

# Slimdrive SLT

## Product family

EN Installation and service instructions

192483-01



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# 1 Introduction

## 1.1 Symbols and illustrations

### Warning notices



In these instructions, warning notices are used to warn against material damage and injuries.

- ▶ Always read and observe these warning notices.
- ▶ Observe all measures marked with the warning symbol and warning word.

Warning symbol	Warning word	Meaning
	<b>DANGER</b>	Danger to persons. Non-compliance will result in death or serious injuries.
	<b>WARNING</b>	Danger to persons. Non-compliance can result in death or serious injuries.
	<b>CAUTION</b>	Danger to persons. Non-compliance can result in minor injuries.

### Further symbols and illustrations

Important information and technical notes are highlighted to explain correct operation.

Symbol	Meaning
	means "important note". Information to prevent property damage, to understand or optimise the operation sequences.
	means "additional Information"
▶	Symbol for an action: This means you have to do something. ▶ If there are several actions to be taken, keep to the given order.

## 1.2 Revisions and validity

Version 01: valid for Slimdrive SLT product family from date of manufacture 2021

## 1.3 Product liability

In compliance with the liability of the manufacturer for his products as defined in the German "Product Liability Act", compliance with the information contained in this brochure (product information and intended use, misuse, product performance, product maintenance, obligations to provide information and instructions) must be ensured. Failure to comply releases the manufacturer from his statutory liability.

## 1.4 Reference documents

Type	Name
Wiring diagram	Automatic sliding doors DCU1-NT/DCU1-2M-NT
Additional wiring diagrams	Automatic sliding doors DCU1-2M-NT, door controller DCU1-2M-NT for automatic sliding doors in escape routes, FR variants DUO, LL, RWS
User manual	Automatic sliding door systems
Faults and corrective measures	DCU1-NT/DCU1-2M-NT Drive electronics for automatic sliding doors
Cable plan	Automatic sliding door systems
Safety analysis	Automatic sliding doors
Pre-installation instructions	Slimdrive SLT product family
Installation instructions	Slimdrive SLT girder section and side panel
Additional installation instructions	Rod locking

These documents are subject to change. Use only the most recent version.

## 2 Fundamental safety notes



GEZE GmbH is referred to as GEZE below.

### 2.1 Intended use

The sliding door system is used for the automatic opening and closing of a building passage.

The sliding door system may only be used in a vertical installation position and in dry rooms within the permitted application area.

The sliding door system is designed for pedestrian traffic in buildings.

The sliding door system is not designed for the following uses:

- for industrial use
- for area of application which do not serve pedestrian traffic (such as garage doors)
- on mobile objects such as ships

The sliding door system may only be used:

- in the modes of operation provided for by GEZE
- with the components approved / released by GEZE
- with the software delivered by GEZE
- in the installation variants / types of installation documented by GEZE
- within the tested/approved area of application (climate / temperature / IP rating)

Any other use is considered non-intended and will lead to the exclusion of all liability and warranty claims to GEZE.

### 2.2 Safety notes

- Intervention and modifications which influence the safety technology and functionality of the sliding door system may only be carried out by GEZE.
- Problem-free and safe operation assumes proper transportation, proper set-up and installation, qualified operation and correct maintenance have taken place.
- The relevant accident prevention regulations and other generally recognised safety technology or health & safety rules must be kept.
- Only original accessories, original spare parts and accessories approved by GEZE guarantee problem-free function of the sliding door system
- The mandatory installation, maintenance and repair work must be performed by properly trained personnel authorised by GEZE.
- The country-specific laws and regulations are to be observed during safety technology tests.
- If unauthorised changes are made to the system, GEZE cannot be held liable in any way whatsoever for any resulting damage, and the statement of approval for use in escape and rescue routes is no longer valid.
- GEZE does not accept any warranty for combinations with third-party products.
- Only original GEZE parts may be used for repair and maintenance work.
- The connection to the mains voltage must be completed by an electrician or specialised electrical technician. Perform the power connection and protective earth connection test in accordance with VDE 0100 Part 600.
- Use an on-site 10-A overload cut-out as the line-side disconnecting device.
- Protect the display programme switch against unauthorised access.
- In compliance with Machinery Directive 2006/42/EC, a risk analysis must be performed and the door system identified in accordance with CE Marking Directive 93/68/EEC before the door system is commissioned.
- Observe the latest versions of guidelines, standards and country-specific regulations, in particular:
  - DIN 18650: "Building hardware – Powered automatic doors"
  - VDE 0100, Part 600: "Installation of low-voltage systems"
  - EN 16005: "Power operated pedestrian doorsets – Safety in use– Requirements and test methods"
  - EN 60335-1: "Household and similar electrical appliances - Safety Part 1: General requirements"
  - EN 60335-2-103: "Household and similar electrical appliances - Safety: Special requirements for drives for gates, doors and windows"
- A relevant regulation must be used to select appropriate fastening materials, such as the guidelines for planning and carrying out installation of windows and front doors for new constructions and renovations of the RAL-Gütergemeinschaft Fenster und Haustüren e.V.
- Do not loosen screw-fitted , electrical ground connections.



The product should be installed or incorporated in such a way that effortless access to the product is guaranteed during any repairs and/or maintenance, and that any removal costs do not stand out of economic proportion to the value of the product.

## 2.3 Safety-conscious working

- Secure workplace against unauthorised entry.
- Watch the swivelling range of long system parts.
- Never carry out work with a high safety risk (e.g. installing the drive, cover or door leaf) while alone.
- Secure the cover/drive panels against falling.
- Secure non-fixed components to prevent them falling.
- Use only the cables specified on the cable plan provided. Cables must be shielded in compliance with the wiring diagram.
- Secure loose, internal drive cables with cable ties.
- Before working on the electrical system:
  - Disconnect the drive from the 230 V mains and secure it against being switched back on again. Check isolation from power supply.
  - Disconnect the control unit from the 24 V rechargeable battery.
- Note that if an Uninterruptible Power Supply (UPS) is used, the system will still be supplied with voltage despite the fact that the power supply is disconnected.
- Always use insulated wire-end ferrules for wire cores.
- Make sure of sufficient lighting.
- Use safety glass.
- Attach safety stickers to glass door leaves.
- Danger of injury with opened drive. Hair, clothing, cables, etc. can be drawn in by rotating parts.
- Risk of injury by trapping, knocking, shearing and hair etc. being pulled in at unsecured points.
- Risk of injury due to glass breakage. Always only use safety glass.
- Risk of injury due to sharp edges on the drive and door leaf.
- Risk of injury during installation through freely moving parts.

## 2.4 Environmentally conscious working

- When disposing of the door system, separate the different materials and have them recycled.
- Do not dispose of batteries and rechargeable batteries with household waste.
- Comply with the statutory regulations when disposing of the door system and the batteries/rechargeable batteries.

## 2.5 Safety notes related to transportation and storage

- The door system and its parts are not built for hard impacts or for falling from a height.
- ▶ Do not throw, do not drop.
- Storage temperatures under  $-30^{\circ}\text{C}$  and above  $+60^{\circ}\text{C}$  can result in damage to the device.
- Protect against humidity.
- Use special glass transport devices (e.g. A-frames) for transporting glass.
- Separate several panes on a frame or during storage using intermediate layers (e.g. cork pads, paper or plastic cords).
- Always store glass in a vertical position on level and load-bearing ground. Use suitable material as a support (e.g. wooden slats).
- In the case of insulated glass, make sure that it is placed flush across the entire element thickness on at least 2 supports.
- During storage and support, safety devices must not cause any damage to the glass or edge seal of insulated glass and must be attached flat on the pane surface.
- Dry, well ventilated, closed, weather-proof and UV-protected rooms are suitable as storage areas

## 2.6 Qualification

Observe country-specific regulations!

Applicable in Germany:

Companies that carry out the pre-assembly of sliding door drives for escape routes must be licensed as an expanded manufacturing facility by the testing institution that issued the type approval certificate.

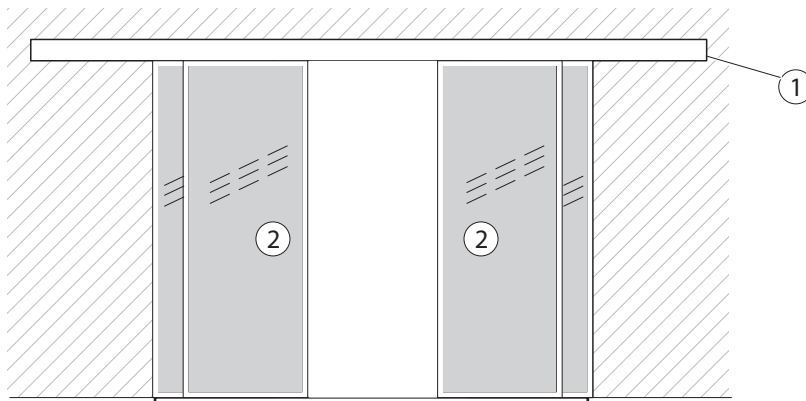
### 3 About this document

#### 3.1 Overview

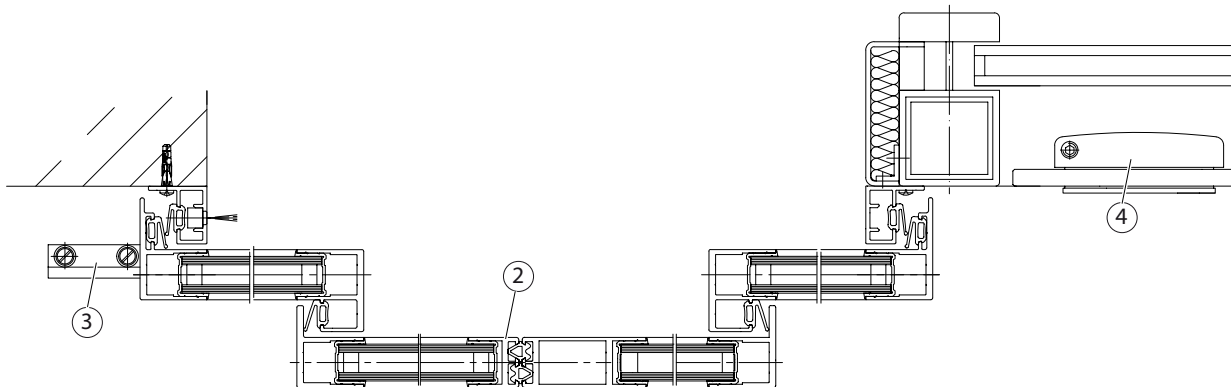
These instructions describe the installation of automatic sliding door systems of the Slimdrive SLT product family without side panel. The installation of the side panels and the girder section installation is described in the installation instructions "Girder section with side panel".

**i** The following drawings illustrate installation with ISO profile systems. The IGG profile is also possible in combination with the Slimdrive SLT.

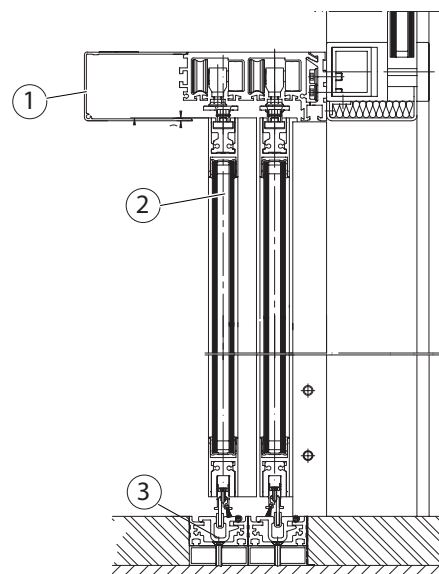
#### View from the front



#### View from above (Slimdrive SLT with ISO profiles)



#### View from the side (Slimdrive SLT with ISO profiles)



- 1 Drive of the sliding door system
- 2 Moving leaf
- 3 Floor guide
- 4 Safety leaf

## 4 Overview

### 4.1 Diagrams

Number	Type	Name
70487-0-007	Drive drawing	Slimdrive SLT, drive
70487-0-010	Dimensioned drawing	Slimdrive SLT/SLT-FR 2M, 4-leaf with rod locking
70487-ep01	Installation diagram	Slimdrive SLT / -FR 2 M, insulated glass doors, post-rail construction
70487-ep06	Installation diagram	Slimdrive SLT with floor lock
70487-ep07	Installation diagram	Slimdrive SLT/SLT-FR 2M with IGG
70487-ep10	Installation diagram	Slimdrive SLT/SLT-FR 2M ISO, Lock M, post-rail
70487-ep20	Installation diagram	IGG profile system
70487-ep21	Installation diagram	2-leaf, left-hand side, 1-leaf, left hand slide to open
70487-ep22	Installation diagram	2-leaf, right-hand side, 1-leaf, right hand slide to open
70487-ep27	Installation diagram	Wooden leaf
70487-ep40	Installation diagram	ISO with rod locking
70715-9-9818	Installation diagram	Continuous floor guide SL + SLT
70484-ep04	Installation diagram	Safety leaf for sliding door drives
70484-ep15	Installation diagram	Protective leaf mounting
70717-ep02	Installation diagram	Slimdrive SLT, ISO self-supporting girder section
70717-ep04	Installation diagram	Slimdrive SLT, girder section lintel installation
70717-ep08	Installation diagram	Slimdrive SLT, self-supporting girder section Lock M
70717-ep09	Installation diagram	Slimdrive SLT, girder section lintel installation Lock M
70484-2-0572	Component drawing	Cover, bespoke SL/SLT
70484-2-0574	Component drawing	Track, bespoke
70484-2-0467	Component drawing	Track 6500 and 4500 mm - 2-leaf - with rod locking
70484-2-0575	Component drawing	Track, bespoke - 2-leaf - with rod locking
70484-2-0691	Component drawing	Track, bespoke - 1-leaf - with rod locking
70715-1-0159	Assembly group drawing	Floor guide continuous
70715-9-9837	Installation drawing	SLT insulated glass leaf
70717-9-0967	Installation drawing	SL/ SLT side panel



The diagrams are subject to change without notice. Use only the most recent version.

### 4.2 Tools and aids

Tool	Closer size
Tape measure	
Marking pen	
Torque spanner	
Allen key	2 mm, 2.5 mm, 3 mm, 4 mm, 5 mm, 6 mm
Open-ended spanner	8 mm, 10 mm, 13 mm, 15 mm, 13 mm flat (GEZE specialised tool)
Ring spanner	8 mm
Screwdriver set	Floor guide slit up to 6 mm, cross-slot PH2 and PZ2
Torx key	TX 20 (bit insert length at least 110 mm)
Side-cutting pliers	
Crimping pliers for cables	
Wire stripper	
Multimeter	
Display programme switch/Service terminal ST 220/GEZEconnects	

### 4.3 Torques

The torques are given at the respective installation step.

### 4.4 Components and assembly groups

See the ep-drawing for the required installation situation and drive drawings.

## 5 Installation



### WARNING!

**Risk of fatal injury due to electric shock!**

- ▶ Do not loosen screw-fitted electrical protective earth connections.



- ▶ Secure workplace against unauthorised entry.
- ▶ Always work with a second person.
- ▶ Use a stepladder or stepstool with test seal.
- ▶ Keep inside area of track clean.

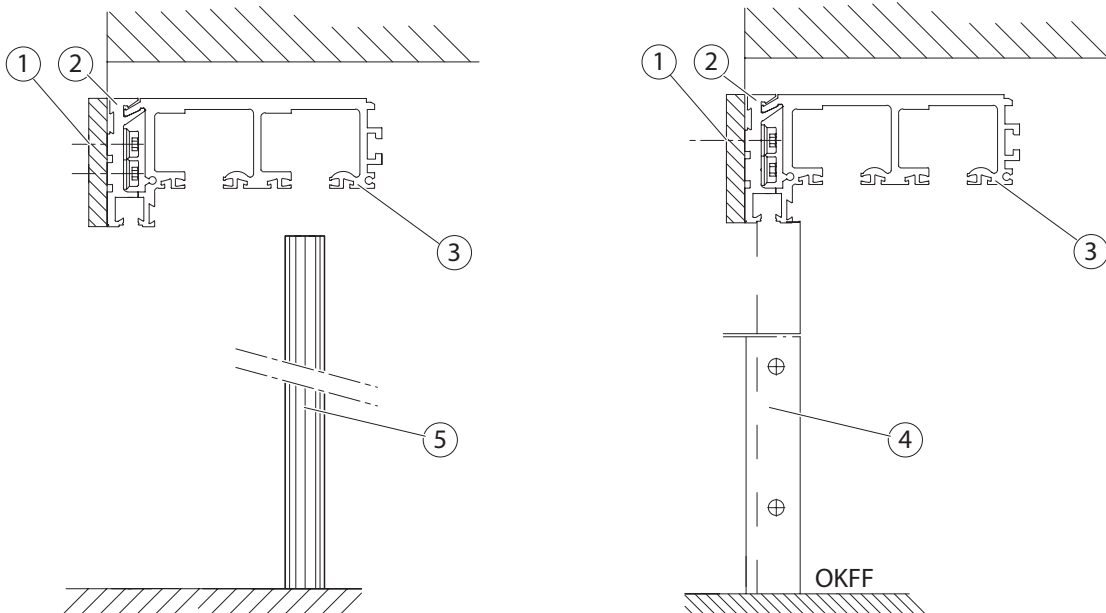
### 5.1 Preparations to be made on-site



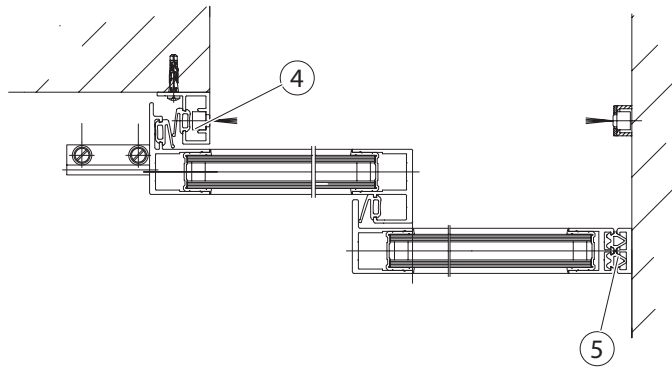
- ▶ Check the preparations made on site by the customer to ensure proper installation:
  - Type and load capacity of the façade construction or suspending frame
  - Evenness of the installation surface
  - Evenness of the finished floor level
  - Cable plan requirements

### 5.2 Mounting the track

#### View from the side





**View from above**

- 1 Fastening drill holes
- 2 Mounting profile
- 3 Track
- 4 Sealing profiles
- 5 Wall strips

- ▶ Determine the installation height of the mounting profile (2).  
Take unevenness of wall and floor into account.
  - ▶ Align the mounting profile (2) horizontally.
  - ▶ Mark the fastening drill holes (1).
  - ▶ Prepare the cable guide according to on-site conditions, e.g. hold the cap on the left side of the mounting profile (2) and transfer the cable feed through.
  - ▶ Remove the mounting profile.
  - ▶ Drill fastening holes (1) into the mounting profile.
  - ▶ Cut out mounting profile (2) in the marked position.
  - ▶ Align the mounting profile (2) in the installation area and use it as a drilling template.
  - ▶ Drill the drill holes.
  - ▶ Screw on the mounting profile (2).
  - ▶ Suspend the track (3) with pre-assembled assemblies and caps in the mounting profile.
  - ▶ Align the track laterally.
  - ▶ Install the sealing profiles (4).
  - ▶ Press rubber seal into the draught sealing profiles.
- With 1-leaf door systems:
- ▶ Install the wall strips (5).

## Clamping the track with clamping strips



### WARNING!

Risk of injury!

Unsecured components may fall when under load.

- ▶ Remove the cap with side plate.

The track (3) is clamped to the mounting profile (1) using clamping strips (2) so that the track (3) is attached so as to be prevented from twisting.

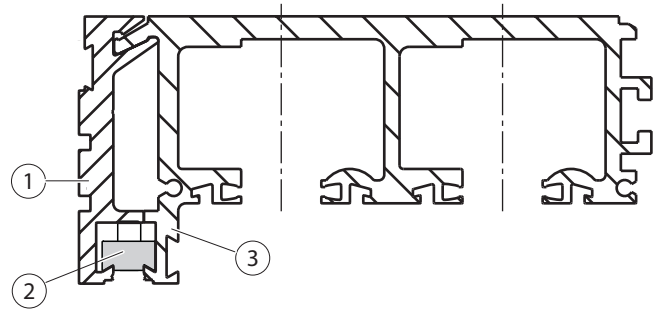
- ▶ Slide 7 clamping strips (2) between the mounting profile (1) and the track (3).

Post/rail version:

- ▶ Position inner 5 clamping strips (2) at the level of the inner posts and position others between them.

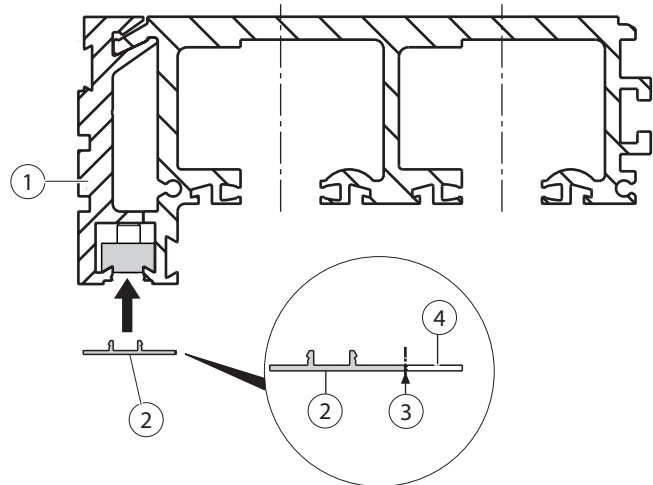
Wall and ceiling installation:

- ▶ Mount the cap with side plate (see pre-installation instructions).
- ▶ Position one clamping strip (2) on the exterior of each mounting profile/track as follows:
  - Left at the transition between the cap and track,
  - Right at an appropriate distance from the end of the track.



### Mounting the cover

- ▶ Disconnect the cover (2) at the disconnection point (3) from the residual piece (4).
- ▶ Dispose of the residual piece.
- ▶ If necessary, slide the cover (2) in to the mounting profile (1).



## 5.3 Mounting the floor guide



- The floor guide is selected based on the on-site conditions. One of the following floor guide options must be used.
- For further information see the respective installation drawing, Chapter 4.1.

### 5.3.1 Angled floor guide, floor mounting (option)

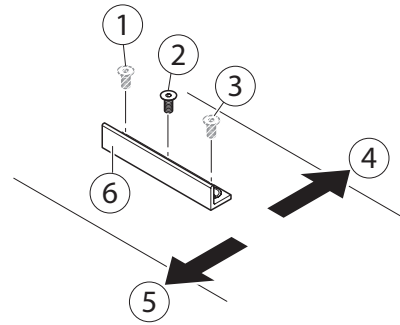
#### Angled floor guide with moving leaf left hand slide to open

- ▶ Screw in the angled floor guide (6) with 2 suitable countersunk head screws (1) and (2).

#### Angled floor guide with moving leaf right hand slide to open

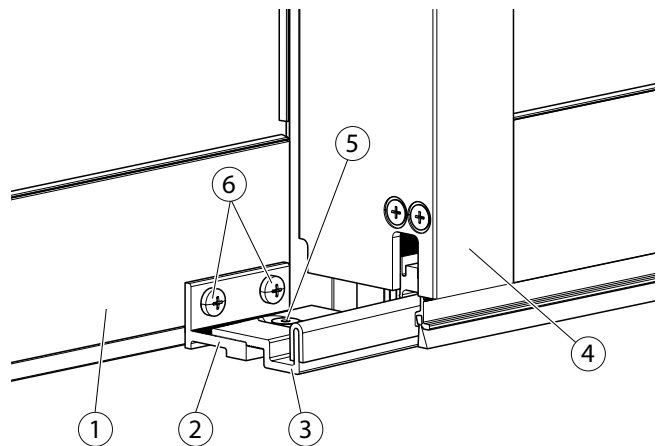
- ▶ Screw in the angled floor guide (6) with 2 suitable countersunk head screws (3) and (2).

- 1 Countersunk screw for moving leaf left hand slide to open
- 2 Countersunk screw
- 3 Countersunk screw for moving leaf right hand slide to open
- 4 outside
- 5 inside
- 6 Angled floor guide



### 5.3.2 Adjustable angled floor guide wall installation (option)

- ▶ Screw the fastening bracket (2) onto the fixed panel (1) using two screws (6) (tightening torque 10 Nm).
- ▶ Align the moving leaf (4) and thereby the adjusting angle (3).
- ▶ Tighten the screw (5).
- ▶ If there is no fixed panel, mount the floor guide onto the wall using suitable attachment materials.



### 5.3.3 Continuous floor guide (option)



- For assembly of the continuous floor guide, see the "Continuous floor guide" assembly drawing.
- For further information see the respective installation diagrams, Chapter 4.1.

## 5.4 Installing the moving leaf

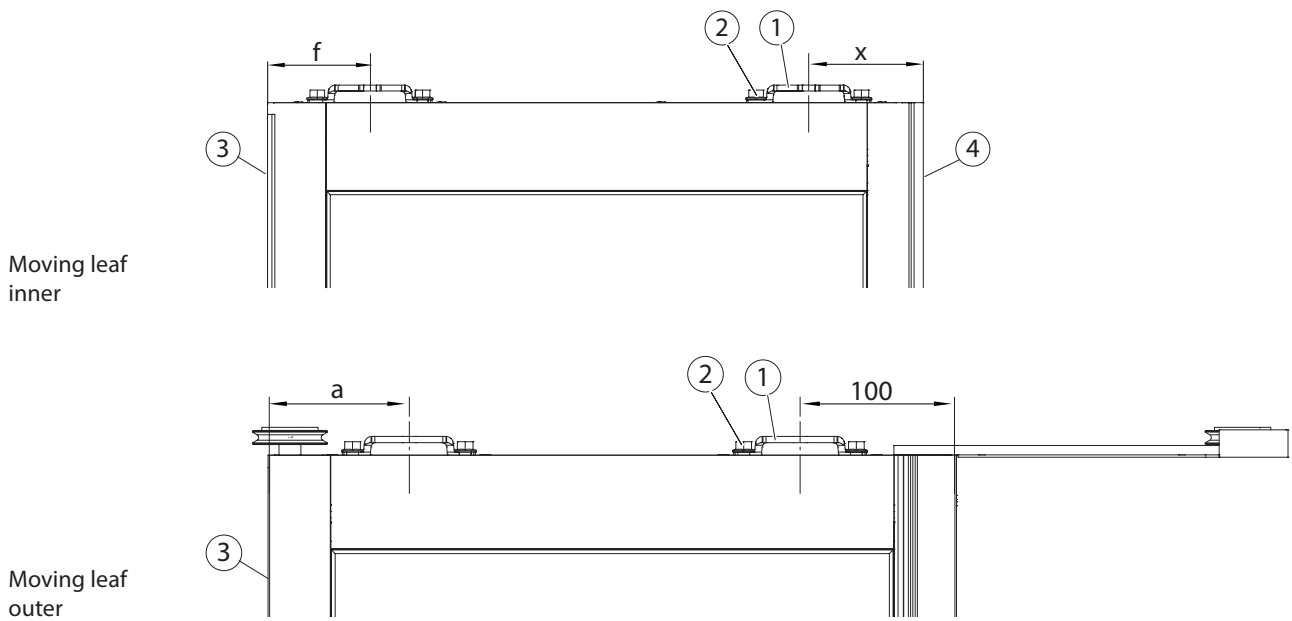
### 5.4.1 Install the door suspension plates on the moving leaf

**!** The door suspension plates are installed during glazing of the moving leaves. In case of subsequent installation of the door suspension plates, the frames of the moving leaves must be dismantled (see installation instructions for moving leaves).

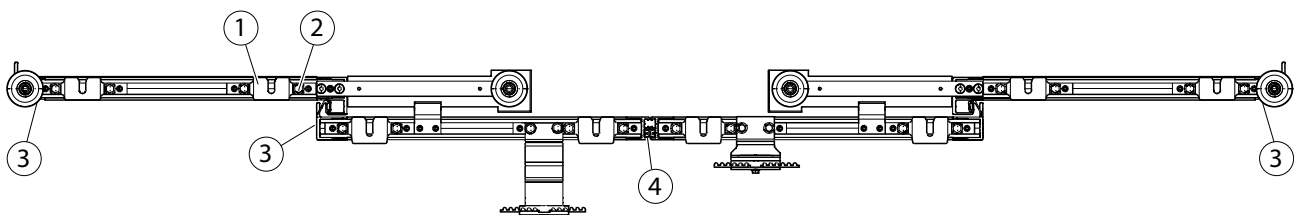
**i** See the installation drawing for the moving leaf for the position of the bracket support (distance  $x$ ,  $y$  and overhang).

#### Installing the door suspension plates

View from the side



View from above:



- 1 Door suspension plate
- 2 Screws
- 3 Secondary closing edge
- 4 Main closing edge

- ▶ Screw the door suspension plates (1) to the moving leaf using screws (2).
- ▶ Do **not** tighten the screws yet.

## 5.4.2 Installing the connecting arm and driver

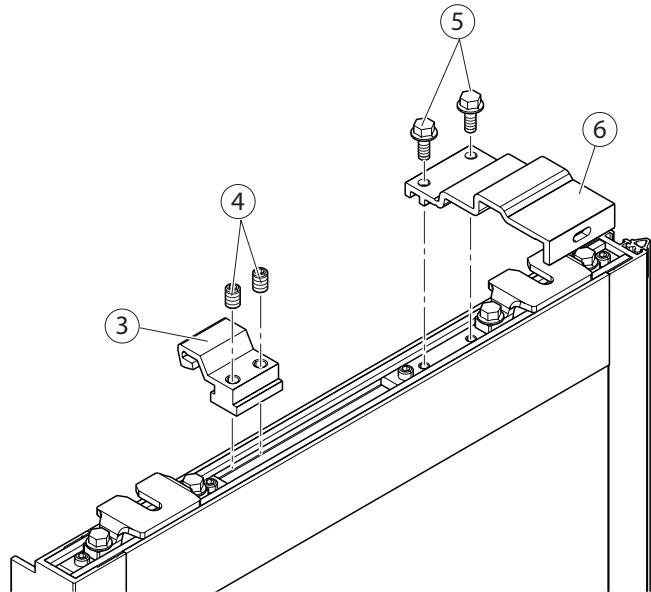


- Drivers must not touch any obstacle over the entire travel path.
- See the drive drawing for the precise position of the driver.

**4-leaf**

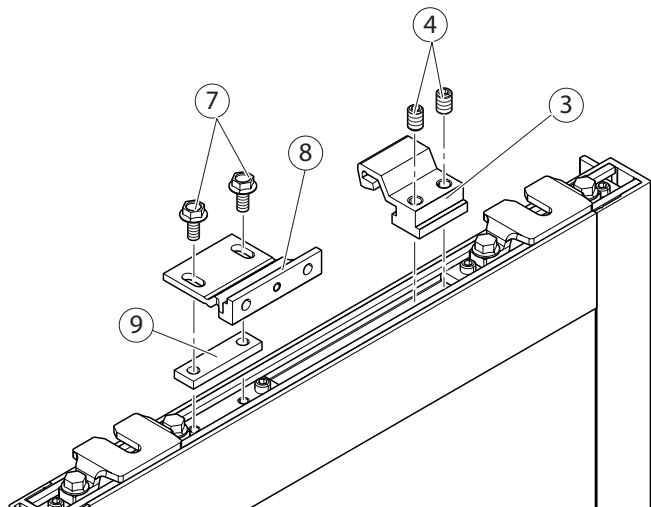
Installing the connecting arm and long driver:

- ▶ Use 2 hexagon screws (5) to screw the long driver (6) to the inner left moving leaf (torque 15 Nm).
- ▶ Clamp the connecting arm (3) in place using 2 setscrews (4) (torque 3 Nm).



Installing the connecting arm and short driver:

- ▶ Use 2 hexagon screws (7) and intermediate plate (9) to screw the short driver (8) to the inner right moving leaf (torque 15 Nm).
- ▶ Clamp the connecting arm (3) in place using 2 setscrews (4) (torque 3 Nm).



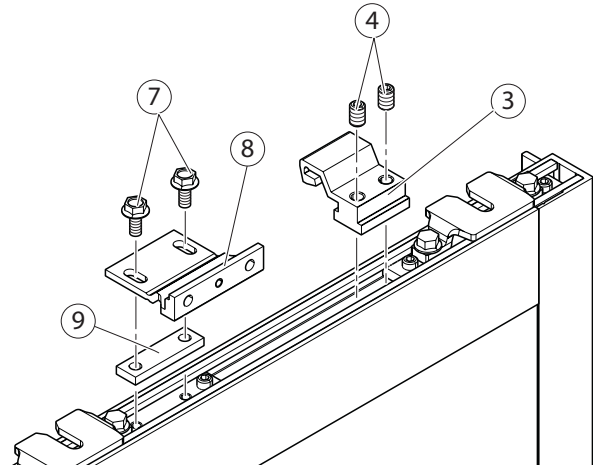
**2-leaf**

Installing the connecting arm and short driver:



For drive SLT-FR 2-leaf, right, an angled driver, short (8) is mounted.

- ▶ Use 2 hexagon screws (7) and intermediate plate (9) to screw the short driver (8) to the inner moving leaf (torque 15 Nm).
- ▶ Clamp the connecting arm (3) in place using 2 setscrews (4) (torque 3 Nm).



### 5.4.3 Fitting the moving leaves

**WARNING!**

**Risk of injury caused by moving leaf falling over!**  
**The moving leaves are very heavy.**

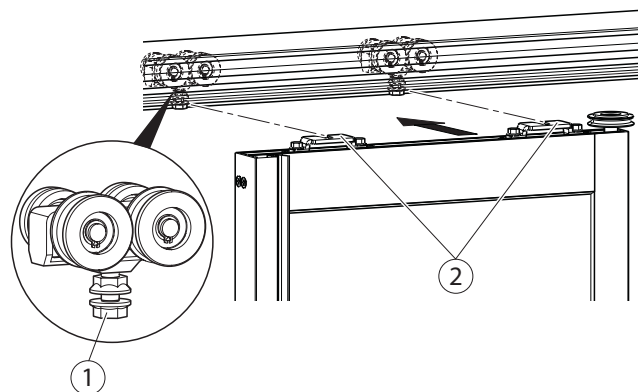
- ▶ At least 2 people should work together to set up the moving leaf.

**WARNING!**

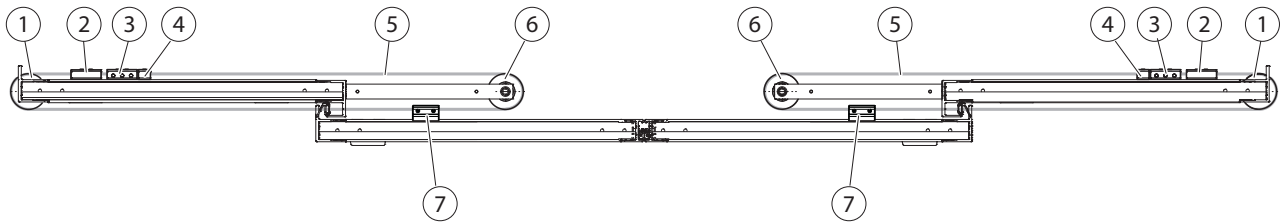
**Risk of injury due to glass breakage.**

- ▶ At least 2 people should work together to set up the moving leaf.

- ▶ Remove the roller carriage from the transport locking device, push the stop buffer outwards.
- ▶ Hang door suspension plates (2) from the front into the suspension bolts of two roller carriages.
- ▶ Secure the moving leaf using lock nuts (1).  
 Do **not** tighten the lock nuts (1) yet.

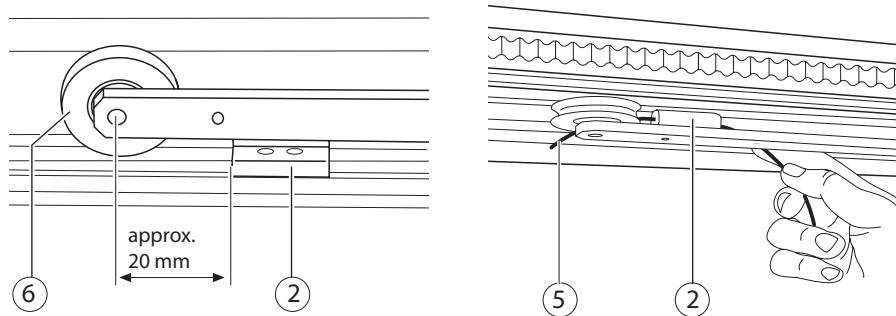


## 5.4.4 Installing the wire rope

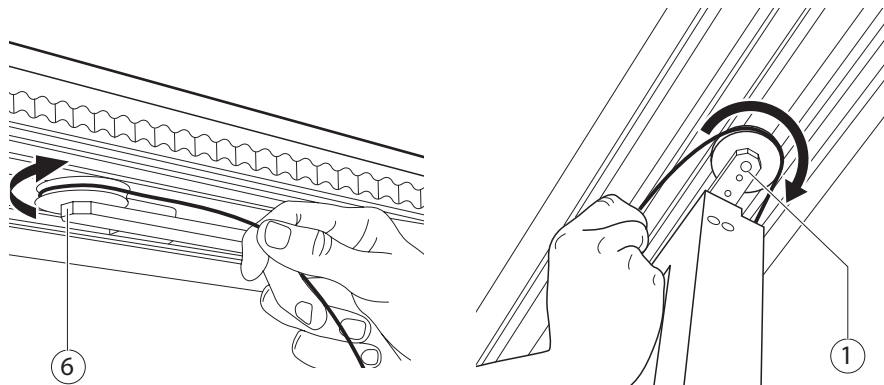
**Overview (4-leaf shown)**

- 1 Rope pulley, short
- 2 Suspension piece
- 3 Clamping piece
- 4 Tensioning piece
- 5 Wire rope
- 6 Rope pulley, long
- 7 Connecting arm

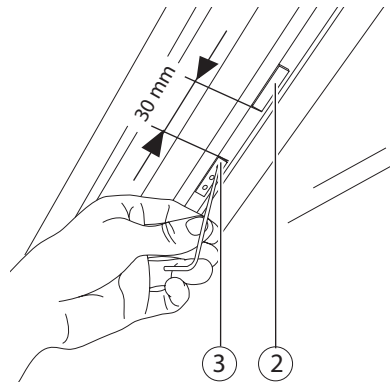
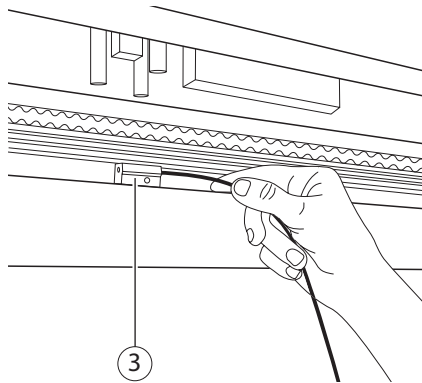
► Push outer moving leaf into open position.



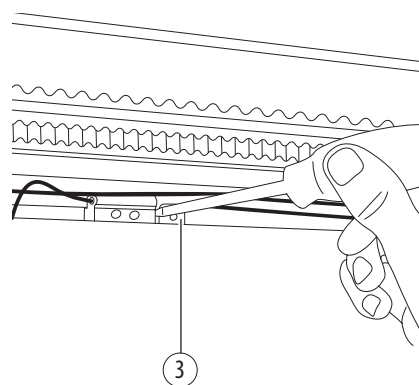
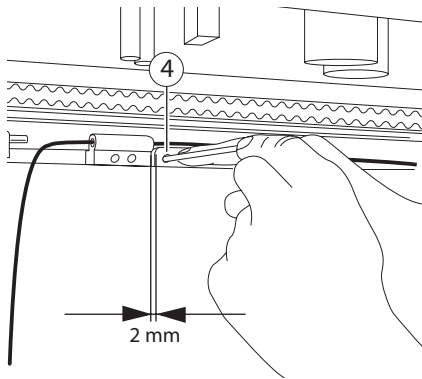
- Position suspension piece (2) on the track approx 20 mm from the centre axis of the long rope pulley (6) and clamp in position.
- Thread in the wire rope (5) from right to left into the suspension piece (2) and pull through until the nipple contacts.



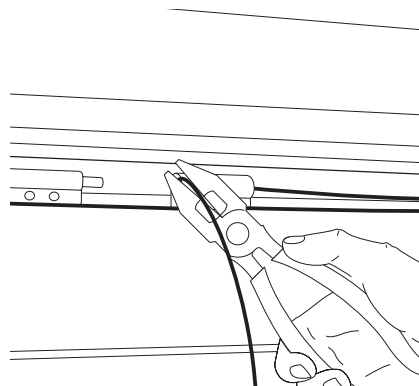
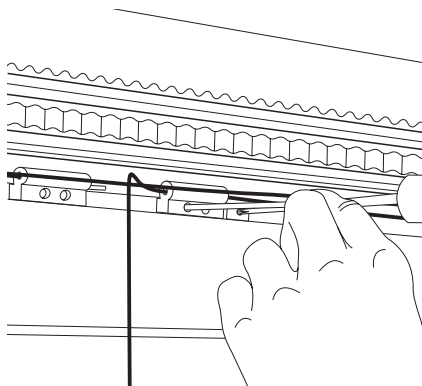
- Route the wire rope around the long rope pulley (6) of the moving leaf.
- Route the wire rope around the short rope pulley (1) of the moving leaf.



- ▶ Thread the wire rope into the clamping piece (3) and pull through.
- ▶ Position the clamping piece (3) on the track (approx. 30 mm distance from the suspension part (2)) and clamp in position.
- ▶ Tighten the wire rope by hand and secure in the clamping piece (3) (screws from underneath).

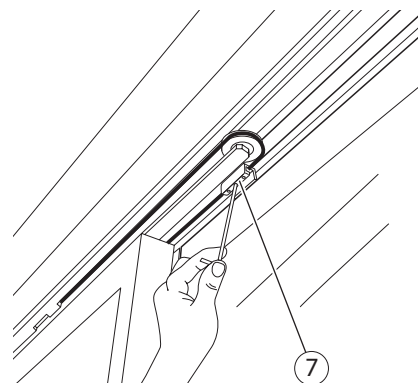


- ▶ Position the tensioning piece (4) approx. 2 mm away from the clamping piece (3) and clamp tightly.
- ▶ Undo the fixing screws of the clamping piece (3) while at the same time, with the help of a screwdriver, push the clamping piece (3) to the left and tighten the wire rope slightly.



- ▶ Tighten the clamping piece (3) on the track.
- ▶ Cut off protruding end of the wire rope. Length of the remaining overhang approx. 20 mm.
- ▶ Hook inner moving leaf in place and use lock nuts to pre-secure moving leaf.
- ▶ Thread the wire rope into the connecting arm (7), but do not clamp yet.

To reach the connecting arm, the moving leaves must be placed in the closed position. The connecting arm is then accessible from the outside.





## 5.4.5 Adjusting the moving leaves

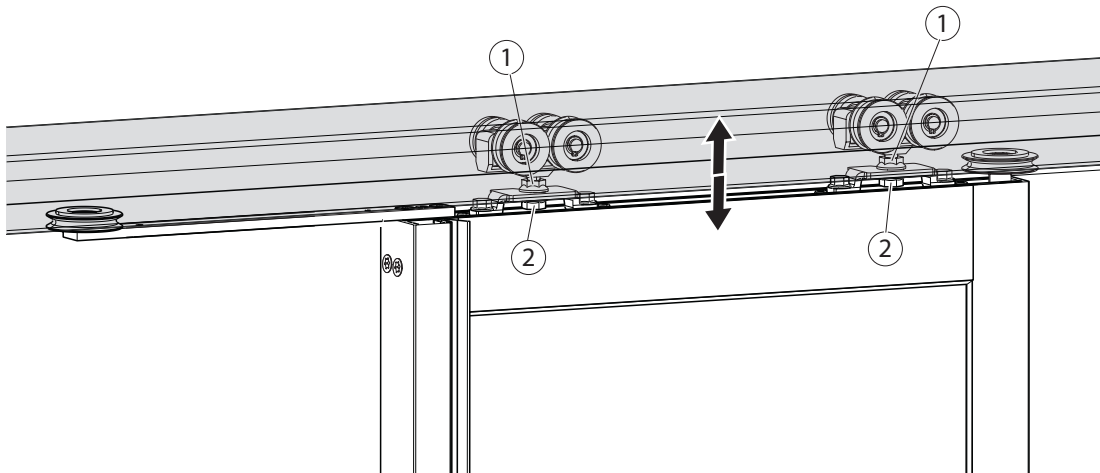
**WARNING****Risk of crushing!****The moving leaves are still unsecured and move easily.**

- ▶ Ensure that the moving leaves are not moved accidentally or by unauthorised persons!

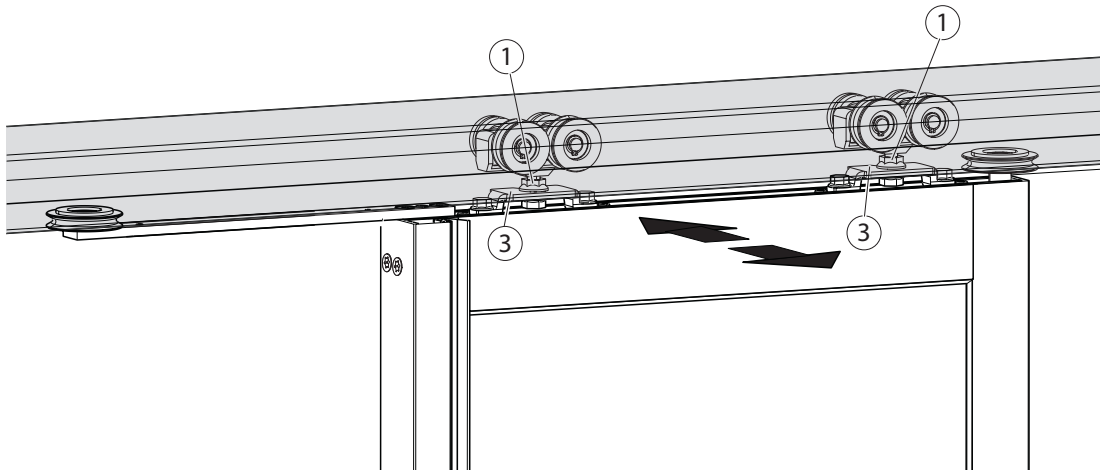


- ▶ Observe the applicable standards and guidelines on crushing, shearing and drawing-in spots.

- ▶ Loosen the locknut (1).

**Adjusting the inclination and level of the moving leaves**

- ▶ Adjust the inclination and level of the moving leaves using the hex of the suspension bolts (2):

**Horizontal adjustment of the moving leaves**

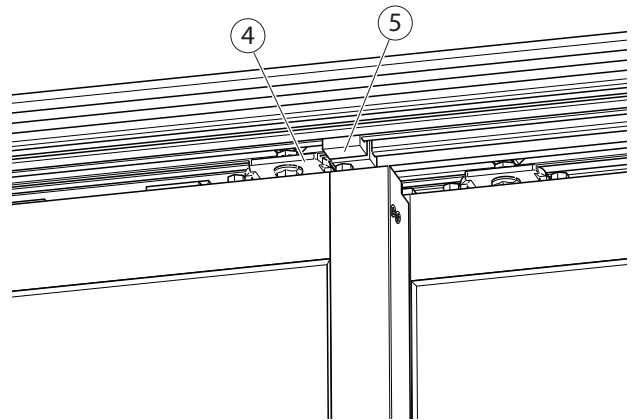
- ▶ Move the moving leaves horizontally in the leaf suspension (3).
- ▶ Make the individual moving leaf move smoothly.
- ▶ Align moving leaves flush with each other. Ensure the same level and parallel closing edges when doing so.
- ▶ Align moving leaves to maximum opening width.

Once all the moving leaves have been adjusted:

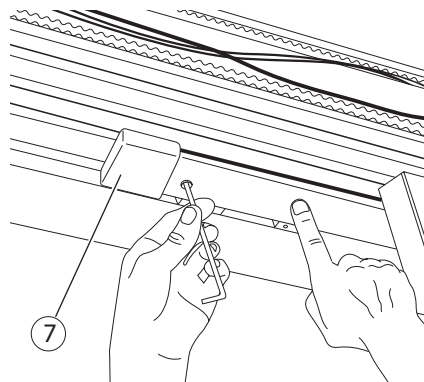
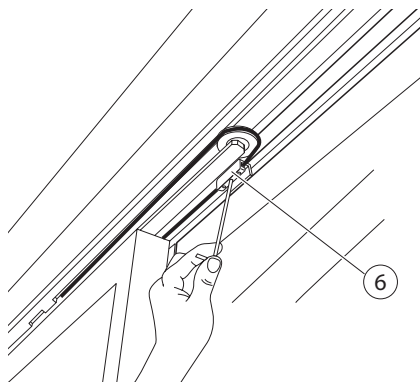
- ▶ Tighten the lock nut (1) (torque 20 Nm).

**Securing the moving leaves**

- ▶ Fix the stop buffers (5) behind the outer roller carriage (4).



- ▶ Push the vertically adjustable strip with brush into the moving leaf until it snaps into place (see the assembly drawing for the Slimdrive SL moving leaf).
- ▶ Mount the guide rails in the floor area (see the assembly drawing for the Slimdrive SLT moving leaf).
- ▶ Slide the moving leaves to the closing position.

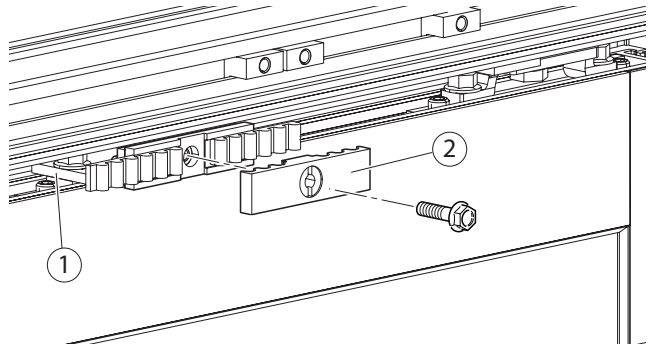


- ▶ Clamp the wire rope on the connecting arm (6).
- ▶ Install the covers (7) for rope pulleys.

## 5.5 Fitting the tooth belt

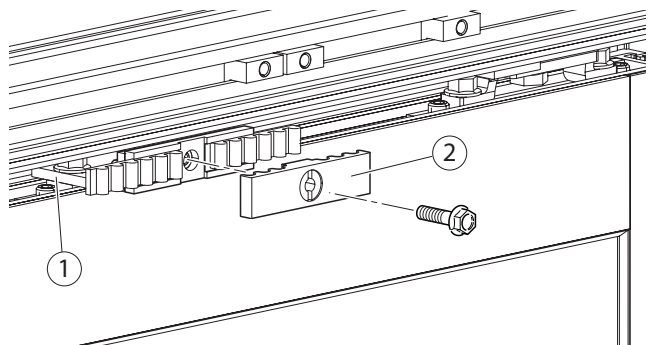
### 1-leaf

- ▶ Screw the toothed belt locking (2) on the short driver (1) (torque 10 Nm).

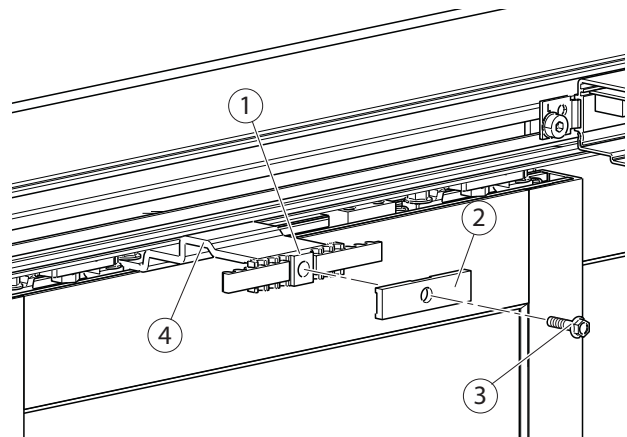


### 2-leaf

- ▶ Screw the toothed belt locking (2) on the short driver (1) (torque 10 Nm).



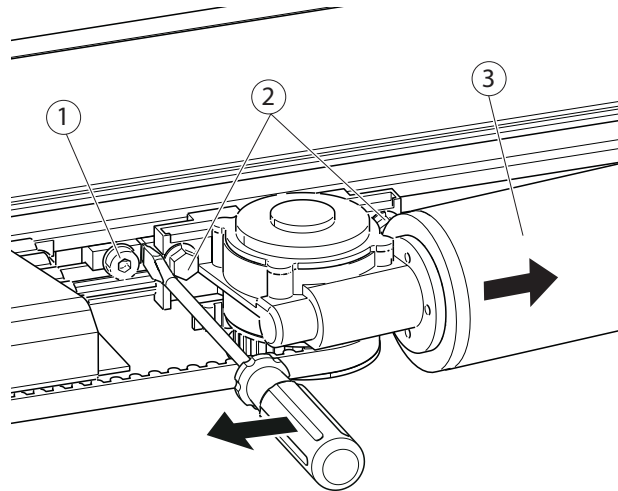
- ▶ Fix the toothed belt locking (1) on the long driver (4) using the screw (3) and the counterplate (2) (torque 10 Nm).



### 5.5.1 Tensioning the tooth belt

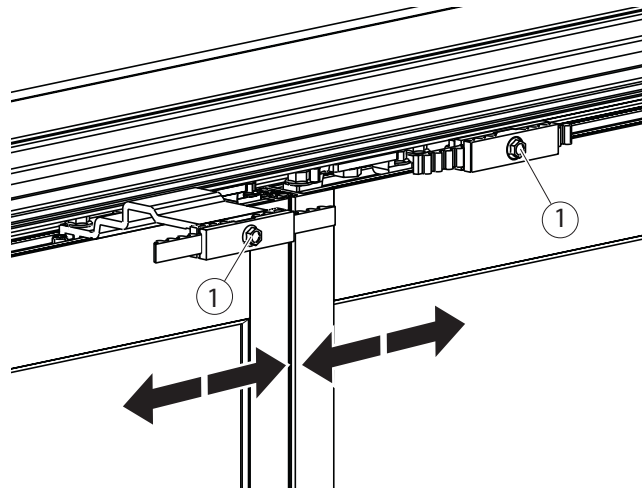
- ! ▶ The tooth belt must be pre-tensioned with  $300\text{ N} \pm 35\text{ N}$  (see drive drawing).

- ▶ Undo 2 screws (2).
- ▶ Slide the motor gear unit (3) to the right by hand.
- ▶ Undo the screw (1) and move the sliding block in such a way that a slot-head screwdriver can be pushed between the sliding block and the motor gear unit.
- ▶ Tighten the screw (1) (torque 10 Nm).
- ▶ Push the slot-head screwdriver into the gap and lever it until the tooth belt is tensioned.
- ▶ Tighten 2 screws (2) (torque 15 Nm).



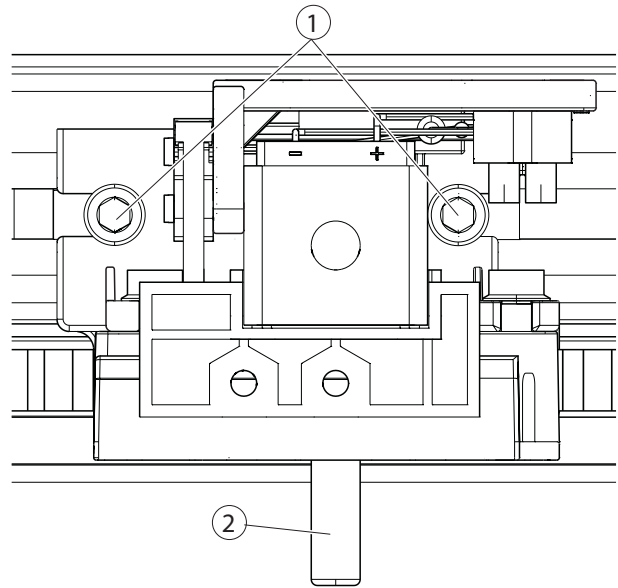
### 5.5.2 Setting the closing position

- ▶ Loosen screws (1).
- ▶ Push the moving leaf to the closed position and align in the centre.
- ▶ Tighten the screws (1) when the exact closing position has been set (torque 10 Nm).



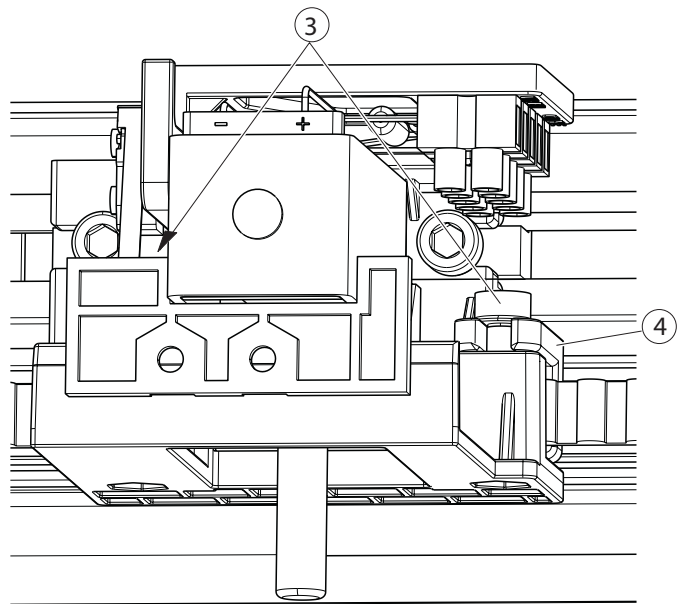
### 5.5.3 Positioning the tooth belt locking mechanism (optional)

- ▶ Close the moving leaves.
- ▶ Loosen the screws (1) at the tooth belt locking mechanism (optional).
- ▶ Align the locking device to the toothed belt.



**!** Following installation, the locking pin (2) must be positioned in the hole in the cover so that the tooth belt locking mechanism can be locked and unlocked.

- ▶ If necessary enlarge the drill hole.
- ▶ Tighten screws (1).
- ▶ Adjust the locking guide (4) so that the tooth belt neither touches nor has too much clearance. To do this, loosen 2 screws (3), move the locking guide (4) and re-tighten the screws (3) (torque 5 Nm).



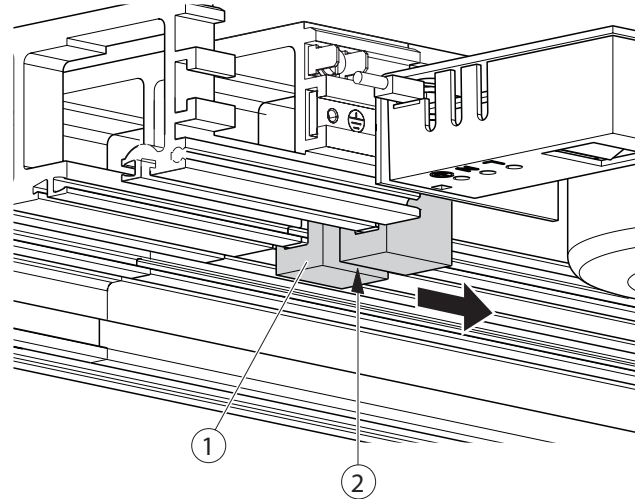
**!** The driver must not come into contact with the tooth belt locking mechanism (optional) during operation.

**!** ▶ After the tooth belt has been installed, check (click) the switching points of the indicator switches of the tooth belt locking mechanism (optional). Adjust by bending the actuator levers, if necessary.

## 5.6 Setting the stop buffer

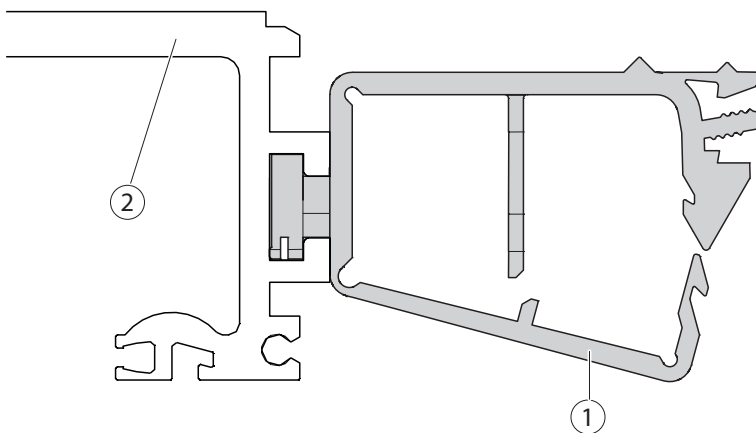
**!** During installation, the rubber buffers must point in the direction of the middle of the track.

- ▶ Undo the setscrew (2) on the stop buffer (1).
- ▶ Slide the moving leaf to the open position.
- ▶ Slide the stop buffer (1) on the roller carriages.
- ▶ Tighten the setscrew (2) using the Allen key (torque 3 Nm).



## 5.7 Installing cable guides

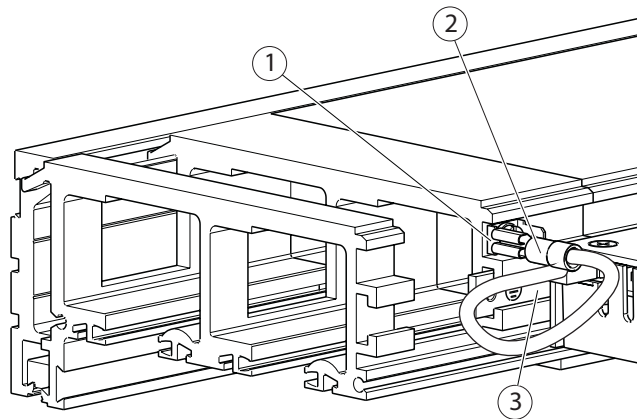
**!** **Cables can be cut!**  
▶ Lay cables in such a way that there are no cables near the moving parts.



- ▶ Mount the cable guide (1) on the track (2), distance approx. 200 mm.

## 5.8 Fitting the transformer ground

- ! The track is not earthed if there is a poor connection between earthing rail (3) and track.
  - ▶ Check whether the setscrews of the earthing rail (3) penetrate the anodised layer of the track.
- ! The transformer must be positioned according to the drawing so that it covers the track sufficiently and fulfils the electrical safety requirements.
  - ▶ Connect the earthing cable (2) from the transformer to the device flat plug (1).



## 6 Production test and commissioning

### 6.1 Connecting the drive

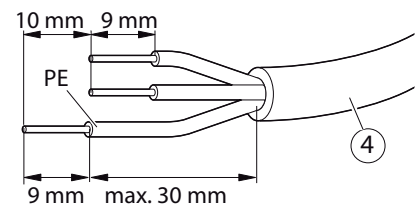
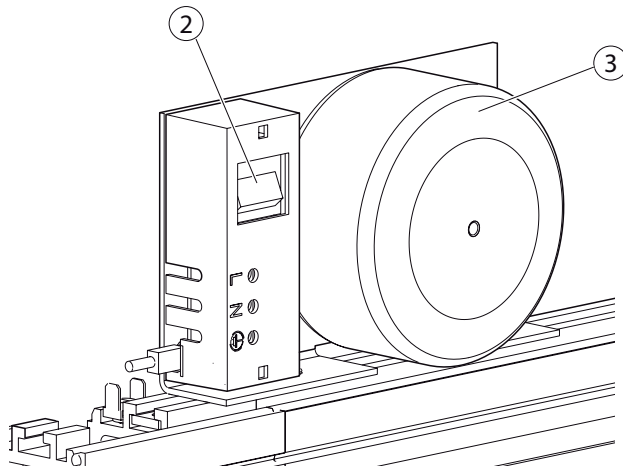


#### WARNING

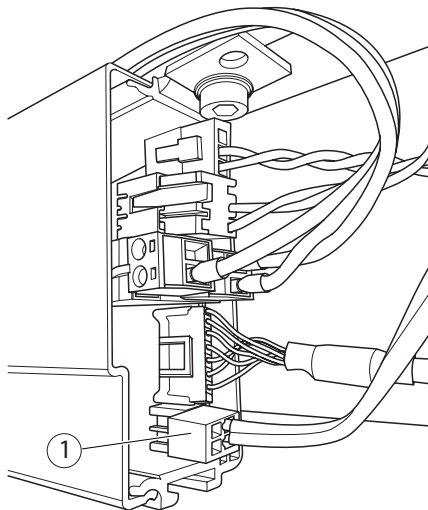
##### Risk of fatal injury due to electric shock!

- ▶ The electrical system (230 V) may only be connected and disconnected by a professional electrician.
- ▶ Carry out mains connection and earth conductor test in accordance with VDE 0100 Part 600.

- ▶ Remove the sheath of the mains cable (4) on a max. of 40 mm.



- ▶ Strip the mains cable (4).
  - Sheath removal length 40 mm
  - Stripping length 9 mm
  - PE line lead 10 mm
- ▶ Connect the drive to the 230 V mains network.
- ▶ Switch on the main switch (2) on the transformer (3).
- ▶ Insert the rechargeable battery connector (1) at the control unit.



- ▶ Carry out the production test as described in the wiring diagram "Automatic sliding doors DCU1-NT/DCU1-2M-NT".



## 6.2 Mounting the cover



### WARNING!

#### Risk of injury!

People can be injured when handling the cover.

- ▶ Always make sure two people handle the cover.



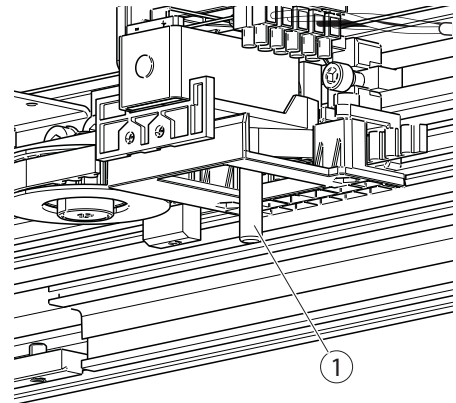
### WARNING!

#### Risk of injury from falling cover!

▶ Make sure that the cover is attached along the entire length of the track.

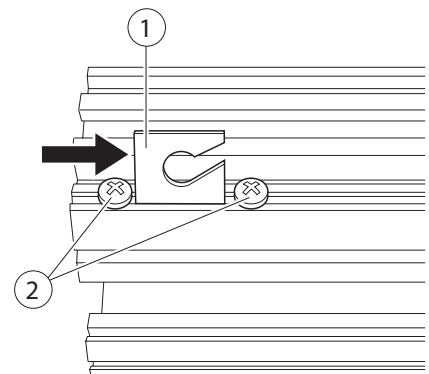
▶ Release the cover carefully and check whether it has been suspended safely.

- ▶ Unscrew the locking pin (1) from the tooth belt locking mechanism (optional).



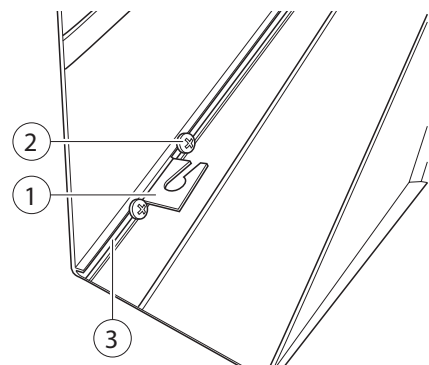
## 6.3 Mounting the cover suspension piece

- ▶ Insert the suspension pieces (1) for the cover catch cable into the front groove on the right approx. 1 cm from the edge of the track and on the left approx. 1 cm from the edge of the cap.
- ▶ Screw in using the enclosed fillister head tapping screws (2).

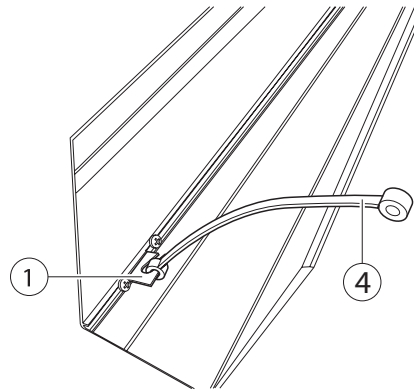


- ▶ Make sure there is enough space for the earthing after installation of the suspension pieces (1) in the cover.

- ▶ Push the suspension pieces (1) for the cover safety rope, right and left, approx. 5 cm from the edge of the cover on each side, into the groove (3) of the cover.
- ▶ Screw in using the enclosed fillister head tapping screws (2).

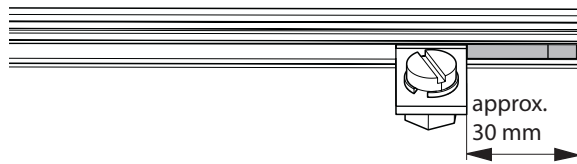
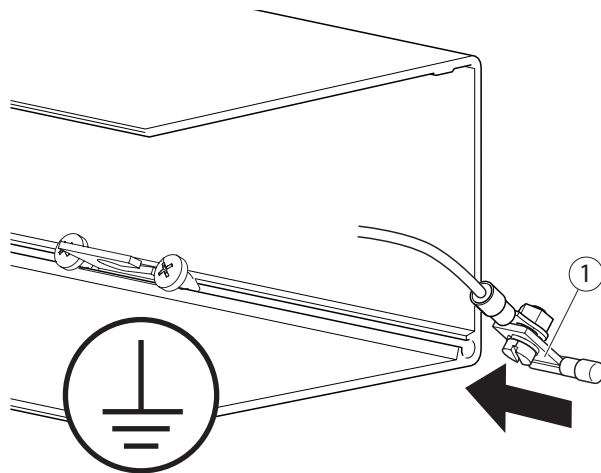


- ▶ Push the cords (rubber cables) (4) onto the mounted suspension pieces (1) of the cover.

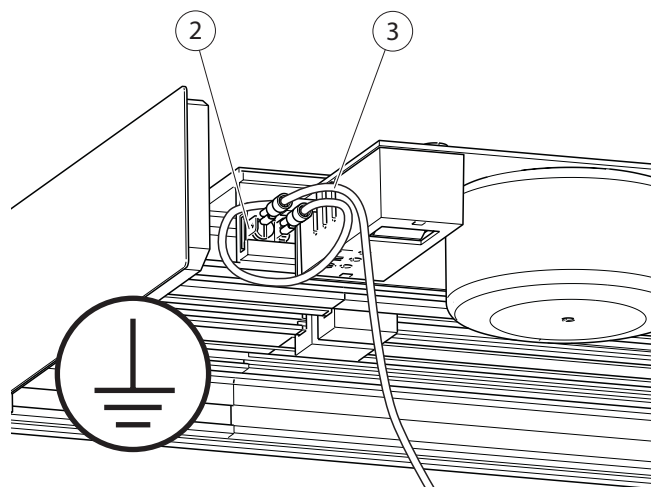


### 6.3.1 Fitting the cover earthing

- ▶ Knock the locating pin for the cover earthing (1) on the side of the earthing approx. 30 mm into the upper screw duct.



- ▶ Connect the earthing cable (3) of the cover to the plug-in connection of the device flat plug (2).

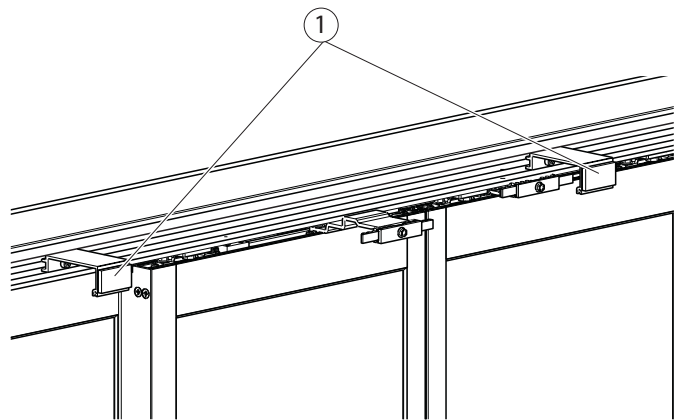


### 6.3.2 Mounting cover fixing brackets

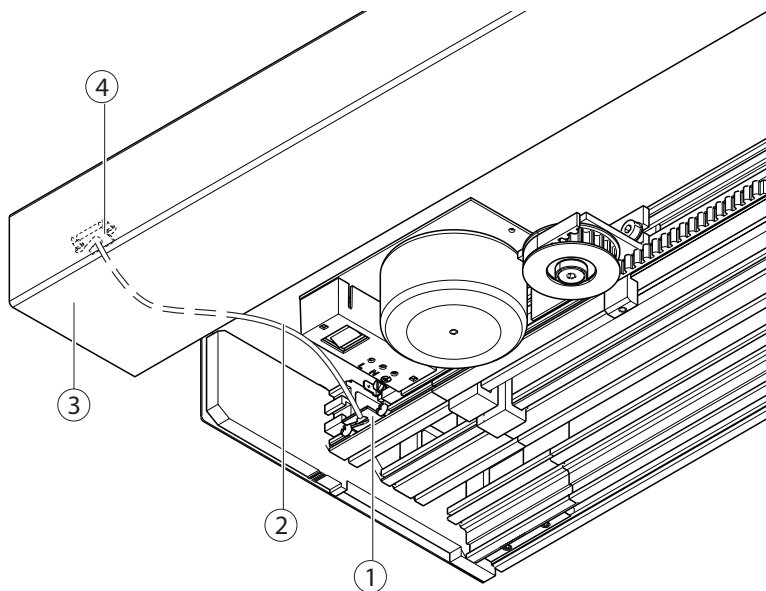
**!** Cables can be cut!

- ▶ Lay the cables so that there are no cables near any moving parts.

- ▶ Install cover fixing bracket (1) and fix on a sliding block using locking screw M6 x 16 hexagon socket locking screw (torque 15 Nm).
- ▶ Distribute the cover fixing brackets evenly on the track, depending on the space available.



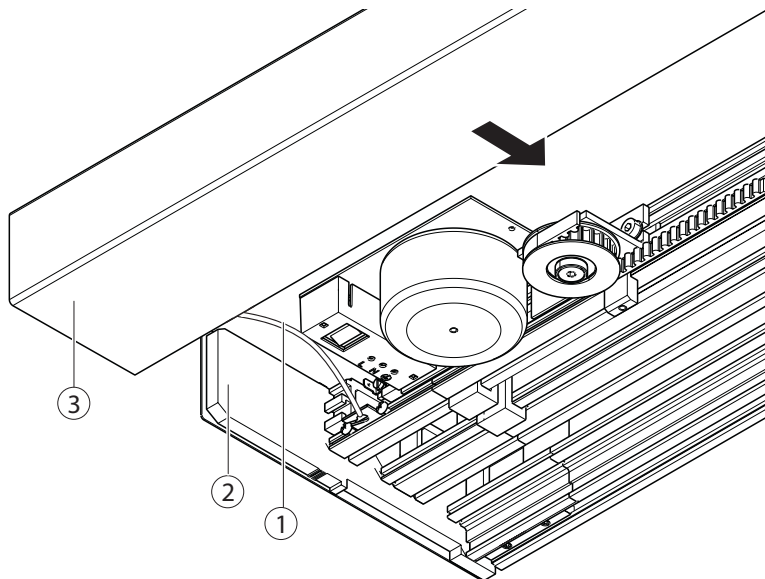
### 6.3.3 Hooking the cover safety rope in place



- ▶ Hook the cover safety rope (2) on the cover suspension piece (4) in the cover (3).
- ▶ Hook the cover safety rope (2) on the suspension piece (1) in the track.

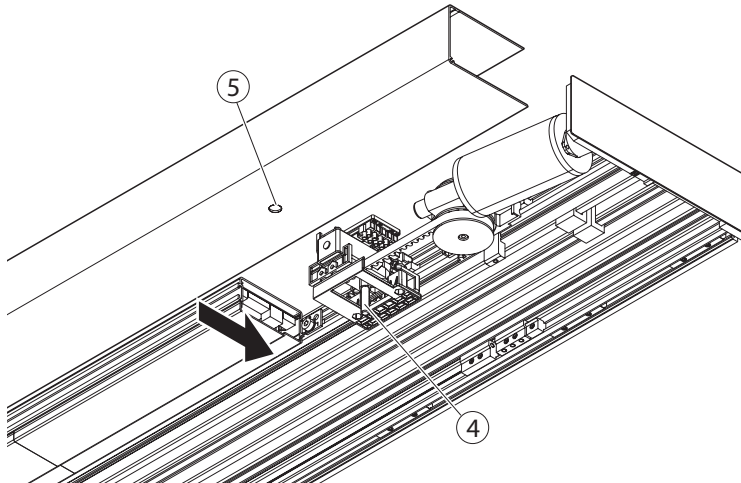
## 6.3.4 Attaching the cover

- ▶ **!** Ensure that cables are not crushed or damaged.



- ▶ Slide the cover (3) onto the side panels (2) until it latches in and ensure that it is also seated correctly in the area of the track and cable guides.

- ▶ **!** Check the correct position of the cover safety ropes (1) and the earthing wire. There must not be any contact with moving parts.



- ▶ Turn the locking pin (4) into the tooth belt locking mechanism (optional).
- ▶ If necessary, enlarge the drill hole (5) in the cover.

## 6.4 Mounting the safety devices



For information about connection and parameter setting of the safety sensors, and the inputs and outputs and on commissioning, please refer to the wiring diagram.

- ▶ Mount safety and activation equipment.
  - ▶ Route cables properly in cable ducts.
- For electrical installation, see wiring diagram.

## 6.5 Installing operating elements/switches/push buttons

For electrical installation, see wiring diagram.



- ▶ Mount the operating elements so that users cannot stand in the danger zones.

## 6.6 Commissioning the door system



For information about connection and parameter setting of the safety sensors, and the inputs and outputs and on commissioning, please refer to the wiring diagram.

### 6.6.1 Creating a log book

- ▶ Carry out a safety analysis.
- ▶ Record installed options in the safety analysis for the operator.

## 6.7 Dismantling



### **WARNING!**

#### **Risk of injury!**

People can be injured when the cover is handled.

- ▶ Only handle the hood with two persons.



### **CAUTION!**

#### **Risk of injury due to impact and crushing!**

- ▶ Secure the moving leaves against unintentional movement.
- ▶ Disconnect the rechargeable battery.
- ▶ Disconnect the drive from the power supply.

Dismantling is done in the reverse order of installation.

## 7 Service and maintenance

### 7.1 Mechanical service

#### 7.1.1 Checking tooth belt tension

- ▶ The tooth belt must not lift up from the motor gear or skip when braking and accelerating.
- ▶ If the tooth belt lifts up or jumps, adjust the tooth belt tension to  $300 \text{ N} \pm 35 \text{ N}$ .

#### 7.1.1 Tensioning the tooth belt

See chapter 5.5.1.

## 7.2 Maintenance



### CAUTION!

#### Risk of injury due to impact and crushing!

- ▶ Secure door leaves against accidental movement.
- ▶ Disconnect rechargeable battery.
- ▶ Disconnect the mains voltage.



- Only original replacement parts may be used.
- To ensure proper function, the wear parts of the sliding door system must be inspected and exchanged if necessary during every maintenance.



- The prescribed maintenance work on the sliding door system must be handled by an expert:
  - at least once a year
  - or
  - When the service indicator on the programme switch lights up (see wiring diagram).
- Not all wear parts listed may be present, depending on the configuration.
- ▶ Provide test documents and keep them up-to-date.

Wear parts present	Exchange interval
Rechargeable battery	Two years
Roller carriage track and support rollers	In case of wear or damage
Cleaning and sealing brushes	In case of wear or damage
Tooth belt	In case of wear or damage
Floor guide	In case of wear or damage
Deflection pulleys	In case of wear or damage
Motor gear unit	In case of wear or damage
Cover fixing	In case of wear or damage
Rubber cable	In case of wear or damage
Pulleys for rubber cable	In case of wear or damage



After completing the maintenance work, always execute the learning function for the door.

Tested component	Action	Comments
Track	Check for cracks	▶ Replace the track
	Check for cleanliness	▶ Clean the track
Roller carriage	Check the abrasion of the track rollers	▶ Remove the abrasion
Floor guide area	Check for jarring-free function	▶ Clean floor guide area
Floor guide area (brushes)	Check for contamination and hardness	▶ Clean or replace
Moving leaf	Check for smooth movement	▶ See Chapter 8.1.1
Tooth belt	Check for wear & tear and damage	▶ If necessary, replace the tooth belt (see Chapter 5.5)
	Check tension	▶ If necessary, tighten the tooth belt (see Chapter 5.5.1)
	Check tooth belt locking mechanism (optional) for damage	▶ Re-position the tooth belt locking mechanism (optional) if necessary (see Chapter 5.5.3)
Tooth belt locking mechanism (optional)	Check function	▶ Re-position the tooth belt locking mechanism (optional) (see Chapter 5.5.3)
Screws	Check for tight fit	▶ Tighten the screws if (refer to drive drawing for torques)
Assembly groups and peripherals	Check for correct function	▶ Replace assembly group
Cables	Check for damage and correct fastening	▶ Fasten or replace cables

## 8 Troubleshooting

### 8.1 Mechanical faults

Cause	Remedy
Track bent	<ul style="list-style-type: none"> <li>▶ Replace the track</li> <li>▶ Check the installation surface</li> </ul>
Moving leaf stiff	<ul style="list-style-type: none"> <li>▶ Check the moving leaf (see Chapter 8.1.1)</li> </ul>
Roller carriage jammed or defective, high abrasion on the track rollers	<ul style="list-style-type: none"> <li>▶ Replace the track roller (see Chapter 8.2), clean the track</li> </ul>
Tooth belt damaged	<ul style="list-style-type: none"> <li>▶ Replace the tooth belt</li> </ul>

#### 8.1.1 Checking the moving leaf

- ▶ Disconnect the moving leaf from the toothed belt using the toothed belt locking.
  - ▶ Move the moving leaf and check for ease of movement.
- If moving leaves move easily:
- ▶ Check the motor gear unit and deflection pulley and replace if necessary.

#### 8.2 Replacing roller carriage



#### **WARNING!**

**Risk of injury caused by moving leaf falling over!**

**The moving leaves are very heavy.**

- ▶ At least 2 people should work together to set up the moving leaf.

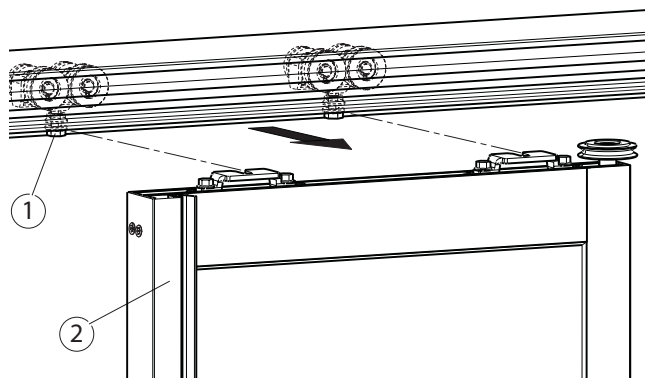


#### **WARNING!**

**Risk of injury due to glass breakage.**

- ▶ At least 2 people should work together to set up the moving leaf.

- ▶ Remove the cap, if necessary only unscrew the side plates.
- ▶ With inner moving leaves, loosen the driver from the toothed belt locking.
- ▶ Loosen lock nuts (1).
- ▶ Remove the moving leaf (2) from the suspension and secure.
- ▶ Move the roller carriage out at the side.
- ▶ Remove the wire cable for the outer moving leaf, see Chapter 5.4.4.
- ▶ Loosen lock nuts (1).
- ▶ Remove the moving leaf (2) from the suspension and secure.
- ▶ Replace roller carriage.
- ▶ Install the roller carriage and moving leaf in the reverse order.



## 8.3 Electrical faults

- ▶ **!** For read-out instructions and a list of fault messages, see wiring diagram.

### 8.3.1 Replacing fuse in transformer



#### **DANGER!**

**Risk of fatal injury due to electric shock!**

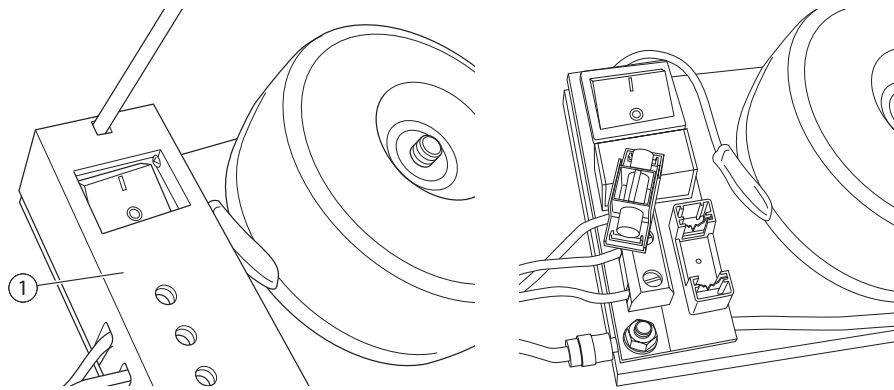
**If the main switch on the transformer is activated, the fuse is still energised since it is upstream of the main switch.**

**The mains voltage 230/115 V must be disconnected from the mains upstream of the fuse.**

- ▶ Disconnect the door system from the 230/115 V mains supply on site before removing the PCB cover (1) and secure against being switched back on again.



- ▶ You will find the fuse value on the wiring diagram.



- ▶ Insert a suitable screwdriver into the opening of the PCB cover (1) above the switch.
- ▶ Carefully press the end wall of the PCB cover upward with the tip of the screwdriver. This releases the snap catch.
- ▶ Remove the PCB cover (1).
- ▶ Pull the fuse holder forwards and off and replace the defective fuse.
- ▶ Attach the fuse holder.



- ▶ Do not trap the cable when setting the cover in place.

- ▶ Set the PCB cover (1) in place and clip on.

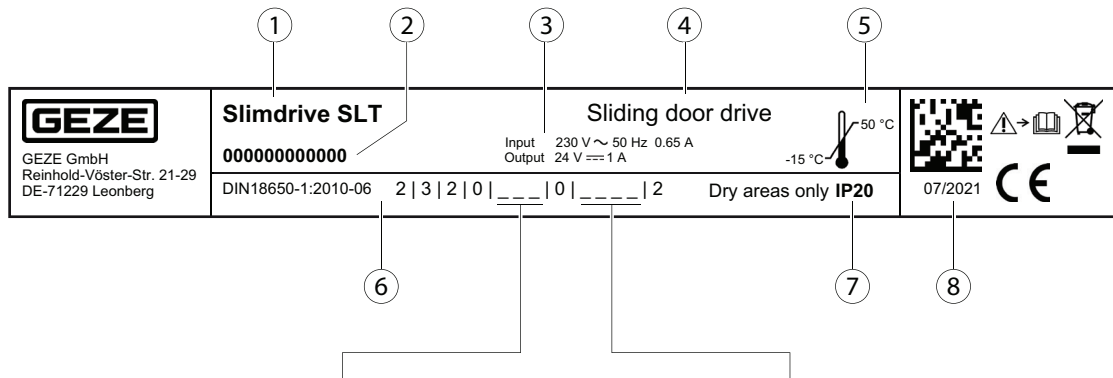


## 9 Drive type plate



Only relevant in Germany and within the scope of validity of DIN 18650-1.

► Add the classification code to the type plate.



### Safety devices on the drive (fifth character)

A distinction is made between three classes in terms of safety requirements:

- 1: Force limitation;
- 2: Connection to external safety systems which have been approved by the drive manufacturer;
- 3: Low-energy.

Note: Several classes may be marked.

### Safety on the automatic door system – version/ installation (seventh character)

A distinction is made between five classes of safety devices on door leaves:

- 0: No safety devices;
- 1: With sufficiently dimensioned safety distances
- 2: With protection against crushing, shearing and drawing-in of fingers;
- 3: With built-in turning fitting unit;
- 4: With sensor-controlled protective devices.

Note: Several classes may be marked.

- 1 Product name
- 2 Serial number
- 3 Electr. data
- 4 Machine category
- 5 Ambient temperature
- 6 Only relevant in Germany and within the scope of validity of DIN 18650-1: Classification code
- 7 IP rating
- 8 Date of manufacture

## 10 Inspection of the installed door system

### 10.1 Measures to prevent and secure hazardous areas

- ▶ Check protective earth connection to all metal parts that can be touched.
- ▶ Perform a safety analysis (risk analysis).
- ▶ Check the function of safety sensors and movement detectors.

### 10.2 Installation checklist Slimdrive SLT

no.	Test	in	On page	Completed
1	All cables laid correctly for the installation of the Slimdrive SLT?	–	–	
2	Track mounted?	5.2	8	
3	Angled floor guide/continuous floor guide installed?	5.3	11	
4	Moving leaf installed?	5.4	12	
5	Drive components installed?	5.5	19	
6	Tooth belt mounted?	5.5	19	
7	Tooth belt locking mechanism (optional) and control unit connected?	–	–	
8	Safety devices mounted?	6.4	29	
9	Switches/push buttons installed and correctly connected?	6.5	29	
10	Programme switch installed?	6.5	29	
11	Transformer ground fitted?	5.8	23	
12	Ground connection established?	6.3.1	26	
13	230/115 V connection established?	6.1	24	
14	Cover earthing connected?	6.3.1	26	
15	Supports for cover installed?	–	–	
16	Cover safety ropes fitted?	–	–	
17	Safety analysis carried out?	–	–	
18	Deviations of the door system checked in accordance with safety analysis?	–	–	
19	Are all components mounted in accordance with the following instructions:	–	–	
20	▫ Pre-installation instructions Slimdrive SLT	–	–	
21	▫ Installation instructions SLT – girder section and side panel	–	–	
22	▫ Pre-installation instructions profile system leaves and side panel	–	–	
23	▫ Installation instructions protective leaf for sliding door drives	–	–	
24	▫ Installation instructions safety leaf	–	–	
25	Was the type plate for the Slimdrive SLT adhered instead of the type plate for the Slimdrive SL?	9	33	
26	Type plate added to the sliding door system? Notes:	9	33	
	▫ Only relevant for Germany and within the scope of validity of DIN 18650			
	▫ The type plate may only be attached to the sliding door system if assembly was also checked for correct completion according to the GEZE specifications using the check list.			



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