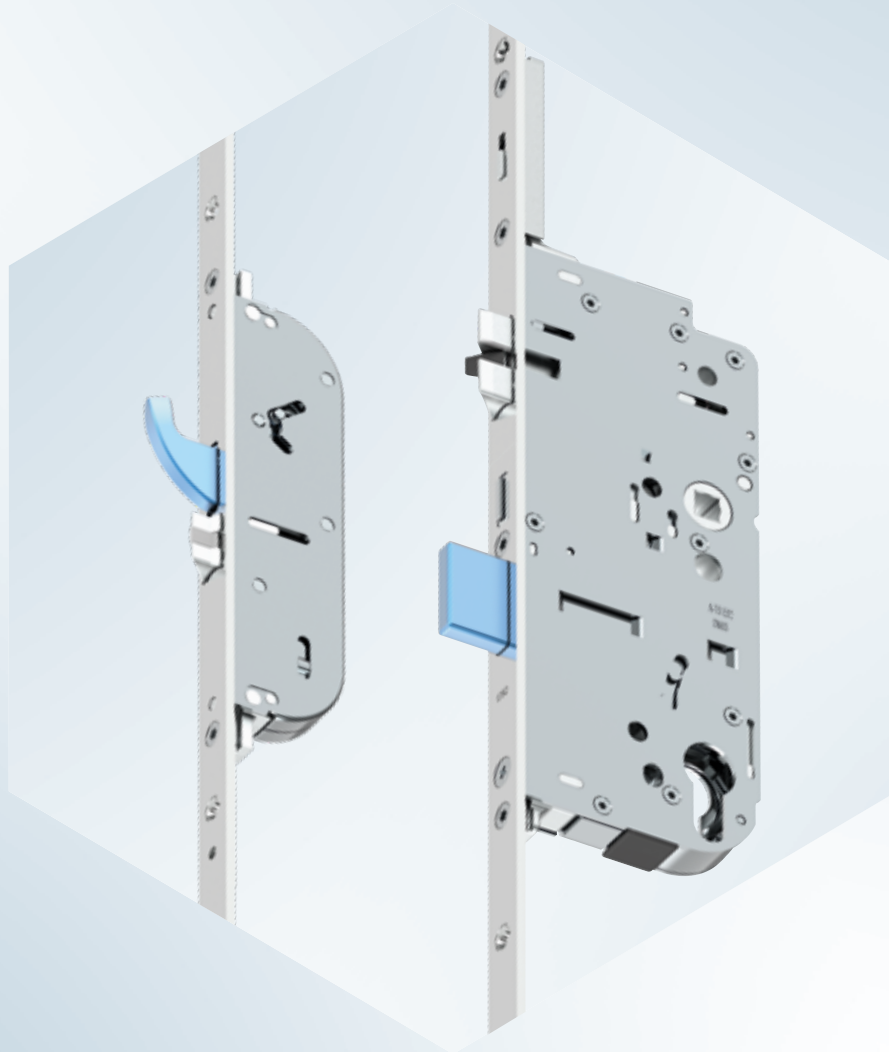


ASSEMBLY INSTRUCTIONS

# A-TS

## Automatic door lock timber



M119317

For use  
only by certified specialists!



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## Important

### Target

This documentation is intended exclusively for specialist companies and certified specialists. The work-steps described here in may only be carried out by certified specialists.

### Instructions for use

- Unless otherwise indicated, measurements are made in millimetres.
- Assemble all hardware parts professionally as described in these instructions and observe all safety instructions.
- All diagrams are only symbolic.
- With the spacer-block setting, observe the technical guideline No. 3 of the glazier trade "Blocking of glazing units".
- Observe the "Guidelines and Instructions for Product and Liability (GIPL)".
- Inform the end-user about the contents of the "Guidelines and Instructions for End Users (GIEU)".
- Printing errors, mistakes and changes are reserved.

### Material notes

- The hardware described in this assembly instructions are made from anti-rust material or galvanically pacified steel and sealed according to EN 12329. They must not be used in environments with aggressive, corrosive air content.
- Do not use acid-curing sealants, as these can lead to corrosion of the hardware parts.
- The door lock elements may only be surface-treated before the hardware is installed. Any subsequent surface treatment may restrict the functionality of the hardware. In this case, no warranty claims can be made against the hardware manufacturer.

## Key



Backset



Distance



Handle height



Profile front edge

MF

Multi-function latch

EV

End lock

FFH

Sash rebate height

K+

Case dimension top

K-

Case dimension bottom

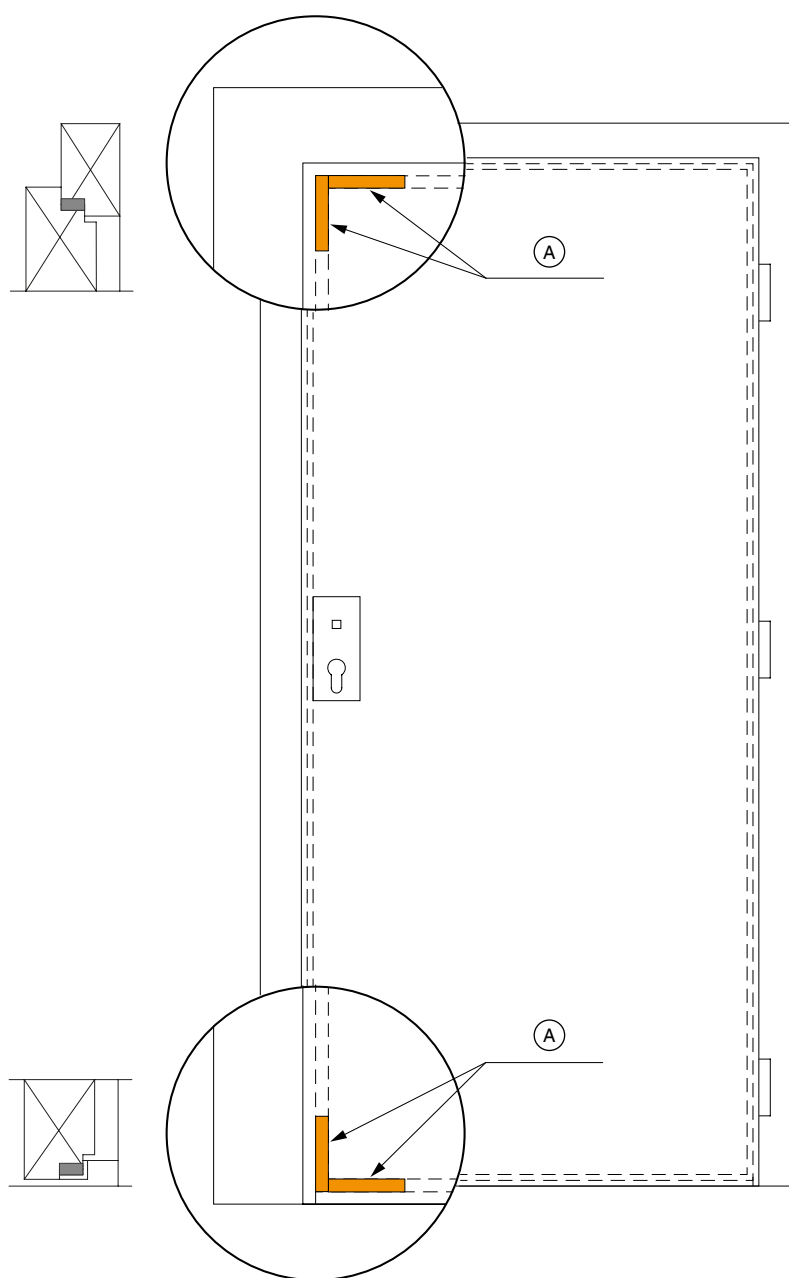


Important Information

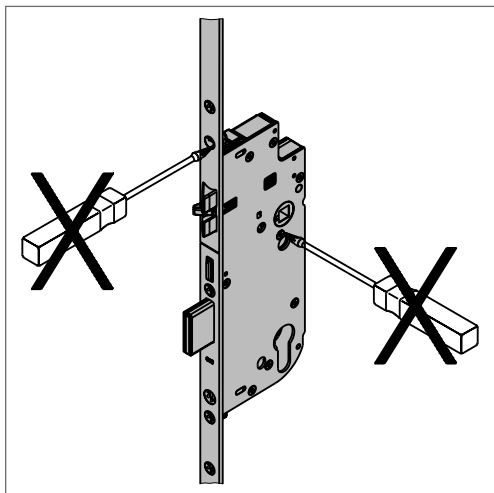
## Use of transportation protection devices

Simple transport protection devices, wedges or blocks ensure a safe transport of the entire door element. Total door elements. Remove only after installation.

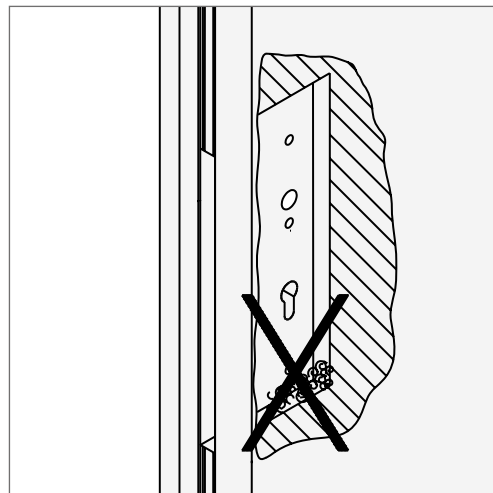
Ⓐ Transport protection device position



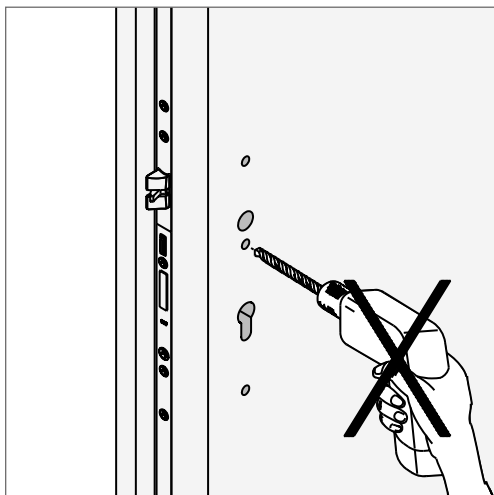
## Instructions for use



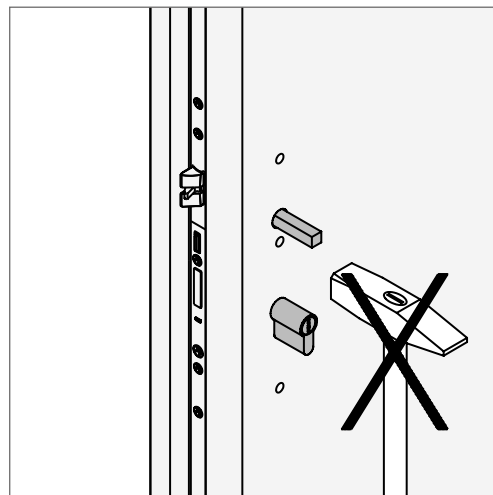
Never open the lock case!



Remove swarf from the milled space!

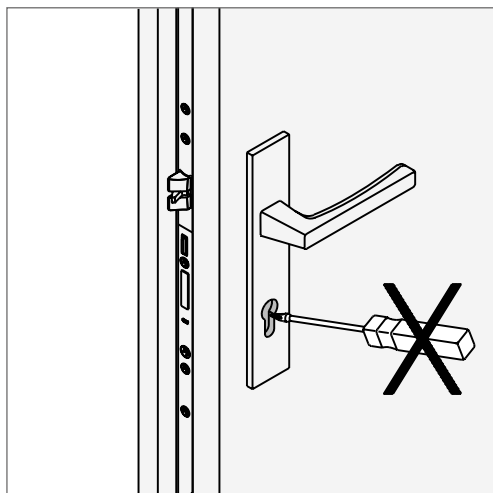


Drill all holes before installation of the lock!

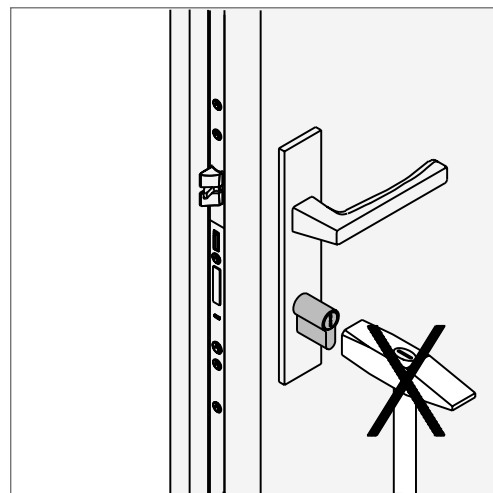


Do not force the handle pin through the lock nut!

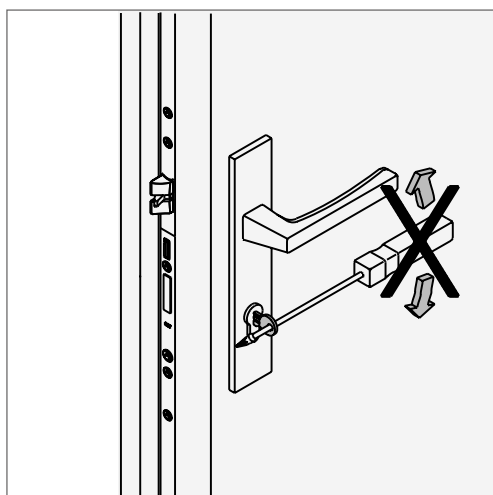
## Instructions for use



Only close the lock with the corresponding operating key!

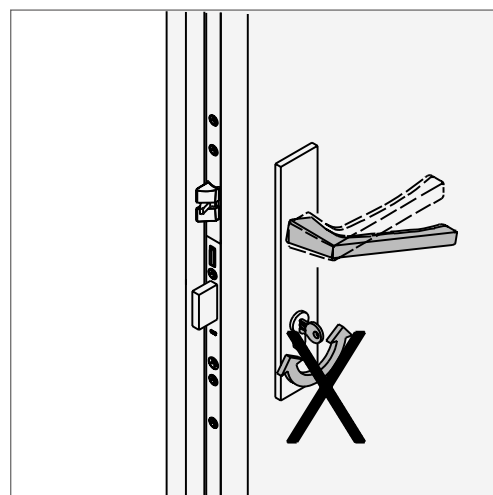


Do not use force during the cylinder assembly!



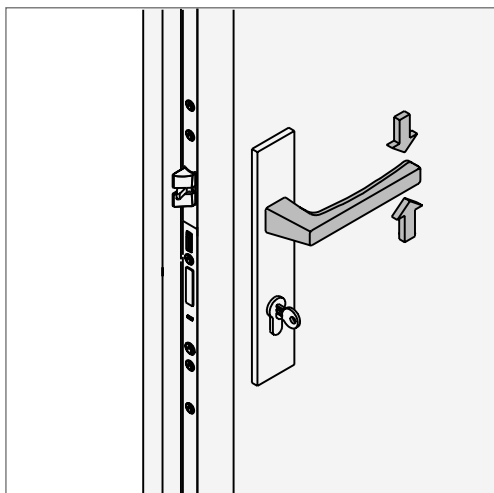
Do not turn the key using force!

The latch of the main lock must not rub against the striker plate – this also applies to multi-point locks without door acceleration, and all latches of the side locks. For this, use the adjustment option on the striker plates and door hinges. Adjustment of the holes in the striker plates is not permitted.

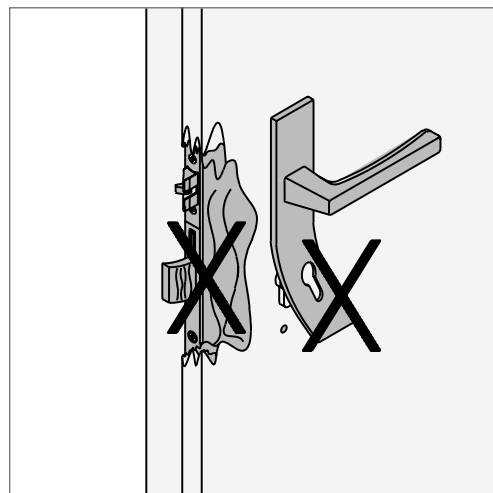


Do not simultaneously press the key and handle!

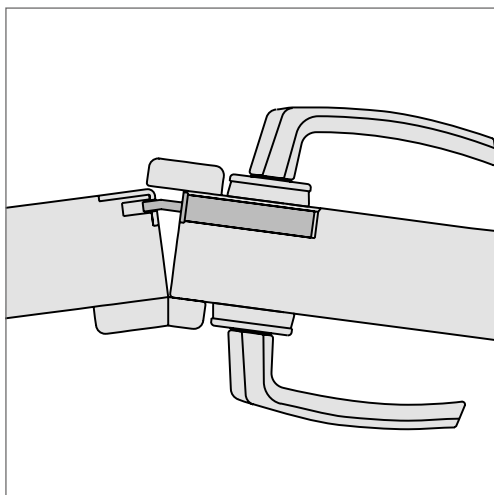
## Instructions for use



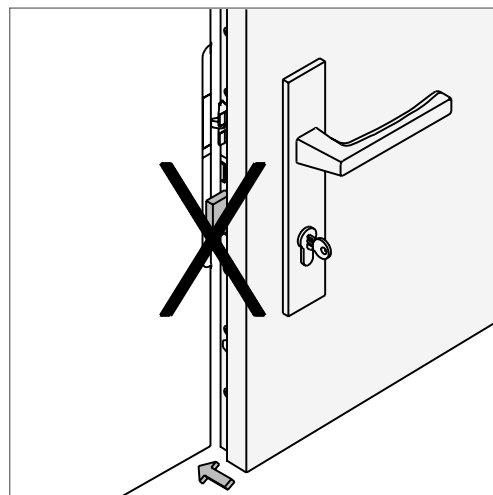
Only apply load to the handle in the normal direction! Apply a maximum force of 15 kg in the direction of actuation (on the handle)!



The multi-point lock must be replaced as soon as traces of use of force are visible!

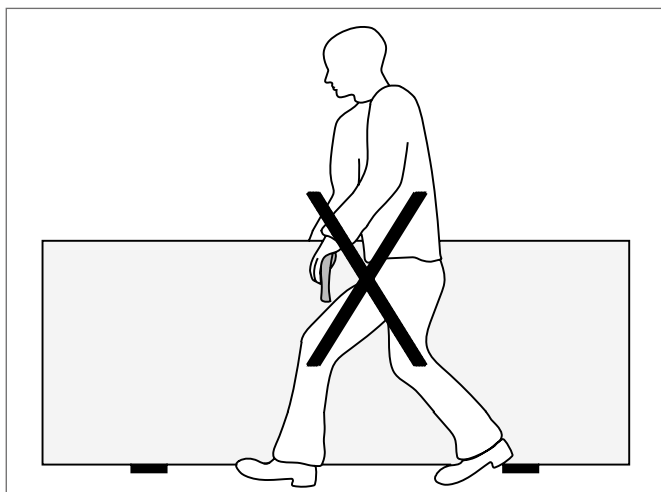


Two-sash doors must not be forced over the inactive leaf!

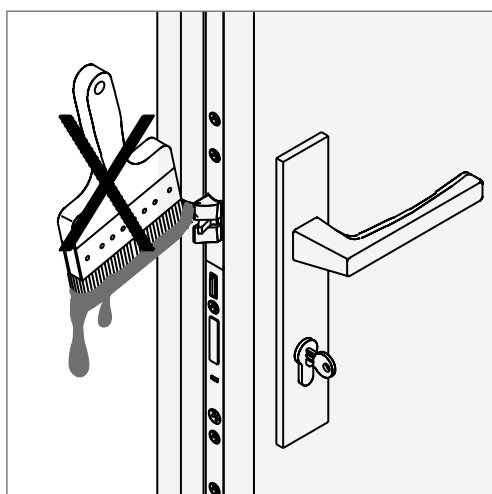


Do not close the lock latch when the door is open!

## Instructions for use

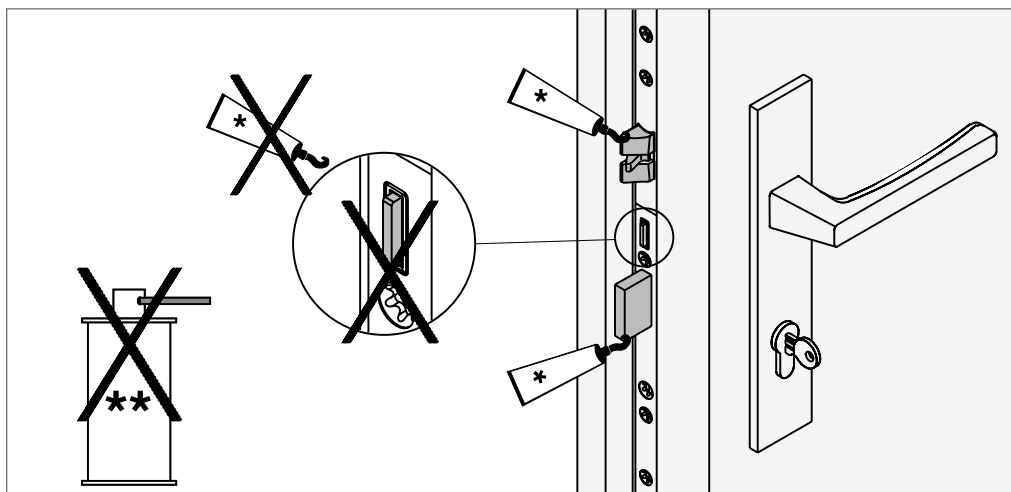


Do not carry the door leaf with the handle!

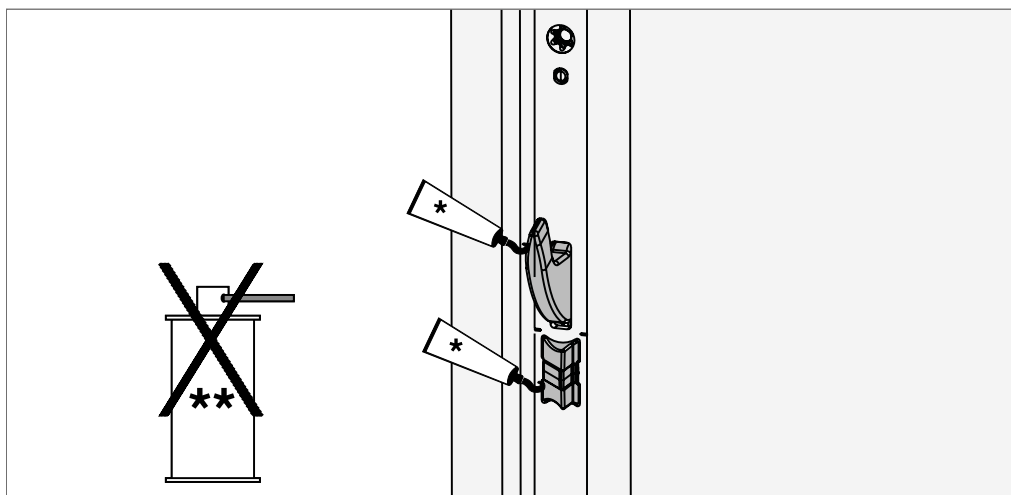


Do not paint or varnish over the padlock bolt or latch!

## Instructions for use



The door lock (lock case) is delivered with an intensive lubrication of high-performance greases and must NOT be re-greased!



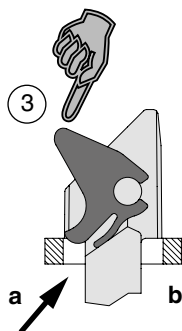
Lubricate the MF-HO locking element 1x annually!



**Do not use lubricating oil, rust remover, silicon spray etc!  
Lubricate only with grease or technical Vaseline! Grease the latch and  
deadbolt 1x annually!**

\* Spray grease (455341), \*\* Rust remover

## Installation Instructions

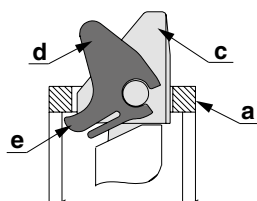


a = faceplate

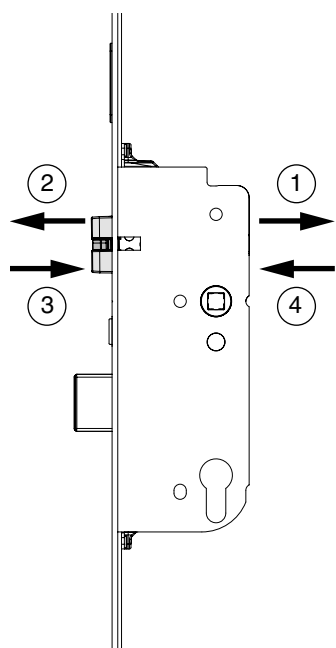
c = latch

d = latch insert

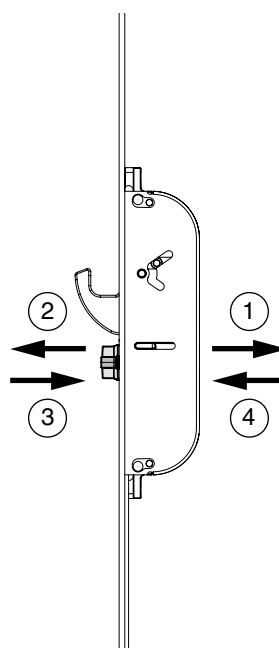
e = insert leg of latch insert



### Crank



### Multi-function latch



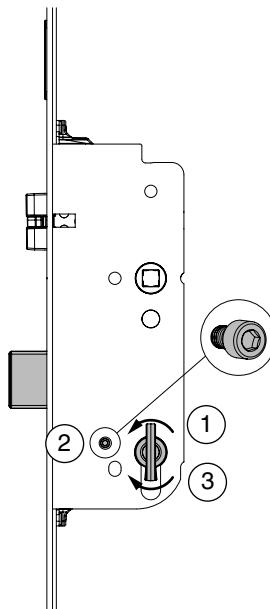
- ① Release the screw and push forward using the screwdriver!
- ② Remove the latch!
- ③ Turn the latch over and place it on the faceplate (a) so you can press the insert leg (e) of the latch insert (d) under the faceplate recess (b).  
Only then press the latch in completely!
- ④ Screw in the screw (Torque min. 1.5 Nm to max. 2 Nm)!



**Perform function test!**

## Installation Instructions

Set lock for day release function (assembler)



### Set day release function

- ① Lock
- ② Remove the day release screw (2.5 mm hex socket)
- ③ Unlock

### Manufacturer delivery state

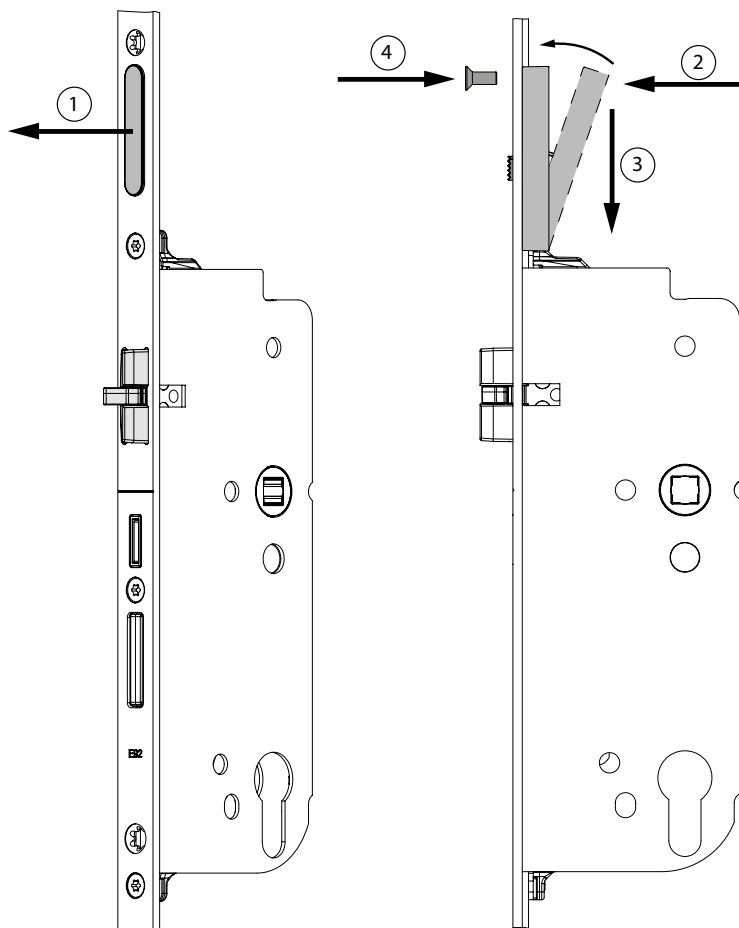
- ① Lock
- ② Insert the day release screw (2.5 mm hex socket)
- ③ Unlock



**When the day release is pre-set, the main latch is not operated on motorised operation (door does not automatically spring open)!**

## Installation Instructions

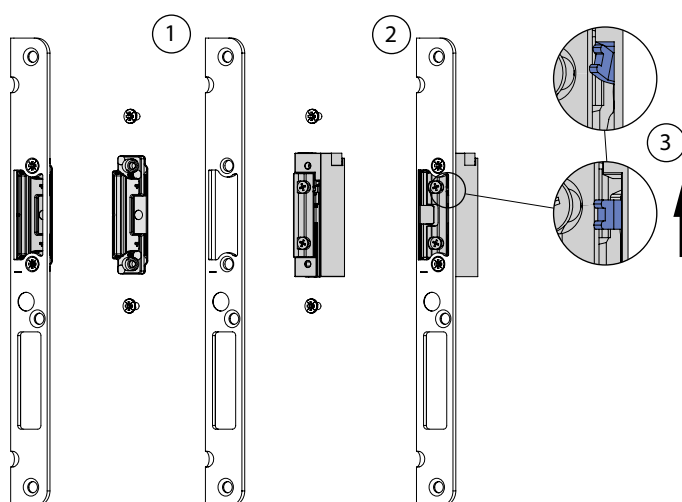
Day release element assembly on the lock (assembler)



- ① Remove the faceplate cover.
- ② Position the day release element on the back of the faceplate (directly on the latch above the lock case)
- ③ and push onto the lock case.
- ④ Screw on the day release element with the attached TX20 M4x10 screw on the front of the faceplate!

## Installation Instructions

MACO day release opener assembly on the striker plate (assembler)

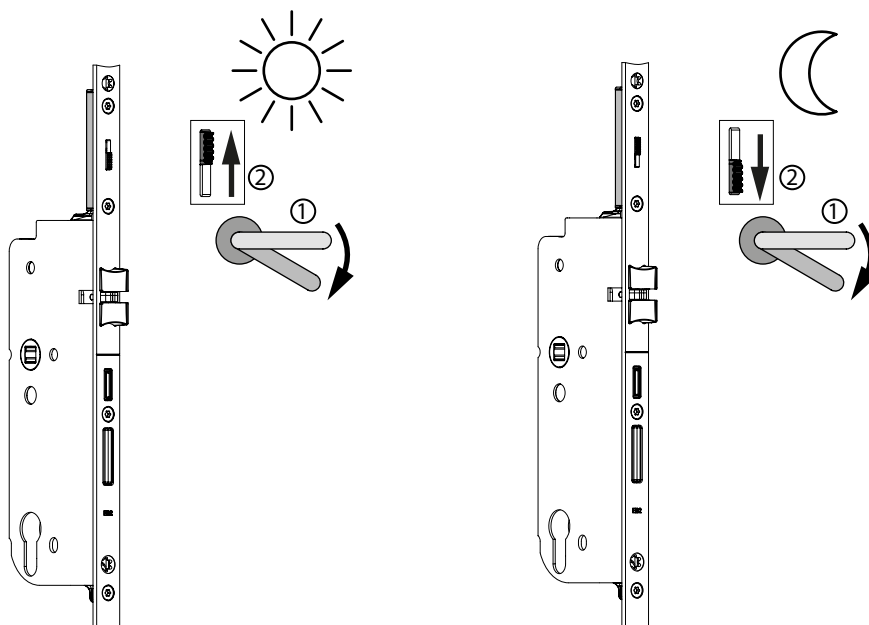


- ① Demount the latch element.
- ② Mount the MACO day release opener.
- ③ Activate the mechanical unlocking using the lever on the day release opener\*.

\* The mechanical unlocking can remain active as the day release is controlled via the day release actuator on the lock (see "Day Release" operating instructions p.16).

## Installation Instructions

Day Release operating instructions (end-customer)



### Activate day release

- ① Press the handle so that the locking element and the multi-function latch are pulled in!
- ② Push the day release actuator upwards, release the handle!

### Deactivate day release

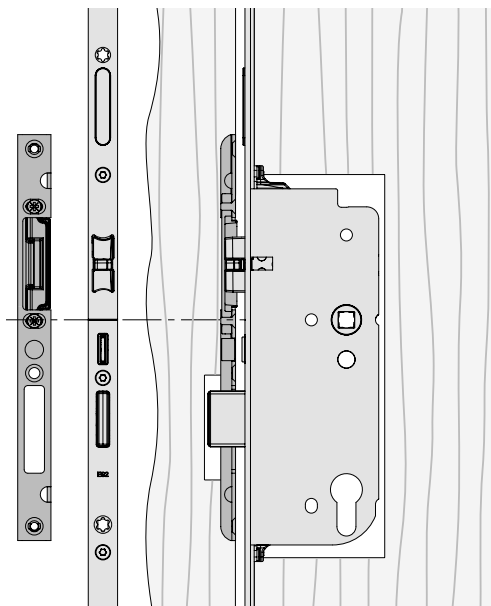
- ① Press the handle so that the locking element and the multi-function latch are pulled in!
- ② Push the day release actuator downwards!

The A-TS basic function, automatic locking, is again active!

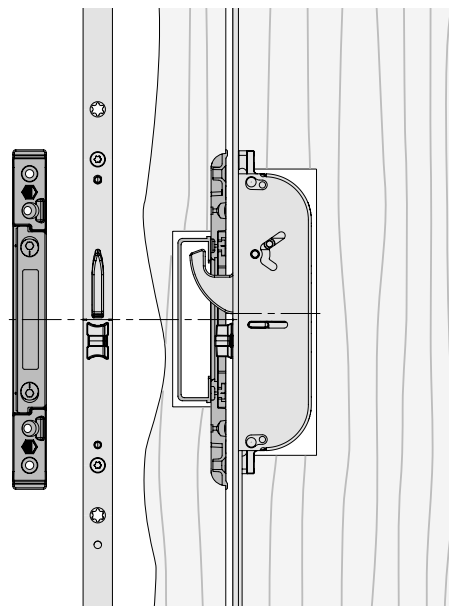
## Installation instructions

Positions 4 mm air gap, 9/10 mm offset

**Position of latch and deadbolt  
striker plate**



**Position of striker plate and  
multi-function latch with hook**



### **Pressure adjustment:**

+/- 2 mm with latches and deadbolt striker plate

+/- 1.5 mm with MF-HO striker plate

Positioning of notch faceplate = notch striker plate

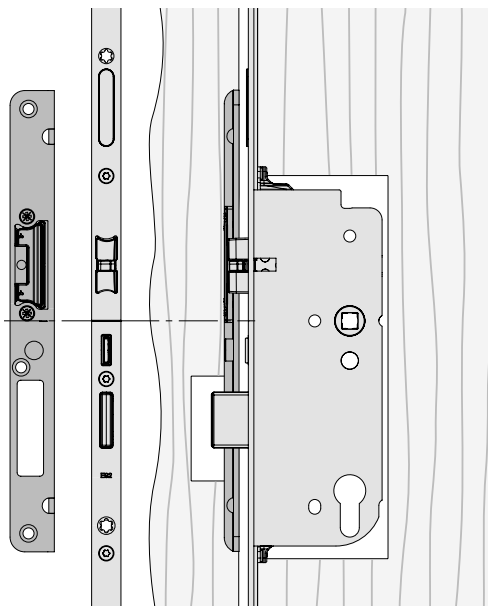


**A rebate clearance of 2-6 mm must be adhered to in the installed state!**

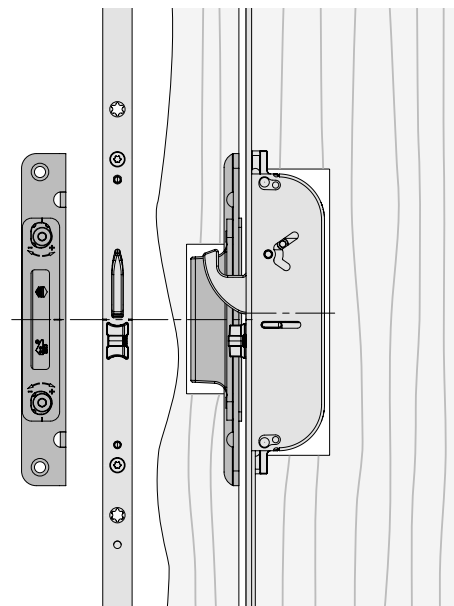
## Installation instructions

Positions 4 mm air gap, 13 mm offset

**Position of latch and deadbolt  
striker plate**



**Position of striker plate and  
multi-function latch with hook**



### **Pressure adjustment:**

+/- 2 mm with latches and deadbolt striker plate

+/- 1.5 mm with MF-HO striker plate

Positioning of notch faceplate = notch striker plate

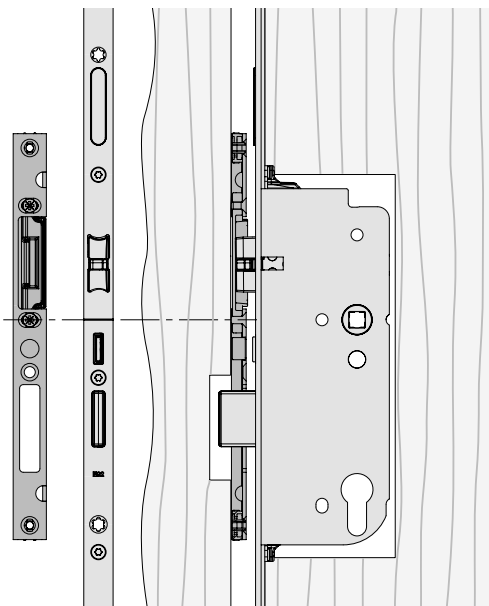


**A rebate clearance of 2-6 mm must be adhered to in the installed state!**

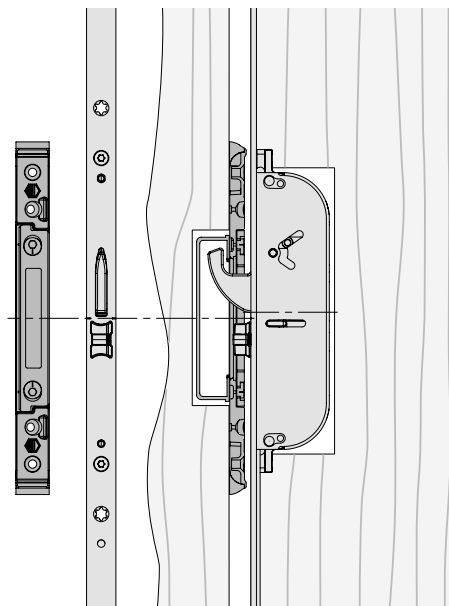
## Installation instructions

Positions 12 mm air gap, 9/10 mm offset

### Position of latch and deadbolt striker plate



### Position of striker plate and multi-function latch with hook



### Pressure adjustment:

+/- 2 mm with latch and deadbolt striker plate

+/- 1 mm with MF-HO striker plate

Positioning of notch faceplate = notch striker plate

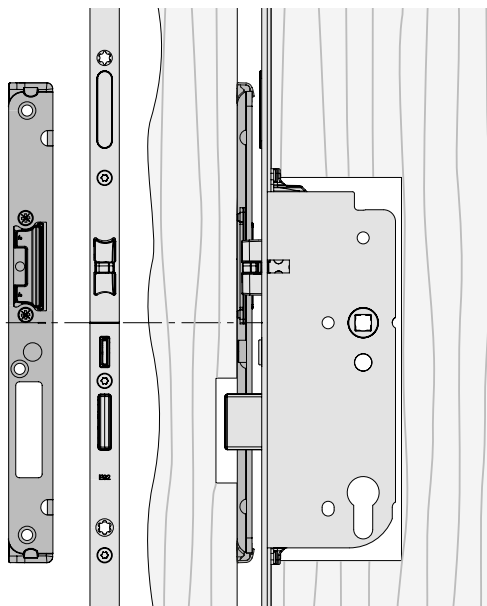


**A rebate clearance of 10-14 mm must be adhered to in the installed state!**

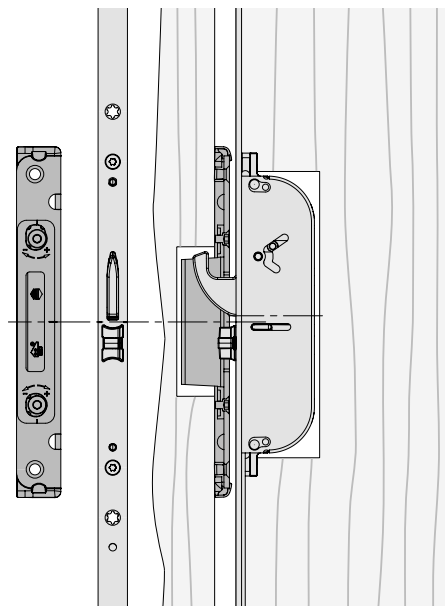
## Installation instructions

Positions 12 mm air gap, 13 mm offset

**Position of latch and deadbolt  
striker plate**



**Position of striker plate and  
multi-function latch with hook**



### **Pressure adjustment:**

+/- 2 mm with latch and shootbolt striker plate

+/- 1.5 mm with MF-HO striker plate

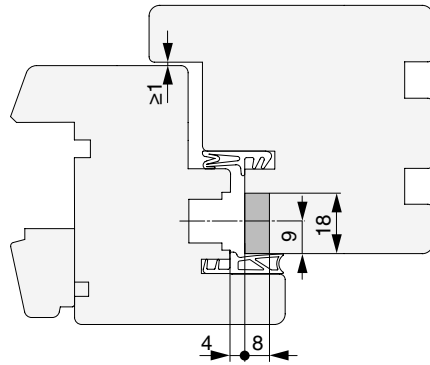
Positioning of notch faceplate = notch striker plate



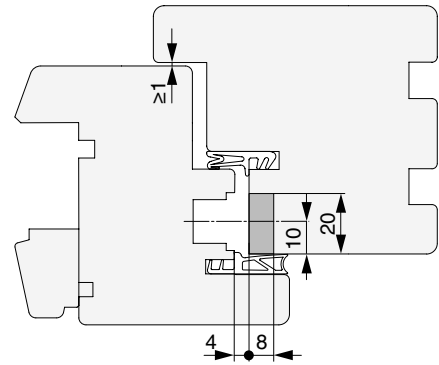
**A rebate clearance of 10-14 mm must be adhered in the installed state!**

## Door constructions

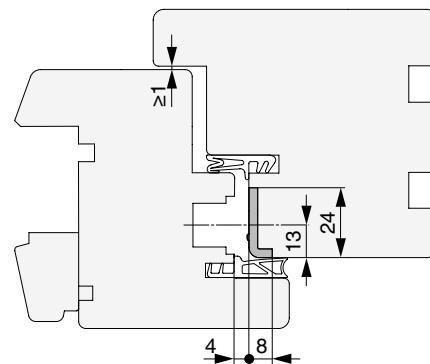
Timber 4 mm air gap



4 mm air gap, 9 mm offset



4 mm air gap, 10 mm offset



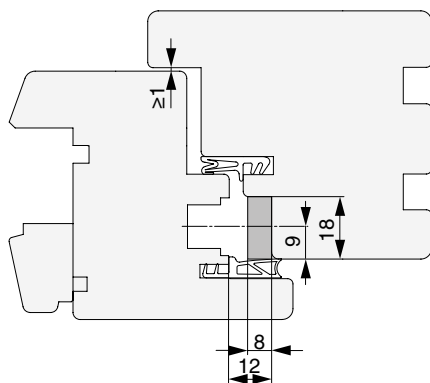
4 mm air gap, 13 mm offset



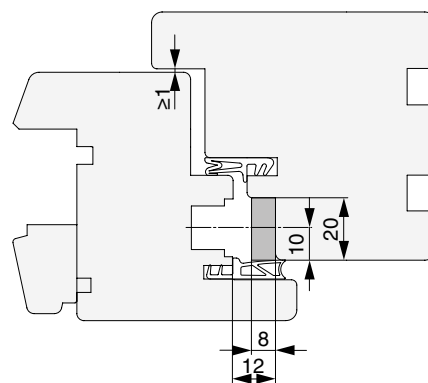
**A rebate clearance of 2 – 6 mm must be adhered in the installed state!**

## Door constructions

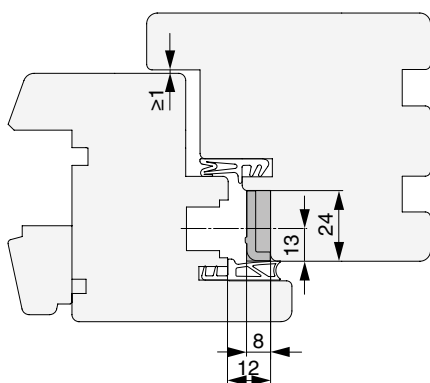
Timber 12 mm air gap



12 mm air gap, 9 mm offset



12 mm air gap, 10 mm offset



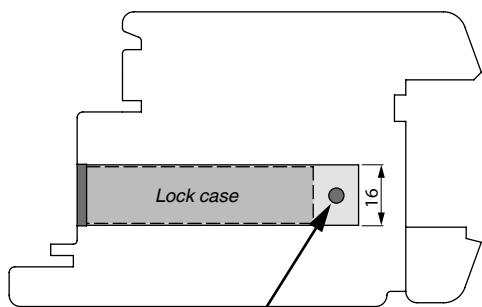
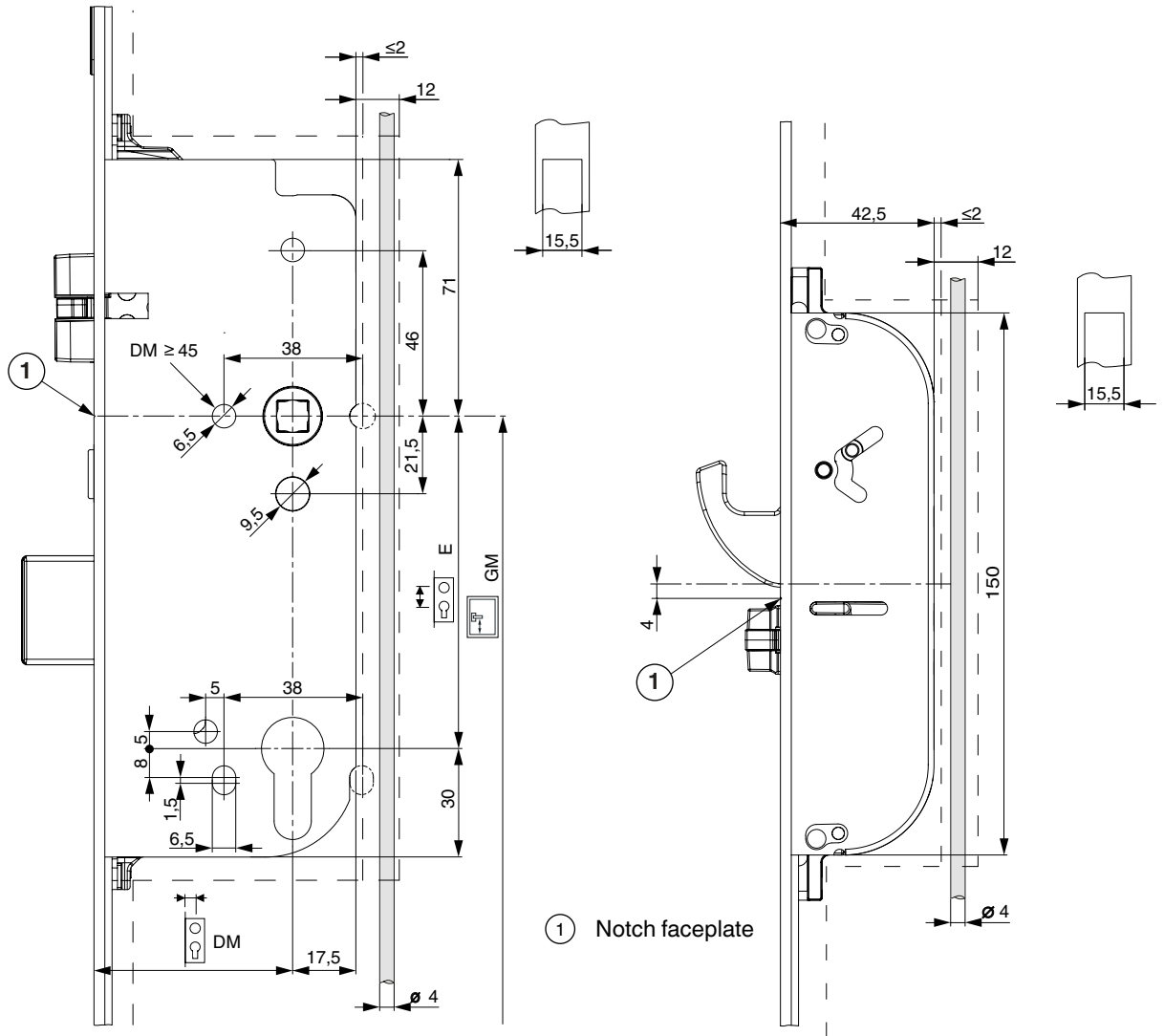
12 mm air gap, 13 mm offset



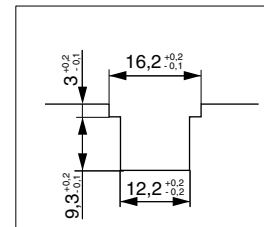
**A rebate clearance of 10-14 mm must be adhered in the installed state!**

# Drilling and routing patterns

Lock case and multi-function latch with hook locking



Recommended cable position for access control

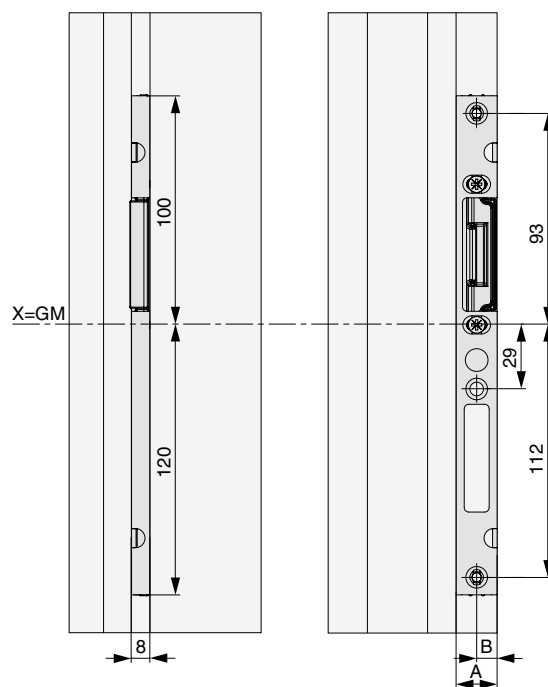
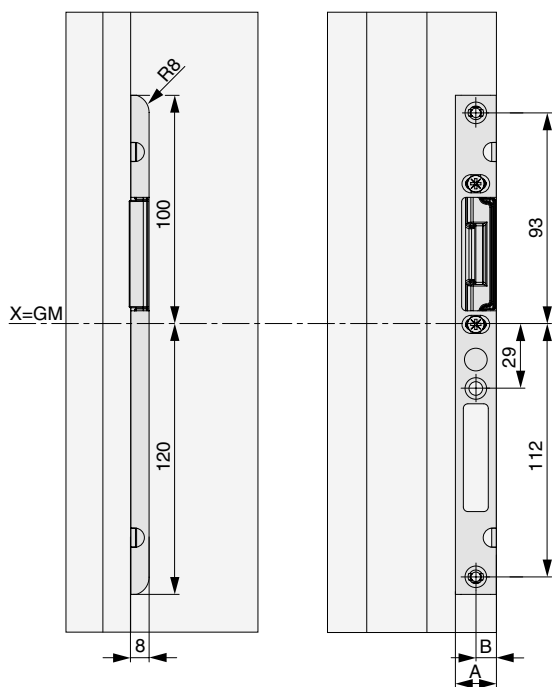
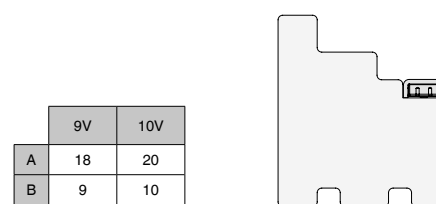
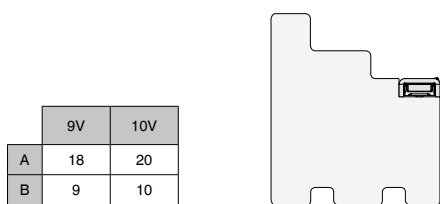


# Drilling and routing patterns

Latches and deadbolt striker plate 9/10 mm offset

**Timber 4 mm air gap**

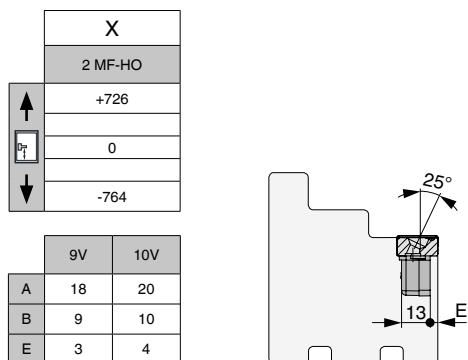
**Timber 12 mm air gap**



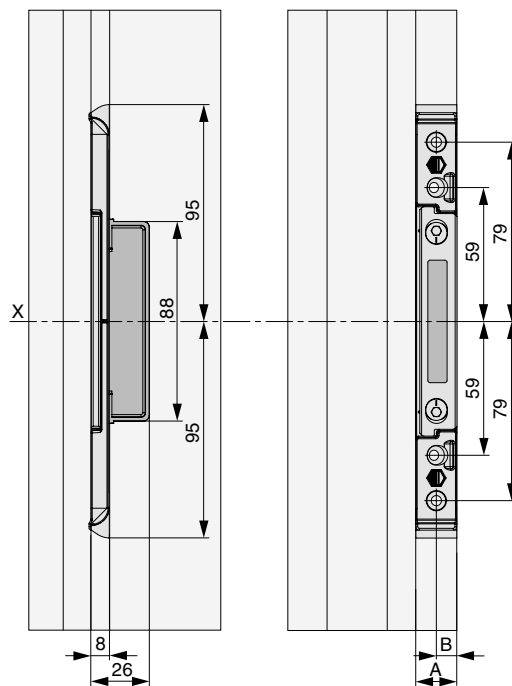
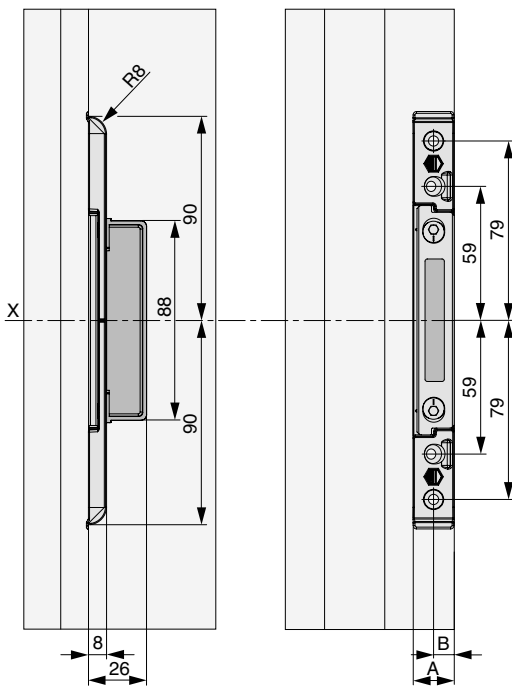
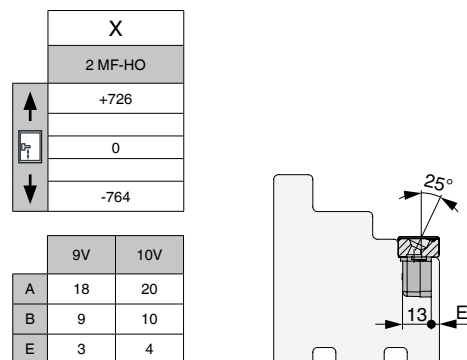
# Drilling and routing patterns

## Multi-function hook striker plate 9/10 mm offset

### Timber 4 mm air gap

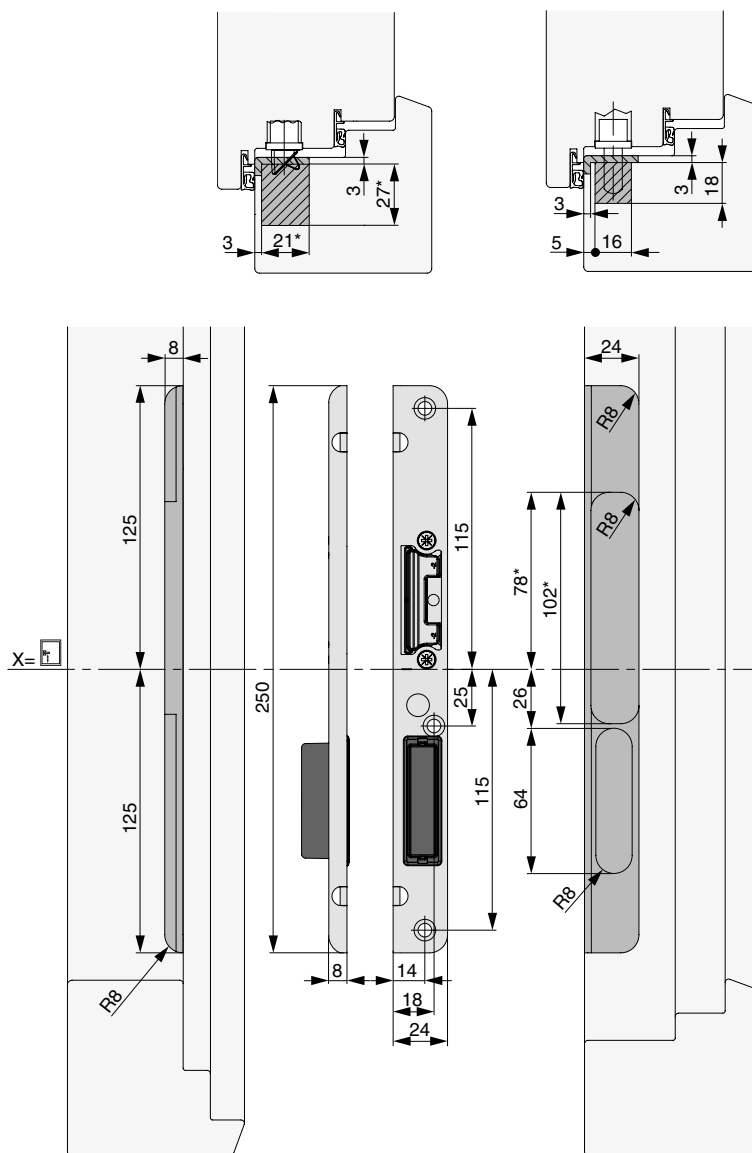


### Timber 12 mm air gap



## Drilling and routing patterns

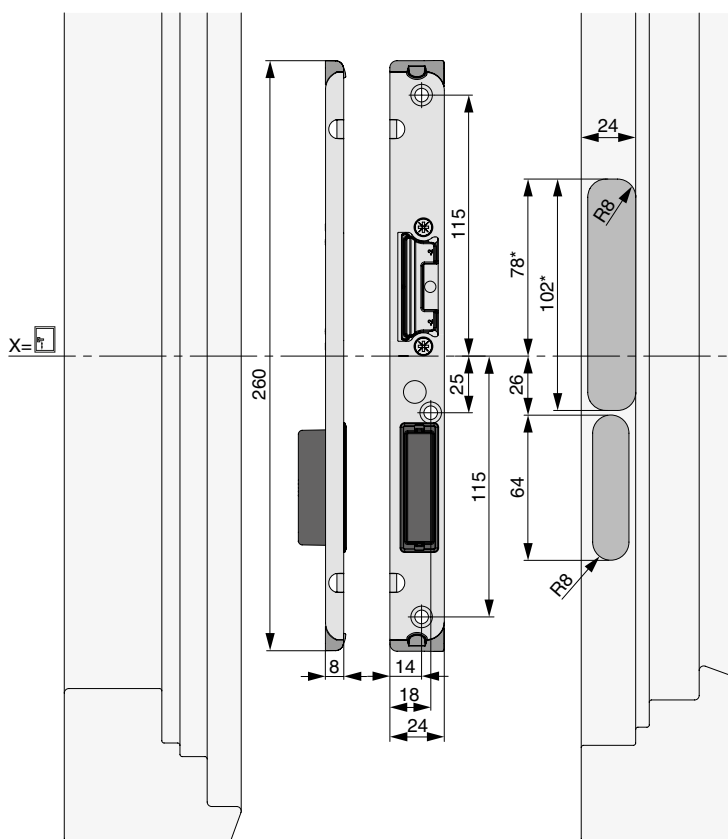
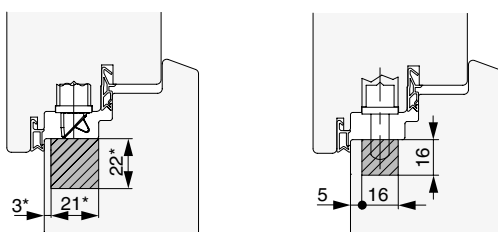
Latches and deadbolt striker plate 13 mm offset, 4 mm air gap



\* routing pattern E-openers

## Drilling and routing patterns

Latches and deadbolt striker plate 13 mm offset, 12 mm air gap



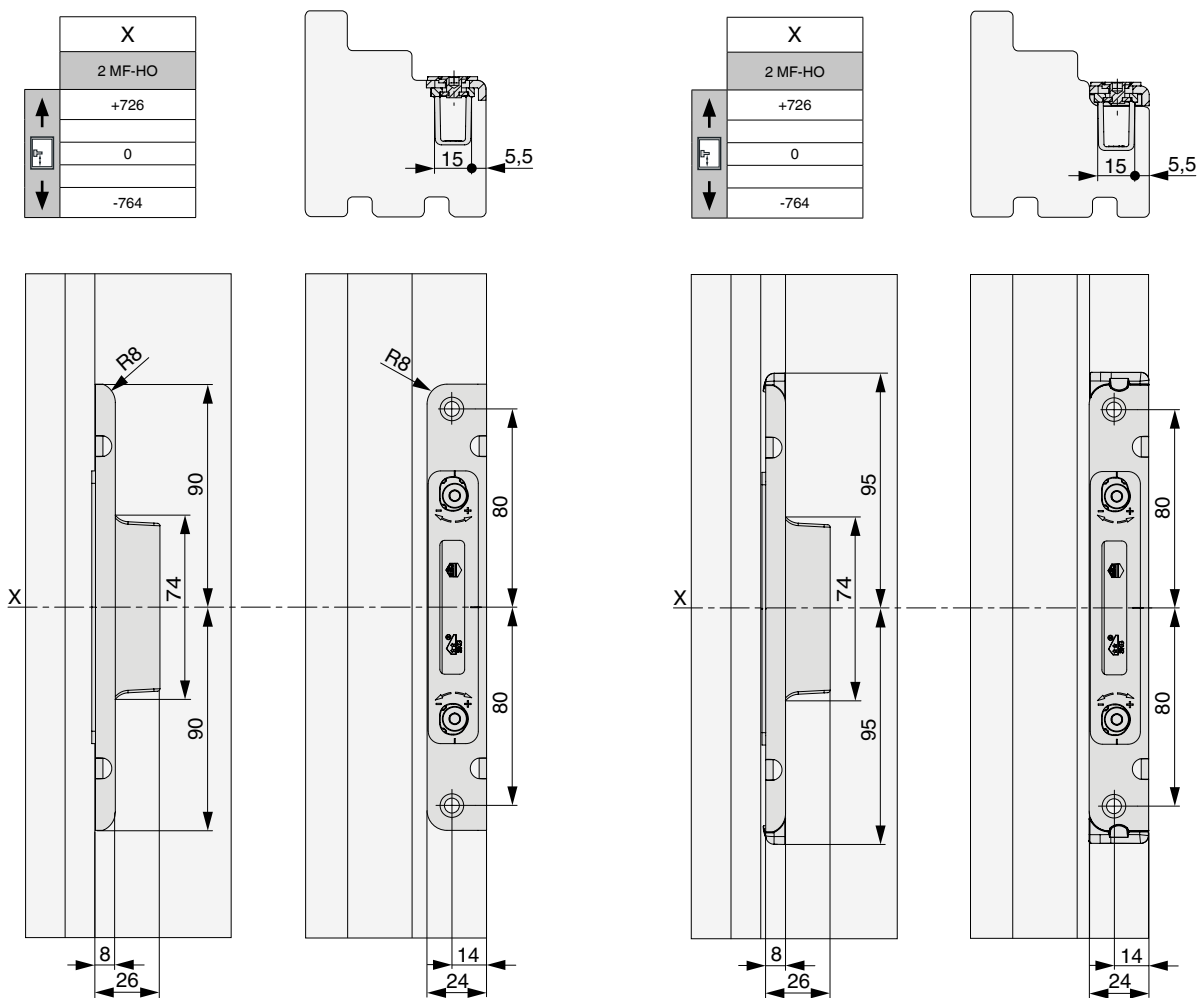
\* routing pattern E-openers

## Drilling and routing patterns

Multi-function hook striker plate 13 mm offset

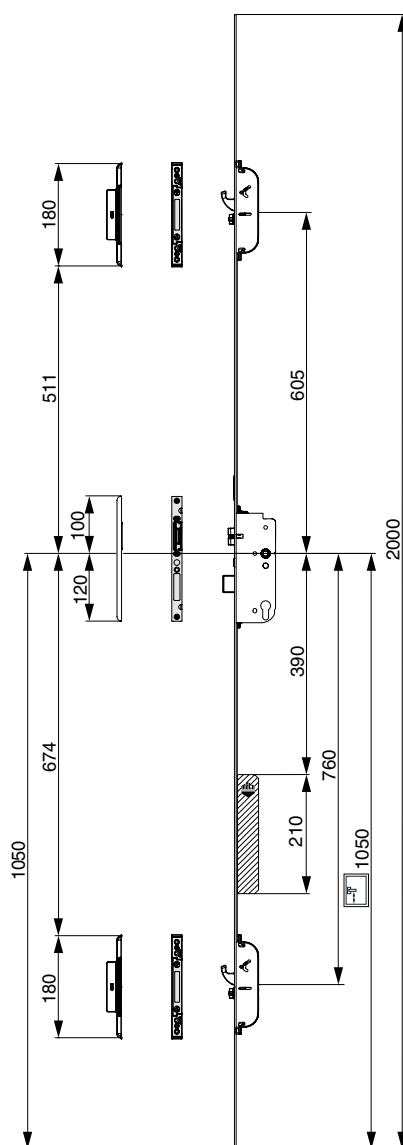
Timber 4 mm air gap


Timber 12 mm air gap



## Positioning of striker plates

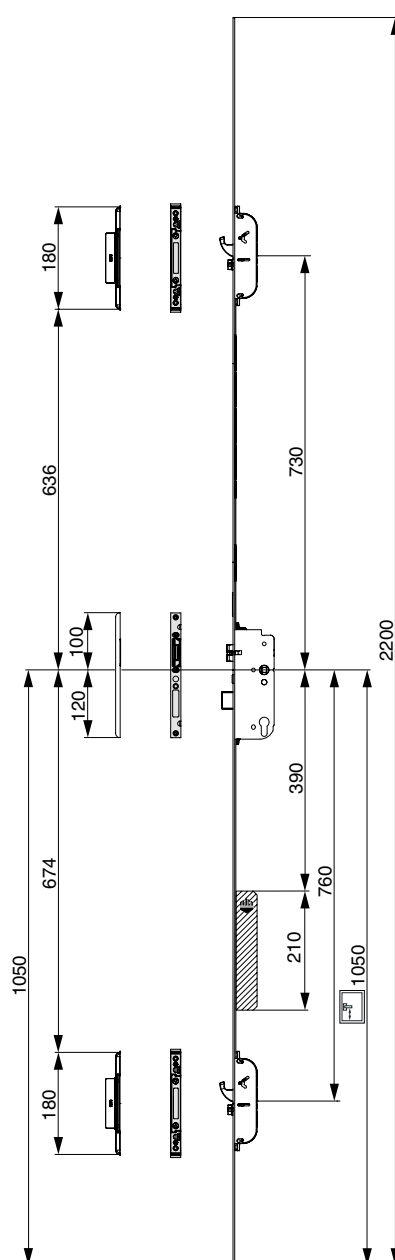
2 Multi-function latches with hooks, Low K+605  
 4 mm air gap, 9/10 mm offset




\* Use cover faceplate for higher SRH!  
 Motor for motorised opening

## Positioning of striker plates

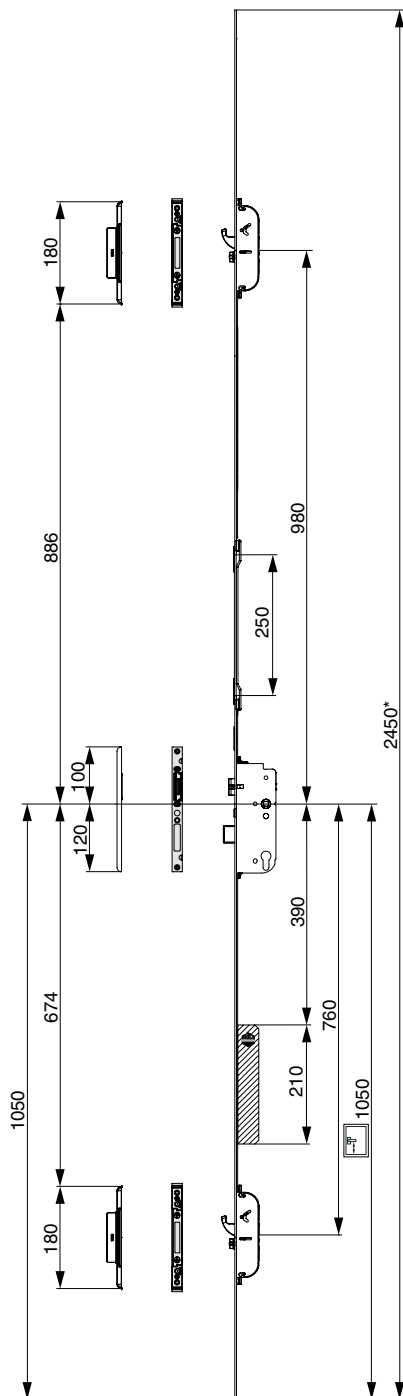
2 Multi-function latches with hooks, Standard K+730  
 4 mm air gap, 9/10 mm offset




\* Use cover faceplate for higher SRH!  
 Motor for motorised opening

## Positioning of striker plates

2 Multi-function latches with hooks, High K+980  
 4 mm air gap, 9/10 mm offset

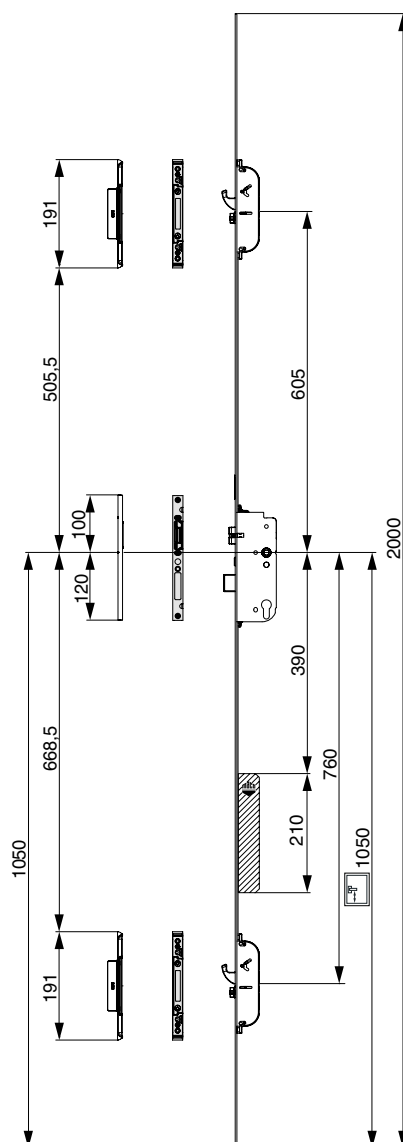



\* Use cover faceplate for higher SRH!

 Motor for motorised opening

## Positioning of striker plates

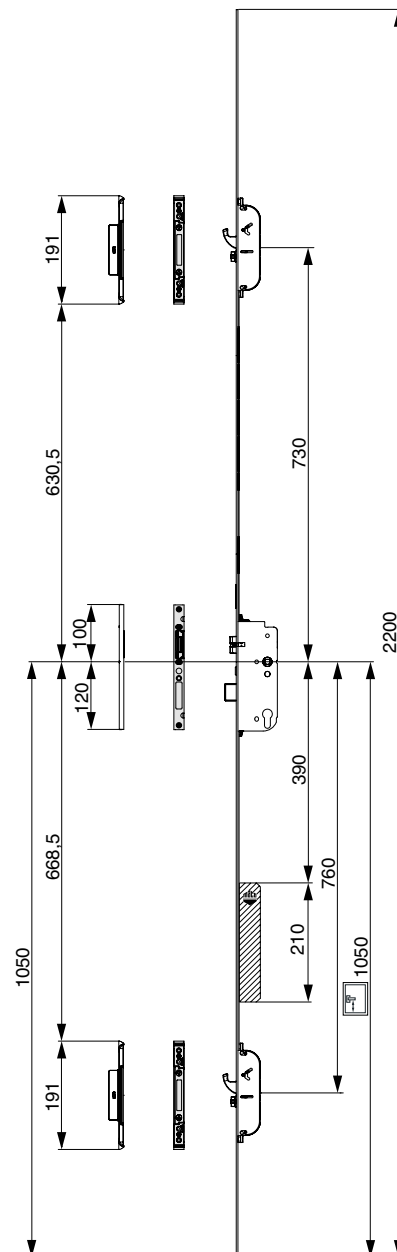
2 Multi-function latches with hooks, Low K+605  
 12 mm air gap, 9/10 mm offset




\* Use cover faceplate for higher SRH!  
 Motor for motorised opening

## Positioning of striker plates

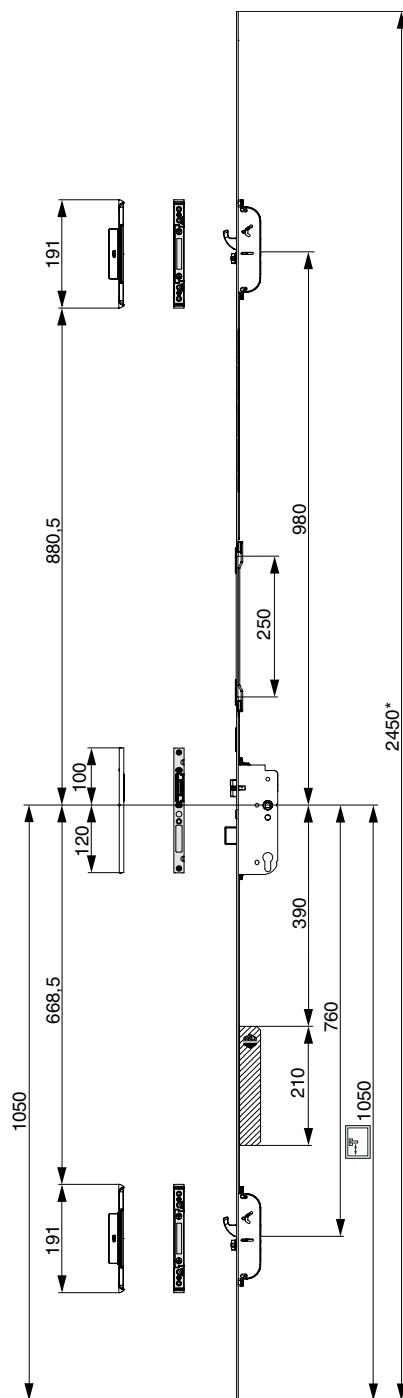
2 Multi-function latches with hooks, Standard K+730  
 12 mm air gap, 9/10 mm offset




\* Use cover faceplate for higher SRH!  
 Motor for motorised opening

## Positioning of striker plates

2 Multi-function latches with hooks, High K+980  
 12 mm air gap, 9/10 mm offset

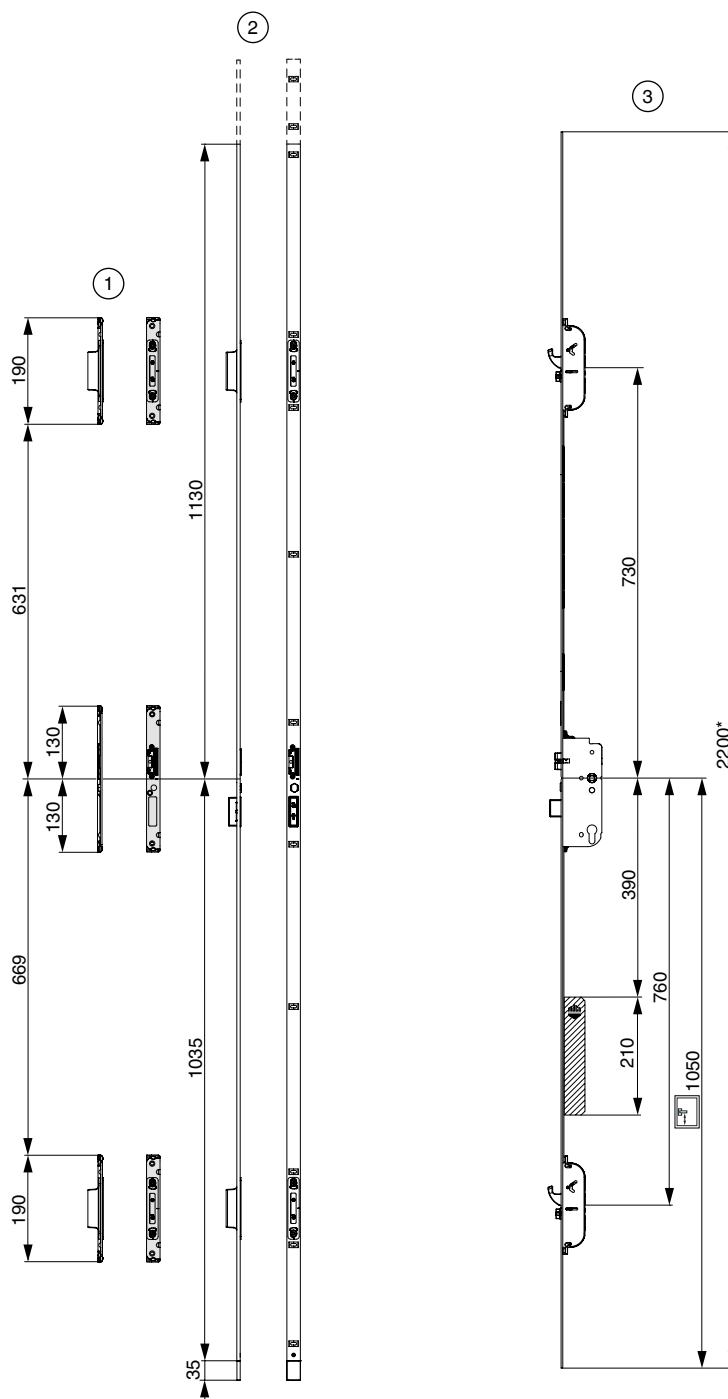


\* Use cover faceplate for higher SRH!  
 Motor for motorised opening

## Positioning of striker plates

2 Multi-function latches with hooks, Standard K+730, 1-sash  
 12 mm air gap, 13 mm offset

- ① Single striker plate
- ② Single piece door striker
- ③ Lock

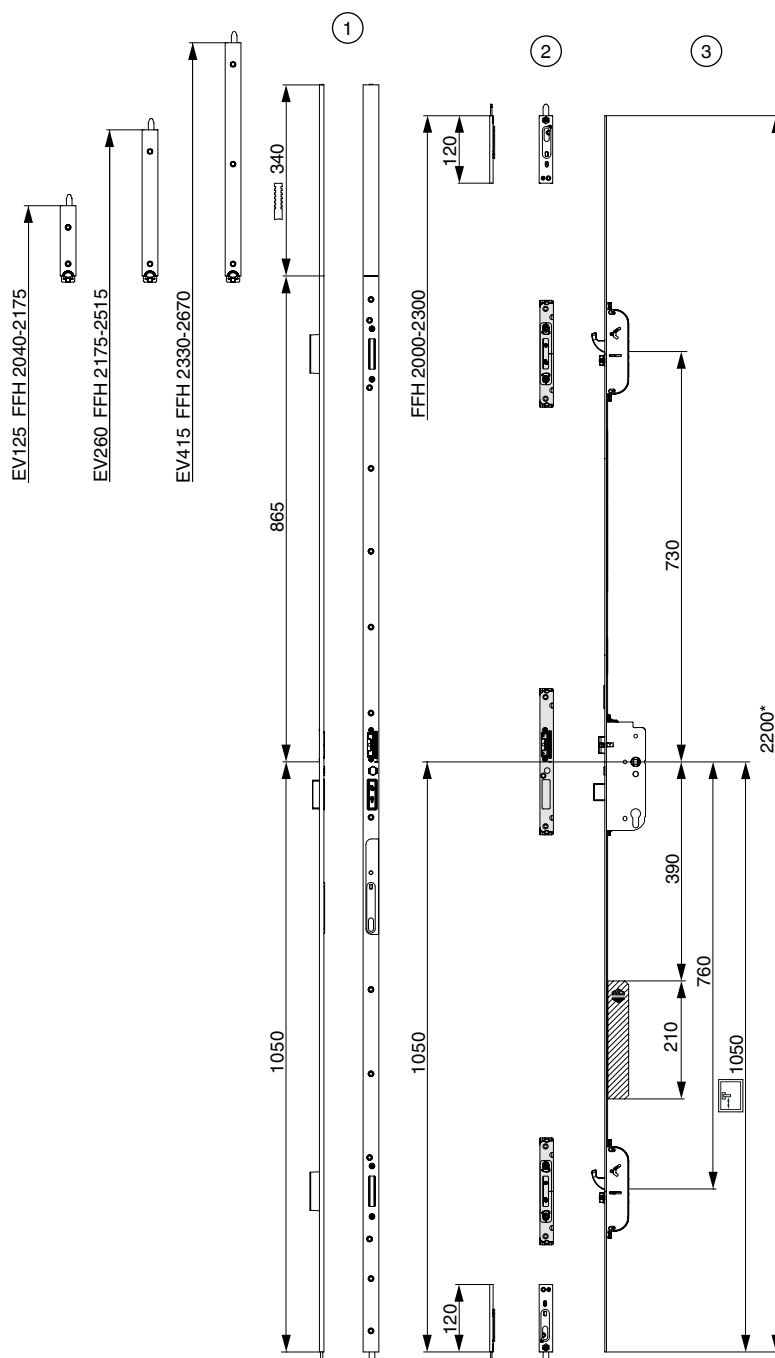


\* Use cover faceplate for higher SRH!  
 Motor for motorised opening

## Positioning of striker plates

2 Multi-function latches with hooks, Standard K+730, 2-sash  
12 mm air gap, 13 mm offset

- ① French casement drive gear
- ② Finger operated door shootbolt
- ③ Lock



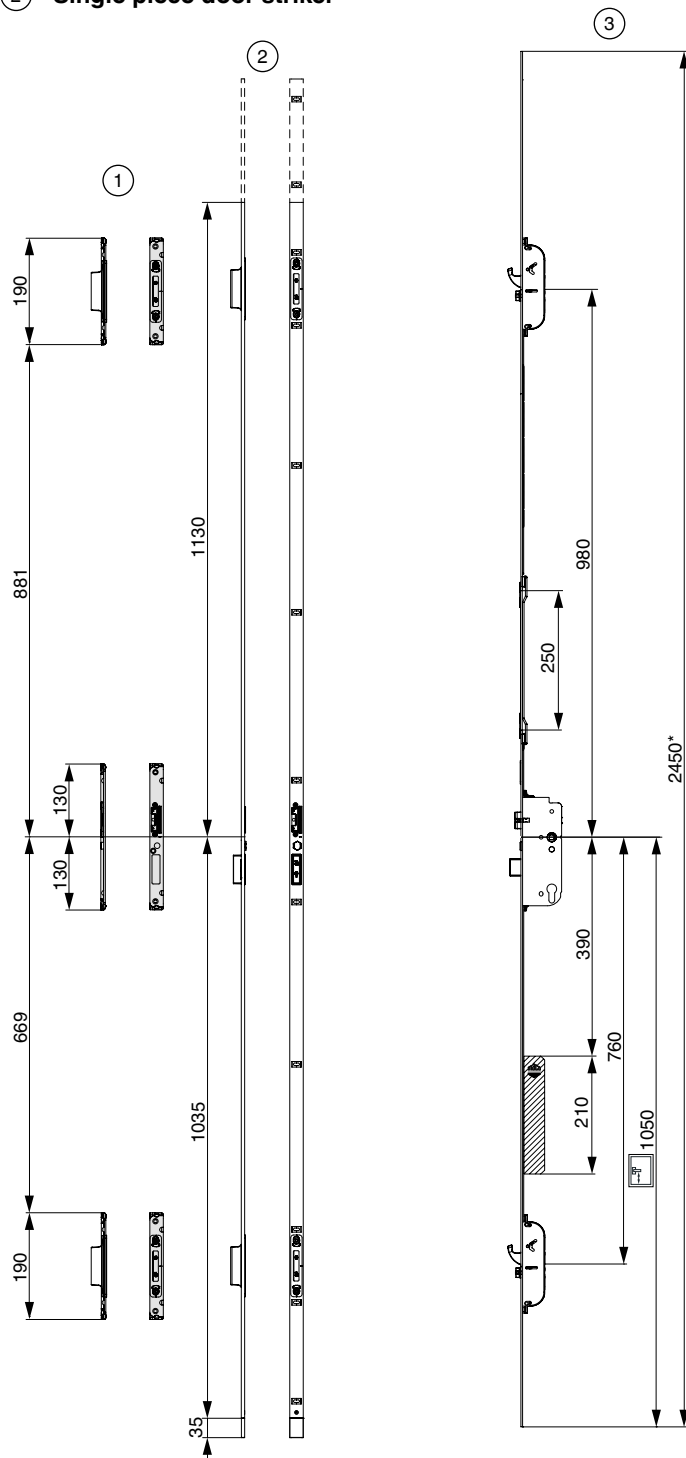
\* Use cover faceplate for higher SRH!

Motor for motorised opening

## Positioning of striker plates

2 Multi-function latches with hooks, High K+980, 1-sash  
 12 mm air gap, 13 mm offset

- ① Single striker plate
- ② Single piece door striker
- ③ Lock

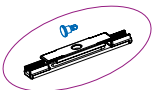


\* Use cover faceplate for higher SRH!  
 Motor for motorised opening



# Lengthening/shortening of the A-TS K+730

Module without additional locking point

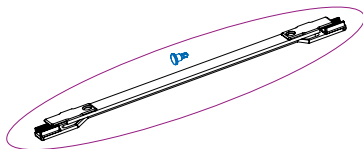


⇒ Only possible with A-TS K+730 module!

⇒ When using the lengthening or shortening faceplate, the standard eurogroove must be used!

## Shortening faceplate pack

Contents: 1 pc. fixing bolt with shortening faceplate and deadbolt

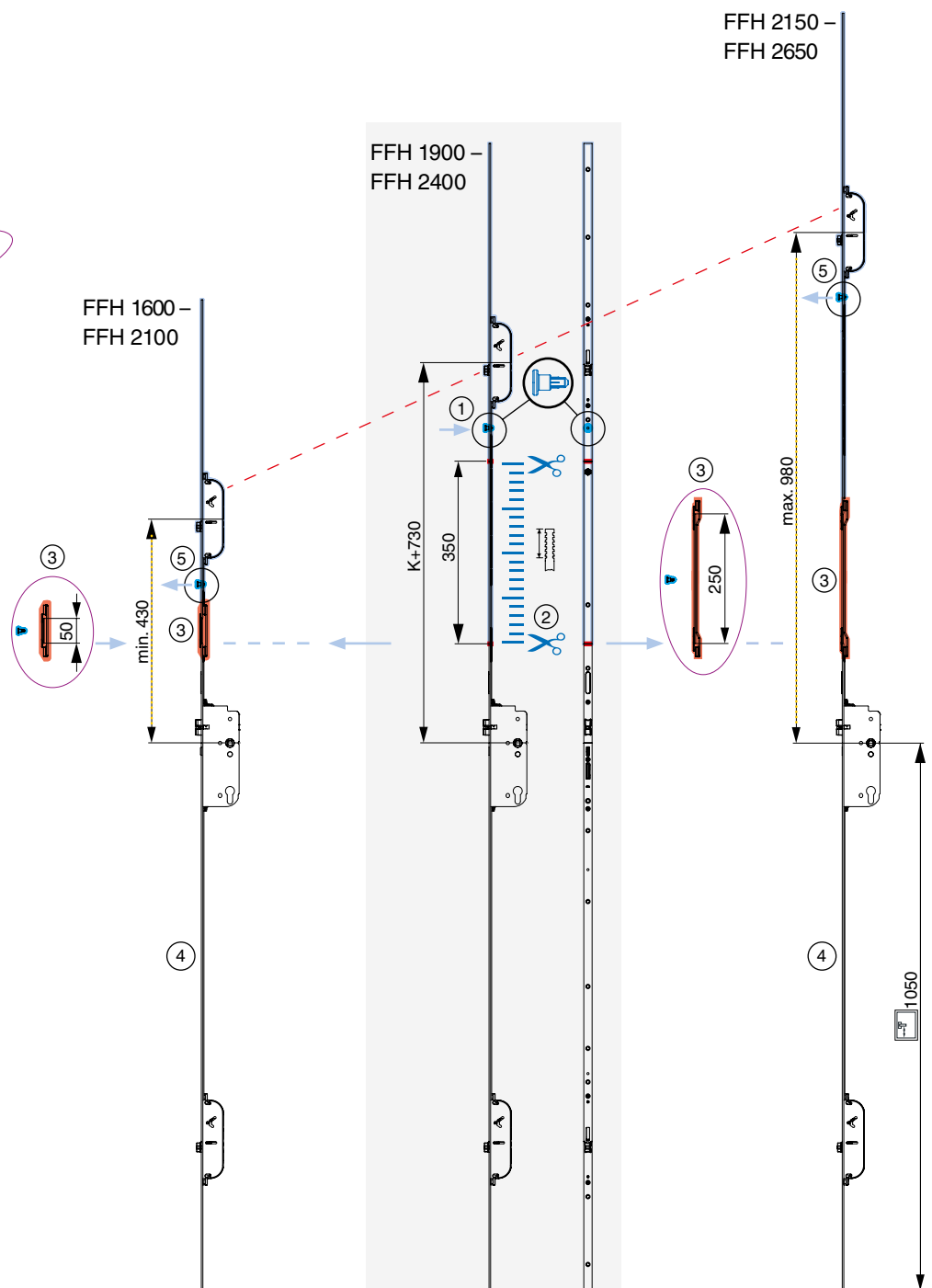


## Lengthening faceplate pack

Contents: 1 pc. fixing bolt with lengthening faceplate and deadbolt

- ① Remove the fixing bolts on Standard A-TS pre-place K+730 Module
- ② Separate the faceplate and deadbolt.
- ③ Use the shortening or lengthening faceplate.
- ④ Screwing the entire faceplate.
- ⑤ Remove the fixing bolts on A-TS intermediate faceplate and the A-TS K+730 Module.

⇒ Perform functional testing!



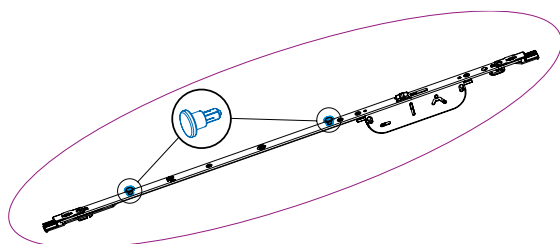
## Extension of the A-TS K+730

Module with additional locking point



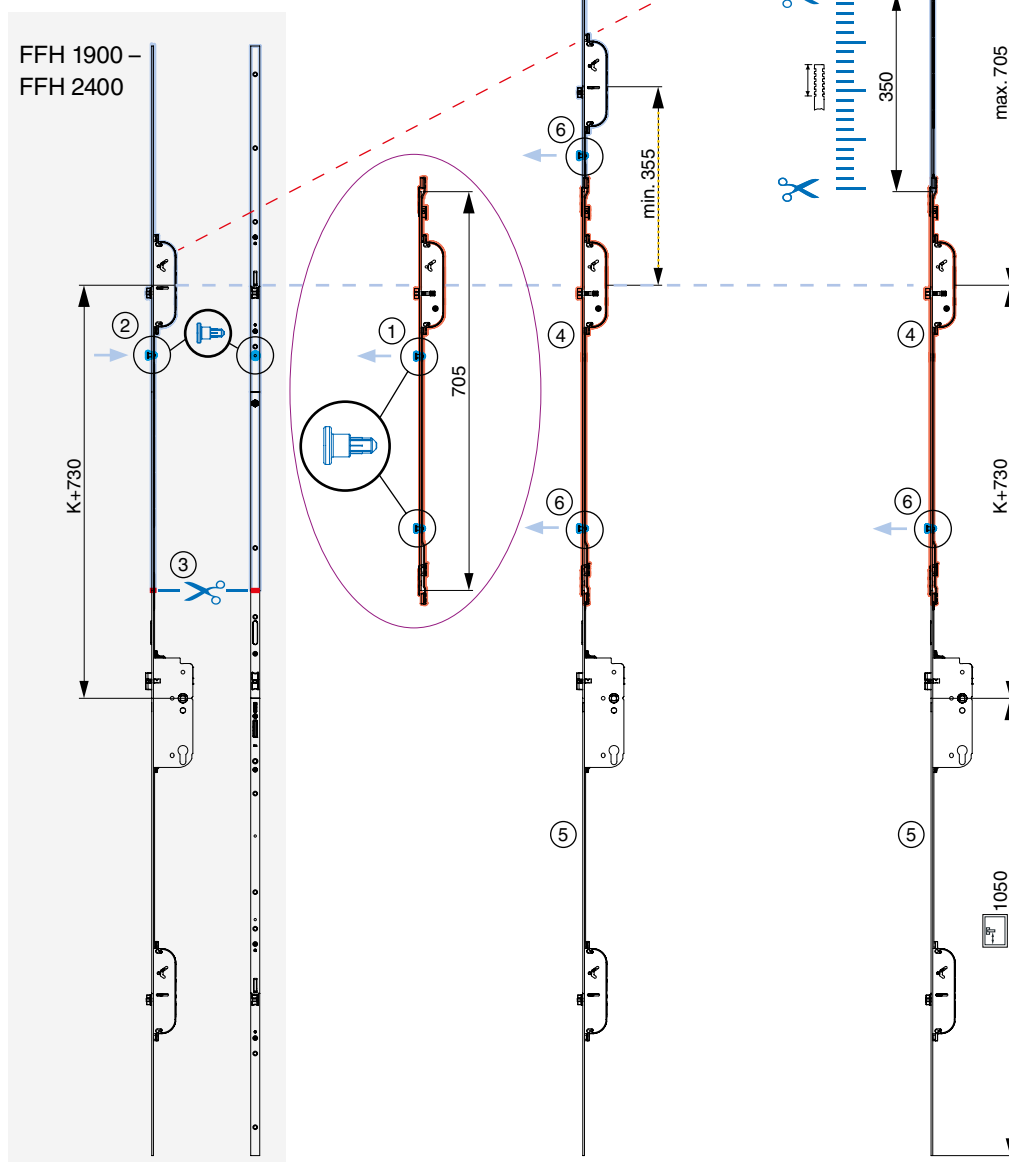
⇒ Only possible with A-TS K+730 module!

⇒ When using the A-TS intermediate faceplate module, the standard eurogroove must be used!



The A-TS intermediate faceplate module is delivered with two pre-inserted fixing pins!

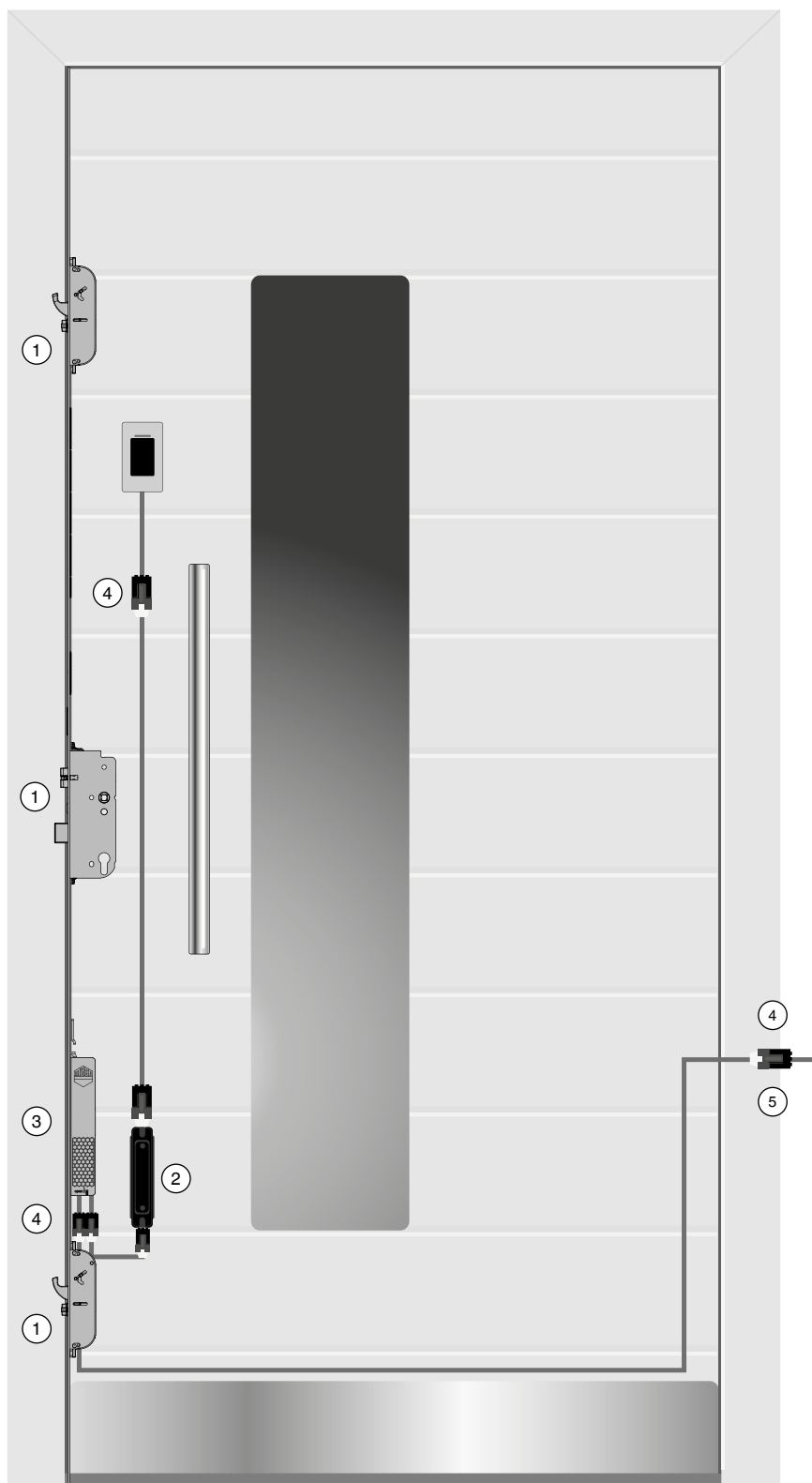
- ① Remove 1 of the fixing pins from the intermediate faceplate.
  - ② Remove the fixing bolts on the Standard A-TS K+730 module
  - ③ Separate the faceplate and deadbolt
  - ④ Insert the A-TS intermediate faceplate with the pre-fitted fixing pins.
  - ⑤ Screw in the entire faceplate.
  - ⑥ Remove the fixing bolts on the A-TS intermediate faceplate and on the A-TS K+730 module.
- ⇒ Perform functional testing!



# openDoor Access Solutions

## Overview

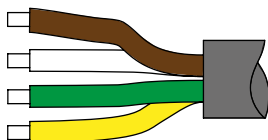
- ① **3-latch door lock with opening motor**  
High security thanks to self-locking of steel hooks and locking latch
- ② **Tamper-proof**  
Control unit protected from unauthorised access
- ③ Maximum comfort thanks to **motorised release**
- ④ **Plug & Play**  
Simple, non-mistakable plug-in connection
- ⑤ **EASY mounting and de-mounting** of the door thanks to plug-in cable transition



# openDoor Access Solutions

## A-TS Transponder Plus

### Plug & Play connector / cable installation



- ① Brown: motor operating voltage minus -
- ② White: motor operating voltage plus +
- ③ Green: control voltage\* minus -
- ④ Yellow: control voltage\* plus +

\*The control voltage is required for push-button (button impulse) and toggle switch (activation/deactivation of day-release)!



Button for button impulse



Toggle switch for Day / Night setting

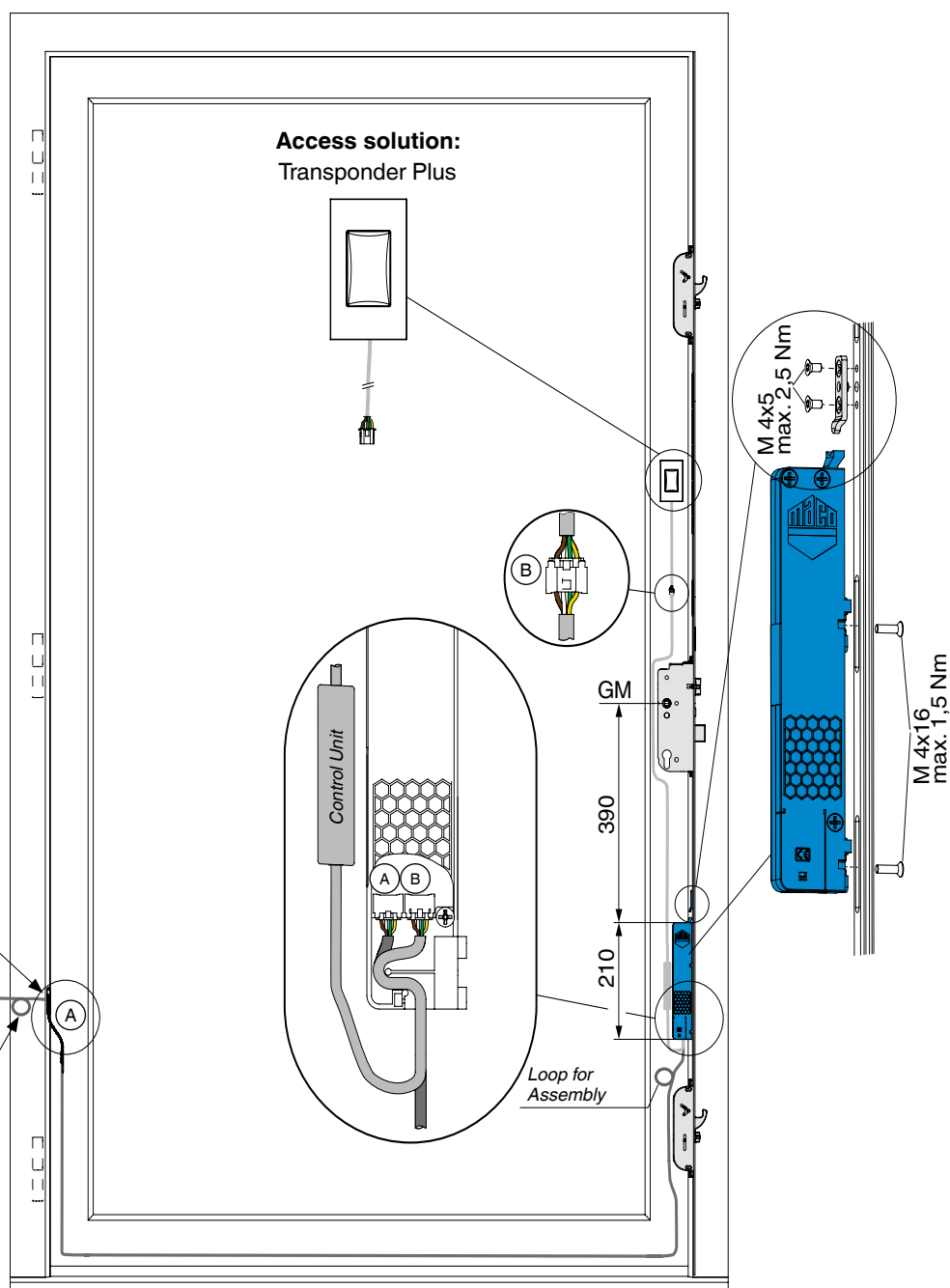
### Cable transition

2.5 m door leaf / 6 or 10 m outer installation length

12 - 24V DC  
min. 1.5 A



- Ⓐ Motor cable connection
- Ⓑ Motor to access solution connection
- Ⓒ ⚡ Power supply 12 - 24 V DC min. 1.5 A
- Ⓓ Tension release

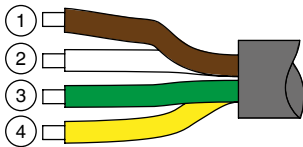


**Electrical connections (connection of power supply, connection cable 0.15 m and 10 m) may only be carried out by authorised personnel!**

# openDoor Access Solutions

## A-TS Transponder Keypad and Touchkey

### Plug & Play connector / cable installation



- ① Brown: motor operating voltage minus -
- ② White: motor operating voltage plus +
- ③ Green: control voltage\* minus -
- ④ Yellow: control voltage\* plus +

\*The control voltage is required for push-button (button impulse) and toggle switch (activation/deactivation of day-release)!



Button for button impulse



Toggle switch for Day / Night setting

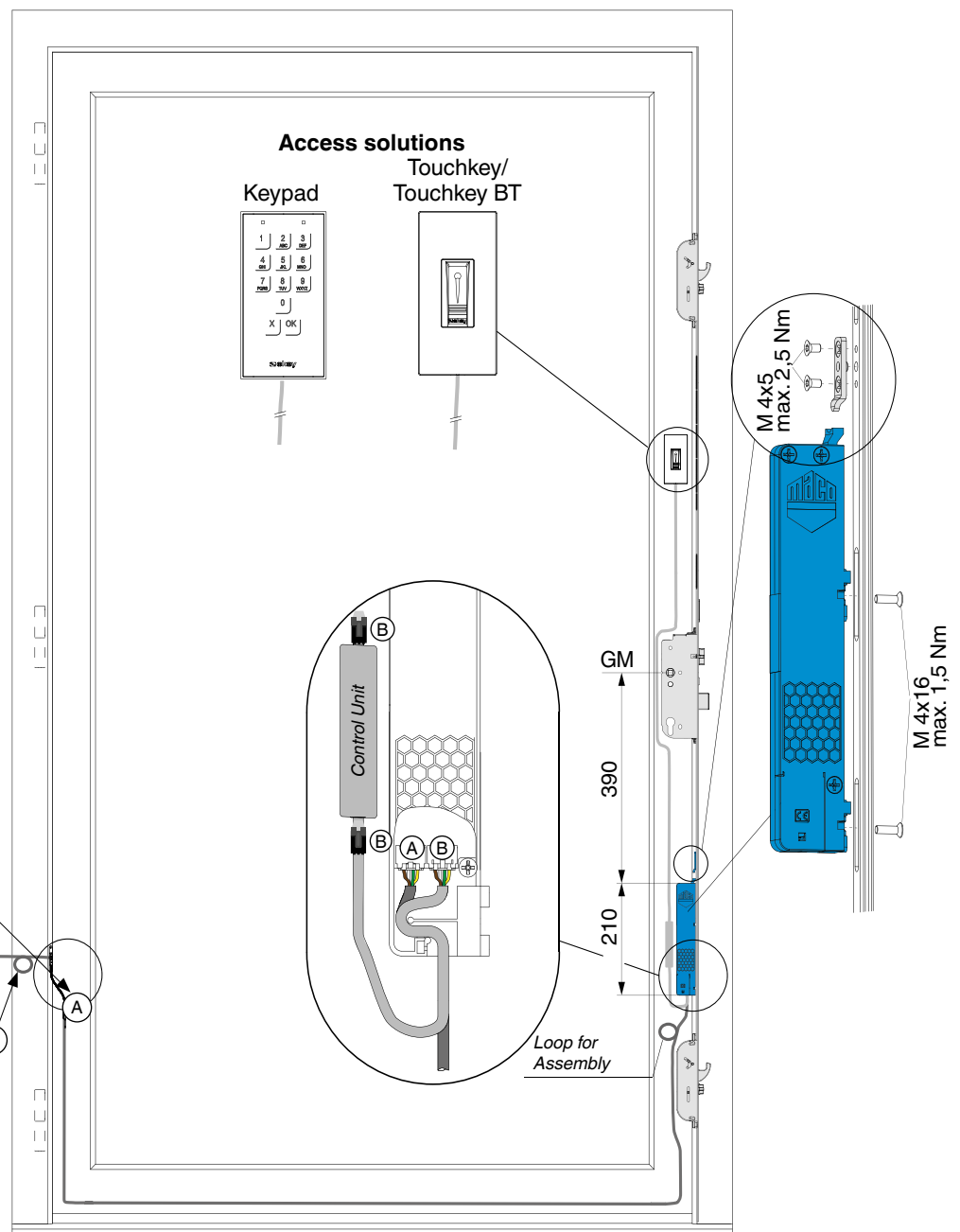
### Cable transition

2.5 m door leaf / 6 or 10 m outer installation length

12 - 24V DC  
min. 1.5 A



- Ⓐ Motor cable connection
- Ⓑ Motor to access solution connection
- Ⓒ ⚡ Power supply 12 - 24 V DC min. 1.5 A
- Ⓓ Tension release



**Electrical connections (connection of power supply, connection cable 0.15 m and 10 m) may only be carried out by authorised personnel!**

# openDoor Access Solutions

## Somfy lock controller

- (A) Motor cable connection
- (B) ⚡ Power supply 12 - 24 V DC  
min. 1.5 A
- (C) Tension release

### DIP switch

DIP switch 4 ON = IN1 / IN 2 Locking monitoring ON  
OFF = IN1 / IN 2 Locking monitoring OFF

DIP switch 5 ON = 3 sec. exit activation 1/2  
OFF = 1 sec. exit activation 1/2

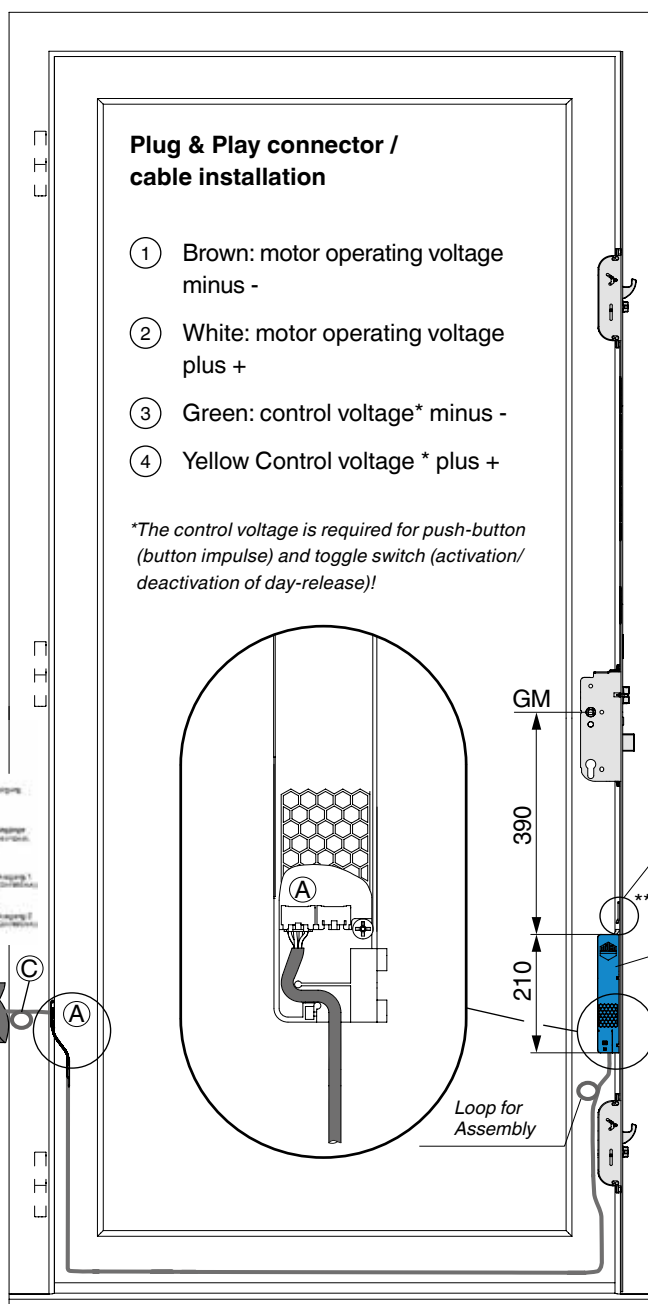
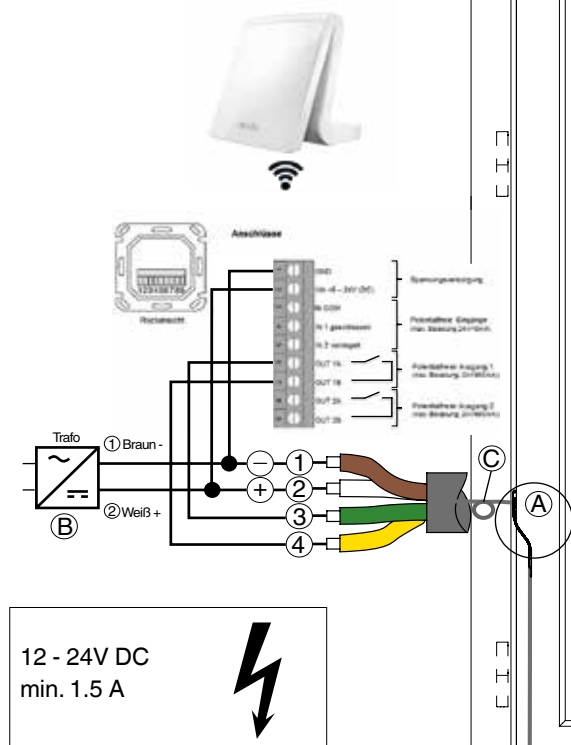
### Connections

1 GND  
2 V in +8 - 24V (DC)  
= **supply power**

3 IN COM  
4 IN closed  
5 IN double locked  
= **Isolated free inputs (max. load 24V / 10mA)**

6 OUT 1A  
7 OUT 1B  
= **Isolated free outputs 1 (max. load 24V / 600mA)**

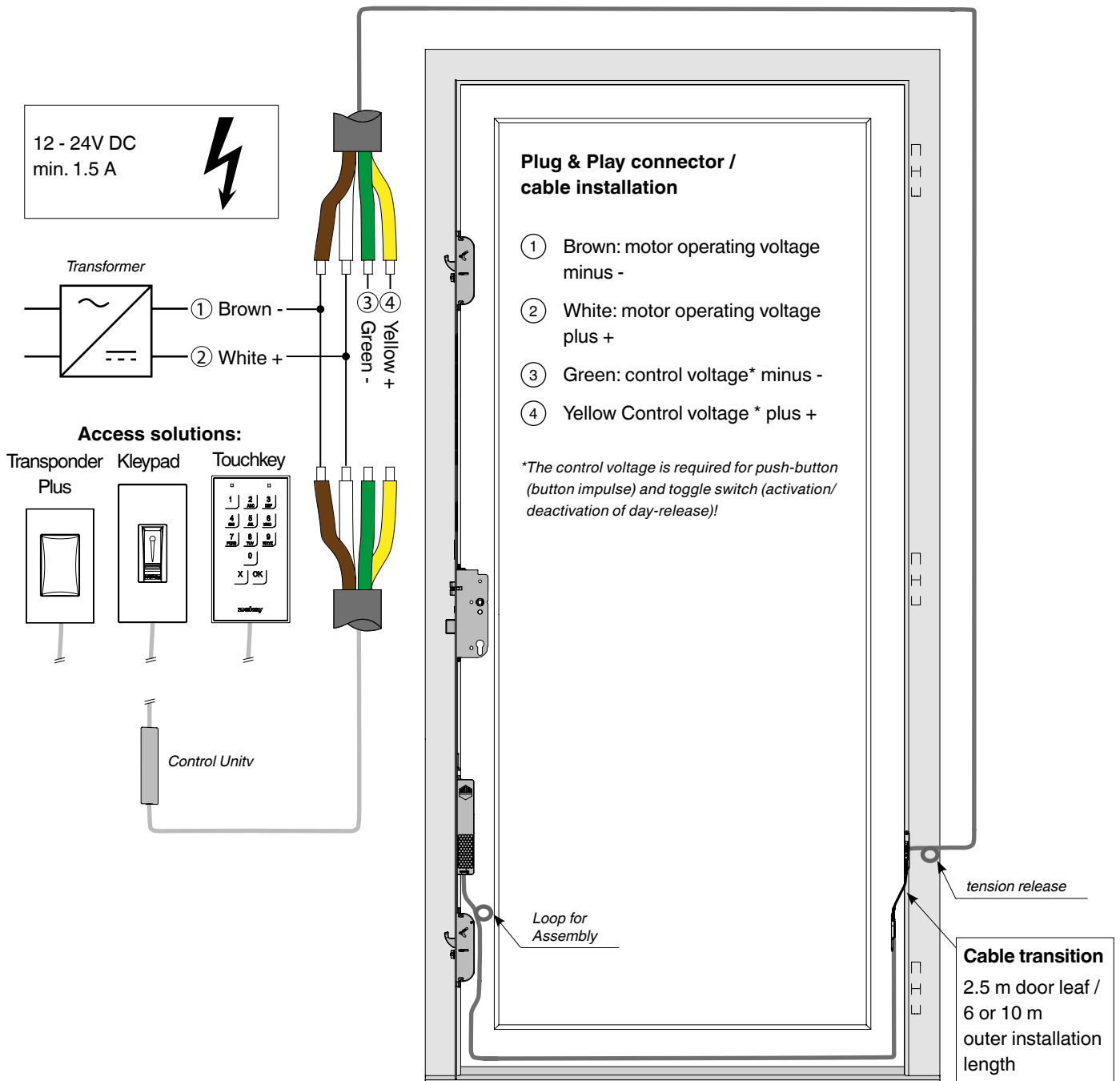
8 OUT 2A  
9 OUT 2B  
= **Isolated free outputs 2 (max. load 24V / 600mA)**



**Electrical connections (connection of power supply, connection cable 0.15 m and 10 m) may only be carried out by authorised personnel!**

# openDoor Access Solutions

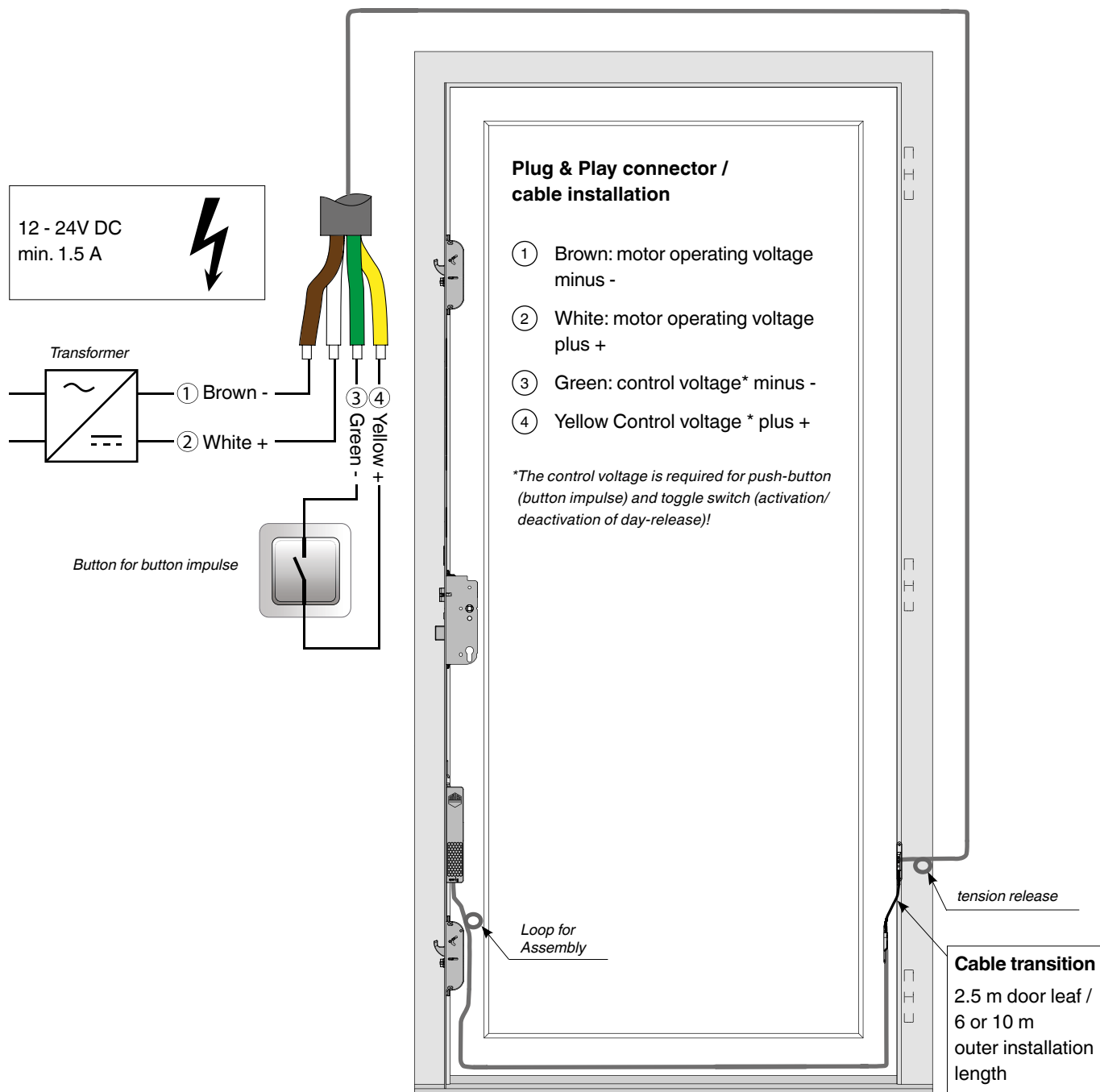
circuit diagram frame side



**Electrical connections (connection of power supply, connection cable 0.15 m and 10 m) may only be carried out by authorised personnel!**

# openDoor Access Solutions

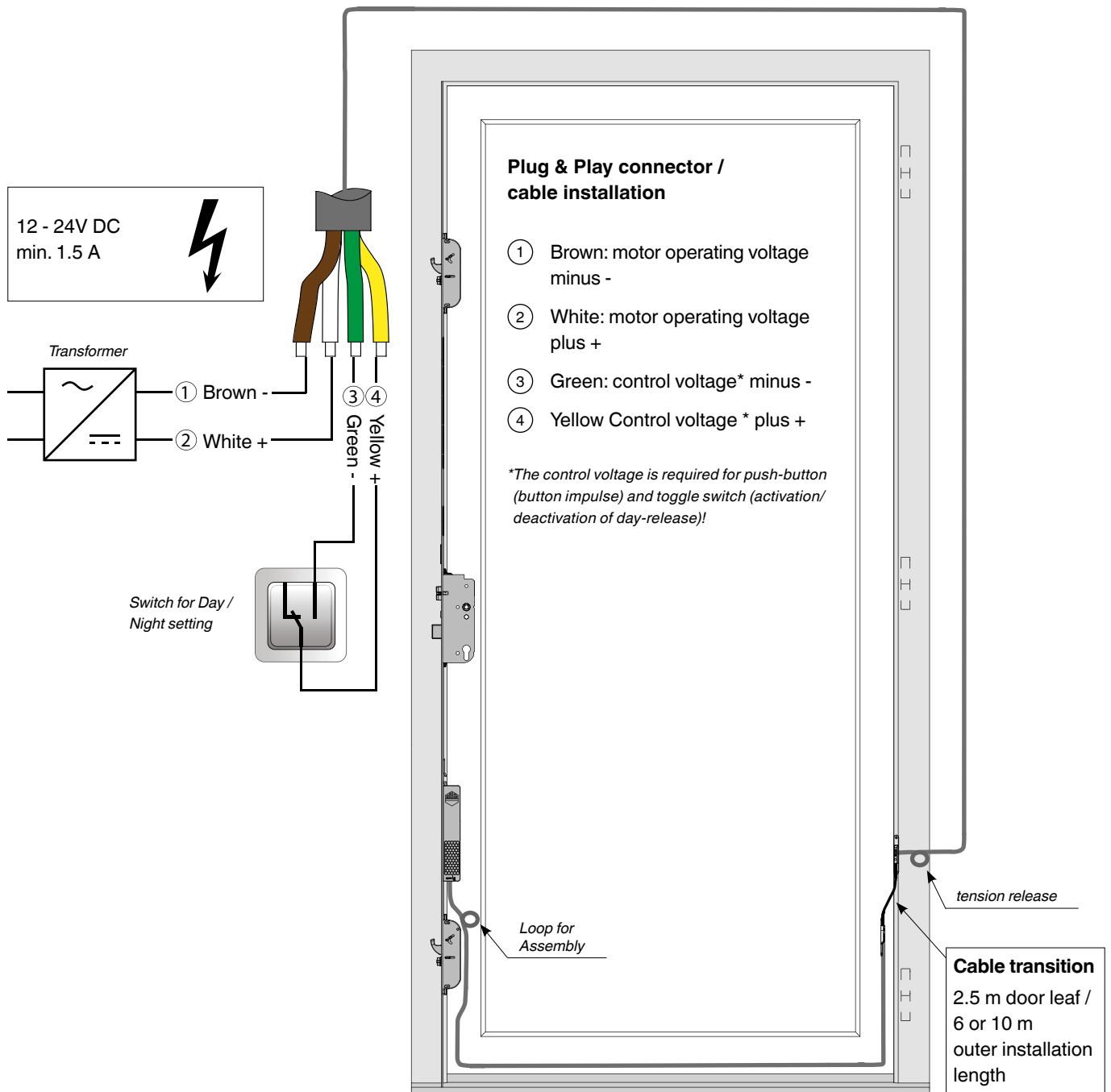
circuit diagram button impulse



**Electrical connections (connection of power supply, connection cable 0.15 m and 10 m) may only be carried out by authorised personnel!**

# openDoor Access Solutions

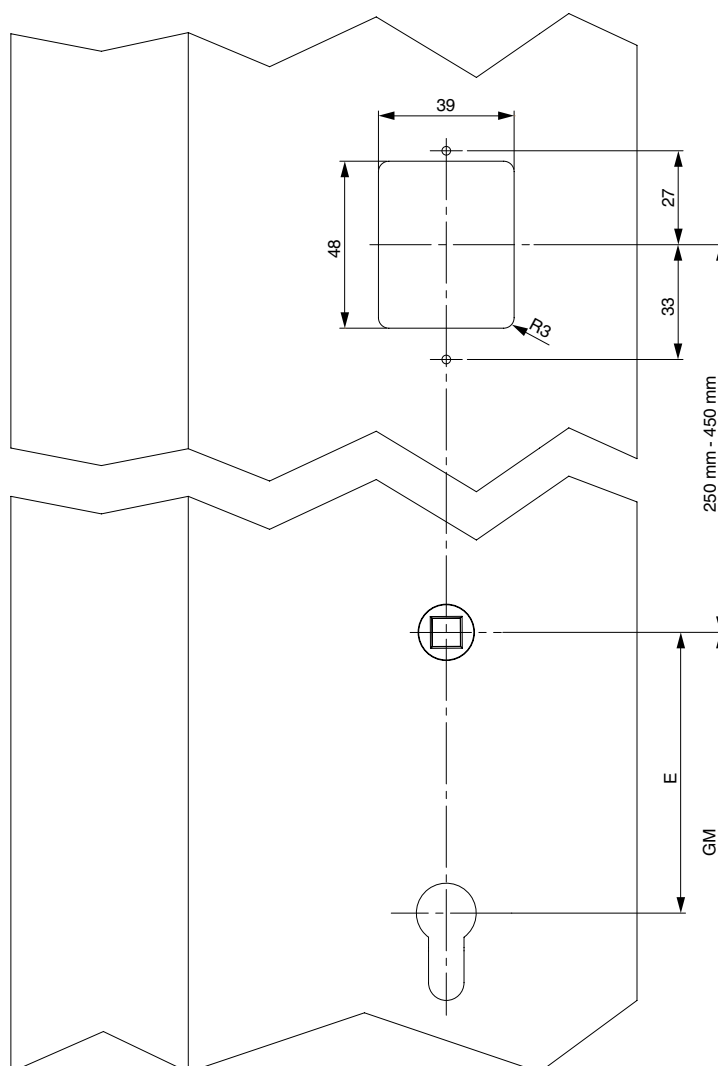
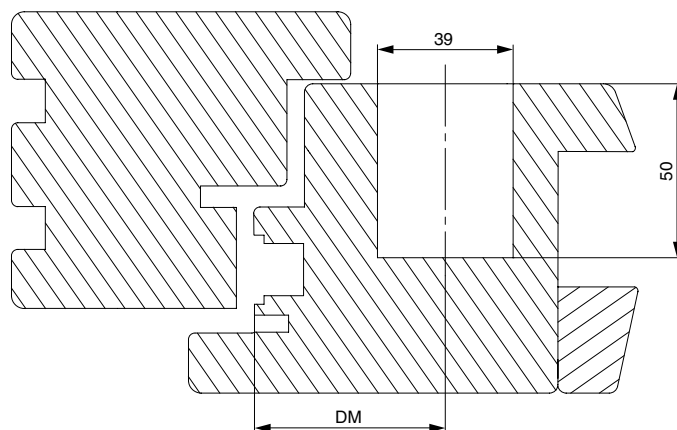
## circuit diagram toggle switch



**Electrical connections (connection of power supply, connection cable 0.15 m and 10 m) may only be carried out by authorised personnel!**

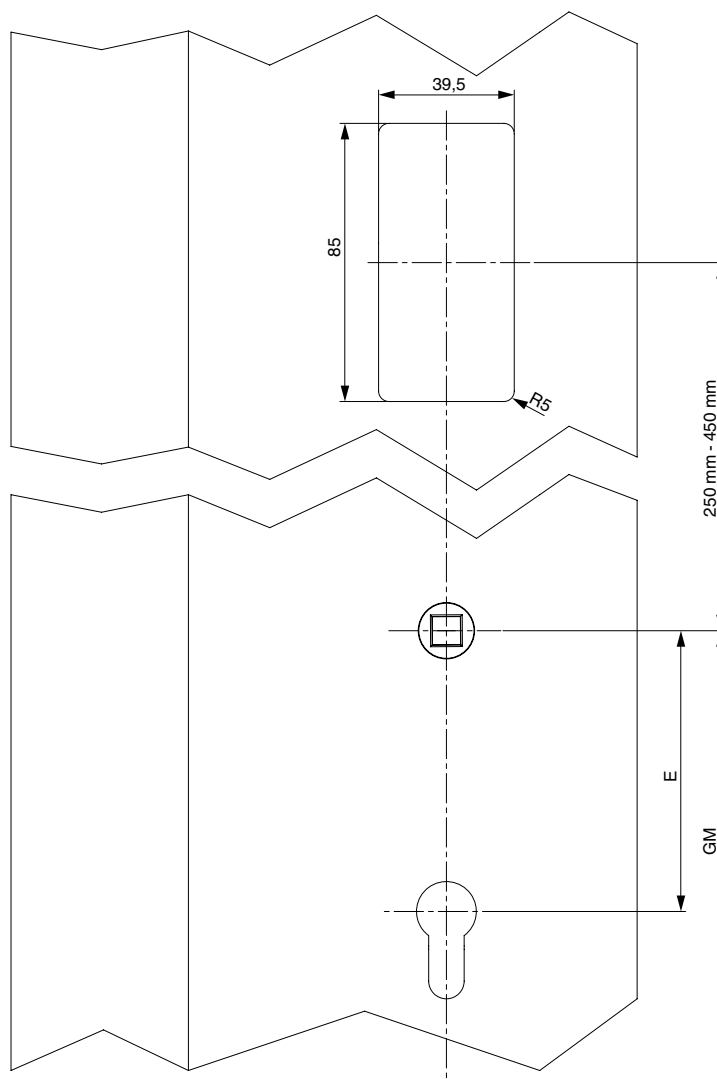
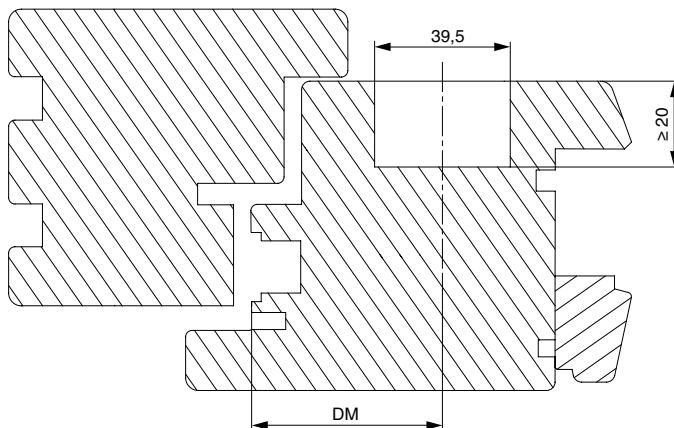
# openDoor Access Control Solutions

## Routing pattern Transponder Plus



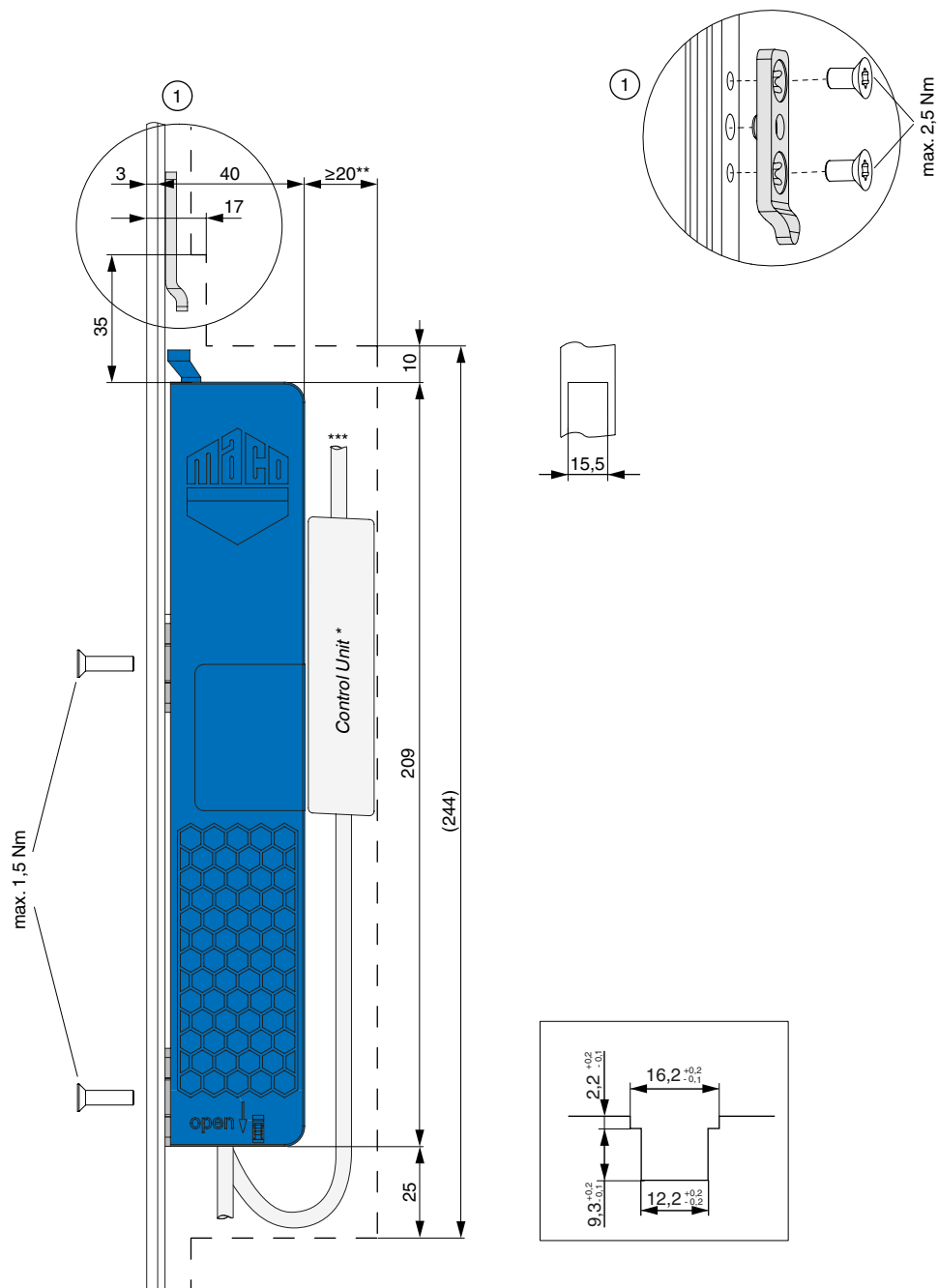
# openDoor Access Control Solutions

Routing pattern Keypad / Touchkey BT



# openDoor Access Control Solutions

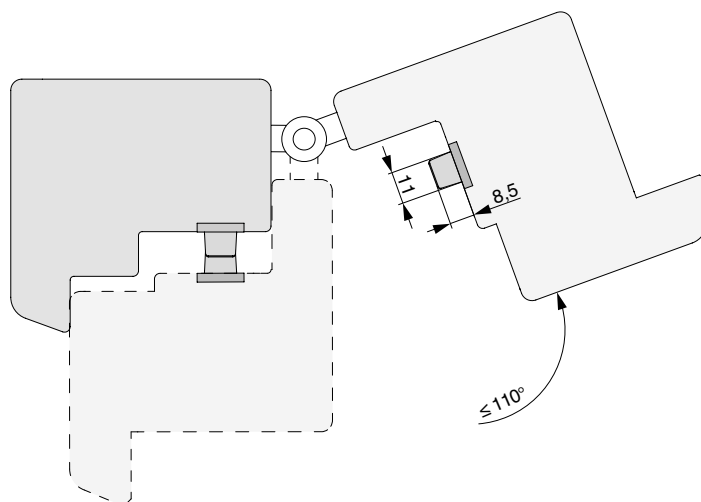
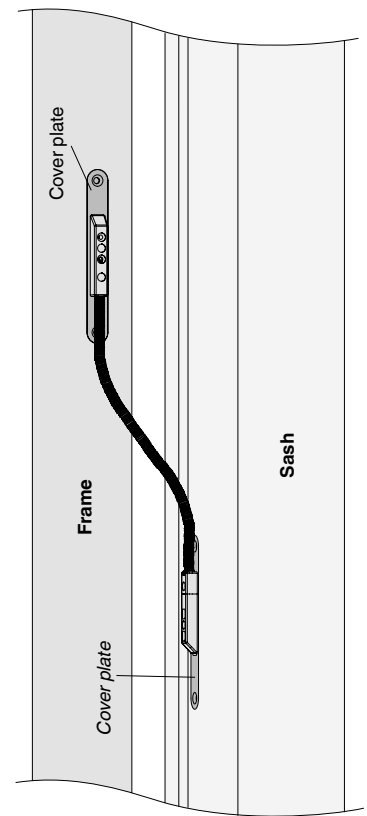
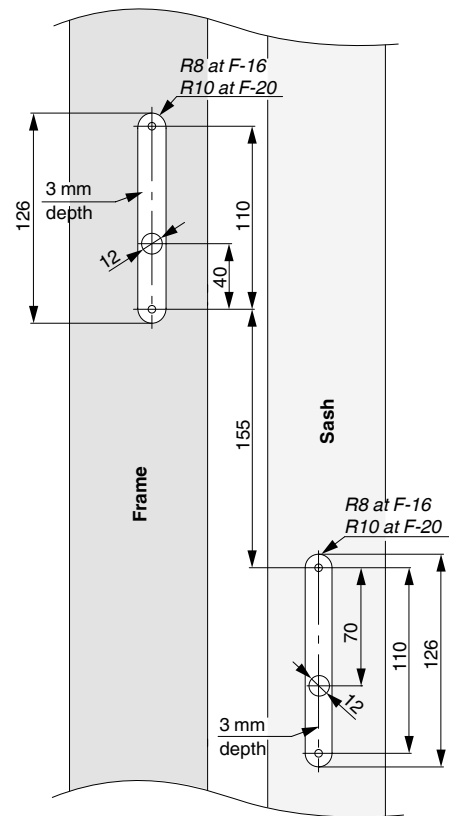
Routing pattern including assembly of connector plate and motor



\* Control unit for openDoor access control solutions, \*\* Cable channel for comfort solution, \*\*\* Cable for openDoor access control solutions

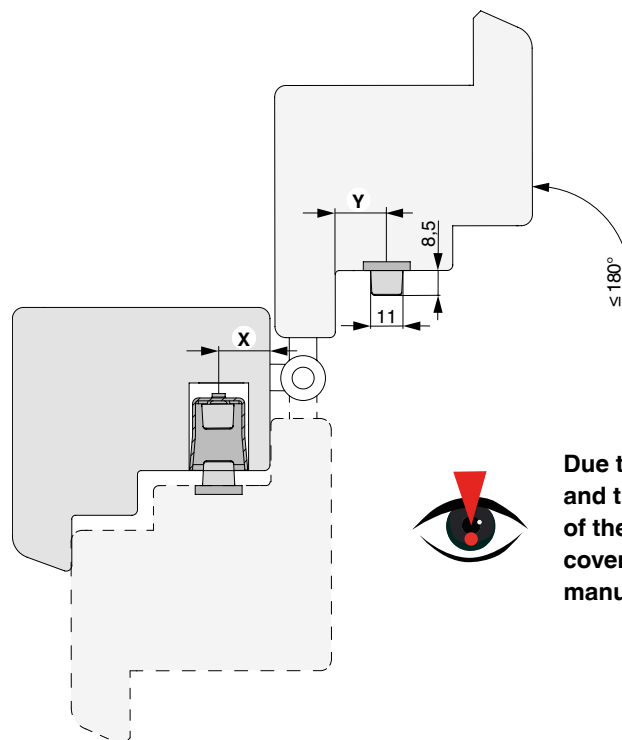
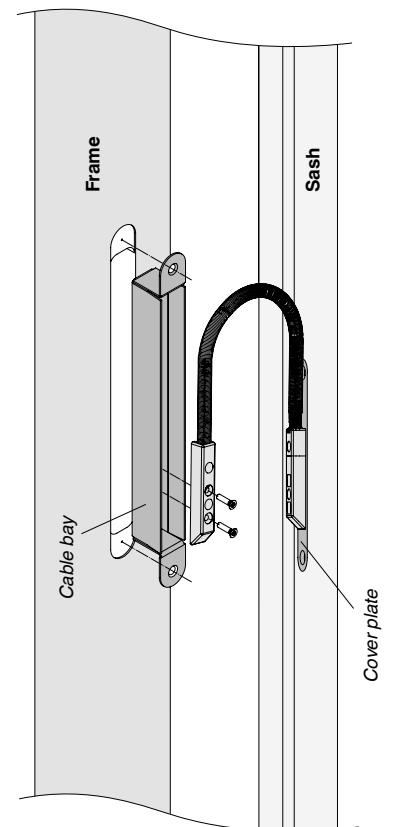
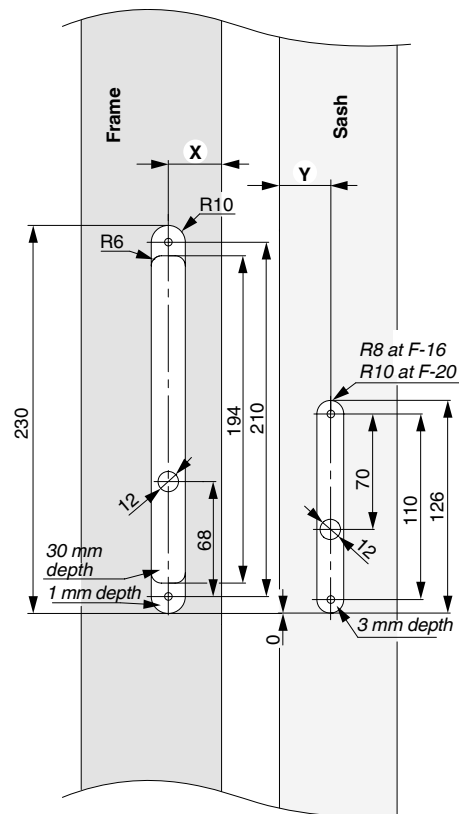
# openDoor Access Control Solutions

Cable transition for opening angle  $\leq 110^\circ$ , Timber 12 Air



## openDoor Access Control Solutions

Cable transition for opening angle  $\leq 180^\circ$ , Timber 4 Air, 12 Air



**Due to the different hinge variations and the resulting drive shafts, the position of the cable tray (dimension X) and the cover plate (dimension Y) must be manually calculated!**



## Notes

A large rectangular area filled with a fine grid pattern, intended for taking notes.



## Notes

A large rectangular area filled with a fine grid pattern, intended for taking notes.



## Notes

A large rectangular area filled with a fine grid pattern, intended for taking notes.

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