



Security Tech Germany

**TECTIQ**

# NARROW FRAME FITTING

Assembly instructions



[abus.com](http://abus.com)

Thank you for choosing a product from ABUS Security Centre ("ABUS" for short). ABUS access systems make an important contribution to securing your property and ensure that only authorised persons can enter the secured areas.

### About this manual

This manual contains all the important information on using the described product in conjunction with the ABUS TECTIQ access control system. The information in this manual has been compiled to the best of our knowledge and is regularly checked and updated. Keep the manual for the duration of use of the product and ensure that you always have the appropriate manual for the product available.

The latest version of the manual is available at any time at the following Internet address:  
abus.com > Article search > ... > Downloads

Observe the information and instructions in this manual. ABUS accepts no liability for damage resulting from incorrect installation, commissioning or other misuse. Responsibility for the use of the product lies with the purchaser or customer and the end user.

Third-party trademarks and industrial property rights are the property of their respective owners and are recognised.

### Customer Service / Customer Support

Specialist dealer / installer

If you have any questions, please contact our well-known support hotline.

End consumer

Please contact your specialist dealer or installer with any questions. Your trained ABUS specialist retail partner will be happy to advise you. You can find a list of ABUS authorised dealers in your region here:

[www.abus.com/ger/Haendersuche](http://www.abus.com/ger/Haendersuche)

### Conformity

Hereby, ABUS Security Center GmbH & Co KG declares that the radio equipment type in this documentation is in compliance with Directive 2014/53/EU. The full text of the EU Declaration of Conformity is available at the following Internet address: [abus.com/product/tec-b-la](http://abus.com/product/tec-b-la)

### Guarantee

- ABUS products are designed and manufactured with the utmost care and tested in accordance with applicable regulations.
- The warranty only covers defects that are attributable to material or manufacturing defects at the time of sale. If there is evidence of a material or manufacturing defect, the device will be repaired or replaced at the discretion of the warranty provider.
- In these cases, the warranty ends with the expiry of the original warranty period of 2 years. Further claims are expressly excluded.
- ABUS is not liable for defects and damage caused by external influences (e.g. transport, use of force, incorrect operation), improper use, normal wear and tear or failure to observe these instructions.
- If you discover a defect in the appliance that was already present at the time of sale, please contact your seller directly within the first two years.
- When asserting a warranty claim, the original proof of purchase with the date of purchase and a brief written description of the fault must be enclosed with the product in question.

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## 1. General information

### 1.1. Introduction

ABUS TECTIQ is the wireless electronic locking and access control system for commercial and public buildings of almost any size. Developed and manufactured in Germany, the complete solution comprising hardware and software offers a comprehensive, high-performance access control and security solution.

ABUS TECTIQ works according to the data-on-card principle, in which access authorisations and information are stored directly on the locking media (transponder, card or ProCap key). This means that the door components are operated offline and do not require a network connection, repeater or other infrastructure.

Access authorisations are managed with the TECTIQ access control centre and the TECTIQ Access Manager locking system software and are generally only transferred to the locking media with a short validity period. New access authorisations are received and the validity of the temporary access authorisation is extended decentrally at the TECTIQ update terminal, e.g. when passing through the main entrance each day. With this concept, the locking authorisation or the locking schedule can be updated at any time so that a quick and flexible response can be made if a locking medium is lost or if there are changes in staffing levels.

Further information can be found at [www.abus.com](http://www.abus.com) or - for dealers and installers - in the partner portal at [www.partner-asc.abus.com](http://www.partner-asc.abus.com)

### 1.2. Intended use

Digital fitting and protective fitting for:

- Building doors with mortise lock on the inside and outside
- For escape doors: Only in conjunction with mortise locks to EN 179 and EN 1125 with prior compatibility check between lock and fitting. See compatibility list at: [abus.com/product/tec-b-la](http://abus.com/product/tec-b-la)
- Installation in doors with leaf thicknesses from 32 to 121 mm

Improper use, repair work or modifications not expressly authorised by ABUS and improper servicing can lead to malfunctions and result in the loss of liability, warranty and separately agreed guarantee claims.

Please note the variants and any accessories required for the respective applications and installation situations.

### 1.3. Target groups

The products/systems described here may only be installed and maintained by persons who are qualified for the respective task. Qualified personnel for the installation and maintenance of the system is usually a trained ABUS authorised dealer.

Responsibility for the operation of the product after installation and commissioning lies with the system operator, main user or owner of the building.

Architects, technical building planners and other consulting institutions are required to obtain all necessary product information from ABUS in order to fulfil their information and instruction obligations. Specialist dealers and installers are required to observe the information in the ABUS documentation and to pass it on to their customers.

#### 1.4. Notes in these instructions

Warnings indicate danger to life and limb. Warnings differentiate according to the severity of the danger and use one of the following signal words:

Symbol	Signal word	Meaning
	WARNING!	Indicates a potential hazard which, if not avoided, could result in death or serious injury.
	CAUTION!	Indicates a potential hazard which, if not avoided, may result in minor or moderate injury.

Failure to observe the instructions in this manual may result in damage to the product, the building or as a result of incorrect operation:

Symbol	Signal word	Meaning
	NOTE	Indicates possible damage to the product or the building.
	IMPORTANT	Indicates possible malfunctions due to incorrect installation or commissioning.
	-	Provides additional important or useful information.

A specific symbol is used instead of the general warning symbol for special hazards or instructions:

	DANGER!	Danger due to electric shock
	NOTE	Damage to the product due to electrostatic discharge

The instructions mentioned can also be embedded in the continuous text if the subsequent action step involves a risk.

#### Further awards

- Text passages preceded by a full stop – are part of an enumeration.
- ▶ Text passages preceded by a triangle indicate an action step: You have to do something here. Please follow the order of the action steps - unless otherwise stated.

## 2. Product description

### 2.1. Function

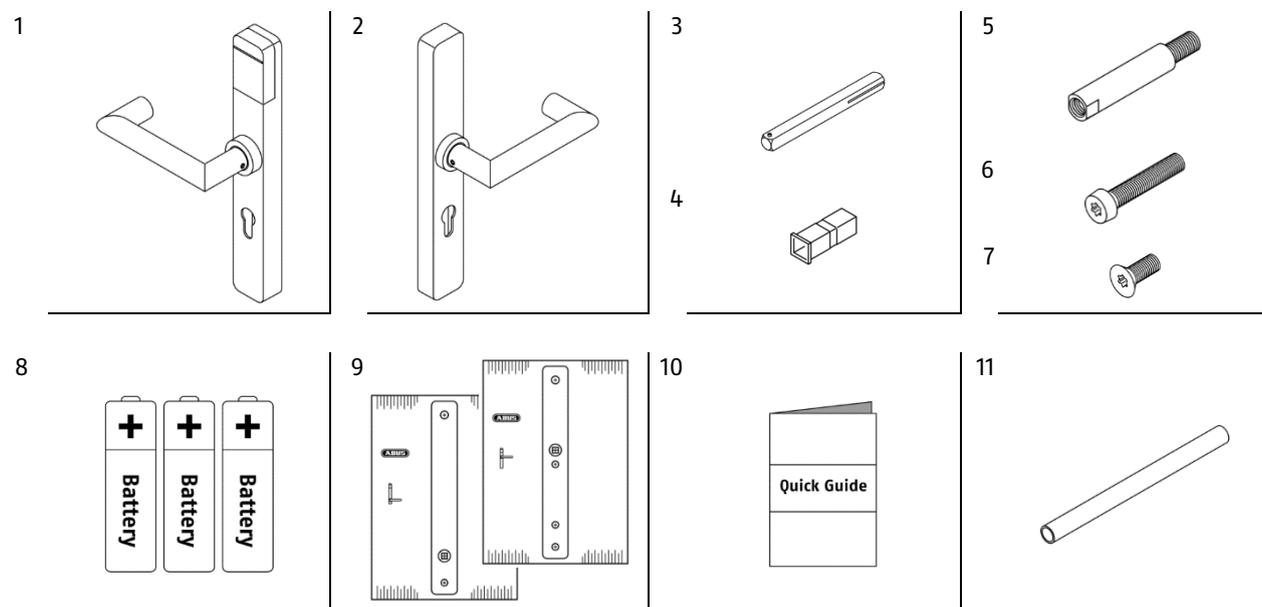
The electronic fittings in the TECTIQ product family are used for electronic access control for entrance doors and interior doors in public or private buildings. Their compact dimensions enable installation on solid leaf doors and framed doors, especially on doors with narrow profile widths. TECTIQ fittings are suitable both for new builds and for retrofitting existing doors in existing buildings. Access authorisation is granted via electronic locking media, which - depending on customer requirements - authorise access from time-limited to permanent access. When combined with a locking cylinder (Euro, round or oval profile), the electronic access control function can be overridden mechanically. The "Security" variant has drill protection that effectively prevents forced entry.

All TECTIQ fittings are suitable for installation on escape and rescue doors. The FIX-DIN- short variant is suitable for installation on doors with a drilling pattern for short backplates (e.g. fire-resistant doors or garage side doors).

Main features:

- Mechatronic narrow frame fitting with RFID reader (MIFARE® DESFire® ) for electronic access control
- Suitable for all standard door dimensions
- For new and existing buildings
- With adapter plate set also for doors with holes for round roses (variants FIX-DIN-round, Scandinavia FIX-wide)
- Suitable for mortise locks with Euro, round or oval profile (for variants, see→ chapter 2.3; Distance dimension PZ72, PZ88, PZ92, R78, R90, R94, Oval 105)
- Mechanical override of electronic access control by combination with mechanical locking cylinder (Euro, round or oval profile)
- Visual feedback via LED
- Access authorisation can be set individually

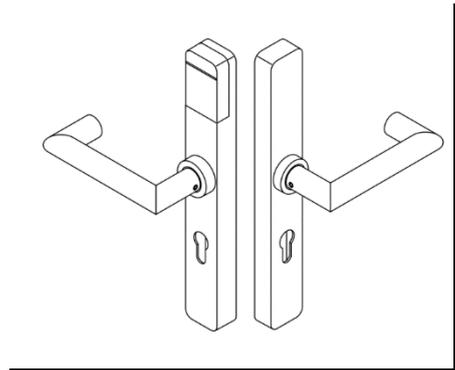
### 2.2. Scope of delivery



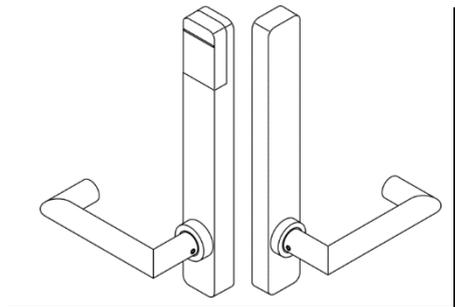
- 1Exterior fitting (1×)
- 2Internal fitting (1×)
- 3Square pin (1×)
- 4 Reducing sleeve (for variants for mortise lock with square spindle 10 mm; 1×)
- 5connection cam (2×  $\varnothing 8$  mm, 1×  $\varnothing 6.4$  mm)
- 6connecting screw M5×30/45/60/75/90/100 (depending on door thickness; 3×)
- 7Screw housing outer fitting M5×12 (6×)
- 8batteries (pre-assembled in internal fitting; 3×)
- 9Drilling template (version "DACH" or "Scandinavia"; 1×)
- 10Quick Guide (1×)
- 11Mounting aid (depending on variant; 1×)

### 2.3. Variants

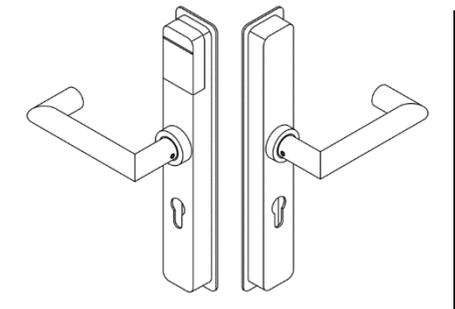
- TECTIQ narrow frame fitting
  - Without profile (closed)
  - With cut-out for Euro profile cylinder
  - With cut-out for round profile cylinder (Swiss round profile)
- TECTIQ Security narrow frame fitting - with anti-drill protection
  - Without profile (closed)
  - With cut-out for Euro profile cylinder
- TECTIQ narrow frame fitting FIX-DIN short: For fire-resistant doors ("FH doors") with 2-point screw fitting
  - Without profile (closed)
  - With cut-out for Euro profile cylinder PZ72



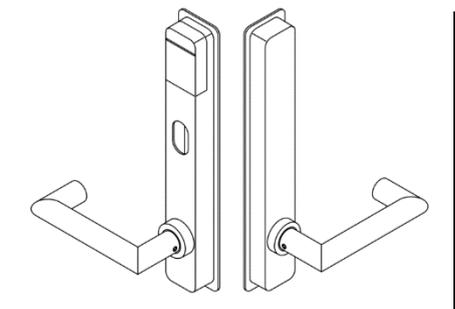
- TECTIQ narrow frame fitting Scandinavia - for Scandinavian locks
  - Without profile (closed)
  - With cut-out for oval locking cylinder



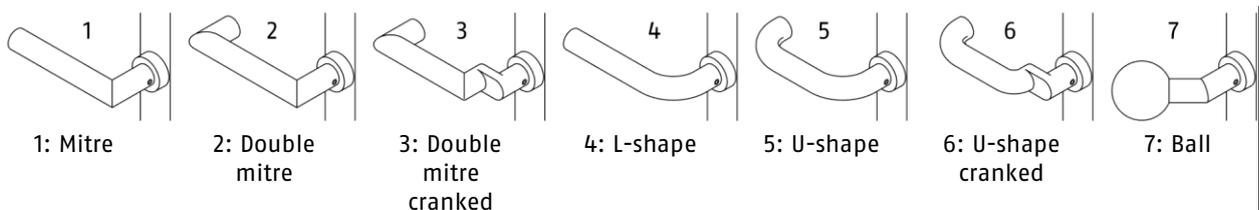
- TECTIQ narrow frame fitting FIX-DIN-round: With adapter plate set for doors with round rosette screw fitting
  - Without profile (closed)
  - With cut-out for Euro profile cylinder PZ72



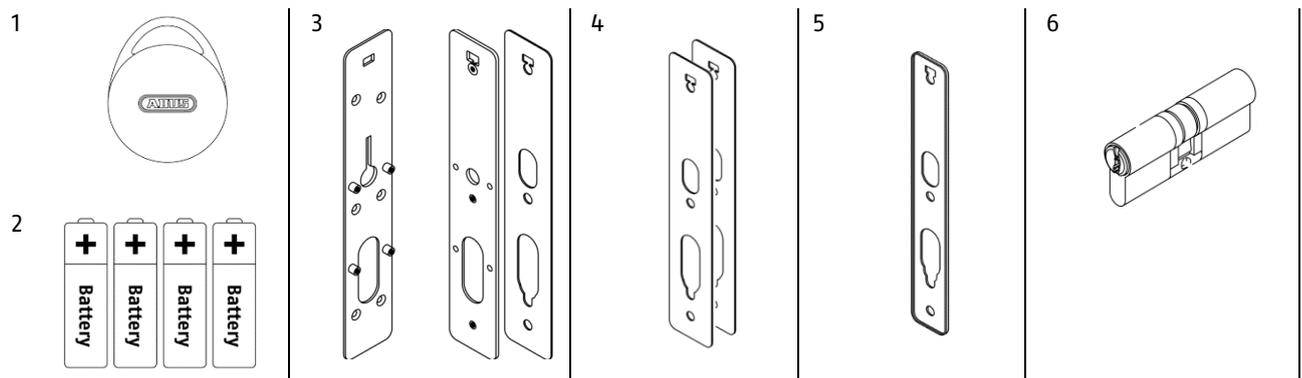
- TECTIQ narrow frame fitting Scandinavia FIX-wide: With adapter plate set (Scandinavian version)
  - Without profile (closed)
  - With cut-out for oval locking cylinder



• Handle moulds:



## 2.4. Accessories



- 1 ABUS MIFARE DESFire® Locking medium
- 2 Replacement battery pack 4× AAA VARTA Ultra Lithium (VARTA Type 06103)
- 3 Adapter plate sets (e.g. for doors with drilling pattern for round rosette screw fittings, Scandinavian doors)
- 4 Renovation panels (width 54 mm, 58 mm, 62 mm)
- 5 Sealing shoe IP55
- 6 Locking cylinders (optional; depending on variant, available from specialist dealers)

### Without illustration:

ABUS Updater cable (article number: ACAC00043); for programming the door components  
 Battery cable DIN short plate / DIN round rosette  
 Battery cable Standard / Security

For spare parts, please use the product catalogue with a separate spare parts section.

## 2.5. Technical data

Supply	3× AAA VARTA Ultra Lithium (VARTA Type 06103)	
Nominal voltage	DC 4.5 V	
Protection class (VDE 0100-410)	III	
Ambient conditions		
Ambient temperature	-20 to +65 °C	
Protection class	All variants:	IP54 (protected against dust and splash water)
	with sealing shoe:	IP55 (protection against dust and water jets)
Locking media	ABUS MIFARE® DESFire ©	
Frequency	13.561 MHz	
Reading distance	typ. 1 cm	
Bluetooth Low Energy		
Radio frequency	2.402 to 2.480 GHz	
Transmitter range	2 to 3 m (free field)	
Transmission power	1.1 mW / 0.4 dBm	
USB		
Connection	USB2-Micro-B	
Line type	ABUS Updater cable, see → chapter 2.4 Accessories	
Internal clock		
Power reserve	approx. 2 h	
Service life	>500 000 closing cycles	
Battery life	>80 000 closing cycles / up to 3 years	

## Conformity

2014/35/EU Low Voltage Directive (LVD)  
 2014/30/EU Electromagnetic Compatibility Directive (EMC)  
 2014/53/EU Radio Equipment Directive (RED)  
 Regulation EU 305/2011 Construction Products Regulation (CPR)  
 2001/95/EC (General Product Safety)  
 2011/65/EU Restriction of Hazardous Substances Directive (RoHS)  
 DIN EN 16867 (in preparation)  
 EN 179 / EN 1125 (in preparation)  
 SKG \*\*\* (Nederland) (in preparation)

## Classification according to EN 16867

1.	2.	3.	4.	5.	6.	7.	8.	9.
4	7	-	B	0	4	D	0/1	1

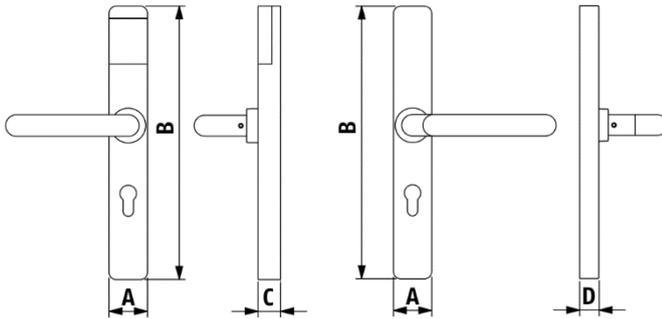
- 1st utilisation category
- 2. continuous functionality
- 3. door dimensions
- 4. fire/smoke protection
- 5. safety in use
- 6. environmental resistance
- 7. authorisation security
- 8. security - attack resistance
- 9. safety - attack resistance in relation to EN 1906

- 4 - For use in doors that are exposed to high loads )<sup>1</sup>
- 7 - Frequent use: 200,000 test cycles  
- (not applicable, not applicable)
- B - Suitable for installation in smoke and fire doors
- 0 - No power set
- 4 - Resistance to temperature, humidity, water
- D - Very high safety
- 0/1<sup>2</sup> ) - 0: No power defined; 1: Average attack resistance
- 1 - Low attack resistance

<sup>1</sup>) Use of force, damage to property, e.g. in football stadiums, barracks or public toilets. Gripping force 60 Nm.

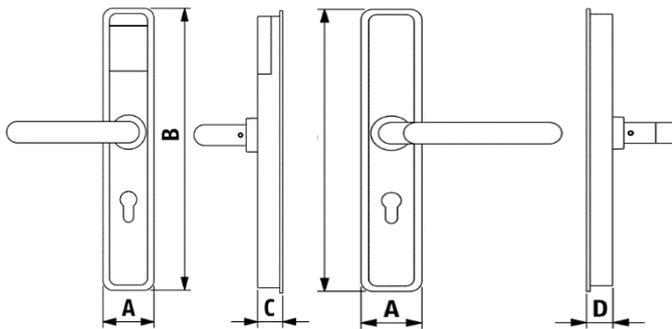
<sup>2</sup>) 1 for security fitting; 0 for all other fittings

## 2.6. Dimensions



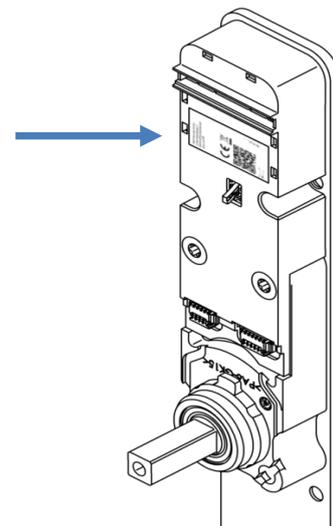
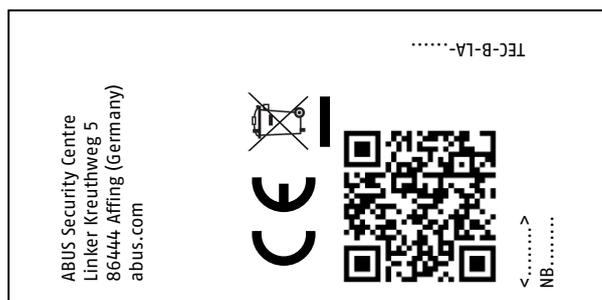
<b>A</b>	40 mm
<b>B</b>	290 mm
<b>C</b>	24 mm
<b>D</b>	20 mm

### Variants FIX-DIN-round, Scandinavia FIX-wide



<b>A</b>	54 mm
<b>B</b>	301 mm
<b>C</b>	27 mm
<b>D</b>	24 mm

## 2.7. Labelling



On the sensor module inside the external fitting:

- Manufacturer name/address
- Mark of conformity
- Label for safe disposal
- QR code
- Internal labelling
- Serial number
- Product type

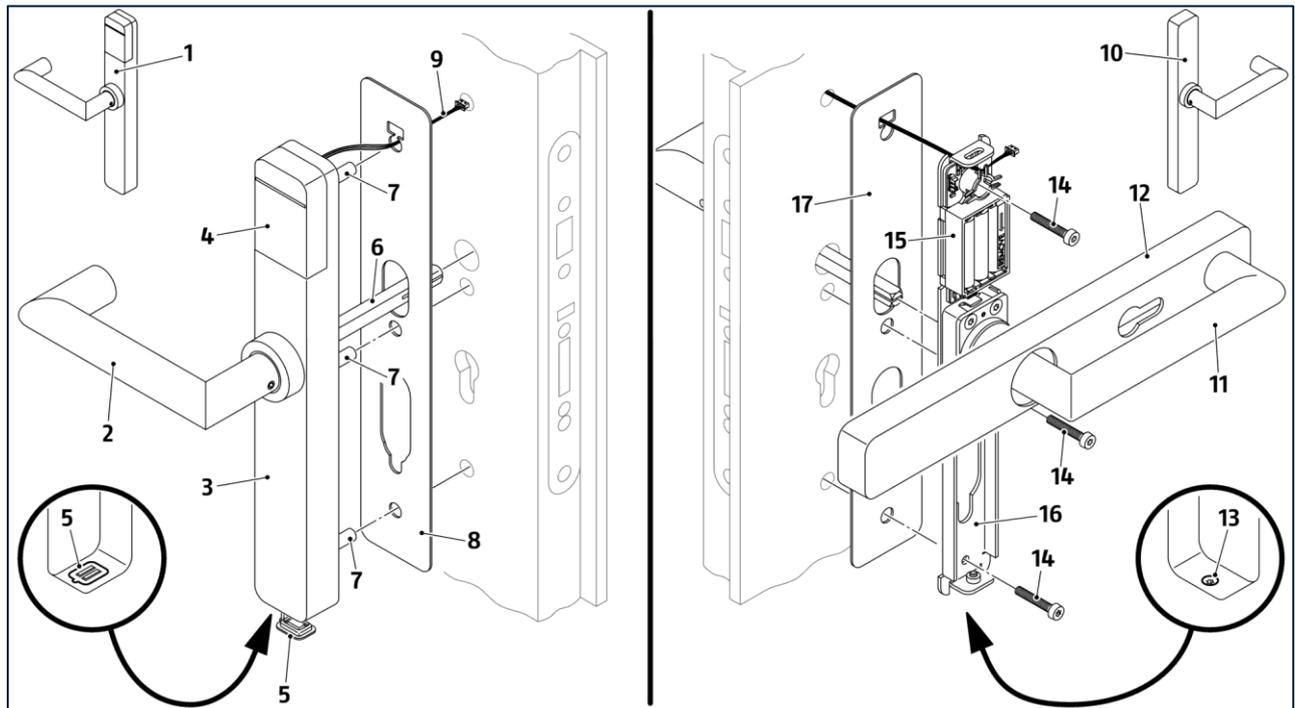
## 2.8. Structure and individual parts

### TECTIQ fitting - variants without adapter plate

- TECTIQ narrow frame fitting
- TECTIQ Security narrow frame fitting

Image similar:

- TECTIQ narrow frame fitting FIX-DIN short (with 2-point screw connection)
- TECTIQ narrow frame fitting Scandinavia



- 1 External fitting
- 2 Outside handle fitting
- 3 Outer fitting panel
- 4 RF sensor cover
- 5 USB socket / USB cover
- 6 Square pin
- 7 Connection cams
- 8 Renovation panel outside (optional)
- 9 Connecting cable

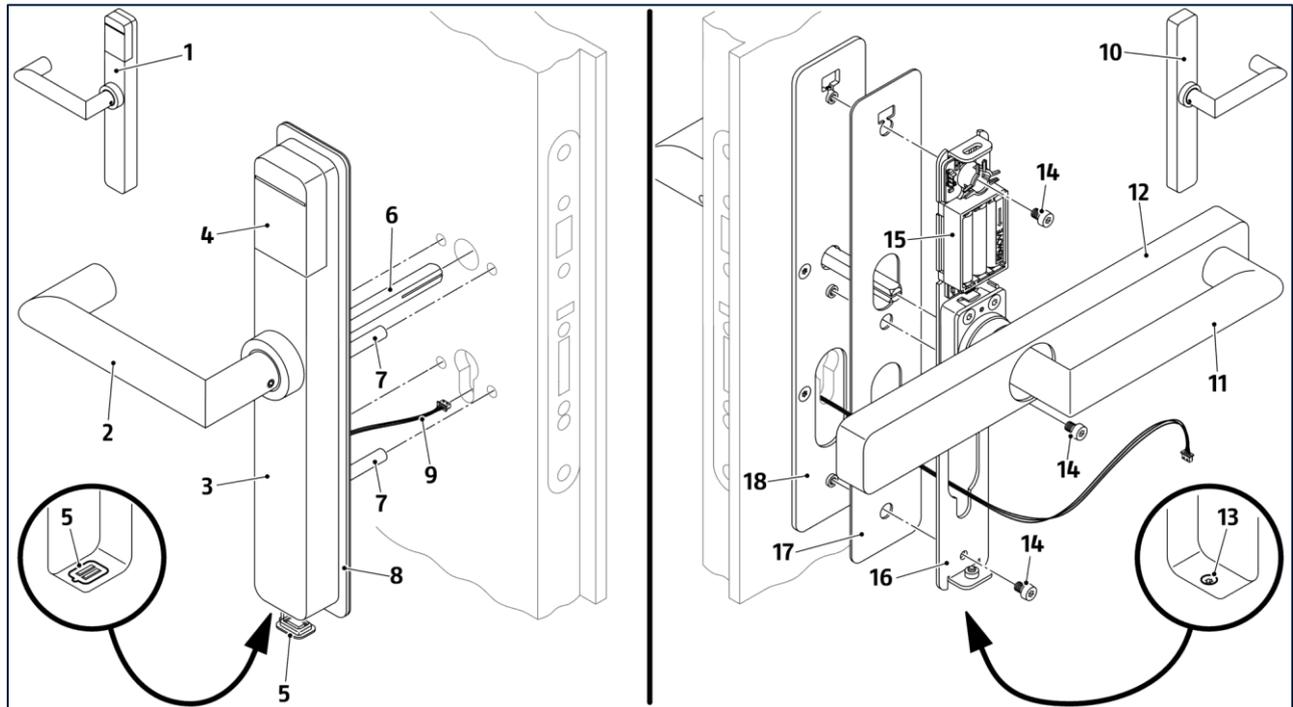
- 10 Interior fitting
- 11 Lever handle Inside fitting
- 12 Inner fitting cover
- 13 Locking screw inner fitting
- 14 Connecting screw
- 15 Battery compartment
- 16 Base plate internal fitting
- 17 Renovation panel inside (optional)

### TECTIQ fitting - variants with adapter plate

- TECTIQ narrow frame fitting FIX-DIN-round
- TECTIQ narrow frame fitting with separate adapter plate

Image similar:

- TECTIQ narrow frame fitting Scandinavia FIX-wide



- 1 External fitting
- 2 Outside handle fitting
- 3 Outer fitting panel
- 4 RF sensor cover
- 5 USB socket / USB cover
- 6 Square pin
- 7 Connection cams
- 8 Exterior adapter plate
- 9 Connecting cable

- 10 Interior fitting
- 11 Lever handle Inside fitting
- 12 Inner fitting cover
- 13 Locking screw inner fitting
- 14 Connecting screw
- 15 Battery compartment
- 16 Base plate internal fitting
- 17 Renovation panel inside
- 18 Adapter plate inside

## 3. Safety instructions

### 3.1. General safety instructions



**WARNING! Explosion hazard!**

Installing and operating electronic fittings in potentially explosive atmospheres can lead to serious injury or death.

- Do not install or operate the electronic fittings in potentially explosive atmospheres.



**CAUTION! Risk of injury from swallowing small parts!**

Children can swallow small parts.

- Ensure that small parts such as screws or locking media do not fall into the hands of small children.



**CAUTION! Risk of injury during installation!**

When sawing or drilling in metal, plastic or wood, flying chips or dust can cause injuries to the eyes, hands or skin. Touching sharp edges or slipping during assembly can injure your hands.

- Always use personal protective equipment such as safety goggles and gloves during installation.
- Vacuum chips and drilling dust.
- Only use tools that are in perfect condition.
- Observe the safety instructions for the devices used (drill, etc.).
- Do not carry out any activities if you are not in good health or are not trained for them.

### 3.2. Safe handling of batteries



**WARNING! Danger due to improper handling of batteries!**

Batteries can overheat and cause fires. Damage or exposure to high heat can cause fires or explosions and lead to serious injuries, burns or chemical burns. Leakage can release hazardous substances that are harmful to your health.

- Note the polarity (+/-).
- Do not recharge, open, throw into fire or short-circuit batteries.
- Do not use new and used batteries together.
- Do not use together with other battery types.
- Only return fully discharged batteries with the terminals taped.
- Keep batteries away from children.

### 3.3. Safety instructions for escape and rescue routes



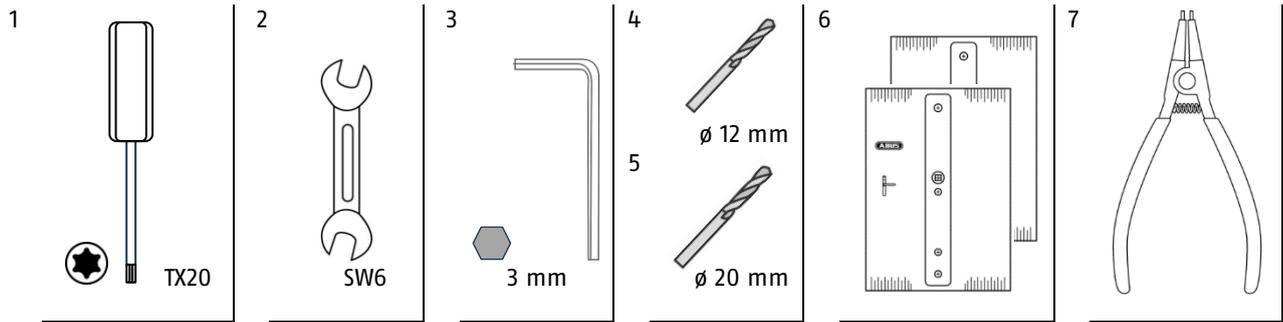
**WARNING! Serious injury or death possible if fittings do not function properly due to improper installation or maintenance!**

Poorly installed or maintained hardware can impair the function of escape doors and fire doors. In emergencies, this can lead to dangerous situations with serious or fatal injuries.

- Only have the fittings on escape and fire doors installed and maintained by specialised personnel.
- Observe and follow all manufacturer's instructions when installing and maintaining the doors, locks and fittings.
- Ensure that only suitable components are installed in escape and rescue routes. Pay particular attention to the compatibility of the installed components and observe the manufacturer's certificates.
- Observe the prescribed maintenance intervals for doors, locks and fittings.
- Replace the hardware on escape and fire doors once the maximum number of closing cycles has been reached (see → Chap. 2.5 Technical data).

## 4. Assembly instructions

### 4.1. Tools required



- 1 hexagon socket screwdriver TX20
- 2A open-end spanner SW6
- 3Socket spanner 3 mm
- 4drill ø 12 mm
- 5Drill ø 20 mm
- 6Drilling template
- 7Locking ring pliers (only for replacing the lever handle or cover)

#### 4.2. Pre-programming before assembly

The electronic fitting is decoupled on delivery.

- ⓘ After programming, the fitting is in the uncoupled state. Access is then blocked from this side.
  - If you programme the fitting in advance and then install it, make sure that you do not lock yourself out.
  - Keep the door open or distribute valid locking media promptly.

#### 4.3. Preparations before assembly

- Structural work on the building site has been completed.
- The door is fully assembled.
- The mortise lock is fitted.
- Hardware and software for parameterising the door components for the TECTIQ system are available and ready for operation.

For mortise locks with 10 mm square spindle:

- ▶ Fit the reducing sleeve into the square spindle of the lock.

- ⓘ Install the fitting with the door open. Make sure that the door remains open during installation and that you do not inadvertently lock yourself out. Do not leave fire doors unattended during installation so that fire protection is guaranteed. Keep escape and rescue routes clear.



**NOTE** The door leaf, the fitting and surrounding parts can be damaged.

- Do not carry out any work that you are not familiar with.
- Only use tools that are in perfect condition.
- Pay particular attention to careful and professional execution when drilling into door leaves.



**IMPORTANT!** Changes to doors or mortise locks can lead to the cancellation of certificates.

#### 4.4. Cable routing between external and internal fitting

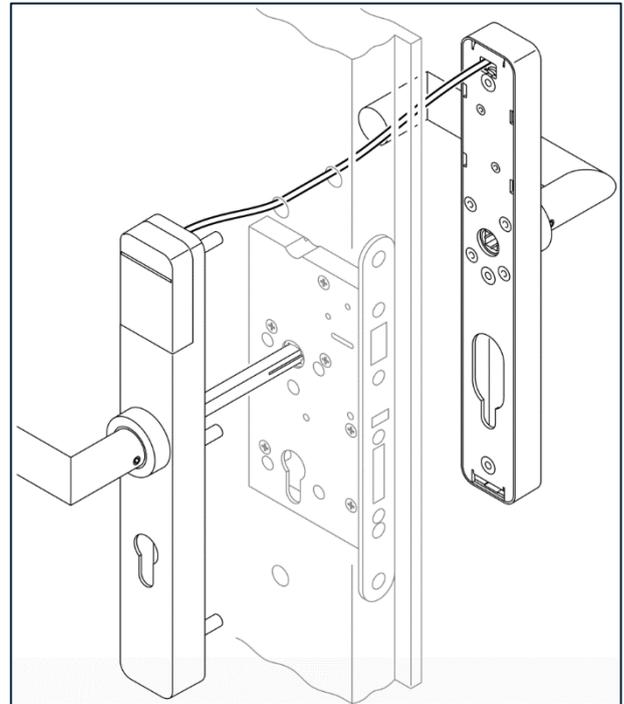
**i** The length of the connecting cable is configured and delivered with the order.

##### Cable routing A: Through top hole

- Mounting without adapter plate

For:

- TECTIQ narrow frame fitting
- TECTIQ Security narrow frame fitting
- TECTIQ narrow frame fitting Scandinavia

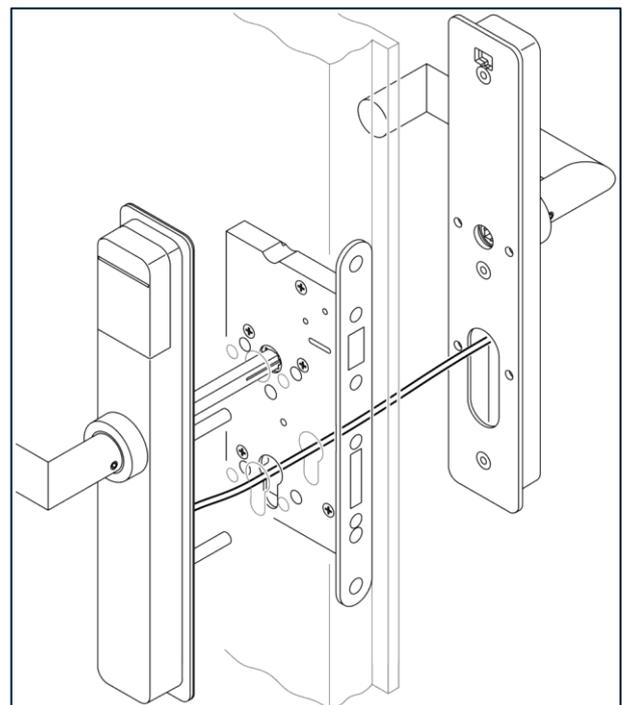


##### Cable routing B: Through the cylinder opening

- Installation with adapter plate, without locking cylinder

For:

- TECTIQ narrow frame fitting FIX-DIN-short
- TECTIQ narrow frame fitting FIX-DIN-round (with closed cover)



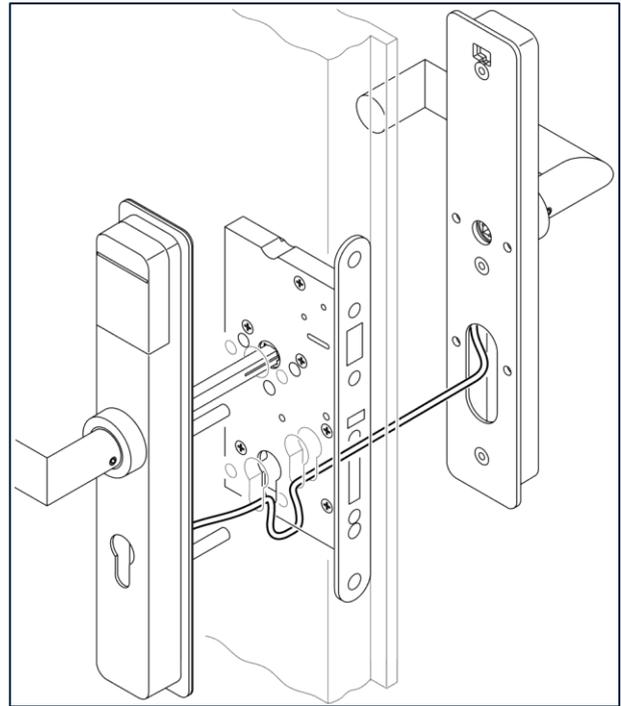
### Cable routing C: Below the mortise lock

- Installation with adapter plate and with locking cylinder

For:

- TECTIQ narrow frame fitting FIX-DIN round (with open panel)
- TECTIQ narrow frame fitting FIX-DIN-Kurz (for installation in doors with short backplate, e.g. FH doors)

**i** If the length of the existing connecting cable is not sufficient, it may need to be replaced with a longer one (see→ chapter 12.1).

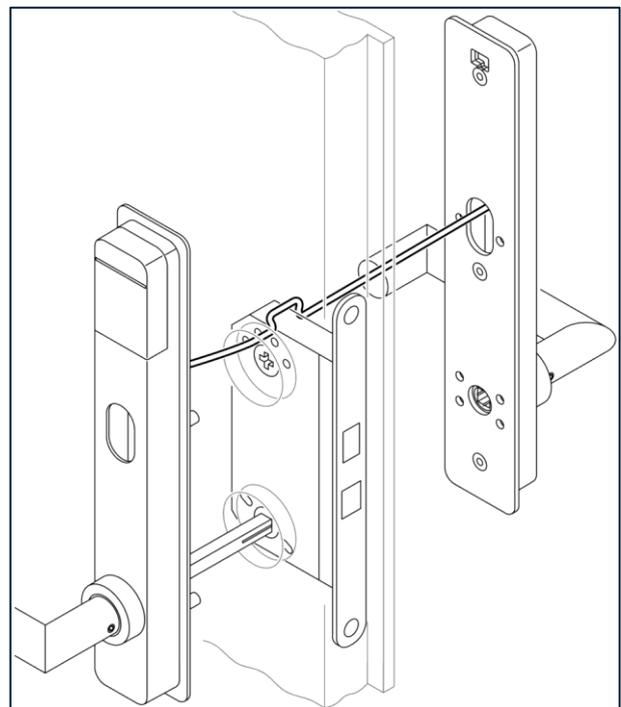


### Cable routing D: Above the mortise lock

For:

- TECTIQ narrow frame fitting Scandinavia FIX-wide (with adapter plate)

**i** If the length of the existing connecting cable is not sufficient, it may need to be replaced with a longer one (see→ chapter 12.1).



## 5. Fitting the TECTIQ narrow frame fitting

For doors in which additional holes may be drilled.

For standard doors: Cable routing **A**, see→ chapter 4.4.

For doors with short plate screw connection: Cable routing **C**, see→ chapter 4.4.

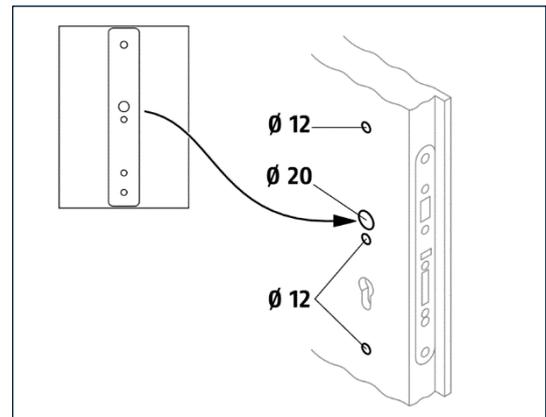
**i** For doors with holes for round roses: Use adapter plate, see→ chapter 6.

### Step 1: Drill holes for fittings

**i** Not for FH doors. Only the existing drill holes are used here. Deviating drill holes are only permitted with the authorisation of the door manufacturer.

**i** Depending on the design of the door, drill the holes separately on the inside and outside.

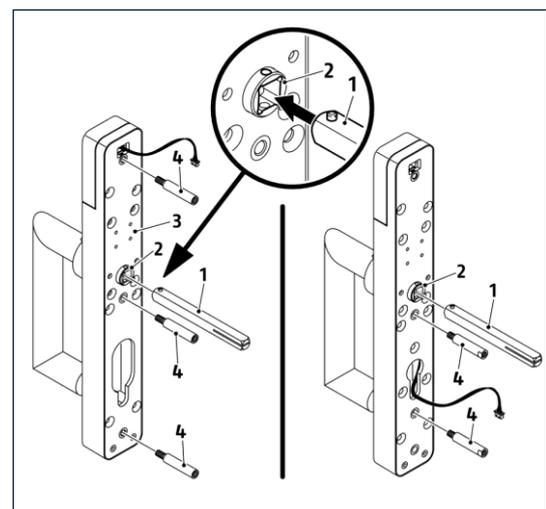
- ▶ Align the enclosed drilling template vertically on the door at the installation location - matching the mortise lock. Insert the square spindle into the mortise lock to secure the drilling template.
- ▶ Mark the drill holes.
- ▶ Remove the mortise lock and drill the holes.
  - Top: 12 mm
  - Centre: 20 mm for square socket  
12 mm
  - Bottom: 12 mm



### Step 2: Attach the connecting cams and square spindle to the outer fitting

**i** For FH doors with only two holes, the top screw connection is omitted.

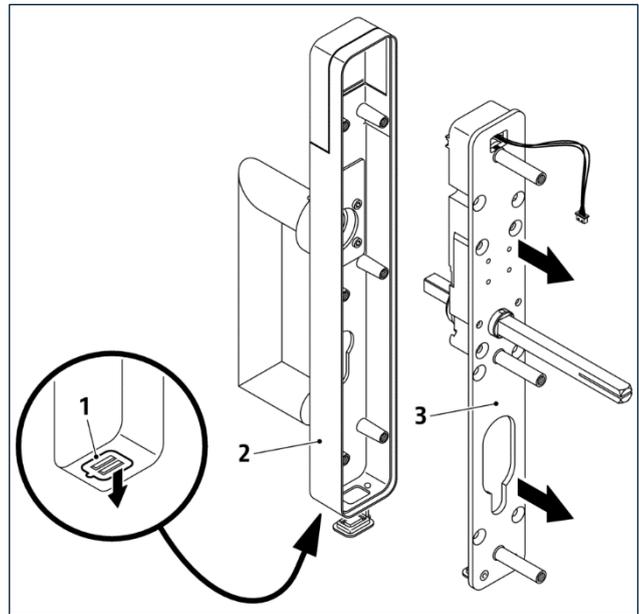
- ▶ Screw the connecting cams (4) into the outer fitting (3). Tightening torque approx. 2 Nm.
  - Top: Connecting cams 8 mm
  - Centre: Connecting cams 6.4 mm
  - Bottom: Connecting cams 8 mm
- ▶ Insert the square spindle (1) into the square socket (2) of the external fitting (3). The spring pin must point upwards.



### Step 3: Align the lever handle with the external fitting

On delivery, the lever handle on the external fitting is aligned vertically.

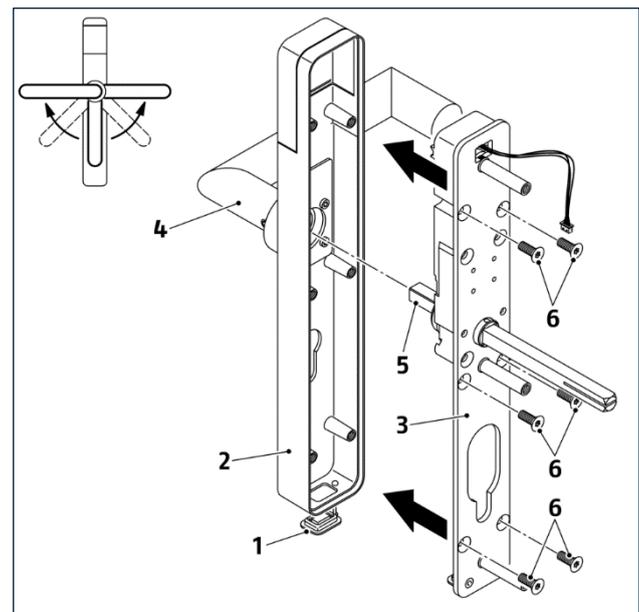
- ▶ Open the USB cover (1) on the outside fitting on the underside.
- ▶ Remove the complete cover (2) from the outer fitting.



- ▶ Move the lever handle (4) to the correct rest position.

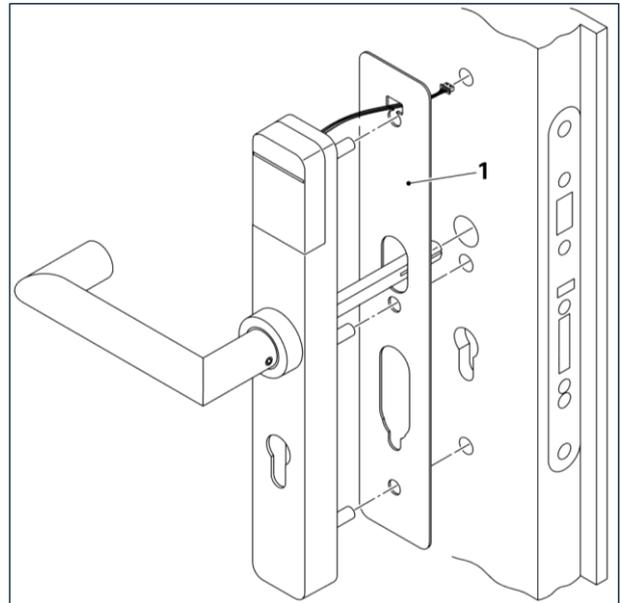
 **NOTE:** Do not crush the cables! Damaged cables can render the fitting unusable.

- ▶ Place the lever handle (4) in the correct position on the square (5) of the outside fitting and carefully replace the cover (2).
- ▶ Tighten the cover (2) with the 6 housing screws (6). Tightening torque approx. 2 Nm.
- ▶ Replace the USB cover (1) on the USB port.



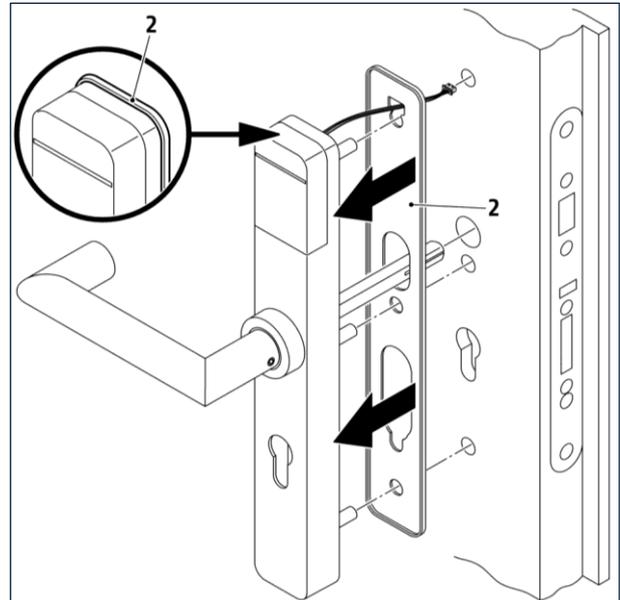
#### Step 4: Mount the external fitting on the door

- ① You can cover existing screw holes in rosettes fittings with a renovation plate (1) between the external fitting and the door leaf.



For installation protected against water jets:

- ▶ Fit the sealing shoe (2) to the rear of the external fitting.



For square socket 10 mm:

- ▶ Insert the reducing sleeve into the square socket.

For standard doors (cable routing **A**):

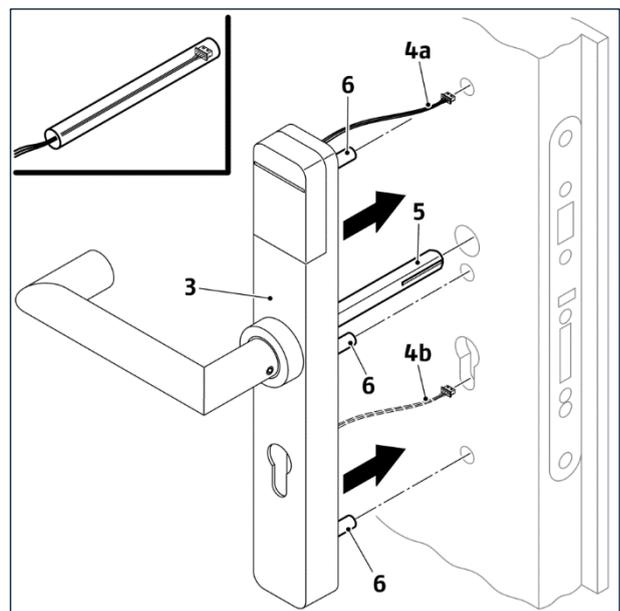
- ▶ Guide the connecting cable (4a) through the upper hole in the door leaf. Use the installation aid for this (dispose of after installation).

For doors with short backplate screw fitting (-FIXDIN- Short variants, cable guide **C**):

- ▶ Guide the connecting cable through the opening of the profile cylinder (4b).

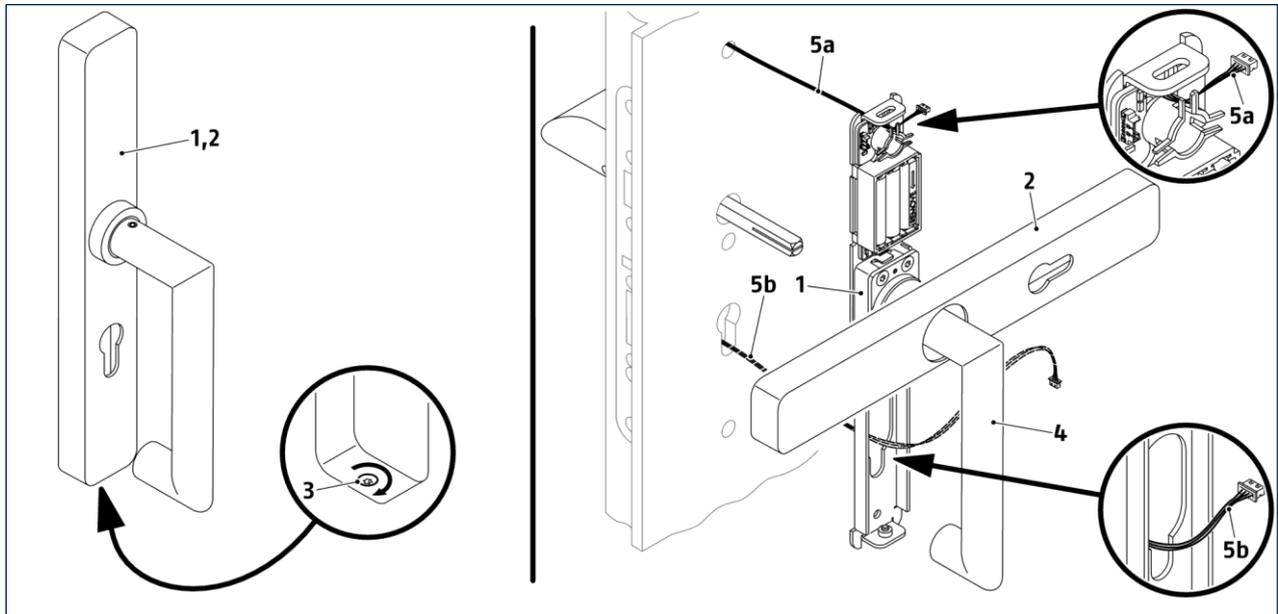
⚠ NOTE: Do not crush the cables! Damaged cables can render the fitting unusable.

- ▶ Place the outer fitting (3) on the outside of the door.
- ▶ Guide the square spindle (5) and the connecting cams (6) through the holes until the outer fitting rests on the door leaf.



#### Step 5: Installing the interior fitting

**i** You can cover existing screw holes in rose fittings with a renovation plate between the inside fitting and the door leaf.



**🏠** NOTE: Protect the handle from scratches during installation.

- ▶ On the inside fitting, screw the locking screw (3) on the underside into the fitting to release the cover (2).
- ▶ Pull the cover (2) off the inside fitting (1) until it can be rotated freely on the handle (4).
- ▶ Guide the connecting cable (5a / 5b) of the external fitting into the internal fitting.

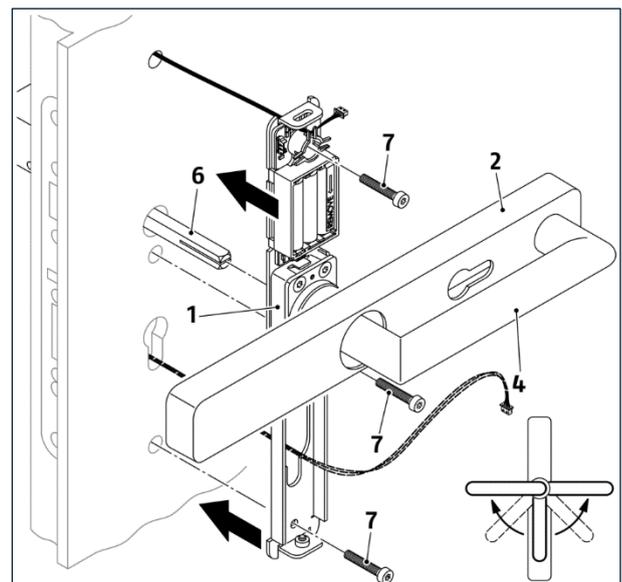
**🏠** NOTE: Do not crush the cables! Damaged cables can render the fitting unusable.

**🏠** NOTE: Protect outer fitting from falling down.

Move the lever handle (4) of the inside fitting into the correct position and place it on the square spindle.

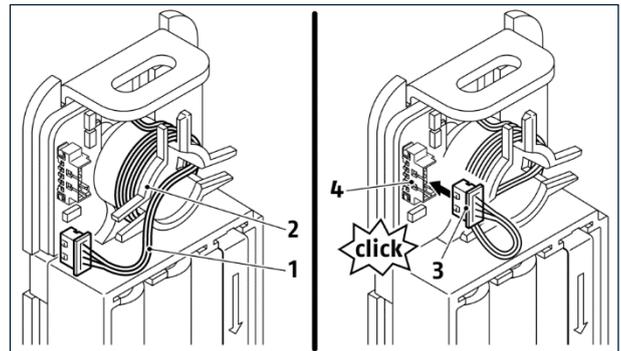
- ▶ Place the inside fitting on the door leaf.
- ▶ Connect the inside fitting and outside fitting with the 3 connecting screws (FH doors: 2). Tightening torque: approx. 2 Nm.

**i** It must be possible to move the inside and outside handles without any problems. If in doubt, loosen the centre screw connection slightly.



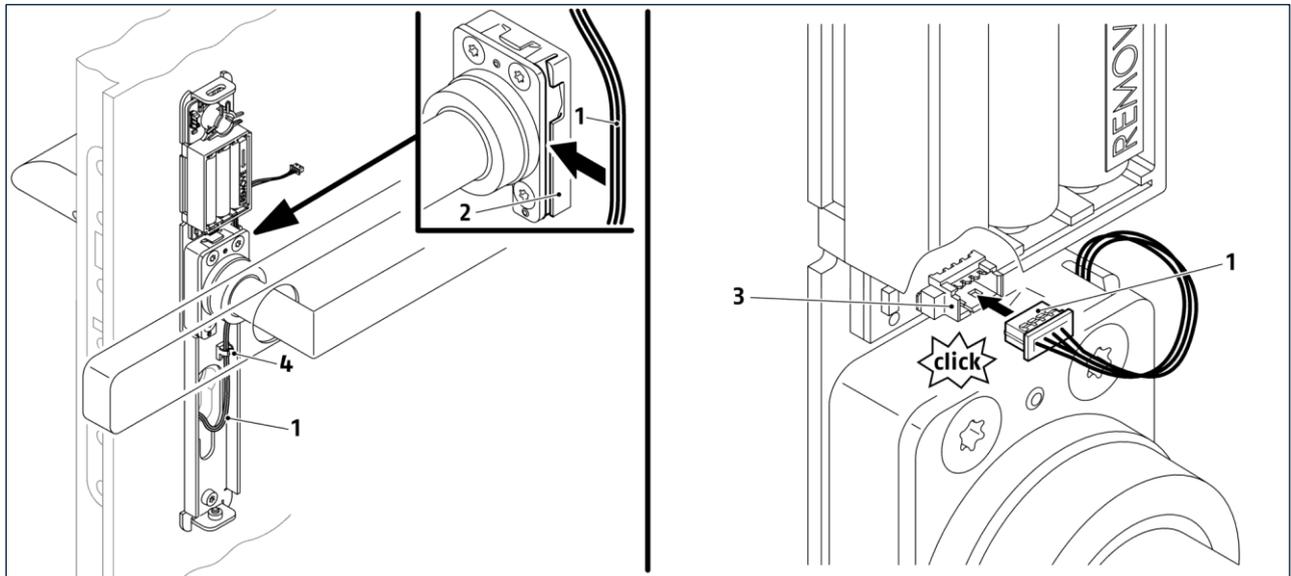
### Step 6: Making the connection between the inside and outside fitting

- ▶ Guide the connecting cable (1) around the collar (2) so that the cable cannot be crushed by the cover.
- ▶ Insert the plug (3) of the connecting cable into the slot (4).



### Cable routing for FH doors (TECTIQ narrow frame fitting FIX-DIN short):

- ▶ Guide the connecting cable (1) upwards through the groove along the pressure sensor (2).
- ▶ Insert the plug into the slot (3) below the battery compartment.
- ▶ Secure loose cables to the clip (4).

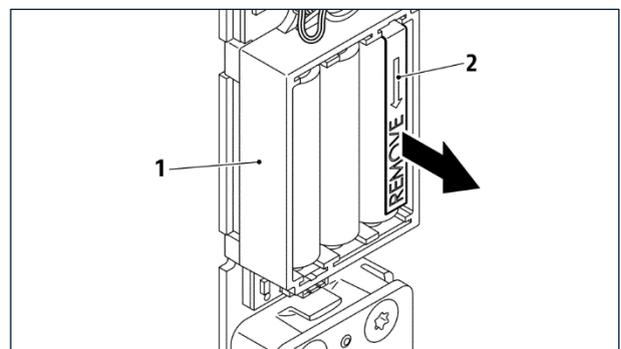


### Step 7: Remove battery insulation

On delivery, the batteries are inserted in the inside fitting.

- ▶ Pull out the insulating flag (2) from the battery compartment (1) in the inner fitting.

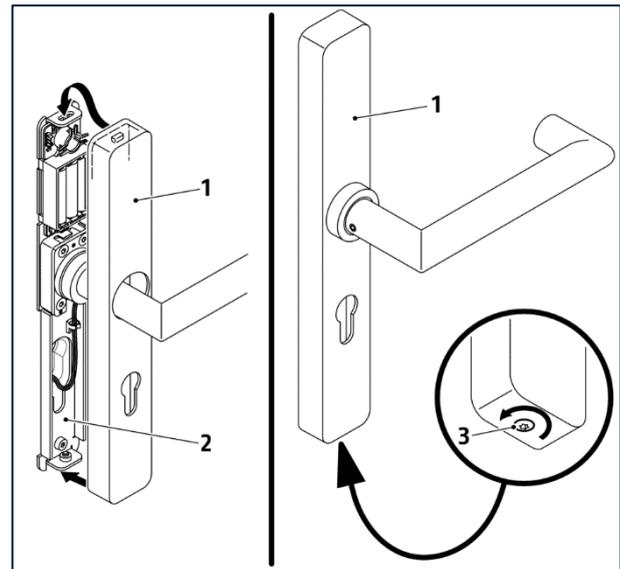
= As soon as the fitting is supplied with power, the LEDs on the external fitting flash briefly (green-red-green-red).



### Step 8: Close the inside fitting

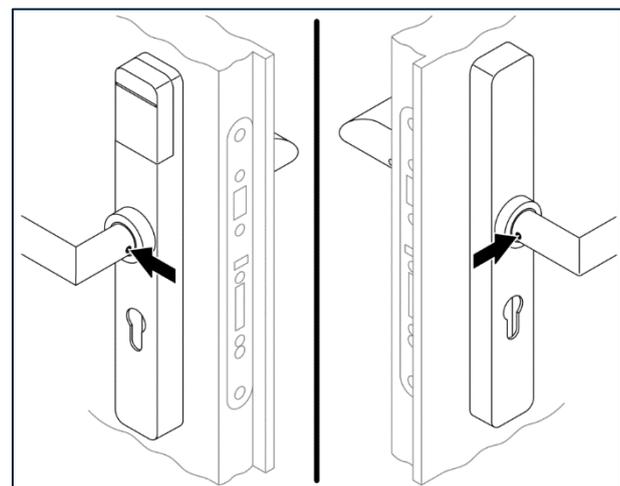
- ▶ Place the cover (1) first at the top and then at the bottom of the fitting (2).

- ⓘ NOTE: Do not exceed the tightening torque! The fitting, the panel and the door leaf may be damaged.
  - ▶ Unscrew the locking screw on the underside of the inner fitting until the panel is locked. Tightening torque: approx. 1.2 Nm.



### Step 9: Secure the lever handle to the fitting

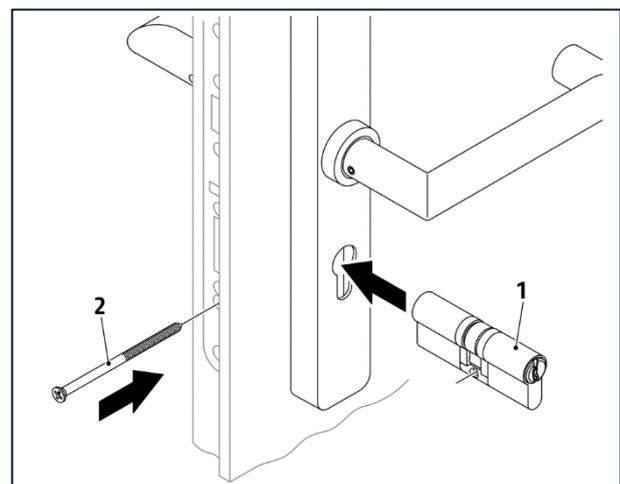
- ▶ Screw in the grub screws on both door handles - on the inside and outside. Tightening torque: approx. 2 Nm.



### Step 10: Insert locking cylinder (optional)

For fittings with opening for locking cylinder:

- ▶ Insert the locking cylinder (1) into the fitting and mortise lock.
- ▶ When the locking cylinder is in the correct position, move the locking bolt out and tighten the locking cylinder with the forend screw (2).
- ⓘ It must be possible to move the latchbolt and latch properly. If in doubt, loosen the forend screw slightly.
- ▶ Move the locking bolt back in.



## 6. Fitting TECTIQ narrow frame fitting FIX-DIN-round with adapter plate

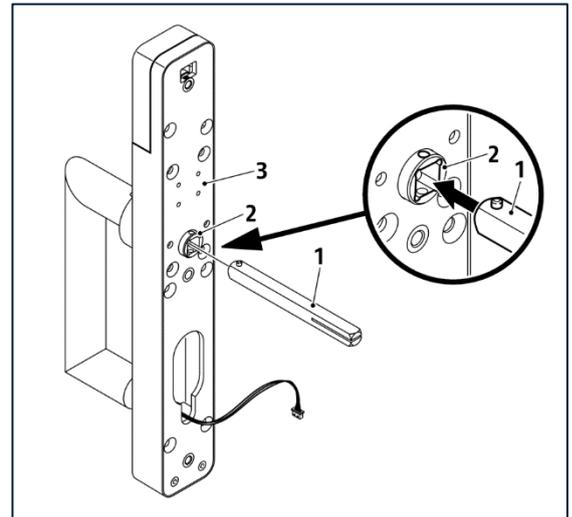
For doors with holes for round rose fittings.

**i** The cables are routed through the cylinder opening. If a standard fitting is used, it must first be converted, see → chapter 12.1.

- For closed fittings: Cable routing B, see → chapter 4.4.
- For fittings with locking cylinder: Cable routing C see → chapter 4.4.

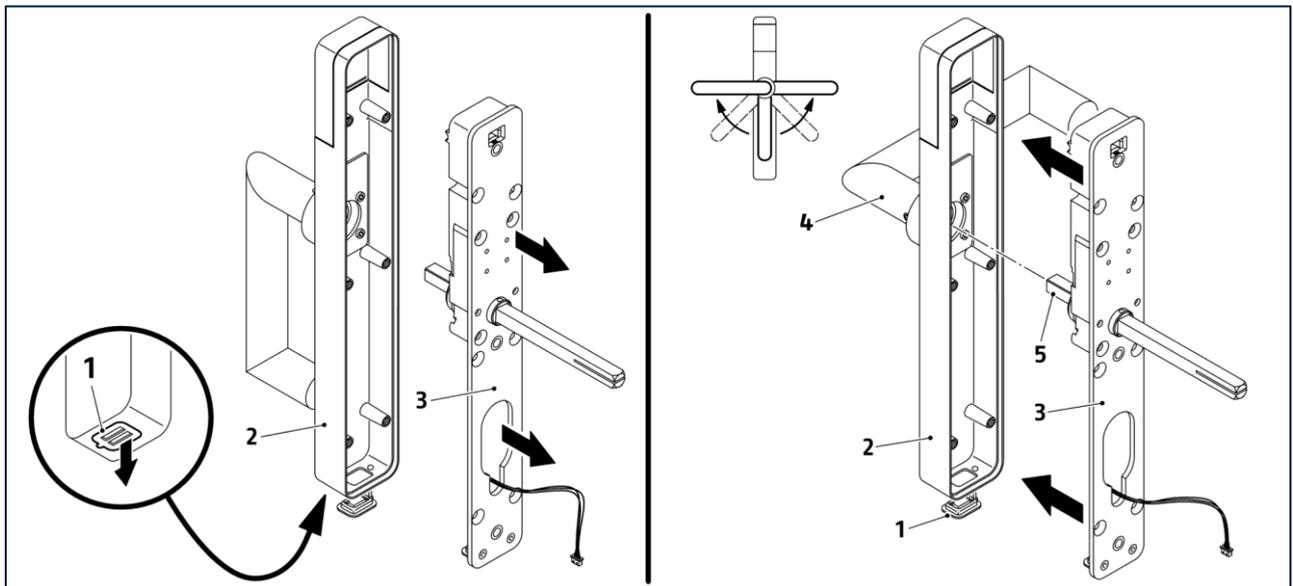
### Step 1: Attach the square spindle to the outer fitting

- ▶ Insert the square spindle (1) into the square socket (2) of the external fitting (3). The spring pin must point upwards.



### Step 2: Align the lever handle with the external fitting

On delivery, the lever handle on the external fitting is aligned vertically.



- ▶ Open the USB cover (1) on the outside fitting on the underside.
- ▶ Remove the complete cover (2) from the outer fitting (3).

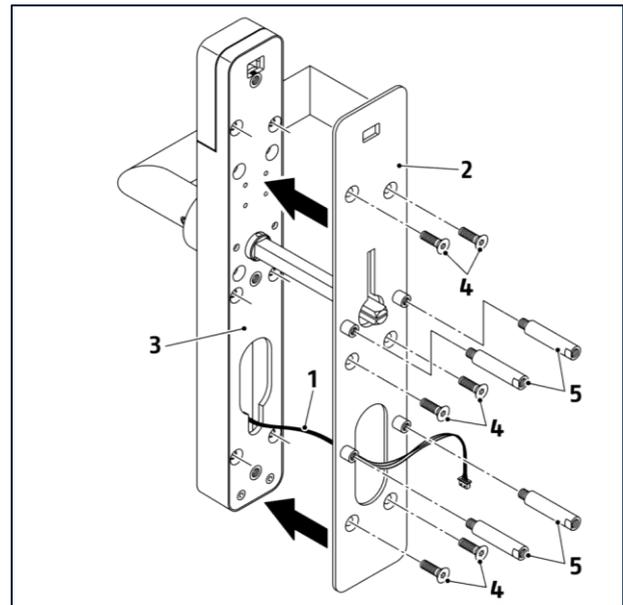
**⚠** NOTE: Do not crush the cables! Damaged cables can render the fitting unusable.

- ▶ Place the lever handle (4) in the correct position on the square (5) of the external fitting and carefully replace the cover.
- ▶ Replace the USB cover (1) on the USB port.

### Step 3: Attach the adapter plate to the outer fitting

The adapter plate for the external fitting can be recognised by the welded-on screw sleeves.

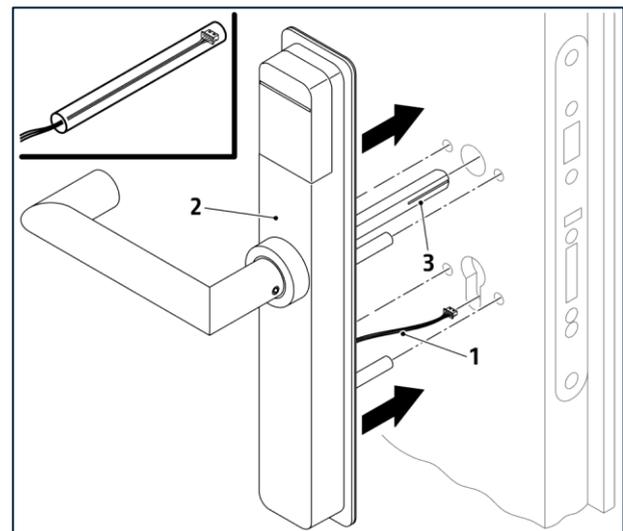
- ▶ Guide the connection line (1) through the cylinder opening of the adapter plate (2).
- ▶ Place the adapter plate (2) on the back of the outer fitting (3) and screw tight with 6 housing screws (4). Tightening torque approx. 2 Nm.
- ▶ Screw the connecting cam (5) onto the adapter plate. Tightening torque approx. 2 Nm.



### Step 4: Mount the external fitting on the door

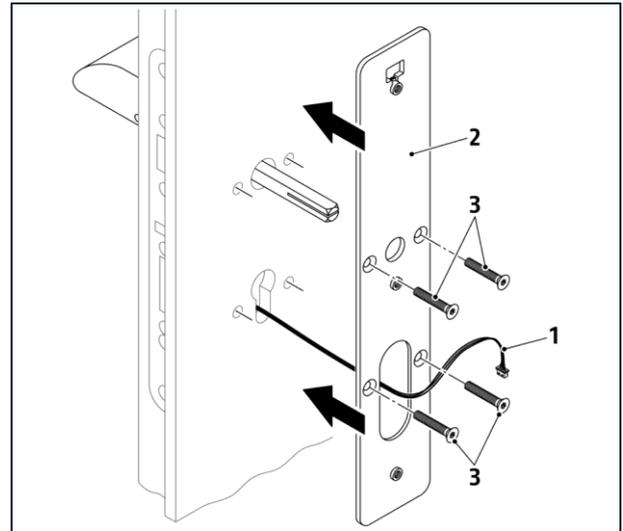
For square socket 10 mm:

- ▶ Insert the reducing sleeve into the square socket.
- ▶ Guide the connecting cable (1) through the cylinder opening through the door leaf. Use the installation aid for this (dispose of after installation).
- ⓘ NOTE: Do not crush the cables! Damaged cables can render the fitting unusable.
- ▶ Place the outer fitting (2) on the outside of the door. Guide the square spindle (3) and the connecting cams through the holes until the outer fitting rests on the door leaf.



### Step 5: Fitting the adapter plate inside

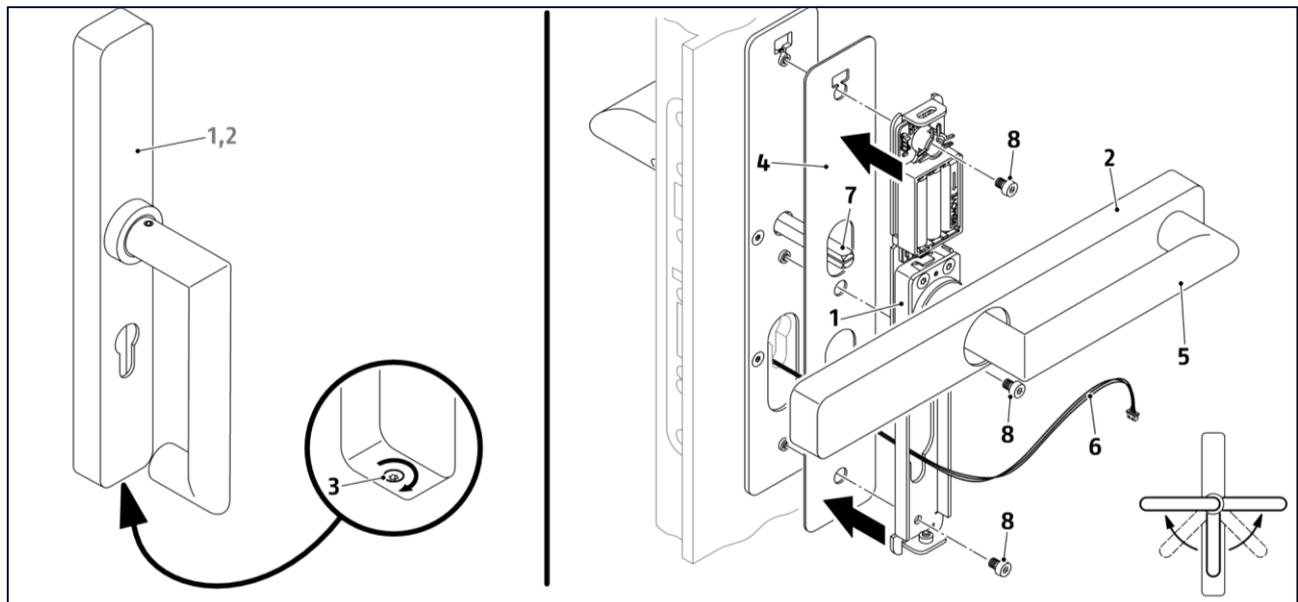
- ▶ On the inside of the door, guide the connecting cable (1) through the adapter plate (2) and place the adapter plate on the door.
- ▶ Use the 4 fixing screws (3) to connect the adapter plate to the outer fitting and screw tight. Tightening torque: approx. 2 Nm.



### Step 6: Installing the interior fitting

NOTE: Protect the handle from scratches when fitting.

- ▶ On the inside fitting, screw the locking screw (3) on the underside into the fitting and lift the cover (2) off the inside fitting until it can be rotated freely.
- ▶ Place the renovation plate (4) on the adapter plate.
- ▶ Guide the connecting cable (6) through the cylinder opening into the inside fitting.



- ▶ Move the lever handle (5) of the inside fitting into the correct position and place it on the square spindle (7).

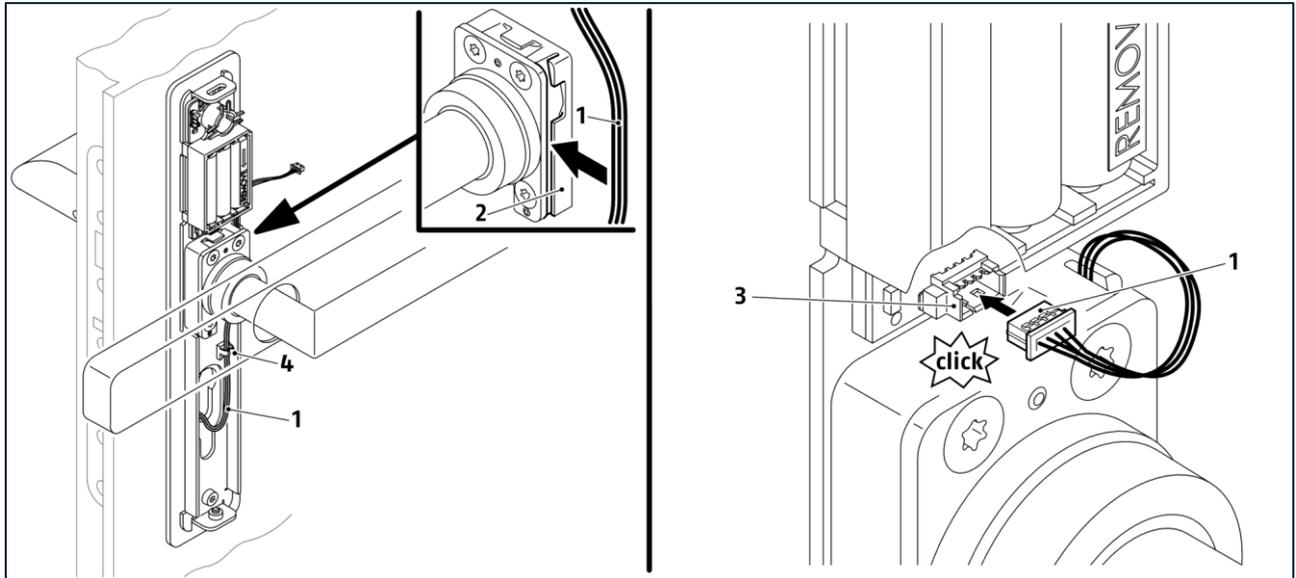
NOTE: Do not crush the cables! Damaged cables can render the fitting unusable.

- ▶ Place the inner fitting (1) on the adapter plate and tighten with the 3 connecting screws (8). Tightening torque: approx. 2 Nm.

It must be possible to move the inside and outside handles without any problems. If in doubt, loosen the centre screw connection slightly.

### Step 7: Make the connection between the inside and outside fitting

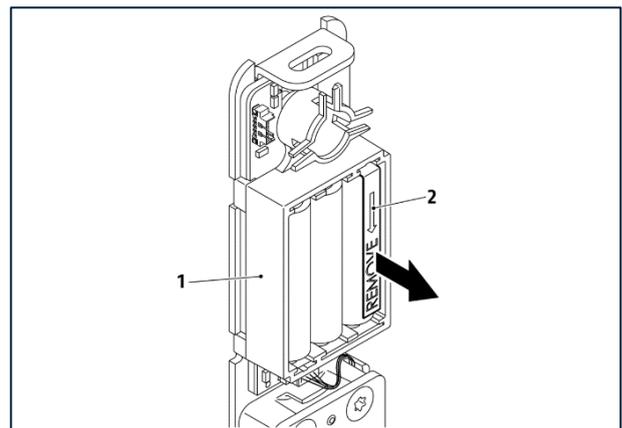
- ▷ Guide the connecting cable (1) upwards through the groove along the pressure sensor (2).
- ▷ Insert the plug of the connecting cable (1) into the slot (3) below the battery compartment.
- ▷ Secure loose cables to the existing clip (4) so that the cable is not crushed by the cover.



### Step 8: Remove battery insulation

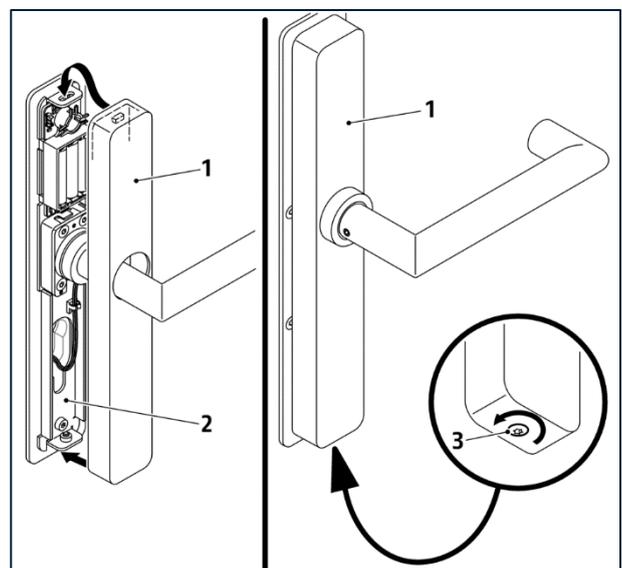
The batteries are pre-assembled in the inside fitting when delivered.

- ▷ Pull out the insulating flag (2) from the battery compartment (1) in the inner fitting.
- = As soon as the fitting is supplied with power, the LEDs on the external fitting flash briefly (green-red-green-red).



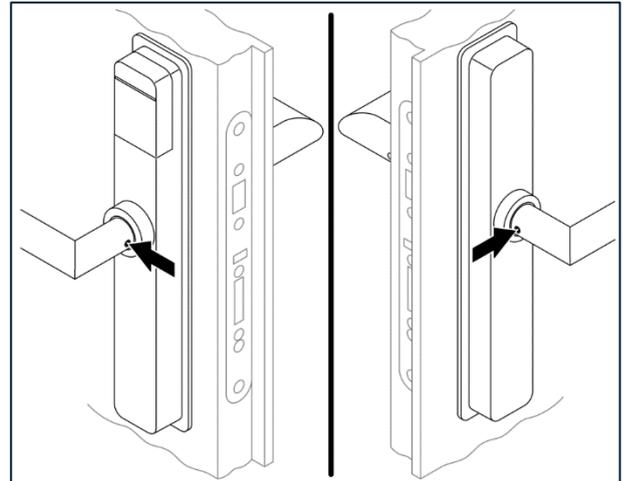
### Step 9: Close the inside fitting

- ▷ Place the cover (1) first at the top and then at the bottom of the fitting (2).
-  **NOTE:** Do not exceed the tightening torque! The fitting, the panel and the door leaf may be damaged.
- ▷ Unscrew the locking screw (3) on the underside of the inner fitting until the panel is locked. Tightening torque: approx. 1.2 Nm.



**Step 10: Secure the lever handle to the fitting**

- ▶ Screw in the grub screws on both door handles - on the inside and outside.  
Tightening torque: approx. 2 Nm.



## 7. Installing TECTIQ Scandinavian narrow frame fittings

For doors with mortise lock to SS 817375 - with or without oval cylinder.

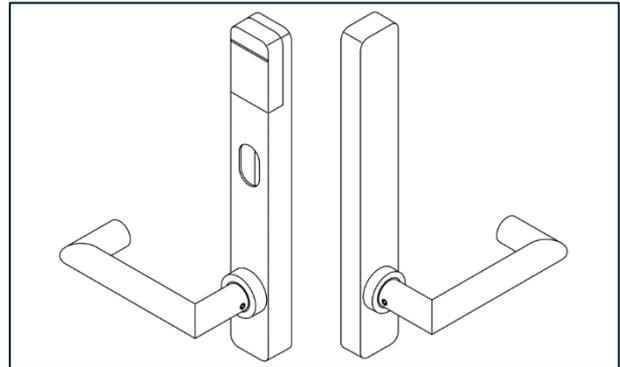
Drill cut-outs 44 mm can be covered with renovation panels. see→ chapter 2.4.

Cable routing A, see→ chapter 4.4.

**i** For doors with holes for round roses: Use adapter plate Scandinavia FIX-Breit, see→ chapter 8.

### Preparation

- Structural work on the building site has been completed.
- The door is fully assembled.
- The mortise lock is fitted.
- Hardware and software for parameterising the door component for the TECTIQ system is available and ready for operation.

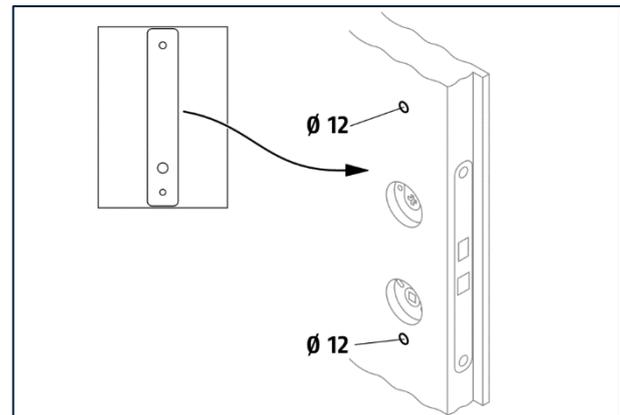


### Step 1: Drill holes for fittings

**i** Not for FH doors. Only the existing drill holes are used here.  
Deviating drill holes are only permitted with the authorisation of the door manufacturer.

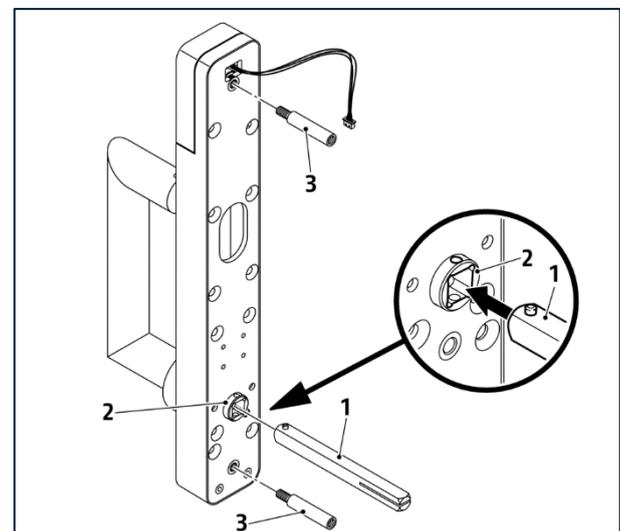
**i** Depending on the design of the door, drill the holes separately on the inside and outside.

- ▷ Align the drilling template vertically on the door at the installation location.  
To fix the drilling template in place, insert the square spindle into the mortise lock.
- ▷ Mark and drill the drill holes:  
Top: 12 mm  
Centre: 20 mm (for square socket, if required)  
Bottom: 12 mm



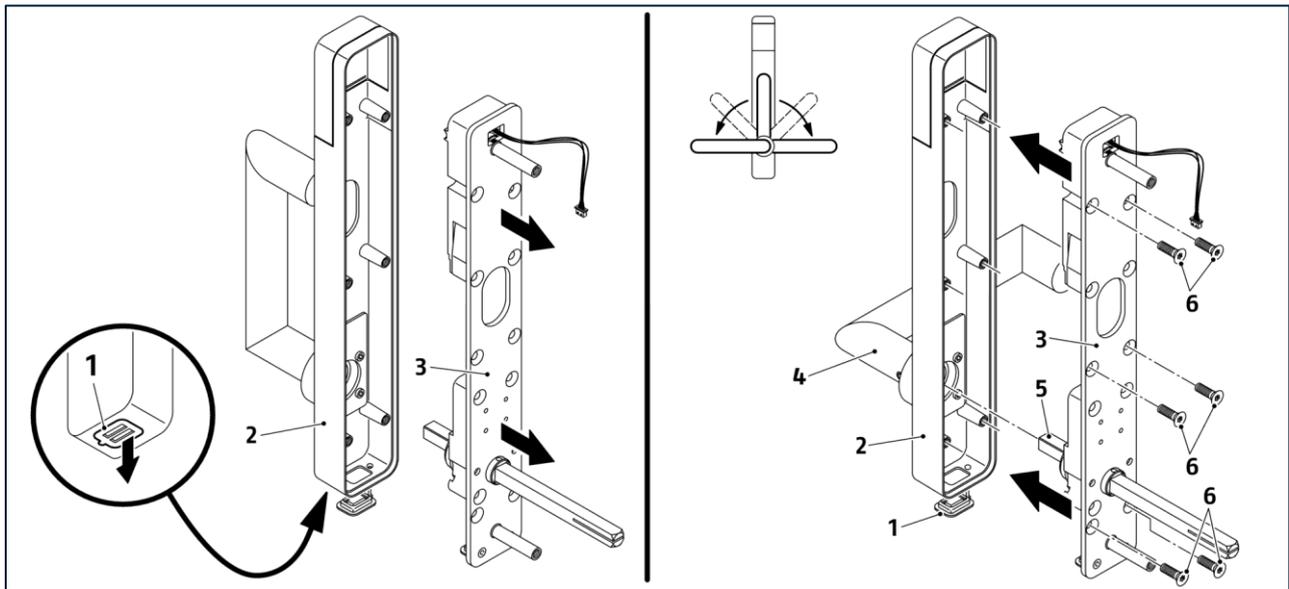
### Step 2: Attach the connecting cams and square spindle to the outer fitting

- ▷ Screw the 2 connecting cams (3) into the outer fitting. Tightening torque approx. 2 Nm.
- ▷ Insert the square spindle (1) into the square socket (2) of the external fitting. The spring pin must point upwards.



### Step 3: Align the lever handle with the external fitting

On delivery, the lever handle on the outside fitting is aligned vertically.



- ▶ Open the USB cover (1) on the outside fitting on the underside.
- ▶ Remove the complete cover (2) from the outer fitting.
- ▶ Move the lever handle (4) to the correct rest position.

 **NOTE:** Do not crush the cables! Damaged cables can render the fitting unusable.

- ▶ Place the lever handle (4) in the correct position on the square (5) of the outside fitting and carefully replace the cover (2).
- ▶ Tighten the cover with 6 housing screws (6). Tightening torque approx. 2 Nm.
- ▶ Replace the cover on the USB port (1).

### Step 4: Mount the external fitting on the door

For square socket 10 mm:

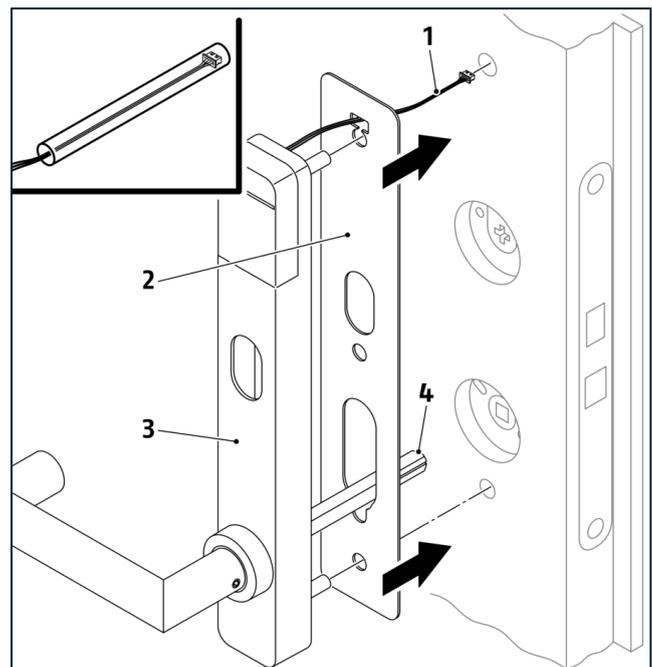
- ▶ Insert the reducing sleeve into the square socket.

 You can cover existing screw holes in rosette fittings with a renovation plate between the external fitting and the door leaf.

- ▶ Feed the connecting cable (1) through the renovation panel (if used; 2) and the door leaf. Use the installation aid for this (dispose of after installation).

 **NOTE:** Do not crush the cables! Damaged cables can render the fitting unusable.

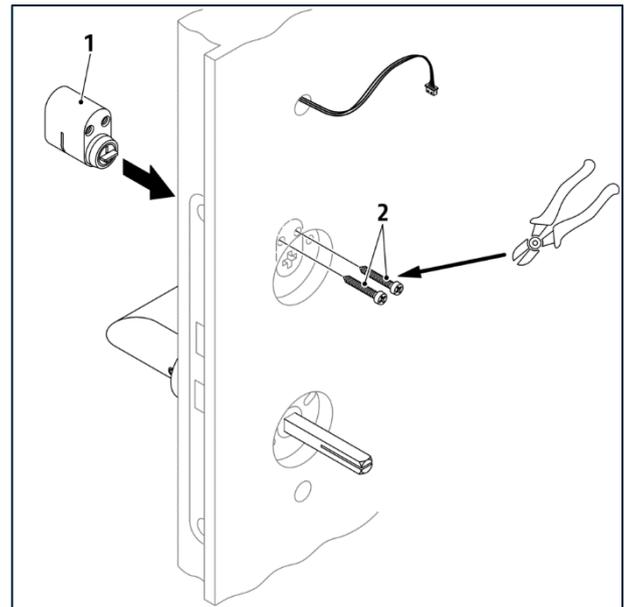
- ▶ Place the renovation panel on the outside of the door leaf and then fit the external fitting (3).
- ▶ Guide the square spindle (4) and the connecting cams through the holes until the outer fitting rests on the door leaf.



### Step 5: Insert locking cylinder (optional)

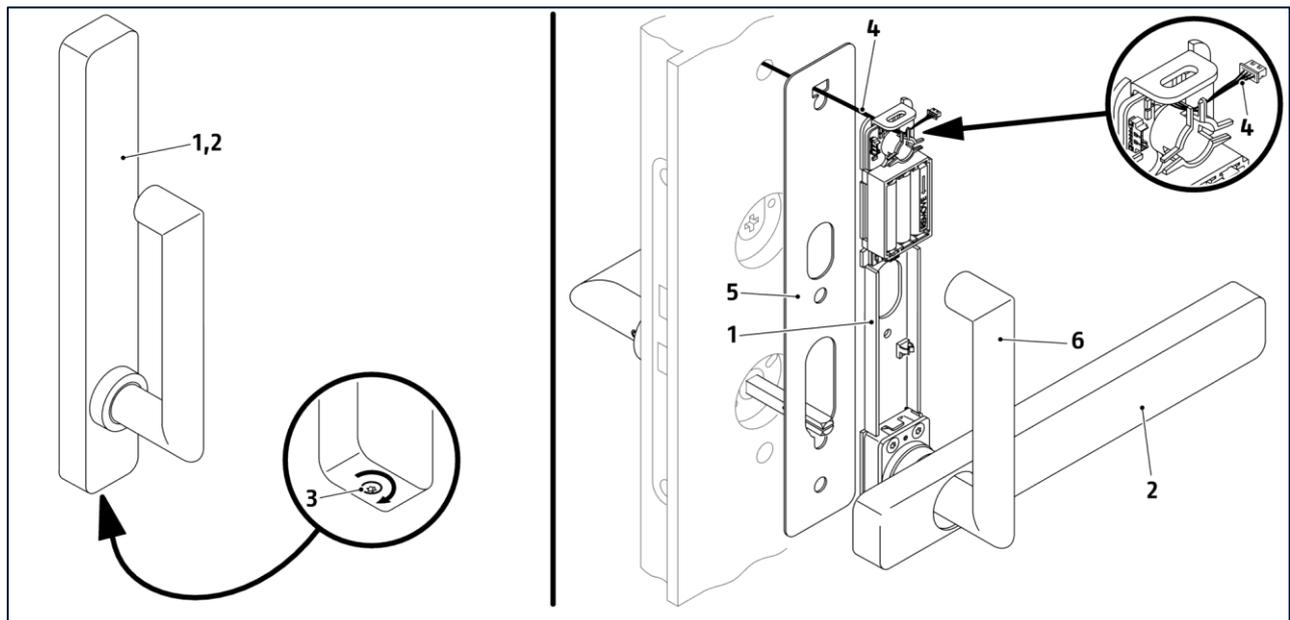
- ▶ Insert the oval cylinder (1) on the outside.  
The tappet must engage in the lock follower.
- ▶ Shorten the connecting screws (2) as required.
- ▶ Screw the locking cylinder to the lock.

**i** The locking cylinder must not protrude more than 3 mm beyond the fitting.



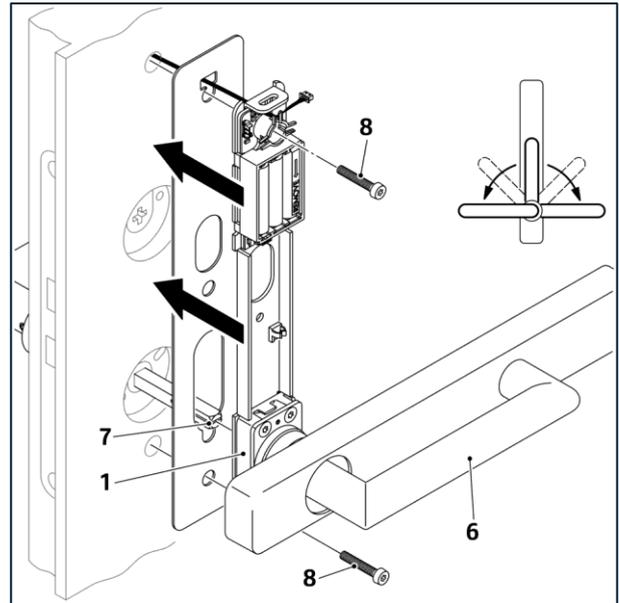
### Step 6: Installing the interior fitting

**🏠** NOTE: Protect the handle from scratches when fitting.



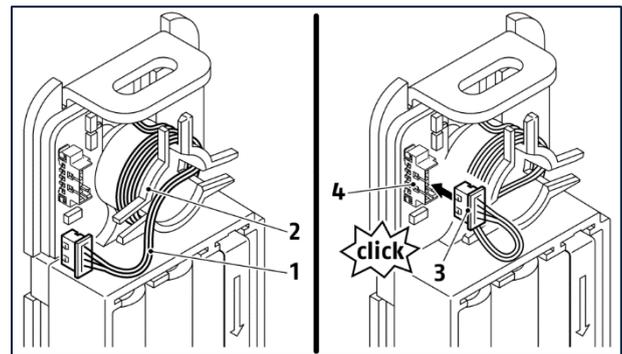
- ▶ On the inside fitting, screw the locking screw (3) on the underside into the fitting to release the cover.
- ▶ Lift the cover (2) until it can be rotated freely.
- ▶ Guide the connecting cable (4) through the renovation plate (5, if present) into the inside fitting (1).

- ▶ If available: Place the renovation panel on the door leaf.
  - ▶ Move the lever handle (6) of the inside fitting into the correct position and place it on the square spindle (7).
  - ▶ Place the inside fitting on the door leaf.
- NOTE:** Do not crush the cables! Damaged cables can render the fitting unusable.
- ▶ Connect the inner fitting and outer fitting with the connecting screws (8). Tightening torque: approx. 2 Nm.
- i** It must be possible to move the handles inside and outside without any problems. If in doubt, loosen the screw connection slightly.



#### Step 7: Making the connection between the inside and outside fitting

- ▶ Guide the connecting cable (1) around the collar (2) so that the cable is not crushed by the cover.
- ▶ Insert the plug (3) into the slot (4).

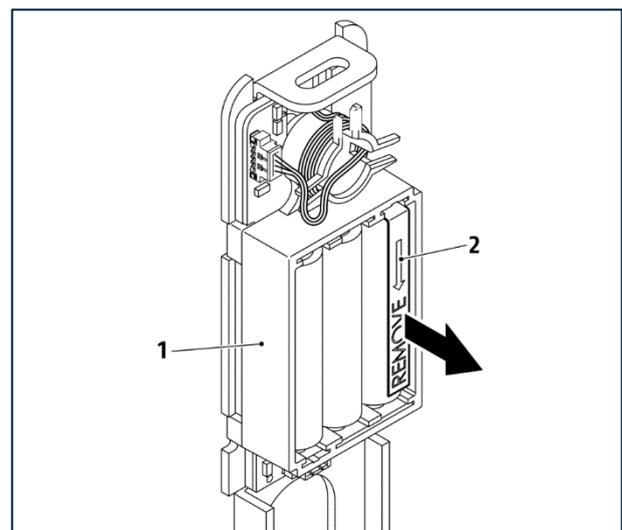


#### Step 8: Remove battery insulation

The batteries are pre-assembled in the inside fitting when delivered.

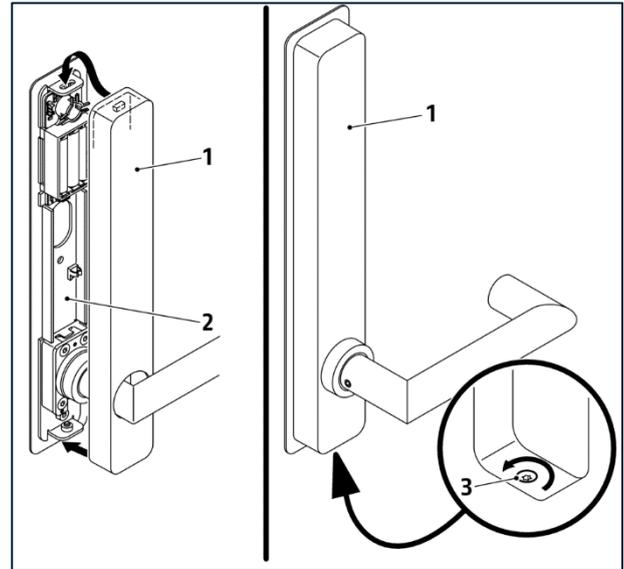
- ▶ Pull out the insulating flag (2) on the battery compartment (1).

= As soon as the fitting is supplied with power, the LEDs on the external fitting flash briefly (green-red-green-red).



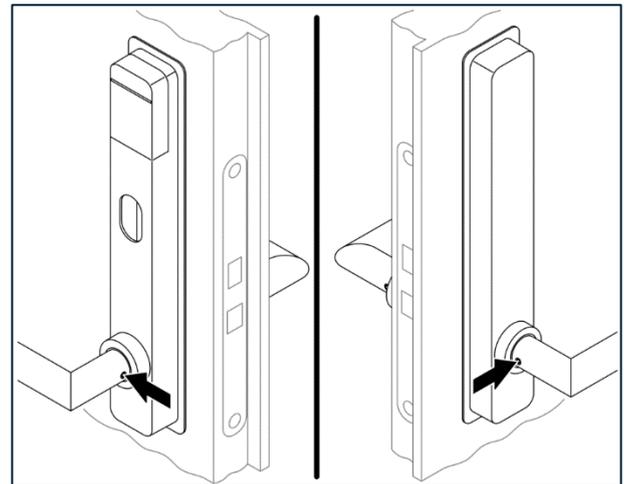
**Step 9: Close the inside fitting**

- ▶ Place the cover (1) first at the top and then at the bottom of the fitting (2).
- ⚠ NOTE: Do not exceed the tightening torque! The fitting, the panel and the door leaf may be damaged.
- ▶ Unscrew the locking screw (3) on the underside of the inner fitting until the panel is locked. Tightening torque: approx. 1.2 Nm.



**Step 10: Secure the lever handle to the fitting**

- ▶ Screw in the grub screws on both door handles - on the inside and outside. Tightening torque: approx. 2 Nm.

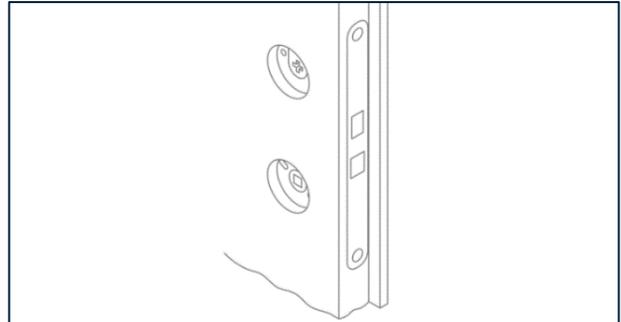


## 8. Installing TECTIQ narrow frame fitting Scandinavia FIX-wide with adapter plate

For doors with mortise lock to SS 817375 and mounting holes with  $\varnothing$  44 mm.

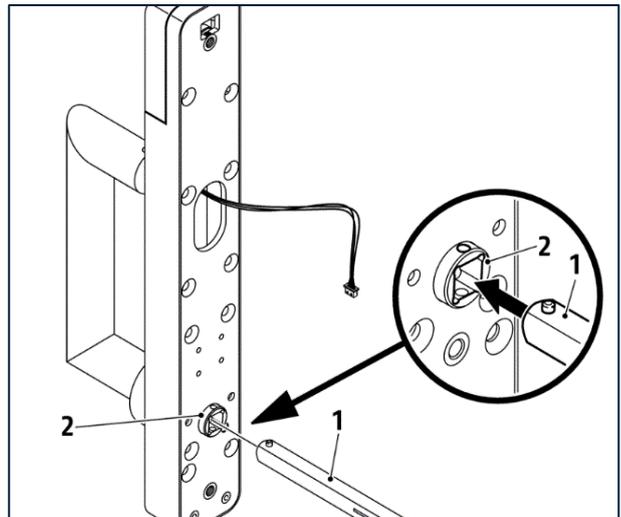
Cable routing D - below the lock case, see  $\rightarrow$  chapter 4.4.

- i** The cables are routed through the cylinder opening. If a standard fitting is used, it must first be converted (see  $\rightarrow$  chapter 12.1).



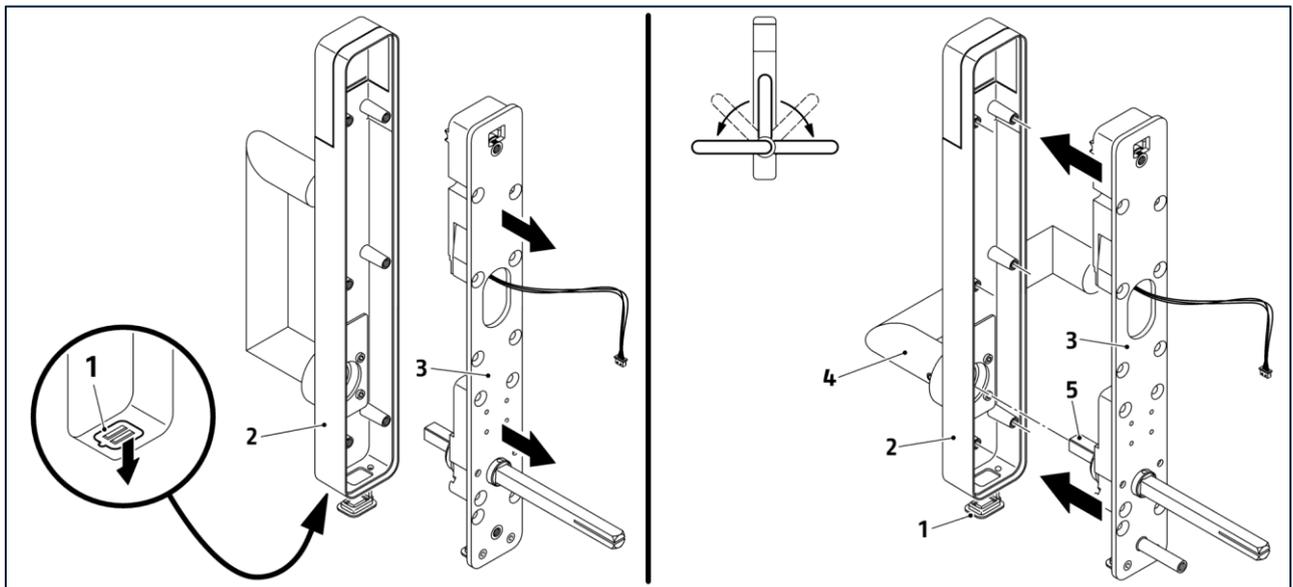
### Step 1: Attach the square spindle to the outer fitting

- $\triangleright$  Insert the square spindle (1) into the square socket (2) of the external fitting. The spring pin must point upwards.



### Step 2: Align the lever handle with the external fitting

On delivery, the lever handle on the external fitting is aligned vertically.



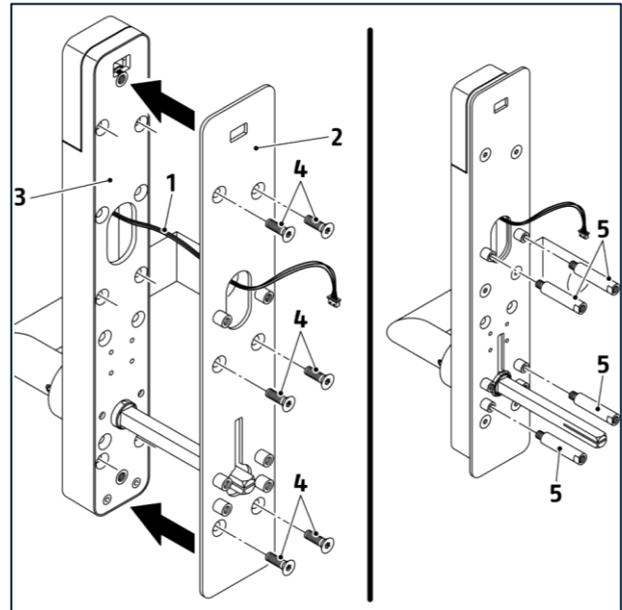
- $\triangleright$  Open the USB cover (1) on the outside fitting on the underside.
- $\triangleright$  Remove the complete cover (2) from the outer fitting.

**NOTE:** Do not crush the cables! Damaged cables can render the fitting unusable.

- $\triangleright$  Place the lever handle (4) in the correct position on the square (5) of the outside fitting and carefully replace the cover (2).
- $\triangleright$  Replace the USB cover (1).

### Step 3: Attach the adapter plate to the outer fitting

- ▶ Guide the connection line (1) through the cylinder opening of the adapter plate (2).
- ▶ Place the adapter plate (2) on the back of the outer fitting (3) and screw tight with 6 housing screws (4). Tightening torque approx. 2 Nm.
- ▶ Screw the connecting cam (5) onto the adapter plate. Tightening torque approx. 2 Nm.



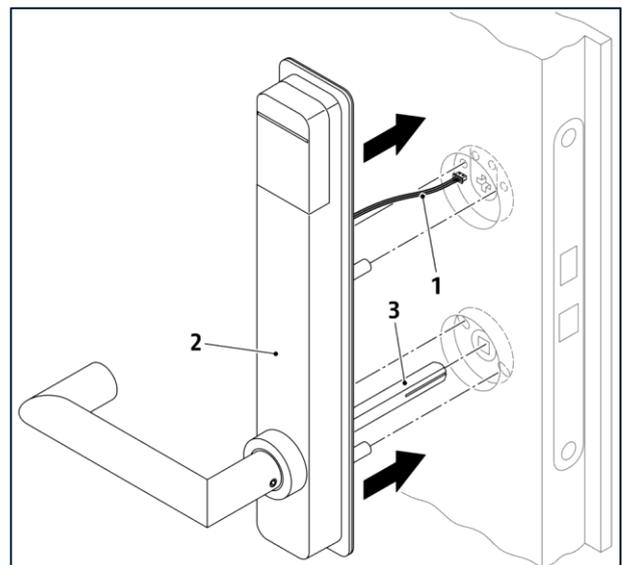
### Step 4: Mount the external fitting on the door

For square socket 10 mm:

- ▶ Insert the reducing sleeve into the square socket.
- ▶ Guide the connecting cable (1) above the mortise lock through the door leaf (see → chapter 4.4, cable routing D).

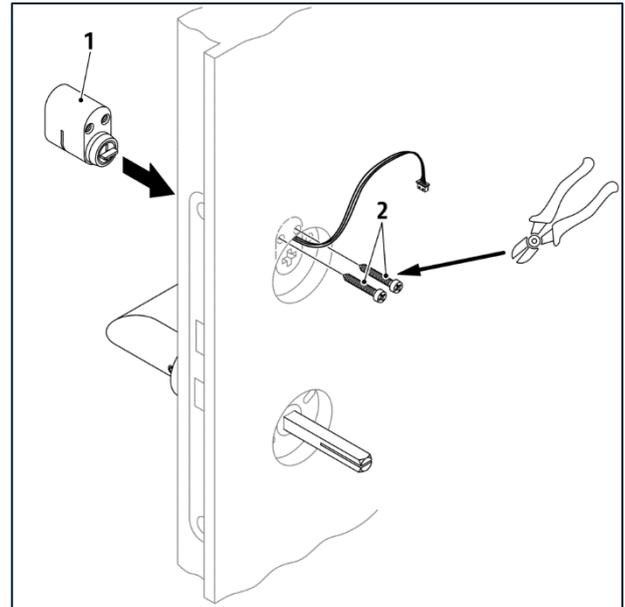
 NOTE: Do not crush the cables! Damaged cables can render the fitting unusable.

- ▶ Place the outer fitting (2) on the outside of the door until the outer fitting rests on the door leaf and the square spindle (3) is inserted in the mortise lock.



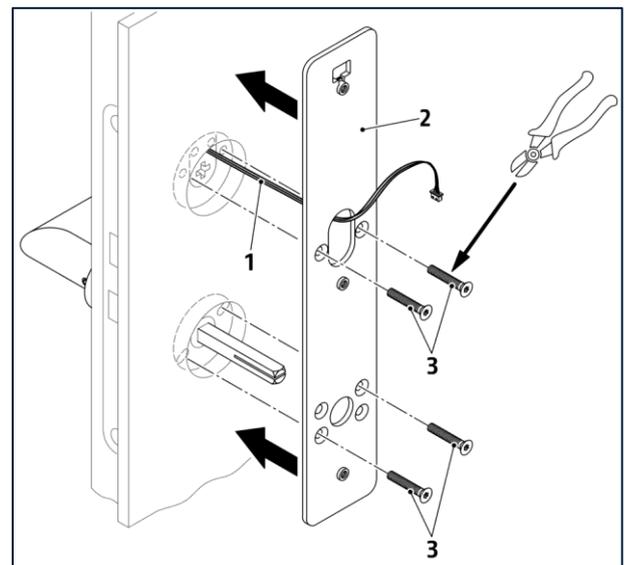
### Step 5: Insert locking cylinder (optional)

- ▶ Insert the oval cylinder (1) on the outside.  
The tappet must engage in the lock follower.
- ▶ Shorten the connecting screws (2) as required.
- ▶ Screw the locking cylinder to the lock.

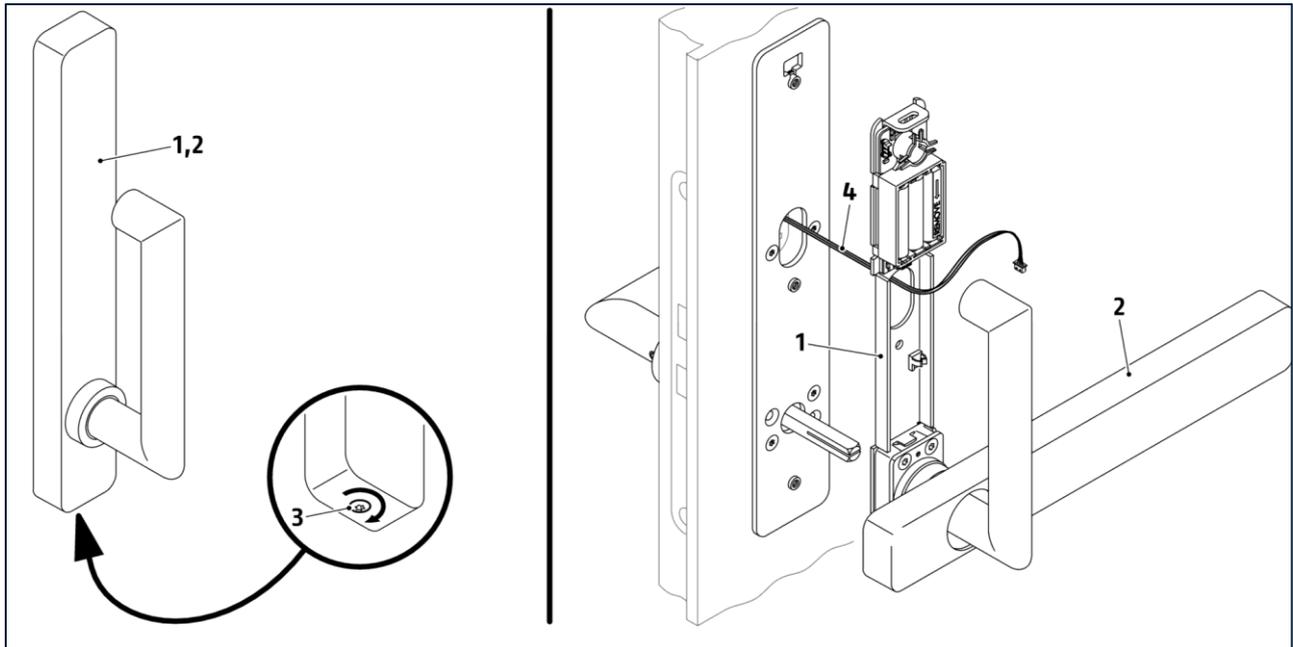


### Step 6: Fitting the adapter plate inside

- ▶ On the inside of the door, guide the connecting cable (1) through the adapter plate (2) and place the adapter plate on the door.
- ▶ Shorten the fastening screws (3) as required.
- ▶ Use the 4 fastening screws (3) to connect the adapter plate to the outside and screw tight. Tightening torque: approx. 2 Nm.



### Step 7: Installing the interior fitting



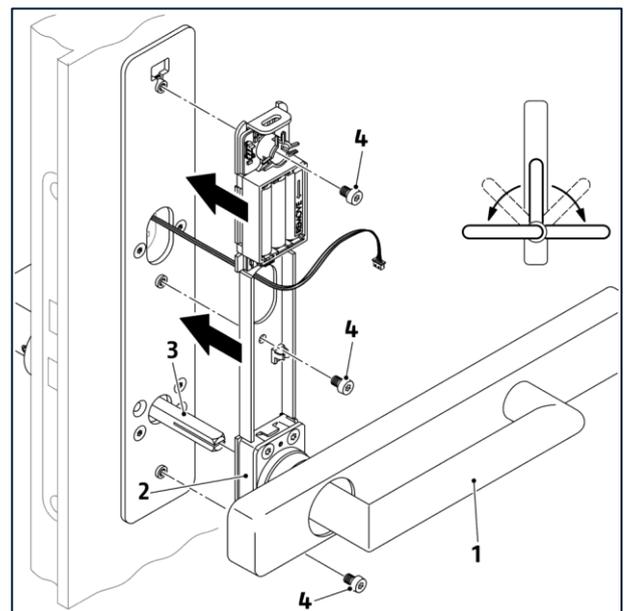
- ▶ On the inside fitting, turn the locking screw (3) on the underside into the fitting and loosen the cover (2) until it can be turned freely.
- ▶ Guide the connecting cable (4) into the inside fitting.

- ▶ Move the lever handle (1) of the inside fitting into the correct position and place it on the square spindle (3).

 **NOTE:** Do not crush the cables! Damaged cables can render the fitting unusable.

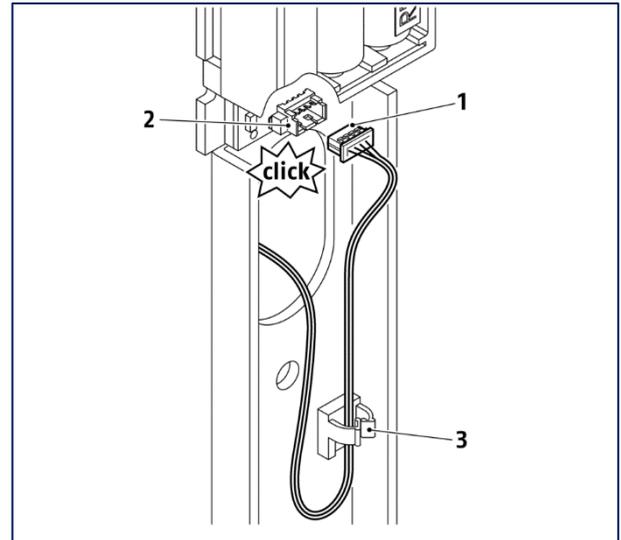
- ▶ Place the inner fitting on the adapter plate and tighten with the 3 connecting screws (4). Tightening torque: approx. 2 Nm.

 It must be possible to move the inside and outside handles without any problems. If in doubt, loosen the centre screw connection slightly.



### Step 8: Make the connection between the inside and outside fitting

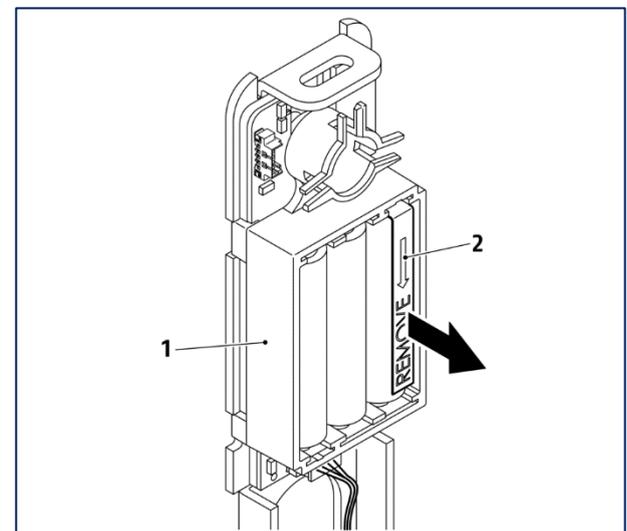
- ▶ Insert the plug (1) into the slot (2).
- ▶ Secure loose cables to the existing clip (3) so that the cable is not crushed by the cover.



### Step 9: Remove battery insulation

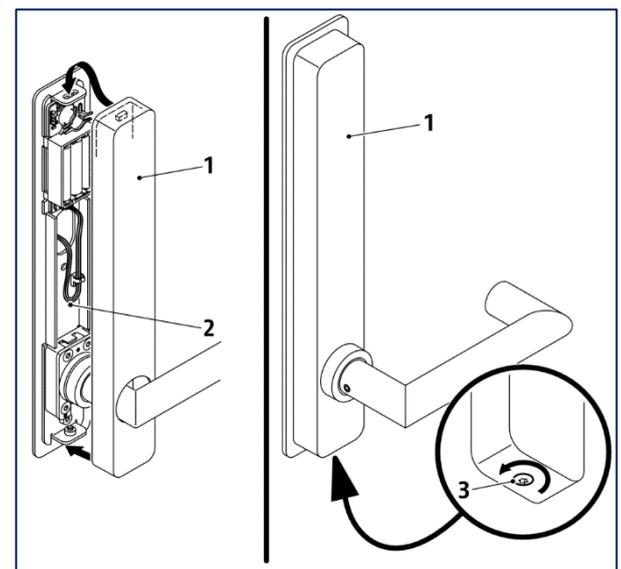
The batteries are pre-assembled in the inside fitting when delivered.

- ▶ Pull out the insulating flag (2) from the battery compartment (1) in the inner fitting.
- = As soon as the fitting is supplied with power, the LEDs on the external fitting flash briefly (green-red-green-red).



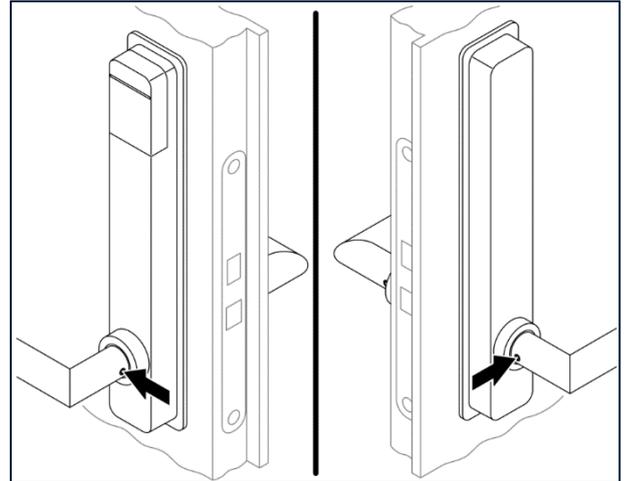
### Step 10: Close the inside fitting

- ▶ Place the cover (1) first at the top and then at the bottom of the fitting (2).
-  **NOTE:** Do not exceed the tightening torque! The fitting, the panel and the door leaf may be damaged.
- ▶ Unscrew the locking screw (3) on the underside of the inner fitting until the panel is locked. Tightening torque: approx. 1.2 Nm.



**Step 11: Secure the lever handle to the fitting**

- ▶ Screw in the grub screws on both door handles - on the inside and outside.  
Tightening torque: approx. 2 Nm.



## 9. Commissioning

Commissioning of the product is described in the ABUS TECTIQ system documentation.

## 10. Operation

The operation of the product is described in the ABUS TECTIQ system documentation.



## 11. Care and maintenance

ABUS TECTIQ fittings are maintenance-free. If installed correctly, no maintenance work is required apart from cleaning and battery replacement. If you are unsure, please contact your ABUS authorised dealer.



**NOTE** The product may be damaged. Unsuitable lubricants can damage the function and surface of the fitting.

- Do not use any lubricants containing resin, grease or oil.
- Do not use graphite.
- Do not allow any liquids, lubricants or other substances to seep into the inside of the housing.

### 11.1. Product cleaning



**NOTE** The product may be damaged.

- Do not use abrasive cleaning agents or cleaning agents containing solvents.
  - Do not use sharp-edged tools.
- ▷ Clean the fitting with a clean, slightly damp (microfibre) cloth.
- ▷ Use a mild cleaning agent for stubborn stains.

## 11.2. Change batteries

### Multi-stage battery warning system

The electronic fitting has a two-stage battery warning system to ensure reliable operation.

#### Battery warning level 1:

As soon as the battery charge level is no longer sufficient to permanently supply the fitting, the fitting indicates this:

- by delayed opening with each access (5 seconds)
- by changing the signalling: 3× red, 2× green
- by display in the TECTIQ Access Manager (software)

-  If the battery is low, the fitting will only function for a limited time.
- Replace the battery as soon as the fitting signals a low battery.

#### Battery warning level 2:

If the battery is empty, the fitting only has energy for 3 opening attempts, which are only carried out with an authorised emergency transponder.



**WARNING! Function failure with empty battery!**

If the battery is not replaced in good time, the fitting will no longer function and will not display any feedback. In an emergency, this will make it more difficult for emergency services to access the door and potentially endanger lives!

- Replace a flat battery immediately!

## Change flat batteries



### **WARNING!** Danger from exhausted lithium batteries!

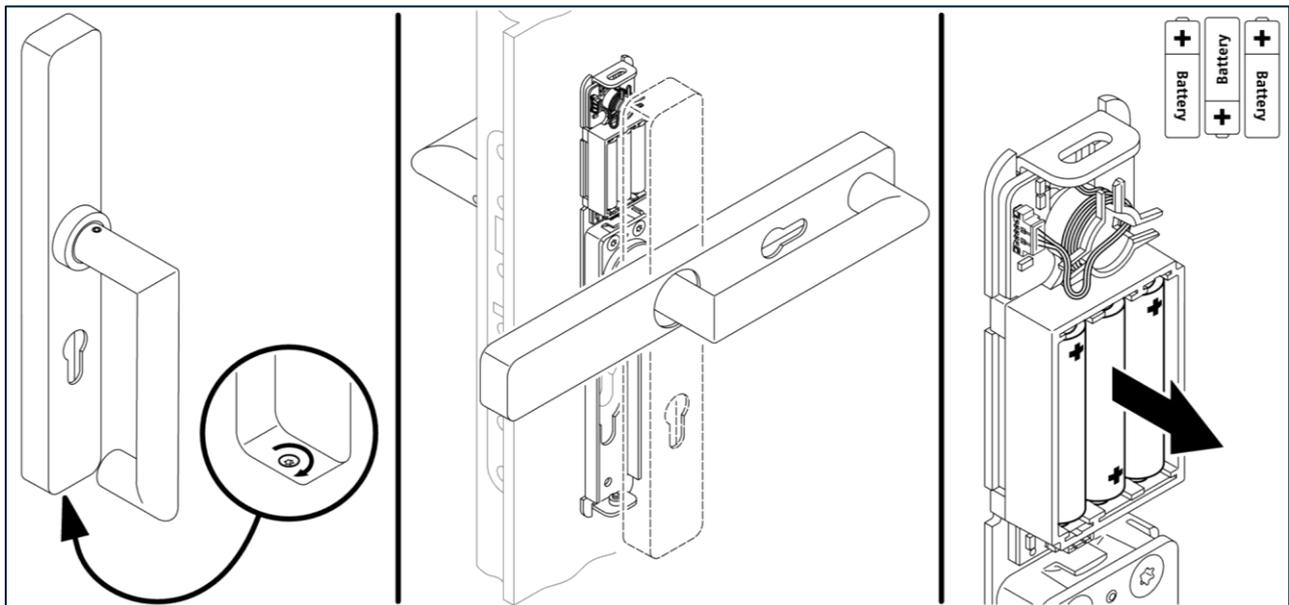
Even exhausted lithium batteries can still contain enough energy to cause damage to life and limb. Improper handling or damage can lead to serious injuries, burns or chemical burns or cause fires.

- Do not store used lithium batteries in your trouser pocket or toolbox.
- Secure used lithium batteries against short circuits and tape the terminals.
- Do not recharge, open, throw into fire or short-circuit batteries.
- Do not mix old and new batteries.
- Do not reverse the polarity of the batteries.
- Keep batteries away from children.



**IMPORTANT!** If other battery manufacturers or types are used, complete and permanent function is not guaranteed. In particular, the function of the battery warning level 2 may be impaired.

- Only use original types from Varta (see→ chapter 2.5).
- Only use batteries from one batch.



**i** Protect the handle and cover from scratches, e.g. by covering them.

- ▶ On the inside fitting, screw the locking screw on the underside into the fitting until the panel on the underside is released.
- ▶ Carefully pull off the cover until it can be rotated freely on the pusher.
- ▶ Remove the used batteries from the battery compartment and dispose of them in an environmentally friendly manner, see→ chapter 14.
- ▶ Insert new batteries into the battery compartment. Observe polarity!
- ▶ Close the inside fitting again.

**i** After changing the battery, the internal clock must be reset. Follow the instructions in the TECTIQ system documentation.

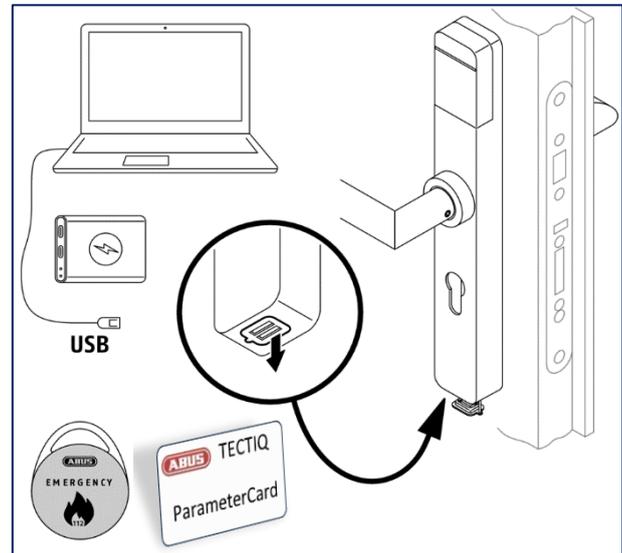
### 11.3. Opening the door when the battery is flat

If the fitting does not respond despite current access authorisation, the battery may be so low that there is no longer enough power to open it. In this case, and if no emergency medium is available, the USB port in the external fitting can be used for emergency opening.

**i** Then replace the batteries in the inside fitting before closing the door again.

On the outer fitting:

- ▶ Remove the USB cover on the underside.
- ▶ Connect USB battery pack, power bank, PC or similar, e.g. with updater cable.
- ▶ Synchronise date/time, e.g. with parameter card or TECTIQ Admin App.
- ▶ Present locking medium with current access authorisation and open door.



### 11.4. Firmware update

Updating the firmware is described in the ABUS TECTIQ system documentation.

**i** Software updates should always be installed.



## 12. Repair

### 12.1. Replace connecting cable

The connecting cable between the inside fitting and the outside fitting can be replaced:

- if the connecting cable is defective (e.g. due to cable breakage, short circuit).
- if a standard fitting is to be installed on an FH door or with an adapter plate.

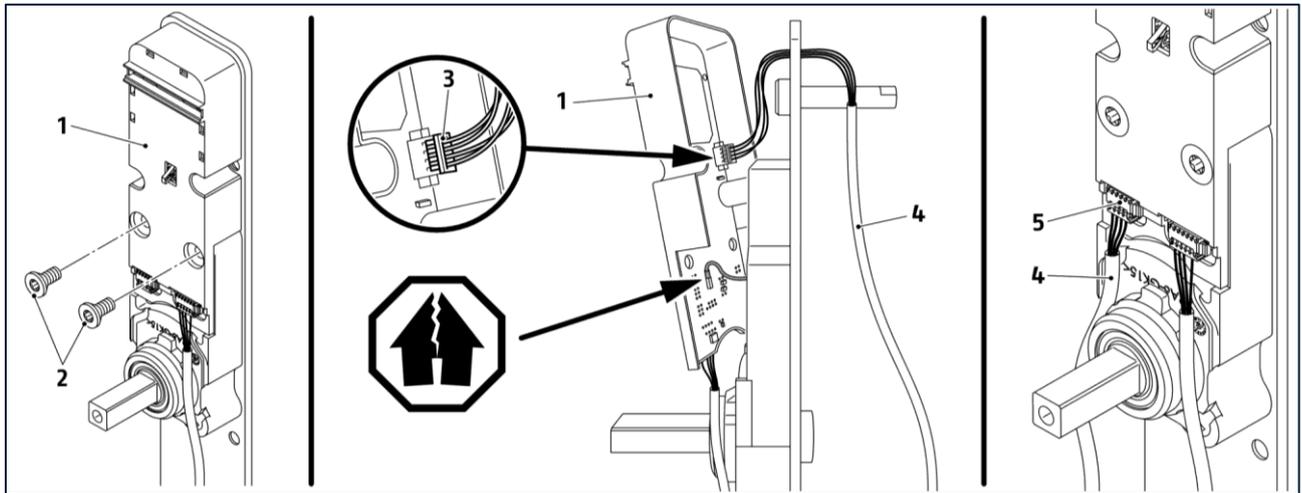
In these cases, the cable routing may need to be changed (see→ chapter 4.4) and the existing connecting cable must be replaced with a longer one (see→ chapter 2.4).



**NOTE** Damage to the product due to electrostatic discharge.

- Protect the electronics against electrostatic influences.
- Ensure charge equalisation between you, the electronics and the installation environment before the conversion.
- Avoid direct contact with the electronics.
- Remove the batteries before conversion and store them in a safe place.

- ▷ Dismantle the inside and outside fittings. Disassembly is carried out in the reverse order to assembly. Observe the assembly chapters, see→ chapter 5 to 8.
- ▷ Open the outer fitting.



- ▷ Loosen the 2 housing screws (2) on the sensor housing (1).



**NOTE:** Only lift off the sensor housing carefully (max. 20°). Do not tear off the connecting cables.

- ▷ Carefully lift off the sensor housing until the plug contact (3) is accessible.
- ▷ Release the plug contact (3) from its socket and remove the old connecting cable (4).
- ▷ Install new connecting cable (4).
  - a. as a replacement: in the same place
  - b. when converting: on the plug connector (5) next to the battery compartment.
- ▷ Close the sensor housing. Tightening torque: max. 0.5 Nm.
- ▷ Close the external fitting, see→ chapter 5 to 8.

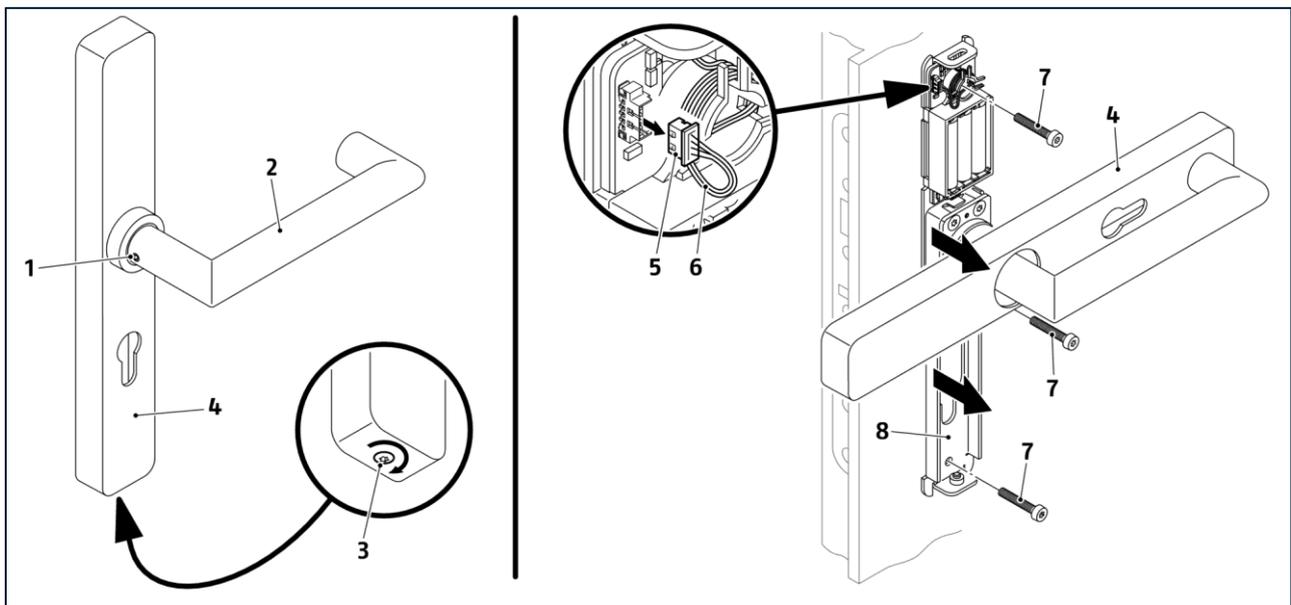
## 12.2. Replace handle

### 12.2.1. Replace the lever handle on the inside

#### Preparation: Dismantling the interior fitting

To dismantle the inside fitting, observe the installation chapters, see → chapters 5 to 8.

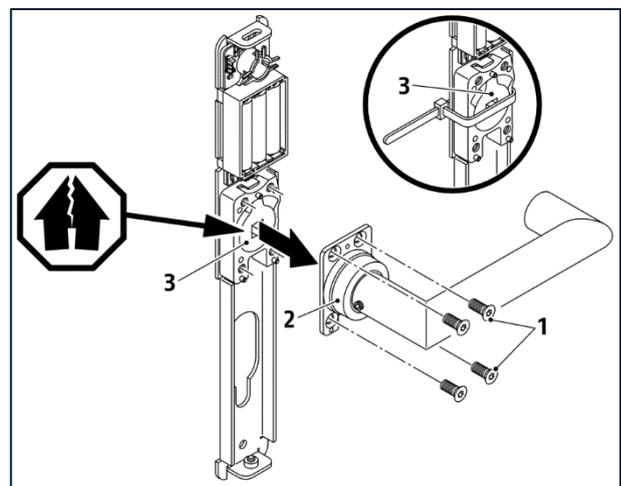
- ▷ Loosen the grub screw (1) on the lever handle (2).
- ▷ Screw in the screw (3) at the bottom and lift off the inner panel (4) first at the bottom, then at the top.
- ▷ Pull out the plug (5) and disconnect the battery cable (6).
- ▷ Unscrew the connecting screws (7).
- ▷ Remove the inside fitting (8) from the door.
- ▷ Pull the cover (4) off the pusher; remove it completely if possible.



#### Step 1: Open the handle holder

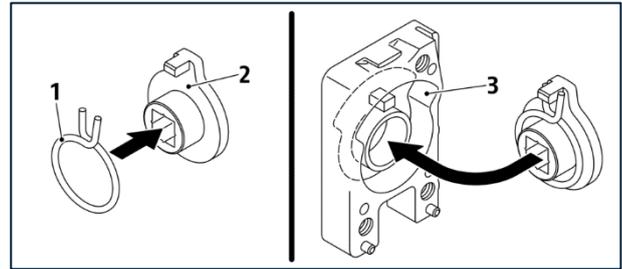
**NOTE:** The square nut in the handle holder is under tension. When removing the retaining plate, ensure that the square spindle remains in place and that the spring is not released. Secure the square spindle against falling out.

- ▷ Unscrew 4 screws (1) from the handle holder.
- ▷ CAREFULLY pull off the retaining plate (2) with the pusher.
- Once accessible, fix the square nut (3) in the holder.
- ▷ Secure the square socket (3) in the handle holder with a cable tie or similar to prevent it from falling out.



**i** If the square spindle and spring have come out of the socket, the components can be refitted in the lever handle holder as follows:

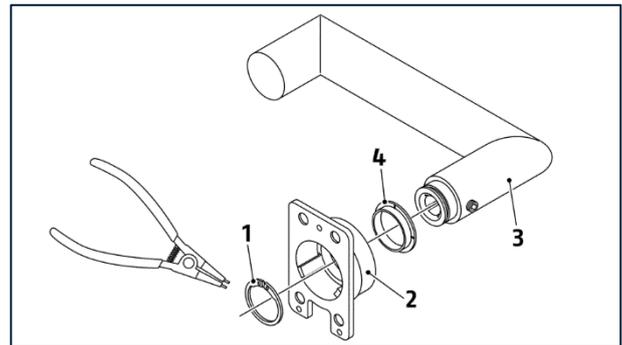
- ▶ Place the spring (1) on the inside of the square nut (2).
- ▶ Tension the legs of the spring around the driver of the square nut.
- ▶ Push the square nut into the handle holder (3) so that the spring remains tensioned.
- ▶ Secure the square socket with a cable tie or similar to prevent it from falling out.



### Step 2: Dismantle the old handle

On the inside of the retaining plate:

- ▶ Loosen and remove the circlip (1) with circlip pliers. If present: Remove the spacer disc.
- ▶ Pull the pusher (3) and sliding bush (4) out of the retaining plate (2).

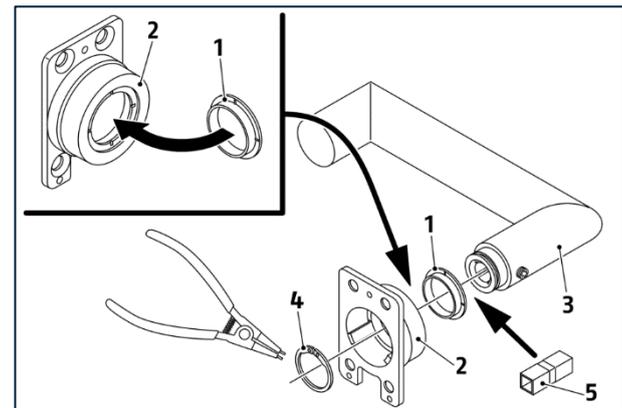


### Step 3: Fitting the new lever handle

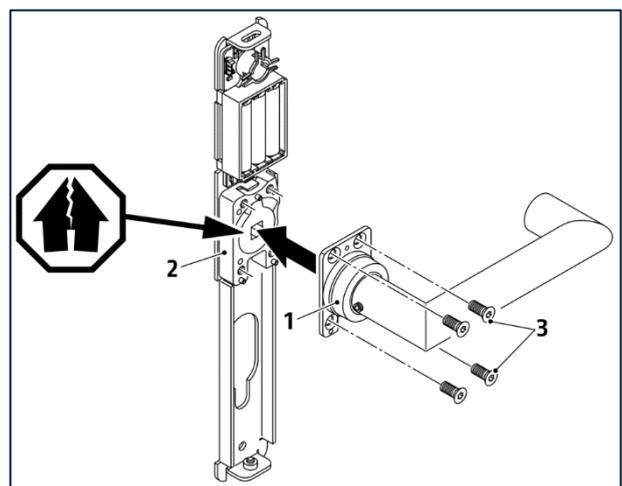
**i** With a ball lever handle, place the cover on the handle shaft now.

- ▶ Insert the sliding bush (1) into the collar of the retaining plate (2) in the correct position. Ensure that the catches of the sliding bush are in the grooves of the collar.
- ▶ Insert the new pusher (3) into the retaining plate.
- ▶ Insert the retaining ring on the inside.

**i** Check the fit of the new lever handle on the square spindle. If the lever handle only fits loosely on the square spindle, insert the supplied reducing sleeve (5) into the lever handle.



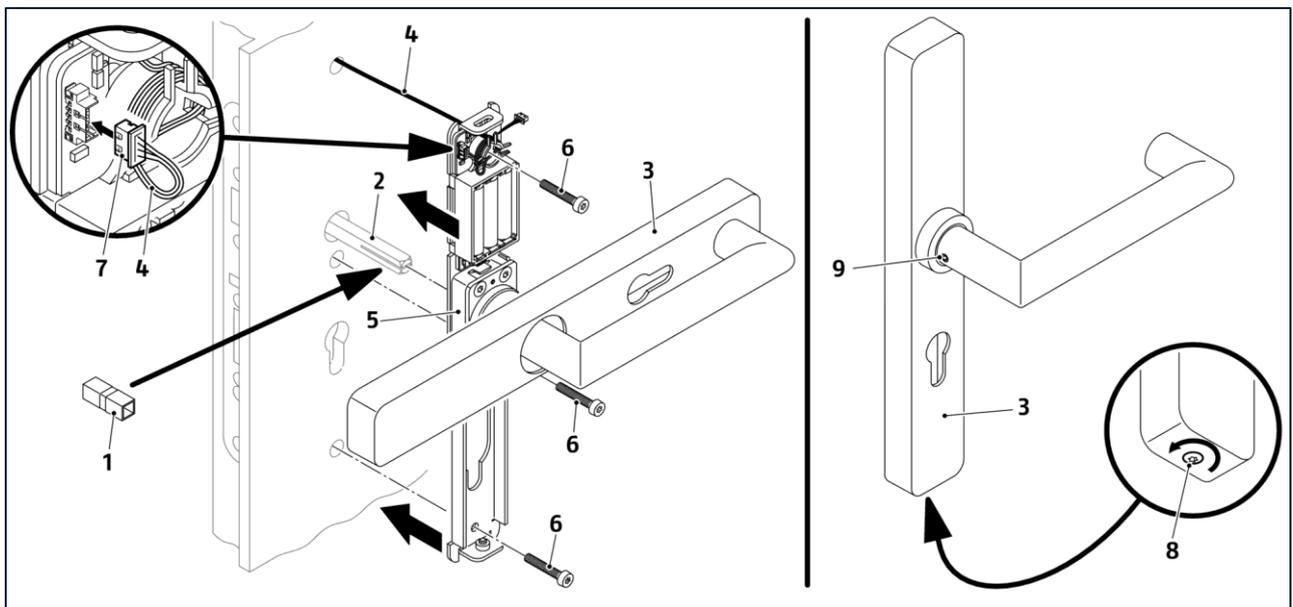
- ▶ Slide the retaining plate (1) with the new lever handle onto the lever handle holder and tighten with 4 screws (3). Tightening torque: approx. 2 Nm.



#### Step 4: Refit the interior fitting

Observe the installation chapters, see → chapters 5 to 8.

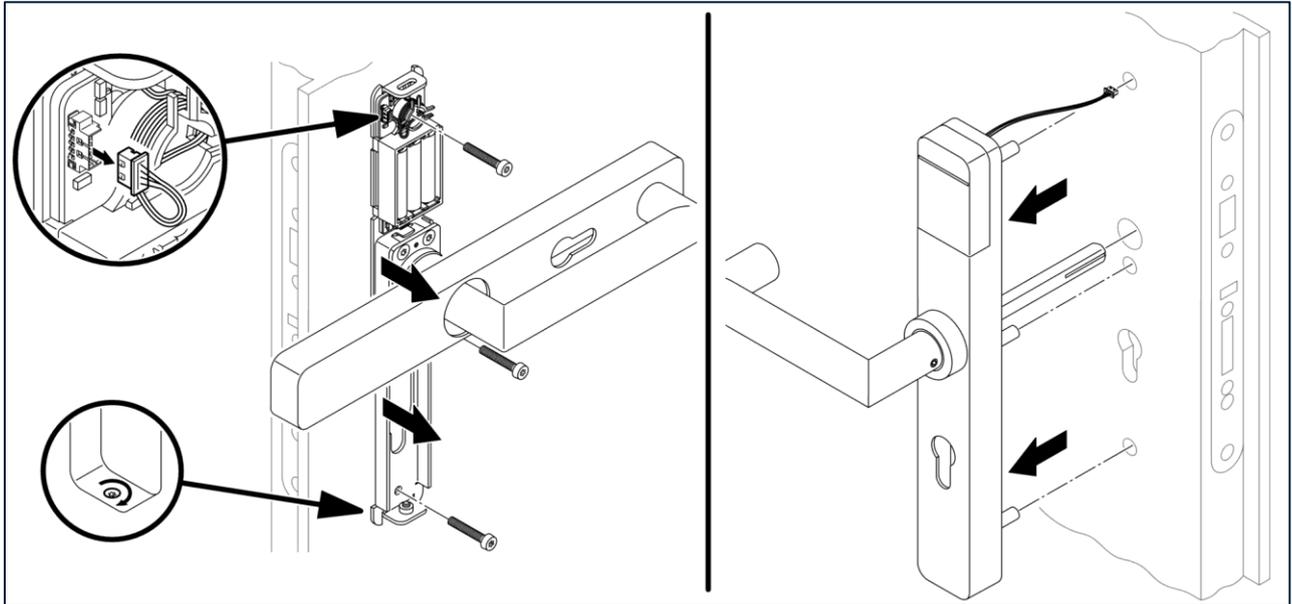
- ⓘ Use grub screws with undamaged paint coating. Alternatively, apply new screw locking varnish to the screws.
- ▷ If necessary: Insert reducing sleeve (1) on square spindle (2).
- ▷ Fit the cover (3) the right way round.
- ▷ Guide the battery cable (4) into the interior fitting (observe the cable routing, see → chapter 4.4)
- ▷ Refit the inside fitting on the door.
- ▷ Tighten the connecting screws (6).
- ▷ Fit the plug (7).
- ▷ Fit the cover (3) and close the fitting.
- ▷ Unscrew the screw (8) at the bottom and lock the cover.
- ▷ Screw in the grub screw (9). Tightening torque: approx. 2 Nm.



## 12.2.2. Replace the lever handle on the outside

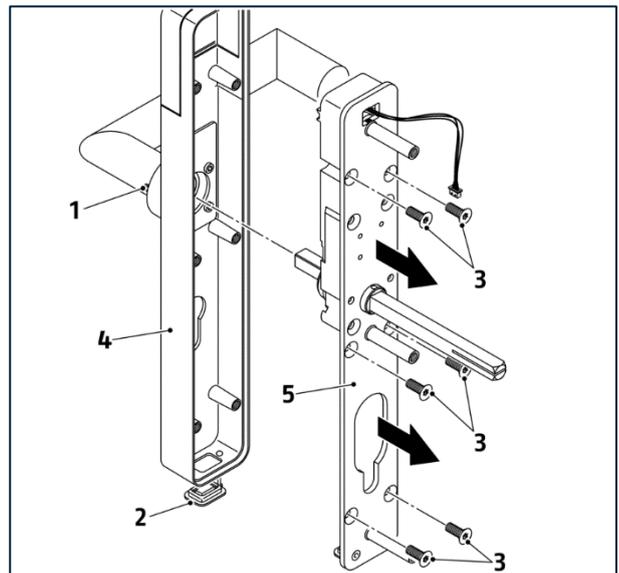
### Preparation: Dismantling the interior and exterior fittings

- ▶ Completely dismantle the inside and outside fittings. Observe the assembly chapters, see → chapters 5 to 8.



### Step 1: Open the outer fitting

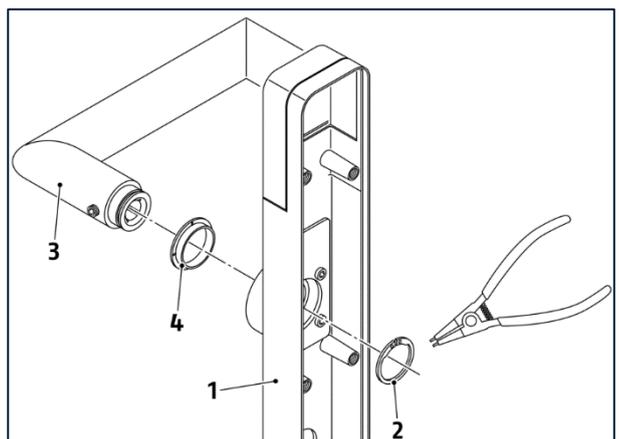
- ▶ Loosen the grub screw (1).
- ▶ Open the USB cover (2) at the bottom.
- ▶ Loosen all 6 screws (3) on the back.
- ▶ Pull the cover (4) off the fitting (5).



### Step 2: Dismantling the handle

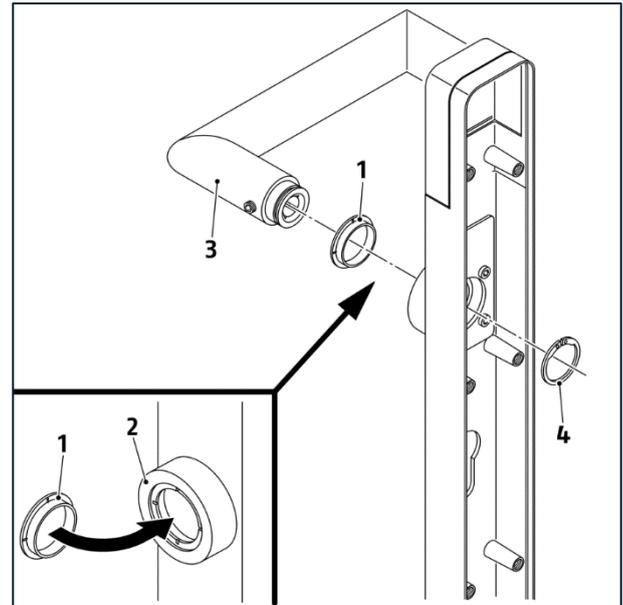
On the old outer panel (1):

- ▶ Loosen the circlip (2) from the inside using circlip pliers.
- ▶ Pull the pusher (3) and sliding bush (4) out of the collar.



### Step 3: Fitting the new lever handle

- ▷ Insert the sliding bush (1) into the collar (2) in the correct position.  
Ensure that the catches of the sliding bush are in the grooves of the collar.
- ▷ Insert the new pusher (3) into the collar.
- ▷ Insert circlip (4) with circlip pliers.

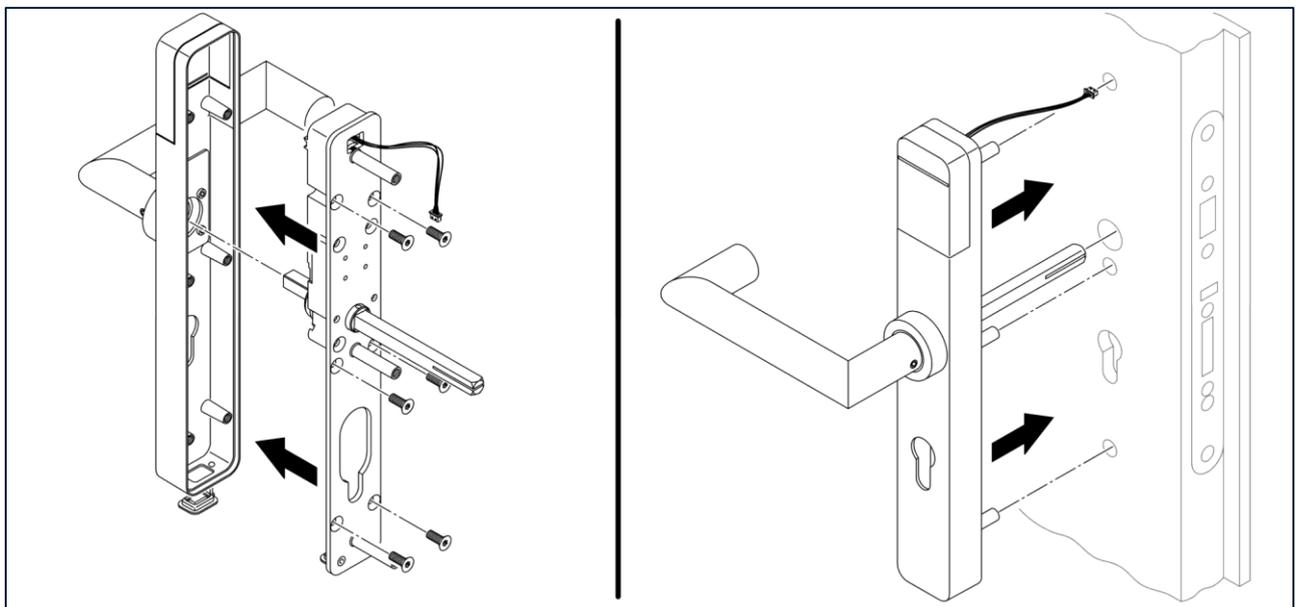


### Step 4: Refit the outer fitting

For details, please refer to the installation chapters, see → chapters 5 to 8.

**i** Use grub screws with undamaged paint coating. Alternatively, apply new screw locking varnish to the screws.

- ▷ Close outer fitting.
- ▷ Screw in the grub screw on the outside handle. Tightening torque: approx. 2 Nm.
- ▷ Guide the battery cable through the door leaf. Observe cable routing, see → chapter 4.4.
- ▷ Mount the external fitting on the outside of the door leaf.



### Step 5: Refit the interior fitting

See → chapter 12.2.1 Step 4.

## 12.3. Replace cover

### 12.3.1. Replace inner panel

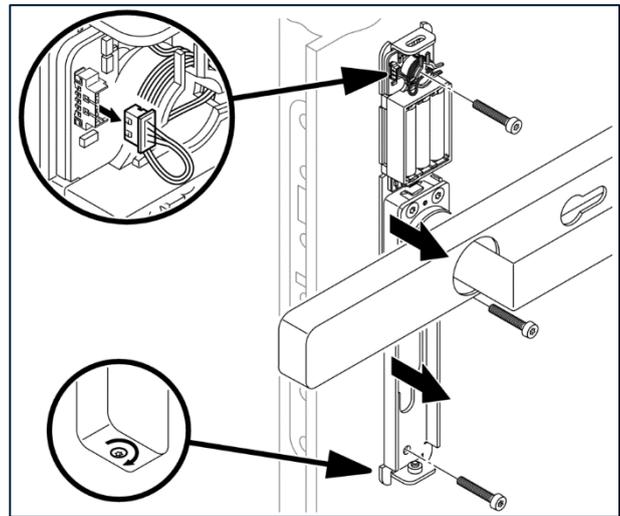
#### Preparation: Dismantling the interior fitting

- ⓘ Depending on the variant, the inside fitting must be completely removed.

Dismantling is carried out in the following individual steps. For details, please refer to assembly chapters 5 to 8.

- ▶ Screw in the screw at the bottom and lift off the inner panel first at the bottom, then at the top.
- ▶ Pull out the plug and disconnect the connecting cable.
- ▶ Loosen the connecting screws.
- ▶ Remove the inside fitting from the door.
- ▶ Remove the cover from the handle.

- ⓘ If the fitting has a ball handle, the cover can only be removed with the handle.



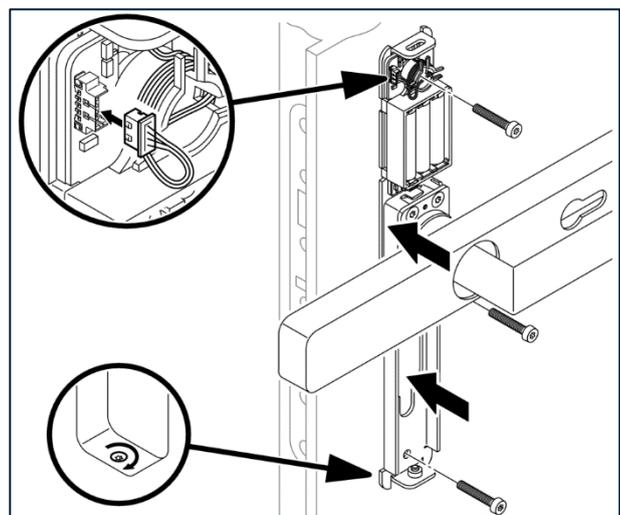
#### Step 1: Dismantling the lever handle on the inside

Only required if:

- a ball lever handle is fitted;
  - Retaining plate (with collar) to be replaced
- ▶ Open the handle holder, see→ chapter 12.2.1 Step 1
  - ▶ Dismantle the lever handle, see→ chapter 12.2.1 Step 2
  - ▶ Mount the handle on the new retaining plate; see→ chapter 12.2.1 Step 3

#### Step 2: Fitting the new inner panel

- ⓘ Use grub screws with undamaged paint coating. Alternatively, apply new screw locking varnish to the screws.
- ▶ Fit the new inner cover onto the inner handle.
  - ▶ Unscrew the screw and lock the cover.
  - ▶ Screw in the grub screw.  
Tightening torque: approx. 2 Nm.



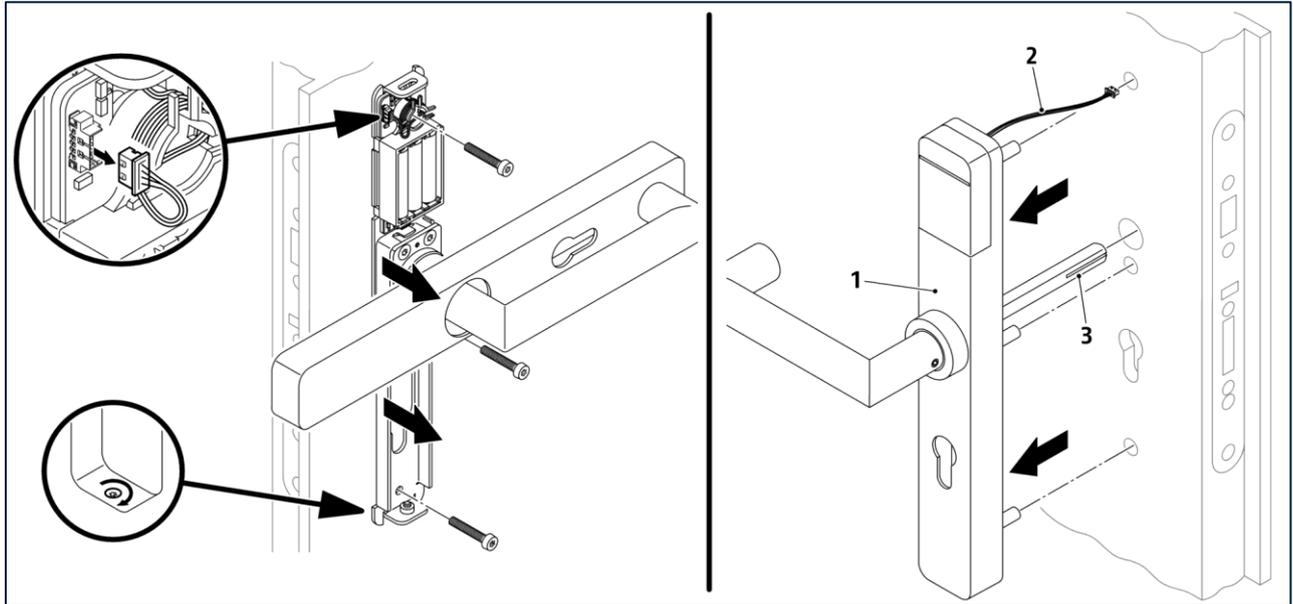
#### Step 3: Refit the interior fitting

Observe the installation chapters, see→ chapters 5 to 8.

### 12.3.2. Replace outer panel

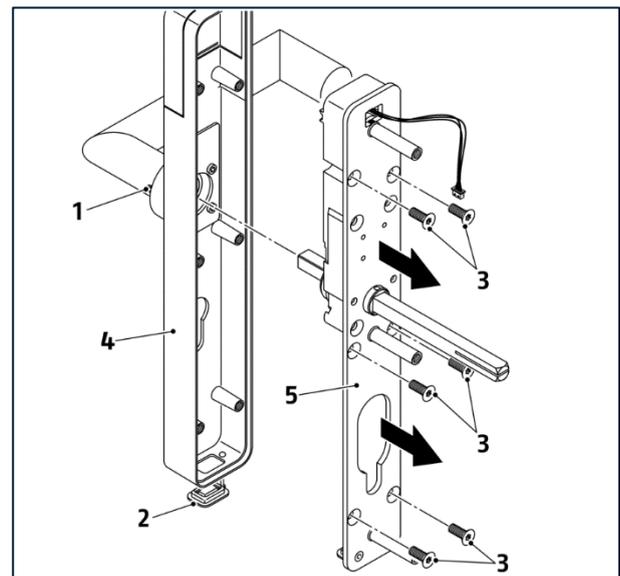
#### Preparation: Dismantling the fitting

- Completely dismantle the inside and outside fittings. Please refer to installation chapters 5 to 8.



#### Step 1: Open the outer fitting

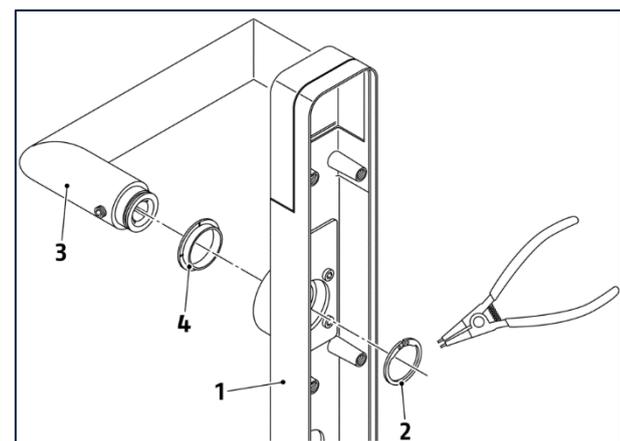
- Loosen the grub screw (1).
- Open the USB cover (2) at the bottom.
- Loosen all 6 screws (3) on the back.
- Remove the cover (4) from the fitting (5)



#### Step 2: Dismantling the handle

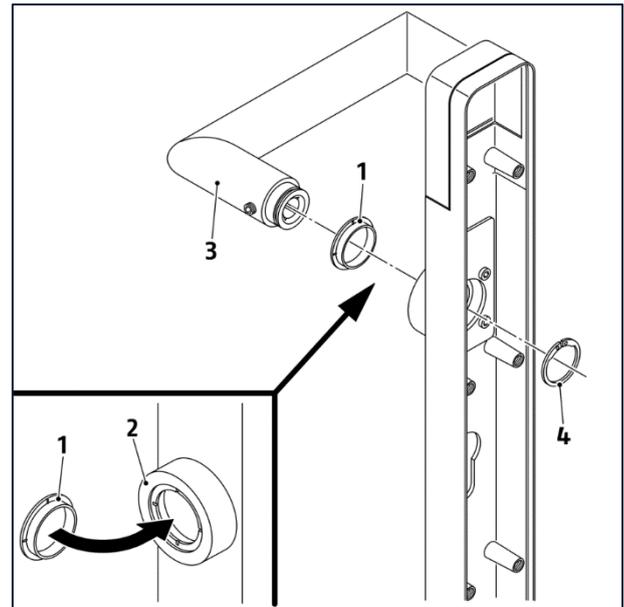
On the old outer panel (1):

- Loosen the circlip (2) with circlip pliers.
- Pull the pusher (3) and sliding bush (4) out of the collar.



### Step 3: Mount the handle in the new outer panel

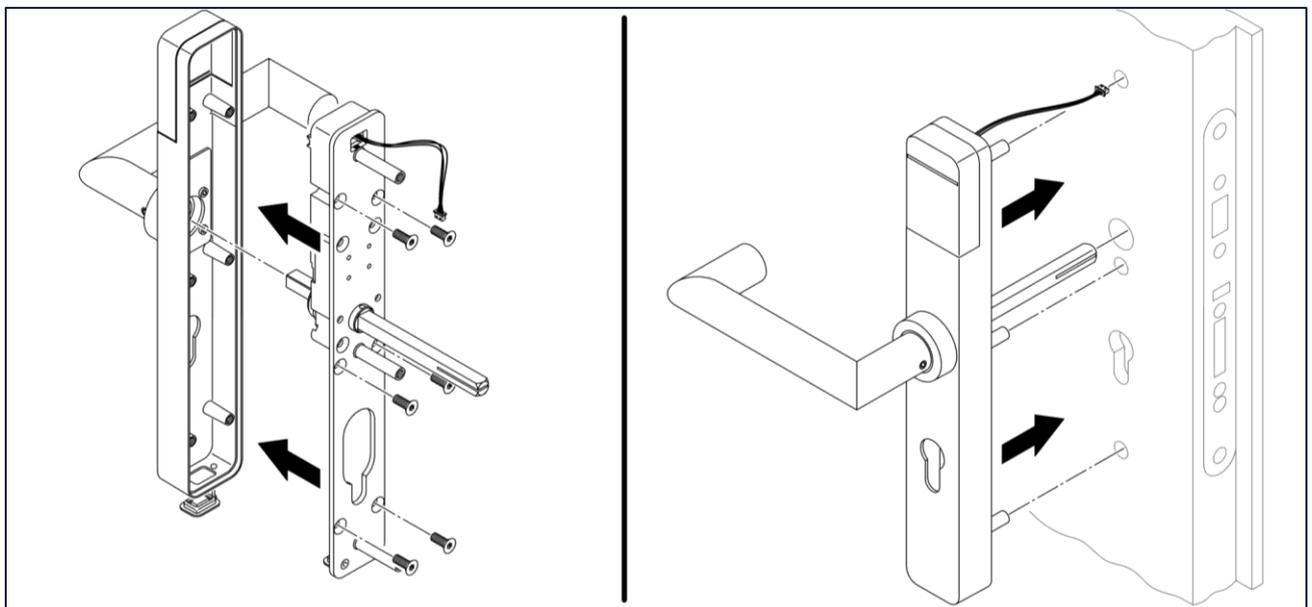
- ▶ Insert the sliding bush (1) into the collar (2) of the new cover in the correct position. Ensure that the catches of the sliding bush are in the grooves of the collar.
- ▶ Insert the pusher (3) into the collar (2).
- ▶ Insert circlip (4) with circlip pliers.



### Step 4: Refit the outer fitting

For details, please refer to the installation chapters, see → chapters 5 to 8.

- ⓘ Use grub screws with undamaged paint coating. Alternatively, apply new screw locking varnish to the screws.
- ▶ Close outer fitting.
- ▶ Screw in the grub screw on the outside handle. Tightening torque: approx. 2 Nm.
- ▶ Guide the battery cable through the door leaf. Note the cable routing, see → chapter 4.4.
- ▶ Mount the outside fitting on the outside of the door leaf.



### Step 5: Refit the interior fitting

See → chapter 12.2.1 Step 4.

## 13. Decommissioning and dismantling

### 13.1. Logging the fitting out of the locking system

Fittings that are removed from the system should be deregistered from the locking system using the TECTIQ Access Manager locking software. This ensures that invalid access authorisations are deleted from the TECTIQ system.

- ▶ To log out, follow the instructions in the TECTIQ system documentation.

### 13.2. Dismantling the fitting

- ▶ Disassembly is carried out in the reverse order to assembly. Observe the assembly chapters.

### 13.3. Reset to factory settings

Follow the instructions in the TECTIQ system documentation.



## 14. Waste disposal



Dispose of the device in accordance with the Waste Electrical and Electronic Equipment EU Directive 2012/19/EU - WEEE (Waste Electrical and Electronic Equipment). If you have any queries, please contact the local authority responsible for disposal. Information on collection points for your old appliances can be obtained, for example, from the local municipal or city administration, the local waste disposal companies or from your dealer.

### Disposal of batteries

Only return lithium batteries and battery packs to the collection points when they are discharged! Avoid short circuits and insulate the battery terminals with adhesive tape. According to legal requirements, end users of the product are obliged to return batteries. Information on environmentally friendly disposal can be obtained from the local authority.

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