

Gunnebo Lifting GrabiQ



The all-inclusive chain
sling system for coupling,
and shortening



GUNNEBO
LIFTING



A 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.

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.

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.



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WARNING:

Failure to read, understand and comply with following instructions, working load limits and specifications in this publication could result in serious injury or damage to property.

Gunnebo Lifting – GrabiQ

The all-inclusive chain sling system for coupling, shortening and lifting in grade 10.

Our GrabiQ sling system is designed to improve and make your lifting as quick and easy as possible.

GrabiQ means for example;

- 25 % additional strength in the new grade 10 material.
- All top assemblies consist of no more than three components.
- Shortening function of chain legs is integral with no extra components.

One of the main merits of the GrabiQ system is that the work involved in connecting, adjusting and checking the lift takes less time and can be carried out more easily. The already included shortening function, for example, means that a four-part sling which previously required up to thirteen different top components now needs only three in the GrabiQ system.

The German Berufsgenossenschaften (BG) launched in the beginning of 2004 a new specification for Grade 10 components, Gunnebo has passed this new specification as one of the first companies in the world.



Gunnebo Lifting continues to find solutions to well-known problems with the latest innovative products launched in the GrabiQ range.

One of the fundamental ideas of the products in the GrabiQ range is that the option of shortening a chain leg should always be available in order to avoid incorrect loading when lifting asymmetrical loads. A natural development in this spirit is one of the most interesting ideas this year, the MIG "Midgrab" shortener that makes it possible to adjust and shorten a chain leg quickly and easily on any position of the chain leg.

The MIG "Midgrab" shortener is also a vital component in the Gunnebo Lifting newly developed load securing system which meets and exceeds the requirements of the latest European Standard EN12195-3.

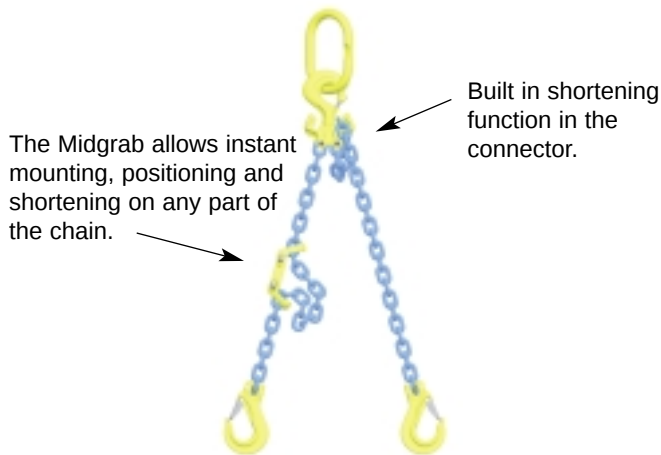
In the new FlexiLeg concept, the possibilities with the C-coupling are used to maximise and increase the flexibility and to reduce the number of chain legs and components. Further the newly developed FlexiLeg ID-tag gives additional important information to the user of the lifting assembly.

Another innovation this year is the MFS masterlink which with its unique shape has been designed to fit large crane hooks according to DIN15401. The slim design of the MFS means that the weight has been reduced considerably.

The upgrading of components from the Gunnebo Lifting - Classic range continues. From now on well known components such as the MT - Masterlink, G - Coupling link, GBK - Griplatch hook, LBK - Swivel safety hook, OKE - Foundry hook, GG - Grab hook and the GC- C hook is also available in the GrabiQ range.

3-D CAD files available on www.gunnebolifting.com.

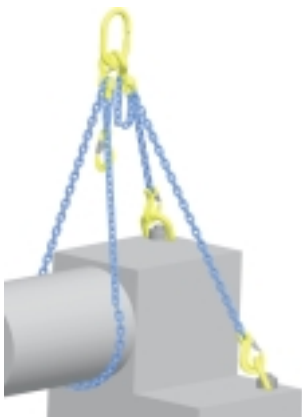
Versatile



The option of shortening is always there.



With C-lok as terminal fitting the sling can be altered between choke hitch, basket hitch and leg extension with flattened links.



With the flexibility of the GrabIQ system a number of different lifting situations can be solved using the same GrabIQ sling.



Every chain leg can instantly be altered from straight lift to a loop sling by using the shortening pocket.



Oversized or squared shaped master links are ideal for use with large crane hooks (e.g. DIN15401).



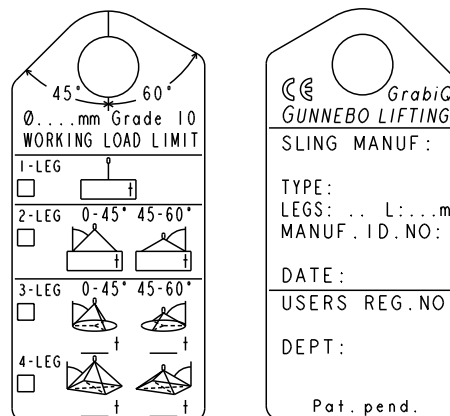
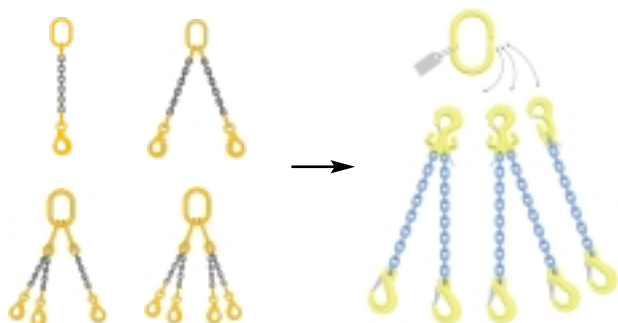
The C-parts are designed to allow for correct size of wire rope thimble to be fitted into the eye. This opens the way for new ideal combinations of chain and wire rope slings.

GrabiQ FlexiLeg (Pat. pending)

By using the unique features of the GrabiQ range, Gunnebo Lifting has increased the flexibility even further. GrabiQ FlexiLeg is a flexible solution with instant leg shift, where one single master link and a combination of five legs replace ten legs with the traditional system.

Traditional system – a total of 10 legs

GrabiQ FlexiLeg – a total of 5 legs

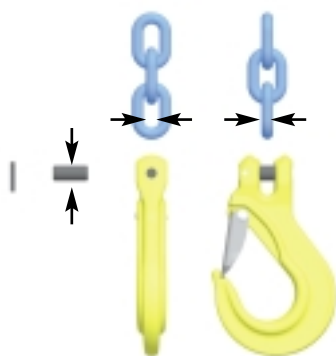


ID tag special designed for the GrabiQ FlexiLeg system.

The backside contains info about the sling manufacture and users reg. number.

Foolproof

The GrabiQ system has been designed with special care so that it should be easy to use correctly.



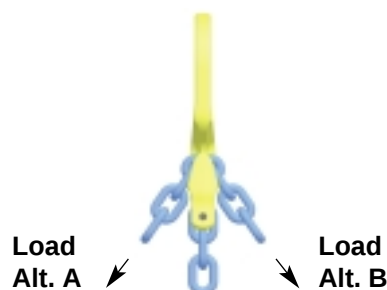
All clevis type connections are snugly matched to the correct size of chain and pin dimension, thereby eliminating any incorrect assembly.



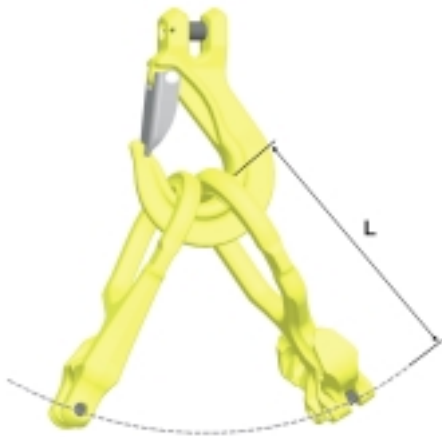
All GrabiQ components are uniformly marked with the equivalent chain size, grade, traceability code, manufacturers name and designation, for positive identification.



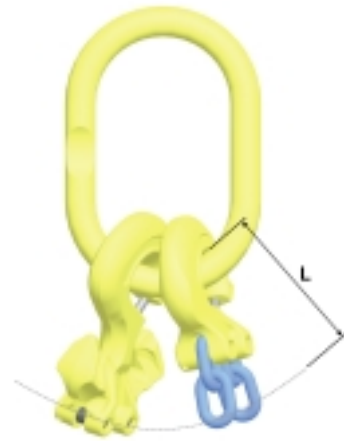
The roundsling hooks are colour coded in order to match the corresponding size of the roundsling. Red=5T / Yellow=3T/Green=2T/Violet=1T.



With the following GrabiQ design the outgoing chains from the shortening pocket are allowed on either side for loading, thereby eliminating misuse. The GrabiQ shortening components fulfil the new requirements from BG, Germany.



Mastergrab single type MG and duo type MGD have the same length, which allow for equal leg length if they are united in the top end into a common shackle or crane hook.



With two extra chain links, CL and CLD will have the same effective length as CG and CGD.

Economical

The cost for a product or complete lifting equipment can not only be isolated to the time of purchase, the total cost during the entire lifecycle must also be taken into consideration.

Due to the radical reengineering which GrabiQ offers, the total cost can be reduced! How can that be possible?

With the new innovative GrabiQ system the number of unique components has been reduced, which means:

- Less components required.
- Less components to assemble, requires less time.
- Less wear points means less wear points to inspect.
- Lower inventory required.
- Multifunctional slings reduces the number of slings required to a minimum.
- Increased lifting capacity.

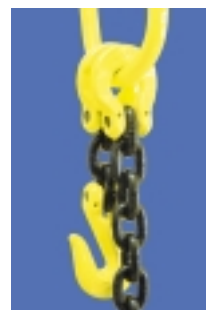
Traditional solution



15 components



7 components



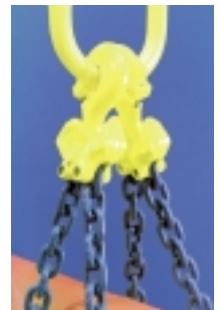
4 components

4-legs

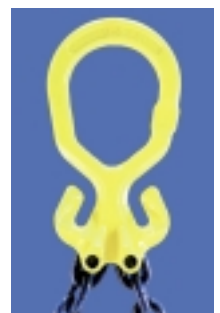
2-legs

1-leg

GrabiQ



3 components only!



1 component only!



1 component only!

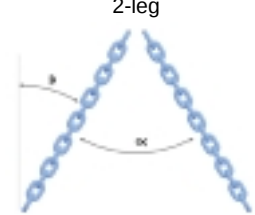
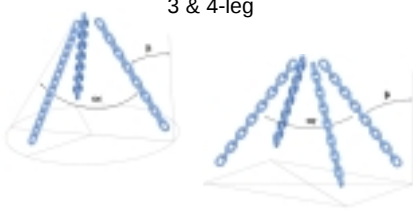
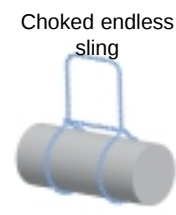
Information for safe use and maintenance

The following information aims to give advice and explain the most common questions in order to ensure safe and proper use of lifting equipment.

It is of utmost importance that this information is known to the user, and in accordance with the Machinery Directive 98/37/EC this information must be delivered to the customer.

Working Load limits (Tonnes)

Chain slings Grade 10.

1-leg		2-leg		3 & 4-leg		Choked endless sling
						
Chain dim.		β 0 - 45° α 0 - 90°	β 45 - 60° α 90 - 120°	β 0 - 45° α 0 - 90°	β 45 - 60° α 90 - 120°	
6 mm - GRABIQ	1,5	2,12	1,5	3,15	2,24	2,5
8 mm - GRABIQ	2,5	3,5	2,5	5,2	3,7	4,0
10 mm - GRABIQ	4,0	5,6	4,0	8,4	6,0	6,4
13 mm - GRABIQ	6,7	9,5	6,7	14,0	10,0	10,7
16 mm - GRABIQ	10,0	14,0	10,0	21,0	15,0	16,0

An alternative method of rating may be used for a specific lifting application. It is essential that the WLL for each single component of the sling should never be exceeded. For further information contact your Gunnebo Lifting dealer.

Extreme temperature conditions

The in service temperature of the G8+ chain and G10 components affects 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 its full capacity within the above temperature range. Chain slings should not be used above or below these temperatures. For chain grade 10 the maximum in service temperature is 200°C.

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 manufacturer's certificate is in order.
- Ensure that the identification and the WLL on the ID-tag corresponds 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 the full details of the chain sling is recorded.
- Ensure that the staff using the chain sling have 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.

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. 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.

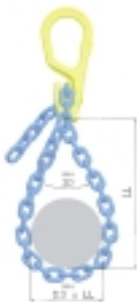
The chain may be passed under or through the load to form a choke hitch or basket hitch, the chain should be allowed to assume its natural angle and should not be hammered down.



Where choke hitch is employed the WLL of the chain sling should be no more than 80% of that marked.

Use edge protection to prevent sharp edges from damaging the lifting equipment. A rule of thumb is that the radius of the edge > 2 x chain diameter. When lifting with chain directly on lugs we recommend that the lug diameter > 3 x the pitch of the chain. With a lug, diameter which is less than stipulated above, the WLL must be reduced with 50%.

Home pocket loop shall have an internal loop top angle of max. 30°. Rule of thumb: Cross dimension of the load shall be max. 0,3 times the loop length (LL)



Definition: The home pocket is the shortening pocket of the top component to which the chain is connected.

Assembly:

G-link assembly:

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



C-lok / C-grab assembly:

Note: Either dismantable or permanent assembly is possible

1. Assemble the masterlink, C-parts and locking pin.
2. Fit the retaining pin
3. Assemble the chain, clevis connection, load pin.
4. Fit the retaining pin / pins.
5. Make sure that the load pins and locking pins is properly secured by the retaining pins.



Maintenance

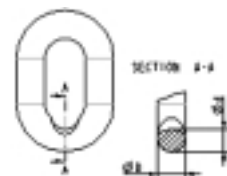
Periodic thorough examination must be carried out at least every 12 months or more frequently according to statutory regulations, type of use and past experience.

1. Chain with bent links, elongated links, cracks or gauges in the link should be replaced, as should deformed components such as bent masterlinks opened up hooks and any fitting showing sign of damage.
2. Max. clearance between hook and latch. Note: For a griplatch hook measure the difference between "A" with unloaded spring and "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	7
16	4	9

3. 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.

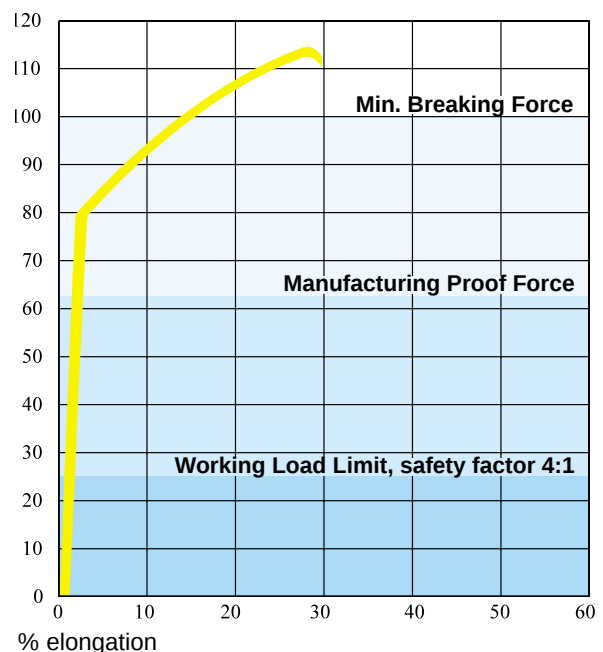


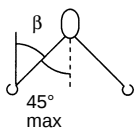
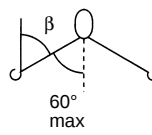
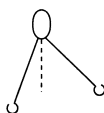
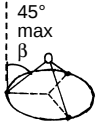
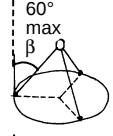
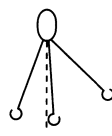
$$\frac{D + d}{2} > 0,9d_n$$

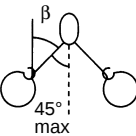
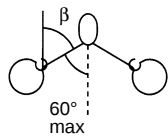
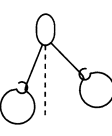
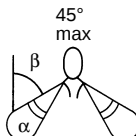
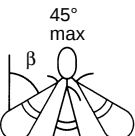
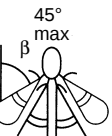
4. Overloaded chain slings must be taken out of service.
5. Always use Gunnebo Lifting original spare parts

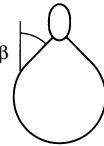
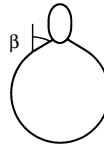
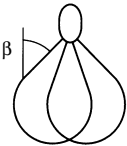
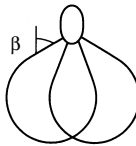
Stress/elongation diagram

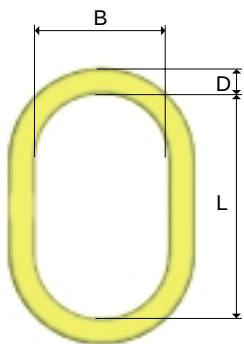
Chain grade 10, type KL
% of min. Breaking Force



Sling type	1-leg	2-leg				3- and 4-leg			
									
Condition of use	Straight	β 0-45°	β 45-60°	Asymmetrical load	Single point lift	β 0-45°	β 45-60°	Asymmetrical load	Single point lift
Load factor	1	1.4	1	1	1	2.1	1.5	1	1
Chain size									
6	1.5	2.12	1.5	1.5	1.5	3.15	2.24	1.5	1.5
8	2.5	3.5	2.5	2.5	2.5	5.2	3.7	2.5	2.5
10	4.0	5.6	4.0	4.0	4.0	8.4	6.0	4.0	4.0
13	6.7	9.5	6.7	6.7	6.7	14.0	10.0	6.7	6.7
16	10.0	14.0	10.0	10.0	10.0	21.0	15.0	10.0	10.0

Sling type	1-leg	Choke hitch				Home pocket loop			
									
		β 0-45°	β 45-60°	Asymmetrical load	Single point lift	Note: "Max 30° – every in-loop topangle"			
Condition of use	Straight	β 0-45°	β 45-60°	Asymmetrical load	Single point lift	α max 30°	β 0-45° α max 30°	β 0-45° α max 30°	β 0-45° α max 30°
Load factor	0.8	1.1	0.8	0.8	0.8	1	1.4	2.1	2.1
Chain size									
6	1.2	1.6	1.2	1.2	1.2	1.5	2.12	3.15	3.15
8	2.0	2.7	2.0	2.0	2.0	2.5	3.5	5.2	5.2
10	3.2	4.4	3.2	3.2	3.2	4.0	5.6	8.4	8.4
13	5.2	7.4	5.3	5.3	5.3	6.7	9.5	14.0	14.0
16	8.0	11.0	8.0	8.0	8.0	10.0	14.0	21.0	21.0

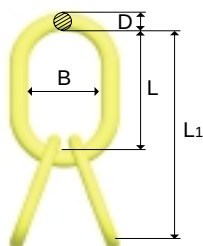
Sling type	Basket slings				Endless choke sling
	Single 2-leg top assembly		Double 4-leg assembly		
					
Condition of use	β 0-45°	β 45-60°	β 0-45°	β 45-60°	
Load factor	1.4	1.0	2.1	1.5	1.6
Chain size					
6	2.12	1.5	3.15	2.24	2.5
8	3.5	2.5	5.2	3.7	4.0
10	5.6	4.0	8.4	6.0	6.4
13	9.5	6.7	14.0	10.0	10.7
16	14.0	10.0	21.0	15.0	16.0



Master Link, MF

For 1-, 2-, 3- and 4 leg slings, with C-grab and C-lok.

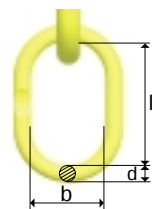
Code	WLL Tonnes* β 0-45°	For chain size, mm			L	B	D	Weight kgs
		1-leg	2-leg	3-4-leg				
MF 86-10	2,5	6, 8	6	-	120	70	14	0,4
MF 108-10	4	10	8	6	140	80	17	0,7
MF 1310-10	7,5	13	10	8	160	95	22	1,5
MF 1613-10	10	16	13	10	190	110	25	2,2
MF 2016-10	17	-	16	13	240	140	34	5,1
MF 2220-10	25	-	-	16	250	150	38	7,2



Master Link, MT

Designed for use with chain or wire rope

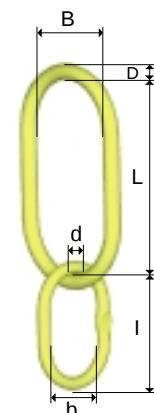
Code	WLL Tonnes* β 0-45°	L1	L	B	D	I	b	d	Weight kgs
MT 6-10	3,5	270	150	90	19	120	70	14	1,8
MT 8-10	5,2	300	160	95	22	140	80	17	3,0
MT 10-10	11,5	360	200	120	30	160	95	22	6,5
MT 13-10	17	450	250	150	40	200	120	30	15
MT 16-10	28	500	300	200	50	200	120	32	23



Master Link, MFX

Oversized, for 1- and 2-leg sling.

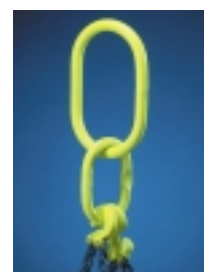
Code	WLL Tonnes* β 0-45°	For chain size, mm		L	B	D	Weight kgs
		1-leg	2-leg				
MFX 108-10	4	8, 10	8	340	180	25	3,7
MFX 1310-10	6,7	13	10	340	180	28	4,7
MFX 1613-10	10	16	13	340	180	34	7,0
MFX 1916-10	14,4	-	16	340	180	38	8,9



Master Link, MTX

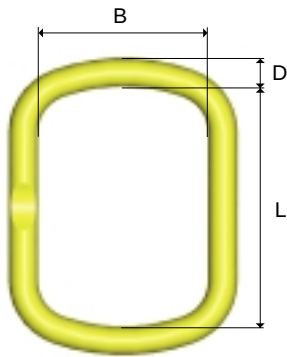
Oversized, for 3- and 4-leg sling.

Code	WLL Tonnes* β 0-45°	For chain size mm 3-4-leg	L	B	D	I	b	d	Weight kgs
MTX 8-10	5,2	8	340	180	28	160	95	22	6,2
MTX 10-10	8,4	10	340	180	34	200	120	30	10,5
MTX 13-10	14	13	340	180	38	200	120	32	12,9
MTX 16-10**)	21	16	340	180	45	-	-	-	13,7



*Safety factor 4:1

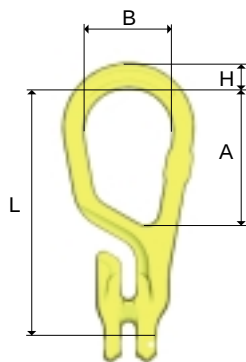
***) Note! Without sublink



Master Link, MFS

Designed for crane hooks, DIN 15401.

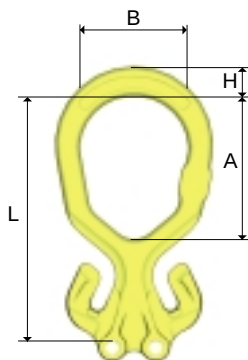
Code	WLL Tonnes* β 0-45°	For chain size, mm			L	B	D	Weight kgs	For crane hook DIN 15401
		1-leg	2-leg	3-4-leg					
MFS 1310-10	7,5	13	10	8	200	125	22	1,9	12
MFS 1613-10	10	16	13	10	220	135	25	2,7	12
MFS 2016-10	17		16	13	240	135	32	4,5	16
MFS 2220-10	28			16	250	175	38	7,6	25
MFSW 2220-10	25			16	320	225	38	9,5	50



Master Grab, MG

All-in-one compact top link.

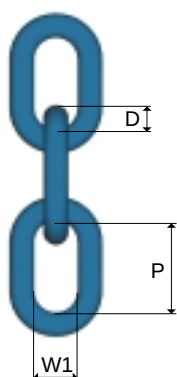
Code	WLL Tonnes*	L	A	B	H	Weight kgs
MG 6-10	1,5	145	85	60	15	0,5
MG 8-10	2,5	171	95	60	18	1,0
MG 10-10	4	211	115	75	22	1,8
MG 13-10	6,7	261	138	90	26	3,5
MG 16-10	10	311	162	105	30	5,8



Master Grab Duo, MGD

All-in-one compact top link for 2-leg slings.

Code	WLL Tonnes* β 0-45°	L	A	B	H	Weight kgs
MGD 6-10	2,1	144	90	60	17	0,7
MGD 8-10	3,5	171	100	75	21	1,4
MGD 10-10	5,6	211	124	90	24	2,5
MGD 13-10	9,5	262	148	105	29	5
MGD 16-10	14	309	175	120	35	8,9



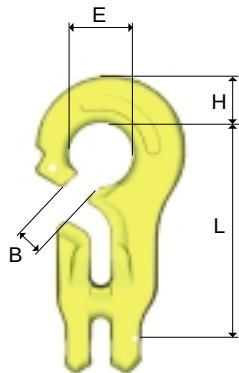
Chain KLA

Grade 8+ or grade 10

Code	WLL Tonnes*	ØD mm (nom)	P	W1	Weight kgs/m
KLA 6	1,5	6	18	8	1,0
KLA 8	2,5	8	24	11	1,7
KLA 10	4	10	30	14	2,6
KLA 13	6,7	13	39	18	4,5
KLA 16	10	16	48	22	6,6



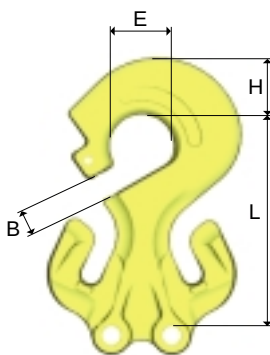
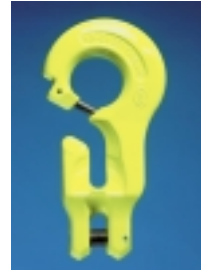
*Safety factor 4:1



C-Grab, CG

For use with master links and choke.

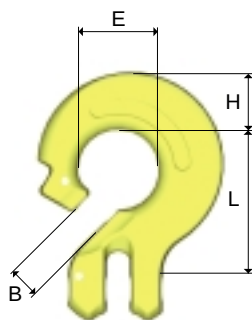
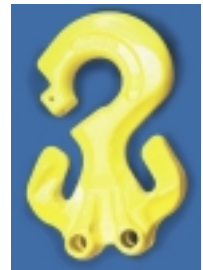
Code	WLL Tonnes*	L	B	E	H	Weight kgs
CG 6-10	1,5	80	11	24	19	0,3
CG 8-10	2,5	107	12	32	24	0,8
CG 10-10	4	134	15	40	29	1,5
CG 13-10	6,7	172	18	52	38	3,2
CG 16-10	10	215	22	64	47	6,1



C-Grab Duo, CGD

For use with master links.

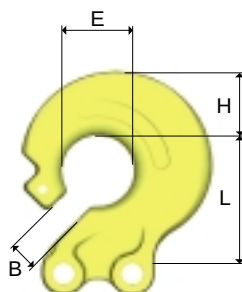
Code	WLL Tonnes* β 0-45°	L	B	E	H	Weight kgs
CGD 6-10	2,1	79	11	24	20	0,5
CGD 8-10	3,5	106	12	32	29	1,3
CGD 10-10	5,6	133	15	40	37	2,5
CGD 13-10	9,5	173	18	52	46	5,5
CGD 16-10	14	215	22	64	57	10,2



C-Lok, CL

For use with master links and choke.

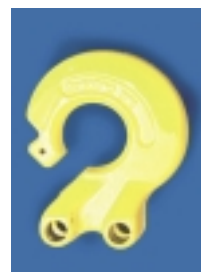
Code	WLL Tonnes*	L	B	E	H	Weight kgs
CL 6-10	1,5	43	11	24	18	0,2
CL 8-10	2,5	59	12	32	24	0,5
CL 10-10	4	74	15	40	29	0,9
CL 13-10	6,7	96	18	52	38	2
CL 16-10	10	119	22	64	48	3,8



C-Lok Duo, CLD

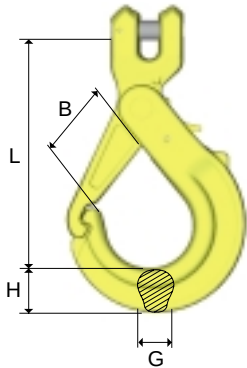
For use with master links.

Code	WLL Tonnes* β 0-45°	L	B	E	H	Weight kgs
CLD 6-10	2,1	43	11	24	22	0,3
CLD 8-10	3,5	57	12	32	29	0,8
CLD 10-10	5,6	71	15	40	37	1,5
CLD 13-10	9,5	93	18	52	46	3,2
CLD 16-10	14	115	25	64	57	6



*Safety factor 4:1

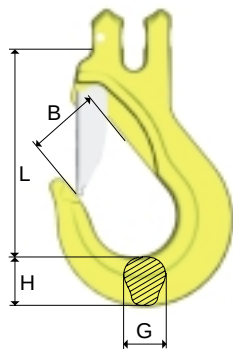
Safety hook, GBK/BKG



Code	WLL Tonnes*	L	B	G	H	Weight kgs
BKG 6-10	1,5	91	29	15	21	0,5
GBK 8-10	2,5	119	37	20	22	0,8
GBK 10-10	4	150	47	24	29	1,3
GBK 13-10	6,7	172	54	27	35	2,4
GBK 16-10	10	207	68	29	43	5,6



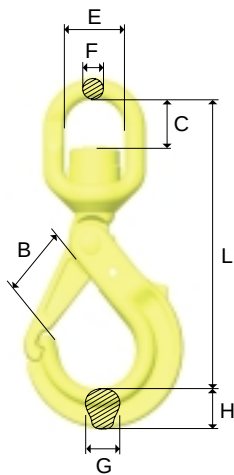
Sling hook, EGKN



Code	WLL Tonnes*	L	B	G	H	Weight kgs
EGKN 6-10	1,5	86	27	17	20	0,4
EGKN 8-10	2,5	95	31	17	22	0,5
EGKN 10-10	4	121	41	23	30	1,0
EGKN 13-10	6,7	145	49	28	38	2,0
EGKN 16-10	10	170	59	36	45	3,8



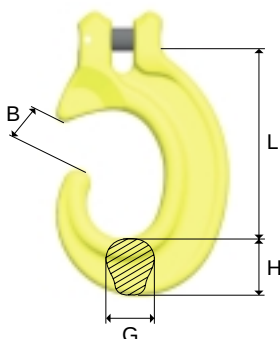
Swivel safety hook with griplatch, LBK/LKBK LKBK with ball-bearing.



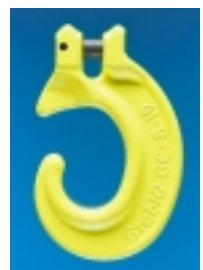
Code	WLL Tonnes*	L	B	C	E	F	G	H	Weight kgs
LBK/LKBK-7/8-10	2,5	176	37	27	38	12	20	22	0,8
LBK/LKBK-10-10	4	213	47	35	42	15	22	29	1,8
LBK/LKBK-13-10**	6,7								



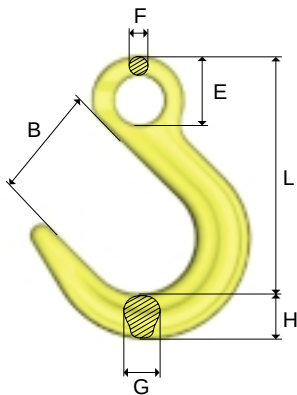
C-hook, GC



Code	WLL Tonnes*	L	B	G	H	Weight kgs
GC 8-10	2,5	79	20	16	27	0,5
GC 10-10	4	105	27	22	31	1,0
GC 13-10	6,7	138	35	32	38	2,1



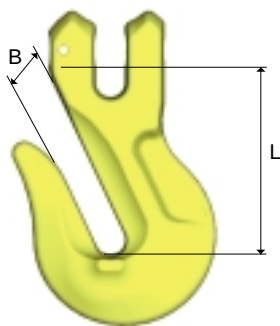
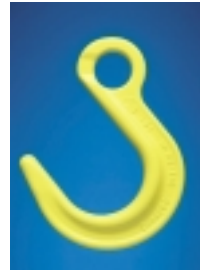
*Safety factor 4:1
**Under development



Foundry hook, OKE

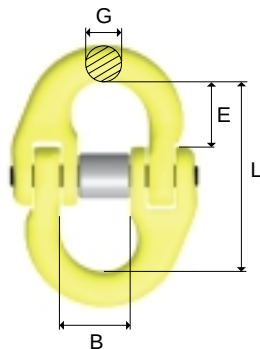
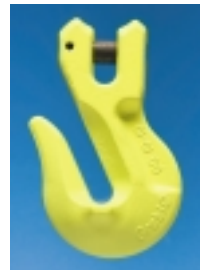
Code	WLL Tonnes*	L	B	E	F	G	H	Weight kgs
OKE 7/8-10	2,5	123	63	28	11,5	20	26	0,7
OKE 10-10	4	151	76	34	15	26	29	1,3
OKE 13-10	6,7	184	90	44	19	33	39	2,8
OKE 16-10	10	217	102	56	23	40	46	4,9

Can be used with CL.



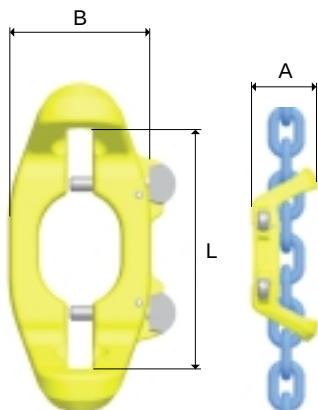
Grab hook, GG

Code	WLL Tonnes*	L	B	Weight kgs
GG 8-10	2,5	57	10,5	0,4
GG 10-10	4	83	12	0,8
GG 13-10	6,7	97	16	1,7
GG 16-10	10	124	20	3,1



Coupling link, G

Code	WLL Tonnes*	L	B	G	E	Weight kgs
G 6-10	1,5	4,5	15	8	16	0,1
G 8-10	2,5	56	18	9	22	0,2
G 10-10	4,0	68	25	12	26	0,3
G 13-10	6,7	89	29	15	33	0,7
G 16-10**	10					

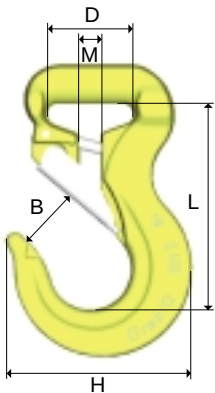


Midgrab shortener, MIG

Code	WLL Tonnes*	Dimension in mm			Weight kgs
		L	A	B	
MIG-8-10**	2,5				
MIG-10-10	4	125	70	77	1,1
MIG-13-10**	6,7				

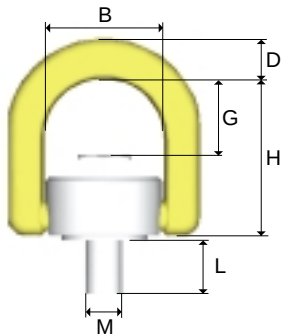


*Safety factor 4:1
**Under development



Roundsling Hook, RH

Code	WLL Tonnes*	B	D	L	H	M	Weight kgs
RH 1-10	1	24	35	84	73	8	0,4
RH 2-10	2	28	40	96	86	10	0,7
RH 3-10	3	33	47	117	108	12	1,4
RH 5-10	5	43	73	155	131	16,5	3,2



Rotating Lifting Point, RLP

Code	WLL Tonnes*	L	M	B	D	G	H	Weight 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".

*Safety factor 4:1

Working Load Limits (tonnes)

No. of legs	1	1	2	2	2 symmetric		3 and 4 symmetric	
β	0°	90°	0°	90°	0-45°	45-60°	0-45°	45-60°
Load factor		1		2	1,4	1	2,1	1,5
Product code: 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	0,75	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

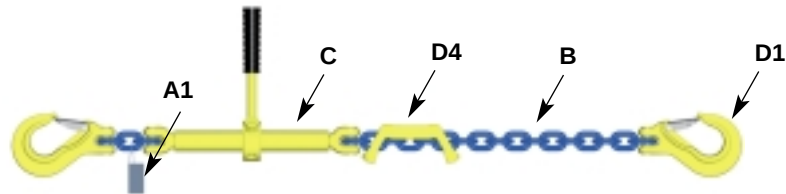
RLP- Rotating Lifting Point, Grade 10

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.

Lashing chain according to EN12195-3

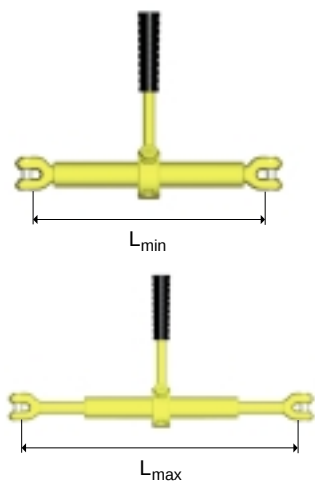
With the new ratchet chaintensioner (T) for lashing chain according to EN12195-3 Gunnebo Lifting is adding yet another component to the multifunctional GrabIQ range and is offering a full range of GrabIQ also for cargo securing. The T chain tensioner in combination with the new patented Midgrab shortener (MIG) is the ultimate solution for safe lashing. All parts of the lashing chain fully conforms to the requirements of EN12195-3.



Product features – Customer benefits		
See picture above	A	Complete lashing equipment Contains the following components: <i>B – Tensioning element – Round steel link chain</i> <i>C – Tensioning device – Ratchet chain tensioner</i> <i>A1 – Marking</i> <i>D – Connecting components – Shortening component, Lashing hook</i>
	B	High tensile short link chain grade 10 = 1000N/mm2 type KLA-10-10, LC = 8.000 daN Surface treatment: Powder Coated ID-Marking of chain: H32 and 8+G or 10G
	C	Ratchet chain tensioner with foolproof clevis connection in both ends in Grade 10. Extremely robust and user friendly design of housing and ratchet mechanism – standing up against tough handling. - The thread is enclosed in the housing, thereby protecting the thread from external damage. - The openings of the housing are sealed with O-rings thereby protecting thread from sand or dirt. - The interior is greased in the factory and effectively sealed – which makes the chain tensioner practically maintenance free. - The chain tensioner is provided with a safety device in order to avoid unintentional dismounting. - Ergonomically designed rubber handle for effective tensioning and reduced slip risk. - Dismountable handle in case of tensioning in narrow spaces or need for replacement. No need for safety chain. Marked with positive indication of the manufacturer, product designation, size, batch number and grade.
	A1	ID-tag with indication of: - Lashing Capacity (LC) in daN - Standard Tension Force (STF) - Manufacturer - Traceability code - Applicable standard, EN12195-3 - Information “Not for lifting”
	D4	Midgrab shortening device in grade 10 with heavy duty securing devices against working loose. The Midgrab shortener offers the possibility to be assembled either fixed on the securing chain or moveable in either direction of the chain. The Midgrab shortener can also offer the possibility of shortening in either direction of the chain. Marked with positive indication of the manufacturer, product designation, size, batch number and grade.
	D1	Lashing Hooks in grade 10 such as the EGKN sling hook with a heavy duty latch against working loose or the GBK Griplatch Safety Hook. Marked with positive indication of the manufacturer, product designation, size, batch number and grade.

Advice for safe use:

Consider the required lashing capacity taking into account the mode of use and the load to be secured.
 Choose a lashing chain strong enough and plan the fitting removal operation before the journey starts.
 Never mix lashing chain with web lashing securing the same load.
 Before release of the load assure the stability of the load
 Protect the lashing chain from sharp edges, use correct padding
 Never overload the lashing chain
 Don't use a lashing chain connected with screws, twisted or knotted.
 Check the lashing chain from signs of damage or wear.



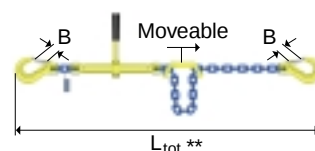
Chain Tensioner - T

Chain size (mm)	Code	Breaking force (kN)	Min. length L _{min} (mm)	Max length L _{max} (mm)	Tensioning length L _{ten} (mm)	Weight (kg)
8	T 8-10	102	355	535	200	3,0
10	T 10-10	158	355	535	200	3,1



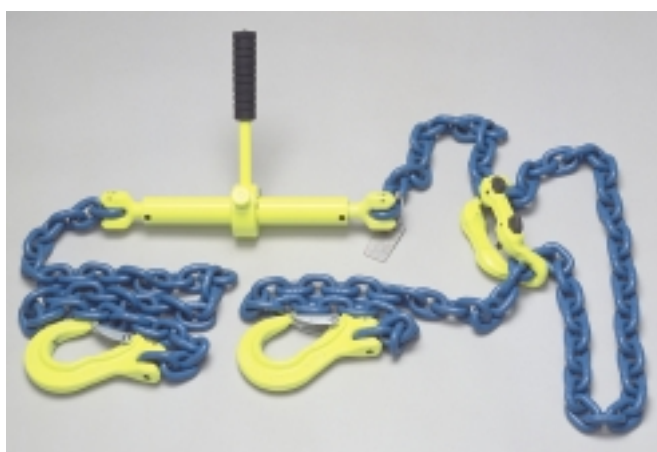
Chain Lashing set - T-MIG

MIG Shortener locked firmly on the chain



Chain size (mm)	Code	Lashing capacity daN-(t)	S _{TF} (kN)	Min. length L _{min} (mm)	Hook opening B (mm)	Weight (kg)
8	T-MIG-LC-8-10	5000 - (5)	13	765	33	9,3
10	T-MIG-LC-10-10	8000 - (8)	20	870	43	12,7

**) L_{tot} standard total length 3500 mm. Other lengths on request.



GrabiQ Lashing set. (T-MIG-CC)



Cargo securing of agricultural equipment.

Spare Parts

CS/CP, the C-connection set for CG, CGD, CL and CLD consists of one blocking pin, one spring retaining pin (for dismountable) and one spring type self-retaining blocking pin (for permanent connection).
Code: CS/CP-6, CS/CP-8, CS/CP-10, CS/CP-13, CS/CP-16.

CLS, the clevis connections set consist of one load pin and one spring retaining pin.



Code:
CLS-6
CLS-8
CLS-10
CLS-13
CLS-16

CLP single, permanent locking set for single leg components.



Code:
CLP-6 single
CLP-8 single
CLP-10 single
CLP-13 single
CLP-16 single

CLP duo, permanent locking set for duo components.



Code:
CLP-6 duo
CLP-8 duo
CLP-10 duo
CLP-13 duo
CLP-16 duo

BK Tool kit



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

RDOBK, spare part set for GBK, LBK, LKBK safety hook.



Code:
RDOBK-6
RDOBK-7/8
RDOBK-10
RDOBK-13
RDOBK-16

RDBK, spare part set for BKG safety hook.



Code:
RDBK-6
RDBK-7/8
RDBK-10
RDBK-13
RDBK-16

RDEKN, spare part set for EGKN sling hook and RH hook.



Code:
RDEKN-6 (RH-1)
RDEKN-8 (RH-2)
RDEKN-10 (RH-3)
RDEKN-13 (RH-5)
RDEKN-16

RDRLP, set consists of bolt and metal clip.
Fits; RLP M8-10 — RLP M48-10.

Locking set, MIG



Close / Open device "C"
Spring operated locking device. Can be placed either in open or closed position.
Code: C-10

Locking set, MIG



Locking device "L"
for fixed mounting on a chain leg.
Code: L-10

Popular slings

MG1-GBK



MG2-GBK



TG3-GBK



TG4-GBK



BDGG



TG1-CL

Alt.



TG2-CG

Alt.



MG1-MG

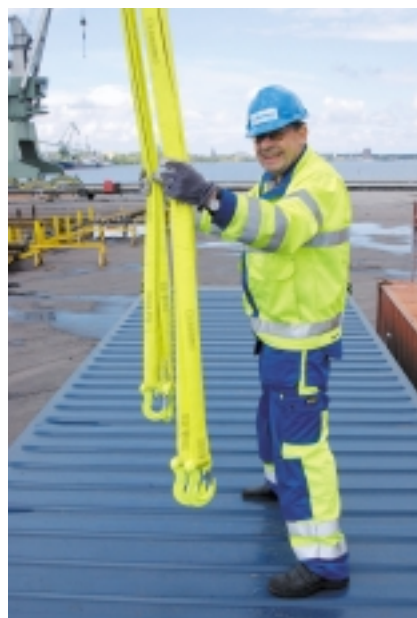
Alt.



When ordering state: Code eff. Length, size or max load.
Example: MG2-GBK, 3m, 13mm.



Lifting with GrabIQ sling.



RH hook in action.



Cargo securing.

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