Poly-Control

Danalock V3

SKU: POLELOCKV3

(((Z WAVE PLUS
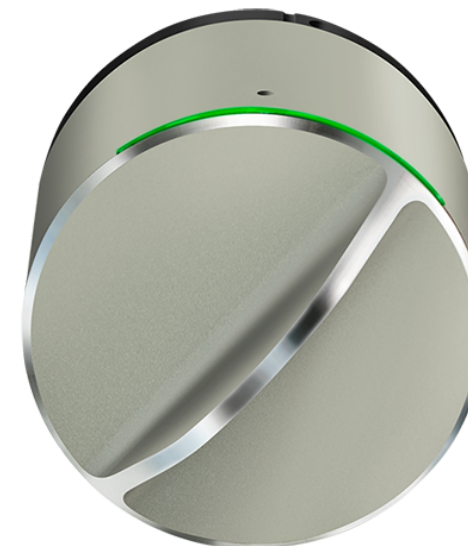
SECURE V2

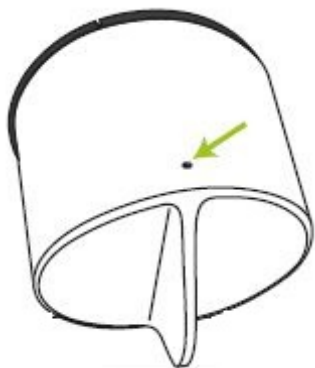### Quickstart

This is a **secure Door Lock** for **Europe**. To run this device please insert fresh **4 * CR123A** batteries. Please make sure the internal battery is fully charged. To add this device to your network execute the following action:
Push the switch once.

What is Z-Wave?

Z-Wave is the international wireless protocol for communication in the Smart Home. This device is suited for use in the region mentioned in the Quickstart section. (For more information about frequency regulations please refer to the frequency coverage overview at Sigma Designs Website).

Z-Wave ensures a reliable communication by reconfirming every message (**two-way communication**) and every mains powered node can act as a repeater for other nodes (**meshed network**) in case the receiver is not in direct wireless range of the transmitter.

This device and every other certified Z-Wave device can be **used together with any other certified Z-Wave device regardless of brand and origin** as long as both are suited for the same frequency range.

If a device supports **secure communication** it will communicate with other devices secure as long as this device provides the same or a higher level of security. Otherwise it will automatically turn into a lower level of security to maintain backward compatibility.

For more information about Z-Wave technology, devices, white papers etc. please refer to www.z-wave.info.

Product Description

The Danalock is a doorlock with a integrated motor, which you place on the inside of your front door. You can control it with a smartphone (via Z-Wave Gateway or directly via Bluetooth). The Danalock fits to every door with a mechanical Euro profile cylinder.

Easy installation - without drilling holes

For the installation of the lock your existing cylinder is replaced by a Danalock cylinder and the doorlock with the motor will be attached to it.

Battery empty or Smartphone lost?

After the installation you can unlock the door with a physical key any longer. On the outside of the door you can use the key and inside you can lock/unlock it manually.

Auto-Lock

Let the door lock automatically when you leave your home. The auto-lock-function locks the door automatically after a predefined time.

Properties:

- Z-Wave Plus & Bluetooth Version

- EU frequency: 868,42 MHz (Z-Wave)

- Package content: 1x Danalock V3 incl. Batteries (without lock cylinder)

- Power supply: 4x CR123

- Battery lifetime: 6-12 month

- torque: 1,5 Nm

Prepare for Installation / Reset

Please read the user manual before installing the product.

In order to include (add) a Z-Wave device to a network it **must be in factory default state.** Please make sure to reset the device into factory default. You can do this by performing an Exclusion operation as described below in the manual. Every Z-Wave controller is able to perform this operation however it is recommended to use the primary controller of the previous network to make sure the very device is excluded properly from this network.

Reset to factory default
This device also allows to be reset without any involvement of a Z-Wave controller. This procedure should only be used when the primary controller is inoperable.

The Danalock can be set to factory settings by pushing the switch ten times.
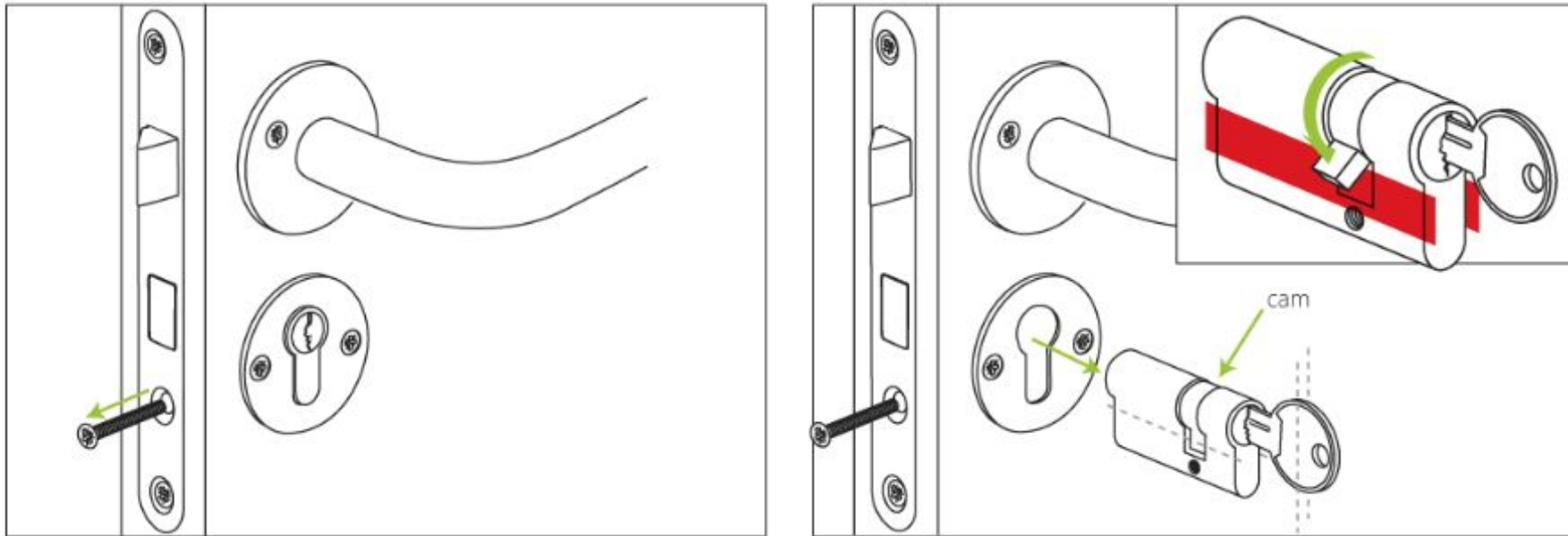

Safety Warning for Batteries
The product contains batteries. Please remove the batteries when the device is not used. Do not mix batteries of different charging level or different brands.

Installation

1. Remove the old cylinder

First you have to remove your current cylinder. Unscrew the lock-screw in the mortise-plate on the side of the door.
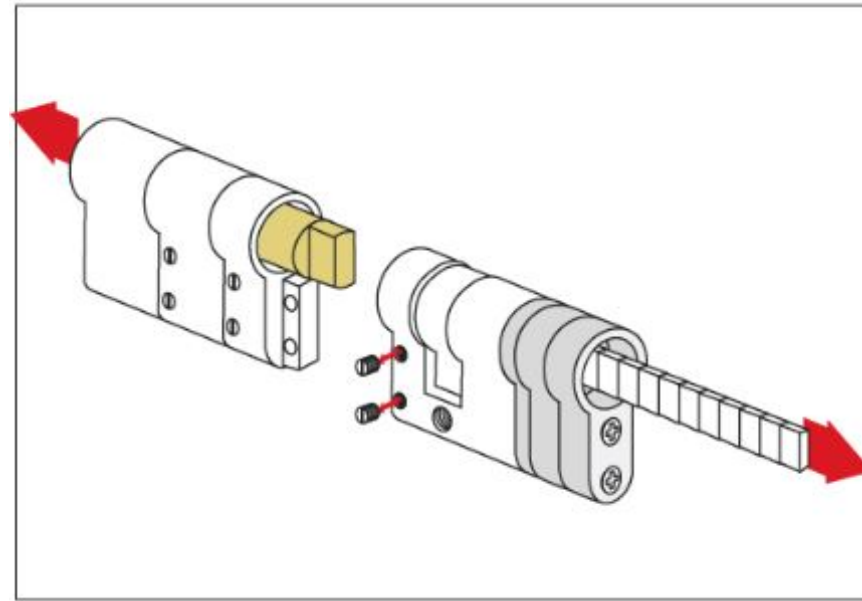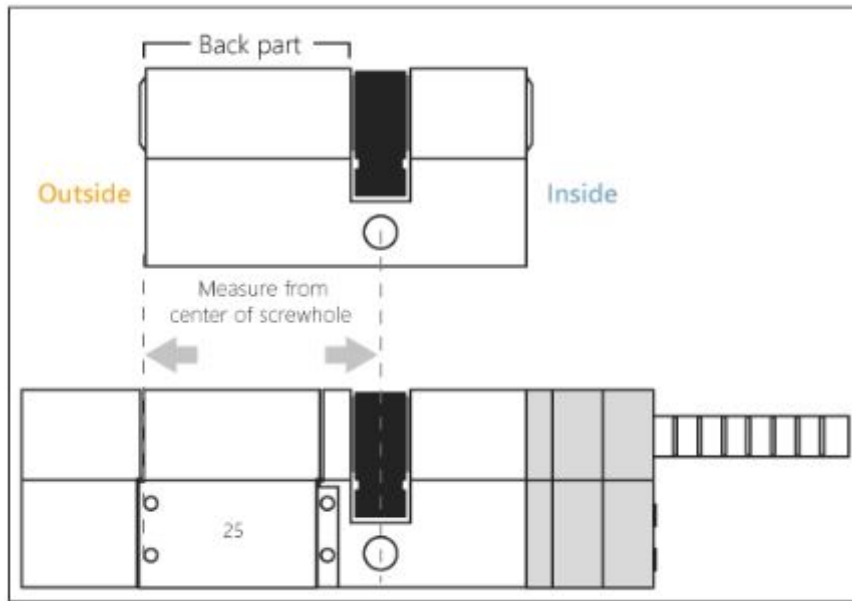
2. Pull out the old cylinder

Insert your key and turn it so the cam lines up with the body of the cylinder. Now pull out the cylinder.
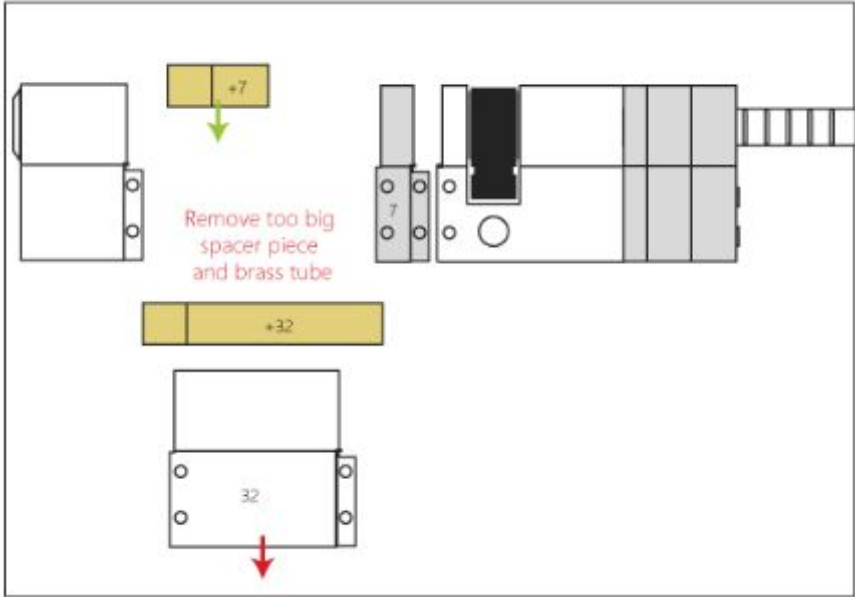
3. Adjust the new cylinder

Measure the back part (on the outside of your door) of the old cylinder from the middle of the screwhole and away (see illustration). In the Danalock box you'll find an adjustable lock cylinder.
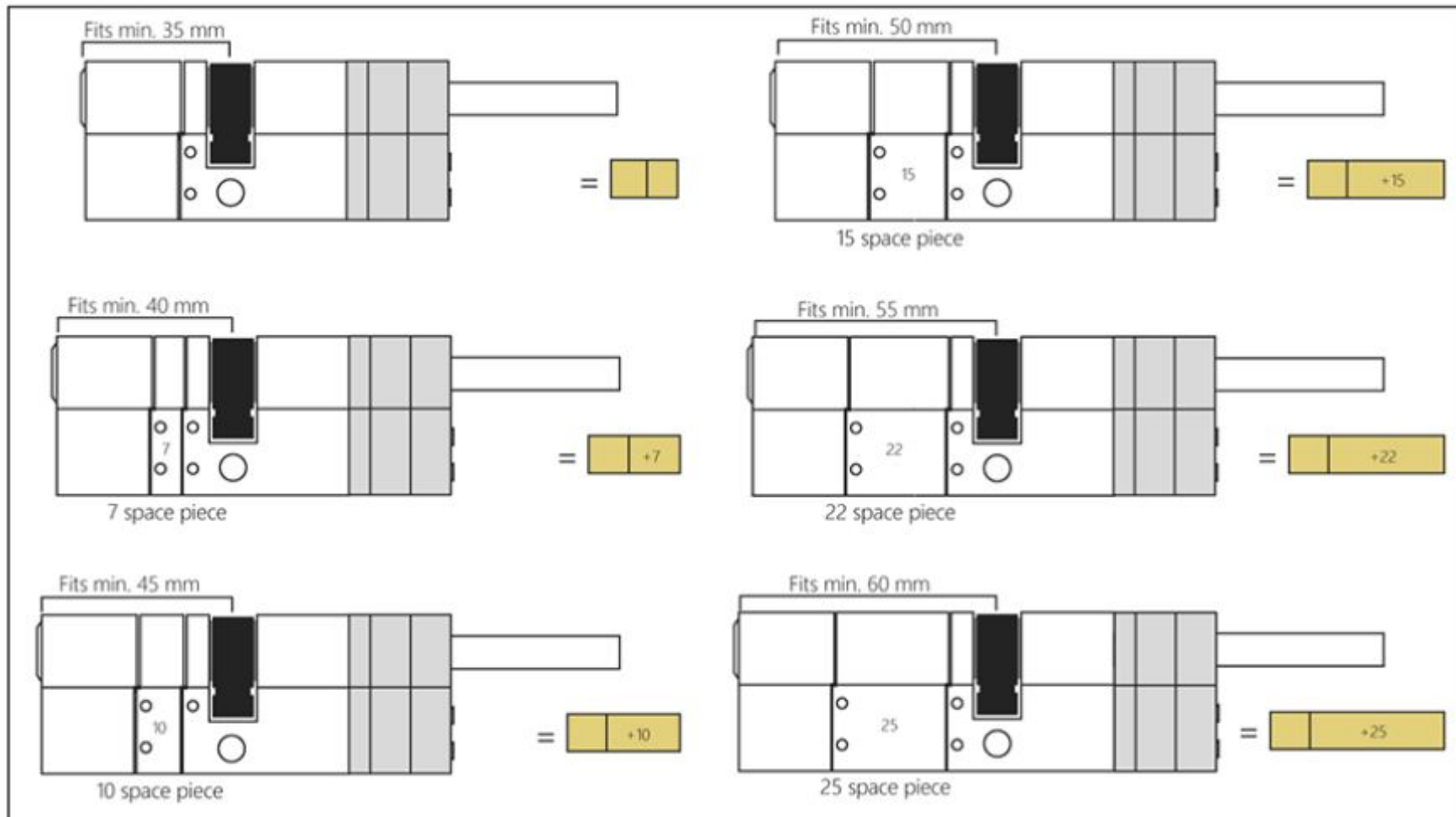If the old cylinder and the adjustable cylinder matches - go to no 5. If they don't please proceed.

Back part

Outside

Inside

Measure from
center of screwhole

25

4. Unscrew the small screws on both sides of the cylinder and pull it apart.

5. Insert the same size of spacer piece and brass tube to make the adjustable cylinder match the old cylinder. Please look at the following size guide to find the right length for the spacer piece and the brass tube.

Remove too big
spacer piece
and brass tube

+7

7

+32

32

Size guide - When you adjust the size of the Danalock cylinder to the old cylinder you'll have to exchange the brass tube in the center with another that fits the spacer piece. Here are the different combinations.

6. Assemble the cylinder and screw the small screws back in on both sides of the cylinder.
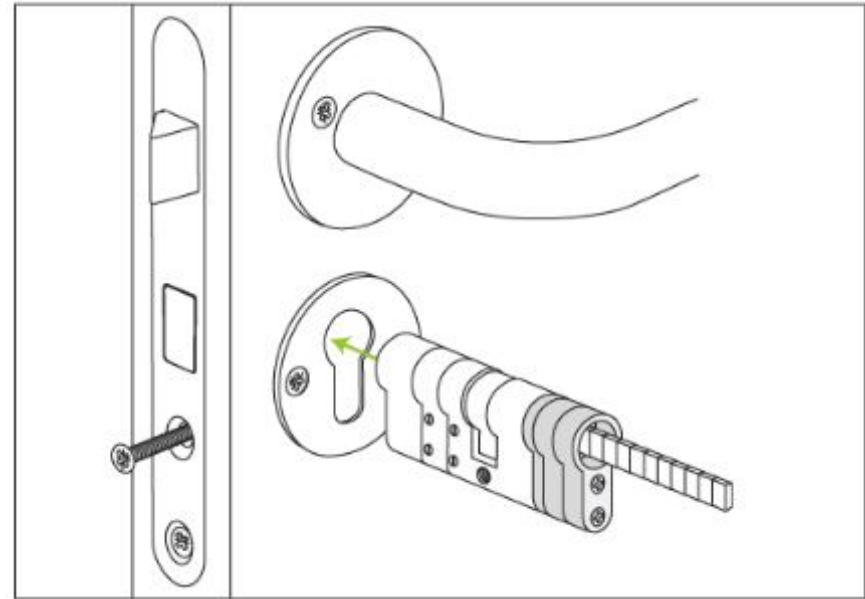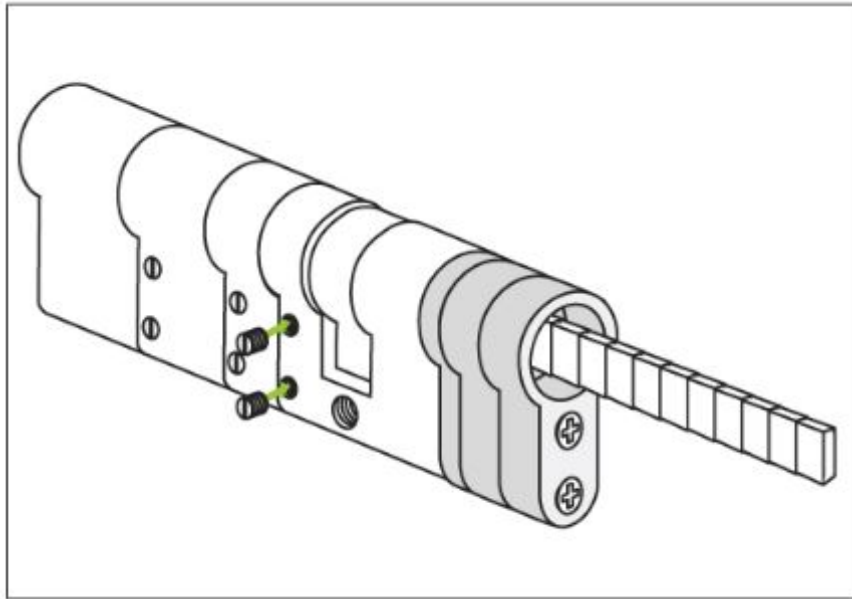
7. Insert the adjustable cylinder

Insert the new cylinder, and re-insert the lock-screw in the mortise-plate to fix the cylinder. (b) Do not tighten the screw to hard - make sure the cylinder is working by locking and unlocking with your hand.
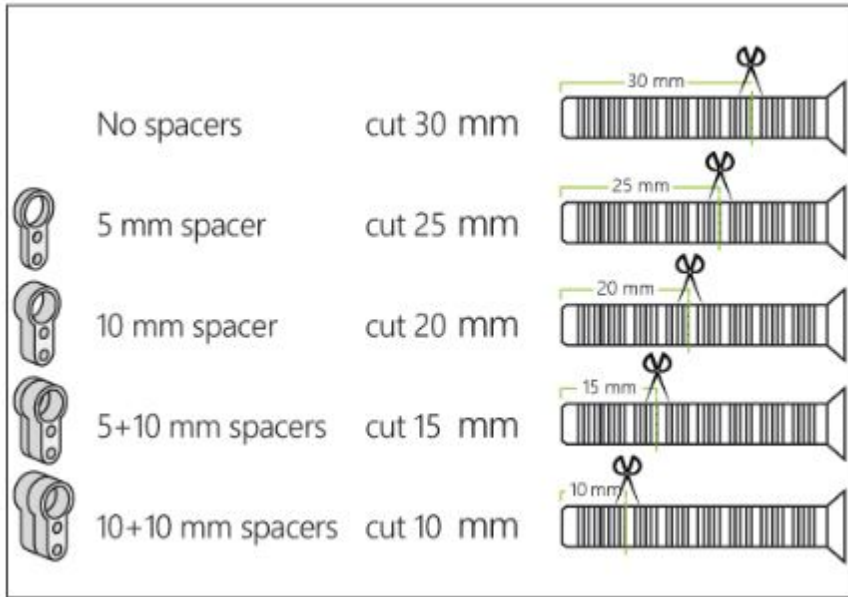
8. The right rosette spacer

To avoid pulling the cylinder out of place you need to find the right spacer or a spacer combination between the rosette and the back plate. Unscrew the two breakable screws that holds the spacers together with the adjustable cylinder. Choose one or more spacers so they flush with the rosette surface. (See next illustration).

Labels in figure: 10 mm, 5 mm, Breakable screws, Rosette spacers
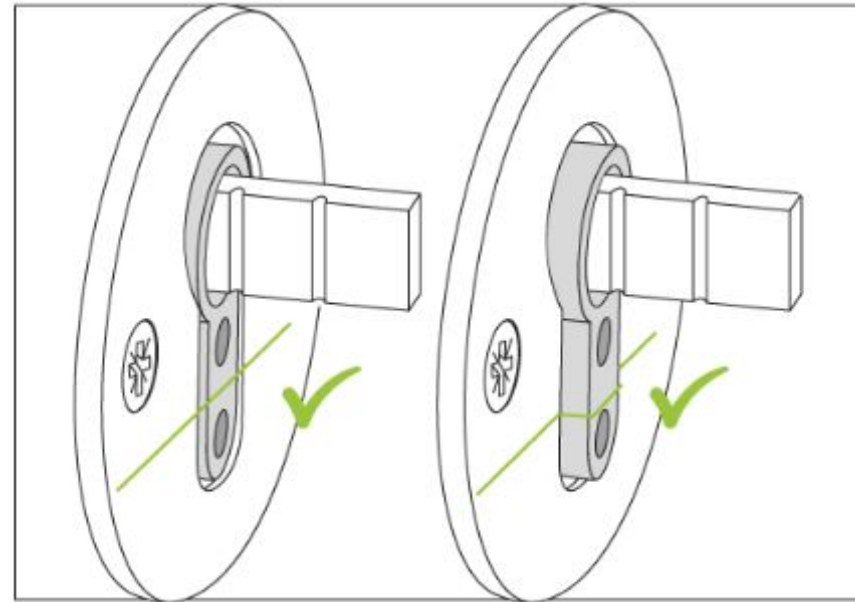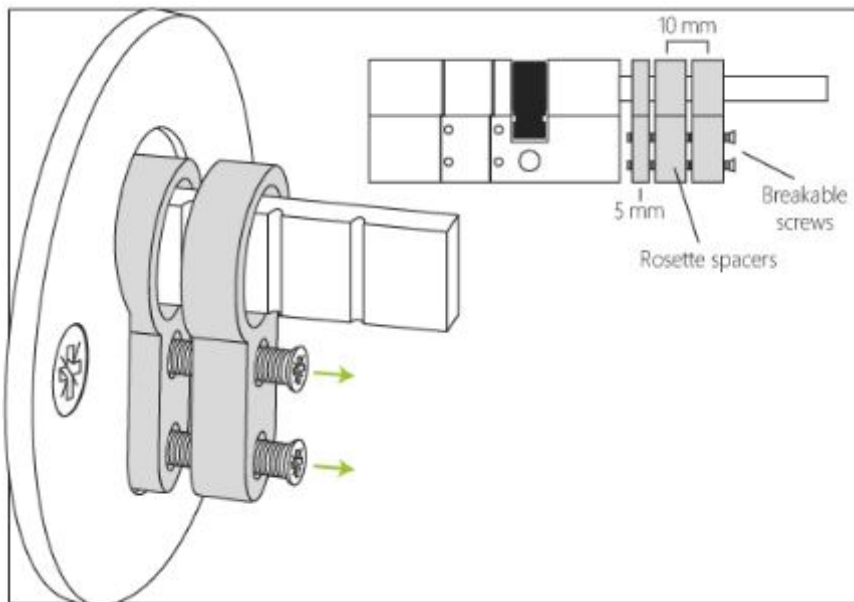
IMPORTANT! Avoid pulling the cylinder out of place. It is important that the spacer flushes or sticks out from the hole in the rosette plate.

9. Break the screws to the right length

Depending on which spacer or spacer combination you chose, it is now important that the screws that fasten the cylinder to the back plate have the right length. Use this chart to find the right length.Use a wirecutter, two pliers or bend the screws forth and back several times in a vice to break them.

No spacers	cut 30 mm	30 mm
5 mm spacer	cut 25 mm	25 mm
10 mm spacer	cut 20 mm	20 mm
5+10 mm spacers	cut 15 mm	15 mm
10+10 mm spacers	cut 10 mm	10 mm

10. Fasten the back plate to the cylinder

Now fasten the back plate to the cylinder with the rosette spacer in between them.
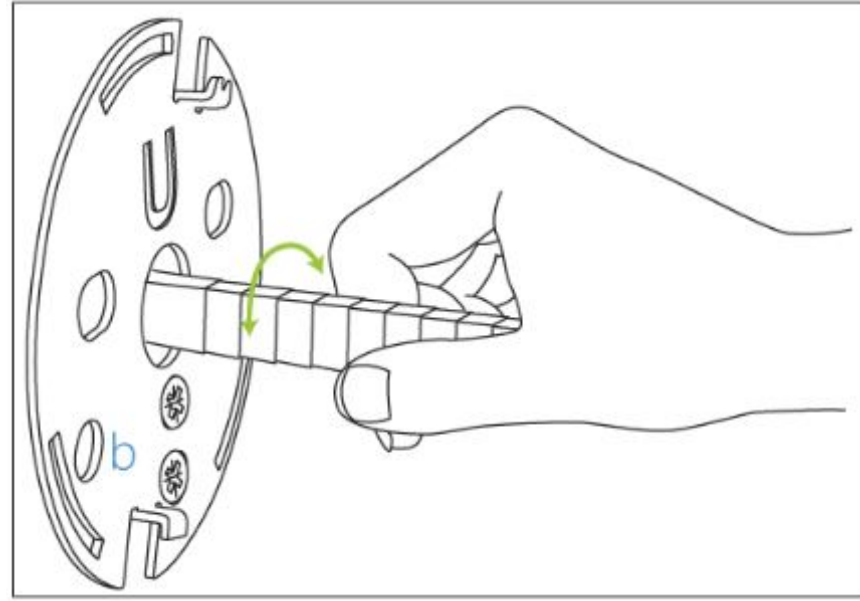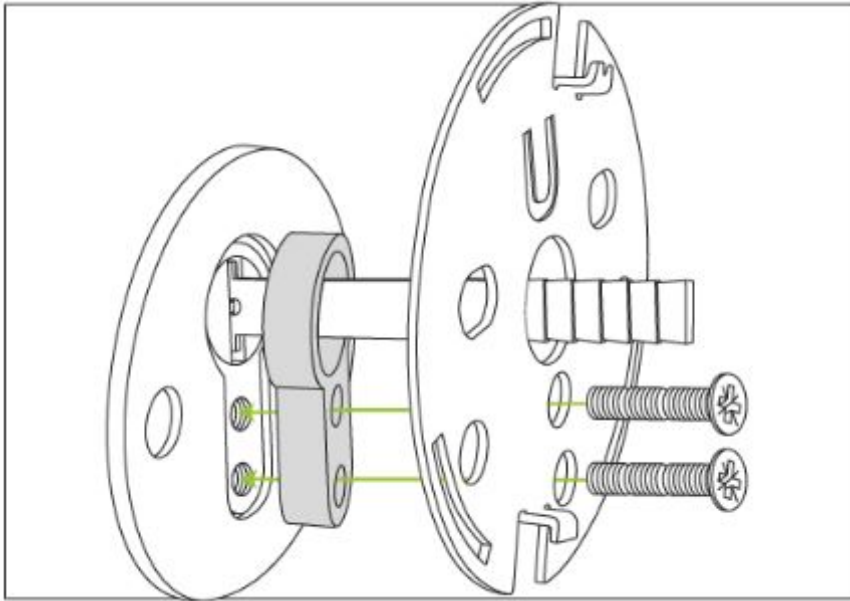
**IMPORTANT!** Check that the lock atill works!

Make sure that the lock still works properly by tuning the tailpiece. If you cant lock and unlock this way please loosenthe cylinder screws.

11. Give the tailpiece the right length

To avoid damaging the Danalock you will have to shorten the new cylindertailpiece to max 35mm from the door surface. Use two plierts or a wire cutter to shorten the tailpiece.
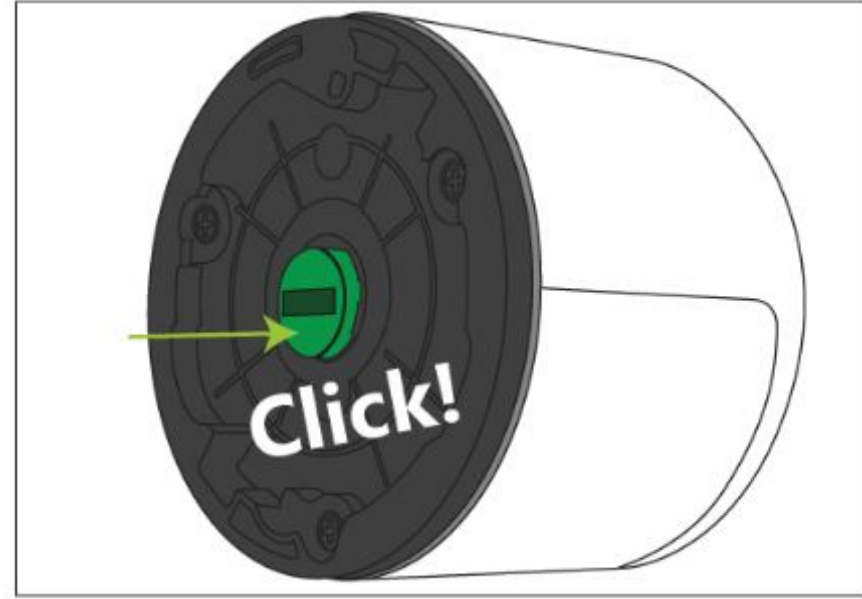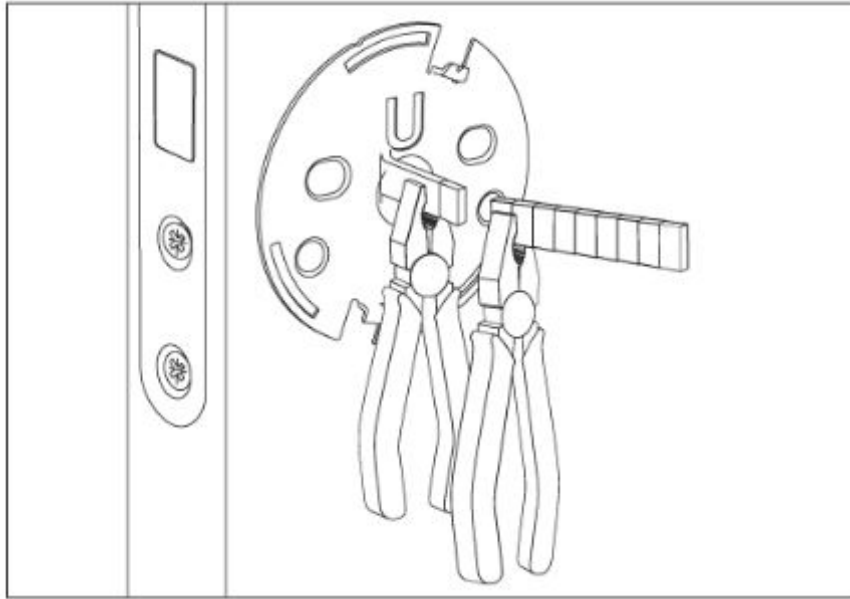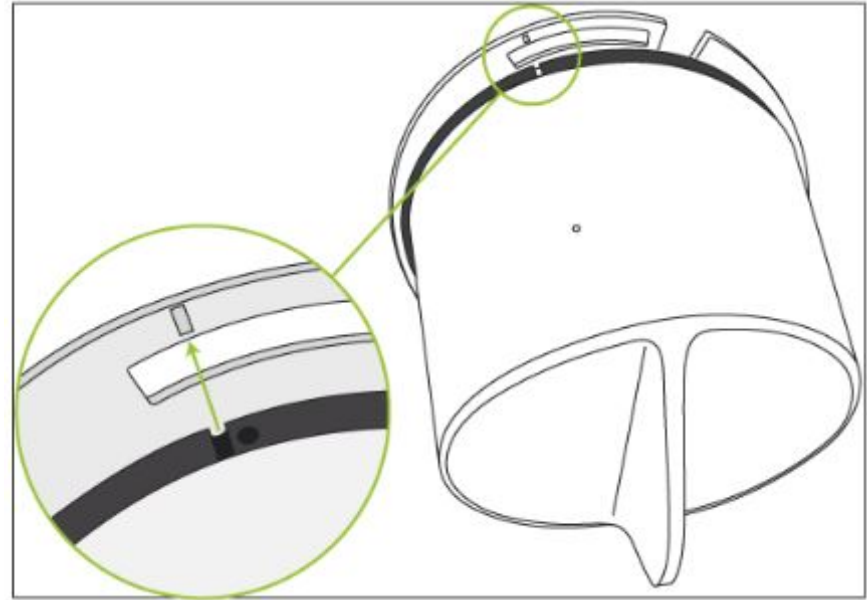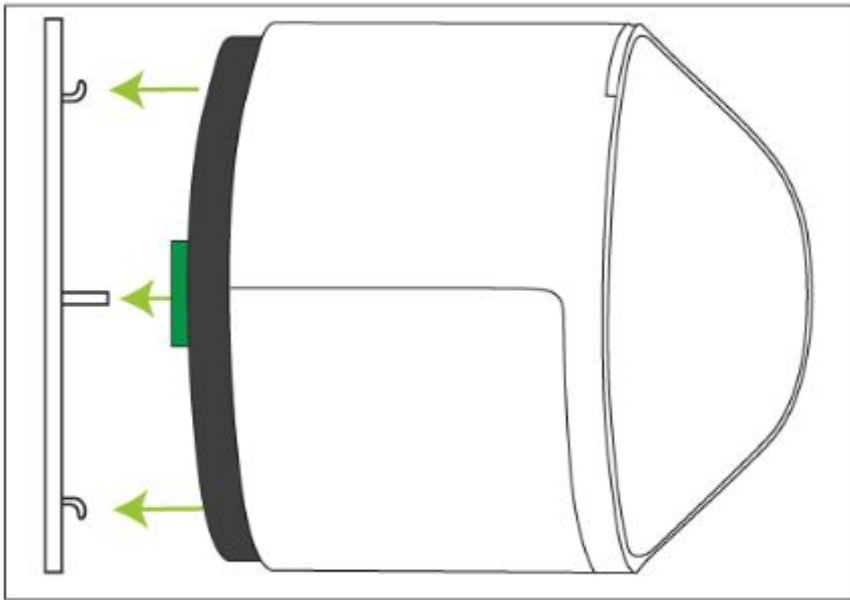
12. Attach the tailpiece adaptor

Insert the gteen taipliece adaptor in the center tube on the backside of the Danalock. Press on the adaptor until a click ensures it is fixed firmly to the Danalock.

13. Fit the tailpiece to the middle of the housing base

Fit the Danalock over the back plate. Make sure the tailpiece hits the slide in the middle of the adaptor.

14. Align the plate marks

Find the small marking on the edge of the back plate and align the mark on the back of the Danalock baseplate with it. Now you are sure to hit the notches on the back plate with the Danalock.

15. Fasten the Danalock

Turn the Danalock clockwise until it clicks to fasten it to the back plate. NOTE: If you need to unfasten and retry, see "Uninstall instructions" at the end of the manual.
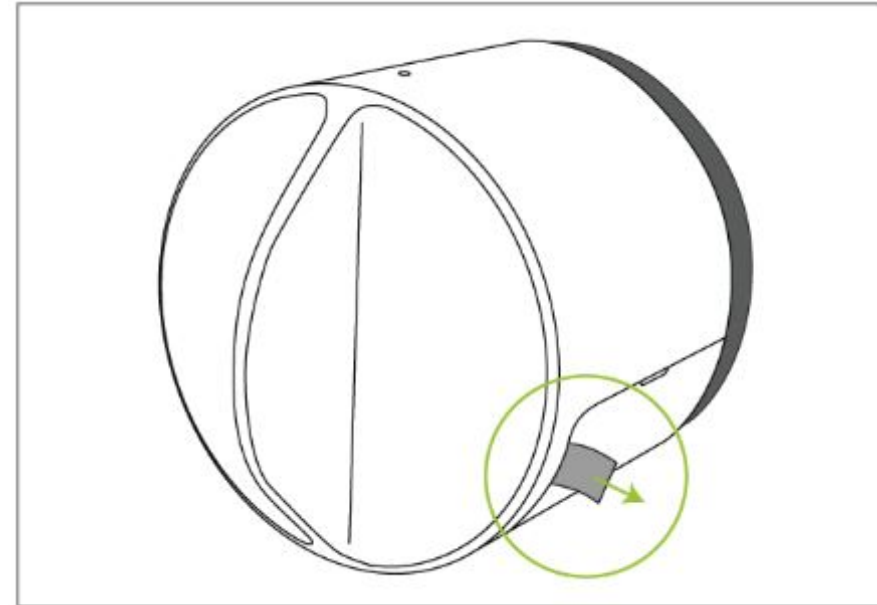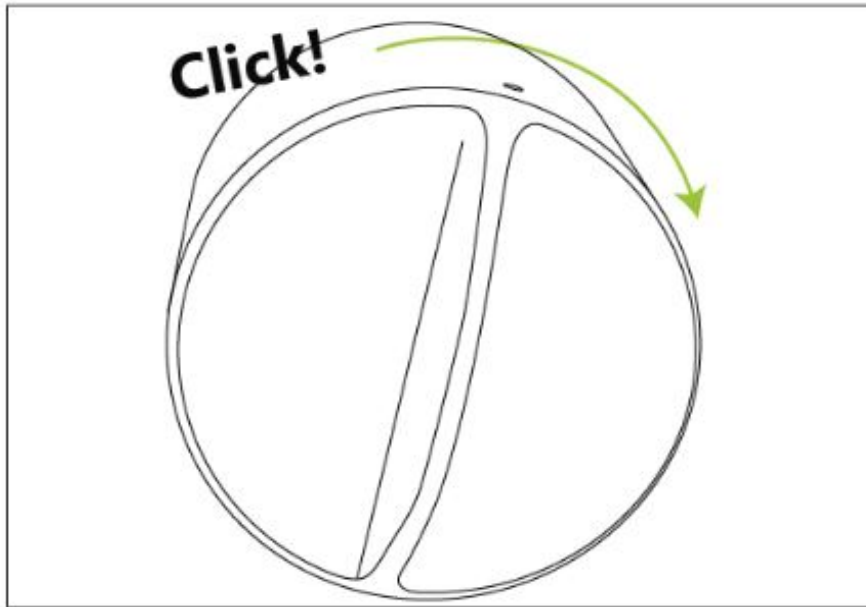
16. Activate batteries

Pull out the plasitc teb to activate the batteries. Alight will flash to confirm the Danalock is ready.

Dismount instruction

If at any time you need to dismount the Danalock from your door, insert a pen tip into the hole at the top inner edge of the lock and press while turning the lock counter-clockwise until the lock releases. This will not reset the lock or disconnect it from your account, but the lock may need to be re-calibrated if fastened to your door again.
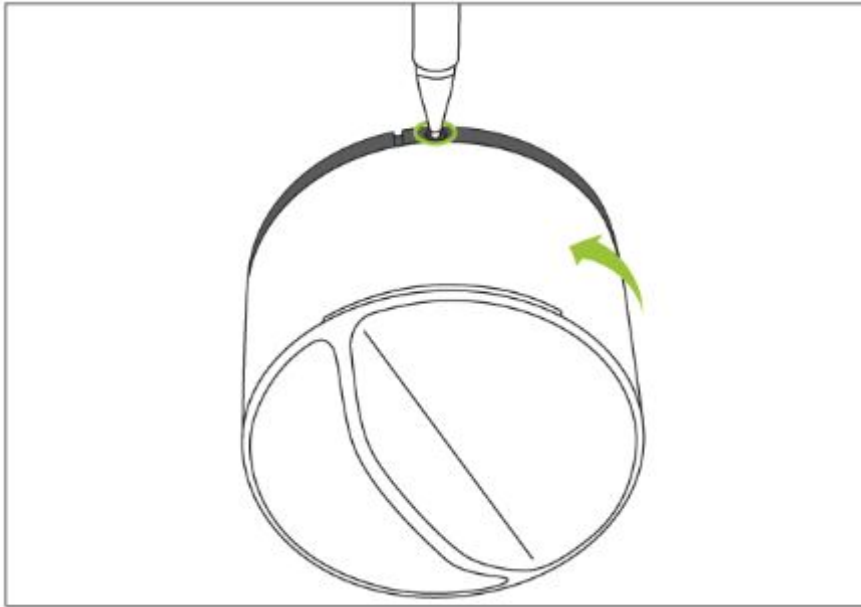
Inclusion/Exclusion

On factory default the device does not belong to any Z-Wave network. The device needs to be **added to an existing wireless network** to communicate with the devices of this network. This process is called **Inclusion**.

Devices can also be removed from a network. This process is called **Exclusion**. Both processes are initiated by the primary controller of the Z-Wave network. This controller is turned into exclusion respective inclusion mode. Inclusion and Exclusion is then performed doing a special manual action right on the device.
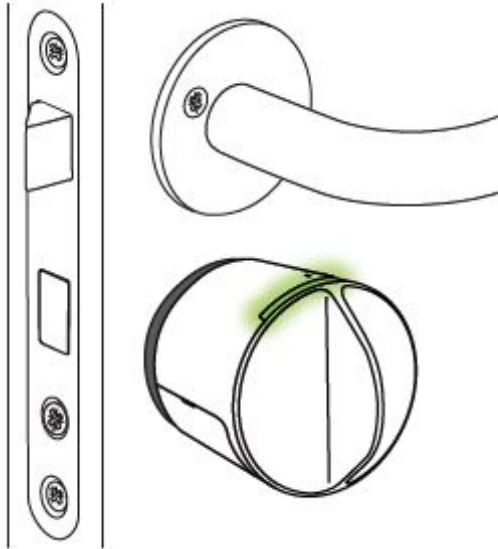
Inclusion
Push the switch once.

Exclusion
Push the switch once.

Product Usage

LED signals

LEDs are installed at the edge of the Danalock, which are protected by LEDs.
Different colors indicate certain operations.

- Constant red until end of action Lock has successfully locked
- Constant green until end of action Lock has successfully unlocked
- Constant white for 3 seconds Switched on, current flows
- Red light flashes every 5 minutes Critical battery status
- Constant purple firmware is updated
- Blue light flashing Settings are changed/stored

Button commands
By pressing the button (hole on the upper part of the screen) page of the Danalock), the following commands are triggered. Do not allow more than 5 seconds to pass until next time, otherwise the entry will be lost. and the corresponding command is activated.

1x green Activating the pairing mode
Puts the Danalock V3 into pairing mode in order to connect it via other radio standards. to control it, press button once and wait 5 seconds until the lock turns green flashes. Now you have 30 seconds to connect the V3 with a gateway.

2x yellow Manual adjustment

Turn the V3 by hand until the lock is unlocked (if necessary incl. door latch) and press the button twice. Wait 5 seconds until the V3 flashes yellow, then move in the other direction until the lock is locked and press 1x.

3x white Automatic adjustment
Turn the V3 by hand until the lock is unlocked and leave the lock locked. Door open during adjustment. Press 3 times and after 5 seconds the automatic adjustment (not recommended for the EU model).

7x About
If you have lost count when pressing the key, you can cancel the entry by pressing 7x press to abort.

10x red Factory reset
This command deletes all settings and permissions. Press 10x and wait 5 seconds until the V3 flashes red. It is then reset.

Quick trouble shooting

Here are a few hints for network installation if things dont work as expected.

1. Make sure a device is in factory reset state before including. In doubt exclude before include.
2. If inclusion still fails, check if both devices use the same frequency.
3. Remove all dead devices from associations. Otherwise you will see severe delays.
4. Never use sleeping battery devices without a central controller.
5. Dont poll FLIRS devices.
6. Make sure to have enough mains powered device to benefit from the meshing

Association - one device controls an other device

Z-Wave devices control other Z-Wave devices. The relationship between one device controlling another device is called association. In order to control a different device, the controlling device needs to maintain a list of devices that will receive controlling commands. These lists are called association groups and they are always related to certain events (e.g. button pressed, sensor triggers, ...). In case the event happens all devices stored in the respective association group will receive the same wireless command wireless command, typically a 'Basic Set' Command.

Association Groups:

Group Number	Maximum Nodes	Description
1	1	Z-Wave Plus Lifeline - Device Reset Locally: triggered upon reset - Battery/notification: triggered upon

		low battery. Door Lock operation report: triggered upon a change in door lock Notification: triggered upon a change in door lock

Configuration Parameters

Z-Wave products are supposed to work out of the box after inclusion, however certain configuration can adapt the function better to user needs or unlock further enhanced features.

IMPORTANT: Controllers may only allow configuring signed values. In order to set values in the range 128 ... 255 the value sent in the application shall be the desired value minus 256. For example: To set a parameter to 200 it may be needed to set a value of 200 minus 256 = minus 56. In case of a two byte value the same logic applies: Values greater than 32768 may needed to be given as negative values too.

Parameter 1: Twist Assist
Helps you to lock and unlock your door lock.
Size: 1 Byte, Default Value: 0

Setting	Description
0	Disabled
1	Enabled

Parameter 2: Hold and Release
After a unlock operation the lock holds the lock, so the door can be opened
Size: 4 Byte, Default Value: 0

Setting	Description
0	Disable
1 - 2147483647	Enable no. of seconds

Parameter 3: Block to Block
The lock will run the motor until it hits resistance.
Size: 1 Byte, Default Value: 0

Setting	Description
0	Disable

1	Enable

Parameter 4: BLE Temporary Allowed
The BLE is enabled for a number of seconds.
Size: 4 Byte, Default Value: 0

Setting	Description
0	Disable
1 - 2147483647	Enable no. of seconds

Parameter 5: BLE Always Allowed

Size: 1 Byte, Default Value: 0

Setting	Description
0	BLE Always disabled
1	BLE Always enabled

Parameter 6: Autolock
Lock after an unlock. The value is the delay in time before the lock is locked again.
Size: 4 Byte, Default Value: 0

Setting	Description
0	Diable
1 - 2147483647	Enable no. of seconds

Technical Data

Dimensions	0.0600000x0.0600000x0.0680000 mm
Weight	160.05 gr

Hardware Platform	ZM5202
EAN	5712560000462
IP Class	IP 20
Battery Type	4 * CR123A
Device Type	Door Lock Keypad
Network Operation	Listening Sleeping Slave
Z-Wave Version	6.71.01
Certification ID	ZC10-17095764
Z-Wave Product Id	0x010E.0x0009.0x0001
Firmware Updatable	Updatable by Consumer by RF
Supported Notification Types	Access Control

Supported Command Classes

- Association Grp Info
- Association V2
- Battery
- Configuration
- Device Reset Locally
- Door Lock V2
- Firmware Update Md V4
- Manufacturer Specific V2

- Notification V8

- Powerlevel

- Security

- Security 2

- Supervision

- Transport Service V2

- Version V2

- Zwaveplus Info V2

Explanation of Z-Wave specific terms

- **Controller** — is a Z-Wave device with capabilities to manage the network. Controllers are typically Gateways,Remote Controls or battery operated wall controllers.

- **Slave** — is a Z-Wave device without capabilities to manage the network. Slaves can be sensors, actuators and even remote controls.

- **Primary Controller** — is the central organizer of the network. It must be a controller. There can be only one primary controller in a Z-Wave network.

- **Inclusion** — is the process of adding new Z-Wave devices into a network.

- **Exclusion** — is the process of removing Z-Wave devices from the network.

- **Association** — is a control relationship between a controlling device and a controlled device.

- **Wakeup Notification** — is a special wireless message issued by a Z-Wave device to announces that is able to communicate.

- **Node Information Frame** — is a special wireless message issued by a Z-Wave device to announce its capabilities and functions.