

# Mounting Instructions

Original in compliance with 2006/42/EG

## Connecting links

TWN 1320 and TWN 1920

Grades 8 and 10/XL

Manufacturer:

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- In the event of doubts about use, inspection, maintenance or similar things contact your safety officer or the manufacturer.
- Usage without split sleeves is not allowed. Split sleeve do not stay in contact to other parts.

**THIELE will not be responsible for damage caused through non-observance of the instructions, rules, standards and notes indicated!**  
**As regards quality grade 10/XL THIELE does not give its general approval to the assembly of components stemming from different manufacturers!**

**Working under the influence of drugs or alcohol is strictly forbidden.**

### 1 Beschreibung und bestimmungsgemäße Verwendung

Connecting links are intended for use with sling chain assemblies for the attachment and lifting of loads according EN 818-4 or for lashing chains according EN 12195-3.

They are exclusively meant to connect individual chain sections/legs to each other or to intermediate links or other attachment elements with eyelets and must only be arranged in one load-carrying chain section.

A connecting link consists of two symmetrical halves attached to each other by means of a secured pin. The link is marked with nominal chain size and quality grade, manufacturer's symbol and traceability code.

THIELE connecting links meet EG Machinery Directive 2006/42/EG requirements and feature a safety factor of at least 4 based on Working Load Limit (WLL).

The connecting links are designed to withstand 20 000 dynamic load changes under maximum load conditions. In the event of higher loads (e.g. multi-shift/automatic operation, magnetic spreaders) the Working Load Limit (WLL) must be reduced before the links are put to use.

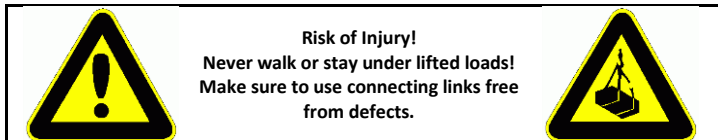
Connecting links must exclusively be used

- within the limits of their permissible working load limit,
- for permissible attachment methods and inclination angles,
- within the temperature limits prescribed,
- by trained and authorized persons.

Any alternating use for lifting and lashing purposes is impermissible!

Connecting links are as a rule not permitted for the transportation of persons.

### 2 Safety Notes



- Operators, fitters, and maintenance personnel must especially observe the Operating Instructions of the sling chain assembly into which the connecting links are to be installed. They have to observe the documentations DGUV V 1, DGUV R 100-500 Chapter 2.8, DGUV R 109-004, DGUV I 209-013 and DGUV I 209-021 issued by the German Employer's Liability Association as well as standard specifications DIN 685-5 and DIN EN 818-6.

- The directions given in these Mounting Instructions and specified documentations relating to safety, assembly, operation, inspection and maintenance must be made available to the respective persons.

- Outside the Federal Republic of Germany the specific provisions issued locally in the country where the items are used must also be observed.

- Make sure these Mounting Instructions are available in a place nearby the product during the time the equipment is used.

Please contact the manufacturer if replacements are needed.

- When performing work make sure to wear your personal protective equipment!

- **Improper assembly and use may cause personal injury and/or damage to property.**

- Assembly and disassembly as well as inspection and maintenance must exclusively be carried out by skilled and authorized persons.

- Structural changes are impermissible (e.g. welding, bending).

- Visually inspect the equipment prior to each use.

- Never use worn-out, bent or otherwise damaged connecting links.

- Never expose connecting links to loads exceeding the specified Working Load Limit.

- When used as locking link in endless chains of identical nominal size the Working Load Limit must be reduced by 20%.

- Do not use force when mounting/positioning the attachment components.

- Avoid sharp edges.

- Do not twist or knot the chains together.

### 3 Commissioning

Prior to using the components for the first time make sure that

- the components comply with the order and have not been damaged,
- test certificate and installation instructions have been provided,
- markings correspond with what is indicated in the documentation,
- documentations are safely kept in an orderly manner.

Dispose of the packing in an environmentally compatible way according to local rules.

### 4 Technical Data

Table includes only series and not customized editions.

Each spare part set includes pin and split sleeve.

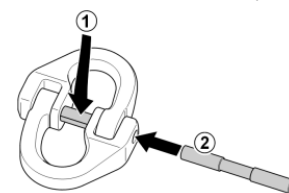
Type	Size	WLL [t]	complete	Spare part sets
THI-LOK TWN 1320	6-8	1,12	F30806	F486012
	7/8-8	1,5	F30816	F486042
	10-8	3,15	F30826	F486072
	13-8	5,3	F30836	F486102
	16-8	8,0	F30846	F486132
	18-8	10	F30850	F48615
	20-8	12,5	F30855	F48617
	22-8	15	F30860	F48619
	26-8	21,2	F30870	F48622
	32-8	31,5	F30880	F48625
XL-LOK TWN 1820	6-10/XL	1,4	F30807	F486013
	8-10/XL	2,5	F30817	F486043
	10-10/XL	4,0	F30827	F486073
	13-10/XL	6,7	F30837	F486103
	16-10/XL	10	F30847	F486133
	22-10/XL	26	F30861	F486191

### 5 Assembly and Disassembly

#### Assembly

Install the connecting link halves in the components to be connected and join both halves.

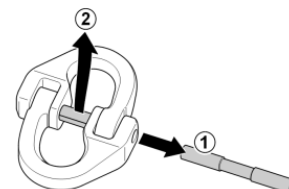
1. Position split sleeve as shown.
2. Push pin up to the split sleeve, align pin bevels to suit split sleeve and drive the pin in using a hammer.
3. Check to make sure split sleeve safely embraces the pin centrally.



**Check the parts to be connected are able to move freely within the connector halves.**

#### Disassembly

1. Use drift to drive the pin out.
2. Remove the split sleeve.
3. Separate connecting link halves from the components they joined.



A set of drifts to TWN 0945 is available by Article No. Z03303.

The split sleeves must only be installed once.

### 6 Storage

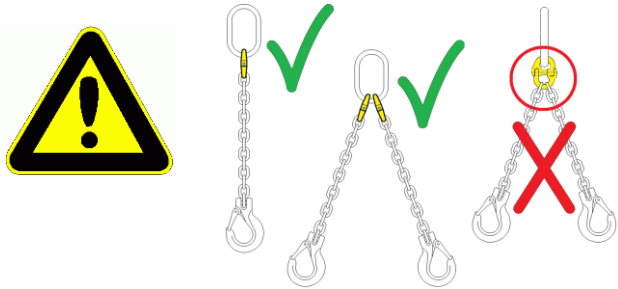
Connecting links must be stored in dry spaces at temperatures ranging between 0 and +40 °C.

## 7 Conditions of Use

In mounted sling/suspension chain assemblies the chains are for example joined to other components by means of connecting links. This way components can be mounted the nominal size of which deviates from that of the chain.

Trade sizes and quality grades of chain and connecting link must always coincide!

When attaching components observe correct position of the connecting link. Relevant forces must act in longitudinal direction.



**If two chain legs are arranged in one connecting link half for alternate use, only one chain leg must be subjected to loads!**

Connecting links must not be used in environments where acids, aggressive or corrosive chemicals or their fumes are present. Hot-dip galvanizing or a galvanic treatment is prohibited as well.

### Application temperature

Type	Temperature	Remaining Working Load Limit
THI-LOK TWN 1320 Gkl. 8	-40 °C < 200 °C	100 %
	200 °C < 300 °C	90 %
	300 °C < 400 °C	75 %
XL-LOK TWN 1820 Gkl. 10/XL	-30 °C < 200 °C	100 %
	200 °C < 300 °C	90 %
	300 °C < 380 °C	60 %

Should the connecting links be exposed to temperatures exceeding the maximum values specified they must no longer be used.

## 8 Inspection, Maintenance, Disposal

Inspections and maintenance and inspection intervals must be arranged for by the Owner!

Inspections must be carried out regularly by competent persons and at least once a year, or more frequently if the links are in heavy-duty service.

After three years at the latest the links must additionally be examined for cracks. A load test shall never be considered a substitute for this examination.

The condition of all attachment components must be documented in the record file during these inspections.

The results of the inspection shall be entered into a document to be prepared when the sling/suspension chain assembly is first used. This document will show characteristic data of the chains and components as well as identity details.

Immediately stop using connecting links that show the following defects:

- Limited hinging capability (halves get stuck),
- Wear in excess of 10%, e.g. in the receiving area of the connecting link halves and of the pin diameter,
- Deformation, elongation, cuts, notches, cracks, pinches,
- Links heated beyond permissible limits,
- Severe corrosion,
- Missing or illegible identification/markings.

### Maintenance

Maintenance work must only be performed by competent persons.

Minor notches and cracks may be eliminated by careful grinding observing the maximum cross section reduction requirement of 10 % and avoid making more severe cuts or scores.

All maintenance activities are to be documented.

### Inspection Service

THIELE offers inspection, maintenance and repair services by trained and competent personnel.

### Disposal

All components and accessories of steel taken out of service are to be scrapped in line with local regulations and provisions.

## 9 Spare Parts

Only use original THIELE-spare parts.

See chapter 5, Technical data.

## 10 Publishing information

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„#“ Changes to previous edition.