

# Installation instructions

## Manual barriers EH 25L – 75L



Translation of original installation and operating instructions

**D-ID: V8\_0 – 11.12**

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# 1 Preface

## 1.1 General notes

These operating instructions must be available on site at all times. It should be read thoroughly by all persons who use, or service the appliances. Improper usage or servicing or ignoring the operating instructions can be a source of danger for persons, or result in material damage. If the meaning of any part of these instructions isn't clear, then please contact ELKA-Torantriebe GmbH u. Co. Betriebs KG before you use the appliance.

This applies to all setup procedures, fault finding, disposal of material, care and servicing of the appliance. The accident prevention regulations and applicable technical regulations (e.g. safety or electrical) and environment protection regulations of the country in which the appliance is used also apply. All repairs on the appliances must be carried out by qualified persons. ELKA-Torantriebe GmbH u. Co. Betriebs KG accepts no liability for damage which is caused by using the appliance for purposes other than those for which it is built.

ELKA-Torantriebe GmbH u. Co. Betriebs KG cannot recognise every possible source of danger in advance. If the appliance is used other than in the recommended manner, the user must ascertain that no danger for himself or others will result from this use. He should also ascertain that the planned use will have no detrimental effect on the appliance itself. The appliance should only be used when all safety equipment is available and in working order. All faults which could be a source of danger to the user or to third persons must be eliminated immediately. All warning and safety notices on the appliances must be kept legible.

All electrical periphery equipment which is connected to the appliance must have a CE Mark, which ensures that it conforms to the relevant EEC regulations. Neither mechanical nor electrical alterations to the appliance, without explicit agreement of the manufacturer, are allowed. All alterations or extensions to the appliance must be carried out with parts which ELKA-Torantriebe GmbH u. Co. Betriebs KG have defined as suitable for such alterations, and be carried out by qualified personnel. Please note that with any alteration of the product, no matter whether mechanical or electrical, the warranty expires and the conformity is revoked. Only the use of ELKA accessories and original ELKA spare parts is allowed. In case of any contravention ELKA disclaims liability of any kind.



### INFORMATION!

The operation of the system within CEN countries must also be conformant with the European safety-relevant directives and standards.

*We reserve the right to make technical improvements without prior notice.*

### 1.1.1 Symbol explanation

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Remarks regarding the safety of persons and the gate opener itself are marked by special symbols. These remarks have to be absolutely observed in order to avoid accidents and material damage.

**DANGER!**

...points to an imminent dangerous situation, which can cause death or serious injuries if it is not avoided.

**WARNING!**

...points to a potentially dangerous situation, which can cause death or serious injuries if it is not avoided.

**ATTENTION!**

...points to a potentially dangerous situation, which can cause minor or slight injuries if it is not avoided.

**ATTENTION!**

...points to a potentially dangerous situation, which can cause property damage if it is not avoided.

**REMARK!**

Important notice for installation or functioning.

### 1.2 Copyright

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The operating manual and the contained text, drawings, pictures, and other depictions are protected by copyright. Reproduction of any kind – even in extracts – as well as the utilization and/or communication of the content without written release certificate are prohibited. Violators will be held liable for damages. We reserve the right to make further claims.

### 1.3 Information regarding installation instruction

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This document is to be used as installation instruction for partly completed machinery (according to machinery directive 2006/42/EG, article 13, (2)).

## **2 Safety**

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### **2.1 General notes on safety**

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The valid regulations and standards have to be observed during installation and operation, e.g. DIN EN 13241-1, DIN EN 12445, DIN EN 12453 etc.

Only the use of spare parts made by the original manufacturer is allowed. Do not put a defective gate opener / barrier into operation.

After set-up (installation) every user of the equipment has to be instructed about the operation and function of the gate opener / barrier.

### **2.2 Notes on safety for the operation**

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Children and not instructed persons are not allowed to operate the barrier.

No persons, objects, or animals are allowed within the range of the barrier movement during opening or closing.

Never reach into moving parts of the barrier.

Drive through the barrier only after complete opening.

### **2.3 Intended use**

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The operational safety can only be ensured when the barrier is used as intended.

After installation, the barriers of the series ES 25 – ES 80 serve as passage control of pedestrian and vehicle paths.

**Any use above and beyond the above mentioned use is prohibited and constitutes improper use.**

## 3 Transportation and storing

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### 3.1 Transportation inspection

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The shipment has to be inspected for transportation damage immediately after receipt. In case of any damage record the type and extent on the delivery receipt or refuse acceptance.

Inform ELKA-Torantriebe immediately in the event of damage.

In case the above points are not observed claims will be denied due to insurance regulations.

### 3.2 Storing

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The barrier has to be stored as follows:



Do not expose the barrier to aggressive substances.



Do not expose the barrier to heat sources.

### 3.3 Lifting heavy loads

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#### **WARNING!**

#### **Risk of injury by lifting heavy loads!**

Lifting heavy loads may cause serious injuries.

- Never lift the barrier single-handedly.
- To lift the barrier use a suitable lifting device.
- Wear suitable safety shoes.

## 4 Technical Data

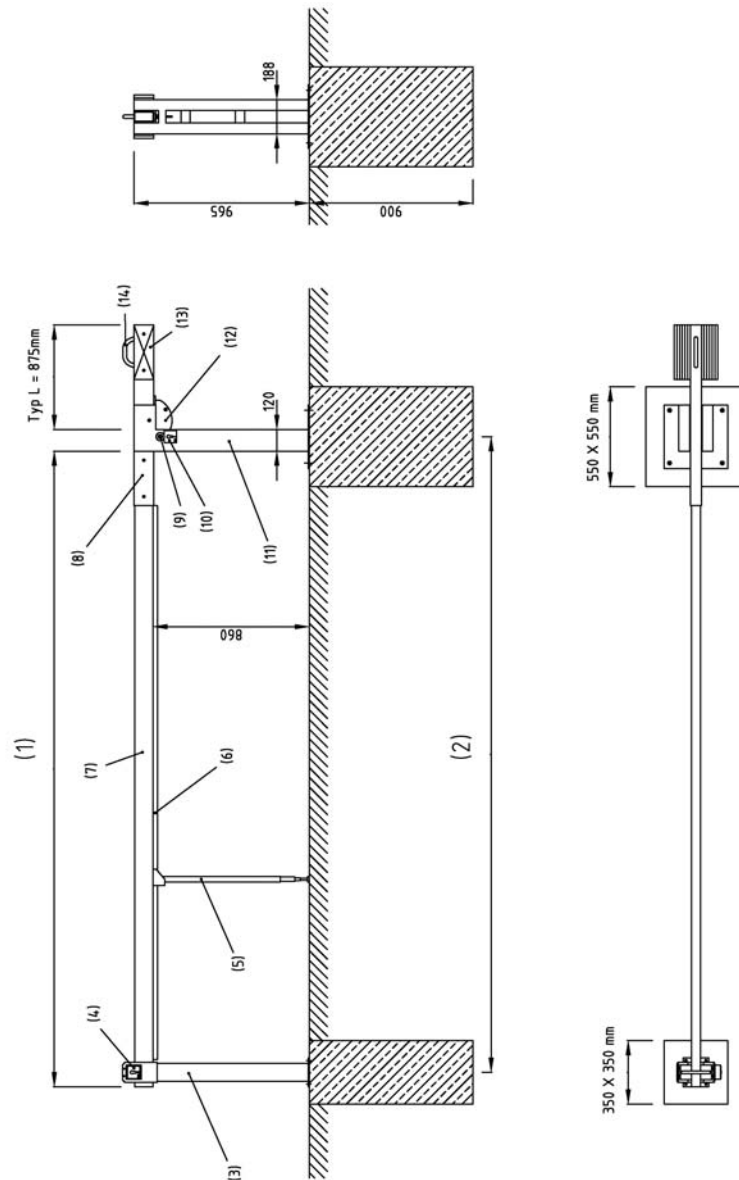
Product	Effective boom length (mm)	Number of counter weights <u>without</u> swinging support	Number of counter weights <u>with</u> swinging support	Total weight <u>without</u> swinging support (kg)	Total weight <u>with</u> swinging support (kg)
EH 25L	2.500	0	2	45	54
EH 30L	3.000	2	4	54	62
EH 35L	3.500	2	4	55	63
EH 40L	4.000	2	4	56	64
EH 45L	4.500	4	6	64	73
EH 50L	5.000	6	8	73	81
EH 55L	5.500	12	14	102	110
EH 60L	6.000	14	16	110	119
EH 65L	6.500	16	18	119	127
EH 70L	7.000	18	20	127	136
EH 75L	7.500	20	22	136	145

Table 1



For a boom length of more than 5.000mm a stabilisation rope is absolutely necessary! The additional number of counter weights is already taken into consideration in the above table.

## 5 Installation dimensions



Drawing 1

- |                                     |                      |
|-------------------------------------|----------------------|
| (1) Effective length = Boom length  | (8) Boom connector   |
| (2) Foundation middle = Boom length | (9) Catch bolt       |
| (3) Fixed support                   | (10) Lock            |
| (4) Lock                            | (11) Barrier stand   |
| (5) Swinging support                | (12) Bolt disc       |
| (6) Protective rubber tube          | (13) Counter weights |
| (7) Baum                            | (14) Handle          |



## 6 Installation



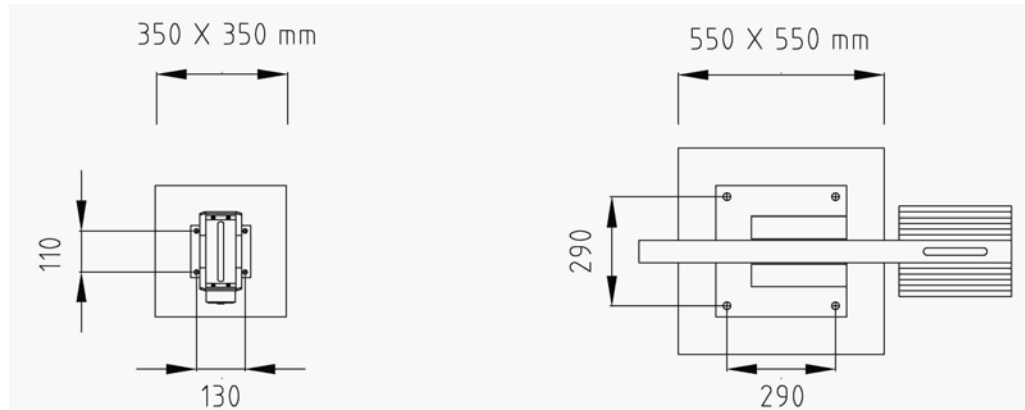
### REMARK!

The foundation has to be frost-free with a horizontal surface of 550mm x 550mm for the barrier stand and 350mm x 350mm for the fixed support (optional).



### REMARK!

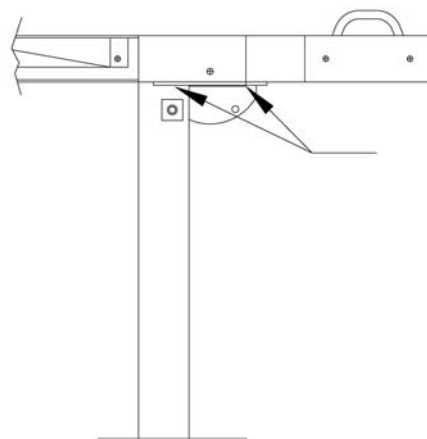
For the barrier foundation we recommend a concrete strength class of C20/25 (or higher) and the use of chemical dowels (M12).



Drawing 2

1. Use either bolts to cast into the foundation or after the foundation is hardened, drill holes for heavy duty dowels. Please make sure the drilling holes for the fixed support are aligned correctly (130mm / 110mm).
2. Secure the barrier stand and the fixed support (optional) on the foundation.
3. Disengage and close the barrier. Please engage the barrier in this position.
4. Connect the boom (cut the boom length if required). Please note that a stabilisation rope is necessary for a boom length of 5,000mm and longer.
5. Fasten the counter weights onto the boom connector. For the quantity of weights please see table under paragraph 4 - Technical Data.
6. Open and close the barrier a few times. Make sure it blocks correctly in the end positions.

### 6.1 Vandalism protection

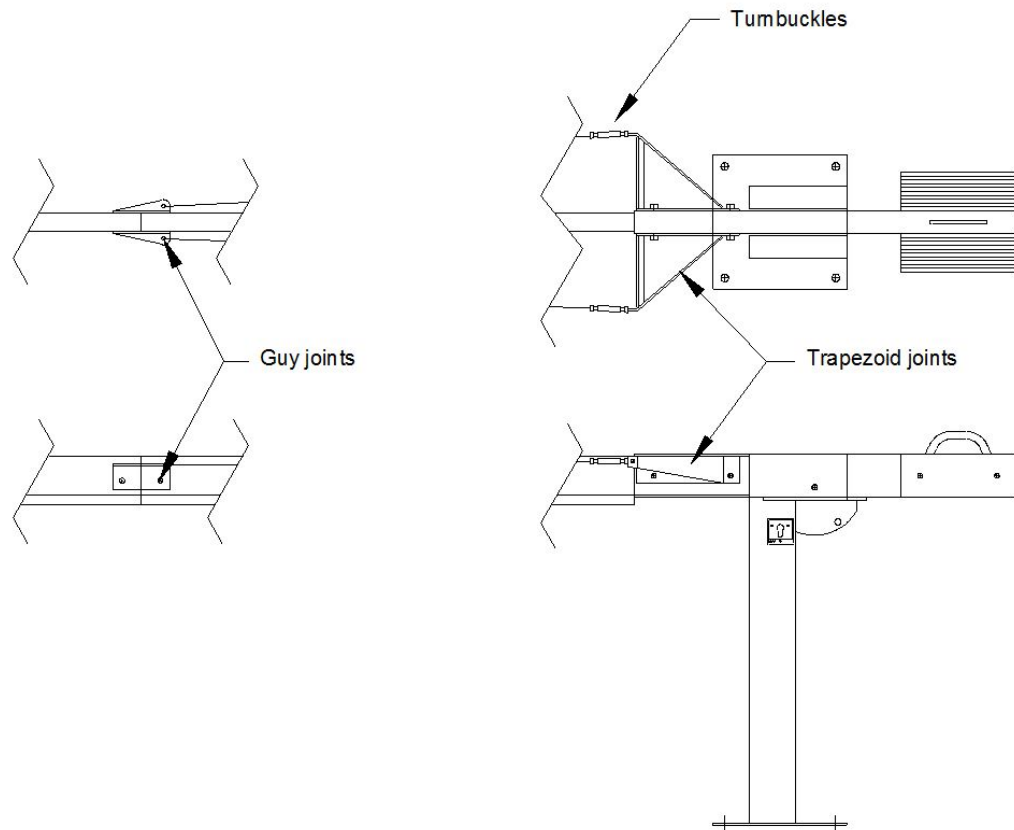


Drawing 3



The connection screws of the bolt disc represent a vandalism protection (predetermined braking point). They prevent greater damage to the mechanical parts in case the boom is forced open by pushing. The connection screws should be replaced with equivalent screws only (DIN 912 – M6 x 25 – 8.8).

## 6.2 Installing the stabilisation rope

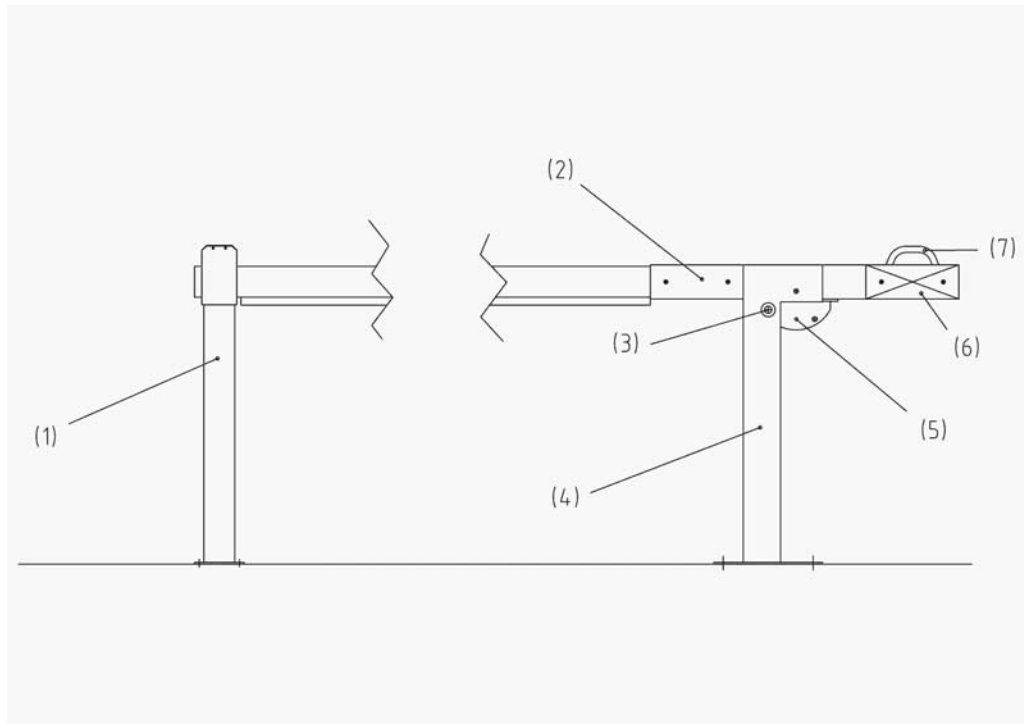


*Drawing 4*

1. Mount the trapezoid joints at the boom connector left and right with the screws of the barrier boom. Make sure the alignment is correct (see right side of drawing).
2. Screw the guy joints together with the boom extension onto the barrier boom. Make sure the alignment is correct (see left side of drawing).
3. Mount the stabilisation ropes (1x left, 1x right) as follows: Connect one end of the wire rope (with dead-eye) to the guy joint, the other end to the turnbuckle. The turnbuckle has to be mounted to the trapezoid joint.
4. Using the turnbuckles tighten both ropes evenly.

## 7 Operation

### 7.1 Standard-Barrier



*Drawing 5*

- |                    |                     |
|--------------------|---------------------|
| (1) Fixed support  | (5) Bolt disc       |
| (2) Boom connector | (6) Counter weights |
| (3) Catch bolt     | (7) Griff           |
| (4) Barrier stand  |                     |

#### **Opening:**

1. Pull the catch-bolt out of the bolt-disc.
2. Push the boom connector down using the handle. Move the barrier boom into a vertical position, until the catch-bolt engages into the bolt disc again.

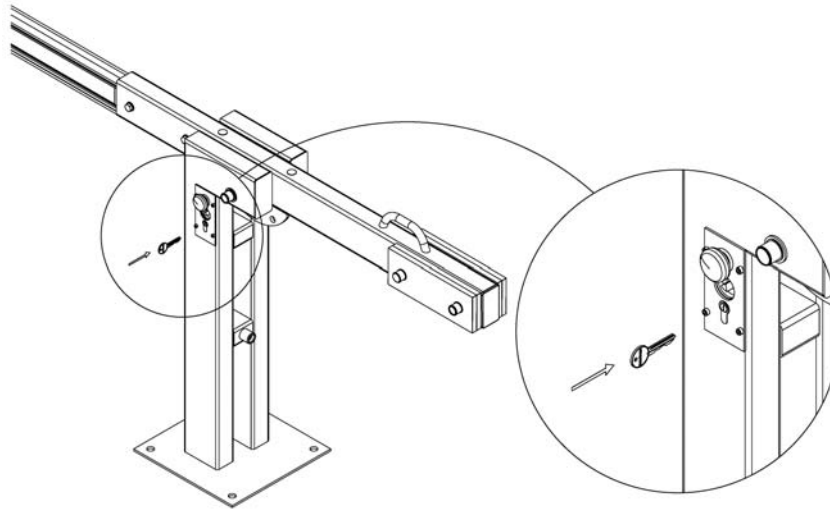
#### **Closing:**

1. Pull the catch-bolt out of the bolt-disc.
2. Pull the boom connector up using the handle. Move the barrier boom into a horizontal position, until the catch-bolt engages into the bolt disc again.

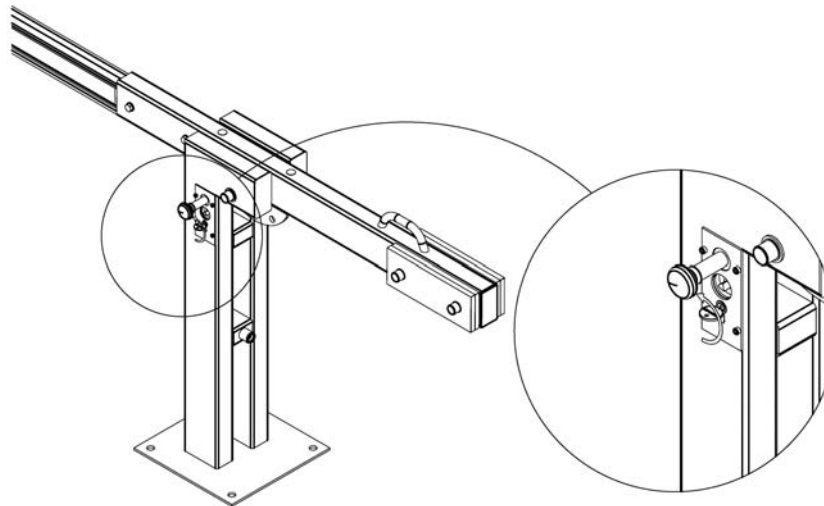
## 7.2 Barrier with cylinder lock with forced closure and fire emergency release at the barrier stand

### Opening with cylinder lock:

1. Unlock the cylinder lock at the barrier stand by turning the cylinder lock key approx. 180° to the left.

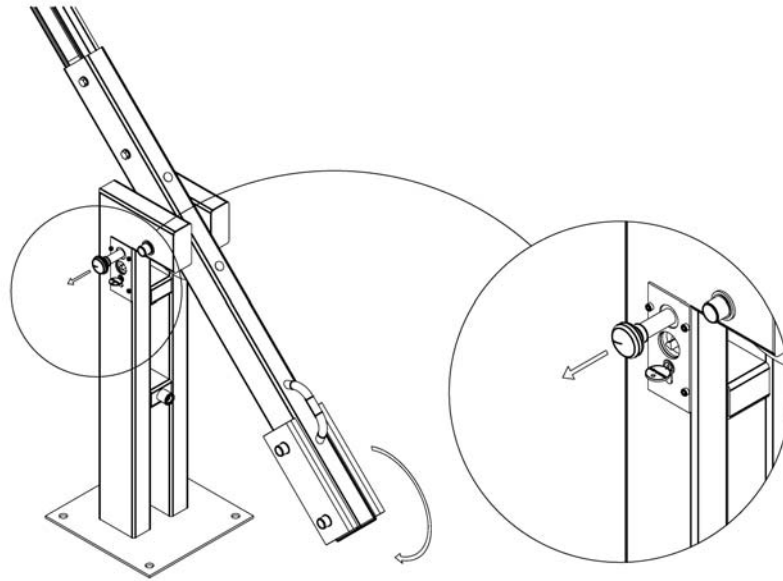


*Drawing 6*



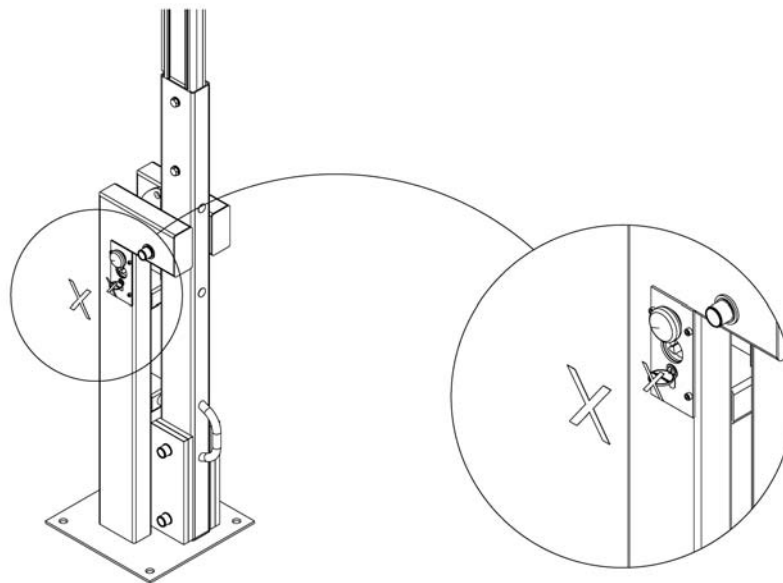
*Drawing 7*

2. Pull the catch-bolt out of the bolt disc and push the boom connector downwards using the handle. Move the barrier boom into a vertical position until the catch-bolt engages into the bolt disc again.



*Drawing 8*

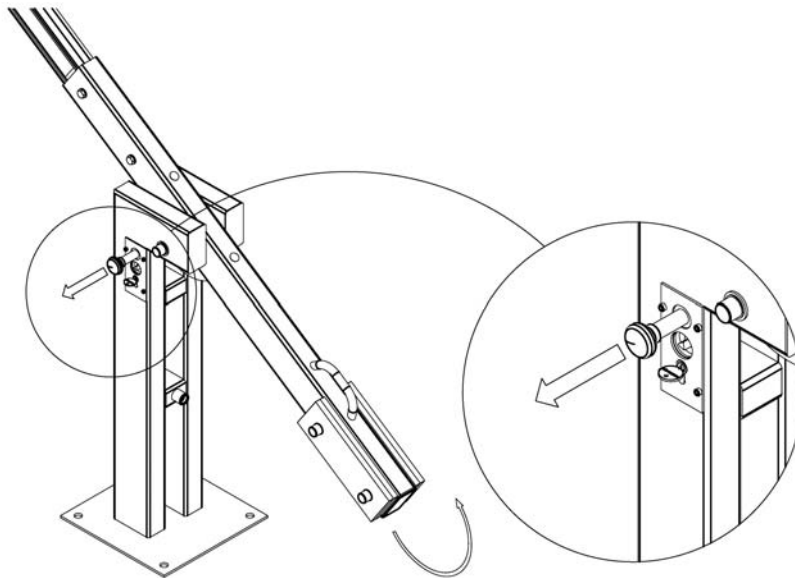
3. This position does not allow to remove the cylinder lock key from the lock (forced closure).



*Drawing 9*

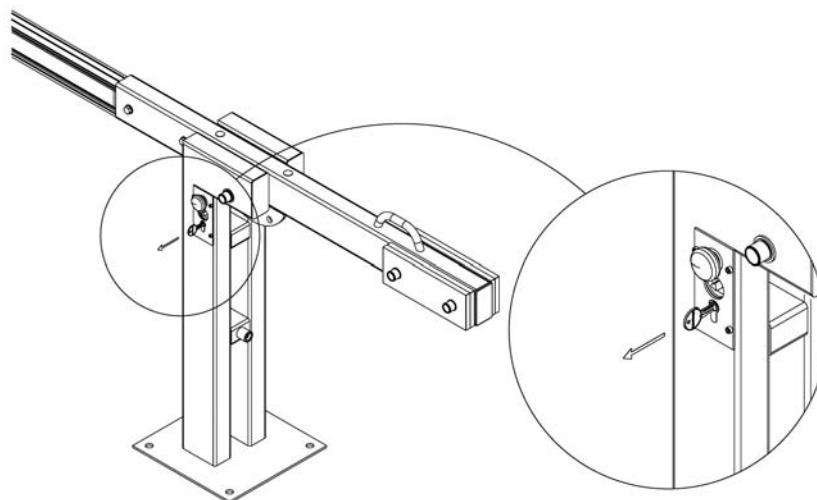
**Closing with cylinder lock:**

1. Pull the catch-bolt out of the bolt disc. Pull the boom connector upwards using the handle. Move the barrier boom into a horizontal position until the catch-bolt engages into the bolt disc again.



*Drawing 10*

2. This position allows to remove the cylinder lock key from the lock.

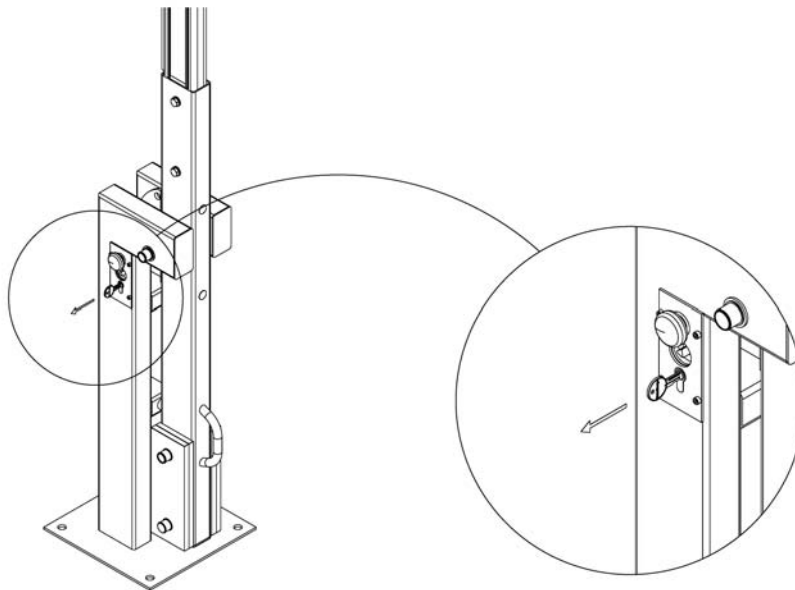


*Drawing 11*

### 7.3 Barrier with cylinder lock without forced closure and without fire emergency release at the barrier stand

#### Opening with cylinder lock:

1. Unlock the cylinder lock at the barrier stand by turning the cylinder lock key approx. 180° to the left and pull the catch-bolt out of the bolt disc.
2. Push the boom connector downwards using the handle. Move the barrier boom into a vertical position until the catch-bolt engages into the bolt disc again.
3. This position allows to remove the cylinder lock key from the lock.



Drawing 12

#### Closing with cylinder lock:

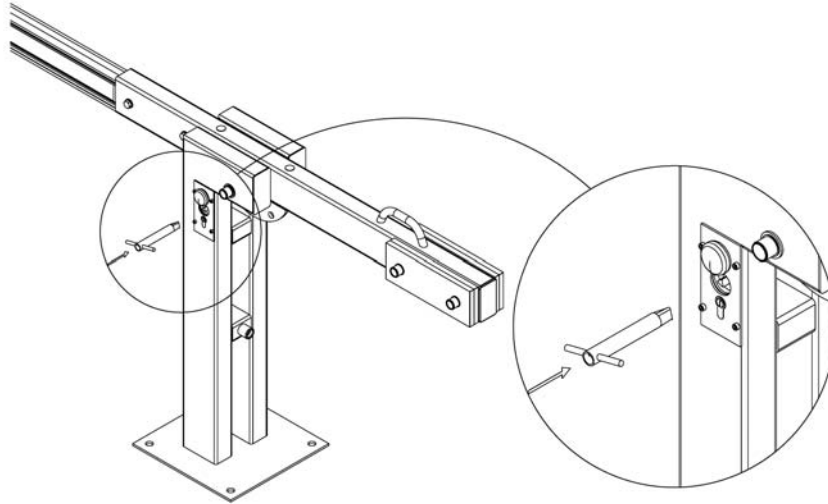
1. Unlock the cylinder lock at the barrier stand by turning the cylinder lock key approx. 180° to the left.
2. Pull the catch-bolt out of the bolt disc and push the boom connector upwards using the handle. Move the barrier boom into a horizontal position until the catch-bolt engages into the bolt disc again.
3. This position allows to remove the cylinder lock key from the lock.



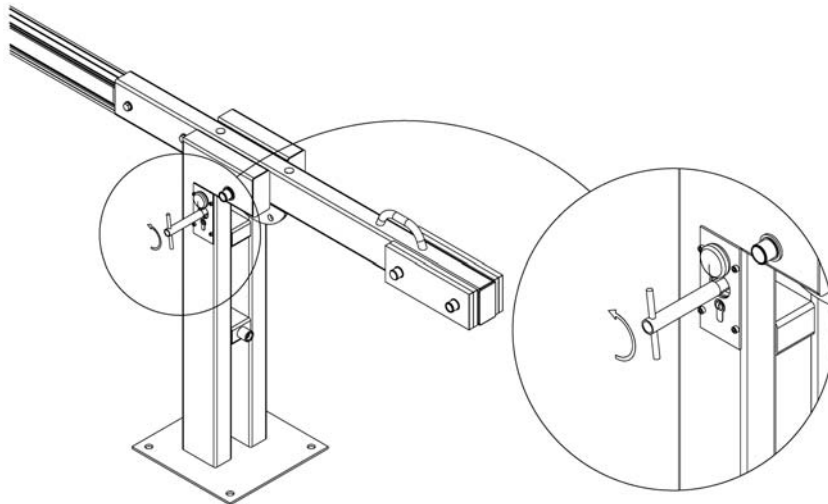
## 7.4 Barrier with cylinder lock with / without forced closure and fire emergency release at the barrier stand

### Opening with fire emergency release:

1. Unlock the fire emergency release lock at the barrier stand by turning the fire emergency release key approx. 180° to the left.

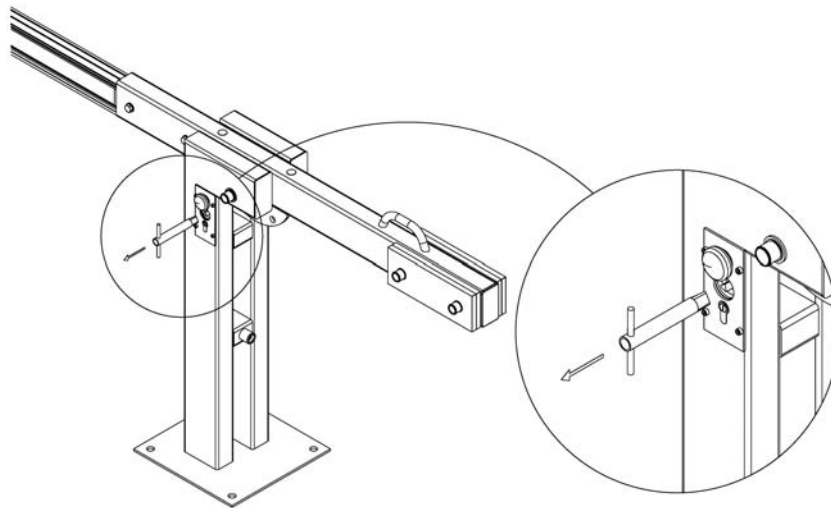


Drawing 13



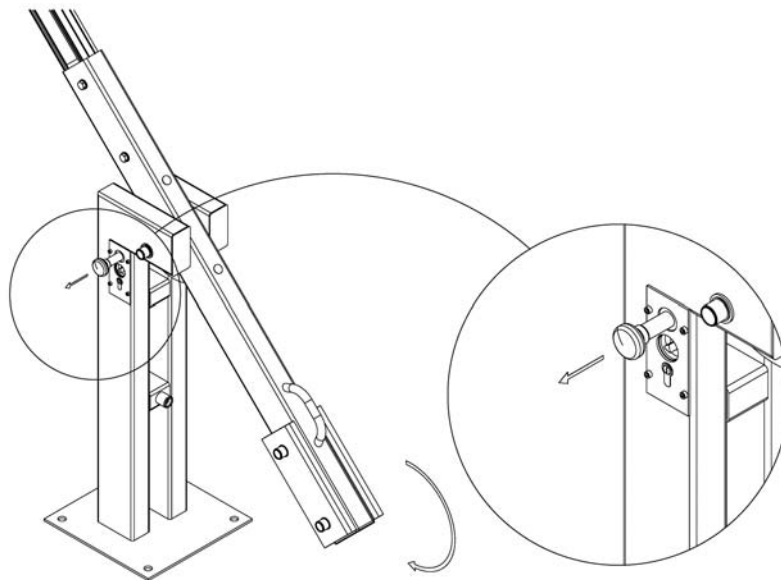
Drawing 14

2. Remove the fire emergency release key from the lock.



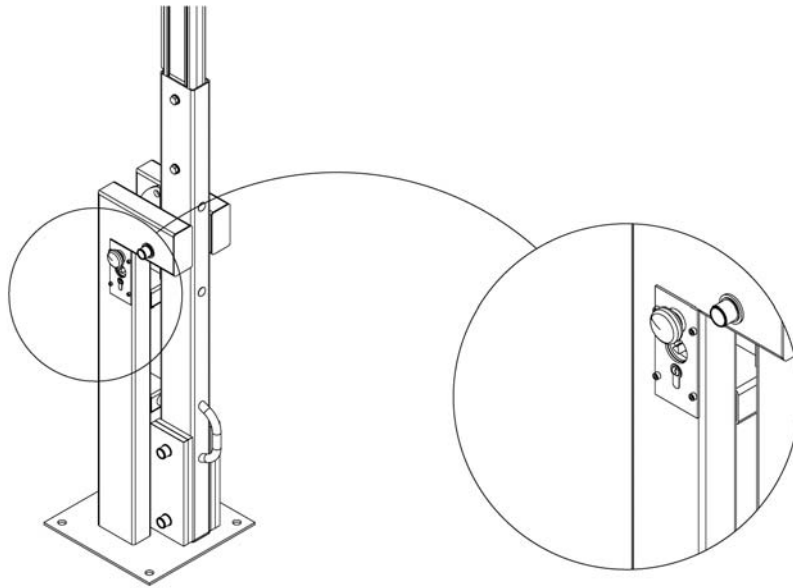
*Drawing 15*

3. Pull the catch-bolt out of the bolt disc. Push the boom connector downwards using the handle.



*Drawing 16*

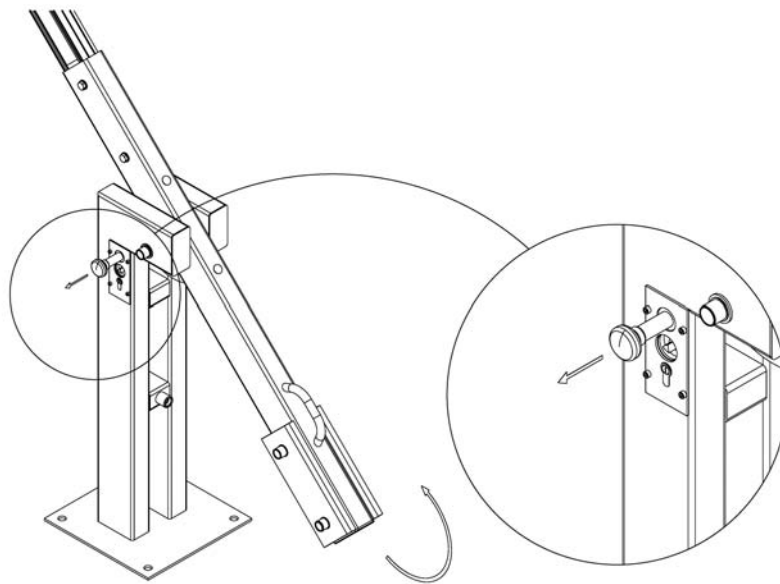
4. Move the barrier boom into a vertical position until the catch-bolt engages into the bolt disc again.



Drawing 17

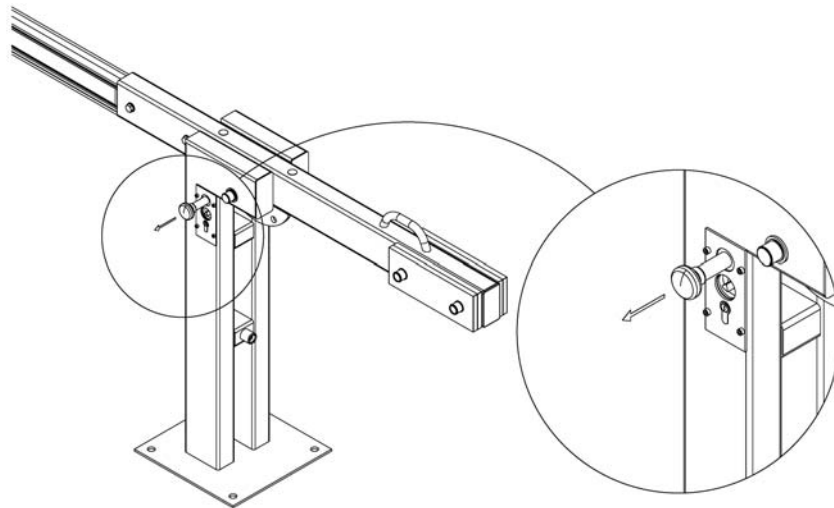
**Closing:**

1. Pull the boom connector upwards using the handle. Move the barrier boom into a horizontal position until the catch-bolt engages into the bolt disc again.



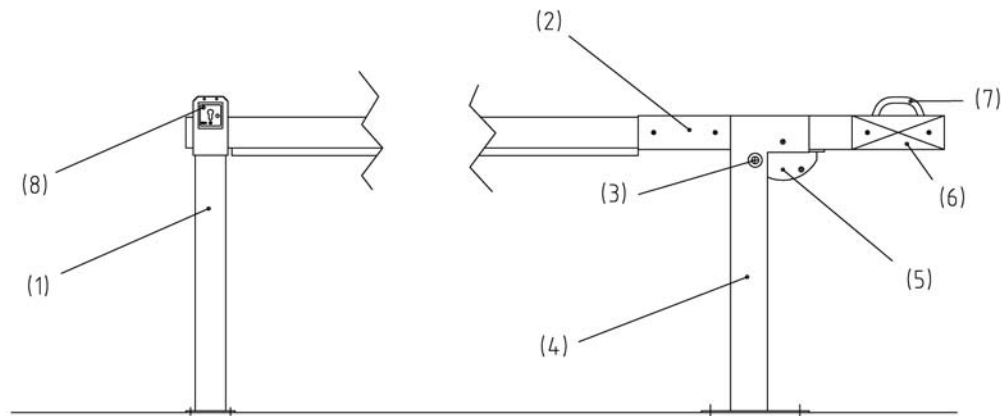
Drawing 18

2. Pull the catch-bolt until the mechanism snaps in audibly.



*Drawing 19*

## 7.5 Barrier with cylinder lock or fire emergency release at the barrier stand or at the fixed support



Drawing 20

- |                    |                     |
|--------------------|---------------------|
| (1) Fixed support  | (5) Bolt disc       |
| (2) Boom connector | (6) Counter weights |
| (3) Catch bolt     | (7) Handle          |
| (4) Barrier stand  | (8) Lock            |

### Opening:

1. Unlock, depending on the version, the cylinder lock or the fire emergency release at the barrier stand or at the fixed support.
2. When using locks at the fixed support, first pull the lockage bolt out of the fork of the support.
3. Pull the catch-bolt out of the bolt-disc.
4. Push the boom connector down using the handle. Move the barrier boom into a vertical position, until the catch-bolt engages into the bolt disc again.
5. Lock the cylinder lock or the fire emergency release at the barrier stand. When using locks at the fixed support, return the lockage bolt into the fork of the support and lock it again with the cylinder lock or with the fire emergency release.

**Closing:**

1. Unlock, depending on the version, the cylinder lock or the fire emergency release at the barrier stand or at the fixed support.
2. When using locks at the fixed support, first pull the lockage bolt out of the fork of the support.
3. Pull the catch-bolt out of the bolt-disc.
4. Pull the boom connector up using the handle. Move the barrier boom into a horizontal position, until the catch-bolt engages into the bolt disc again.
5. Lock the cylinder lock or the fire emergency release at the barrier stand. When using locks at the fixed support, return the lockage bolt into the fork of the support and lock it again with the cylinder lock or with the fire emergency release.

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