## dormakaba

## 1 Information about this document

### 1.1 Contents and purpose

This manual describes the mounting, operation and safe running of the integrated locking device. The manual's picture section is partly supported by text in this section of the manual.

## NOTE

- The manual shows how to mount the locking device on the left side of the main closing edge (**HSK-L**). The mounting on the right main closing edge (**HSK-R**) is performed mirror-inverted.
- In this manual the mounting is shown using the example of MUTO Premium XL 80/150. The manual is also valid for MUTO Comfort L 80.
- Differences in mounting are shown accordingly.

## 1.2 Target group

The target group of these mounting instructions is qualified personnel who have been specially trained in glazing installation.

### 1.3 Other applicable documents

- Mounting instructions for MUTO Comfort/Premium integrated locking device (picture section)
- Mounting instructions for MUTO sliding door system
- Maintenance manual for manual sliding doors

#### 1.4 Documents storage

This manual must be kept during the service life of the product and must be passed on with the product.

## 2 Safety

#### 2.1 Intended use

- Only use the locking device in indoor areas and prevent the effects of humidity, dust and sun or other heat radiation.
- Only load the locking device up to the specified power limit. Overloading can lead to destruction, fire or electrical accident.
- When planning and installing electrical systems, the relevant standards and directives of the country in which the system is installed must be observed. The applicable accident prevention regulations must be observed.
- The locking device may only be operated with type AAA 1.5 volt lithium batteries.

### 2.2 Limitations on use

• The locking device is not suitable for use in emergency and escape routes.

## 3 Product description

The described locking device is part of a building installation and is operated with a battery pack (3 V). The MUTO locking device set may only be used in combination with DORMOTION.

Always mount the locking device and battery pack on the outside so that manual unlocking/locking via the control unit can be operated from outside (see Chapter 3.4).

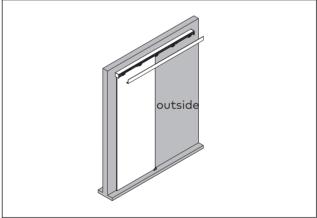


Fig. 1 Locking device outside

## MUTO Comfort / Premium Integrated locking device

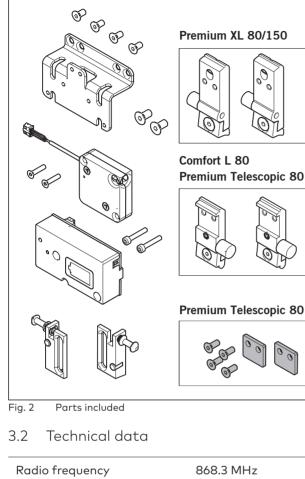
Mounting instructions

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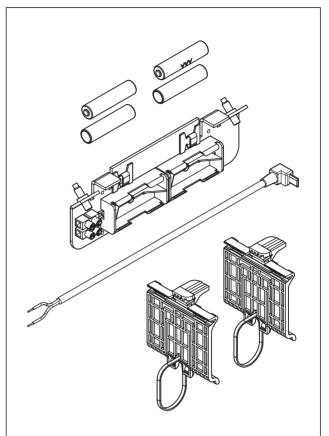
#### 3.1 Parts included

- A transmitter is required to operate the locking device. This transmitter is not included in delivery.
- Optionally, a cable set can be used for an external status display.

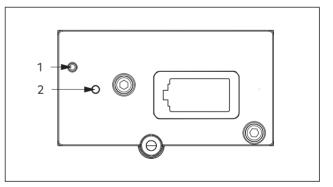


Radio frequency	868.3 MHz
Typ. free field range	100 m
Power supply	4x 1.5 volt lithium battery, type AAA
Battery life	approx. 2 years at 10 operations per day
Standby power consumption	< 100 µA
Dimensions (WxHxD)	14 x 18.8 x 64 mm
Temperature	+10° C to 55° C
Humidity	max. 90% RH, non-condensing

#### 3.3 Variants



- Fig. 3 With battery pack
- 3.4 Locking device structure



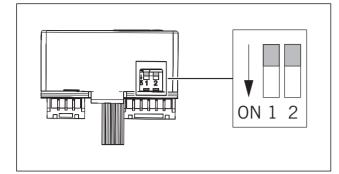
- Button for teach-in and manual unlocking/ locking
- (2) Device LED

The locking device's teach-in button is recessed in the housing. Use a pointed object to press it.

2

#### dormakaba Montageanleitung Mounting instructions

3.5 Setting options for the locking device



DIP switch 1 = **OFF** Sequential control active

 Sequential control active = The locking device can only be activated with the door in closed position.

DIP switch 1 = **ON** Sequential control inactive

 Sequential control inactive = The locking device can be activated regardless of door position.

Important: Carry a hand-held transmitter.

DIP switch 2 = **OFF** Audible warning active DIP switch 2 = **ON** Audible warning inactive

#### 3.6 Device LED feedback

Various locking states are indicated by the device LED flashing:

The device LED flashing code	Meaning
Slow flashing	Teach-in mode
Rapid flashing	Reset
Once long, x times short (depending on error type)	Error. Internal defect. The device must be replaced.
2x long, 1x short	Test after power ON

3.7 Acoustic feedback/Warning thresholds A low or empty battery is indicated by beeping when DIP switch 2 = **OFF** "Audible warning active" is set.

#### Warning threshold 1:

2 beeps = battery replacement is recommended.

#### Warning threshold 2:

6 beeps = battery replacement is required.

The locking device can only unlock and then becomes inoperative.

Removing the batteries resets the meter.

Therefore we recommend only removing the batteries to replace them. Otherwise the meter will not reflect the true battery charge status.

#### 3.8 Notes on radio operation

The frequencies used by the locking device are also used by other devices, so interference cannot be excluded. Structural conditions and environmental influences such as humidity impact the transmitter's range.

#### Duty cycle

The duty cycle describes a legally regulated limitation of the transmission time of devices in the 868 MHz range.

The maximum transmission time is 36 seconds/hour. When this limit is reached, all further transmissions are inhibited (see Chapter 7).

3.9 Behavior after voltage recovery

A test is performed after the batteries are inserted. If an error is detected, this is indicated by the device LED flashing (see Chapter 3.6). This is repeated continuously and the locking device does not function.

#### 4 Mounting

Select the respective end stoppers for your system before beginning the mounting.

Notes on the following installation stages

## 6

Only loosely tighten the screws so that the latch is still movable.

## 8

Align the holder so that it does not bump or scratch the locking device housing. Function test: Press the button for manual unlocking/ locking.

## 9

The picture shows the DIP switches in their delivery state. For the locking device's setting options see Chapter 3.5.

## 10

Connect the USB cable to the locking device and shorten it to the required length if necessary.

## 11

If necessary, replace 2 of the holder inserts with the supplied holder inserts with cable ties.

## 13

Mount the pre-assembled battery pack 5 mm from the holder insert with cable ties.

## 15

Glue an adhesive pad in the track's channel.

## 16

Pass the USB cable from the locking device through the adhesive pad in the track, through the cable tie on the holder insert to the battery carrier.

## 17

If the USB cable's cabling is OK, place the cable against the curve of the holder insert, tighten the cable ties and cut off the protruding end.

## 18

Insert the batteries, observing the polarity.

#### Optional cable set (Art. 36.855)

for the locking device function as a status indicator

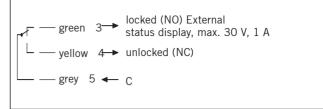
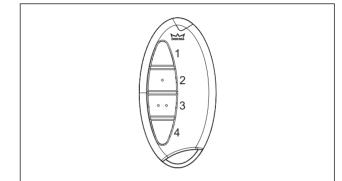


Fig. 4 Cable colors for the optional cable set

# 5 Connect locking device to a transmitter

Please read this section completely before connecting your dormakaba components.

5.1 Procedure for hand-held transmitter BRC-H



#### Fig. 5 Hand-held transmitter BRC-H

Carry out the following points (1 – 3) within 20 seconds, otherwise the teach-in mode is automatically terminated.

- **1.** Briefly press the teach-in button on the transmitter.
  - The transmitter's device LED flashes green.
- **2.** Press the desired operating button on the transmitter.
  - The device LED flashes orange.
- **3.** Press the locking device's teach-in button for more than 4 seconds.
  - The locking device LED flashes red briefly; the transmitter LED flashes orange for 7 seconds, then green briefly. The devices are connected.
  - The device LED lights up red for 2 seconds; the transmitter LED lights up orange for 7 seconds, then briefly red. Teach-in has failed: reset programming and repeat teach-in.
- **4.** Check locking device function with door in closed position.

To connect additional transmitters to the locking device, repeat steps 1 - 4.

## 5.2 Procedure for wall switch BRC-W

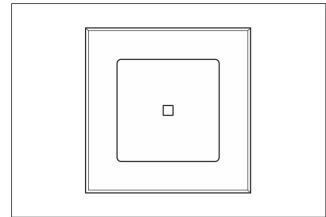


Fig. 6 Wall switch BRC-W

Carry out the following points (1 – 3) within 20 seconds, otherwise the teach-in mode is automatically terminated

- Briefly press the teach-in button on the transmitter. Do not press the transmitter's touch surface.
  - The transmitter's device LED flashes green.
- **2.** Press the transmitter's touch surface.
  - The device LED flashes orange.
- **3.** Press the locking device's teach-in button for more than 4 seconds.
  - The locking device LED flashes red briefly; the transmitter LED flashes green for 3 seconds. The devices are connected.
  - The device LED lights up red for 2 seconds; the transmitter LED lights up red for 3 seconds. Teach-in has failed: reset programming and repeat teach-in.
- **4.** Check locking device function with door in closed position.

To connect additional transmitters to the locking device, repeat steps 1 – 4.

# 6 Manual locking/unlocking (directly on the control unit)

The locking device can be operated manually independently of the hand-held transmitter or wall switch. If this is required, briefly press the teach-in button (see Chapter 3.4) once.

### 7 Reset programming

To reset the programming, delete the transmitter and receiver data (locking device).

# Procedure for transmitter and receiver (locking device):

- 1. Press the teach-in button for more than 4 seconds.
  - The device LED flashes red slowly.

To cancel the reset, briefly press the teach-in button again. The slow red flashing stops.

- **2.** Press the teach-in button for more than 4 seconds again.
  - The device LED starts flashing red more rapidly.
  - When you release the teach-in button, the device LED
- flashes red briefly when it is locked,
- flashes red for 3 seconds on the BRC-W or
- the red LED goes out on the BRC-H.
  - ightarrow The transmitter and receiver are reset.

## 8 Perform a function test

If an error has occurred, perform a function test.

1. If necessary remove the batteries and replace them with new batteries.

The radio transmitter's function is restored (see the radio transmitter's flashing codes). If the device is not ready for use afterwards, this is due to the duty cycle being exceeded (see Chapter 3.6 Flashing codes and Chapter 3.7 Warning thresholds). The control unit is unaffected by the duty cycle.

#### 9 Maintenance and care

- At least 2 years maintenance-free operation (at 10 operations per day)
- Replace damaged components immediately
- Only use original dormakaba parts

### 10 Replacing battery

## WARNING

## Risk of injury due to heat generation, explosion and fire

Improper handling of batteries (e.g. overheating, destruction, recharging, use of the battery in other products) can cause heat generation, explosion and fire. There is a risk of injury.

- Only use the battery types recommended and approved by dormakaba.
- Observe warnings on the batteries.
- Only use the batteries as intended.
- Pay attention to the correct polarity.

Always observe the warnings on batteries. Only use the battery types recommended and approved by dormakaba.

#### Type AAA 1.5 volt lithium batteries

The battery may be replaced by the operator. Dismantling is carried out in reverse order of the mounting instructions. Please refer to the mounting instructions for your MUTO sliding door system. Proceed as follows to replace the battery:

1. Remove the end caps (Fig. 7/1) and the cover profile (Fig. 7/2) from the track.

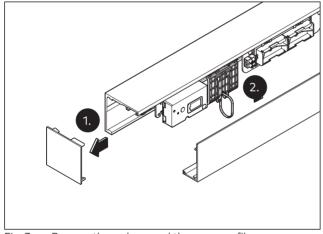


Fig. 7 Remove the end cap and the cover profile

**2.** Replace the batteries, observing the polarity.

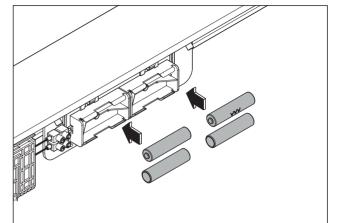


Fig. 8 Replacing the batteries

**3.** Mount the cover profile and the end caps on the track.

## 11 Disassembly and disposal

Disassembly is carried out in the reverse order of mounting and must be carried out by qualified personnel.



The product must be disposed of in an environmentally friendly manner.

Electrotechnical parts and batteries must not be disposed of as domestic waste. Dispose of

electrotechnical parts and batteries in the designated acceptance and collection points. Refer to the statutory regulations for your country.

#### 12 EC declaration of conformity DORMA-Glas GmbH Max-Planck-Str. 33-45 32107 Bad Salzuflen

hereby declares that the product MUTO Comfort locking device set is in complete compliance with the provisions of the listed EC Directive(s) and that the standards and/or technical specifications referred to below have been applied.

Directive: 2014/30/EU Electromagnetic Compatibility

> 2014/53/EU Radio Equipment 2011/65/EU RoHS

The technical documentation is available from the Product Compliance Manager at: product-compliance.dach@dormakaba.com

Harmonized European standard, national rule:

- EN 300 220-1 V3.1.1
- EN 300 220-2 V3.1.1
- EN 62479
- EN 61000 6 1
- EN 61000 6 3
- Draft EN 301489-1 V2.2.0
- Draft EN 301489-3 V2.2.1
- EN 50581