

## Installation instructions

**m-connect** tension rod and compression strut systems are of crucial significance as load-bearing components for the load-bearing capacity of the whole construction. Observation of the following instructions is a prerequisite for trouble-free functioning.

If the components in the tension rod system are subsequently subjected to thermal or mechanical treatment, the German / European technical approval loses its validity.

### 1. Delivery condition

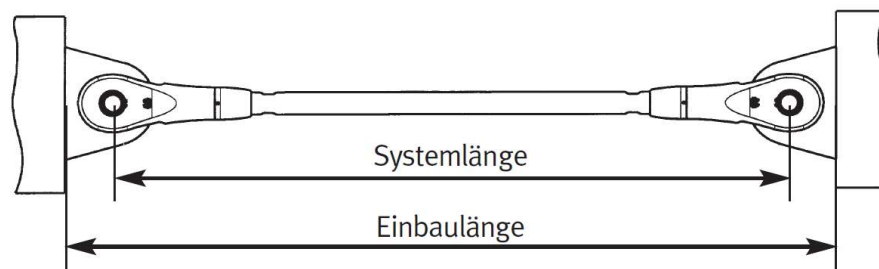
- 1.1 **m-connect** tension rod and compression strut systems are preassembled and supplied as ready-to-install load chains with the corresponding markings.

### 2. Packaging

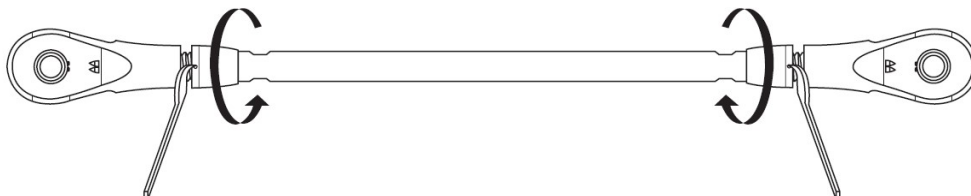
- 2.1 Wooden laths are used to protect the tension rod systems from damage. The delivery packages are wrapped in foil as protection against dust and dirt. Wooden crates are used for the delivery of individual components.
- 2.2 On delivery the components must be inspected for transport damage and protected against moisture by storage in close rooms until assembly. It is not allowed to use damaged parts. Mürmann Gewindetechnik GmbH assumes no liability for damage due to incorrect storage or handling.

### 1. Installation

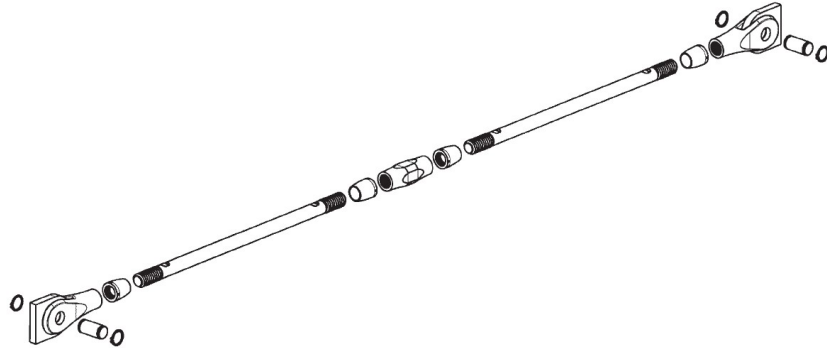
- 1.1 Visually check all components prior to assembly to ensure that they are in flawless condition and it is advisable to check that the installation dimensions correspond with the delivered systems lengths.



- 1.2 Loosen cover nuts, screwing them back a little.

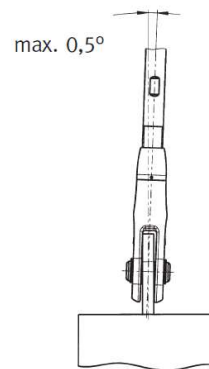


- 1.3 Remove the circlips on the pins at the fork heads and extract the pins. By multipart pins remove the fastening bolts and extract the fixing plate and pin.



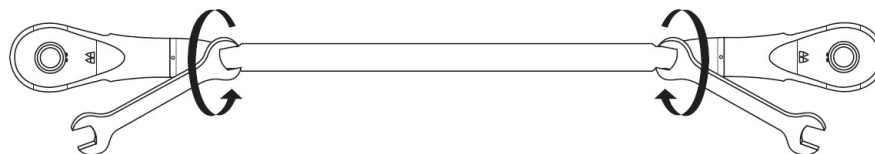
- 1.4 Position the fork heads on the connection lugs and make the pin connection. Sudden loading of the fork heads (e.g. by knocking in the pins with a hammer) is not permissible.

- 1.5 To avoid any bending loads the connection lugs have to be installed in one plane. A rotation of 90° is not allowed. Maximum deviation from axis is 0.5°.



- 1.6 For the installation of the tension rod systems it is required that the fork heads can slide over the lugs from side. This is not given for all lugs and installation situation. In this case a use of center plate or cross sleeve is required.

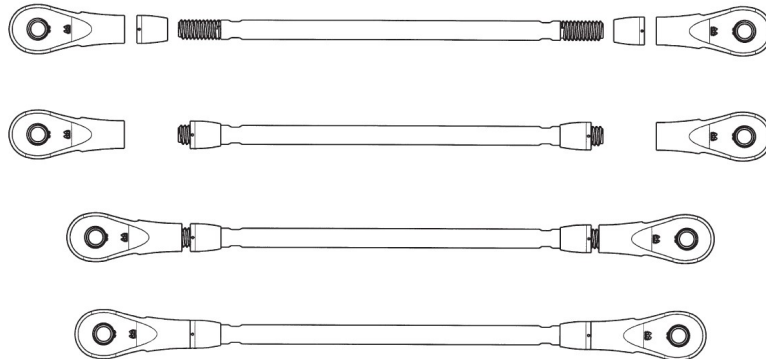
- 1.7 If length adjustment is required, it is only to be made by rotating the tension rod, in this way the engagement depths of the left hand/right hand thread are kept equal and the maximum adjustment possibility is maintained.



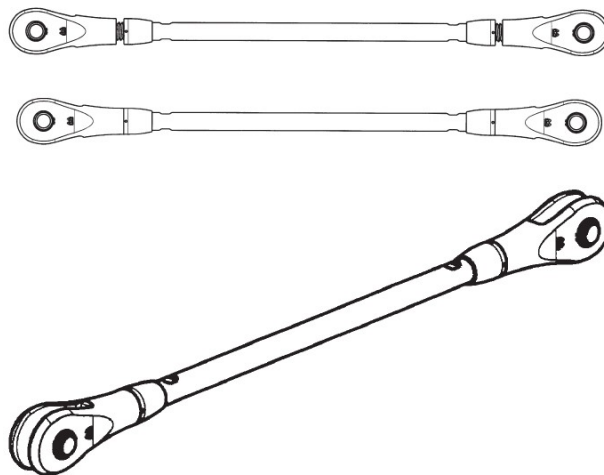
- 1.8 For the proper functioning of the tension rod, the end connection must be free of play. Therefore sufficient prestress must be applied by roation of the rod. It is recommended to turn both ends at the same time.

#### 4.0 After the installation

To ensure that the minimum thread engagement is given the rod threads have to be covered fully by the cover nut.



- 4.1** Tighten the cover nuts. The screw connections are supplied with permanently elastic, silicon-free sealing material. If the tension rod systems are to be used outdoor, the gap between cover nut and tension rod should be filled with a suitable sealant. For outdoor applications the tension rod system 560 should be hot dip galvanized or coated.



- 4.2** The proper installation, the conformity of the installed tension rod systems with the regulations of the European technical approval and the minimum engagement of the threads has to be confirmed in writing.

- 4.3** For maintenance and repair the tension rod systems have to be accessible.

- 4.4** After the installation the tension rod systems have to be checked frequently of corrosion damages. The check had to be confirmed in writing.