User Manual

Chain Tensioner GT for Lifting



GT-10-10

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Part number: KCG-UM-009-A
Version 2025 September

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1 Introduction and EC declaration

This manual is an original instruction in accordance with:

Directive 2006/42/EC on machinery, section 1.7.4 Instructions and Annex II Declarations.

It also meets the requirements in:

EN 1677-1/2/3:2000+A1:2008 Components for slings - Safety - Part 1: Forged steel components.

This manual is valid for the Chain Tensioner GT for lifting. See the General Description for an overview of included variants depending on chain size.

This manual is valid together with Gunnebo Industries' instruction for slings and lifting guide.

All manuals are continuously updated and are only valid in their latest version, which can be downloaded from www.kitocrosby.com.

1.1 EC declaration of conformity

The Engineering Manager is the authorized person to compile the technical file.

We declare that the lifting component described in this user manual fulfils all the relevant provisions of the Directive 2006/42/EC as a partly completed machine.

The main use of the product is to be incorporated as part of a CE-marked lifting assembly but must not be put into service until the final assembly has been declared to be in conformity with the provisions of the Directive 2006/42/EC.

Our quality management system complies with ISO 9001:2015 and is certified by LRQA Sverige AB for and on behalf of Lloyd's Register Quality Assurance Limited (certificate identity number: 10140613).

Information about harmonized and national standards/technical specifications that apply, and the valid version of this user instruction are available at www.kitocrosby.com.

If the product is modified without approval from Gunnebo Industries, this declaration becomes invalid.

Växjö, September 2025

Fredrik Sandberg

Engineering Manager

1.2 Abbreviations

EC	European Commission
LRQA	Lloyd's Register Quality Assurance
WLL	Working Load Limit

Table 1: Abbreviations

2 Safety precautions

2.1 Warnings, cautions and notes

Carefully read the instructions before using the lifting equipment.

The following signs are used in the instructions, to alert about potential dangers and safety related issues.



Warning!

A warning alerts about a situation which, if not avoided, could result in injury, or death.



Caution!

A caution alerts about a situation which, if not avoided, could result in minor or moderate injury, or damage to the equipment or other property.

!

Note!

Notes are added to give more information.

2.2 General safety precautions

The rigger is responsible for safety regulations relating to the lifting operation and for considering the limitations of the equipment.

The rigger is a competent person capable of judging the condition of the sling and ensuring it is correctly dimensioned with regard to the lifting object.

2.3 Lifting precautions



Warning!

Visual function check:
Before each operation check that the tensioning screw can move freely when not loaded. If not, clean the threads and try again. If the problem persists, do not use the tensioner.



Warning!

If the Chain Tensioner GT bumps into an obstacle during operation check again that it is fully functional.

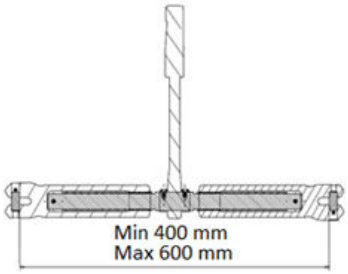
Warning!
During lifting, it is only permitted to adjust a non-tensioned sling leg.

Warning!
Do not reposition the load during lift. This should be done when unloaded.

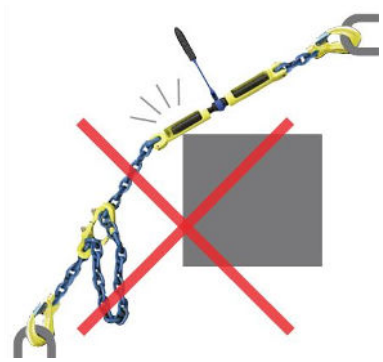
Warning!
Make sure that the Chain Tensioner GT aligns with the pull direction. Check that the lifting chain is not twisted or rotated.

Warning!
Do not attach anything other than a KLA lifting chain to the clevis connector of the Chain Tensioner GT.

Warning!
Make sure to check that the length adjustment screw is not at its end position when tightening or loosening with the handle.

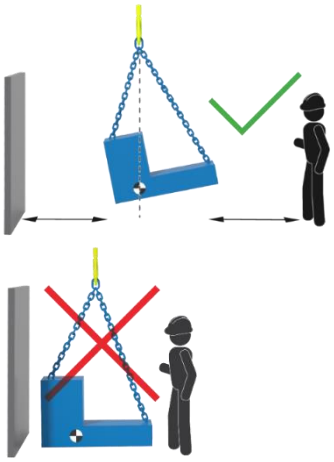


Warning!
Side loading is not allowed on any lifting components. Side loading can cause the load to swing or cause the equipment to fail.



Note!

When lifting asymmetric loads, be aware of sudden movement of the load. Keep distance.



Note!

Maximum tightening torque 250 Nm.

3 General description

All measurments shown in images, and technical data can be found on the website www.kitocrosby.com.

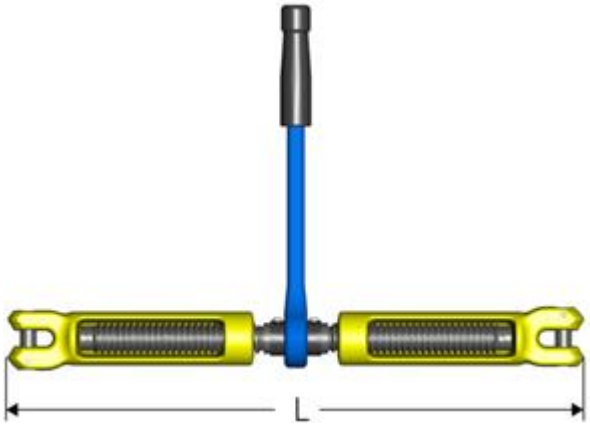


Figure 1: GT-10-10

Chain size		GT-8-10	GT-10-10
Art. No.		Z101367	Z10138
Metric (mm)	Imperial (inch)		
8	5/16	x	
10	3/8		x

Table 2: Chain size and material grade

Each Chain Tensioner GT is marked as follows:

- Manufacturer identification (GUNNEBO SWEDEN)
- Product name, chain size, material grade
- Batch/traceability code
  The traceability code consists of letters and numbers that identify which plant the product was made in, the year and the batch. This enables tracing the product back through the manufacturing process, all the way back to the specific raw material.
- German professional worker association (BG) H32

Gunnebo Industries issue:

- Manufacturer´s certificate according to EN 1677-1
- 3.1 material certificate acc. to EN 10204

Authorized resellers may provide their own documentation and will be able to provide the original certificates upon request.

4 Intended use and restrictions

4.1 Intended use

The Chain Tensioner GT is intended to be part of a chain lifting sling.

The Chain Tensioner GT is available in two versions:

- For chain size 8, GT-8-10
- For chain size 10, GT-10-10

The Chain Tensioner GT can only be used for lifting when the user has a valid certificate.

Authorized resellers may provide their own documentation and will be able to provide the original certificates upon request.

Chain Tensioner GT - Example of use



Figure 2: Lifting sling

4.2 General limitations of use

- Attach only Gunnebo short link chain of corresponding size and grade to the Chain Tensioner GT.
- Check that the GT Tensioner is part of the certification of the sling or lifting equipment.
- Never modify, repair, or reshape the Chain Tensioner GT by welding, heating or bending as this will affect the nominal WLL.
- Never heat-treat the product as this may affect the WLL.
- Do not galvanize or subject the product to any plating or coating process without approval of the manufacturer.
- Do not use the product in alkaline or acidic conditions.
- Do not expose the product to aggressive chemicals, such as acids, and vapors.

4.3 Use in exceptionally hazardous conditions

The rating of lifting accessories in European Standards assumes the absence of exceptionally hazardous conditions.

Exceptionally hazardous conditions include offshore activities, the lifting of persons, and lifting of potentially dangerous loads such as molten metals, corrosive materials, or fissile materials.

In such cases a competent person should assess the degree of hazard and adjust the working load limit accordingly.

4.4 WLL reduction at elevated temperatures

The general service temperature is -40 °C/-40 °F to +200 °C/392 °F.

For temperatures higher than +200 °C/392 °F, the following apply:

Service temperature	New load capacity in % of original WLL
200-300 °C 392-572 °F	90%
300-400 °C 572-752 °F	75%
> 400 °C > 752 °F	Not allowed

Table 3: WLL reduction at elevated temperatures

4.5 Fatigue

It is important to understand that fatigue failure can occur even if the prescribed WLL is not exceeded.

Scenarios in which the Chain Tensioner GT is subjected to variable load over a prolonged period of time, will carry the risk of fatigue. Consider this when dimensioning and deciding service intervals.

4.6 Additional marking

If markings such as project code, and serial number are added, it must be done in a way that does not reduce the strength, corrosion resistance, or the legibility of the manufacturer's own marking.

The following methods are recommended for marking:

- Marking tape
- Engraving tool
- Low stress punches



Figure 3: Recommended areas for punched or engraved marking

5 Instructions prior to use

Read and understand this manual before using the Chain Tensioner GT. Read the Safety precautions. For further recommendations regarding safe use of the Chain Tensioner GT in sling applications, download the lifting guide and and instructions for safe use of slings from www.kitocrosby.com.

With the chain tensioner it is possible to adapt the length of the chain sling legs during the lift if for example one leg is not active. Hereby you get instant feedback and can ensure that all legs are tensioned equally during the lift.

Reposition the load during lift, by changing the length of the sling legs in unloaded position.

Observe that the marking 8/10-10 is general for both GT-8-10 and GT-10-10. It is not possible to insert a 10 chain into the GT-10-8 since the clevis connection is adapted.

5.1 Verification prior to first use

Before first use ensure that:

- The Chain Tensioner GT is precisely as ordered.
- The manufacturer's certificate is in order.

5.2 Inspection prior to each use

Inspect the Chain Tensioner GT for obvious damage or deterioration before each use in accordance with local regulations.

Check also against the items listed under Inspection. If there is any doubt regarding meeting these criteria, do not use the Chain Tensioner GT for lifting operation.

5.3 Before loading

- Determine the weight of the load and the center of gravity.
- Check the conformity of the load with the WLL of the lifting equipment for the specific working configuration.
- Ensure that the Chain Tensioner GT has been correctly assembled in accordance with the Assembly instructions.
- Ensure that no obstacles obstruct the lift and prepare the landing site.

6 Assembly

Only a qualified person may assemble the Chain Tensioner GT.

When the Chain Tensioner GT is incorporated as part of a lifting sling, it must be part of the certification and WLL rating of the complete sling.

The Chain Tensioner is delivered assembled with a handle. The CLS load pins and retainers are delivered in a plastic bag.

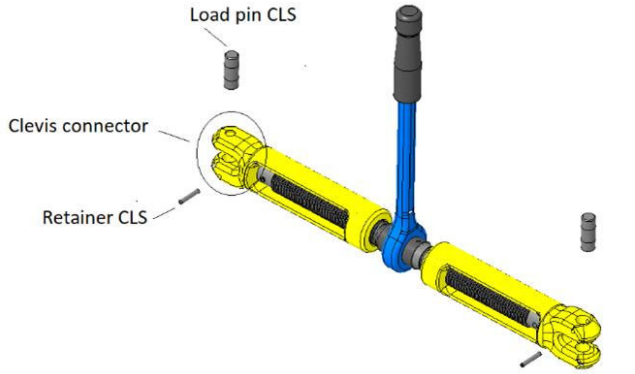


Figure 4: Chain Tensioner GT-10-10

- Observe that the marking 8/10-10 is general for both the GT-8-10 and GT-10-10.
- Only use the GT-8-10 in combination with a size 8 Gunnebo KLA chain.
  Only use the GT-10-10 in combination with a Gunnebo KLA-10-10 chain.
- It is mechanically not possible to insert a size 10 chain into the GT-8-10 since the clevis connection is adapted.



Figure 5: General marking on both GT-8-10 and GT-10-10

6.1 Connect chain to clevis connector

Connect the Clevis Connector of the GT Tensioner to the chain.

- Verify that the correct size and grade of chain is assembled.
  For Chain Tensioner GT-8-10 of size 8 and grade 10, use Gunnebo chain KLA-8-10.
  For Chain Tensioner GT-10-10 of size 10 and Grade 10, use Gunnebo chain KLA-10-10.
- Verify that all markings are readable on the Chain Tensioner GT.

Prerequisites:

- A hammer
- A load pin
- A retainer pin.

1. Put the chain in position.



2. Insert load pin.



3. Secure the load pin with the retainer using a hammer.



4. Make sure both the load pin and the retainer pin are secured.
5. Make sure that all markings are readable on the connected parts



Disassembly

Put the lifting compontent on a solid support. Position a pin tool smaller in diameter than the retainer. Tap gently to drive the retainer pin out of position.



6.2 Spare parts

Available spare parts:

- Load pin with retainer

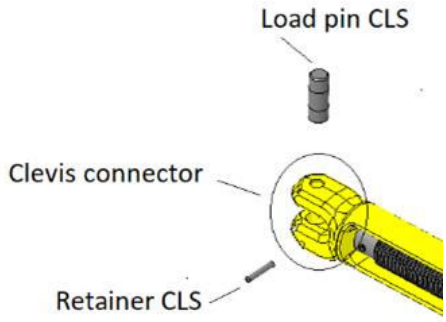


Figure 6: Available spare parts

See www.kitocrosby.com for article numbers or the Gunnebo Industries Product Catalogue.

6.3 Limitation

The Chain Tensioner GT is designed to be connected in the Clevis Connector with the appropriate short link chain and load pin, grade and size. Do not use any other connecting part.

Check that the spring function of the retainer pin is working and that it secures the load pin. If it does not work, do not use the Chain Tensioner GT before it has been replaced.

7 Maintenance

When performing maintenance or inspection, always read and follow the Safety Precautions.

7.1 Inspection

During service, Lifting equipment are subjected to conditions which affect their safety. Therefore ensure that the equipment is safe for continued use. See Safety Precautions.

Withdraw the Chain Tensioner GT from service and refer the Chain Tensioner GT to a competent person for thorough examination if any of the following is observed:

- The Chain Tensioner GT markings are illegible.
- More than 10% reduction of dimension at any point.
- Cuts, nicks, gouges, cracks, excessive pitting or corrosion, heat discoloration, bends, distortion, or other defects.
- The tensioner is not working. When no load is applied it should be possible to adjust the length of the screws by hand force without the help of the handle.

7.2 Examination

A competent person should thoroughly examine the Chain Tensioner GT at least once every year. The inspection should be carried out more frequently if deemed necessary, taking into consideration the following points.

- Local, national, or branch-specific regulation.
- The service condition of the Chain Tensioner GT.
- Use in demanding environments (such as corrosive, or extreme temperature).
- Use where the Chain Tensioner GT is subjected to repeated loads that may induce metal fatigue.

Maintain records of examinations. Before examination, clean the Chain Tensioner GT so it is free from oil, dirt, and rust.

Any cleaning method which does not damage the parent metal is acceptable. Methods to avoid are those using acids, overheating, removal of metal or movement of metal which may cover cracks or surface defects.

See also Safety Precautions.

7.3 Repair

A competent person with relevant knowledge and technical skills must do the repairs. The product shall only be returned to service after approval by a designated person.

Maintain records of repairs.

Any replacement component or part of the Chain Tensioner GT should be in accordance with the appropriate European Standard for that component or part. Use only original Gunnebo spare parts.

Discard or replace components that are cracked, visibly distorted or twisted, severely corroded or have deposits which cannot be removed.

Remove minor damage such as nicks and gouges by careful grinding or filing. The surface should blend smoothly into the adjacent material without abrupt change in the section. The complete removal of the damage should not reduce the thickness of the section at that point to lesser than the manufacturer's specified minimum dimensions or by more than 10% of nominal thickness of the section.

7.4 End of use/Disposal

Recycle as general steel scrap.