limit, thanks to supporting lugs on either side of hook to prevent chain link deformation.

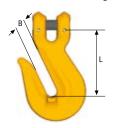


0-4-	WLL	For chain		Dim. ii	n mm		Weight appr.
Code	tonnes*	size mm	L	В	E	F	kgs
OG-7/8-8	2.0	7, 8	65	10	16	10	0.3
OG-10-8	3.2	10	85	12	20	12	0.6
OG-13-8	5.4	13	104	15	25	16	1.2
OG-16-8	8.0	16	130	19	28	19	2.4
OG-19/20-8	12.5	19	156	22.5	36	23	4.6
OG-22-8	15.5	22	180	25.5	42	26	6.2



Grab hook GG

No reduction of working load limit, thanks to supporting lugs which prevents chain link deformation.



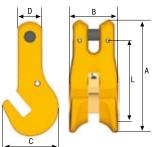
Code	WLL	For chain size	Dim.	in mm	Weight appr.
Code	tonnes*	mm	L	В	kgs
GG-7/8-8	2.0	7, 8	58	10	0.4
GG-10-8	3.2	10	77	12	0.8
GG-13-8	5.4	13	97	15	1.5
GG-16-8	8.0	16	124	19	2.8
GG-19/20-8	12.5	19	145	22.5	4.8



^{*}Safety factor 4:1



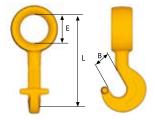
Shortening clutch GKL Can be supplied without safety latch.



Code	WLL	For chain			Dim. in mm			Weight
Code	tonnes*	size mm	Α	В	С	D	L	appr. kgs
GKL-6-8	1.12	6	75	34	38	15	53	0.3
GKL-7-8	1.5	7	93	42	42	20	66	0.5
GKL-8-8	2.0	8	93	42	42	20	65	0.5
GKL-10-8	3.2	10	120	55	58	25	84	1.0
GKL-13-8	5.4	13	151	66	74	32	103	2.4
GKL-16-8	8.0	16	179	79	90	40	122	3.4



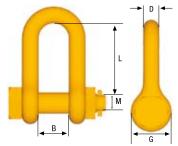
Choker hook LK For use with Berglok as end component.



Code	WLL	For chain size		Dim. in mm		Weight appr.
Code	tonnes*	mm	L	В	Е	kgs
LK-7/8-8	2.0	7, 8	96	19	32	0.3
LK-10-8	3.2	10	120	21	42	0.8
LK-13-8	5.4	13	150	26	52	1.8



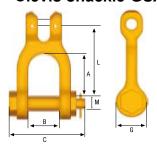
Shackle SA



Code	WLL	For chain			Dim. in mm			Weight
Code	tonnes*	size mm	L	В	D	G	М	appr. kgs
SA-7/8-8	2.0	7, 8	30	15	8	20	10	0.1
SA-10-8	3.2	10	52	24	13	35	16	0.4
SA-13-8	5.4	13	65	28	16	42	20	0.7
SA-16-8	8.0	16	72	30	18	46	22	1.0
SA-19-8	11.5	19	86	36	22	55	27	1.8
SA-22-8	15.5	22	94	40	25	62	30	2.5
SA-26-8	21.6	26	116	48	32	75	39	5.2



Clevis shackle GSA



Codo	WLL	For chain		Dim. in mm						
Code	tonnes*	size mm	Α	В	С	G	L	М	appr. kgs	
GSA-7/8-8	2.0	7, 8	36	32	79	34	60	16	0.5	
GSA-10-8	3.2	10	48	34	93	40	80	20	0.9	
GSA-13-8	5.4	13	65	50	118	44	98	22	1.7	
GSA-16-8	8.0	16	70	60	141	54	114	27	3.0	



Clevis egglink CEL



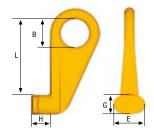
Code	WLL	For chain			Dim. in mm			Weight
tonnes*	tonnes*	size mm	Α	В	G	Н	L	appr. kgs
CEL-7/8-8	2.0	7, 8	80	40	14	15	100	0.4
CEL-10-8	3.2	10	100	50	18	19	126	0.7
CEL-13-8	5.4	13	130	65	23	25	162	1.5
CEL-16-8	8.0	16	157	78	28	30	197	2.6



^{*}Safety factor 4:1



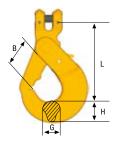
Container hook CH-3



Code	WLL			Weight				
	tonnes*	L	В	Н	F	G	E	appr. kgs
CH-3	12.5	192	70	46	25	47	75	4.0
CH-3 Turned 45° left	12.5							
CH-3 Turned 45° right	12.5							

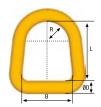


Container hook BKGC



Code	WLL	For chain		Dim. in mm					
ton	tonnes*	size mm	L	В	G	Н	kgs		
BKGC-13-8	5.4	13	164	55	27	43	3.2		
BKGC-16-8	8.0	16	160	55	27	43	3.4		
(Spare part: RD	OBK-16 to b	oth sizes)							

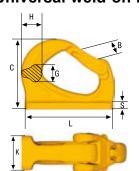
Master link D



Code	WLL		Dim. in mm					
Code	tonnes**	В	D	L	R	kgs		
D-14-8	2.5	55	14	65	24	0.3		
D-17-8	4.0	64	17	62	29	0.5		
D-22-8	8.0	76	22	90	33	1.0		



Universal weld-on hook UKN



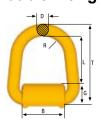
Code	WLL				Dim. in mm	1			Weight
Code	tonnes**	В	С	G	Н	K	L	S	appr. kgs
UKN-0,75***	0.75	20	56	13	20	19	81.5	5	0.3
UKN-1***	1.0	20	72	17	25	25	95	6	0.6
UKN-2***	2.0	26	86	20	30	30	114	8	1.0
UKN-3	3.0	30	105	23	32	35	132	10	1.3
UKN-4	4.0	29	114	29	38	42	140	11	1.9
UKN-5	5.0	34	131	30	47	45	165	12	2.9
UKN-8	8.0	34	133	40	51	50	172	13	3.5
UKN-10	10.0	47	170	43	58	55	220	14	6.4
UKN-15	15.0	53	188	50	67	60	240	15	8.8



If welding on to an excavator or it's accessories we recommend that the working load limit is reduced, where necessary, to meet any appropriate legislative requirements. Please contact your distributor for further information.

- *** Welding plate slightly curved ** Safety factor 5:1

Weldable lifting point WLP Can be supplied with or without spring for stay up function.



0-4-	WLL		Dim. in mm							
Code	tonnes*	В	D	G	L	R	Т	appr. kgs		
WLP-1T	1.0	50	14	27	53	24	95	0.5		
WLP-3T	3.0	58	17	34	48	29	97	0.9		
WLP-5T	5.0	64	22	41	73	33	135	1.7		

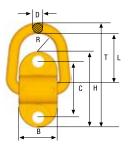


^{**} The loadbearing width must be at least 0.5 X B

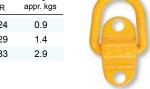
^{*}Safety factor 4:1



Screw-on lifting point SLP

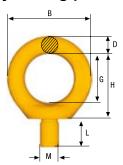


Code	WLL		Dim. in mm							Weight
Code	tonnes*	В	С	D	Н	L	М	Т	R	appr. kgs
SLP-1T	1.0	50	72	14	98	55	M14	139	24	0.9
SLP-3T	3.0	58	84	17	114	50	M16	144	29	1.4
SLP-5T ***	5.0	64	116	22	160	74	M20	203	33	2.9



*** Can be supplied with spring for stay up function

Eye lifting point ELP



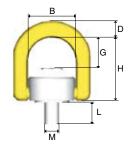
Code	WLL	WLL			Weight				
Code	tonnes*	0°**	В	D	G	Н	L	М	appr. kgs
ELP-M16-8	1.0**	4.0	72	16	42	55	24	M16	0.4
ELP-M20-8	1.5**	6.0	72	16	42	57	30	M20	0.5
ELP-M24-8	2.0**	8.0	88	19	48	70	36	M24	0.9
ELP-M30-8	3.0**	12.0	106	22	60	84	45	M30	1.4
ELP-M36-8	4.0**	16.0	127	26	72	100	54	M36	2.3



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

Note: Threaded depths need to be at least 1xM for steel, 1,25xM for cast iron and 2xM for aluminium alloy.

Rotating lifting point, RLP



*Safety	factor	4.1	

Code	WLL			Dim. i	in mm			Weight
Code	tonnes*	L	M	В	D	G	Н	kgs
RLP M8-10***	0.3**	15	M8	42	12	35	60	0.3
RLP M10-10***	0.5**	20	M10	42	12	34	60	0.3
RLP M12-10***	0.75**	19	M12	57	19	46	85	0.9
RLP M16-10***	1.5**	24	M16	57	19	44	85	0.9
RLP M20-10***	2.5**	32	M20	83	28	56	111	2.8
RLP M24-10	3.5	37	M24	83	28	53	111	2.8
RLP M30-10	6	49	M30	114	34	69	144	7.0
RLP M36-10	8	61	M36	114	34	65	144	7.3
RLP M42-10	14	65	M42	149	40	90	185	14.0
RLP M48-10	16	75	M48	149	40	86	185	14.9



Longer bolt can be supplied on special request

- *** The WLL of the RLP may be double in case of 1-leg applications provided only axial loading takes place, i.e. no bending force applied in the direction of the thread.
- ** Available in UNC thread; 5/16", 3/8", 7/16", 5/8", 3/4".

Working Load Limits (tonnes)

		T		<u></u>	β Λ T	<u>}</u>	β	
No. of legs	1	1	2	2	2 sym	metric	3 and 4 s	ymmetric
β	0°	90°	0°	90°	0-45°	45-60°	0-45°	45-60°
Load factor	*)	1	*)	2	1.4	1	2.1	1.5
RLP-M 8-10	0.60	0.30	1.20	0.60	0.42	0.30	0.63	0.45
RLP-M10-10	1.00	0.50	2.00	1.00	0.70	0.50	1.05	0.75
RLP-M12-10	1.50	0.75	3.00	1.50	1.00	0.72	1.60	1.13
RLP-M16-10	3.00	1.50	6.00	3.00	2.10	1.50	3.15	2.25
RLP-M20-10	5.00	2.50	10.00	5.00	3.50	2.50	5.25	3.75
RLP-M24-10	7.00	3.50	14.00	7.00	4.90	3.50	7.35	5.25
RLP-M30-10	12.00	6.00	24.00	12.00	8.40	6.00	12.60	9.00
RLP-M36-10	14.00	8.00	28.00	16.00	11.20	8.00	16.80	12.00
RLP-M42-10	16.00	14.00	32.00	28.00	19.60	14.00	29.40	21.00
RLP-M48-10	20.00	16.00	40.00	32.00	22.40	16.00	33.60	24.00

*) Provided only axial loading takes place, i.e. no bending force applied in the direction of the thread.

RLP- Rotating Lifting Point, Grade 10

The patented new design of the RLP makes it suitable also in applications where a conventional Lifting point would not be fully adequate. Intended to be used as a Lifting point, Lashing point or Towing attachment.

- Dismountable open D-ring. Enables assembly of roundsling, master link, link or hook directly onto the RLP.
- Hexagon-headed screw for easy assembly/ disassembly by means of an ordinary wrench.
- RLP can rotate 360° and articulate 180°.
- Forged in Grade 10 material permits higher WLL than Grade 8 and DIN 580 eyebolts.



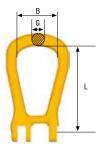
The SK System

A range of specialised Grade 8 alloy steel components for safe and easy assembly to chain, steel wire rope, webbing and roundslings, designed to solve your below-the-hook problems.

The SK System provides:

- Universal coupling of components to chain, wire and synthetic slings.
- Quick and simple assembly only a hammer needed.
- Foolproof assembly standardised dimensions within each size range effectively eliminates the wrong assembly of components with different safe working loads.
- Heavy hoisting with strong yet lightweight equipment all components are manufactured from alloy steel for use with Grade 8 chain.

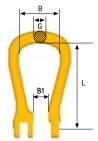
Master link (closed) SKG



Cada	WLL	For chain size		Dim. in mm		Weight appr.
Code	tonnes*	mm	L	В	G	kgs
SKG-7/8-8	2.0	7, 8	99	50	14	0.3
SKG-10-8	3.2	10	127	66	18	0.6
SKG-13-8	5.4	13	145	72	22	1.1
SKG-16-8	8.0	16	175	82	25	1.7
SKG-18/20-8	12.5	19	204	105	30	2.8



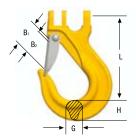
Master link (open) SKO



Code	WLL	For chain		Dim. i	n mm		Weight appr.
	tonnes*	tonnes* size mm		В	G	B1	kgs
SKO-7/8-8	2.0	7, 8	99	50	14	15	0.3
SKO-10-8	3.2	10	127	66	18	20	0.6
SKO-13-8	5.4	13	145	72	22	25	1.0
SKO-16-8	8.0	16	175	82	25	30	1.6
SKO-18/20-8	12.5	19	204	105	30	36	2.6



Sling hook with latch ESKN/SKN, without latch ESKH/SKH

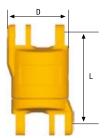


0-1-	WLL	For chain		Weight				
Code	tonnes*	size mm	L	B1	B2	G	Н	appr. kgs
SKN-7/8-8	2.0	7, 8	90	32	27	18	21	0.4
SKN-10-8	3.2	10	115	40	34	23	29	0.9
SKN-13-8	5.4	13	141	48	42	28	36	1.8
ESKN-16-8	8.0	16	181	62	54	34	43	3.4
ESKN-18/20-8	12.5	19	197	67	59	41	51	5.0





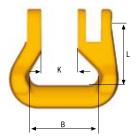
Roller-bearing swivel SKLI Electrically insulated, lubricated, sealed rollerbearing swivel. Fully rotational even at maximum load. Tested to resist 1000 V. Suitable for protection of overhead cranes during welding operations on suspended loads.



Code	WLL tonnes*	For chain size	Dim.	Dim. in mm			
	WLL tornes	mm	L	D	kgs		
SKLI-7/8-8	2.0	7, 8	75	48	0.7		
SKLI-10-8	3.2	10	96	59	1.4		
SKLI-13-8	5.4	13	120	75	2.9		
SKLI-16-8	8.0	16	137	90	4.9		
SKLI-18/20-8	12.5	19	159	104	7.2		
SKLU-22-8**	15.5	22	160	109	9.2		
SKLU-26-8**	21.6	26	207	135	17.7		



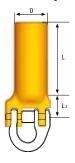
Roundsling coupling SKR Special shape for full WLL of the roundsling.



Code	WLL tonnes*		Weight appr.		
		L	В	K	kgs
SKR-7/8-8	2.0	35	40	18	0.2
SKR-10-8	3.2	42	47	24	0.4
SKR-13-8	5.4	50	53	29	0.7
SKR-16-8	8.0	62	67	35	1.2
SKR-18/20-8	12.5	71	80	43	1.9
SKR-22-8	15.5	111	125	50	5.3
SKR-26-8	21.6	129	150	58	9.0



Shank coupling SKS Supplied unmachined as standard. Can be machined to customer requirements.



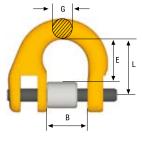
Code	WLL tonnes*	For chain size mm	Dim. in mm				Weight appr.
			L	L2	D	dmin	kgs
SKS-7/8-8	2.0	7, 8	70	27	30	13	0.5
SKS-10-8	3.2	10	85	34	36	16	0.9
SKS-13-8	5.4	13	100	43	42	20	1.4
SKS-16-8	8.0	16	112	52	50	25	2.5
SKS-18/20-8	12.5	19	88	55	72	30	4.7



d min = The smallest shank dimension after machining.

Note! After machining of the shank, proof loading must be carried out.

Half link SKT (incl. locking set).



Code	WLL For chain tonnes* size mm	Dim. in mm				Weight appr.	
		size mm	L	В	G	E	kgs
SKT-7/8-8	2.0	7, 8	28	18	9	22	0.1
SKT-10-8	3.2	10	34	25	12	26	0.2
SKT-13-8	5.4	13	44	29	15	33	0.4
SKT-16-8	8.0	16	52	36	19	40	0.7
SKT-18/20-8	12.5	19	63	43	22	48	1.1
SKT-22-8	15.5	22	76	50	24	60	1.7
SKT-26-8	21.6	26	80	58	29	61	2.6
SKT-32-8	32.0	32	100	70	36	78	4.9



^{**)} Uninsulated

^{*}Safety factor 4:1





Spare parts

SKA locking set for Coupling links G, consists of load pin and bush.



Size: SKA 6 -SKA 32-8

BLA, set for Berglok and Clevis type connections. Consists of one load pin and two retaining pins



Size: BLA 6 - BLA 19 Note: Special spare part set for GKL 7

RDBK, set for BK Safety hooks consists of latch, stainless steel spring, retaining pin and assembly kit.



Size: RDBK 6 -RDBK 28

RDOBK, set for OBK Safety hooks consists of latch, stainless steel spring, retaining pin and assembly kit.



Size: RDOBK 6-RDOBK 22

Tool kit for replacement BK-trigger set.Tool kit in a plastic box, suit BK and OBK hooks, sizes 6 mm-16 mm.



RDEKN set consists of latch, stainless steel spring and rivet.



Fits: EKN 6 - EKN 32 LKN 7/8 - LKN 16 EGKN 6 - EGKN 19/20 RH 1 - RH 5 ESKN 16 - ESKN 18/20

RDSKN/LKN/OKN set consists of latch, stainless steel spring and rivet.



Fits: SKN 7/8 - SKN 18/20 LKN 7/8 - LKN 16 (old) OKN 16 - OKN 22

RDGKN/OKN set consists of latch, stainless steel spring and rivet.



Fits: GKN 7/8 - GKN 16 OKN 7/8 - OKN 13

RDUKN msp, consists of forged latch, pin, stainless steel spring and retaining pin.

RDUKN usp, consists of pin, stainless steel spring and retaining pin.



Size: RDUKN 0.75 - RDUKN 15

RDRLP, set consists of bolt and metal clip. Size RDRLP M8-10 – RDRLP M48-10

RDGKL, set consists of latch, stainless steel spring and retaining pin.

Size RDGKL 6 - RDGKL 16

RDSKLI, set for roller bearing swivel SKLI, consists of spring pin, sealing, lower insulating bush, screws,labels and user instructions.

Size RDSKLI-7/8 - RDSKLI-18/20

ID-tags, in stainless steel.

GUNNEBO INDUSTRIER AB (publ)
Business Area Lifting
P.O. Box 44
SE-730 60 Ramnäs, Sweden
Tel: +46 220 384 00
Fax: +46 220 384 98

E-mail: export@gunnebolifting.com www.gunnebolifting.com