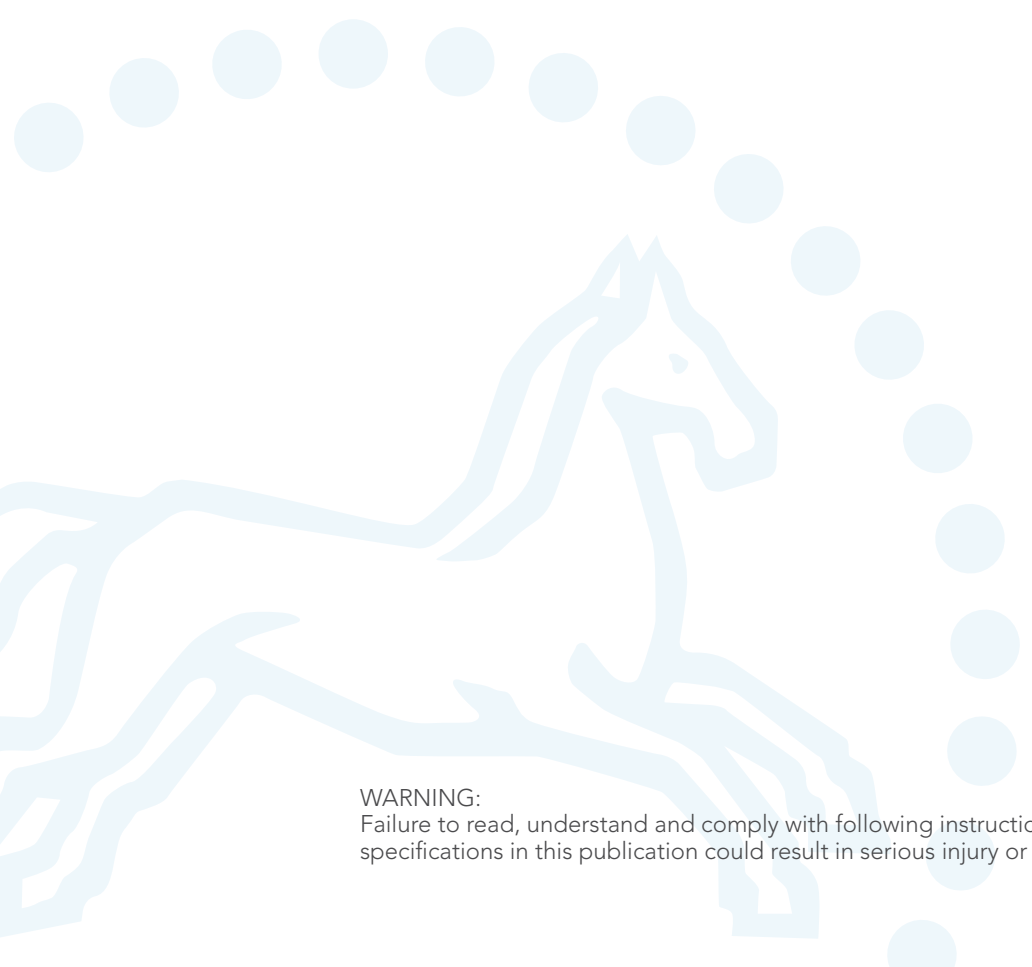


Lashing & Transport

Chain Tensioner, GT	8:2 - 8:4
Lashing 1 - 10 tonnes	8:5
Rigging Screw with Ratchet Handle	8:5

Technical Information

Safe Use and Maintenance	8:6 - 8:7
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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.

Chain Tensioner - GT

The chain tensioner from Gunnebo Industries, GT, is integral in one set. It is made of light weight Grade 10 material and the ratchet handle contributes to a fast and ergonomic lashing procedure. The GT is fitted with safety pins to prevent unintended release of the threaded end fittings.

GT has 25% increased Lashing Capacity (LC) compared to Grade 8 lashings and high Standard Tension force (STF) thanks to the unique ratchet handle

Our chain tensioner is designed to be compatible with the GrabiQ product range, enabling the choice of robust end-hooks with latches. Can also be provided as approved for lifting purposes.



Unique Benefits With our Chain Tensioner



Short Handle

- Fully protected ratched mechanism with 8 steps per 90 degree pull, enabling use in very narrow spaces.
- Easy to change direction
- The rubber handle decreases the risk of slipping and is convenient in cold climates

Open Design

- For easier and faster cleaning and lubrication
- Allows dirt to fall through instead of building up
- Two drain holes in the body prevent water residue.

Trapezoidal Thread

- Makes the thread less sensitive to dirt and particles
- Low-friction treated for trouble free operation
- Makes lashing faster
- Safety pins prevents unintended unwinding

Chain Lashing System

Gunnebo Industries offers a complete chain lashing system approved according to EN 12195-3. The system has been developed with focus on the user's needs and working environment, and with safety as highest priority. The unique Midgrab chain shortener saves valuable time and effort, and is a natural part of an efficient and effective chain lashing system.

GT Chain Lashing System offers 25% increased Lashing Capacity (LC) compared to Grade 8 lashings.

End Fitting

Lashing hooks in grade 10, such as the EGKN Sling Hook with a heavy duty latch or the GBK Griplatch Safety Hook. Marked with positive indication of the manufacturer, product designation, size, batch number and grade.

ID-tag

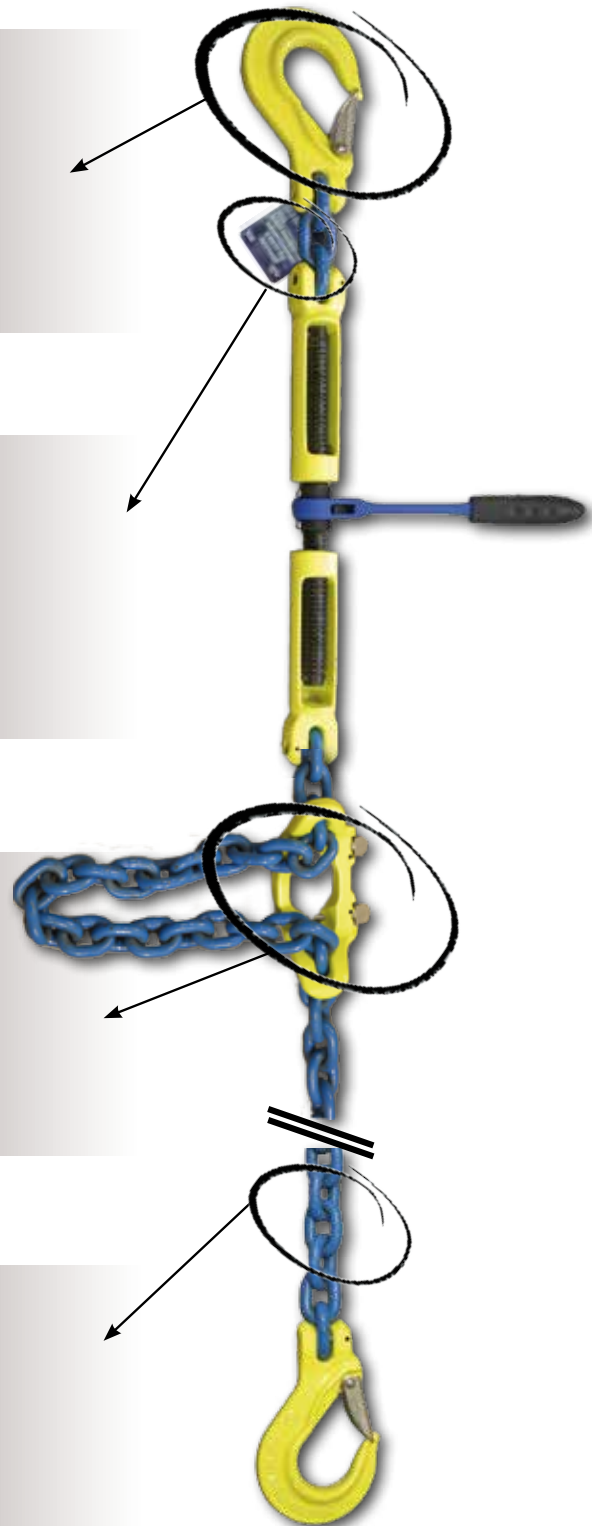
The ID-tag must state the lashing Standard, capacity, tension force, traceability and name of manufacturer. It must also clearly say that the set is for lashing only, lifting is prohibited

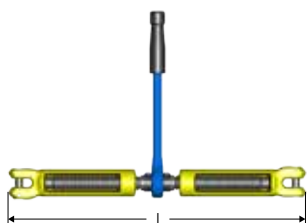
Shortening Function

The Midgrab offers instant mounting on any part of the chain, with the ability to shorten the chain in either direction. It is designed to prevent the chain from disengaging. Marked with positive indication of the manufacturer, product designation, size, batch number and grade

Chain

Gunnebo Industries high tensile short link chain, grade 10 = 1000 N/mm² type KLA-10-10, LC = 80 kN. Surface treatment: Powder coated. ID-marking of the chain: 10G

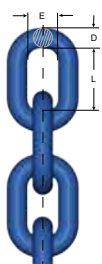




Chain Tensioner GT

Art. no	Model	Lashing capacity (kN)	STF (daN)	L = Min. length (mm)	L = Max. length (mm)	Weight (kgs)
Z101336	GT-8-10	50	2800	400	600	3.3
Z101337	GT-10-10	80	2800	400	600	3.3

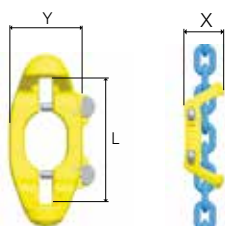
GT Chain Tensioner also available in a lifting version - see page 2:21.



Chain GrabiQ Grade 10

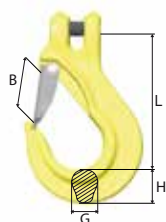
Short link, KL

Art. no.	Code	WLL tonnes	Lashing capacity (kN)	D nom. mm	L » mm	E » mm	Weight kgs/m	MPF kN
Z802301	KLA-8-10	2.5	50	8	24	11	1.5	63
Z801921	KLA-10-10	4.0	80	10	30	14	2.3	100



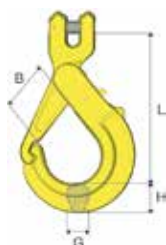
Midgrab MIG with locking pins

Art. no.	Code	WLL tonnes	Lashing capacity (kN)	L	X	Y	Weight kgs
B14303	MIG CC-8-10	2.5	50	95	50	60	0.7
B14313	MIG CC-10-10	4.0	80	125	70	77	1.1



Sling Hook EGKN

Art. no.	Code	WLL tonnes	Lashing capacity (kN)	L	B	G	H	Weight kgs
B14461	EGKN-8-10	2.5	50	95	28	17	23	0.5
B14462	EGKN-10-10	4.0	80	121	35	23	31	1



Safety Hook GBK

Art. no.	Code	WLL tonnes	Lashing capacity (kN)	L	B	G	H	Weight kgs
Z100759	GBK-8-10	2.5	50	119	36	20	22	0.8
Z100760	GBK-10-10	4.0	80	150	47	22	29	1.4

Complete set for Lashing GT
with chain, hooks and MIG Shortener



Lashing GT
with GG hooks



Lashing Chain GrabiQ
with hooks in both ends



Lashing 4 - 10 Tonnes

EN 12195-2

Art. no.	Description	Colour	Width	Breaking strength (t)	EN 12195-2 LC daN	EN 12195-2 STF daN
Complete lashing						
M275141	0.4+9.5 m with wire hook	Yellow	75	10.0	4000	305
Complete lashing						
M135098	0.4+7.5 m with wire hook	Blue	50	5.0	2000	350
M136090	0.4+9.5 m with wire hook	Blue	50	5.0	2000	350
Complete lashing						
M134098	0.4+ 7.5 m wire hook	Blue	50	4.0	1700	340
M134090	0.4+9,5 m wire hook	Blue	50	4.0	1700	340
M24595W	10m endless	Blue	50	5.0	4000	340
Ratchet with short straps						
M135051K	0.4m with wire hook	Blue	50	4 & 5	2000	



Lashing 1 - 4 Tonnes

EN 12195-2

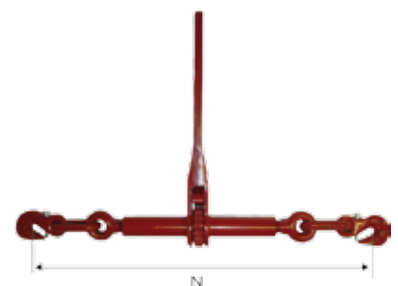
Art. no.	Description	Colour	Width mm	Breaking strength (t)	EN 12195-2 LC daN	EN 12195-2 STF daN
Complete lashing						
M140090	0.5+4.5 m with wire hook	Orange	35	2.5	1000	180
M140091	0.5+5.5 m with wire hook	Orange	35	2.5	1000	180
M14P00W	5 m endless (single web.)	Orange	35	5.0	2000	
Complete lashing stainless						
M22210K	0.4+9.5 m with wire hook	Blue	50	3.0	1500	305
Complete lashing						
M150101	0.4+3,6 m with sewn-on eyes	Blue	26	1.5	700	150
M150102	0.4+3,6 m with wire hook	Blue	26	1.5	700	150
M150110	0.4+4,5 m with wire hook	Blue	26	1.5	700	150
M150103	5 m endless	Blue	26	3.0	1400	150
Complete lashing						
M151002	0.4+3.6 m with sewn-on eyes	Orange	25	0.7	300	100
M151003	0.4+3.6 m with wire hook	Orange	25	0.7	300	100
M151005	0.4+4.5 m with wire hook	Orange	25	0.7	300	100
M151001	5 m endless	Orange	25	1.4	600	100



Rigging Screw with Ratchet Handle

Hooks with locking pins

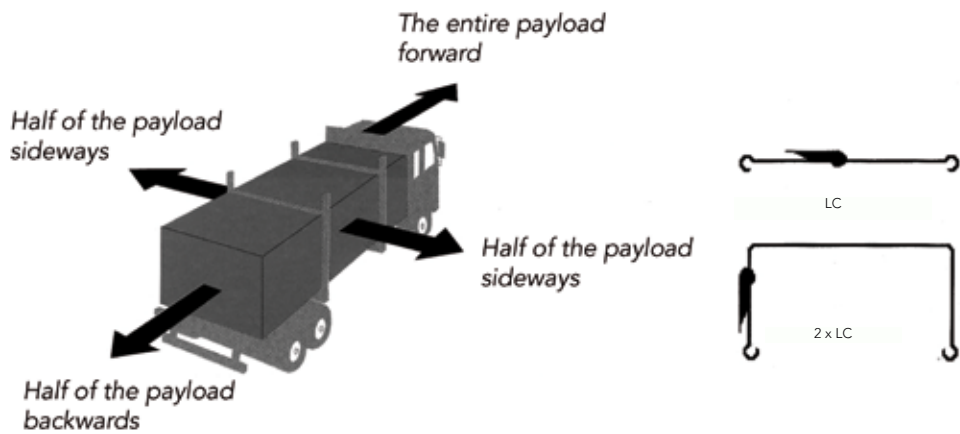
Art. no.	Type	For chain diam. mm	Breaking strength approx. tonnes	N	Tensioning length mm
G009860018	RS	10 mm	12.6	615	165
G009860023	RS	13 mm	21.6	695	158



Information for Use and Maintenance of Web Lashing

1. In selecting and using web lashings, consideration shall be given to the required lashing capacity, taking into account the mode of use and the nature of the load to be secured. The size, shape and weight of the load, together with the intended method of use, transport environment and the nature of the load will affect the correct selection. For stability reasons free-standing load units must be secured with a minimum of one pair of web lashings for frictional lashing and two pairs of web lashing for diagonal lashing.
2. The selected web lashings shall both be strong enough and of the correct length for the mode of use. Basic lashing rules:
 - Plan the fitting and removal operations of lashing before starting a journey
 - Keep in mind that during journeys parts of the load may have to be unloaded
 - Calculate the number of web lashings
 - Only web lashings designed for frictional lashing, marked with STF on the label, are to be used for frictional lashing
 - Check the tension force periodically, especially shortly after starting the journey.
 - The handle must be in a closed position during transport.
3. Because of different behaviour and elongation under load conditions, different lashing equipment (i.e lashing chain and web lashings) shall not be used to lash the same load. Consideration shall also be given to ancillary fittings (components) and lashing devices in the load restraint assembly are compatible with the web lashing.
4. During use flat hooks shall engage over the complete width of the bearing surface of the strap.
5. Release of the web lashing: Care should be taken to ensure that the stability of the load is independent of the lashing equipment and that the release of the web lashing does not cause the load to fall off the vehicle, thus endangering the personnel. If necessary, attach lifting equipment for further transportation, before releasing the tensioning device in order to prevent accidental falling and/or tilting of the load.
6. Before attempting to unload, the web lashings shall be released so that it can be lifted freely from the load platform.
7. During loading and unloading attention has to be paid to proximity of any low overhead power lines.
8. The materials from which web lashings are manufactured have a selective resistance to chemical attack. Seek the advice of the manufacturer or supplier if exposure to chemicals is anticipated. It should be noted that the effects of chemicals may increase with rising temperature. Polyester has good resistance to mineral acids but is attacked by alkalis. Solutions of acids or alkalis which are harmless may become sufficiently concentrated by evaporation to cause damage. Take contaminated webbings out of service at once, thoroughly soak them in cold water, and dry naturally.
9. Web lashings complying with EN 12195-2 are suitable for use in the following temperature ranges: -40°C to $+120^{\circ}\text{C}$ for polyester (PES). These ranges may vary in a chemical environment. In this case the advice of the manufacturer or supplier shall be sought.
10. Changing the environmental temperature during transport may affect the forces in the web lashing. Check the tension force after entering warm areas. Web lashings shall be rejected or returned to the manufacturer for repair if they show any signs of damage. The following criteria are considered to be signs of damage:
 - Only web lashings bearing identification labels should be repaired.
 - If there is any accidental contact with chemical products, a web lashing shall be removed from service and the manufacturer or supplier shall be consulted
 - for web lashings (to be rejected): tears, cuts, nicks and breaks in load bearing fibres and retaining stitches; deformations resulting from exposure to heat
 - for end fittings and tensioning devices: deformations, splits, pronounced signs of wear, signs of corrosion.
11. Care should be taken that the web lashing is not damaged by the sharp edges of the load on which it is used. A visual inspection before and after each use is recommended.
12. Only legibly marked and labelled web lashings shall be used.
13. Web lashings shall not be overloaded: Only the maximum hand force of 500 N (50 daN on the label; 1 daN = 1 kg) shall be applied. Mechanical aids such as levers, bars etc. as extensions are not to be used unless they are part of the tensioning device.
14. Never use a knotted web lashing.
15. Damage to labels shall be prevented by keeping them away from sharp edges of the load and, if possible, from the load itself.
16. The webbing shall be protected against friction, abrasion and damage from loads with sharp edges by using protective sleeves and/or corner protectors.

The lashing must take:



Gunnebo Lifting lashings with a breaking load of 500 kg and above are clearly marked with labels.

The dimensioning of a lashing arrangement must be based on local regulations

Technical Explanations for: Standard EN 12195-2

LC = Lashing capacity:	Maximum force for use in straight pull that a web lashing is designed to sustain in use.
Safety factor:	2:1 complete system and metal parts. 3:1 non-sewn polyester webbing.
Elongation:	Maximum 7% when polyester webbing subjected to the LC.
Marked:	Traceability code similar to lifting products. A protected label ensures traceability at all circumstances.
1dAN:	ca 1 kg.



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