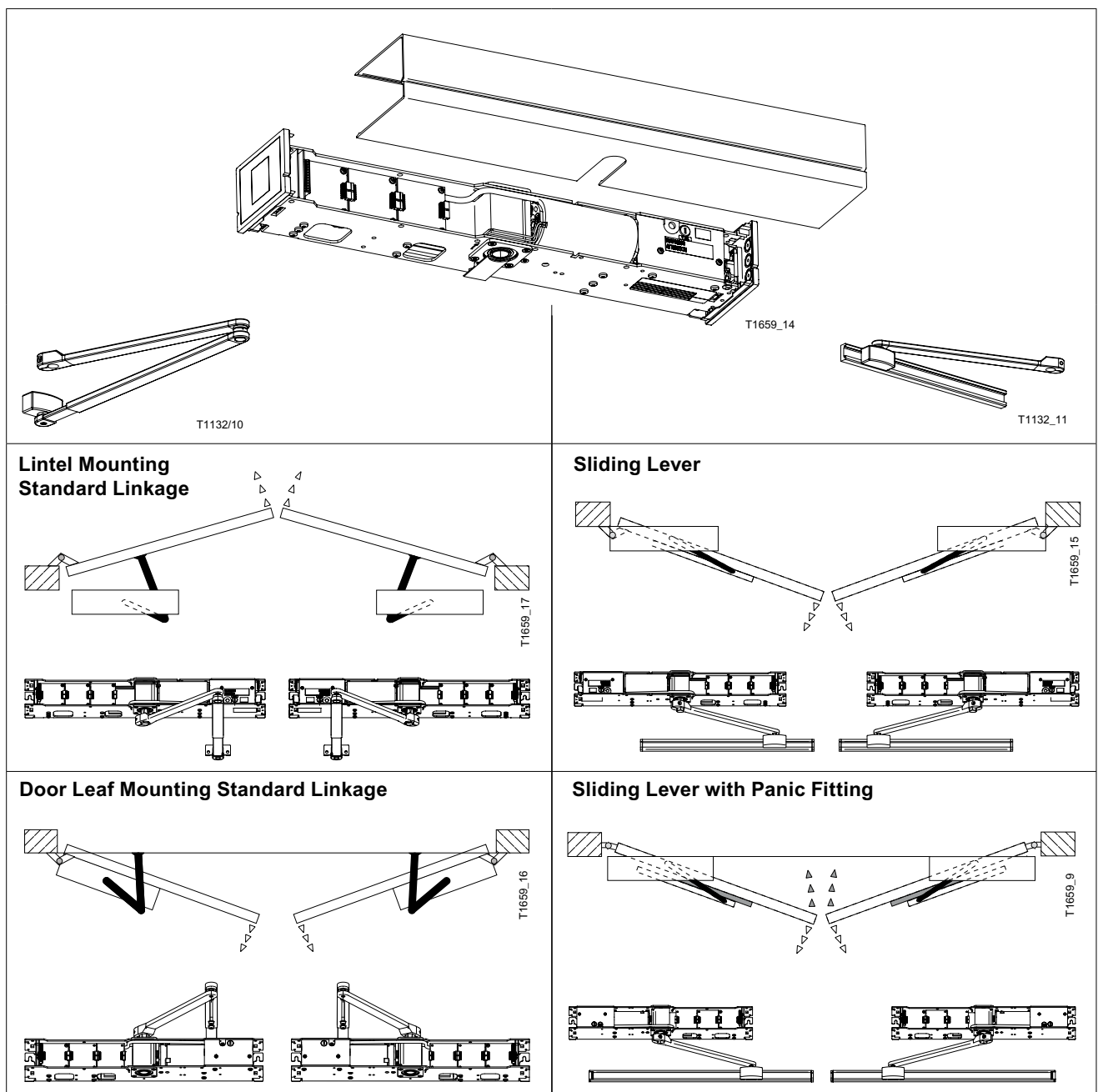


<b>T-1659 e</b>	<b>Installation on Site</b>	<b>★★★★★</b> <b>TORMAX</b> AUTOMATIC  TORMAX   CH-8180 Bülach www.tormax.com info@tormax.com
Area of application	<b>TORMAX 1102, 1201</b> Swing Door Drive	
Release	9 Mai 2018	
Use	Installation	

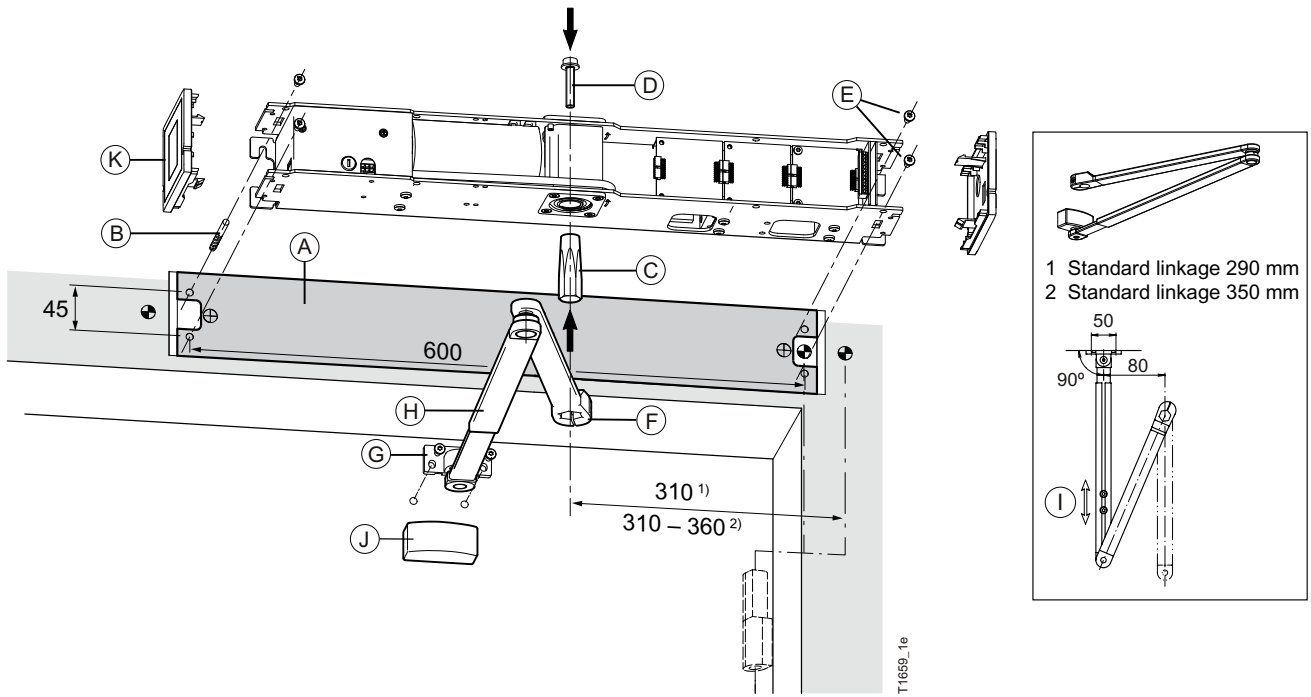
## Contents

Overview of Mounting Methods	1	Removing the Drive Shaft	7
Lintel Mounting Standard Linkage	2	Marking	7
Door Leaf Mounting Standard Linkage	3	Commissioning	7
Sliding Lever	4		
Sliding Lever with Panic Fitting	5		
Mechanical Adjustment	6		

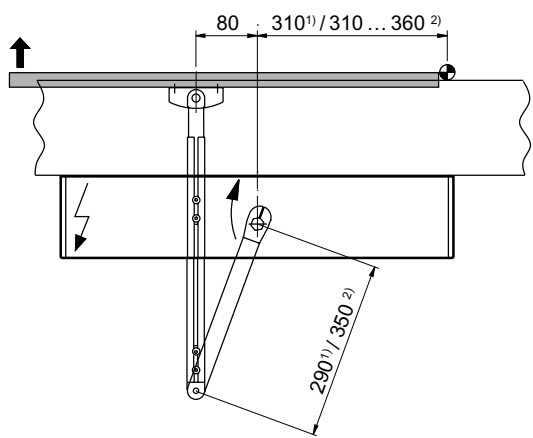
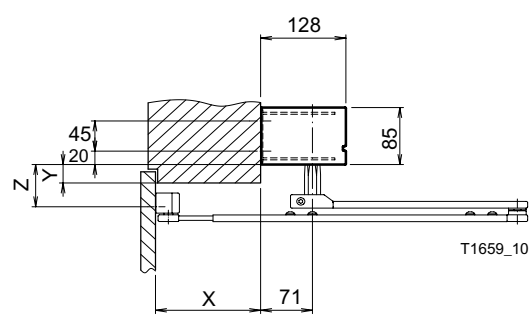
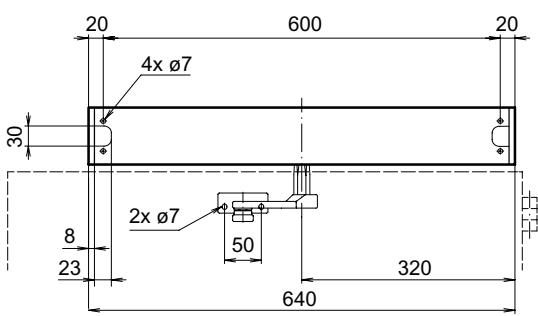
## Overview of Mounting Methods



# Lintel Mounting Standard Linkage



- A) Glue on template (position horizontal depending on linkage <sup>1)</sup> or <sup>2)</sup>, vertically see dimension Y). Consider the overview on page 1 for correct installation.
  - B) Drill holes for screw diameter 6 mm.
  - C) Insert drive shaft into output shaft. Matching side see arrow for opening direction.
  - D) Tighten hexagon-socket screw only so much that the drive shaft can still be turned by hand. The drive shaft is screwed tight during commissioning.
  - E) Bolt down the drive at the lintel.
  - F) Attach and screw tight the drive lever to the drive shaft.
  - G) Attach the bearing block to the door leaf in accordance with the dimensional specifications.
  - H) Attach the adjustment member with loosened screws to the drive lever and the bearing block.
  - I) Turn the drive lever in opening direction while the door leaf closed until the adjustment member is at right angle with the door leaf. Tighten screws of the adjustment member in this position.
  - J) Attach cover of the bearing block.
  - K) Mount side plates.
- Perform commissioning according to T-1654.

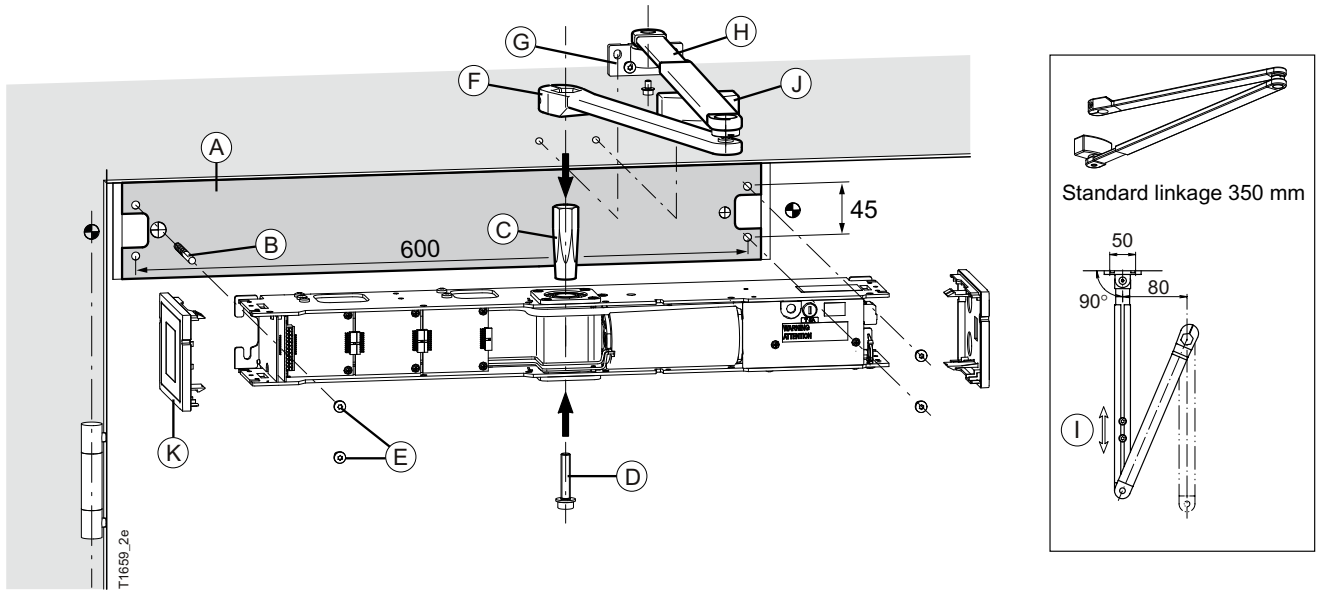


X <sup>1)</sup>	-40 ... +100	+100 ... +240
X <sup>2)</sup>	-100 ... +40	+40 ... +180
L	L = 291 ... 436	L = 436 ... 581

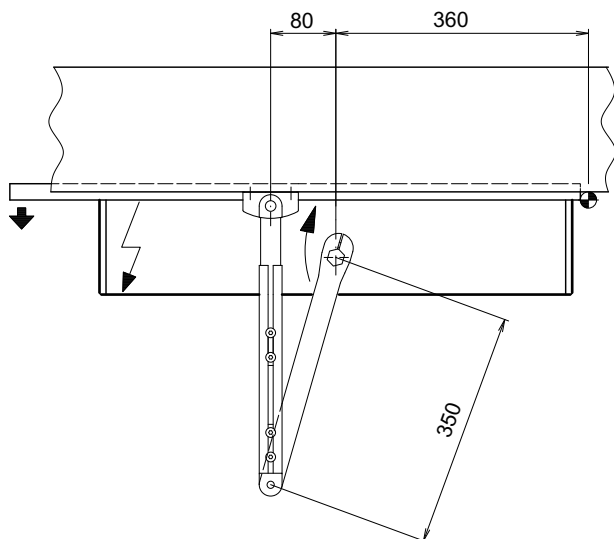
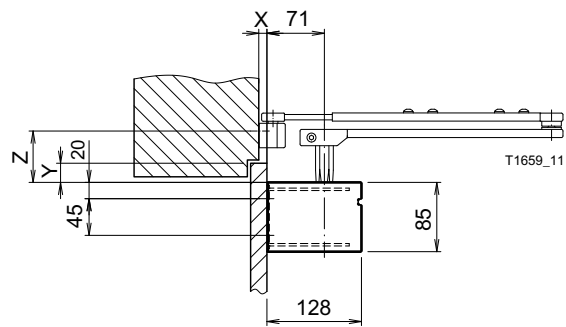
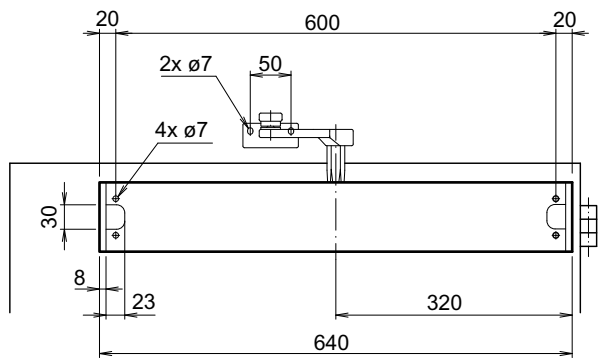
Y	0 ... 10	0 ... 29	0 ... 70
Z	33	52	93
	63	82	123

<sup>1)</sup> Standard linkage 290 mm  
<sup>2)</sup> Standard linkage 350 mm

# Door Leaf Mounting Standard Linkage



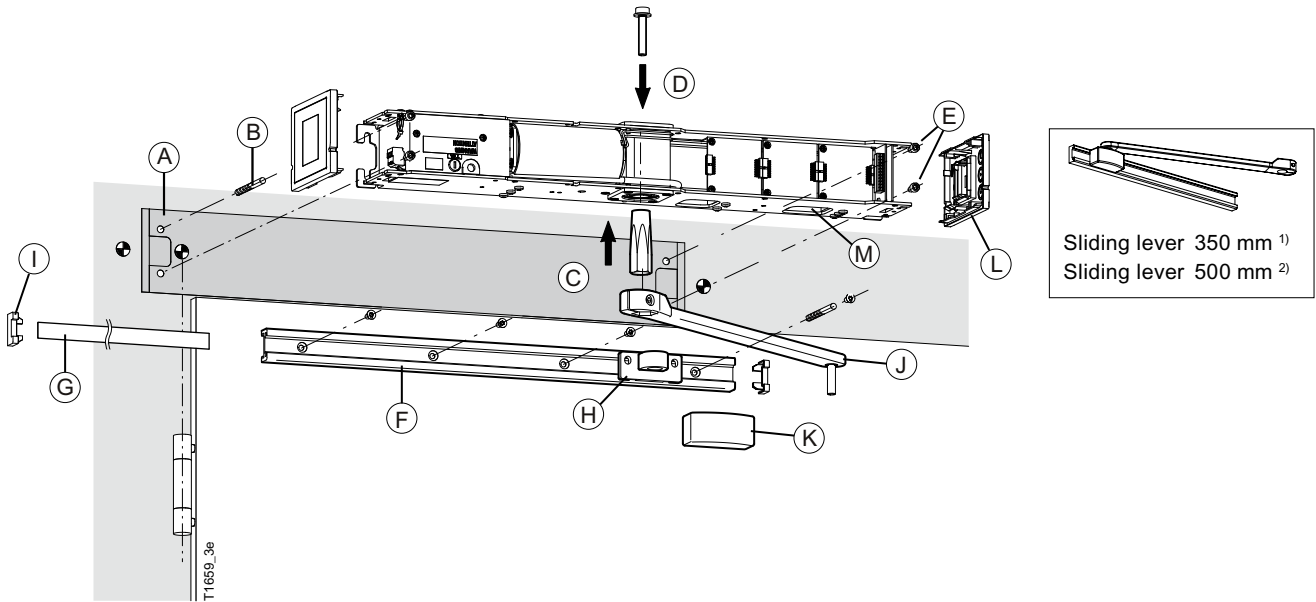
- A) Glue on template (position vertically see dimension Y). Consider the overview on page 1 for correct installation side.
  - B) Drill holes for screw diameter 6 mm.
  - C) Insert drive shaft into output shaft. Matching side see arrow for opening direction.
  - D) Tighten hexagon-socket screw only so much that the drive shaft can still be turned by hand. The drive shaft is screwed tight during commissioning.
  - E) Bolt down the drive at the door leaf.
  - F) Attach and screw tight the drive lever to the drive shaft.
  - G) Attach the bearing block to the lintel in accordance with the dimensional specifications.
  - H) Attach the adjustment member with loosened screws to the drive lever and the bearing block.
  - I) Turn the drive lever in opening direction while the door leaf closed until the adjustment member is at right angle with the door leaf. Tighten screws of the adjustment member in this position.
  - J) Attach cover of the bearing block.
  - K) Mount side plates.
- Perform commissioning according to T-1654.



X	-100 ... +40	+40 ... +180
L	L = 291 ... 436	L = 436 ... 581

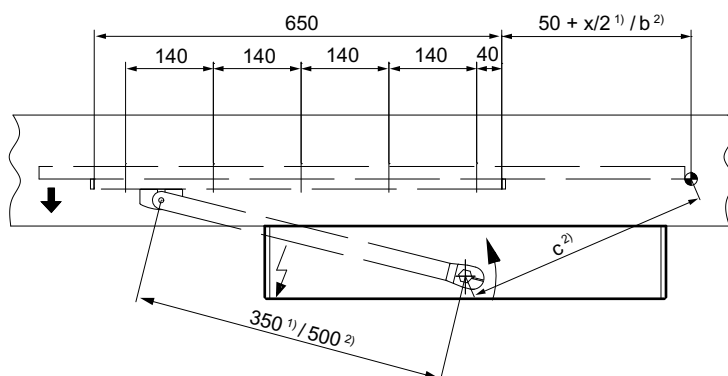
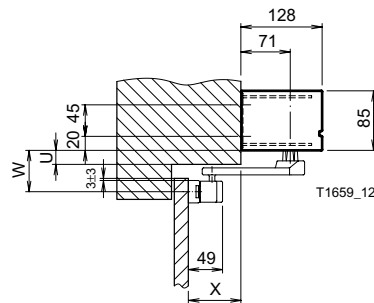
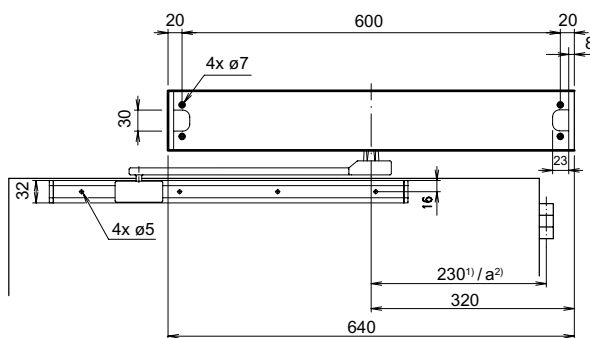
Y	0 ... 10	0 ... 29	0 ... 70
Z	33	52	93
	63	82	123


# Sliding Lever



Sliding lever 350 mm <sup>1)</sup>  
Sliding lever 500 mm <sup>2)</sup>

- A) Glue on template (position horizontal depending on linkage <sup>1)</sup> or <sup>2)</sup>, vertically see dimension U). Consider the overview on page 1 for correct installation side.
  - B) Drill holes for screw diameter 6 mm.
  - C) Insert drive shaft into output shaft. Matching side see arrow for opening direction.
  - D) Tighten hexagon-socket screw only so much that the drive shaft can still be turned by hand. The drive shaft is screwed tight during commissioning.
  - E) Bolt down the drive at the lintel.
  - F) Mount the slide rail onto the door leaf in accordance with the dimensional specifications.
  - G) Insert the covering profile.
  - H) Insert the bearing block into the slide rail.
  - I) Install the side parts of the slide rail.
  - J) Attach the drive lever to the drive shaft and move it up to the operator. Insert the front end completely into the bearing block and thereafter screw tight the drive lever.
  - J) Attach cover of the bearing block.
  - K) Mount side plates.
- Perform commissioning according to T-1654.

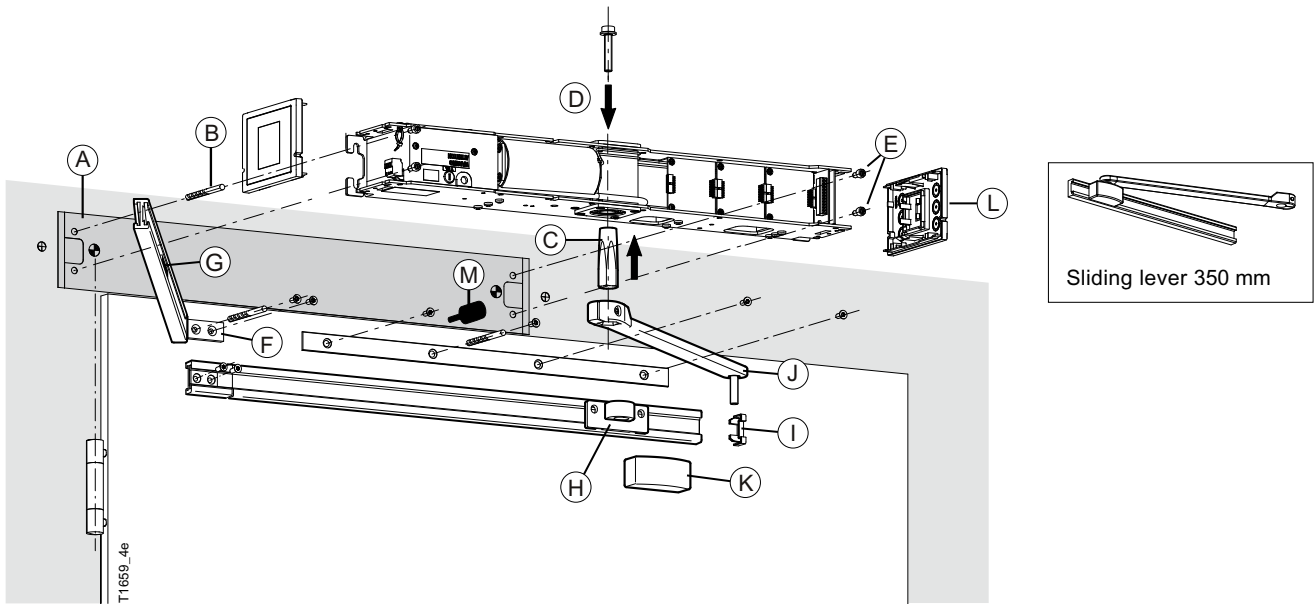


X	0 ... + 150		
U	0 ... 20	0 ... 39	0 ... 80
W	59 ± 3	78 ± 3	119 ± 3
	63	82	123

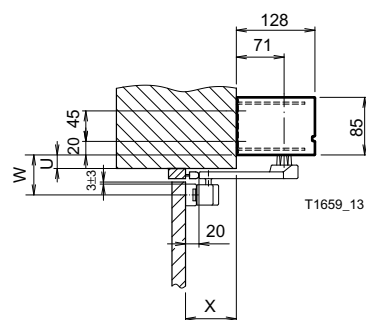
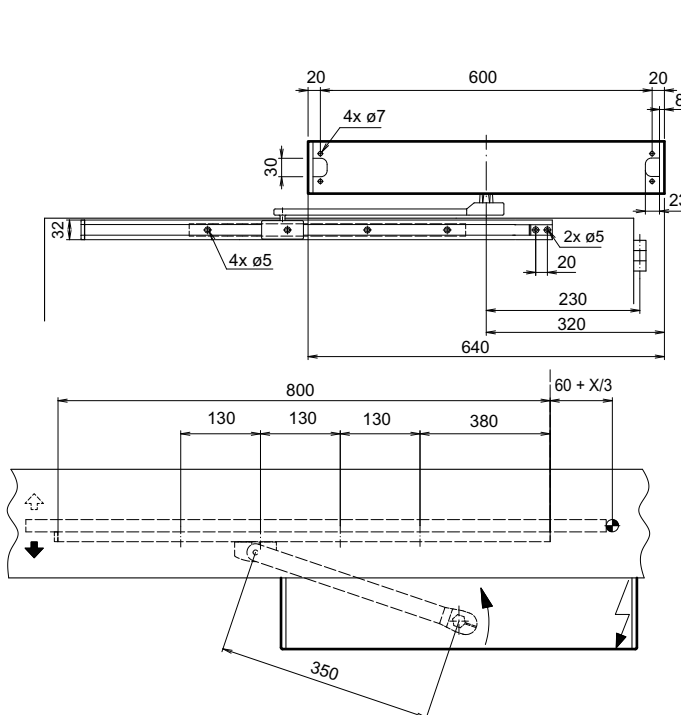
a <sup>2)</sup>	230 ... 360	
b <sup>2)</sup>	c - 90	$\sqrt{a^2 + (x + 80)^2} - 90$
d min. <sup>2)</sup>	c + 570	$\sqrt{a^2 + (x + 71)^2} - 570$


<sup>1)</sup> Sliding lever 350 mm  
<sup>2)</sup> Sliding lever 500 mm

# Sliding Lever with Panic Fitting



- A) Glue on template (vertical position see dimension U). Consider the overview on page 1 for correct installation.
  - B) Drill holes, diameter 6 mm.
  - C) Insert drive shaft into output shaft. Matching side see arrow for opening direction.
  - D) Tighten hexagon-socket screw only so much that the drive shaft can still be turned by hand. The drive shaft is screwed tight during commissioning.
  - E) Bolt down the drive at the lintel.
  - F) Attach hinge/slide rail of the panic fitting to the door leaf in accordance with the dimensional specifications.
  - G) Adjust the desired retaining force by shifting the magnet.
  - H) Insert the bearing block into the slide rail.
  - I) Install the side parts of the slide rail.
  - J) Attach the drive lever to the drive shaft and move it up to the drive. Insert the front end completely into the bearing block and thereafter screw tight the drive lever.
  - K) Attach cover of the bearing block.
  - L) Mount side plates.
  - M) Mount rubber cushion to the lintel so that the drive lever is stopped when the panic fitting is triggered. Set door end stop on panic opening side at max. 90°.
- Perform commissioning according to T-1654.



X	0 ... + 150		
U	0 ... 20	0 ... 39	0 ... 80
W	59 ± 3	78 ± 3	119 ± 3
	63	82	123

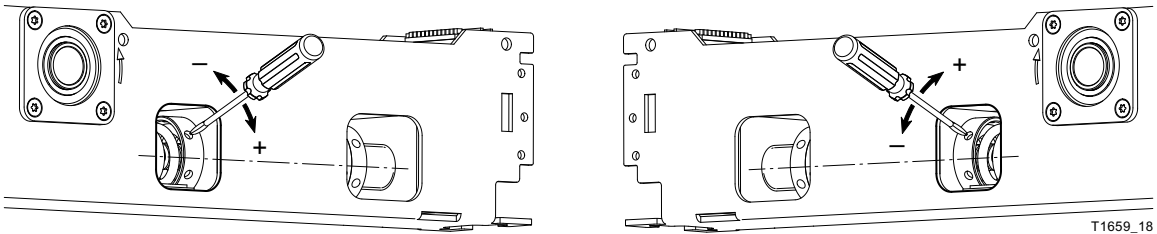
# Mechanical Adjustment

## Adjusting OPEN End Stop

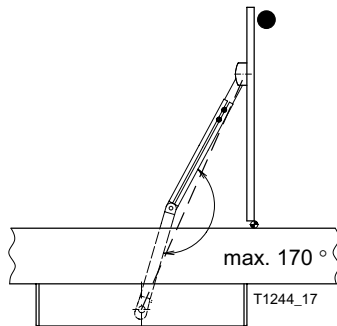
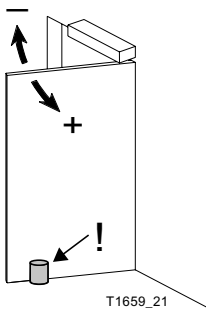
The setting can only be done after commissioning with coupled linkage and accurate spring preload.

The internal OPEN end stop limits the opening of the door in the search run or e.g. in manual operation. It must not be hit in automatic operation!

An external doorstopper must be installed if high wind loads are possible.



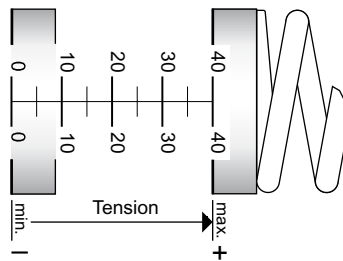
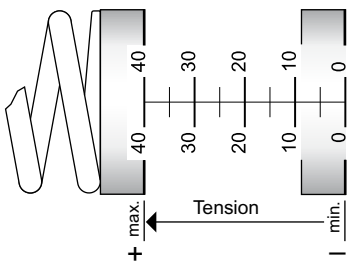
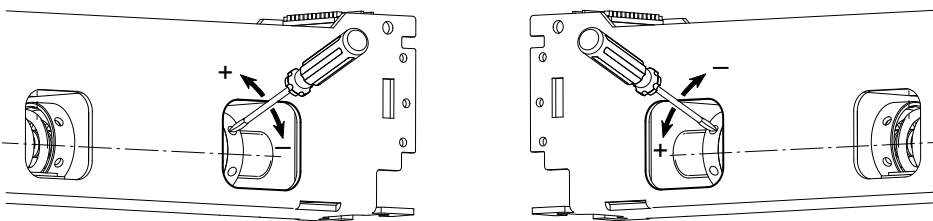
T1659\_18



## Adjusting the spring tension (TORMAX 1201)

Adjustment dependent on the closing size and possible wind loads.

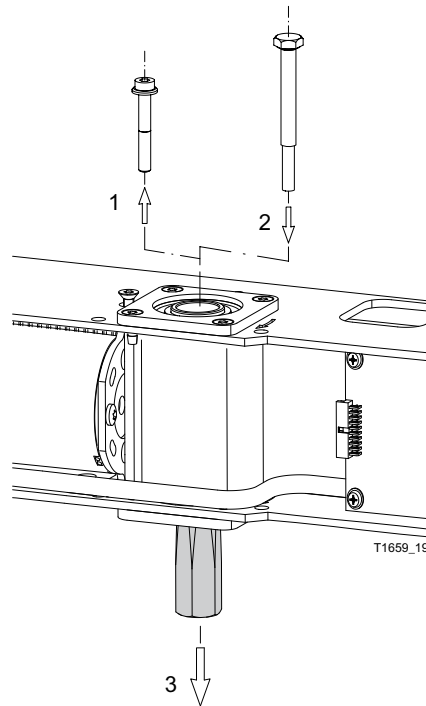
- If the spring tension is changed, the corresponding value must be programmed. Thus forces at the door edge are correctly limited. Standard value = 0 mm



T1659\_20e

## Removing the Drive Shaft

- Remove hexagon-socket screw (1).
- Screw in drift bolt (2).
- Tighten until the drive shaft (3) releases.



## Marking

### Identification plate door drive

- Classification according to DIN 18650: Complete missing numbers on identification plate with wipe-resistant pen.

<b>★★★★★</b> <b>TORMAX</b> AUTOMATIC		Landert Motoren AG Unterweg 14 CH-8180 Bülach					
Model: TORMAX 1102 Swing Door Drive / TTX 1102							
DIN 18650-1:2010		1	3	123	0	4	EN 16005
Un: 230V AC		50Hz...60Hz		IP: 20		TA: -20°C ... +50°C	
Pmax: 210W		Imax: 1.05A		Pedestrian Door Operator			
Pmin: 6W		Imin: 0.05A		Manufactured: MM/YYYY			
Jmax: 35kgm <sup>2</sup> , mmax: 125kg, Mn: 20Nm							
							Serial No.:

TORMAX 1102

<b>★★★★★</b> <b>TORMAX</b> AUTOMATIC		Landert Motoren AG Unterweg 14 CH-8180 Bülach					
Model: TORMAX 1201 Swing Door Drive							
DIN 18650-1:2010		1	3	123	0	4	EN 16005
Un: 230V AC		50Hz...60Hz		IP: 20		TA: -20°C ... 50°C	
Pmax: 235W		Imax: 1.15A		Pedestrian Door Operator			
Pmin: 6W		Imin: 0.05A		Manufactured: MM/YYYY			
Jmax: 65kgm <sup>2</sup> , mmax: 250kg, Mn: 55Nm							
							Serial No.:

TORMAX 1201

## Commissioning

- Perform the commissioning of the installation according to the document T-1654 "Commissioning with base module MCU42-BDM-A" or T-1758 "Commissioning with user interface MCU32-USIN-7-A".