

# KFV

## Multi-point locks Key-operated

Main lock set

for BS 230X, BS 250X, BS 26XX, BS 6XXX

Window systems

Door systems

Comfort systems



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### 1 Introduction

Please read these instructions carefully before you begin the assembly work. Follow the instructions in Chapter 2 "Safety", in order to prevent personal injury or functional disorders.

These instructions are an integral part of the main lock set and must be accessible to the specialist personnel at all times.

#### 1.1 Manufacturer and Service

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Please contact your retail partner in case of complaints or service requirement.

#### 1.2 Target group of this documentation

This documentation is intended for use by specialists only. All work described in these instructions is to be performed only by experienced professionals with training and practice in the assembly as well as the commissioning and maintenance of the main lock set.

#### 1.3 Intended use

##### 1.3.1 Installation location

- The main lock set is suitable as a replacement for existing main locks.
- The main lock set may only be installed in technically sound multi-point locks.
- The multi-point lock must permit use of the main lock set.

##### 1.3.2 Locking

- If the main lock is installed in doors where a locking part with an offset latch was previously installed, the softlock latch included in the scope of delivery must be installed.
- For replacing the main lock, use only the same type of main lock (see chapter 4 „Main lock types, key-operated“ from page 9).

#### 1.4 Improper use

- The main lock set must not be used in multi-point locks for escape doors.
- The main lock set must not be used in doors for wet rooms or rooms in which the air contains aggressive or corrosive components.

- Foreign objects and/or materials which impede or prevent proper use must not be placed within the opening range or the locking system.
- The main lock must not be tampered with and/or modified.
- Locking elements must not be misused to hold the door open.
- Movable or adjustable locking elements (e.g. deadbolt, latch) must not be painted.

#### 1.5 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:

- Surface treatment of the door and door frame must take place before the main lock is installed. Subsequent surface treatment can reduce the functional capacity of the main lock.
- Do not overtighten the screws or insert them at an angle.
- Do not drill into or through the main lock under any circumstances.
- Install hardware components and cylinder flush.
- Make sure that the dimensions and technical properties of the backset, PZ dimension and profile cylinder between the multi-point lock and the main lock are compatible.
- Use only acid-free neutral-cure sealants to prevent corrosion of components.

#### 1.6 Transport

- The transit support provided must remain in the main lock during the transport of a pre-assembled door without cylinder lock.






#### 1.7 Dimensions

All measurements are given in mm.

### 1.8 Symbols used

The following icons are used in this document:

	General warning symbol
	Useful information or advice
	Do not use mechanical force

### Other types of indicators

Below is a list of symbols used in these instructions and their meanings:

- Items of text following this marker are found in lists.
  - Items of text following this marker are found in subordinate lists.
- ▶ Items of text with this marking in front of them are instructions that must be followed in the specified order.

### Cross reference

- „“ A separate cross reference is enclosed by quotation marks.
- () A cross reference in the flow text is enclosed by brackets.


### 1.9 Aligning the frame parts and main lock in the door

The distances and dimensions of the latch and deadbolt must be compatible with those of the frame part.

If the dimensions are not compatible, the frame part will need to be replaced, reworked or offset.

### 1.10 Applicable documents

For the installation of the main lock set, it is essential to observe all assembly and operating instructions that are enclosed with other (optional) components. The instructions of the door manufacturer and for other accessories from other manufacturers are also applicable.

	To operate the main lock, download the operating instructions for BS 220X/230X/250X/260X from the download portal of our website <a href="http://www.siegenia.com">www.siegenia.com</a> .
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### 1.11 Appropriate disposal

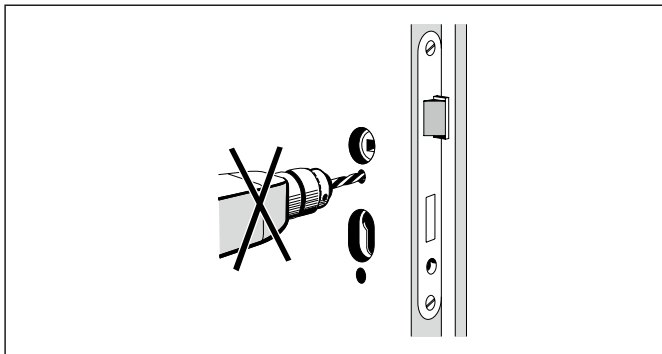
Do not dispose of the main lock set in the household waste. Comply with the current local and national regulations.

The packaging consists of raw materials that can be recycled and can be taken to the local waste paper disposal site.

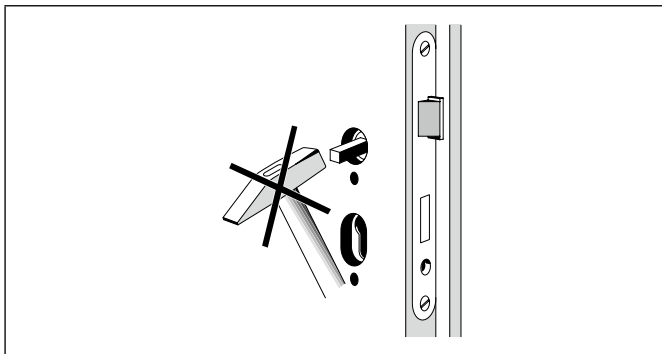
# KFV – Assembly instructions

## Multi-point locks, key operated, main lock set

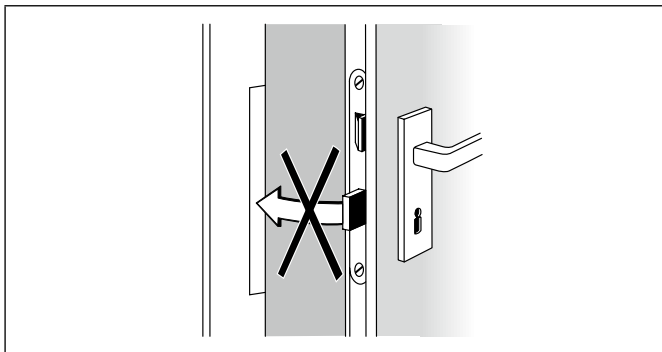
### 1.12 Causes of damage



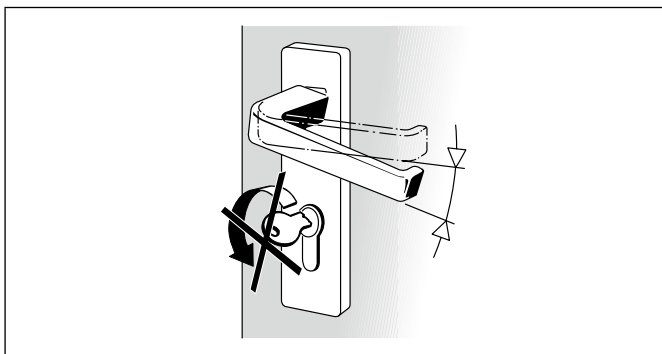
Do not drill through the door leaf in the area of the gear box when the main lock is installed.



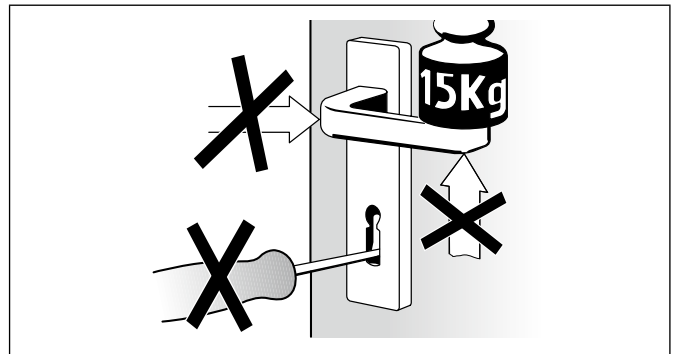
The spindle must not be hit through the lock nut with force.



None of the locking elements may be excluded when the door is open.



The lever handle and key must not be operated at the same time.



Force must be exerted on the lever handle only in the normal direction of rotation.  
A maximum force of 150 N may be applied to the lever handle in the direction of actuation.  
The main lock must be locked only with the associated key (and not with foreign objects).

## 2 Safety


Before starting the assembly work, read the following safety instructions carefully. They are designed to keep you safe and prevent hazards, injuries and material damage. Observe all warning notes.

### 2.1 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 hazards and prohibit specific behaviour.

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

 <b>SIGNAL WORD</b>
<b>Type and source of danger</b>
Explanation of the type and source of danger
<ul style="list-style-type: none"> <li>• Measures for the prevention of the danger</li> </ul>

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

The type and source of the hazard 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.

### 2.2 Warning notes used



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



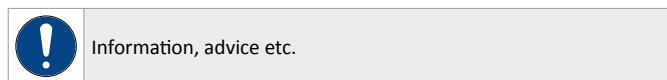
The signal word "Warning" designates a potential hazard. If this hazard is not prevented, it could lead to death or severe injuries.



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



The signal word "Notice" defines actions for the prevention of material damage. The observation of these notes prevents damage to the multi-point lock or the other components.



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

### 2.3 Personal protective equipment

You will need the following protective equipment during the assembly work for the main lock set:

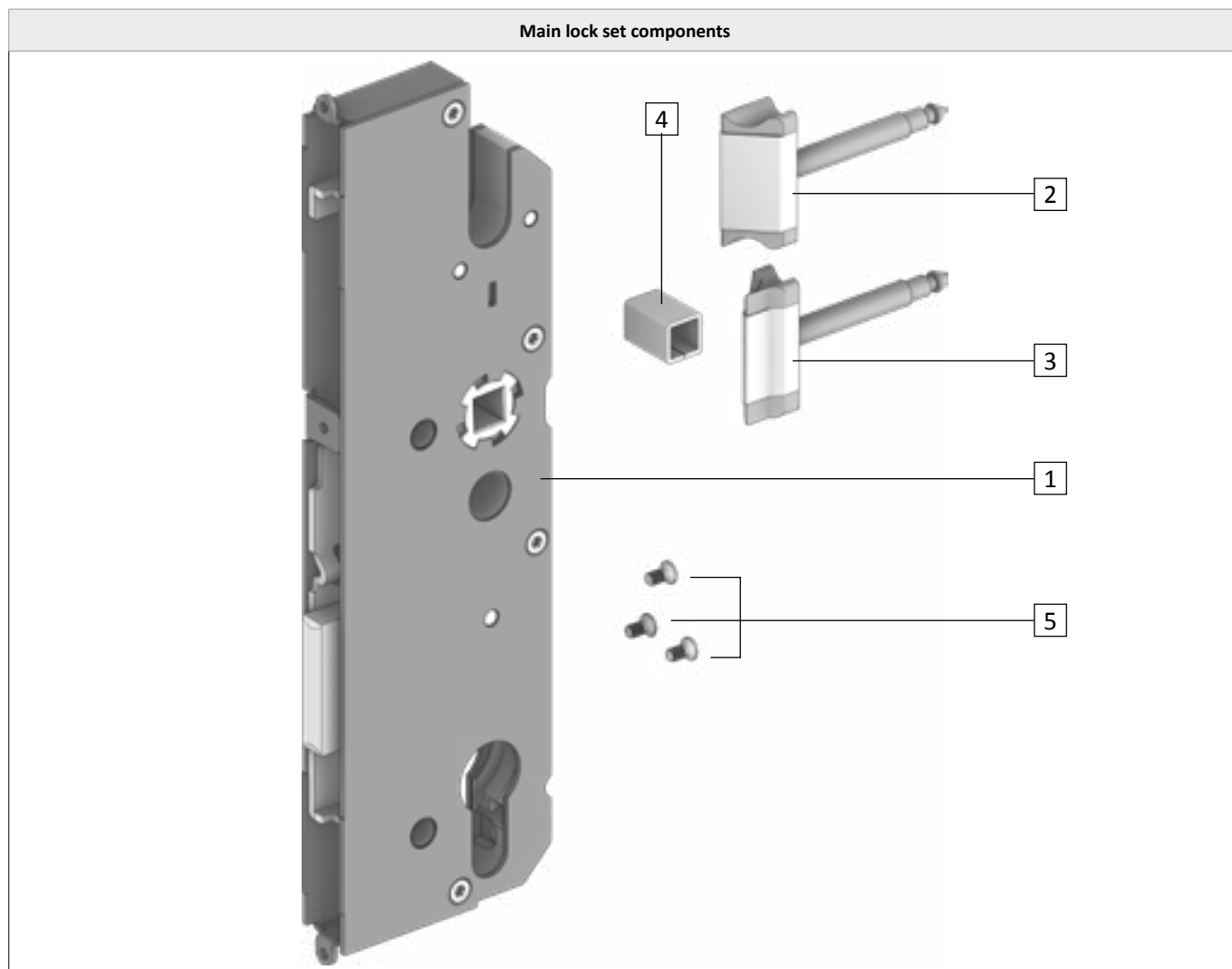
- Protective gloves

## KFV – Assembly instructions

Multi-point locks, key operated, main lock set

### 3 Main lock set:

To order the main lock set, information is required concerning the backset, the type of cylinder lock (profile cylinder PZ or round cylinder RZ) and the PZ dimension. You can find more notes online at our homepage in the download area [www.siegenia.com](http://www.siegenia.com) in the "Multi-point locks and frame parts" section.

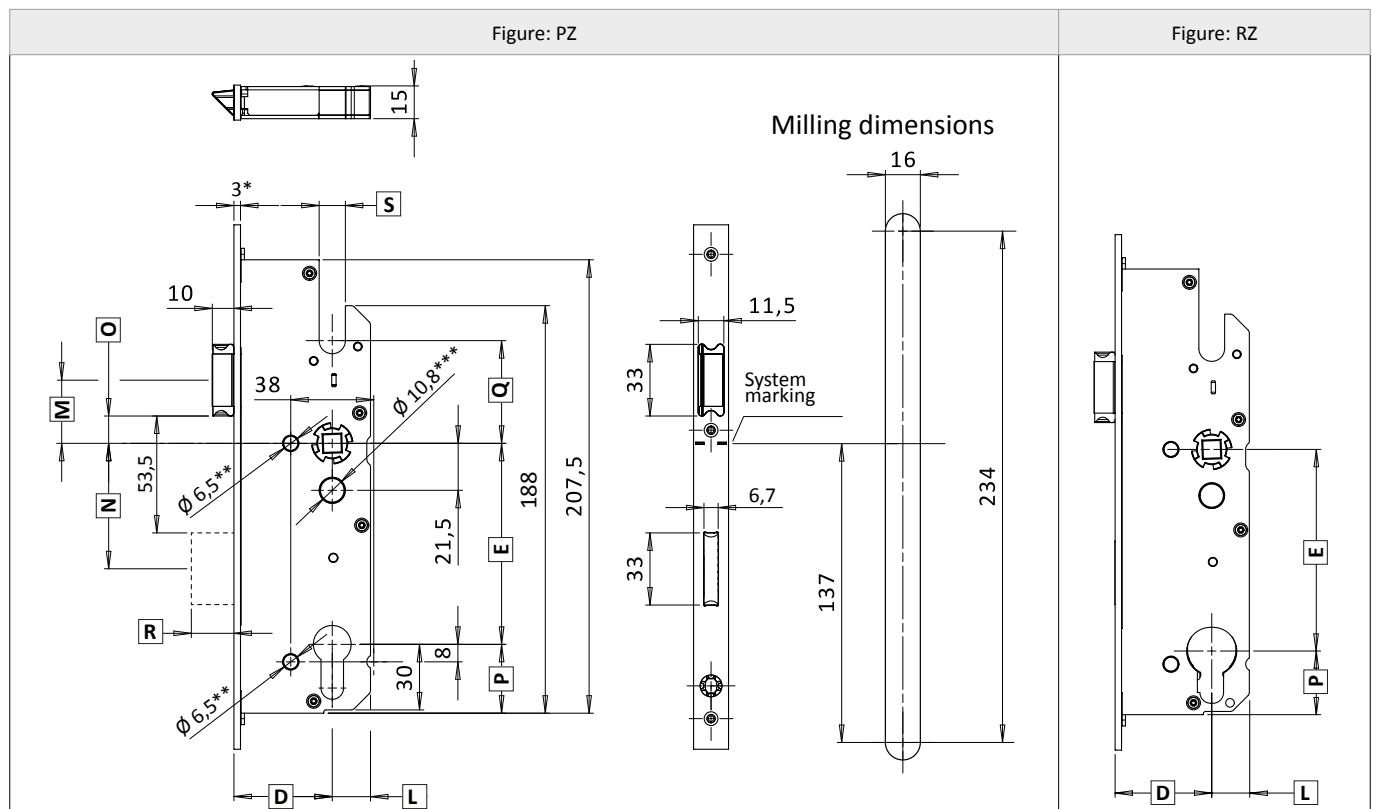


Item	Components
1	Main lock case
2	Soft lock latch bevelled
3	Soft lock latch 2 mm offset
4	Reduction bush, from 10 mm to 8 mm
5	3 x fixing screws (M3 x 6 - T 10)

## 4 Main lock types, key-operated

The main locks are identified by a coloured dot. The main lock types of the main lock set and the associated faceplate sets of the multi-point service lock have the same colour coding. If you want to replace a main lock on an existing multi-point lock, consult the material description to ensure that the main lock type is identical. You will find notes in the download area of our website at [KFV ONE - Explanation of short texts](#).

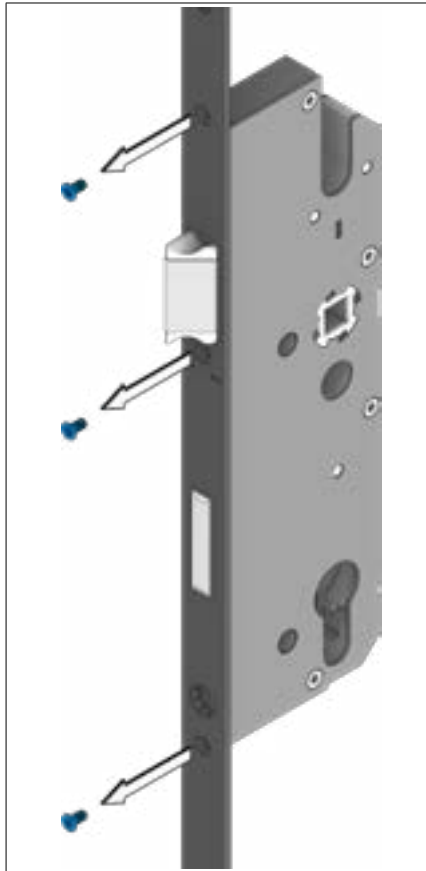
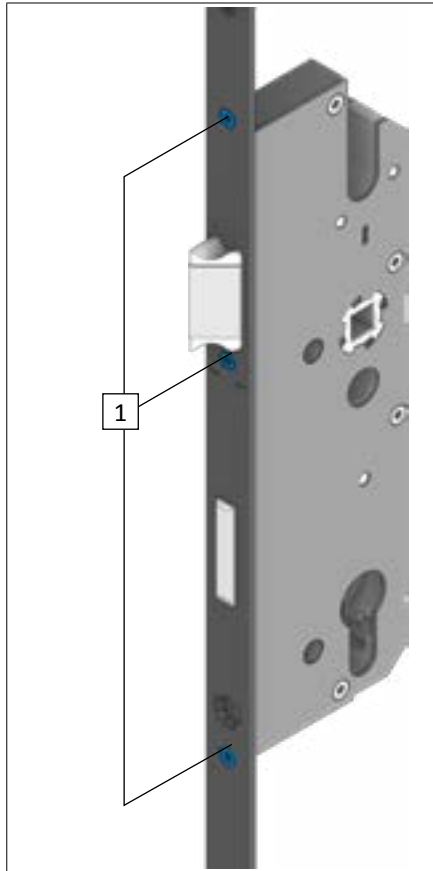
Main lock type	Colour coding	Cylinder lock PZ/RZ	Variable dimensions in mm									
			PZ dimension [E]	Backset [D]	Rear backset [L]	Deadbolt projection [R]	[M]	[N]	[O]	[P]	[Q]	[S]
V	Grey	PZ	72	55, 65, 70, 80	17.5	20	29	57.5	12.5	51.5	47	12
H	Dark blue	PZ	85	25	17.5	without deadbolt	36	50.5	19.5	31.5	52	8
H	Dark blue	PZ	85	30	17.5	10	36	50.5	19.5	31.5	52	8
H	Dark blue	PZ	85	35	17.5	16	36	50.5	19.5	31.5	54	12
H	Dark blue	PZ	85	40 - 80	17.5	20	36	50.5	19.5	31.5	54	12
H	Dark blue	PZ	88	35	17.5	16	33	53.5	16.5	31.5	51	12
H	Dark blue	PZ	88	40 - 80	17.5	20	33	53.5	16.5	31.5	51	12
H	Dark blue	PZ	92	25	17.5	without deadbolt	29	57.5	12.5	31.5	45	8
H	Dark blue	PZ	92	30	17.5	10	29	57.5	12.5	31.5	45	8
H	Dark blue	PZ	92	35	17.5	16	29	57.5	12.5	31.5	47	12
H	Dark blue	PZ	92	40 - 80	17.5	20	29	57.5	12.5	31.5	47	12
H	Dark blue	RZ	94	35	17.5	16	29	57.5	12.5	29.5	47	12
H	Dark blue	RZ	94	40 - 80	17.5	20	29	57.5	12.5	29.5	47	12



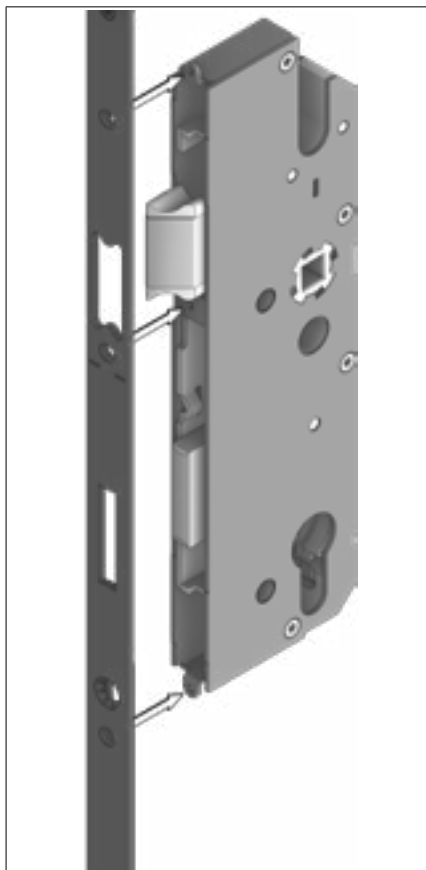
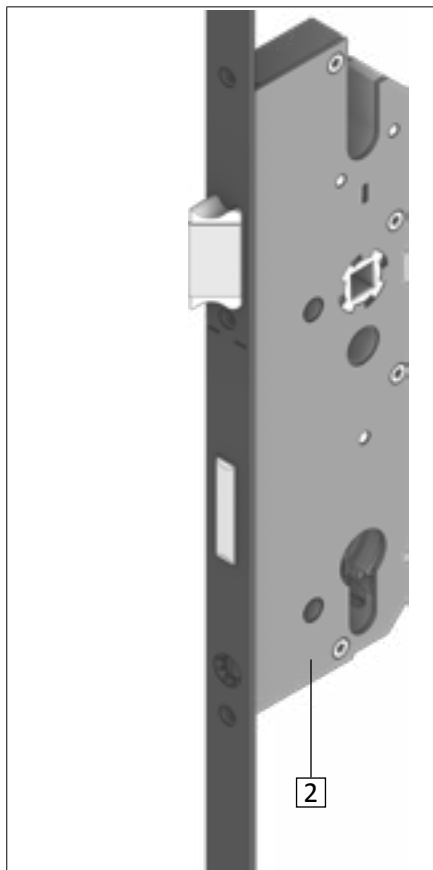
\* This dimension refers to a flat face plate 3 mm, galvanized steel.  
 This dimension and other dependent dimensions could change if other secondary sashes are used.  
 \*\* Hole first from [D] = 40 mm / \*\*\* With [E] = 72 mm the hole is  $\varnothing$  6.5 mm

### 5 Installation

#### 5.1 Dismounting the existing main lock

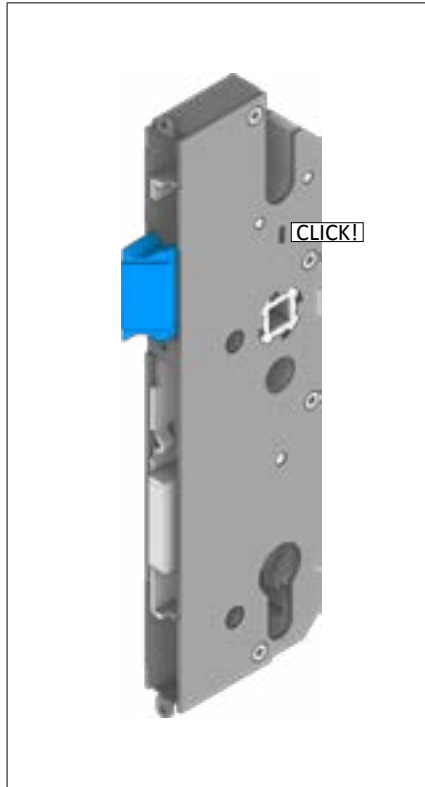
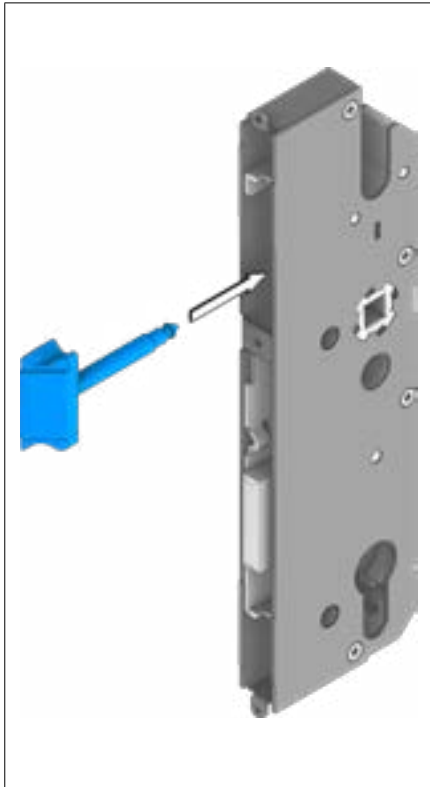


► Loosen and remove the three fixing screws [1] of the main lock.



► Remove the existing main lock [2].

### 5.2 Insert the latch into the new main lock

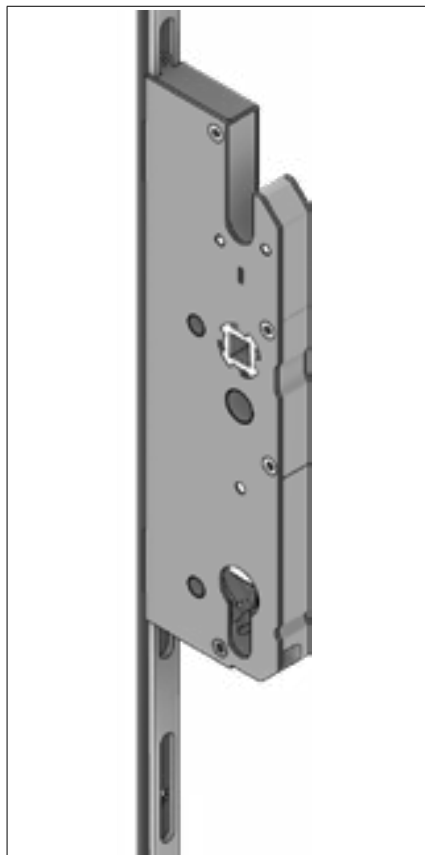
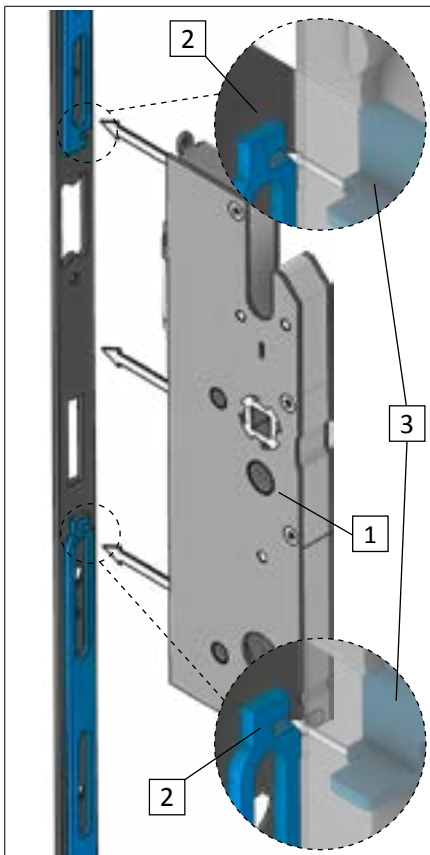


- ▶ Insert one of the supplied latches into the main lock according to the DIN direction.
- ▶ The latch must engage audibly.

### 5.3 Installing a new main lock

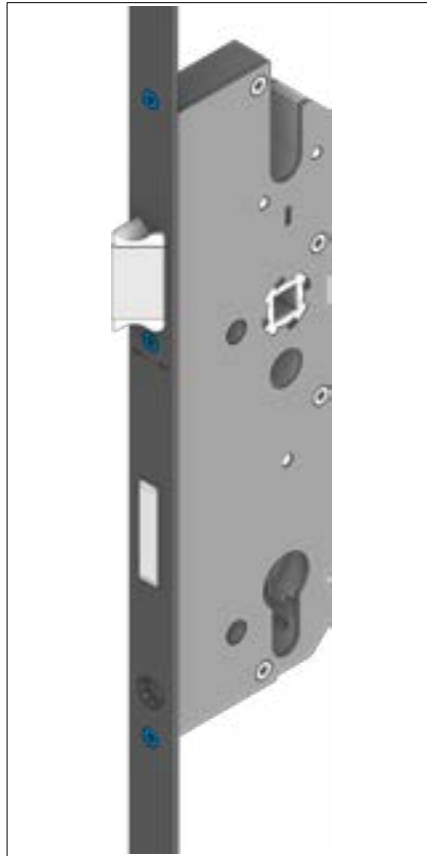
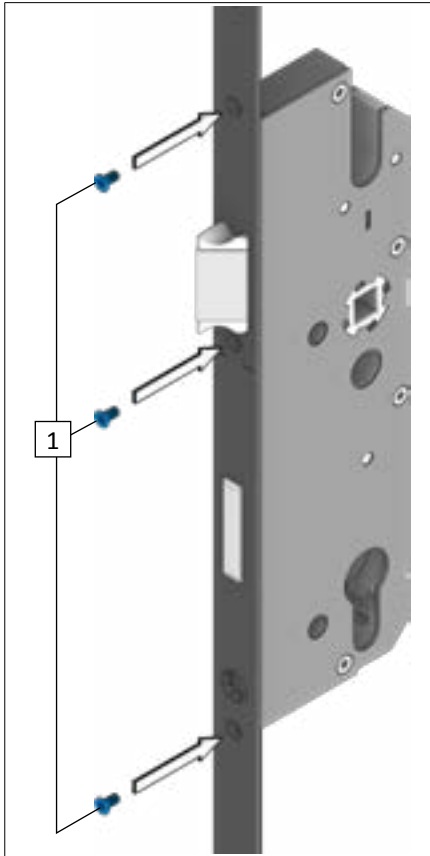



If you are using the existing cylinder lock, first use the key to check that the cylinder lock is working correctly.




- ▶ Position the new main lock [1] on the faceplate.

For assembly with a multi-point lock, the cams of the slider [3] of the main lock must grip into the grooves of the main rods [2].

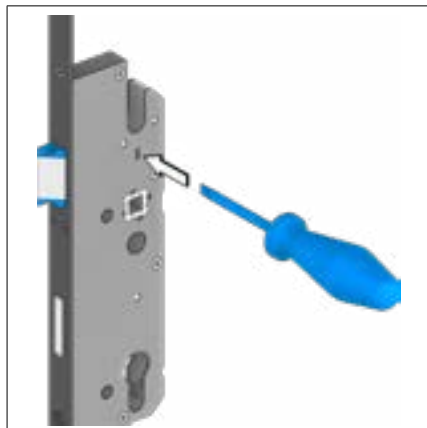
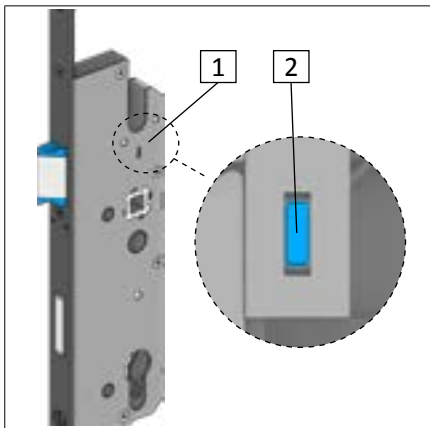



 Use the new screws enclosed.  
The old screws must not be reused.

 T 10  
1.5 Nm

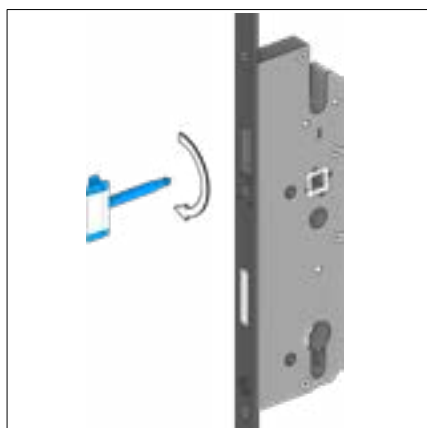
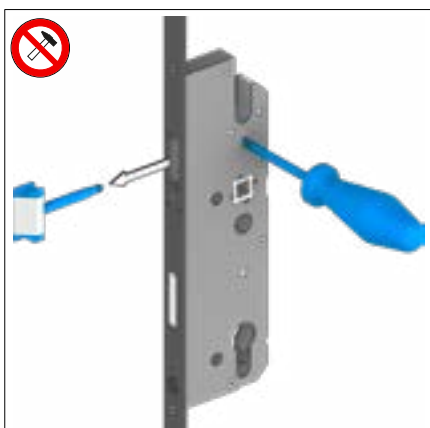
- ▶ Use the three screws enclosed [1] to screw the faceplate and the main lock into place.

### 5.4 Change DIN orientation of the soft lock latch or replace the soft lock latch



 1 x 3.5 mm

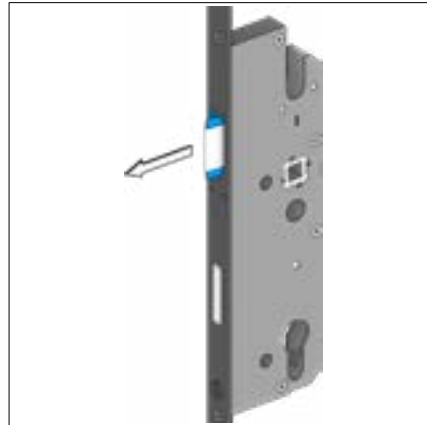
There is a slot [1] on the gear box side. The locking spring [2] of the latch shank can be opened through this slot using a slotted screwdriver.



- ▶ Carefully press on the locking spring of the latch shank through the opening using the slotted screwdriver.

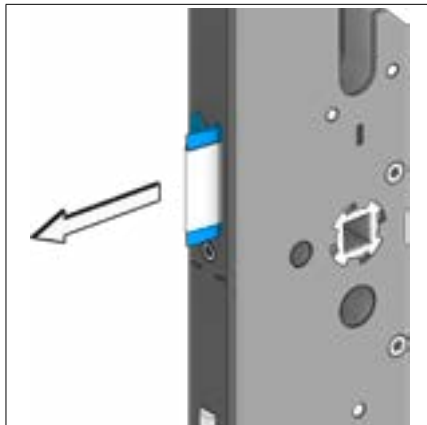
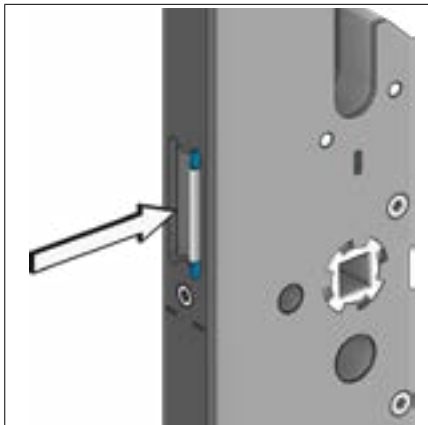
The latch shank will be released.

- ▶ Pull out the latch and turn it 180° or replace the existing latch with the recessed soft lock latch included in the delivery.



- ▶ Carefully press the latch into the gear box until the latch shank snaps into the locking spring and then release the latch.

The latch must be able to extend independently and be held securely by the locking spring.



- ▶ Check that the latch is properly seated and is smooth running. Press the latch several times (approx. 5x) into the gear box and release the latch again.

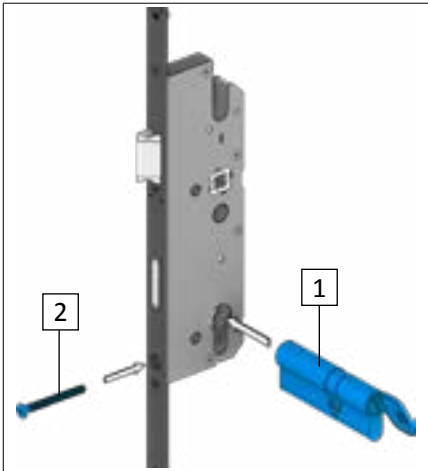
The latch must move with ease and extend again independently.

# KFV – Assembly instructions

Multi-point locks, key operated, main lock set

## 5.5 Final functional test

### 5.5.1 Check when dismantled



- ▶ Place the cylinder lock [1] temporarily in position and secure it using the cylinder lock fixing screw [2].
- ▶ Check the functionality of the main lock based on the table below.

Test	Malfunction	Action
<b>Lock the deadbolt completely</b>		
It must be possible for the deadbolt to move easily.	Deadbolt does not operate with ease.	<ul style="list-style-type: none"> <li>• Check that the drive rods are correctly seated in the fastenings.</li> <li>• If the fault has not been rectified: Replace the main lock case.</li> </ul>
<b>Remove the key in the locking position</b>		
It must be possible to pull out the key without resistance when it is in the locking position.	Key cannot be pulled out.	<ul style="list-style-type: none"> <li>• Check the cylinder lock while it is removed. If the cylinder lock is defective, replace it.</li> <li>• If the cylinder lock is not defective: Replace the lock case.</li> </ul>
<b>Continue to turn and the key into the unlocking position and release (cylinder operated lock)</b>		
<ul style="list-style-type: none"> <li>• The latch must be able to retract with ease.</li> <li>• The latch may protrude from the faceplate by a maximum of 2 mm.</li> <li>• The latch must be able to extend again with ease.</li> </ul>	<ul style="list-style-type: none"> <li>• The latch is unable to retract easily.</li> <li>• The latch is unable to retract far enough.</li> <li>• The latch runs with difficulty, does not extend completely, or does not extend at all.</li> </ul>	Replace the lock case case.
<b>Unlock and relock the main lock</b>		
It must be possible for both drive rods to move with ease.	The drive rods run with difficulty.	<ul style="list-style-type: none"> <li>• Loosen the three screws for the faceplate.</li> <li>• Check that the drive rods are correctly seated in the fastenings.</li> <li>• Remove any contamination from the running surfaces and drive rods.</li> </ul>



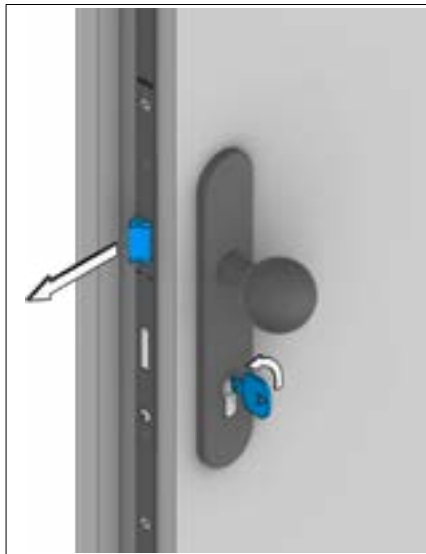
A functional disorder in the main lock of the multi-point lock may result in it being impossible to open after locking. If a functionality check is performed on a closed door, it may be very difficult to open the door again without causing damage.  
Never start the functionality check until the door is open..

### 5.5.2 Check when the door is open



#### Check the functioning of the lever handle:

- ▶ Press the lever handle down fully.  
The lever handle must be able to move with ease and the latch must retract.
- ▶ Let go of the lever handle.  
The lever handle must return to its original position by itself and the latch must project completely.



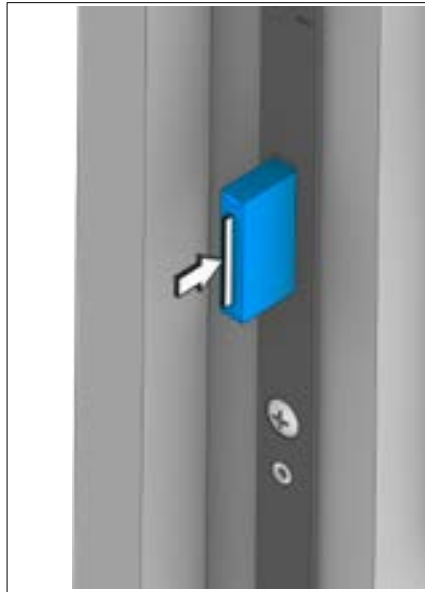
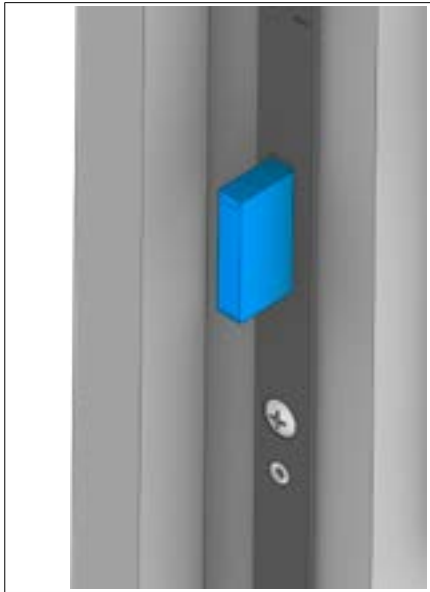
#### Check the functioning of the latch with the key (cylinder operated lock).

- ▶ Turn and hold the key in the release position.  
The latch must be able to retract with ease.
- ▶ Let go of the key.  
The latch must project completely.



#### Withdrawing the key

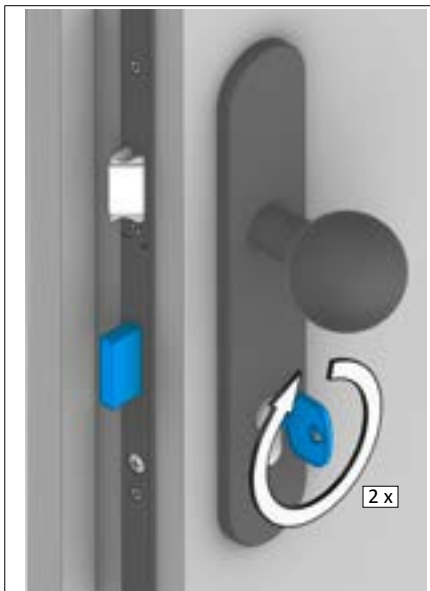
- ▶ Turn the key to the withdrawal position and withdraw the key.  
The key must be able to be withdrawn with ease from the profile cylinder.



### Checking the counter-pressure retention

- ▶ Move the deadbolt to the locking position.
- ▶ Press back the deadbolt manually.

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

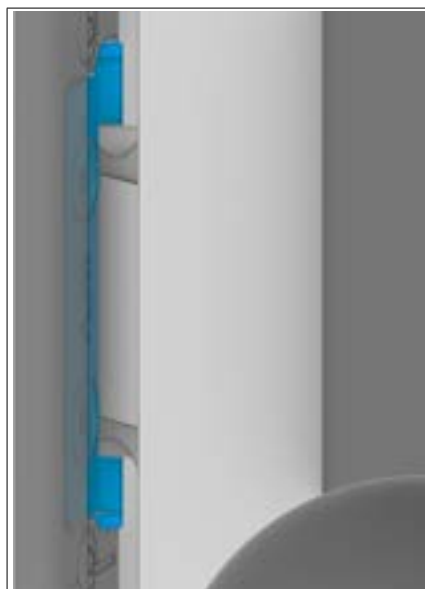


### Retracting the main lock bolt

- ▶ Turn the key in the unlocking direction with a double turn.

The main lock bolt must be able to retract completely and with ease.

### 5.5.3 Check when the door is closed



### Checking the engaging of the latch

- ▶ Shut the door.

The door must close easily.

The latch must engage properly in the AT piece.

If the latch does not engage or if the pressure on the door seal is too high:

- ▶ Adjust the AT piece in the direction of the door leaf.

If the latch has too much play:

- ▶ Adjust the AT piece in the direction of the frame.



### Check the release of the latch with the lever handle

- ▶ Activate the lever handle and open the door.

The latch must be able to retract completely and with ease.

### Check the release of the latch with the key

- ▶ Turn the key in the release position and open the door.

The latch must be able to retract completely and with ease.



### Check the locking of the main lock bolt

- ▶ Turn the key in the locking direction with a double turn.

The main lock bolt must extend completely.

The locking elements of a multi-point lock must simultaneously extend into the auxiliary box. The door leaf must be moved laterally onto the seal.



### Check the retraction of the main lock bolt

- ▶ Turn the key in the unlocking direction with a double turn.

The main lock bolt must be able to retract completely and with ease.

- ▶ Open the door.

The door must open easily.

## 6 Troubleshooting

### 6.1 Functional disorder 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 dimensions of the routed pocket of the main lock.
- 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, it 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.

### 6.2 Functional disorder of the profile cylinder

**The key cannot be pulled out.**

- ▶ Dismount the cylinder lock and check for functional disorders.
- 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 main lock must be checked by KFV.

### 6.3 Functional disorder of the main lock bolt

- ▶ Check the adjustments of the AT piece.
- Adjust the AT piece in the direction of the door leaf to reduce the lateral contact pressure.
- ▶ Repeat the test step with the readjusted AT piece.
- If this sluggishness persists, the dimensions of the routed pocket of the main lock must be checked.
- When the routed pocket is compliant with the specified dimensions and the sluggishness persists, the main lock must be checked by KFV.
- If the routed pocket does not comply with the specified dimensions, it must be reworked.
- ▶ Repeat the test step with the reworked routed pocket.
- ▶ Check that the drive rods are correctly seated in the fastenings.
- ▶ Remove any contamination from the running surfaces and drive rods.
- Remove any contamination.
- ▶ Check the tightening torque of the plates and rosette fittings.
- ▶ Check that the cylinder lock is correctly seated.

### 6.4 Functional disorder of the latch

**The latch runs with difficulty, does not extend completely, or does not extend at all**

- ▶ Check the specified dimensions of the routed pocket of the main lock.
- When the routed pocket is compliant with the specified dimensions and the sluggishness persists, the main lock must be checked by KFV.
- ▶ If the routed pocket does not comply with the specified dimensions, it must be reworked.
- ▶ Adjust the frame part.



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