

# PinCode keypad AX

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## Manual

28.11.2024

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## 1. General safety instructions

### Signal word: Possible immediate effects of non-compliance

WARNING: Death or serious injury (possible, but unlikely)

CAUTION: Minor injury

IMPORTANT: Property damage or malfunction

NOTE: Low or none



### WARNING

#### Blocked access

Access through a door may stay blocked due to incorrectly fitted and/or incorrectly programmed components. SimonsVoss Technologies GmbH is not liable for the consequences of blocked access such as access to injured or endangered persons, material damage or other damage!

#### Blocked access through manipulation of the product

If you change the product on your own, malfunctions can occur and access through a door can be blocked.

- ❑ Modify the product only when needed and only in the manner described in the documentation.

#### Do not swallow battery. Danger of burns from hazardous substances

This product contains lithium button cell batteries. Swallowing the button cell battery, in can result in severe internal burns leading to death in as little as two hours.

1. Keep new and used batteries away from children.
2. If the battery compartment does not close securely, cease using the product and keep it away from children.
3. If you think batteries have been swallowed or are in any part of the body, seek medical attention immediately.

#### Risk of explosion due to incorrect battery type

Inserting the wrong type of battery can cause an explosion.

- ❑ Only use the batteries specified in the technical data.



### CAUTION

#### Fire hazard posed by batteries

The batteries used may pose a fire or burn hazard if handled incorrectly.

1. Do not try to charge, open, heat or burn the batteries.
2. Do not short-circuit the batteries.

**IMPORTANT****Damage resulting from electrostatic discharge (ESD) when enclosure is open**

This product contains electronic components that may be damaged by electrostatic discharges.

1. Use ESD-compliant working materials (e.g. Grounding strap).
2. Ground yourself before carrying out any work that could bring you into contact with the electronics. For this purpose, touch earthed metallic surfaces (e.g. door frames, water pipes or heating valves).

**Damage resulting from liquids**

This product contains electronic and/or mechanic components that may be damaged by liquids of any kind.

- ❑ Keep liquids away from the electronics.

**Damage resulting from aggressive cleaning agents**

The surface of this product may be damaged as a result of the use of unsuitable cleaning agents.

- ❑ Only use cleaning agents that are suitable for plastic or metal surfaces.

**Damage as a result of mechanical impact**

This product contains electronic components that may be damaged by mechanical impacts of any kind.

1. Avoid touching the electronics.
2. Avoid other mechanical influences on the electronics.

**Damage due to polarity reversal**

This product contains electronic components that may be damaged by reverse polarity of the power source.

- ❑ Do not reverse the polarity of the voltage source (batteries or mains adapters).

**Operational malfunction due to radio interference**

This product may be affected by electromagnetic or magnetic interference.

- ❑ Do not mount or place the product directly next to devices that could cause electromagnetic or magnetic interference (switching power supplies!).

**Communication interference due to metallic surfaces**

This product communicates wirelessly. Metallic surfaces can greatly reduce the range of the product.

- ❑ Do not mount or place the product on or near metallic surfaces.

**NOTE****Intended use**

SimonsVoss-products are designed exclusively for opening and closing doors and similar objects.

- ❑ Do not use SimonsVoss products for any other purposes.

**Malfunctions due to poor contact or different discharge**

Contact surfaces that are too small/contaminated or different discharged batteries can lead to malfunctions.

1. Only use batteries that are approved by SimonsVoss.
2. Do not touch the contacts of the new batteries with your hands.
3. Use clean and grease-free gloves.
4. Always replace all batteries at the same time.

**Qualifications required**

The installation and commissioning requires specialized knowledge.

- ❑ Only trained personnel may install and commission the product.

**Incorrect installation**

SimonsVoss Technologies GmbH accepts no liability for damage caused to doors or components due to incorrect fitting or installation.

Modifications or further technical developments cannot be excluded and may be implemented without notice.

The German language version is the original instruction manual. Other languages (drafting in the contract language) are translations of the original instructions.

Read and follow all installation, installation, and commissioning instructions. Pass these instructions and any maintenance instructions to the user.

## 2. General information



### 2.1 Intended use

You can use PIN code keypad AX to activate corresponding SimonsVoss AX locking devices by entering a numerical code (PIN), e.g.:

- SmartHandle AX
- SmartHandle AX Advanced
- SmartLocker AX
- Digital Cylinder AX
- Padlock AX

You can conveniently make all settings in the locking plan software (AXM).

### 3. How it works

The PIN code keypad AX is a digital key which opens suitable SimonsVoss locking devices after entering correct PINs via Bluetooth Low Energy (BLE).

To do so, you can use the AXM for tasks related to the PIN code keypad AX:

- Create
- Authorise at a locking device
- Configure
- Program

The PIN code keypad AX is thus seamlessly integrated into your locking system.

- IP65 protection: can be used outdoors.
- Battery operation: PIN code keypad AX self-sufficient.

#### 3.1 Operating modes

Your PIN code keypad AX is always in one of these four operating statuses:

Status	Explanation
Standby	Idle state. This PIN code keypad AX consumes very little energy.
Opening	Active state. The PIN code keypad AX checks the PIN entered. If the PIN is correct, it activates the corresponding locking device via BLE (see <a href="#">Operation [► 7]</a> ).
Programming	Compare with the locking plan and change in the settings. AXM saves authorisations and other settings on the PIN code keypad AX.
Battery warning	Low battery. A battery warning system signals when you need to change the batteries in good time (see <a href="#">Feedback signals [► 27]</a> and <a href="#">Battery replacement [► 20]</a> ).

#### 3.2 Operation

Your PIN code keypad AX is very easy to use.

- ✓ PIN code keypad AX is authorised for just one locking device (see *Initial operation* [▶ 10]).
- ✓ PIN code keypad AX is programmed (see *Initial operation* [▶ 10]).
- 1. Enter a previously programmed PIN.
- 2. Wait until the PIN code keypad AX checks the PIN.
  - ↳ PIN code keypad AX checks the PIN.  
If the length is correct, the PIN is checked immediately; if the PIN is too short, the PIN code keypad AX waits for five seconds and then aborts.
  - ↳ If the PIN is correct, the PIN code keypad AX will flash green and beep to indicate that the PIN was correct (see *Feedback signals* [▶ 27]).
  - ↳ PIN code keypad AX actuates the locking device via BLE.



## 4. PINs

A personal identification number (= PIN) is a numerical code that the PIN code keypad AX uses to identify a user as authorised.

PINs for the PIN code keypad AX may only be

- Created (see *Initial operation* [▶ 10])
- Modified
- Deleted with LSM/AXM.

Users cannot modify PINs in any way.


When a correct PIN is entered, the PIN code keypad AX opens the locking device assigned to this PIN via BLE (see *Operation* [▶ 7]).

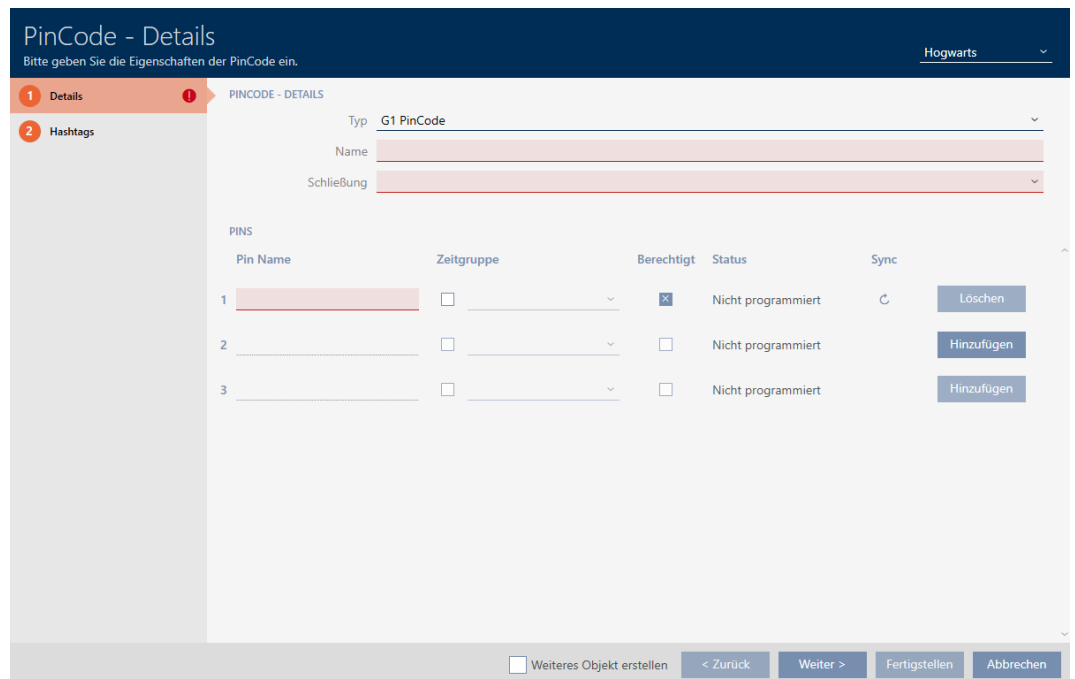
## 5. Initial operation

Initial operation is described as an example for the AXM in this section.

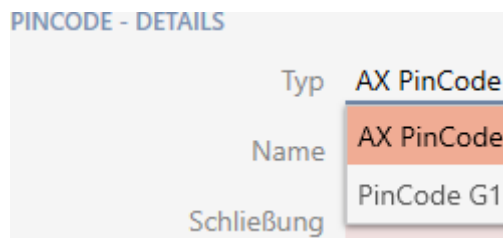
### Create PIN code keypad AX

- ✓ Locking device has been created for the PIN code keypad (see Creating a locking device in the AXM manual).

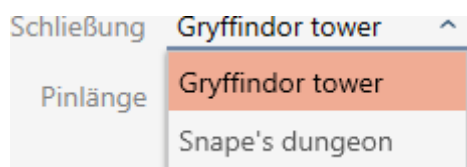
1. Click on the **New PinCode** button .  
 ↳ The "PinCode - Details" window will open.



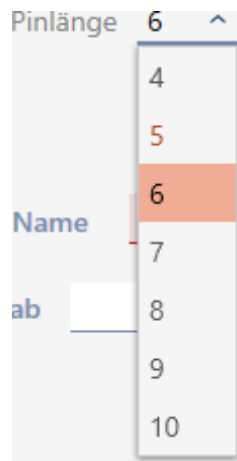
2. Select the PIN code keypad you wish to create from the ▼ **Type** drop-down menu.



3. Enter a name for the PIN code keypad in the *Name* field.
4. Select the locking device on which you would like to use the PIN code keypad from the ▼ **Lock** drop-down menu.



5. If you are creating a PIN code keypad AX, select the length of the PINs from the ▼ Pin length drop-down menu.



The image shows a user interface for setting PIN length. A label 'Pinlänge' is next to a drop-down menu. The menu is open, showing a list of numbers: 4, 5, 6, 7, 8, 9, and 10. The number 6 is highlighted in orange, indicating it is the selected option. Above the list, the number 6 is also displayed. Below the menu, there is a label 'Name' and a text input field containing 'ab'.

6. Enter the name to be displayed in the matrix for this PIN in the *Pin name* field.
7. Enter a PIN.  
↳ Authorisation is set automatically.



#### NOTE

##### Duplicate PINs not permitted for PIN code keypad AX

All PINs for a PIN code keypad must be different for reasons of security and traceability.




Your AXM Plus detects duplicate PINs and highlights them with *The pin is not unique* in red.

8. Disable the ☐ Authorised checkbox if you want to authorise the PIN at a later stage.
9. If you want to control an activation/expiry date or the authorisation in terms of time, use ▼ to expand the PIN settings.
10. If necessary, enter the activation/expiry date in the *Valid from* or *Valid to* field.  
(PIN code keypad AX: possible to the exact day; PIN code keypad 3068: possible to the exact hour)
11. Select the ☒ Time group checkbox if required.  
↳ A drop-down menu will appear.

12. Select the time group you want to use for this PIN from the ▼ Time group drop-down menu.



13. If necessary, click the Add button to create additional PINs.

14. Use the Next > button to switch to the next tab or complete the entries with the Finish button.
15. Use  to sort/filter the displayed entries if required (see Sorting and filtering).
16. Select the required hashtags in the right column (Ctrl+click for single hashtags or Shift+click for multiple hashtags).
17. Use  to move only the selected hashtags or  to move all hashtags.

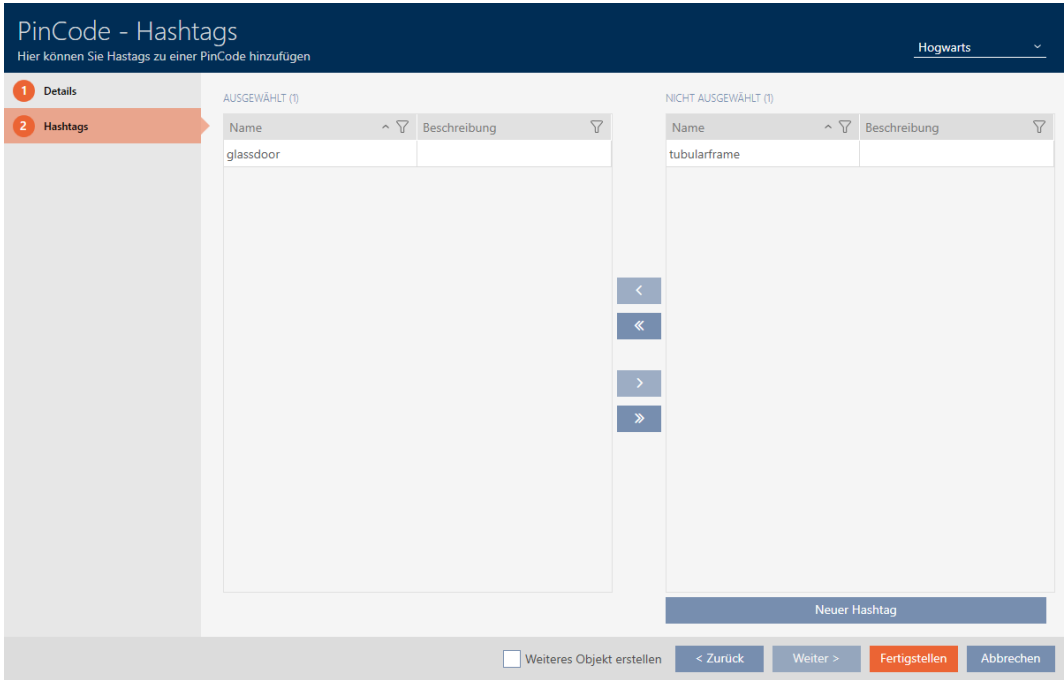


## NOTE

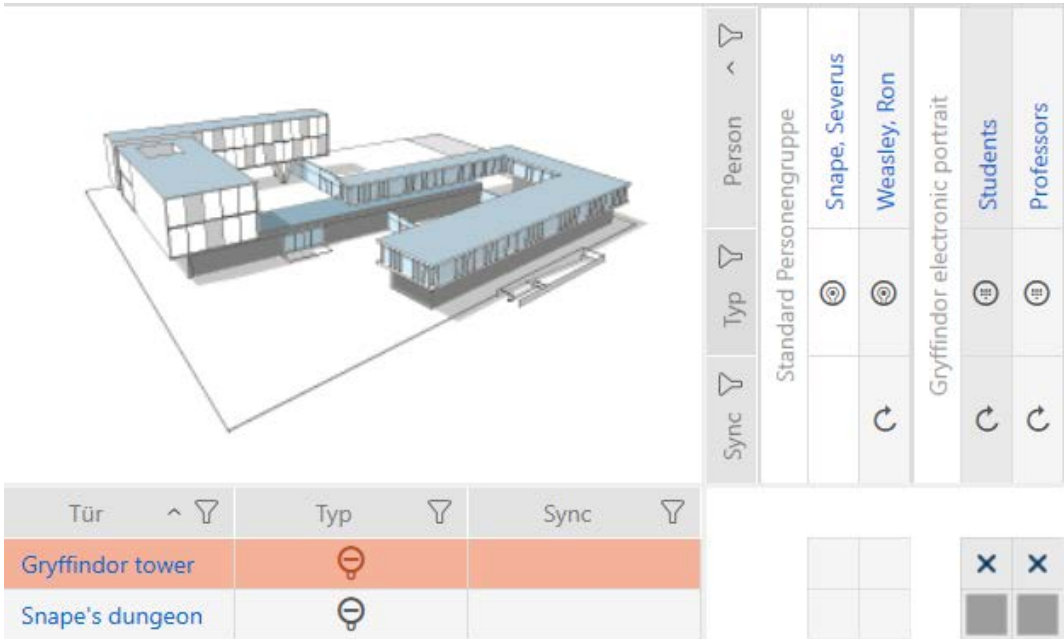
### Double-clicking as an alternative to arrow keys

Double-clicking an entry in the list will also move this entry to the other column.


→ The highlighted hashtags in the left-hand column are used for this PIN code.

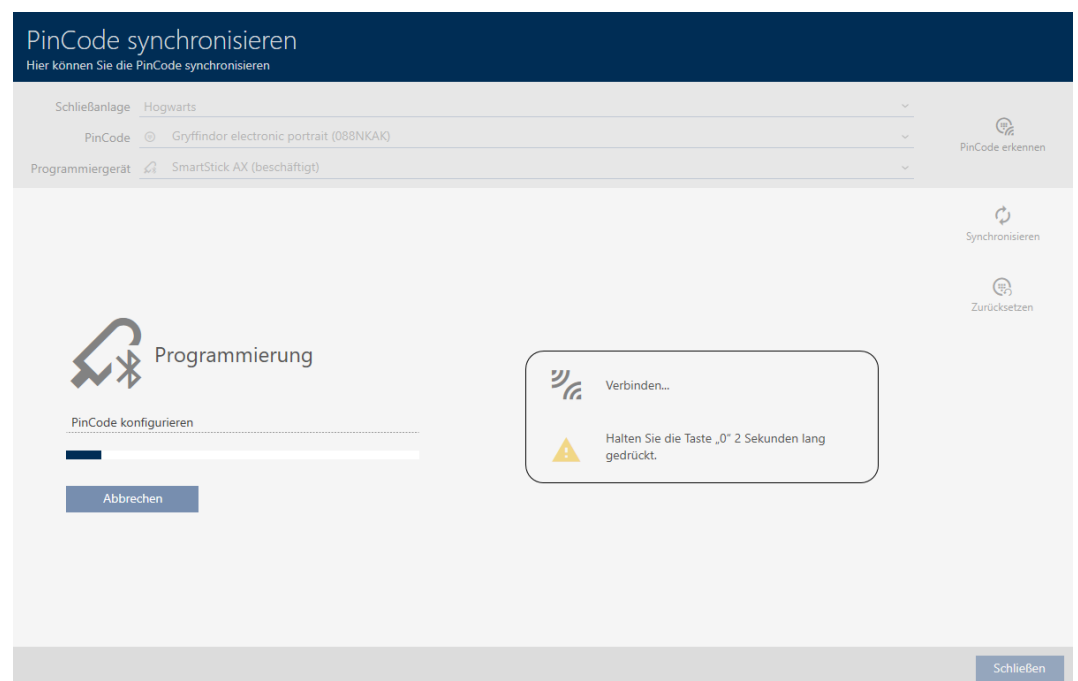


18. Select the ☒ Create additional objects checkbox to leave the window with the same settings open for the next PIN code to be created.
19. Click the **Finish** button to create the PIN code.
- "PinCode - Details" window closes.
- Newly created PIN code is listed or displayed in the matrix.



### Synchronise PIN code keypad AX

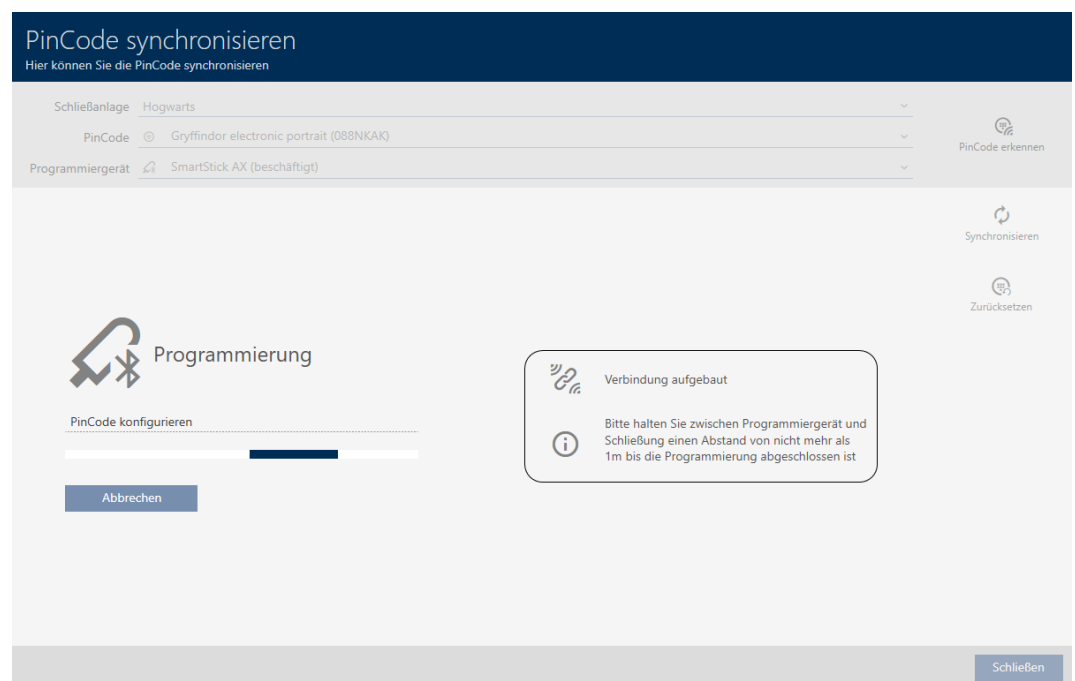
- ✓ PIN code keypad AX created and assigned (see Creating PIN code keypads).
  - ✓ Programming requirement for PIN code keypad AX, e.g. due to a change in authorisation.
  - ✓ Suitable programming device connected (SmartStick AX).
  - ✓ Matrix screen open.
1. Click the synchronise icon  for any PIN associated with the PIN code keypad AX concerned.
    - ➔ The "Synchronise PinCode" window opens and synchronisation starts.



- Press and hold the “0” button on the PIN code keypad AX for at least two seconds.



- Position the SmartStick AX close to the PIN code keypad AX (max. 1 m).
  - LED flickers green and PIN code keypad AX beeps.
  - BLE interface has been awakened.
  - PIN code keypad AX is synchronised.



- PIN code keypad AX is synchronised.



### NOTE

#### **PIN code keypad AX in programming mode after synchronisation**

After synchronisation is complete, the PIN code keypad AX will not function for about 30 seconds as it is still in programming mode.



## 6. Fastening

1. Before fastening, test to ensure that your PIN code keypad AX reaches the locking device (range varies depending on locking device, see [Technical data \[▶ 28\]](#)).
2. Allow the space required to insert a screwdriver so that the housing can be opened again at a later point in time.

### 6.1 Fastening with glue pad

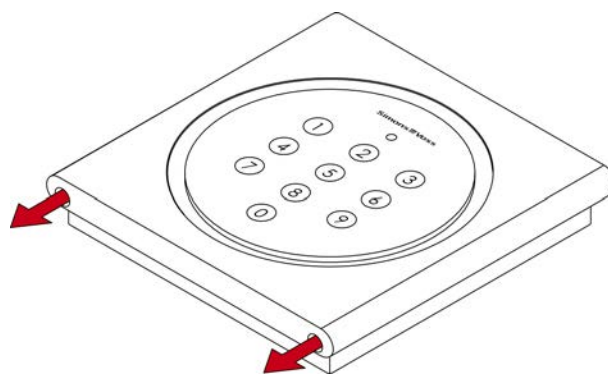
Adhesive mounting is the fastest way to mount your PIN code keypad AX .

- ✓ PIN code keypad AX already programmed.
  - ✓ Subsurface clean and free of grease.
1. Attach the supplied special adhesive pad to your PIN code keypad AX.
  2. Align your PIN code keypad AX at its required position.
  3. Press your PIN code keypad AX to glue it firmly into place.
- PIN code keypad AX is mounted.

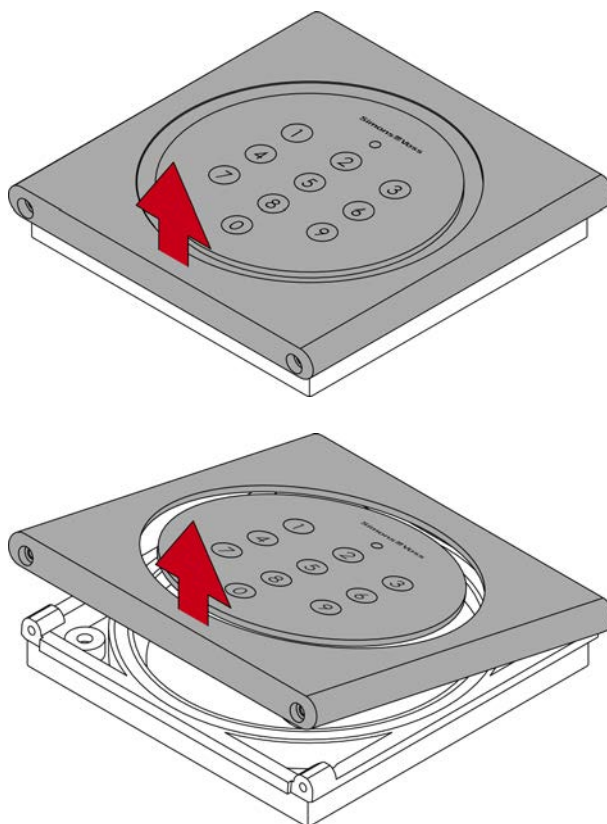
### 6.2 Fastening with screws

You can securely fasten your PIN code keypad AX with screws.

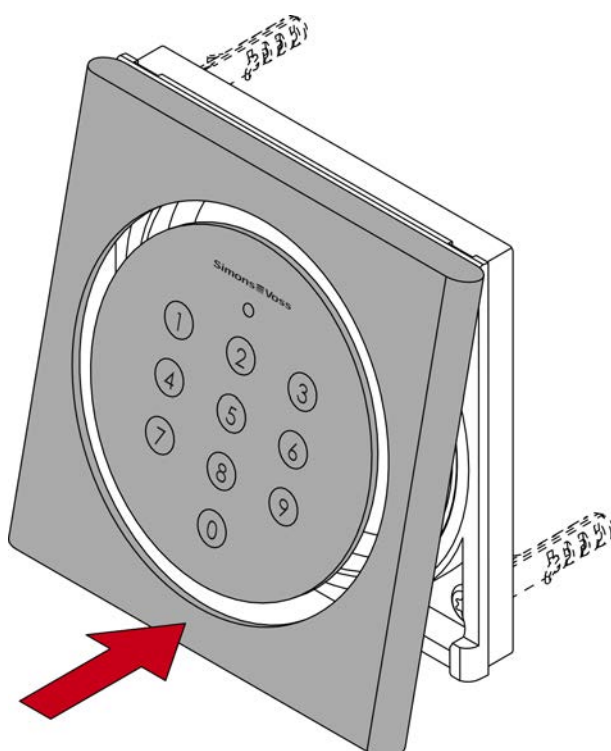
- ✓ PIN code keypad AX already programmed.
  - ✓ Slotted-head screwdriver (size TX 6) - not included in the supplied package.
1. Undo both screws completely from the housing base.



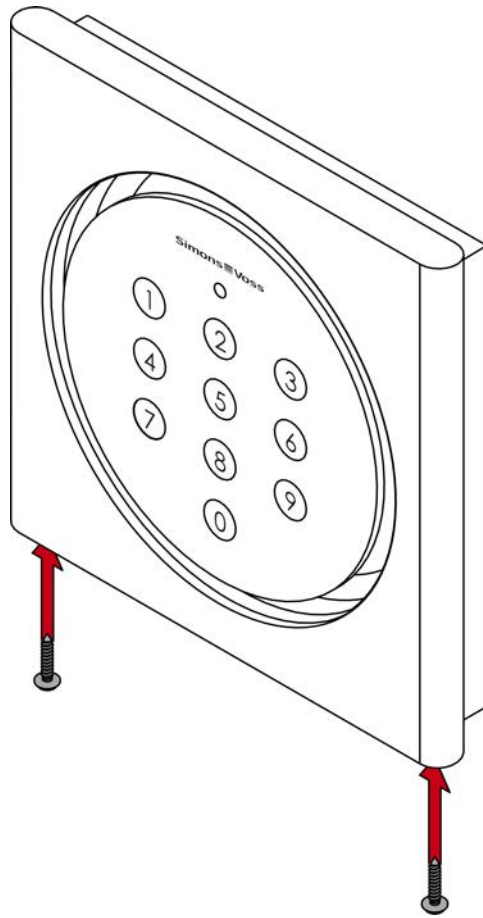
2. Remove the keypad.



3. Align the base plate at the fastening point.
4. Screw/anchor the base plate firmly into position.
5. Put the housing keypad back into position.



6. Screw the keypad back onto the base plate.



→ PIN code keypad AX is mounted.

## 7. Battery replacement

### IMPORTANT

#### Damage to the electronics due to fluids or static discharge

Do not touch electronics/components; do not allow them to come into contact with oil, paint, moisture, alkali or acids.



### NOTE

#### Shorter battery life due to poor contact

Skin oil impairs contact between the battery and the battery holder.

1. Do not touch the contacts on new batteries with your hands when replacing old ones.
2. Use clean cotton gloves free of fat or grease.

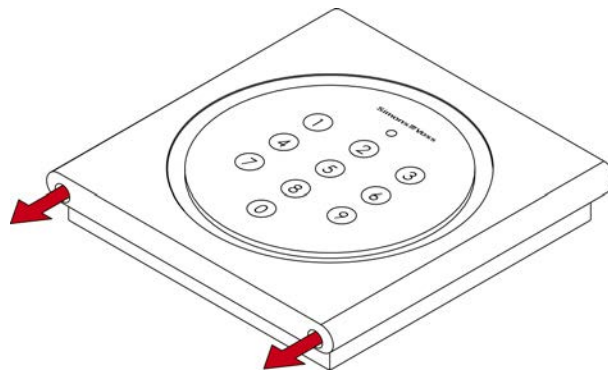
#### Replace batteries in pairs

Different battery types and charge levels can shorten battery lifespans.

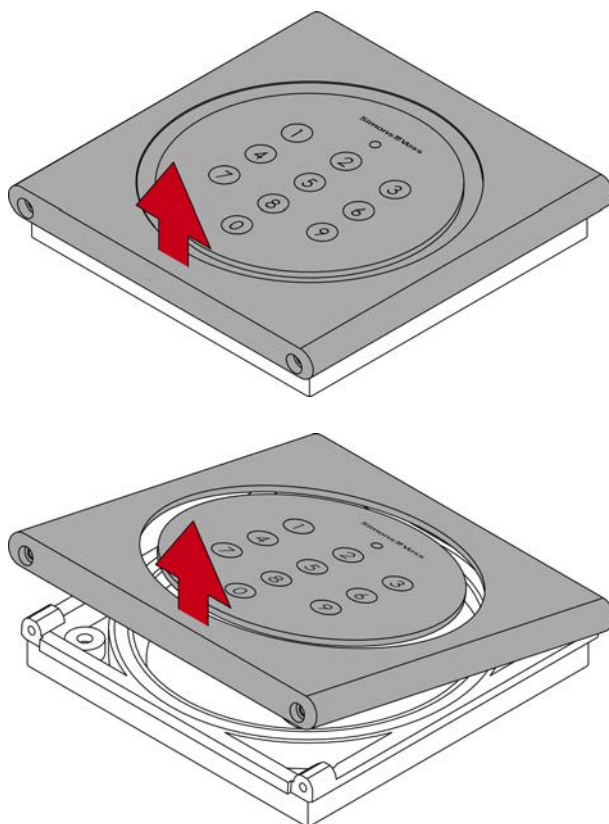
■ Always replace both batteries at the same time with a pair of identical batteries.

- ✓ Slotted-head screwdriver (size TX 6) - not included in the supplied package.

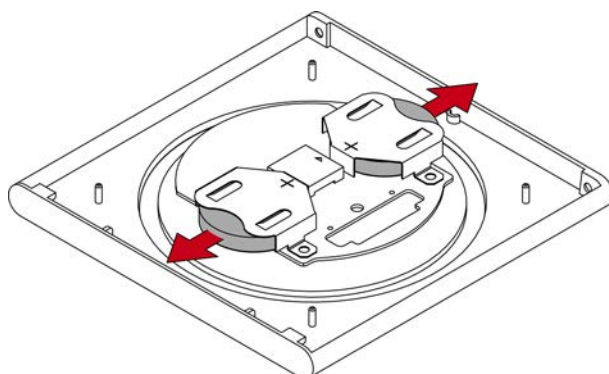
1. Undo both screws completely from the housing base.



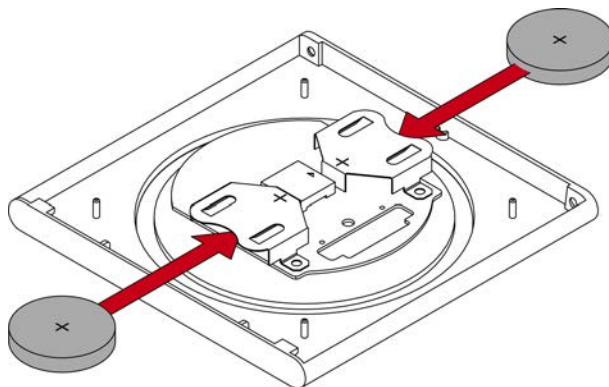
2. Remove the keypad.



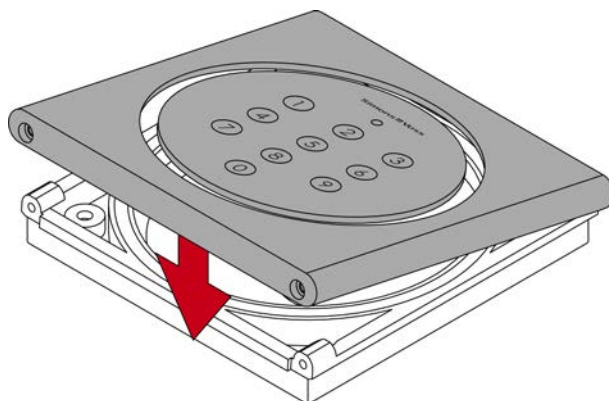
3. Remove the two batteries.



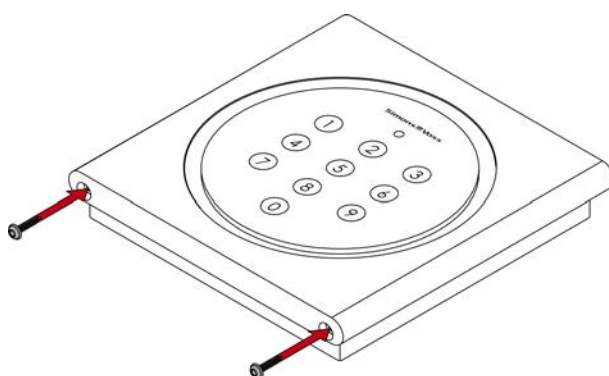
4. Insert two new batteries (CR2450) with the positive terminal facing upwards.



5. Put the housing keypad back into position.



6. Screw the keypad back onto the base plate.



↳ The PIN code keypad AX's batteries have been replaced.

## 8. Updating the PinCode AX firmware

You can update the firmware for your PIN code keypad AX yourself using the AX firmware updatetool and a SmartStick AX.

1. Press 0 and hold for two seconds.
  - ↳ PIN code keypad AX flickers green and beeps.
  - ↳ PIN code keypad AX stays in programming mode for half a minute and can be found with AX firmware update.
2. Transfer the new firmware with AX firmware update.
  - ↳ PIN code keypad AX beeps during transmission.
  - ↳ PIN code keypad AX beeps and flashes red three times.
3. Write down the current firmware version on the rear of the PIN code keypad AX.
  - ↳ Firmware updated successfully.

## 9. Reset

Resetting is described for the AXM by way of example.

✓ Suitable programming device connected (SmartStick AX for PIN code keypad AX, SmartCD2.G2 for PIN code keypad 3068)

✓ PIN code list or matrix screen open.

1. Click on the PIN code keypad you wish to reset.

If the PIN code keypad is not present in your locking system, identify the PIN code keypad (see Identifying unknown PIN code keypad in the AXM manual). Then continue.

→ The PIN code keypad window will open.

**PinCode synchronisieren**  
Hier können Sie die PinCode synchronisieren

Schließanlage: **Hogwarts**  
PinCode: **Gryffindor electronic portrait (088NKAK)**  
Programmiergerät: **SmartStick AX**

**PINCODE DATEN**

Letzte Synchronisierung: 08.05.2024 19:57:02  
Status: Aktiviert  
Sync: Programmiert  
Batteriestatus: Ok  
Tür: Gryffindor tower

**Pin Code List:**

Pin Name	Sync	Berechtigt	Status
1 Students	Sync	Berechtigt	Programmiert
2 Professors	Sync	Berechtigt	Programmiert
3 House-Elfs	Sync	Berechtigt	Nicht programmiert

**Buttons:** In Matrix anzeigen, Synchronisieren, Zurücksetzen, Schließen

2. Click on the **Synchronisation** button.

→ Synchronise window will open.



**PinCode synchronisieren**  
Hier können Sie die PinCode synchronisieren

Schließanlage: **Hogwarts**

PinCode: **Gryffindor electronic portrait (088NKAX)**

Programmiergerät: **SmartStick AX**

**PINCODE DATEN**

Letzte Synchronisierung: 08.05.2024 19:57:02

Status: **Aktiviert**

Sync: **Programmiert**

Batteriestatus: **Ok**

Tür: **Gryffindor tower**

**In Matrix anzeigen**

**Synchronisieren**

**Zurücksetzen**

	Pin Name	Sync	Berechtigt	Status
1	Students	Sync	Berechtigt	Programmiert
2	Professors	Sync	Berechtigt	Programmiert
3	House-Elfs	Sync	Berechtigt	Nicht programmiert

**Schließen**

3. Select the programming device from the ▼ **Programming device** drop-down menu with which you wish to reset your PIN code keypad.

Programmiergerät: **SmartStick AX**

**SmartCD aktiv**

**SmartStick AX**

4. Click on the **Reset** button .



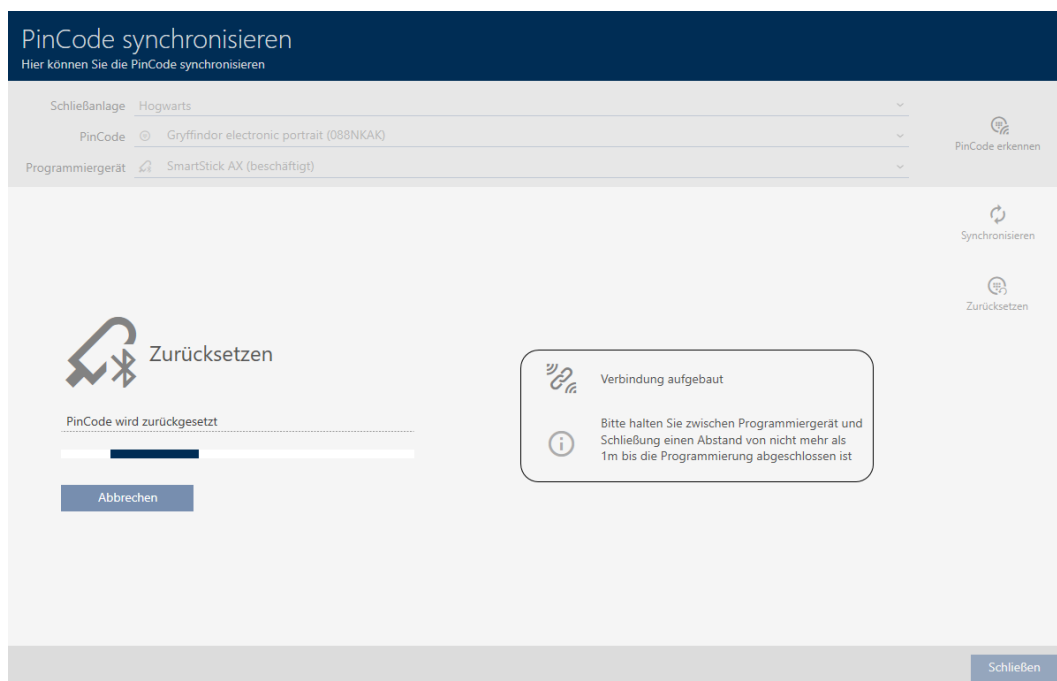
## NOTE

### Resetting PIN code keypads that do not form part of the project

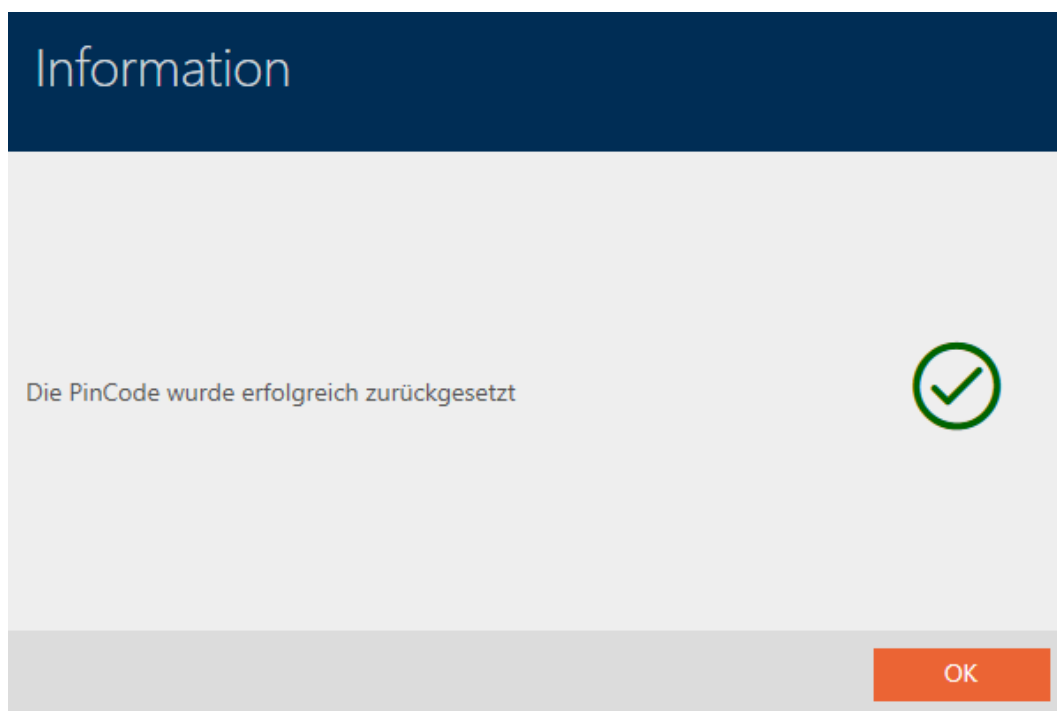
Your AXM Plus can also reset PIN code keypads that were not created in the same project. In this case, however, your AXM Plus does not know the locking system password used.

- In such instances, enter the locking system password when prompted.

- If necessary, enter the locking system password for the locking system to which this PIN code keypad belongs.
- Follow any further instructions as necessary.
  - PIN code keypad is reset.



→ PIN code keypad is reset.



## 10. Feedback signals

Signalling	PinCode keypad AX
Green + beep	PIN correct
Green + short beep	Keystroke
Flickering green + beeping	BLE interface woken up, ready for programming
Red + beep	PIN incorrect
Orange + beep (after pressing a key for the first time)	PIN code keypad AX programmed, but no connection to the locking device
6 × red + beep at the lock	Batteries of the PIN code keypad AX weak
Red + beep (15 seconds)	PIN entered incorrectly 6-7 times
Red + beep (60 seconds)	PIN entered incorrectly 8 times or more

PINs that are correct, but just outside the authorised period, will be deleted, in contrast to the PIN code keypad 3068 signalled as false.

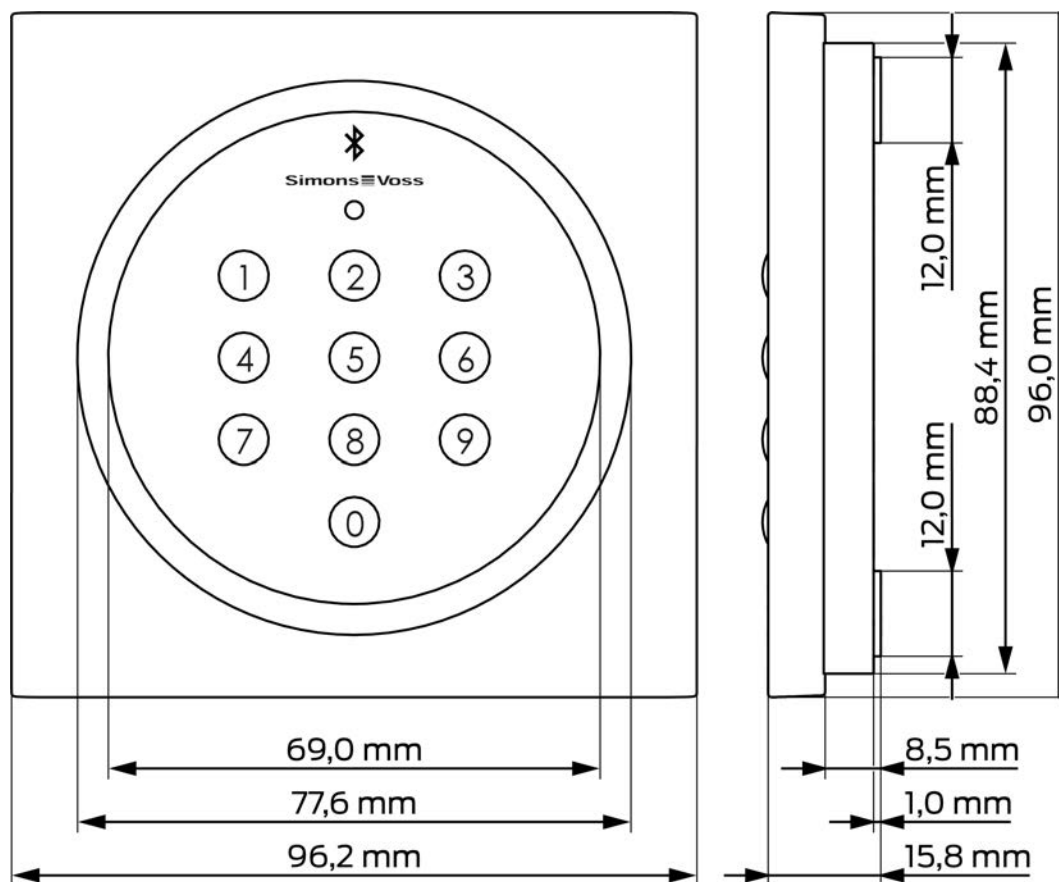
## 11. Technical data

Dimensions	96 mm x 96 mm x 16 mm
Weight	About 100 g with batteries
Fastening	Adhesive pad or screw attachment
Material	ABS plastic
Colour (housing)	Anthracite grey (similar to RAL 9007), semi-transparent rear panel/base plate
Colour (button labelling)	Anthracite grey similar to RAL 7016
Standard protection rating	IP65
Operating temperature range	-20 °C to +50 °C
Storage temperature range	-10 °C to +50 °C
Air humidity	Max. 90% without condensation
Battery type	2x CR2450, 3 V (lithium)
Approved battery manufacturers	Duracell, Murata, Panasonic
Battery life	Up to 100,000 lock operations or up to 10 years on standby
Interface	Bluetooth Low Energy (BLE)
Read range	About 1.5 metres, depending on locking device type, environment and orientation
Supported programming device	SmartStick AX
Signalling	Visual (green/red/orange LED) and audible
Number of programmable PINs	50 user PINs with 4-10 digits

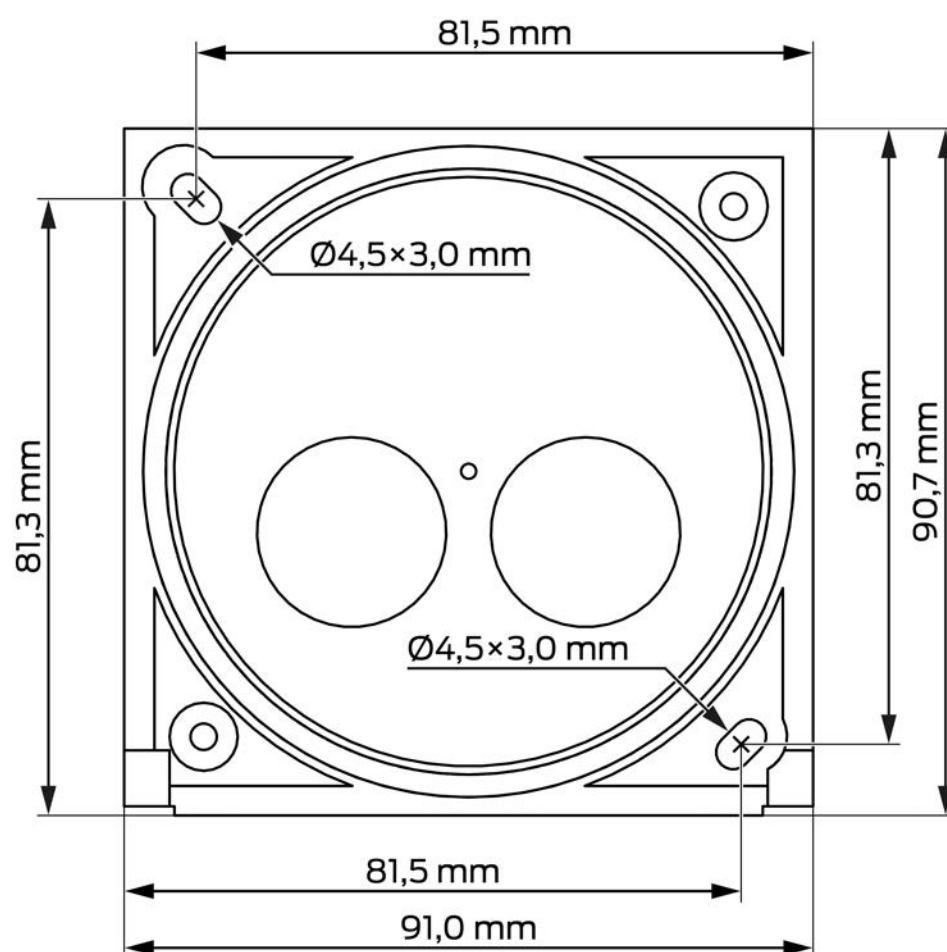
### Radio emissions

2400 MHz - 2483.5 MHz	0 dBm
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### 11.1 Scale drawing



## 11.2 Drilling template



## 12. Declaration of conformity

The company SimonsVoss Technologies GmbH hereby declares that the articles (SV-PINCODE.AX) comply with the following guidelines:

- 2014/53/EU -RED-  
or for the UK: UK statutory 2017 No. 1206 -Radio equipment-
- 2011/65/EU -RoHS-  
or for the UK: UK statutory 2012 No. 3032 -RoHS-



The full text of the EU Declaration of conformity is available at the following internet address: [www.simons-voss.com/en/certificates.html](http://www.simons-voss.com/en/certificates.html).

The full text of the UK Declaration of conformity is available at the following internet address: [www.simons-voss.com/en/certificates.html](http://www.simons-voss.com/en/certificates.html).

## 13. Help and other information

### Information material/documents

You will find detailed information on operation and configuration and other documents on the website:

<https://www.simons-voss.com/en/documents.html>

### Software and drivers

Software and drivers can be found on the website:

<https://www.simons-voss.com/en/service/software-downloads.html>

### Declarations of conformity

You will find declarations of conformity and other certificates on the website:

<https://www.simons-voss.com/en/certificates.html>

### Information on disposal

- Do not dispose the device (SV-PINCODE.AX) in the household waste. Dispose of it at a collection point for electronic waste as per European Directive 2012/19/EU.
- Recycle defective or used batteries in line with European Directive 2006/66/EC.
- Observe local regulations on separate disposal of batteries.
- Take the packaging to an environmentally responsible recycling point.



### Technical support

Our technical support will be happy to help you (landline, costs depend on provider):

+49 (0) 89 / 99 228 333

### Email

You may prefer to send us an email.

[support-simonsvoss@allegion.com](mailto:support-simonsvoss@allegion.com)

### FAQs

You will find information and help in the FAQ section:

<https://faq.simons-voss.com/otrs/public.pl>



### Address

SimonsVoss Technologies GmbH  
Feringastr. 4  
D-85774 Unterfoehring  
Germany



## This is SimonsVoss

SimonsVoss, the pioneer in remote-controlled, cable-free locking technology provides system solutions with a wide range of products for SOHOs, SMEs, major companies and public institutions. SimonsVoss locking systems combine intelligent functionality, high quality and award-winning design Made in Germany.

As an innovative system provider, SimonsVoss focuses on scalable systems, high security, reliable components, powerful software and simple operation. As such, SimonsVoss is regarded as a technology leader in digital locking systems.

Our commercial success lies in the courage to innovate, sustainable thinking and action, and heartfelt appreciation of employees and partners.

SimonsVoss is a company in the ALLEGION Group, a globally active network in the security sector. Allegion is represented in around 130 countries worldwide ([www.allegion.com](http://www.allegion.com)).

### Made in Germany

SimonsVoss is truly committed to Germany as a manufacturing location: all products are developed and produced exclusively in Germany.

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