ASSEMBLY INSTRUCTIONS

SIEGENIA®
brings spaces to life

KFV

Key-operated multi-point locks

AS 2750
AS 2750 with T2

Window systems
Door systems
Comfort systems

Contents

1 About this documentation

1.1 Target group

This information is intended for fabricators, fitters and retrofitters.

The target group "fabricators" comprises all persons who carry out the following activities:

- Machining KFV products in door elements

The target group "fitters and retrofitters" comprises all persons who carry out the following activities:

- install and repair KFV products in a building project
- install and repair door element that are equipped with KFV products in a building project
- retrofit door elements with KFV products

1.2 Product description

The AS 2750 is a key-operated, three-latch multi-point lock with hook bolt in the auxiliary box for the locking of doors.

These operating instructions are an integral part of the AS 2750 and must be accessible to the target group all the time.

1.3 Producer and service

KFV Karl Fliether GmbH & Co. KG
A company of the SIEGENIA GROUP
Siemensstraße 10
42551 Velbert

1.4 Dimensions

All dimensions are given in millimetres (mm).

1.5 Applicable documents

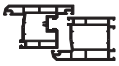
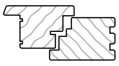
Observe the following applicable document on AS 2750:

- Operating instructions:

siegenia.com/service/doc/h47.mfvrs016

1.6 Symbols used

The following pictograms are used in this document:

	general warning symbol
	useful information or advice
	Refer to the corresponding point
	Elementary material PVC
	Elementary material Timber
	Elementary material Aluminium

2 Safety

2.1 Requirements for the target groups

We assume and require that fabricators possess the following knowledge and skills:

- knowledge of the regulations concerning occupational safety and accident prevention
- comprehension of technical correlations according to state-of-the-art science and technology
- knowledge of professional work steps
- knowledge of the applicable standards and directives
- knowledge of applicable testing regulations
- knowledge and skills with regard to material processing of the respective material (timber, PVC, aluminium)
- knowledge and skills with regard to the professional use of tooling, machines and systems for the production of door elements
- knowledge and skills with regard to the professional fixing of technical elements
- knowledge in functional testing and operation of door elements
- knowledge of the requirements of profile system providers

If the door elements are equipped with an electromechanical drive or a sensor, the following knowledge and skills are presumed and required:

- knowledge and skills with regard to the professional fabrication of electrical components

KFV offers training courses for the acquisition of some of the required knowledge and skills. Contact your KFV sales consultant in case of requirement.

We assume and require that fitters and retrofitters possess the following knowledge and skills:

- knowledge of the regulations concerning occupational safety and accident prevention
- comprehension of technical correlations according to state-of-the-art science and technology
- knowledge of professional work steps
- knowledge of the applicable standards and directives
- knowledge and skills with regard to the professional use of electrical and mechanical tooling
- knowledge and skills with regard to the professional fixing of technical elements
- knowledge and skills with regard to the retrofit of mechanical security technology on window or door elements

If the door elements are equipped with an electromechanical drive or a sensor, the following knowledge and skills are presumed and required:

- knowledge and skills with regard to the professional fabrication of electrical components
- knowledge and skills with regard to the work steps:
  - connecting electrical components
  - commissioning electrical components
  - checking the function of electrical components
- Knowledge of the 5 safety rules:
  - enable
  - secure against reactivation
  - ensure that system is voltage-free
  - earthing and short-circuiting
  - cover or isolate proximate live parts

KFV offers training courses for the acquisition of some of the required knowledge and skills. Contact your KFV sales consultant in case of requirement.

2.2 Intended use

- AS 2750 is a key-operated, three-latch multi-point lock with hook bolt in the auxiliary box for the locking of doors.
- AS 2750 is suitable for installation in entrance doors made of timber, aluminium, steel or PVC.
- AS 2750 is suitable for installation in single-sash and double-sash doors in permanent buildings.
- Only use AS 2750 with KFV accessories.
- Only use AS 2750 when it is in technically sound condition.
- Do not use AS 2750 for escape doors.
- Only install AS 2750 according to the assembly instructions and only operate within the scope of the technical limits.
- Only use AS 2750 according to the operating instructions.

2.3 Transport

- Ensure that the locking elements are in the release position.
- Multi-point locks are sensitive construction elements. Treat the multi-point lock with care and do not throw it, strike it hard or bend it.

2.4 Protective equipment

You will need the following protective equipment when assembling a multi-point lock:

- safety footwear
- protective gloves
- protective goggles

2.5 Safety notes

Risk of foot injury

When working with multi-point locks, the door leaf will need to be lifted off in some cases.

- Wear safety footwear

Risk of hand injury

Cropping metal components creates sharp edges.

- Wear safety gloves

Risk of eye injury

Swarf flying around rapidly during milling.

- Wear safety goggles

2.6 Structure of the warning notes

The warning notes in these instructions

- when observed, provide protection against potential personal injury and material damage,
- classify the level of danger by the signal word,
- designate the danger of personal injury via the hazard sign,
- define the type and source of danger,
- show measures to prevent danger and prohibit specific behaviour.

The warning notes are set up according to the following principle:

⚠ SIGNAL WORD

Type and source of danger

explanation of the type and source of danger

- measures for the prevention of the danger

the hazard sign designates warning notices that warn of personal injury.

The type and source of the danger defines the cause of the hazard. The potential consequences of non-observation of warning notices are e.g. danger to life due to electric shock.

Under measures, actions are listed that must be carried out for the prevention of hazards or which are prohibited for the prevention of a hazard.

2.7 Warning notes used

⚠ DANGER

The signal word "Danger" designates an immediately threatening danger. If this danger is not prevented, it leads to death or severe injuries.

⚠ WARNING

The signal word "Warning" designates a potential danger. If this danger is not prevented, it could lead to death or severe injuries.

⚠ CAUTION

The signal word "Caution" designates a potentially hazardous situation. If this hazardous situation is not prevented, it could lead to minor or moderate injuries.

NOTICE

The signal word "Notice" defines actions for the prevention of material damage. The observation of these notes prevents damage to the components.

!	Information, advice etc.

This symbol indicates special features and designates facts that require increased attention

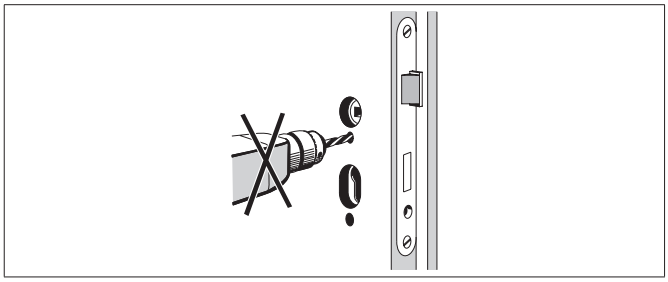
2.8 Foreseeable improper use

NOTICE

Damage to the main lock

The main lock of the multi-point lock could be damaged if you drill through the door leaf in the area of the gear box.

- Do not drill into the door leaf in the area of the gear box.

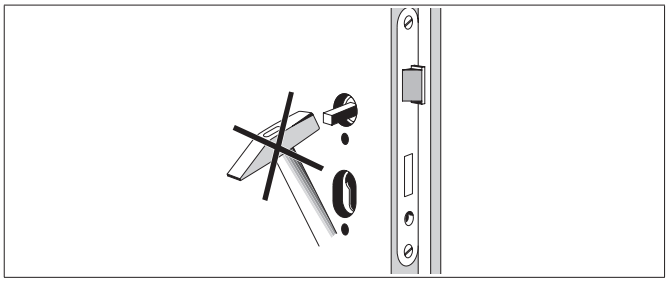


NOTICE

Damage to the main lock

The main lock of the multi-point lock could be damaged if the square spindle of the lever handle is knocked through the locking groove by force.

- Do not knock the square spindle of the lever handle into the locking groove with a tool (e. g. with a hammer) using excessive force.

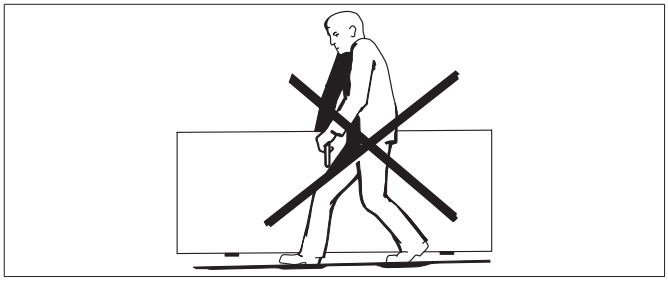


NOTICE

Damage to the lock

The door leaf must not be carried using the lever handle as a grip.

- Use suitable aids to transport the door leaf.

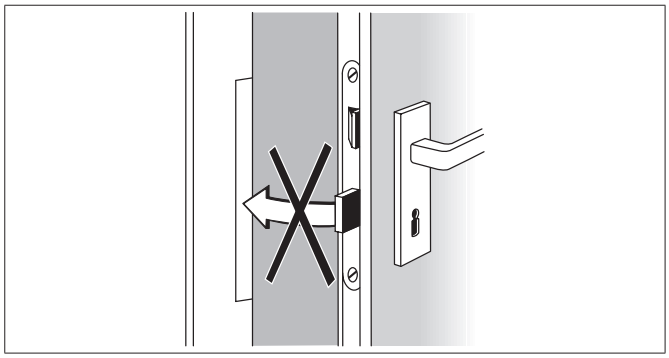


NOTICE

Damage to the lock and the frame parts

The lock can be damaged if the locking elements are in the locking position when the door is open.

- Bring the locking elements into the release position with the door open.

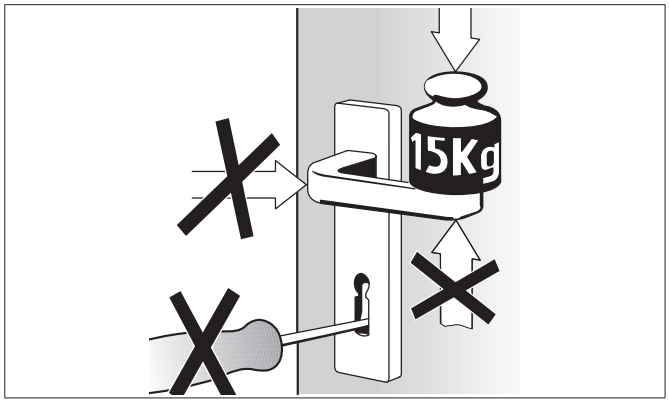


NOTICE

Damage to the lock

The lock could be damaged if the lever handle is not loaded in the normal direction of rotation and loads of more than 150 N are applied to the lever handle in the direction of activation or if the lock is activated with foreign objects.

- Only load the lever handle in the normal direction of rotation and do not apply loads of more than 150 N in the direction of activation and only lock the lock or multi-point lock with the pertinent key.

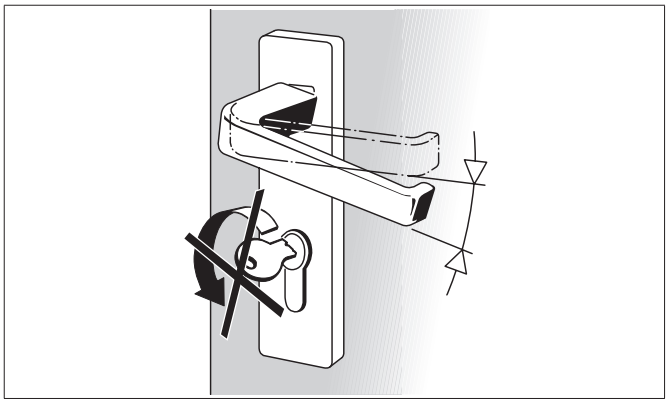


NOTICE

Damage to the main lock

The main lock can be damaged if the lever handle and key are operated at the same time.

- Never activate the key and the lever handle simultaneously.

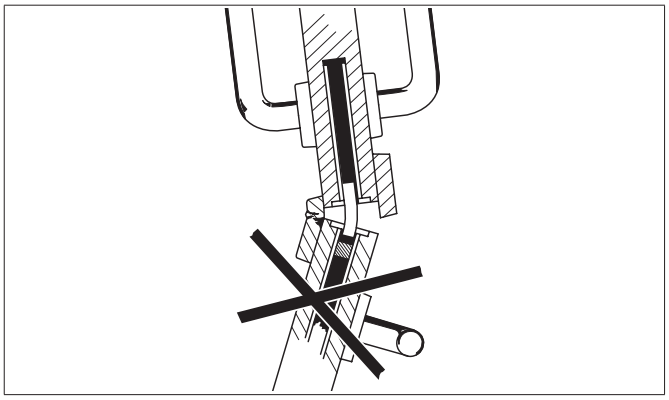


NOTICE

Damage to the multi-point lock

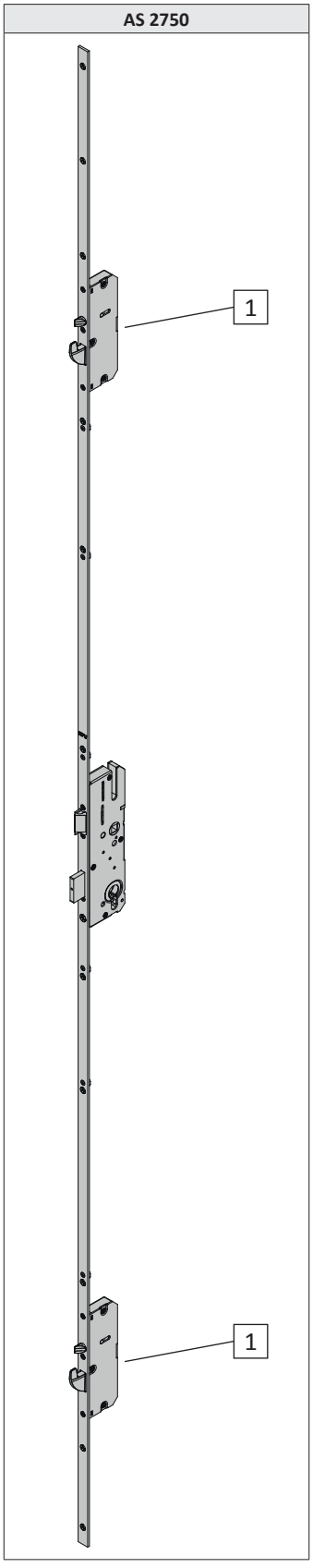
The multi-point lock of double-sash doors could be damaged
by forcing the inactive sash open.

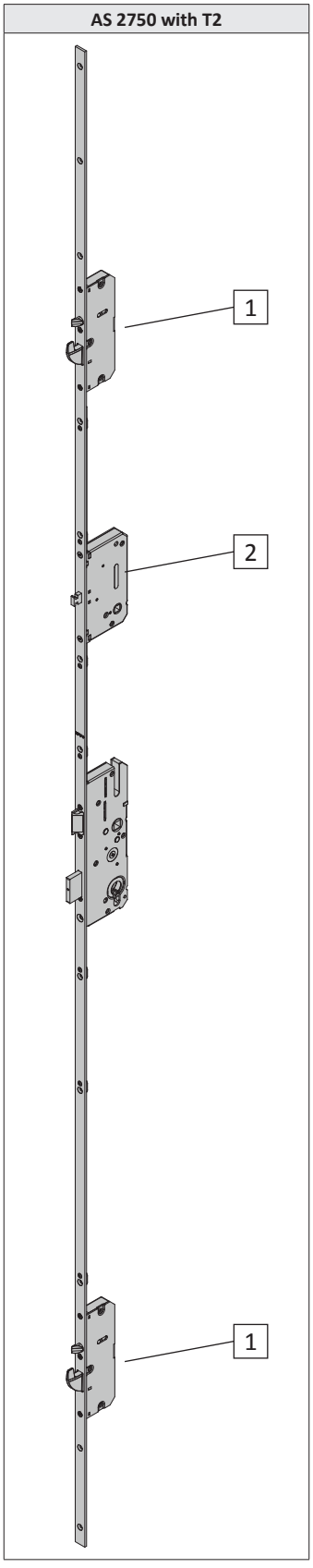
- Double-sash doors must not be forced open using the inactive sash.



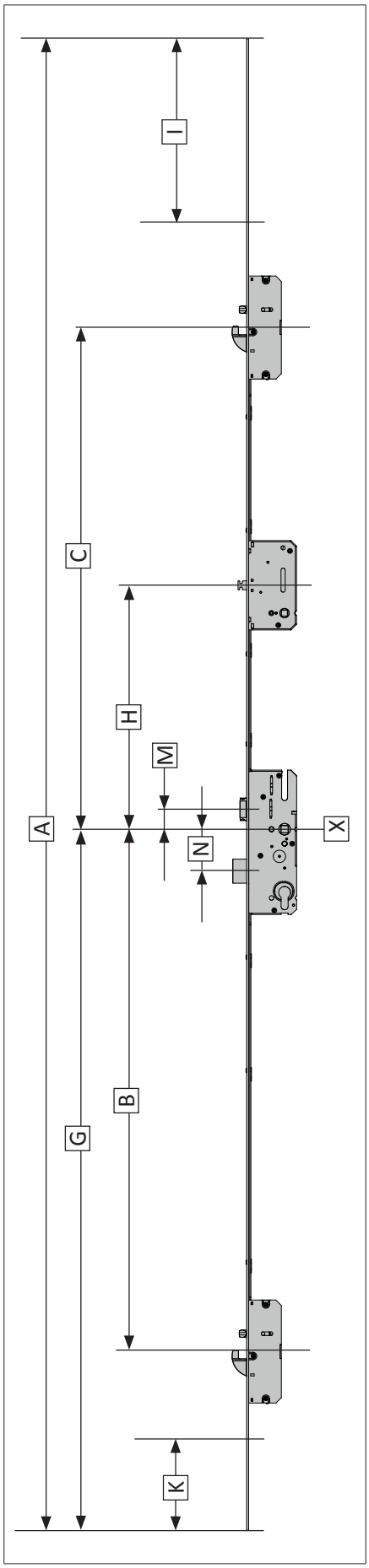
3 Scope of delivery and components

The multi-point lock is equipped with two auxiliary boxes 1 of which each is equipped with two spring mounted soft lock latches. The multi-point lock is optionally available with a pre-mounted safety lock 2.





3.1 Size variants

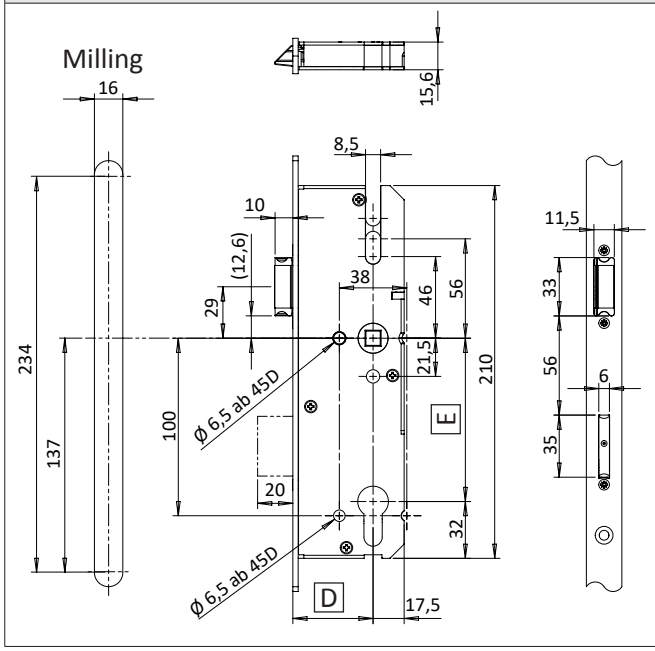


Dimension variants	A	B	C	G	H	I	K	Suitable for sash rebate height
B296*	2170	760	355	1020		665	130	1505 - 1754
B298	2170	760	605	1020	355	415	130	1755 - 1880
B001	2170	760	730	1020	355	290	130	1881 - 2170
B003	2400	760	980	1020	355	270	130	2171 - 2400

*	Not available with hole group "T0"
Dimensions I + K	Can be shortened
X	System marking; All dimensions starting from [X]
M (middle latch)	29.0
N (middle bolt)	60.9

3.2 Dimensions of the lock case

Main lock type U, backset 35-65, PZ-dimension 92/94

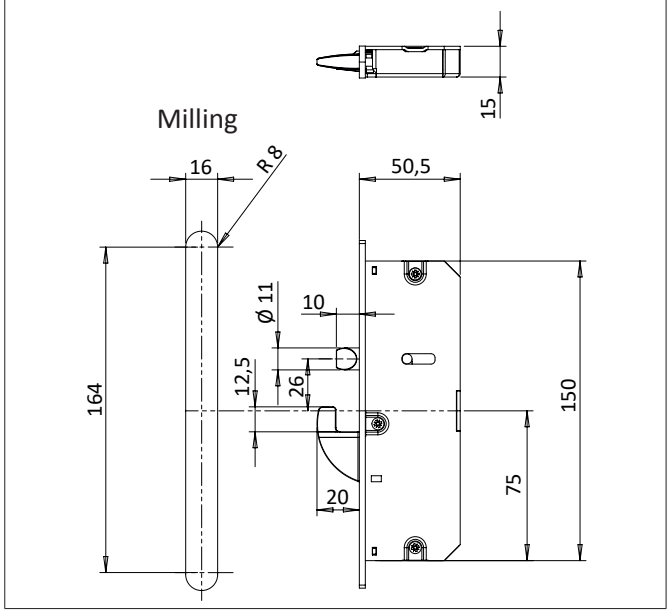


Backset D
35
40
45
50
55
65

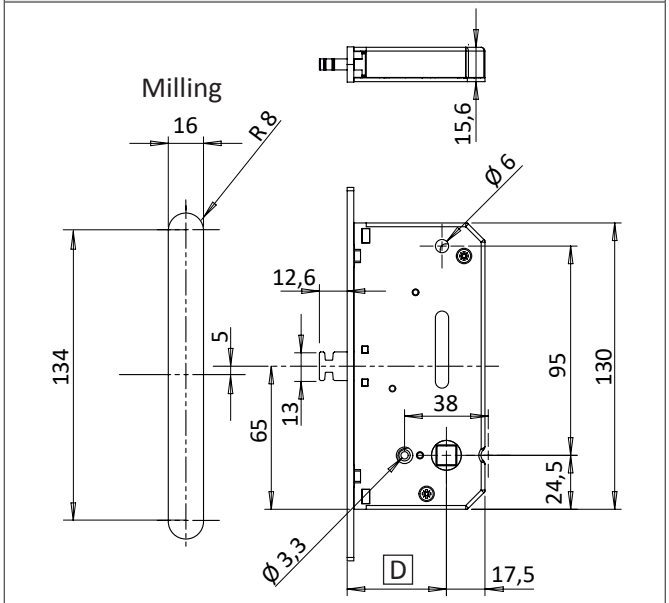
Cylinder lock	PZ dimension E
PZ	92
RZ	94

3.3 Dimensions of the auxiliary box and the safety lock T2

Auxiliary boxes



T2 Safety lock



Backset D
35
40
45
50
55
65

4 Assembly

4.1 Installation conditions and requirements

- Local building laws and regulations must be observed before and during door installation in addition to the following requirements and conditions:
- before installing the multi-point lock, check the dimensional accuracy of the door and the door frame. The multi-point lock must not be installed if the door or the frame is warped or damaged.
- The door and door frame may only be surface treated before installing the multi-point lock. Subsequent surface treatment can reduce the functional capacity of the multi-point lock.
- Observe the specified positions and sizes for all milling and drilling dimensions within the defined tolerances. Observe the horizontal and vertical adjustment accurately.
- Remove any splinters from routed pockets after milling.
- Do not overtighten the screws or insert them at an angle.
- Install hardware components to be aligning. Maintain airgap (interval between frame parts and secondary sash of the multi-point lock): the multi-point lock functions safely with an airgap within 3.5 mm +/- 1.,5 mm. If the interval exceeds this, the fabricator must ensure that the airgap is wide enough to guarantee that the doors are free from constraint.
- Avoid corrosion damage to components or to the door by using non-acidic, moistening sealants.

4.2 Screw recommendation

The screw lengths and screw heads for the assembly must be chosen to ensure an adequate penetration into the material and that the faceplate of the multi-point lock is flush-mounted. For the screw diameter, we recommend the following screws:

Aluminium:

- SKG** Ø ≥ 4.8 mm
- Aluminium profile at least 2 mm wall thickness.

Timber:

- SKG** Ø 4.0 mm x 40 mm
  SKG*** Ø 4.5 mm x 45 mm
- SKH certified

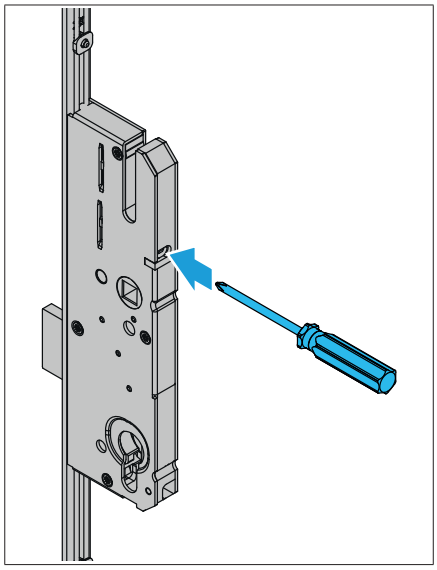
PVC:

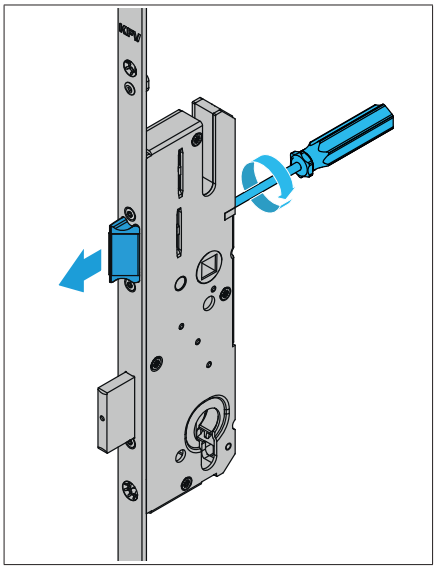
- SKG** Ø ≥ 4.2 mm
- Steel reinforcement min. 1.5 mm wall thickness

Adhere to the screw torque specified by the producer!

5 Assembly of sash side

5.1 Changing the DIN orientation of the main lock latch

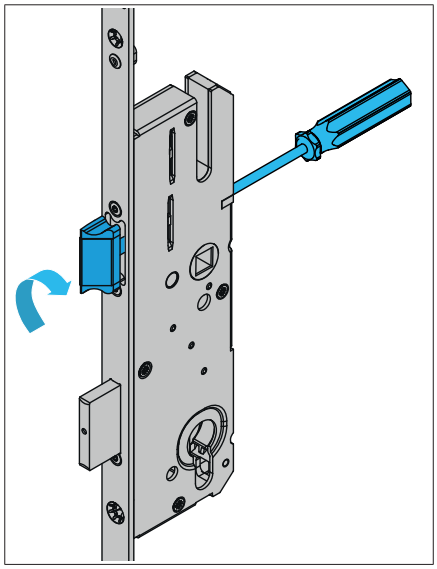


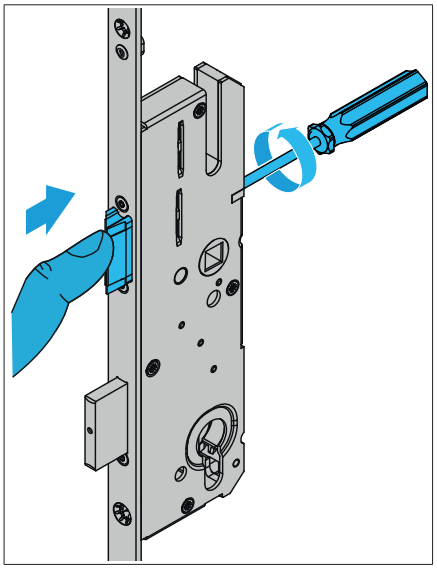


PZ 2

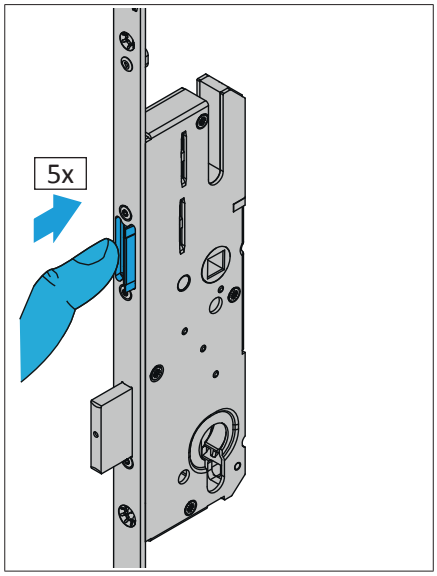
- Insert a PZ2 screwdriver through the hole at the rear of the gear box.
- Loosen the locking screw of the latch shaft with the PZ2 screwdriver until you can turn the latch.

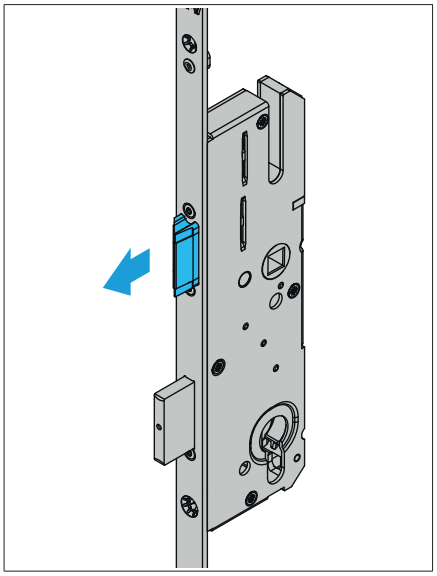
Do not loosen the locking screw completely, as this can result in the latch becoming detached from the locking screw, meaning that the latch can no longer be installed





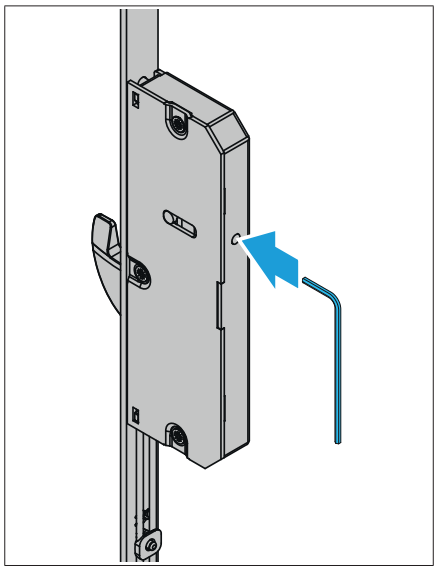
- Turn the latch by 180°.
- Push in the latch and tighten the locking screw of the latch shaft with the PZ2 screwdriver.

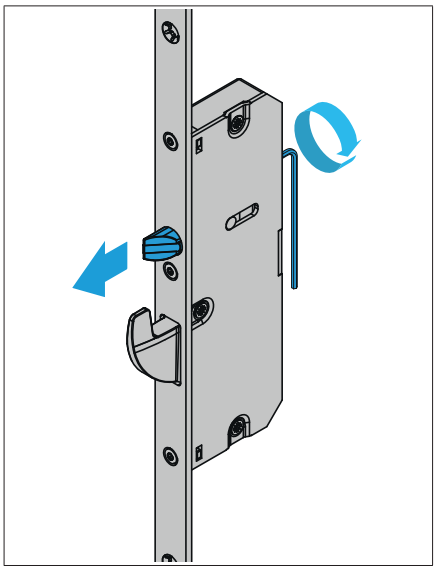




- Press the latch ca. 5 times into the gear box to check the function.
- The latch must always extend easily by itself every time it is pushed in.

5.2 Changing the DIN orientation of the latch in the auxiliary box

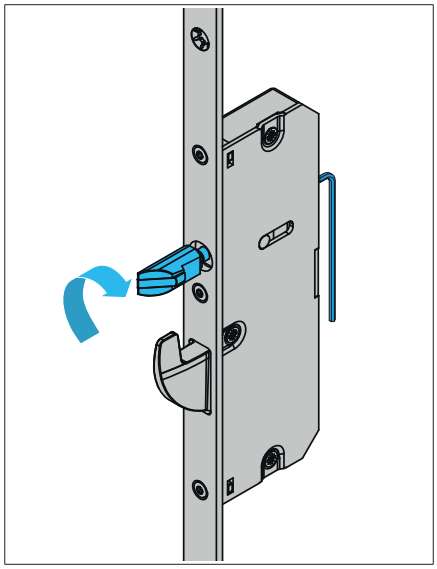


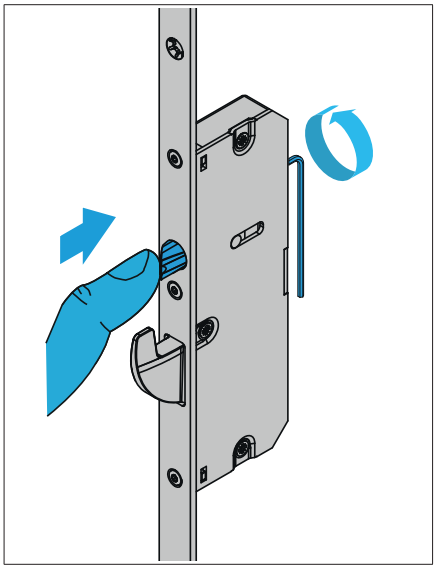


SW 3

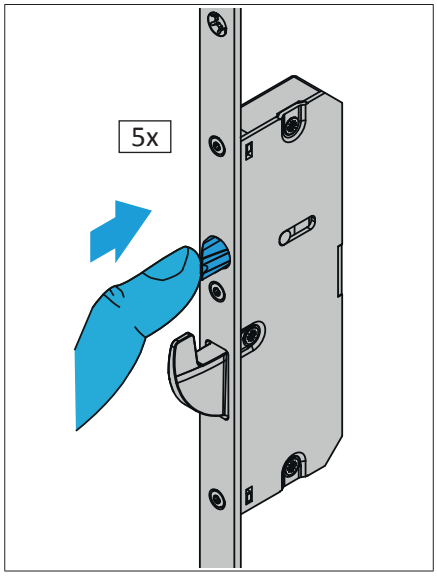
- Insert a 3 mm hexagon wrench into the hole on the rear side of the auxiliary box.
- Loosen the locking screw of the latch shaft with the hexagon wrench until you can turn the latch.

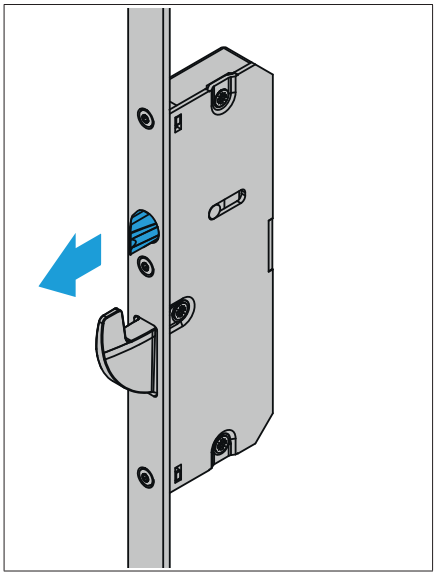
Do not loosen the locking screw completely, as this can result in the latch becoming detached from the locking screw, meaning that the latch can no longer be installed





- Turn the latch by 180°.
- Push in the latch and tighten the locking screw of the latch shaft with the hexagon wrench.





- Press the latch ca. 5 times into the auxiliary box to check the function.
- The latch must always extend easily by itself every time it is pushed in.

5.3 Milling the door leaf

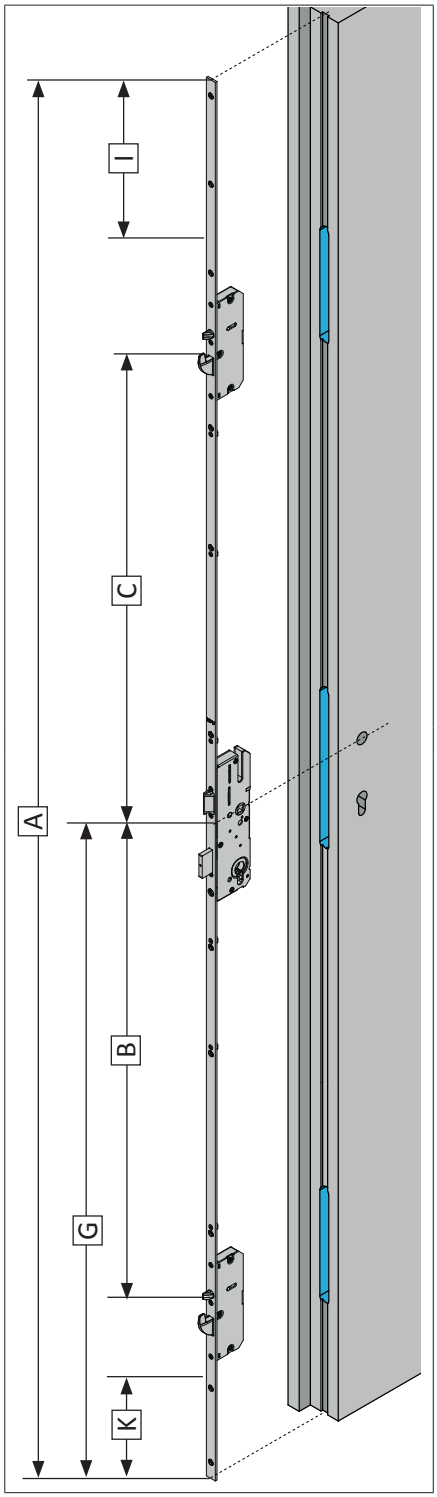
Dimensions A to K see chapter 3.1 to 3.3

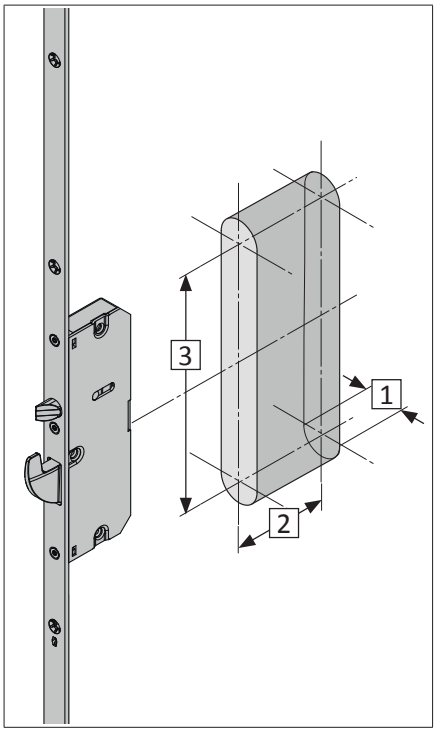
WARNING

Danger of injury from swarf flying around rapidly

During milling work, there will be swarf flying around. You can injure your eyes.

- Wear protective goggles.



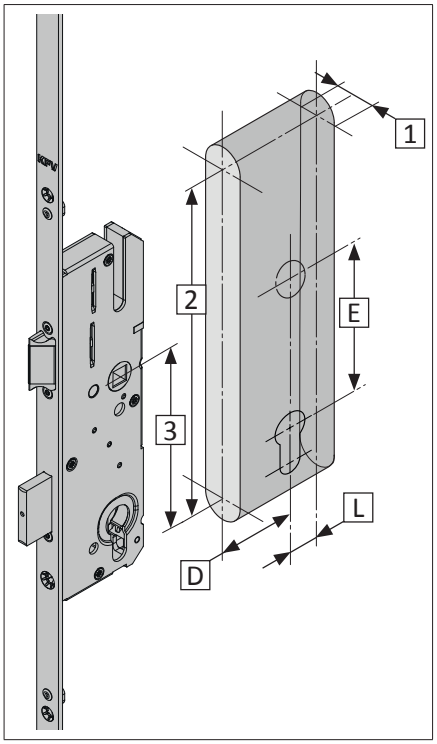


auxiliary box

[1] 16.0 mm

[2] 50.5 + 1 mm

[3] 164.0 mm



main lock

[1] 16,0 mm

[2] 234.0 mm

[3] 137.0 mm

[D] Backset

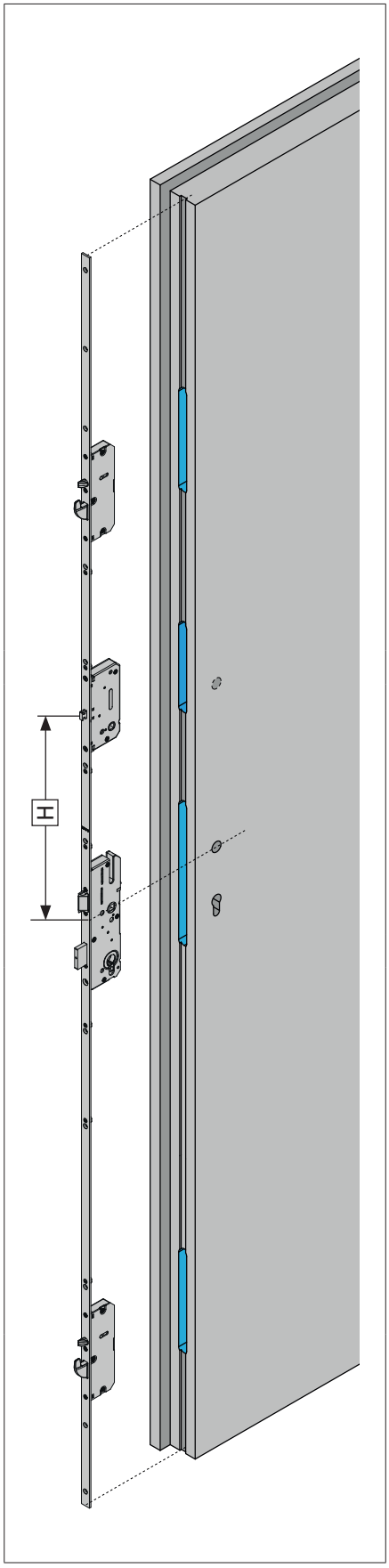
[E] PZ dimension

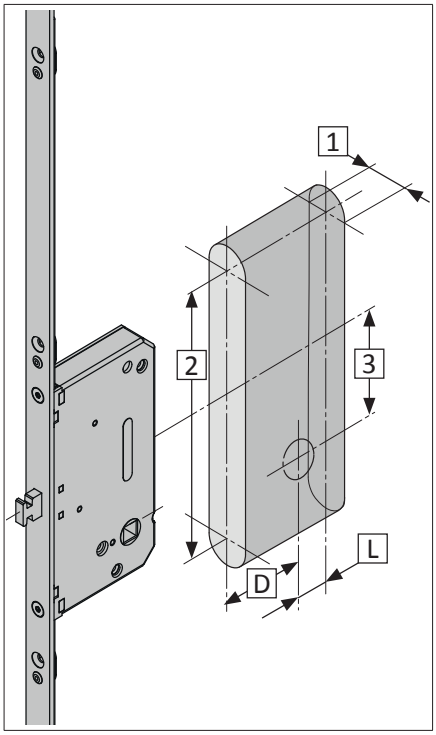
[L] 17.5 + 1 mm

All dimensions of the main lock, see chapter 3.2.

5.3.1 Milling for safety lock T2, handle, lever handle and cylinder lock

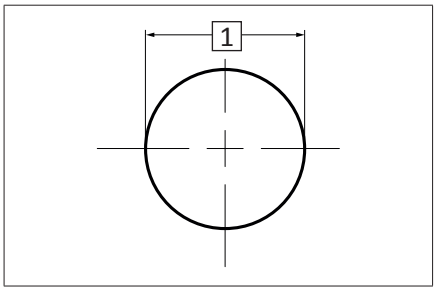
For dimensions H, D, E and L, see chapter 3.1 to 3.3.





Routed pocket safety lock T2:

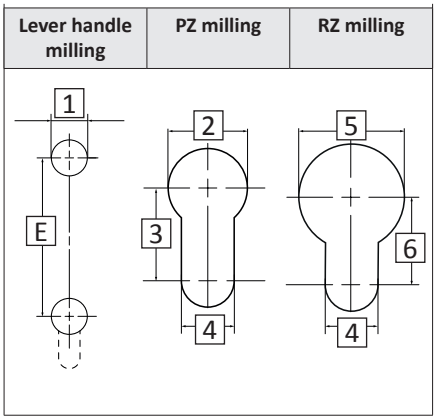
[1] 16.0 mm
[2] 134.0 mm
[3] 40.5 mm
[D] Backset
[L] 17.5 + 1 mm



Blind hole for handle:

[1] Ø 18 mm

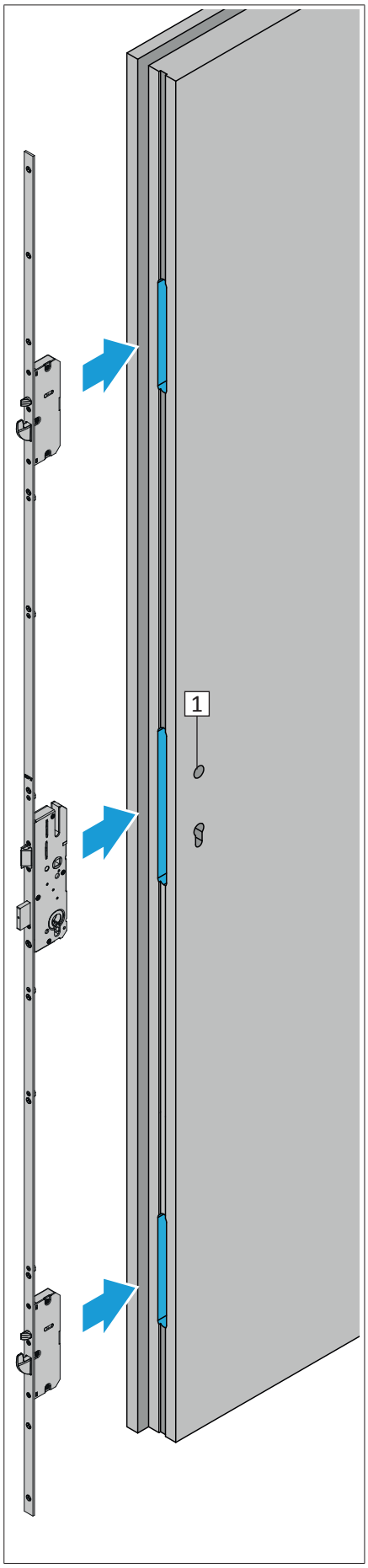
Drill the blind hole for the handle on the inward-opening side of the door sash.

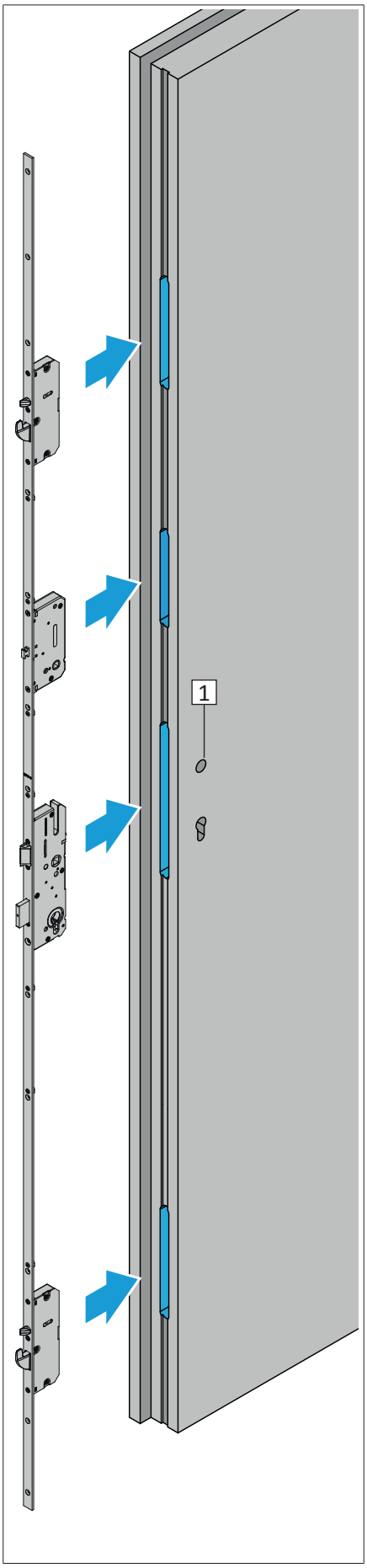


Milling for lever handle and cylinder lock:

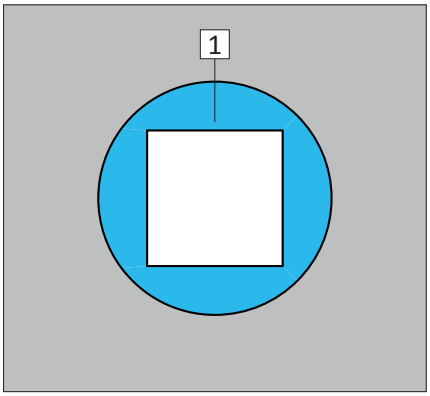
[1] Ø 18.0 mm
[2] Ø 18.0 mm
[3] 21.0 mm
[4] 12.0 mm
[5] Ø 24.0 mm
[6] 20.0 mm
[E] PZ dimension

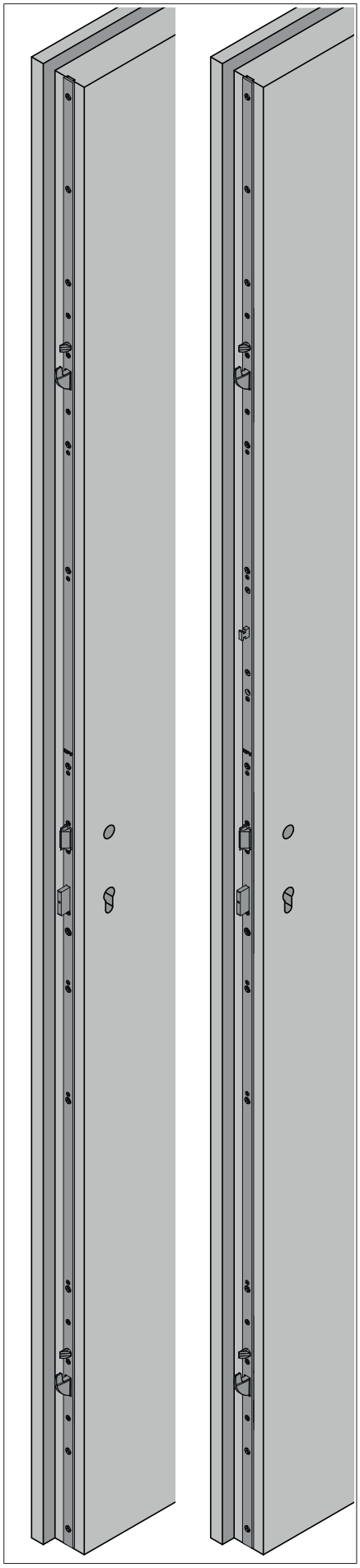
5.4 Screwing the multi-point lock into place

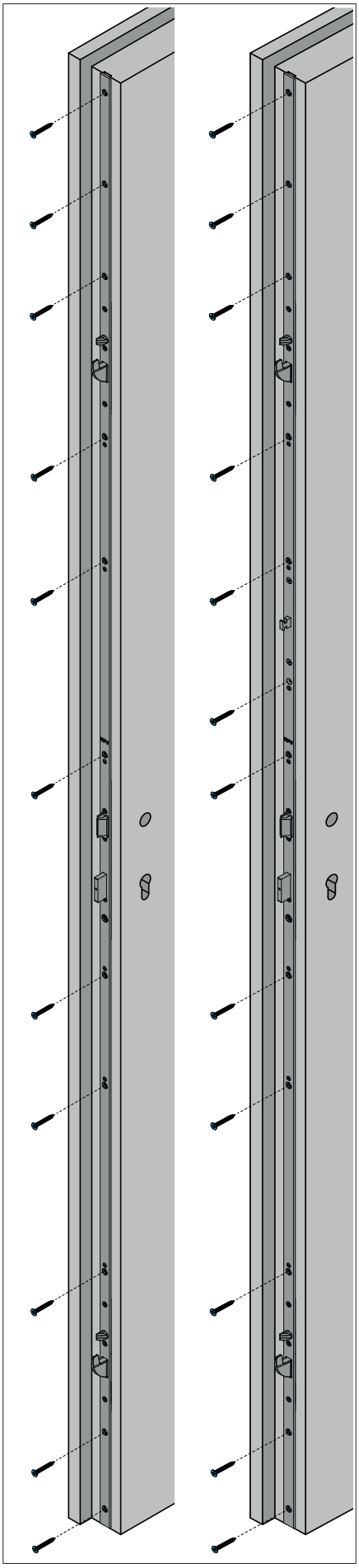




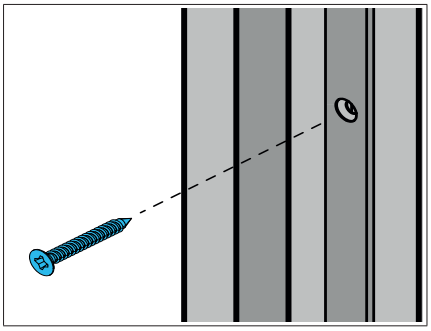
- Insert the multi-point lock in the milled door leaf.
- Adjust the multi-point lock to the handle spindle [1]:

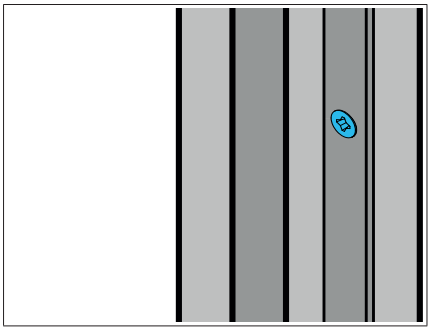






▶ Screw the multi-point lock onto the door leaf:



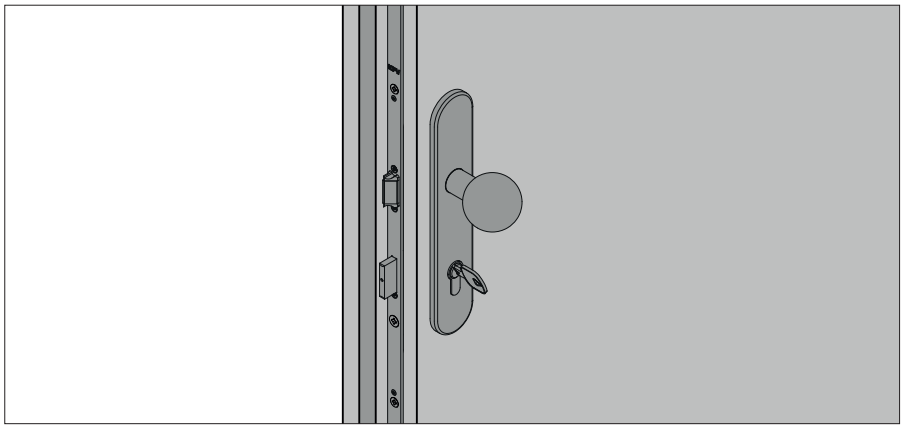


5.5 Mounting the fittings for main lock and T2

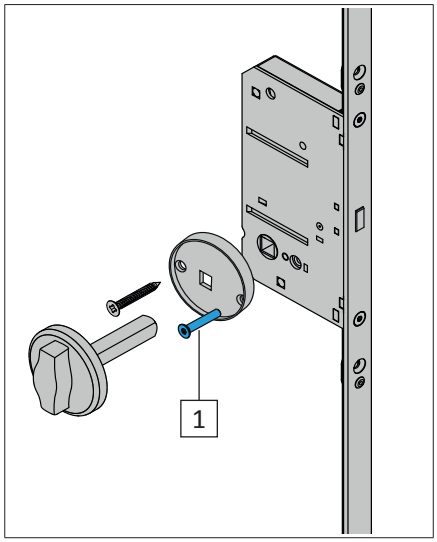
Prior to assembly, check and observe the enclosed assembly instructions of the producer beachten.

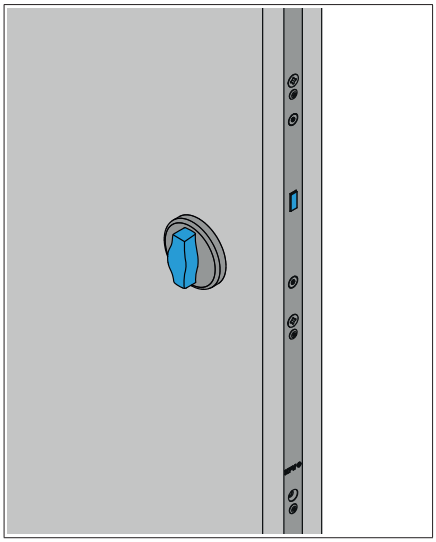
Before drilling, compare the drilling template for the fittings with the positions of the fixing holes of the gear box (see chapter 3.2).

Dismount the multi-point lock before drilling.



▶ Mount the fittings for the main lock according to the instructions of the producer.





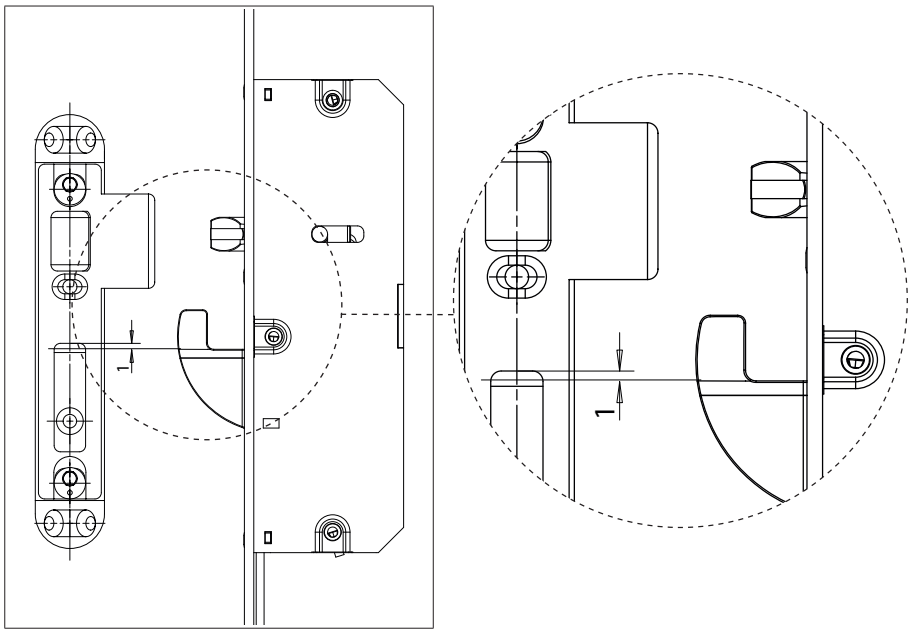
▶ Mount the fittings for the safety lock T2 according to the enclosed assembly instructions of the producer.

Fix the rose on the corresponding thread of the safety lock with a M4 screw [1]

6 Frame side assembly

6.1 Assembly specifications for SKG certified frame parts

The dimensions for the vertical position must be exactly adhered to for the assembly of the frame parts. Consequently, it is ensured that the hook bolt can move fully into the locking position and achieve the specified minimum dimension for the grip into the frame part.



The hook bolt must not exceed an interval of 1 mm from the frame part.

The hook bolt must move smoothly and completely into the locking position and the release position.

Carry out the required milling and mount the frame parts using the prescribed screws (see page 11).

6.2 Milling the frame

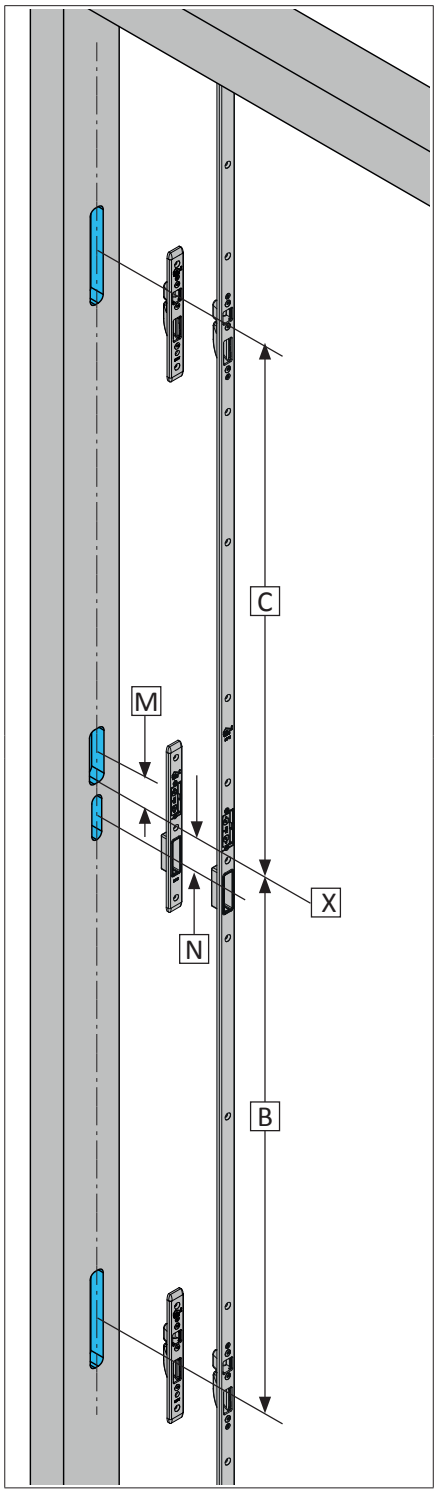
For position determination and size variables, see chapter 3.1

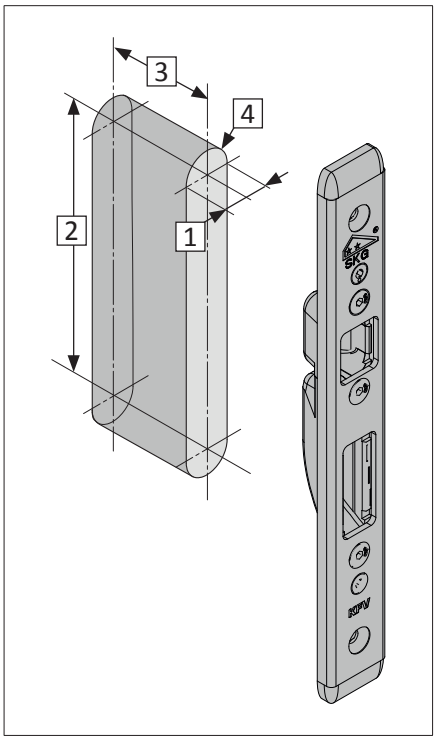
WARNING

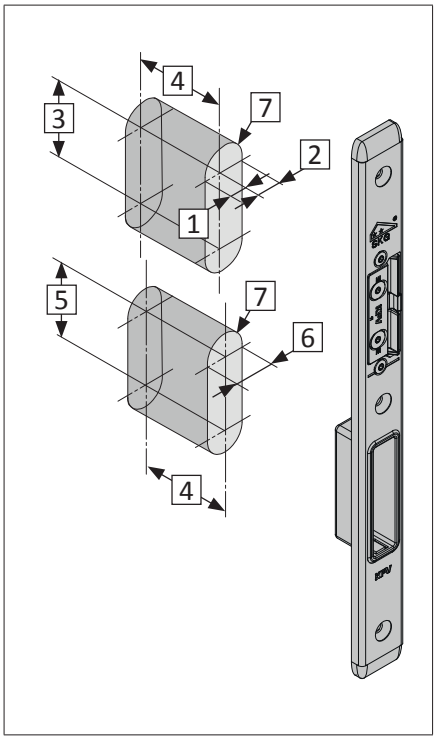
Danger of injury from swarf flying around rapidly

During milling work, there will be swarf flying around. You can injure your eyes.

- Wear protective goggles.







The specified milling dimensions refer to:	
E9H/ERH striker plate:	main lock
Q - striker plate:	auxiliary box
E8QH/E9QH:	locking rail
Contact the KFV customer service to find out the milling dimensions for other frame parts or locking rails.	

Q striker plate:

[1] 21.0 mm
[2] 135.0 mm
[3] component depth + 1 mm
[4] R 8 mm

Replacement part and main dead-bolt backing

[1] 8.0 mm
[2] 11 mm
[3] 72.0 mm
[4] component depth + 1 mm
[5] 46.0 mm
[6] 16.0 mm
[7] R 8 mm

Milling is omitted for U-profiles from a leg length of 6 mm and with use of the replacement part series 118/119.

6.3 Milling the frame for the safety lock T2

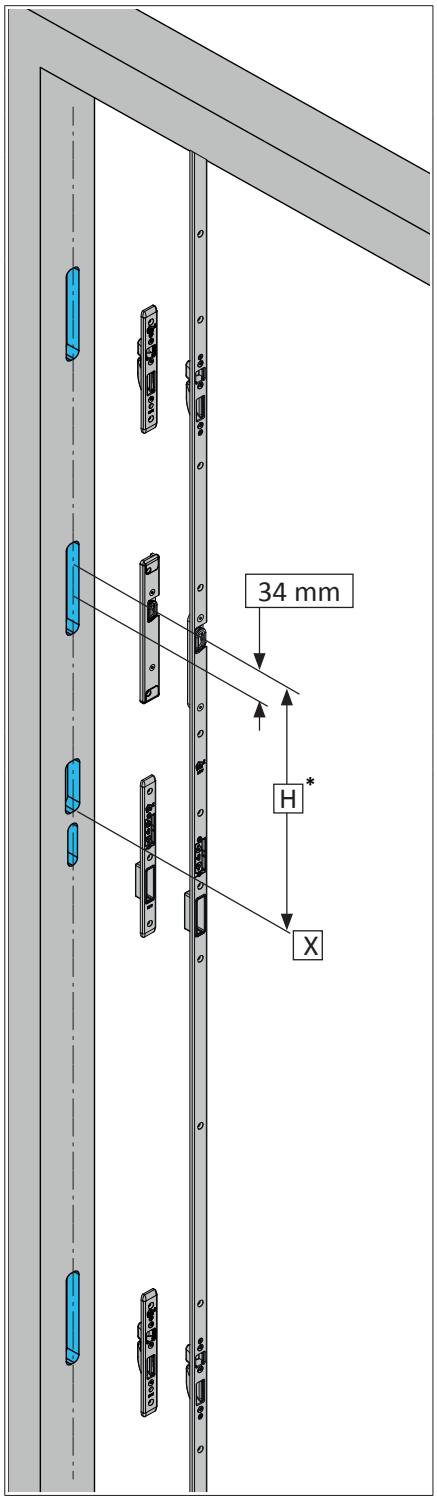
For position determination and size variables, see chapter 3.1

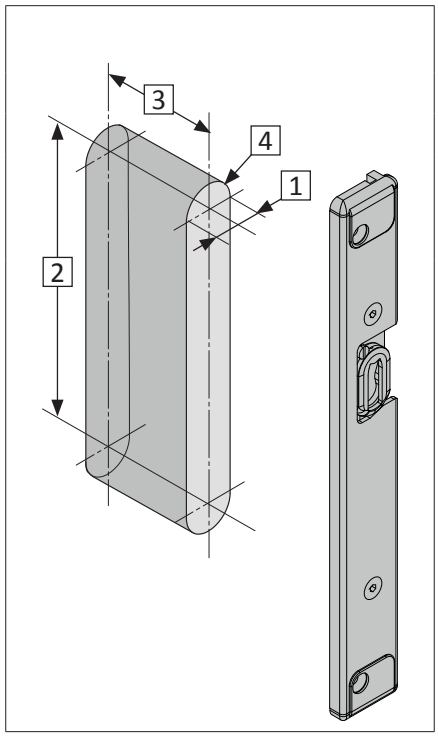
⚠ WARNING

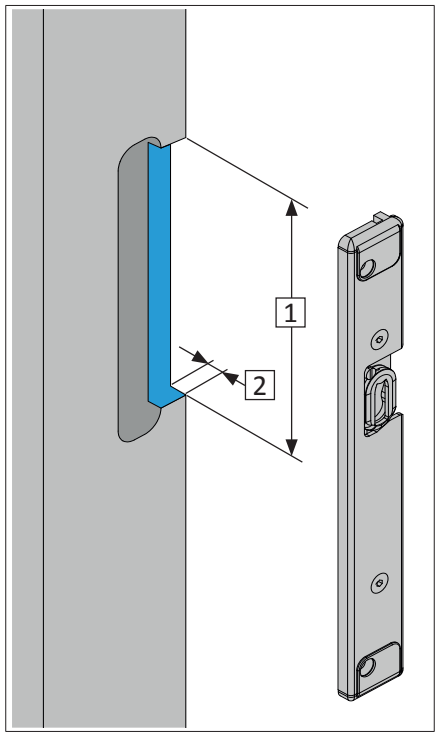
Danger of injury from swarf flying around rapidly

During milling work, there will be swarf flying around. You can injure your eyes.

- Wear protective goggles.







The specified milling dimensions refer to:
T2 striker plate: Safety lock
E8QT2H/E9QT2H: Locking rail with T2
Contact the KFV customer service to find out the milling dimensions for other frame parts or locking rails.

Bolt casing of the safety lock T2

[1] 21.0 mm

[2] 139.0 mm

[3] component depth + 1 mm

[4] R 8.0 mm

*The dimension "H" refers to the bolt centre of the T2 safety lock.

The centre of the milling of the bolt casing is 34 mm deeper.

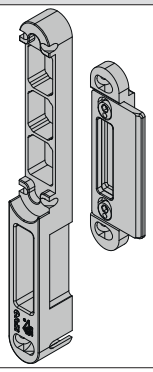
In some cases the pivoting area of the safety catch of the frame must be laterally milled.

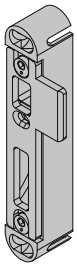
[1] 115.0 mm

[2] 4.0 mm + material thickness e. g. of an angled striker plate

6.4 Screwing specifications for SKG certified frame parts

6.4.1 Timber frames

Frame part for main lock 881-083 + 402-00031 C/D	RC2	RC3
	**3 piece 4.0x40 mm**	**3 piece 4,5x45 mm (SKH-certified)**

Frame part for auxiliary box with round bolt/hook bolt combination 2600-267-2W	RC2	RC3
	**3 piece 4.0x40 mm**	**3 piece 4,5x45 mm (SKH-certified)**

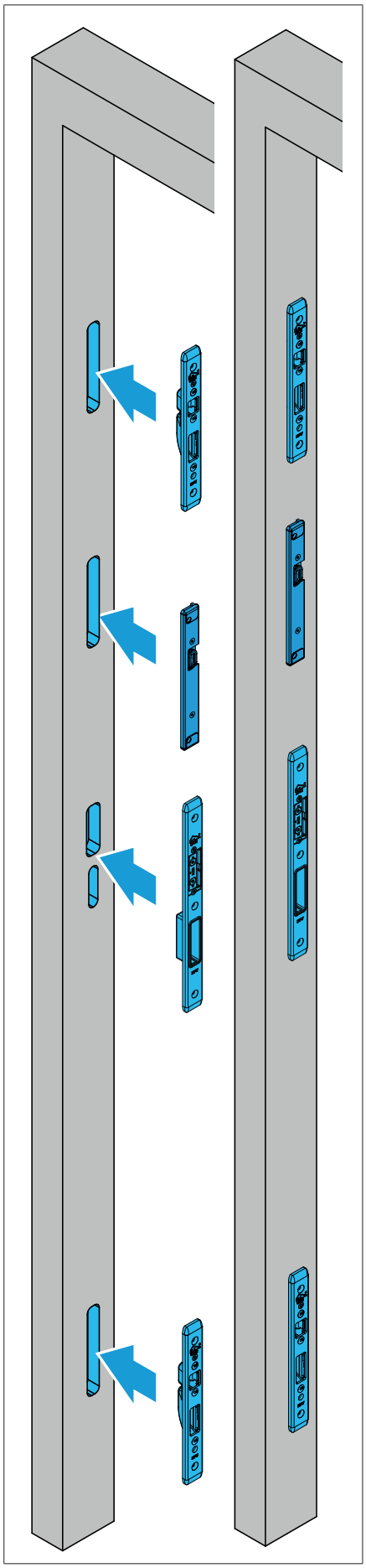
6.4.2 Aluminium frames

Frame parts with SKG stamp	RC2	
SKG®	**Ø ≥ 4.8 mm**	

6.4.3 PVC frames

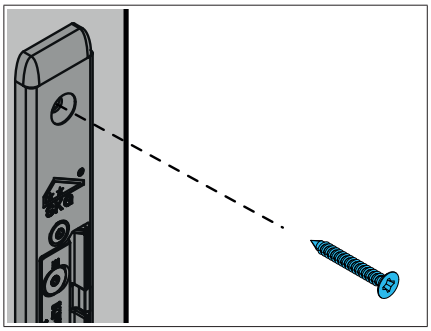
Frame parts with SKG stamp	RC2	
SKG®	**Ø ≥ 4.2 mm**	

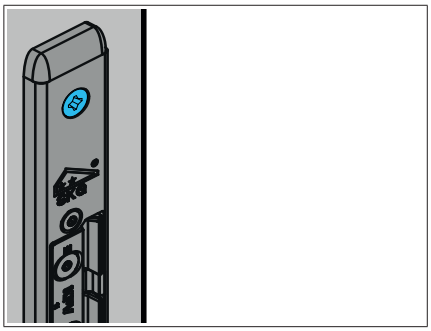
6.5 Mounting the striker plates

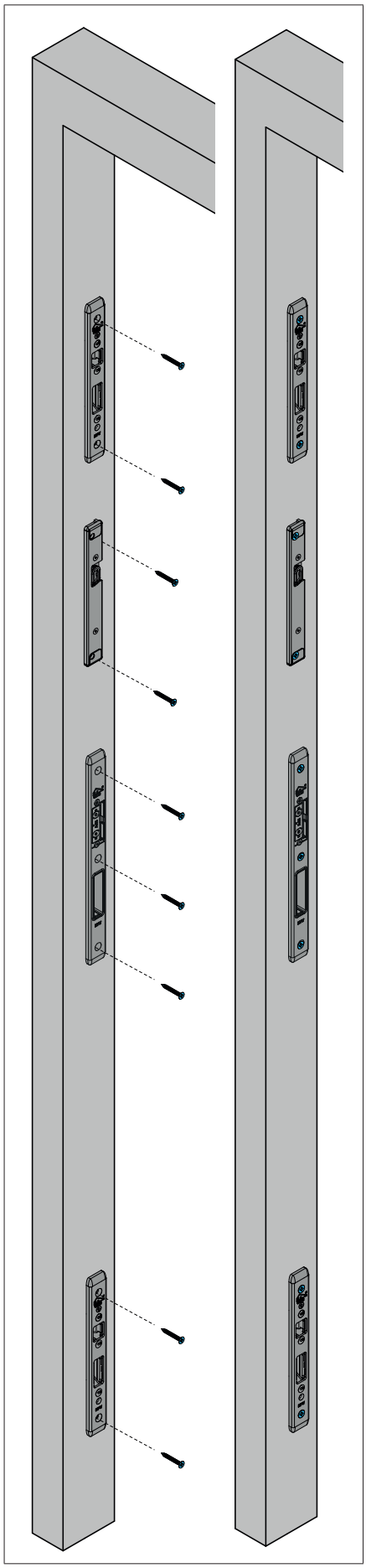


- Insert the striker plates into the millings intended for this purpose.
- Screw the striker plates with the door frame into place:

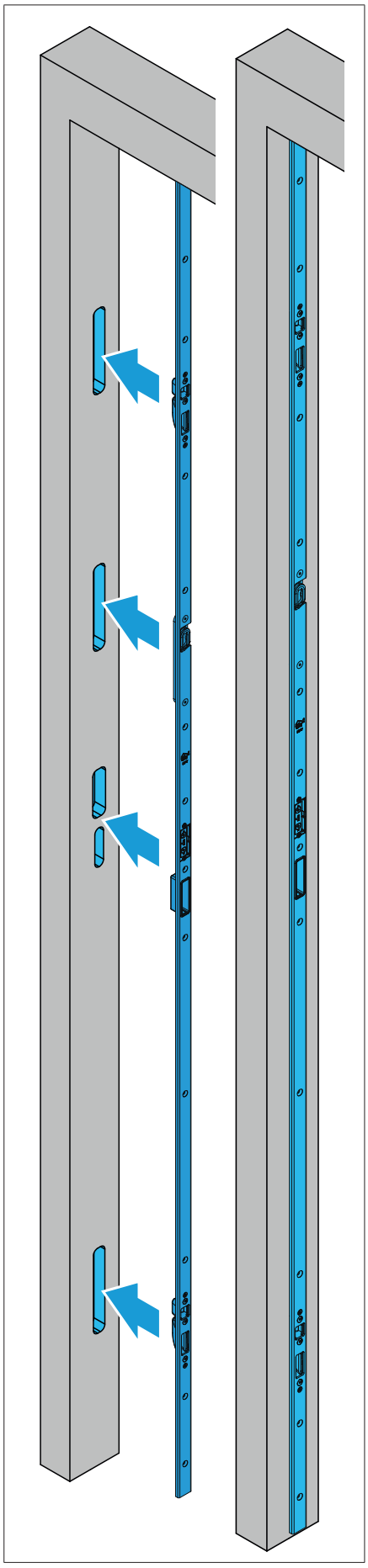
The striker plate for the safety lock T2 is optional.





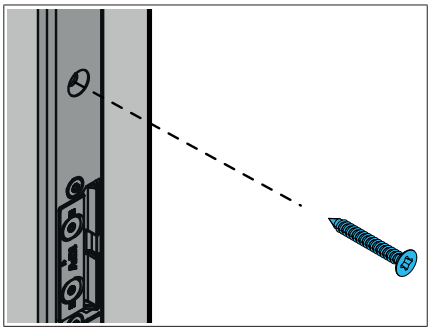


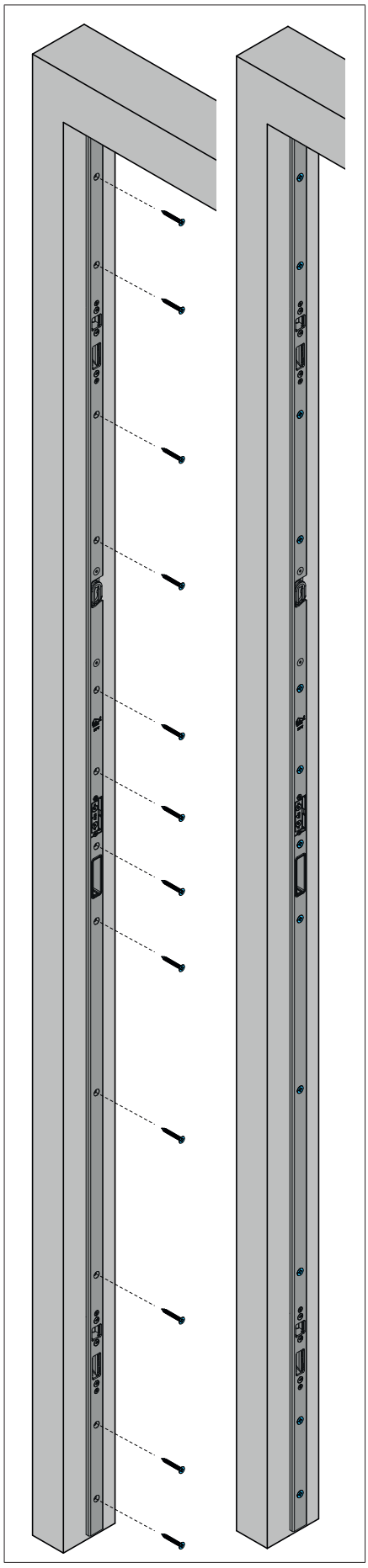
6.6 Mounting the locking rail



- Insert the locking rail plates into the intended millings.
- Then screw the locking rail to the door frame:

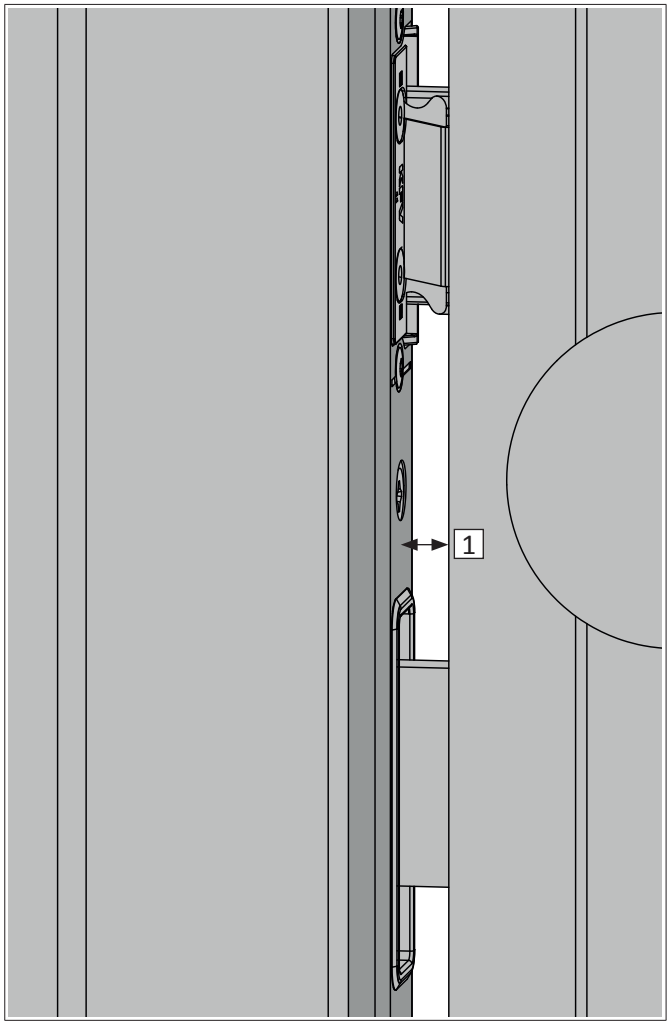
The locking rail with the safety lock T2 is optional





6.7 Adjustment of the airgap

Observe the assembly and operating instructions for the door hinges.

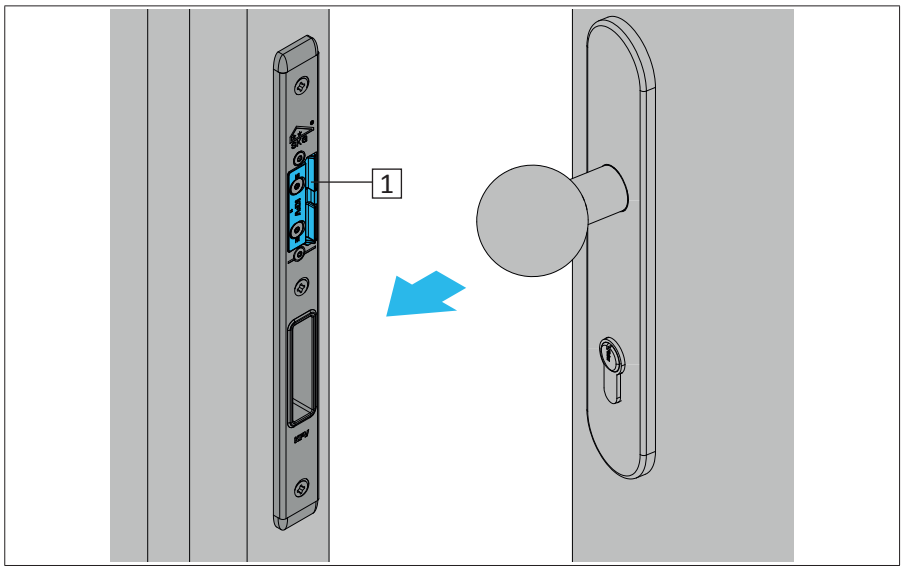


- Adjust the airgap [1] between the secondary sash and the frame part according to the assembly instructions of the door producer.

An airgap of 3.5 ± 1.5 mm must be maintained to allow the KFV multi-point lock to operate properly.

6.8 Adjustment of the replacement part

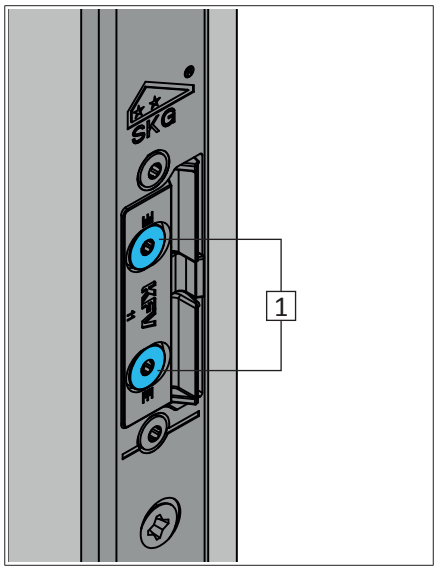
The latch must engage in the replacement part with as little free play as possible when the door is closed. The replacement part is horizontally adjustable for this purpose.

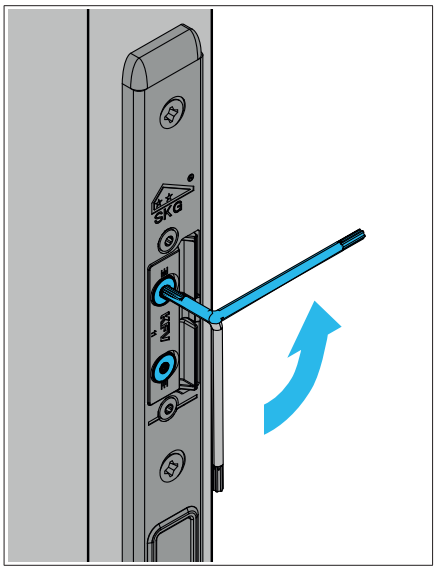


▶ Close the door.

The latch must engage in the replacement part [1] and the door must remain locked.

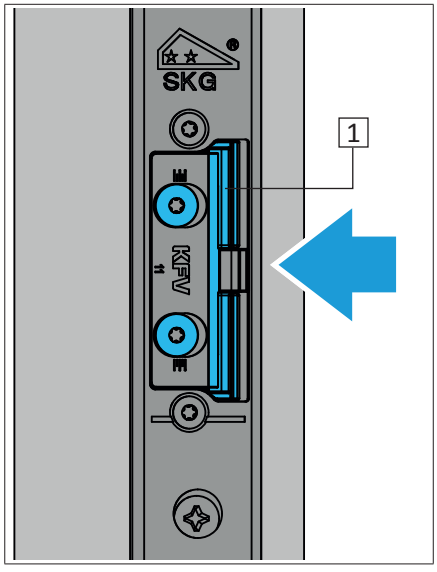
- If the latch does not engage or if the pressure on the door seal is too high, adjust the replacement part in the direction of the door leaf.
- If the latch has too much free play, adjust the replacement part in the direction of the frame.

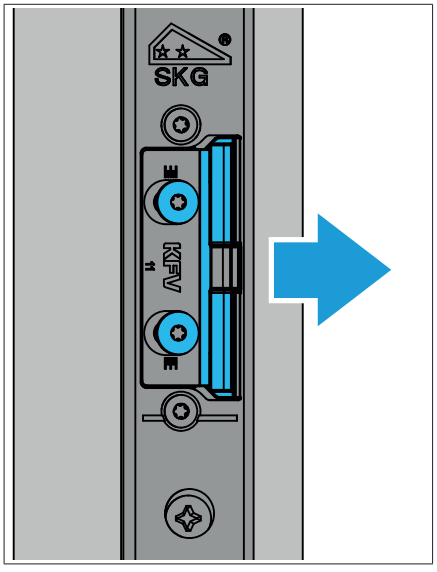




	T 10

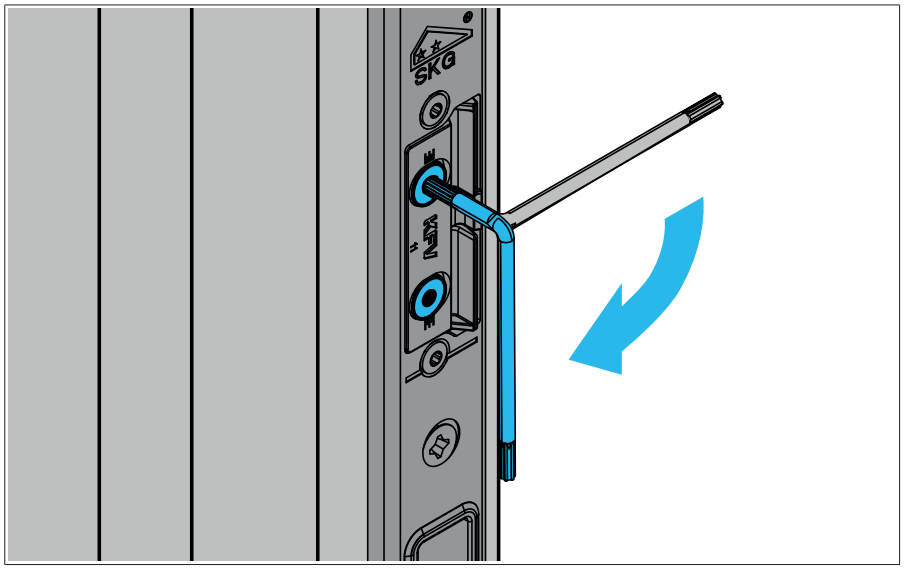
▶ Loosen the two adjustment screws [1].





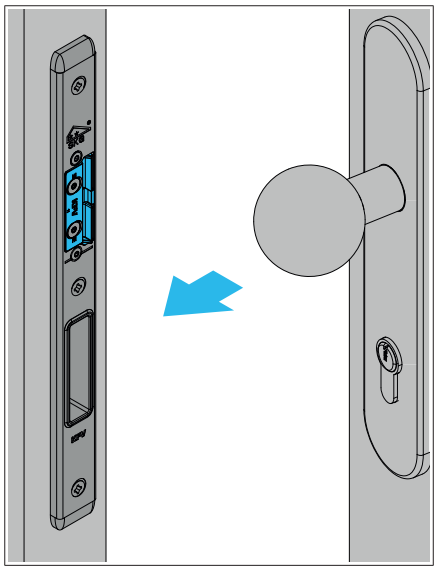
▶ Slide the stop part [1].

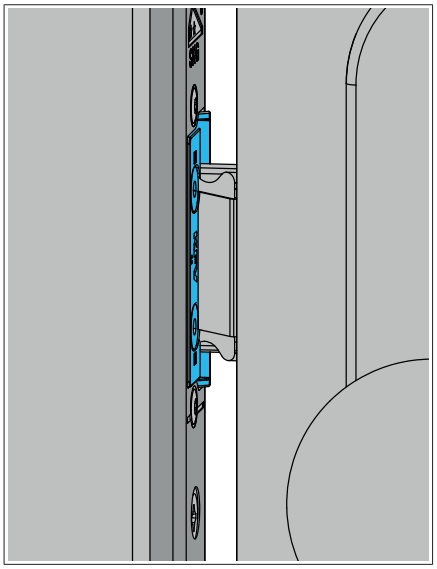
- The pressure is reduced in the direction of the door leaf.
- The pressure will increase in the direction of the frame.



	T 10 2.5 Nm

▶ Tighten the two adjustment screws with the specified torque.



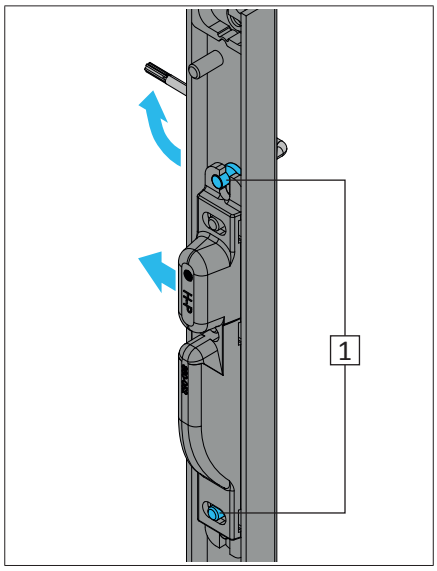


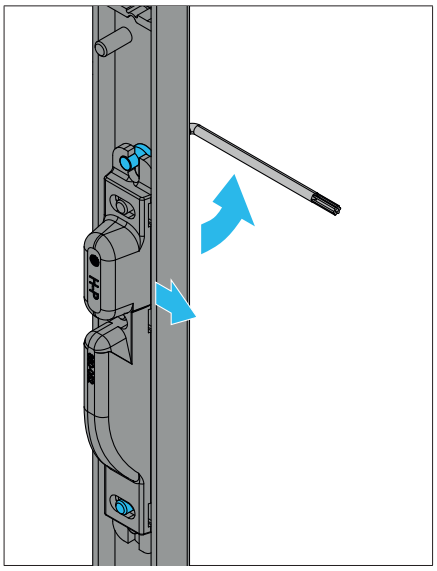
▶ Close the door and check is the latch engages properly.

Repeat the adjustments if necessary.

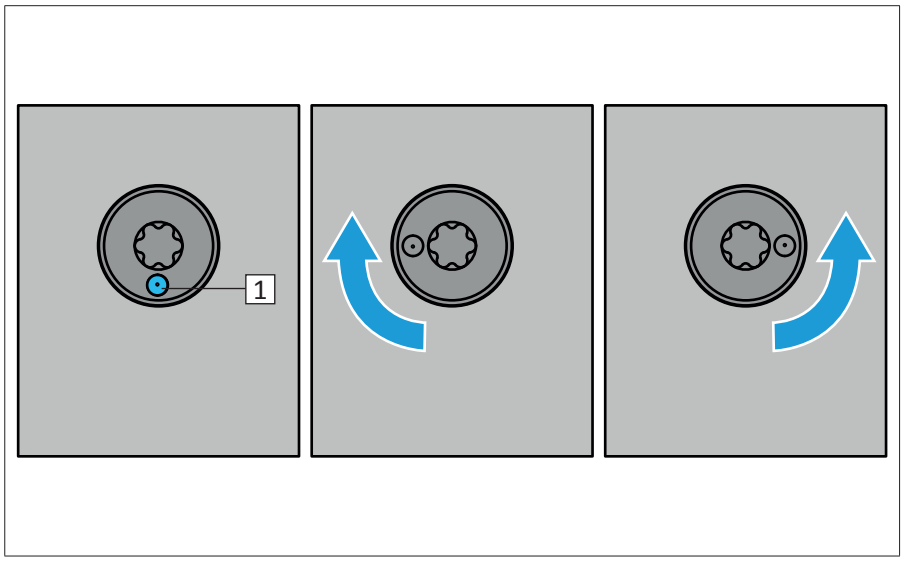
6.9 Adjustment of the Q-adjustment

The Q-adjustment is moved via two eccentric screws [1] laterally by ± 2.5 mm, which changes the contact pressure of the door on the frame seal.





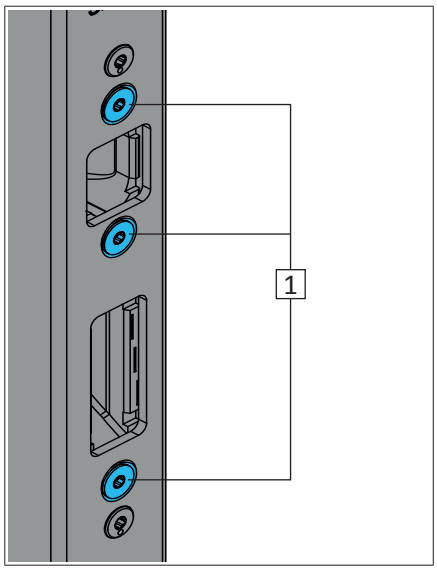
- If the contact pressure of the door on the frame seal is too low, move the Q-adjustment in the direction of the frame seal.
- If the contact pressure of the door on the frame seal is too high, move the Q-adjustment in the direction of the door leaf.

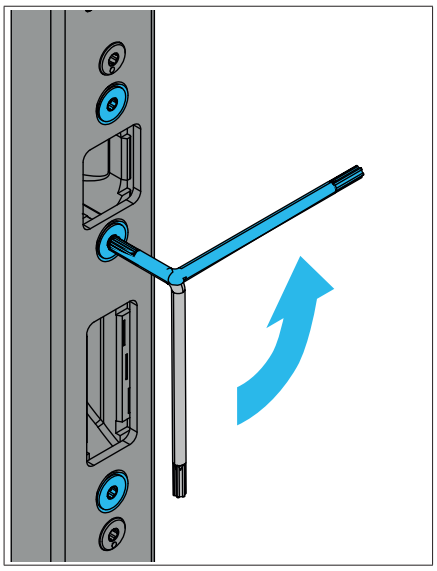


There is a marking [1] on the eccentric screw.

The Q-adjustment is in neutral position in the default settings. The marking points downwards.

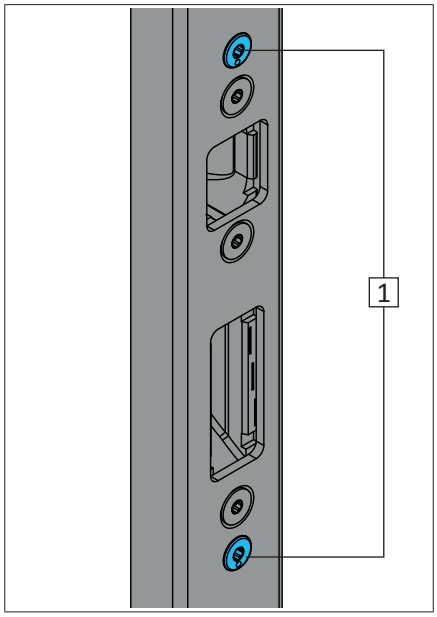
The max. travel range of the Q-adjustment is reached when the marking is in a 90° position.

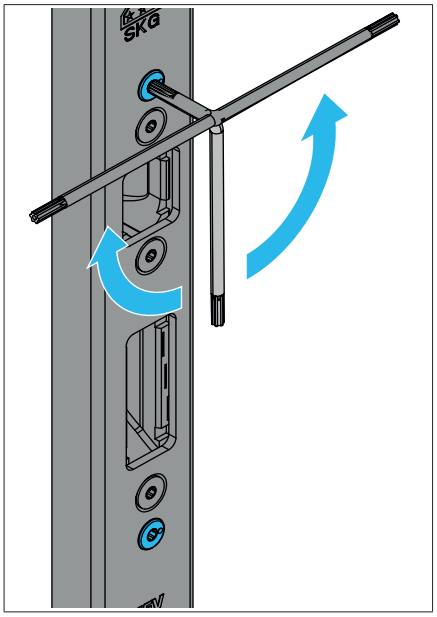




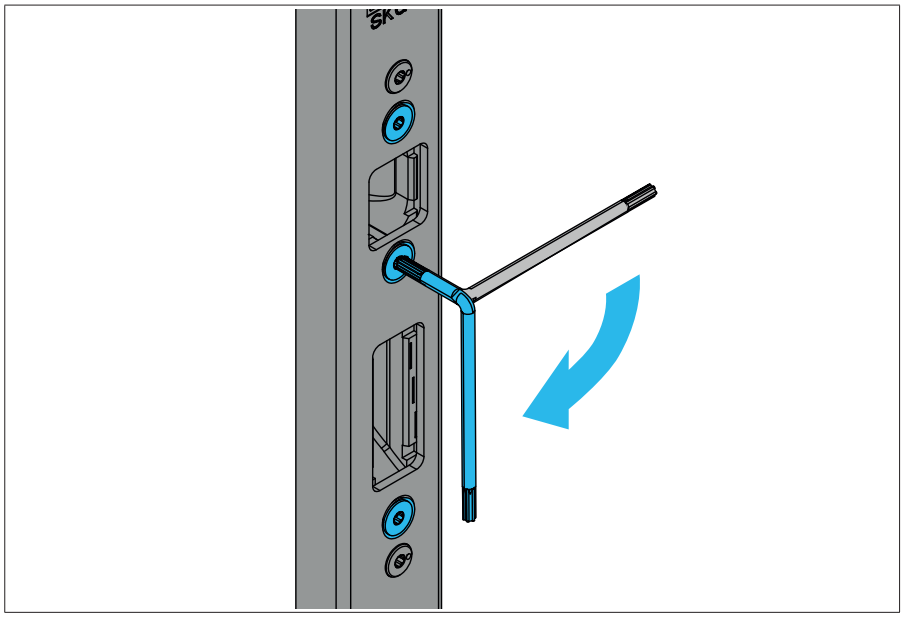
	T 10

▶ Loosen the three fixing screws [1] of the Q-adjustment.



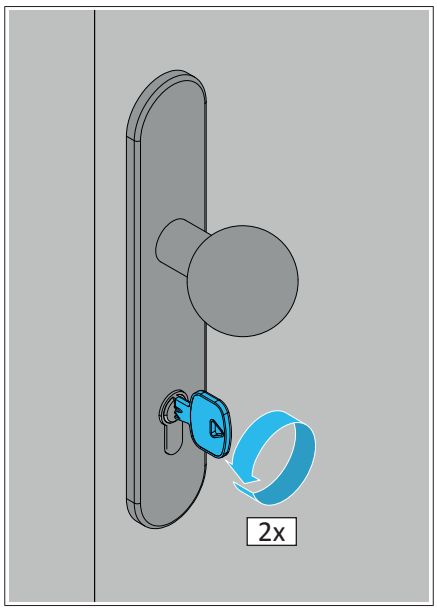


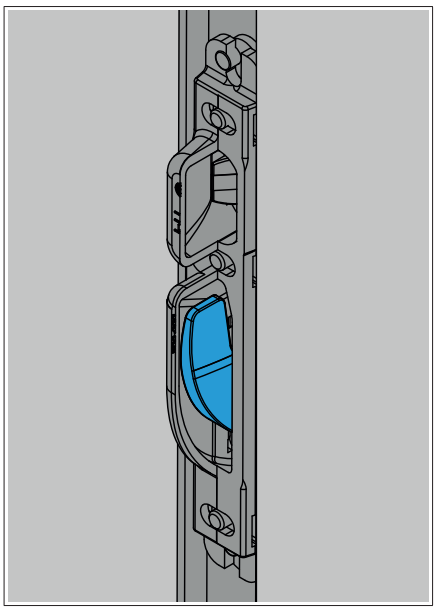
▶ Turn the two eccentric screws [1] up to 90° to the right or left.



T 10
1.3 Nm

▶ Tighten the three fixing screws of the Q-adjustment.





▶ Then close the door and lock with a single turn (2x by 360°)*.

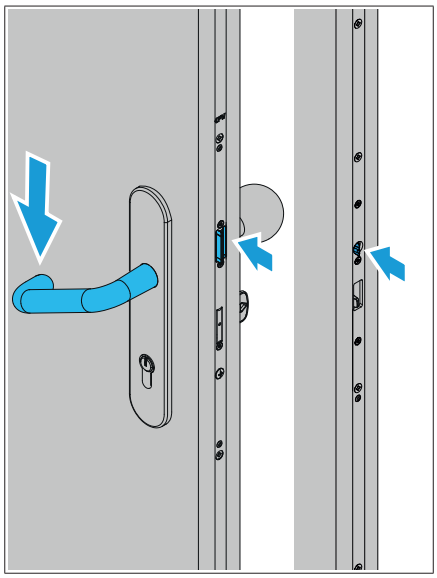
The conical hook bolt moves into the Q-adjustment and presses the side of the door onto the seal.

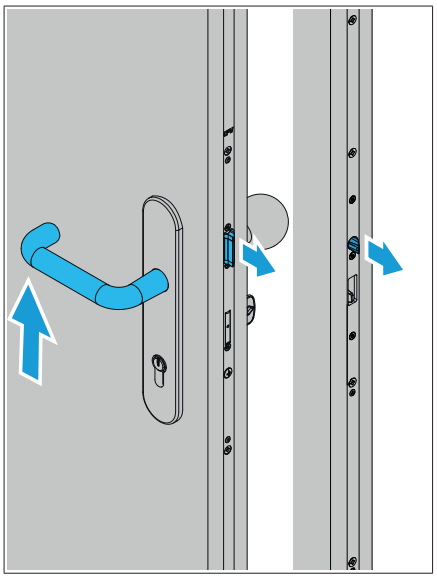
* depending on the cylinder lock

The engagement of the hook bolt not visible from the outside.

7 Functional test

7.1 Test when the door is open





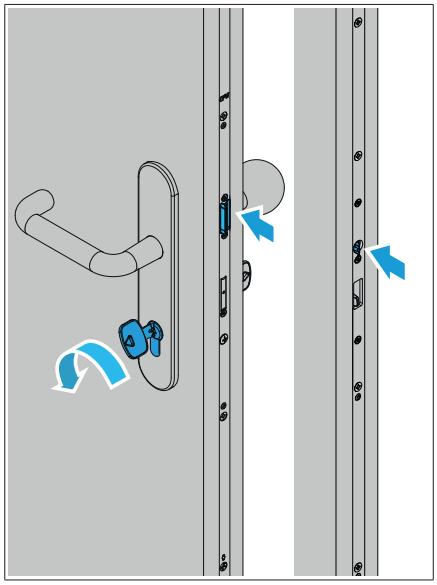
Check the functioning of the lever handle and the latch

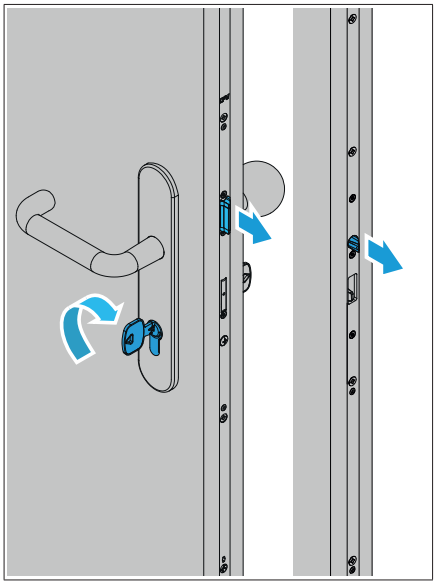
▶ Move the lever handle to the bottom.

The lever handle must be able to move with ease. The main lock latch and the latches of the auxiliary box must retract completely.

▶ Release the lever handle.

The lever handle must return to its original position by itself. The main lock latch and the latches of the auxiliary box must extend completely.





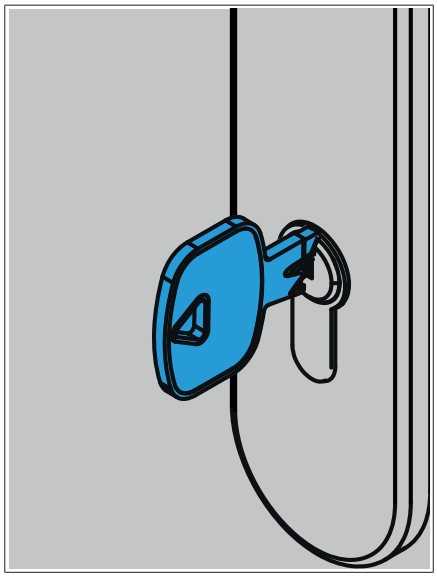
Check the functioning of the latch with the key (cylinder operated lock)

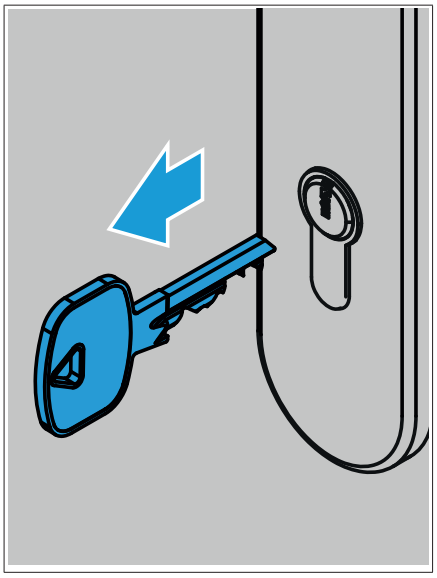
▶ Turn and hold the key in the release position.

The latches must be completely retracted.

▶ Release the key.

The latches must extend completely.

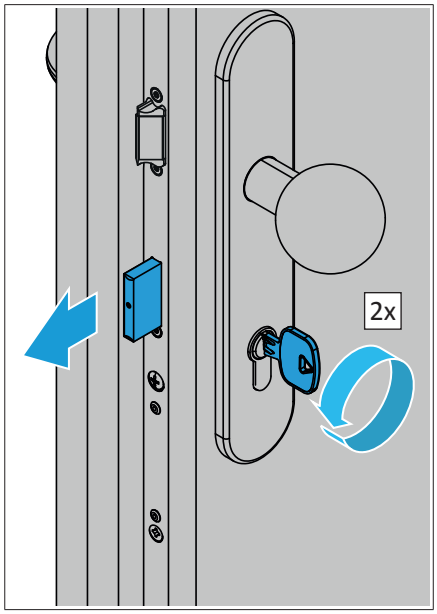


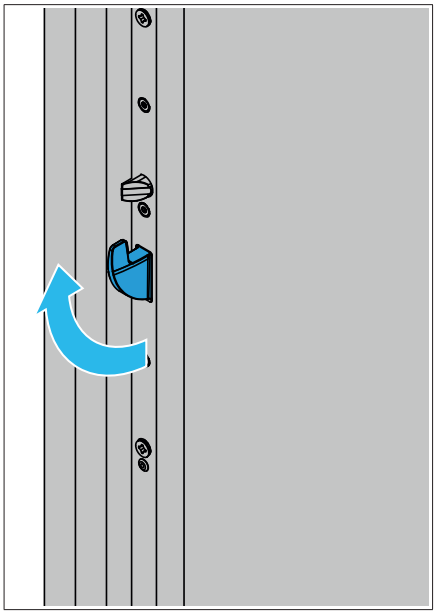


Withdrawing the key

▶ Move the key to the withdrawal position and remove.

The key must be able to be withdrawn with ease from the profile cylinder.



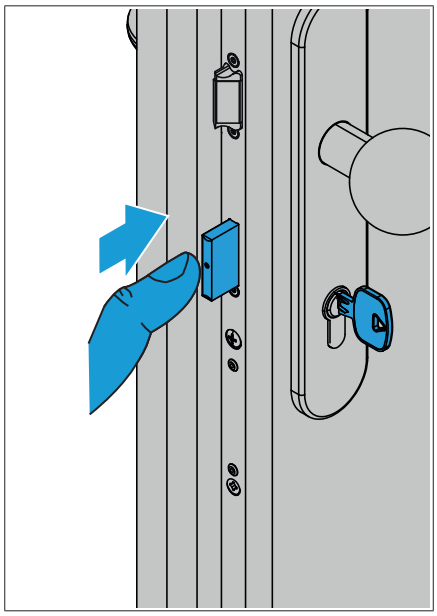


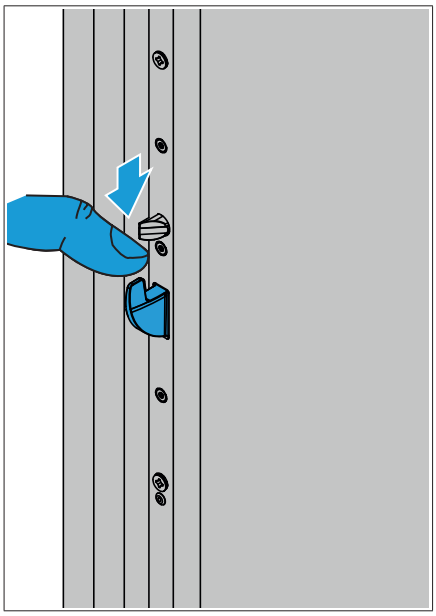
Projecting the locking elements

- ▶ Turn the key in the locking direction with a single turn (2x 360°)*.

The main lock deadbolt and the hook bolt of the auxiliary boxes must extend completely and with ease.

* depending on the cylinder lock

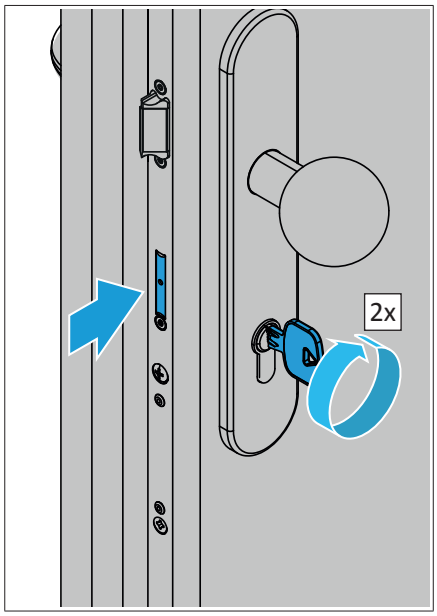


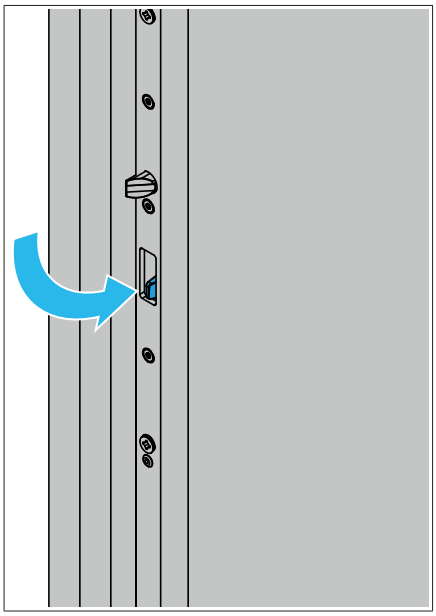


Checking the counter-pressure retention

- ▶ The locking elements try to press back manually.

The locking elements must not move back in case of counter-pressure.





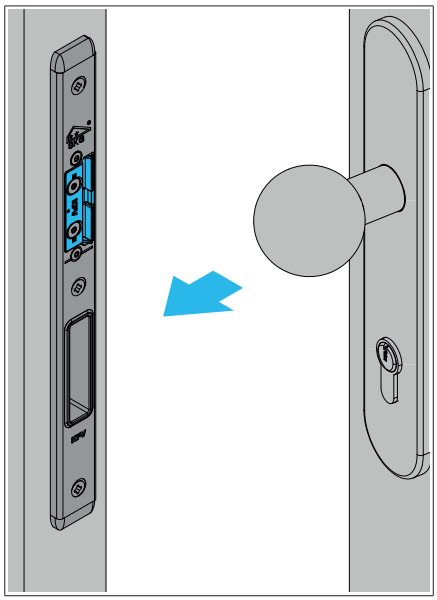
Retracting the locking elements

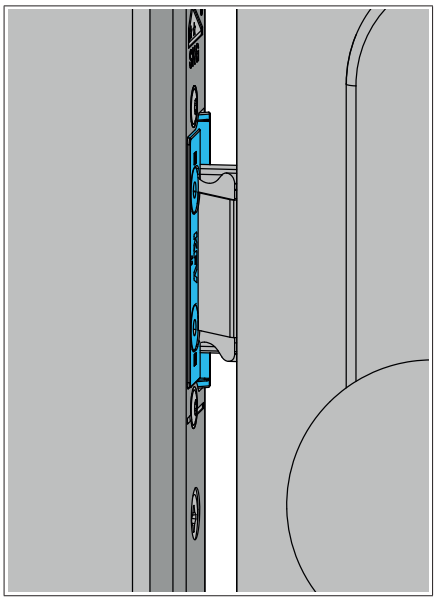
- ▶ Turn the key in the release direction with a single turn (2x 360°)*.

The main lock deadbolt and the hook bolt of the auxiliary boxes must retract completely and with ease.

* depending on the cylinder lock

7.2 Test when the door is closed





Check that the latch engages

▶ Close the door.

The door must close easily.

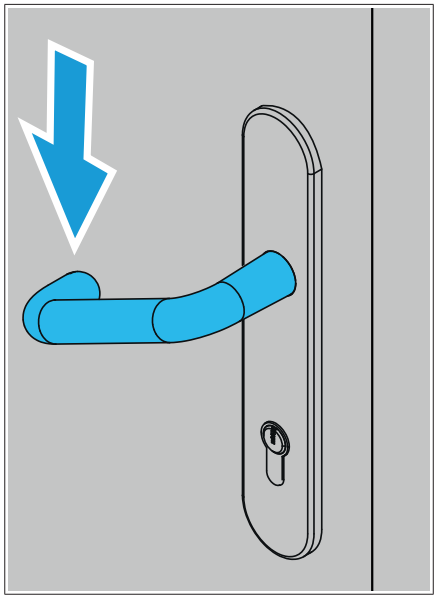
The latch of the main lock must engage properly in the replacement part.

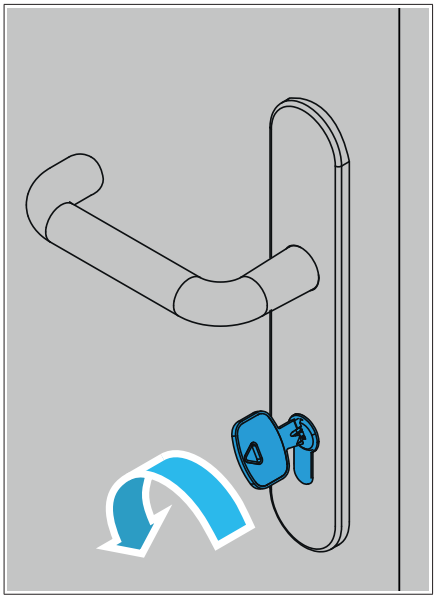
If the latch does not engage:

▶ Adjust the replacement part in the direction of the door leaf.

If the latch has too much free play:

▶ Adjust the replacement part in the direction of the frame.





Check the release of the latches via the lever handle

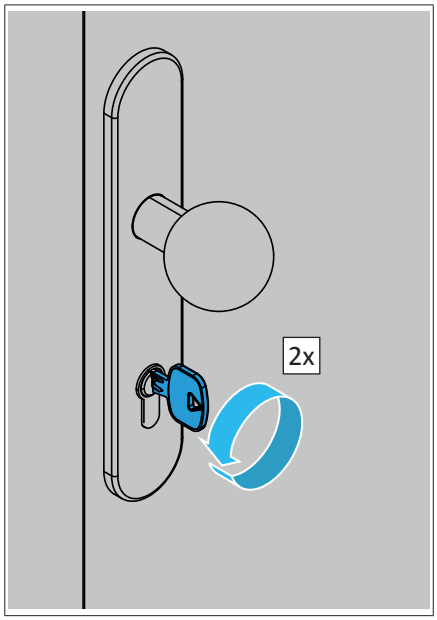
▶ Activate the lever handle and open the door.

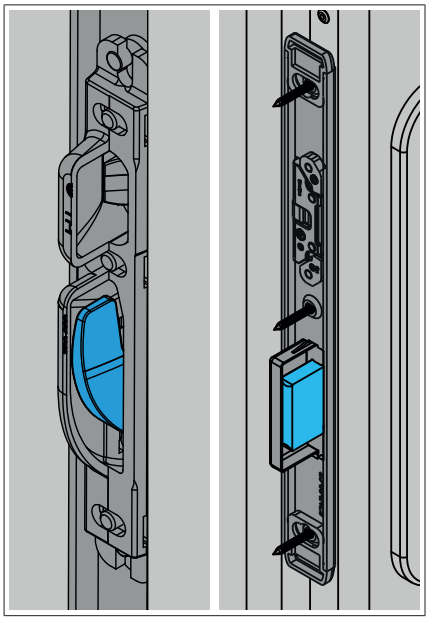
The latches must retract completely and release the door.

Check the release of the latches via the key (cylinder operated lock)

▶ Turn the key into the release position and open the door.

The latches must retract completely and release the door.





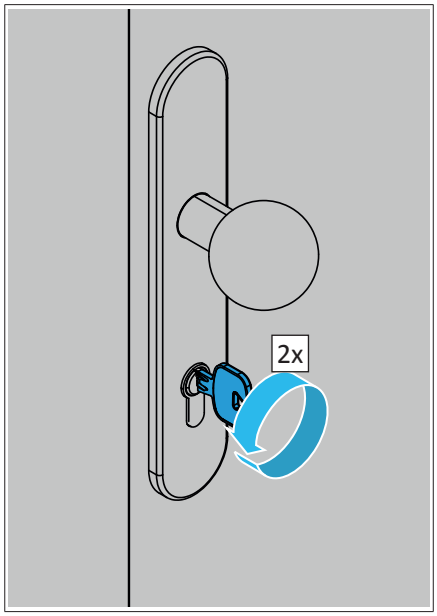
Check the locking of the locking elements

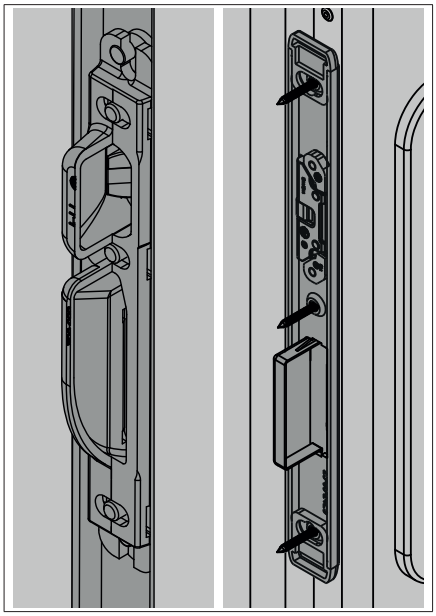
▶ Turn the key in the locking direction with a single turn (2x 360°)*.

The locking elements must extend completely. The door leaf must be moved laterally onto the seal.

The engagement of the locking elements not visible from the outside.

* depending on the cylinder lock





Retracting the locking elements

- ▶ Turn the key in the release direction with a single turn (2x 360°)*.

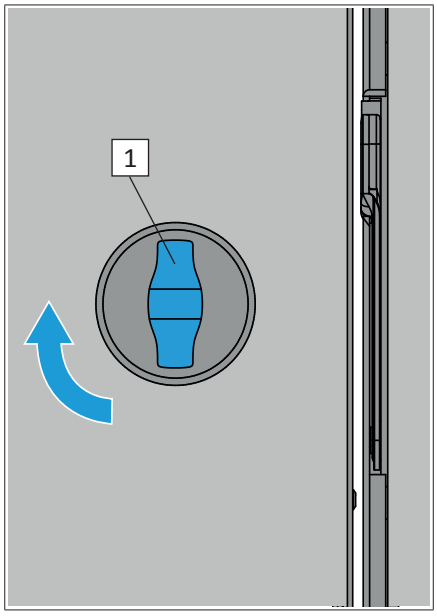
The locking elements must retract smoothly and completely.

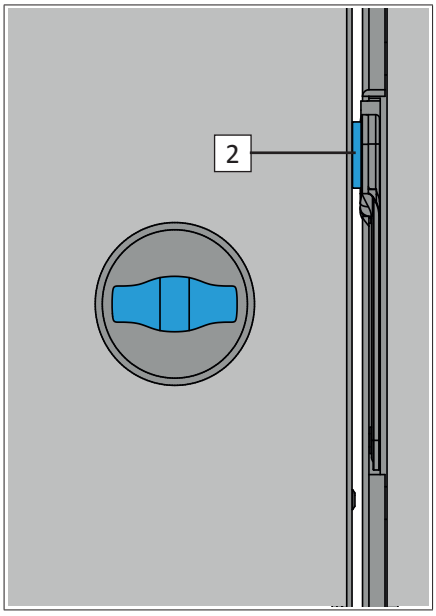
- ▶ Open the door.

The door must open easily.

* depending on the cylinder lock

7.3 Checking the safety lock T2

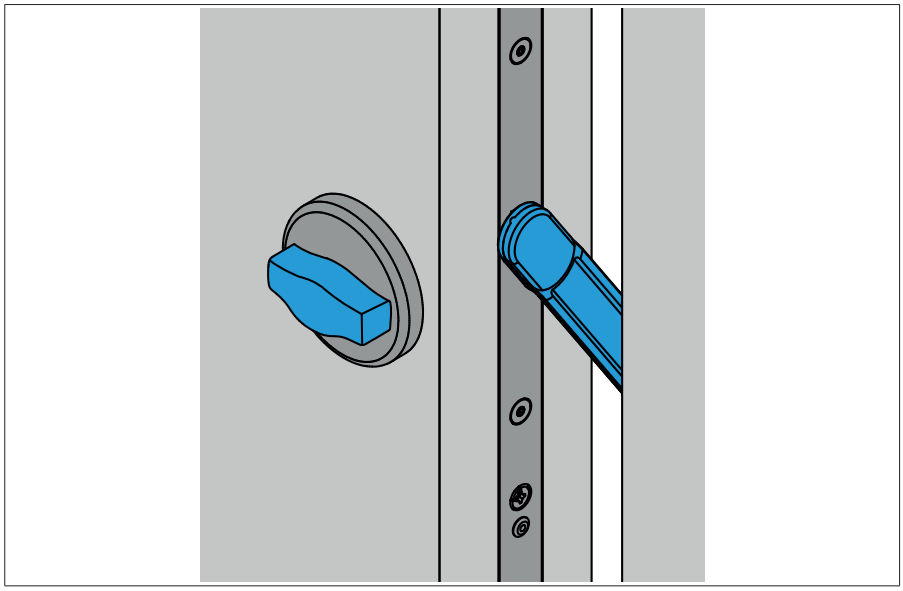




Check lock

- ▶ Turn the thumb turn knob [1] into the locking position with the door closed.

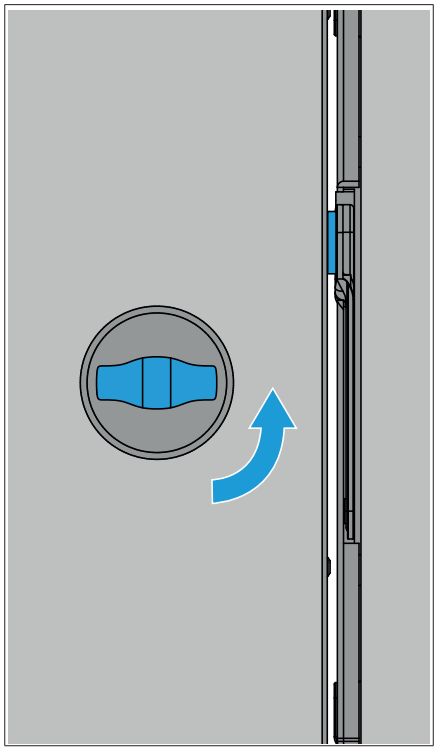
The bolt [2] must move into the opening of the blocking clip (see next testing point).

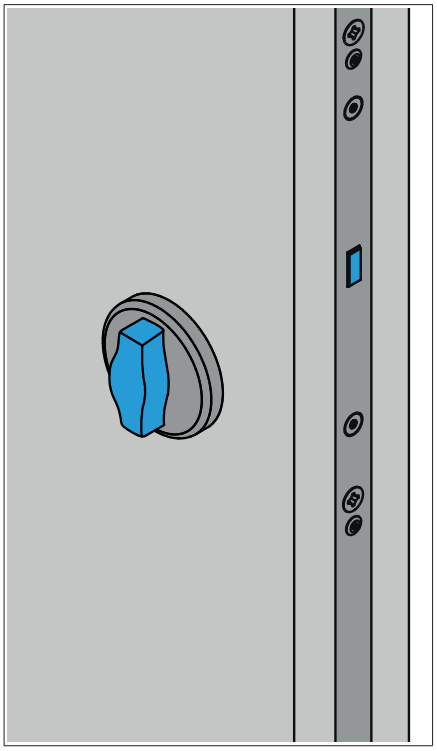


Check the function of the safety catch

- ▶ Open the door.

The safety catch must be picked up by the deadbolt and securely limit the opening gap of the door.





Check the release with the handle

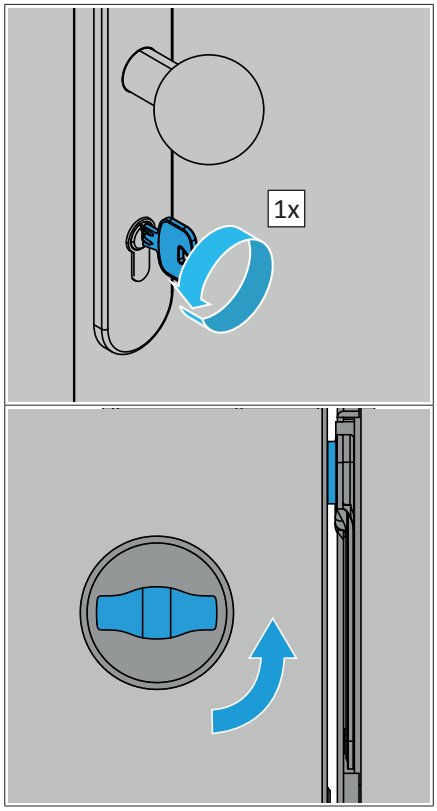
The handle must be in the locking position in the blocking clip.

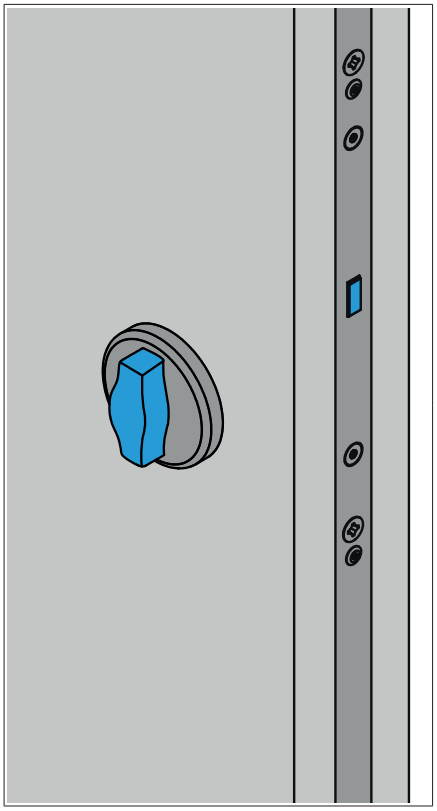
- ▶ Close the door.
- ▶ Turn the handle in the release position.

The deadbolt must move with ease out of the opening of the safety catch.

- ▶ Open the door.

The safety catch must remain in position and the door must open easily and fully.





Check the release with the key

The handle must be in the locking position in the blocking clip.

- ▶ Turn the key from the release position once (1x by 180°)* into the locking position.
- The turn lock must turn independently to the locking position.
- The deadbolt must move with ease out of the opening of the safety catch.
- ▶ Turn the key once from the locked position (1x by 180°)* into the release position.
- ▶ Open the door.

The blocking clip remains in position and the door can be completely opened.

* depending on the cylinder lock

8 Troubleshooting

8.1 Malfunction of the lever handle

The lever handle does not return to its original position by itself.

- ▶ Check that the lever handle is correctly seated.
- The lever handle must not have any contact with the rose or the plate or the gear box.
- ▶ Check the tightening torque of the screwing of the handle set.
- If the screwing is too tight, the routed pocket could be distorted and exercise lateral pressure on the gear box, causing sluggishness.
- ▶ Check the routed pocket of the main lock for adherence to dimensions.
- If, in spite of the specified dimensions being observed, the lever handle does not return to its original position by itself, the multi-point lock must be checked by KFV.
- If the routed pocket does not comply with the specified dimensions, the routes pocket must be reworked.
- ▶ Repeat the test step with the reworked routed pocket.
- If the lever handle continues to fail to return to its original position by itself, the multi-point lock must be checked by KFV.

8.2 Malfunction of the profile cylinder

The key cannot be pulled out.

- ▶ Dismount the cylinder lock and check for malfunctions.
- The cylinder lock must be replaced if it does not function properly.
- ▶ Repeat the test step with the new cylinder lock.
- If the key still cannot be pulled out, the multi-point lock must be checked by KFV.

8.3 Sluggishness during locking and release

- ▶ Check the adjustments of the replacement part (see page 26).
- ▶ Check the adjustments of the Q-adjustments (see page 28).
- Adjust the replacement part and the Q-adjustment in the direction of the door leaf to reduce the lateral contact pressure.
- ▶ Repeat the test step with the readjusted replacement part and the readjusted Q-adjustment.
- If this sluggishness persists, the dimensions of the routed pockets of the main lock and auxiliary box must be checked.
- When the routed pockets are compliant with the specified dimensions and the sluggishness persists, the multi-point lock must be checked by KFV.
- If the routed pockets do not comply with the specified dimensions, they must be reworked.
- ▶ Repeat the test step with the reworked routed pockets.

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