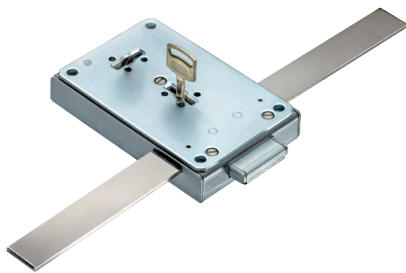
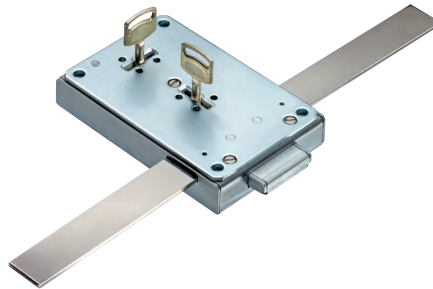


Installation instructions / user's manual

Key locks 1609 / 1619 / 1629 / 1639



1609 / 1619



1629



1639

1 General instructions

- Please read the installation instructions carefully, before activating the lock.

1.1 Liability notes

- The mounting of the lock has to be carried out according to the installation instruction.
- We point out that this installation instruction is part of the VdS-certification and of other testing institutes and non-compliance leads to the loss of this certification.
- We don't assume liability for malfunctions due to incorrect operation, use of force or inappropriate handling. In cases of damage to property or valuables, which are due to incorrect locking of the safe, we also don't assume liability.
- By opening the lock cover warranty of the manufacturer will be void.
- The lock can be installed in all conventional safes.
- The lock has to be protected against external attacks.
- It is recommended to protect all security relevant components of the high-security lock against tempering even when the door is opened.
- Do not insert any lubricants or other substances into the lock (i.e. filler material, detergents or other fouling).
- Take care that the lock, battery compartment and the optional cables should not be damaged.
- If your safe, however, does not open correctly with the following instructions, please contact the manufacturer of the safe.

1.2 Security notes

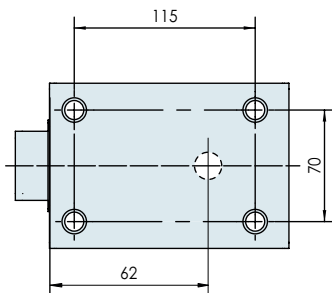
- Due to security reasons it is recommended not to leave the key unattended in the lock.
- The keys have to be stored at a safe place and may only be accessible by authorized persons.
- When losing the key exchange the lock immediately.
- Make sure after each locking if the safe is locked.

2 Installation lock

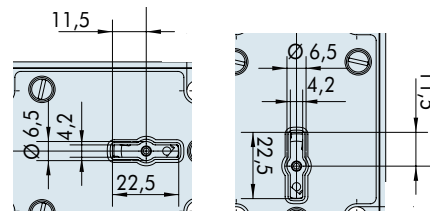
The lock can be mounted in all 4 directions (right-hand, left-hand, up, down).

- The lock can be installed in safes, which are made of commercial materials and construction material.
- 4 threaded holes M6 or 1/4" with depth min. 5 mm for fixing the key lock have to be drilled into the safe door.
- The key lock has to be fixed with the screws included in the scope of delivery or cylinder screws M6 or 1/4" (at least property class 8.8). The screw length should be 30 mm or longer so that a minimum thread length of 5 mm is achieved.
- An independent loosening of the screws has to be avoided. Recommendation: put lock washers underneath the screw's head. To avoid malfunctions, turn the screws with a maximum turning force of 3.5 – 5 Nm.
- Depending on the model there can be optional used more locking elements (e.g. angle with bolts) additional to the existing holes of the bolt. Please make sure that the lock and the connections operate properly.
- After the installation the lock's bolt may not be loaded. Mind sufficient slackness of the locking point.
- The key lock is maintenance free in normal domestic and office surroundings. After approx. 10,000 closures it is recommended to carry out a security and functional test of the key lock.

2.1 Drill pattern lock 1609 / 1619 / 1629 / 1639

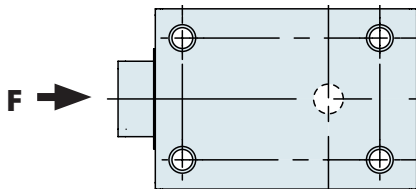


2.2 Keyhole (of the lock) 1609 / 1619 / 1629 / 1639



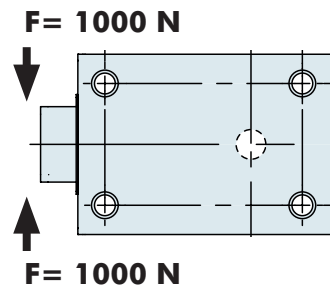
- Break-through in the door must not be bigger than 1.5 mm around the key hole

2.3 Bolt load lock 1609 / 1619 / 1629 / 1639



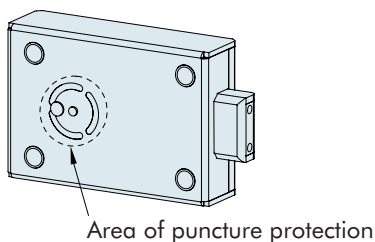
- The **maximum and constantly** bolt load against **bolt closing direction** may not exceed 2.5 N.

2.4 Bolt support load lock 1609 / 1619 / 1629 / 1639



- The load on the bolt must not exceed 1000 N.

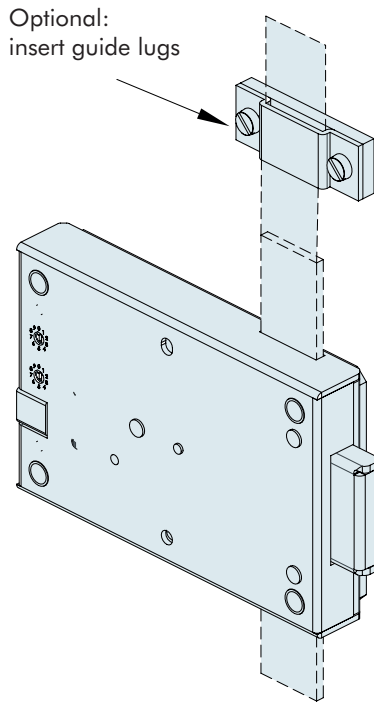
2.5 Puncture protection lock 1609 / 1619 / 1629 / 1639



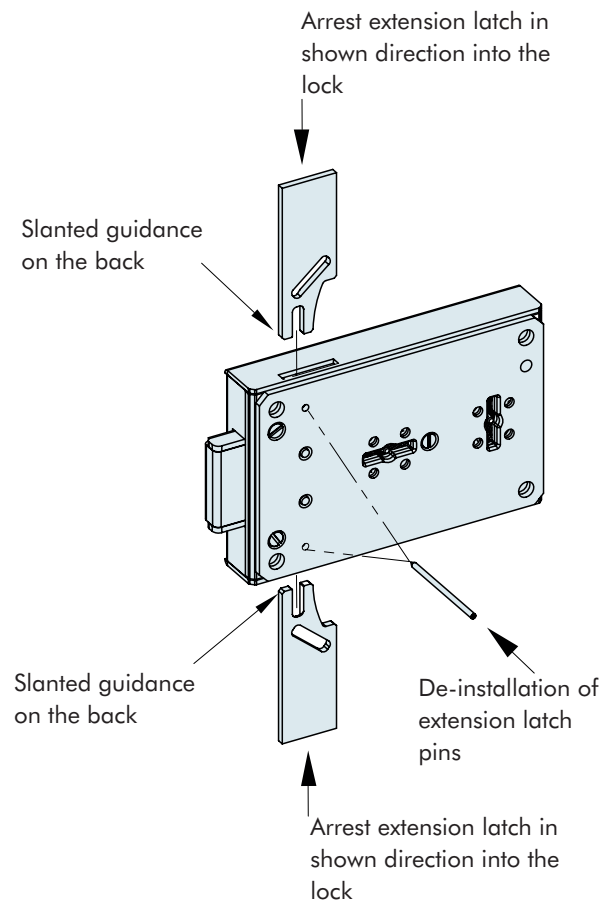
- The puncture protection should not be obstructed by other components.

3 Extension latch

3.1 Guide lugs of extension latch



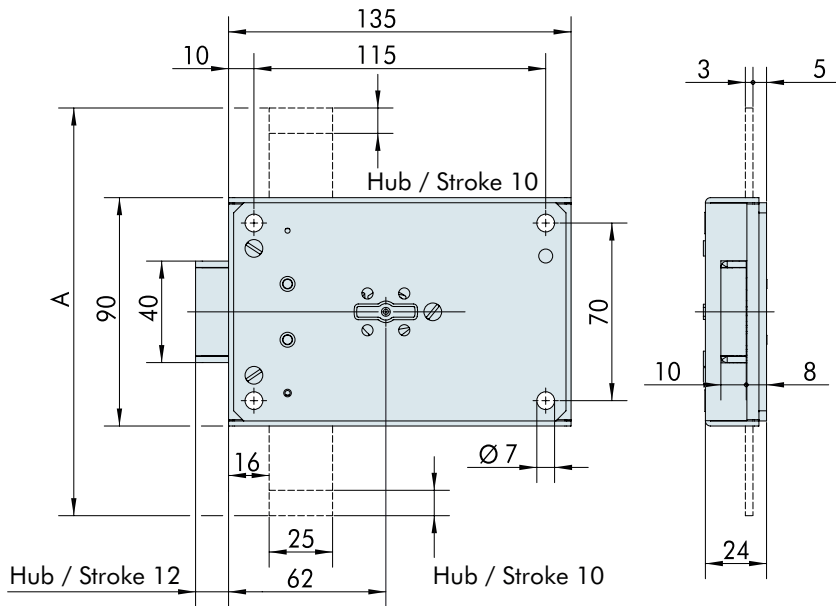
3.2 Arrestable extension latch



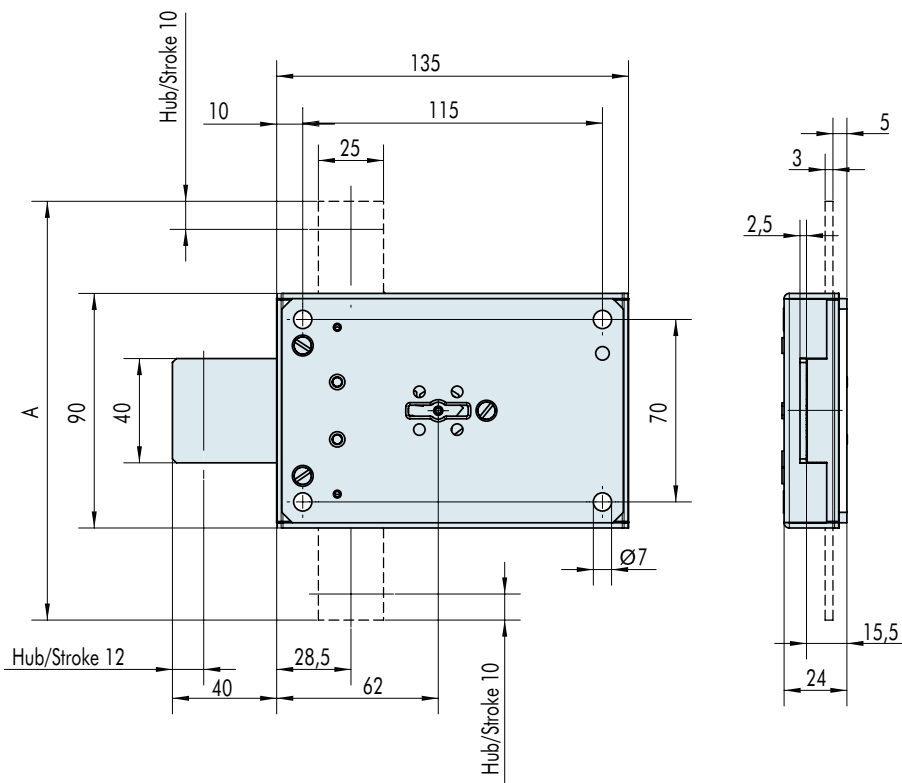
- The locks 1609 / 1619 / 1629 / 1639 optionally are delivered with extension latches.
- Depending on the version, the extension latches are built in factory-provided.
- Please make sure that the lock's function is not affected by the use of extension latches. When mounting the lock make sure that the extension latches are not bent or twisted. The latches have to be guided parallel to the lock.
- After the installation, the latches must not be strained or loaded by pressure.
- Arrestable extension latches are installed by the customer. To disassemble the latches: Press back the arrester that is situated on the inside with pointy object.

4 Dimensions lock 1609 / 1619 / 1629 / 1639

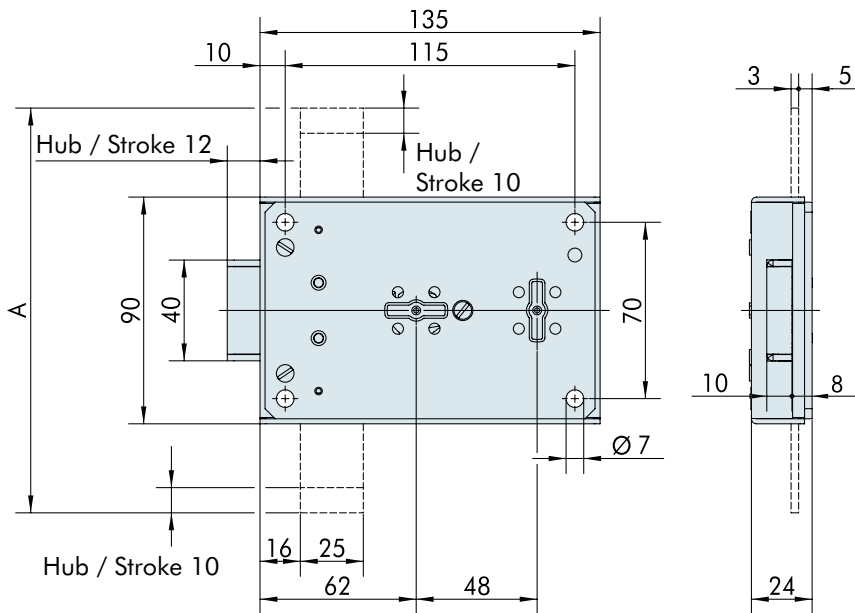
4.1 Key lock 1609 with square bolt



4.2 Key lock 1619 with flat bolt



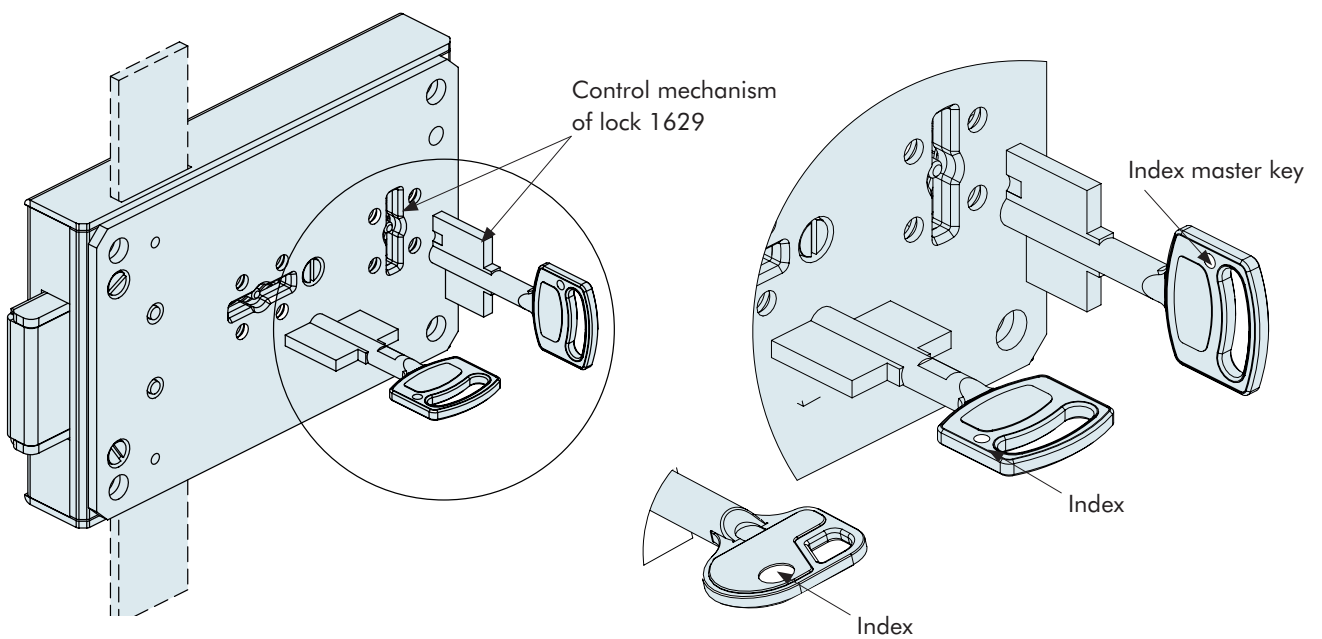
4.3 Key lock 1629 with square bolt



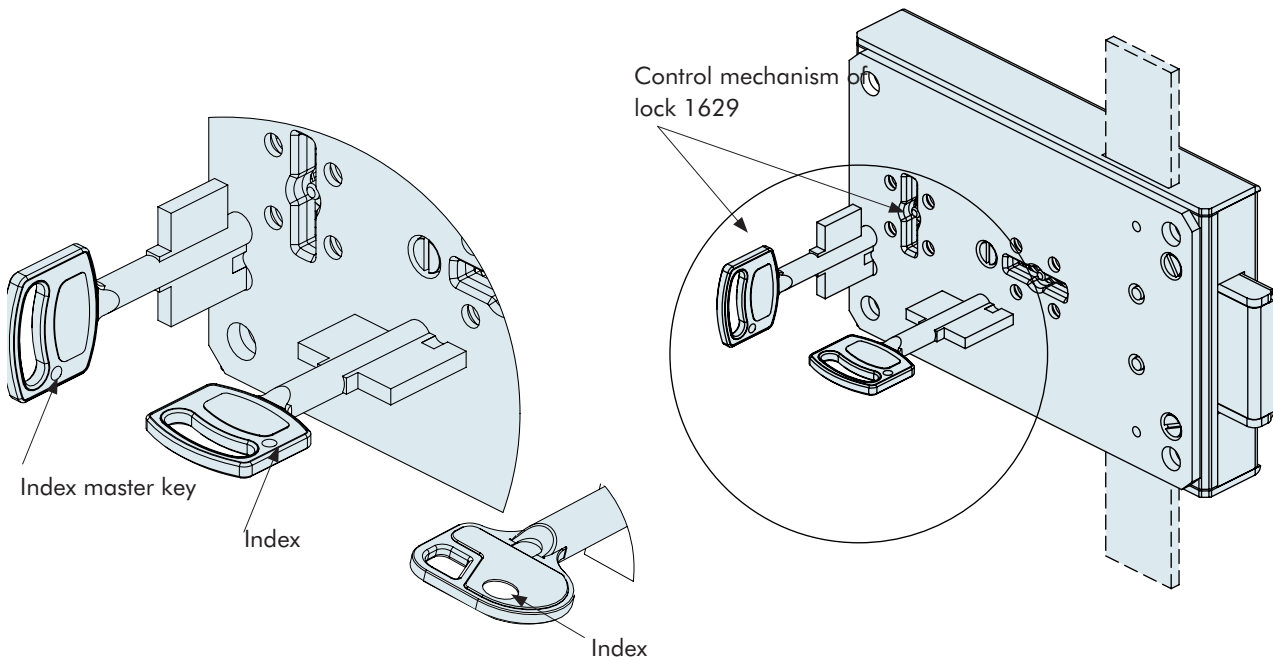
5 Operating notes lock 1609 / 1619 / 1629

- The lock may only be operated with the according keys. The insertion and opening attempts with other keys can lead to internal damage.
- Never use force.

5.1 Operating the lock right-hand



5.2 Operating the lock left-hand



Schloss 1609 / 1619:

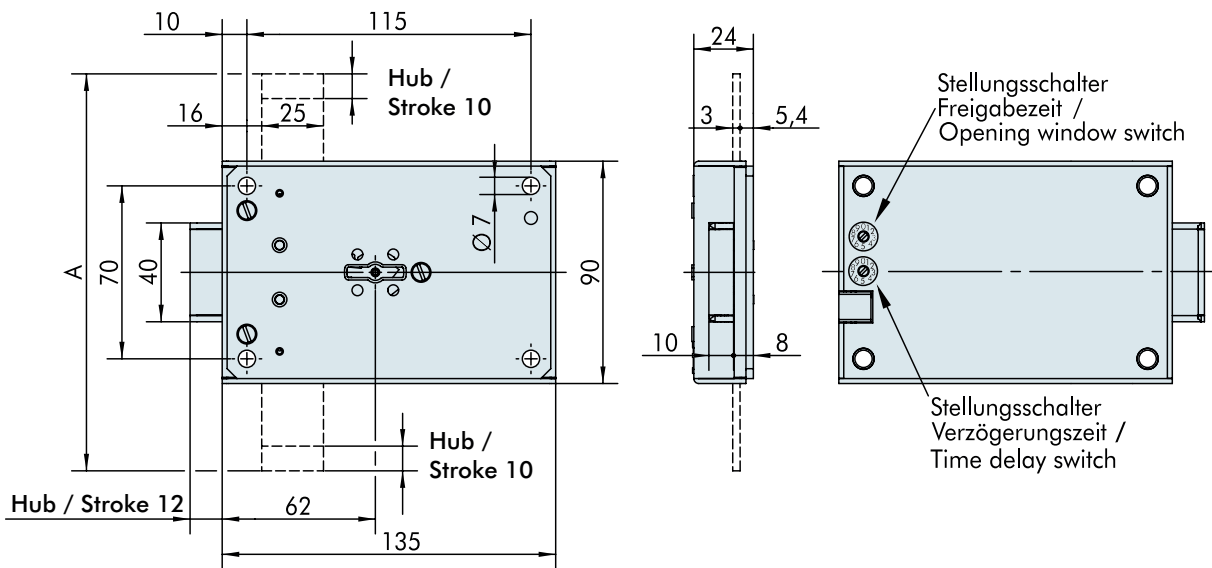
- Insert key so that the marking on the key head is pointing towards the lock's bolt.
- When using right-hand locks (turning axis towards the right) the key has to be turned clockwise. With left-hand locks counter-clockwise.
- Removing of the key is only possible when lock is closed. The key has to be turned to a tight end.
- When turning the key do not use force (no auxiliary means). If jamming occurs contact qualified personnel.

Lock 1629 - Dual verification procedure:

- Control mechanism is opened by master key. Insert the master key into control mechanism (pay attention to the index on the master key, depending on a right-hand sided or left-hand sided lock.) Opening by turning clockwise until the stop.
- Control mechanism removable: Remove the master key.
- Control mechanism not removable: The master remains inside the lock
- Open the lock with standard mechanism (see lock 1609 / 1619).

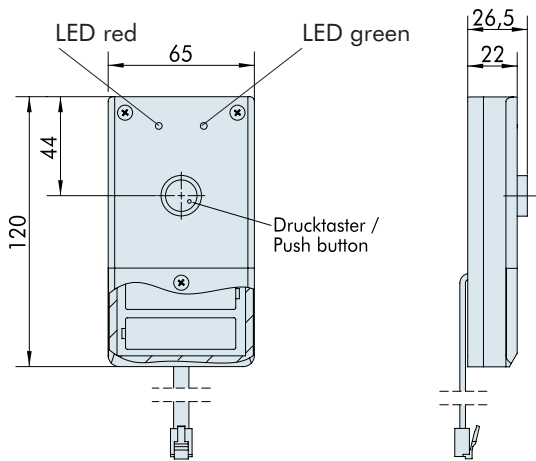
6 Einbaumaße Schloss 1639

6.1 Key lock 1639 with square bolt

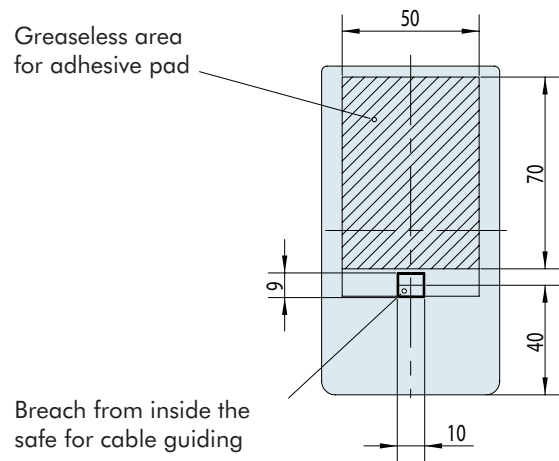


7 Dimensions battery compartment

7.1 Dimensions battery compartment of lock 1639

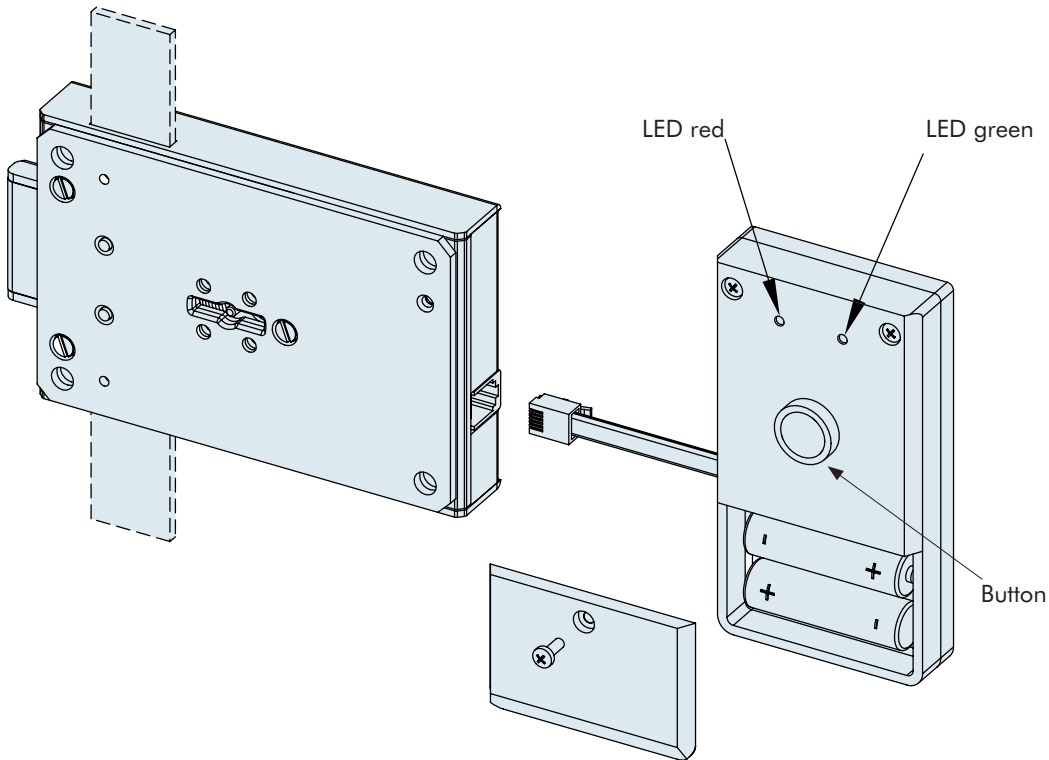


7.2 Drill pattern of lock 1639



- The battery compartment has to be fixed with the adhesive pad at an audio-visual area on the object.
- Connect the cable of the battery compartment to the correct position on the lock.

7.3 Plug positions



- Connect the lock and the battery compartment with the cable.

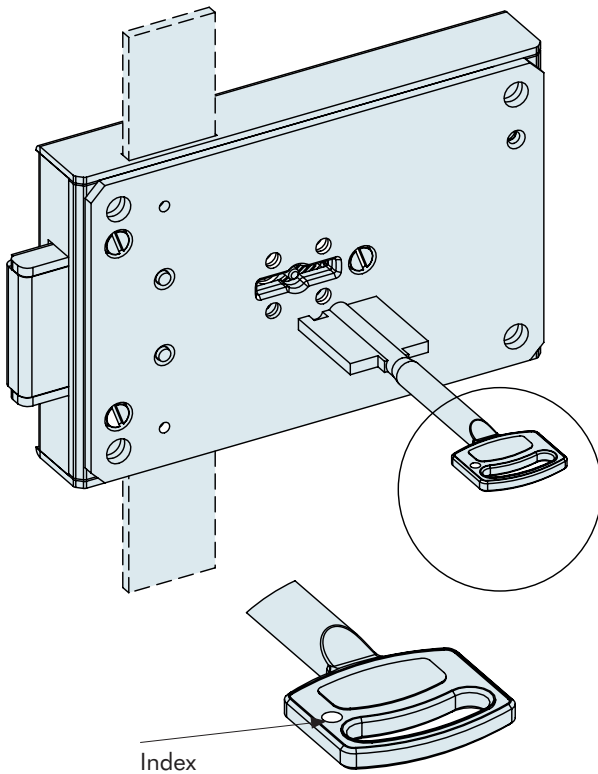
8 Power supply and battery change

- Insert 2 mignon AA batteries into the battery compartment (no rechargeable batteries!) and pay attention to the polarity!
- A short flash of both LEDs signalises the operational readiness.
- If the batteries are low on charge, after activating the opening delay a warning tone occurs 10 times. Both LEDs flash alternately. The process takes approx. 3 seconds.
- Change the batteries as quickly as possible. Please recycle the batteries environment-friendly.

9 Operating notes lock 1639

- The lock may only be operated with the according keys. The insertion and opening attempts with other keys can lead to internal damage.
- Never use force.

9.1 Operating the lock

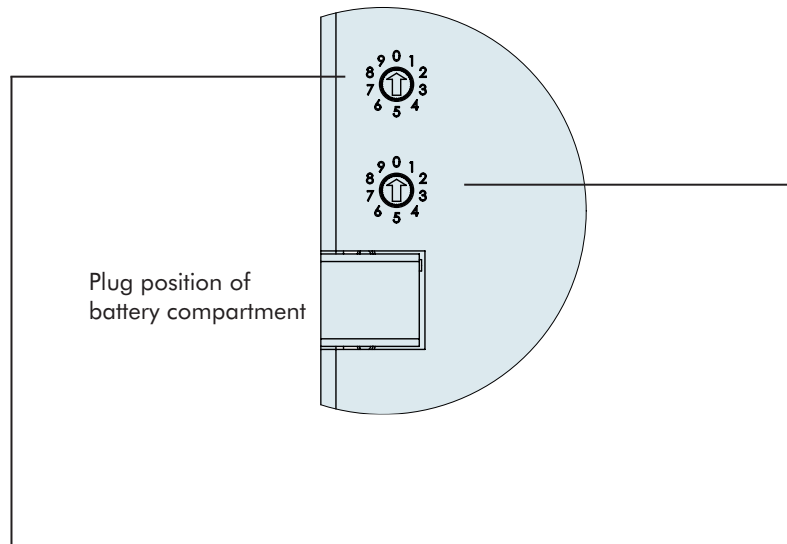
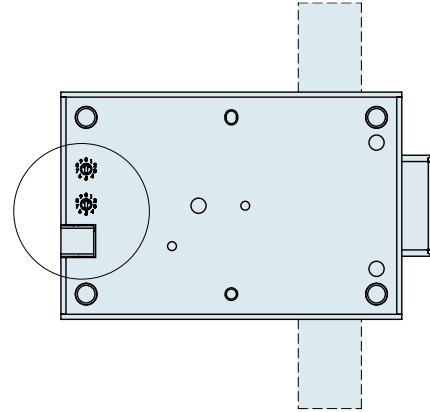
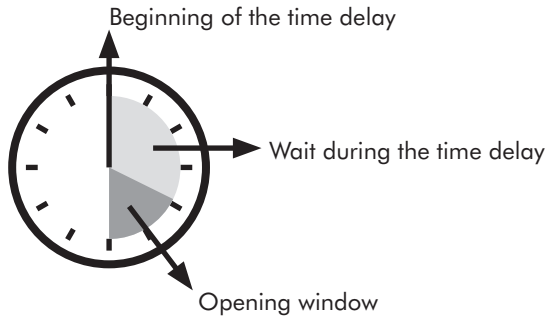


- Activate the opening delay:
 - By pressing the button on the battery compartment
 - by turning the key until the stop and directly back into starting position.
 Insert the key into the lock that the index on the key points towards the bolt.
 Note: The opening delay is not activated if the key remains at the stop for longer than 2 seconds. The red LED flashes until the end of the opening delay.
- The red LED flashes until the end of the time delay..
- A signal tone occurs at the beginning of the opening window. The green LED flashes. The lock can be opened during this time.
- If the lock is not opened it locks after the end of the opening window.
- If the lock is opened, a brief flash of the green LED confirms the following locking. The lock is ready to use again.
 Note: During the time window (approx.. 5 sec.) between locking and flashing of the green LED the locking state can be checked with the key without activating the blocking time.

10 Einstellen Öffnungsverzögerungs-/freigabezeit

- The switches are on the back of the lock.

10.1 Coding switch



3.4 Opening window

Time remaining after the end of the opening delay to open the lock.
10 seconds to 5 minutes can be set by turning the switch.

- 0 - 10 seconds
- 1 - 30 seconds
- 2 - 1 minute
- 3 - 3 minutes
- 4 - 5 minutes
- 5 - 5 minutes
- 6 - 5 minutes
- 7 - 5 minutes
- 8 - 10 seconds
- 9 - 30 seconds

3.4 Time delay

Time to wait until the lock can be opened.
10 seconds to 15 minutes can be set by turning the switch.

- 0 - 1 minute
- 1 - 3 minutes
- 2 - 5 minutes
- 3 - 10 minutes
- 4 - 15 minutes
- 5 - 3 seconds
- 6 - 10 seconds
- 7 - 30 seconds
- 8 - 1 minute
- 9 - 3 minutes

