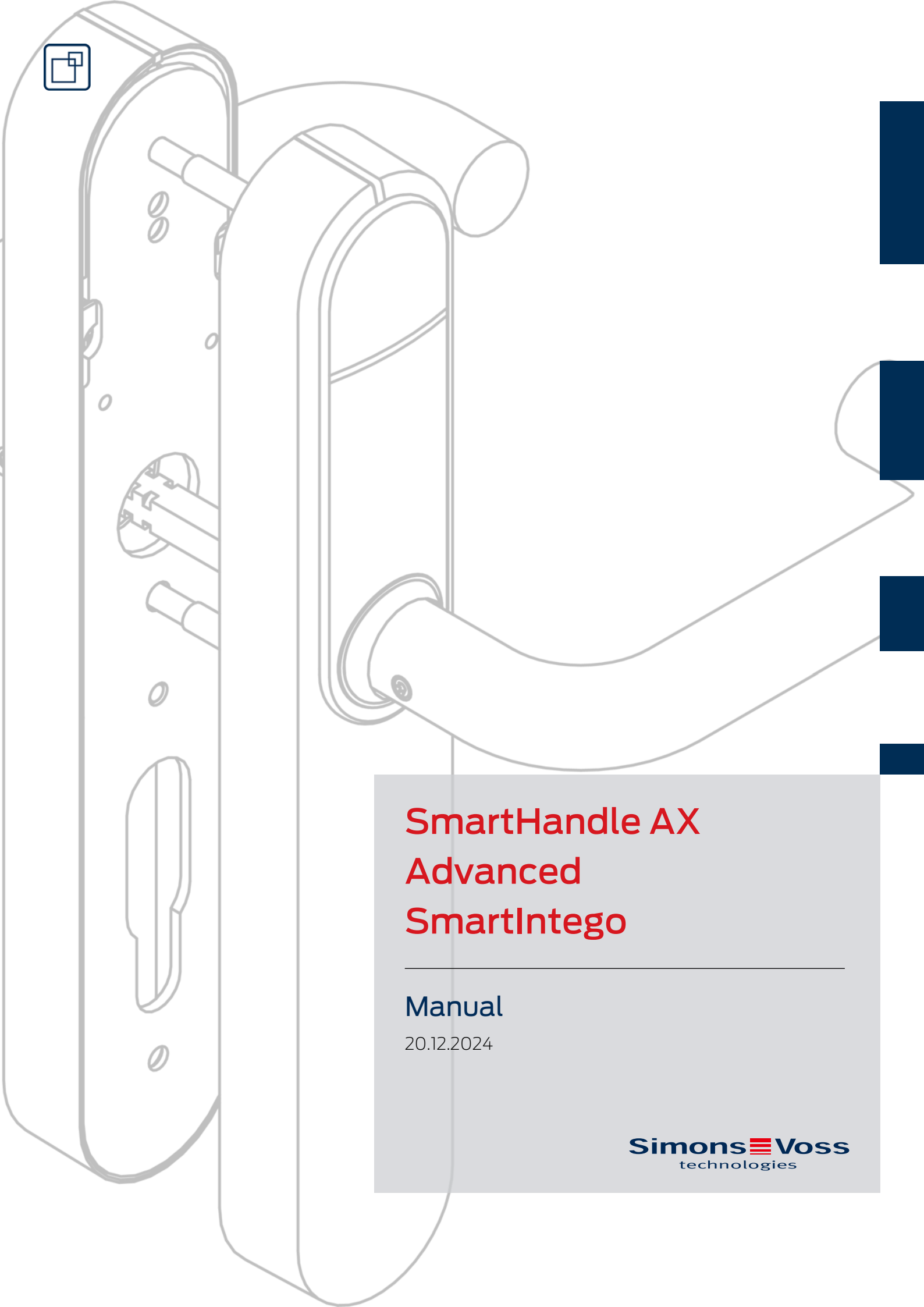

SmartHandle AX Advanced SmartIntego

Manual

20.12.2024

Simons Voss technologies

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1. Intended use

SI SmartHandle AX Advanced are electronic door fittings. The SI SmartHandle AX Advanced can engage and open the door in question when an authorised identification medium is held against it.

The corresponding authorisations need to be issued using an electronic locking plan.

SI SmartHandle AX Advanced may only be used for locking and unlocking doors. No other use is permitted.

2. 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

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

- Do not use SmartIntego 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.

Different times for G2 locks

The internal time unit of the G2 locks has a technical tolerance of up to ± 15 minutes per year.

- Regularly reprogram time-critical locking devices.

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.

3. Product-specific safety instructions

4. Meaning of the text formatting

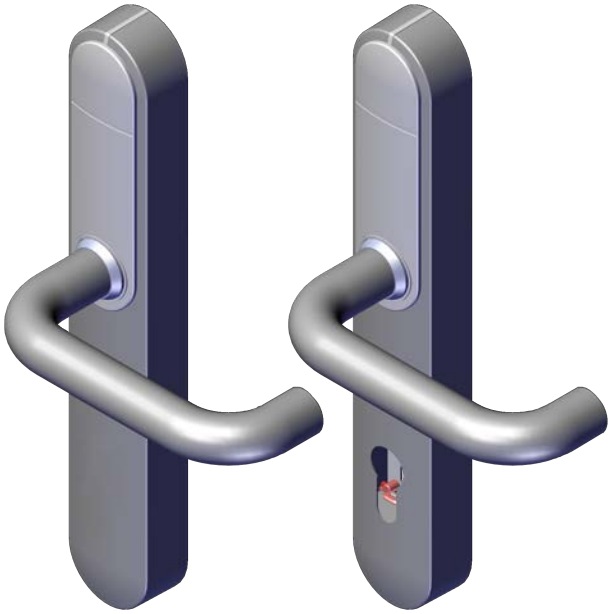
This documentation uses text formatting and design elements to facilitate understanding. The table explains the meaning of possible text formatting:

Example	button
☑ Example ☐ Example	checkbox
◉ Example	Option
[Example]	Tab
"Example"	Name of a displayed window
| Example |	Upper programme bar
Example	Entry in the expanded upper programme bar
Example	Context menu entry
▼ Example	Name of a drop-down menu
"Example"	Selection option in a drop-down menu
"Example"	Area
Example	Field
Example	Name of a (Windows) service
Example	Commands (e.g. Windows CMD commands)
`Example`	Database entry
[Example]	MobileKey type selection

5. Versions

5.1 Mechanical Override (MO)

You can install an additional locking cylinder (see *Profiles [▸ 12]*). This makes it possible to bypass the electronic door opening and to open the door with an alternative key (mechanical secondary locking device).



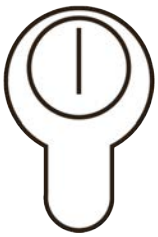
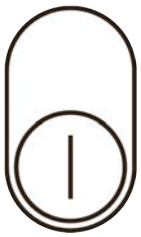
This allows you to set up a mechanical fire service locking system for rescue services, for example.

Order according to your aesthetic needs:

- Cut-out for the cylinder open on both sides
- Cut-out for the cylinder open on one side
- Cut-out for the cylinder concealed on both sides (completely concealed and invisible cylinder)

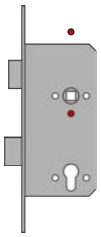
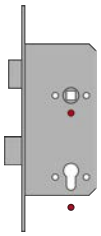
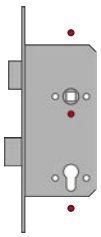
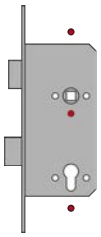
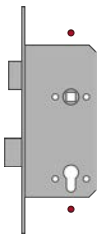
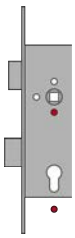
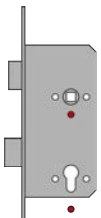
5.2 Profiles

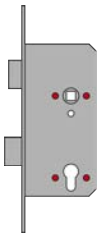
Choose from the following mortise lock profiles for your SI SmartHandle AX Advanced:

Euro profile cylinder	Swiss Round	Scandinavian Oval
		

5.3 Fastening

You can use the following mounting variants:

Fastening	Installation variants	Boreholes used	Description
Backplate mounting	*Long backplate [▸ 64]*		You fasten the SI SmartHandle AX Advanced to the adapter plate. This is screwed on the inner side through holes in the mortise lock and the door.
	Short backplate (KS) [▸ 64]		
Security fitting	*Security fitting (ES) [▸ 185]*		
Conventional installation	*Conventional installation SH3062/FR195 [▸ 289]*	 Centre hole is optional (recommended).	
	Conventional installation 105/145 [▸ 325]		
	Panic with narrow cover and backplate [▸ 219]		
	Panic with wide cover and backplate [▸ 253]		

Fastening	Installation variants	Boreholes used	Description
Installation of rosettes	*Escutcheon installation (RMO) [▸ 117]*		You fasten the SI SmartHandle AX Advanced to the adapter plate. This is only screwed to the inner side through holes in the mortise lock.
	Scandinavian Oval (SO) [▸ 95]		
Metal frame door installation	*Metal frame (RR) [▸ 31]*	Door is not completely drilled through.	You fasten the SI SmartHandle AX Advanced to the adapter plate. This is screwed to the metal frame doors using blind rivet nuts.
	Reader on both sides (DS) [▸ 149]		

5.4 Centres distances and door thicknesses

A* = Euro Profile, B* = Swiss Round, E* = Scandinavian Oval

Abbreviation	Versions	Distance	Door thickness
N1	Long backplate	Euro profile cylinders: ■ 70 mm ■ 72 mm ■ 75 mm ■ 78 mm ■ 85 mm ■ 88 mm ■ 90 mm ■ 92 mm Swiss mortise cylinder: ■ 74 mm ■ 78 mm ■ 92 mm ■ 94 mm	S: 39 - 61 mm M: 59 - 81 mm L: 79 - 101 mm X: 99 - 174 mm
	Short backplate (KS)	Euro profile cylinders: ■ 70 mm ■ 72 mm ■ 75 mm ■ 78 mm ■ 85 mm ■ 88 mm ■ 90 mm ■ 92 mm Swiss mortise cylinder: ■ 74 mm ■ 78 mm ■ 92 mm ■ 94 mm	S: 39 - 61 mm M: 59 - 81 mm L: 79 - 101 mm X: 99 - 174 mm

Abbreviation	Versions	Distance	Door thickness
M1	Security fitting (ES3)	Euro profile cylinders: - 72 mm - 92 mm	S: 39 - 55 mm
			M: 54 - 75 mm
			L: 74 - 95 mm
			X: 93 - 168 mm

Abbreviation	Versions	Distance	Door thickness
N2	Conventional installation (SH3062)	Euro profile cylinders: ■ 70 mm ■ 72 mm ■ 75 mm ■ 78 mm ■ 85 mm ■ 88 mm ■ 90 mm ■ 92 mm Swiss mortise cylinder: ■ 74 mm ■ 78 mm ■ 92 mm ■ 94 mm	S: 37 - 58 mm M: 57 - 78 mm L: 77 - 98 mm X: 97 - 171 mm
	Conventional mounting (French backplate)	Euro profile cylinders: ■ 70 mm ■ 72 mm ■ 75 mm ■ 78 mm ■ 85 mm ■ 88 mm ■ 90 mm ■ 92 mm Swiss mortise cylinder: ■ 74 mm ■ 78 mm ■ 92 mm ■ 94 mm	S: 37 - 58 mm M: 57 - 78 mm L: 77 - 98 mm X: 97 - 171 mm

Abbreviation	Versions	Distance	Door thickness
N3	Conventional mounting105-145	Euro profile cylinders: 72 mm 92 mm	S: 38 - 53 mm
			M: 51 - 73 mm
			L: 71 - 93 mm
			X: 91 - 176 mm

Abbreviation	Versions	Distance	Door thickness
A4	Panic with narrow cover and backplate	Euro profile cylinders: 72 mm 92 mm	S: 32 - 60 mm for: BKS, CISA
			M: 51 - 80 mm for: BKS, CISA
			L: 71 - 100 mm for: BKS, CISA
			X: 100 - 120 mm for: BKS
	Panic with narrow cover and oval rosette	Euro profile cylinders: 72 mm 92 mm	S: 32 - 60 mm for: BKS, CISA
			M: 51 - 80 mm for: BKS, CISA
			L: 71 - 100 mm for: BKS, CISA
			X: 100 - 120 mm for: BKS
	Panic with wide cover and backplate	Euro profile cylinders: 72 mm	S: 32 - 60 mm for: BKS
			M: 51 - 80 mm for: BKS
			L: 71 -

Abbreviation	Versions	Distance	Door thickness
L1	Installation of rosettes (RMO)	Euro profile cylinders: ■ 70 mm ■ 72 mm ■ 75 mm ■ 78 mm ■ 85 mm ■ 88 mm ■ 90 mm ■ 92 mm Swiss mortise cylinder: ■ 74 mm ■ 78 mm ■ 92 mm ■ 94 mm	S: 32 - 54 mm M: 52 - 74 mm L: 72 - 94 mm X: 92 - 184 mm
P1	Scandinavian Oval (SO)	Scandinavian oval cylinder ■ 105 mm	S: 32 - 54 mm M: 52 - 74 mm L: 72 - 94 mm X: 92 - 187 mm

Abbreviation	Versions	Distance	Door thickness
K1	Metal frame doors (RR)	Euro profile cylinders: ■ 72 mm ■ 88 mm ■ 92 mm Swiss mortise cylinder: ■ 94 mm	S: 38 - 60 mm
			M: 58 - 80 mm
			L: 78 - 100 mm
			X: 98 - 184 mm
	Reader on both sides (DS)	Euro profile cylinders: ■ 72 mm ■ 88 mm ■ 92 mm Swiss mortise cylinder: ■ 94 mm	S: 38 - 60 mm
			M: 58 - 80 mm
			L: 78 - 100 mm
			X: 98 - 184 mm

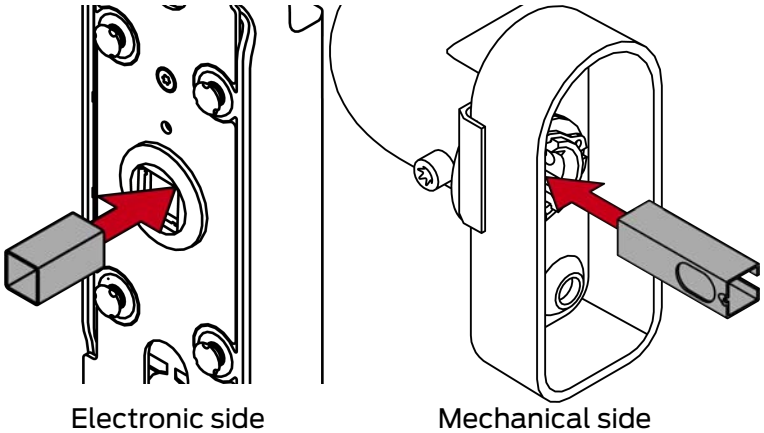
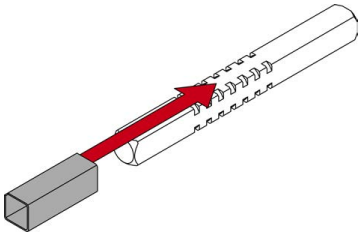
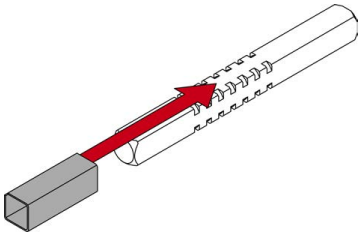
5.5 SmartHandle AX Advanced without electronics

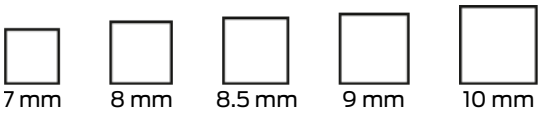
Also available SI SmartHandle AX Advanced without electronics (e.g. for design purposes). The spindle is then always full-length and the door can therefore be operated from both sides without an identification medium.

If you want to lock the door, you need a variant with a mechanical secondary locking device (*Mechanical Override (MO) [▸ 12]*). In this case, you may lock the door using an additional cylinder (see *Profiles [▸ 12]*).

5.6 Spindle socket in mortise lock

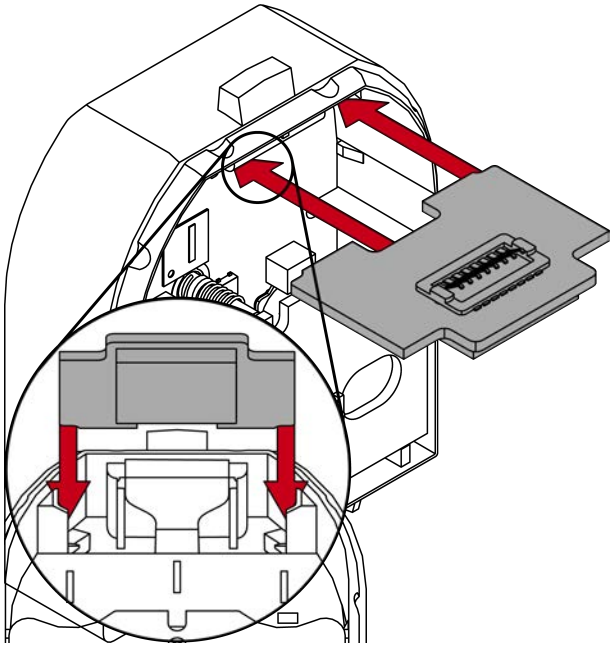
You receive the SI SmartHandle AX Advanced for the following spindle sockets:

Square size	
7 mm	With adapter sleeves in the spindle sockets:  Electronic side Mechanical side
8 mm	
8.5 mm	■ with an 8 mm push-on sleeve (not included in the scope of delivery) ■ which is available separately 
9 mm	Order the fire-resistant version of SI SmartHandle AX Advanced for fire doors and emergency exit locks.
10 mm	With the 8 mm push-on sleeve (already included in SI SmartHandle AX Advanced the scope of delivery for 10 mm version): 



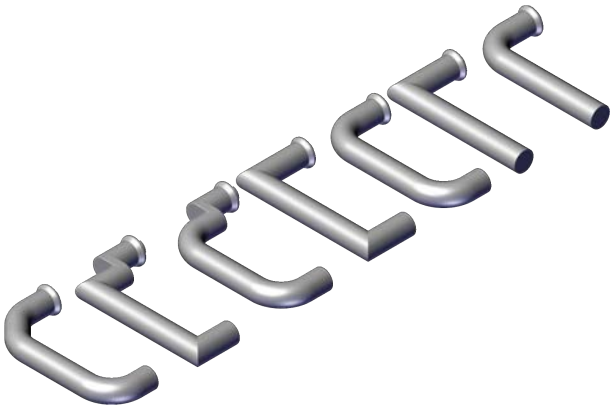
5.7 Network

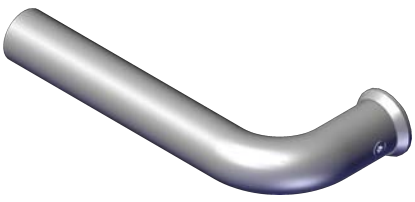
You can equip the SI SmartHandle AX Advanced with a network node at any time (see *LockNode [▸ 371]*). You do not need to replace any components. Instead, simply insert the network node card into the slot provided.

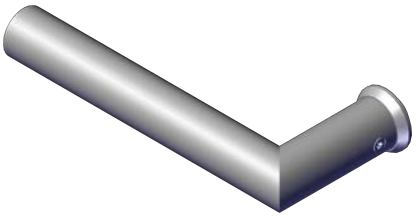
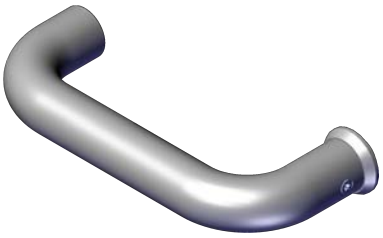
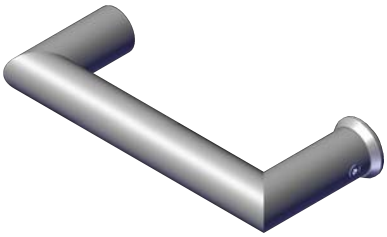
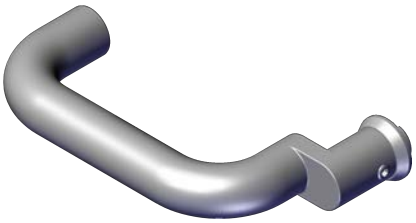
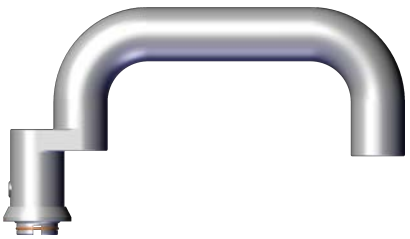
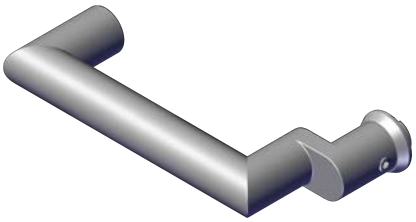


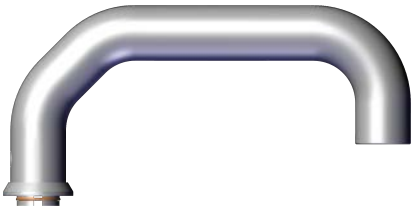
5.8 Handle variants

You can personalise your SI SmartHandle AX Advanced with the following handle variants:



Letter	Description	
A	L-shaped R (round, curved)	

Letter	Description	
□	L-shaped G (mitred) 	
C	U-shaped R (round curved) 	
D	U-shaped G (mitred) 	
E	U-shaped, rounded, offset 	
F	U-shape (rectangular and offset) 	

Letter	Description	
L	U-shape (rounded and angled at 45°)	
0	Delivery without handle (for use with adapter sets and third-party handles, see *Third-party handle adapter (FSB) [▸ 390]*)	

5.9 Surface finishes/colour

The SI SmartHandle AX Advanced is available in different finishes and colours. So it blends perfectly into its surroundings.

Silver/anthracite

Silver/deep black

Silver/white

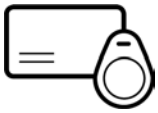
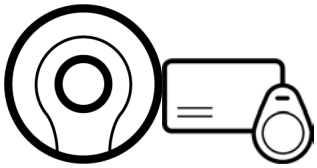
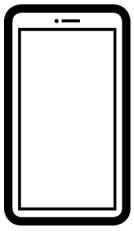
Brass/white

Brass/anthracite

Brass/deep black

5.10 Reader technology

Depending on the equipment, your SI SmartHandle AX Advanced supports the following scanning methods:

Active (25 kHz, e.g. transponder) - initial programming is also passively possible	
Passive (MIFARE – Classic, Plus, DESFire)	
Hybrid (active and passive in oneSI SmartHandle AX Advanced)	
BLE (Bluetooth low energy, e.g. AX2Go)	

Reader on both sides

The mechanical inner side can be replaced by an electronic fitting for the following variants:

- Metal frame doors (see *Reader on both sides (DS) [▸ 149]*)

- Scandinavian Oval (SO) *Double-sided reading for Scandinavian Oval (SO-DS) [▸ 358]*

NOTE

Active and hybrid technology but with reduced range

Active transponder technology offers a significantly greater range. During normal operation, both are reached SI SmartHandle AX Advanced at the same time and communication errors can occur.

- In the AXM/LSM, activate the SI SmartHandle AX Advanced checkbox for a reduced range for both sides.

Permanently engaged

Alternatively, you can receive the SI SmartHandle AX Advanced without electronics. This variant is then permanently engaged and is suitable, for example, if a mechanical handle is to be replaced by SI SmartHandle AX Advanced for design reasons.

6. Installation

6.1 Metal frame (RR)

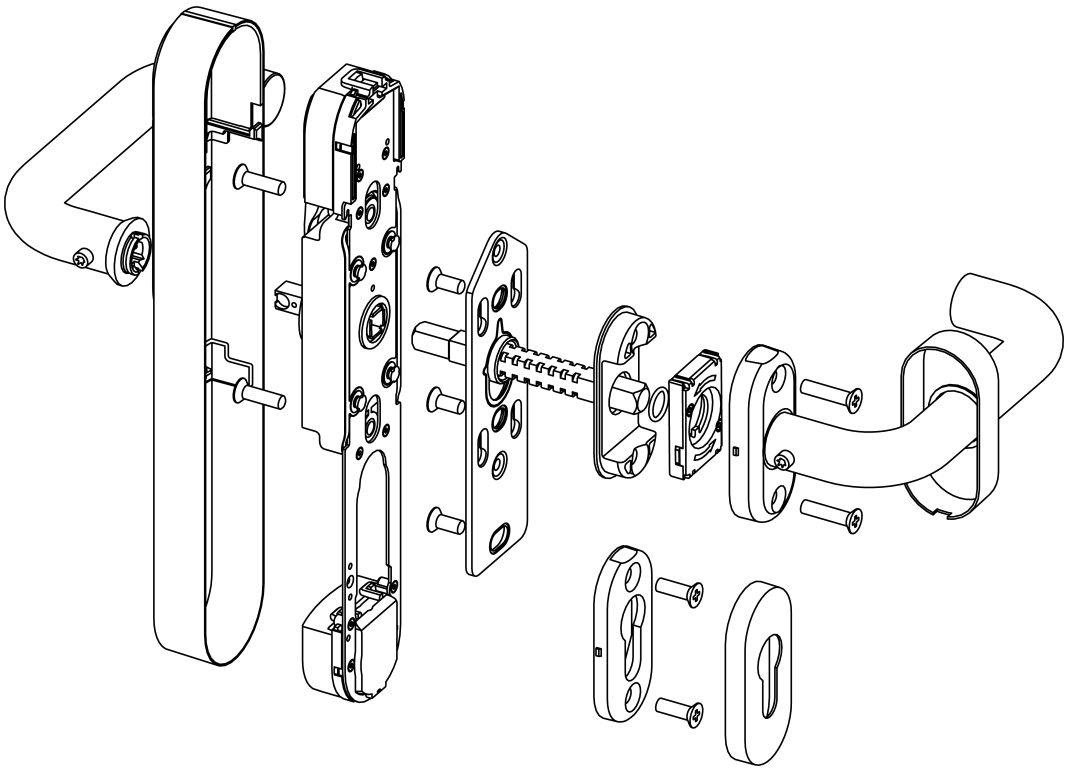
6.1.1 Scope of delivery

- SI SmartHandle AX Advanced for metal frame
- Special tool
- Quick guide

Depending on version:

- Adapter sleeve, 8.5 mm spindle
- Adapter sleeve, 10 mm spindle

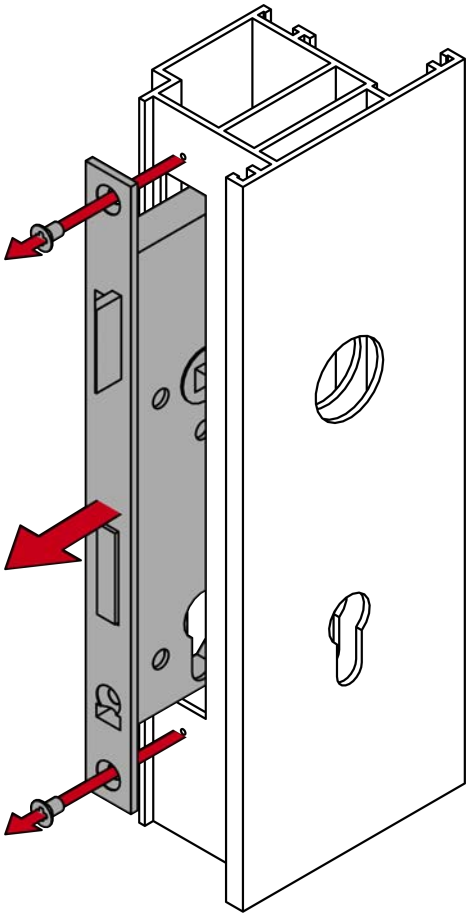
6.1.2 Structure



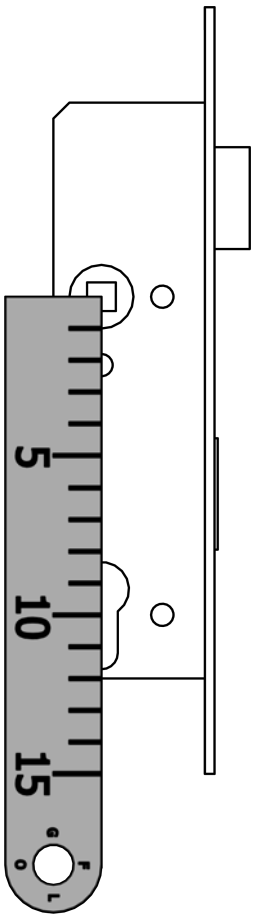
6.1.3 Prepare door (drilling template)

- ✓ Pin or scriber at hand.
- ✓ Drill at hand.
- ✓ Suitable drill bit at hand (Ø 7 mm).
- ✓ Countersink at hand.
- ✓ Ruler at hand.
- ✓ PH2 screwdriver at hand.

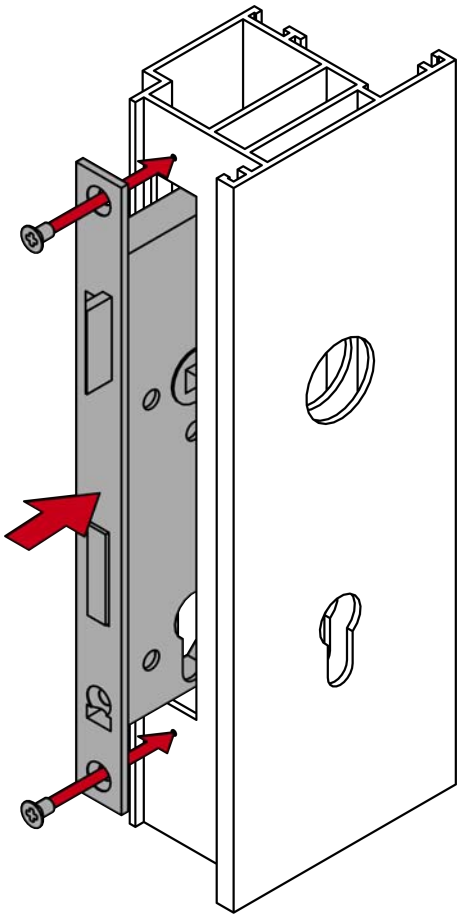
1. Remove the mortise lock.



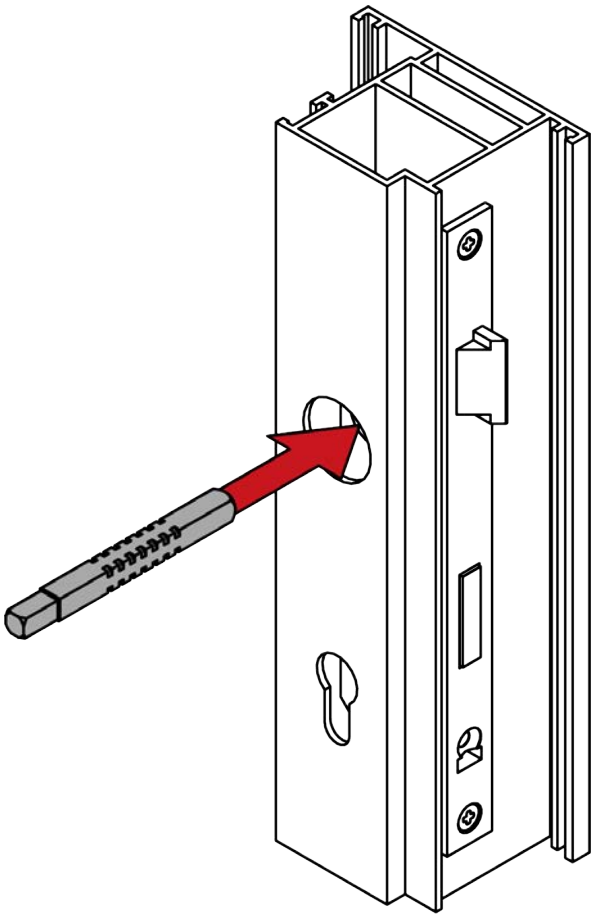
2. Measure the distance (gap between the spindle and cylinder axes of rotation).



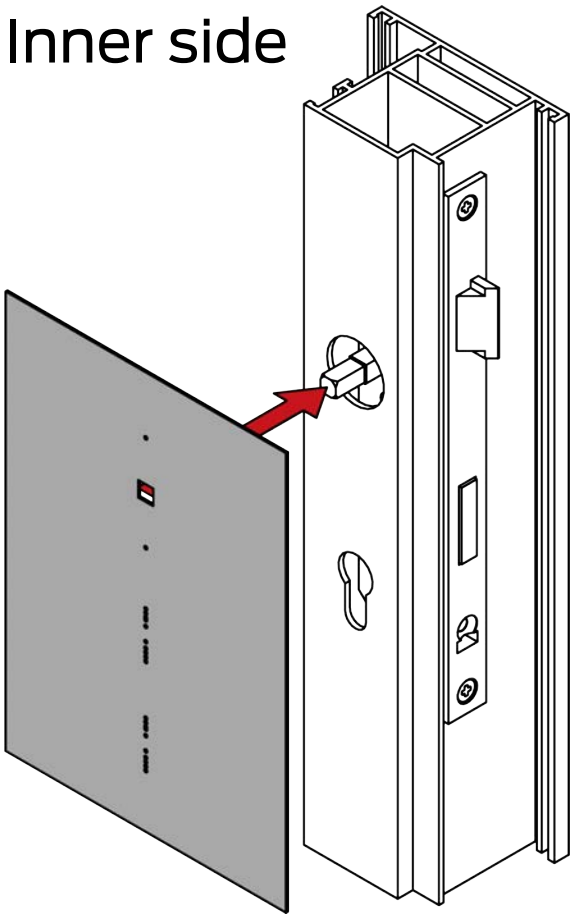
3. Fit the mortise lock.



4. Insert the spindle into the mortise lock.

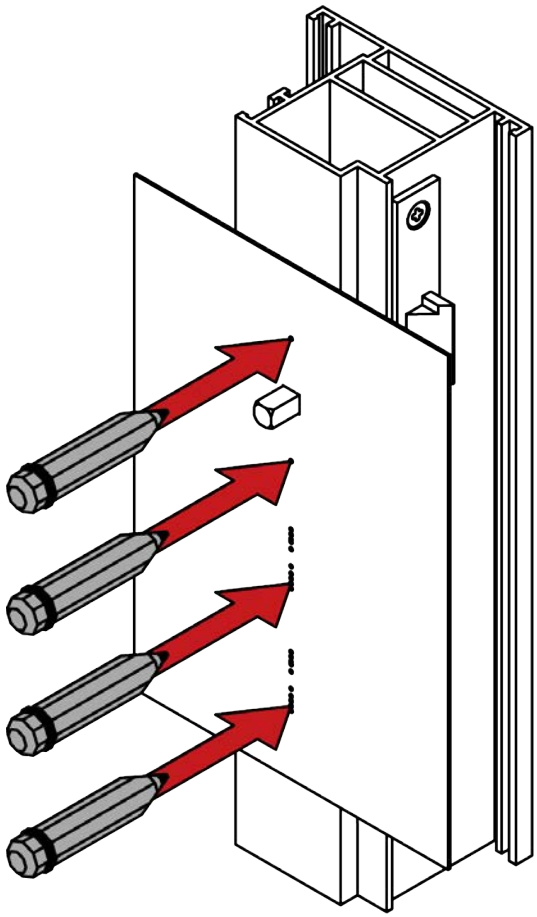


5. Place the drilling template on the spindle from the inner side.

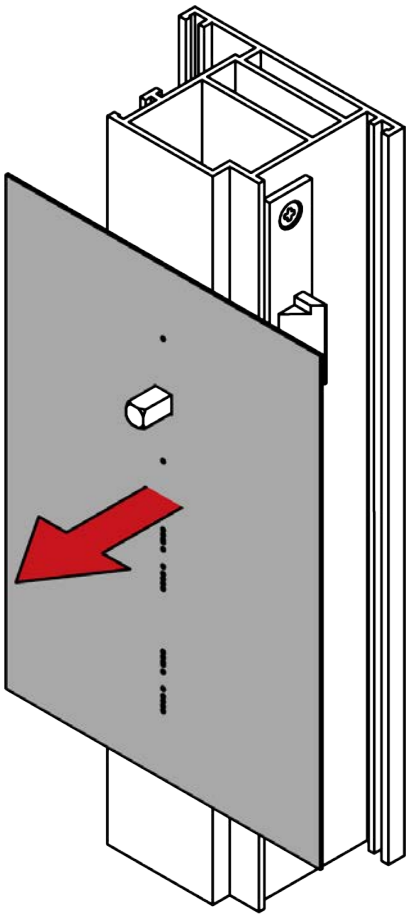


6. Align the drill template vertically using the printed scale.

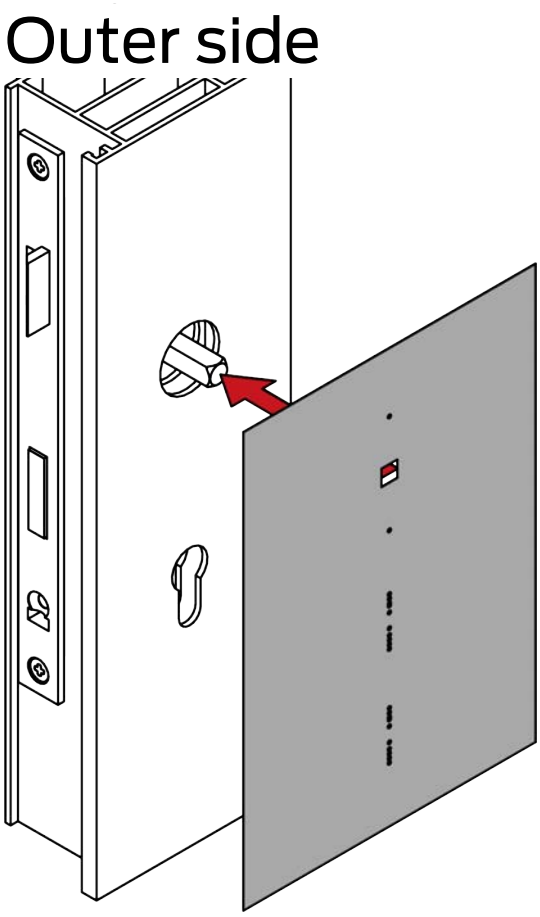
7. Mark the points to be drilled on the inner side of the door.



8. Remove the drilling template.

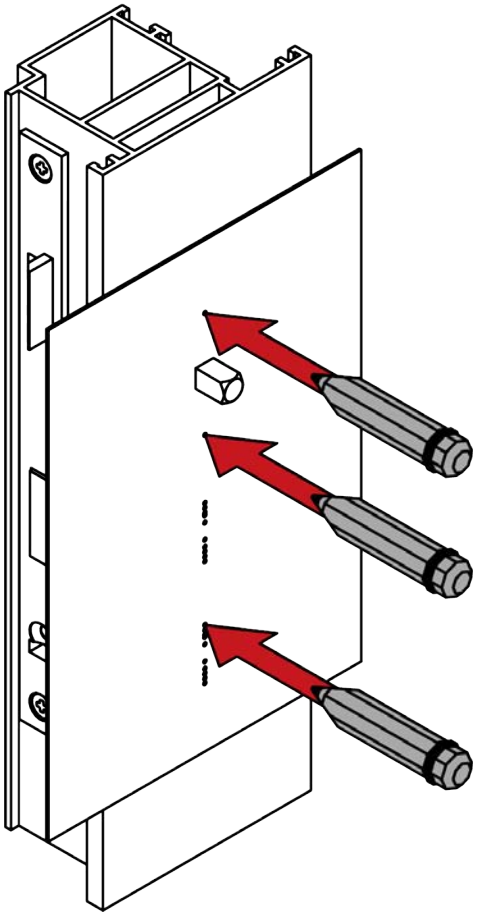


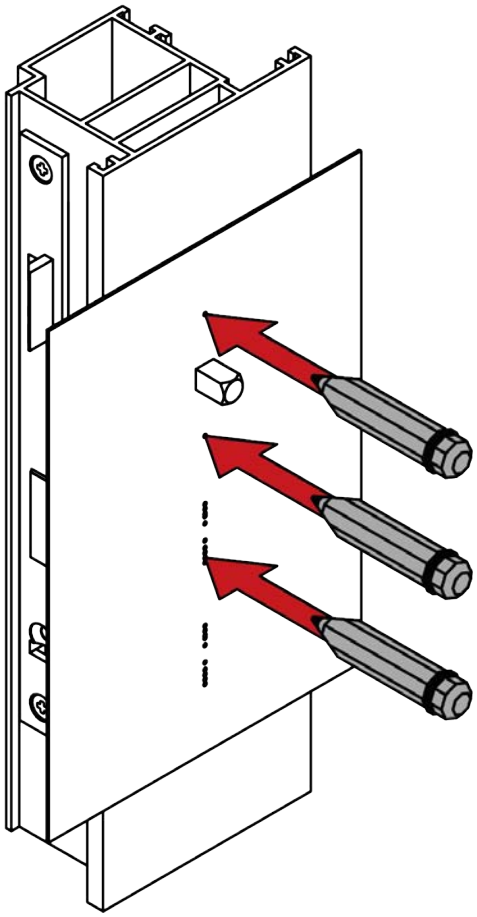
9. Place the drilling template onto the square from the outside.



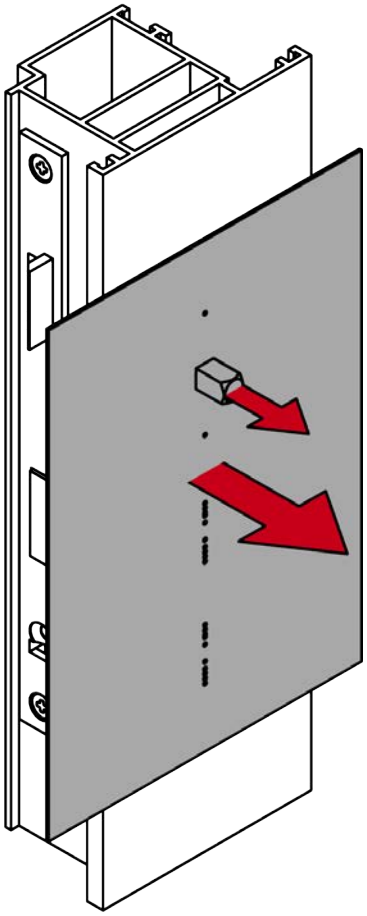
10. Align the drill template vertically using the printed scale.

11. Mark the points where the door is to be drilled on the door.

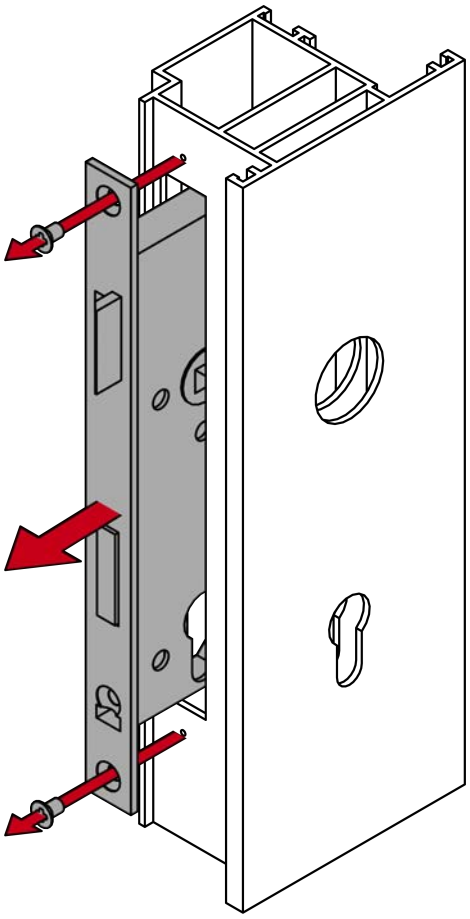




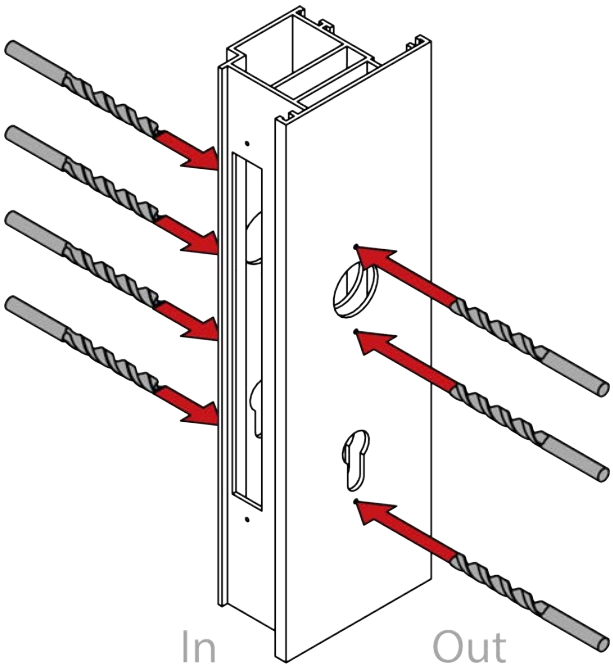
12. Remove the drilling template and spindle.

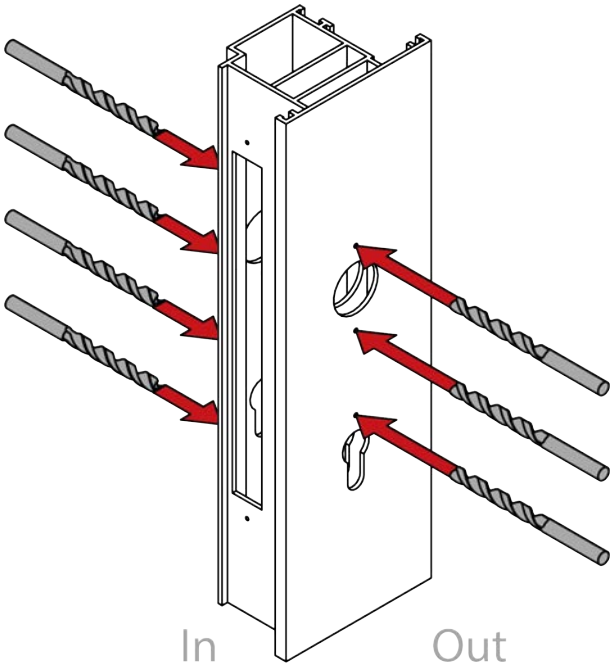


13. Remove the mortise lock.

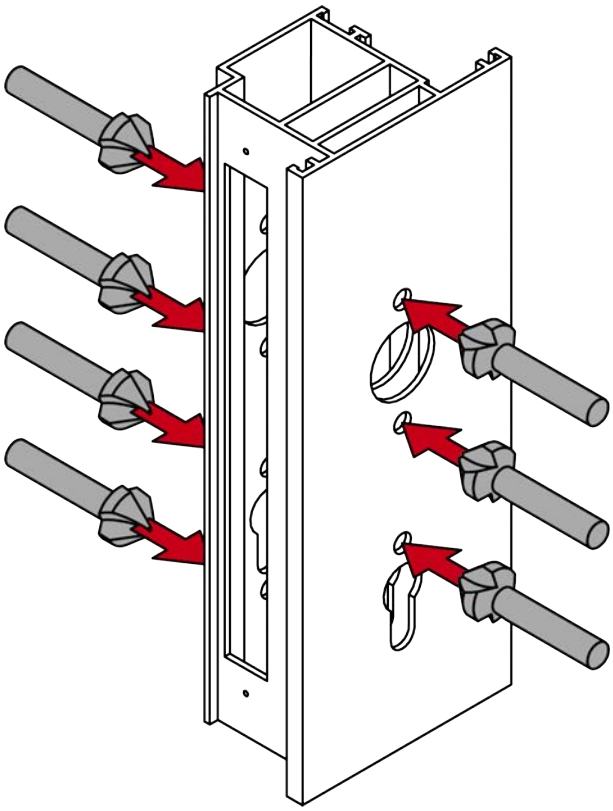


14. Drill the required holes.

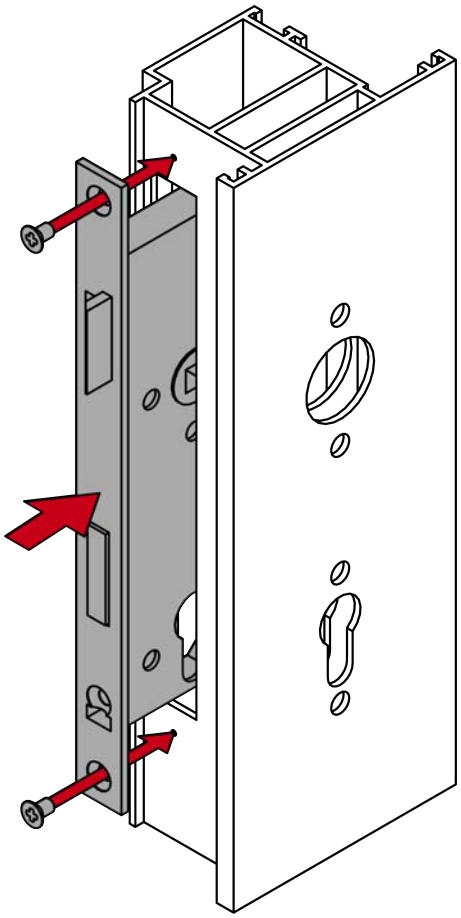




15. Deburr drilled holes with a countersink.



16. Fit the mortise lock.

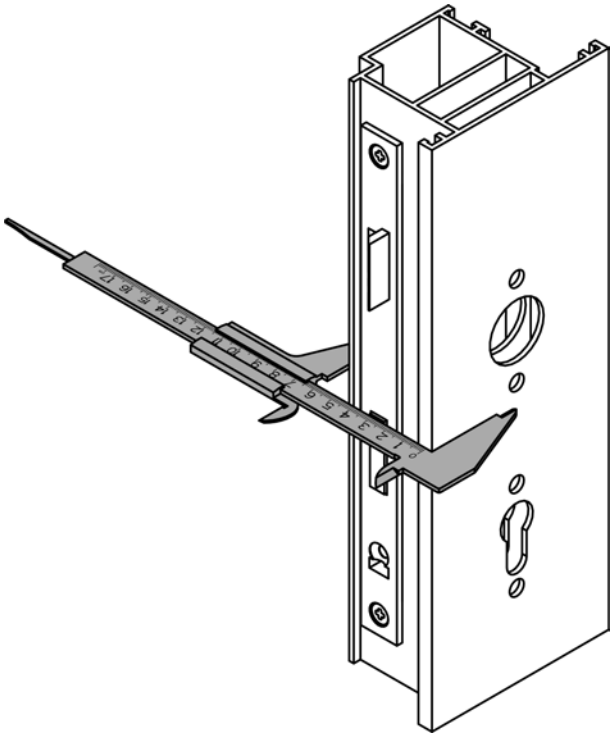


6.1.4 For door thickness X: prepare the spindle

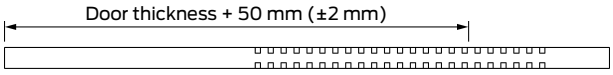
✓ Saw at hand.

✓ Caliper gauge at hand.

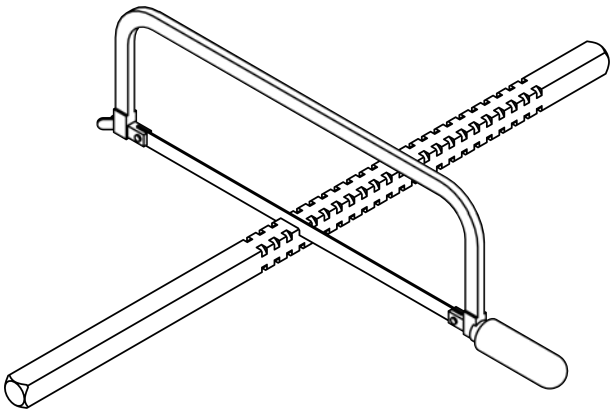
1. Measure the door thickness.



2. For X: mark the sawing point on the spindle.



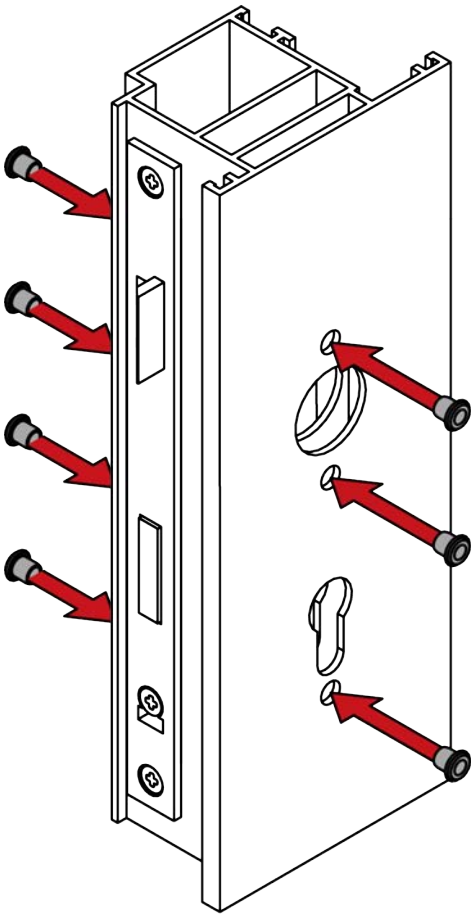
3. For X: Trim the spindle with a suitable saw.

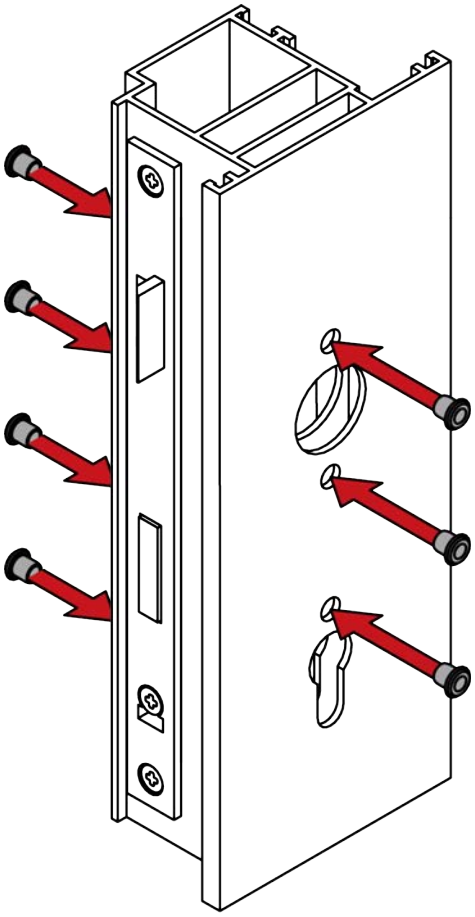


6.1.5 Installing the fitting

- ✓ Door pre-drilled.
- ✓ Blind rivet nut pliers at hand.
- ✓ PH2 screwdriver at hand.
- ✓ TX15 screwdriver at hand.
- ✓ Caliper gauge at hand.

1. Fit the blind rivet nuts into the pre-drilled holes.





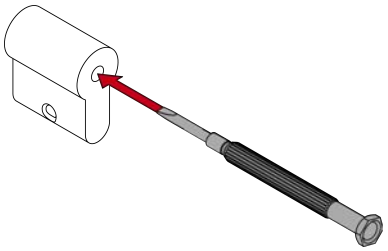
2. For non-MO: insert the blank cylinder.

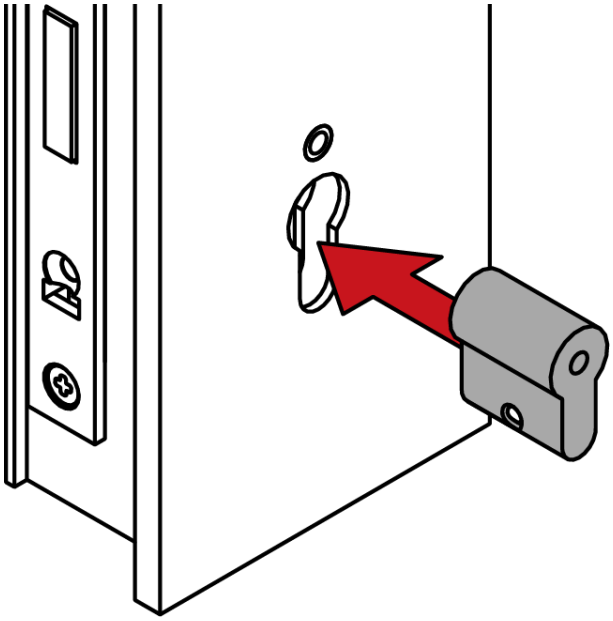
NOTE

Feed the blank cylinder into the hole using a screwdriver

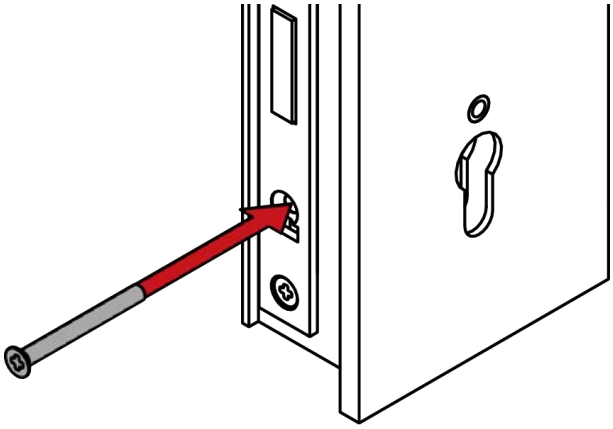
It is difficult to position the blank cylinder correctly, especially in thick doors.

1. Insert a screwdriver into the hole in the blank cylinder.
2. Position the blank cylinder using the screwdriver.

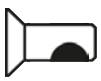


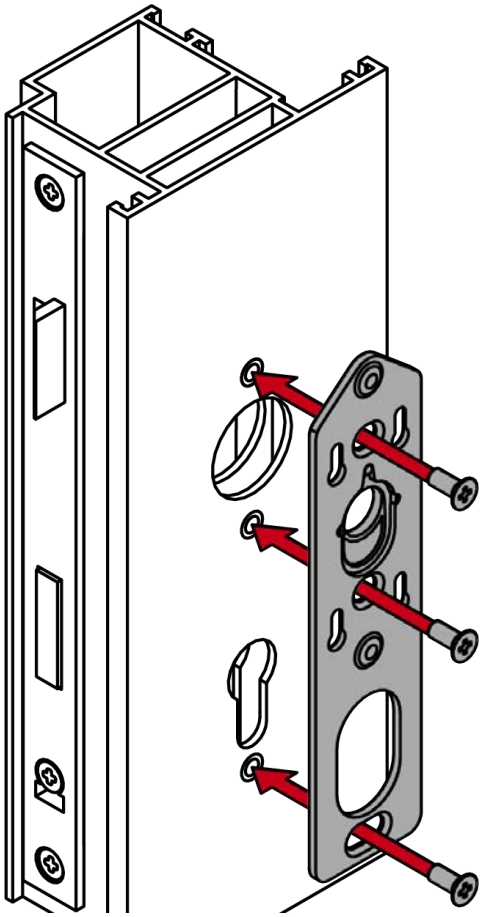


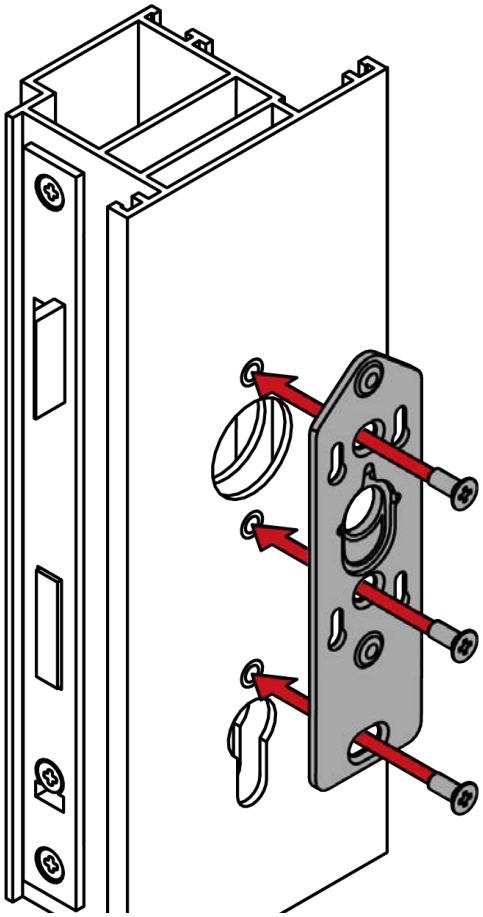
3. For non-MO: screw the blank cylinder firmly into position.



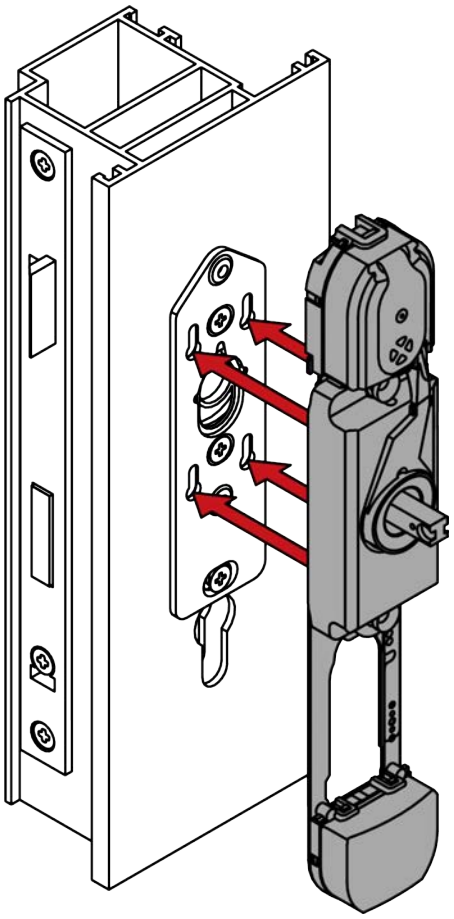
4. Use the 12 mm screws to fix the fastening plate onto the outer side of the door (PH2) with the tip facing upwards.

M5×12 

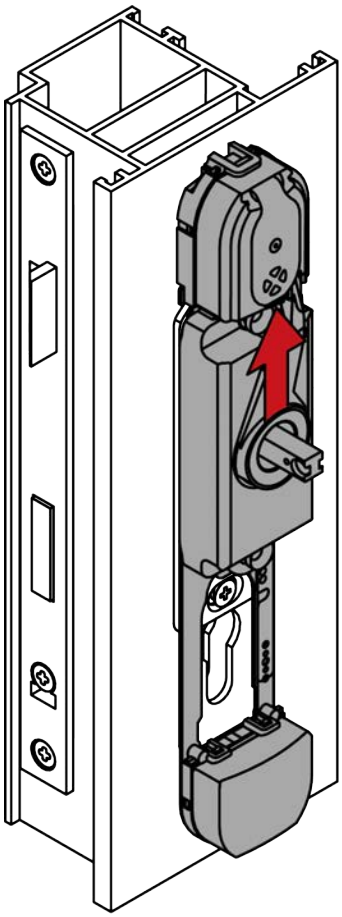




5. Insert the module support into the fastening plate.

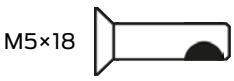


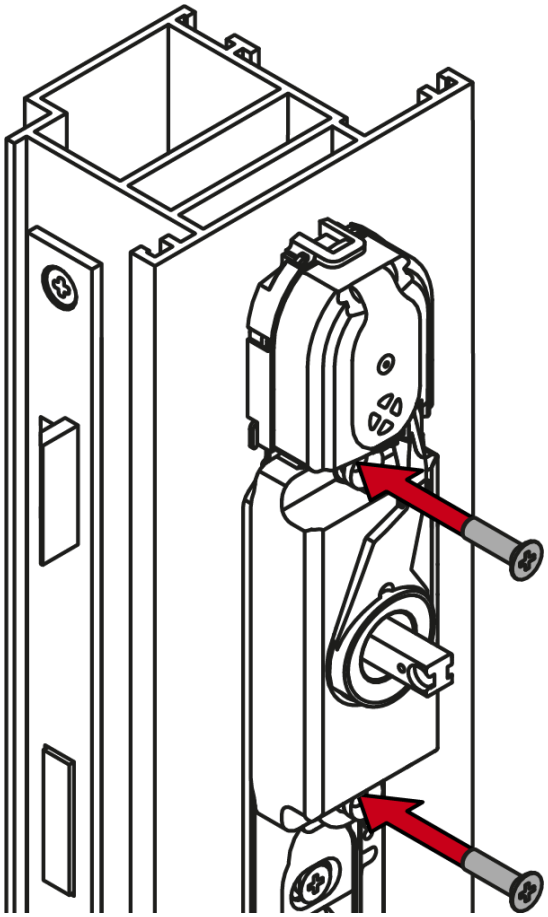
6. Slide the module support upwards.



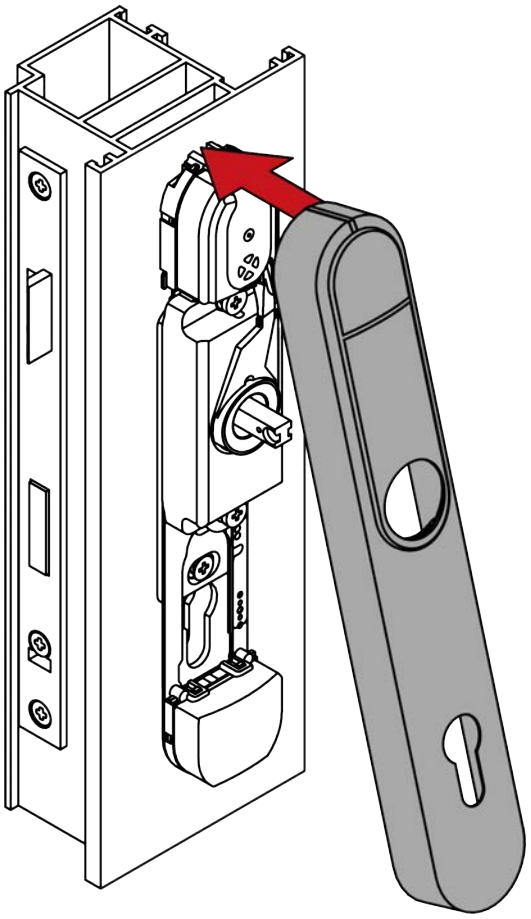
↳ Module support snaps into place.

7. Use the 18 mm screws to fix the module support onto the fastening plate (PH2).

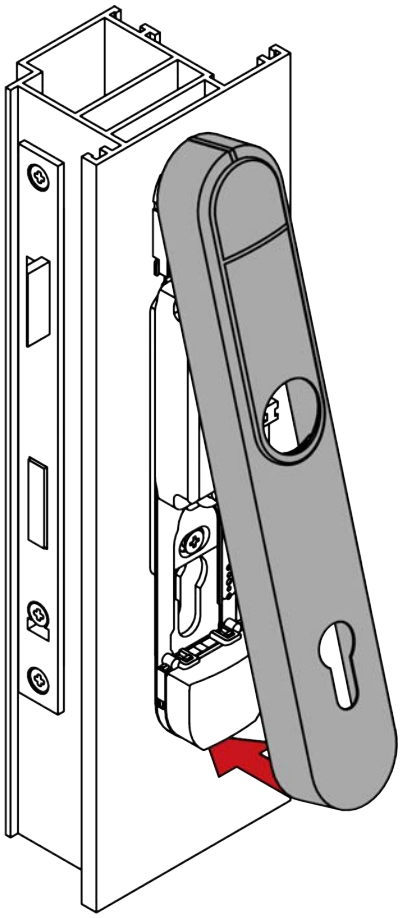




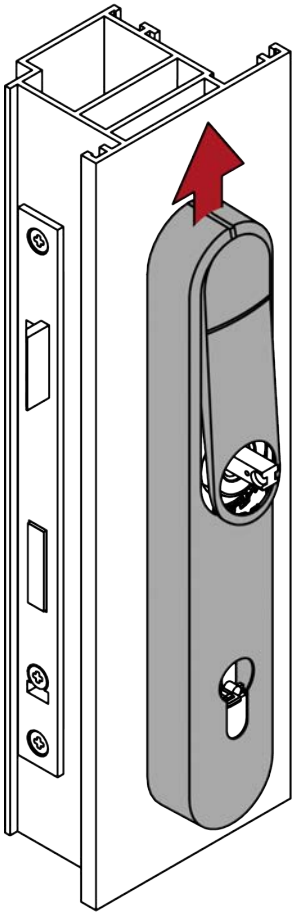
8. Place the cover on top of the fastening plate.



9. Fold down the cover.

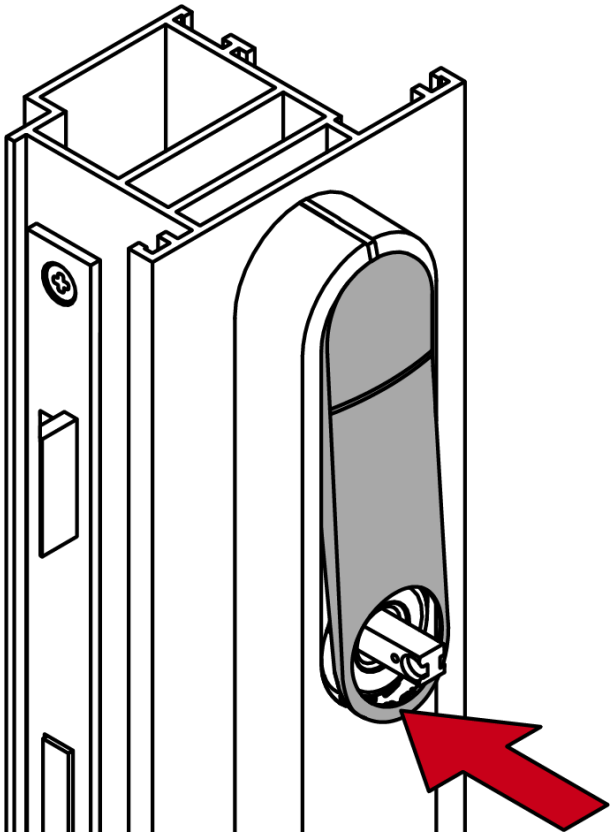


10. Push the cover against the door, sliding it upwards at the same time.

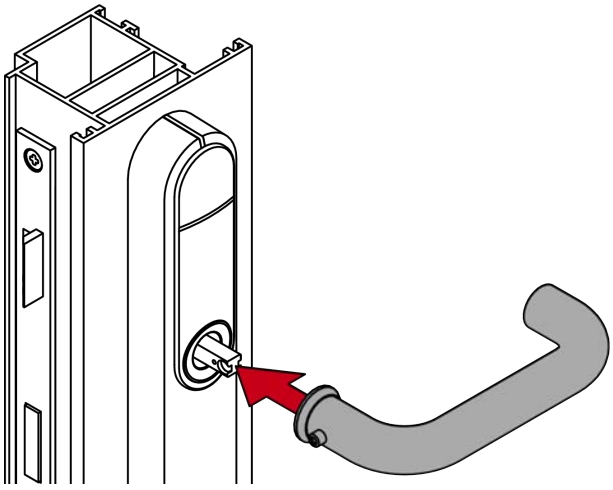


↳ Cover snaps into place.

11. Press the inlay into place.

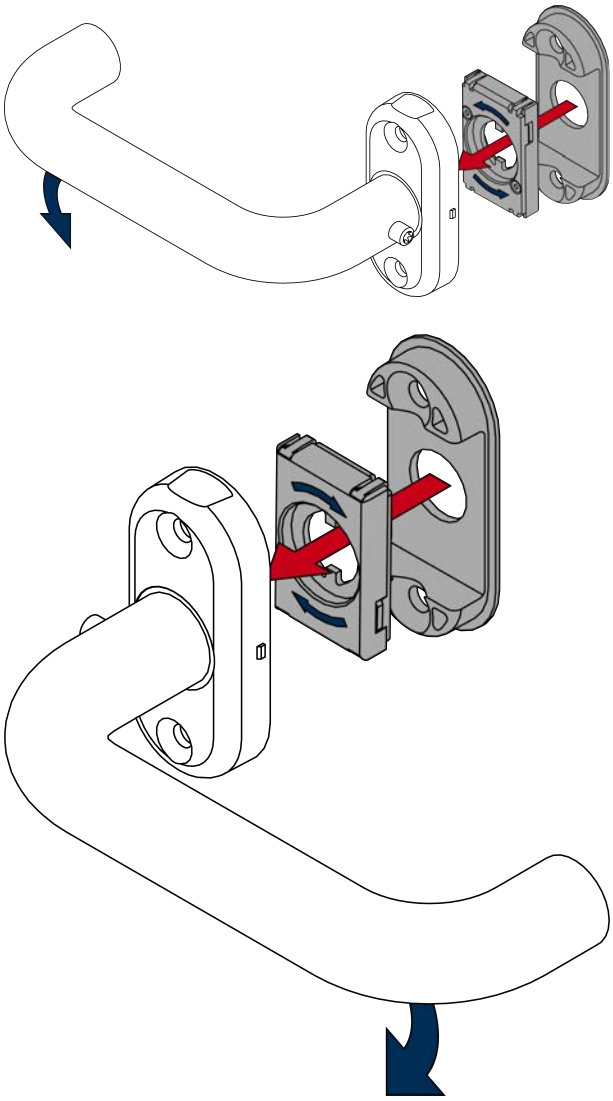


12. Fit the outside handle.

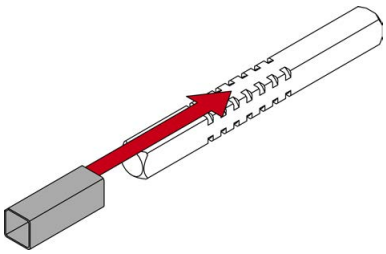


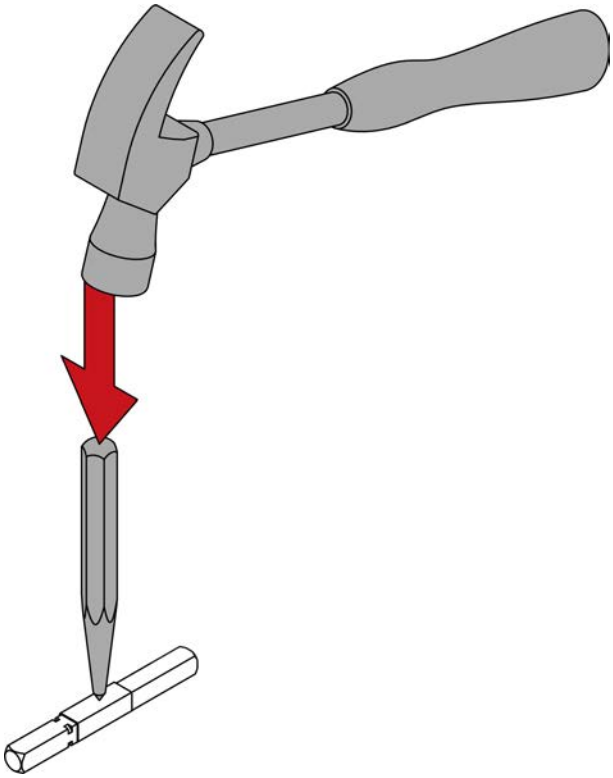
13. Determine the required direction of rotation for your inside handle.
14. Insert the spring element appropriately.

15. Place the underlay in the inside handle unit.

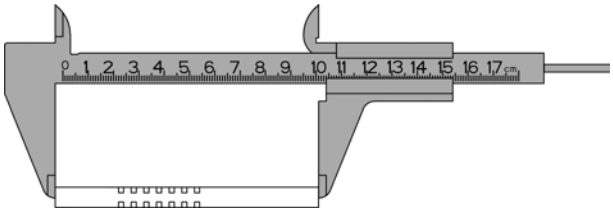


16. For 8.5 mm and 10 mm spindle: slide the adapter sleeve into the centre of the spindle. Use a punch and hammer to make an indent in the adapter sleeve to prevent it from slipping.

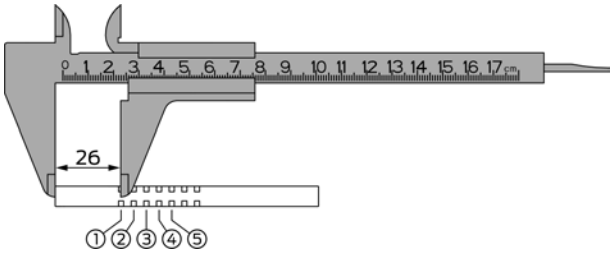




17. Measure the total length of the spindle.

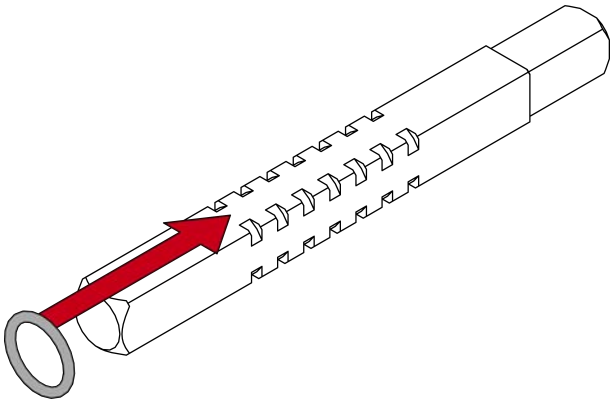


18. Locate the inside of the spindle (four-edge end up to the centre of the first groove = 26 mm).
19. Use the table to determine the position of the O-ring.

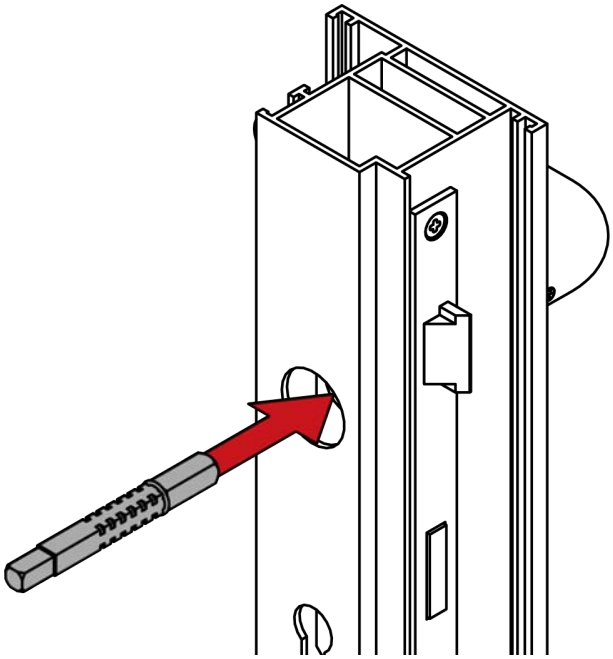


Area	Door thickness (mm)	Spindle length (mm)	Ring position
S	38 – <42	94	3
S	38 – <42	104	5
S	42 – <47	94	2
S	42 – <47	104	4
S	47 – <52	94	1
S	47 – <52	104	3
S	52 – <57	104	2
S	57 – 60	104	1
M	58 – <62	114	3
M	58 – <62	124	5
M	62 – <67	114	2
M	62 – <67	124	4
M	67 – <72	114	1
M	67 – <72	124	3
M	72 – <77	124	2
M	77 – 80	124	1
L	78 – <82	134	3
L	78 – <82	144	5
L	82 – <87	134	2
L	82 – <87	144	4
L	87 – <92	134	1
L	87 – <92	144	3
L	92 – <97	144	2
L	97 – 100	144	1
XL	98 – 184	O-ring is 30–35 mm from the cut end of the spindle.	

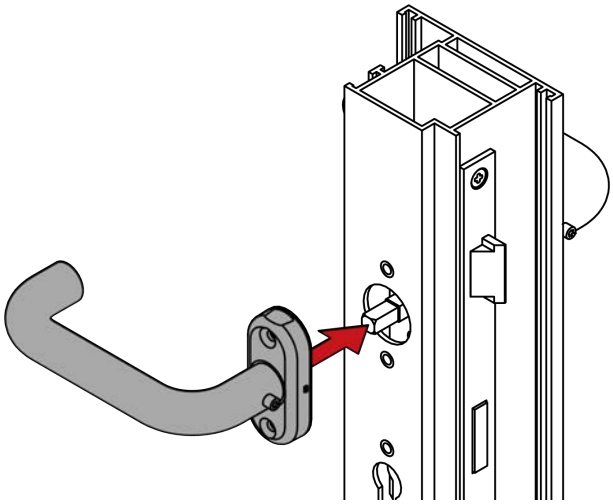
20.Slide the O-ring onto the calculated groove.



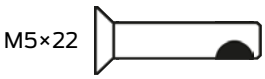
21. Insert the spindle into the door with the ring-free side as far as it will go.

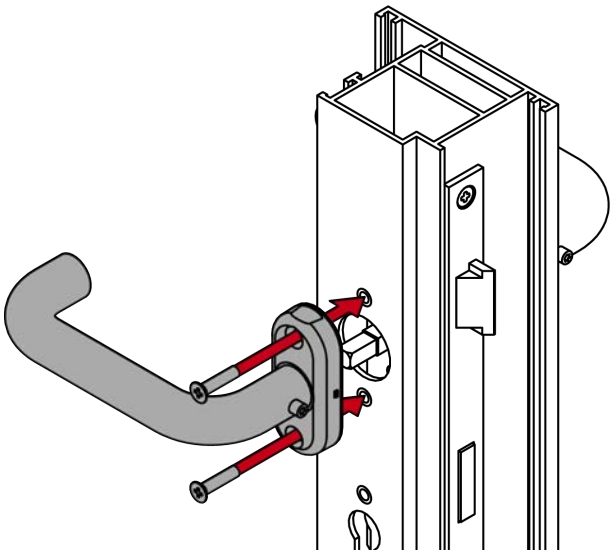


22. Place the inside handle unit on the spindle.

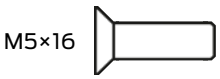


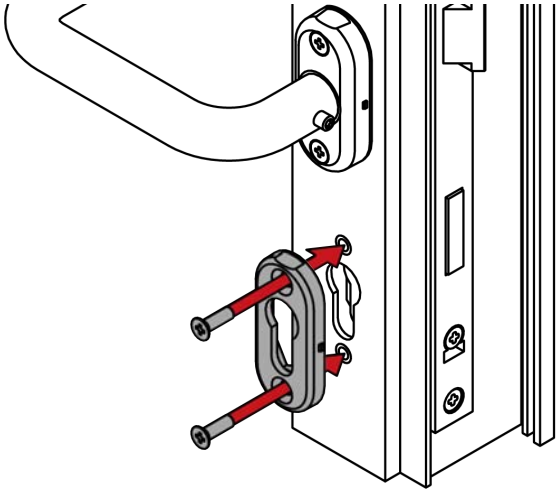
23. Use the 22 mm screws to fasten the inside handle unit onto the inner side of the door (PH2).



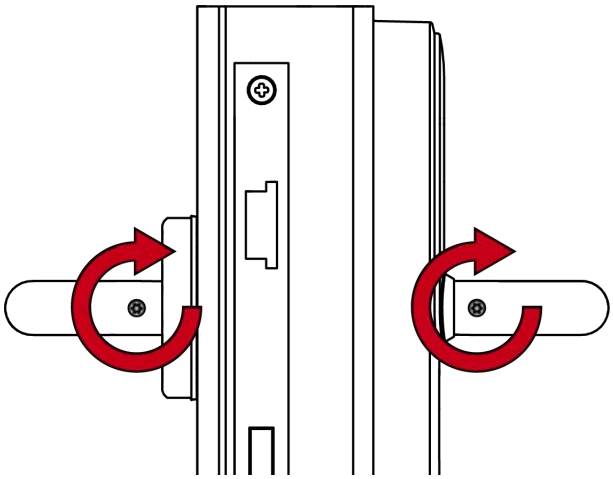


24. Use the 16 mm screws to fasten the cylinder rosette on the inner side of the door (PH2).

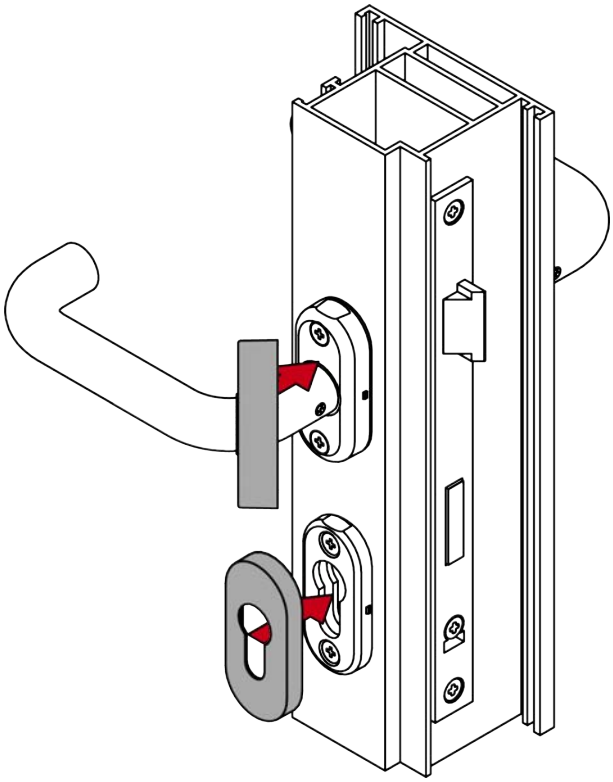




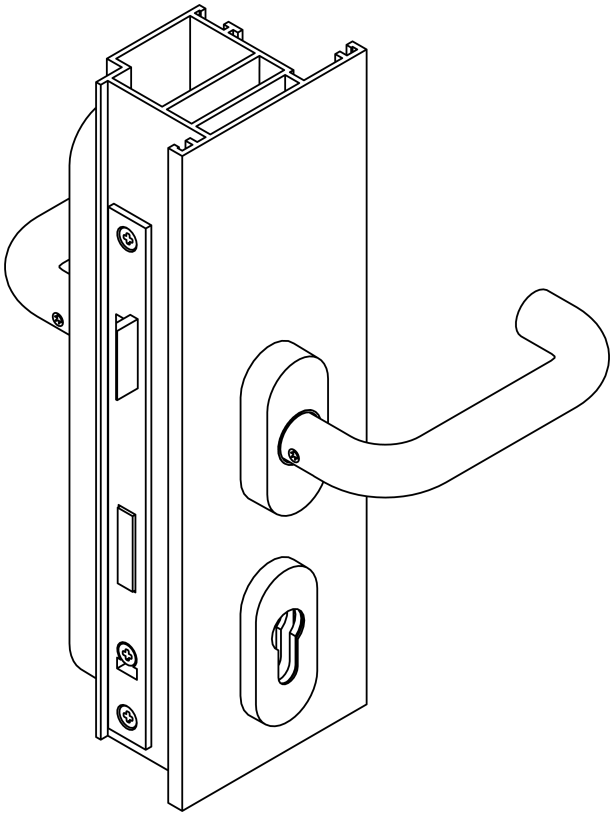
25. Use the grub screws to tighten both handles (TX15).



26. Place the cylinder plate and the inside handle cover onto the escutcheons.



↳ SI SmartHandle AX Advanced fully installed.



6.2 Long backplate and short backplate (LS+KS)

6.2.1 Product-specific safety instructions

IMPORTANT

Difficult installation due to threaded sleeves being pressed out

The threaded sleeves in the fitting are installed using a press fit. If you apply excessive pressure when screwing the fitting onto the fixing plate, this can lead to the threaded sleeves slipping out of the fitting.

1. Do not press on the screws when fastening the module support into place.
2. Place a finger on the ends of the threaded sleeves to hold them in place while screwing.

6.2.2 Scope of delivery

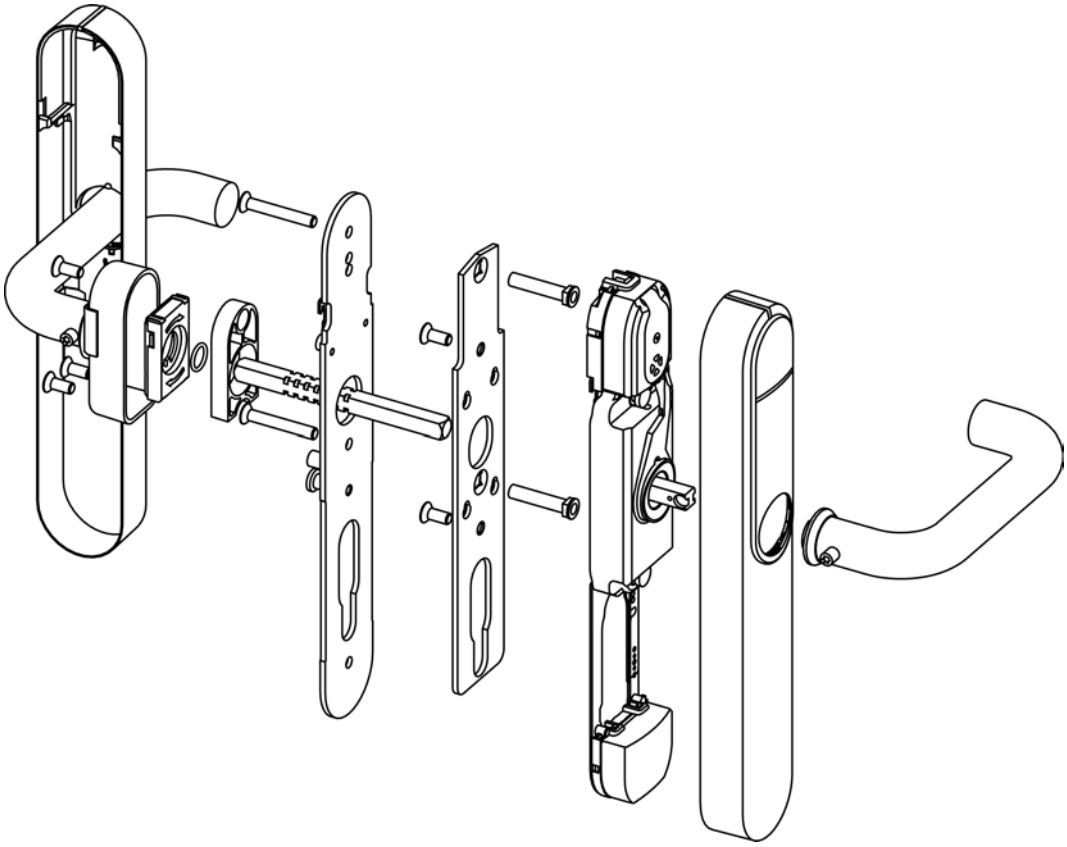
- SI SmartHandle AX Advanced Long backplate/short backplate
- Special tool
- Quick guide

Depending on version:

- Adapter set, 7 mm spindle

- Adapter sleeve, 8.5 mm spindle
- Adapter sleeve, 10 mm spindle

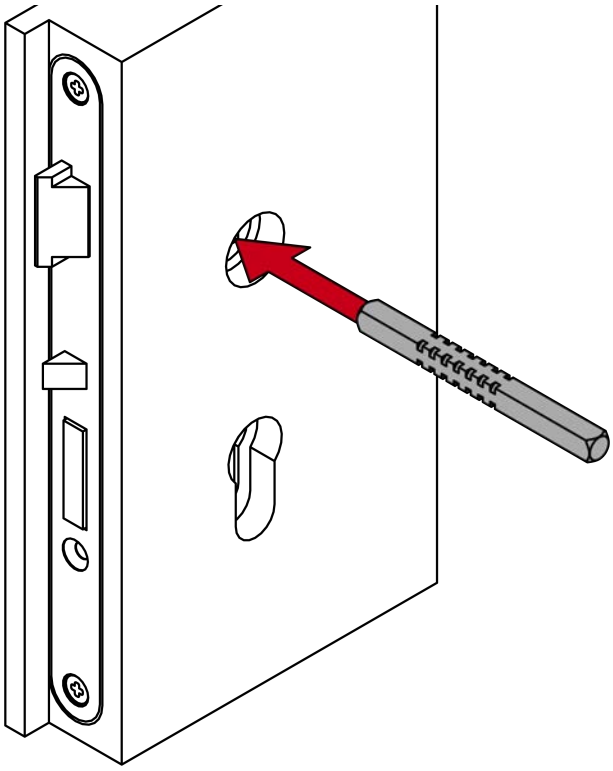
6.2.3 Structure



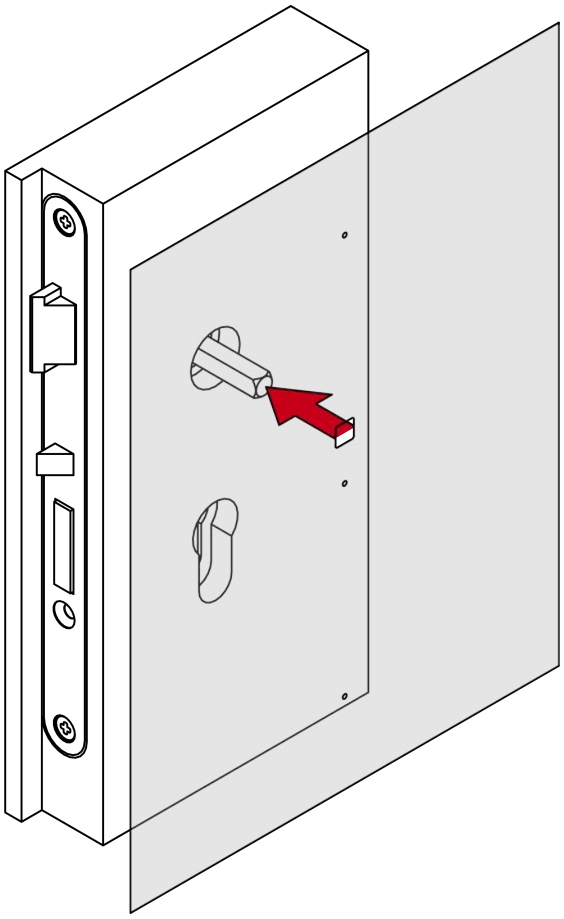
6.2.4 Prepare door (drilling template)

- ✓ Pin or scriber at hand.
- ✓ Drill at hand.
- ✓ Suitable drill bit at hand (Ø 7 mm).
- ✓ PH2 screwdriver at hand.

1. Insert the spindle into the mortise lock.

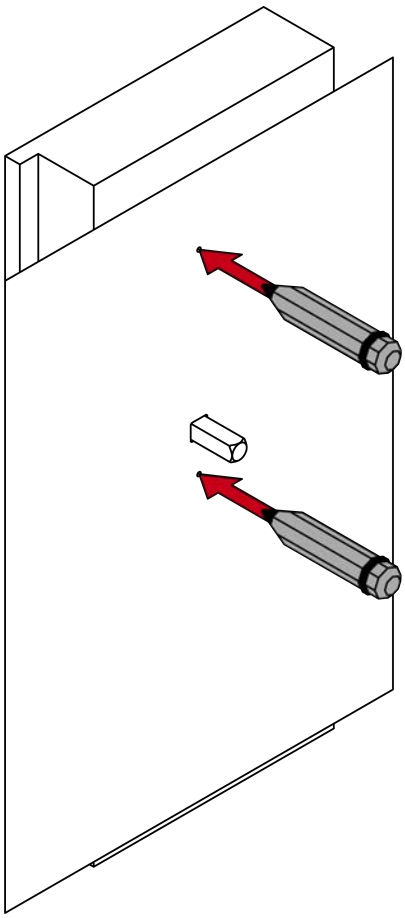


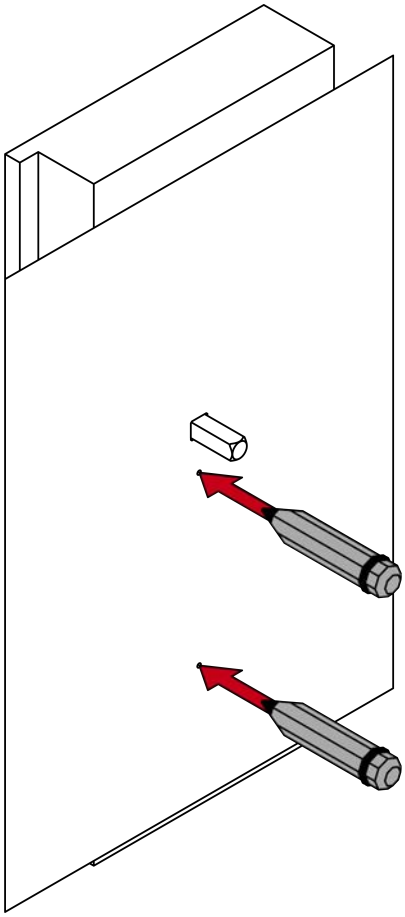
2. Place the drilling template on the spindle.



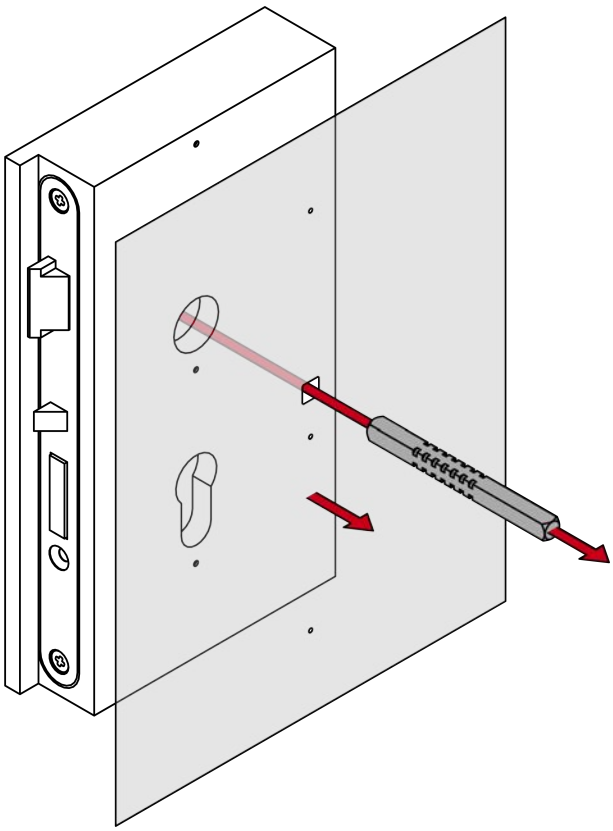
3. Align the drill template vertically using the printed scale.

4. Mark the points to be drilled on the door (backplate: centre/top; short backplate: centre/bottom).

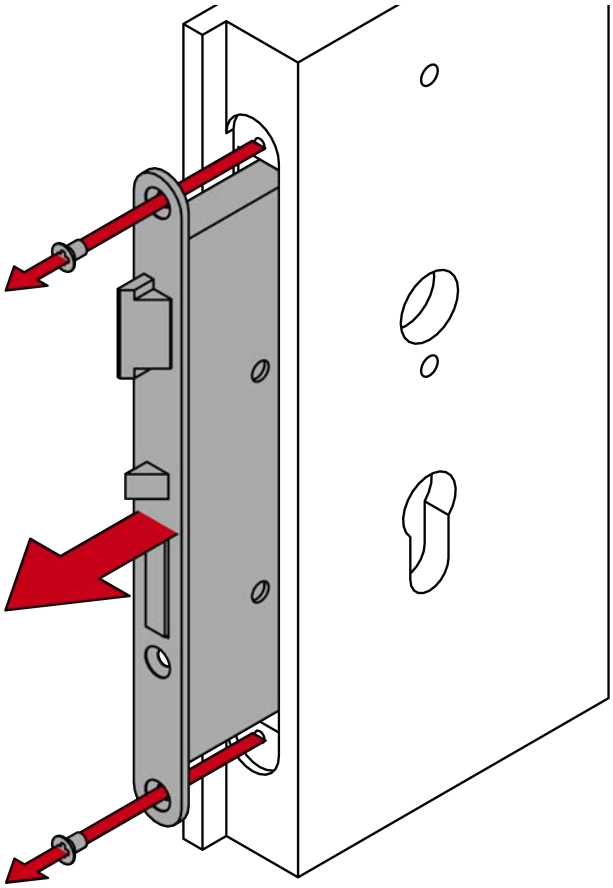




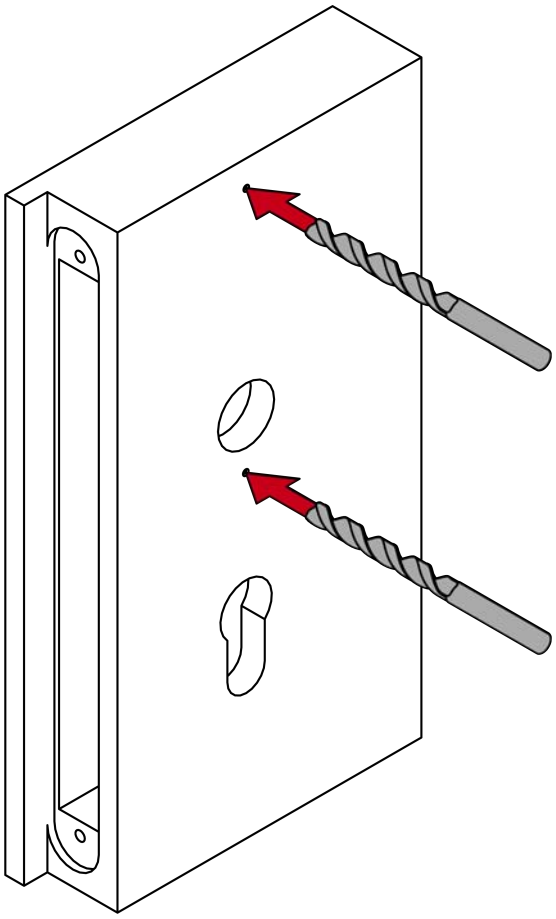
5. Remove the drilling template and spindle.

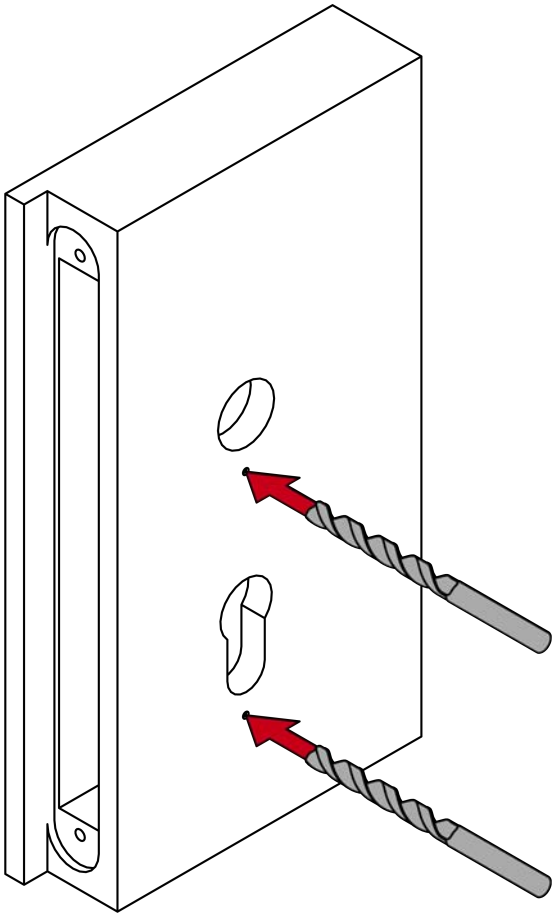


6. Remove the mortise lock.

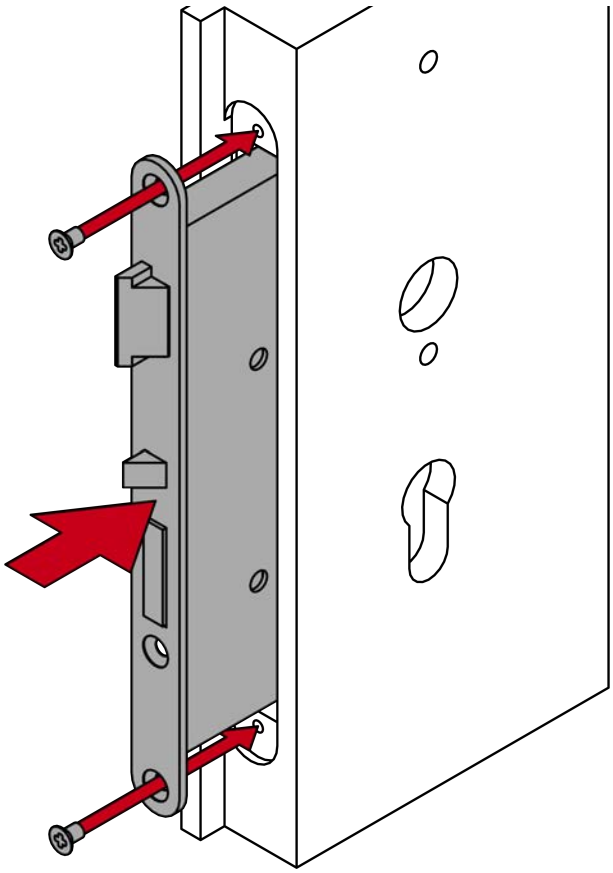


7. Drill the required holes.





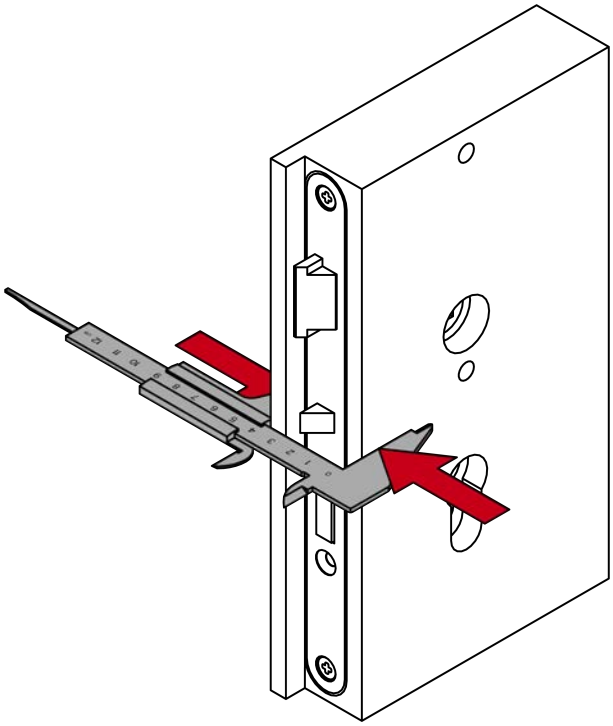
8. Fit the mortise lock.



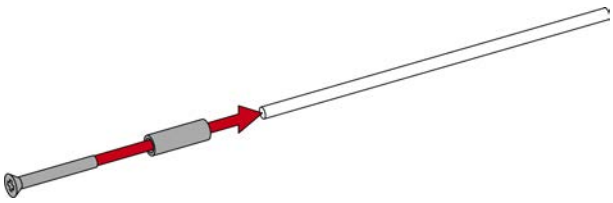
6.2.5 For door thickness X: have the threaded rods and spindle ready

- ✓ Saw at hand.
- ✓ Caliper gauge at hand.
- ✓ PH2 screwdriver at hand.

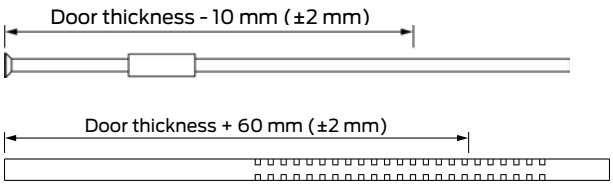
1. Measure the door thickness.



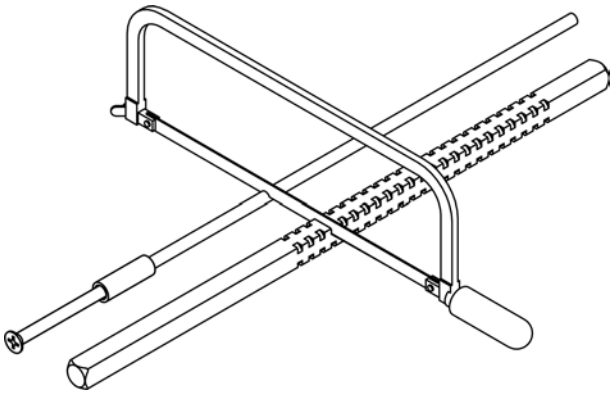
2. For door thickness X: screw the 50 mm screws, threaded sleeves and threaded rods together.



3. For X: mark the sawing points on the threaded rods and spindle.



4. For X: Use a suitable saw to cut the threaded rods and spindle.



6.2.6 Installing the fitting

- ✓ Door pre-drilled.
- ✓ PH2 screwdriver at hand.
- ✓ TX15 screwdriver at hand.
- ✓ Caliper gauge at hand.

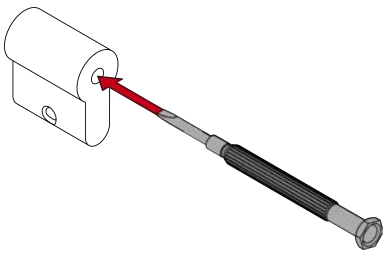
1. For non-MO: insert the blank cylinder.

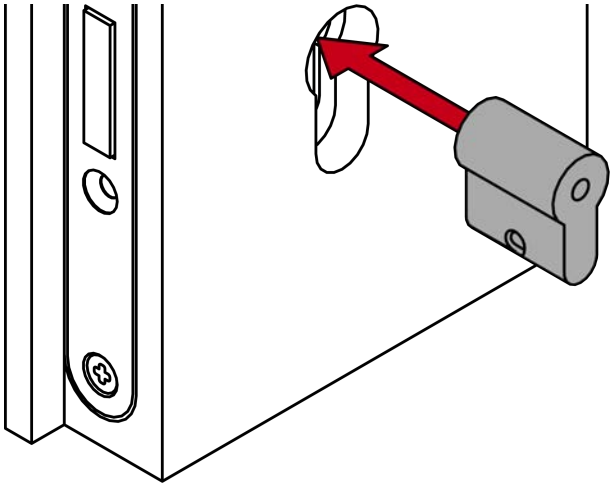
NOTE

Feed the blank cylinder into the hole using a screwdriver

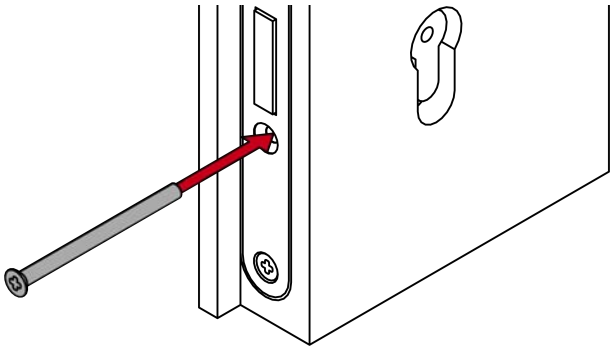
It is difficult to position the blank cylinder correctly, especially in thick doors.

1. Insert a screwdriver into the hole in the blank cylinder.
2. Position the blank cylinder using the screwdriver.



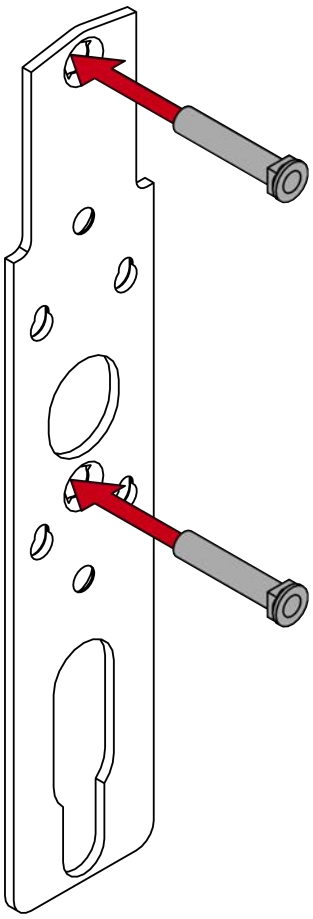


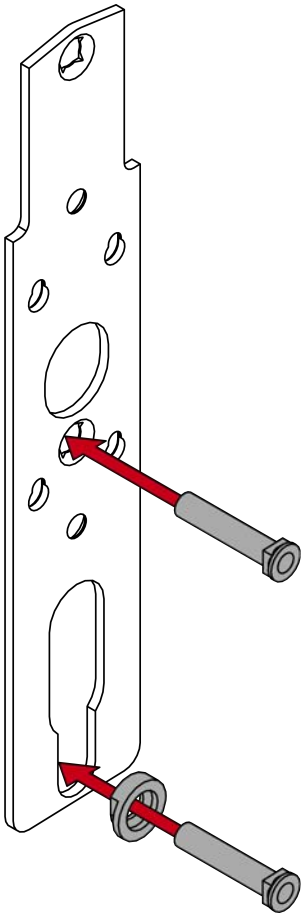
2. For non-MO: screw the blank cylinder firmly into position.



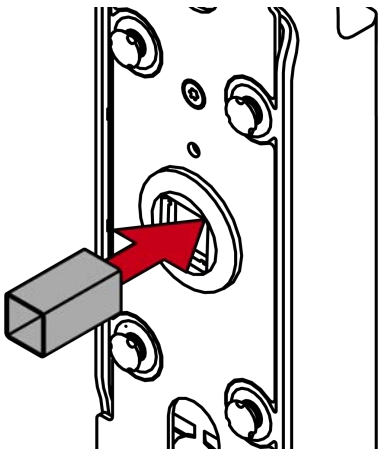
3. For short backplate: insert the mounting disc into the smaller fastening plate.

4. Insert the sleeve nuts into the smaller fastening plate (backplate: centre/top; short backplate: centre/bottom).

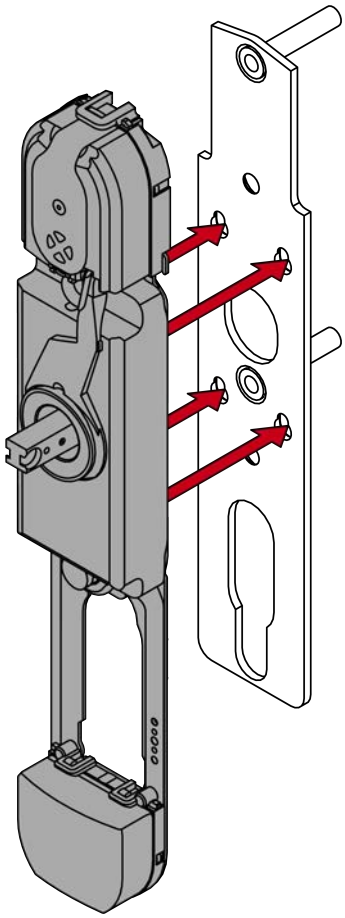




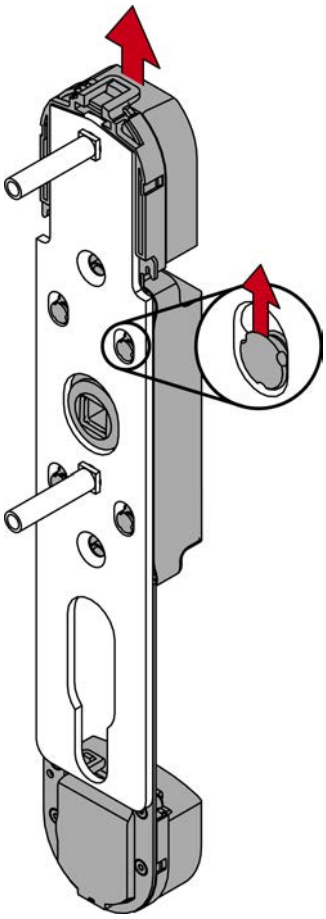
5. For 7 mm spindle: Insert the adapter shoe into the spindle mount on the module support.



6. Insert the module support into the fastening plate.



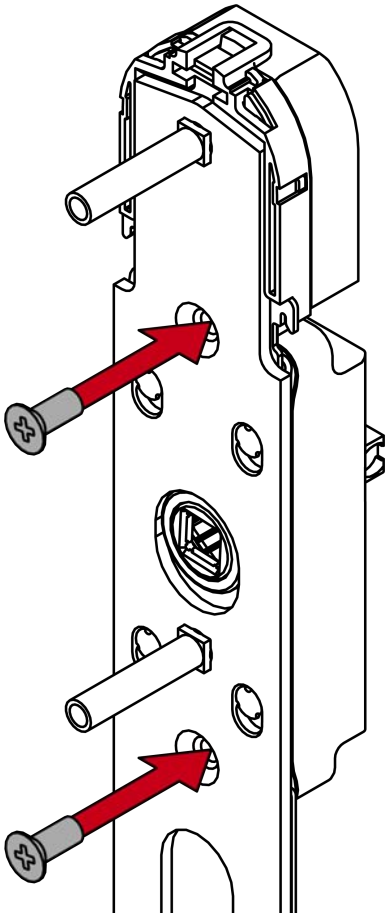
7. Slide the module support upwards.



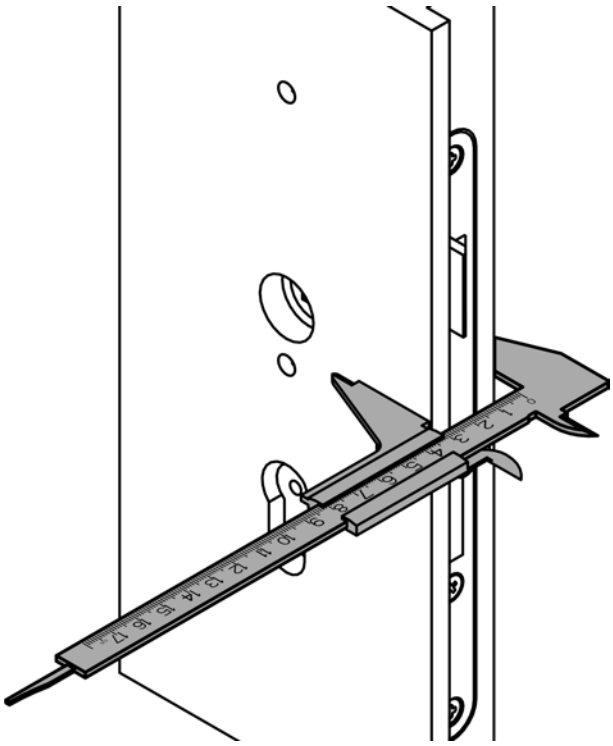
↳ Module support snaps into place.

8. Fasten the module support to the fastening plate (PH2) with the 12 mm screws.

M5×12

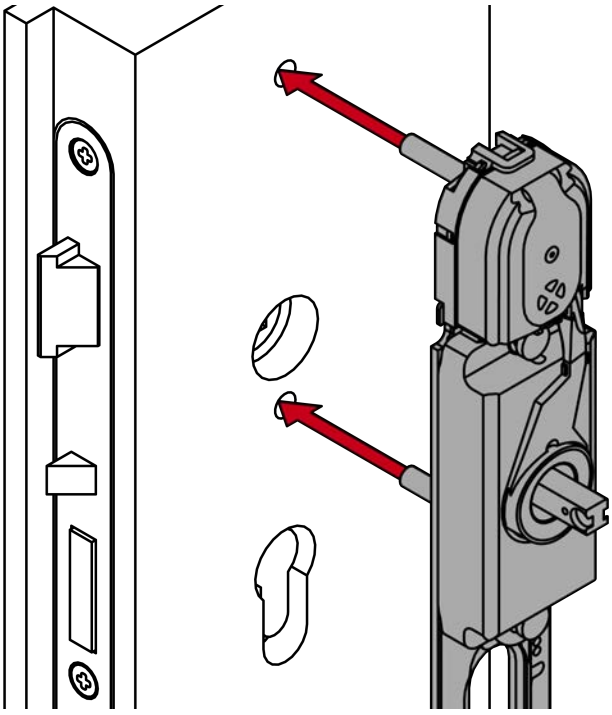


9. Measure the door thickness.

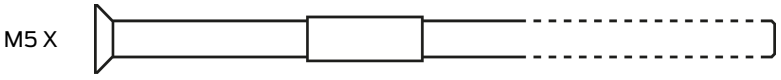


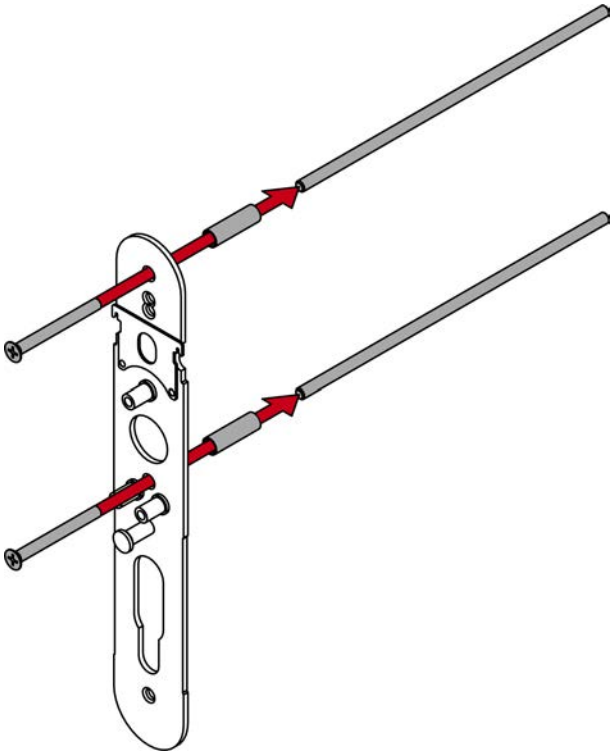
Area	Door thickness (mm)	Screws
S	39 – <51	M5×35
S	51 – 61	M5×45
M	59 – <70	M5×50
M	70 – 81	M5×60
L	79 – <90	M5×70
L	90 – 101	M5×80
X	99 – 174	M5 X

10. Determine what screws are required for the door thickness measured.
11. Insert the module support with the fastening plate into the outer side of the door.

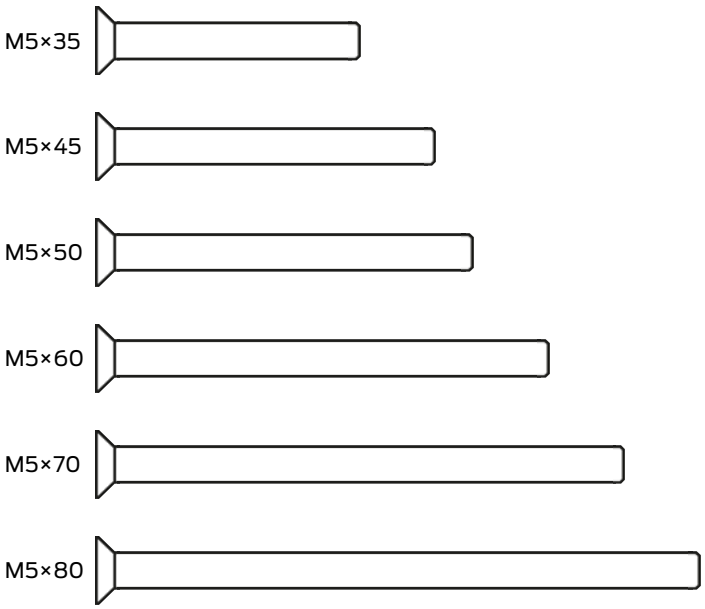


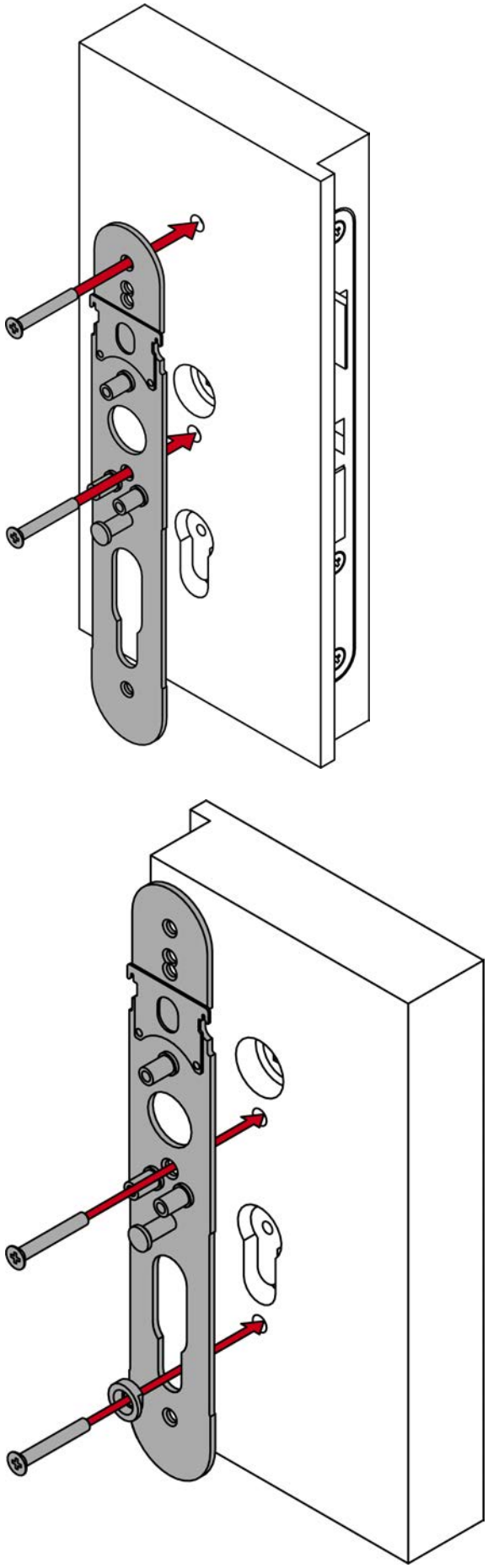
12. For short backplate: Insert the mounting disc into the larger fastening plate.
13. For X: Insert the screws through the larger fastening plate and screw them together with the threaded sleeve and threaded rod.



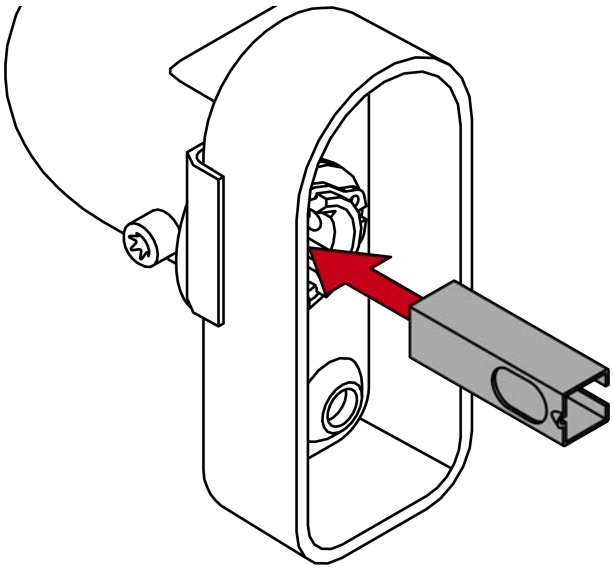


14. Use the required screws to fix the larger fastening plate onto the module support with the smaller fastening plate (PH2, long backplate: centre/top; short backplate: centre/bottom).

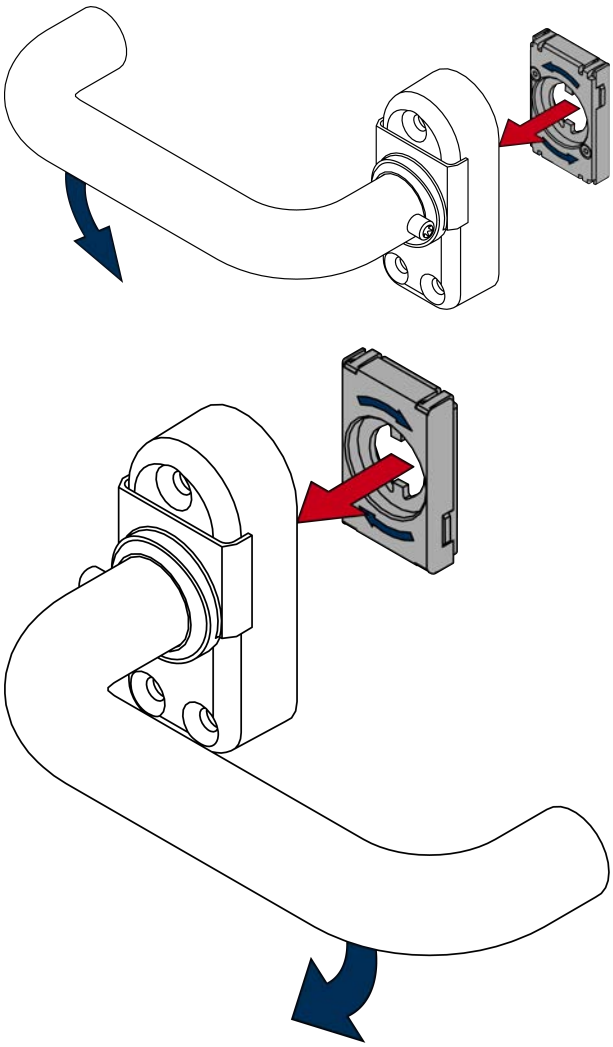




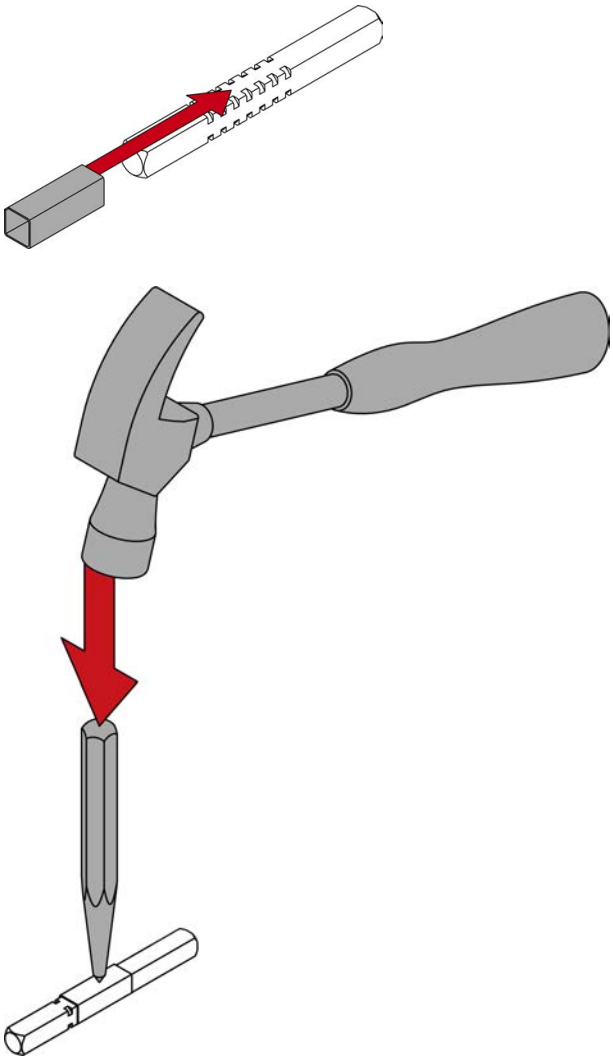
15. For 7 mm spindle: Place the adapter sleeve in the inside handle in such a way that the recess faces the grub screw.



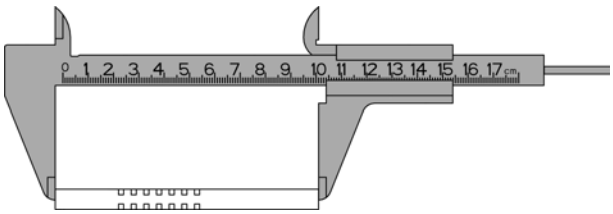
16. Determine the required direction of rotation for your inside handle.
17. Insert the spring element appropriately.



18. For 8.5 mm and 10 mm spindle: slide the adapter sleeve into the centre of the spindle. Use a punch and hammer to make an indent in the adapter sleeve to prevent it from slipping.

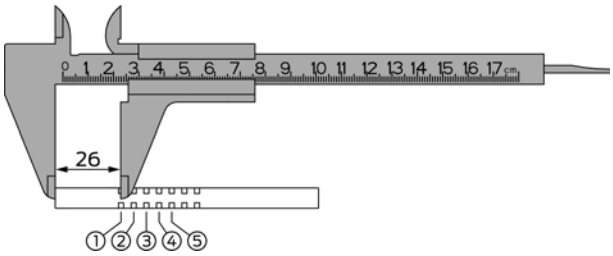


19. Measure the total length of the spindle.



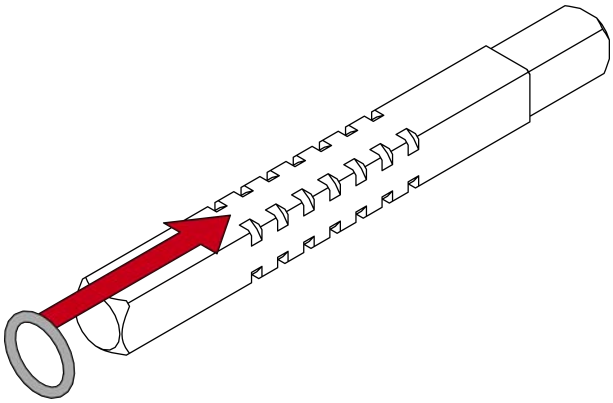
20. Locate the inside of the spindle (four-edge end up to the centre of the first groove = 26 mm).

21. Use the table to determine the position of the O-ring.

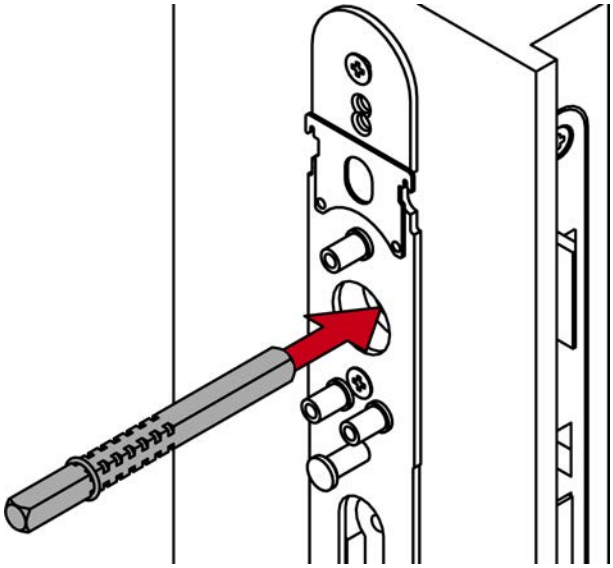


Area	Door thickness (mm)	Spindle length (mm)	Ring position
S	39 – <43	104	3
S	39 – <43	114	5
S	43 – <48	104	2
S	43 – <48	114	4
S	48 – <53	104	1
S	48 – <53	114	3
S	53 – <58	114	2
S	58 – 61	114	1
M	59 – <63	124	3
M	59 – <63	134	5
M	63 – <68	124	2
M	63 – <68	134	4
M	68 – <73	124	1
M	68 – <73	134	3
M	73 – <78	134	2
M	78 – 81	134	1
L	79 – <83	144	3
L	79 – <83	154	5
L	83 – <88	144	2
L	83 – <88	154	4
L	88 – <93	144	1
L	88 – <93	154	3
L	93 – <98	154	2
L	98 – 101	154	1
XL	99 – 174	O-ring is 30–35 mm from the cut end of the spindle.	

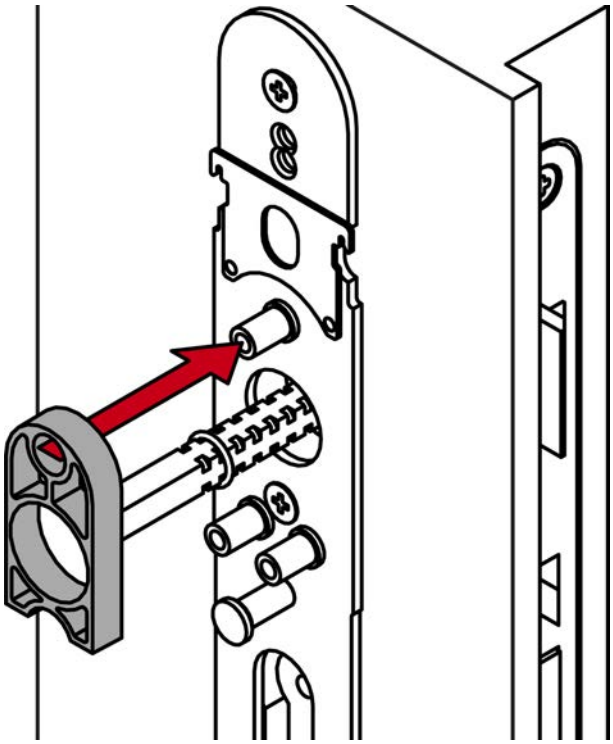
22. Slide the O-ring onto the calculated groove.



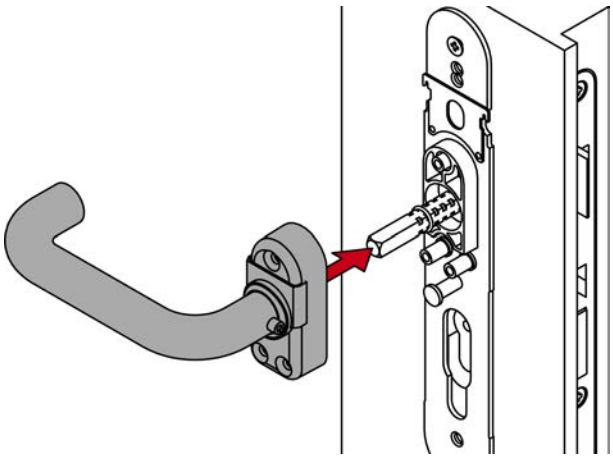
23. Insert the spindle into the door with the ring-free side as far as it will go.



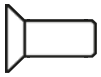
24. Place the filling profile on the larger fastening plate.

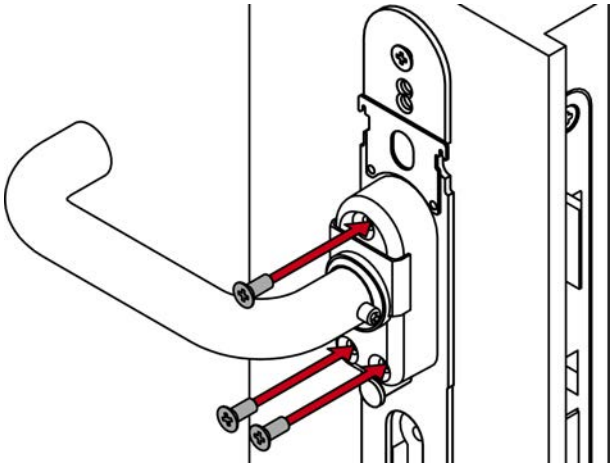


25. Place the inside handle unit on the spindle.

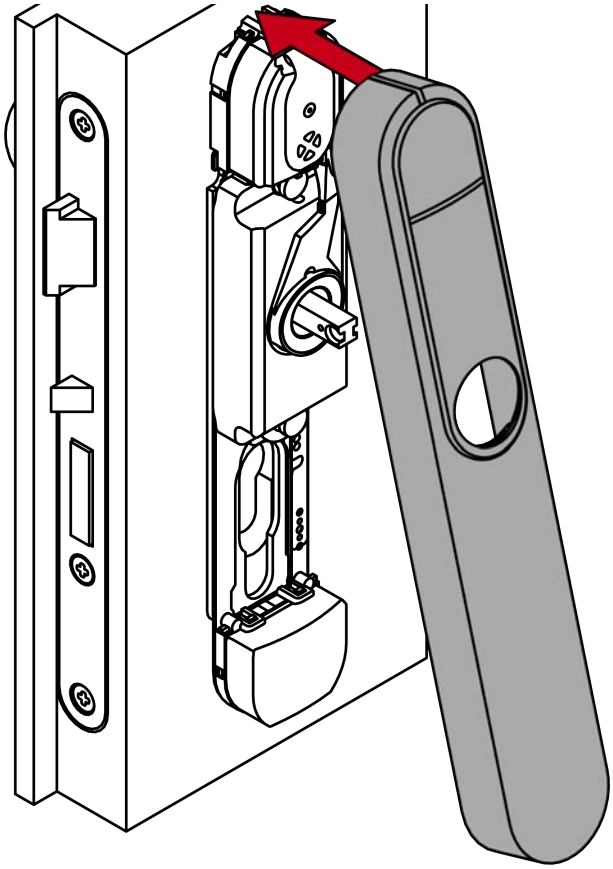


26. Use the 12 mm screws to fasten the inside handle unit onto the fastening plate (PH2).

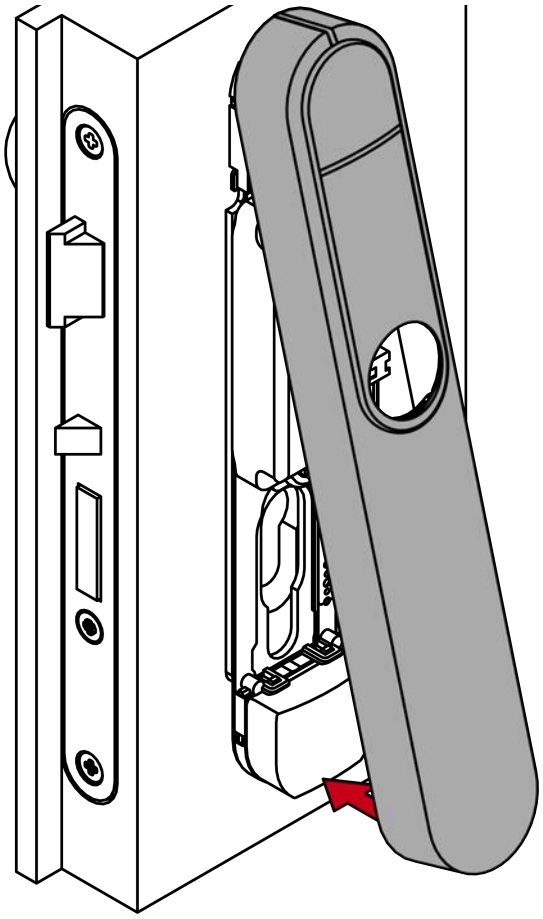
M5×12 



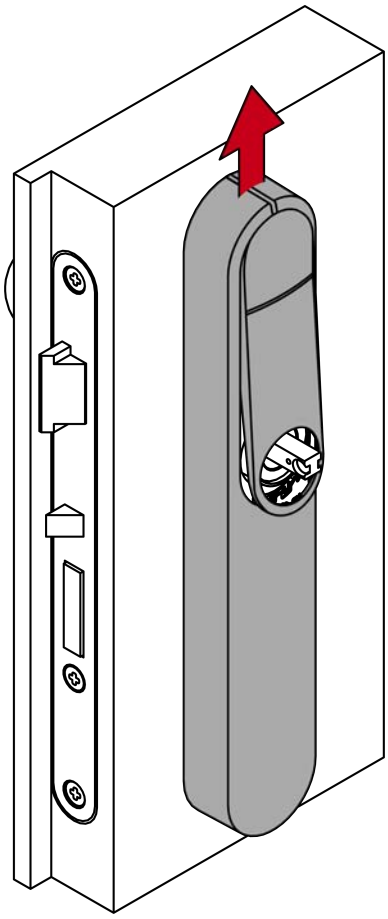
27. Fit the cover for the outer side as follows:
28. Place the cover on top of the fastening plate.



29.Fold down the cover.

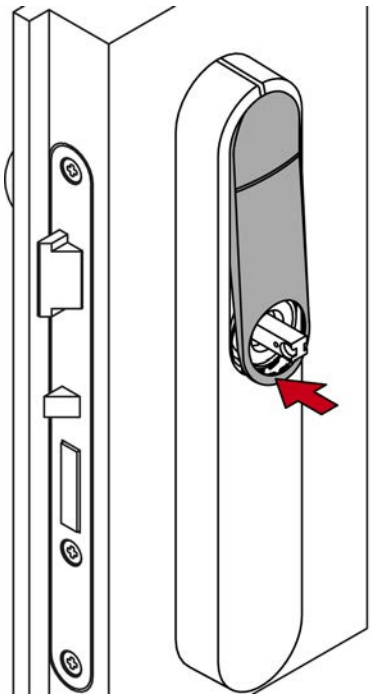


30.Push the cover against the door, sliding it upwards at the same time.

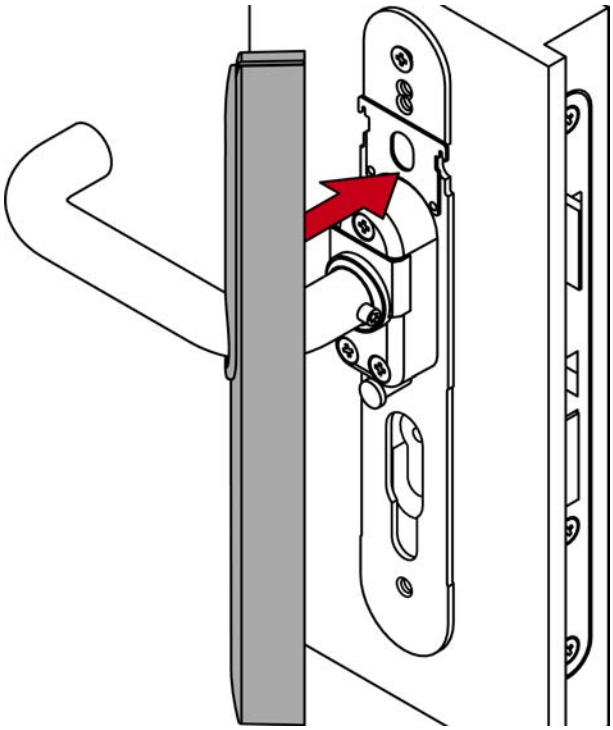


↳ Cover snaps into place.

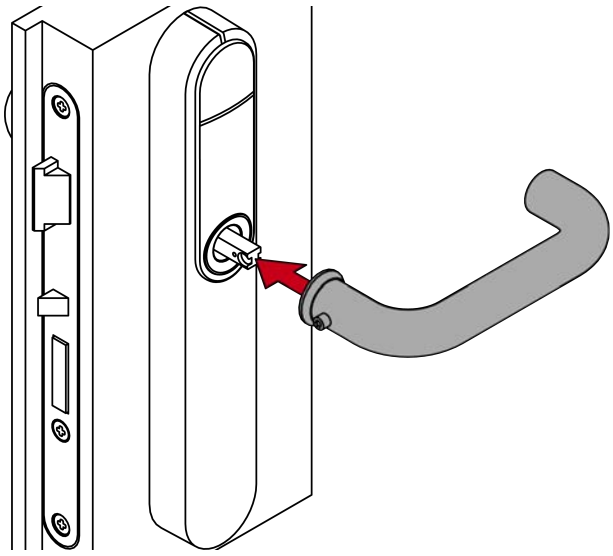
31. Press the inlay into place.



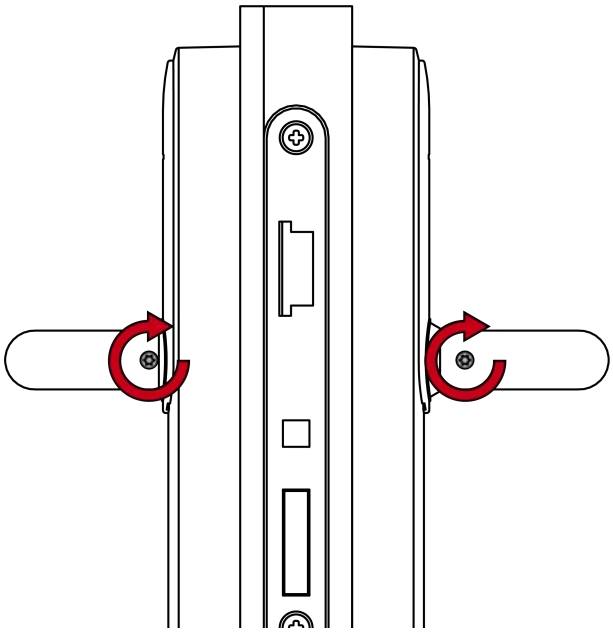
32. Fit the cover for the inner side as well.



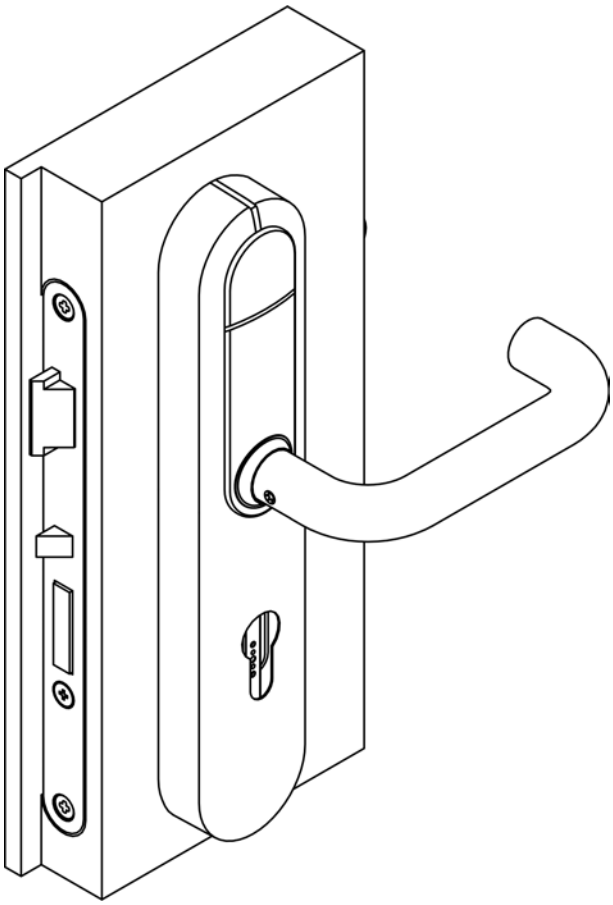
33. Fit the outside handle.



34. Use the grub screws to tighten both handles (TX15).



↳ SI SmartHandle AX Advanced fully installed.



6.3 Scandinavian Oval (SO)

6.3.1 Product-specific safety instructions

IMPORTANT

Difficult installation due to threaded sleeves being pressed out

The threaded sleeves in the fitting are installed using a press fit. If you apply excessive pressure when screwing the fitting onto the fixing plate, this can lead to the threaded sleeves slipping out of the fitting.

1. Do not press on the screws when fastening the module support into place.
2. Place a finger on the ends of the threaded sleeves to hold them in place while screwing.

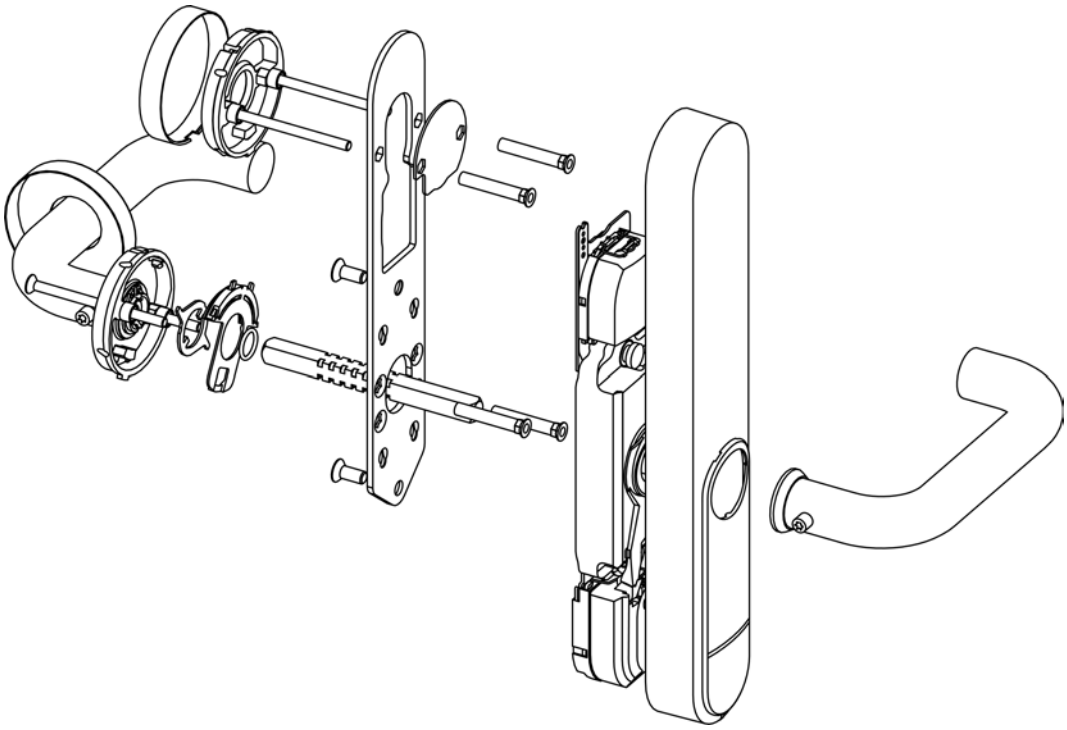
6.3.2 Scope of delivery

- SI SmartHandle AX Advanced Scandinavian Oval
- Special tool
- Quick guide

Depending on version:

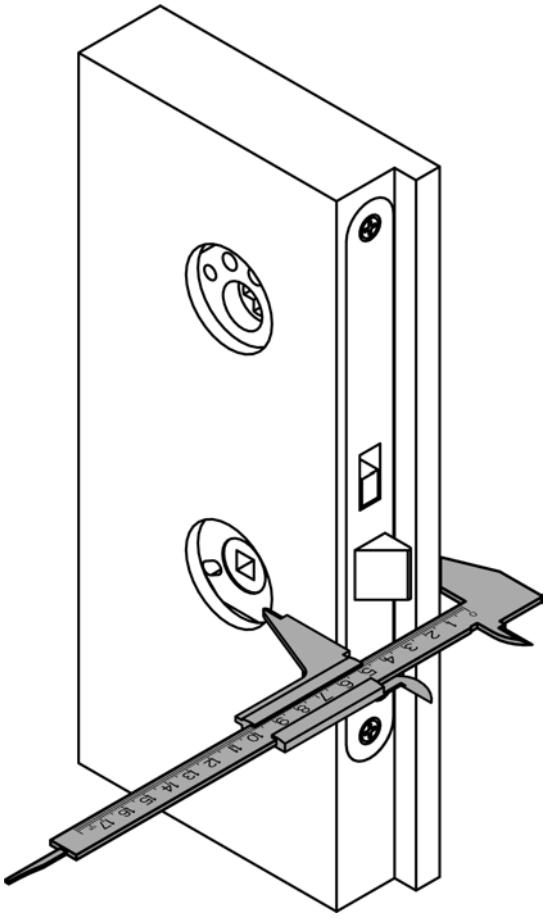
- Adapter set, 7 mm spindle
- Adapter sleeve, 8.5 mm spindle
- Adapter sleeve, 10 mm spindle

6.3.3 Structure

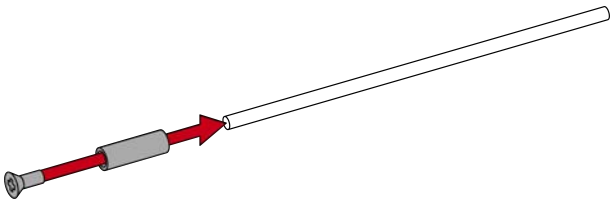


6.3.4 For door thickness X: have the threaded rods and spindle ready

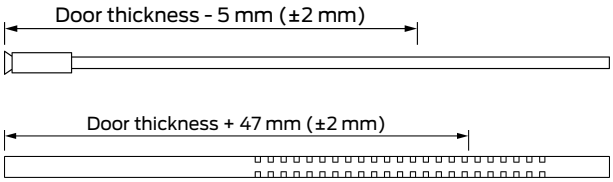
1. Measure the door thickness.



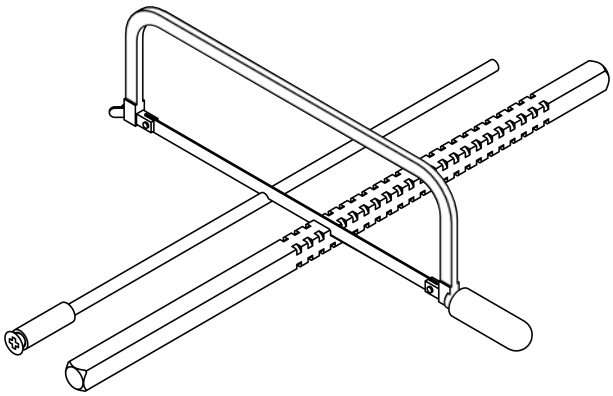
2. For door thickness X: screw the 10 mm screws, threaded sleeves and threaded rods together.



3. For X: mark the sawing points on the threaded rods and spindle.



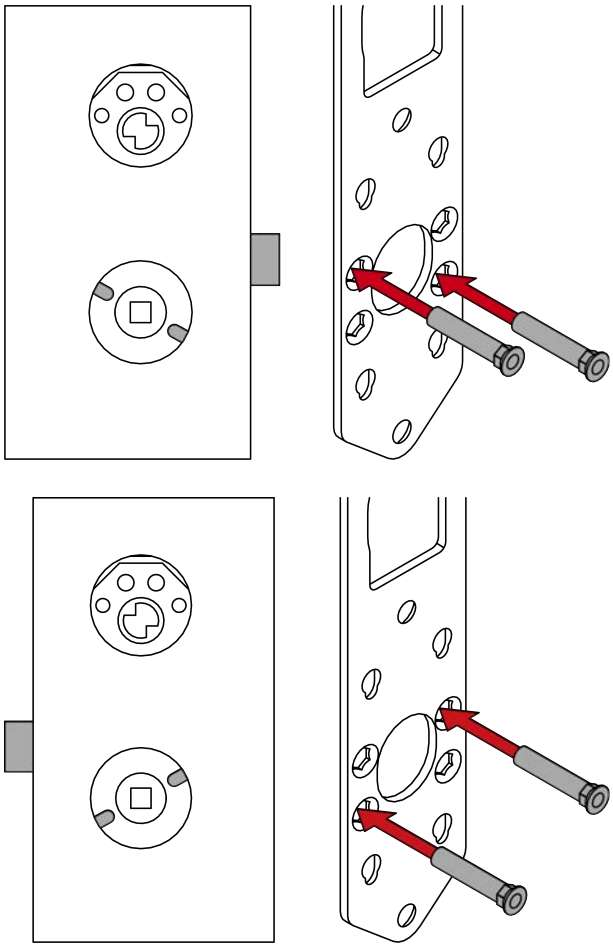
4. For X: Use a suitable saw to cut the threaded rods and spindle.



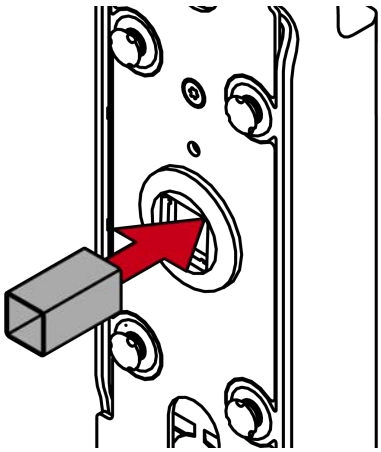
6.3.5 Installing the fitting

- ✓ Door pre-drilled.
- ✓ PH2 screwdriver at hand.
- ✓ TX15 screwdriver at hand.
- ✓ Caliper gauge at hand.
- ✓ For MO: cylinder is already fitted.

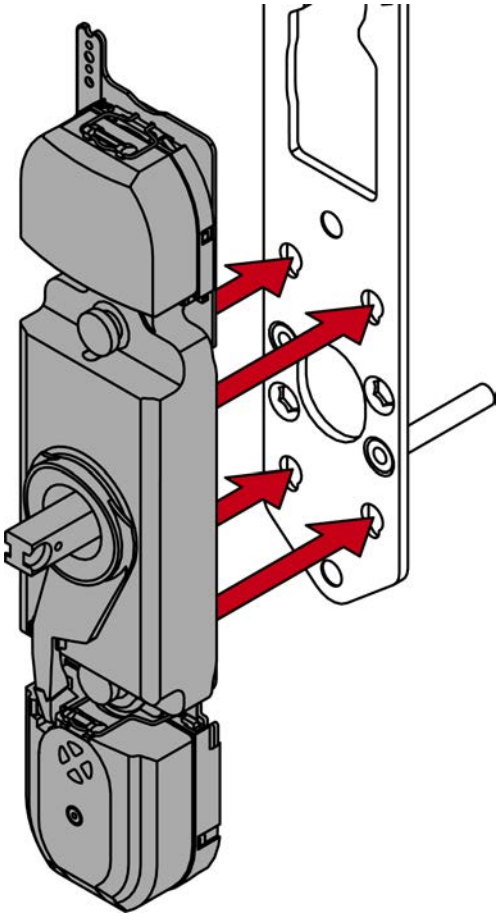
1. Look at the mortise lock from the outer side and insert the sleeve nuts for the mortise lock into the fastening plate.



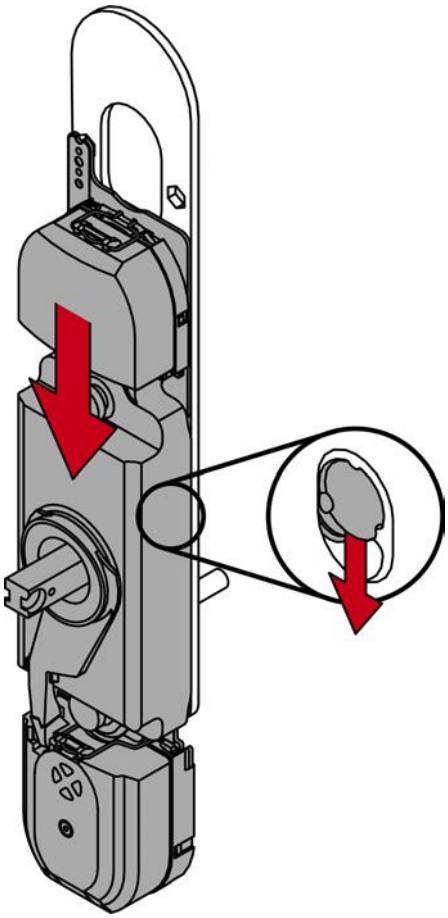
2. For 7 mm spindle: Insert the adapter shoe into the spindle mount on the module support.



3. Insert the module support into the fastening plate.

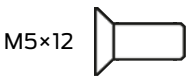


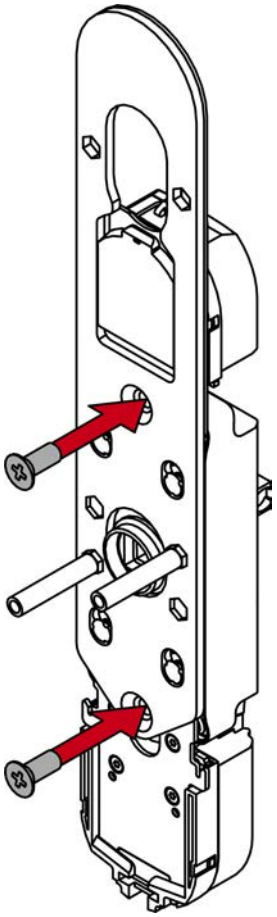
4. Slide the module support downwards.



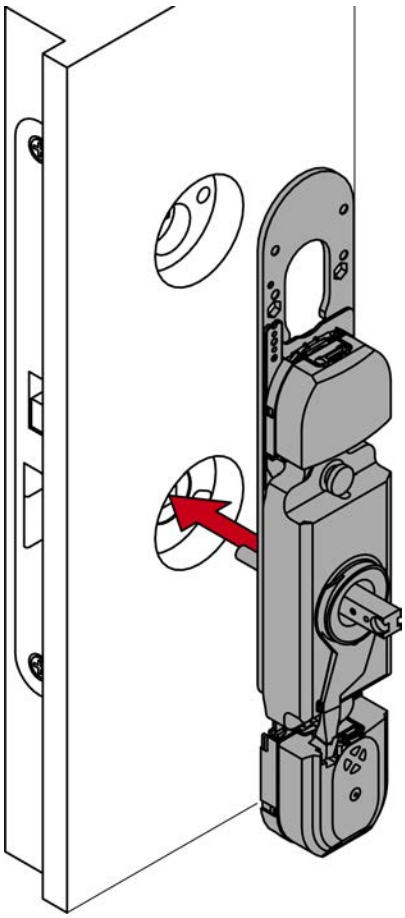
↳ Module support snaps into place.

5. Fasten the module support to the fastening plate (PH2) with the 12 mm screws.



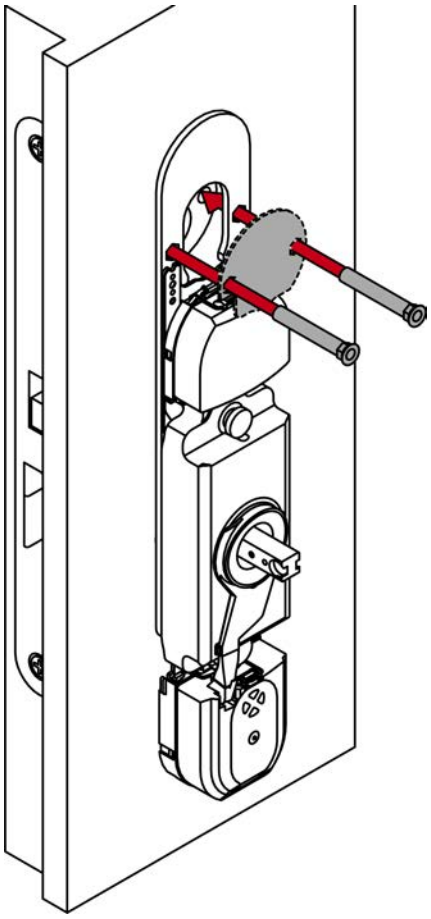


6. Insert the module support with the fastening plate into the outer side of the door.

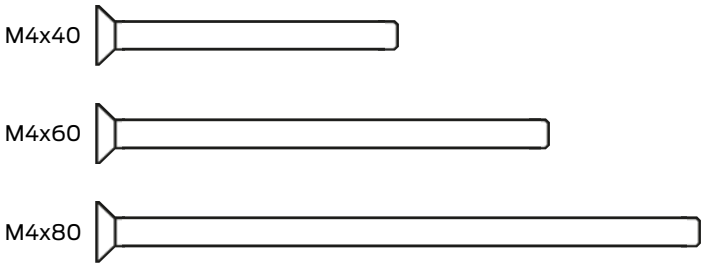


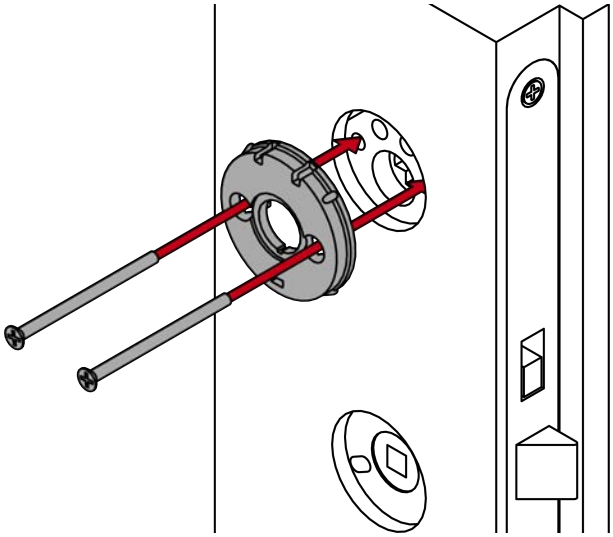
7. For non-MO: Insert the sleeve nuts into the MO cover.

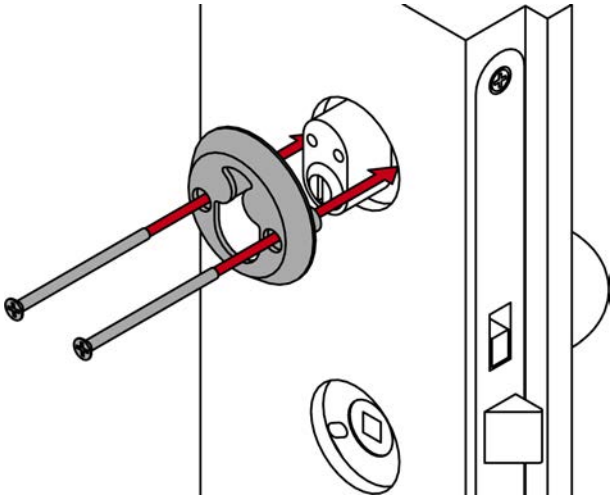
8. Insert the sleeve nuts into the fastening plate.



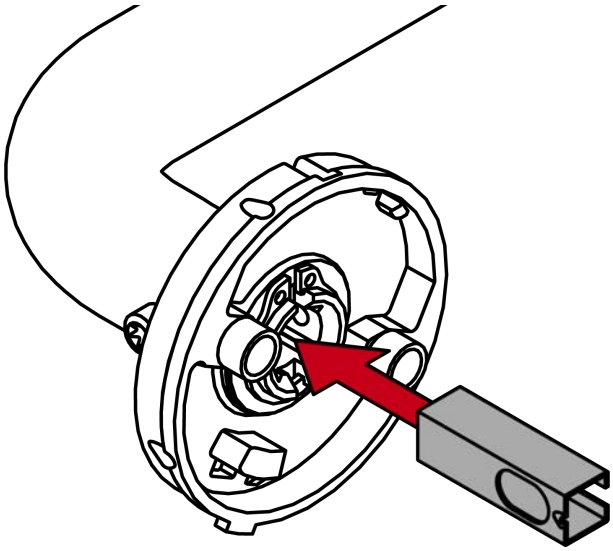
9. Firmly fasten the cylinder escutcheon to the sleeve nuts (PH2).





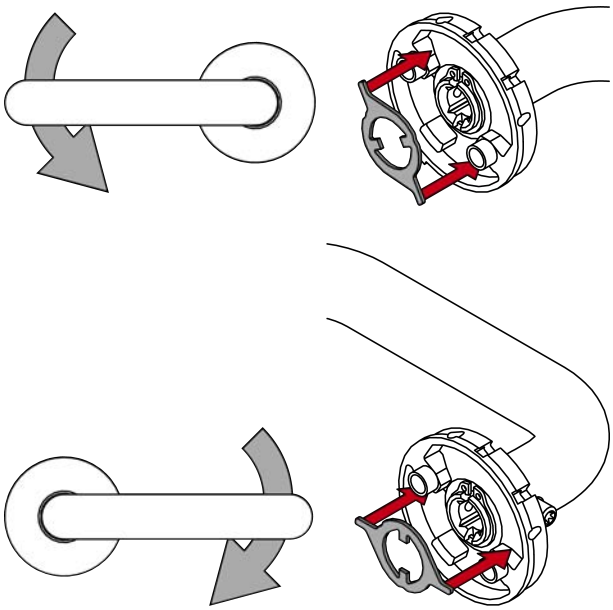


10. For 7 mm spindle: Place the adapter sleeve in the inside handle in such a way that the recess faces the grub screw.

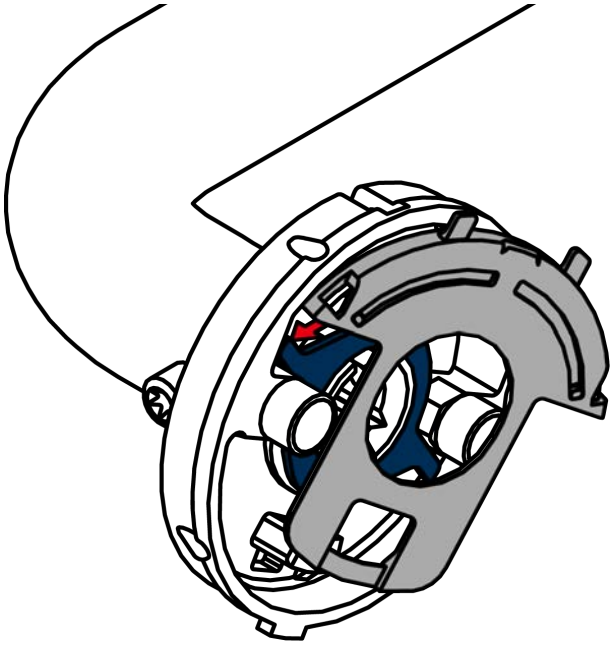


11. Determine the required direction of rotation for your inside handle.

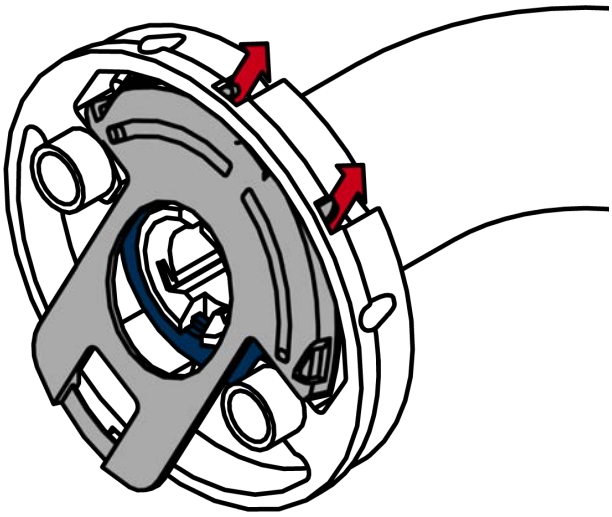
12. Place the interchangeable plate into your inside handle escutcheon as required.



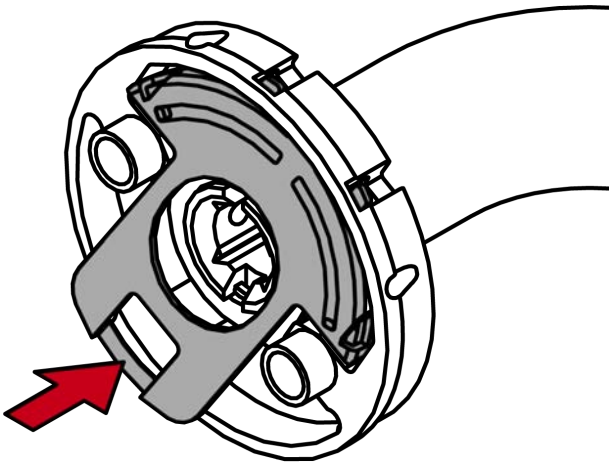
13. Pre-tension the spring element on the interchangeable plate.



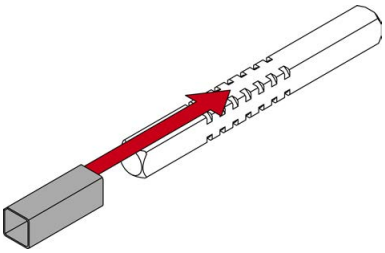
14. Slide the spring element nose into the slot in the escutcheon.

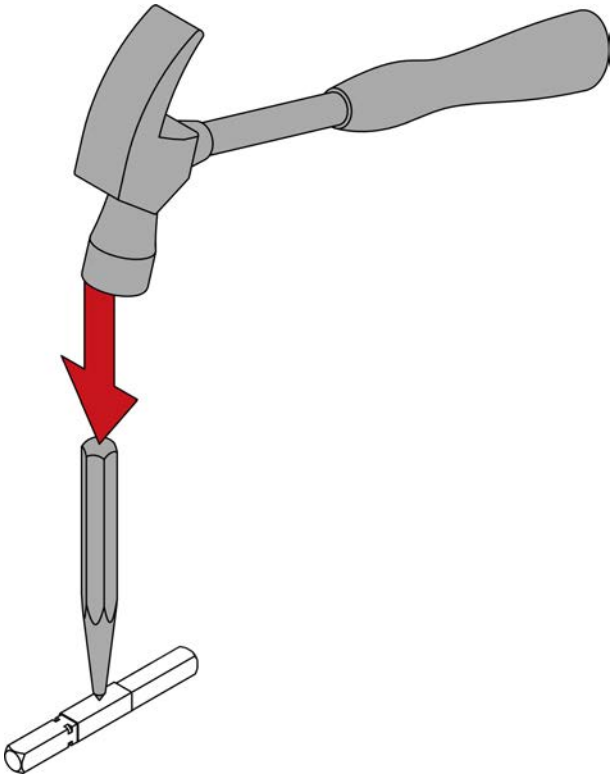


15. Attach the end of the spring element into the slot in the escutcheon.

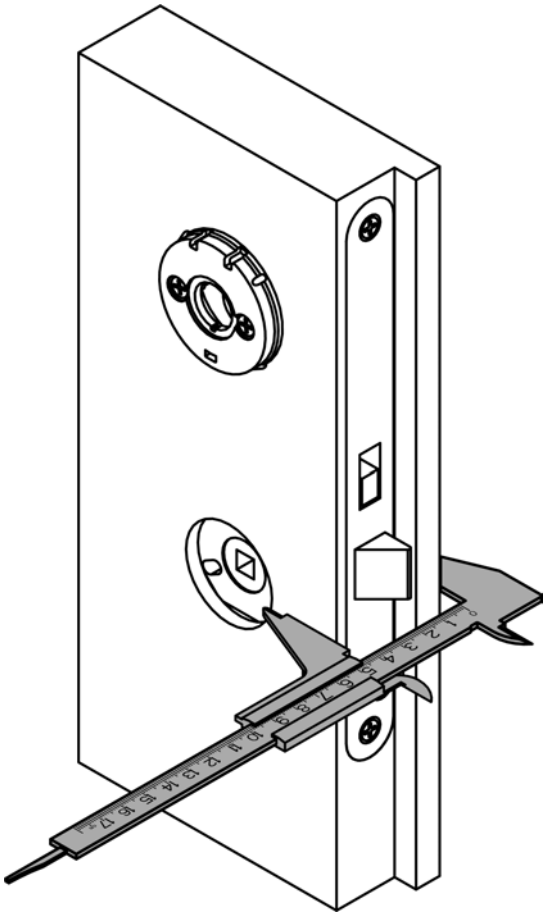


16. For 8.5 mm and 10 mm spindle: slide the adapter sleeve into the centre of the spindle. Use a punch and hammer to make an indent in the adapter sleeve to prevent it from slipping.

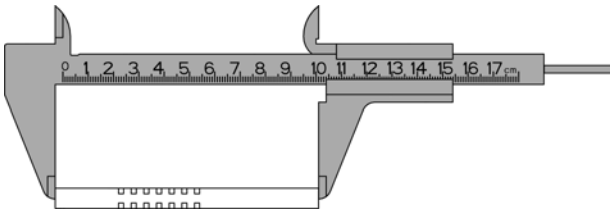




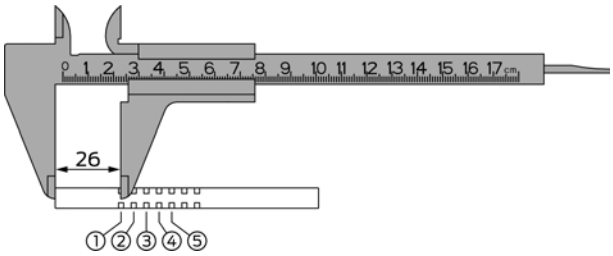
17. Measure the door thickness.



18. Measure the total length of the spindle.

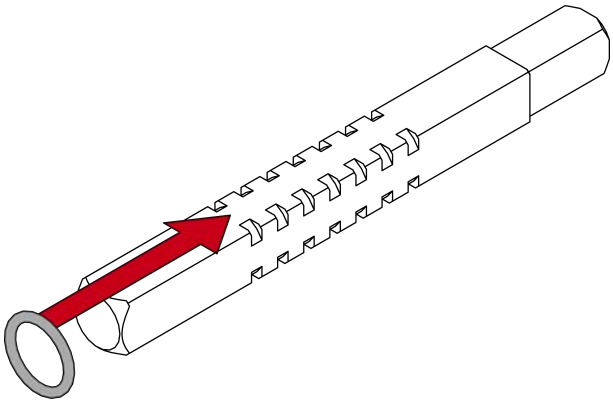


19. Locate the inside of the spindle (four-edge end up to the centre of the first groove = 26 mm).
20. Use the table to determine the position of the O-ring.

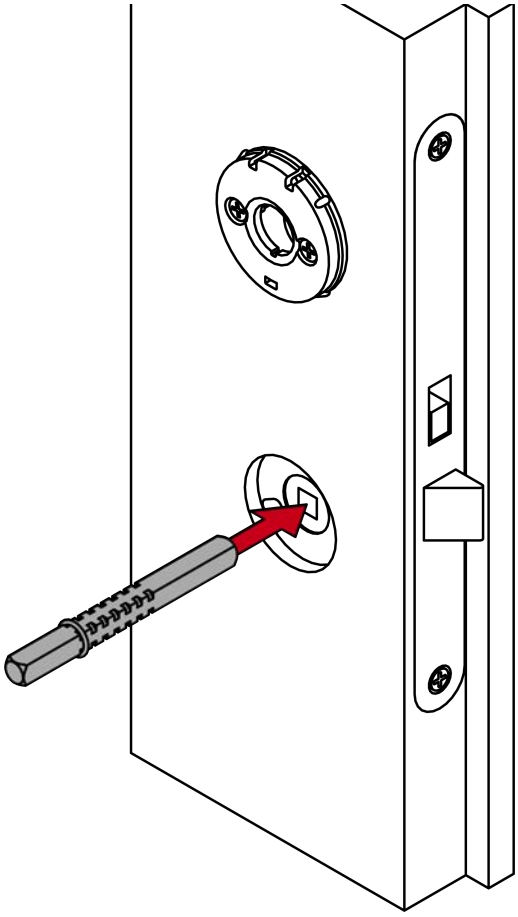


Area	Door thickness (mm)	Spindle length (mm)	Ring position
S	32 – <36	84	3
S	32 – <36	94	5
S	36 – <41	84	2
S	36 – <41	94	4
S	41 – <46	84	1
S	41 – <46	94	3
S	46 – <51	94	2
S	51 – 54	94	1
M	52 – <56	104	3
M	52 – <56	114	5
M	56 – <61	104	2
M	56 – <61	114	4
M	61 – <66	104	1
M	61 – <66	114	3
M	66 – <71	114	2
M	71 – 74	114	1
L	72 – <76	124	3
L	72 – <76	134	5
L	76 – <81	124	2
L	76 – <81	134	4
L	81 – <86	124	1
L	81 – <86	134	3
L	86 – <91	134	2
L	91 – 94	134	1

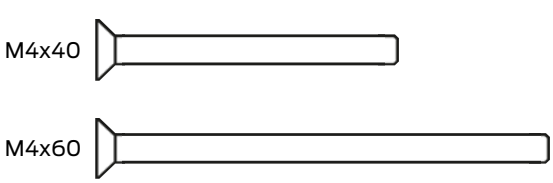
21. Slide the O-ring onto the calculated groove.

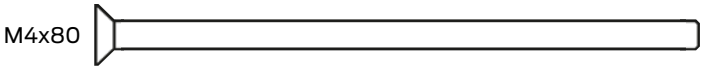


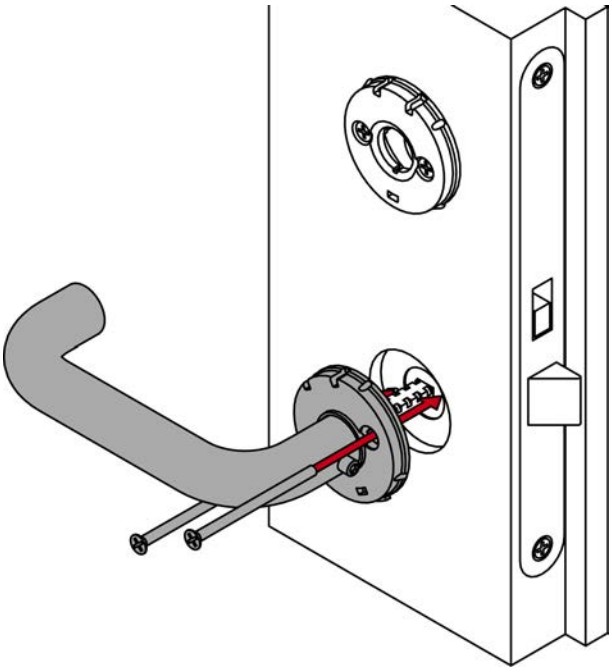
22. Insert the spindle into the door with the ring-free side as far as it will go.



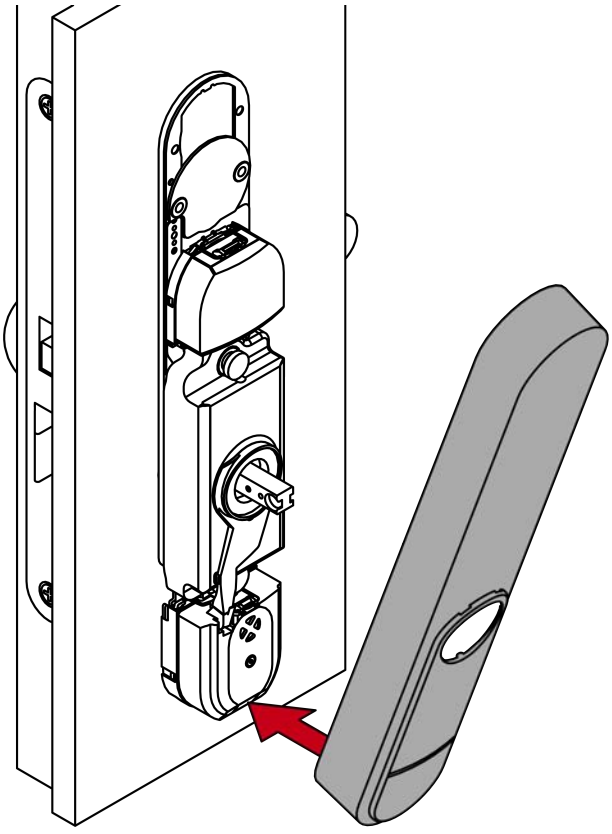
23. Place the inside handle unit on the spindle.
24. Firmly screw the inside handle unit onto the sleeve nuts (PH2).



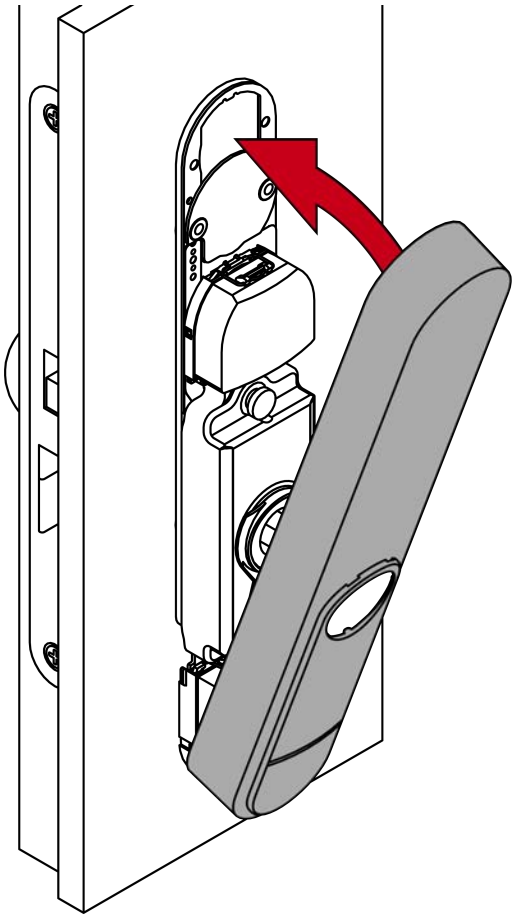




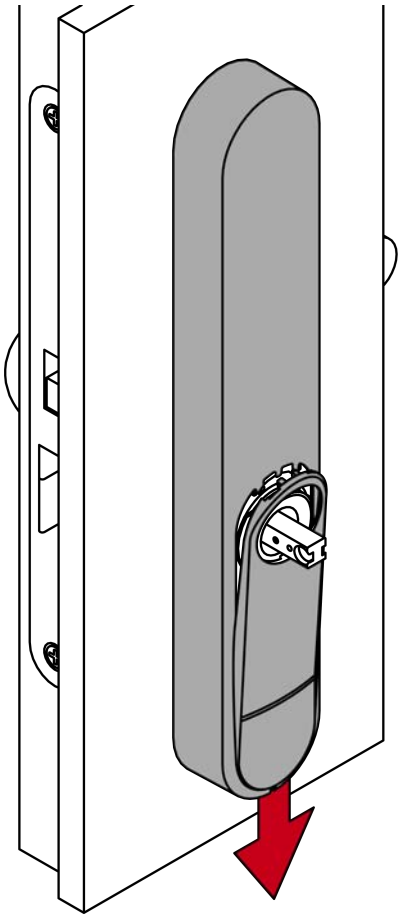
25. Position the cover on the fastening plate at the bottom.



26. Close the cover upwards.



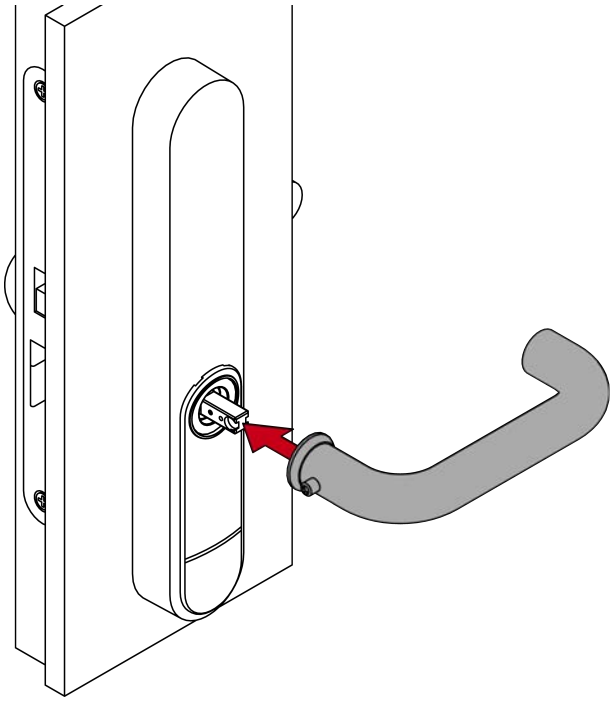
27. Slide the cover downwards.



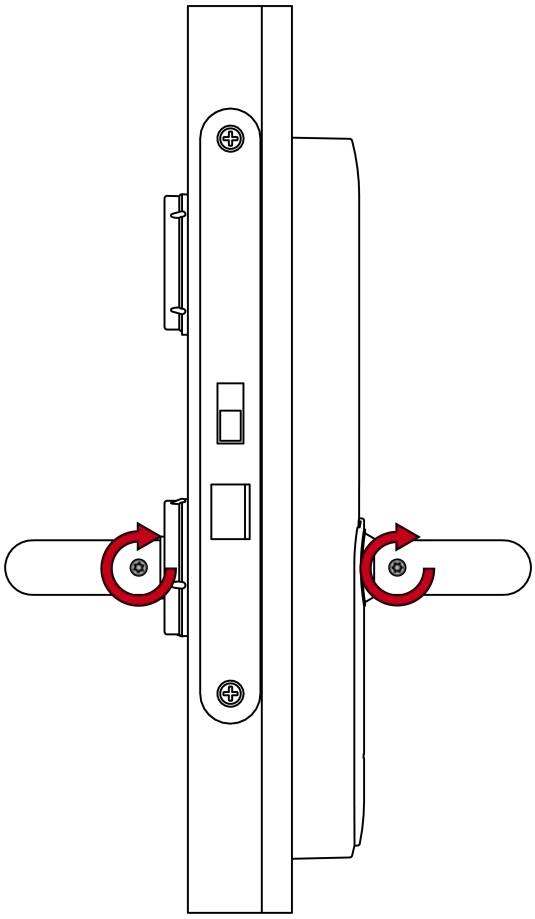
↳ Cover snaps into place.

28. Press the inlay into place.

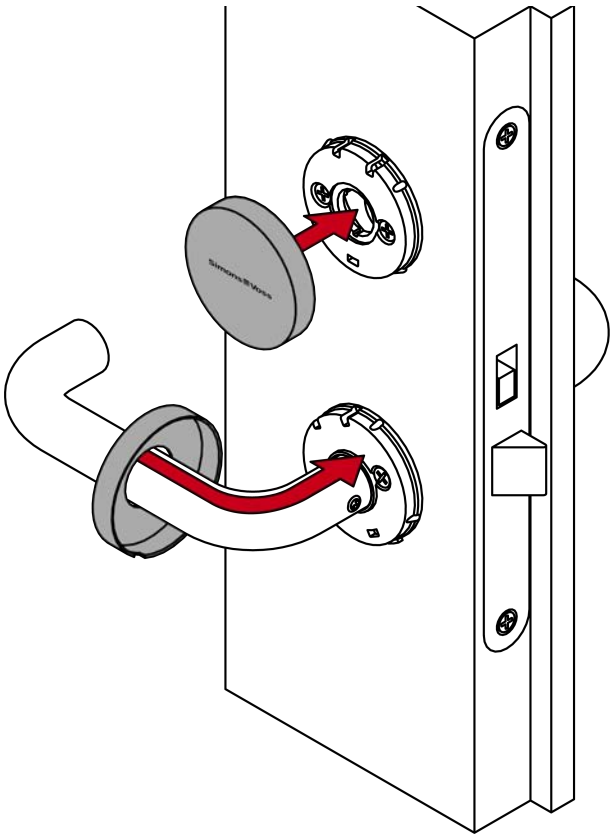
29. Fit the outside handle.



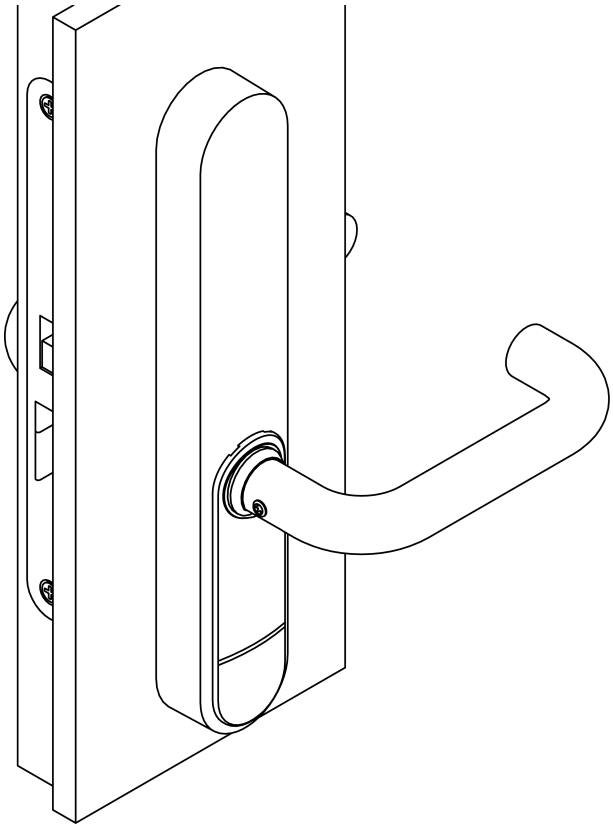
30.Use the grub screws to tighten both handles (TX15).



31. Insert the inside handle cover and, if necessary, the cylinder cover (not for MO version) on the escutcheons.



↳ SI SmartHandle AX Advanced fully installed.



6.4 Escutcheon installation (RMO)

6.4.1 Product-specific safety instructions

IMPORTANT

Difficult installation due to threaded sleeves being pressed out

The threaded sleeves in the fitting are installed using a press fit. If you apply excessive pressure when screwing the fitting onto the fixing plate, this can lead to the threaded sleeves slipping out of the fitting.

1. Do not press on the screws when fastening the module support into place.
2. Place a finger on the ends of the threaded sleeves to hold them in place while screwing.

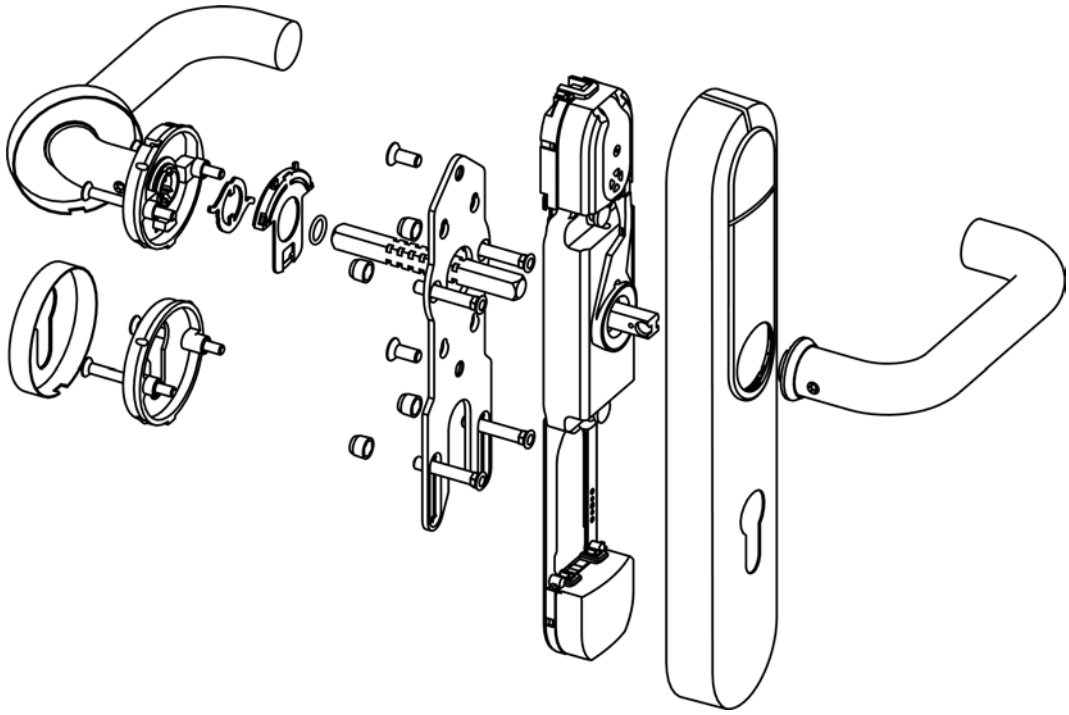
6.4.2 Scope of delivery

- SI SmartHandle AX Advanced full leaf
- Special tool
- Quick guide

Depending on version:

- Adapter set, 7 mm spindle
- Adapter sleeve, 8.5 mm spindle
- Adapter sleeve, 10 mm spindle

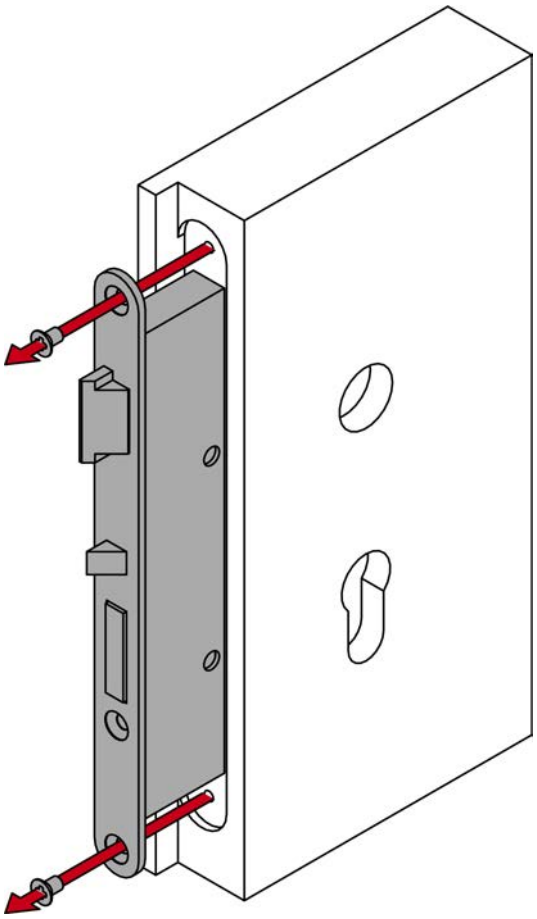
6.4.3 Structure



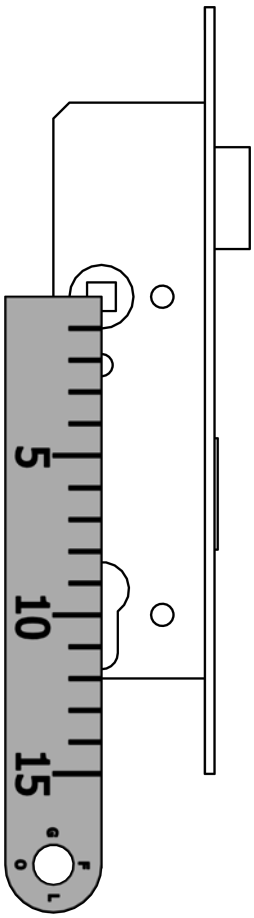
6.4.4 Prepare door (drilling template)

- ✓ Pin or scriber at hand.
- ✓ Drill at hand.
- ✓ Suitable drill bit at hand (Ø 8.5 mm).
- ✓ Ruler at hand.
- ✓ PH2 screwdriver at hand.

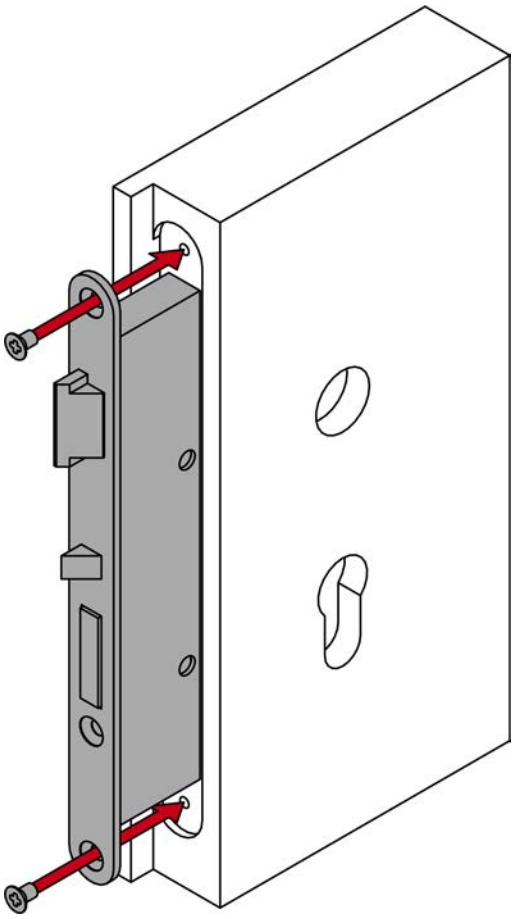
1. Remove the mortise lock.



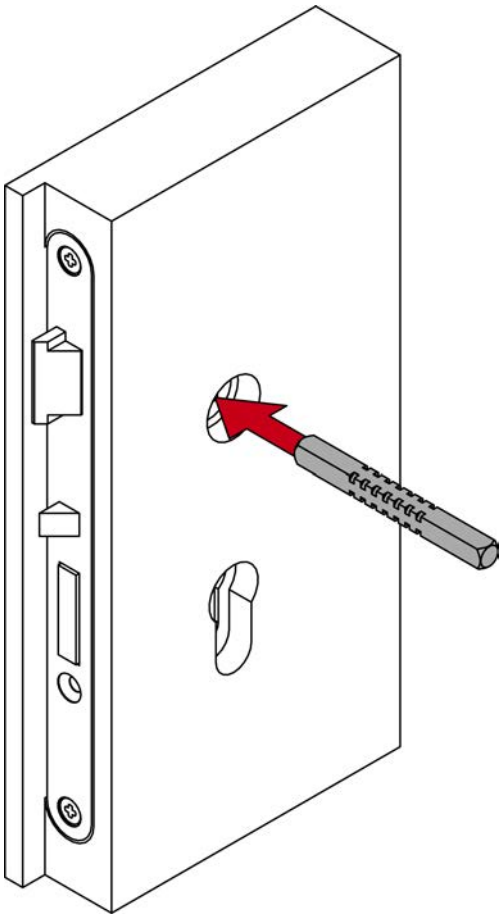
2. Measure the distance (gap between the spindle and cylinder axes of rotation).



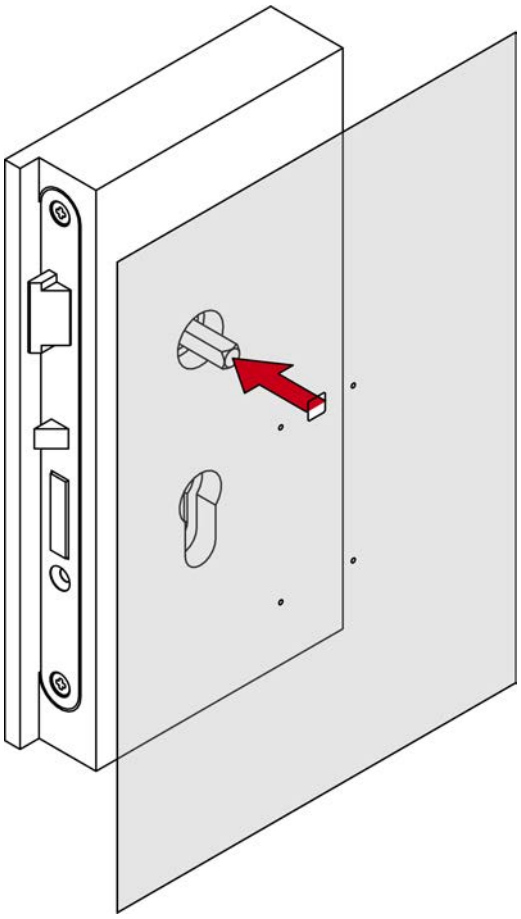
3. Fit the mortise lock.



4. Insert the spindle into the mortise lock.

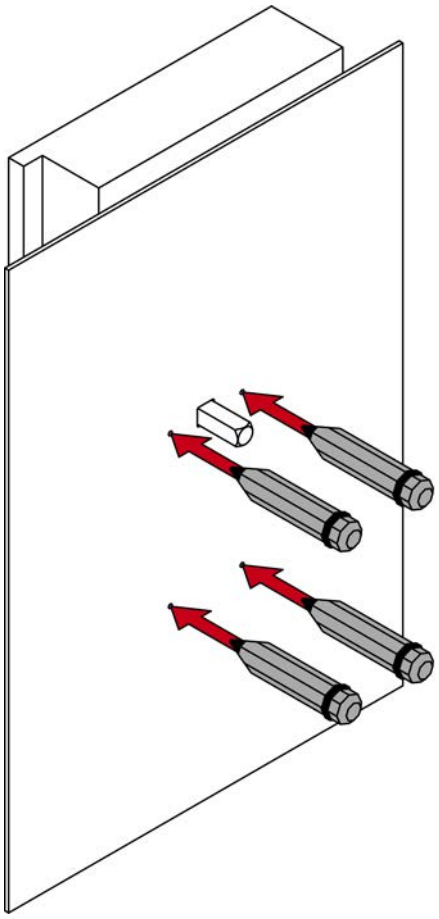


5. Place the drilling template on the spindle.

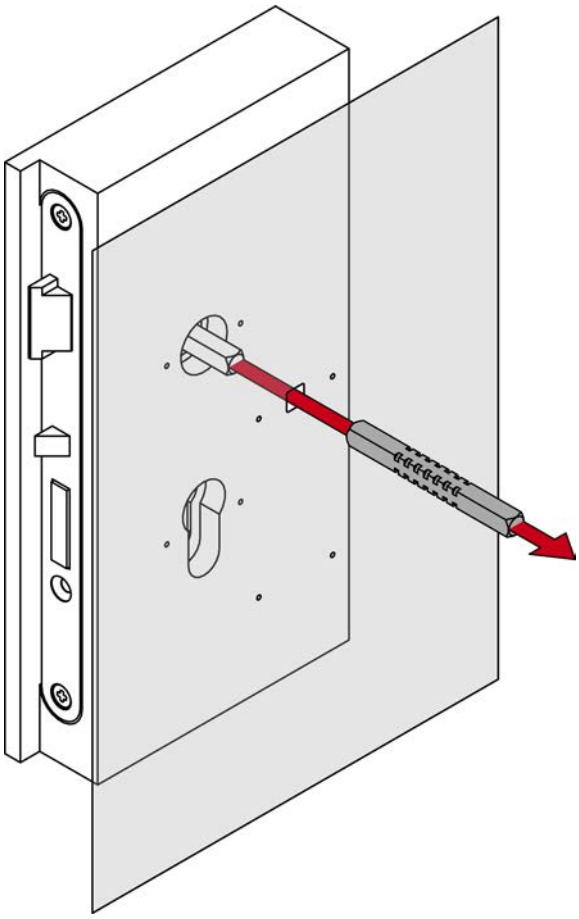


6. Align the drill template vertically using the printed scale.

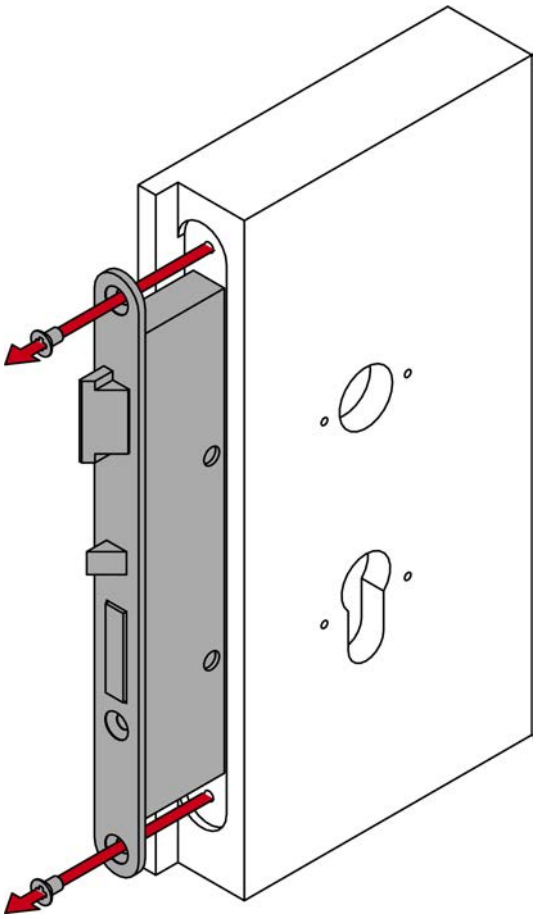
7. Mark the points to be drilled on the door.



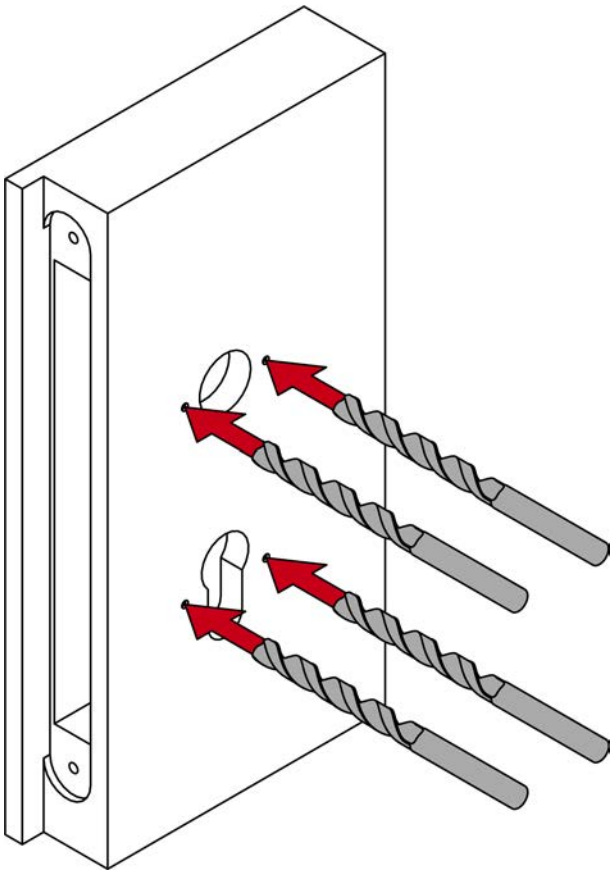
8. Remove the drilling template and spindle.



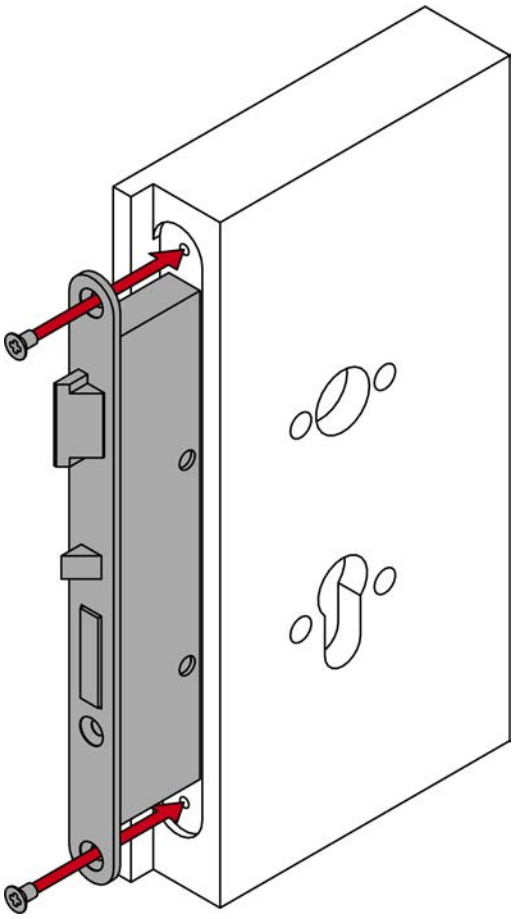
9. Remove the mortise lock.



10. Drill the required holes.



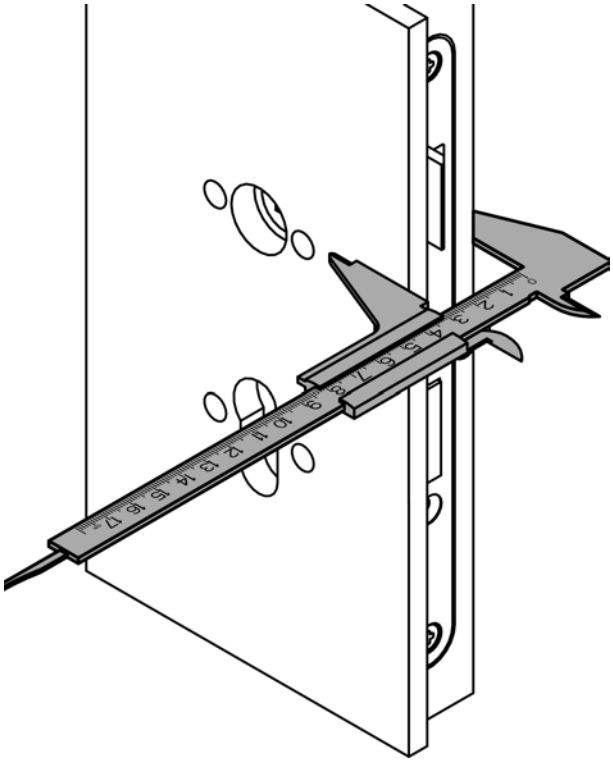
11. Fit the mortise lock.



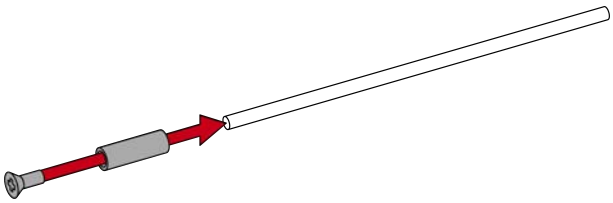
6.4.5 For door thickness X: Preparing the spindle and threaded rods

- ✓ Caliper gauge at hand.
- ✓ Saw at hand.
- ✓ PH2 screwdriver at hand.

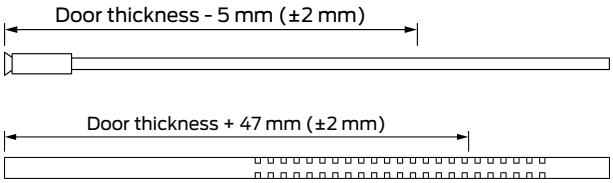
1. Measure the door thickness.



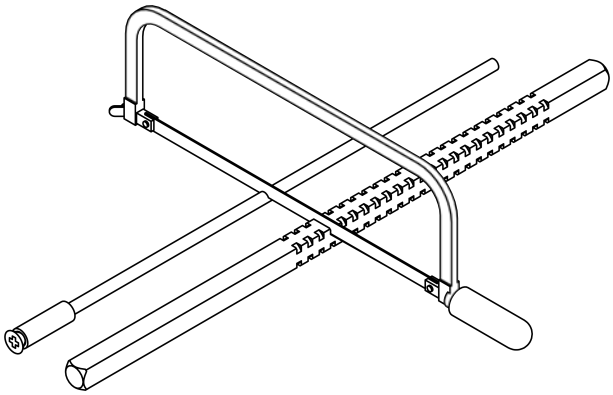
2. For door thickness X: screw the 10 mm screws, threaded sleeves and threaded rods together.



3. For X: mark the sawing points on the threaded rods and spindle.



4. For X: Use a suitable saw to cut the threaded rods and spindle.



6.4.6 Installing the fitting

- ✓ Door pre-drilled.
- ✓ PH2 screwdriver at hand.
- ✓ TX15 screwdriver at hand.
- ✓ Caliper gauge at hand.

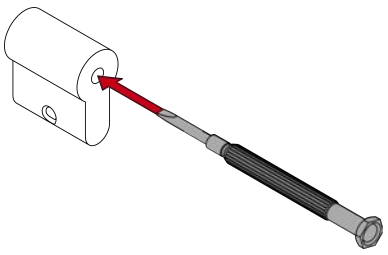
1. For non-MO: insert the blank cylinder.

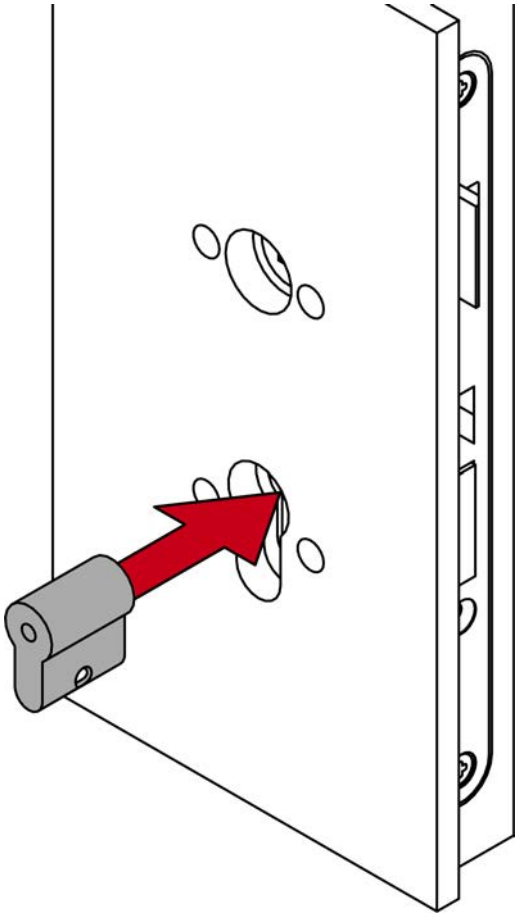
NOTE

Feed the blank cylinder into the hole using a screwdriver

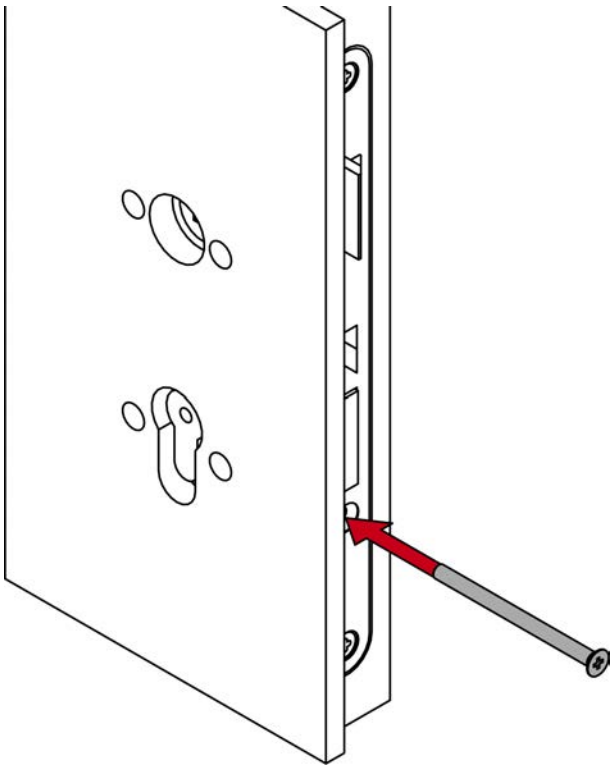
It is difficult to position the blank cylinder correctly, especially in thick doors.

1. Insert a screwdriver into the hole in the blank cylinder.
2. Position the blank cylinder using the screwdriver.

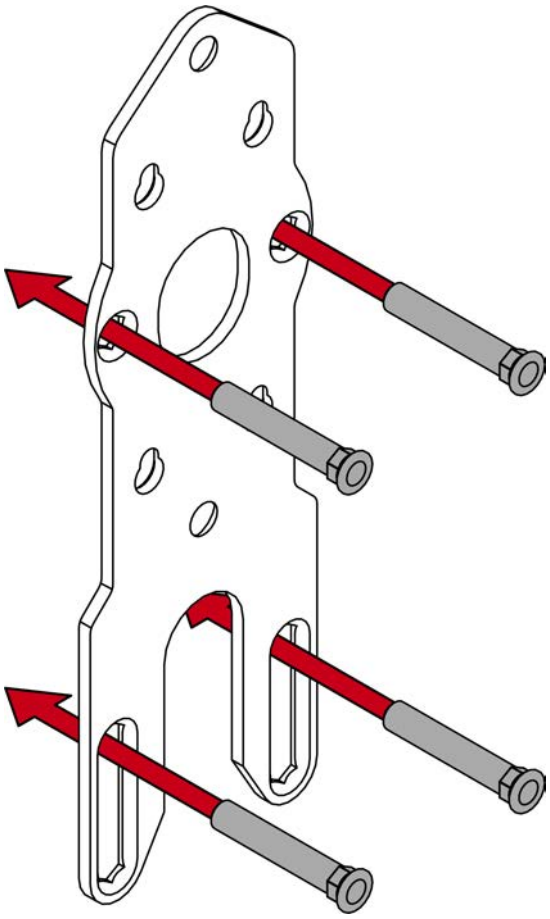




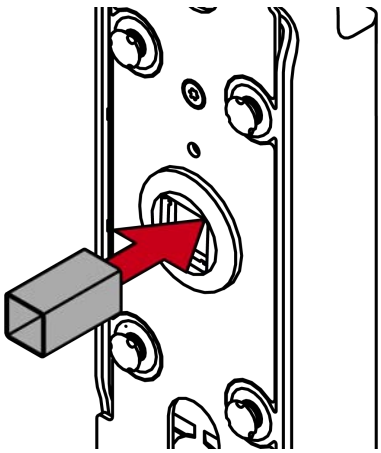
2. For non-MO: screw the blank cylinder firmly into position.



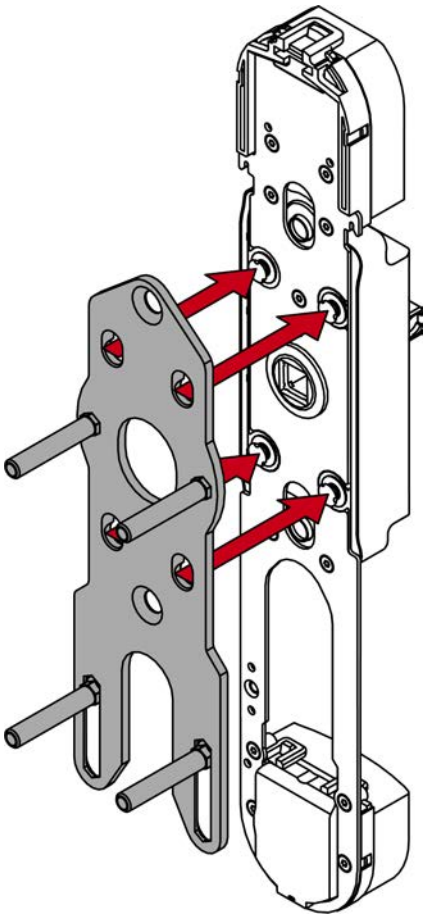
3. Insert the sleeve nuts into the fastening plate.



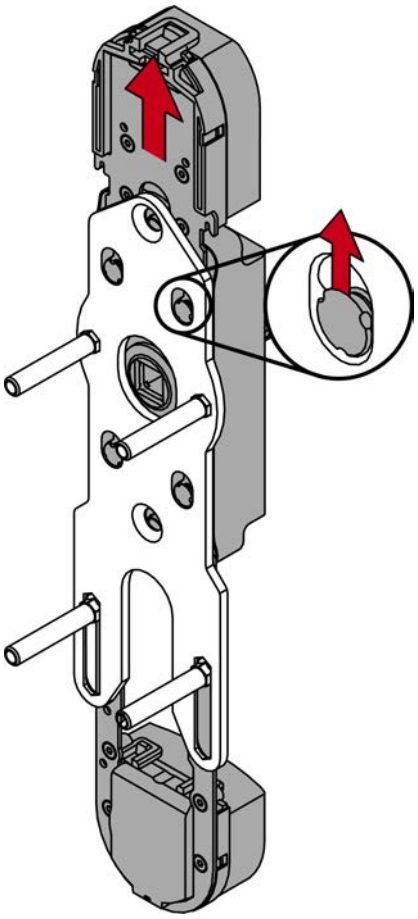
4. For 7 mm spindle: Insert the adapter shoe into the spindle mount on the module support.



5. Insert the module support into the fastening plate.



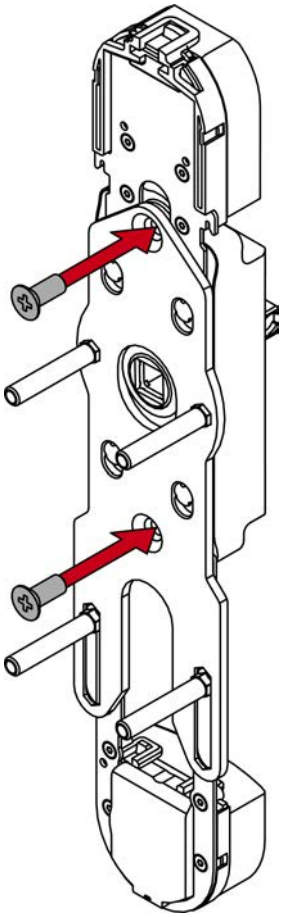
6. Slide the module support upwards.



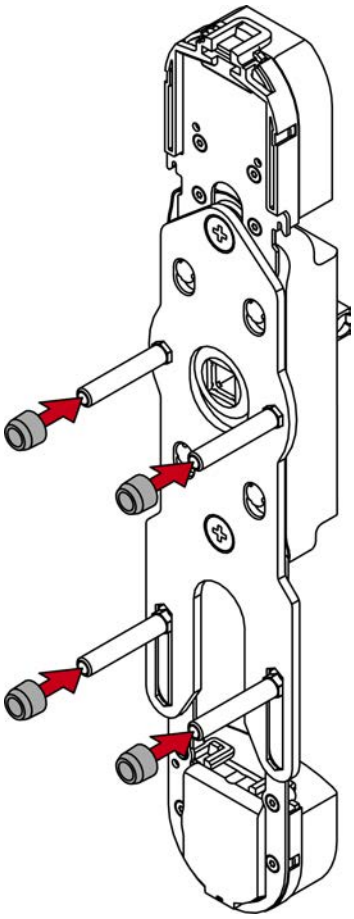
↳ Module support snaps into place.

7. Fasten the module support to the fastening plate (PH2) with the 12 mm screws.

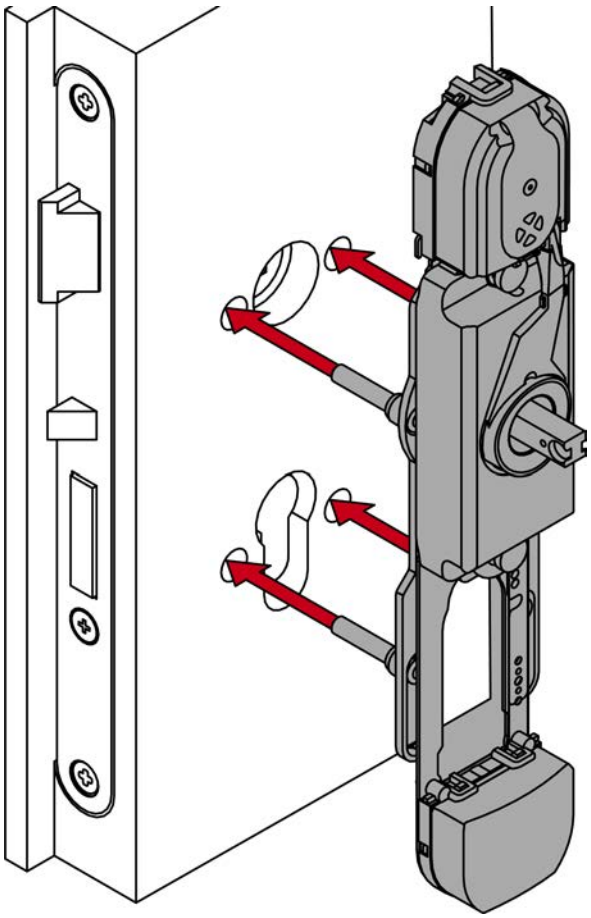
M5×12



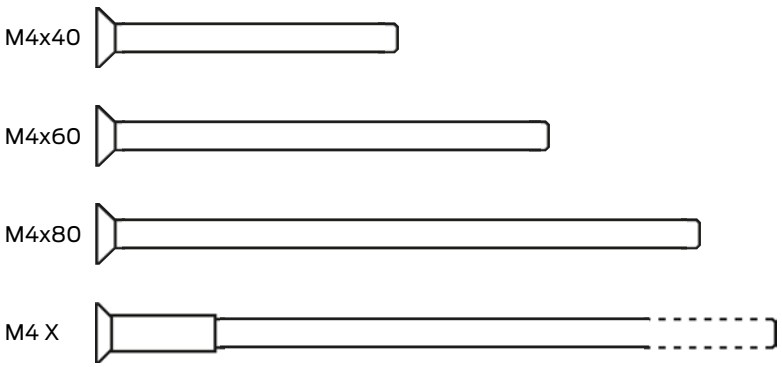
8. Place the compshells on the sleeve nuts.

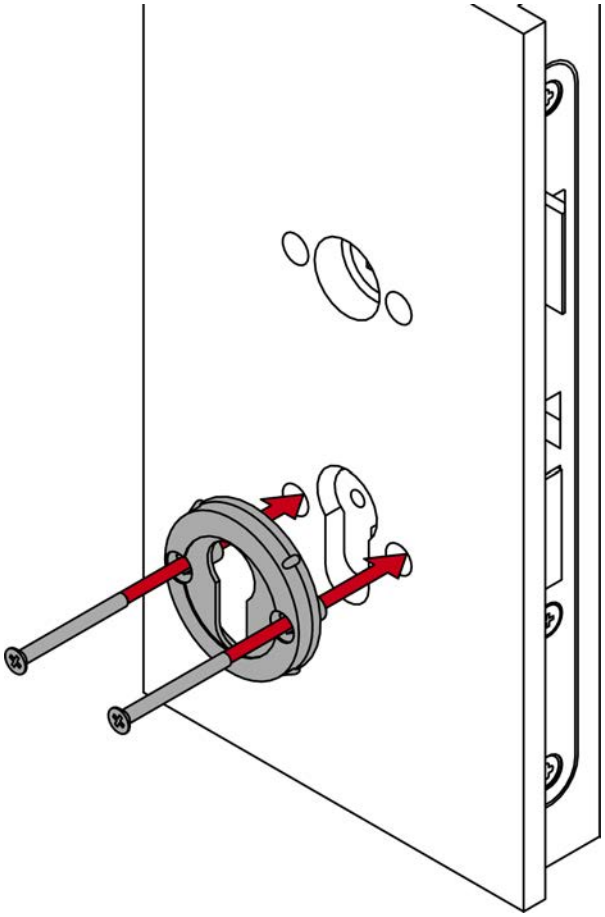


9. Insert the module support with the fastening plate into the outer side of the door.

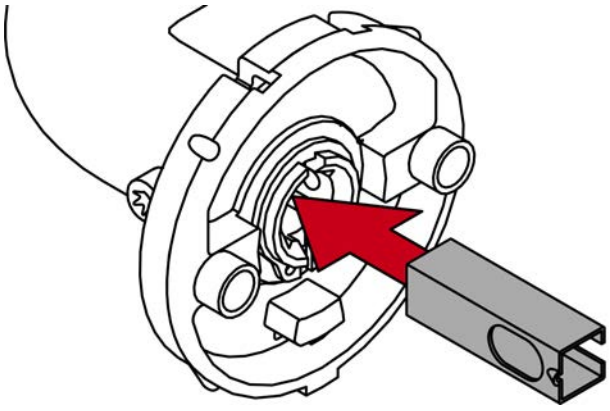


10. Firmly fasten the cylinder escutcheon to the sleeve nuts (PH2).

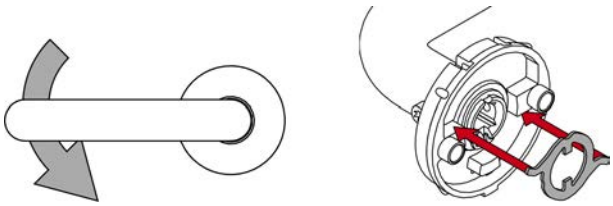


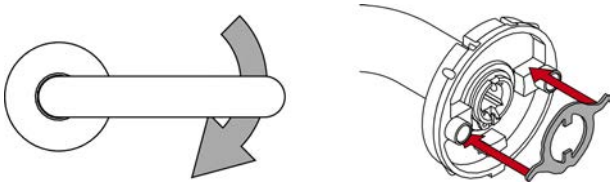


11. For 7 mm spindle: Place the adapter sleeve in the inside handle in such a way that the recess faces the grub screw.

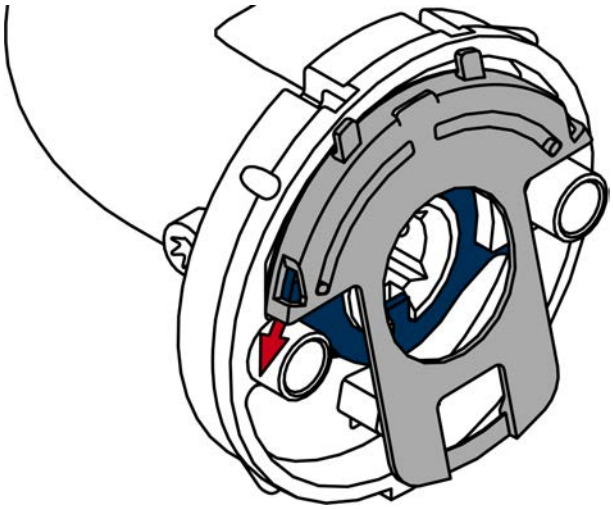


12. Determine the required direction of rotation for your inside handle.
13. Place the interchangeable plate into your inside handle escutcheon as required.

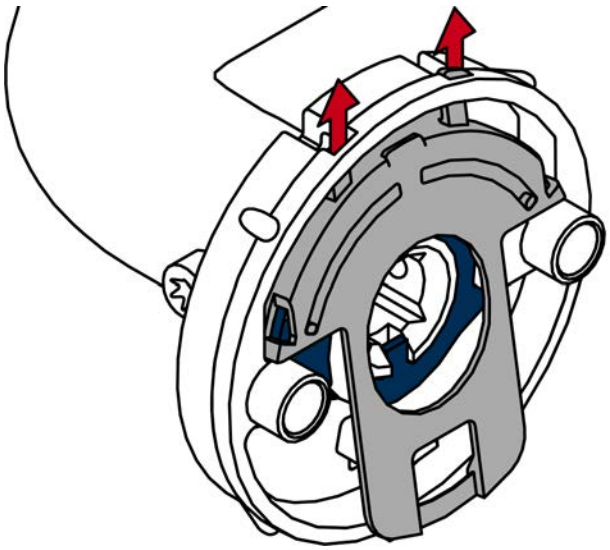




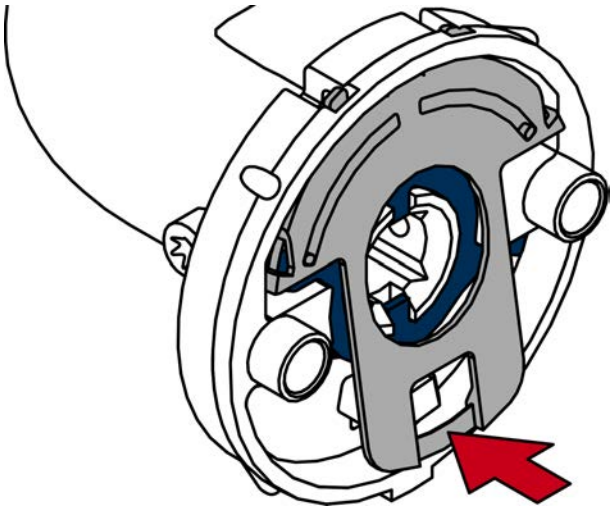
14. Pre-tension the spring element on the interchangeable plate.



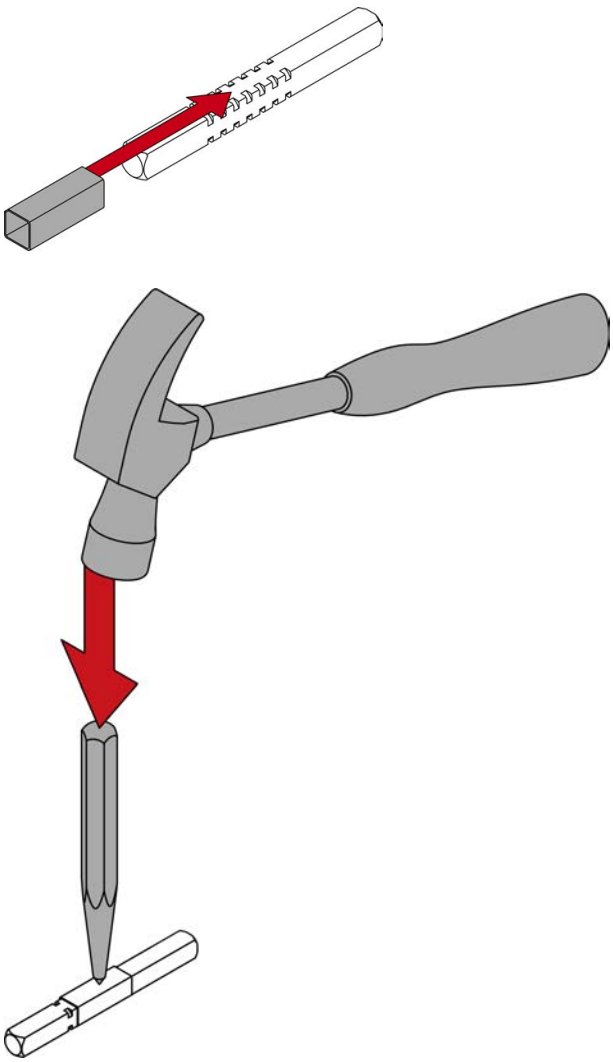
15. Slide the spring element nose into the slot in the escutcheon.



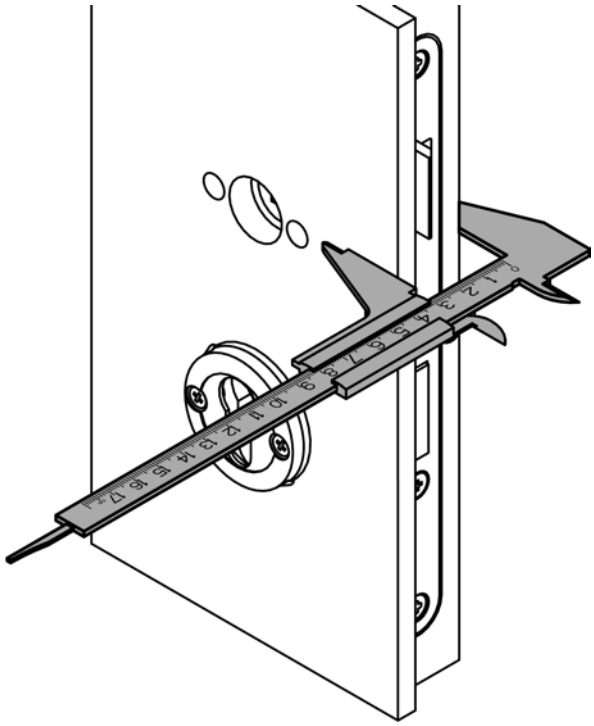
16. Attach the end of the spring element into the slot in the escutcheon.



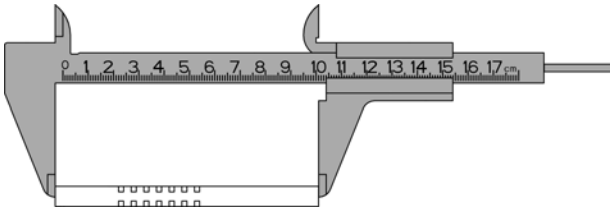
17. For 8.5 mm and 10 mm spindle: slide the adapter sleeve into the centre of the spindle. Use a punch and hammer to make an indent in the adapter sleeve to prevent it from slipping.



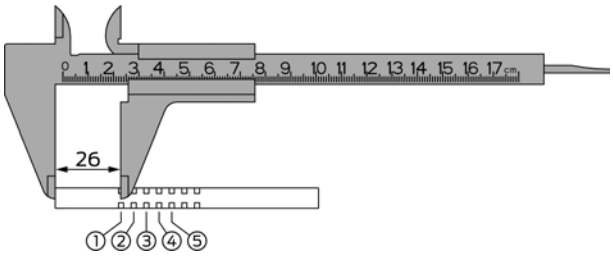
18. Measure the door thickness.



19. Measure the total length of the spindle.

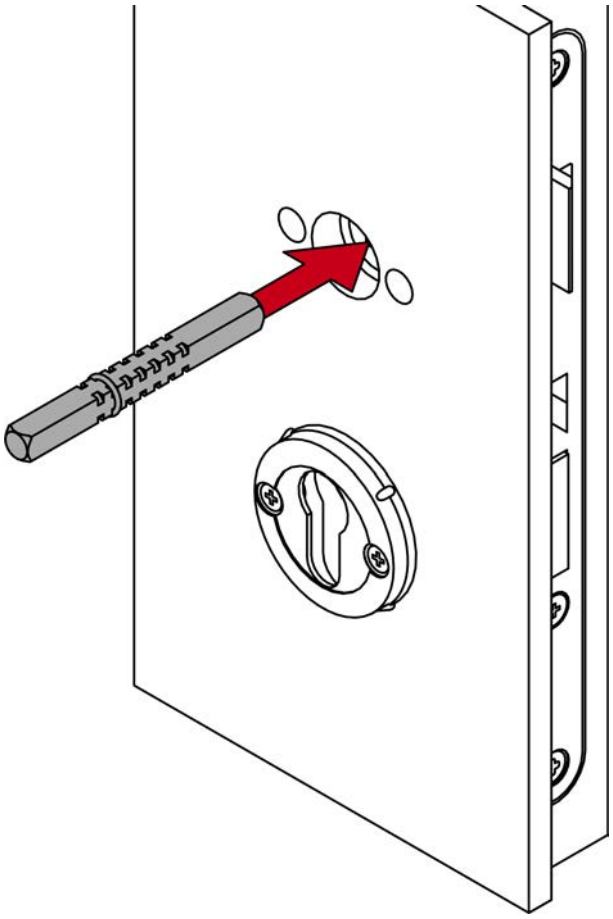


20. Locate the inside of the spindle (four-edge end up to the centre of the first groove = 26 mm).
21. Use the table to determine the position of the O-ring.

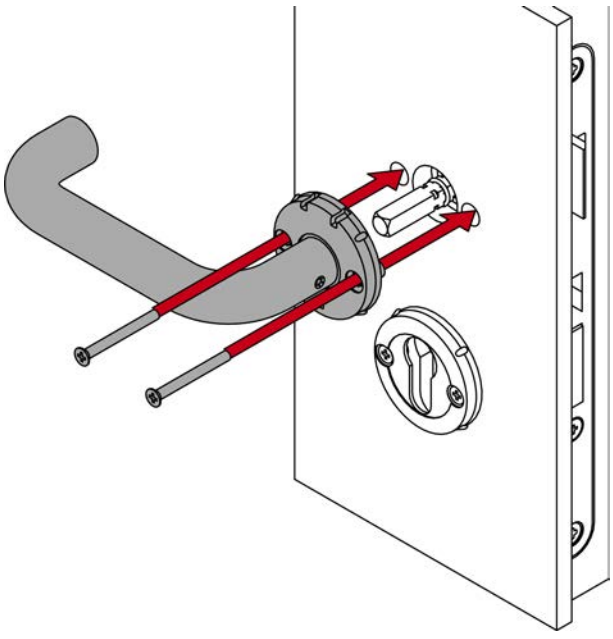


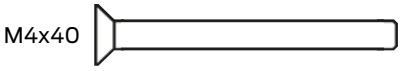
Area	Door thickness (mm)	Spindle length (mm)	Ring position
S	32 – <36	84	3
S	32 – <36	94	5
S	36 – <41	84	2
S	36 – <41	94	4
S	41 – <46	84	1
S	41 – <46	94	3
S	46 – <51	94	2
S	51 – 54	94	1
M	52 – <56	104	3
M	52 – <56	114	5
M	56 – <61	104	2
M	56 – <61	114	4
M	61 – <66	104	1
M	61 – <66	114	3
M	66 – <71	114	2
M	71 – 74	114	1
L	72 – <76	124	3
L	72 – <76	134	5
L	76 – <81	124	2
L	76 – <81	134	4
L	81 – <86	124	1
L	81 – <86	134	3
L	86 – <91	134	2
L	91 – 94	134	1
XL	92 – 184	O-ring is 30–35 mm from the cut end of the spindle.	

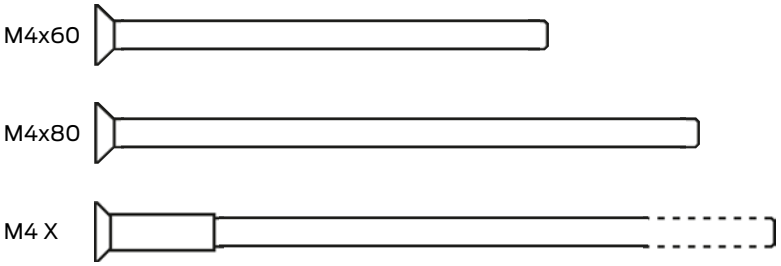
22. Insert the spindle into the door with the ring-free side as far as it will go.



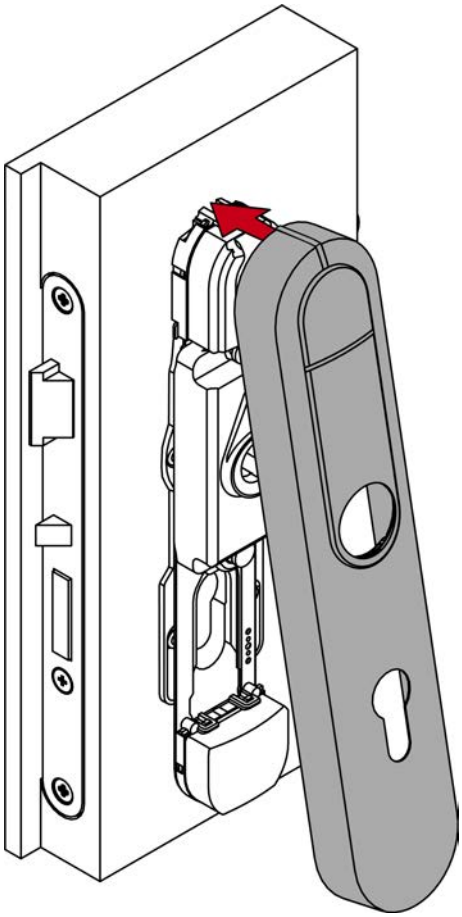
23. Place the inside handle unit on the spindle.
24. Firmly screw the inside handle unit onto the sleeve nuts (PH2).



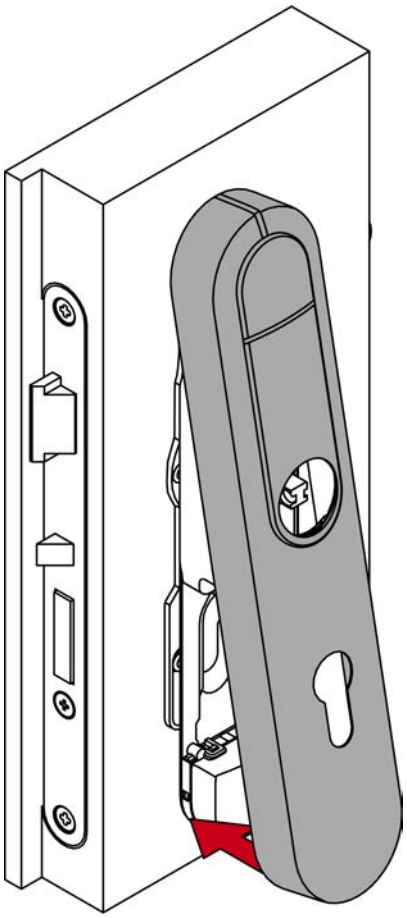




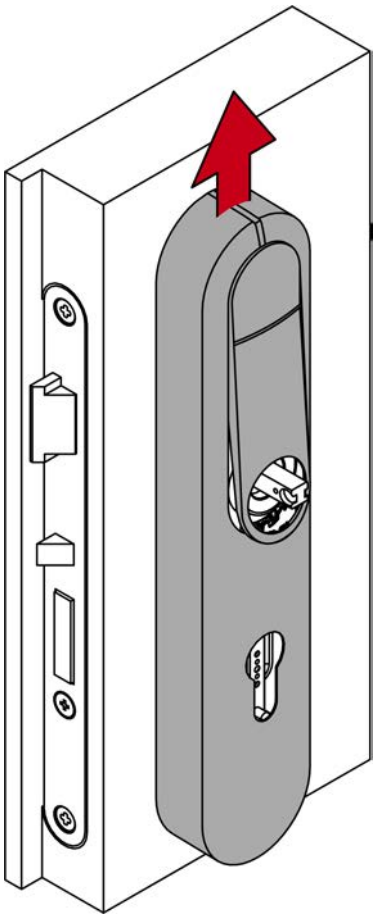
25. Place the cover on top of the fastening plate.



26. Fold down the cover.

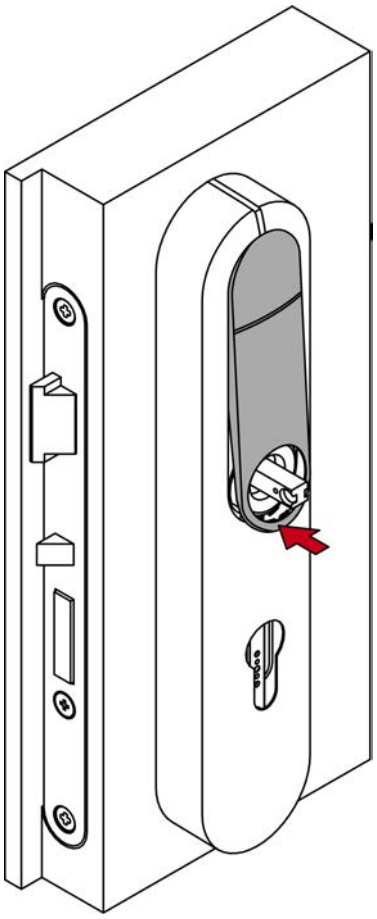


27. Push the cover against the door, sliding it upwards at the same time.

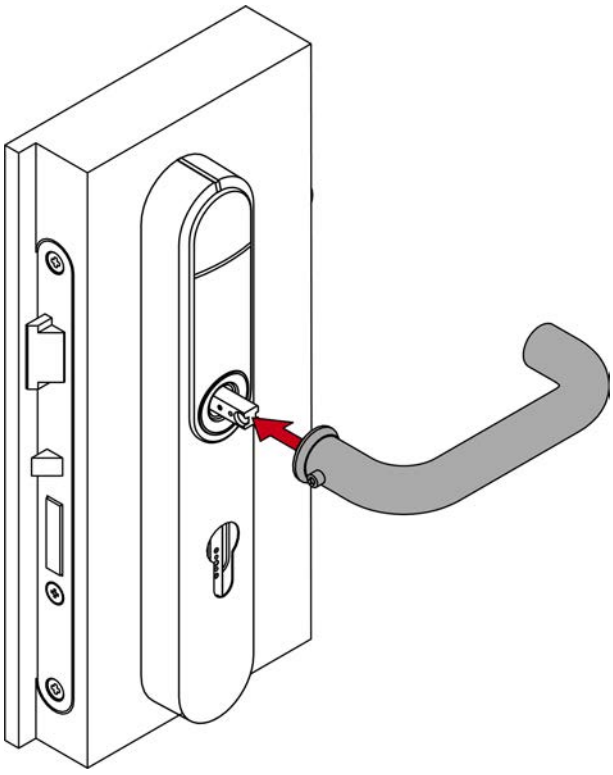


↳ Cover snaps into place.

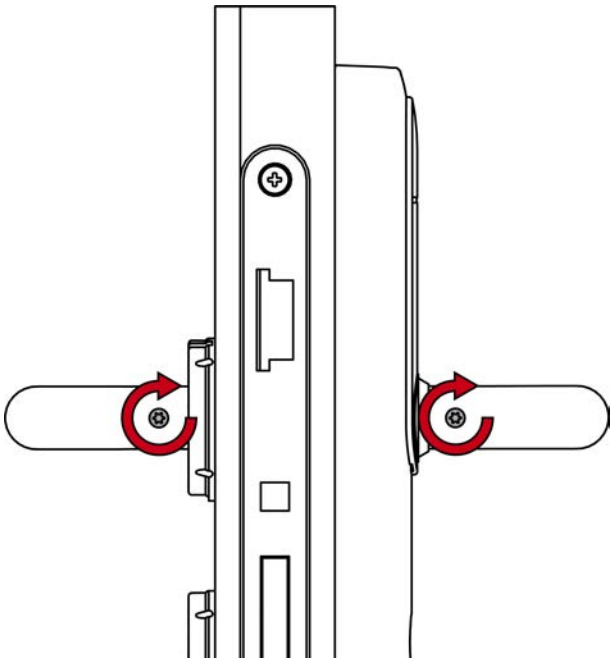
28.Press the inlay into place.



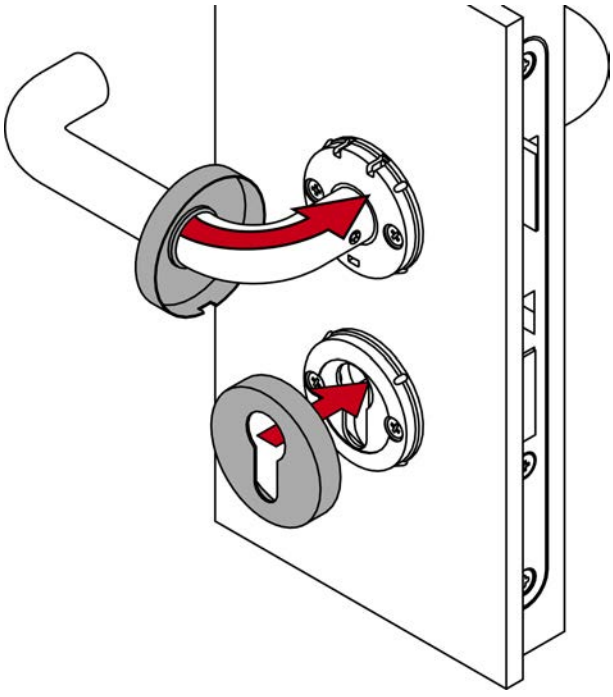
29.Fit the outside handle.



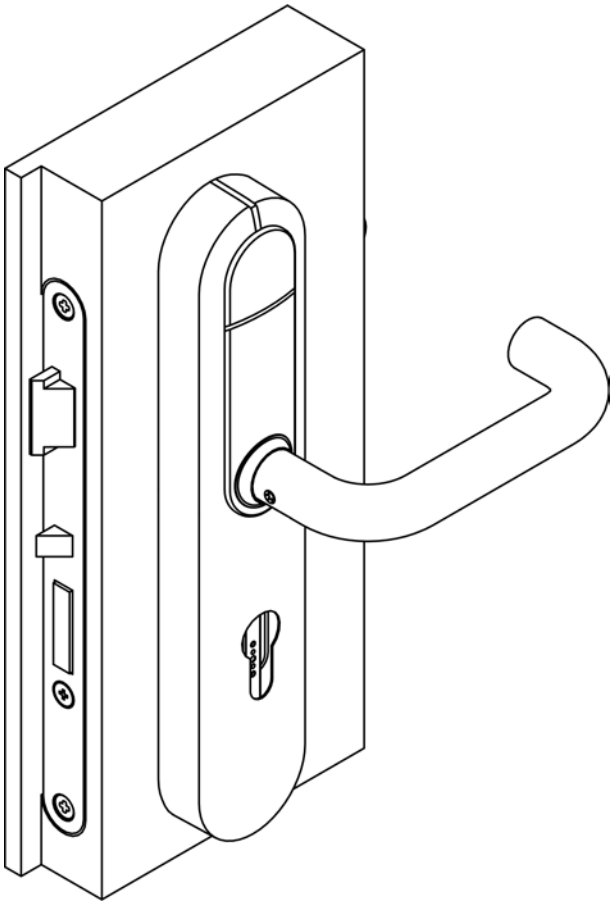
30.Use the grub screws to tighten both handles (TX15).



31. Place both rosette covers on their respective rosettes.



↳ SI SmartHandle AX Advanced fully installed.



6.5 Reader on both sides (DS)

NOTE

Close range mode for active or hybrid reader on both sides

The active technology, also used in hybrid readers, has a significantly greater range. This can lead to the credential mistakenly communicating with the SI SmartHandle AX Advanced on the other side of the door.

- In such cases, activate the close range mode in LSM/AXM (see LSM or AXM manual).

6.5.1 Scope of delivery

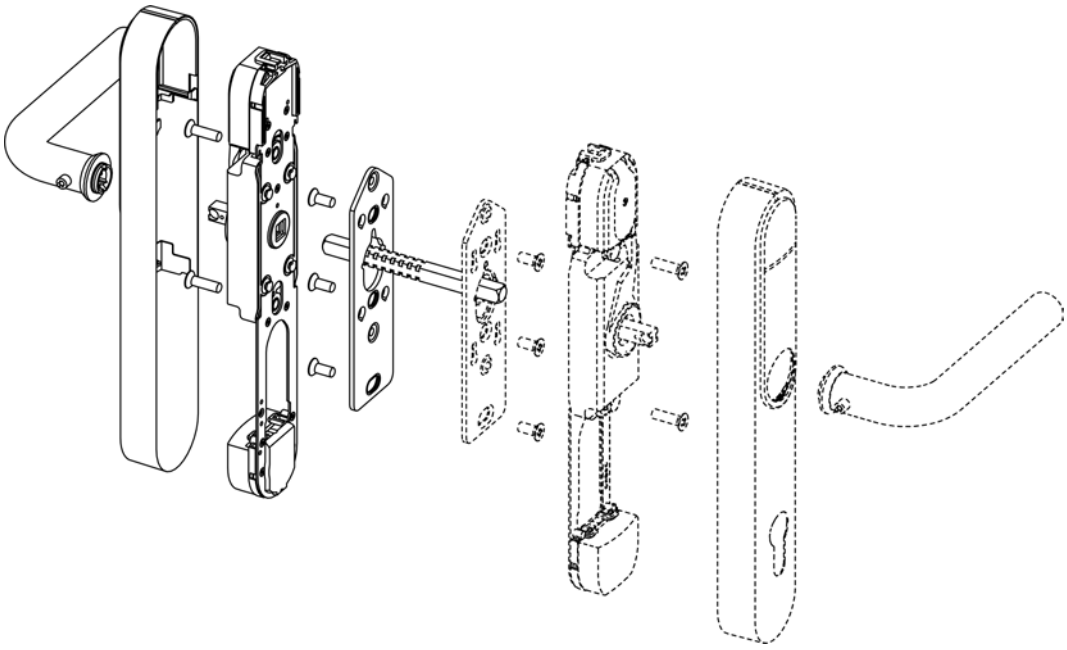
- SI SmartHandle AX Advanced reader on both sides (part for inner side)
- Special tool
- Quick guide

Depending on version:

- Adapter set, 7 mm spindle
- Adapter sleeve, 8.5 mm spindle
- Adapter sleeve, 9 mm spindle

- Adapter sleeve, 10 mm spindle

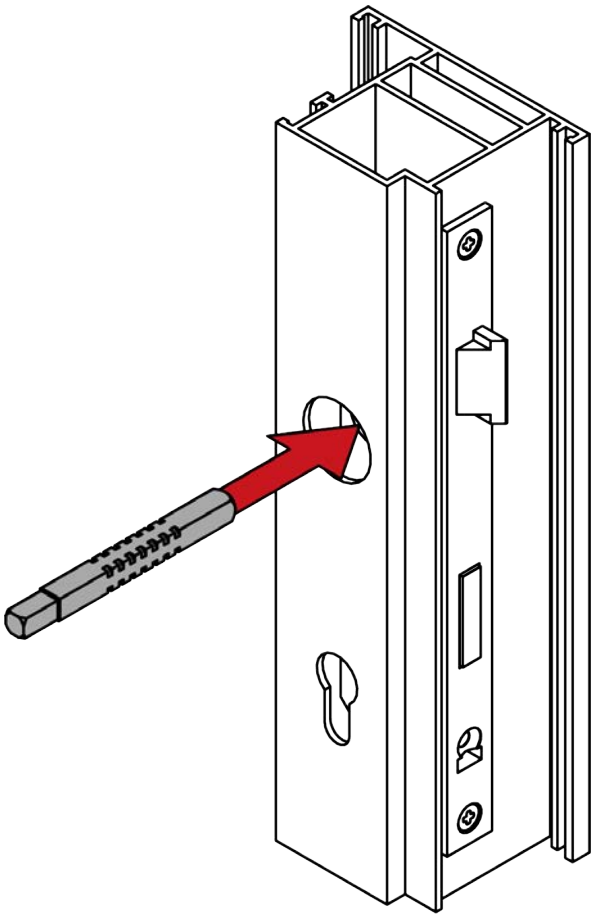
6.5.2 Structure



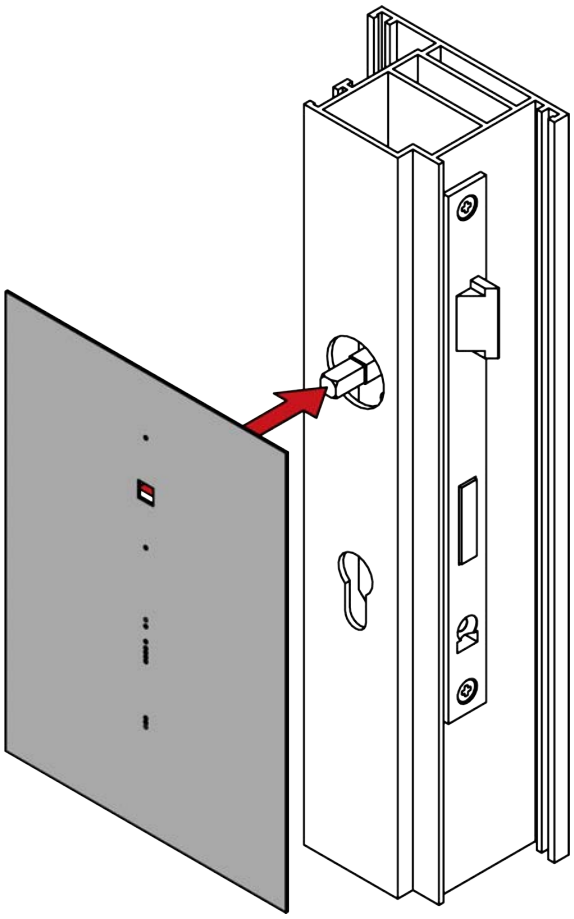
6.5.3 Prepare door (drilling template)

- ✓ PH2 screwdriver at hand.
- ✓ Pin or scriber at hand.
- ✓ Drill at hand.
- ✓ Suitable drill bit at hand (Ø 7 mm).
- ✓ Countersink at hand.

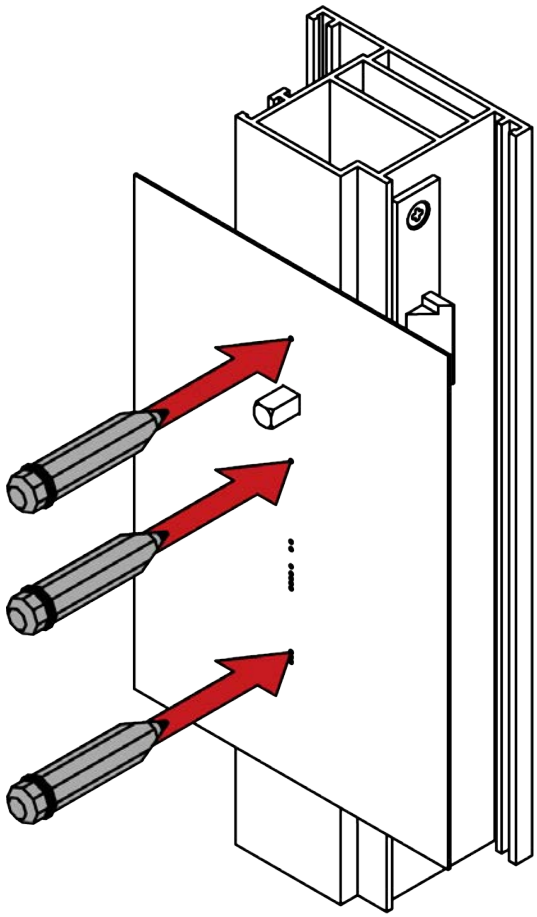
1. Insert the spindle into the mortise lock.

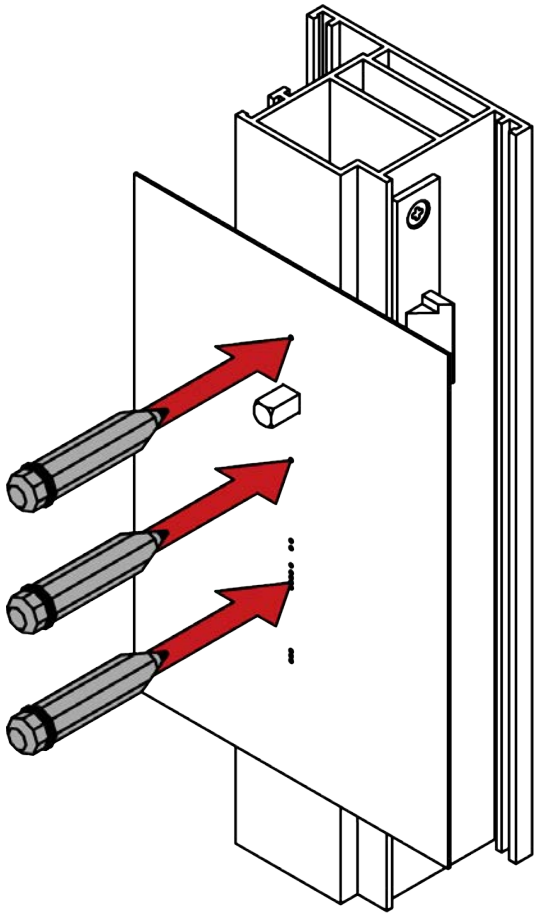


2. Place the drilling template on the spindle from the inner side.

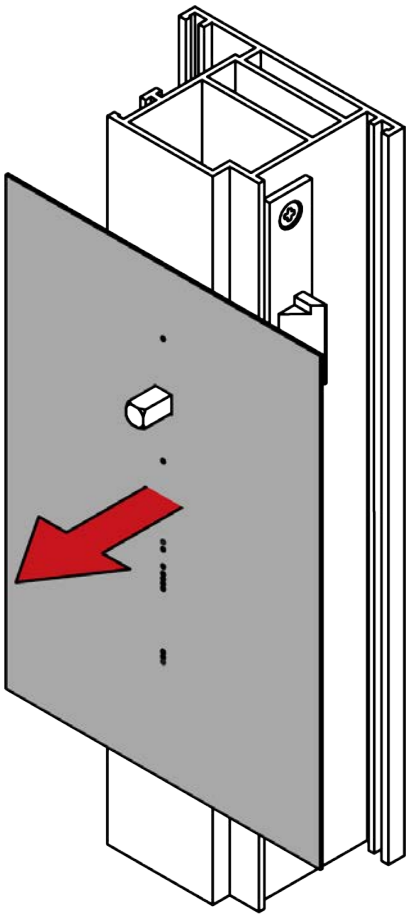


3. Mark the points to be drilled on the inner side of the door.

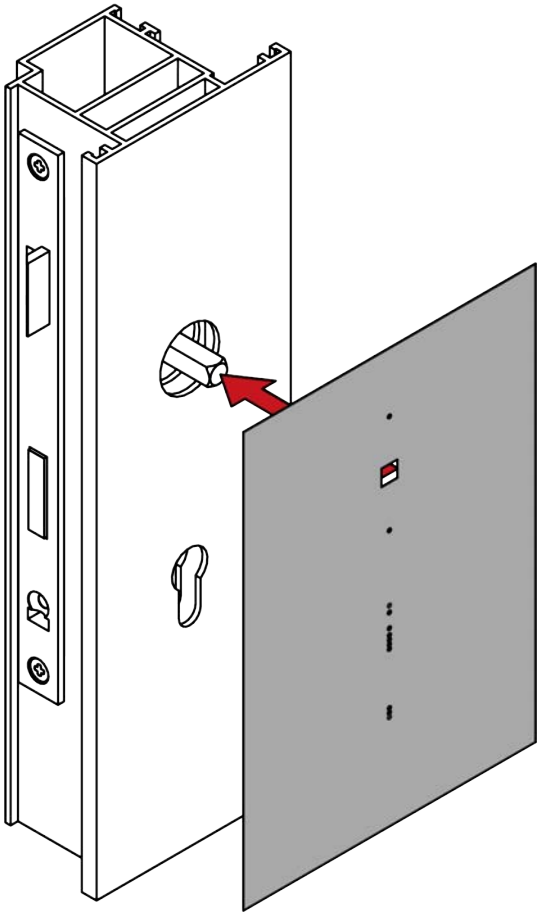




4. Remove the drilling template.

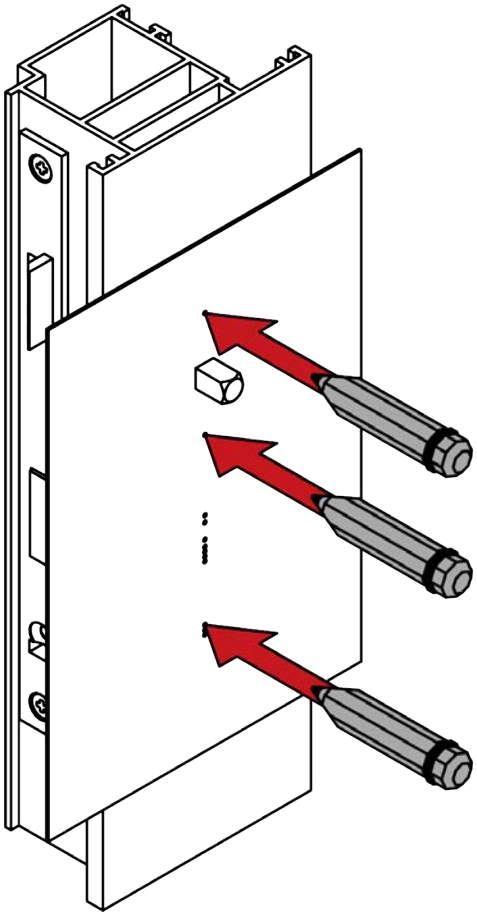


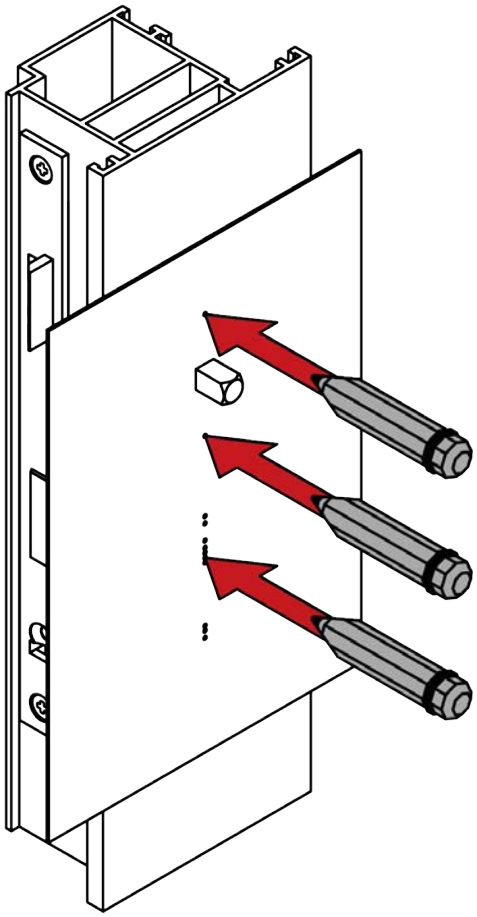
5. Place the drilling template onto the square from the outside.



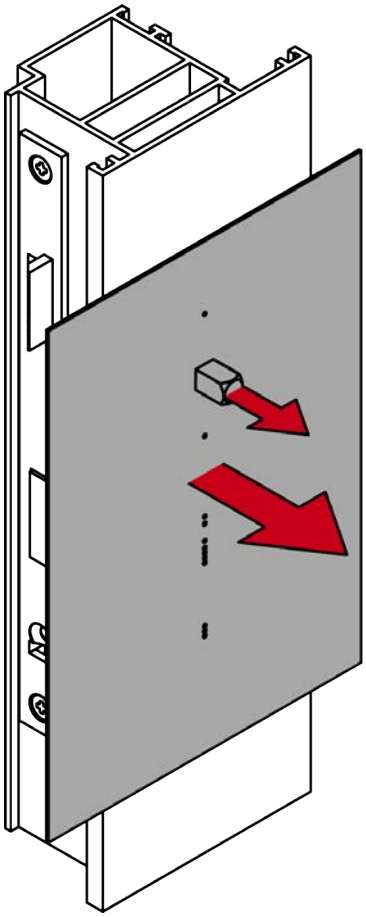
6. Align the drill template vertically using the printed scale.

7. Mark the points where the door is to be drilled on the door.

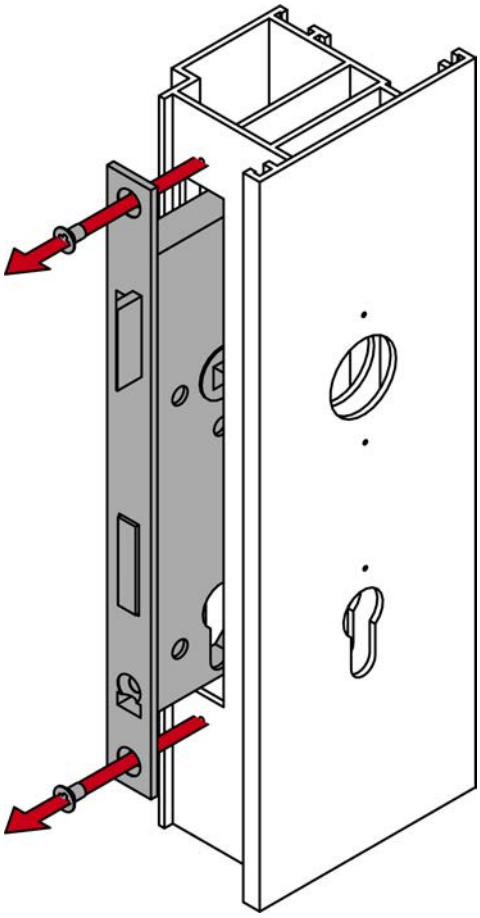




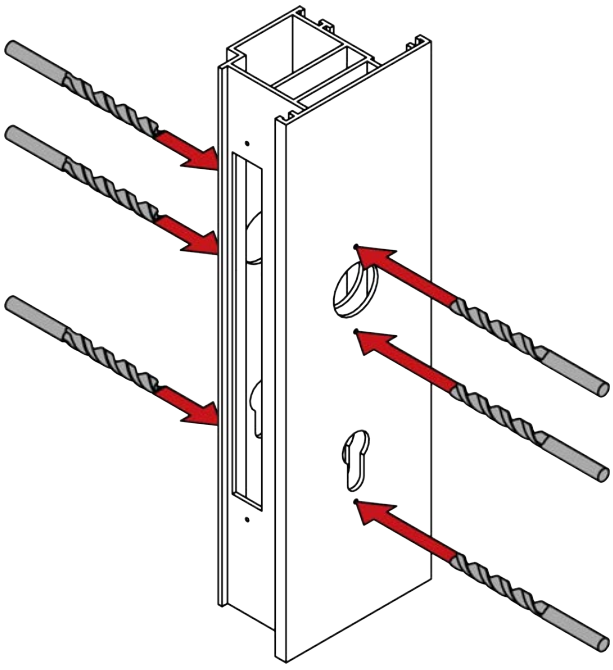
8. Remove the drilling template and spindle.

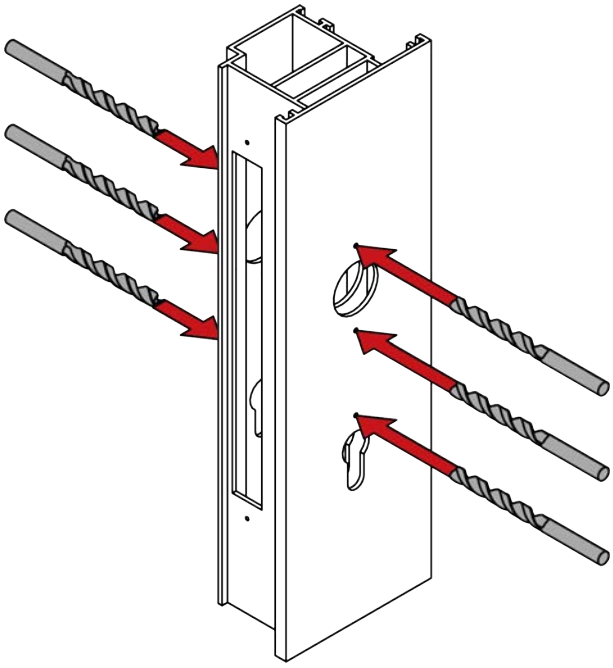


9. Remove the mortise lock.

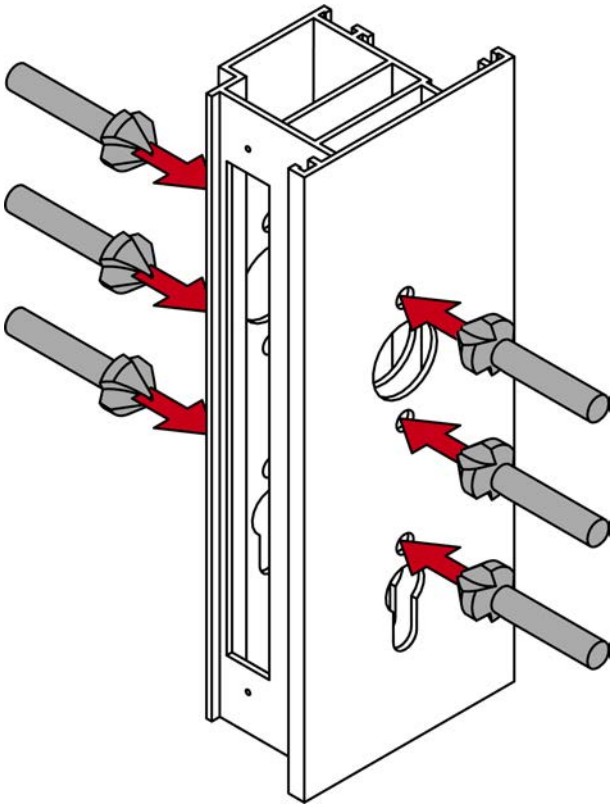


10. Drill the required holes.

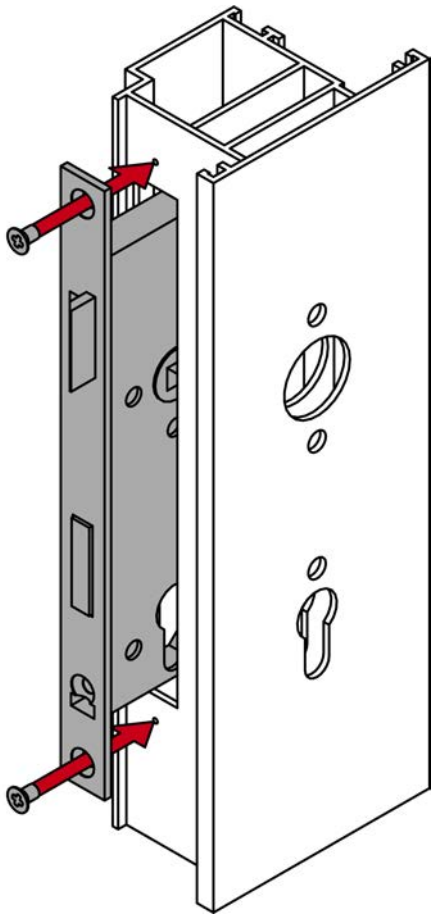




11. Deburr drilled holes with a countersink.



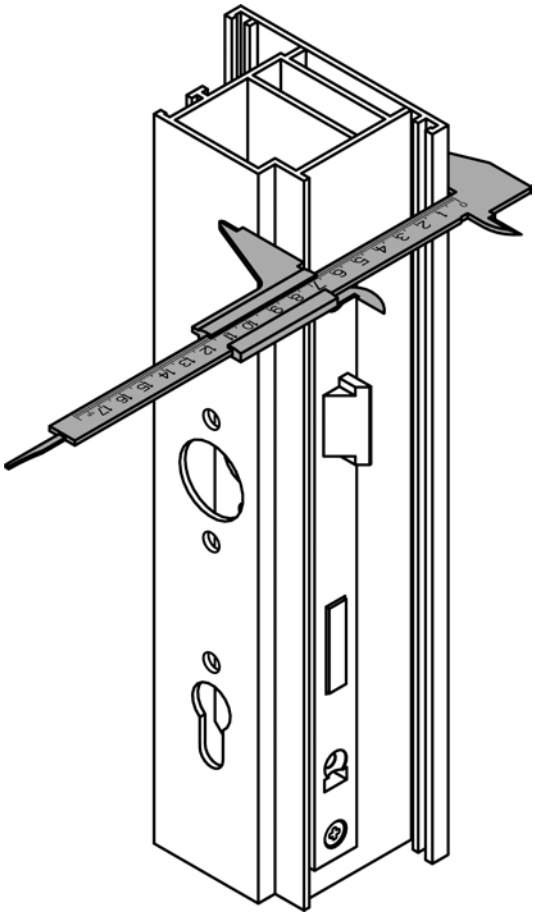
12. Fit the mortise lock.



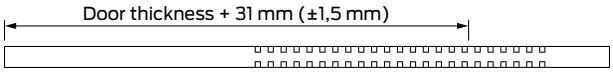
6.5.4 For door thickness X: prepare the spindle

- ✓ Caliper gauge at hand.
- ✓ Saw at hand.

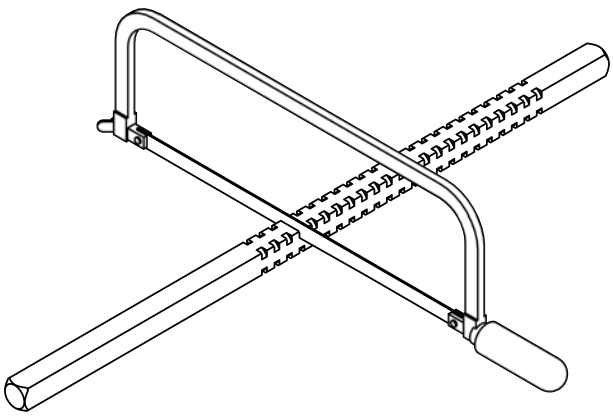
1. Measure the door thickness.



2. For X: mark the sawing point on the spindle.



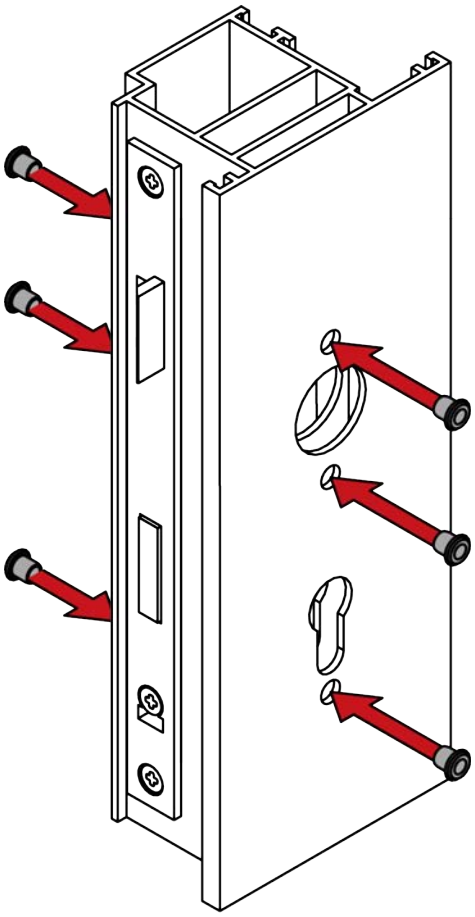
3. For X: Trim the spindle with a suitable saw.

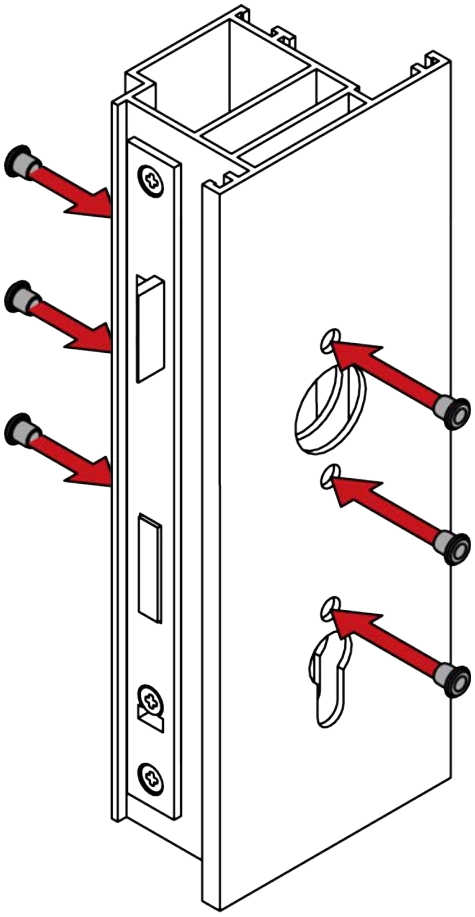


6.5.5 Installing the fitting

- ✓ Door pre-drilled.
- ✓ Blind rivet nut pliers at hand.
- ✓ PH2 screwdriver at hand.
- ✓ TX15 screwdriver at hand.

1. Fit the blind rivet nuts into the pre-drilled holes.





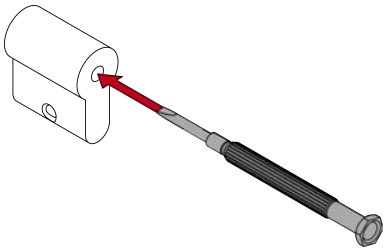
2. For non-MO: insert the blank cylinder.

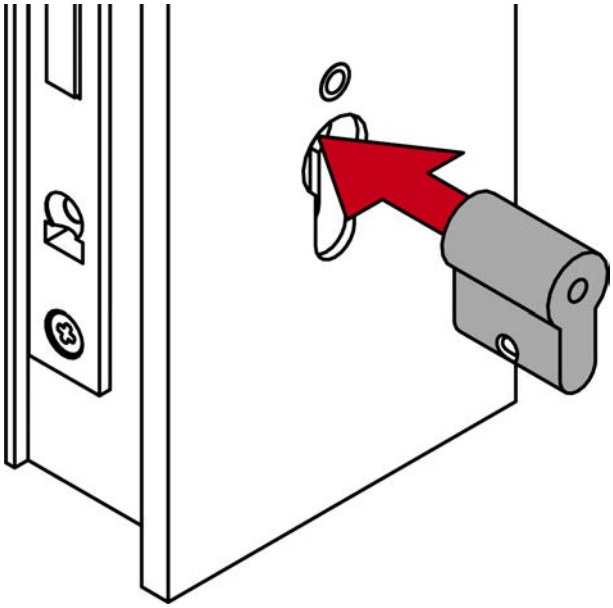
NOTE

Feed the blank cylinder into the hole using a screwdriver

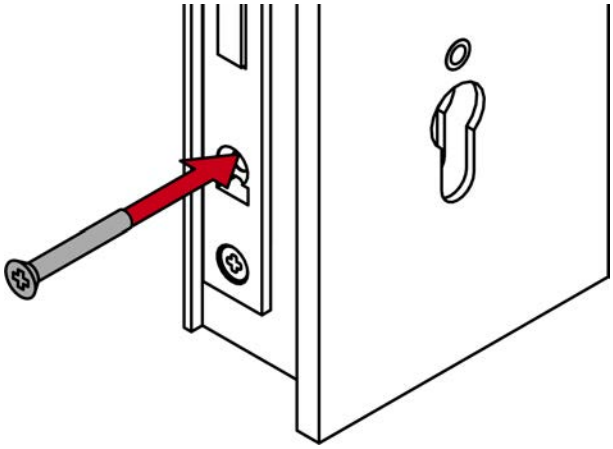
It is difficult to position the blank cylinder correctly, especially in thick doors.

1. Insert a screwdriver into the hole in the blank cylinder.
2. Position the blank cylinder using the screwdriver.

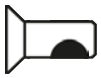


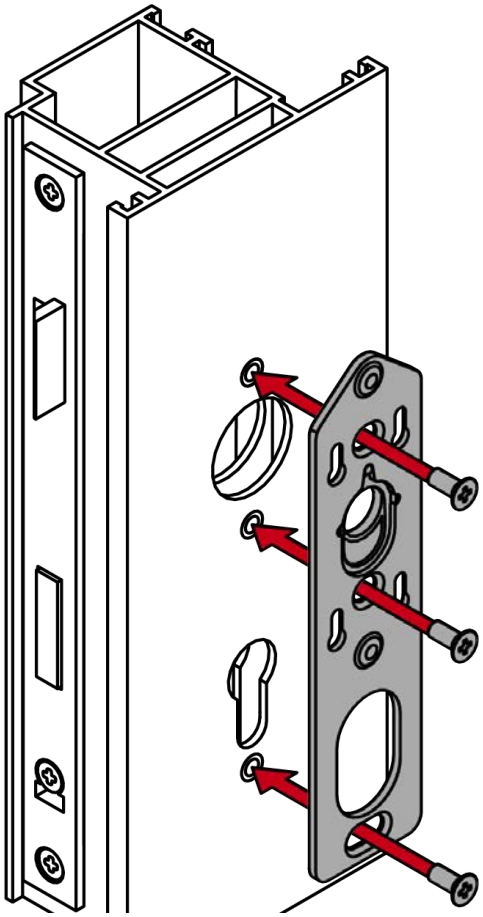


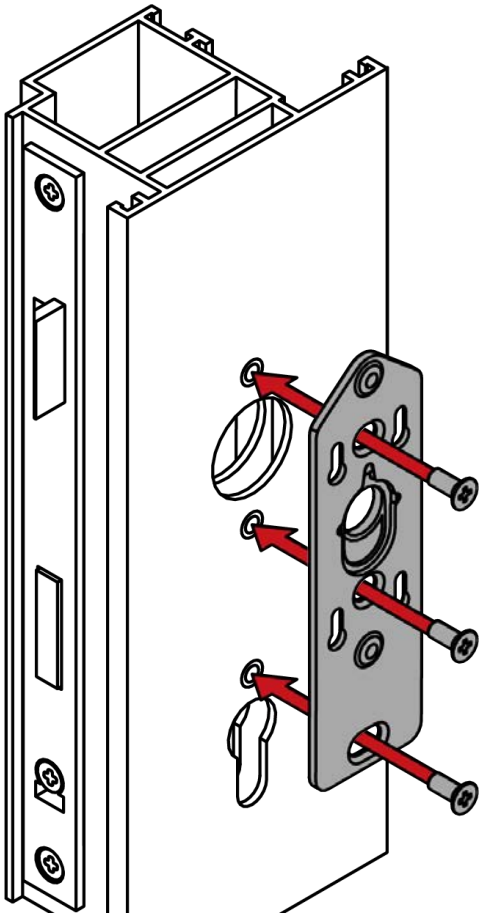
3. For non-MO: screw the blank cylinder firmly into position.



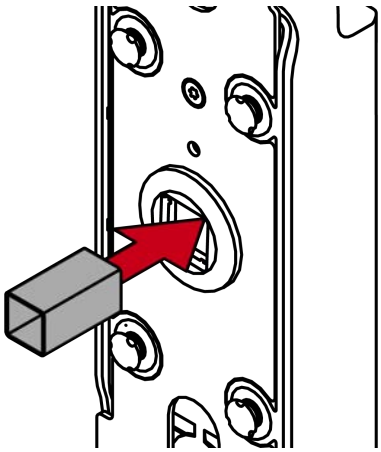
4. Use the 12 mm screws to fix the outer fastening plate onto the outer side of the door (PH2) with the tip facing upwards.
   You can identify the outer fastening plate by its elongated holes.

M5×12 

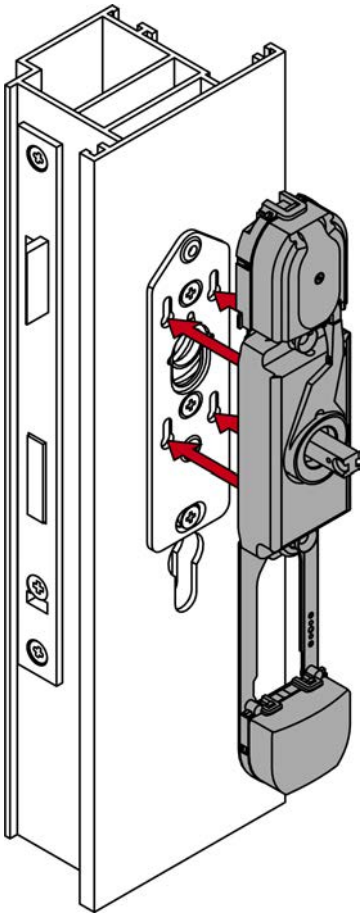




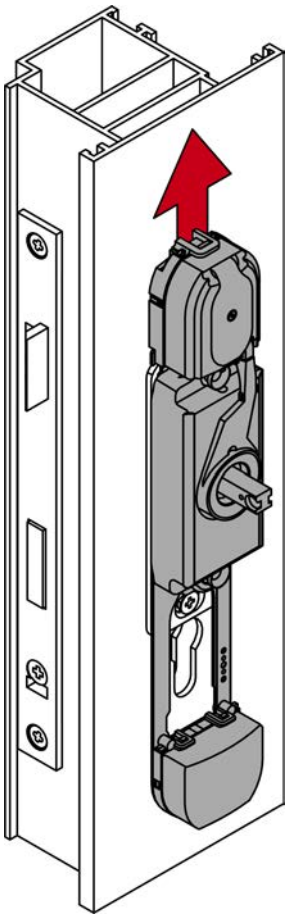
5. For 7 mm spindle: Insert the adapter shoe into the spindle mount on the module support.



6. Insert the module support into the fastening plate.

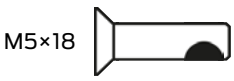


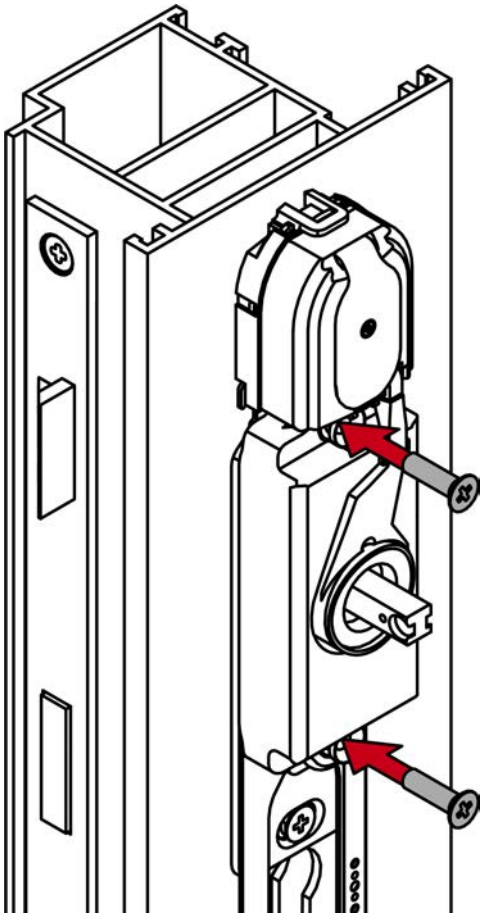
7. Slide the module support upwards.



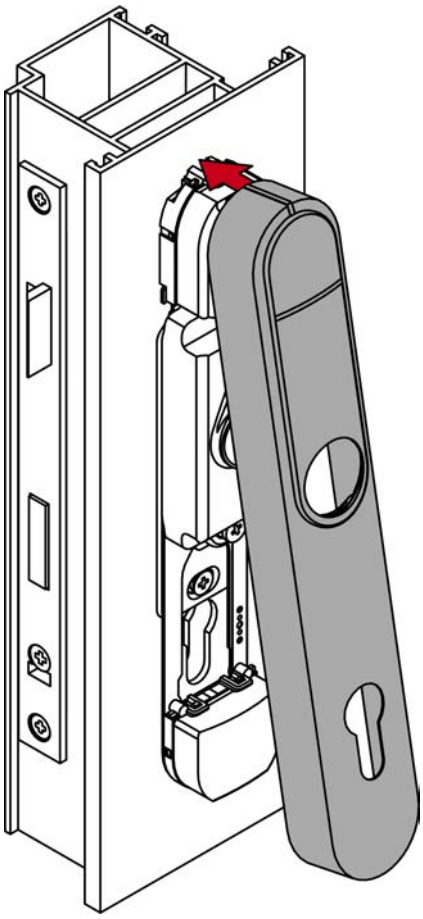
↳ Module support snaps into place.

8. Use the 18 mm screws to fix the module support onto the fastening plate (PH2).

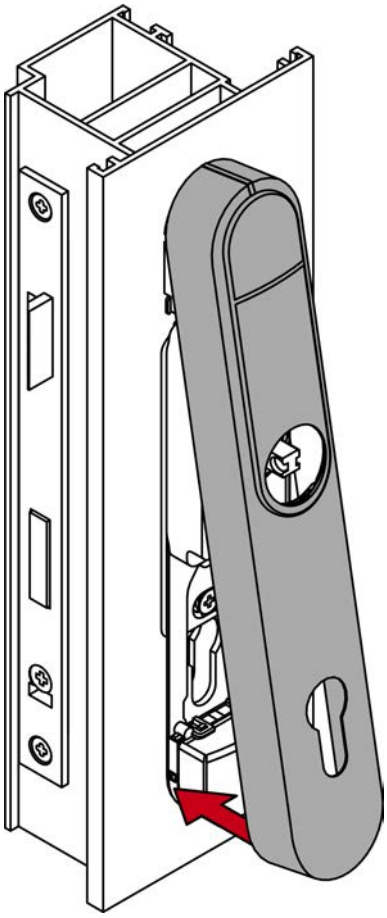




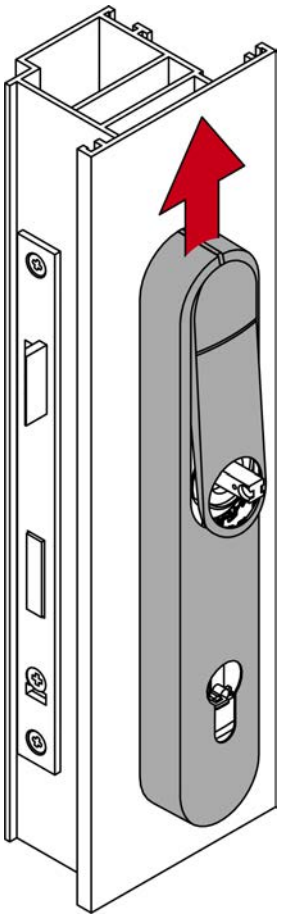
9. Place a cover on the fastening plate at the top.



10. Fold down the cover.

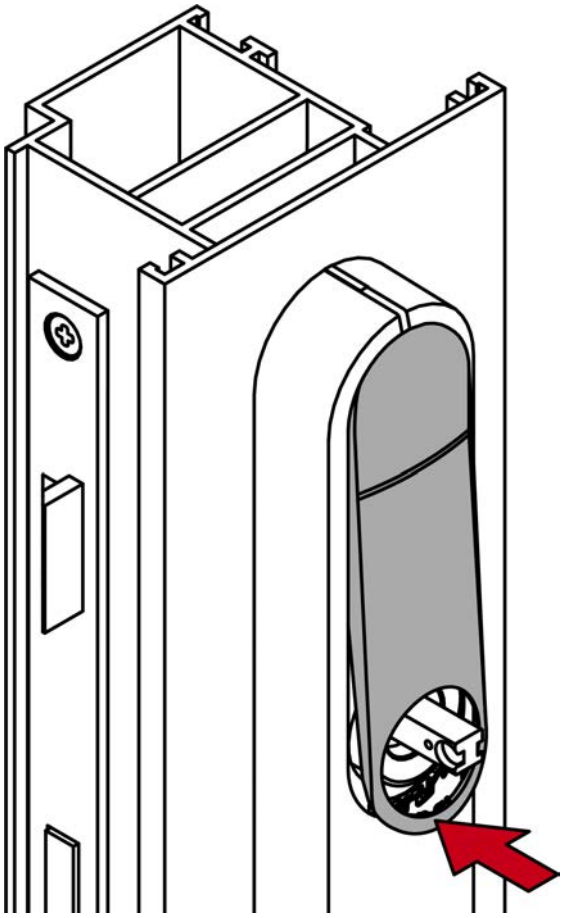


11. Push the cover against the door, sliding it upwards at the same time.

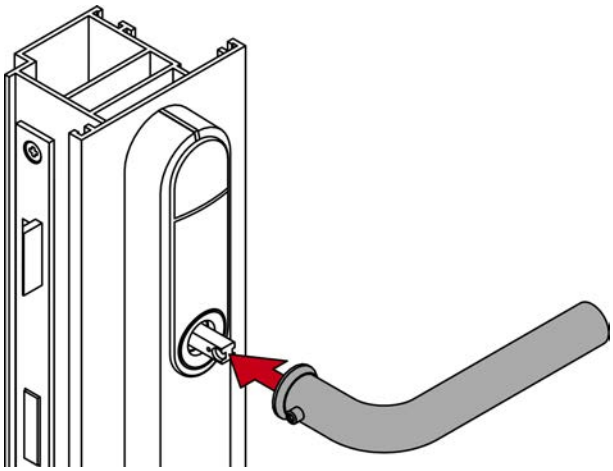


↳ Cover snaps into place.

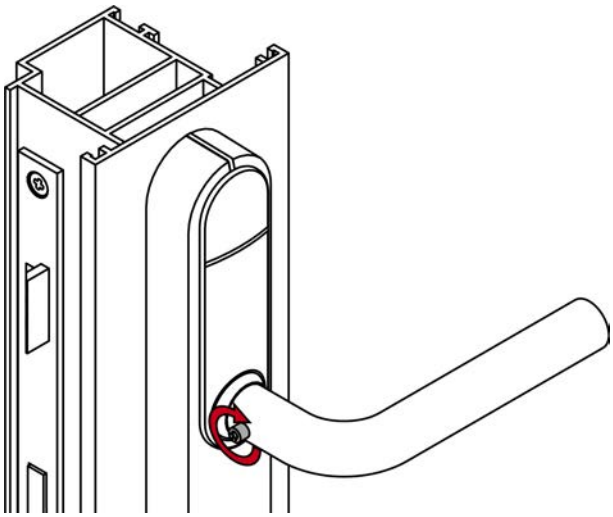
12. Press the inlay into place.



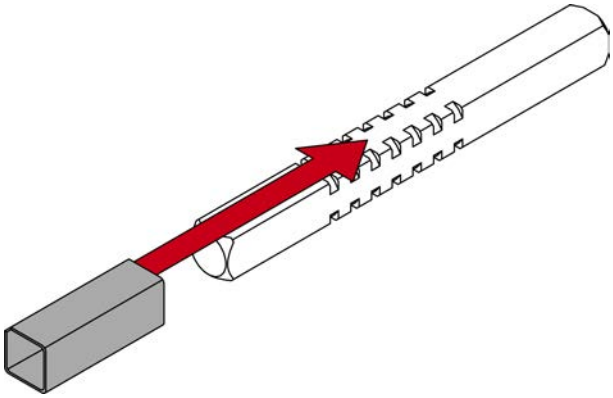
13. Fit the outside handle.

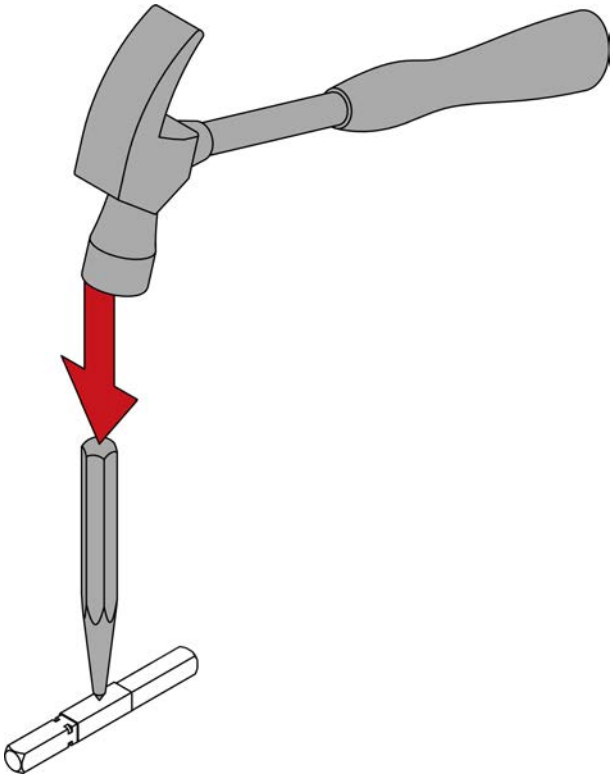


14. Tighten the grub screw in the outer handle.

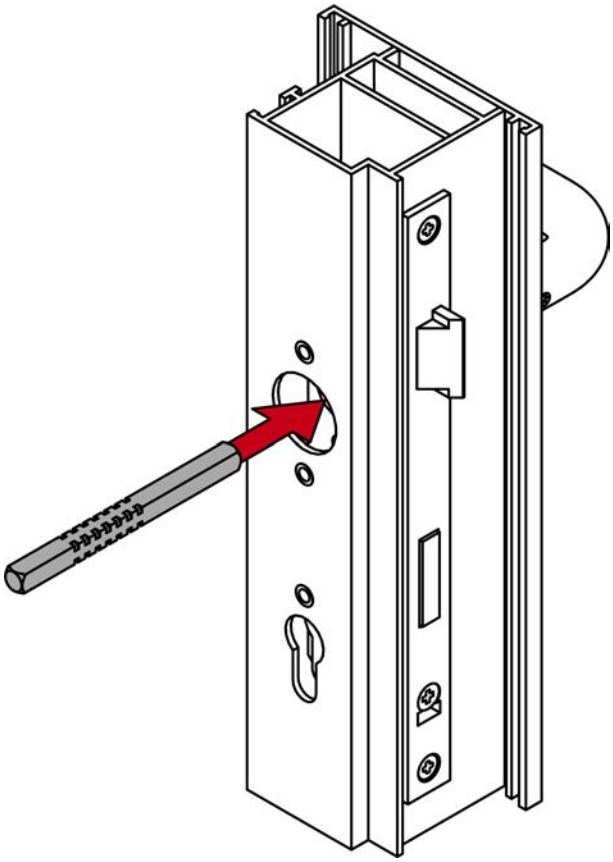


15. For 8.5 mm, 9 mm and 10 mm spindle: slide the adapter sleeve into the centre of the spindle. Use a punch and hammer to make an indent in the adapter sleeve to prevent it from slipping.

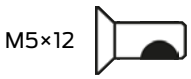


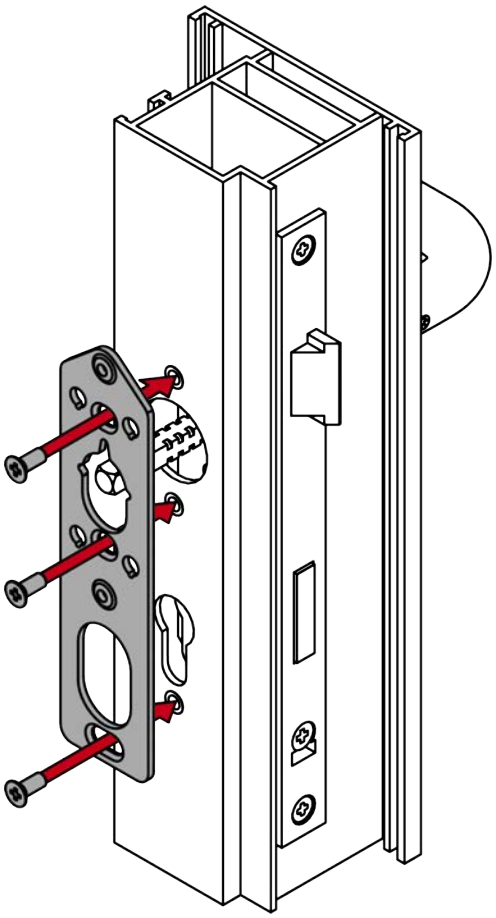


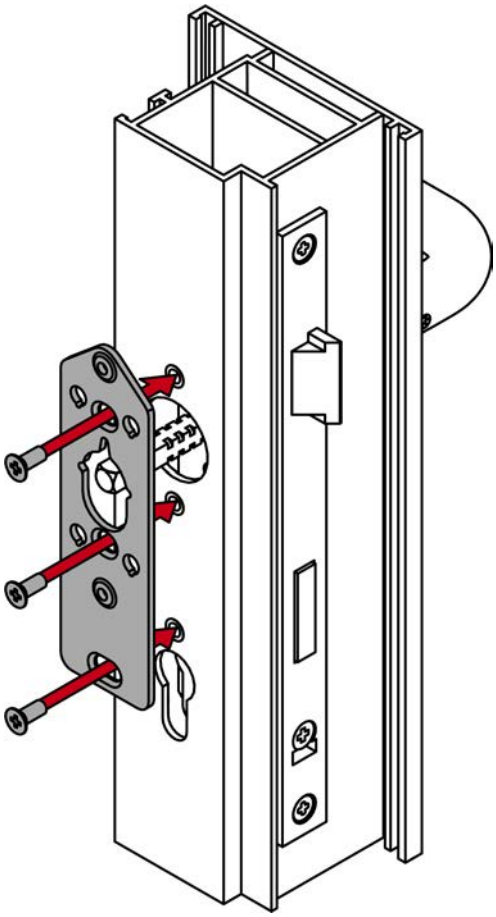
16. Insert the spindle into the door as far as it will go.



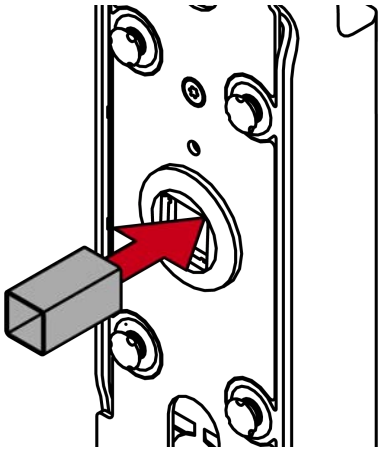
17. Use the 12 mm screws to mount the inner fastening plate onto the inner side of the door (PH2) with the tip facing upwards.



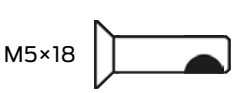


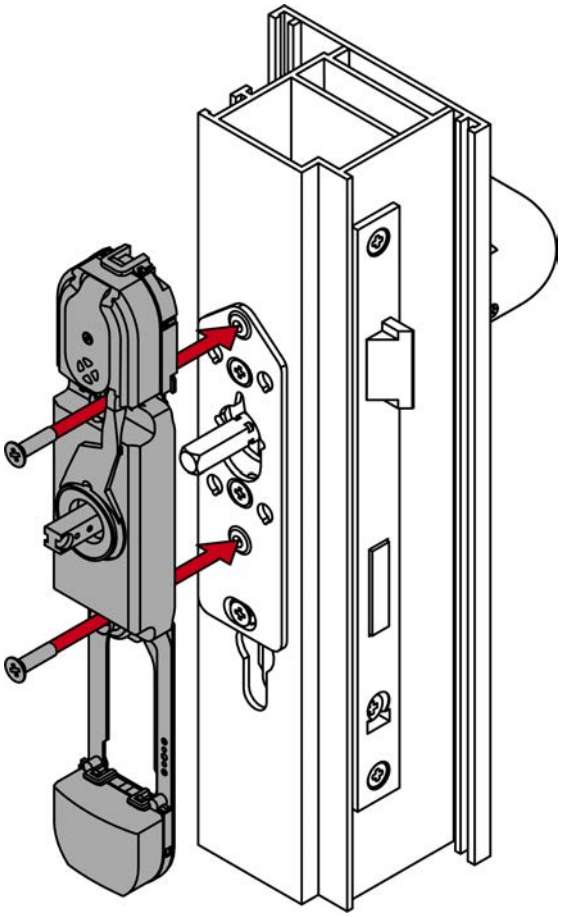


18. For 7 mm spindle: Insert the adapter shoe into the spindle mount on the module support.

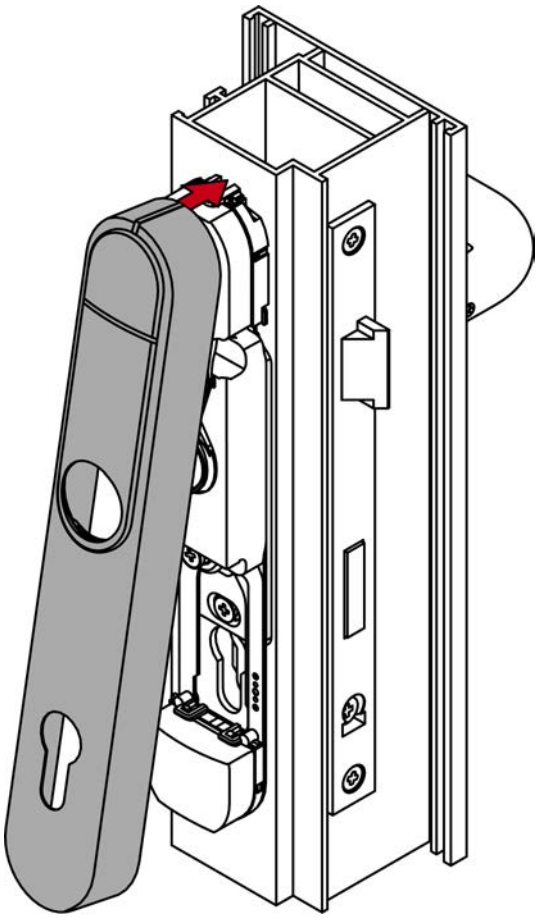


19. Use the 18 mm screws to fix the module support onto the fastening plate (PH2).

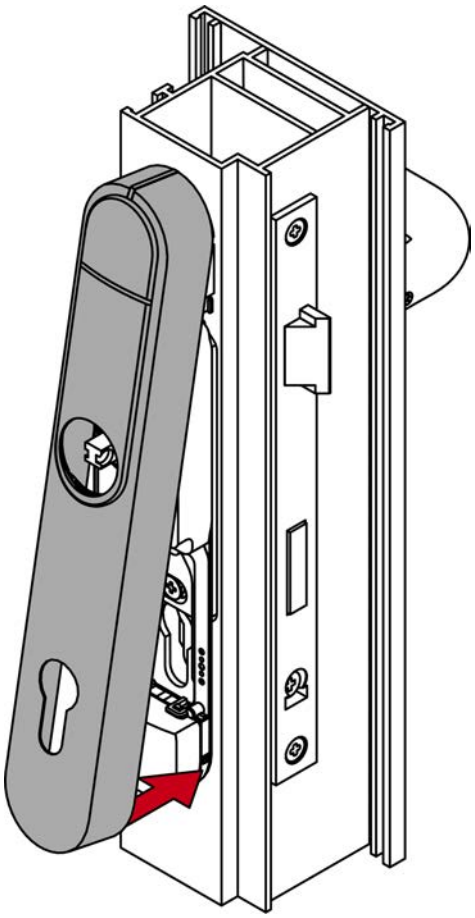




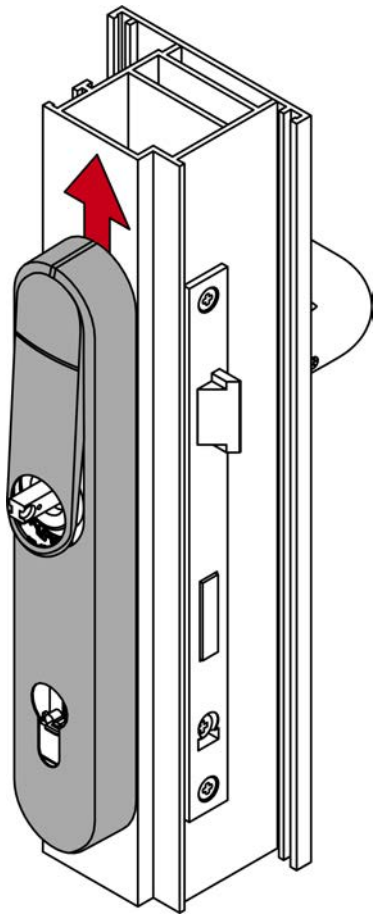
20.Place a cover on the fastening plate at the top.



21. Fold down the cover.

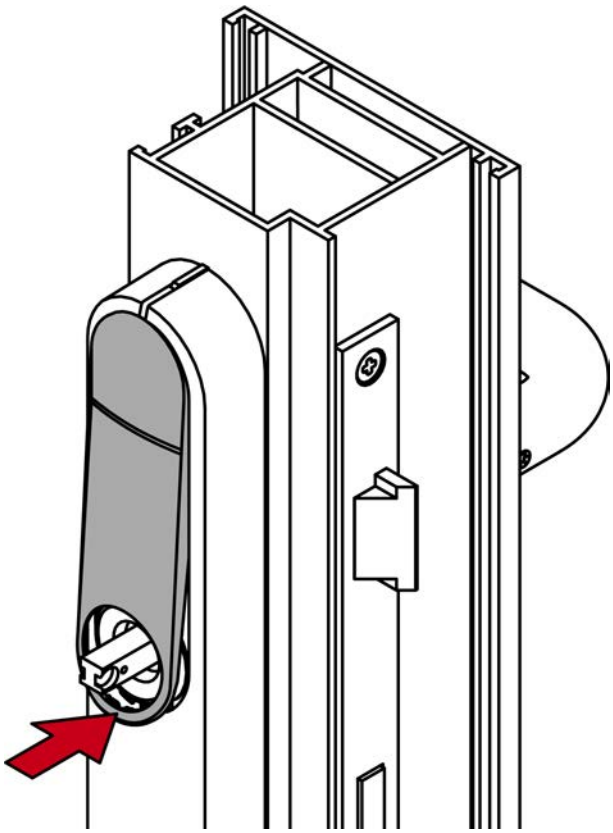


22. Push the cover against the door, sliding it upwards at the same time.

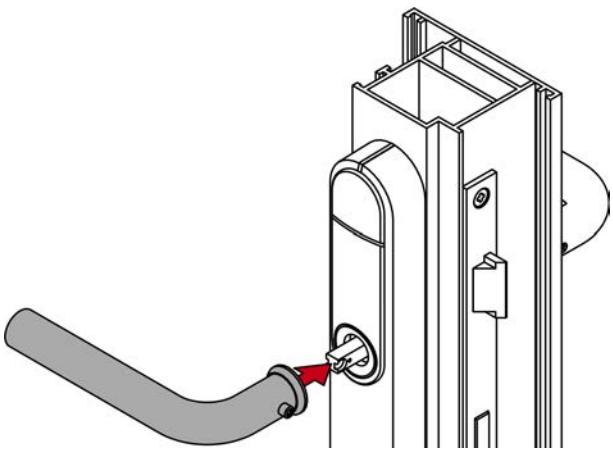


↳ Cover snaps into place.

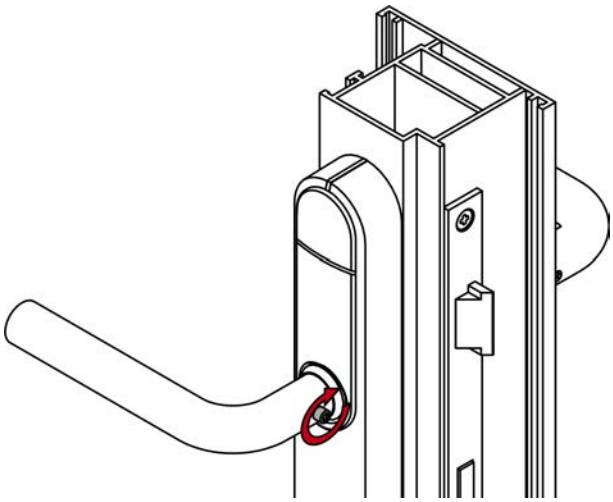
23. Press the inlay into place.



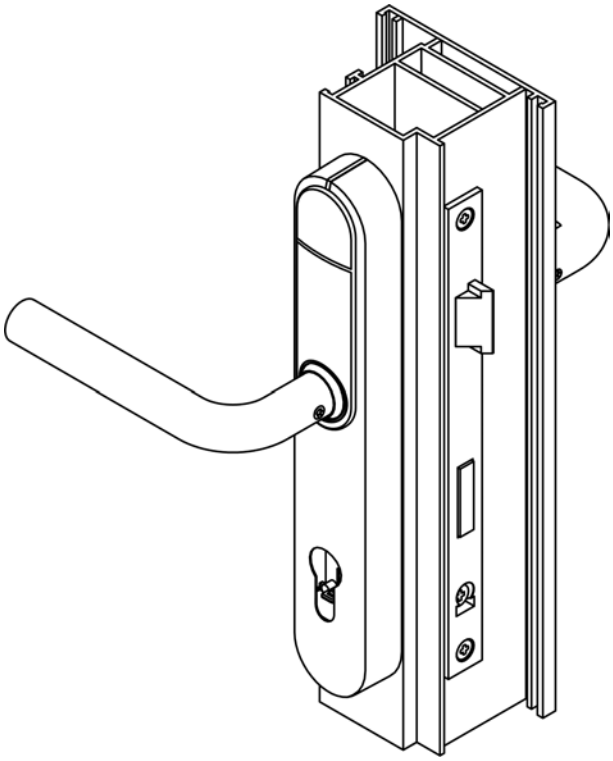
24. Attach an inside handle.



25. Fasten the grub screw into the inside handle.



↳ SI SmartHandle AX Advanced fully installed.



6.6 Security fitting (ES)

6.6.1 Product-specific safety instructions

IMPORTANT

Difficult installation due to threaded sleeves being pressed out

The threaded sleeves in the fitting are installed using a press fit. If you apply excessive pressure when screwing the fitting onto the fixing plate, this can lead to the threaded sleeves slipping out of the fitting.

1. Do not press on the screws when fastening the module support into place.
2. Place a finger on the ends of the threaded sleeves to hold them in place while screwing.

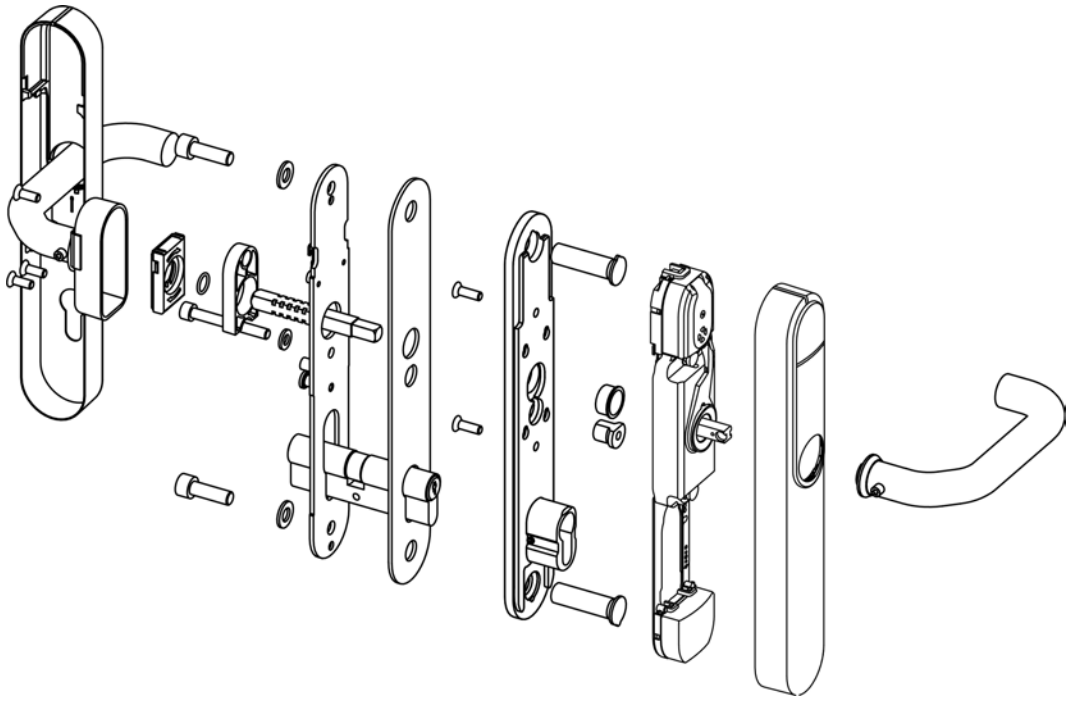
6.6.2 Scope of delivery

- SI SmartHandle AX Advanced Security fitting
- Special tool
- Quick guide

Depending on version:

- Adapter set, 7 mm spindle
- Adapter sleeve, 8.5 mm spindle
- Adapter sleeve, 10 mm spindle

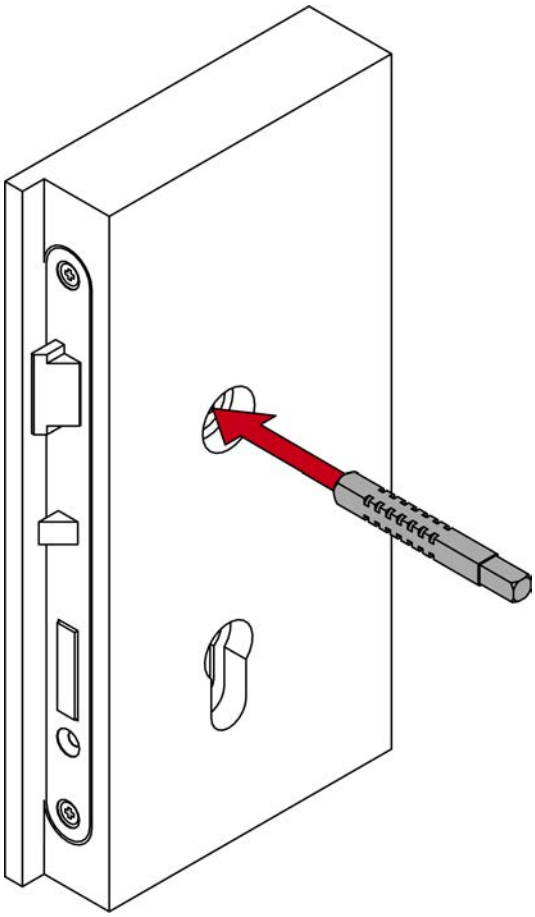
6.6.3 Design



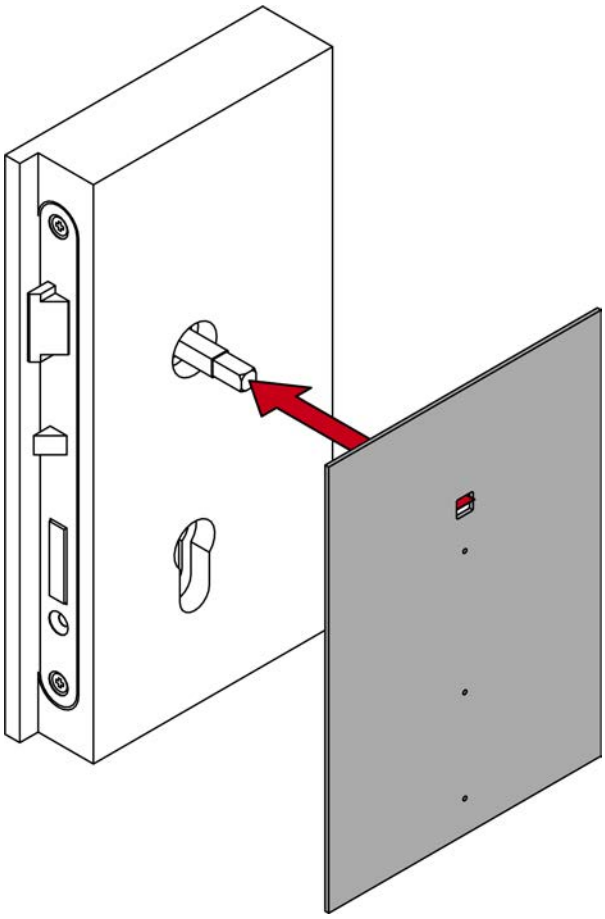
6.6.4 Prepare door (drilling template)

- ✓ Pin or scriber at hand.
- ✓ Drill at hand.
- ✓ Suitable drill available (Ø 13 mm).
- ✓ PH2 screwdriver at hand.

1. Insert the spindle into the mortise lock.

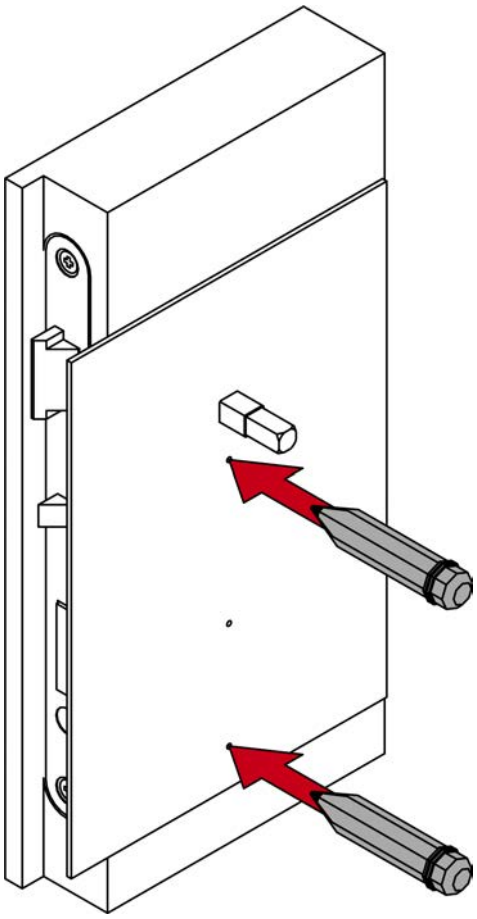


2. Place the drilling template on the spindle.

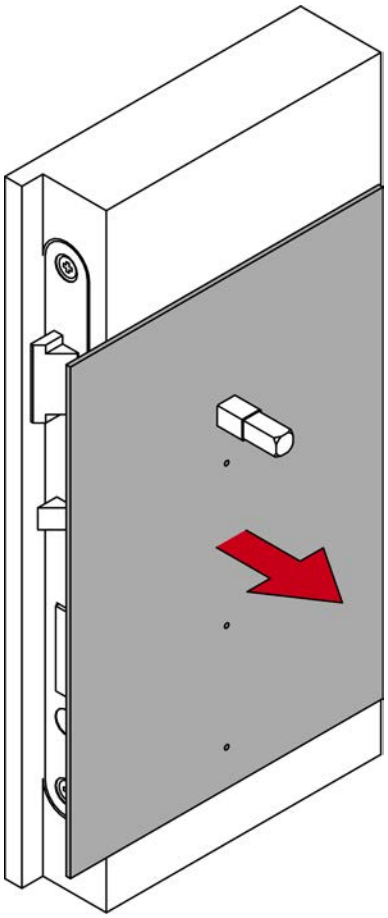


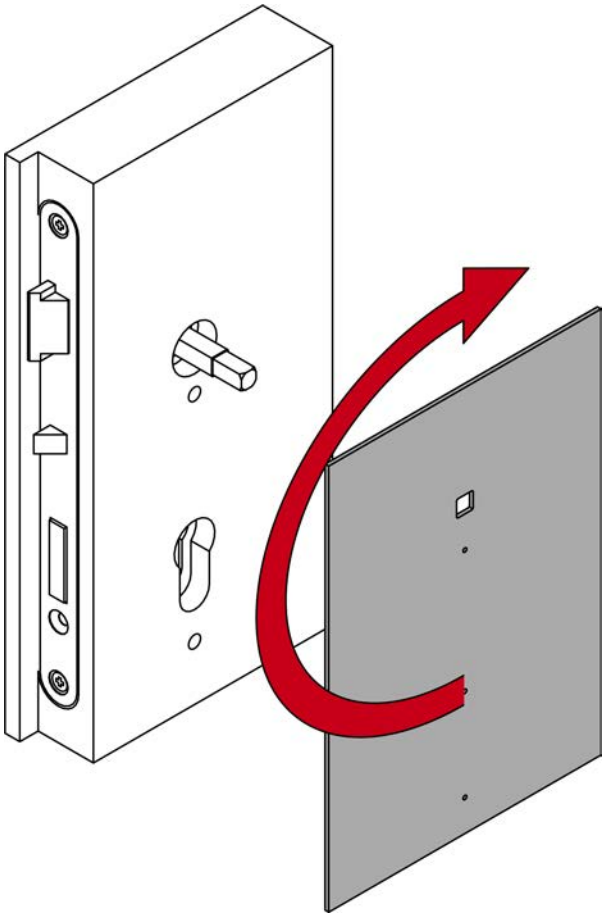
3. Align the drill template vertically using the printed scale.

4. Mark the drill holes with mark 1.

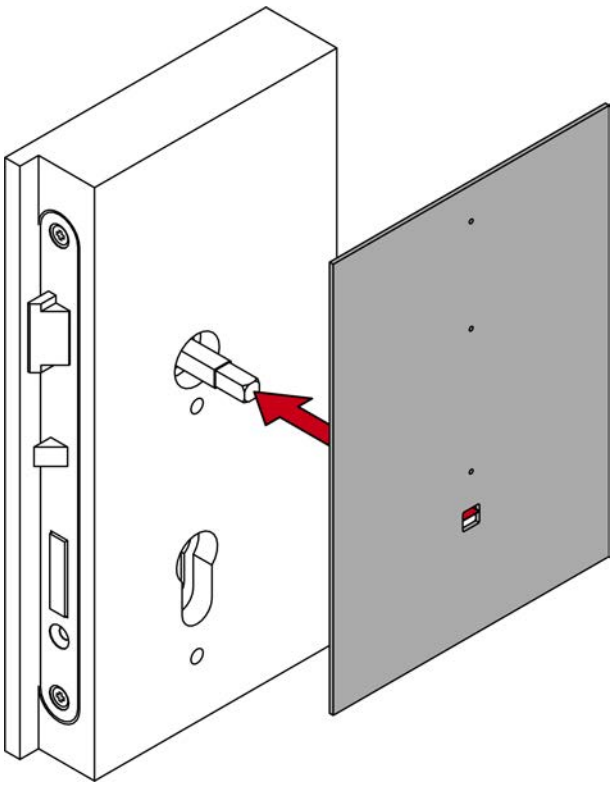


5. Remove the drilling template and rotate it 180 degrees.



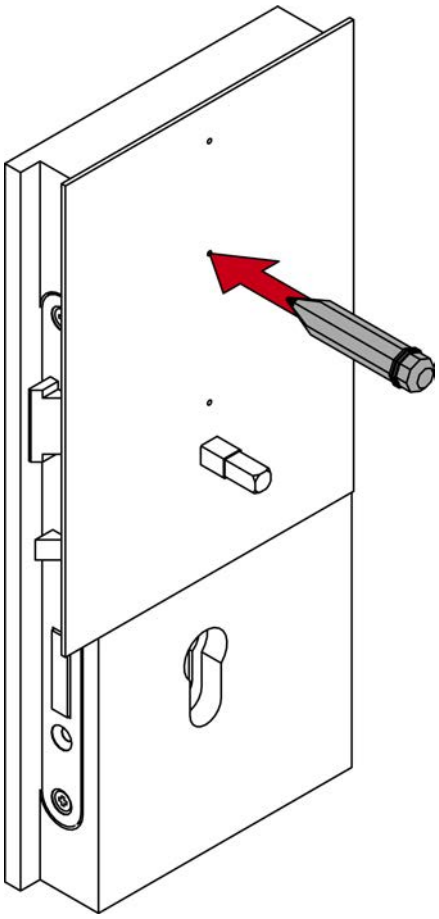


6. Place the drilling template on the spindle.

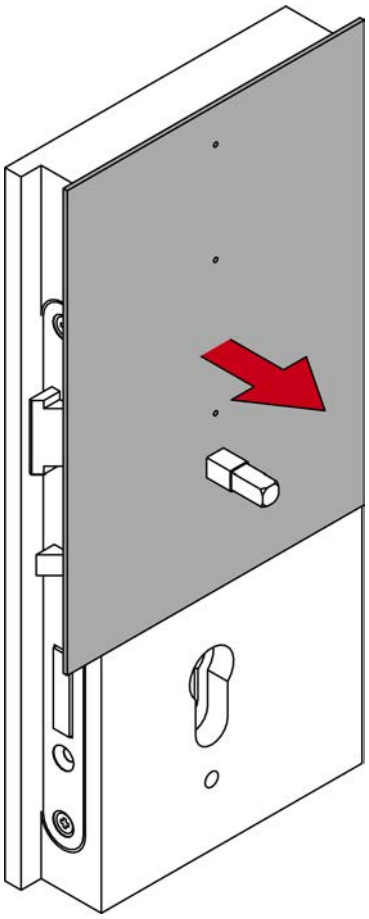


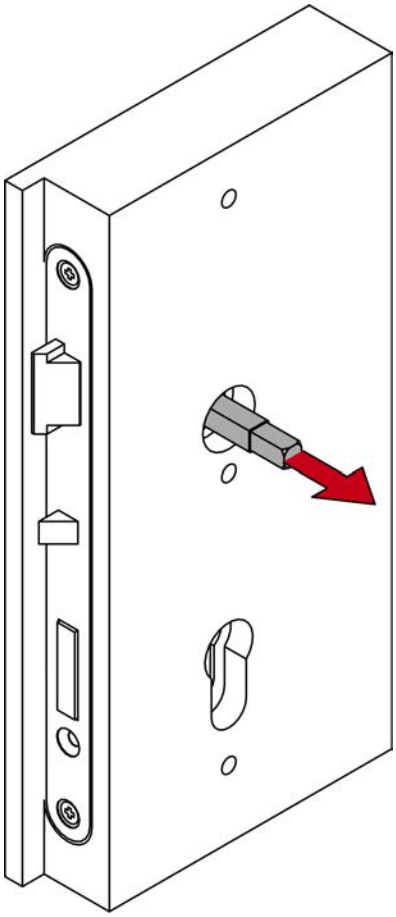
7. Align the drill template vertically using the printed scale.

8. Mark the drill hole with mark 2.

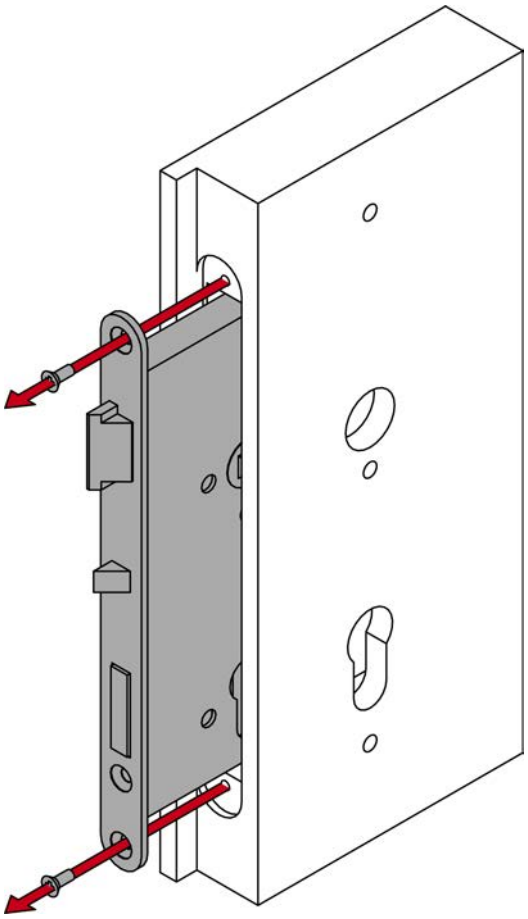


9. Remove the drilling template and spindle.

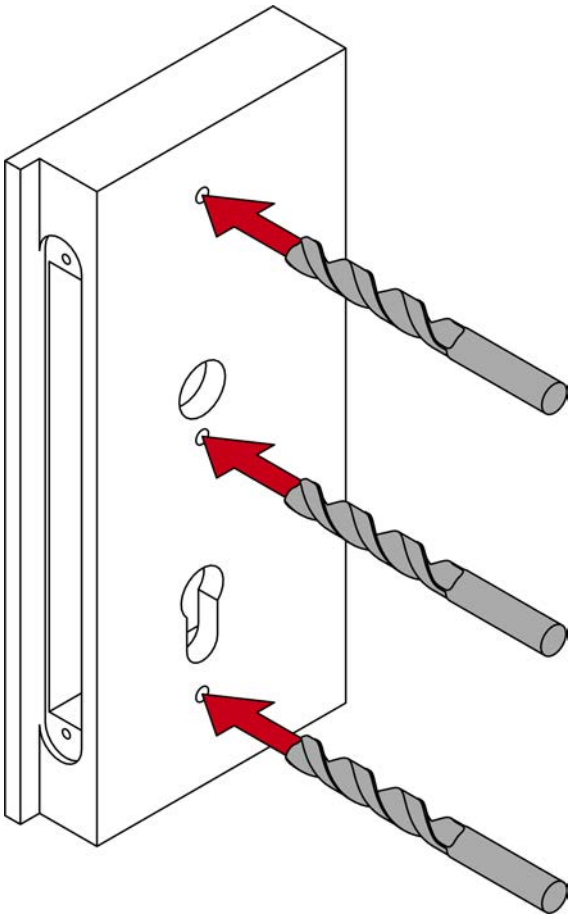




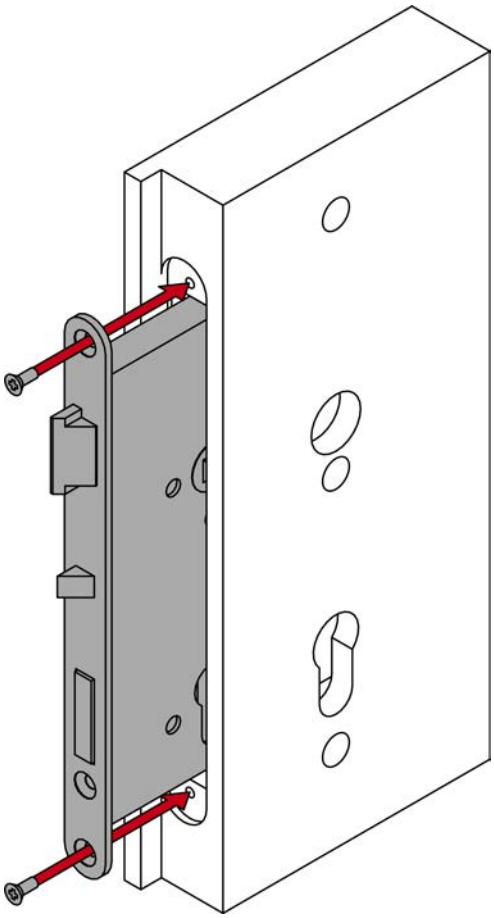
10. Remove the mortise lock.



11. Drill the required holes.



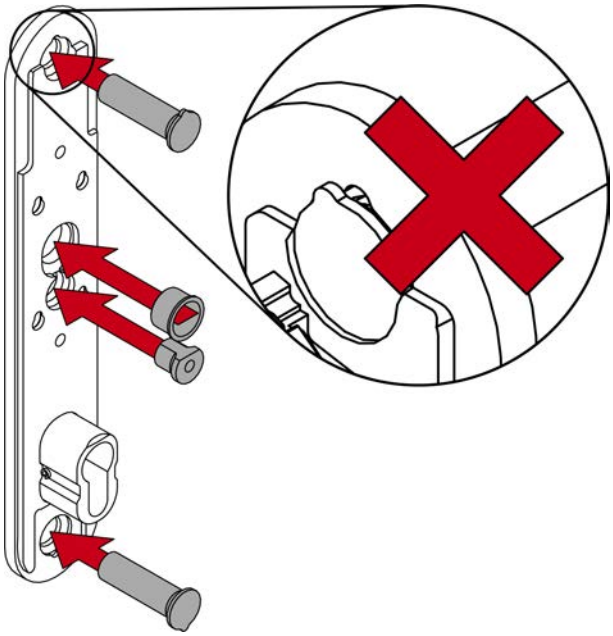
12. Fit the mortise lock.



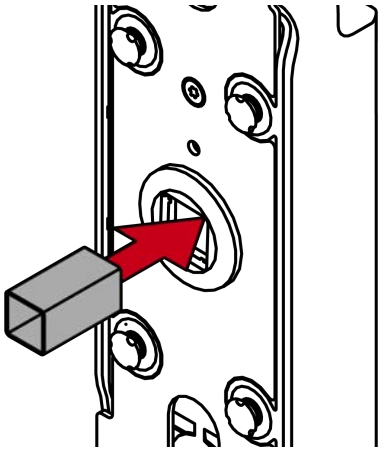
6.6.5 Installing the fitting

- ✓ Door pre-drilled.
- ✓ PH2 screwdriver at hand.
- ✓ TX15 screwdriver at hand.
- ✓ Have an SW6 hex slotted-head screwdriver ready.
- ✓ Have an SW5 hex slotted-head screwdriver ready.
- ✓ Caliper gauge at hand.

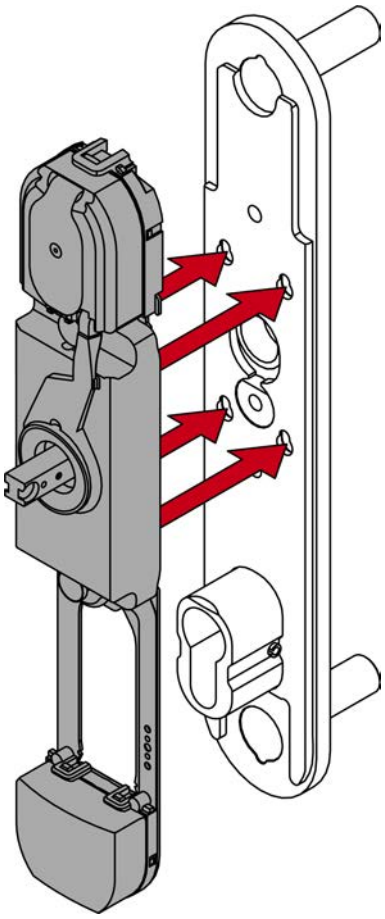
1. Insert the spindle protective tube and the sleeve nuts into the fixing plate (short sleeve nut in the middle).



2. For 7 mm spindle: Insert the adapter shoe into the spindle mount on the module support.



3. Insert the module support into the fastening plate.

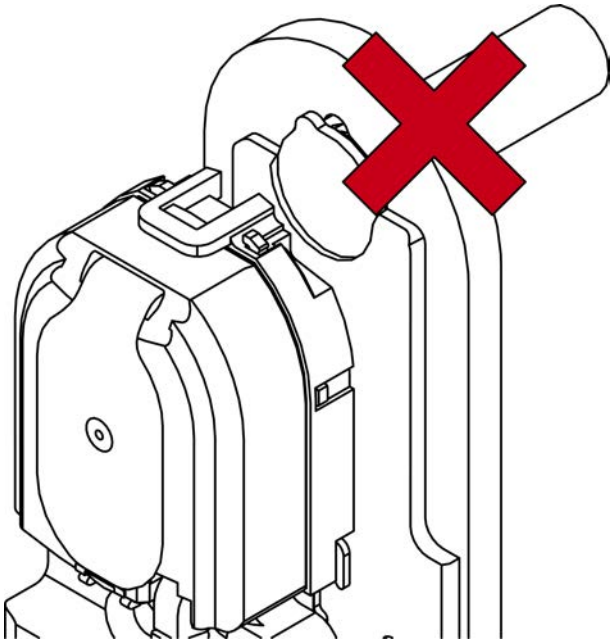


IMPORTANT

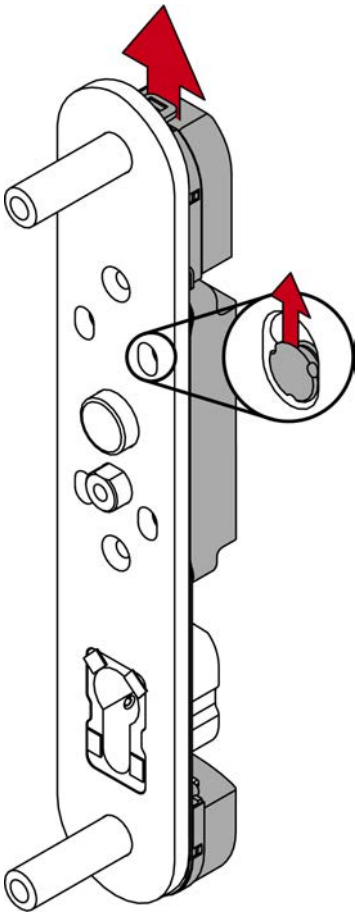
Damage to the sleeve nuts due to improper insertion

If the sleeve nut tabs are not located in the recesses, they can be damaged during further installation. In such cases, the sleeve nut can rotate unintentionally, which makes installation/removal difficult.

- Ensure that the sleeve nut tabs are located in the recesses.

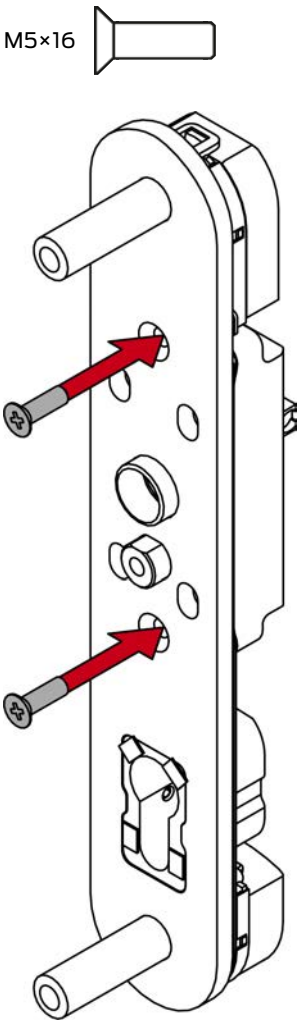


4. Slide the module support upwards.

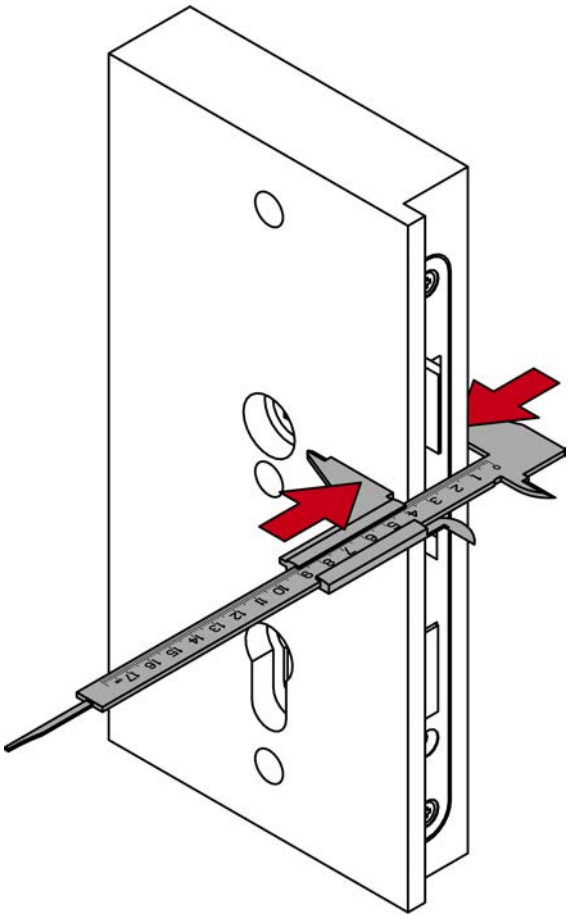


↳ Module support snaps into place.

5. Fasten the module support to the fixing plate (PH2) with the 16 mm screws.

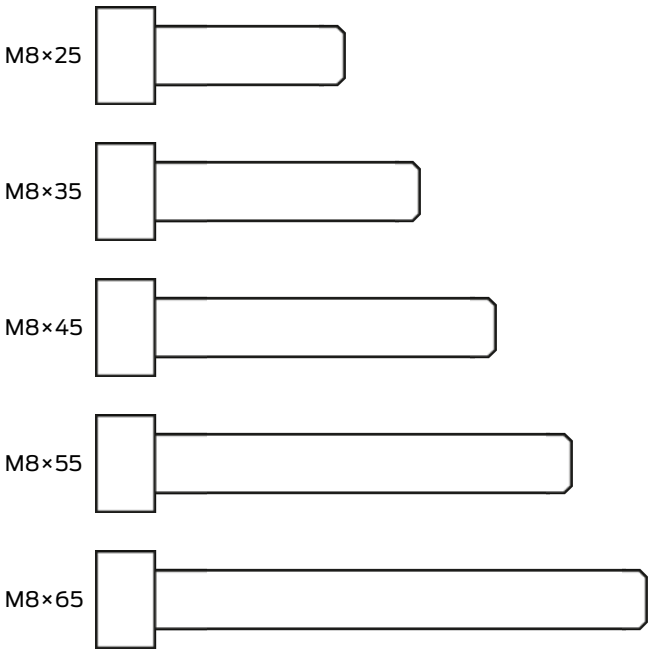


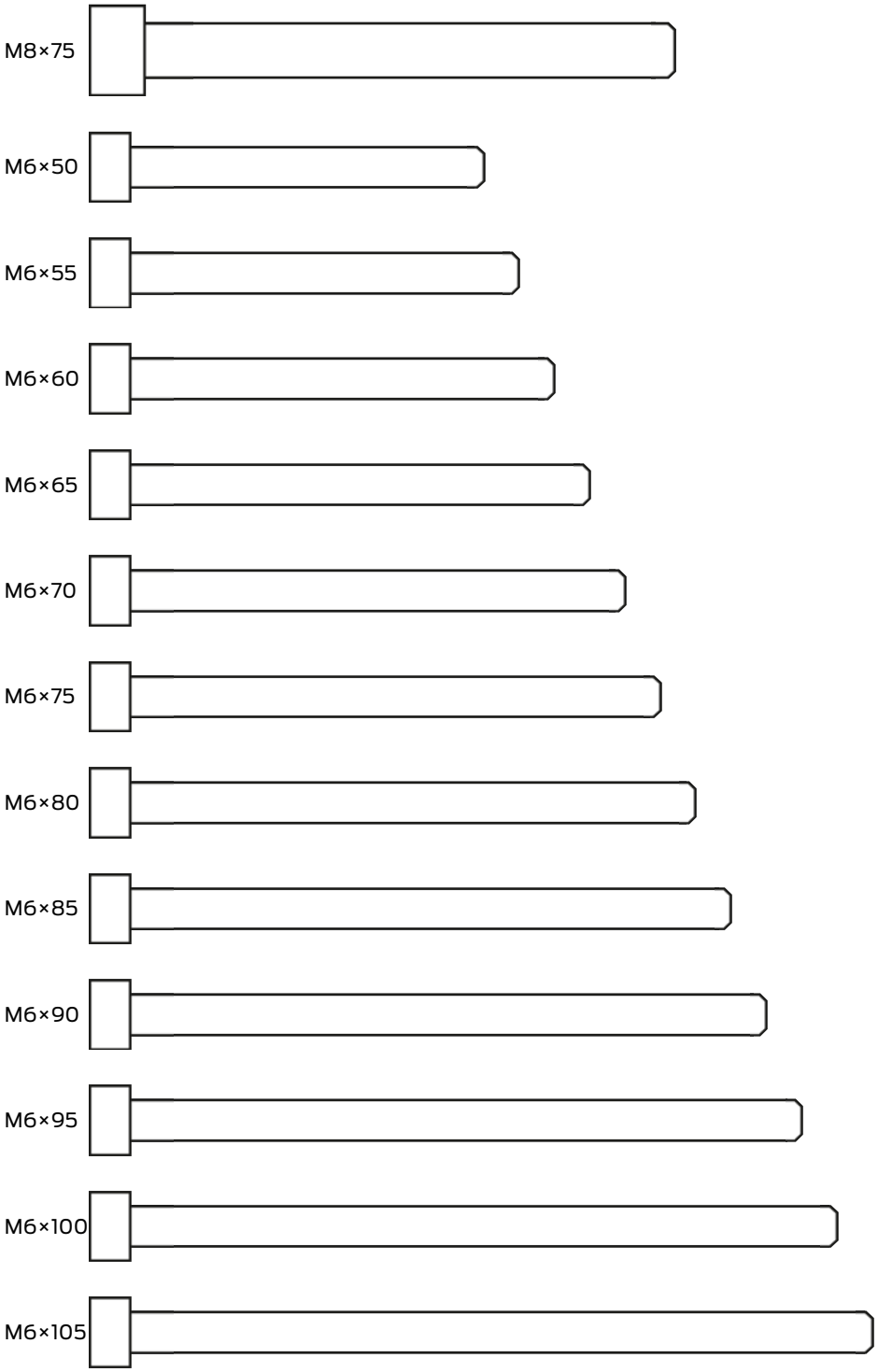
6. Measure the door thickness.



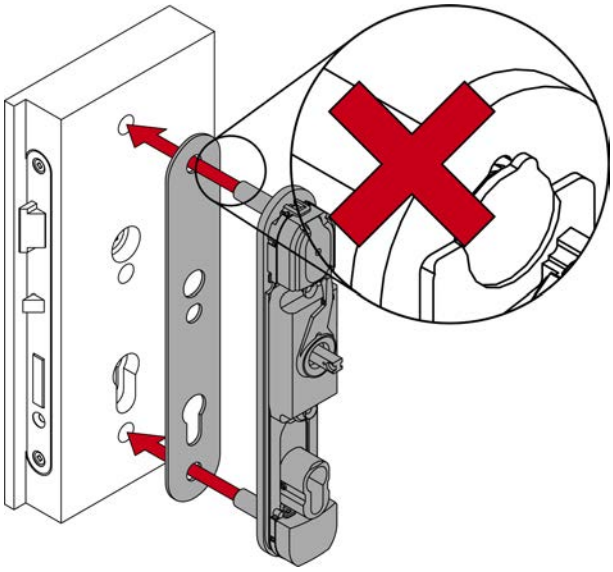
Size	Door thickness (mm)	Screws (M8)	Screw (M6)
S	39 – <43	25	50
S	43 - <45	25	55
S	45 - <47	35	55
S	47 – <52	35	60
S	52 - <55	35	65
M	54 - <58	45	65
M	58 - <63	45	70
M	63 - <65	45	75
M	65 - <67	55	75
M	67 – <72	55	80
M	72 - <75	55	85
L	74 - <78	65	85
L	78 - <83	65	90
L	83 - <85	65	95
L	85 - <87	75	95
L	87 – <92	75	100
L	92 - <95	75	105

7. Determine what screws are required for the door thickness measured.




M8×75
M6×50
M6×55
M6×60
M6×65
M6×70
M6×75
M6×80
M6×85
M6×90
M6×95
M6×100
M6×105

8. Insert the module support with the fastening plate and the drill protection plate into the outer side of the door.

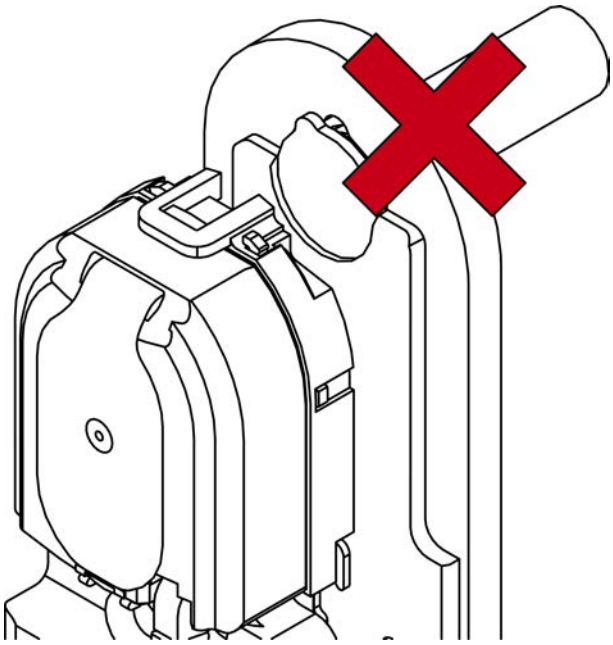


IMPORTANT

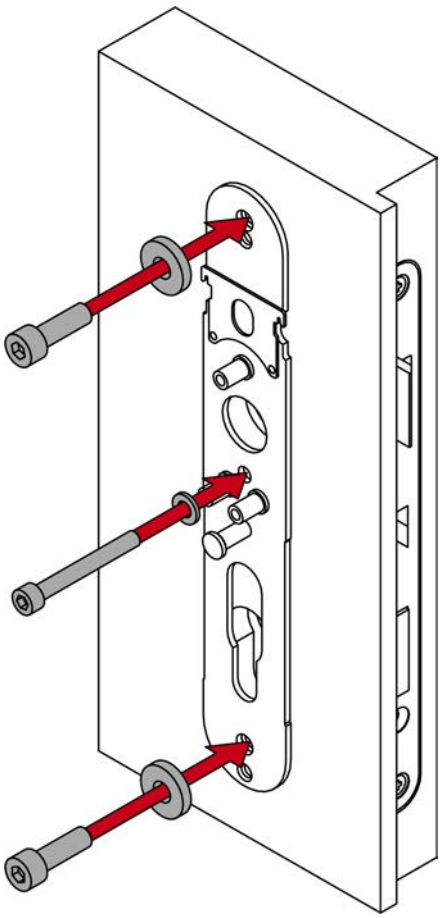
Damage to the sleeve nuts due to improper insertion

If the sleeve nut tabs are not located in the recesses, they can be damaged during further installation. In such cases, the sleeve nut can rotate unintentionally, which makes installation/removal difficult.

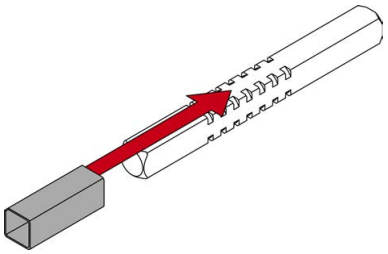
- Ensure that the sleeve nut tabs are located in the recesses.

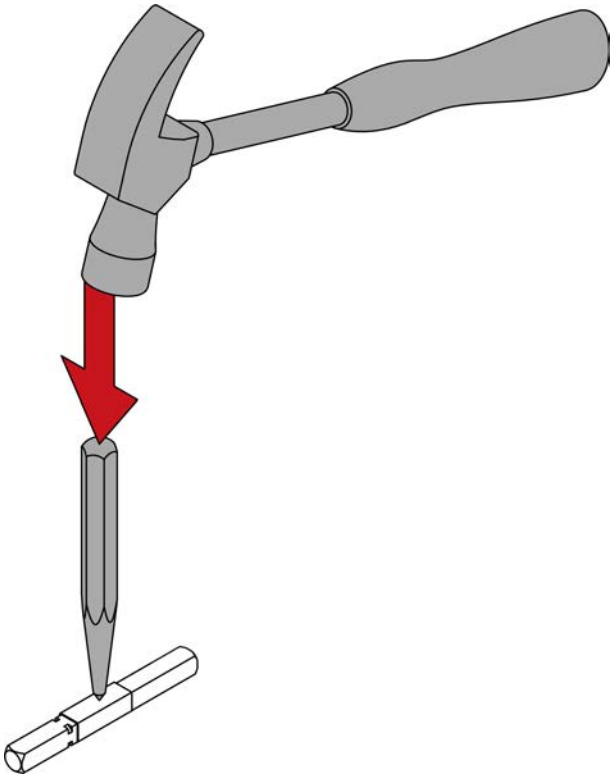


9. Screw the washers and the inner plate firmly onto the module support (SW6 short screws, SW5 long screw in the centre).

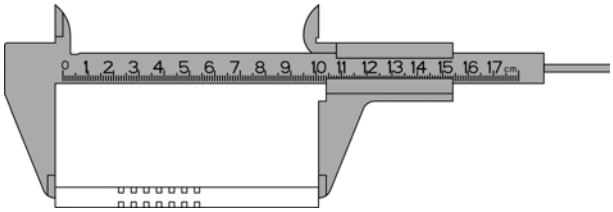


10. For 8.5 mm and 10 mm spindle: slide the adapter sleeve into the centre of the spindle. Use a punch and hammer to make an indent in the adapter sleeve to prevent it from slipping.

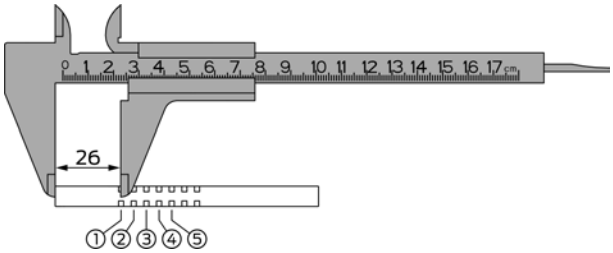




11. Measure the total length of the spindle.

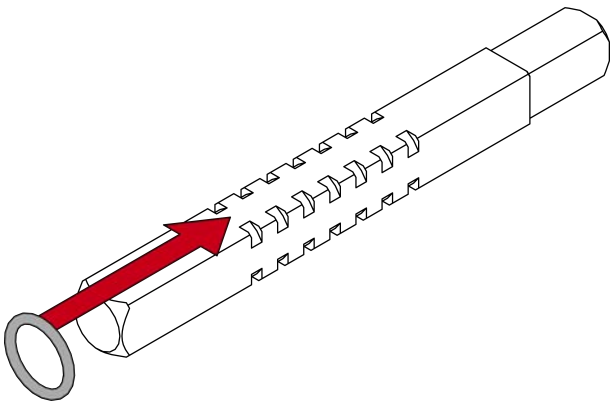


12. Locate the inside of the spindle (four-edge end up to the centre of the first groove = 26 mm).
13. Use the table to determine the position of the O-ring.

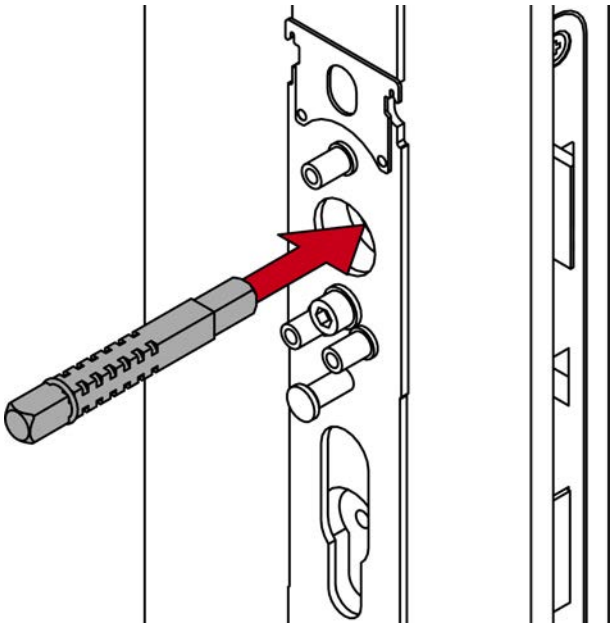


Size	Door thickness (mm)	Spindle length (mm)	Ring position
S	39 - <41	104	2
S	39 - <41	114	4
S	41 – <46	104	1
S	41 – <46	114	3
S	46 - <50	114	2
S	50 - 55	114	1
M	54 - <56	124	3
M	54 - <56	134	5
M	56 – <61	124	2
M	56 – <61	134	4
M	61 – <66	124	1
M	61 – <66	134	3
M	66 – <71	134	2
M	71 - 75	134	1
L	74 - <76	144	3
L	74 - <76	154	5
L	76 – <81	144	2
L	76 – <81	154	4
L	81 – <86	144	1
L	81 – <86	154	3
L	86 – <91	154	2
L	91 - 95	154	1

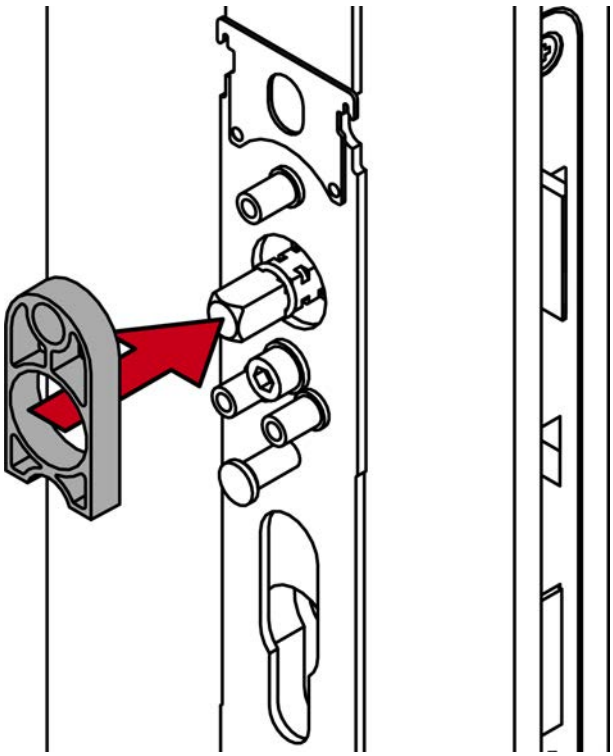
14. Slide the O-ring onto the calculated groove.



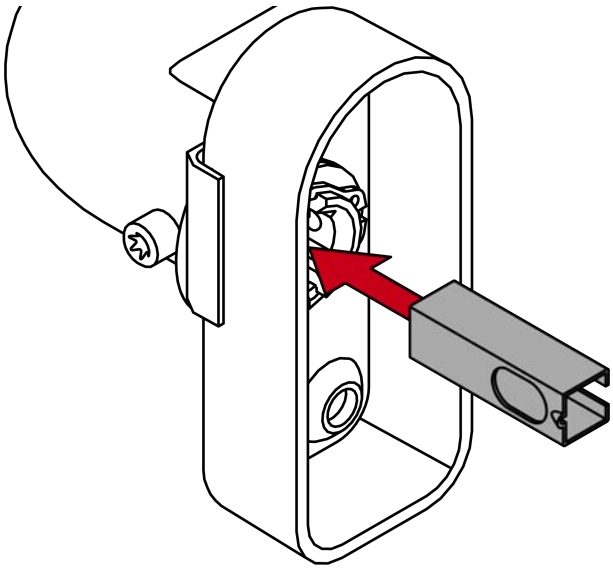
15. Insert the spindle into the door with the ring-free side as far as it will go.



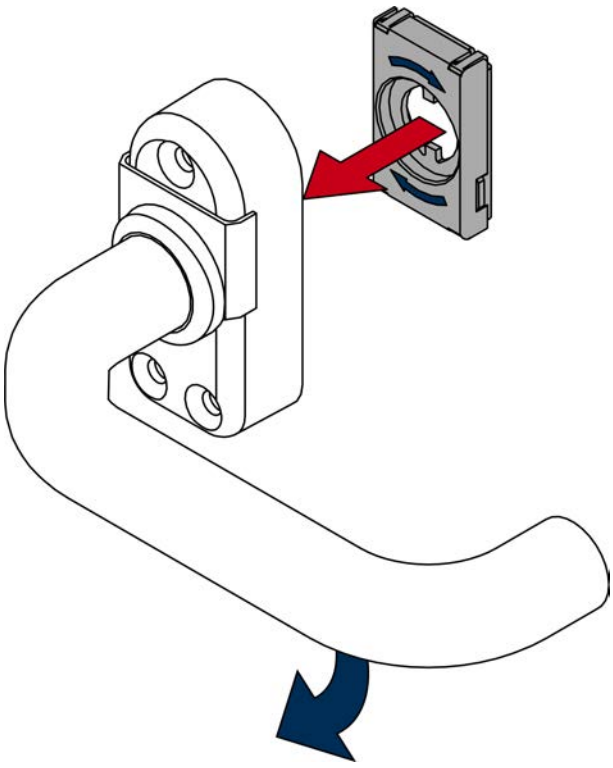
16. Insert the filling profile onto the inner fixing plate.

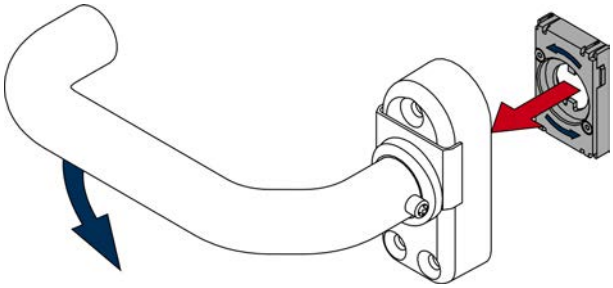


17. For 7 mm spindle: Place the adapter sleeve in the inside handle in such a way that the recess faces the grub screw.

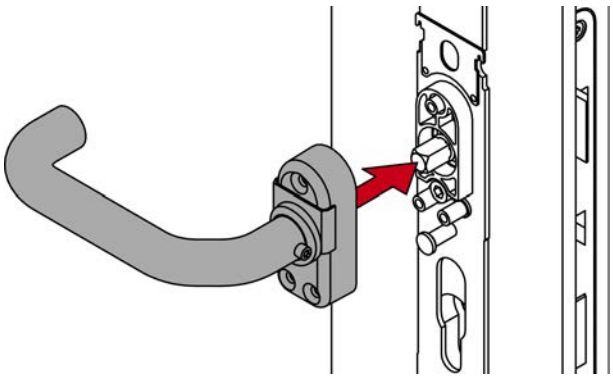


18. Determine the required direction of rotation for your inside handle.
19. Insert the spring element appropriately.



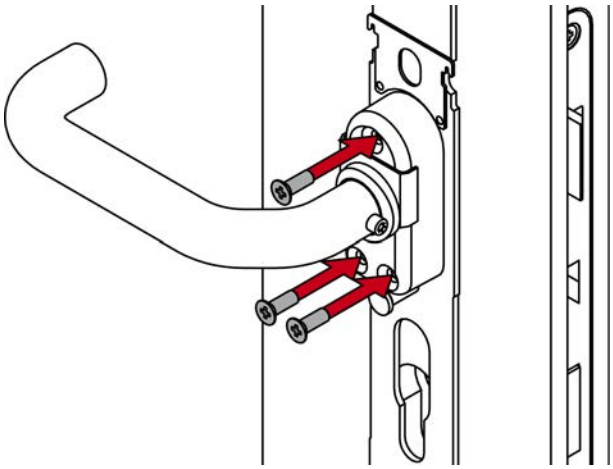


20.Place the inside handle unit on the spindle.

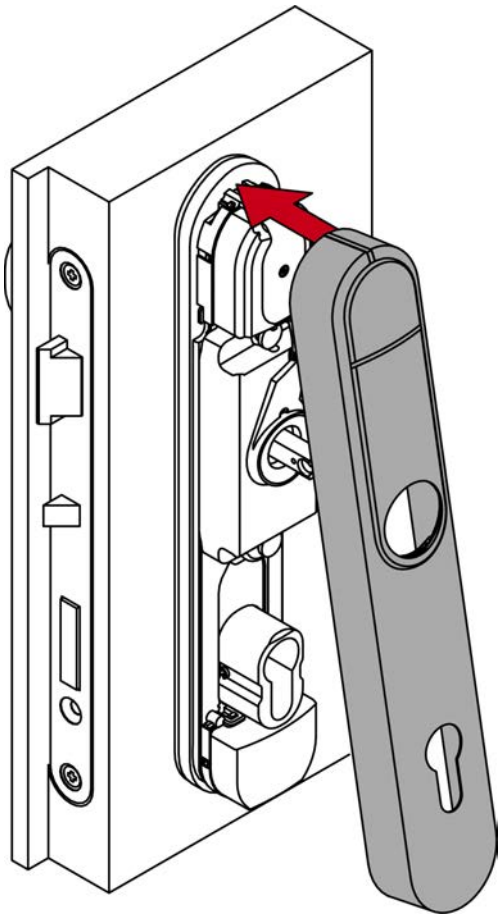


21. Use the 12 mm screws to fasten the inner handle unit onto the fixing plate (PH2).

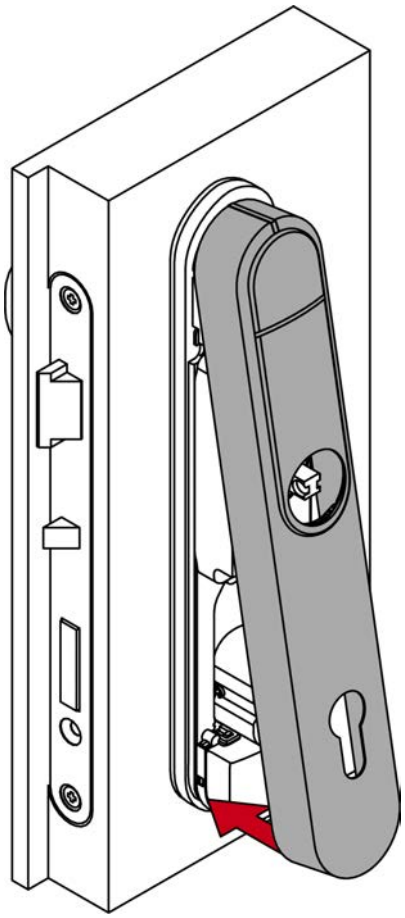
M5×12



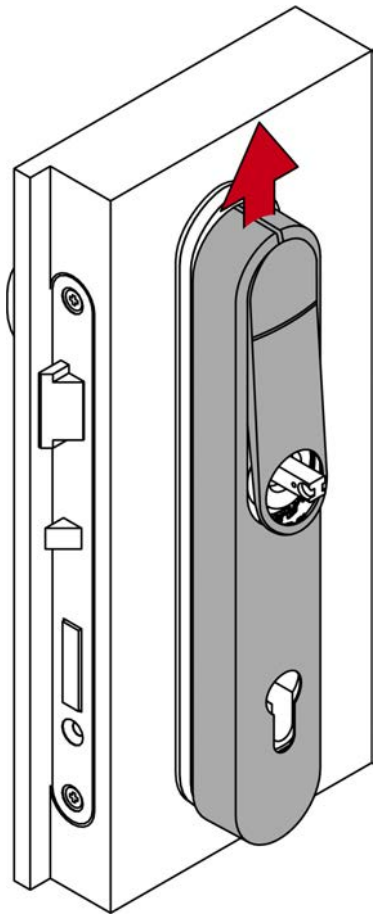
22. Place the cover on top of the fastening plate.



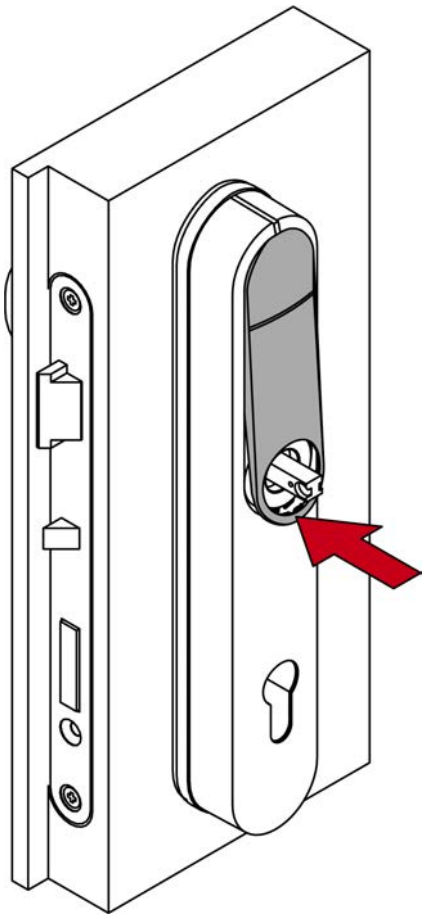
23. Fold down the cover.



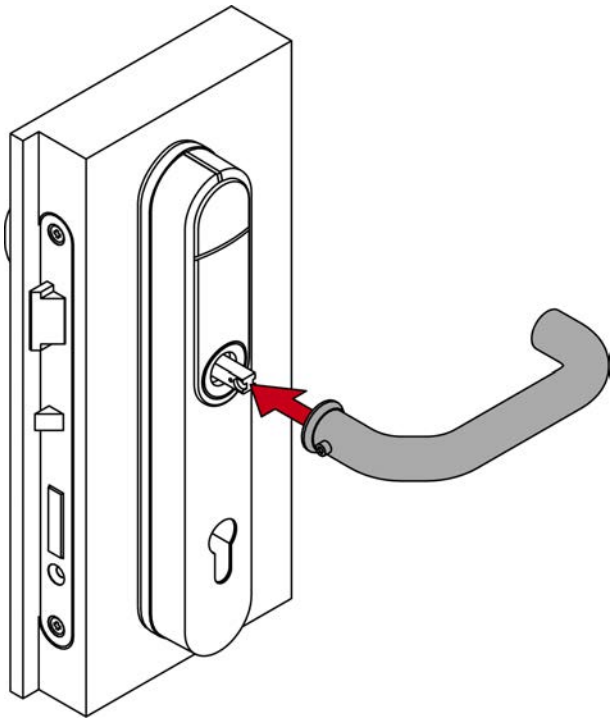
24. Slide the cover upwards.



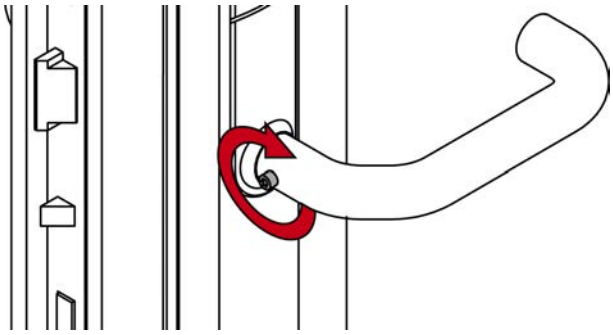
25. Press the inlay into place.



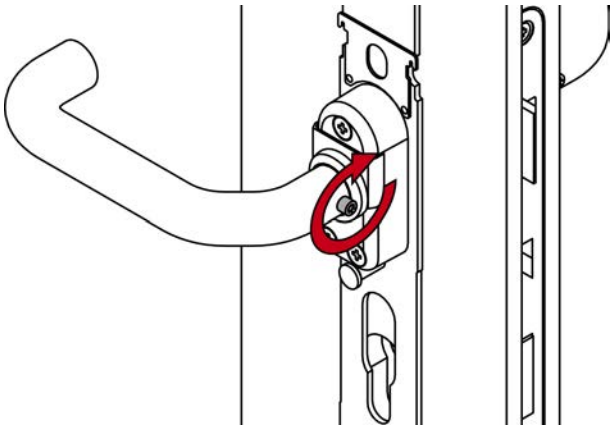
26. Fit the outside handle.



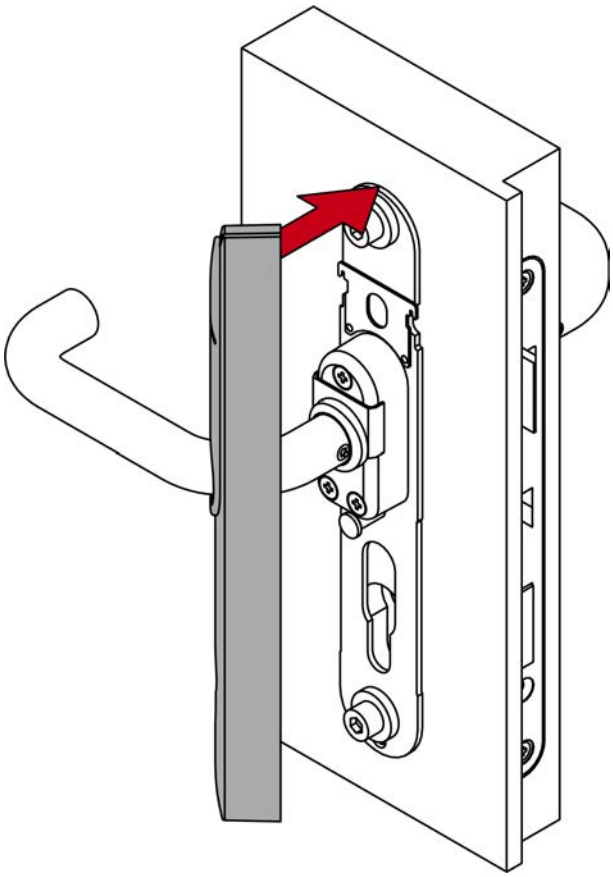
27. Use the grub screw to fasten the outer handle (TX15) into position.



28. Use the grub screw to fasten the inner handle (TX15) into position.



29. Fit the cover for the inner side as well.



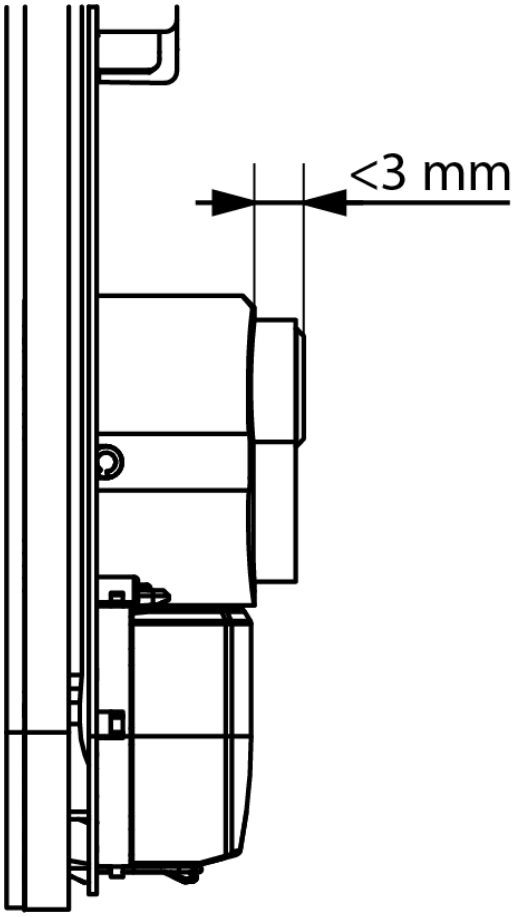
30. Insert a locking cylinder.

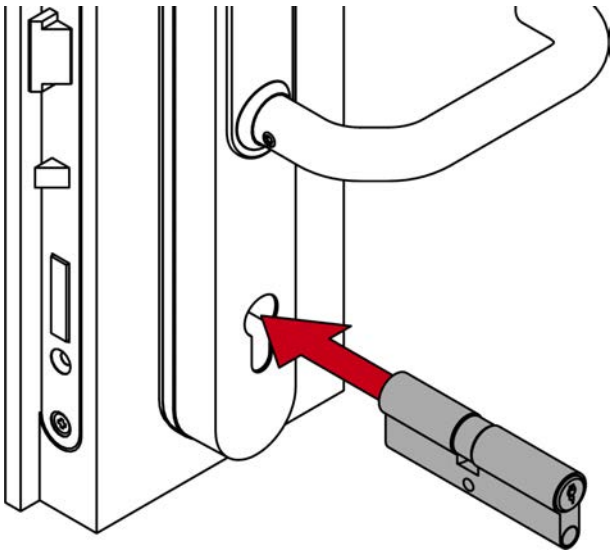
NOTE

Requirements for the security fitting approval

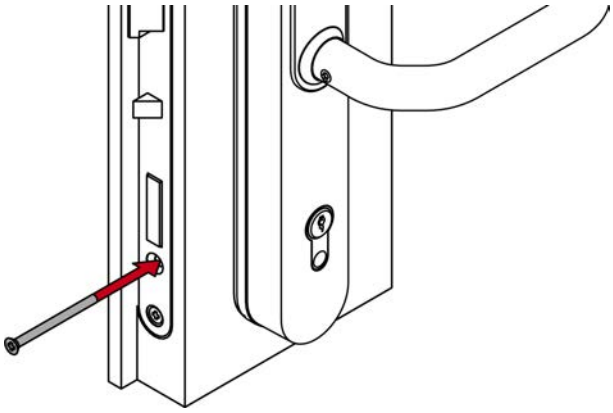
The approval for the SI SmartHandle AX Advanced is subject to conditions:

1. Observe the locking cylinder's protection class.
2. The locking cylinder's housing may protrude a maximum of 3 mm above the cylinder protection profile.


<3 mm



31. Fasten the locking cylinder with a fastening screw (PH2).



↳ SI SmartHandle AX Advanced fully installed.

6.7 Panic fitting with narrow backplate

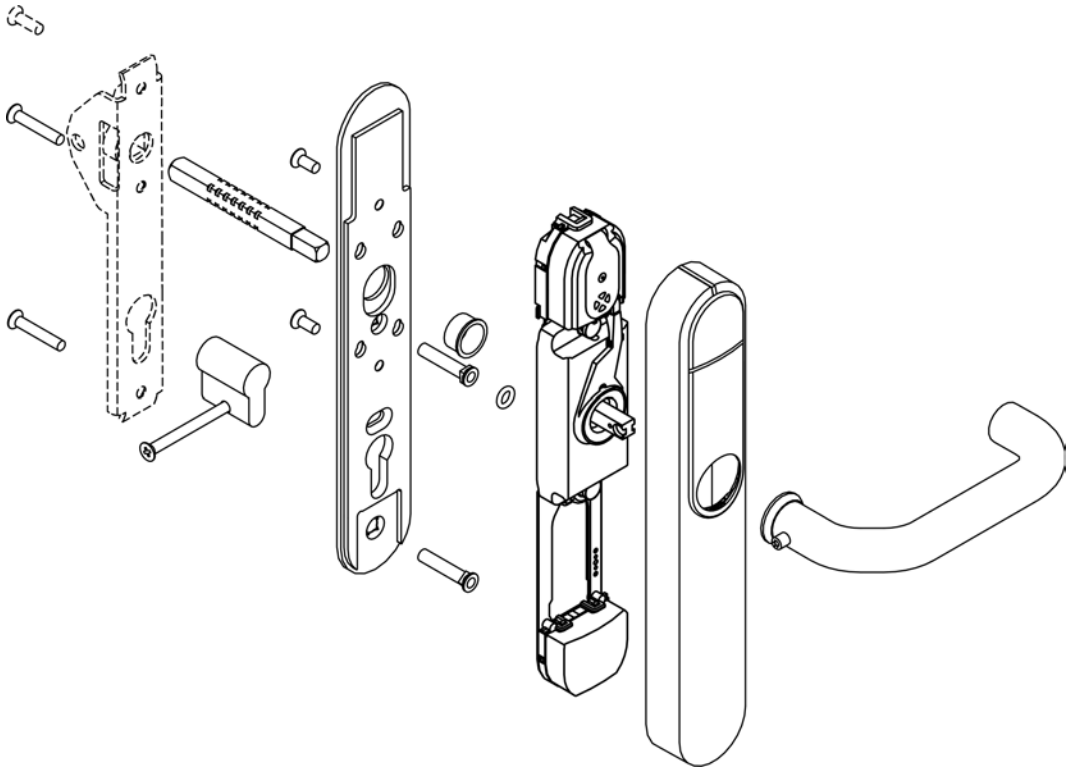
6.7.1 Scope of delivery

- SI SmartHandle AX Advanced Panic fitting with narrow backplate
- Special tool
- Quick guide

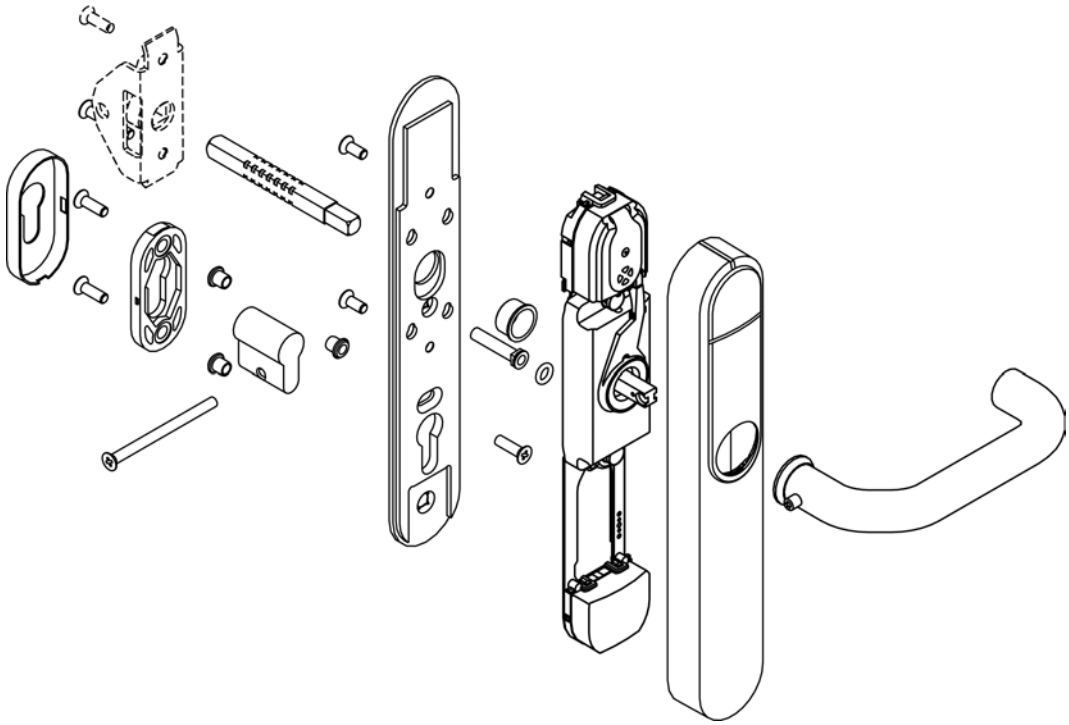
Not included:

- Panic bar
- Screws for fastening the panic bar itself

6.7.2 Structure with backplate (*PS*)



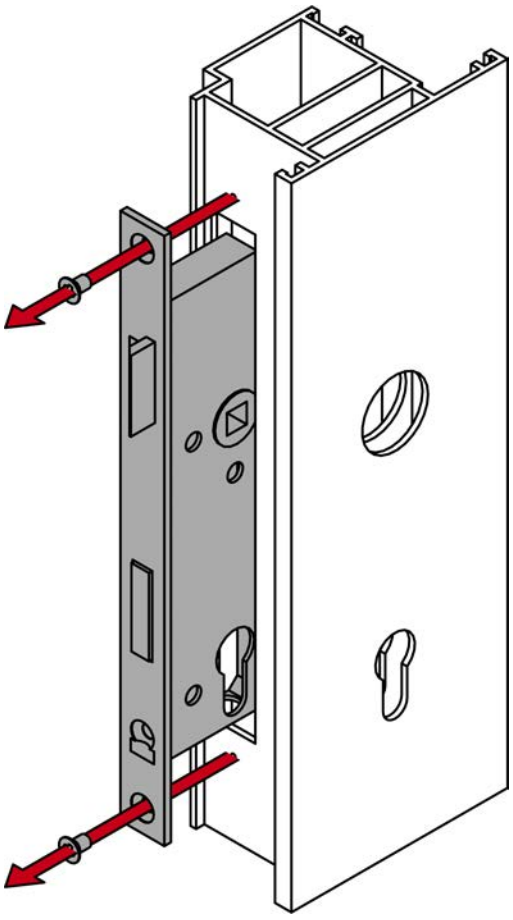
6.7.3 Structure with oval escutcheon (*PO*)



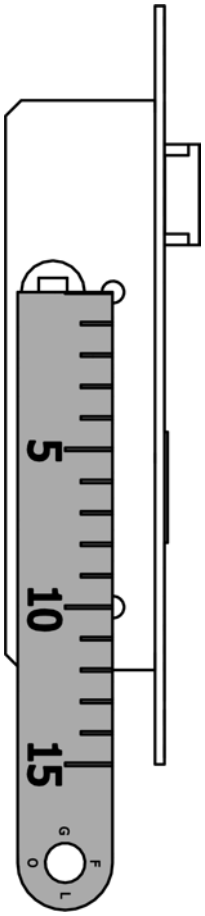
6.7.4 Prepare door (drilling template)

- ✓ Pin or scriber at hand.
- ✓ Drill at hand.
- ✓ Suitable drill bit at hand (Ø 7 mm).
- ✓ PH2 screwdriver at hand.
- ✓ For PO (oval escutcheon): Countersink at hand.
- ✓ For PO (oval escutcheon): Blind rivet nut pliers at hand.
- ✓ Ruler at hand.

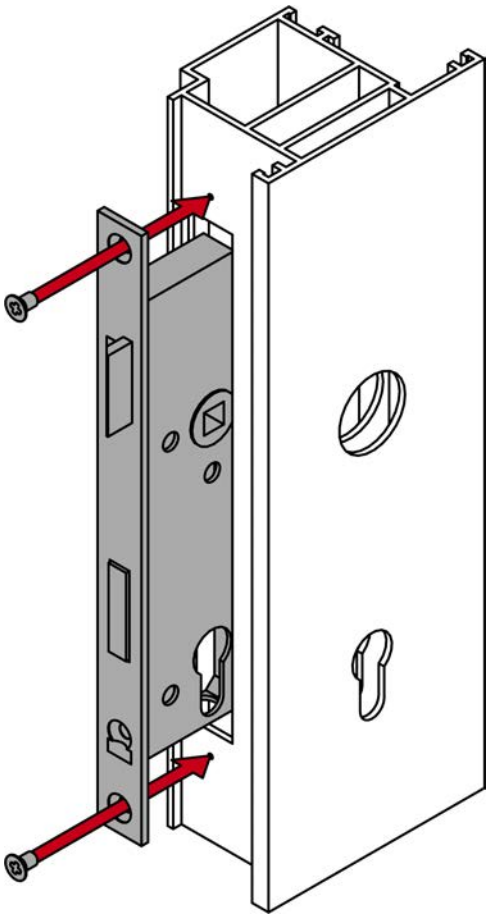
1. Remove the mortise lock.



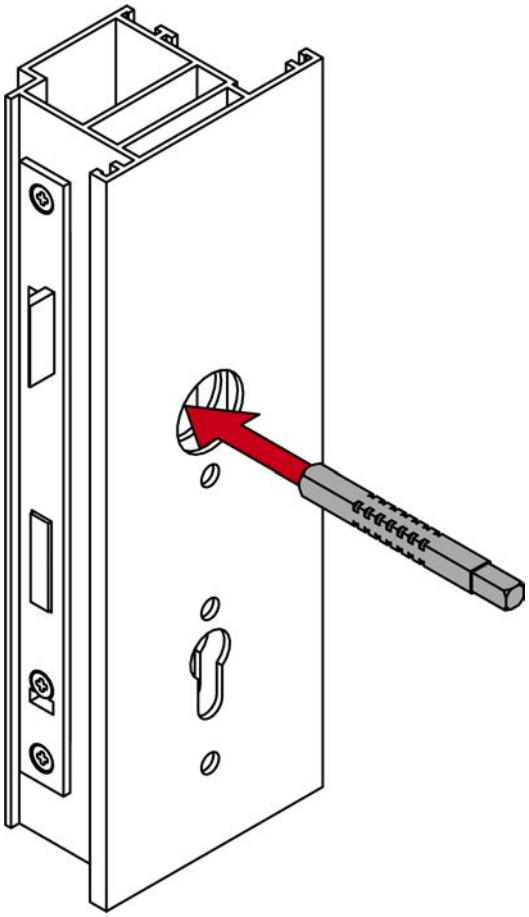
2. Measure the distance (gap between the spindle and cylinder axes of rotation).



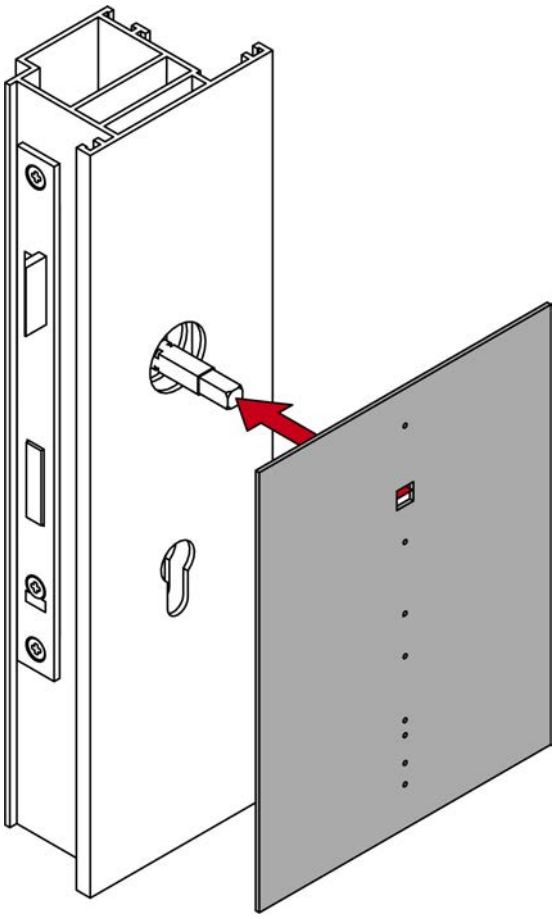
3. Fit the mortise lock.



4. Insert the spindle into the mortise lock.

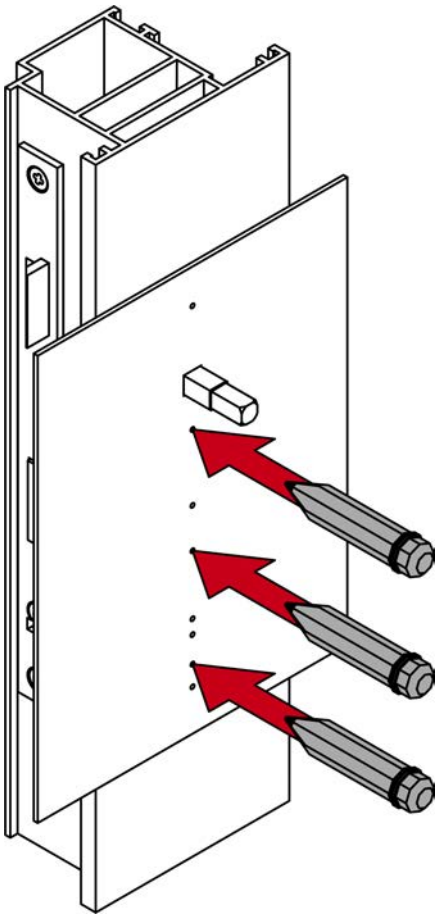


5. Place the drilling template on the spindle.

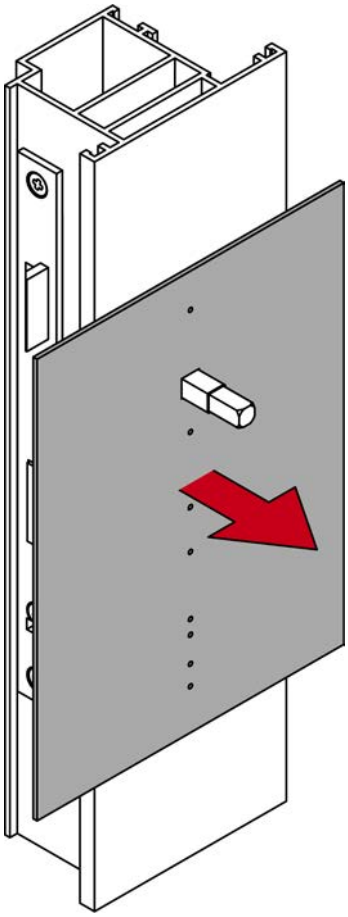


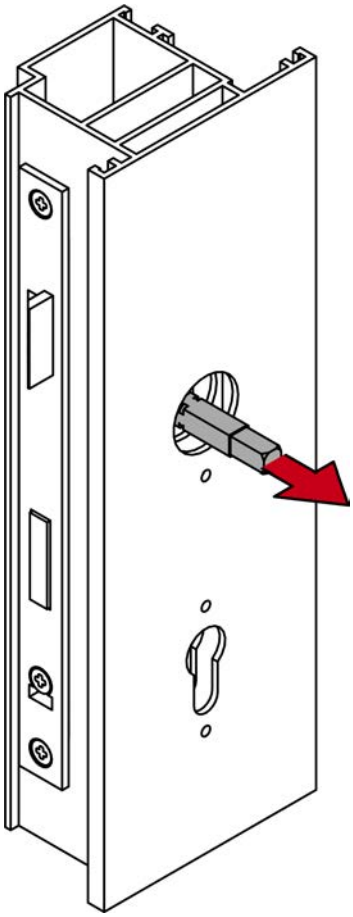
6. Align the drill template vertically using the printed scale.

7. Mark the points to be drilled on the door.

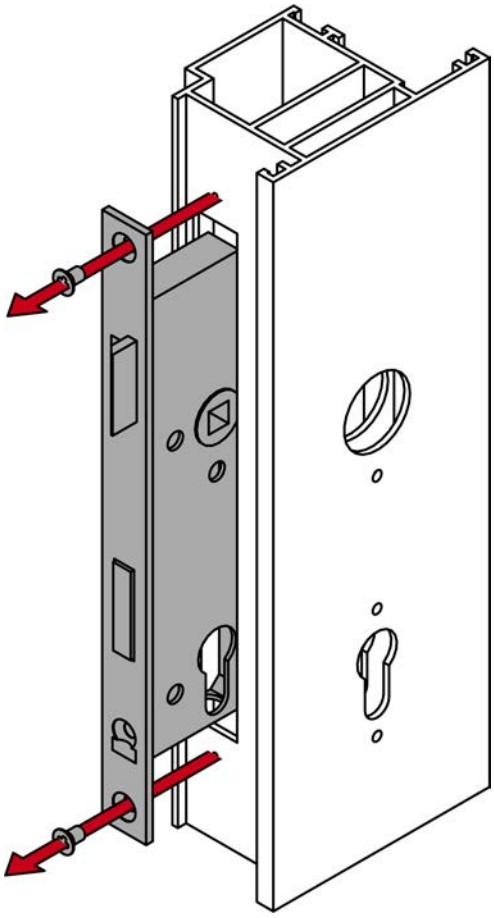


8. Remove the drilling template and spindle.

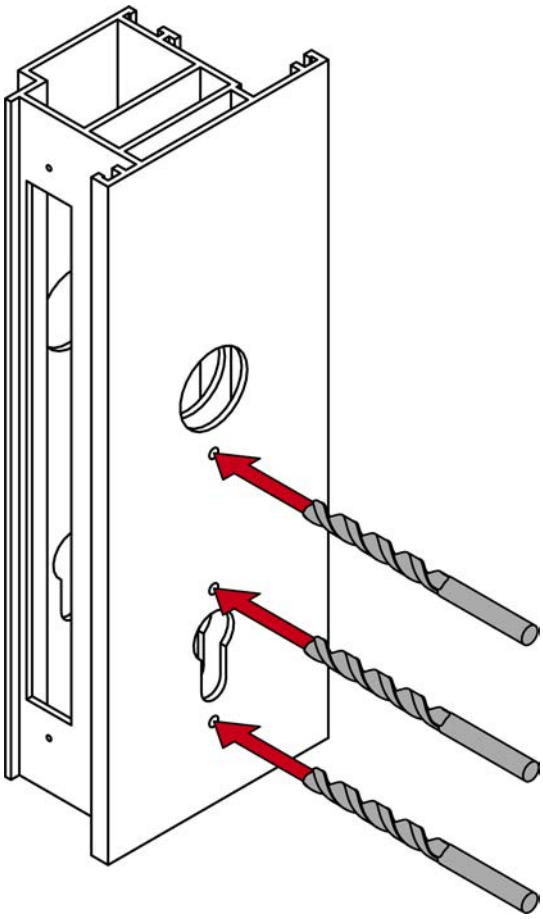




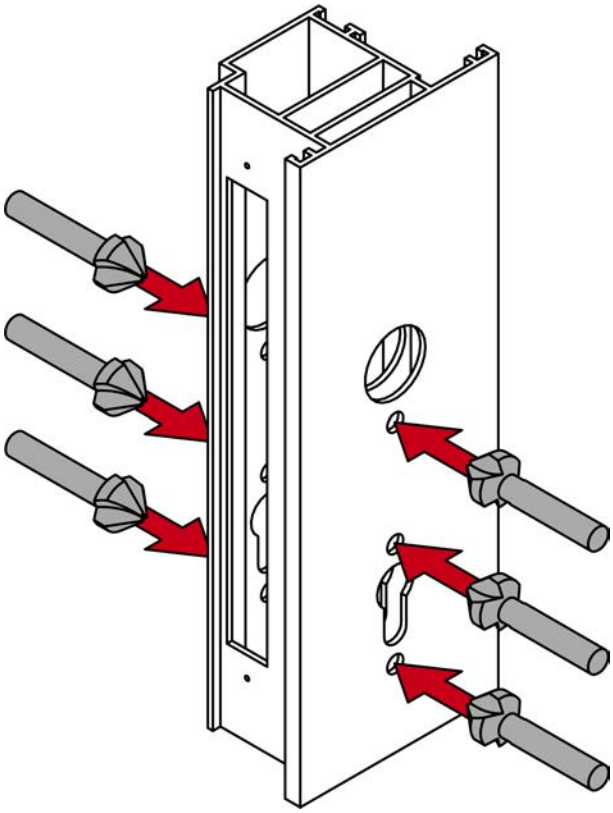
9. Remove the mortise lock.



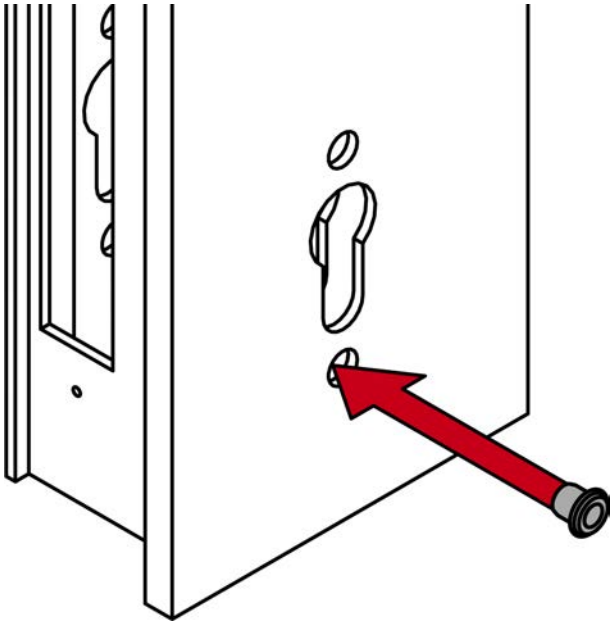
10. Drill the required holes.

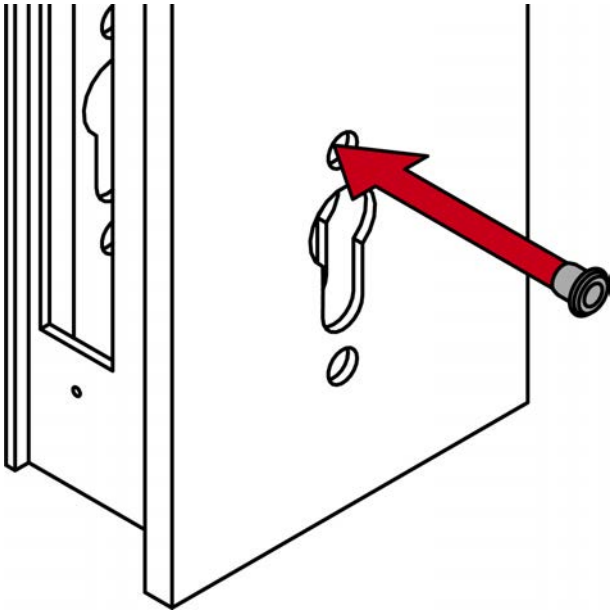


11. For PO (oval escutcheon): Countersink the holes with a countersink so that you can then insert the blind rivet nuts into a flush position.

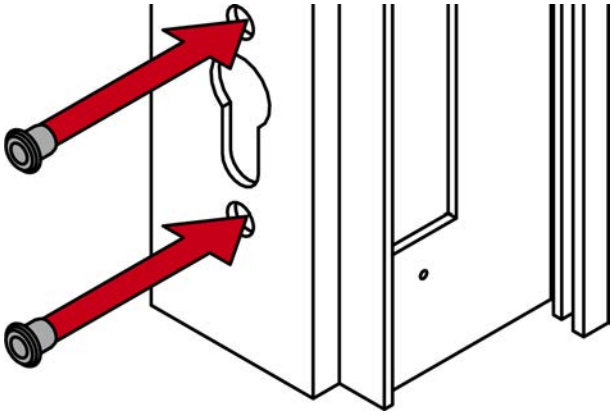


12. For PO (oval escutcheon): Insert a blind rivet nut on the outer side as shown.

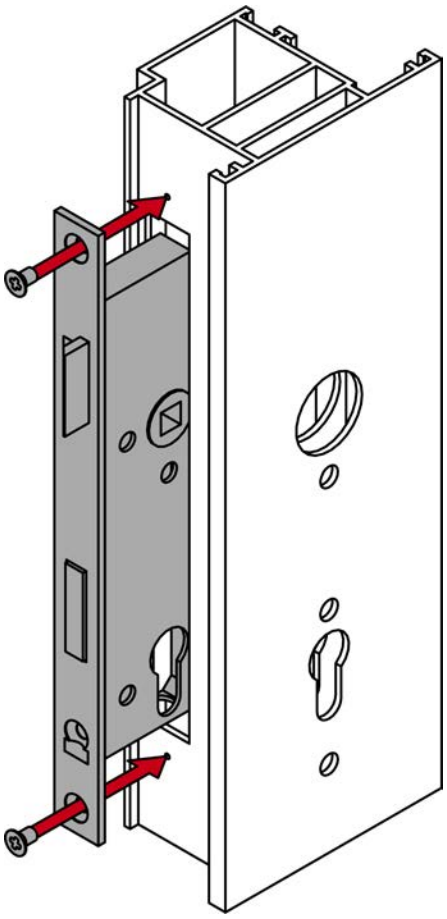




13. For PO (oval escutcheon): Insert the blind rivet nuts on the inner side.



14. Fit the mortise lock.

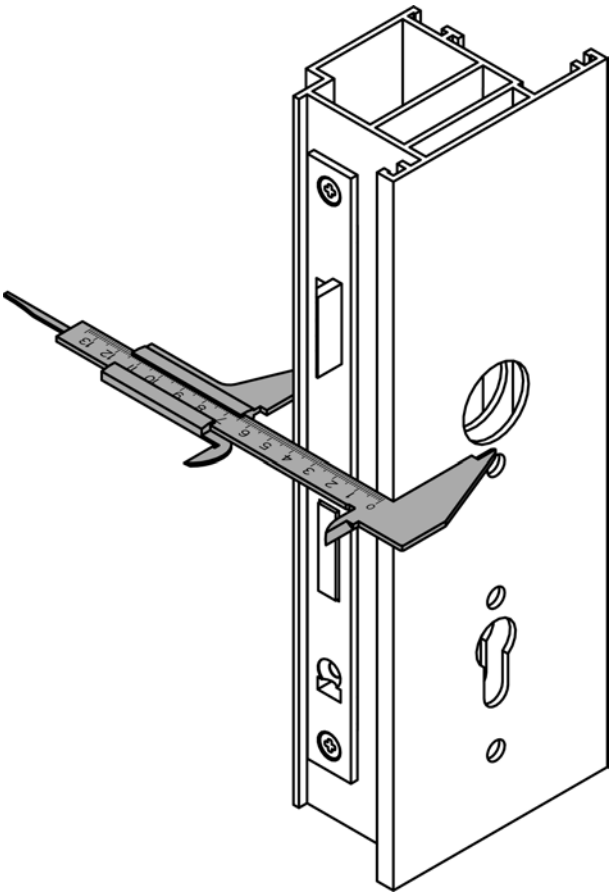


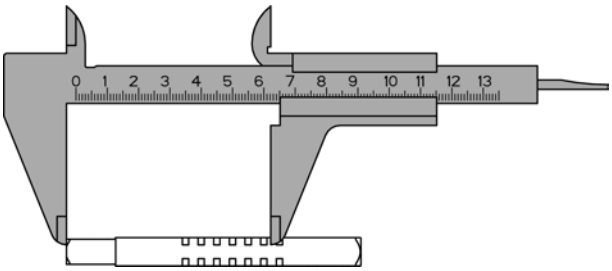
6.7.5 Installing the fitting

- ✓ Door pre-drilled.
- ✓ PH2 screwdriver at hand.
- ✓ TX15 screwdriver at hand.
- ✓ Caliper gauge at hand.
- ✓ Saw at hand.

1. Remove the panic bar as described in the manufacturer's documentation except for the adapter plate.

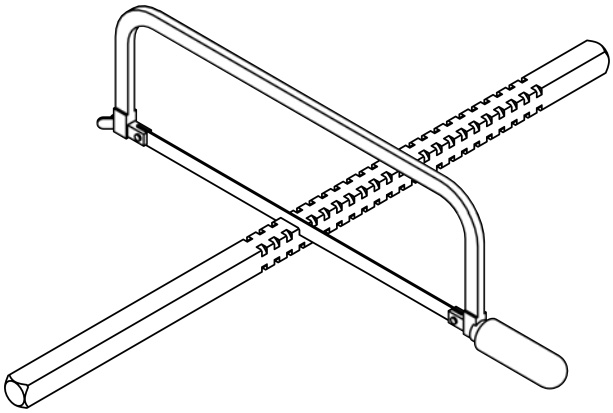
2. Measure the door thickness and determine the length of the spindle.





PS (with backplate)		*PO* (with oval escutcheon)	
BKS (bar handle)	Door thickness – 27.8 ± 1.5	BKS (bar handle)	Door thickness + 27.8 ±1.5 mm
BKS (push bar)	Door thickness – 36.8 ± 2.5 mm	BKS (push bar)	Door thickness + 36.8 ±2.5 mm
CISA 8 mm spindle	Door thickness – 27.3 ± 0.5 mm	CISA 8 mm spindle	Door thickness + 37.3 ±0.5 mm
CISA 9 mm spindle	Door thickness – 19.3 ± 0.5 mm	CISA 9 mm spindle	Door thickness + 27.3 ±0.5 mm

3. Trim the spindle with a suitable saw.



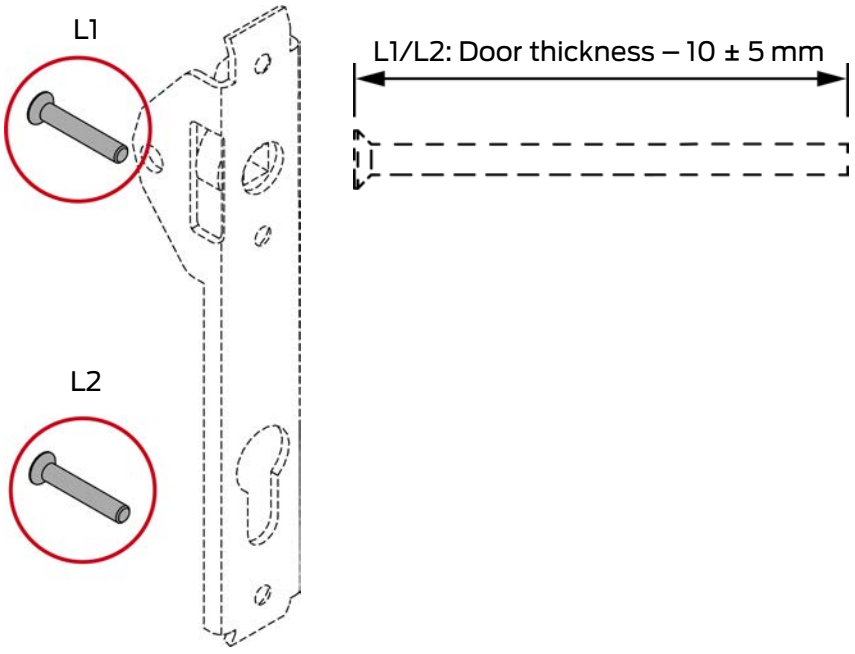
4. Obtain the screws not included in the scope of delivery from the manufacturer of your panic bar.

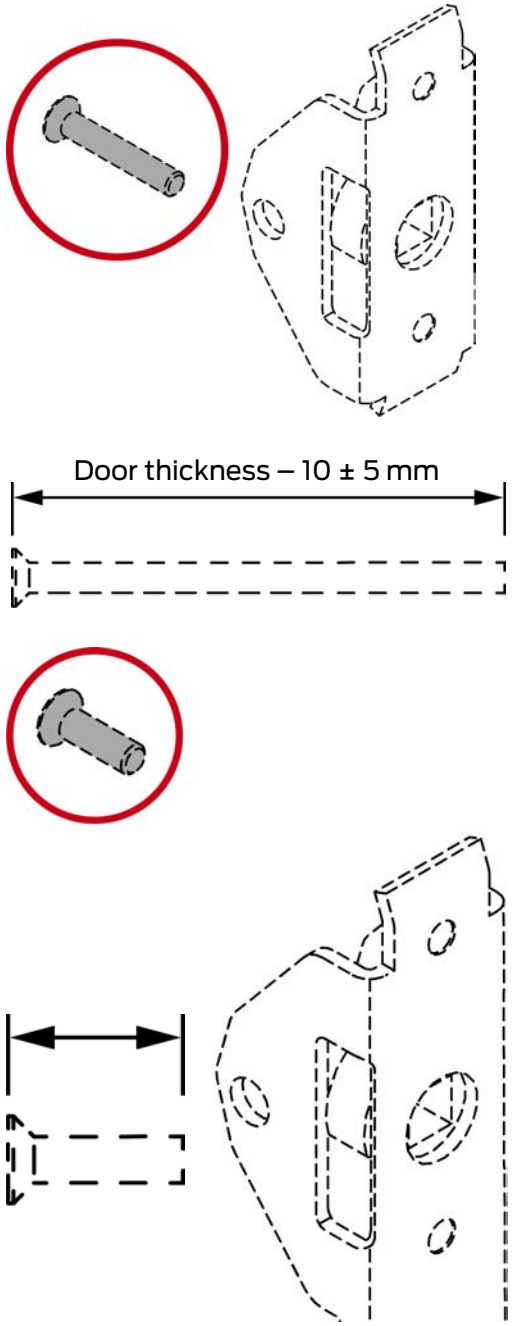
NOTE

Panic bar manufacturer's specifications

The panic bar manufacturer may impose further requirements on the screws, including strength and length.

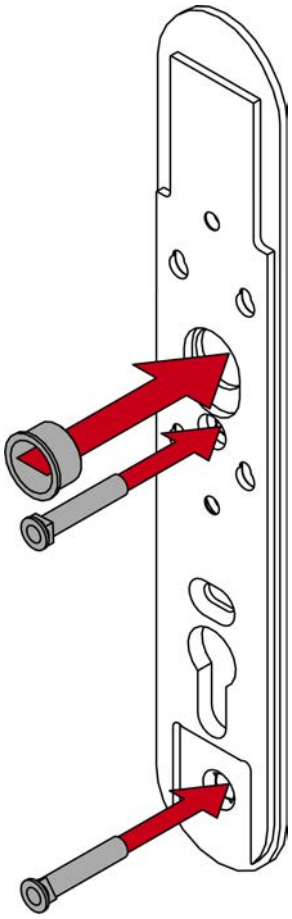
- Observe the documentation provided by the panic bar manufacturer.

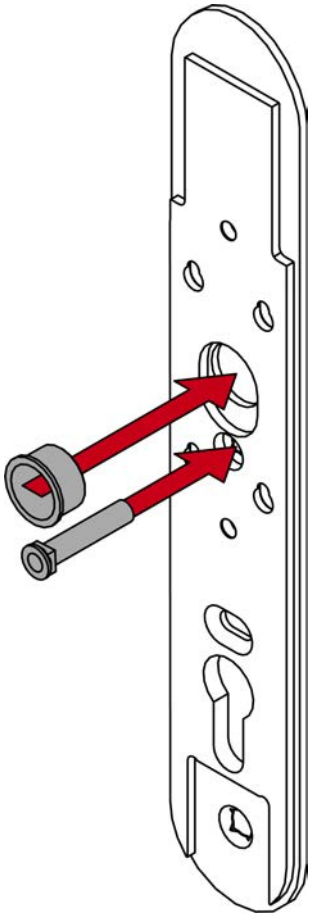




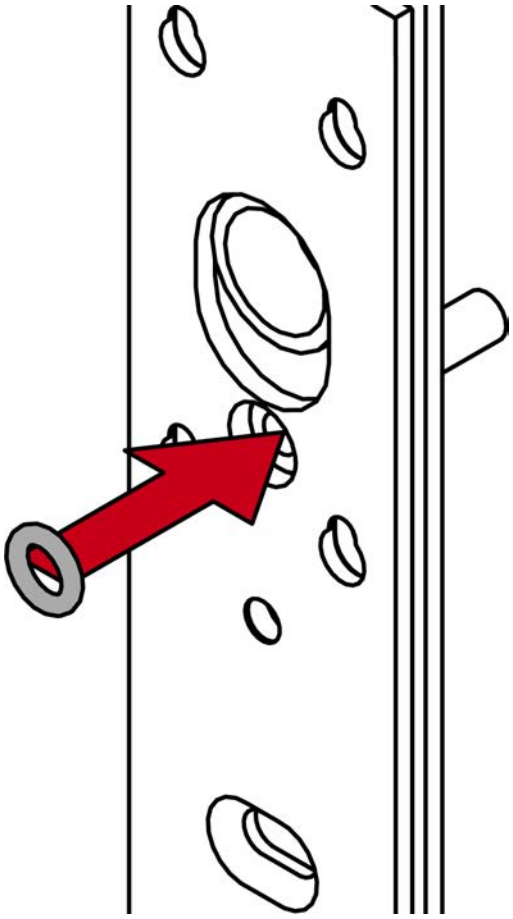
See panic bar manufacturer documentation

5. Insert the sleeve nuts and spindle protection into the fixing plate.

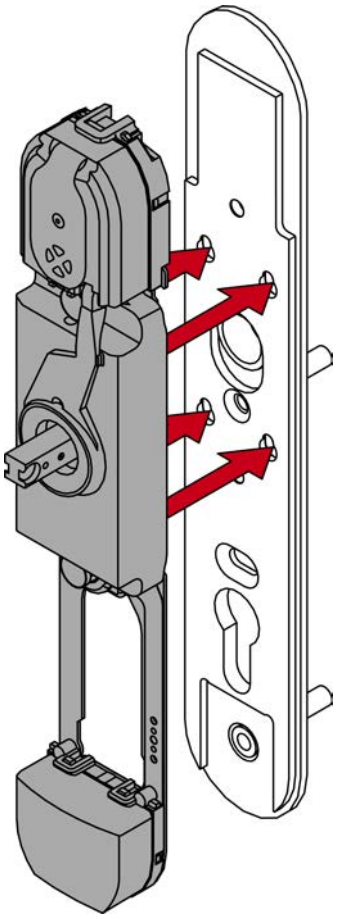




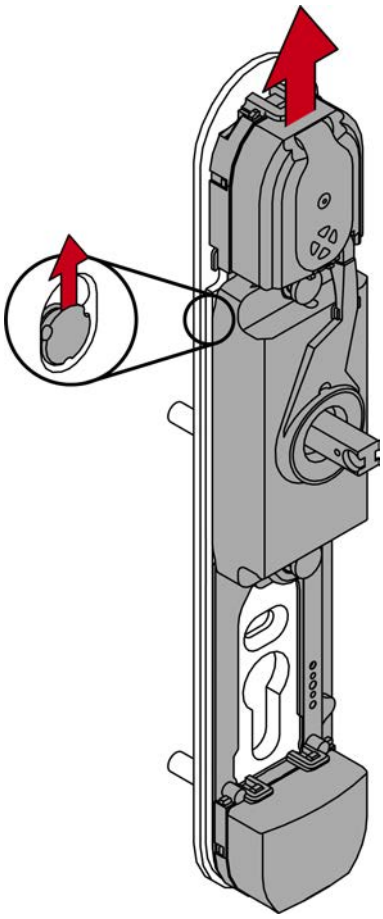
6. Insert a spacer ring into the hole in the middle sleeve nut.



7. Insert the module support into the fastening plate.

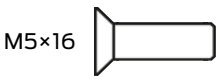


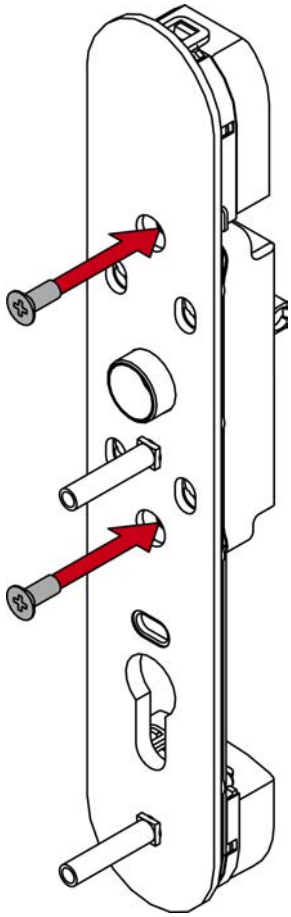
8. Slide the module support upwards.



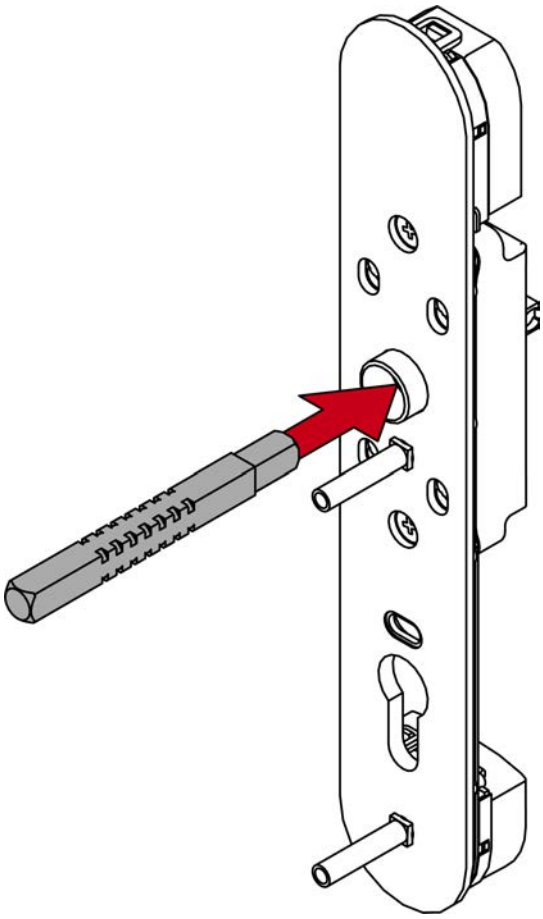
↳ Module support snaps into place.

9. Fasten the module support to the fixing plate (PH2) with the 16 mm screws.

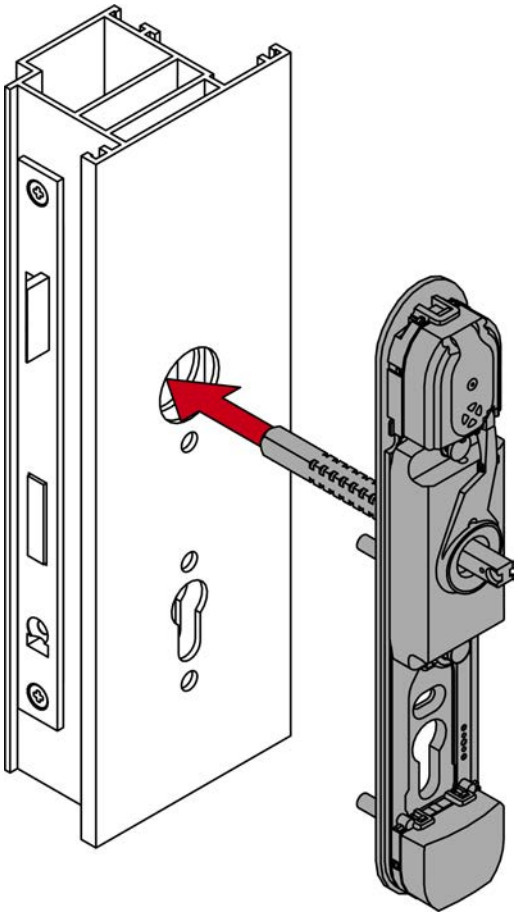


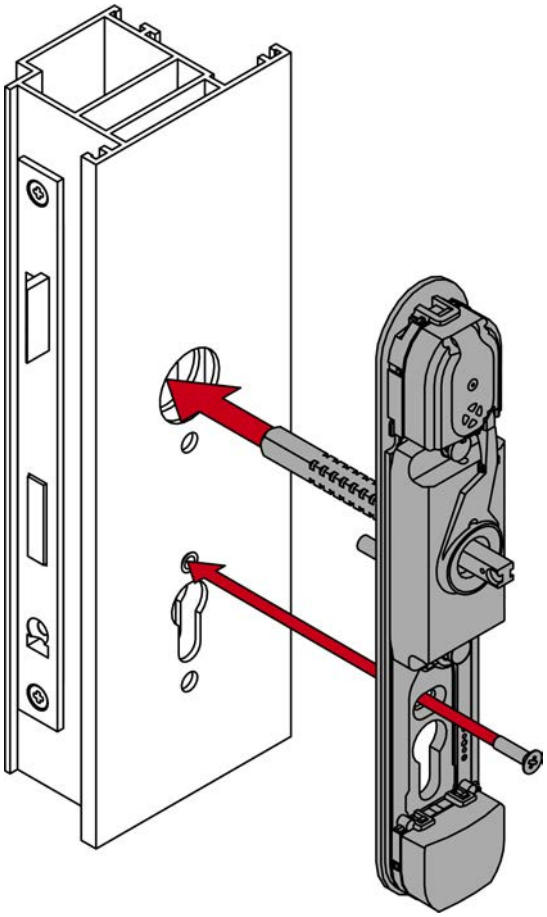


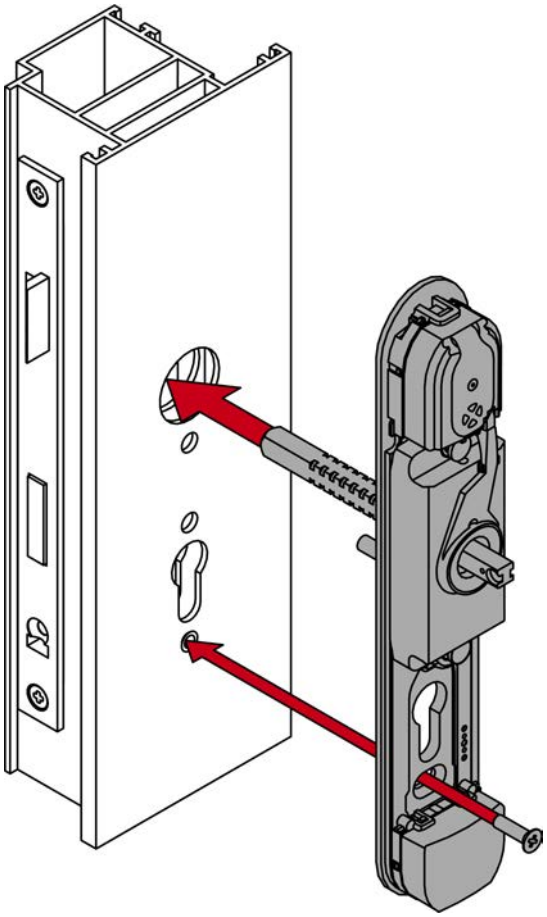
10. Insert the spindle into the fitting.



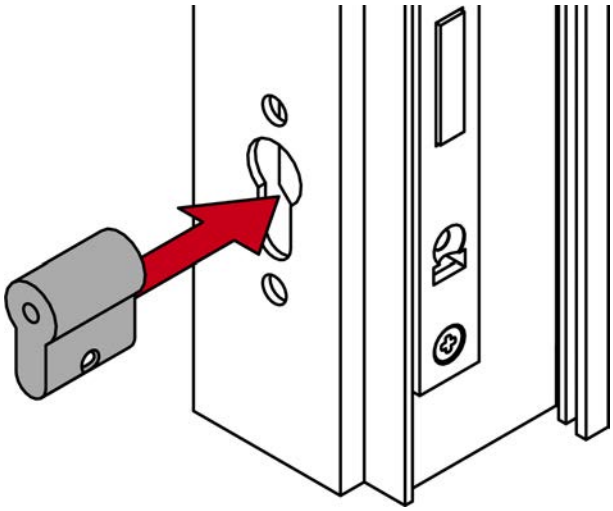
11. Insert the module support with the fastening plate into the outer side of the door.



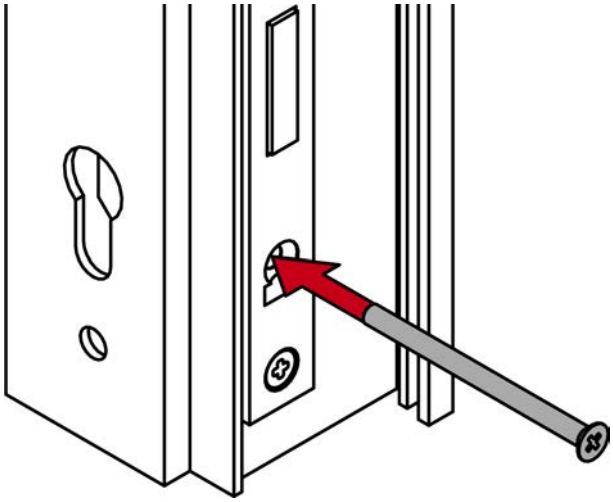




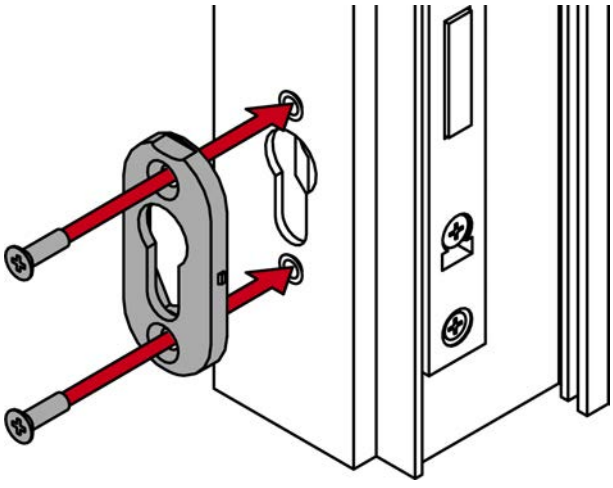
12. For non-MO: insert the blank cylinder.



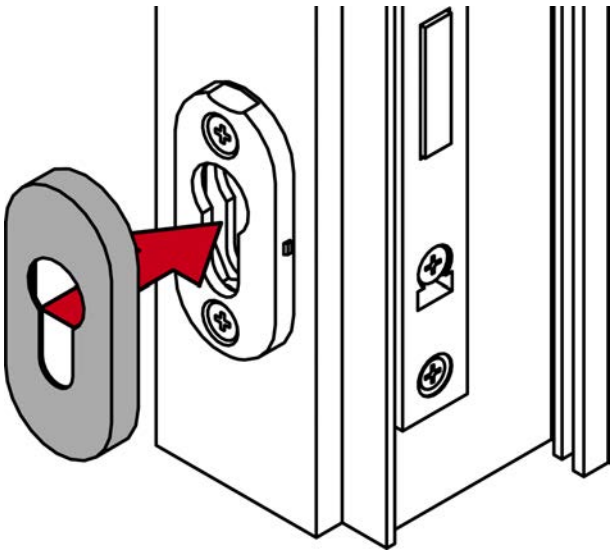
13. For non-MO: screw the blank cylinder firmly into position.



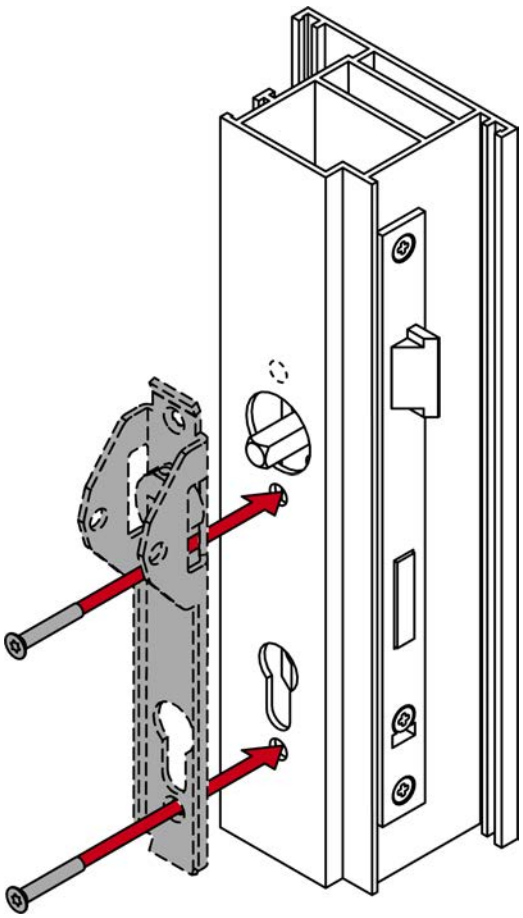
14. For PO (oval escutcheon): Screw on the oval escutcheon base (PH2).

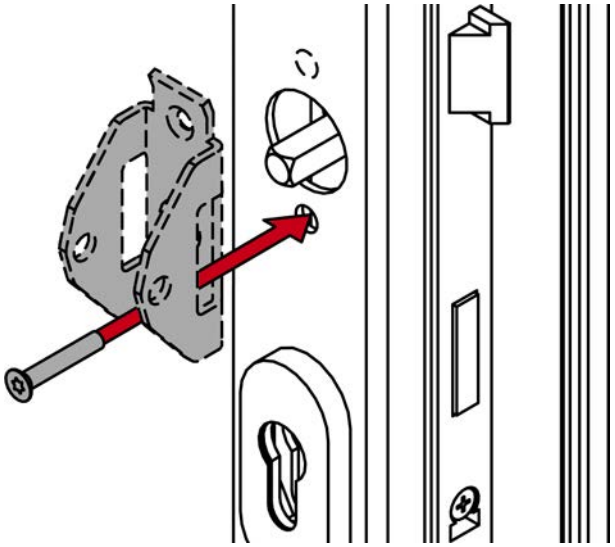


15. For PO (oval escutcheon): Place the covers on the oval escutcheon base.

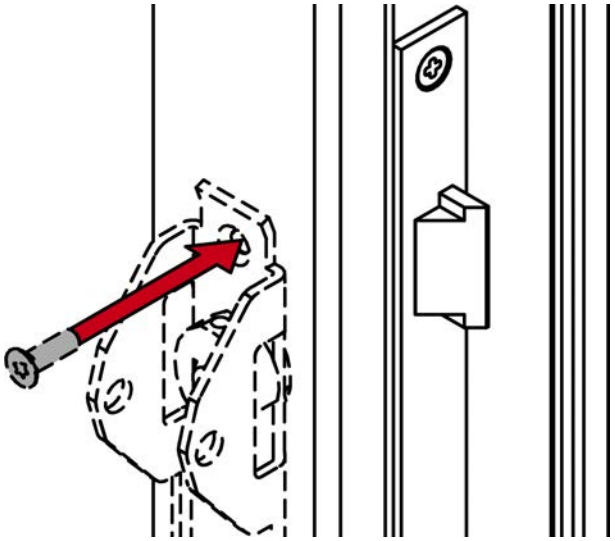


16. Screw on the panic bar mounting plate (TX25, PO [oval escutcheon] and PH2).

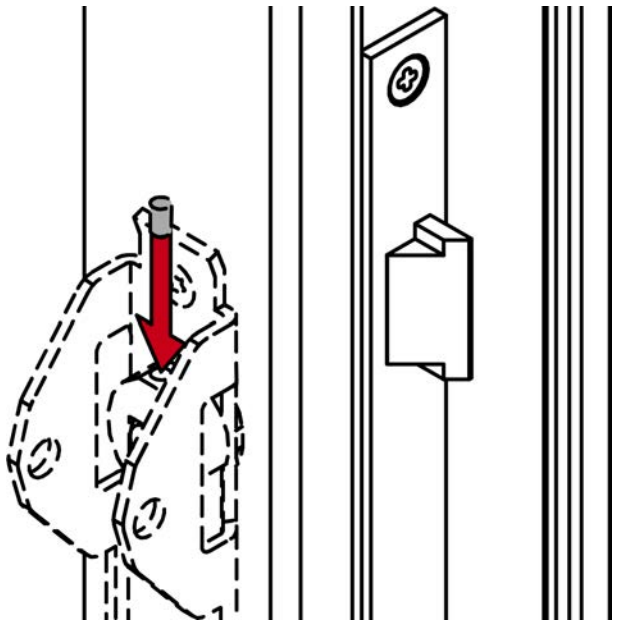




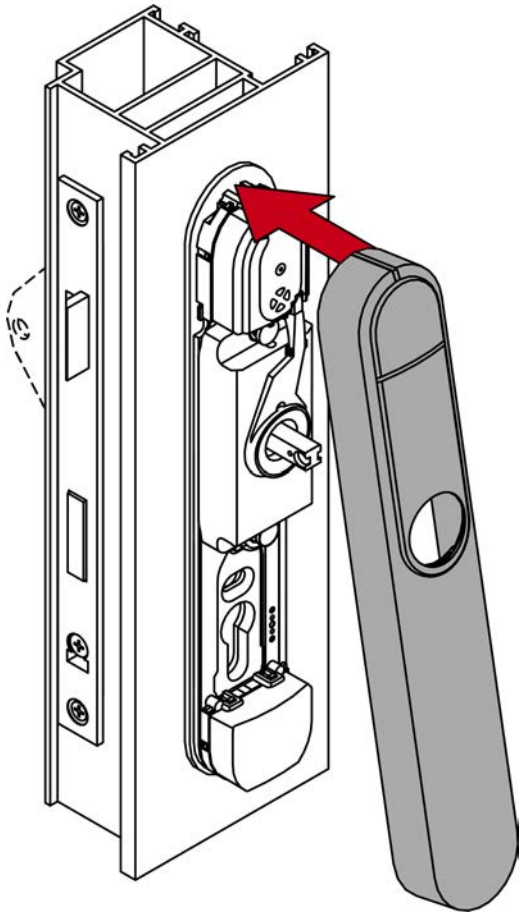
17. Observe any manufacturer-specific requirements for attaching the mounting plate.



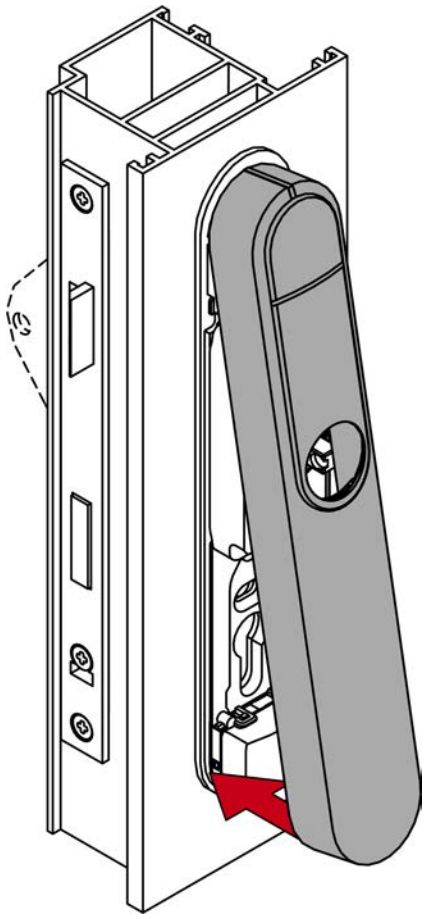
18. Fasten the panic bar according to the manufacturer's specifications (e.g. using grub screw).



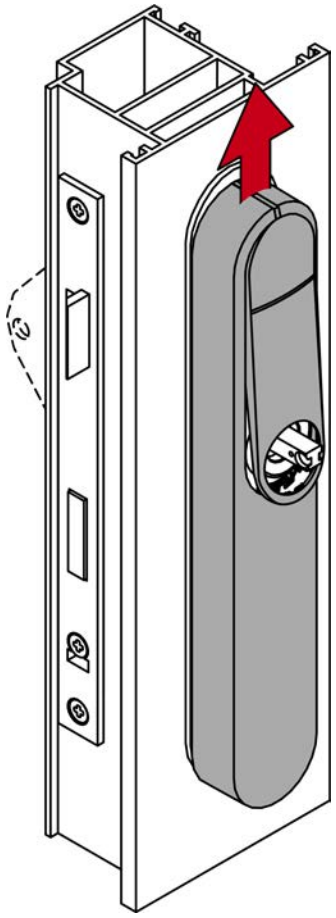
19. Place the cover on top of the fastening plate.



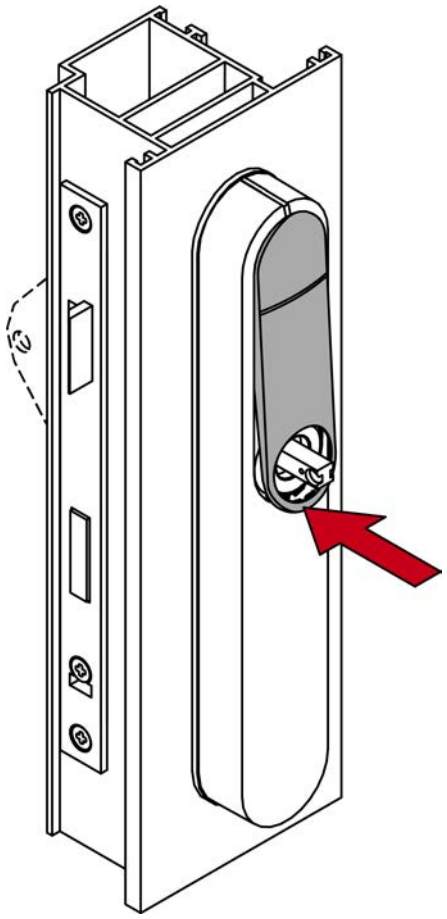
20.Fold down the cover.



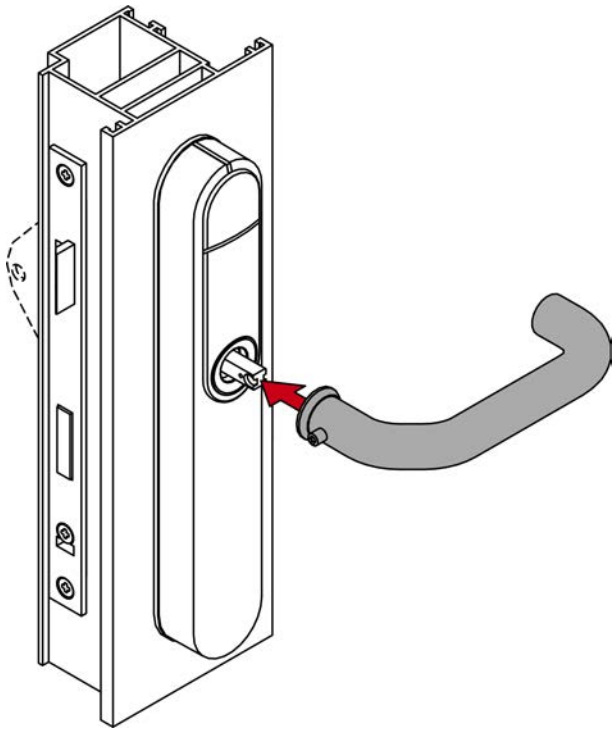
21. Slide the cover upwards.



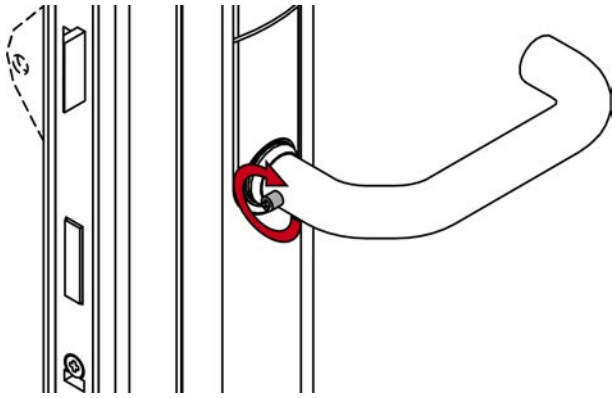
22. Press the inlay into place.



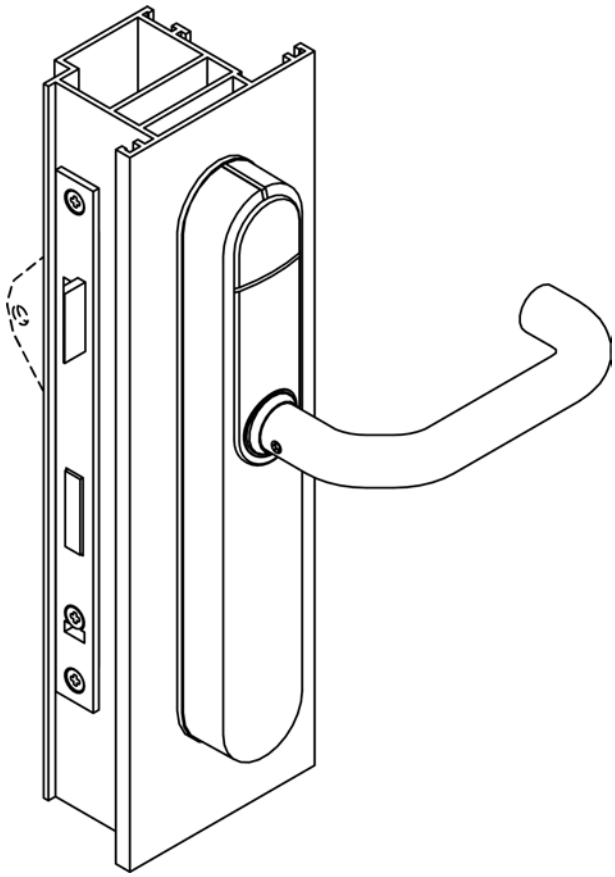
23. Fit the outside handle.



24. Use the grub screw to fasten the outer handle (TX15) into position.



↳ SI SmartHandle AX Advanced fully installed.



6.8 Panic fitting with wide backplate

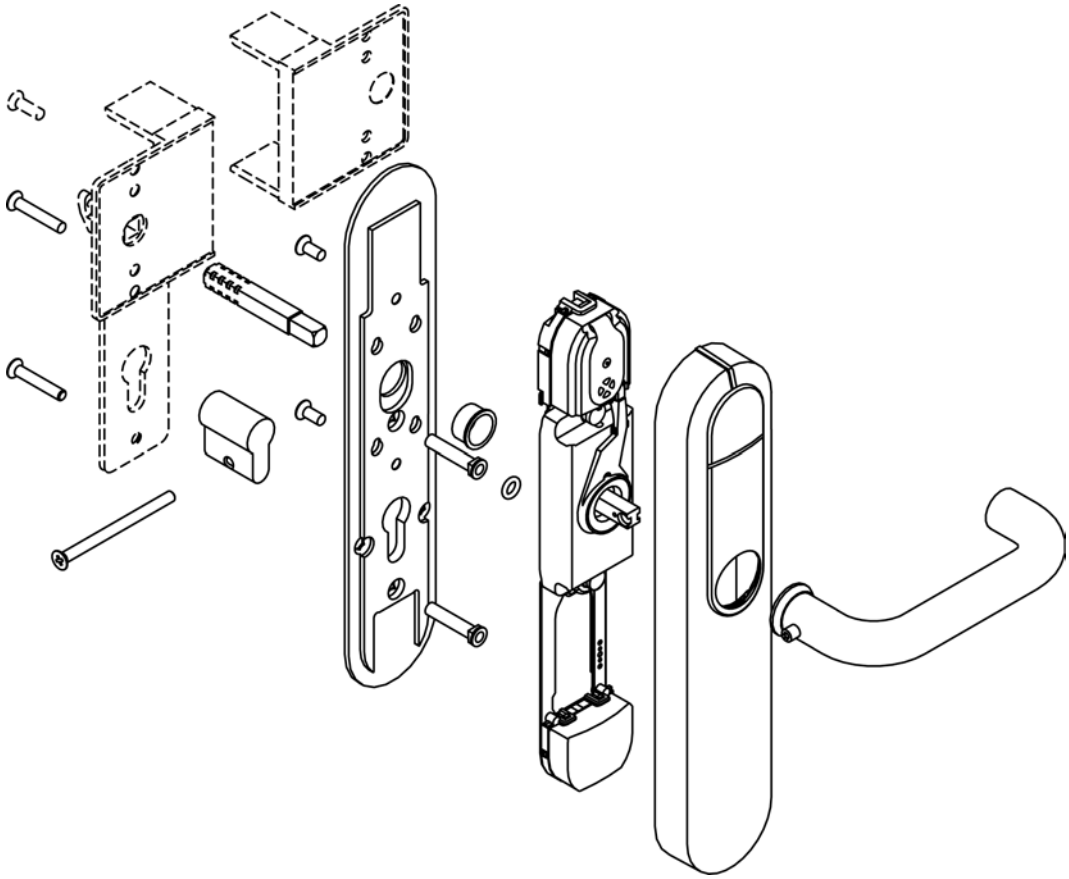
6.8.1 Scope of delivery

- SI SmartHandle AX Advanced Panic fitting with wide backplate
- Special tool
- Quick guide

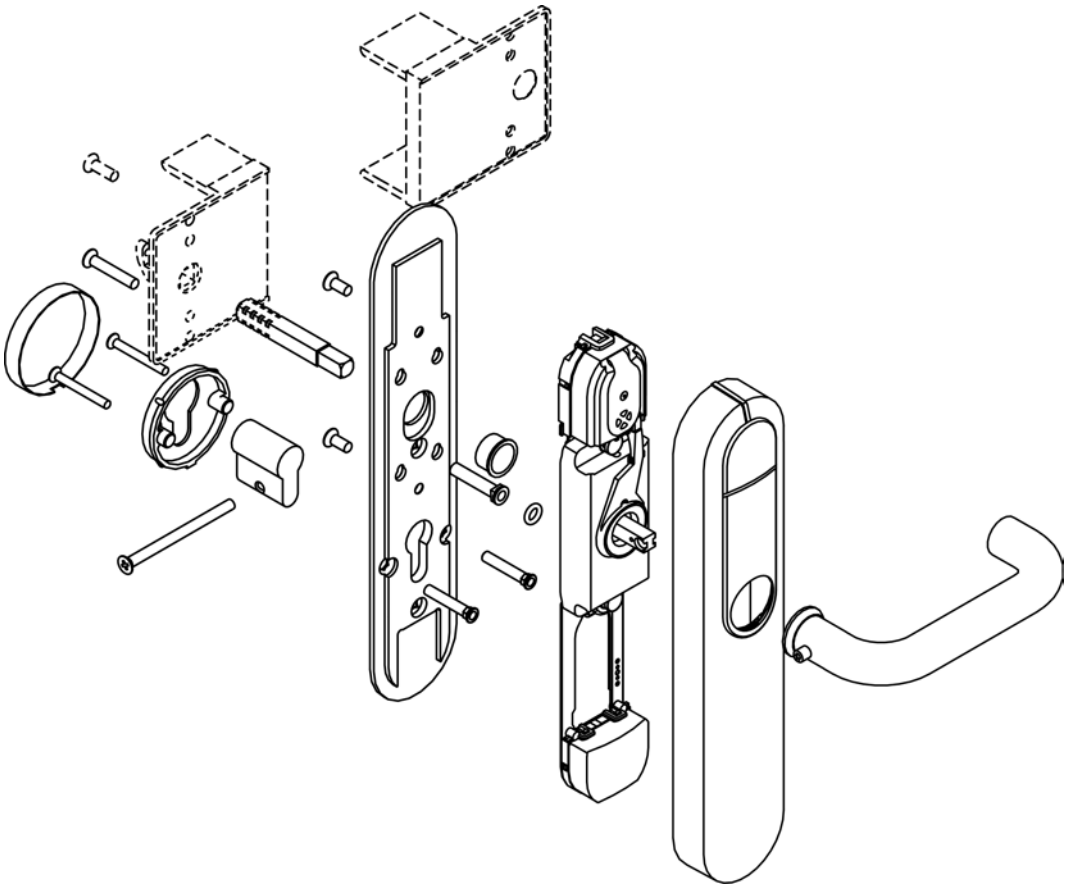
Not included:

- Panic bar
- Screws for fastening the panic bar itself

6.8.2 Structure with backplate (*PS*)



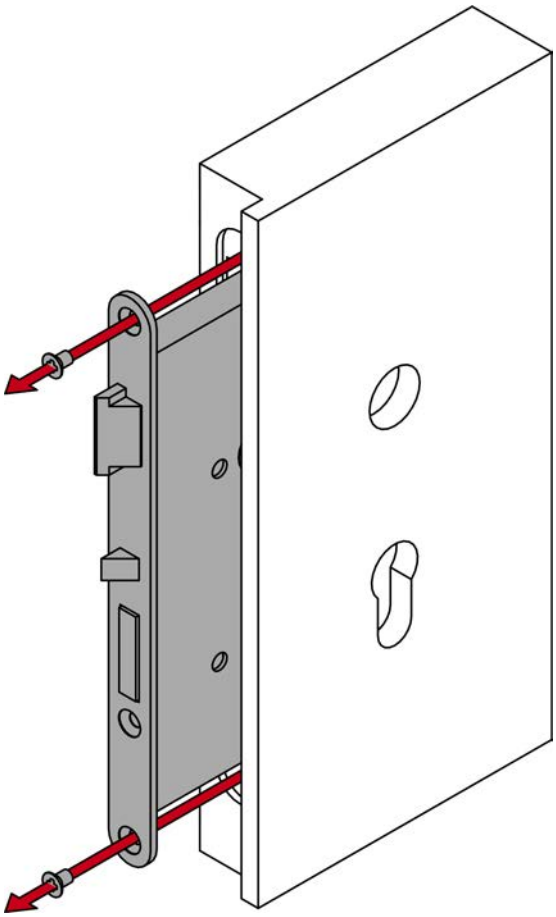
6.8.3 Structure with round escutcheon (*PO*)



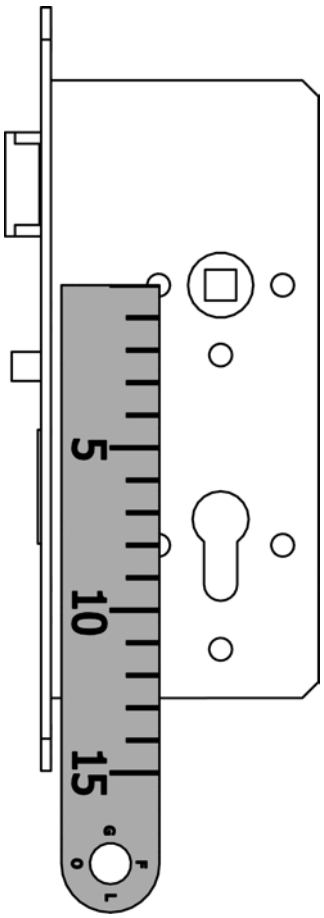
6.8.4 Prepare door (drilling template)

- ✓ Pin or scriber at hand.
- ✓ Drill at hand.
- ✓ Have suitable drill bit at hand (Ø 7 mm; also Ø 6 mm to install round escutcheon).
- ✓ PH2 screwdriver at hand.
- ✓ Ruler at hand.

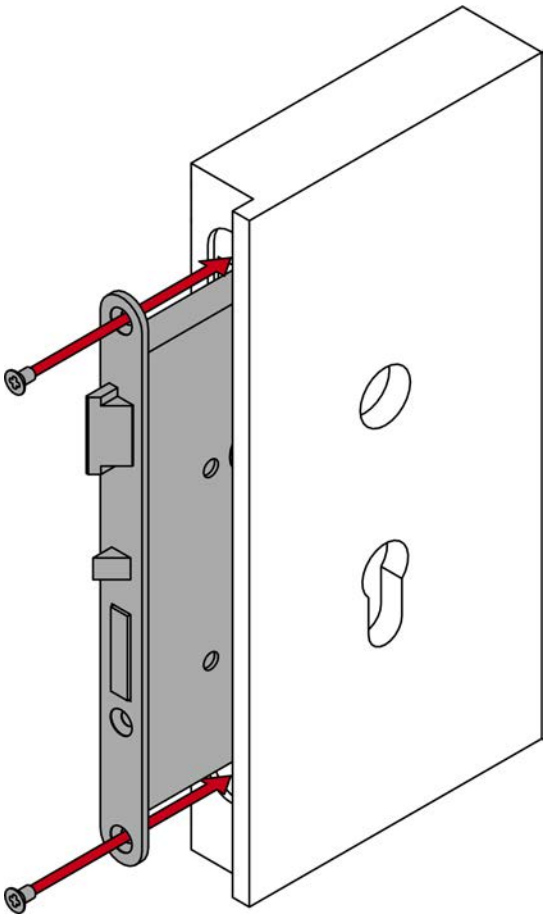
1. Remove the mortise lock.



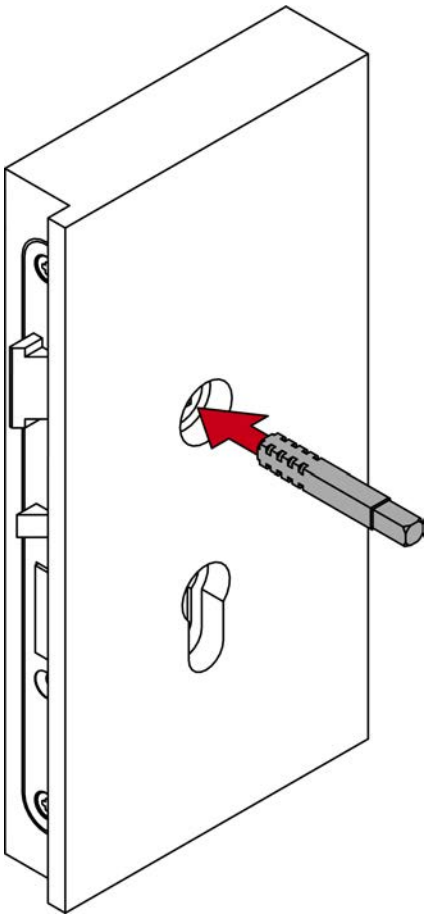
2. Measure the distance (gap between the spindle and cylinder axes of rotation).



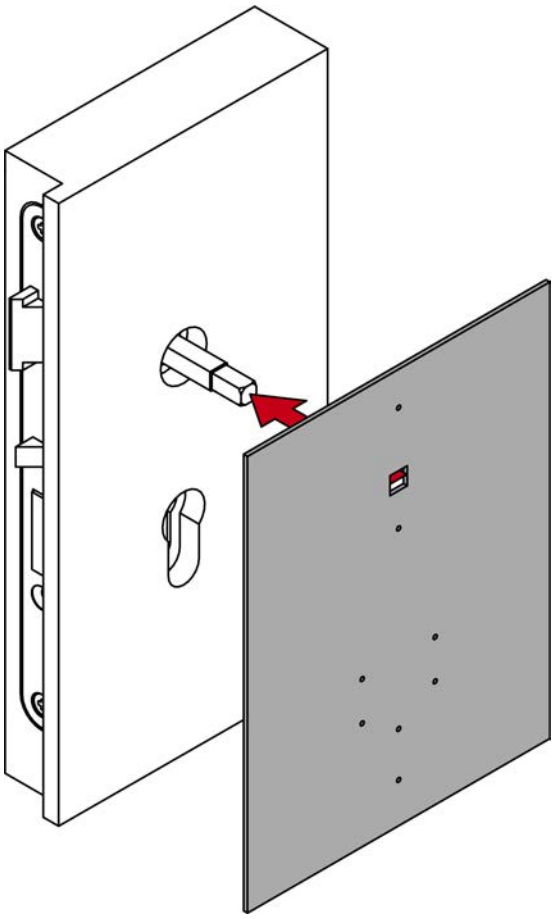
3. Fit the mortise lock.



4. Insert the spindle into the mortise lock.

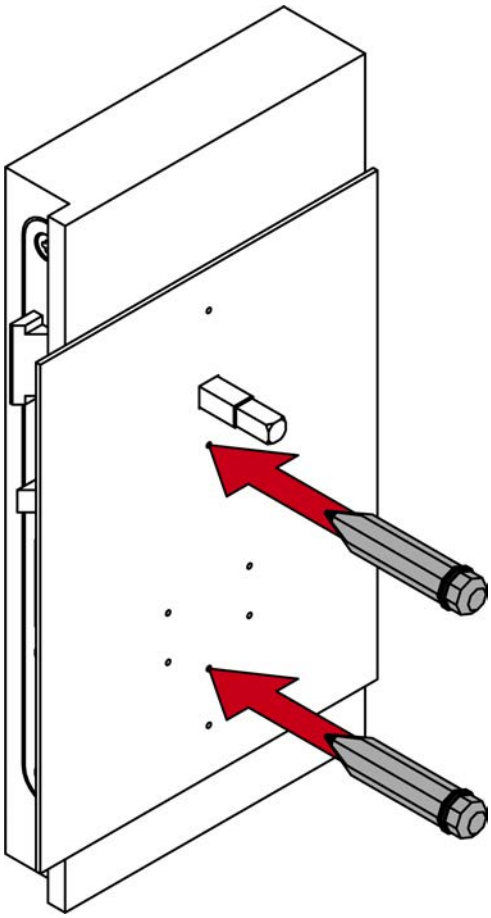


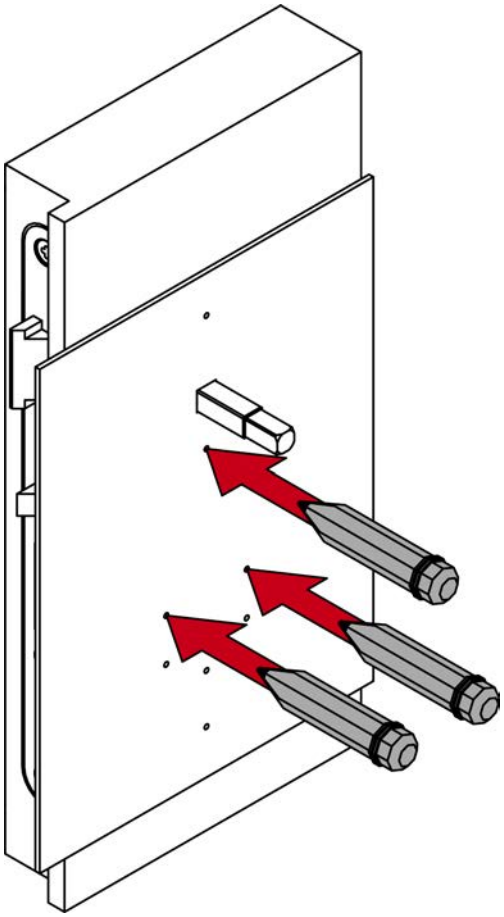
5. Place the drilling template on the spindle.



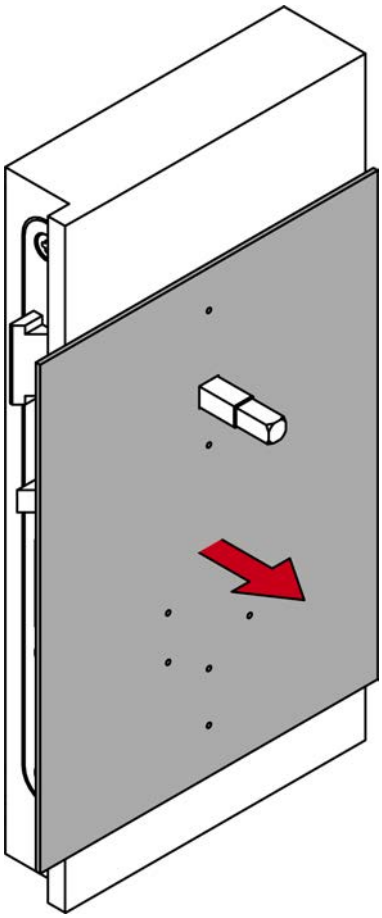
6. Align the drill template vertically using the printed scale.

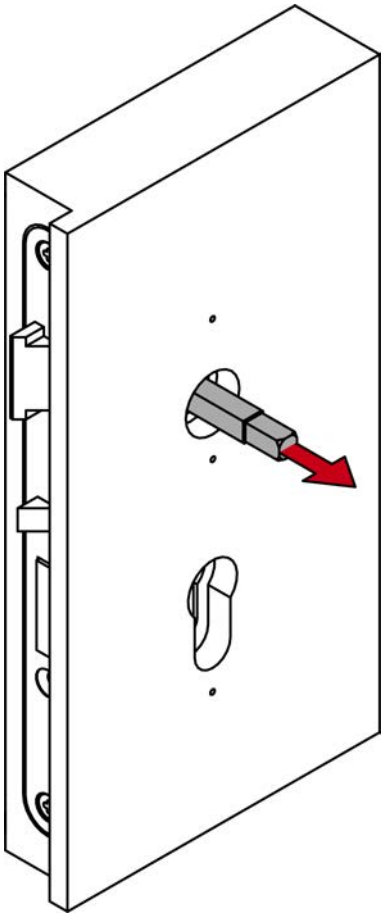
7. Mark the points to be drilled on the door.



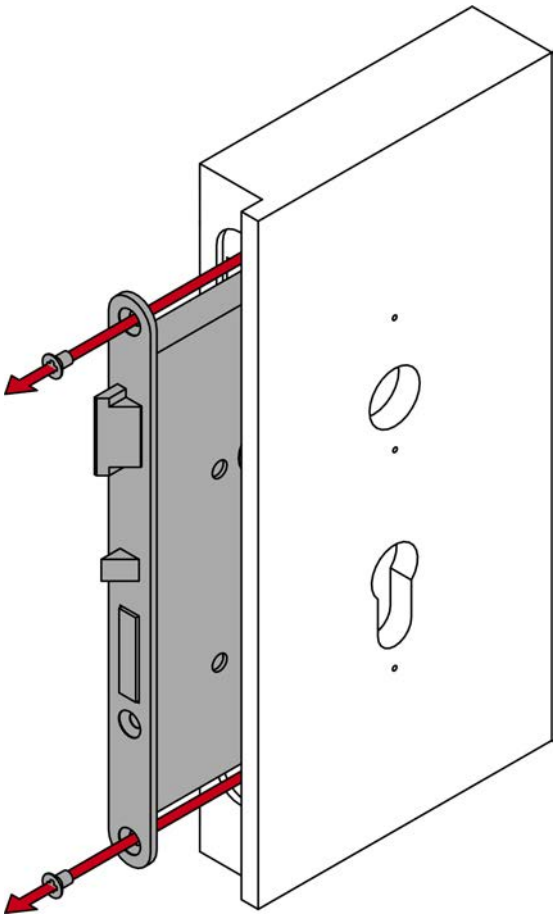


8. Remove the drilling template and spindle.

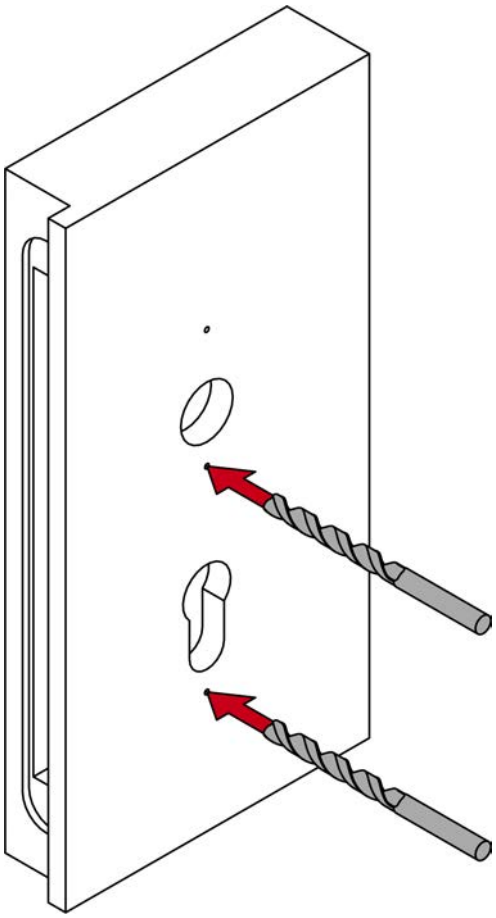


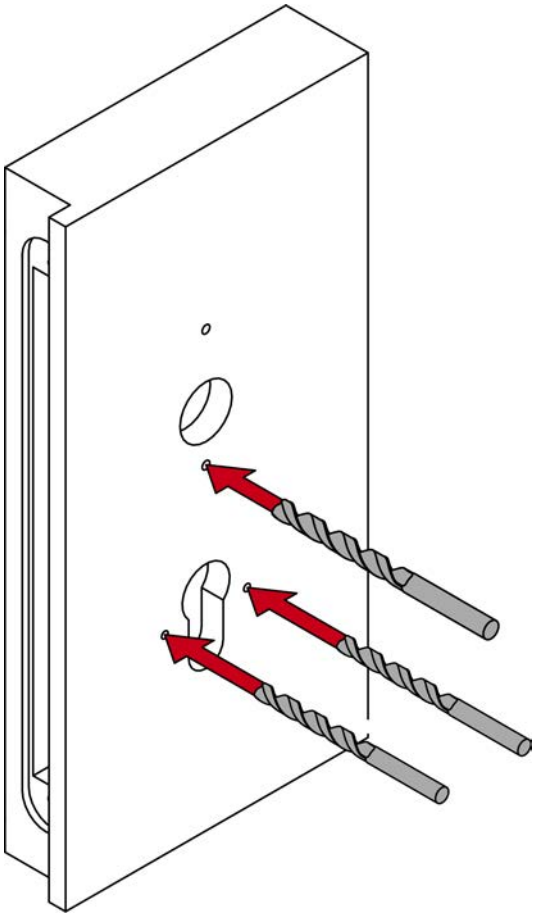


9. Remove the mortise lock.

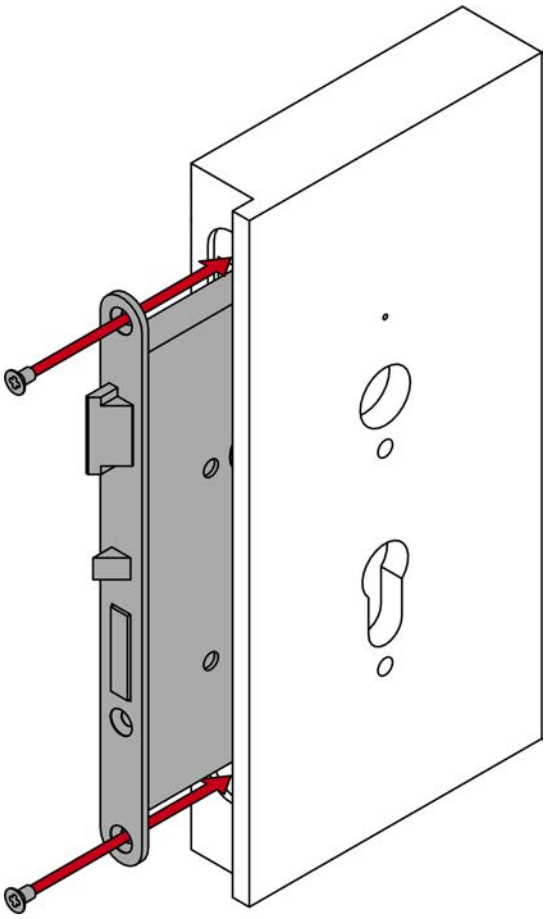


10. Drill the required holes.





11. Fit the mortise lock.

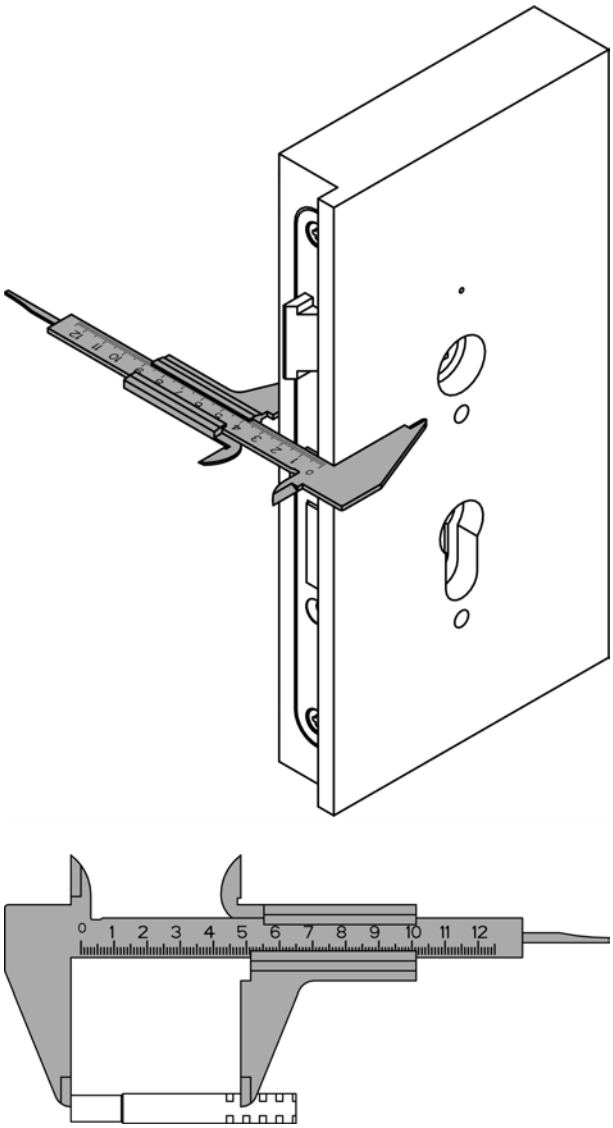


6.8.5 Installing the fitting

- ✓ Door pre-drilled.
- ✓ PH2 screwdriver at hand.
- ✓ TX15 screwdriver at hand.
- ✓ Caliper gauge at hand.
- ✓ Saw at hand.

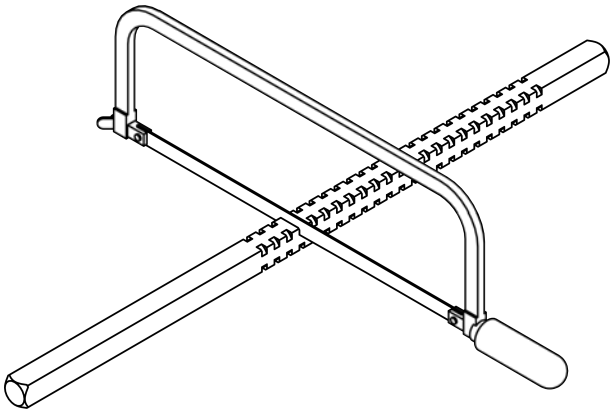
1. Remove the panic bar as described in the manufacturer's documentation except for the adapter plate.

2. Measure the door thickness and determine the length of the spindle.



PS (with backplate)		*PO* (with round escutcheon)	
BKS (bar handle)	Door thickness – 27.8 ± 1.5 mm	BKS (push bar)	Door thickness + 36.8 ±2.5 mm
BKS (push bar)	Door thickness – 36.8 ± 2.5 mm		
CISA 8 mm spindle	Door thickness – 27.3 ± 0.5 mm		
CISA 9 mm spindle	Door thickness – 19.3 ± 0.5 mm		

3. Trim the spindle with a suitable saw.



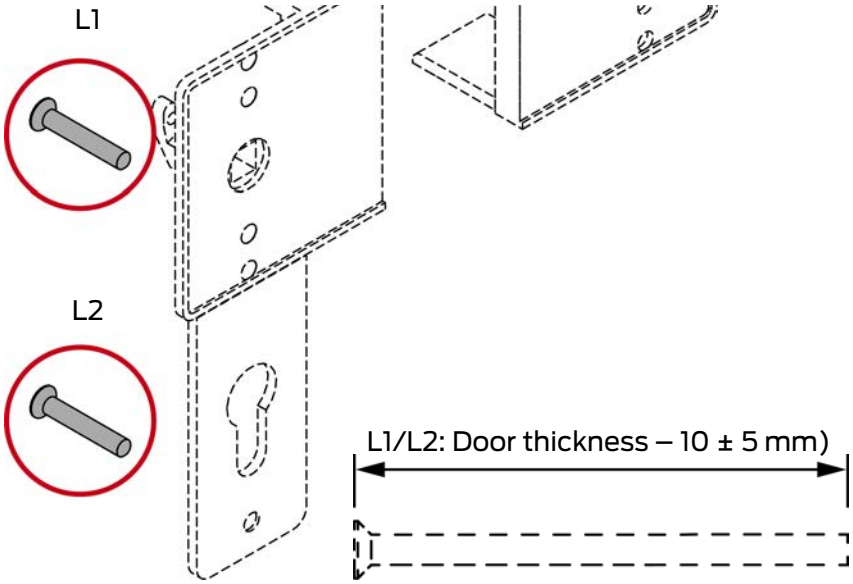
4. Obtain the screws not included in the scope of delivery from the manufacturer of your panic bar.

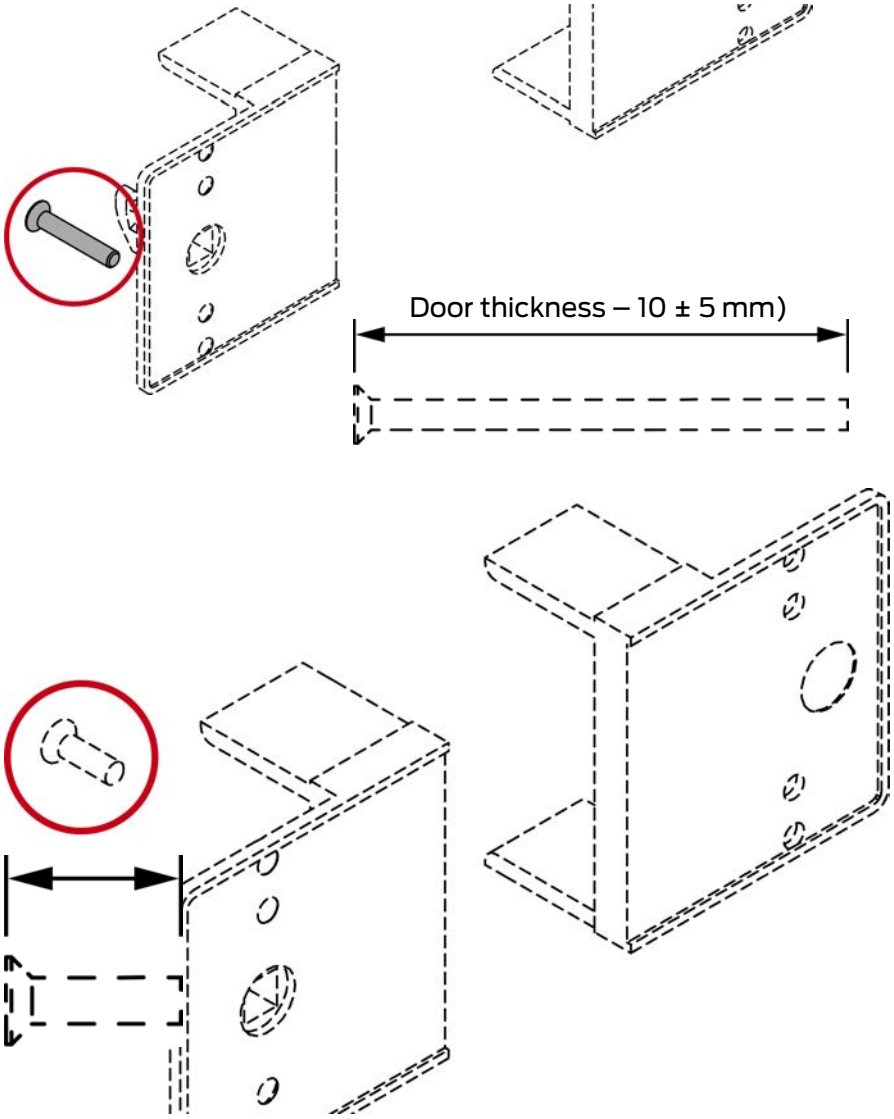
NOTE

Panic bar manufacturer's specifications

The panic bar manufacturer may impose further requirements on the screws, including strength and length.

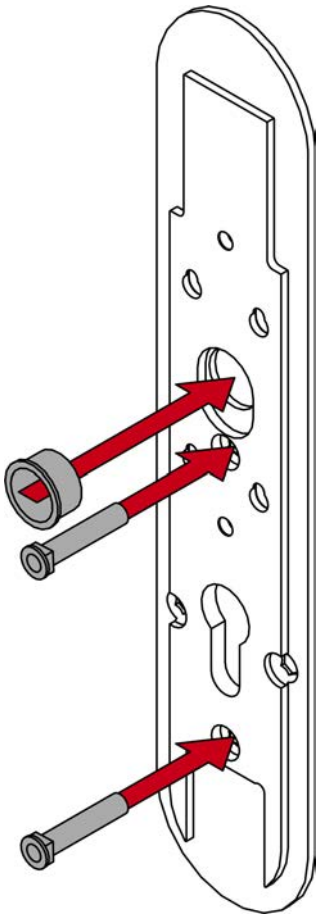
- Observe the documentation provided by the panic bar manufacturer.

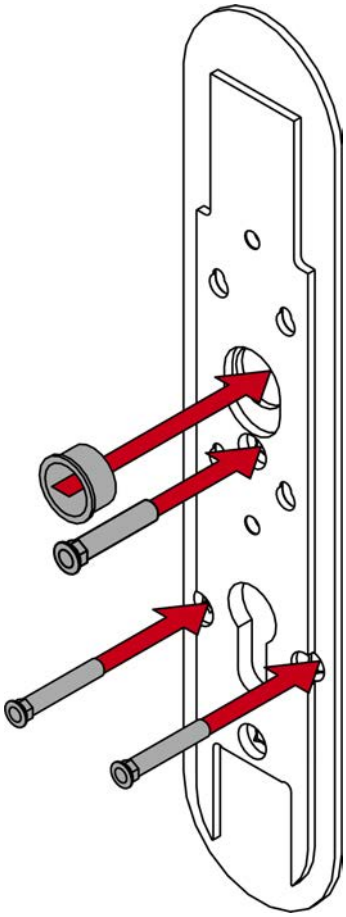




See panic bar manufacturer documentation

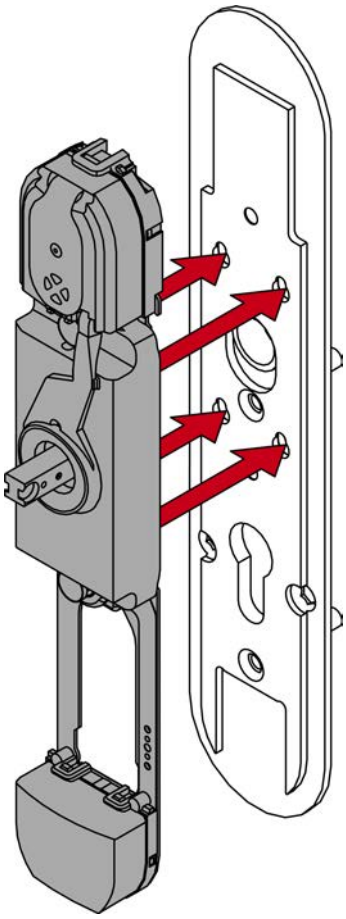
5. Insert the sleeve nuts and spindle protection into the fixing plate.



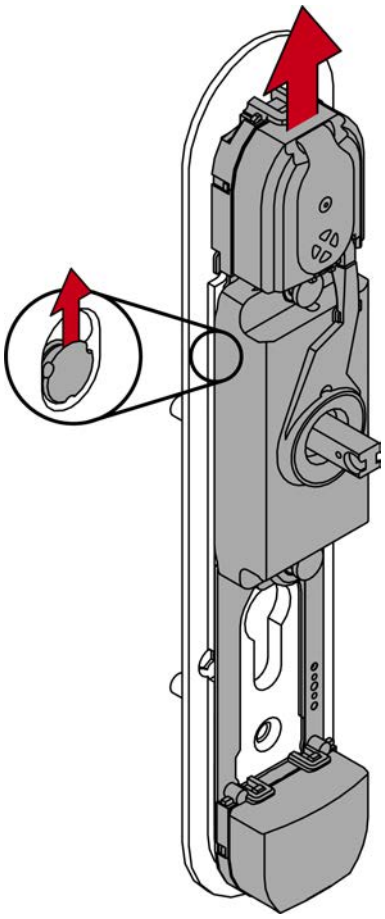


6. Place the spacer ring in the opening of the sleeve nut.

7. Insert the module support into the fastening plate.

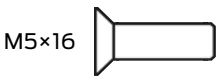


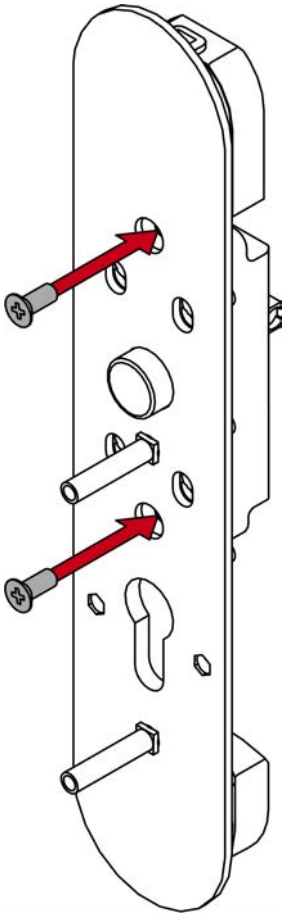
8. Slide the module support upwards.



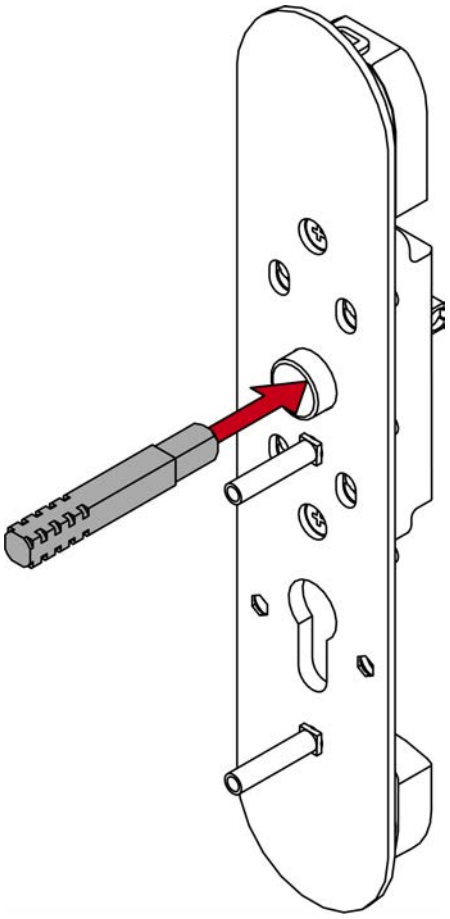
↳ Module support snaps into place.

9. Fasten the module support to the fixing plate (PH2) with the 16 mm screws.

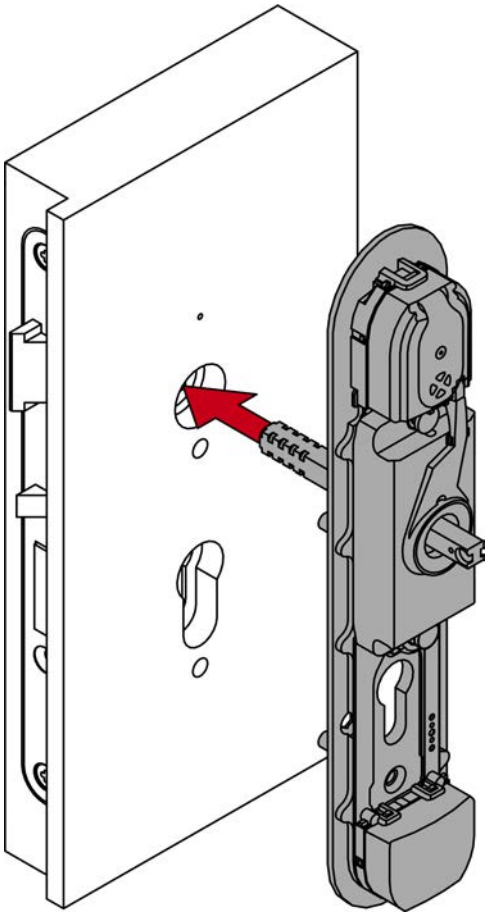




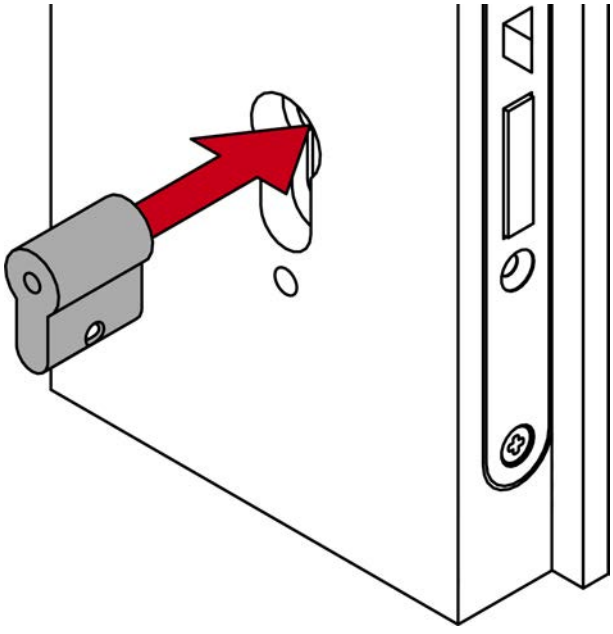
10. Insert the spindle into the fitting.



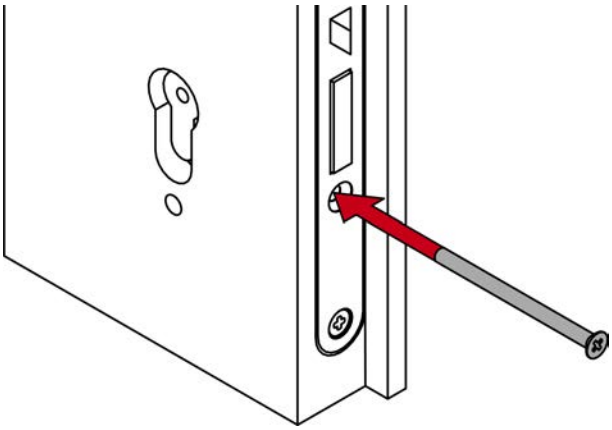
11. Insert the module support with the fastening plate into the outer side of the door.



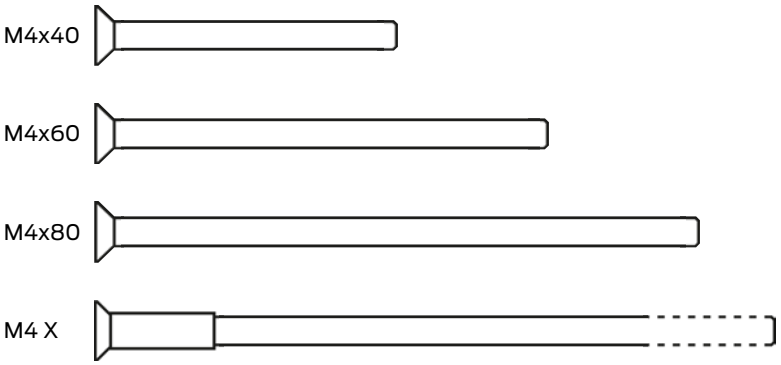
12. For non-MO: insert the blank cylinder.

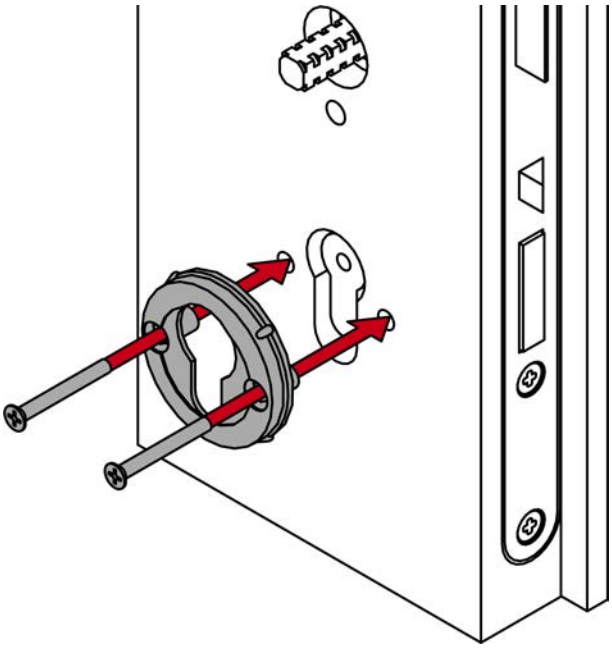


13. For non-MO: screw the blank cylinder firmly into position.

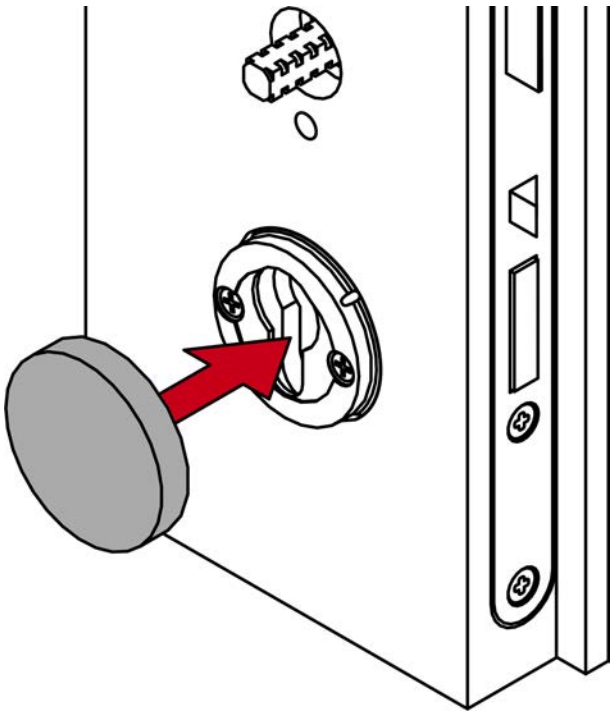


14. For PO (round escutcheon): Fasten the round escutcheon base firmly (PH2).

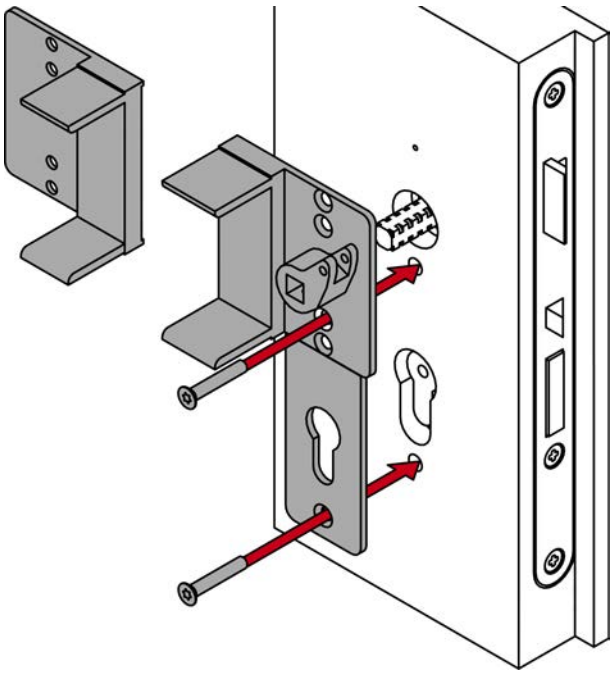


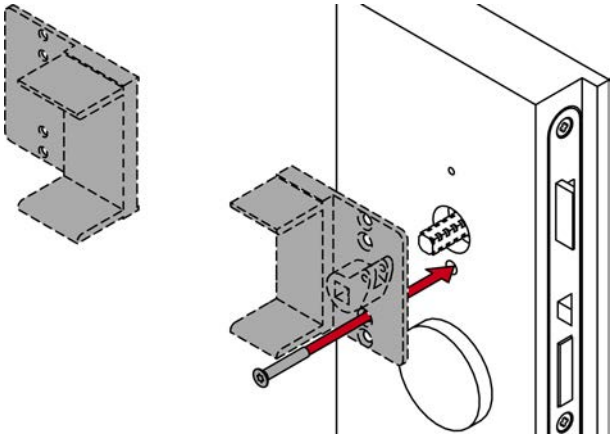


15. For PO (round escutcheon): Place the cover on the round escutcheon base.

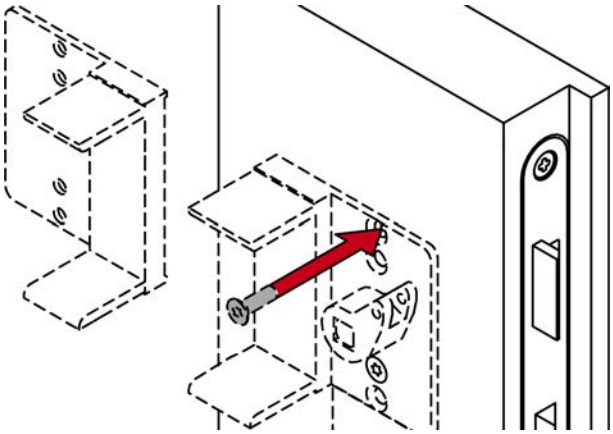


16. Fasten the panic bar mounting plate firmly (TX25).

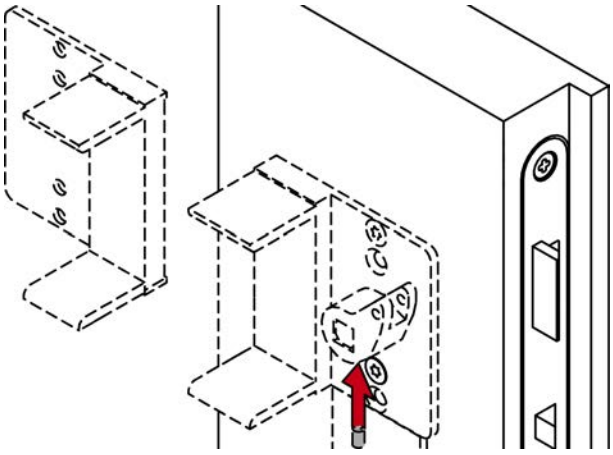




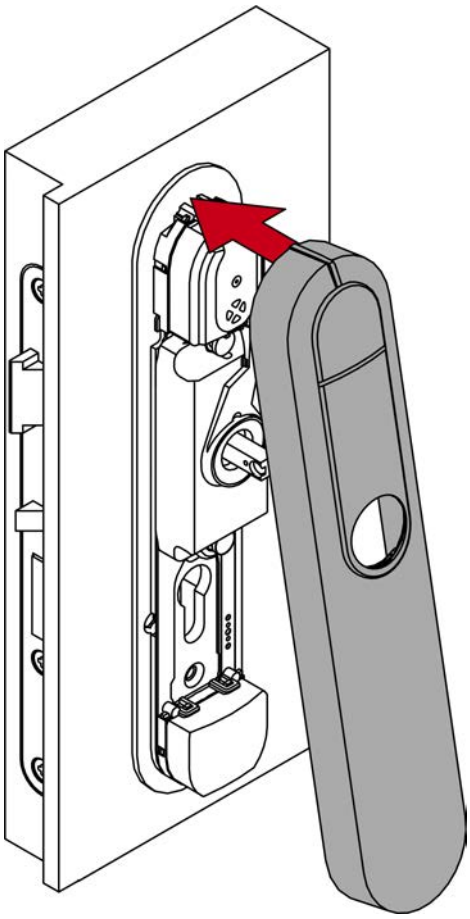
17. Observe any manufacturer-specific requirements for attaching the mounting plate.



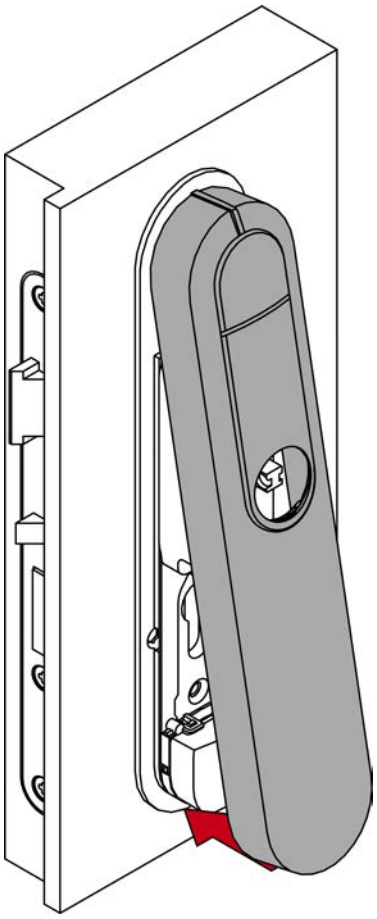
18. Fasten the panic bar according to the manufacturer's specifications (e.g. using grub screw).



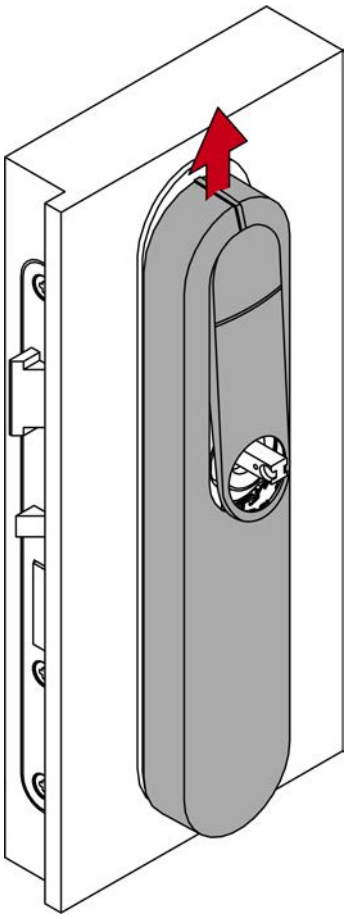
19. Place the cover on top of the fastening plate.



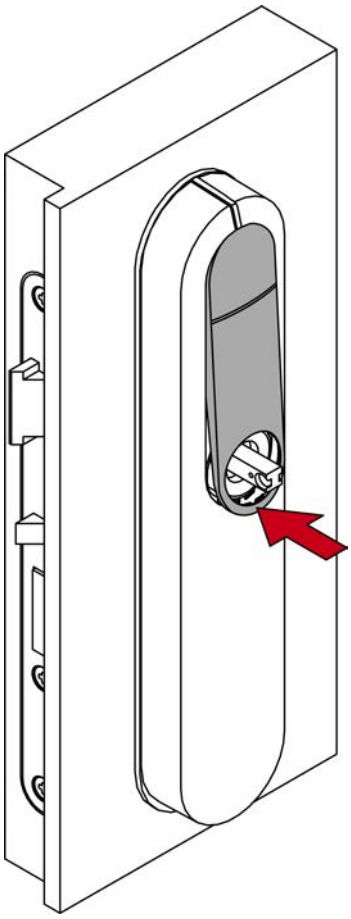
20.Fold down the cover.



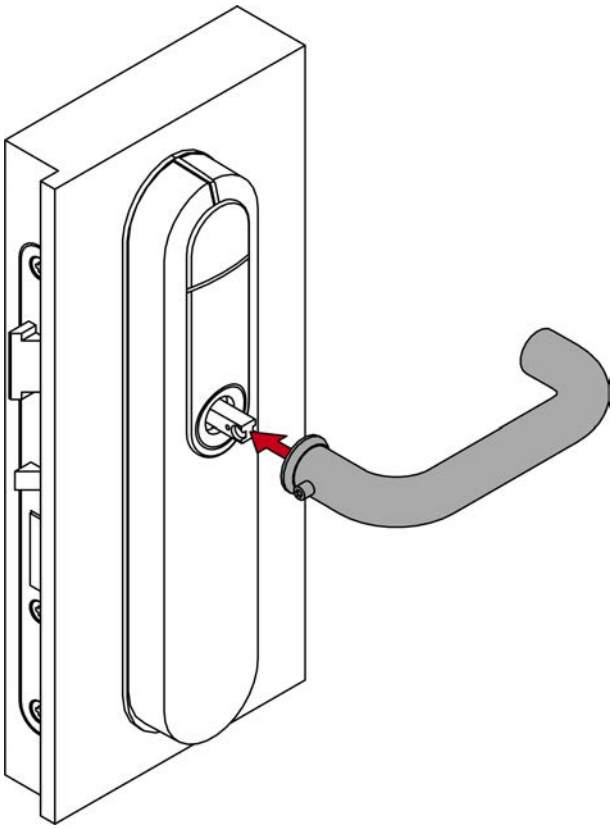
21. Slide the cover upwards.



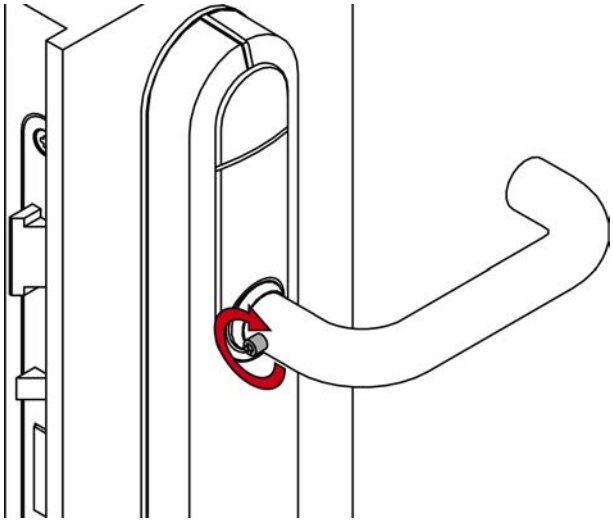
22. Press the inlay into place.



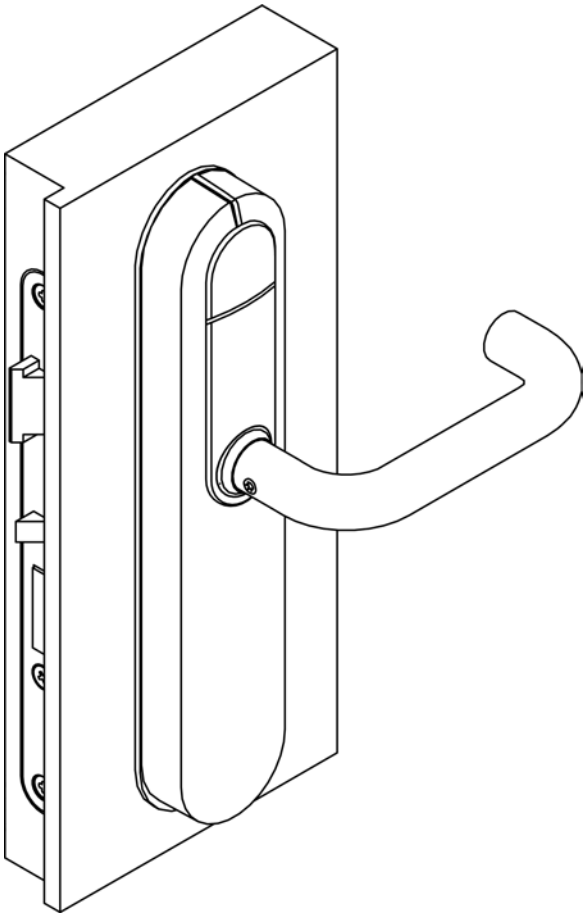
23. Fit the outside handle.



24. Use the grub screw to fasten the outer handle (TX15) into position.



↳ SI SmartHandle AX Advanced fully installed.



6.9 Conventional installation SH3062/FR195

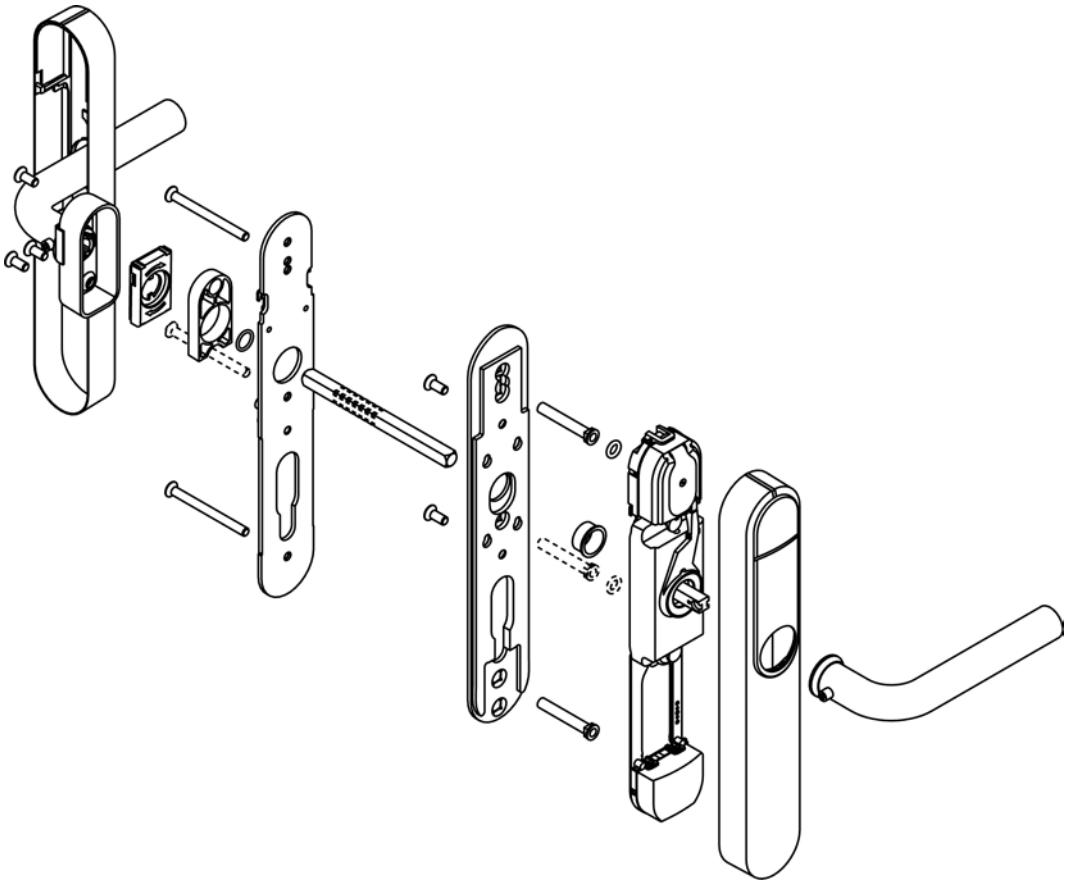
6.9.1 Scope of delivery

- SI SmartHandle AX Advanced for conventional installation SH3062/FR195.
- Special tool
- Quick guide

Depending on version:

- Adapter set, 7 mm spindle
- Adapter sleeve, 8.5 mm spindle
- Adapter sleeve, 10 mm spindle

6.9.2 Design



6.9.3 Prepare door (drilling template)

NOTE

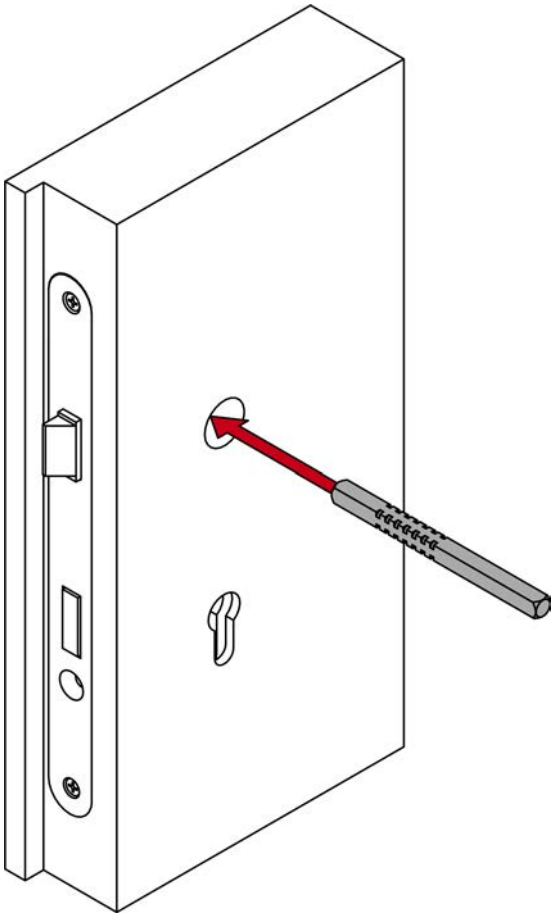
Fastening in the centre is optional

Fastening in the centre is optional. The SI SmartHandle AX Advanced can also be installed without this fastening system.

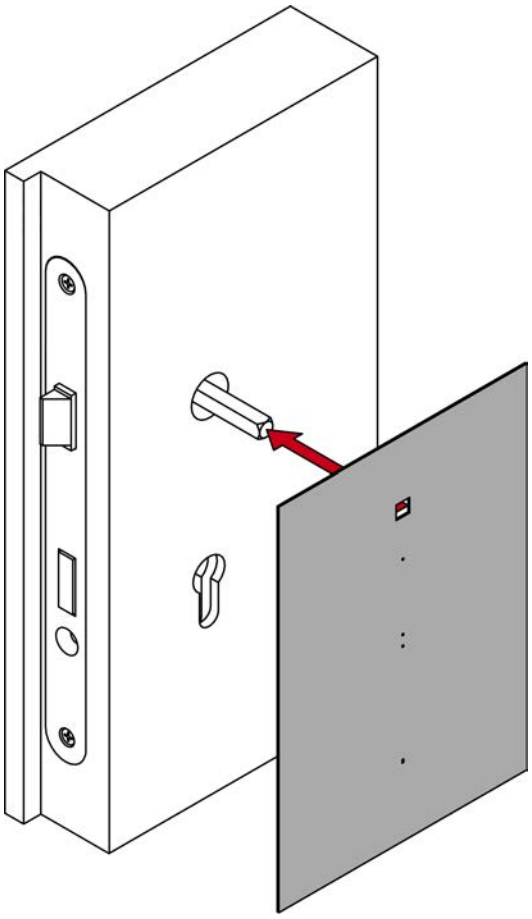
- Use the middle fastener if you require greater stability.

- ✓ Pin or scriber at hand.
- ✓ Drill at hand.
- ✓ Suitable drill bit at hand (Ø 7 mm).
- ✓ PH2 screwdriver at hand.

1. Insert the spindle into the mortise lock.

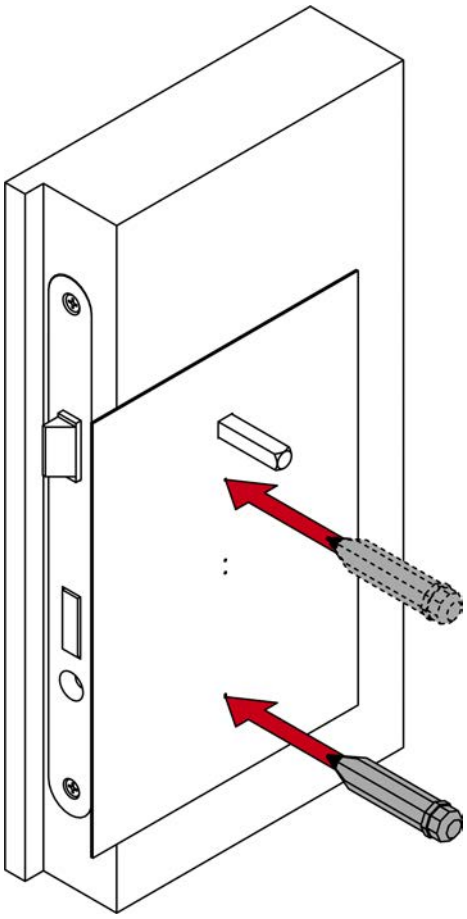


2. Place the drilling template on the spindle.

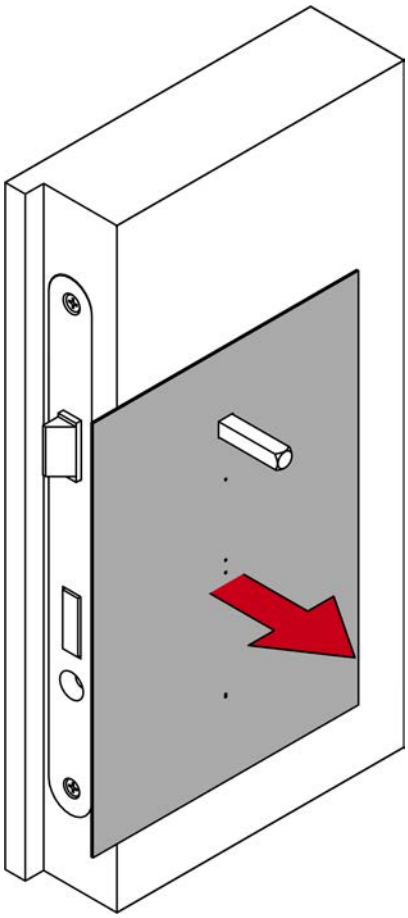


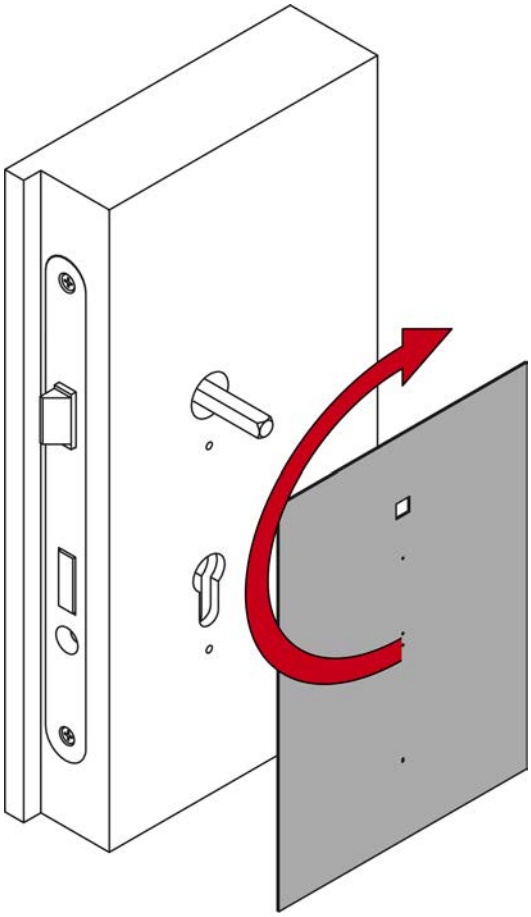
3. Align the drill template vertically using the printed scale.

4. Mark the drill holes with mark 1.

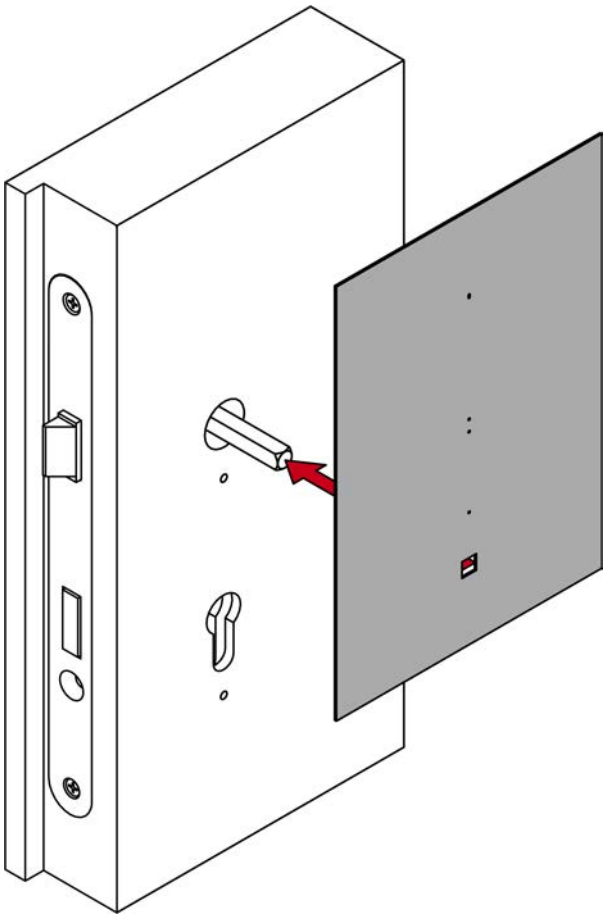


5. Remove the drilling template and rotate it 180 degrees.



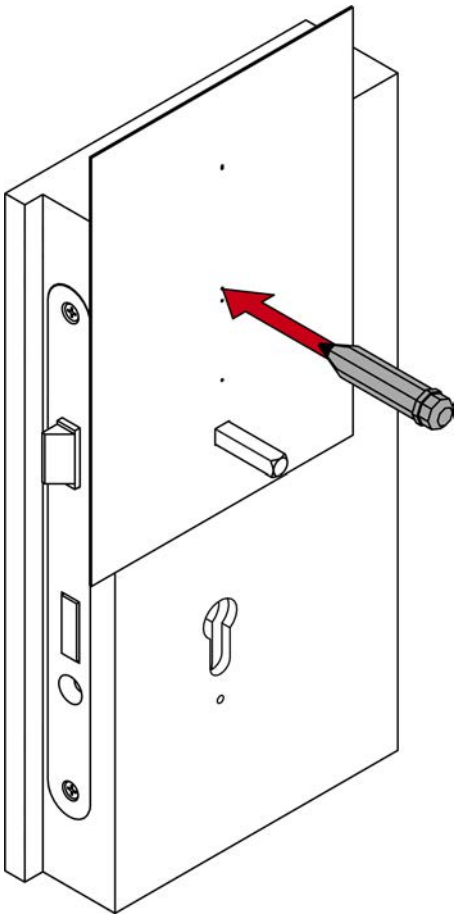


6. Place the drilling template on the spindle.

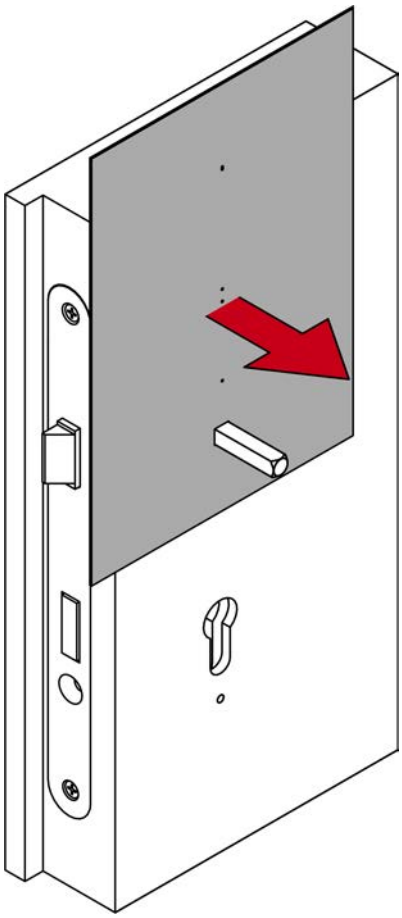


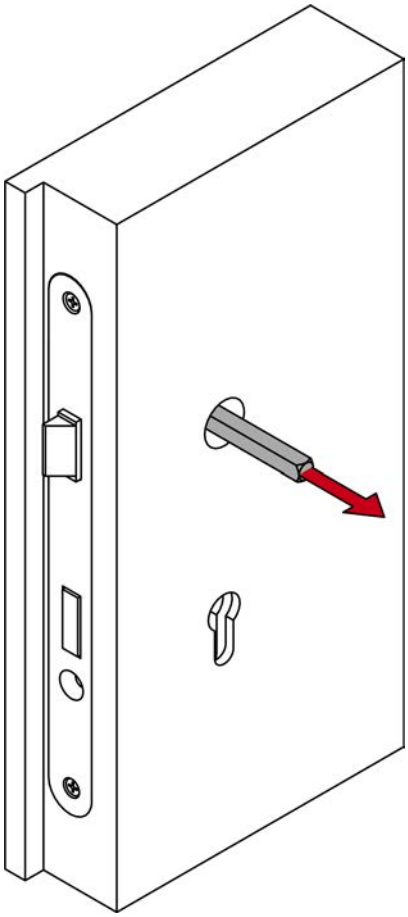
7. Align the drill template vertically using the printed scale.

8. Mark the drill hole with mark 2.

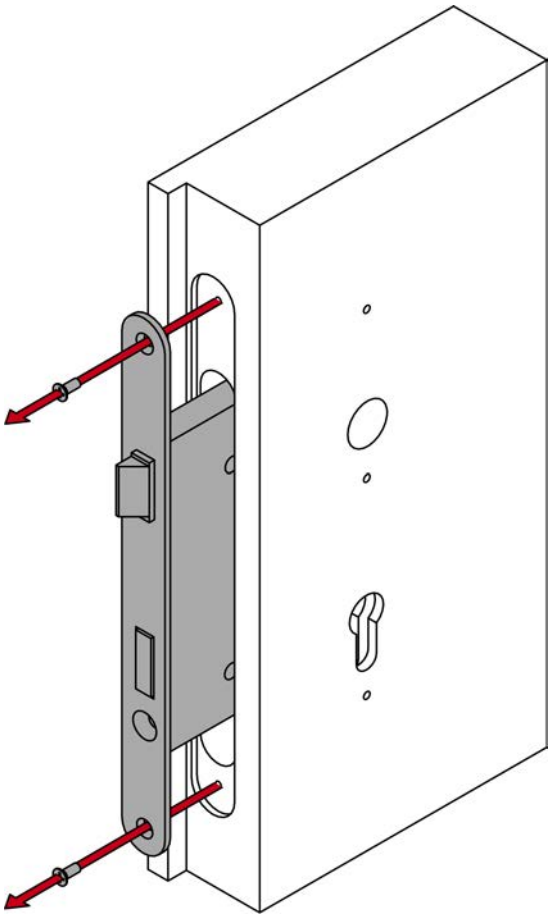


9. Remove the drilling template and spindle.

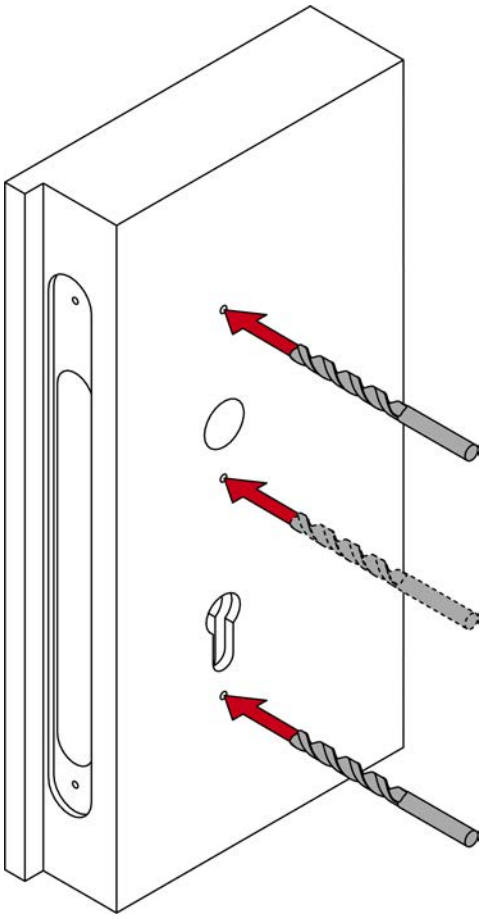




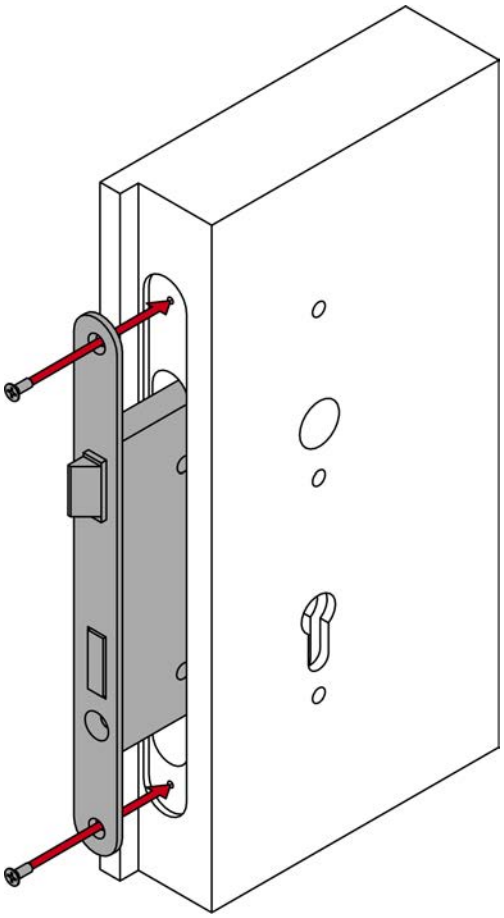
10. Remove the mortise lock.



11. Drill the required holes.



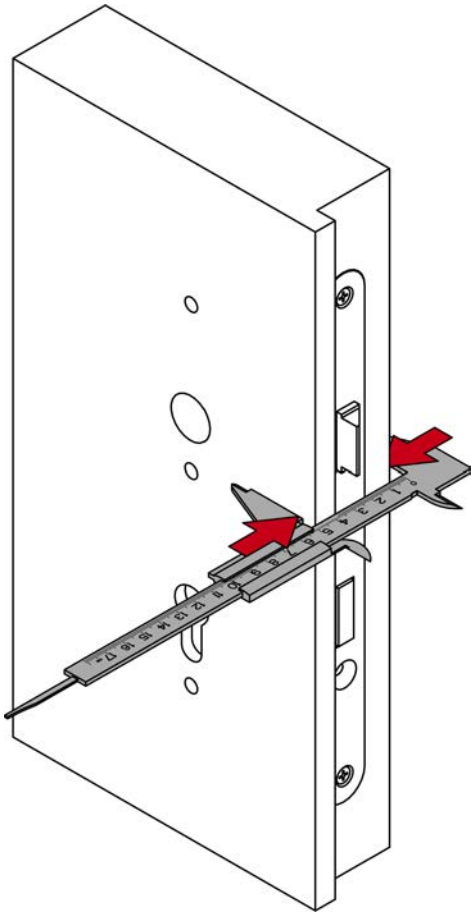
12. Fit the mortise lock.



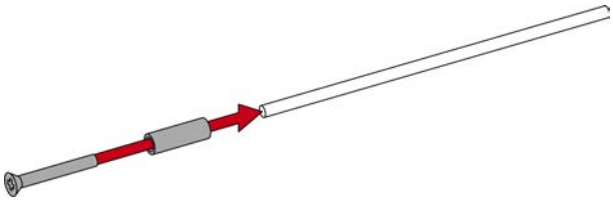
6.9.4 For door thickness X: have the threaded rods and spindle ready at hand

- ✓ Caliper gauge at hand.
- ✓ Saw at hand.
- ✓ PH2 screwdriver at hand.

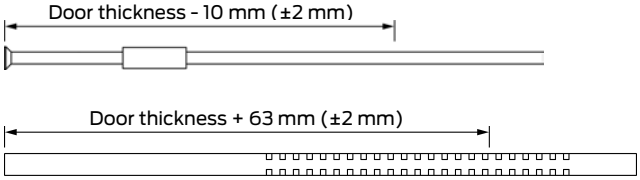
1. Measure the door thickness.



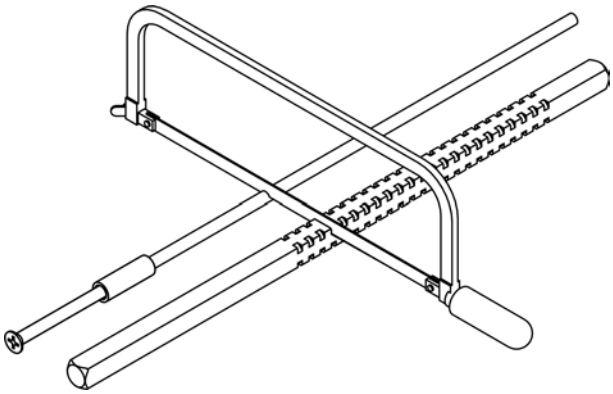
2. For door thickness X: screw the 50 mm screws, threaded sleeves and threaded rods together.



3. For X: mark the sawing points on the threaded rods and spindle.



4. For X: Use a suitable saw to cut the threaded rods and spindle.



6.9.5 Installing the fitting

NOTE

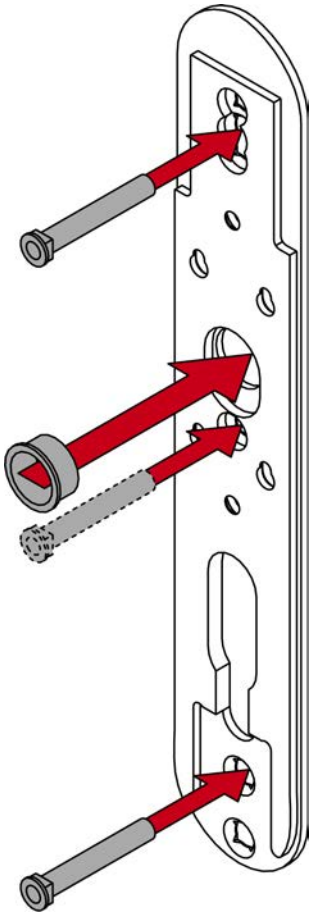
Fastening in the centre is optional

Fastening in the centre is optional. The SI SmartHandle AX Advanced can also be installed without this fastening system.

- Use the middle fastener if you require greater stability.

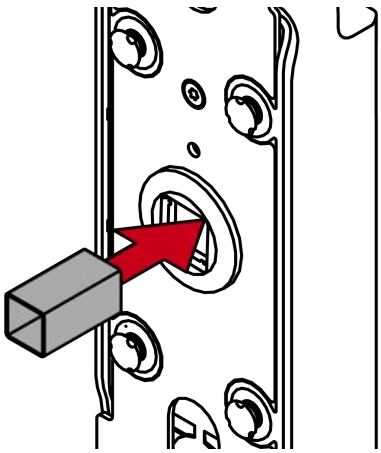
- ✓ Door pre-drilled.
- ✓ PH2 screwdriver at hand.
- ✓ TX15 screwdriver at hand.
- ✓ Caliper gauge at hand.

1. Insert the spindle protective tube and the sleeve nuts into the fastening plate.

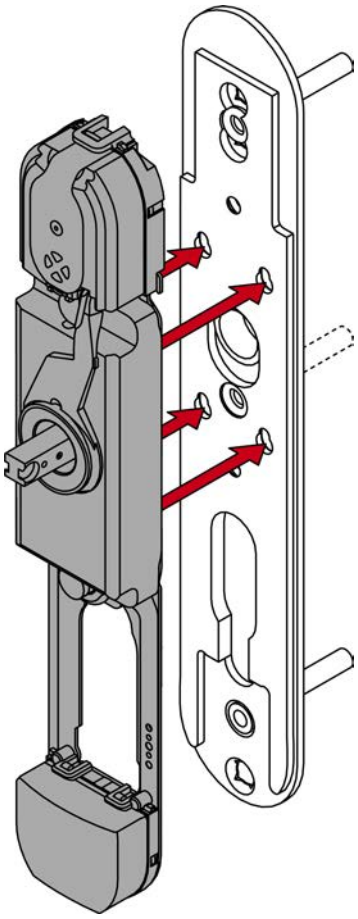


2. Insert a spacer ring into the openings in the middle and top sleeve nuts.

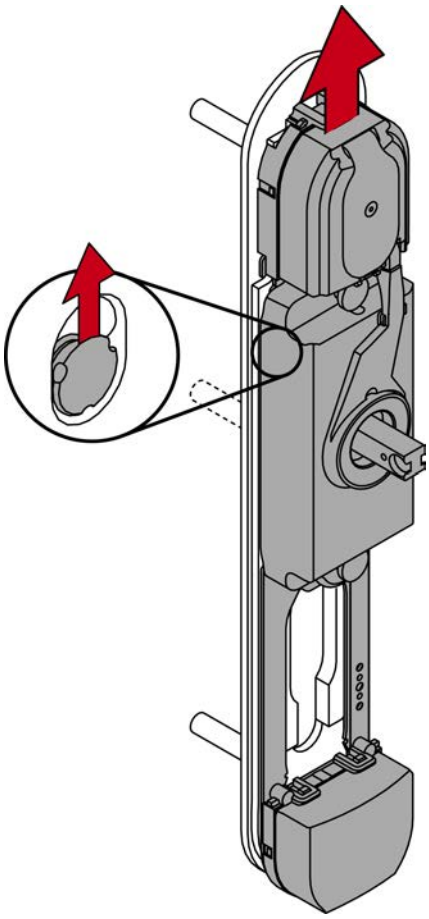
3. For 7 mm spindle: Insert the adapter shoe into the spindle mount on the module support.



4. Insert the module support into the fastening plate.



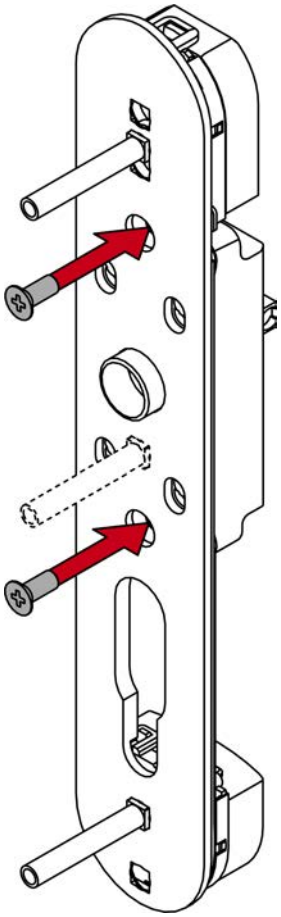
5. Slide the module support upwards.



↳ Module support snaps into place.

6. Fasten the module support to the fastening plate (PH2) with the 12 mm screws.

M5×12



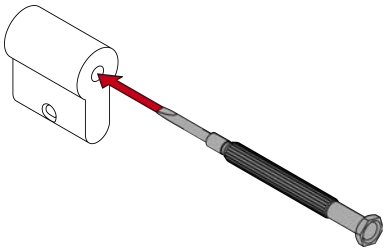
7. For non-MO: insert the blank cylinder.

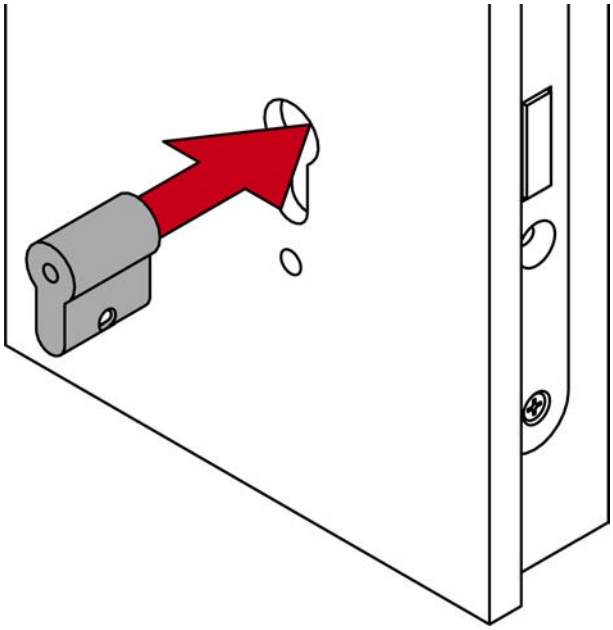
NOTE

Feed the blank cylinder into the hole using a screwdriver

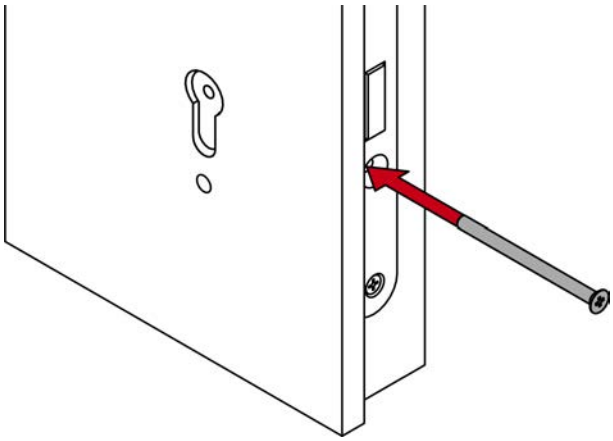
It is difficult to position the blank cylinder correctly, especially in thick doors.

1. Insert a screwdriver into the hole in the blank cylinder.
2. Position the blank cylinder using the screwdriver.

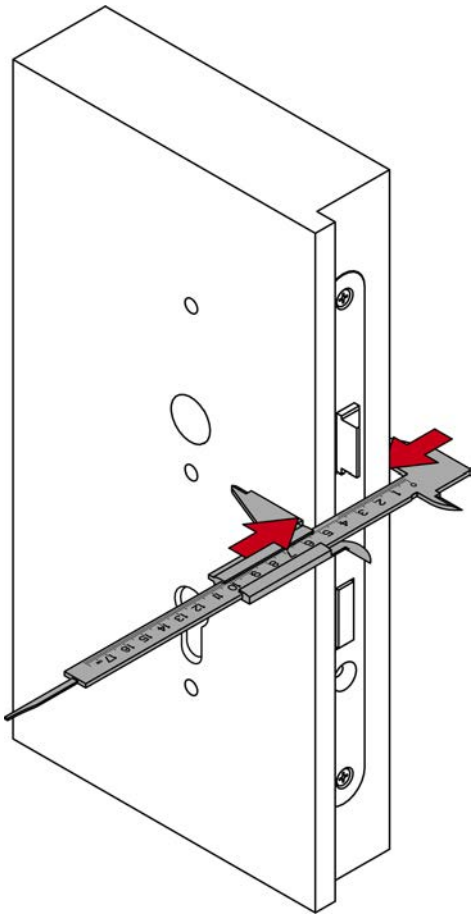




8. For non-MO: screw the blank cylinder firmly into position.



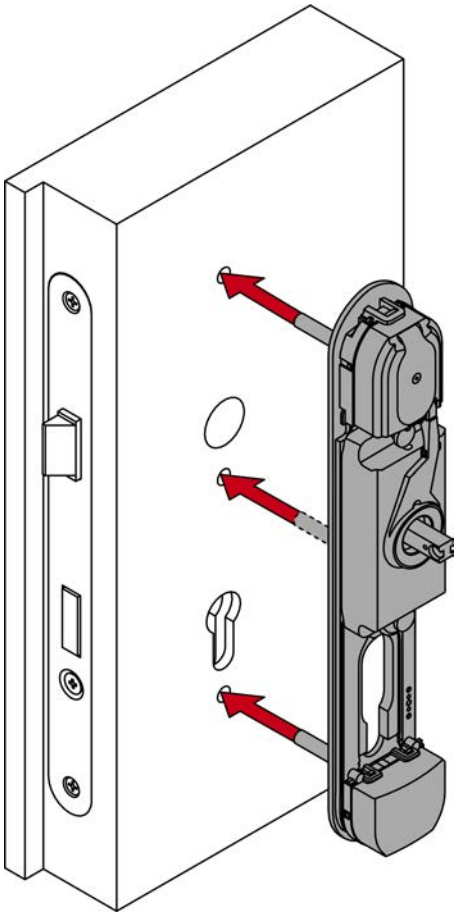
9. Measure the door thickness.



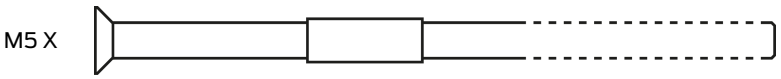
Size	Door thickness (mm)	Screws
S	37 – 48	M5×35
S	47 – 58	M5×45
M	57 – 68	M5×50
M	67 – 78	M5×60
L	77 – 88	M5×70
L	87 – 98	M5×80
X	97 – 171	M5 X

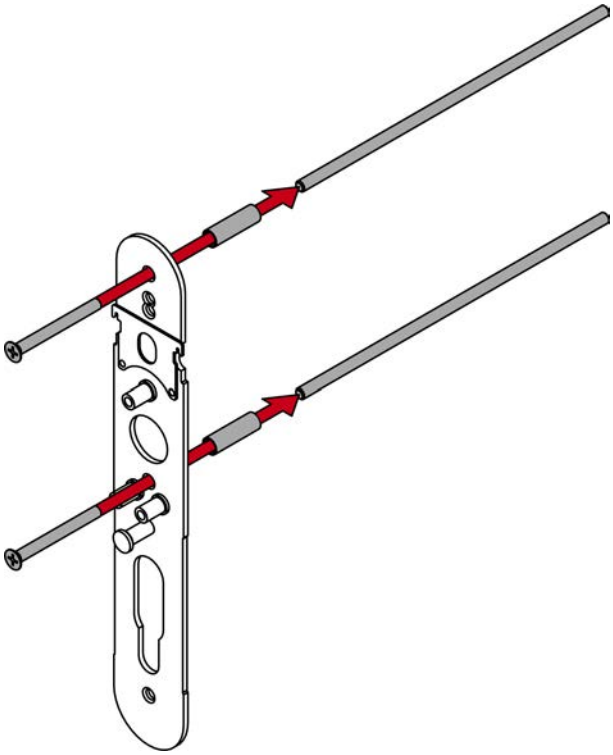
10. Determine what screws are required for the door thickness measured.

11. Insert the module support with the fastening plate into the outer side of the door.

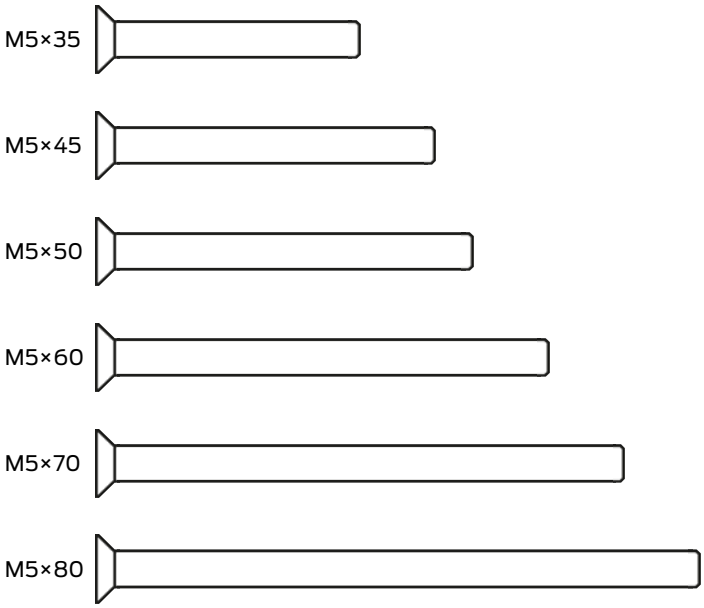


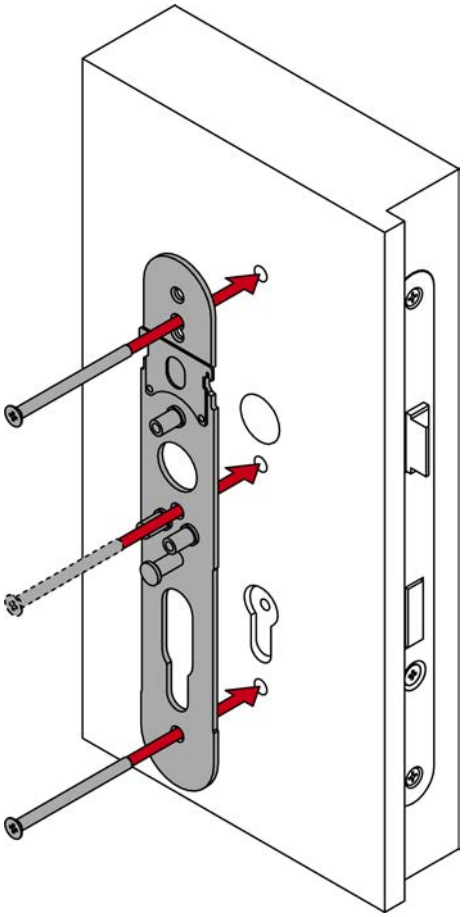
12. For X: Insert the screws through the inner fastening plate and screw them together with the threaded sleeve and threaded rod.



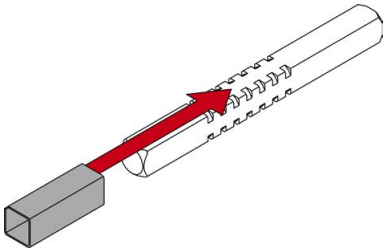


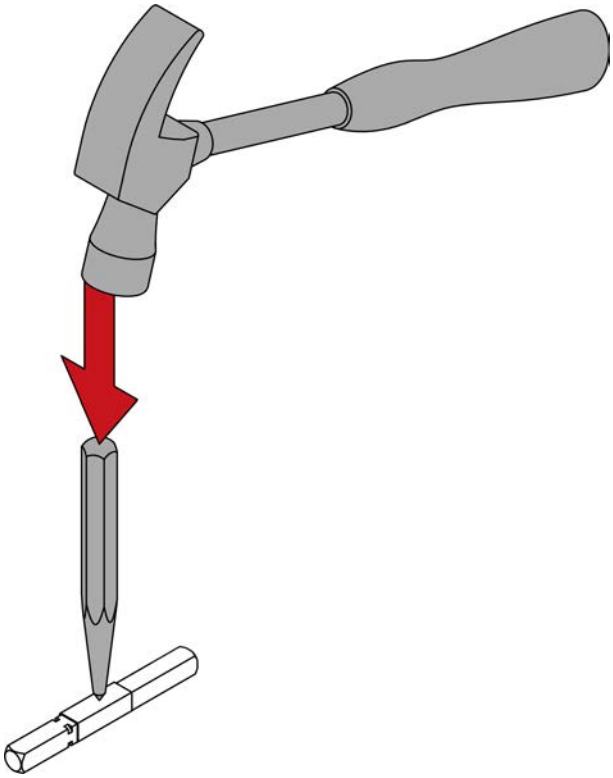
13. Screw the inner fixing plate to the outer part (PH2) with the required screws.



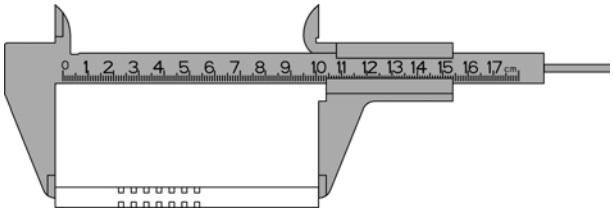


14. For 8.5 mm and 10 mm spindle: slide the adapter sleeve into the centre of the spindle. Use a punch and hammer to make an indent in the adapter sleeve to prevent it from slipping.

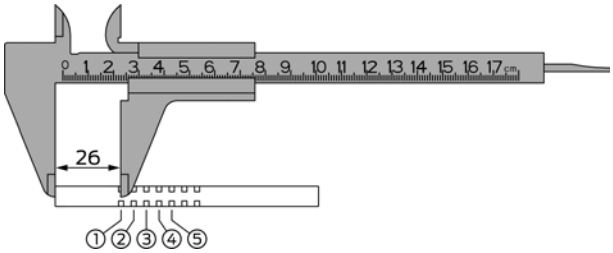




15. Measure the total length of the spindle.

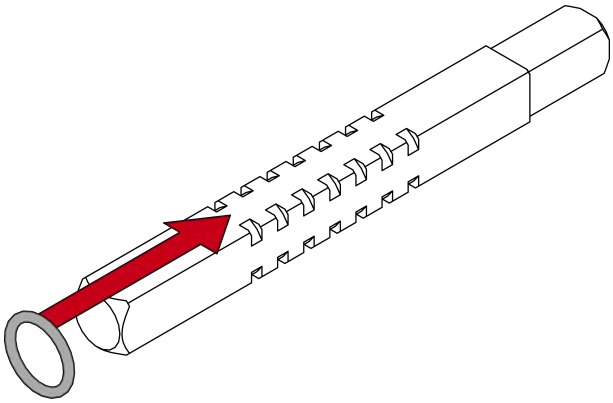


16. Locate the inside of the spindle (four-edge end up to the centre of the first groove = 26 mm).
17. Use the table to determine the position of the O-ring.

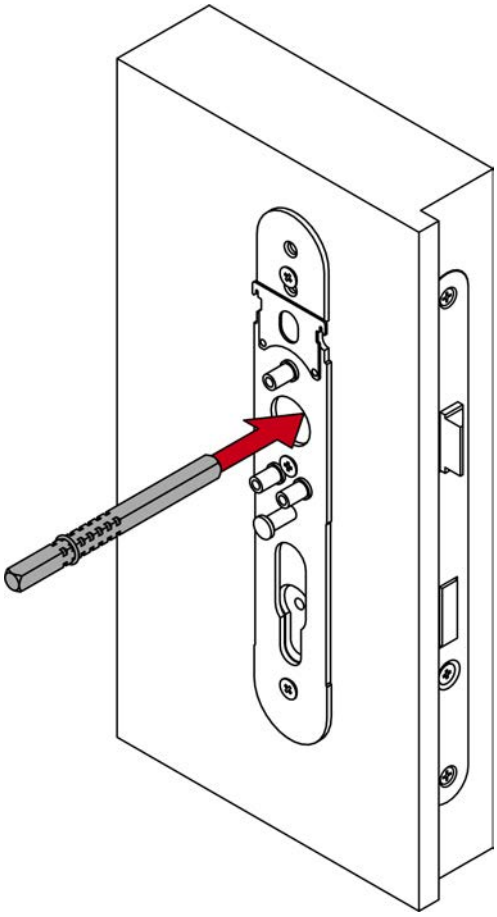


Size	Door thickness (mm)	Spindle length (mm)	Ring position
S	37 – <41	104	3
S	37 – <41	114	5
S	41 – <46	104	2
S	41 – <46	114	4
S	46 – <51	104	1
S	46 – <51	114	3
S	51 – <56	114	2
S	56 – 58	114	1
M	57 – <61	124	3
M	57 – <61	134	5
M	61 – <66	124	2
M	61 – <66	134	4
M	66 – <71	124	1
M	66 – <71	134	3
M	71 – <76	134	2
M	76 – 78	134	1
L	77 – <81	144	3
L	77 – <81	154	5
L	81 – <86	144	2
L	81 – <86	154	4
L	86 – <91	144	1
L	86 – <91	154	3
L	91 – <96	154	2
L	96 – 98	154	1
XL	97 – 171	O-ring is located 30–35 mm from the cut end of the spindle.	

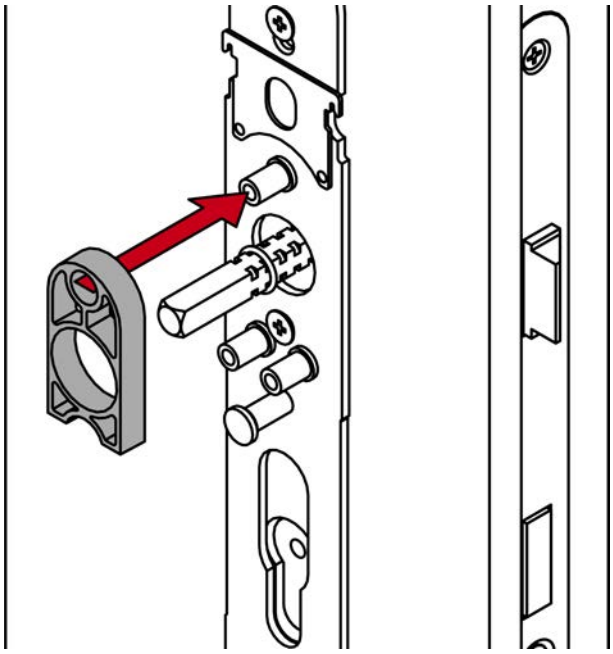
18. Slide the O-ring onto the calculated groove.



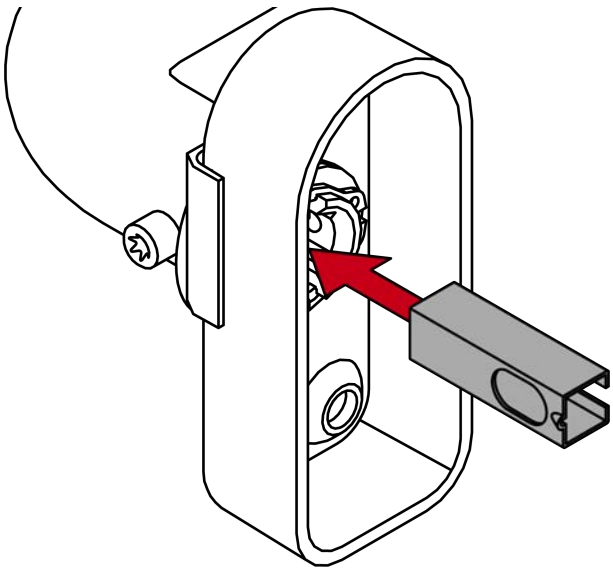
19. Insert the spindle into the door with the ring-free side as far as it will go.



20.Insert the filling profile onto the inner fixing plate.

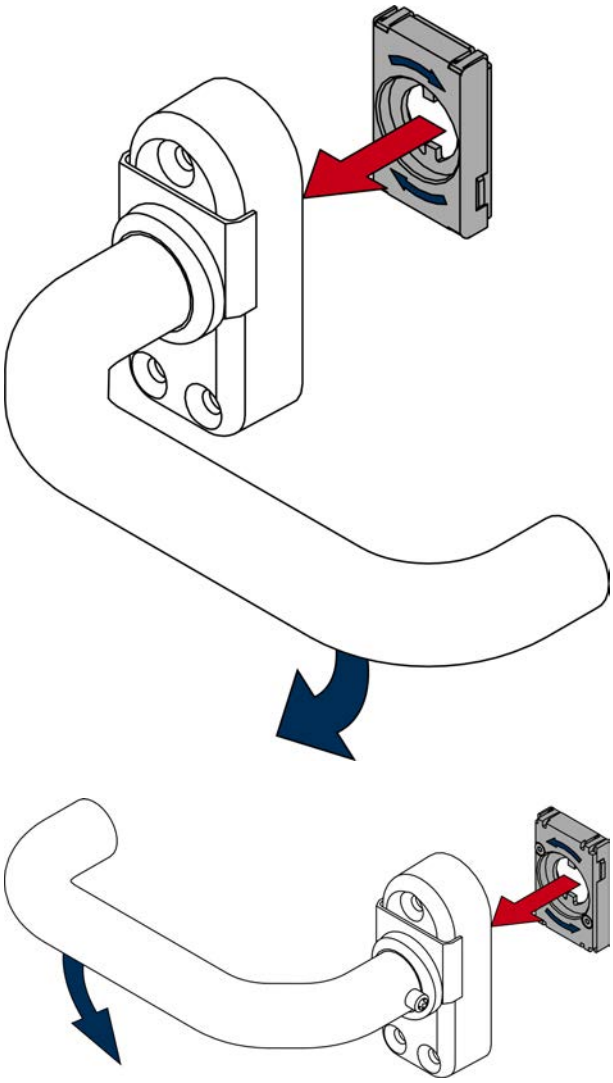


21. For 7 mm spindle: Place the adapter sleeve in the inside handle in such a way that the recess faces the grub screw.

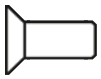


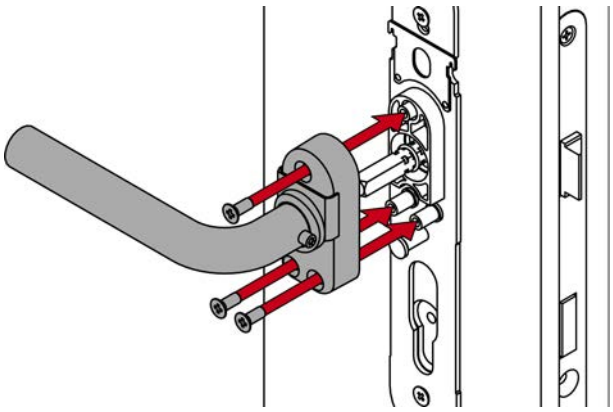
22. Determine the required direction of rotation for your inside handle.

23. Insert the spring element appropriately.

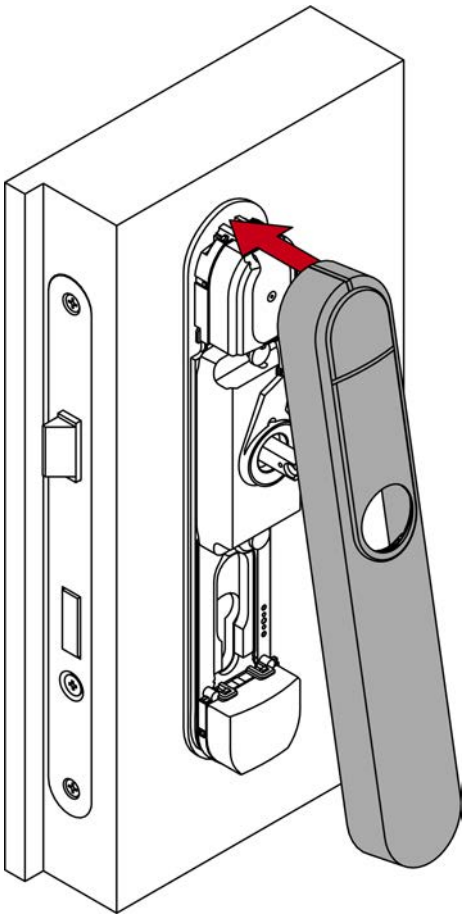


24. Place the inside handle unit on the spindle.
25. Use the 12 mm screws to fasten the inner handle unit onto the fixing plate (PH2).

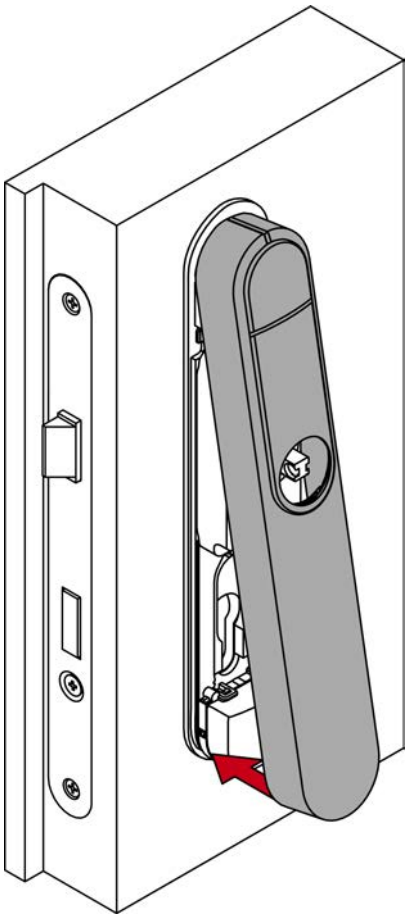
M5×12 



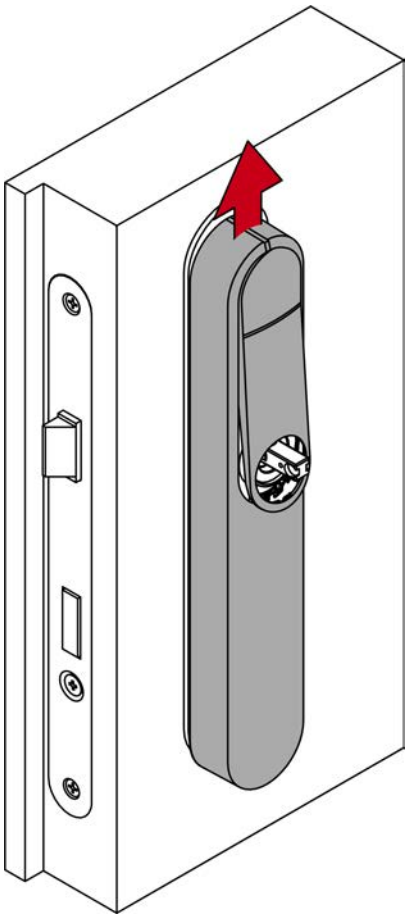
26. Place the cover on top of the fastening plate.



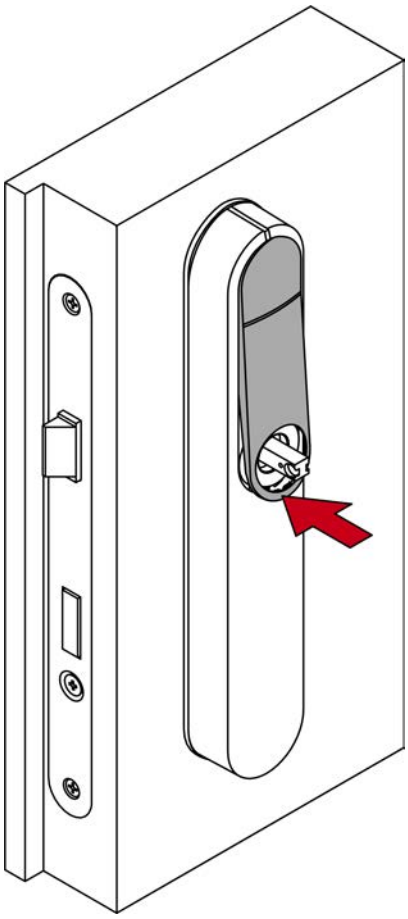
27. Fold down the cover.



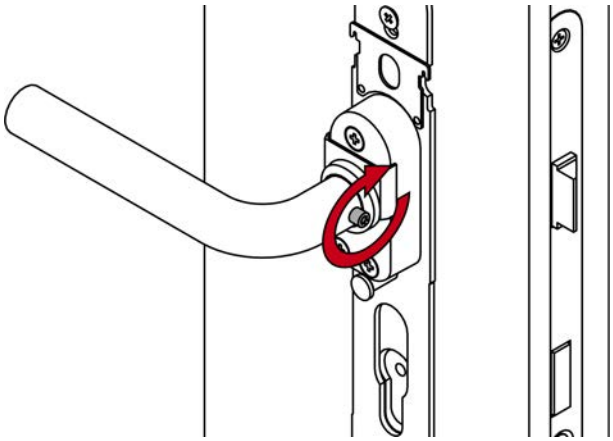
28. Slide the cover upwards.



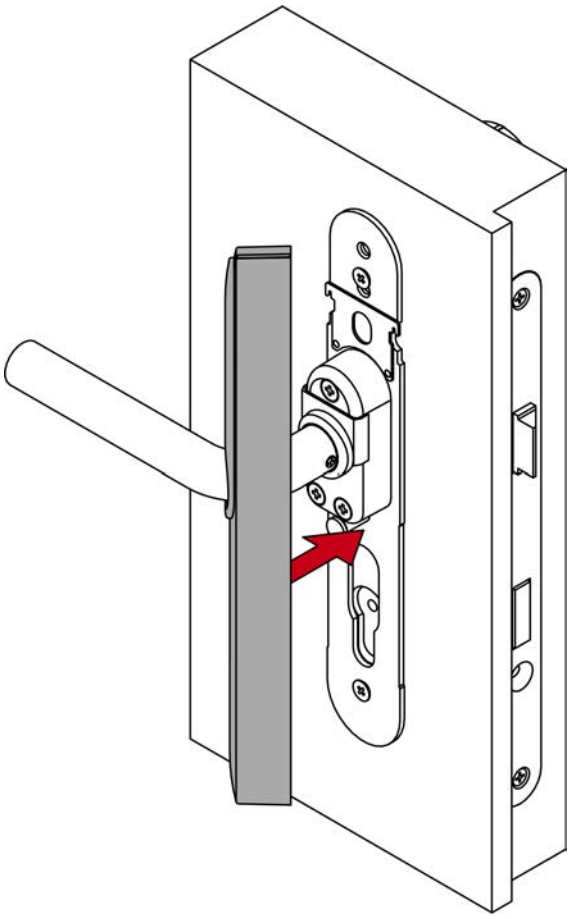
29.Press the inlay into place.



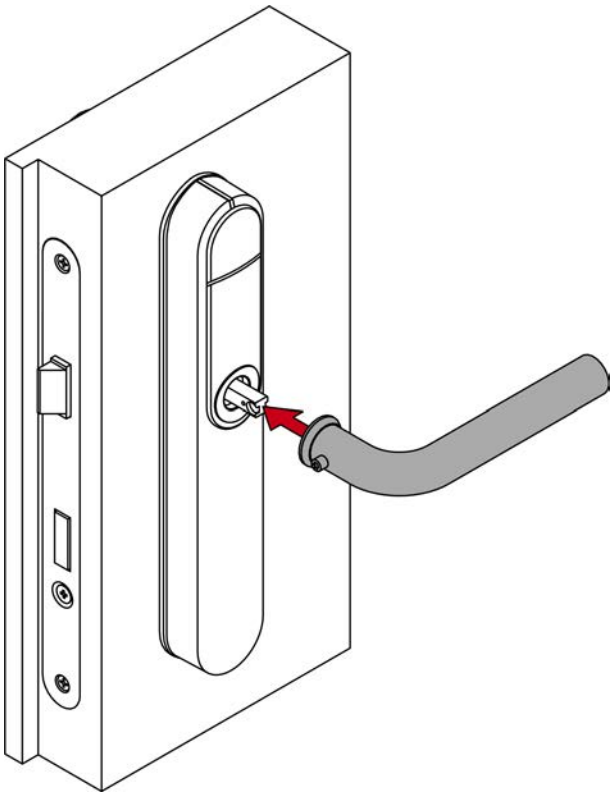
30.Fasten the inner handle grub screw firmly (TX15).



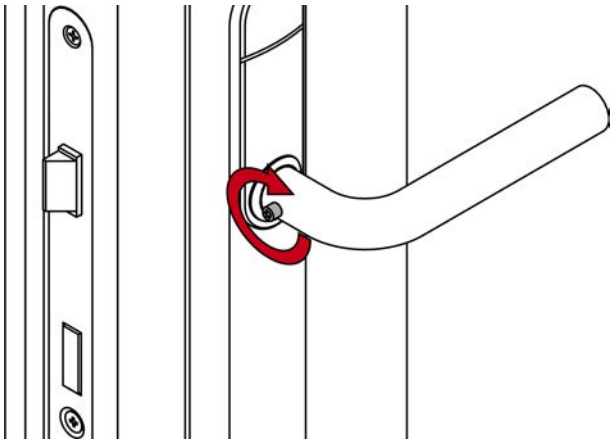
31. Fit the cover for the inner side as well.



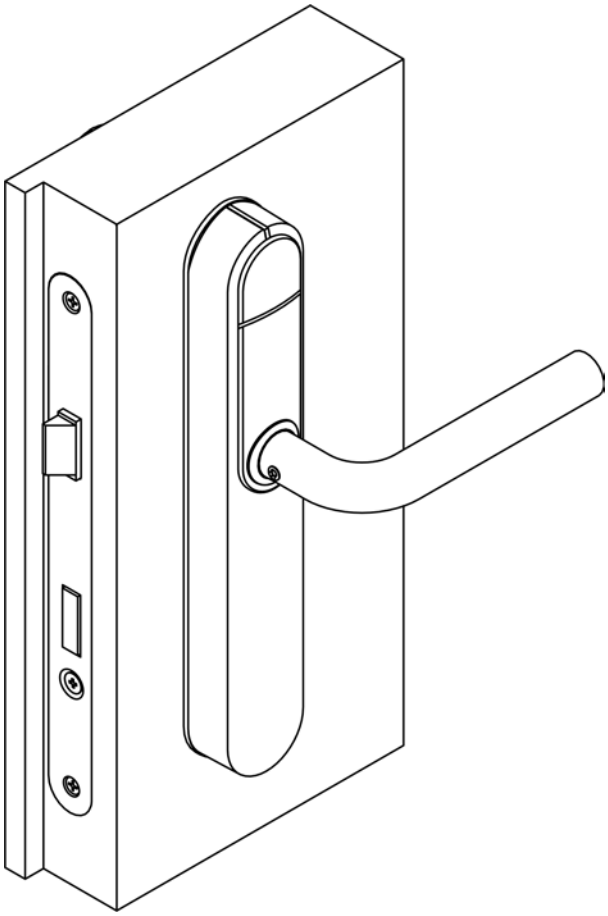
32. Fit the outside handle.



33. Use the grub screw to fasten the outer handle (TX15) into position.



↳ SI SmartHandle AX Advanced fully installed.



6.10 Conventional installation 105/145

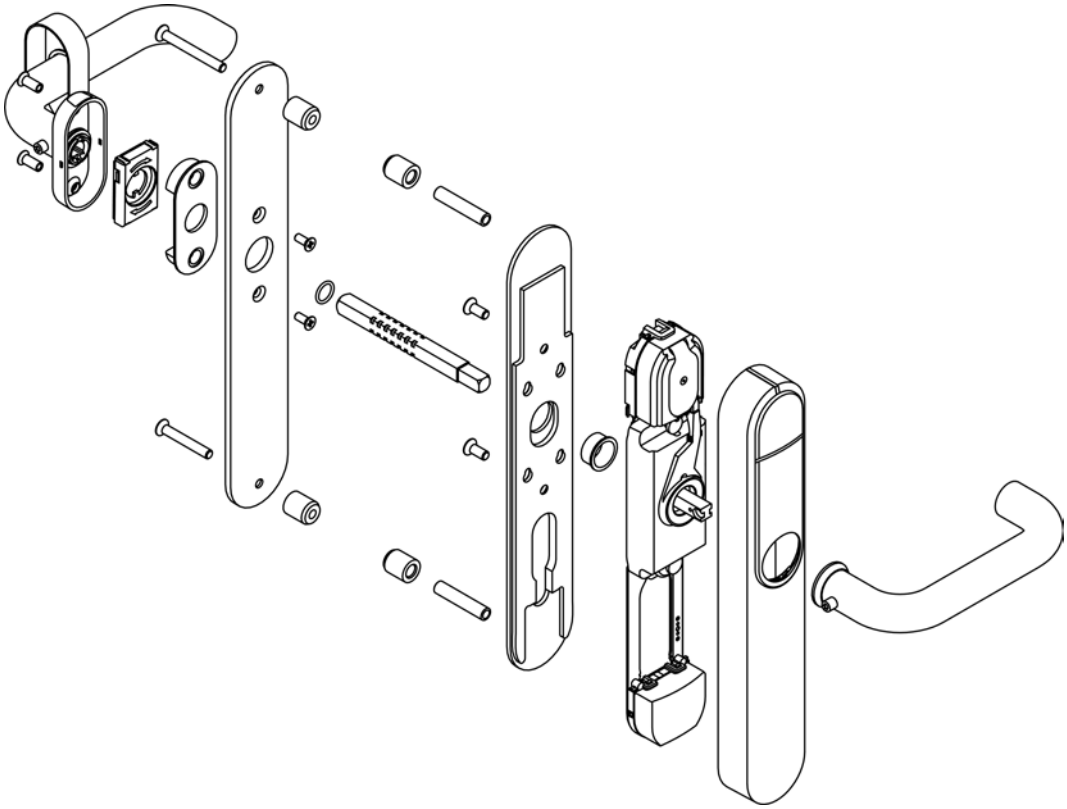
6.10.1 Scope of delivery

- SI SmartHandle AX Advanced for conventional installation 105/145.
- Special tool
- Quick guide

Depending on version:

- Adapter set, 7 mm spindle
- Adapter sleeve, 8.5 mm spindle
- Adapter sleeve, 10 mm spindle

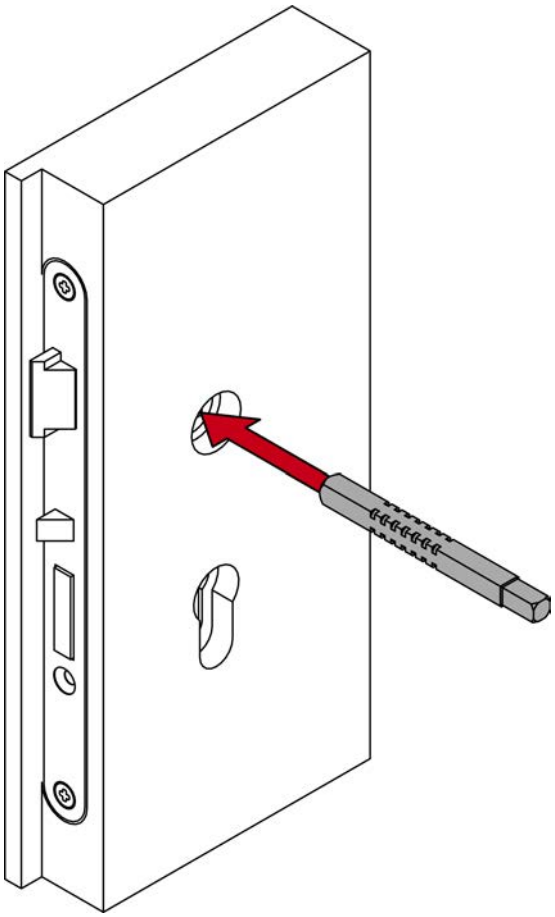
6.10.2 Structure



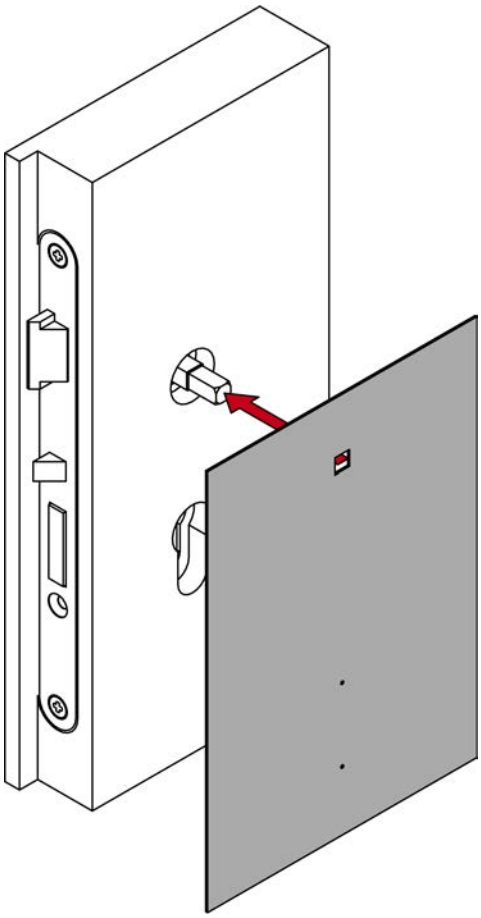
6.10.3 Prepare door (drilling template)

- ✓ Pin or scriber at hand.
- ✓ Drill at hand.
- ✓ Suitable drill bit at hand (Ø 7 mm).
- ✓ PH2 screwdriver at hand.

1. Insert the spindle into the mortise lock.

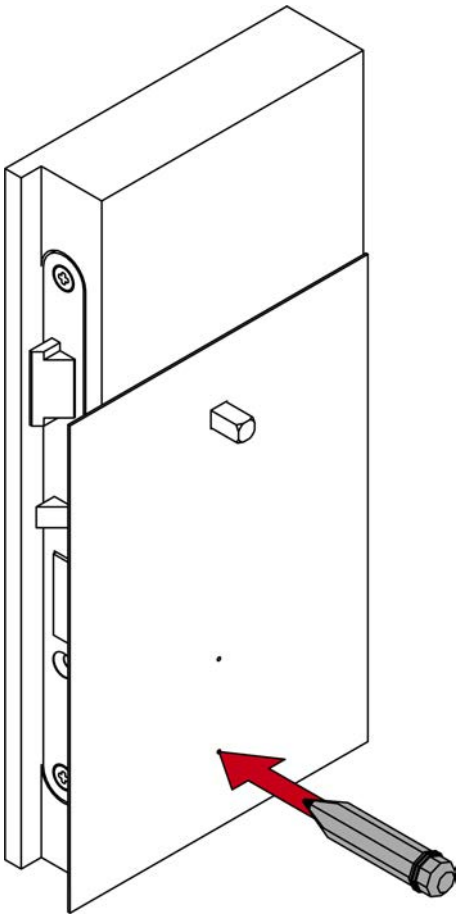


2. Place the drilling template on the spindle.

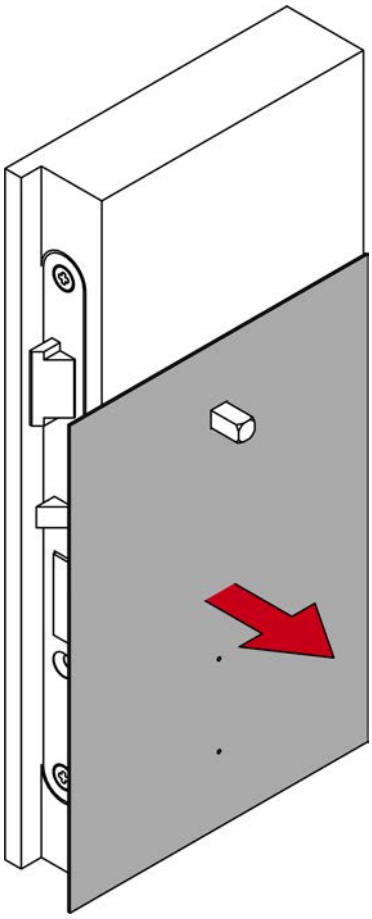


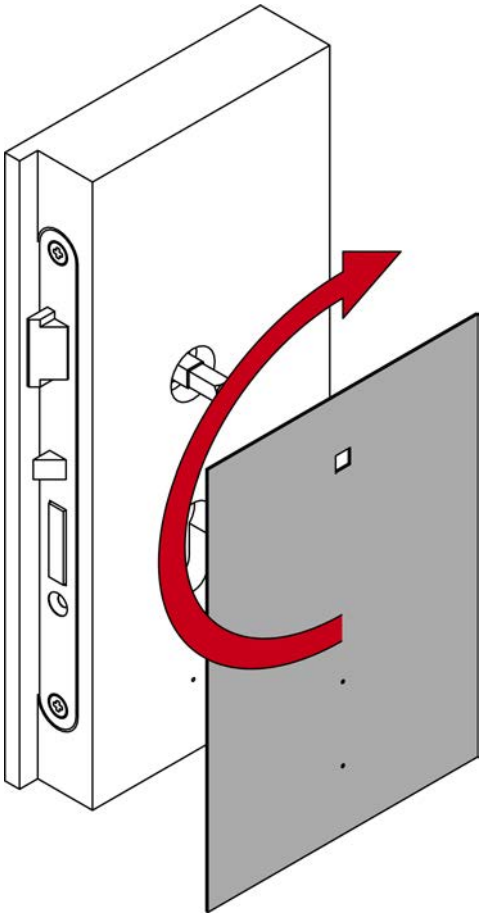
3. Align the drill template vertically using the printed scale.

4. Mark the drill holes with mark 1.

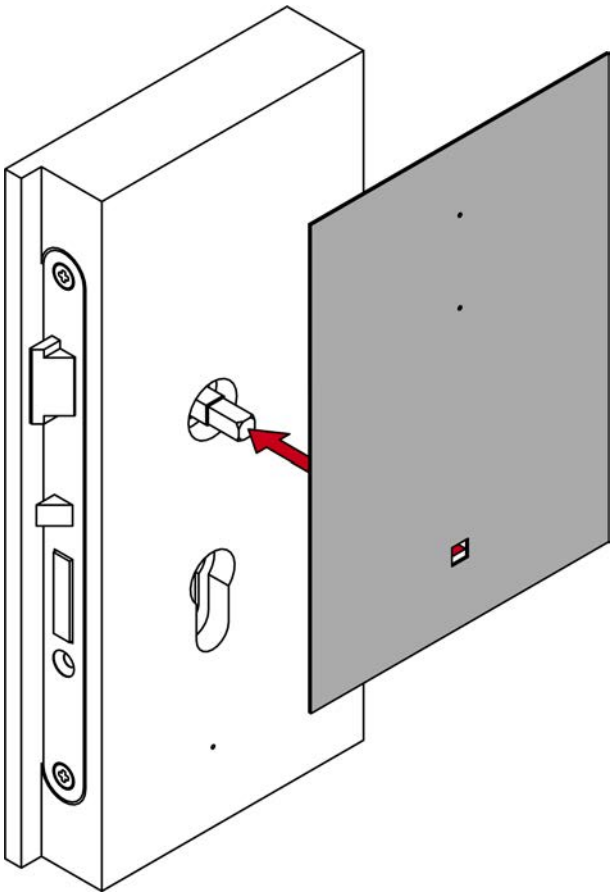


5. Remove the drilling template and rotate it 180 degrees.



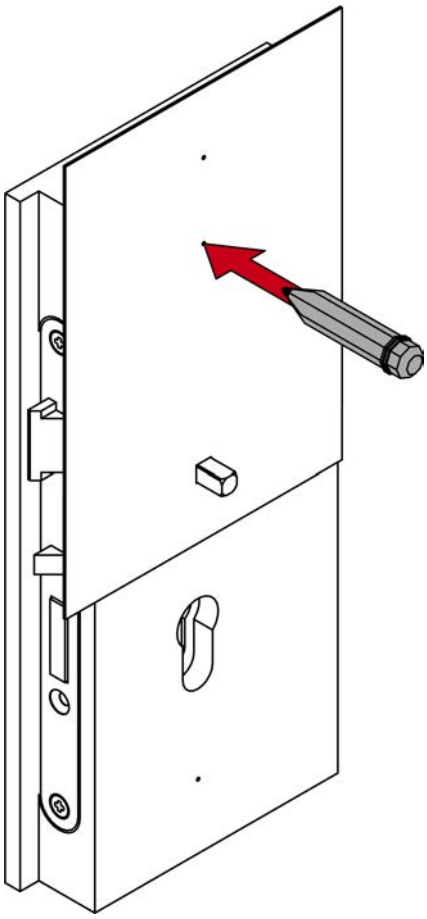


6. Place the drilling template on the spindle.

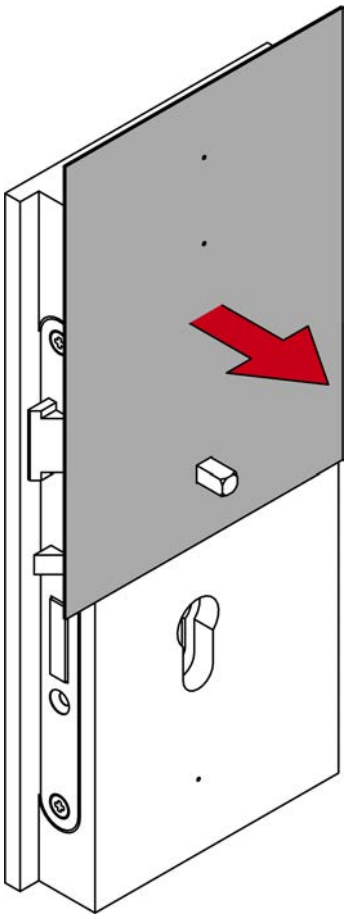


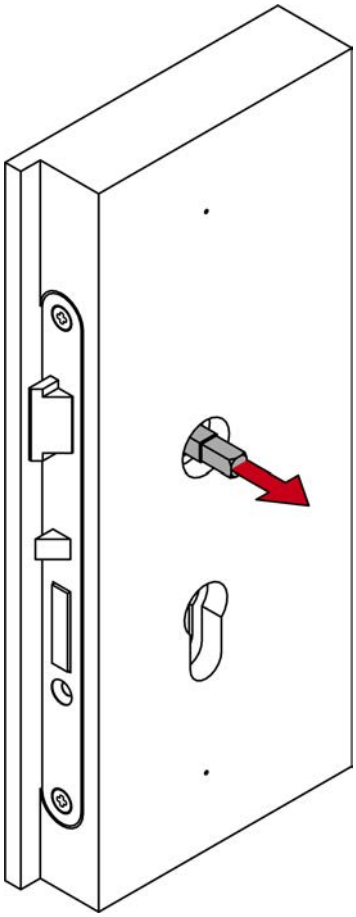
7. Align the drill template vertically using the printed scale.

8. Mark the drill hole with mark 2.

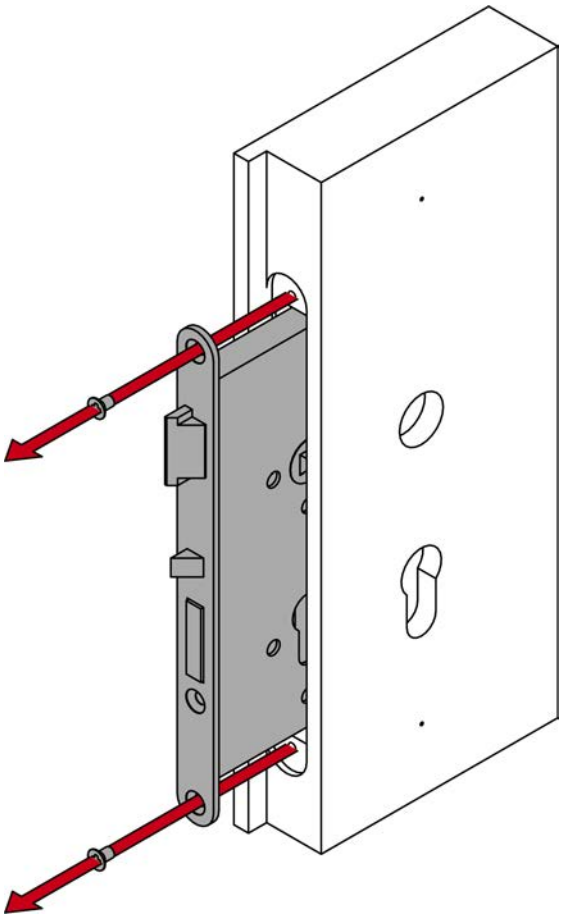


9. Remove the drilling template and spindle.

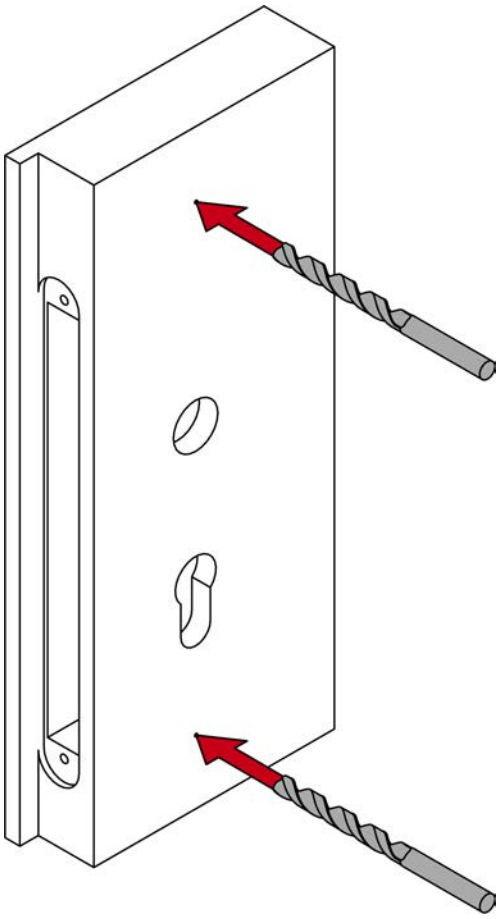




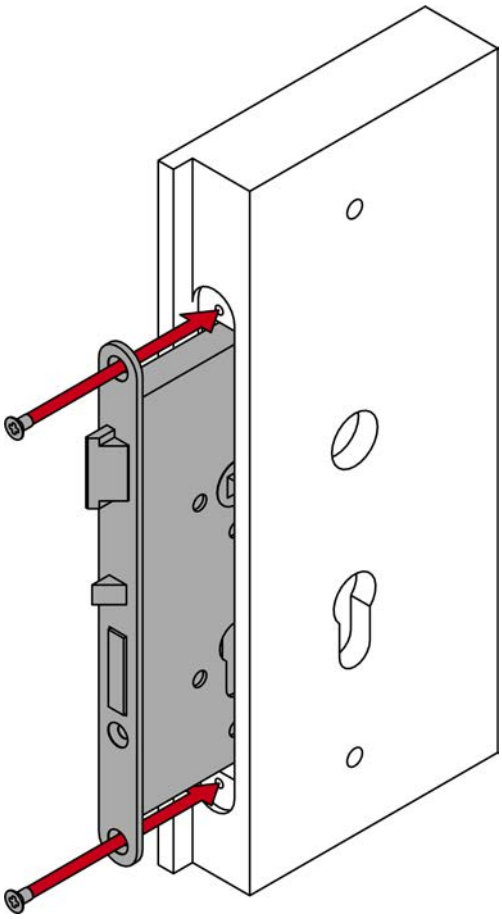
10. Remove the mortise lock.



11. Drill the required holes.



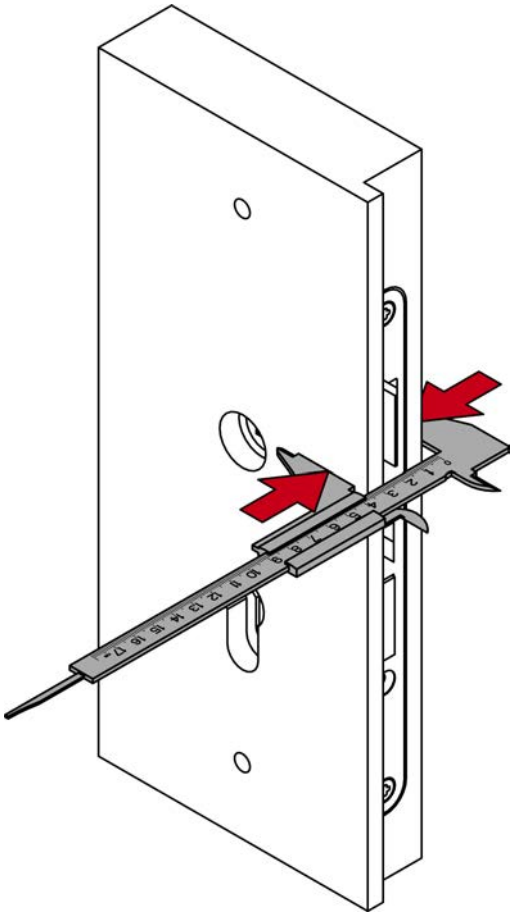
12. Fit the mortise lock.



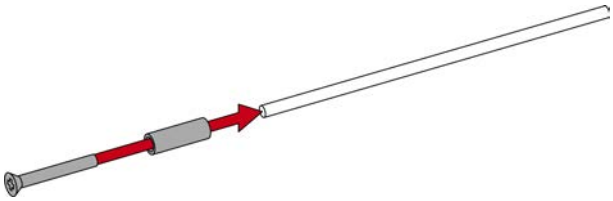
6.10.4 For door thickness X: have the threaded rods and spindle ready at hand

- ✓ Caliper gauge at hand.
- ✓ Saw at hand.
- ✓ PH2 screwdriver at hand.

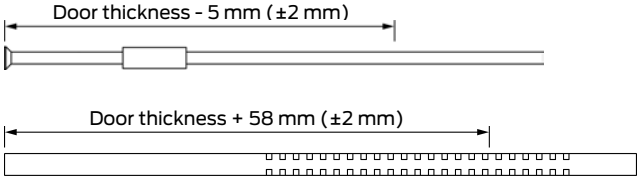
1. Measure the door thickness.



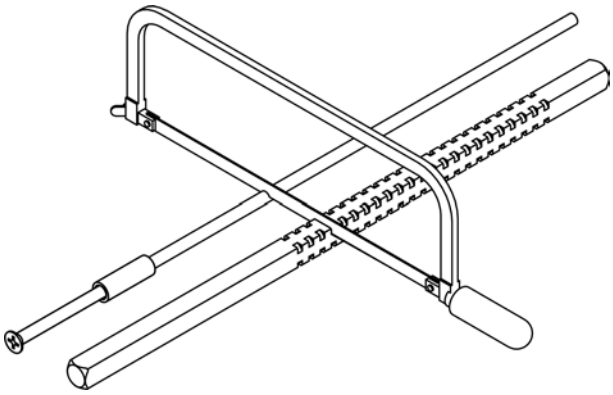
2. For door thickness X: screw the 50 mm screws, threaded sleeves and threaded rods together.



3. For X: mark the sawing points on the threaded rods and spindle.



4. For X: Use a suitable saw to cut the threaded rods and spindle.



6.10.5 Installing the fitting

- ✓ Door pre-drilled.
- ✓ PH2 screwdriver at hand.
- ✓ TX15 screwdriver at hand.
- ✓ Caliper gauge at hand.

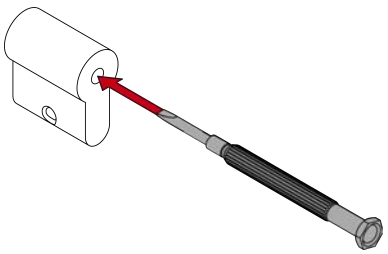
1. For non-MO: insert the blank cylinder.

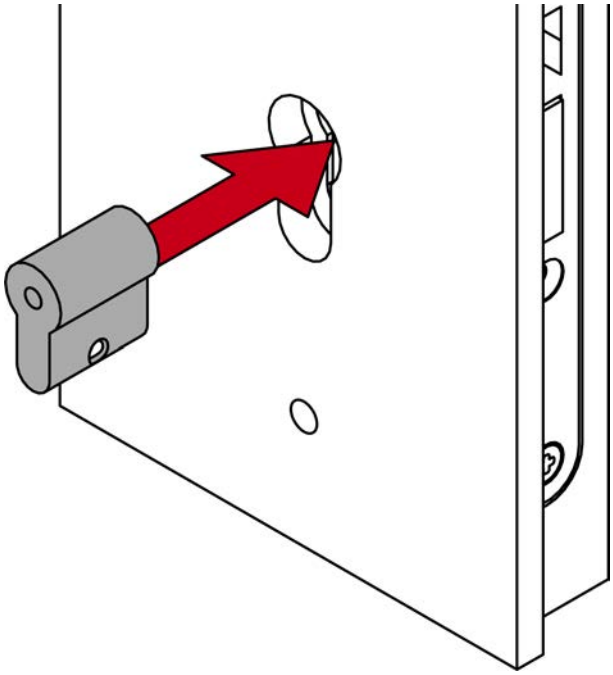
NOTE

Feed the blank cylinder into the hole using a screwdriver

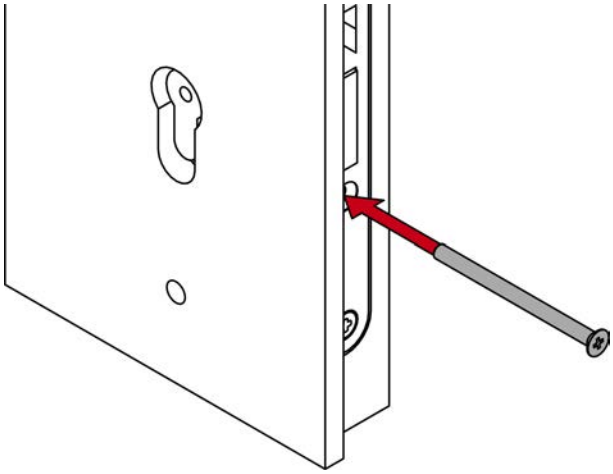
It is difficult to position the blank cylinder correctly, especially in thick doors.

1. Insert a screwdriver into the hole in the blank cylinder.
2. Position the blank cylinder using the screwdriver.



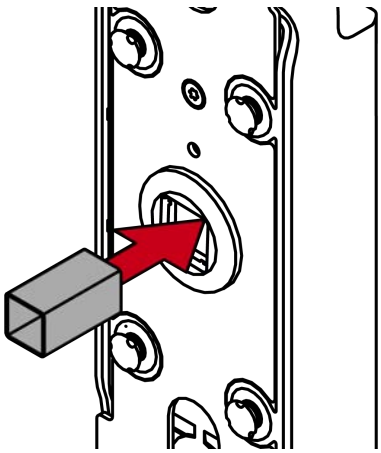


2. For non-MO: screw the blank cylinder firmly into position.

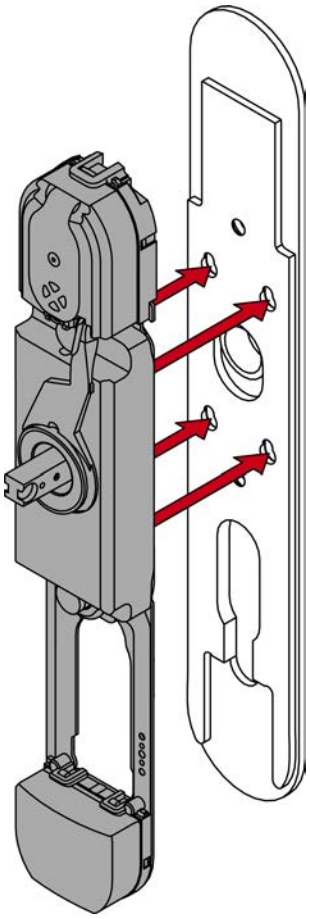


3. Insert the spindle protection tube into the fixing plate.

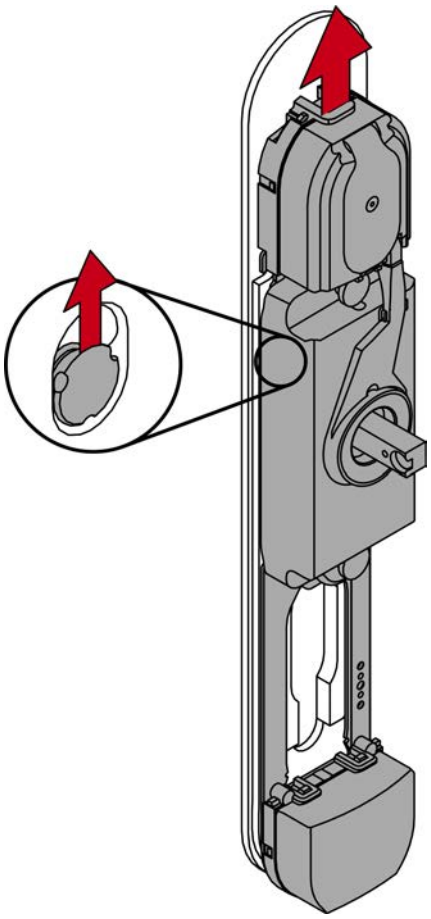
4. For 7 mm spindle: Insert the adapter shoe into the spindle mount on the module support.



5. Insert the module support into the fastening plate.

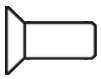


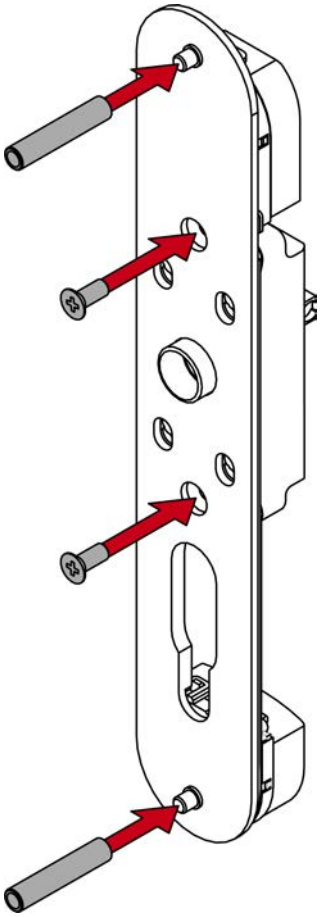
6. Slide the module support upwards.



↳ Module support snaps into place.

7. Screw the threaded sleeves onto the fixing plate threaded bolts.
8. Fasten the module support to the fastening plate (PH2) with the 12 mm screws.

M5×12 



9. Insert the module support with the fastening plate into the outer side of the door.

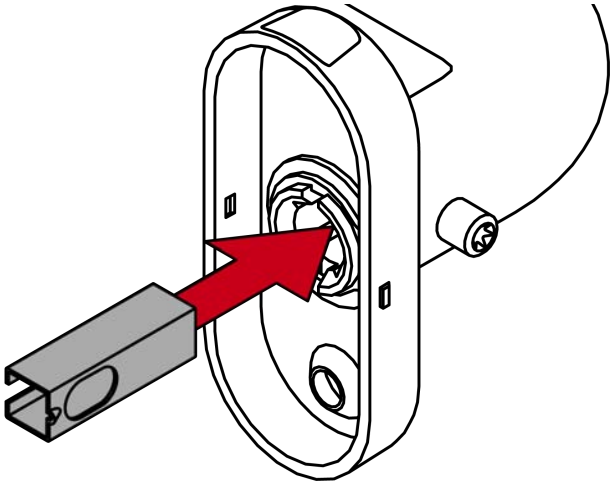
NOTE

Reducing sleeves for existing 14 mm holes

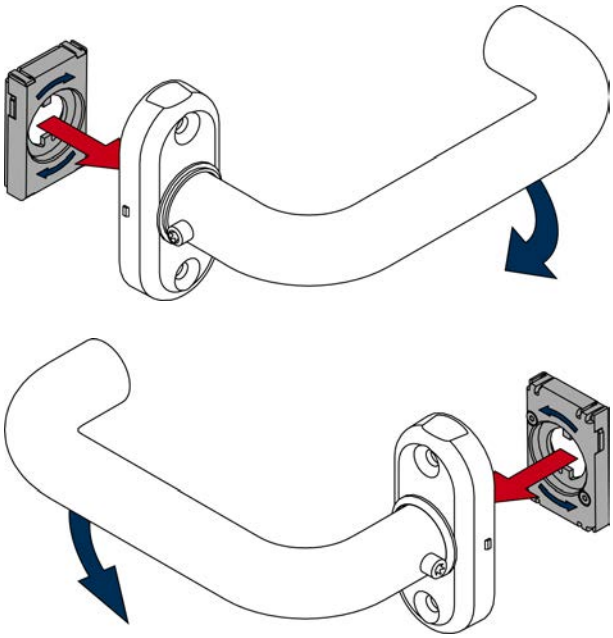
Existing 14 mm holes make it difficult to secure the SI SmartHandle AX Advanced.

- Insert the supplied silicone reducing sleeves into the existing holes to reduce the backlash.

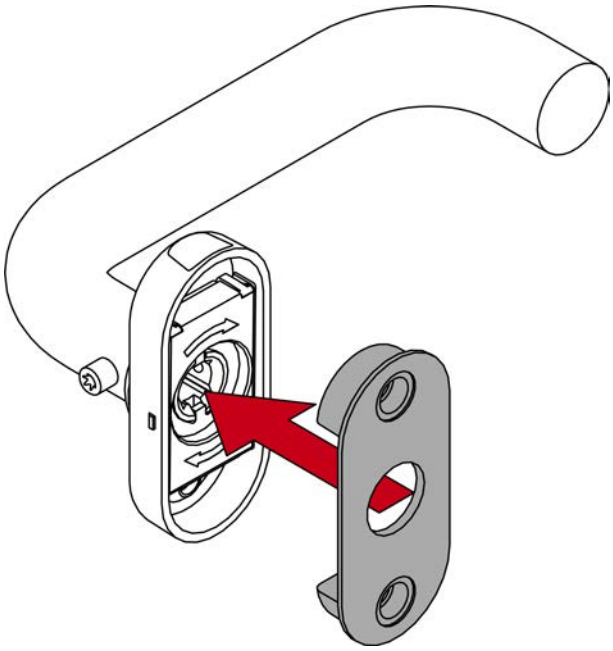
10. For 7 mm spindle: Place the adapter sleeve in the inside handle in such a way that the recess faces the grub screw.



11. Determine the required direction of rotation for your inside handle.
12. Insert the spring element appropriately.

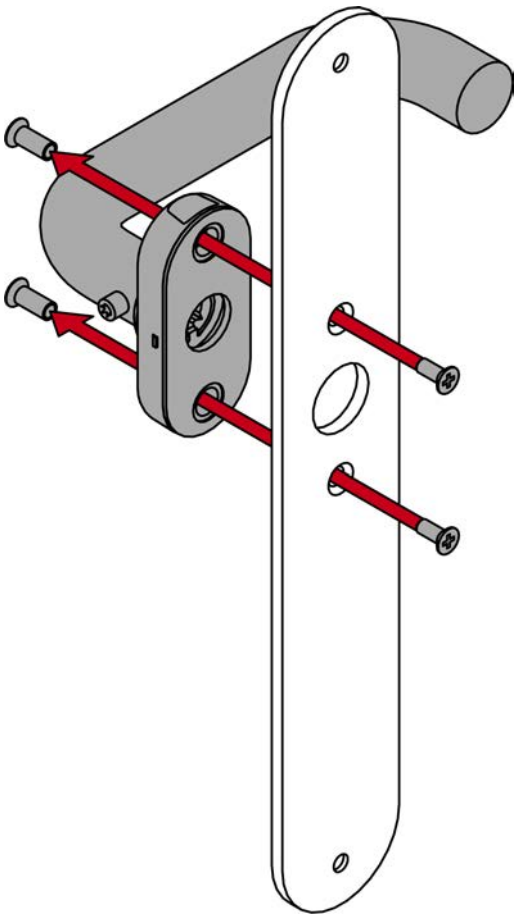


13. Place the underlay in the inner handle unit.

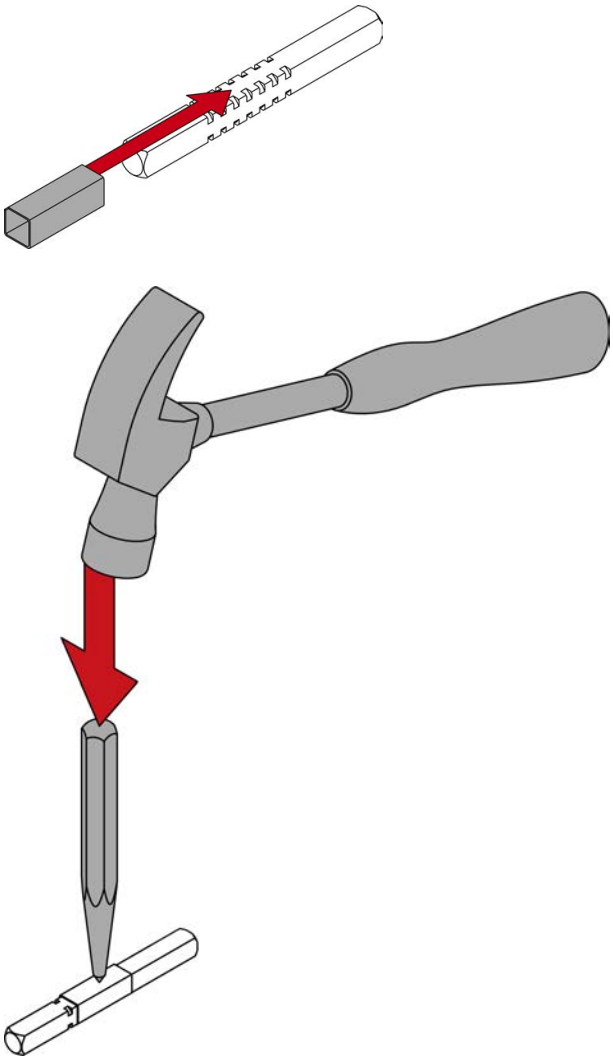


14. Screw the inside handle together with the threaded sleeves and 10 mm screws onto the fixing plate (2.5 mm hex key and PH2).

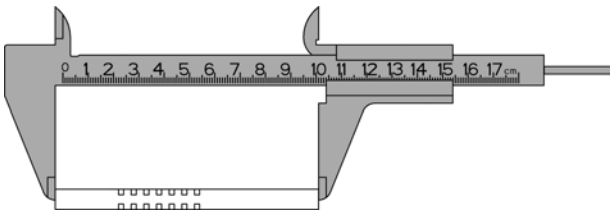
M4x10



15. For 8.5 mm and 10 mm spindle: slide the adapter sleeve into the centre of the spindle. Use a punch and hammer to make an indent in the adapter sleeve to prevent it from slipping.

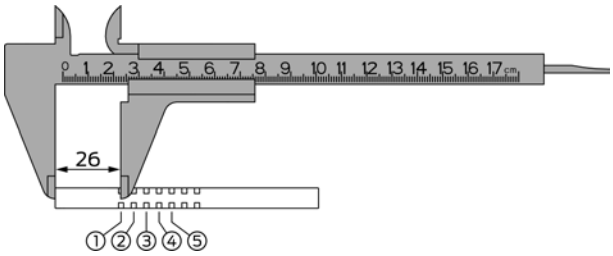


16. Measure the total length of the spindle.



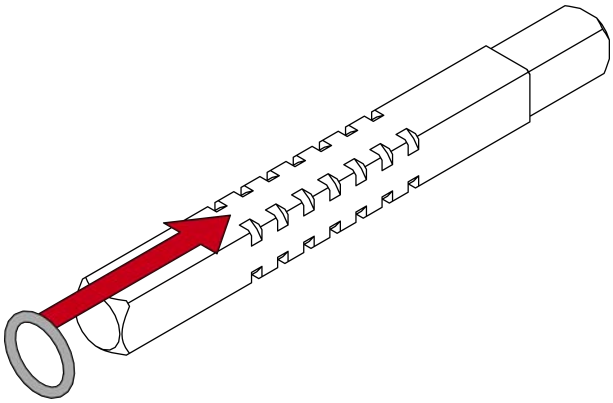
17. Locate the inside of the spindle (four-edge end up to the centre of the first groove = 26 mm).

18. Use the table to determine the position of the O-ring.

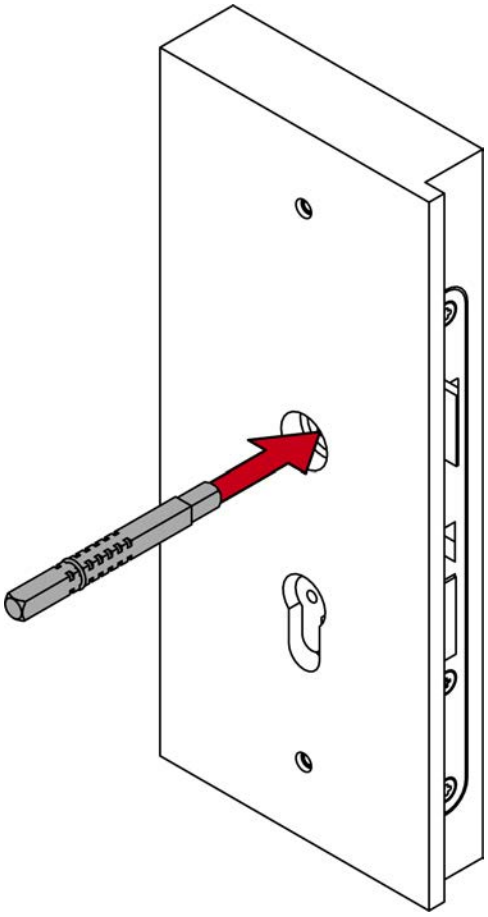


Size	Door thickness (mm)	Spindle length (mm)	Ring position
S	38 – <41	94	2
S	38 – <41	104	4
S	41 – <46	94	1
S	41 – <46	104	3
S	46 – <51	104	2
S	51 – 53	104	1
M	51 – <56	114	3
M	51 – <56	124	5
M	56 – <61	114	2
M	56 – <61	124	4
M	61 – <66	114	1
M	61 – <66	124	3
M	66 – <71	124	2
M	71 – 73	124	1
L	71 – <76	134	3
L	71 – <76	144	5
L	76 – <81	134	2
L	76 – <81	144	4
L	81 – <86	134	1
L	81 – <86	144	3
L	86 – <91	144	2
L	91 – 93	144	1
XL	91 – 176	O-ring is located 30–35 mm from the cut end of the spindle.	

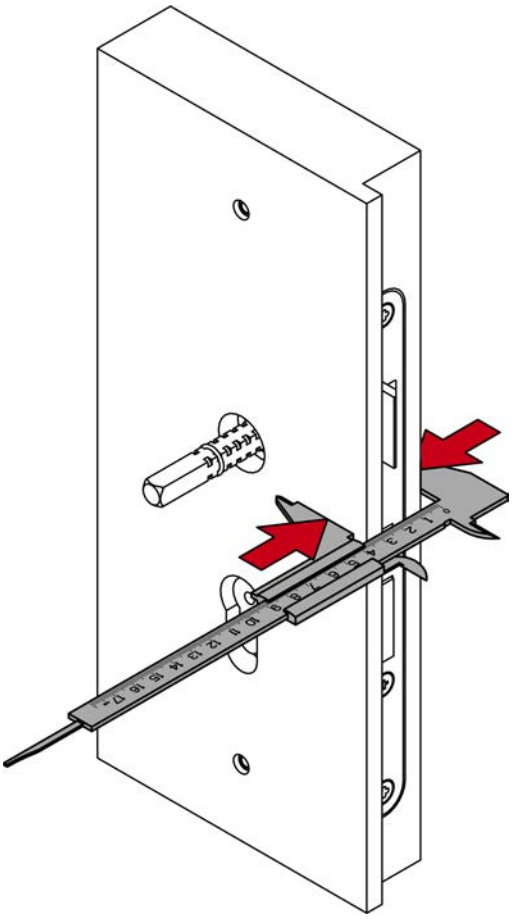
19. Slide the O-ring onto the calculated groove.



20.Insert the spindle into the door with the ring-free side as far as it will go.

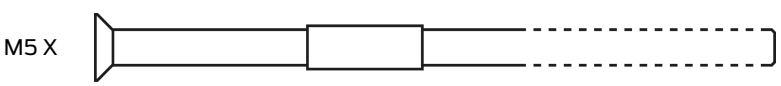


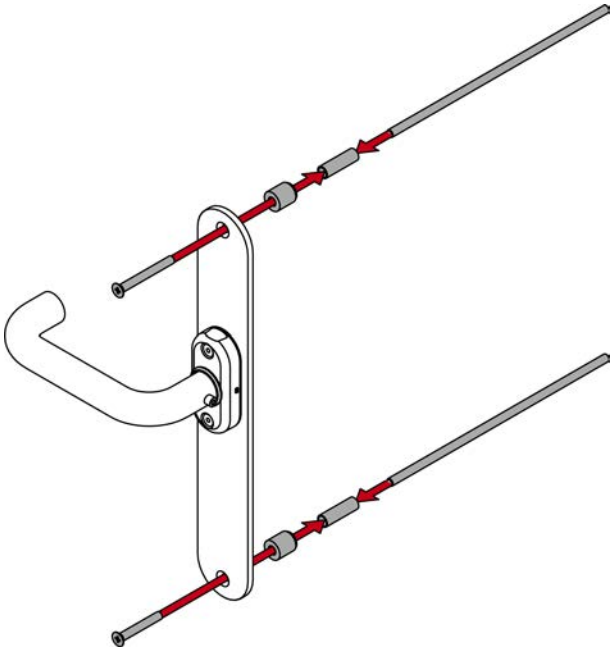
21. Measure the door thickness.



Size	Door thickness (mm)	Screws
S	38 – 53	M5×35
M	51 – 63	M5×40
M	62 – 73	M5×50
L	71 – 83	M5×60
L	82 – 93	M5×70
X	91 – 176	M5 X

22. Determine what screws are required for the door thickness measured.
23. For X: Insert the screws through the inner fastening plate and screw them together with the threaded sleeve and threaded rod.





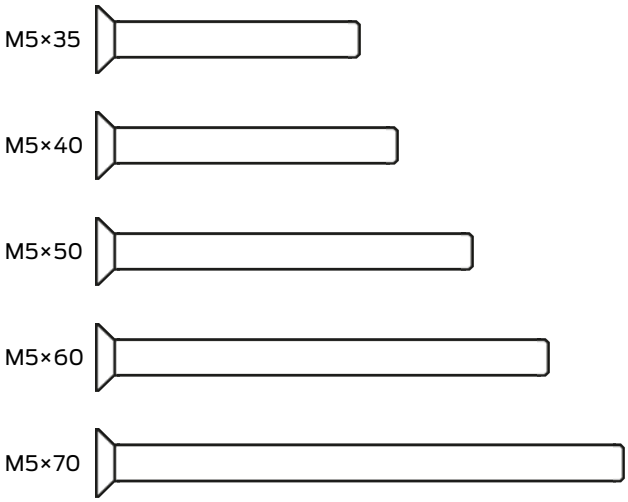
24. Screw the inner part and the outer part (PH2) with the required screws.

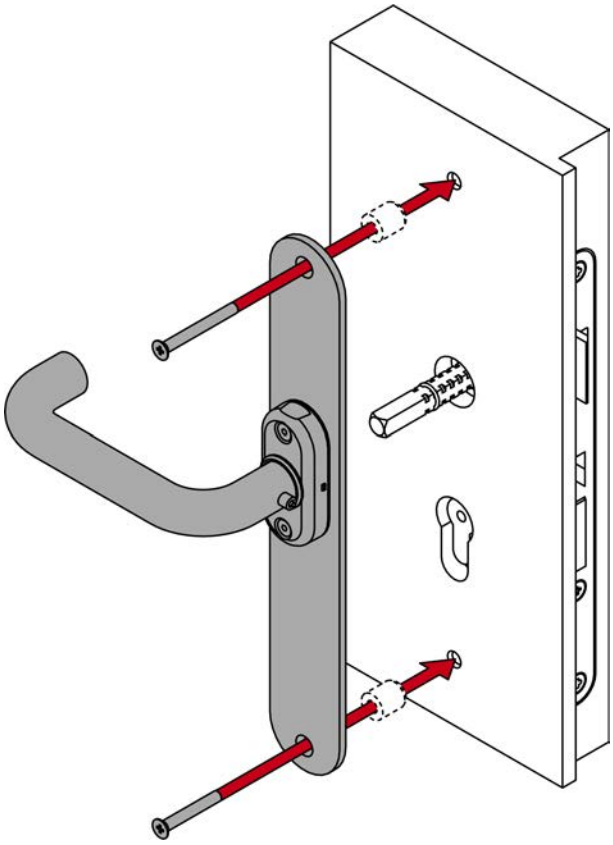
NOTE

Reducing sleeves for existing 14 mm holes

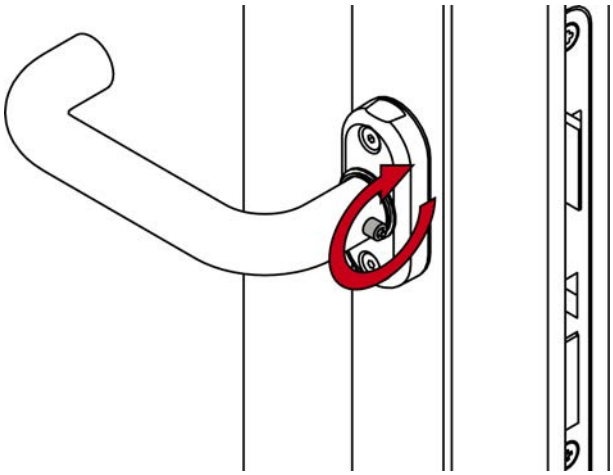
Existing 14 mm holes make it difficult to secure the SI SmartHandle AX Advanced.

- Insert the supplied silicone reducing sleeves into the existing holes to reduce the backlash.

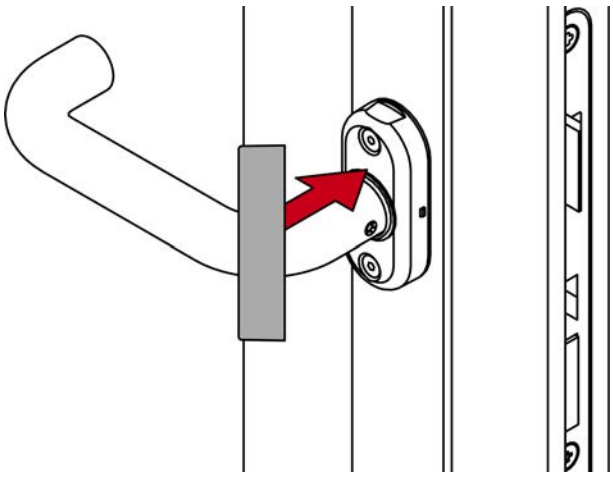




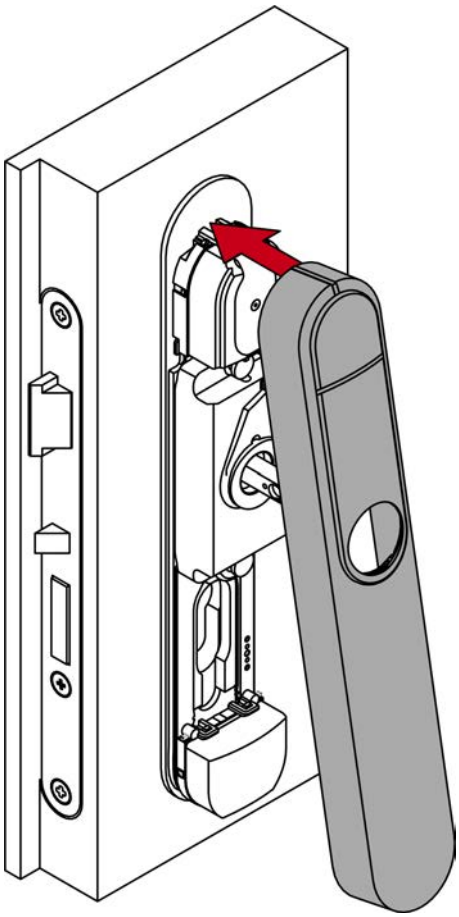
25. Fasten the inner handle grub screw firmly (TX15).



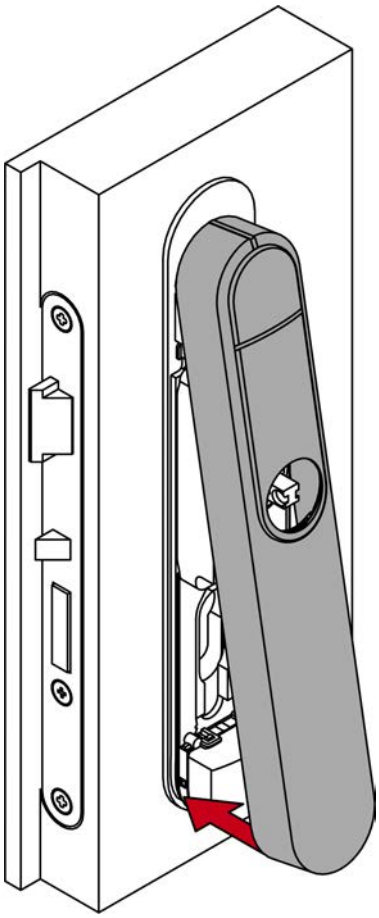
26. Place a cover with the notch facing downwards onto the escutcheon base.



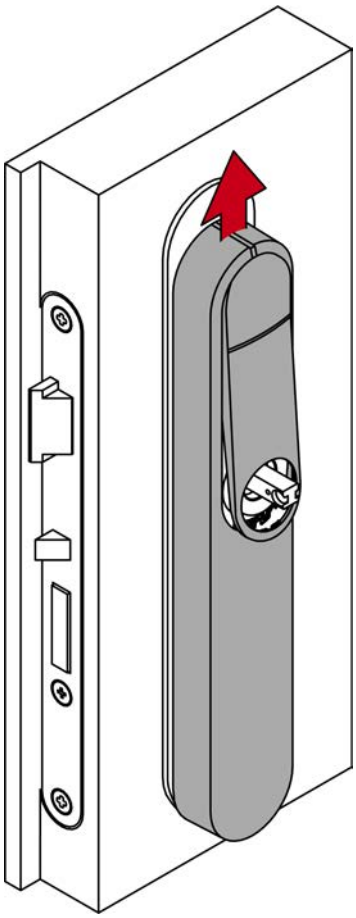
27. Place the cover on top of the fastening plate.



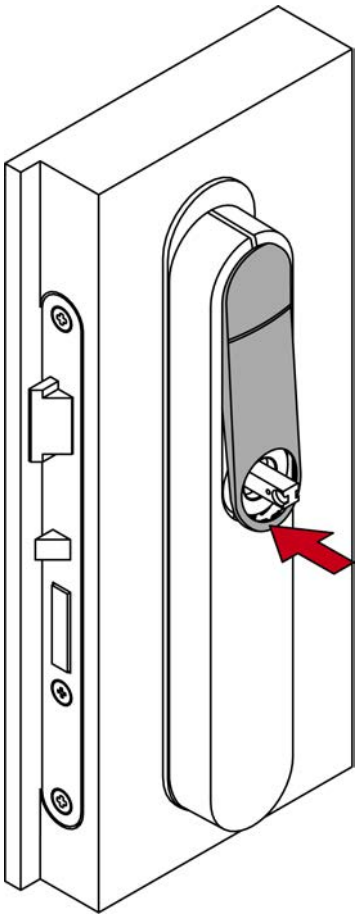
28.Fold down the cover.



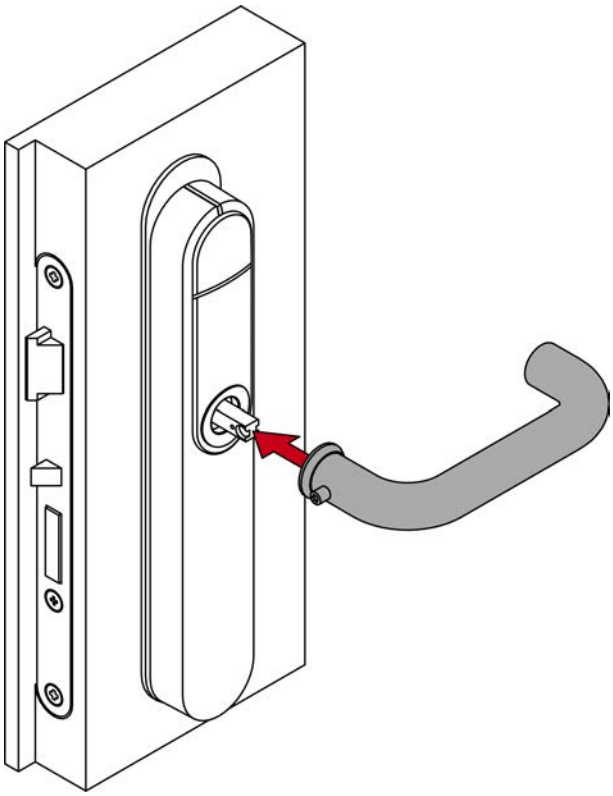
29. Slide the cover upwards.



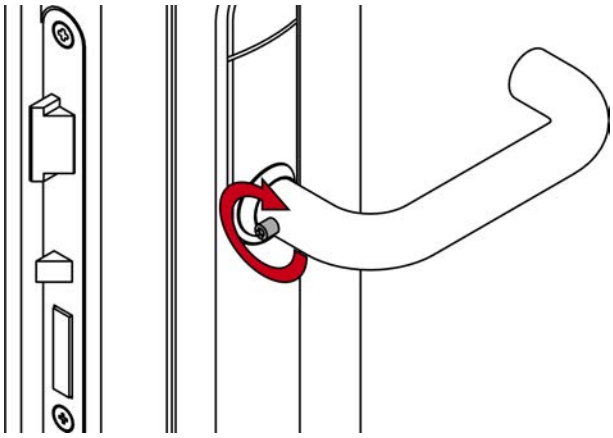
30.Press the inlay into place.



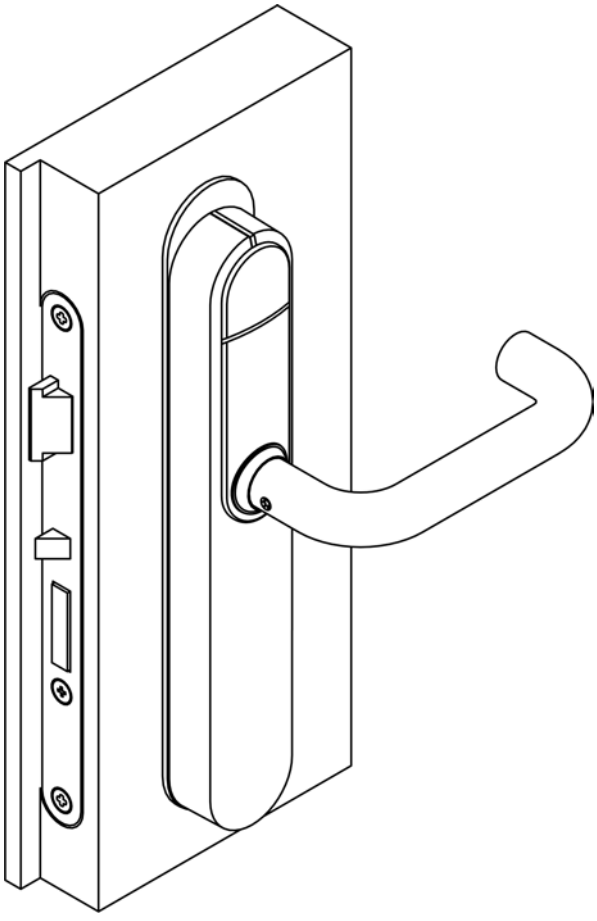
31. Fit the outside handle.



32. Use the grub screw to fasten the outer handle (TX15) into position.



↳ SI SmartHandle AX Advanced fully installed.



6.11 Double-sided reading for Scandinavian Oval (SO-DS)

7. Removing the fitting

Always carry out disassembly using the same steps as installation but in reverse order.

In addition to the grub screw, the outside handle is also secured by a security pin in the spindle.

✓ Outside handle grub screw loosened.

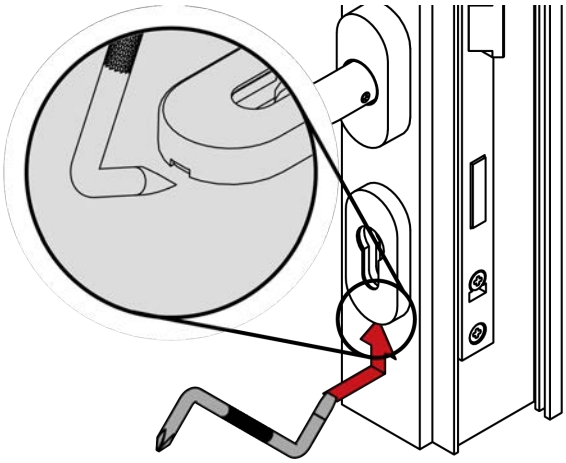
1. Insert a 1.5 mm hex key into the hole in the spindle mount in the module support.
2. Bend the hex key to the side where the hole is located while pulling on the outside handle.

↳ Outside handle is removed.

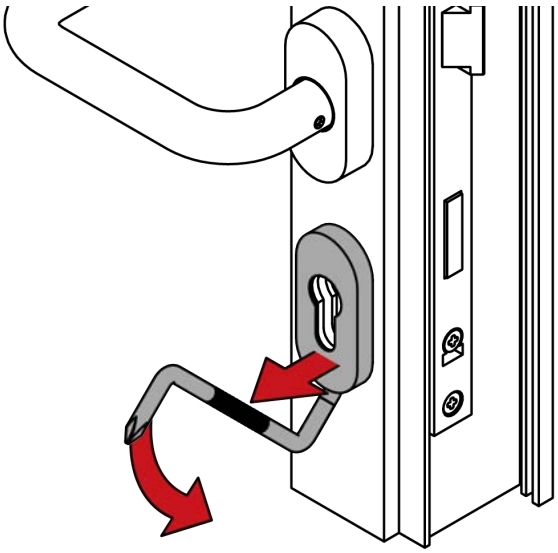
7.1 Removing the fitting (metal frame)

✓ 1.5 mm hexagonal wrench available.

1. Insert a flat-head screwdriver (ideally angled) into the opening in the lower surface of the panels on the inside.

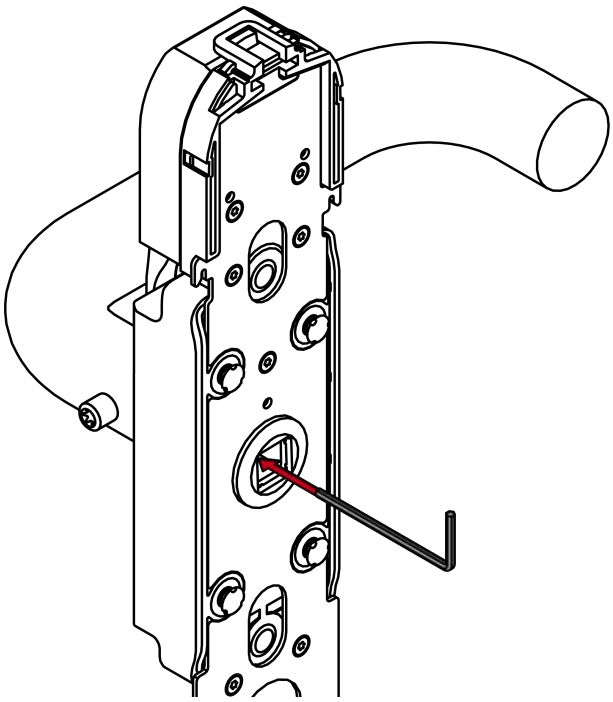


2. Lever off the panels with the flat-head screwdriver.

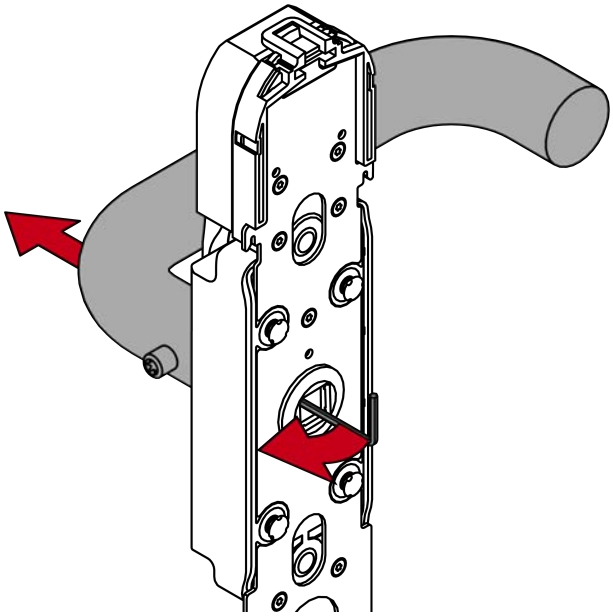


3. Remove the fitting in the reverse order to installation.
4. Loosen the cover by bending the inlay outwards using the special tool.

5. Insert a 1.5 mm hex key into the hole in the spindle mount in the module support.



6. Bend the hex key to the side where the hole is located while pulling on the outside handle.



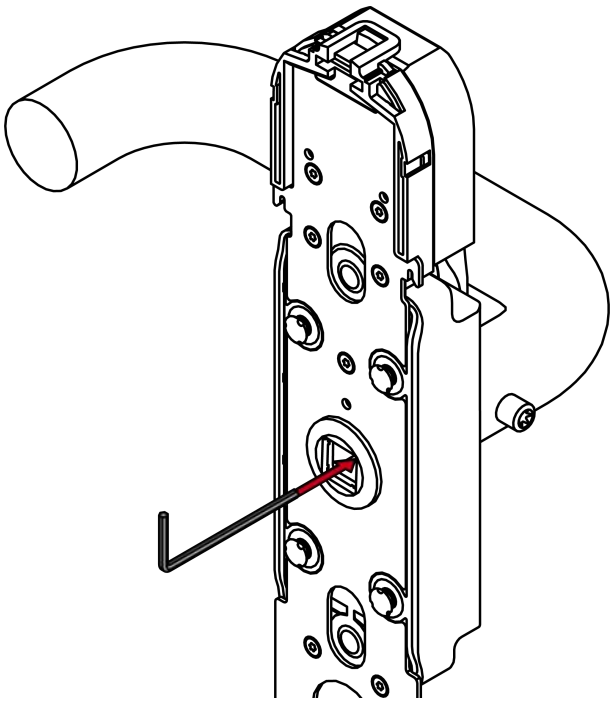
↳ SI SmartHandle AX Advanced is now removed.

7.2 Removing the fitting (long backplate/short backplate)

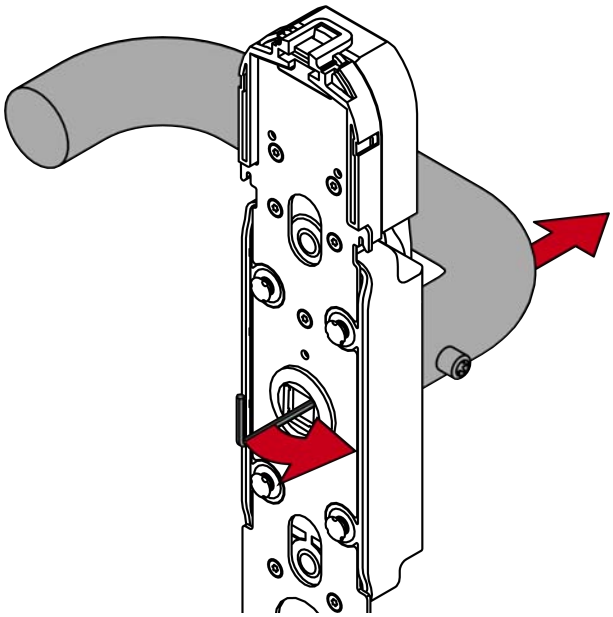
✓ 1.5 mm hexagonal wrench available.

1. Remove the fitting in the reverse order to installation.

2. Loosen the cover by bending the inlay outwards using the special tool.
3. Insert a 1.5 mm hex key into the hole in the spindle mount in the module support.



4. Bend the hex key to the side where the hole is located while pulling on the outside handle.

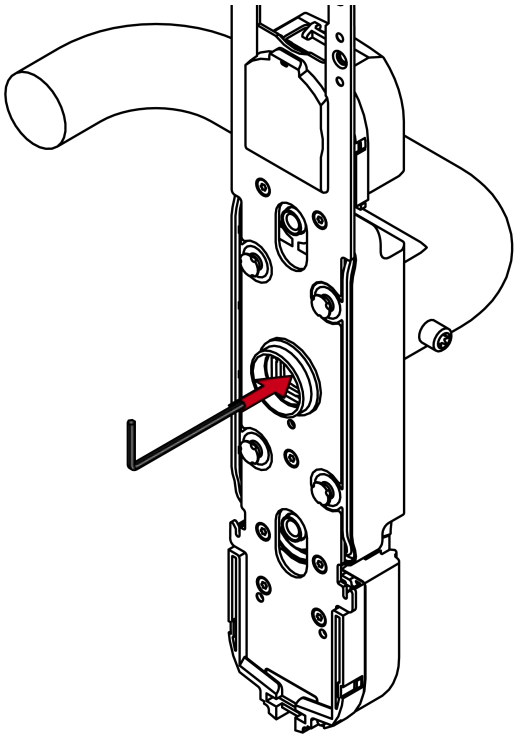


↳ SI SmartHandle AX Advanced is now removed.

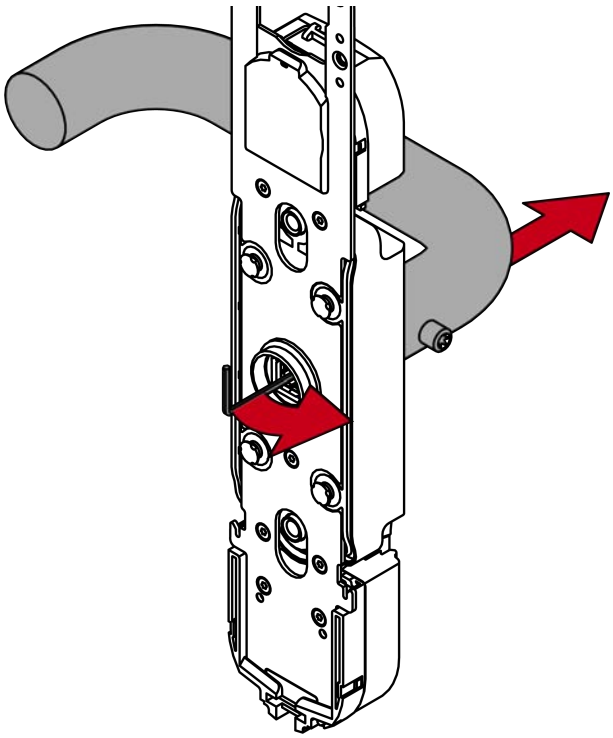
7.3 Removing the fitting (Scandinavian Oval)

✓ 1.5 mm hexagonal wrench available.

1. Remove the fitting in the reverse order to installation.
2. Loosen the cover by bending the inlay outwards using the special tool.
3. Insert a 1.5 mm hex key into the hole in the spindle mount in the module support.



4. Bend the hex key to the side where the hole is located while pulling on the outside handle.



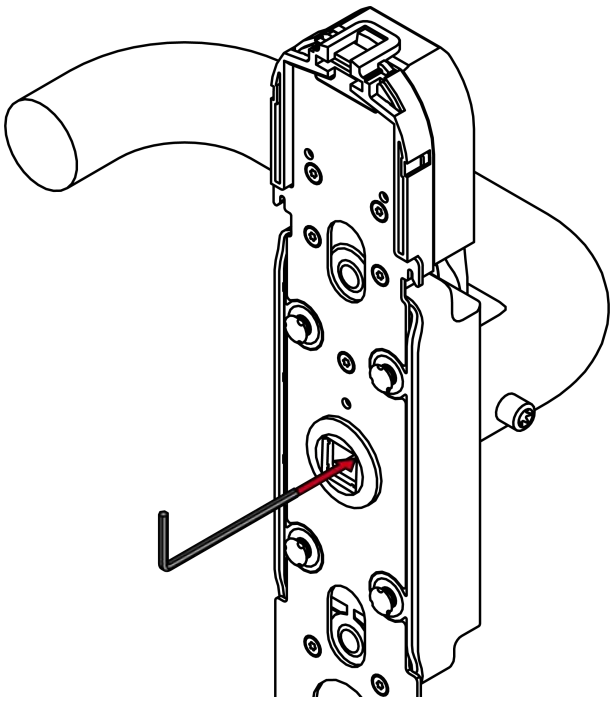
↳ SI SmartHandle AX Advanced is now removed.

7.4 Removing the fitting (full leaf)

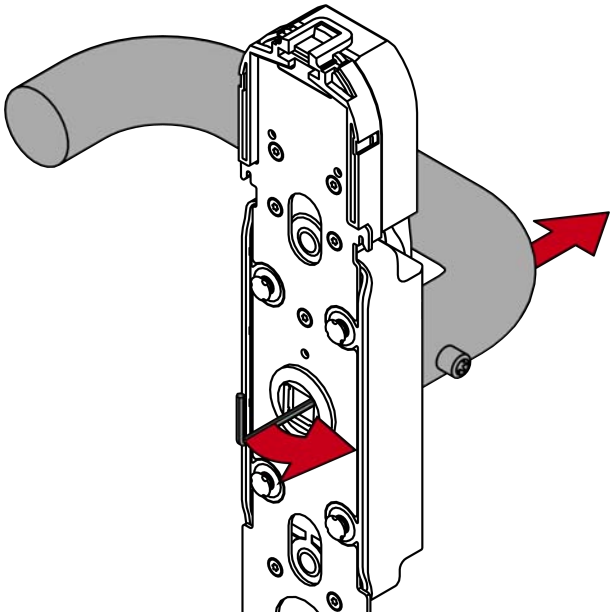
✓ 1.5 mm hexagonal wrench available.

1. Remove the fitting in the reverse order to installation.
2. Loosen the cover by bending the inlay outwards using the special tool.

3. Insert a 1.5 mm hex key into the hole in the spindle mount in the module support.



4. Bend the hex key to the side where the hole is located while pulling on the outside handle.



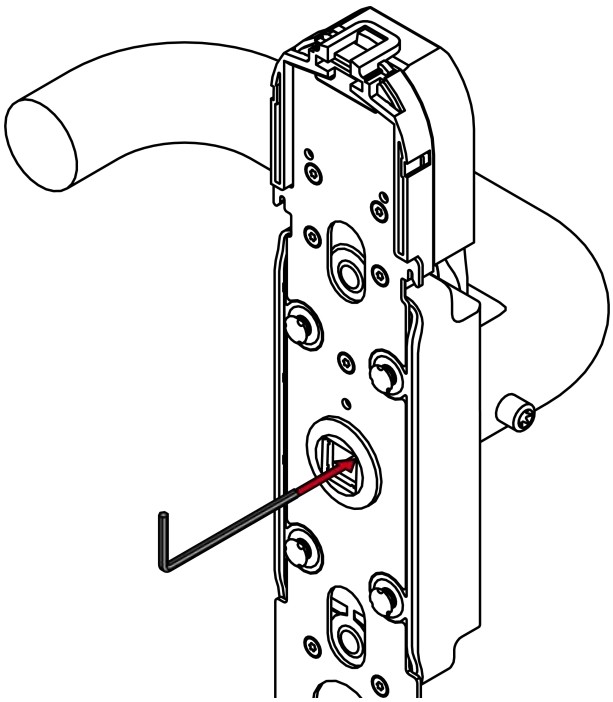
↳ SI SmartHandle AX Advanced is now removed.

7.5 Removing the fitting (reading on both sides)

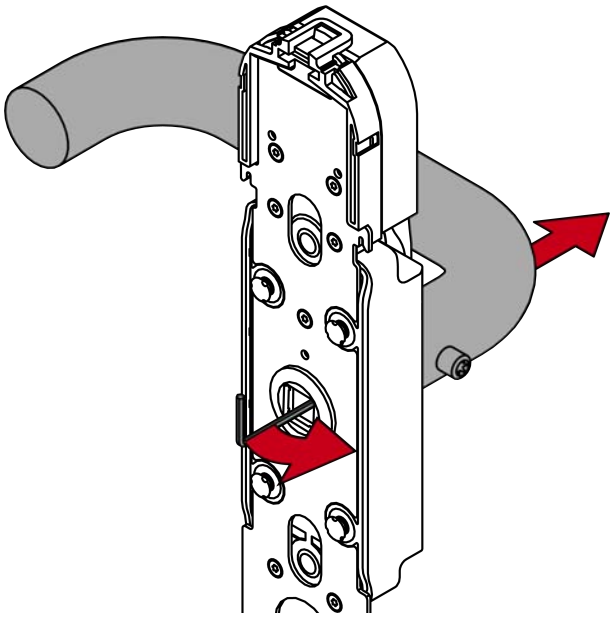
✓ 1.5 mm hexagonal wrench available.

1. Remove the fitting in the reverse order to installation.

2. Loosen the cover by bending the inlay outwards using the special tool.
3. Insert a 1.5 mm hex key into the hole in the spindle mount in the module support.



4. Bend the hex key to the side where the hole is located while pulling on the outside handle.

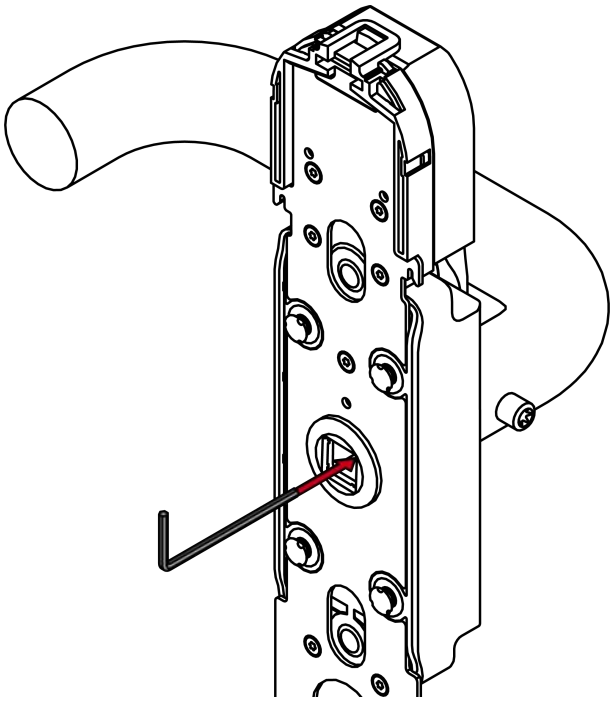


↳ SI SmartHandle AX Advanced is now removed.

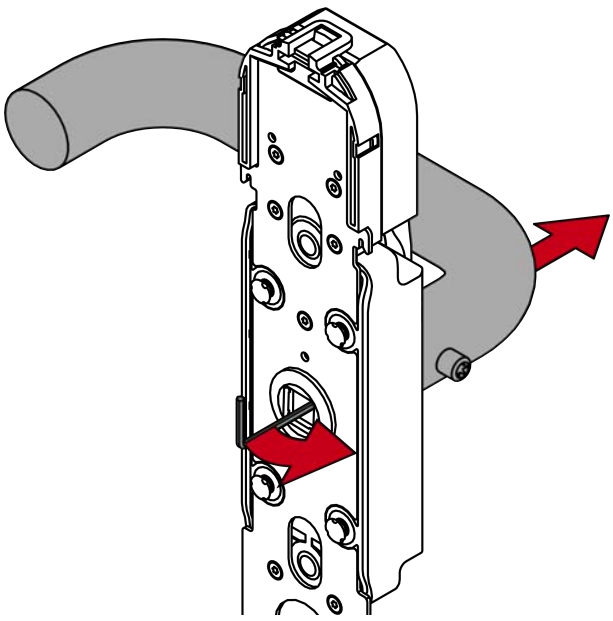
7.6 Removing the fitting (protective fitting)

✓ 1.5 mm hexagonal wrench available.

1. Remove the fitting in the reverse order to installation.
2. Loosen the cover by bending the inlay outwards using the special tool.
3. Insert a 1.5 mm hex key into the hole in the spindle mount in the module support.



4. Bend the hex key to the side where the hole is located while pulling on the outside handle.

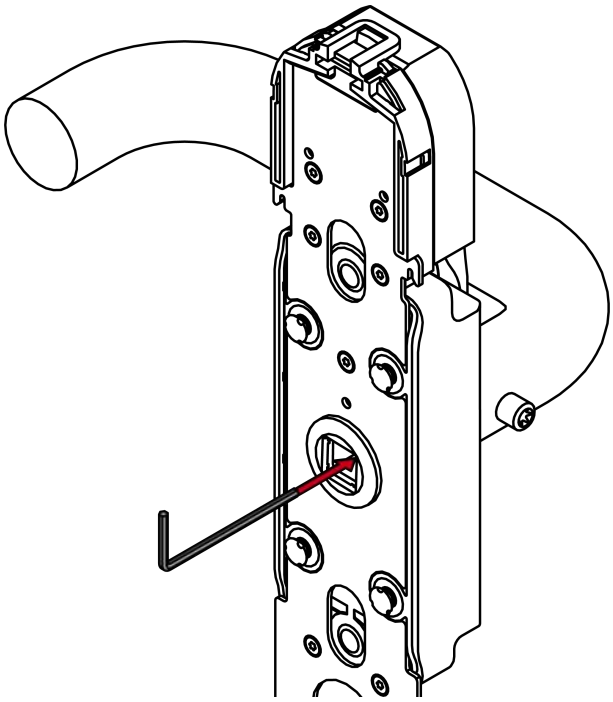


↳ SI SmartHandle AX Advanced is now removed.

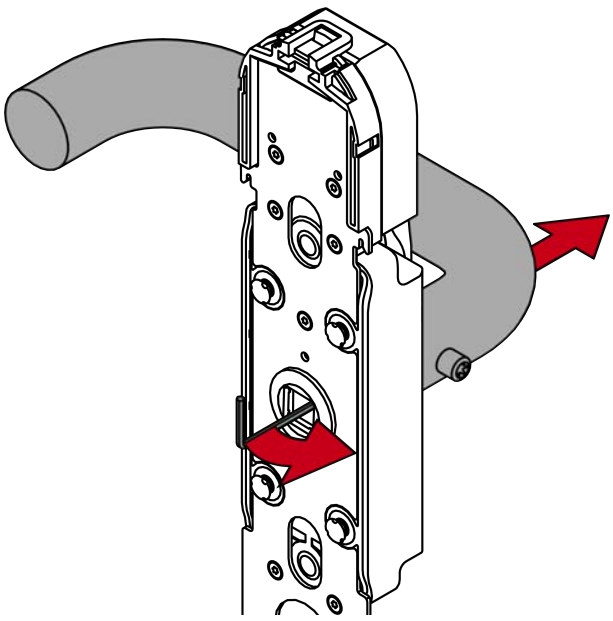
7.7 Removing the fitting (panic fitting)

✓ 1.5 mm hexagonal wrench available.

1. Remove the fitting in the reverse order to installation.
2. Loosen the cover by bending the inlay outwards using the special tool.
3. Insert a 1.5 mm hex key into the hole in the spindle mount in the module support.



4. Bend the hex key to the side where the hole is located while pulling on the outside handle.



↳ SI SmartHandle AX Advanced is now removed.

8. Programming

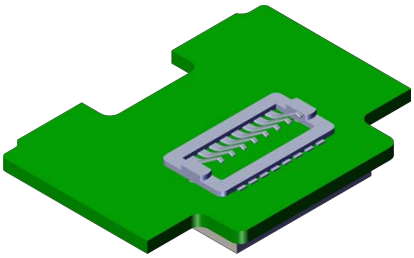
The SI SmartHandle AX Advanced is programmed with the configuration software (AXM/LSM).

9. Configuration

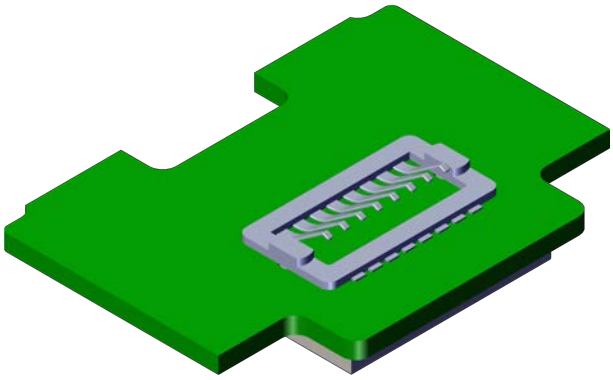
The configuration of the SI SmartHandle AX Advanced is changed with the AXM/LSM.

10. Accessories and spare parts

10.1 LockNode

Item code	Description	
WNM.LN.I.S3	LockNode for retrofitting of SI SmartHandle AX Advanced	

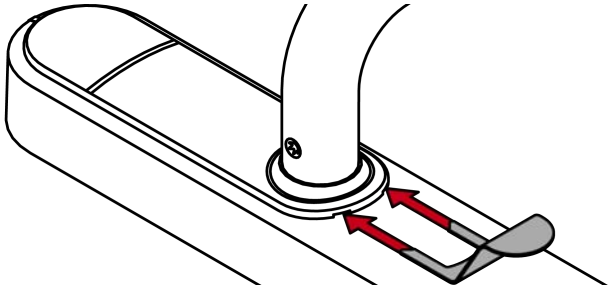
10.1.1 Intended use



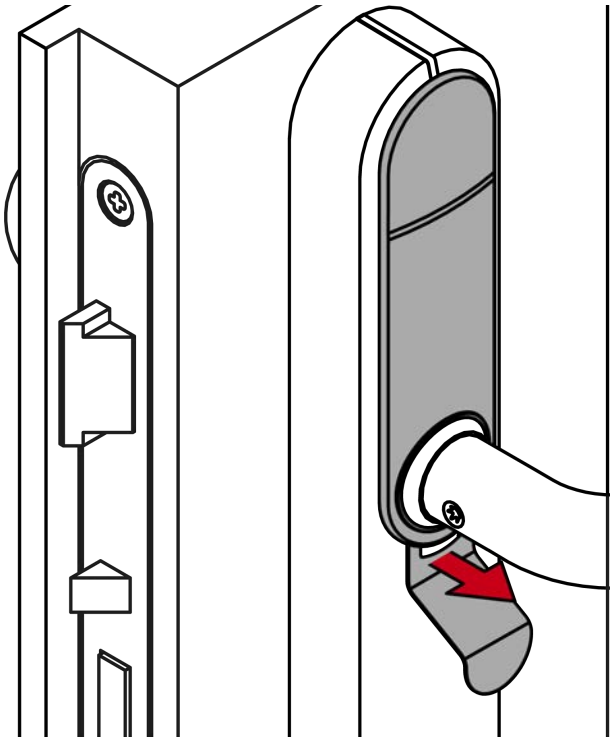
10.1.2 Fitting the LockNode

✓ Special tool at hand.

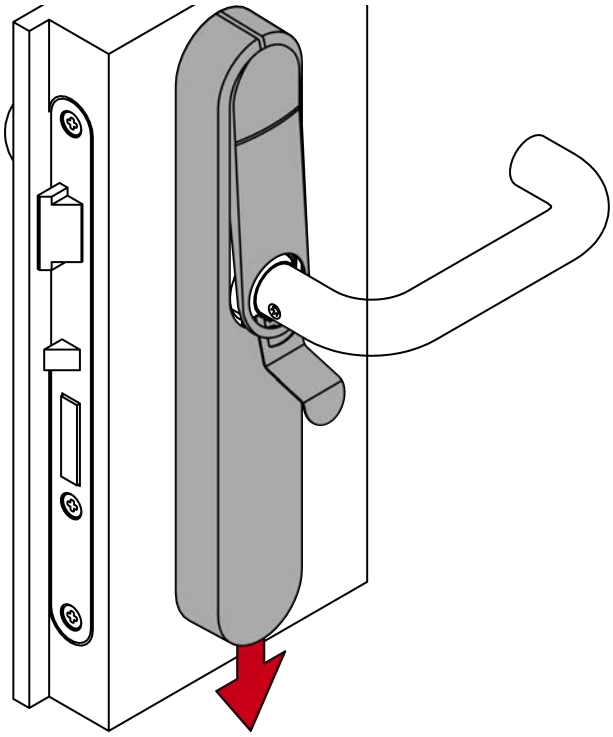
1. Insert the special tool into the cover inlay on the electronics side.



2. Use the special tool to carefully bend the cover inlay upwards.

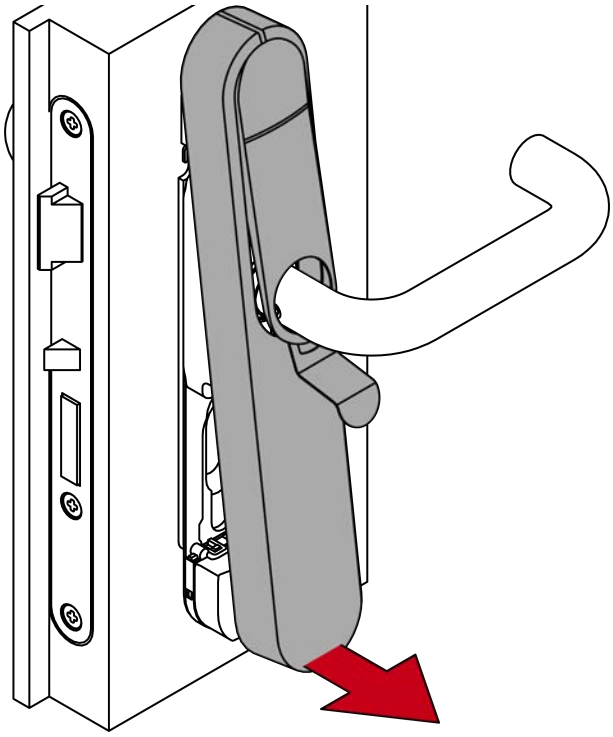


3. Slide the cover downwards.

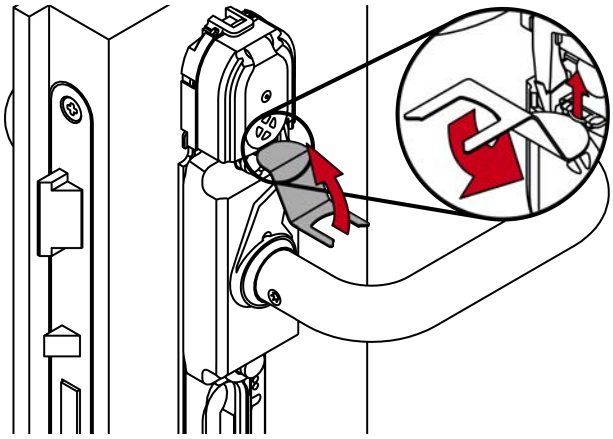


↳ Cover unlocked.

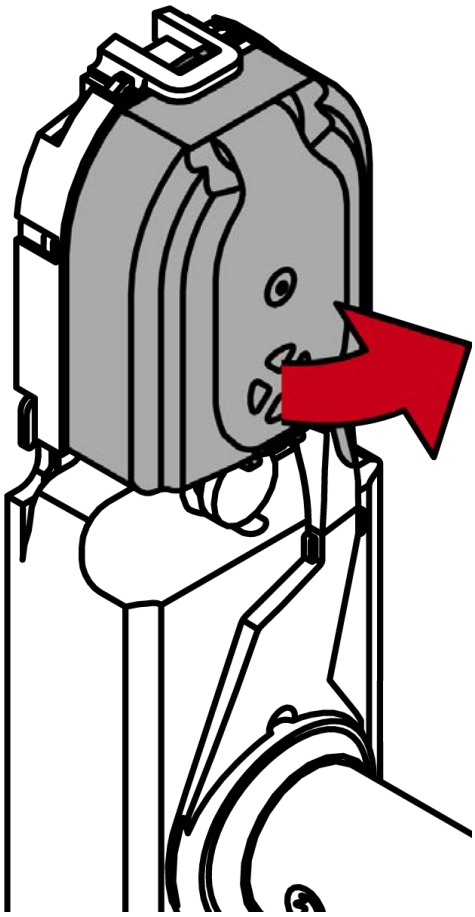
4. Remove the cover.

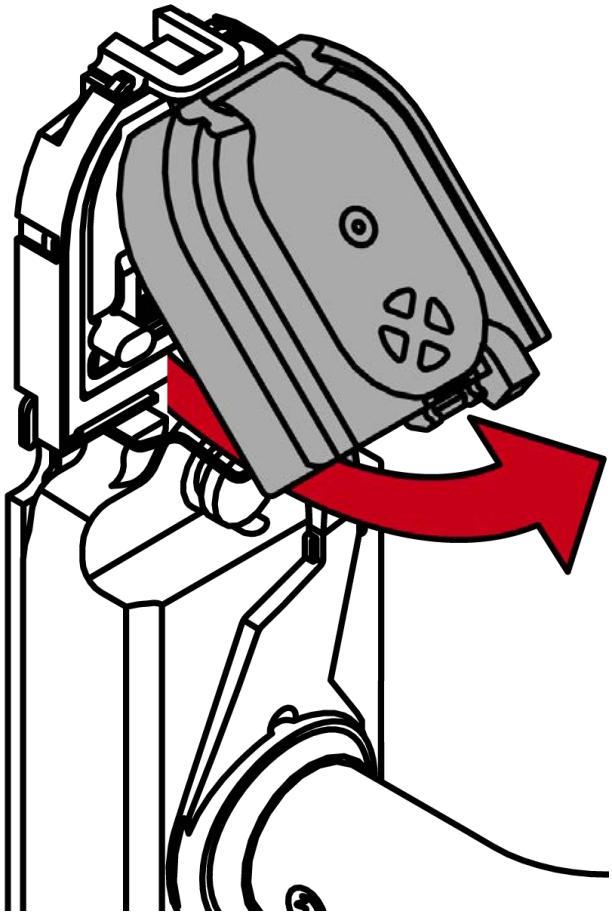


5. Use the special tool to unhook the reader module clip.

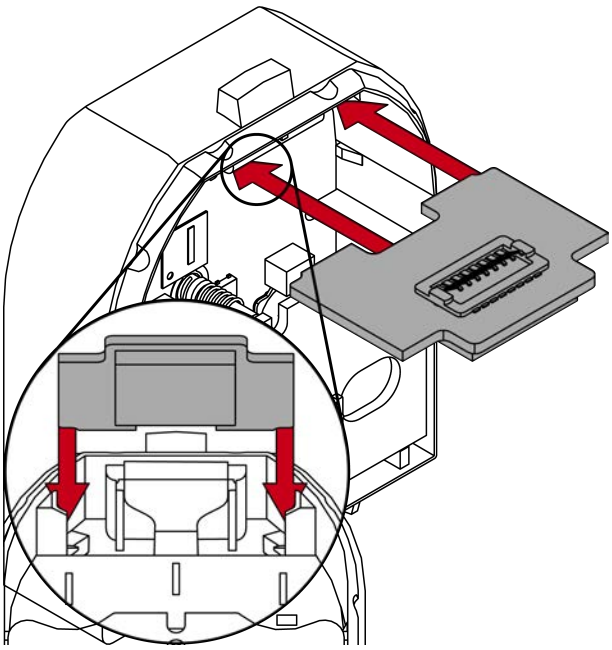


6. Remove the reader module.

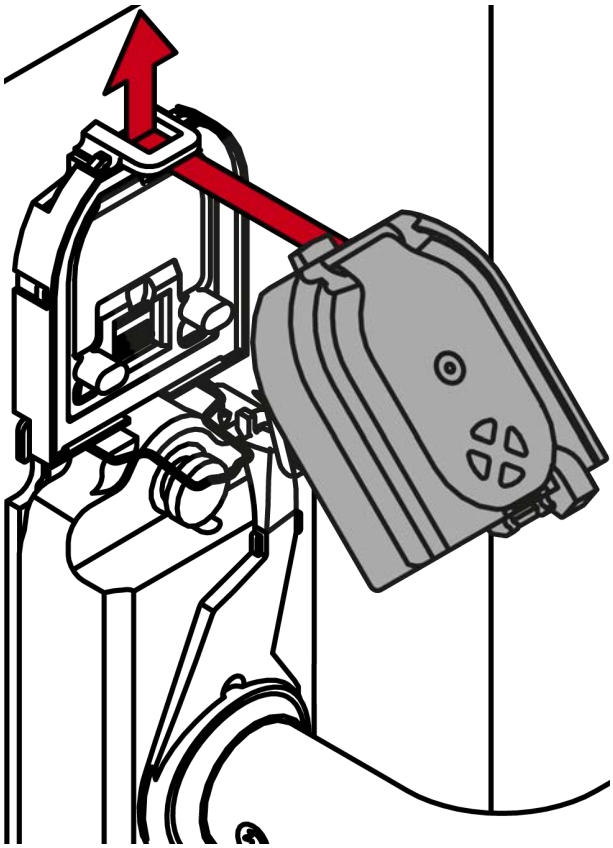


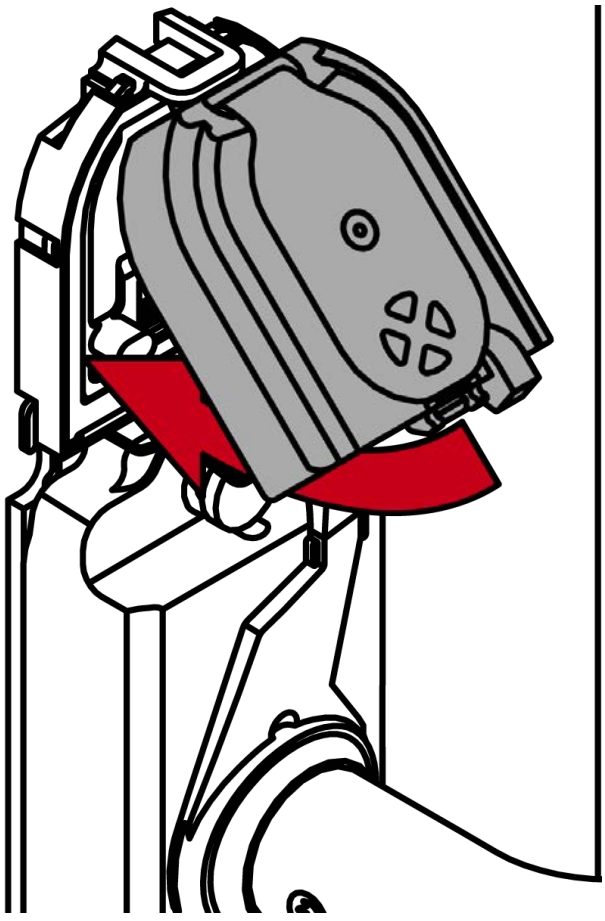


7. Push the LockNode into its designated slot.



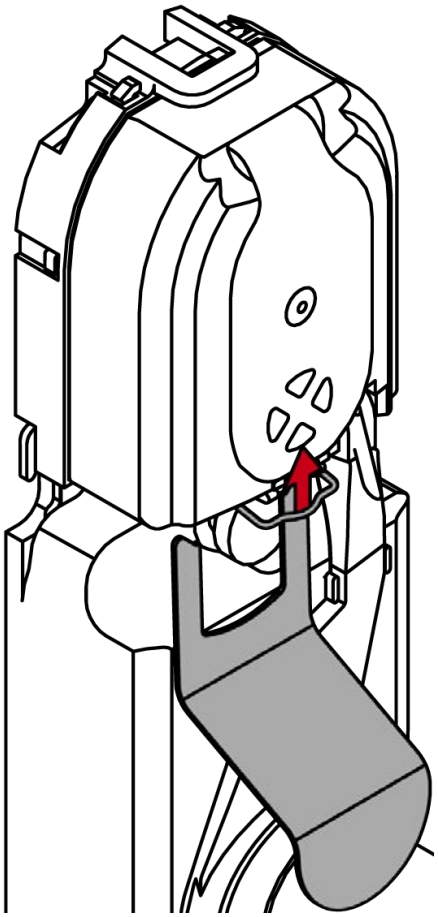
8. Place the reader module back into the module support.



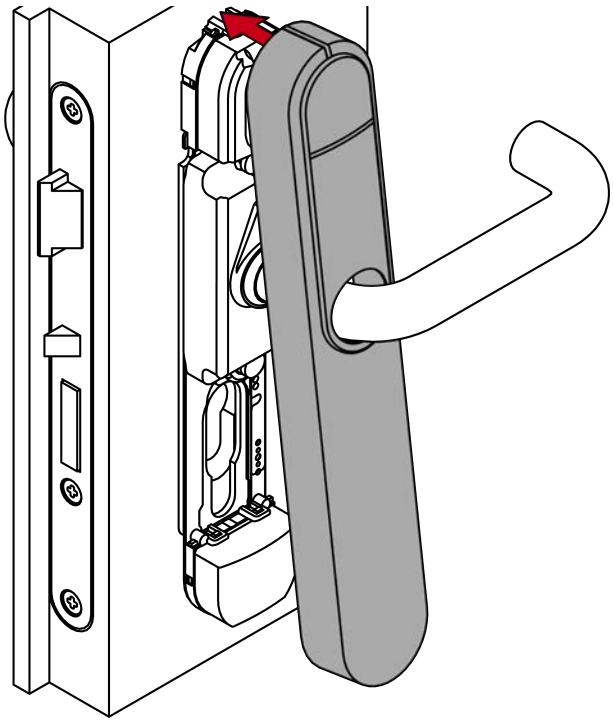


↳ SI SmartHandle AX Advanced will beep three times.

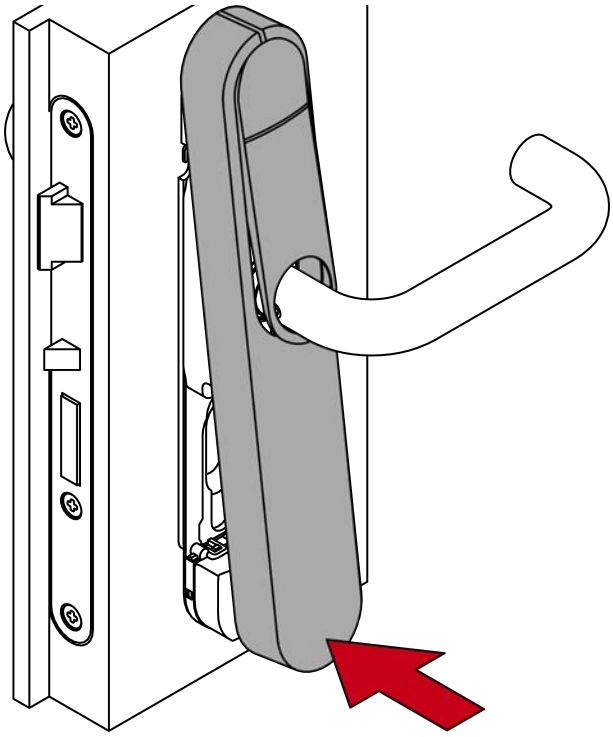
9. Use the special tool to reattach the reader module clip.



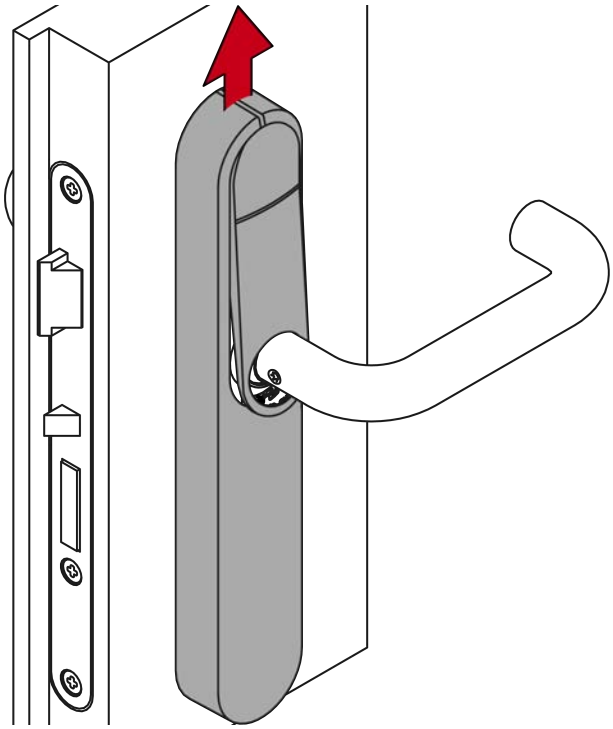
10. Place the cover on top of the fastening plate.



11. Fold down the cover.



12. Push the cover against the door, sliding it upwards at the same time.



↳ Cover snaps into place.

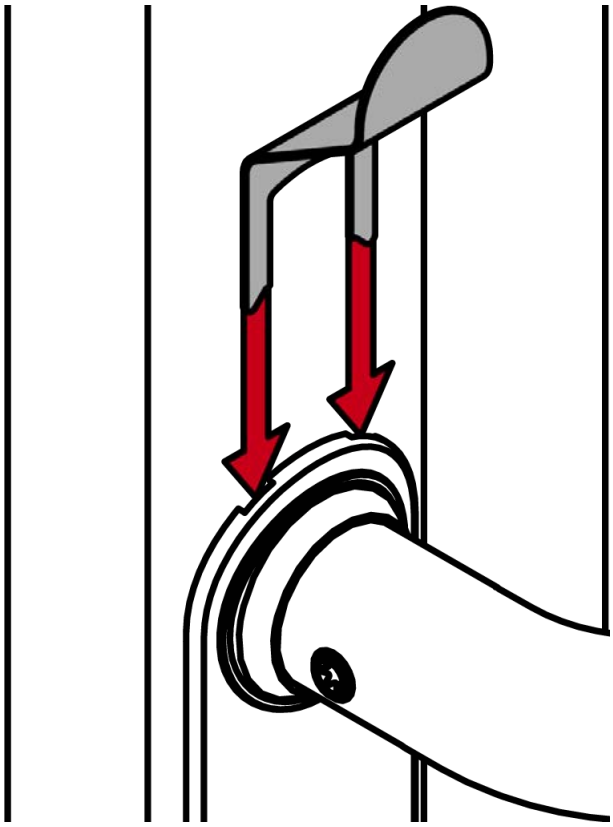
13. Press the inlay into place.

↳ LockNode is mounted.

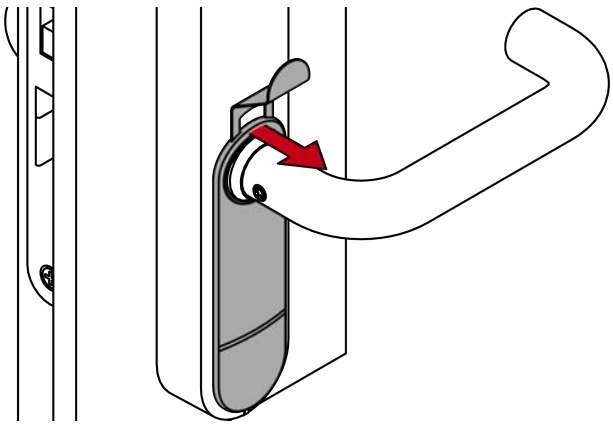
10.1.3 Fitting the LockNode (Scandinavian Oval)

✓ Special tool at hand.

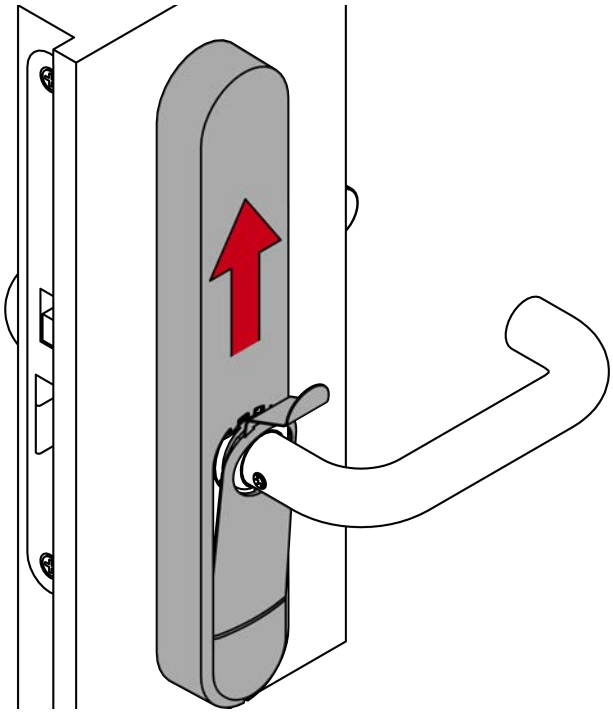
1. Insert the special tool into the cover inlay on the electronics side.



2. Use the special tool to carefully bend the cover inlay upwards.

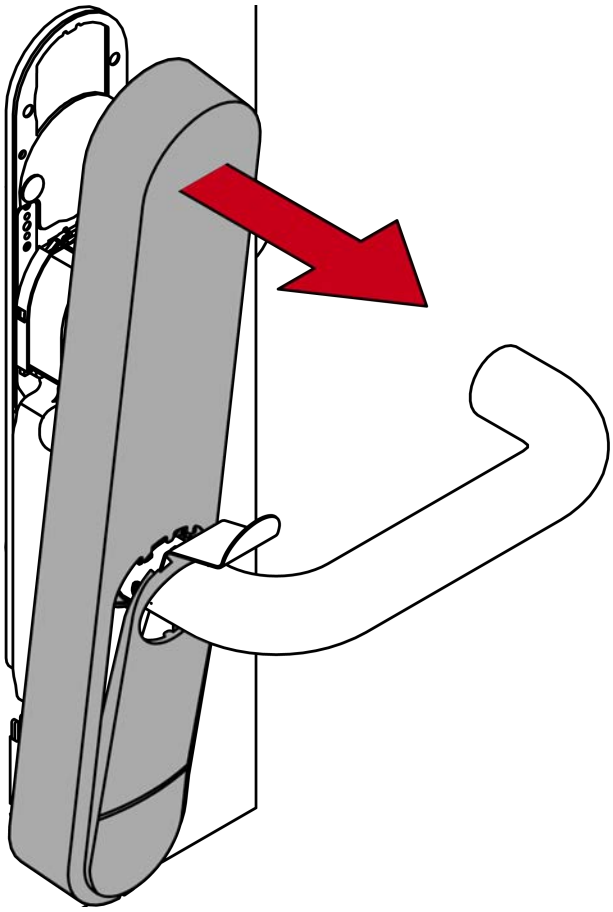


3. Slide the cover upwards.

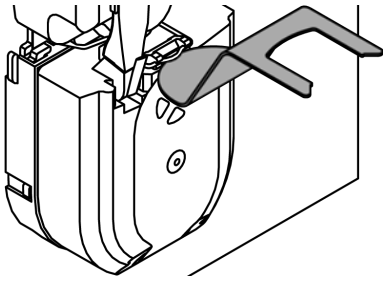


↳ Cover unlocked.

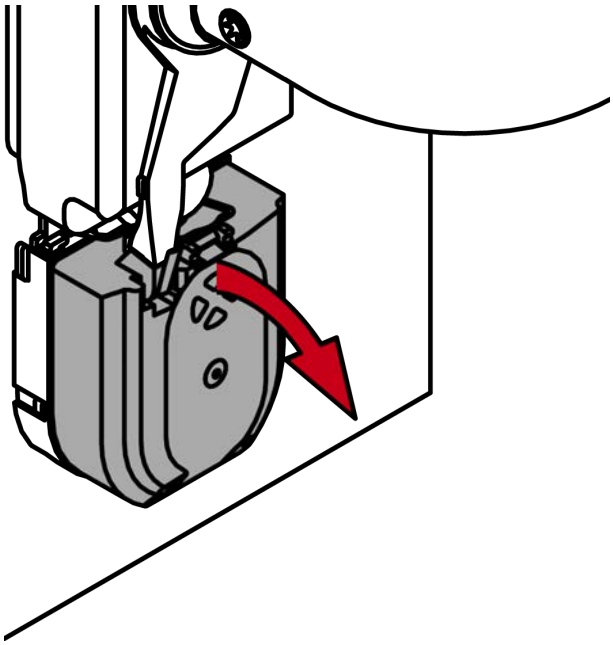
4. Remove the cover.

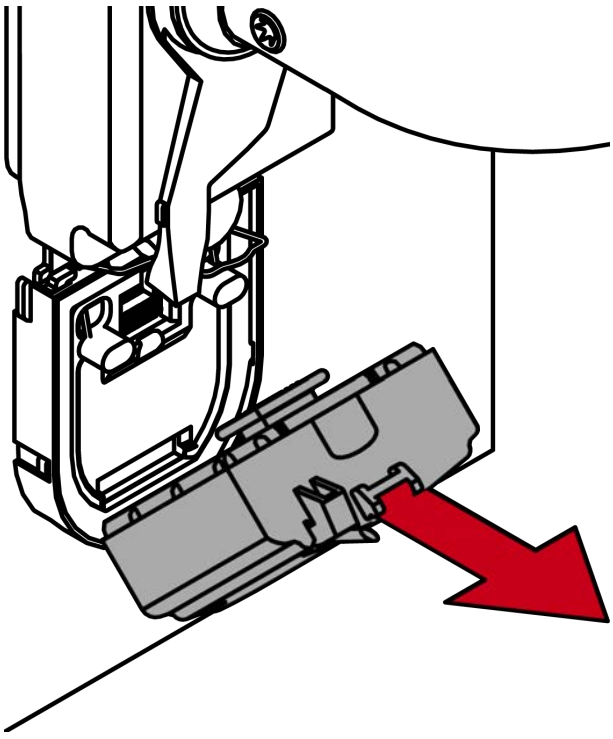


5. Use the special tool to unhook the reader module clip.

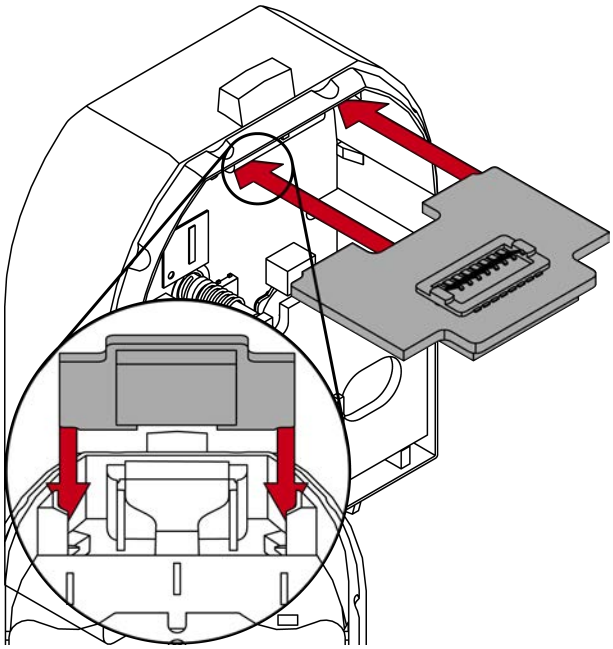


6. Remove the reader module.

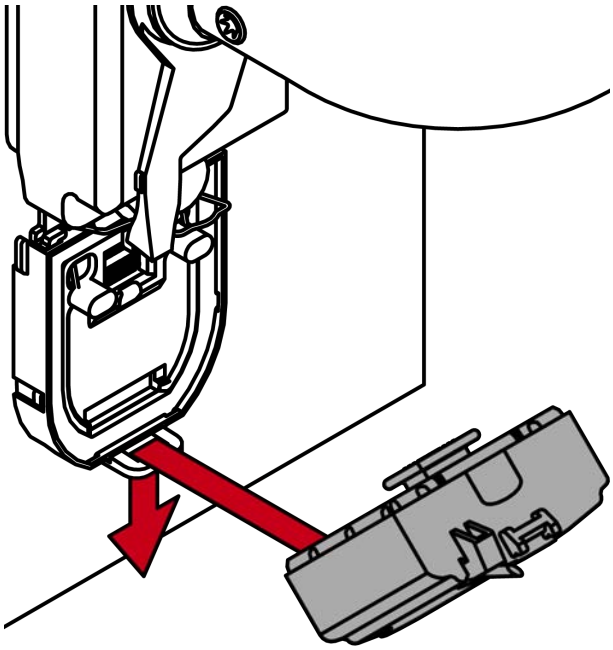


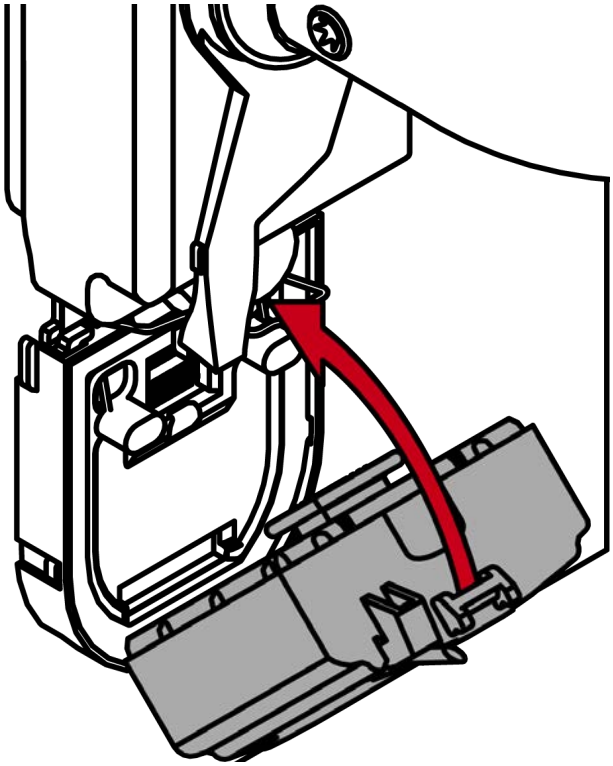


7. Push the LockNode into its designated slot.



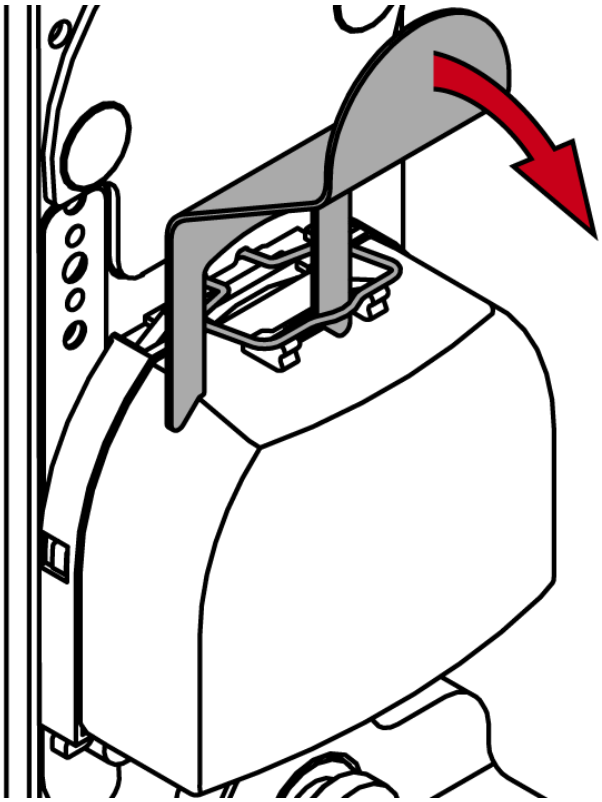
8. Place the reader module back into the module support.



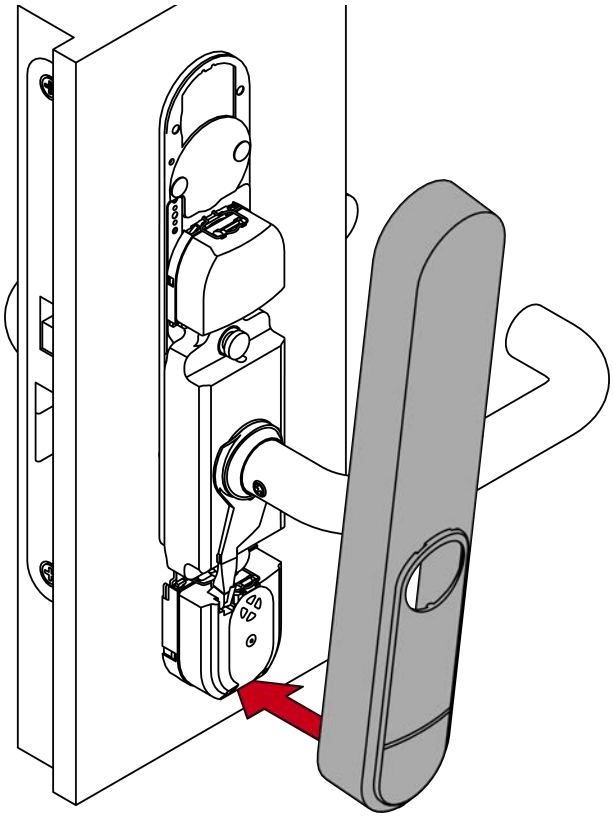


↳ SI SmartHandle AX Advanced will beep three times.

9. Use the special tool to reattach the reader module clip.

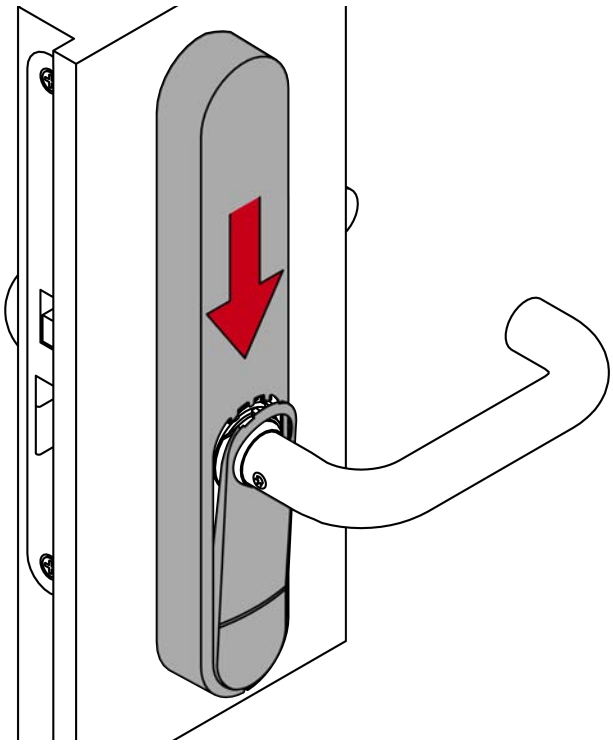


10. Position the cover on the fastening plate at the bottom.



11. Fold the cover upwards.

12. Push the cover against the door while sliding it downwards at the same time.



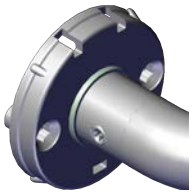
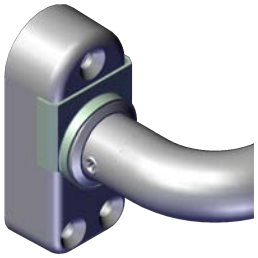
↳ Cover snaps into place.

13. Press the inlay into place.

↳ LockNode is mounted.

10.2 Handle

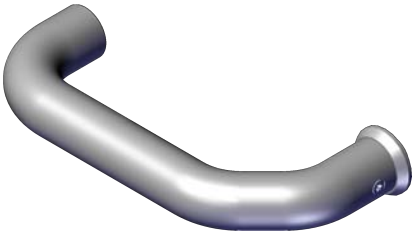
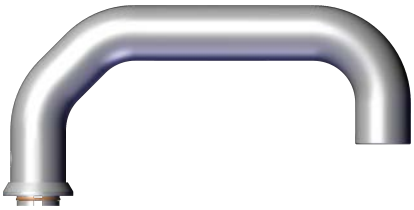
Item code	Description		
S3.LEVER.OR.X.Y	Handle inside and outside with oval rosette for retrofitting of: ■ K1 (metal frame doors) ■ N3 (Conventional mounting 105-145)		

Item code	Description		
S3.LEVER.RR.X.Y	Handle inside and outside with round rosette for retrofitting for: ■ L1 (Mounting of rosettes)		
S3.LEVER.IS.X.Y	Inner side and outer side handle for retrofitting of: ■ N1 (Long backplate/ short backplate) ■ N2 (Conventional mounting SH3062 or French backplate) ■ M1 (Security fitting ES3)		
S3.LERVER.SO.X.Y	Handle inside and outside for Scandinavian Oval for retrofitting with fastening for: ■ P1 (Scandinavian Oval)		

Use X for the lever handle variant and Y for the spindle.

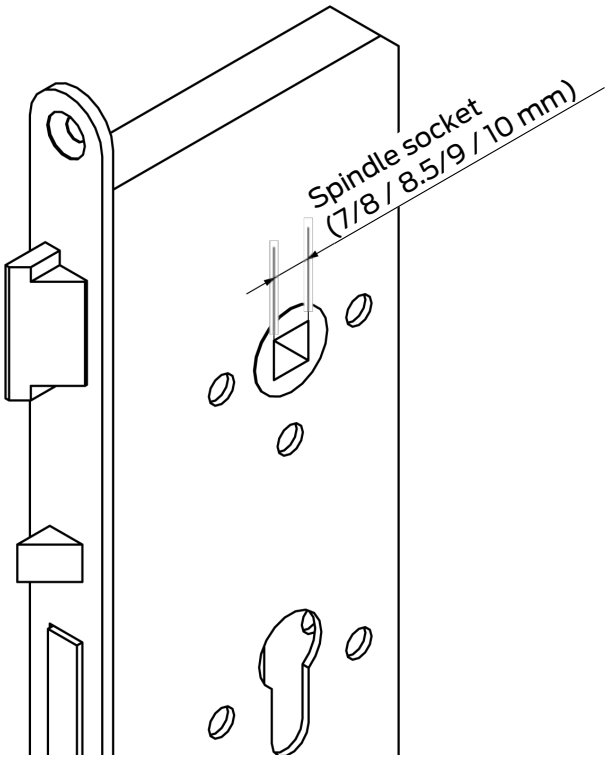
Handle variants

Letter	Description	
A	L-shaped R (round, curved)	
□	L-shaped G (mitred)	
C	U-shaped R (round curved)	
D	U-shaped G (mitred)	
E	U-shaped, rounded, offset	
F	U-shape (rectangular and offset)	

Letter	Description	
L	U-shape (rounded and angled at 45°)	 
0	Delivery without handle (for use with adapter sets and third-party handles, see *Third-party handle adapter (FSB) [▸ 390]*)	

Spindle

This is SI SmartHandle AX Advanced available for various spindle sockets in the mortise lock (see also *Spindle socket in mortise lock [▸ 22]*):



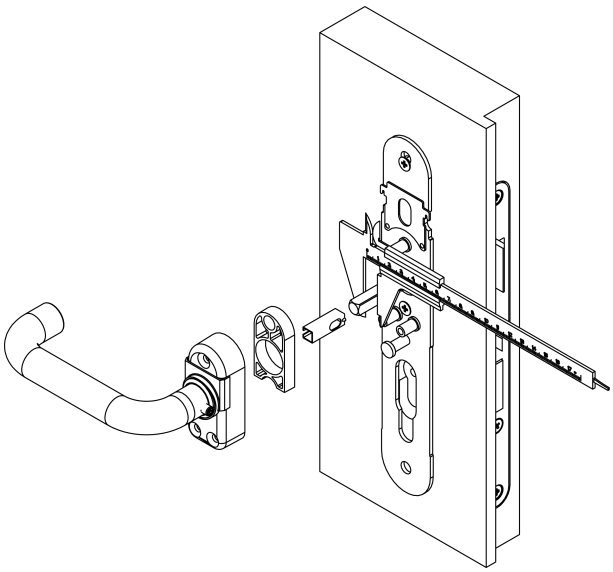
You SI SmartHandle AX Advanced have one of three spindles:

- 7 mm
- 8 mm
- 9 mm

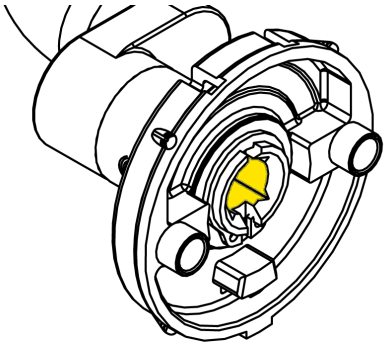
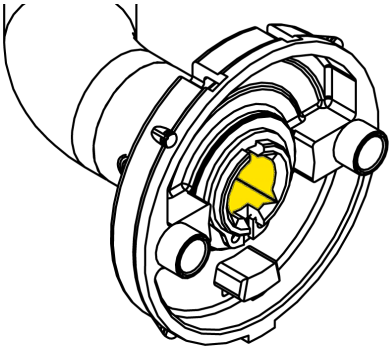
The other spindle sockets in the mortise lock are covered with adapter sleeves.

To order the correct handle set, all you need to know is the width of the spindle. You can easily measure these.

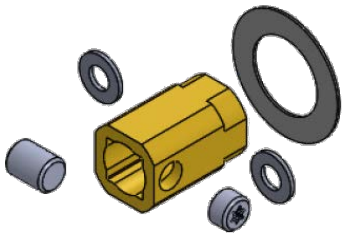
1. Remove the inside handle.
2. For 7 mm spindle only: pull the adapter off the spindle.
3. For 7 mm square only: keep the adapter.
   You will need this for the replacement handle.
4. Measure the width of the spindle.



Then order the handle set that matches your spindle.

Item code	Description	
7-8	The socket for the spindle of the handle has a width of 8 mm. Suitable for all spindle widths except 9 mm.	
9	The handle's spindle recess is 9 mm. Only suitable for 9 mm spindle width.	

10.3 Third-party handle adapter (FSB)

Item code	Description	
S2.AD-APTER.FSB	Adapter set for FSB lever handles from FSB model year 2018, compatible with the following FSB fastening types: ■ Standard (FSB ASL®) ■ Object (FSB AGL®)	
S3.AD-APTER.FSB.2.8	Adapter for mounting a handle (8 mm) from FSB for the inner side of variants N1, N2 and M1	
S3.AD-APTER.FSB.2.9	Adapter for mounting a handle (9 mm) from FSB for the inner side of variants N1, N2 and M1	

Adapter for electronics side

The ADAPTER S2.ADAPTER.FSB is used for the electronics side and is therefore always outdoors. Double-sided readers SI SmartHandle AX Advanced have two electronic sides, so two S2.ADAPTER.FSB are required.

Inside handle adapter not required

Suitable inside handles are available directly from FSB for the following variants. This means you do not need an adapter on the inner side for these variants:

- L1 (Mounting of rosettes RMO)
- P1 (Scandinavian Oval SO)
- K1 (metal frame doors RRund double-sided reading DS)

Inside handle adapter required

The following variants use a special fastening, which is not available for FSB inside handles. Therefore, you need an adapter that matches the spindle.

- N1 (long backplate LS/short backplate KS)
- N2 (Conventional mounting SH3062 and French Backplate)
- M1 (Security fitting ES3)

10.3.1 Intended use

10.3.2 FSB adapter for round rosettes

10.3.3 FSB adapter for oval rosettes

10.4 Spindle and adapter sleeves

Item code	Description	

10.5 Cover

Item code	Description	

10.6 Small parts

Item code	Description	

10.7 Escutcheon

Item code	Description	

10.8 Blank cylinder

Item code	Description	

11. Battery management

11.1 Battery warning

11.2 Replacing the batteries

NOTE

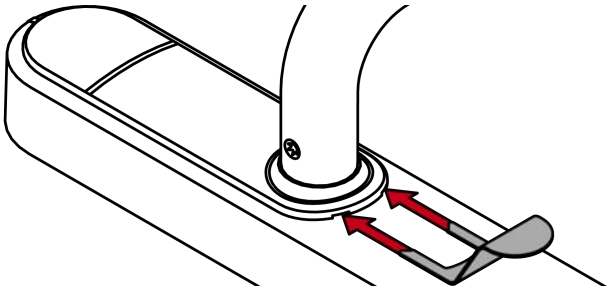
Malfunctions due to poor contact or different discharge

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

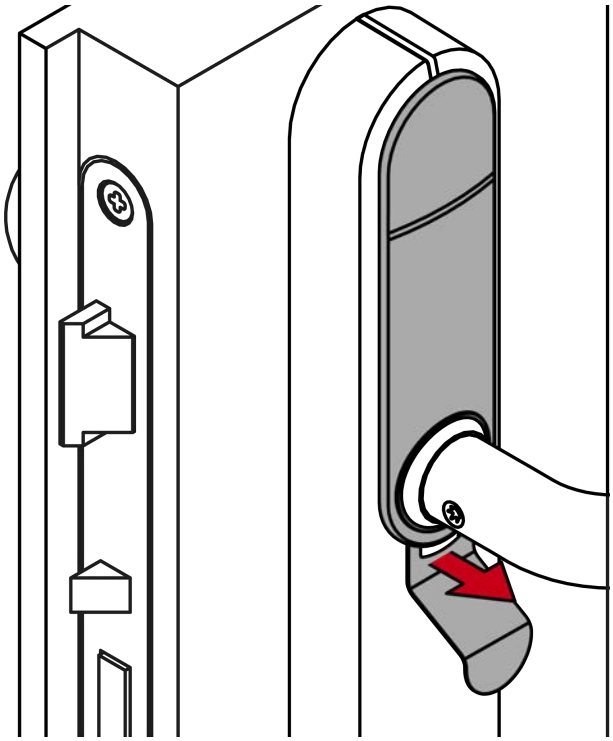
1. Only use batteries that are approved by SimonsVoss.
2. Do not touch the contacts of the new batteries with your hands.
3. Use clean and grease-free gloves.
4. Always replace all batteries at the same time.

✓ Special tool at hand.
✓ Gloves at hand.

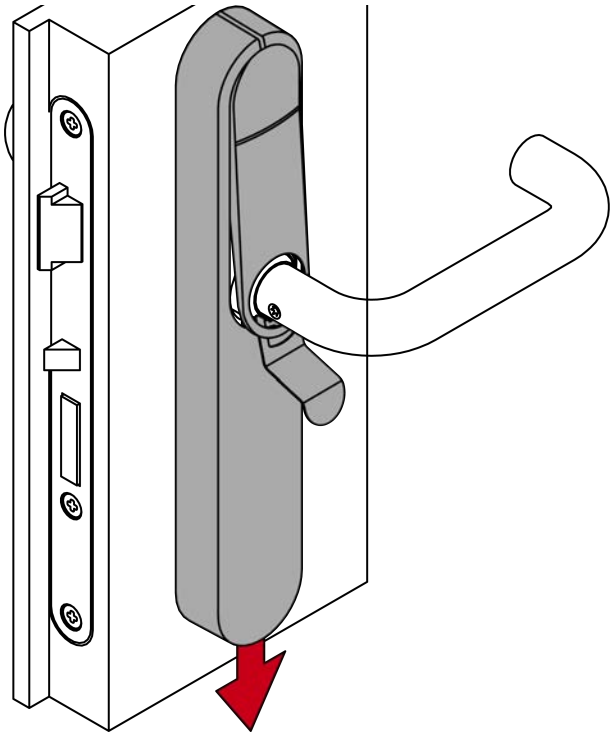
1. Insert the special tool into the cover inlay on the electronics side.



2. Use the special tool to carefully bend the cover inlay upwards.

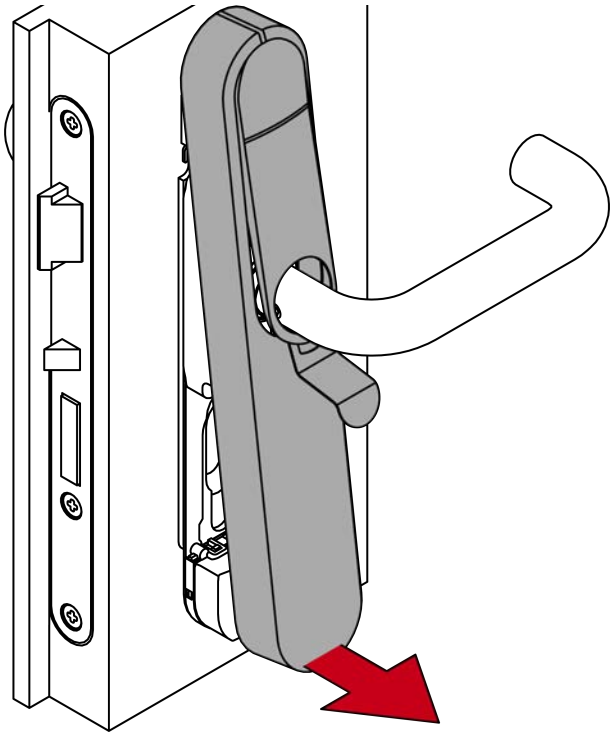


3. Slide the cover downwards.

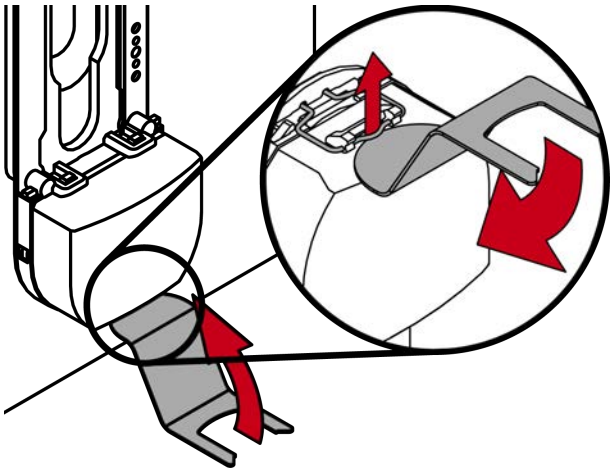


↳ Cover unlocked.

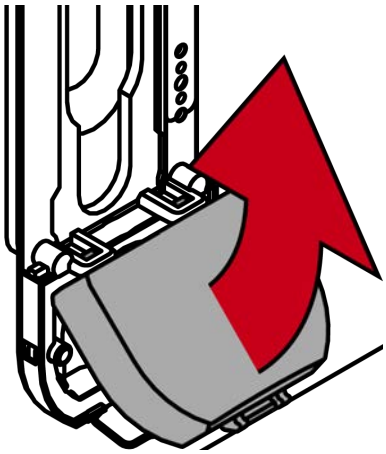
4. Remove the cover.



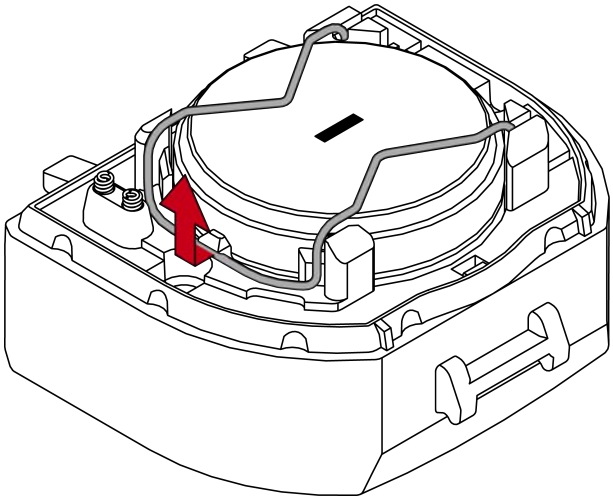
5. Use the special tool to detach the battery module clip.



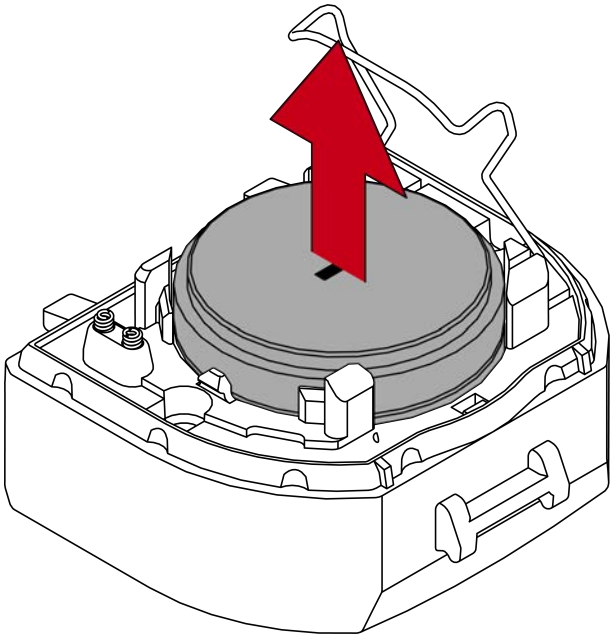
6. Remove the battery module.



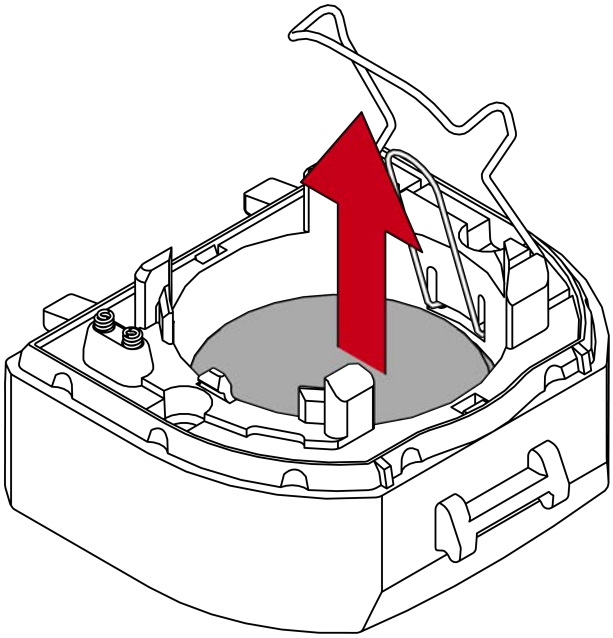
7. Use the special tool to detach the battery clip.



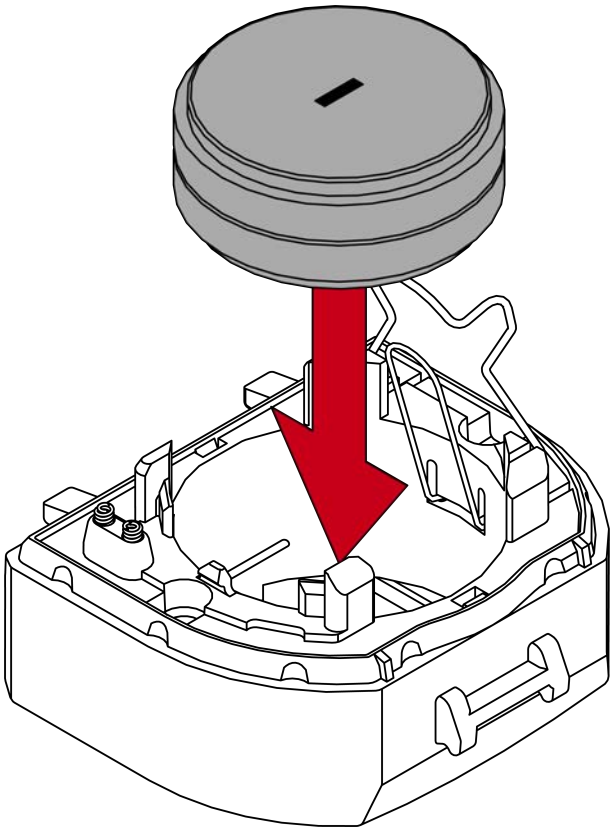
8. Remove the upper batteries.



9. Carefully bend the intermediate spring to one side.
10. Remove the lower batteries.

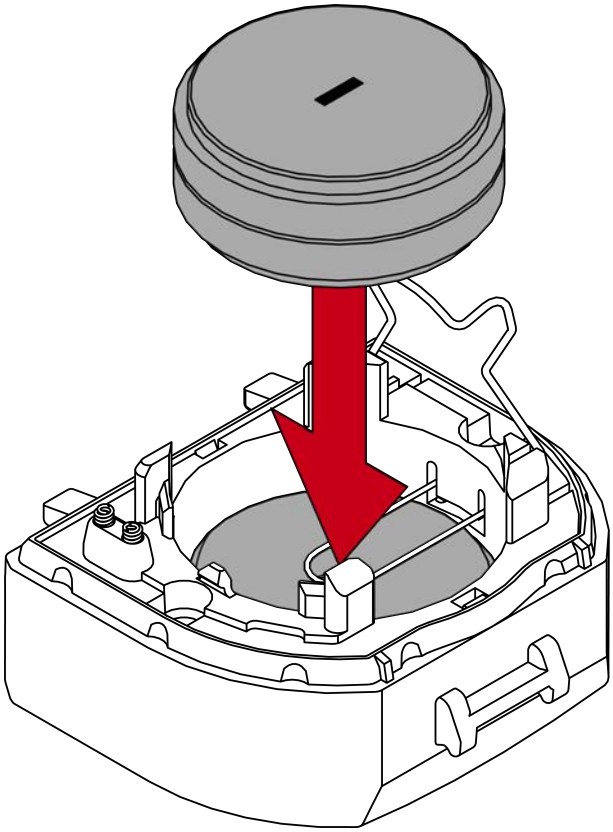


11. Insert two new batteries with the positive terminals next to each other (type CR2450).

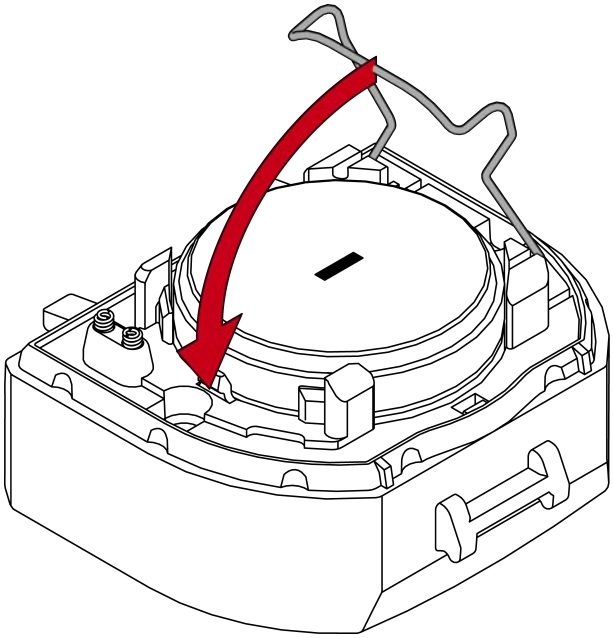


↳ Intermediate spring visible above the lower batteries.

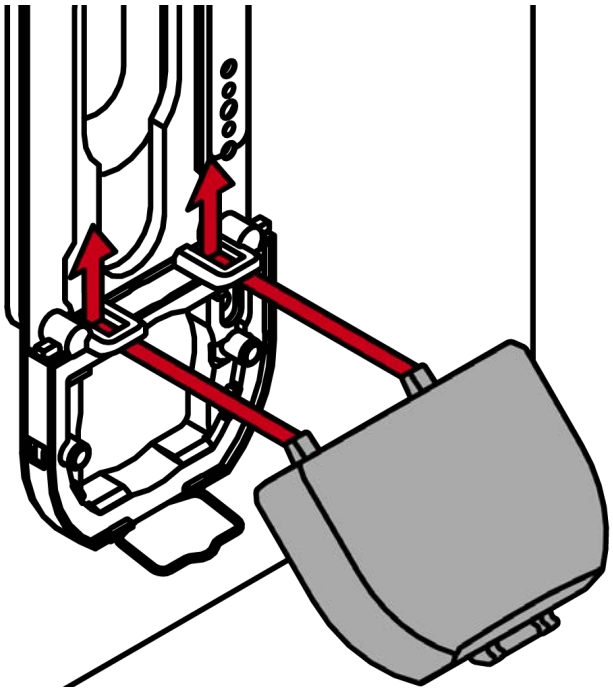
12. Insert two new batteries with the positive terminals next to each other (type CR2450).



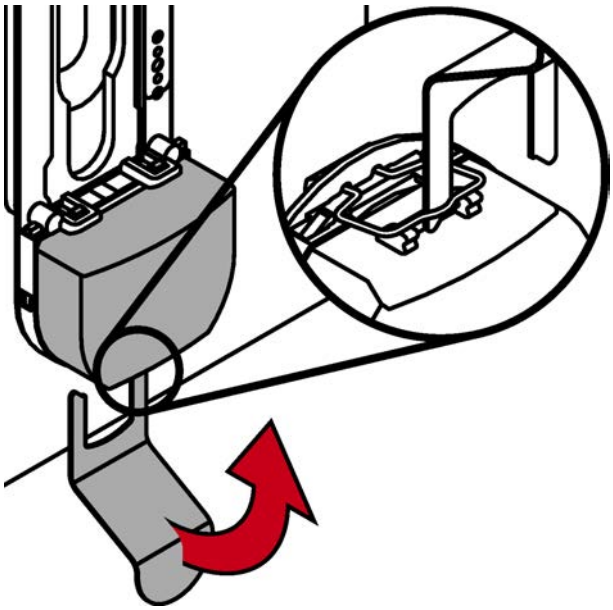
13. Reattach the battery clip.



14. Put the battery module back into the module support.

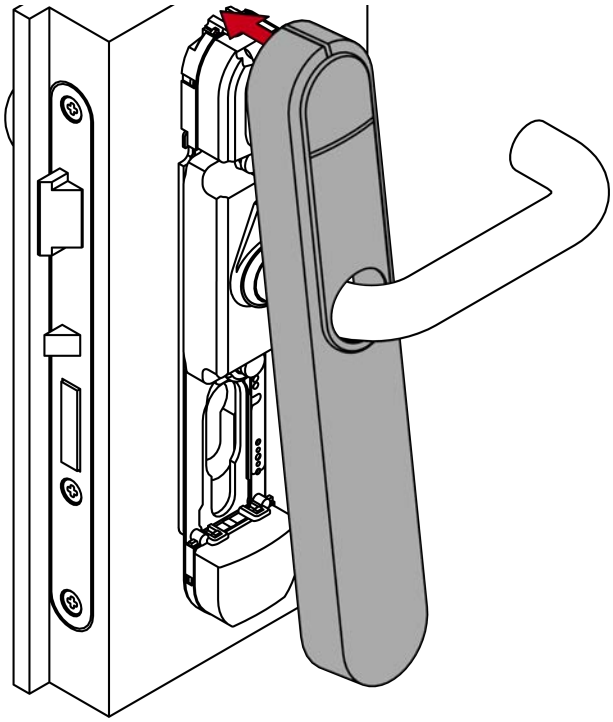


15. Use the special tool to reattach the battery module clip.

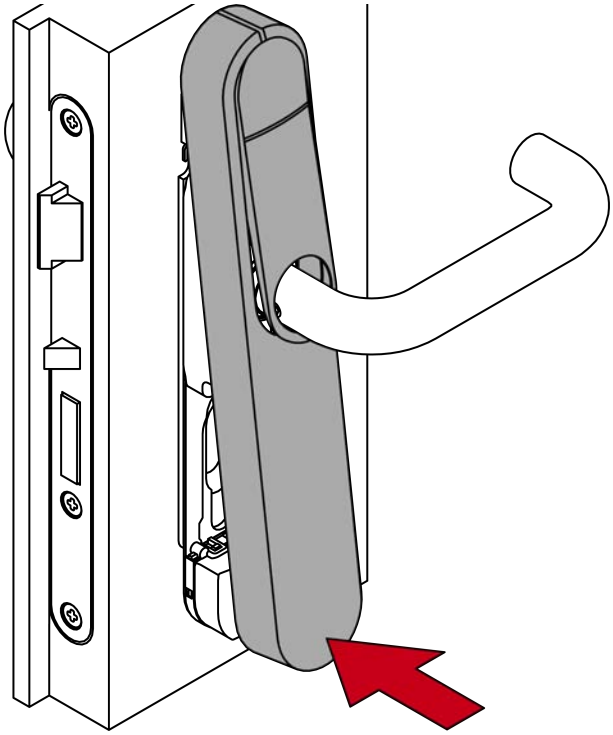


↳ SI SmartHandle AX Advanced will beep three times.

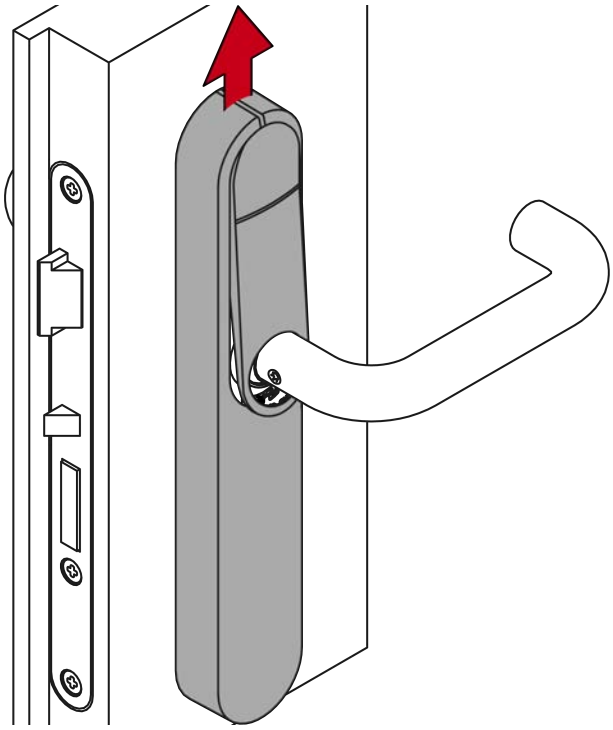
16. Place the cover on top of the fastening plate.



17. Fold down the cover.

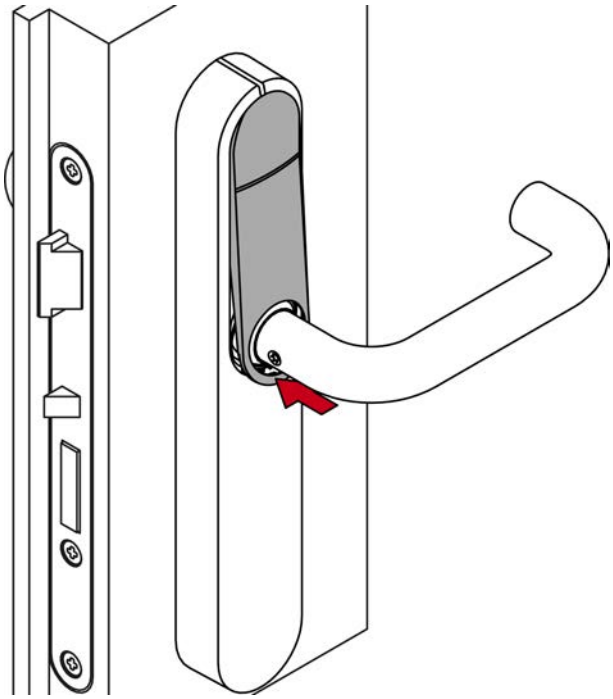


18. Push the cover against the door, sliding it upwards at the same time.



↳ Cover snaps into place.

19. Press the inlay into place.



↳ Batteries are now replaced.

11.3 Replacing batteries (Scandinavian Oval)

NOTE

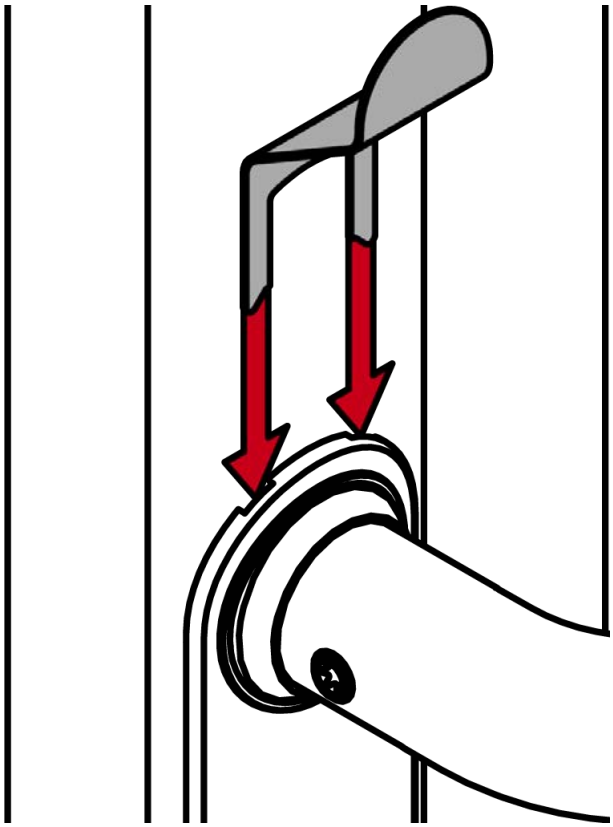
Malfunctions due to poor contact or different discharge

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

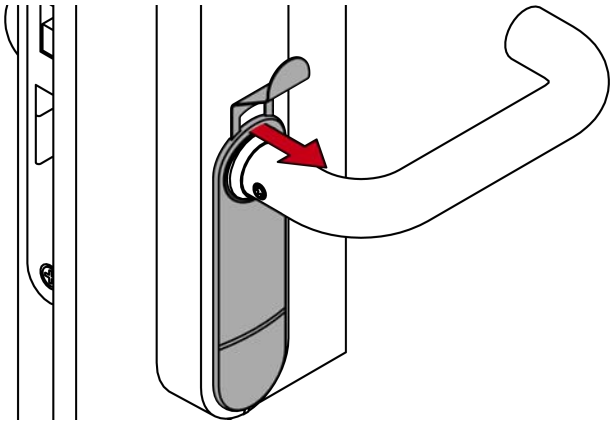
1. Only use batteries that are approved by SimonsVoss.
2. Do not touch the contacts of the new batteries with your hands.
3. Use clean and grease-free gloves.
4. Always replace all batteries at the same time.

✓ Special tool at hand.
✓ Gloves at hand.

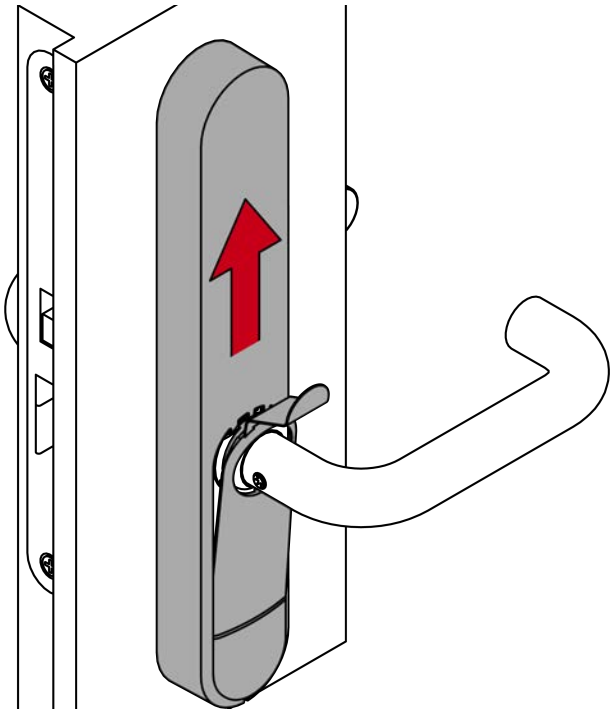
1. Insert the special tool into the cover inlay on the electronics side.



2. Use the special tool to carefully bend the cover inlay upwards.

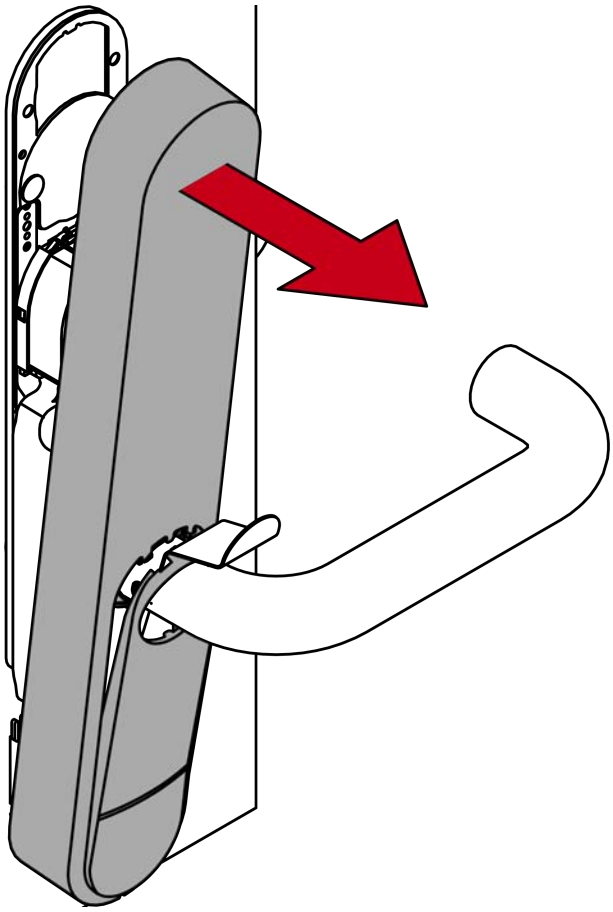


3. Slide the cover upwards.

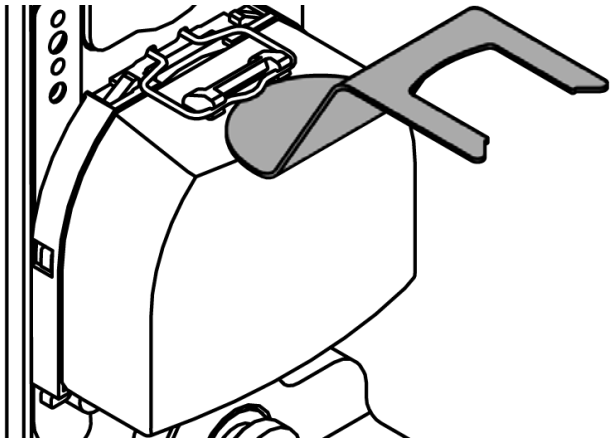


↳ Cover unlocked.

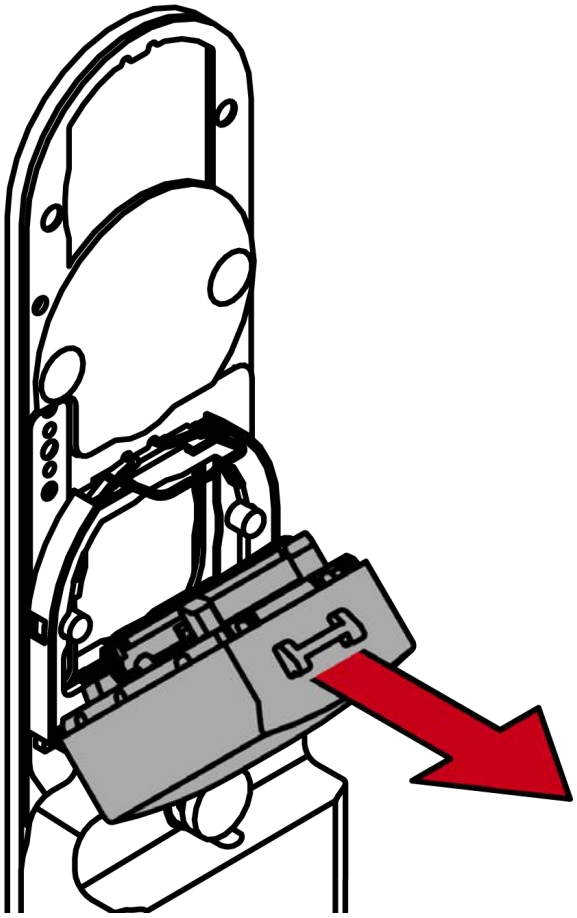
4. Remove the cover.



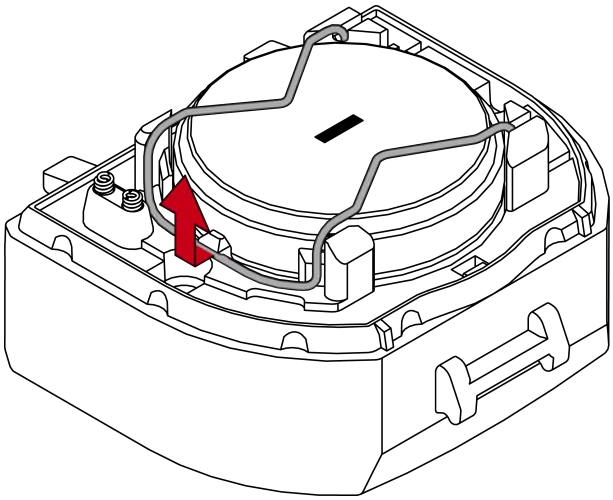
5. Use the special tool to detach the battery module clip.



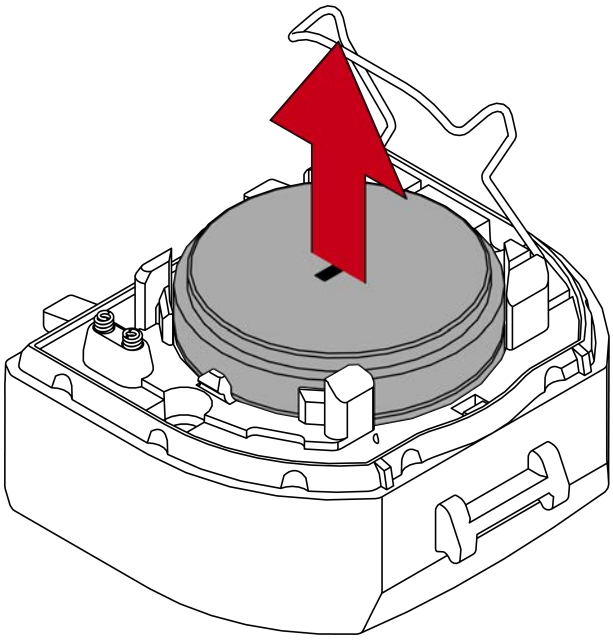
6. Remove the battery module.



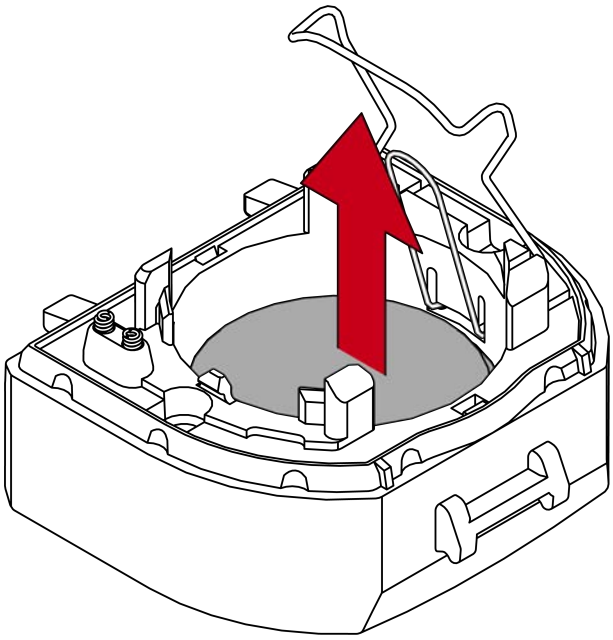
7. Use the special tool to detach the battery clip.



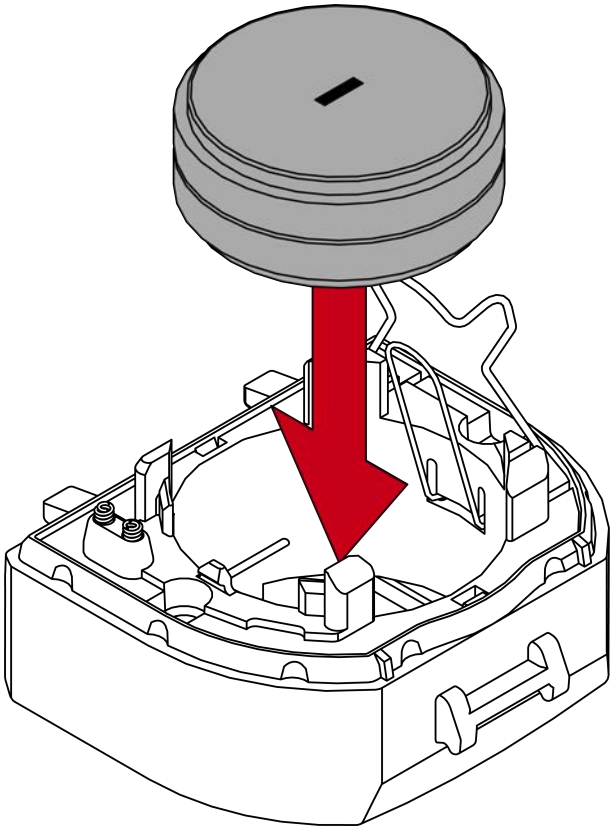
8. Remove the upper batteries.



9. Carefully bend the intermediate spring to one side.
10. Remove the lower batteries.

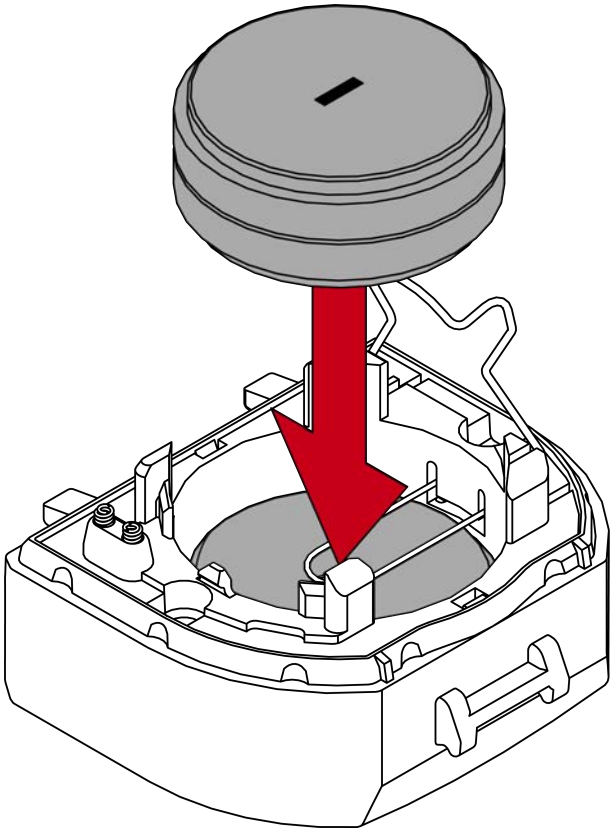


11. Insert two new batteries with the positive terminals next to each other (type CR2450).

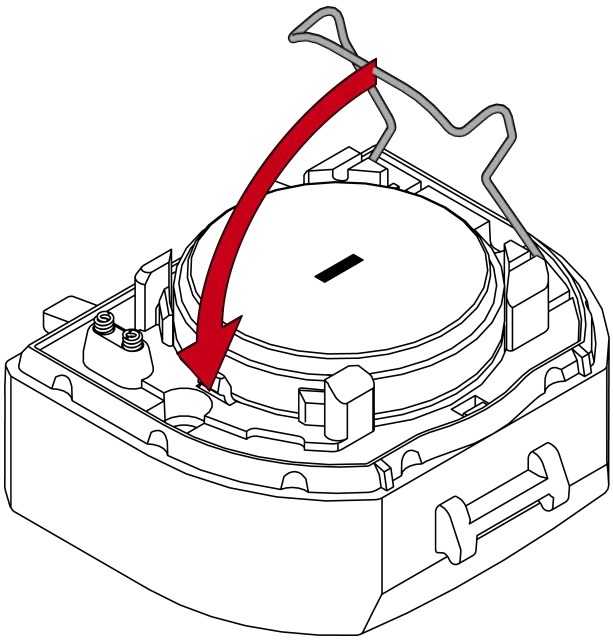


↳ Intermediate spring visible above the lower batteries.

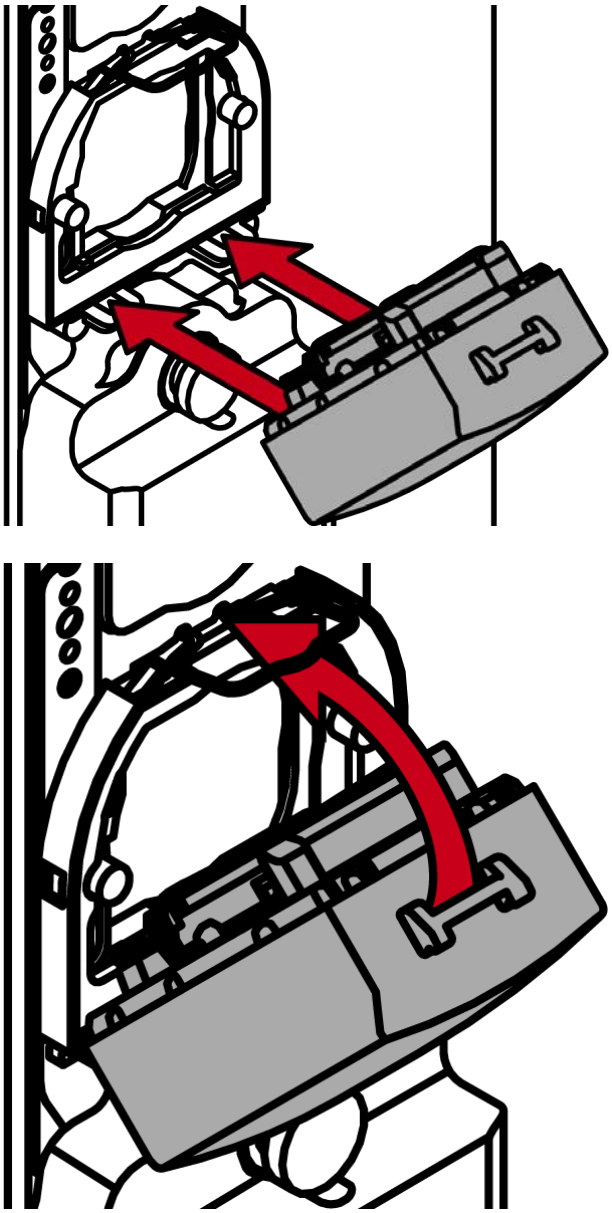
12. Insert two new batteries with the positive terminals next to each other (type CR2450).



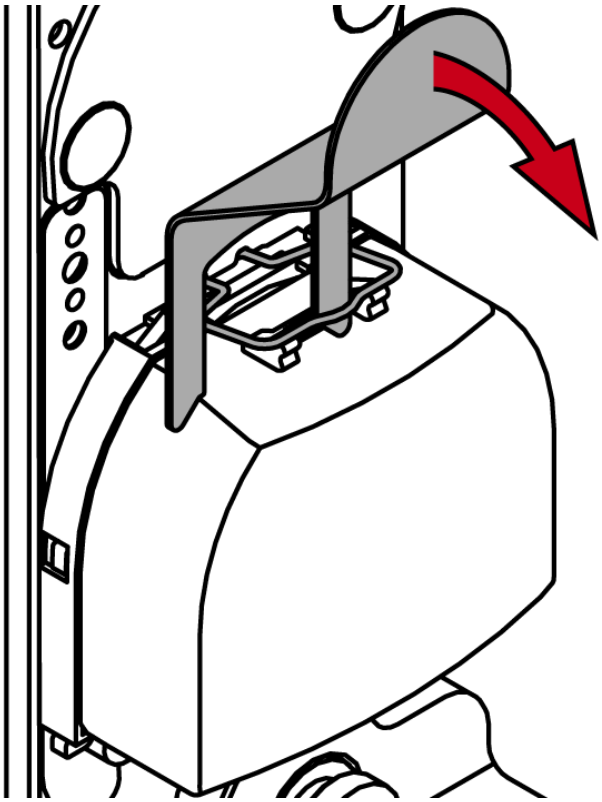
13. Reattach the battery clip.



14. Put the battery module back into the module support.

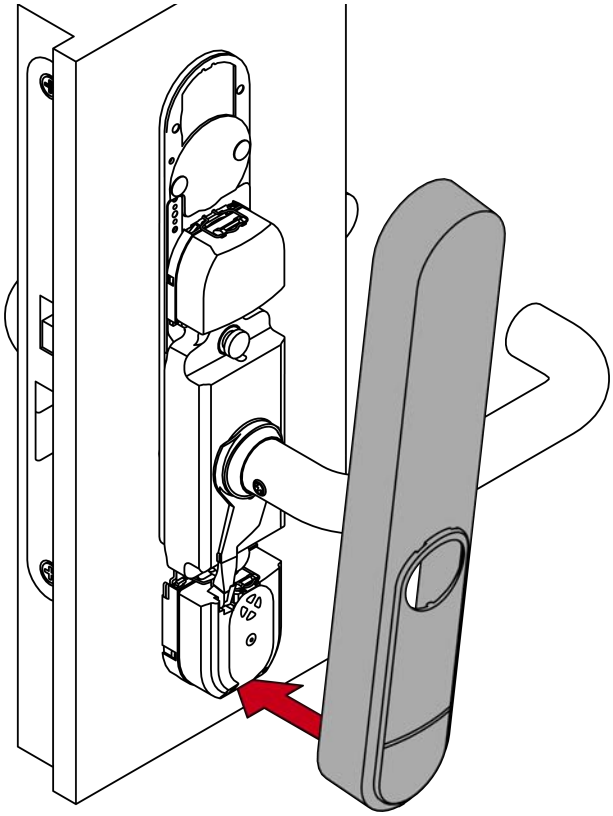


15. Use the special tool to reattach the battery module clip.



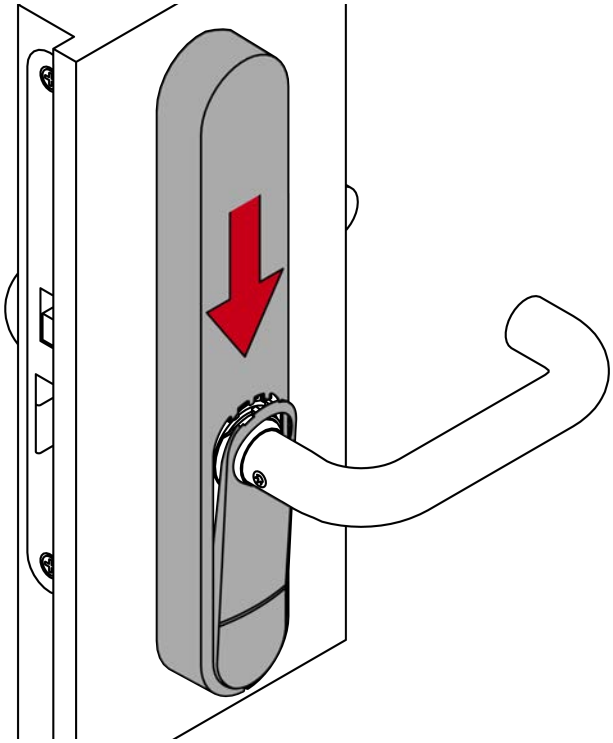
↳ SI SmartHandle AX Advanced will beep three times.

16. Position the cover on the fastening plate at the bottom.



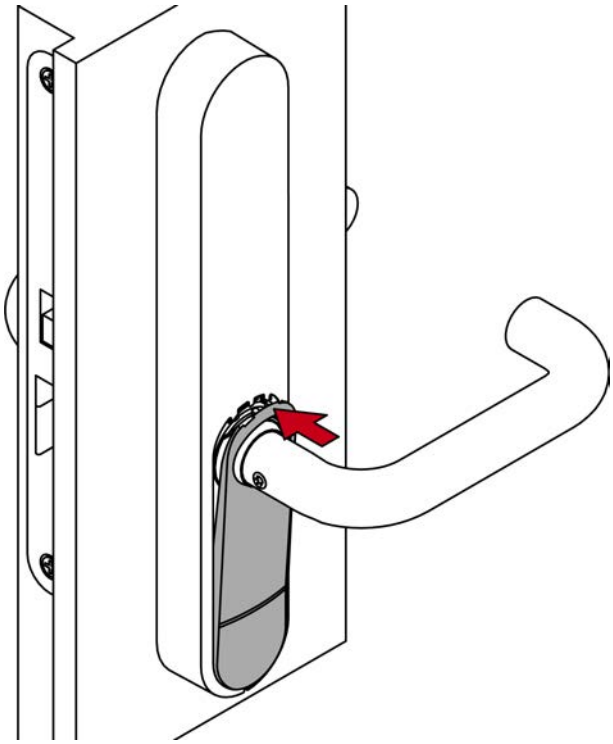
17. Fold the cover upwards.

18. Push the cover against the door while sliding it downwards at the same time.



↳ Cover snaps into place.

19. Press the inlay into place.



↳ Batteries are now replaced.

12. Maintenance, cleaning and disinfection

- If necessary, clean the SI.SmartHandle AX with a soft and, if necessary, damp cloth.
- When disinfecting the SI.SmartHandle AX, only use agents that are expressly intended for disinfecting sensitive metal or plastic surfaces.
- If necessary, change the battery.

13. Technical data

Electronics

Operating temperature range	-25 °C to +60 °C
Battery type	4x CR2450 3V lithium
Battery manufacturer	■ Duracell ■ Murata ■ Panasonic
Battery life	Up to ten years on stand-by (active and passive)
Reader systems	■ Active transponder technology, 25 kHz ■ Passive technology, 13.56 MHz (MIFARE DESFire) ■ Hybrid (active and passive) ■ Bluetooth Low Energy (BLE) ready
Read range	■ Active: ?? ■ Passive: ?? ■ BLE: ??
Networking capability	Network-ready with integrated and retrofittable LockNode
Networking	■ Online ■ Virtual ■ Offline The different types of network can be combined with one another.
Feedback signals	■ Audible (beeper) ■ Visual (LED green/red)

Mechanical system

Installation variants	■ Metal frame doors (oval escutcheons) ■ Solid-leaf doors ■■ Euro Profile cylinders, Swiss Round (round escutcheons, long backplate, short backplate, security fitting) ■■ Scandinavian Oval ■■ Panic bar adaptations
Cover dimensions, wide (W×H×D)	53×272×26 mm
Cover dimensions, narrow (W×H×D)	42×264×26 mm
Centres distance (long backplate, short backplate)	72 mm
Centres distance (metal frame)	■ 85 mm ■ 92 mm ■ 94 mm
Centres distance (Scandinavian Oval)	111.5 mm
Door thickness	■ S: ■ M: ■ L: ■ X:
Door thickness	■ S: ■ M: ■ L: ■ X:
Door thickness	■ S: ■ M: ■ L: ■ X:
Handle turning angle	50° effective

Spindle	■ 7 mm ■ 8 mm ■ 8.5 mm ■ 9 mm ■ 10 mm
IP protection rating	Up to IP66 (WP variant)
Colours (cover)	■ Stainless steel/dark grey (RAL 7021) ■ Stainless steel/traffic white (RAL 9016) ■ Brass/traffic white (RAL 9016)
Colours (handle)	■ Brushed stainless steel, painted ■ Brushed brass, coated
Colours (escutcheon)	■ Brushed nickel, coated ■ Brushed brass, coated
Certifications	■ MPA national technical approval ■ EN 16867 (in pipeline) ■ EN 1634 ■ EN 179 ■ EN 1906 (Grade 4) ■ EN 1125 ■ DIN 18257 (ES3, in pipeline) ■ PAS24

Configuration

Storable access events	Up to 1,500
Time zone groups	100+1
Can be upgraded	Firmware upgradable
Engage interval	■ Pulse opening: 1 s to 25 s ■ Flip-flop
Number of identification media that can be managed per SH AX ADV	Up to 64,000

Emissions

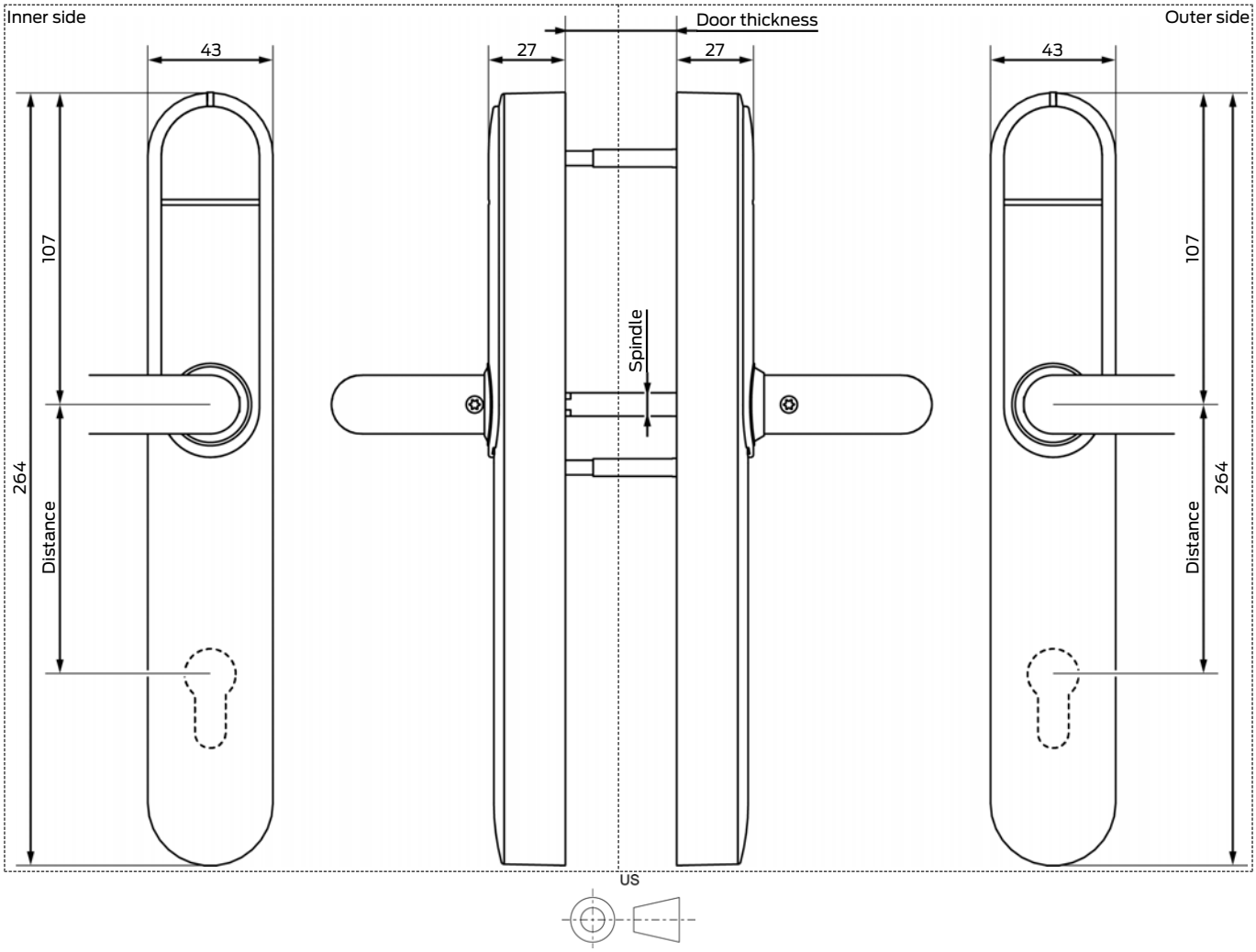
Radio emissions

15.24 kHz - 72.03 kHz Only for item numbers: SI-S3.*LN*	10 dBµA/m (3 m distance)
13.560006 MHz - 13.560780 MHz Only for item numbers: SI-S3.*M.WO*, SI-S3.*LN*, SI-S3.*OSS*	1.04 dBµA/m (3 m distance)
868.000 MHz - 868.600 MHz / 869.700 MHz - 870.000 MHz Only for item numbers: SI-S3.*M.WO*, SI-S3.*LN*	<25 mW ERP
2402 MHz - 2480 MHz Only for item numbers: SI-S3.*M.WO*, SI-S3.*LN*, SI-S3.*OSS*	2.5 mW

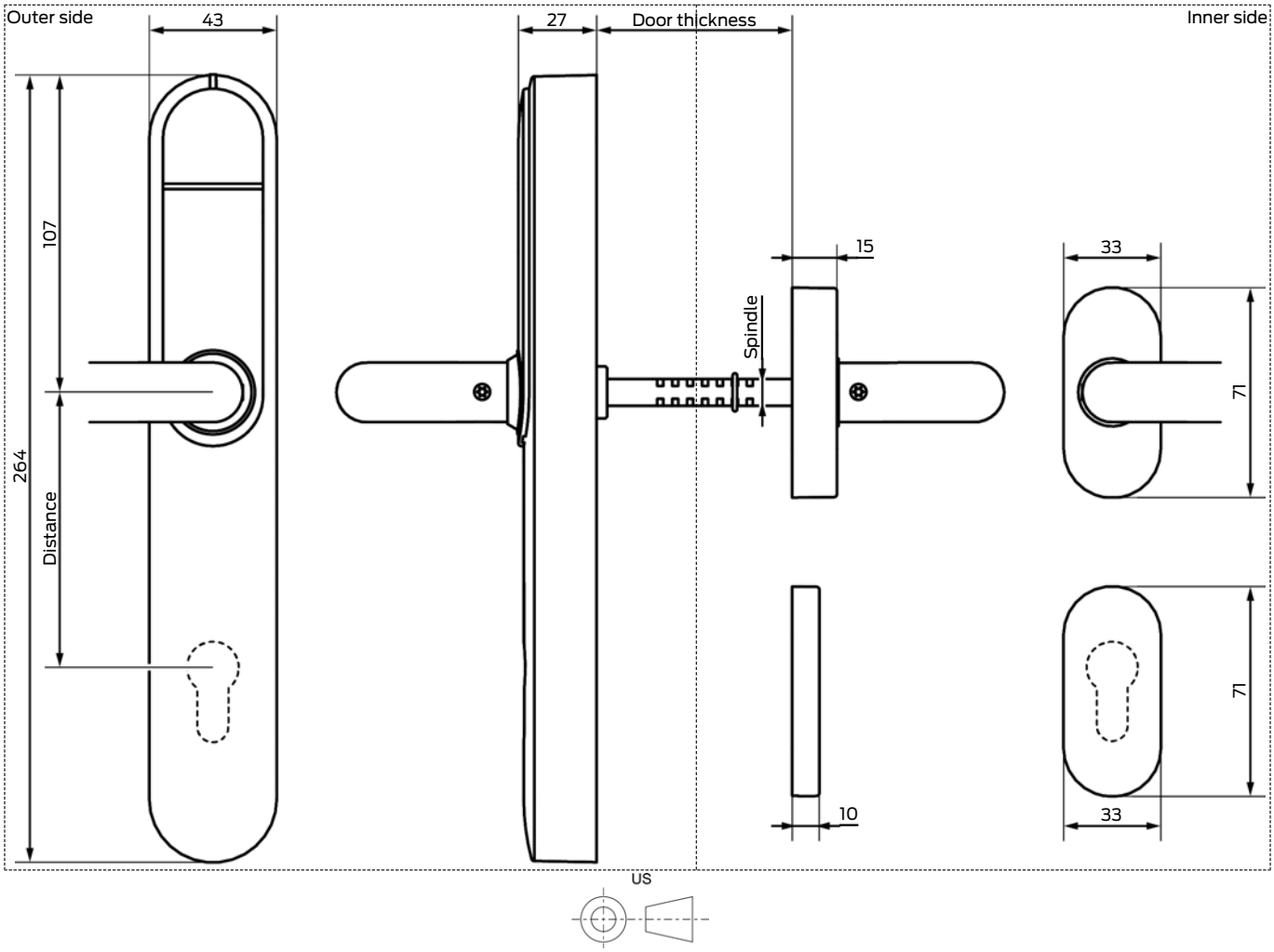
13.1 Scale drawings

13.1.1 fittings

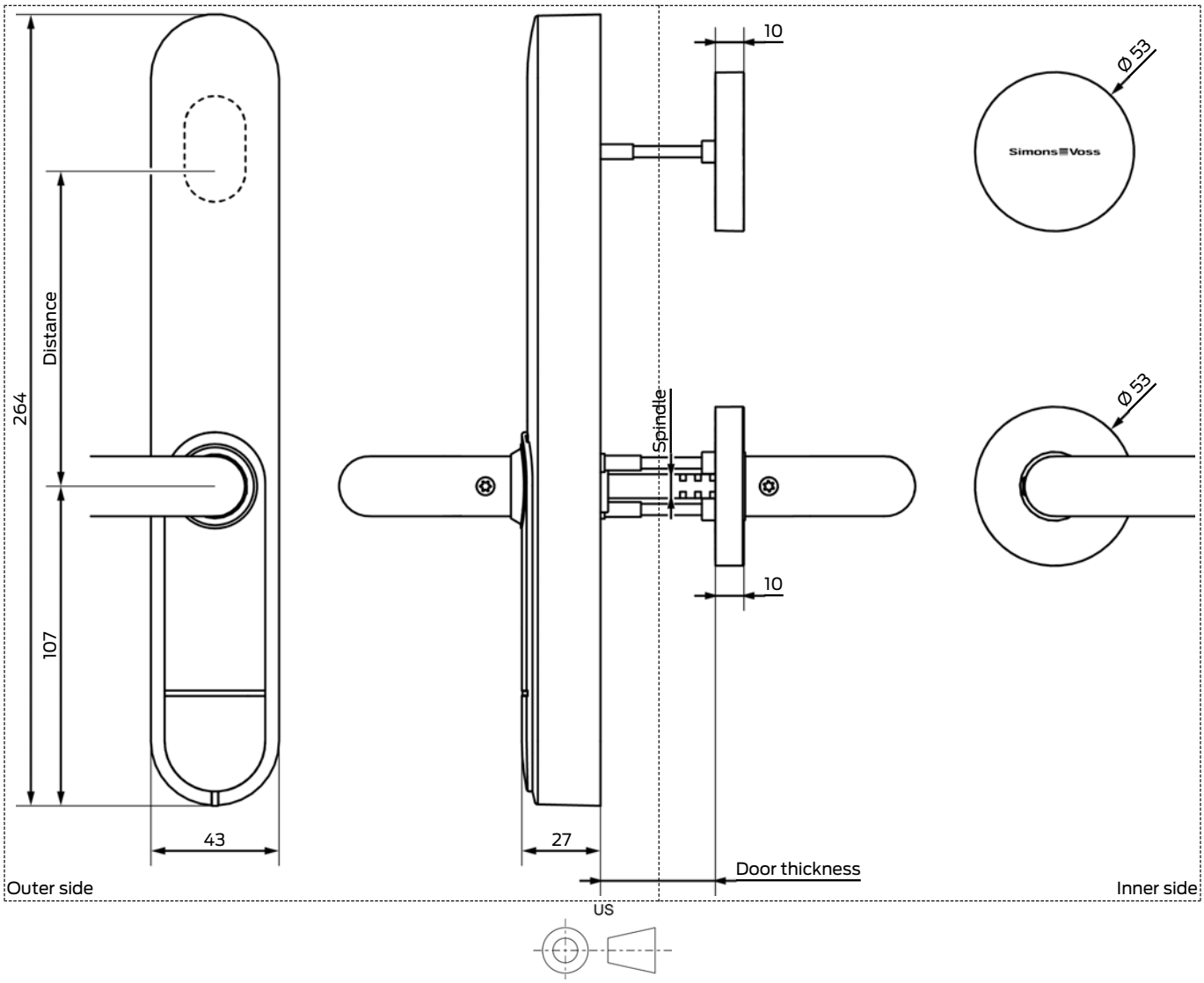
13.1.1.1 Long backplate/short backplate



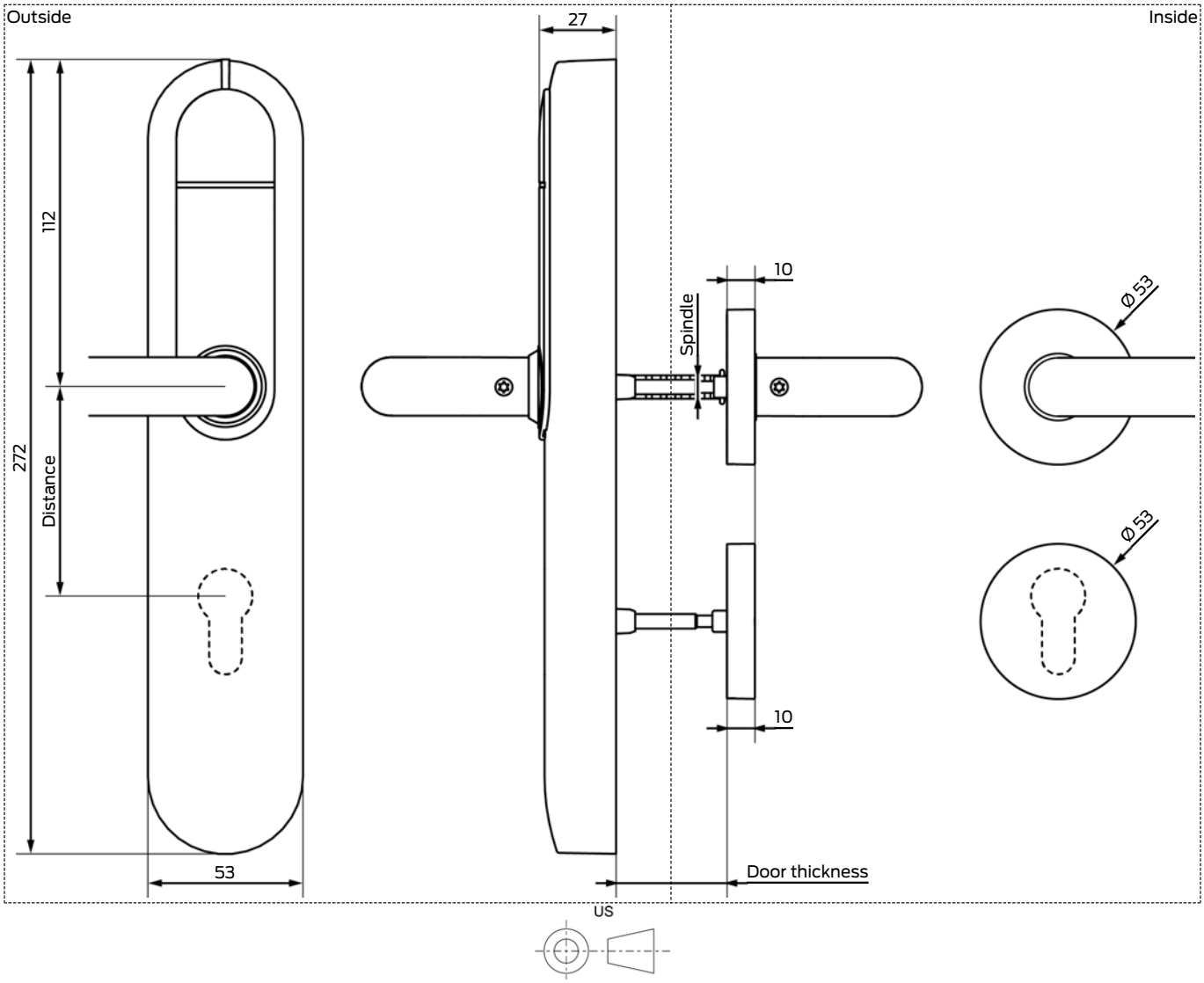
13.1.1.2 Metal frame



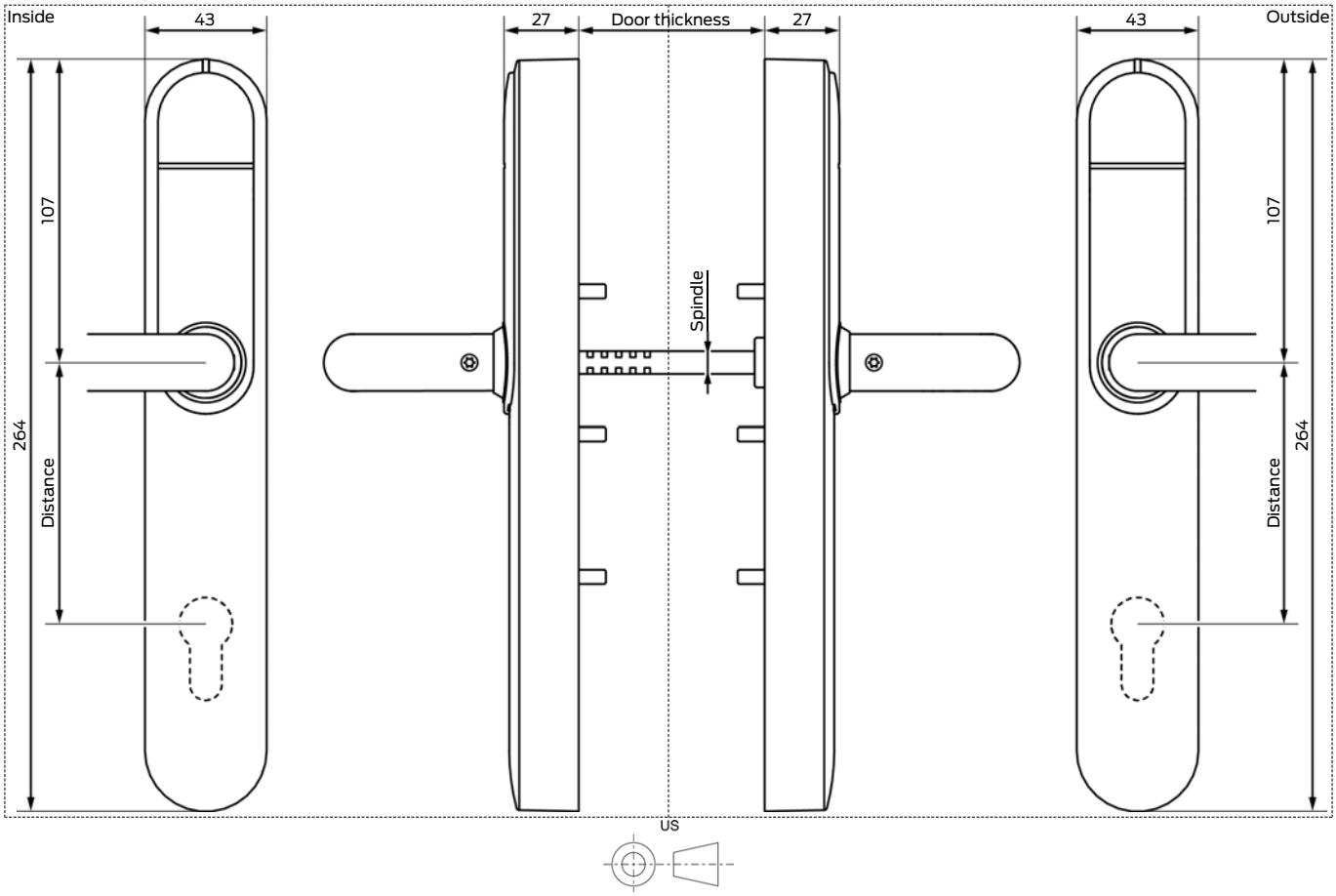
13.1.1.3 Scandinavian Oval



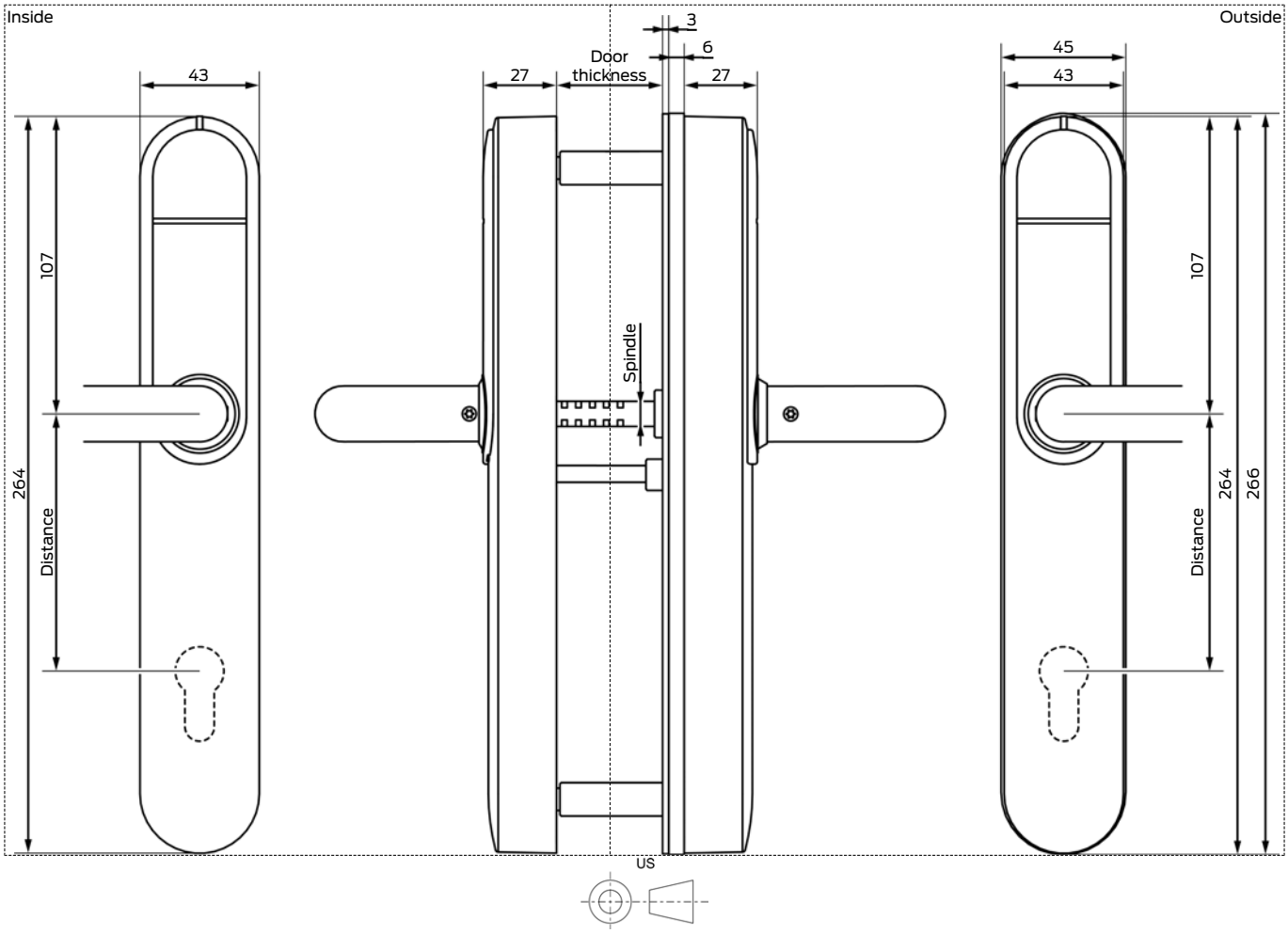
13.1.1.4 Escutcheon installation



13.1.1.5 Reader on both sides

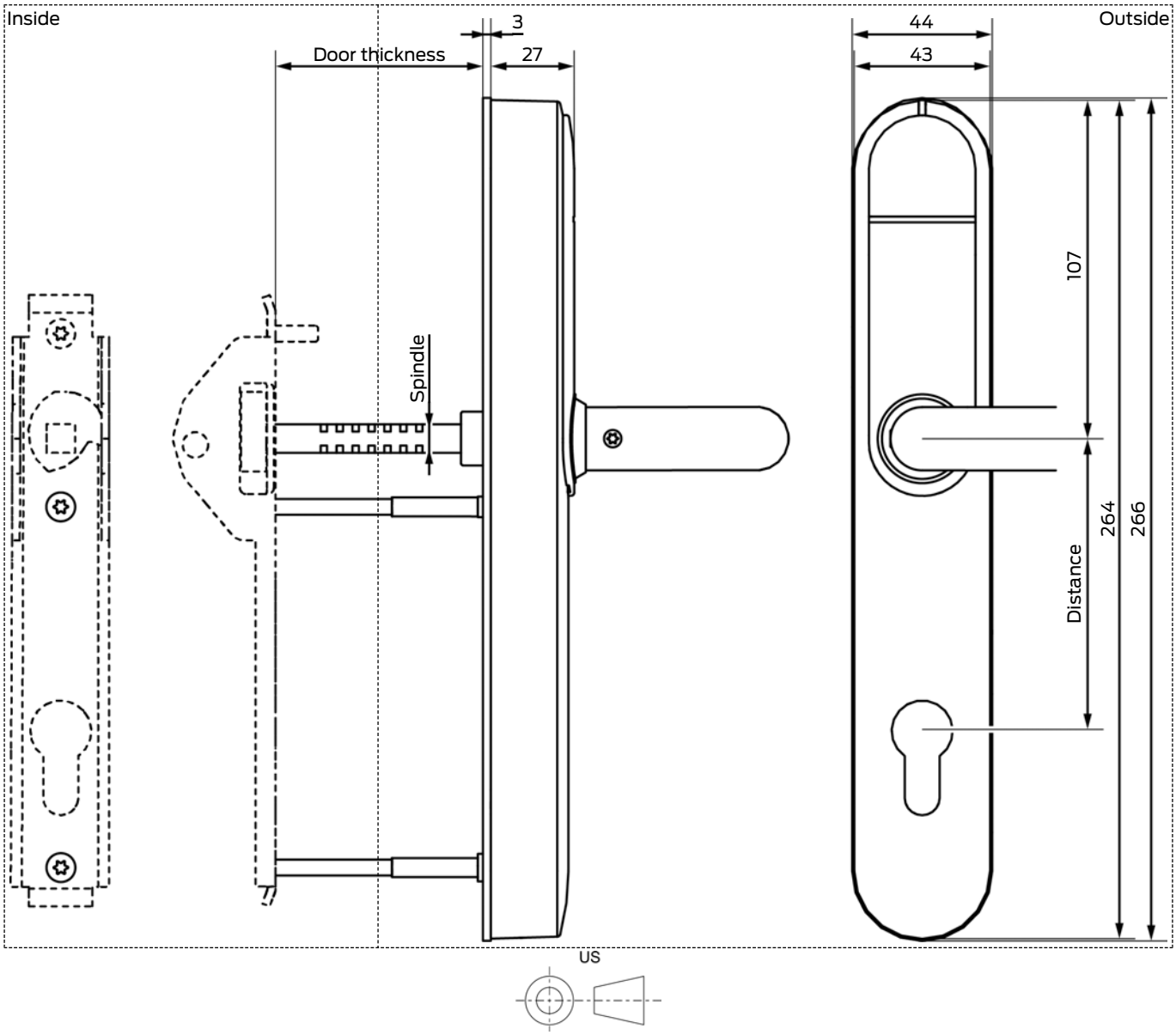


13.1.1.6 Security fitting

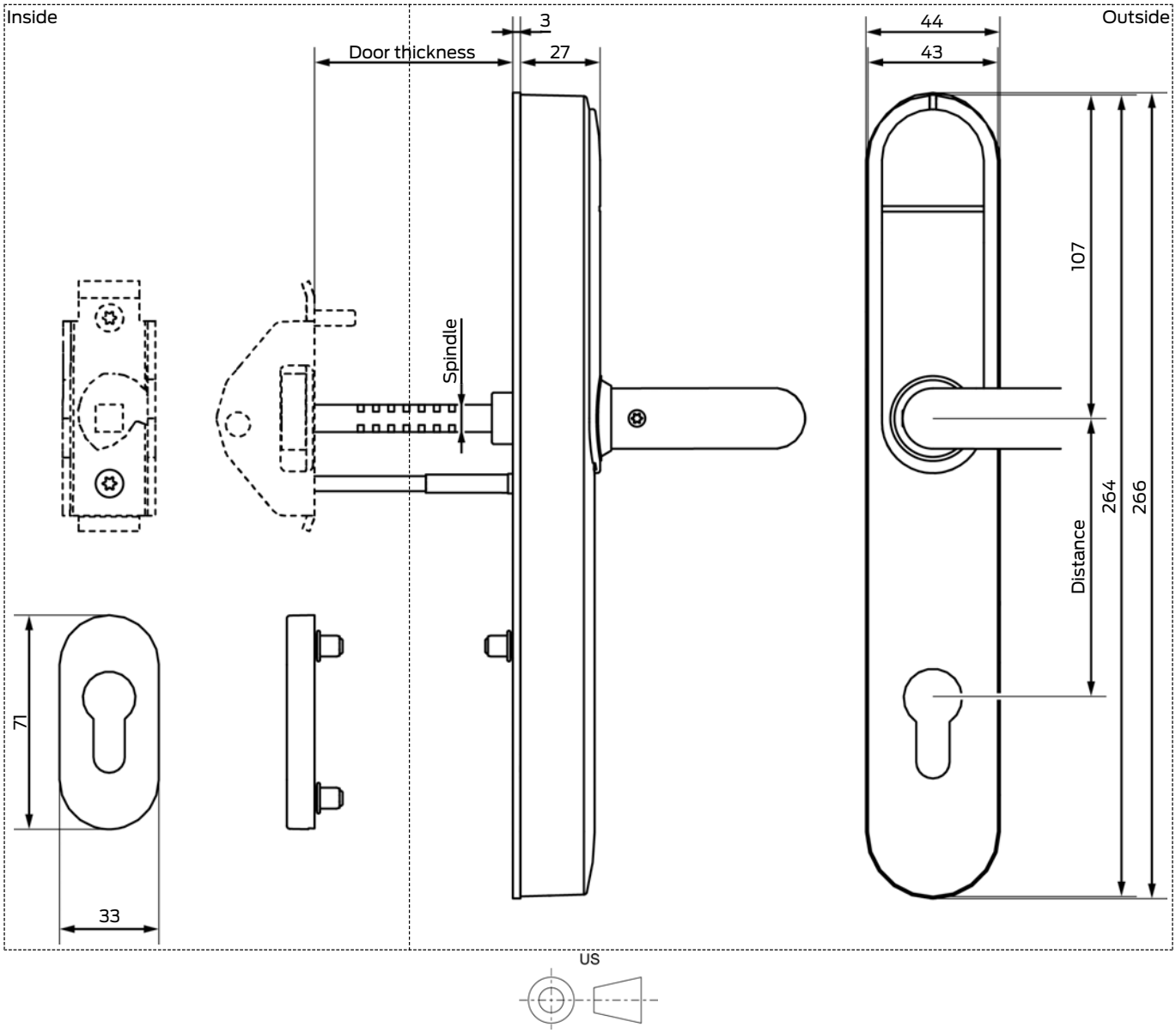


13.1.1.7 Panic fitting with narrow backplate

With backplate

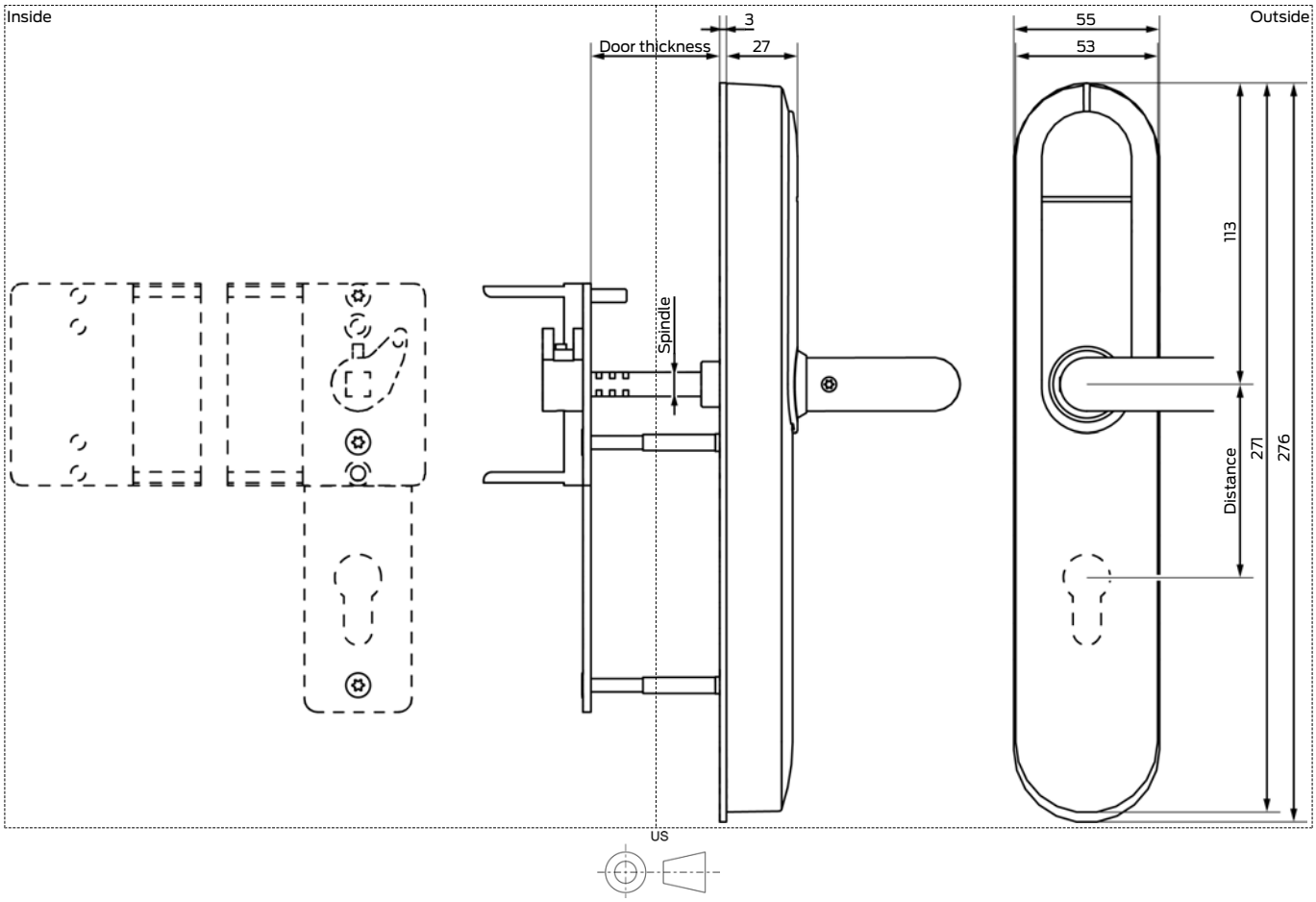


With oval escutcheon

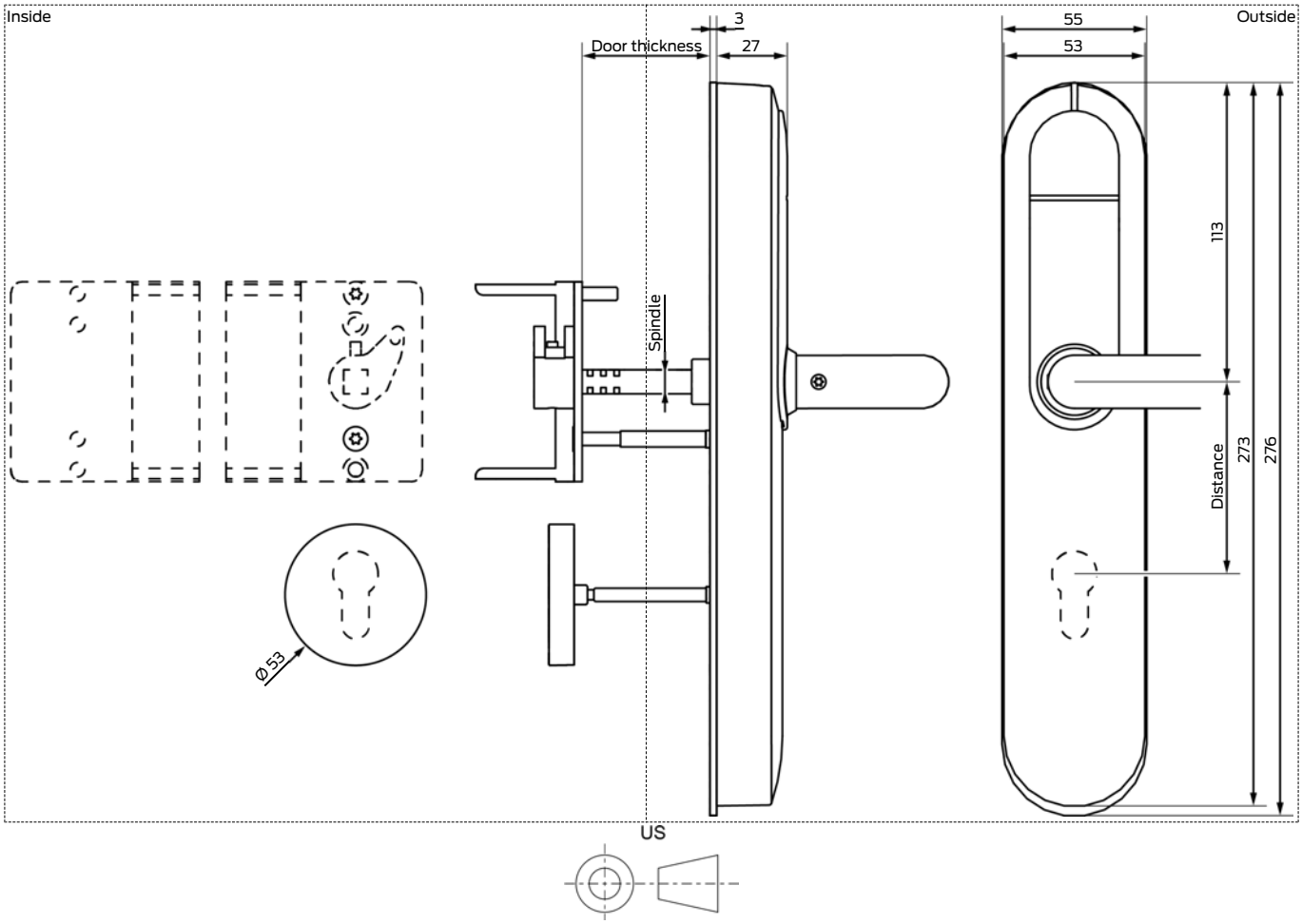


13.1.1.8 Panic fitting with wide backplate

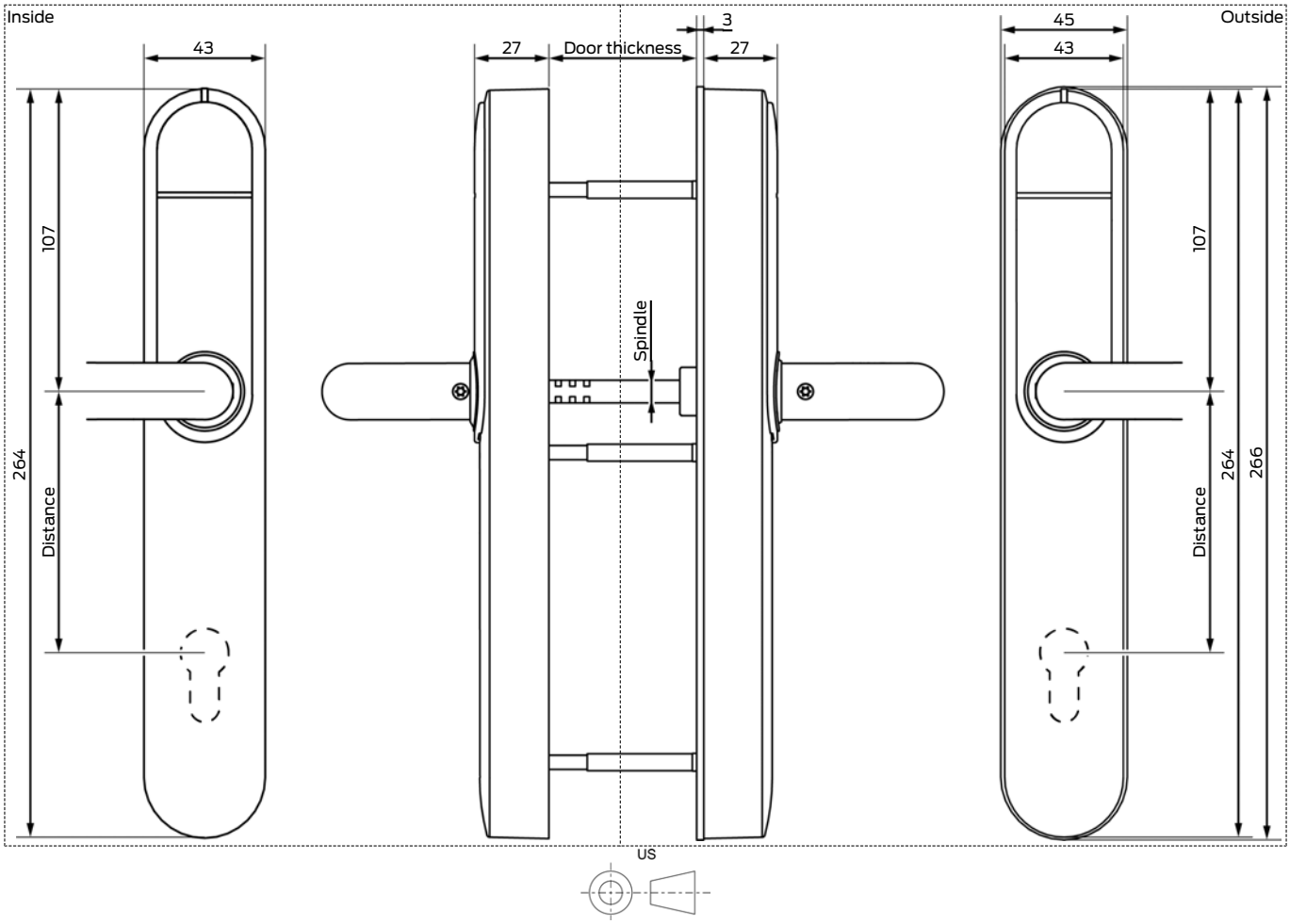
With backplate



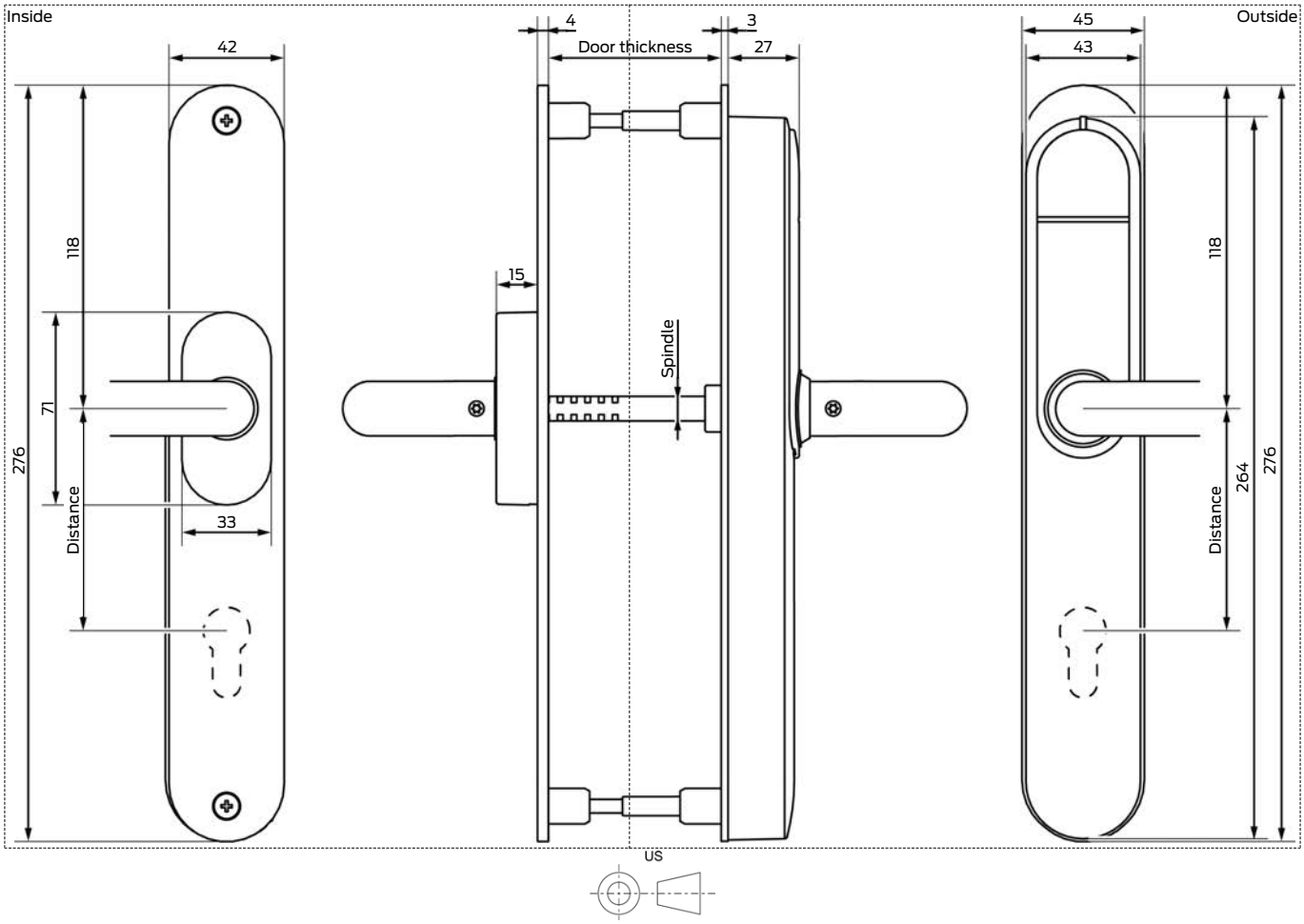
With round escutcheon



13.1.1.9 Conventional installation SH3062/FR195

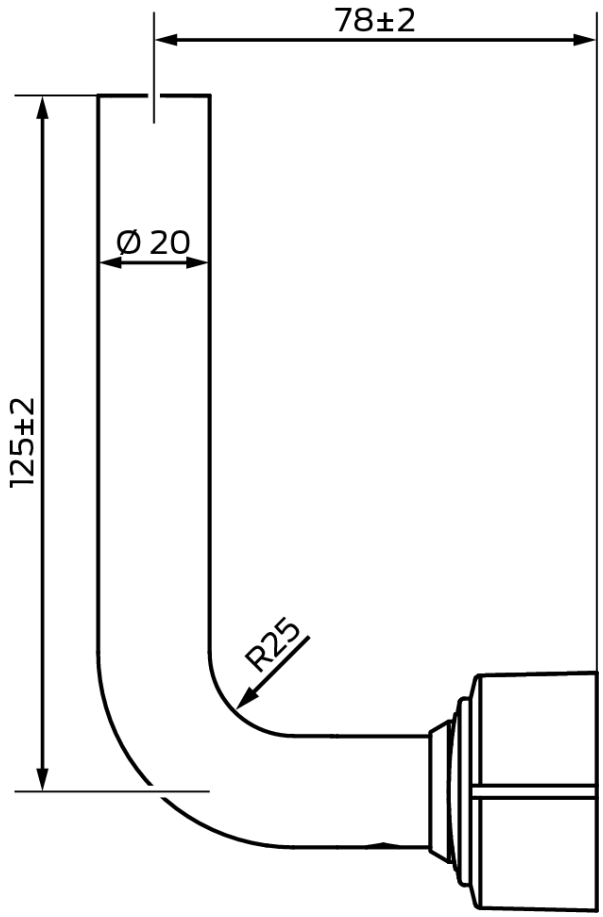


13.1.1.10 Conventional installation 105/145

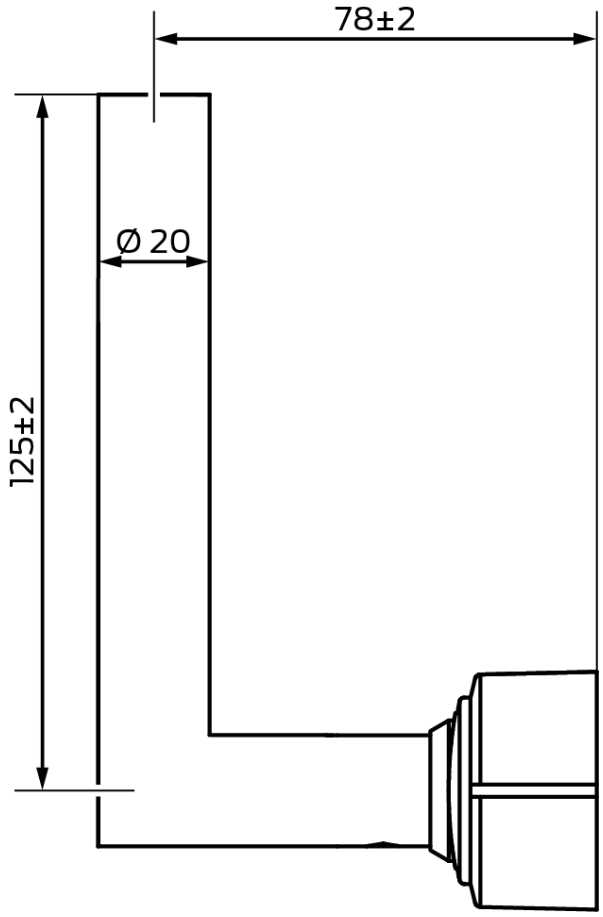


13.1.2 Handle

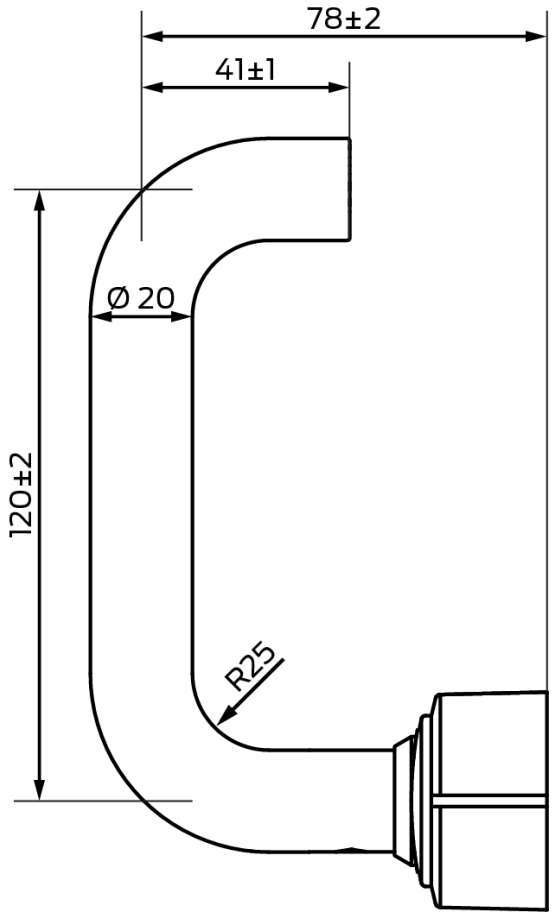
A - L shaped R (rounded, curved)



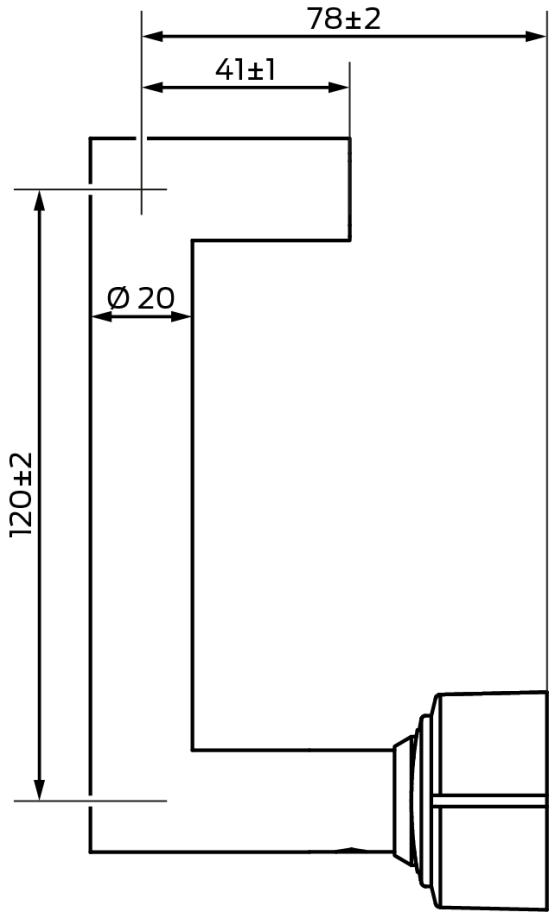
B - L-shaped G (mitred)



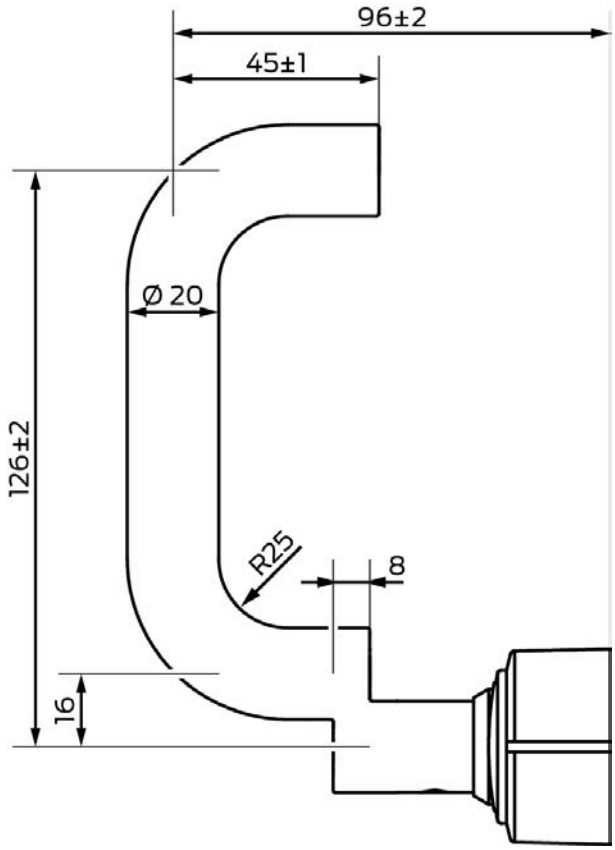
C - U-shaped R (rounded, curved



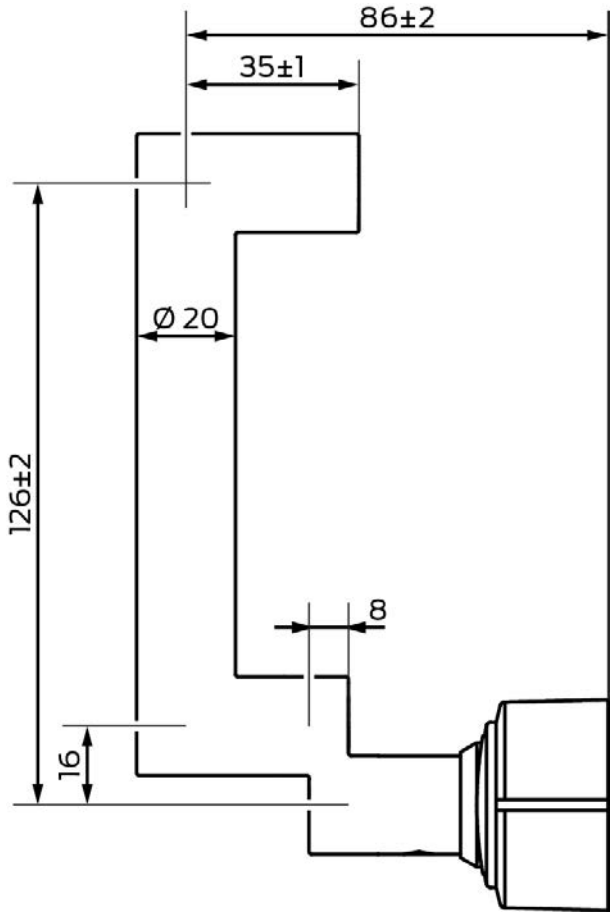
D = U-shaped G (bevelled)



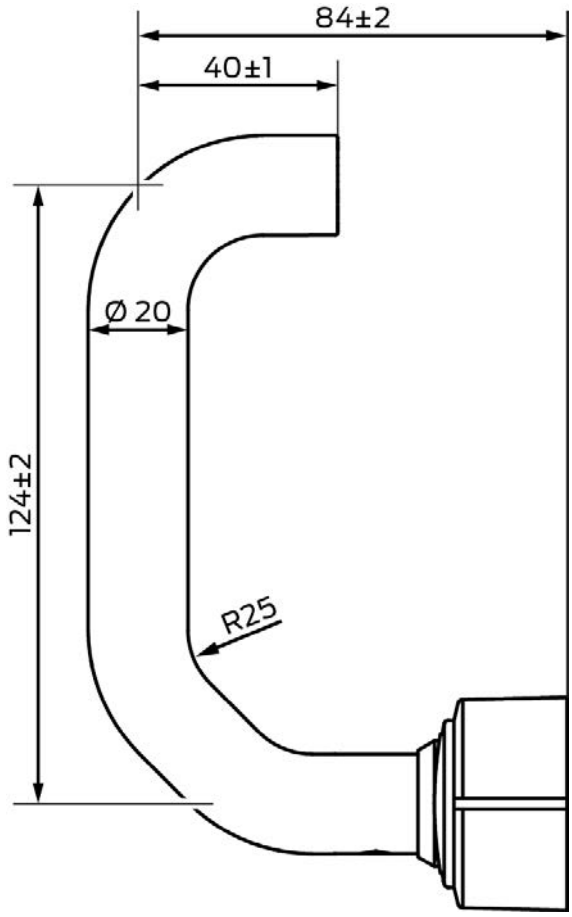
E = U-shaped (rounded, curved), offset



F - U-shaped (square and offset)

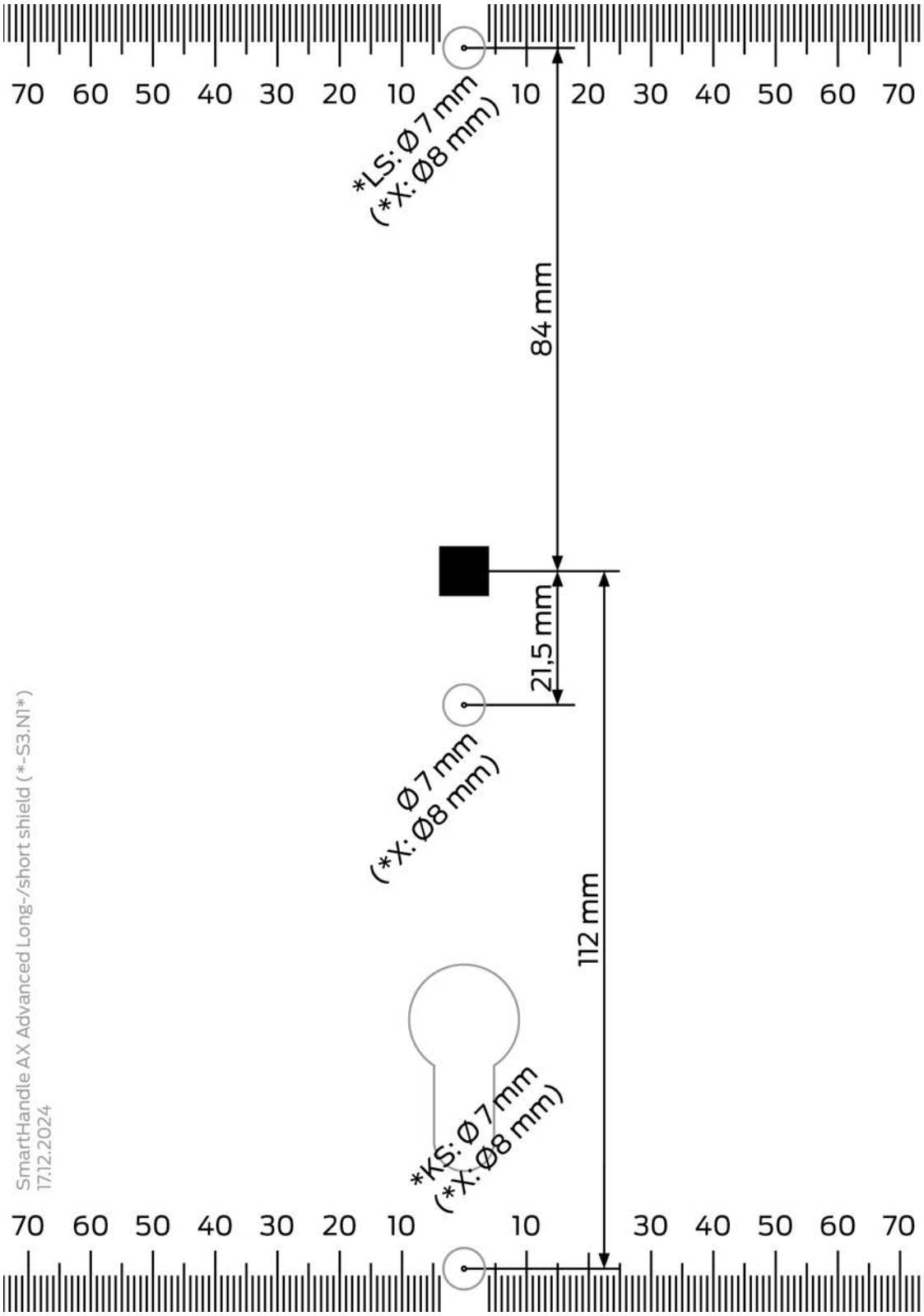


L - U-shaped (rounded and 45º bent)

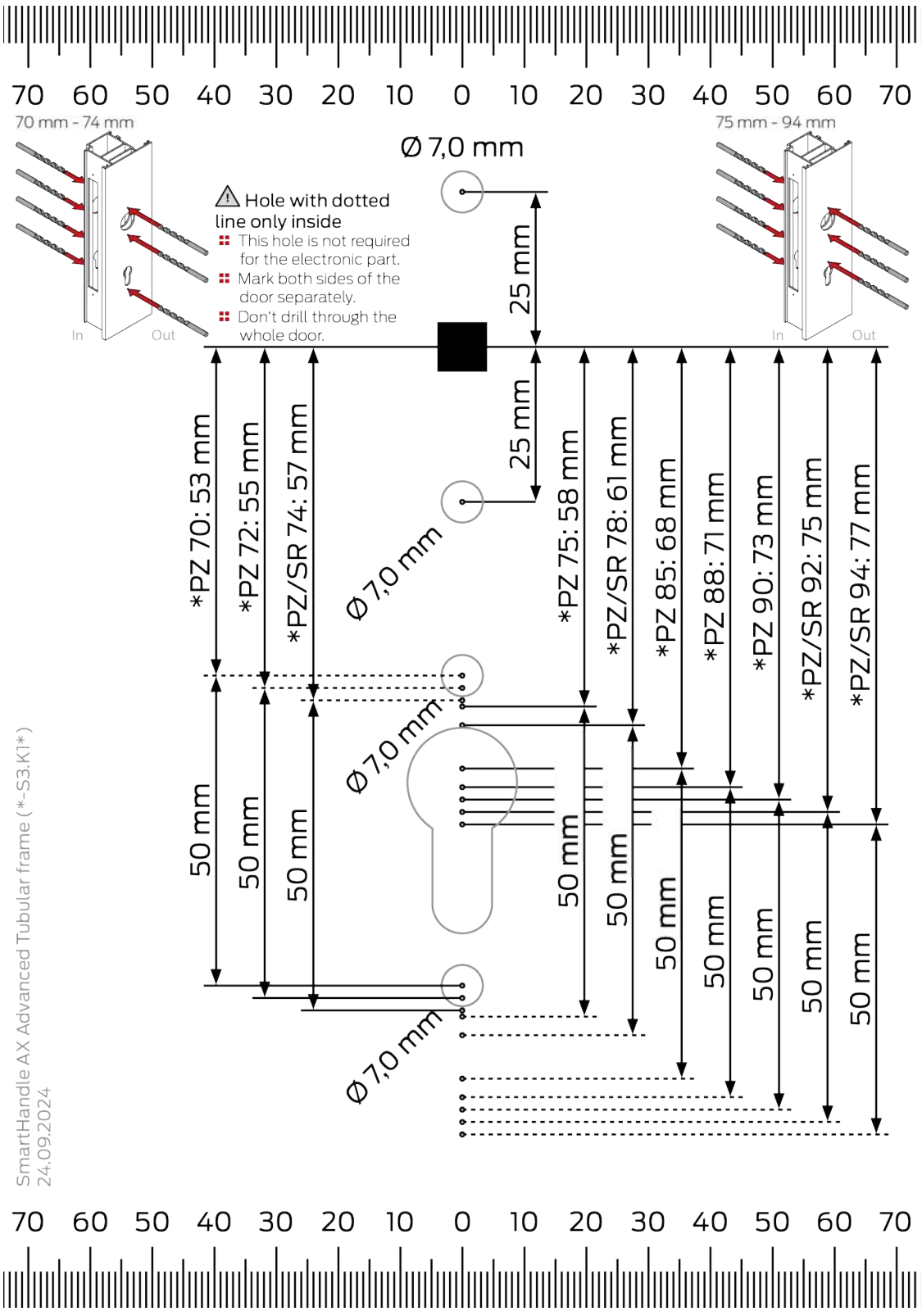


13.2 Drilling templates

13.2.1 Drilling template for long backplate/short backplate

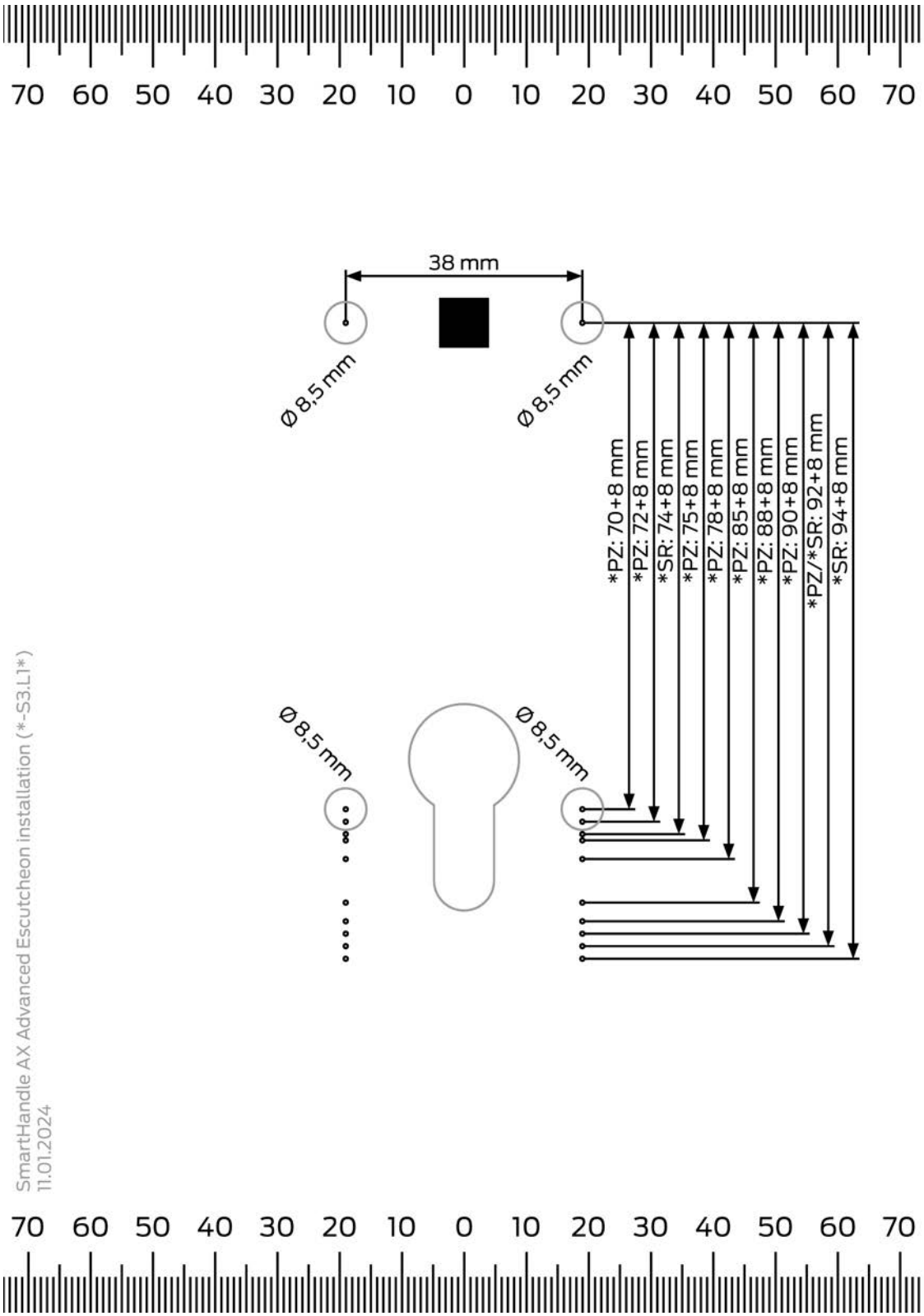


13.2.2 Drilling template for metal frame doors

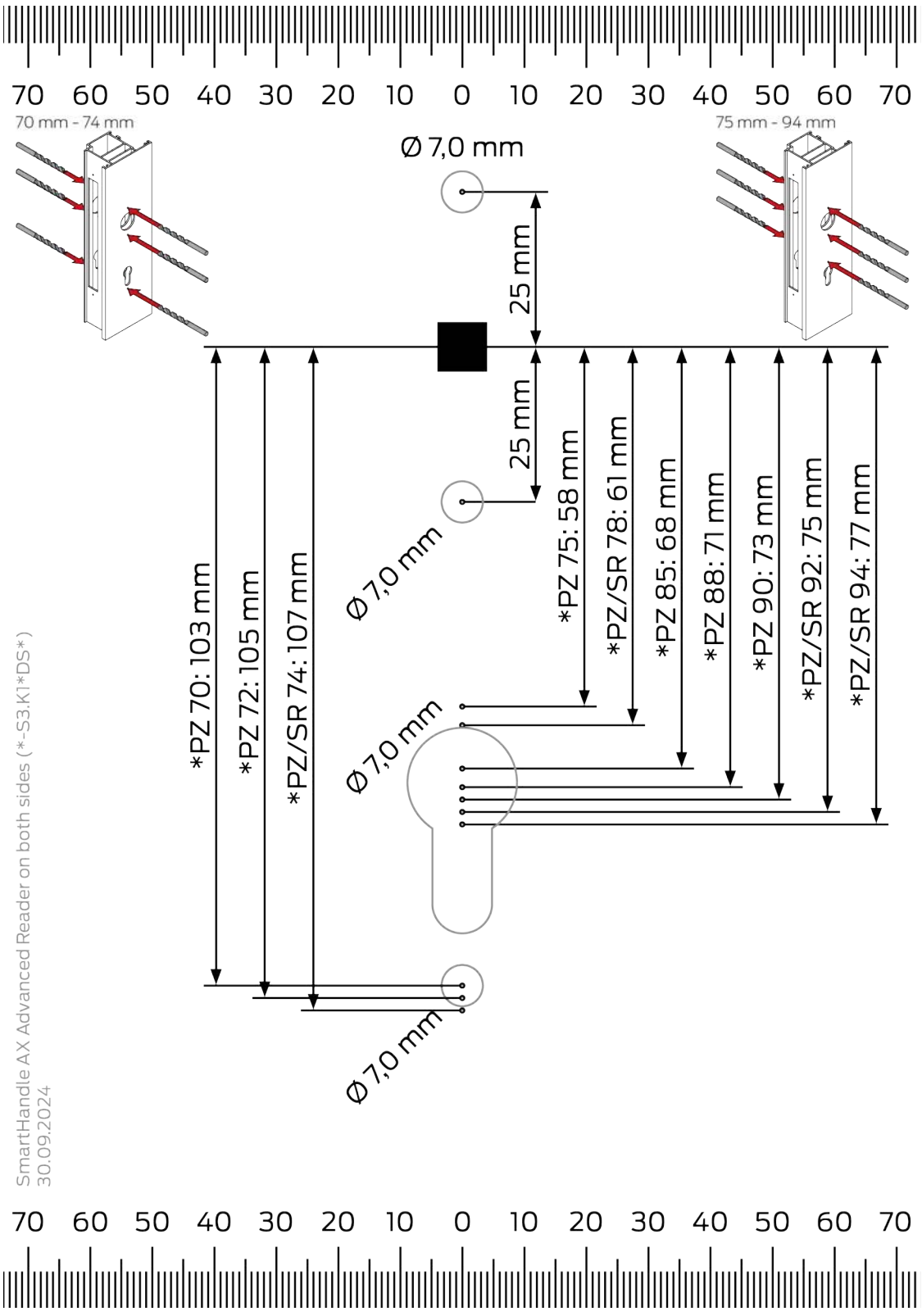


13.2.3 Drilling template for rosette mounting

Download

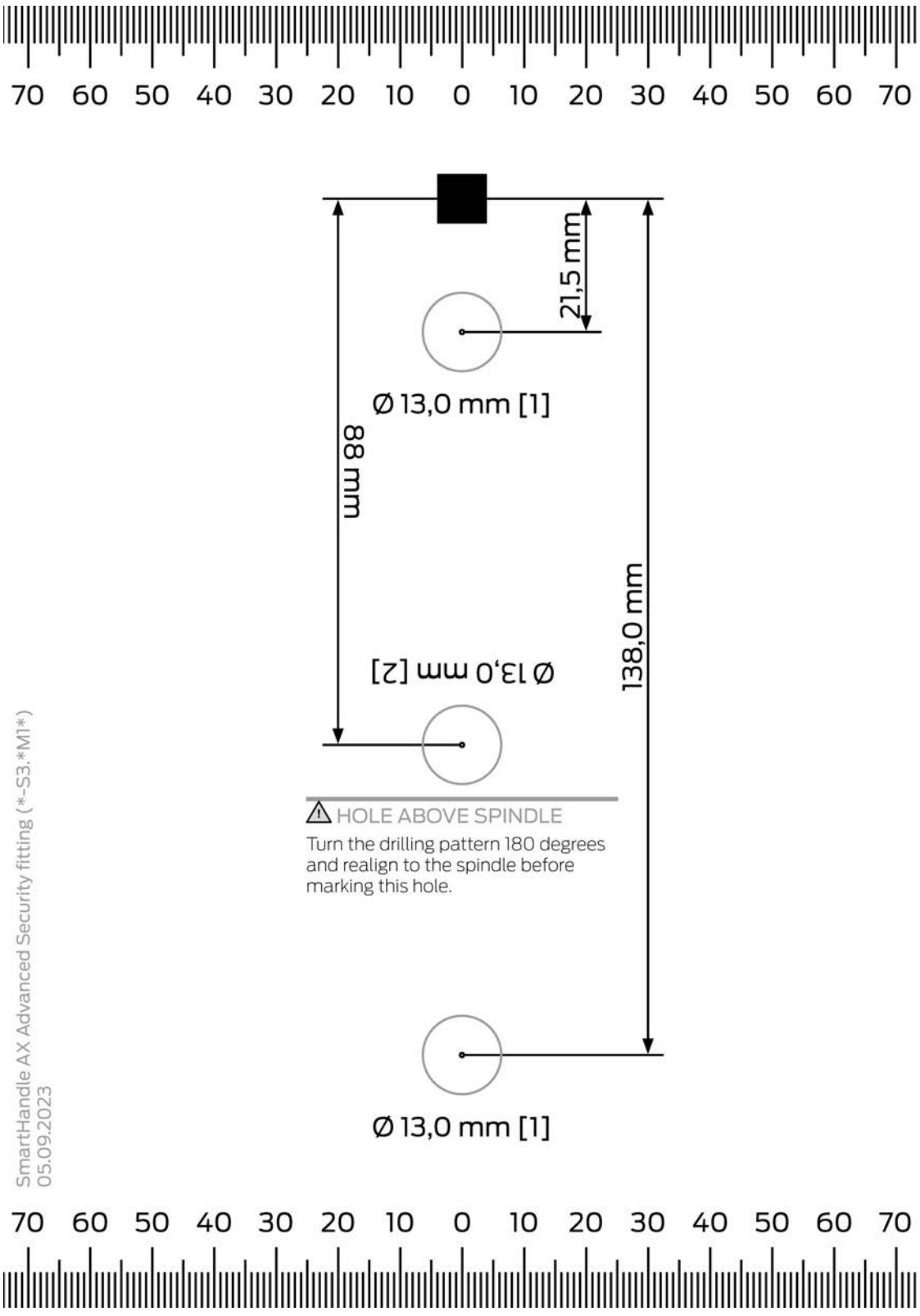

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70
38 mm
Ø 8,5 mm
Ø 8,5 mm
*PZ: 70+8 mm
*PZ: 72+8 mm
*SR: 74+8 mm
*PZ: 75+8 mm
*PZ: 78+8 mm
*PZ: 85+8 mm
*PZ: 88+8 mm
*PZ: 90+8 mm
*PZ/*SR: 92+8 mm
*SR: 94+8 mm
Ø 8,5 mm
Ø 8,5 mm
SmartHandle AX Advanced Escutcheon installation (*-S3.L1*)
11.01.2024
70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

13.2.4 Drilling template for double-sided reader variant



SmartHandle AX Advanced Reader on both sides (*-S3.K1*DS*)
30.09.2024

13.2.5 Drilling template for security fitting



13.2.6 Drilling template for panic fitting with narrow backplate

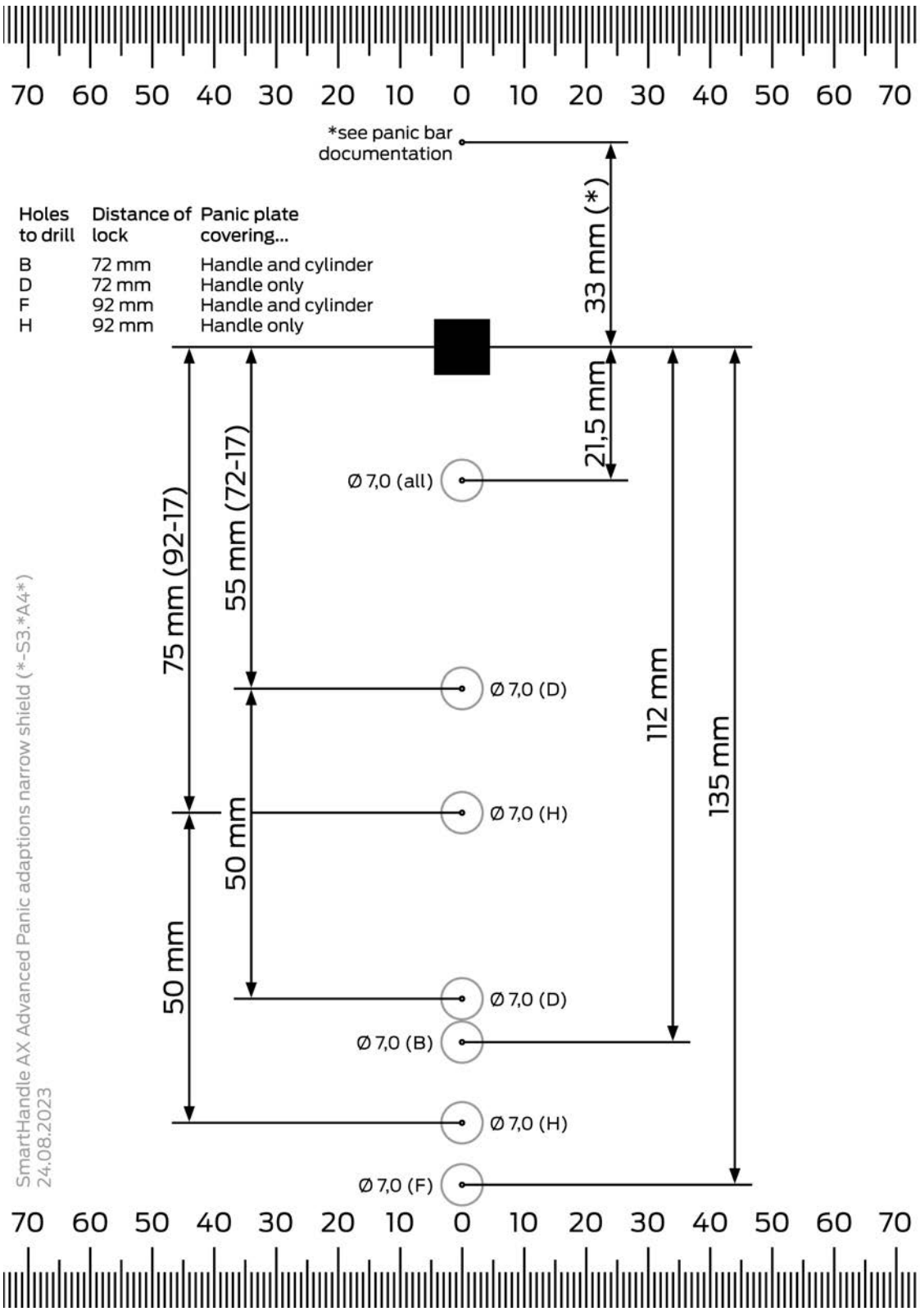
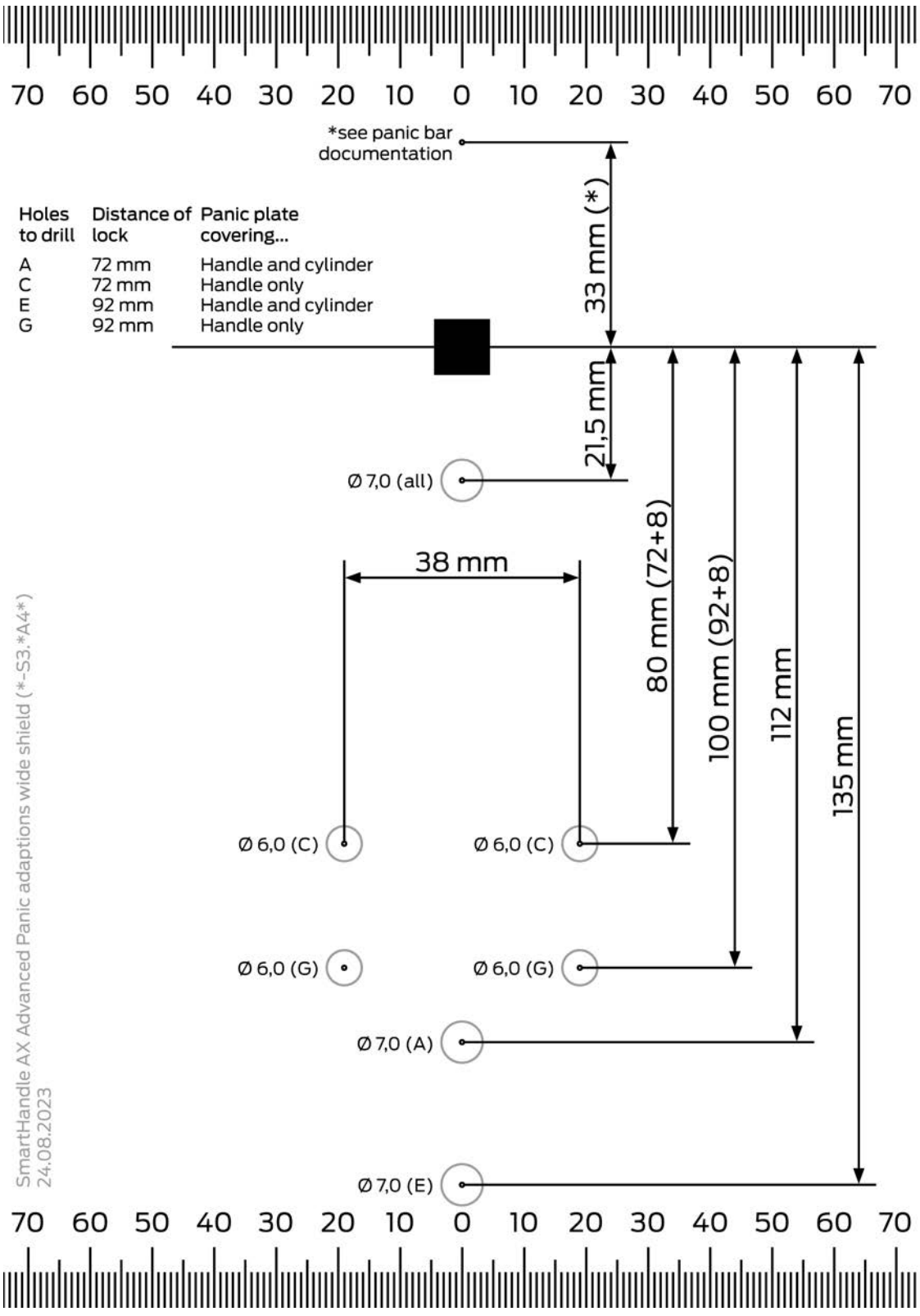


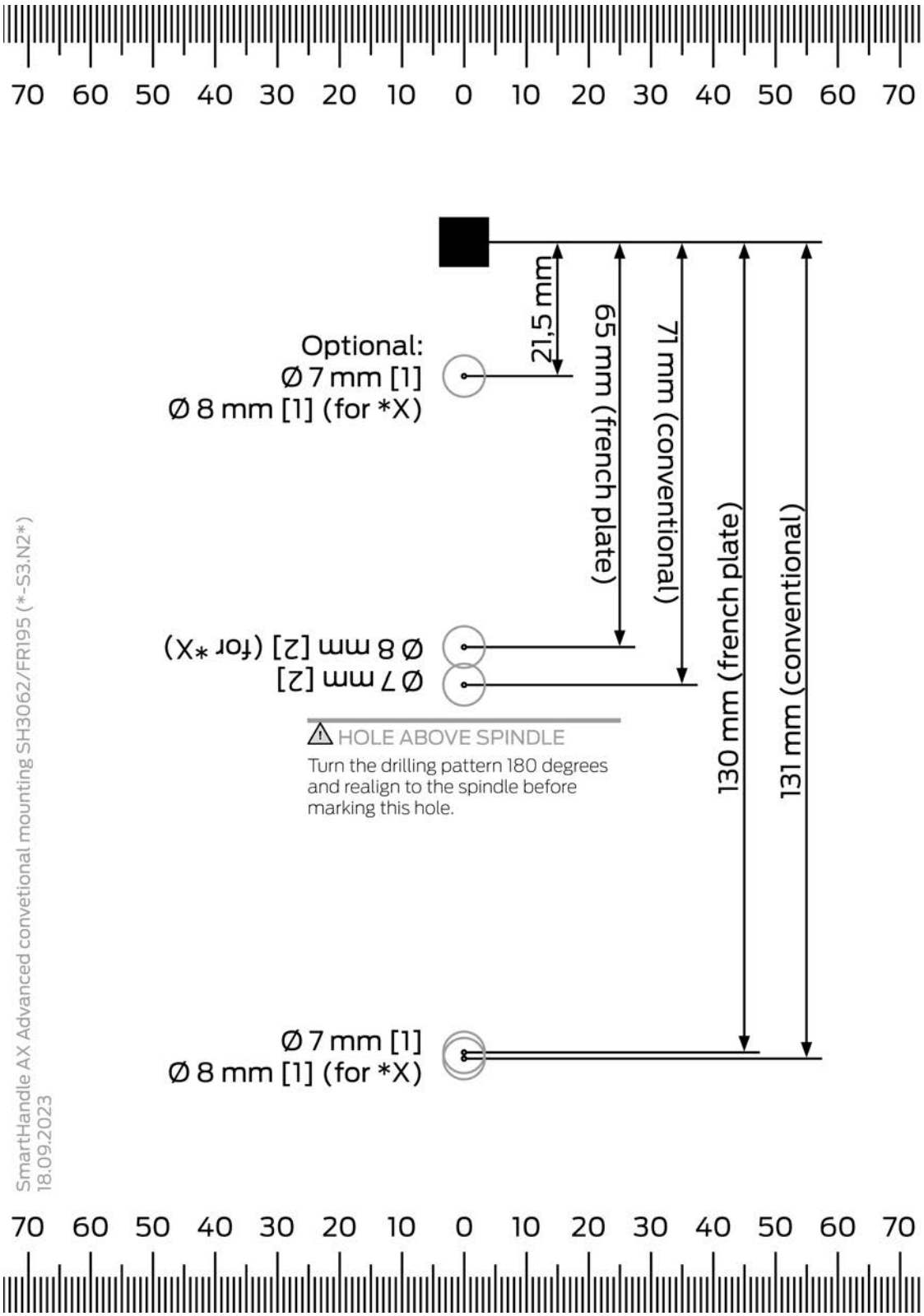
Fig. 1: Download

13.2.7 Drilling template for panic fitting with wide backplate

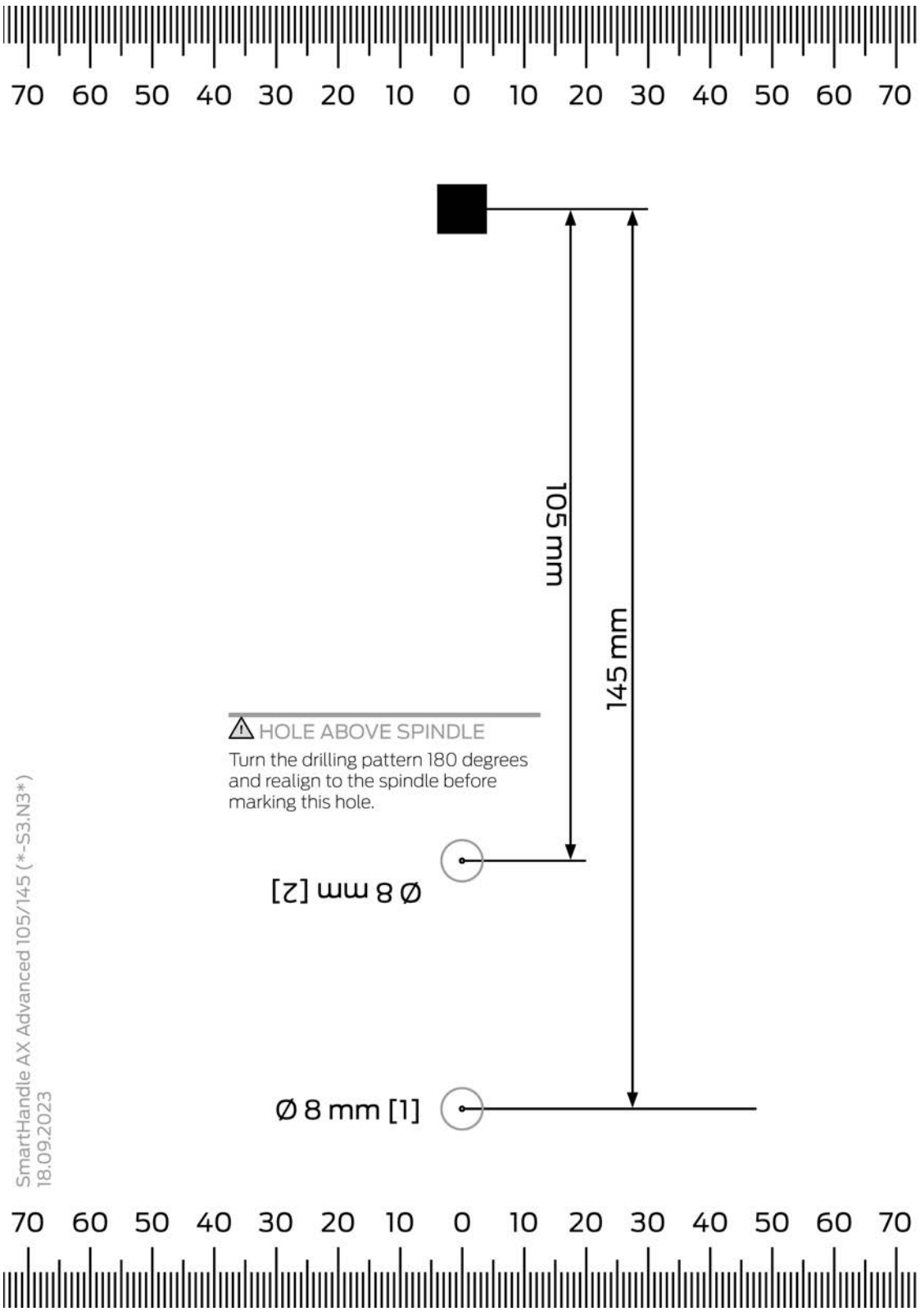


13.2.8 Drilling template for conventional mounting SH3062/FR195

Downlodslkjwsnhfjhwebdkjwemöfwsedbfkjhwebdjwgeqdowenfwezjhedq wkldnwehfbewrjkdnwedwejkdnwejhdbewd weqkj


70 60 50 40 30 20 10 0 10 20 30 40 50 60 70
21,5 mm
65 mm (french plate)
71 mm (conventional)
130 mm (french plate)
131 mm (conventional)
Optional:
Ø 7 mm [1]
Ø 8 mm [1] (for *X)
Ø 8 mm [2] (for *X)
Ø 7 mm [2]
HOLE ABOVE SPINDLE
Turn the drilling pattern 180 degrees and realign to the spindle before marking this hole.
Ø 7 mm [1]
Ø 8 mm [1] (for *X)
SmartHandle AX Advanced convetional mounting SH3062/FR195 (*-S3.N2*)
18.09.2023

13.2.9 Drilling template for conventional mounting 105/145



14. Declaration of conformity

The company SimonsVoss Technologies GmbH hereby declares that the articles (SI-S3.*M.VCN*, SI-S3.*M.WO*, SI-S3.*LN*, SI-S3.*OSS*) 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*.
The full text of the UK Declaration of conformity is available at the following internet address: *www.simons-voss.com/en/certificates.html*.

15. Help and other information

Information material/documents

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

https://www.smartintego.com/int/home/infocenter/documentation

Information on disposal

- Do not dispose the device (SI-S3.*M.VCN*, SI-S3.*M.WO*, SI-S3.*LN*, SI-S3.*OSS*) 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.

si-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).

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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