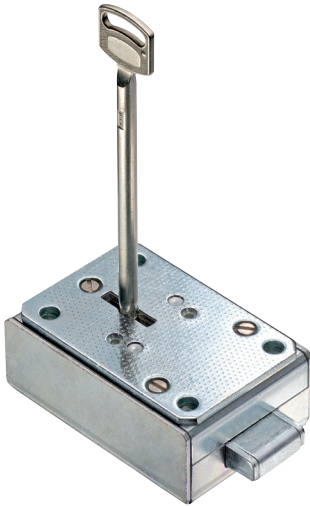


Installation instructions / user's manual

Key locks 1819 / 1821 / 1824



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).
- If your safe, however, does not open correctly with the following instructions, please contact the manufacturer of the safe.

1.2 Security notes

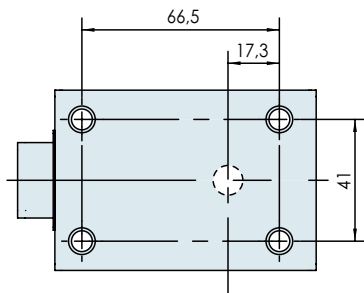
- Due to security reasons it is recommended not to leave the key unattended in the lock.
- The keys have to be stored at a safe place and may only be accessible by authorized persons.
- When losing the key exchange the lock immediately.
- Make sure after each locking if the safe is locked.

2 Installation lock

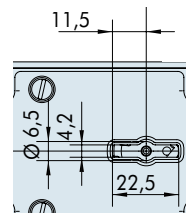
The lock has got standard fixing points and can be mounted in all 4 directions (right-hand, left-hand, up, down).

- 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 1819 / 1821 / 1824

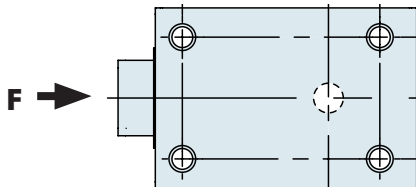


2.2 Keyhole (of the lock) 1819 / 1821 / 1824



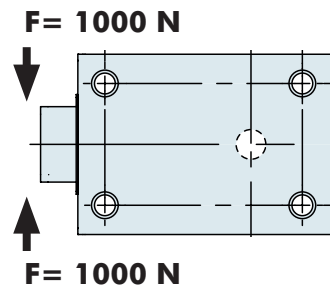
- Break-through in the door must not be bigger than 1.5 mm around the key hole

2.3 Bolt load lock 1819 / 1821 / 1824



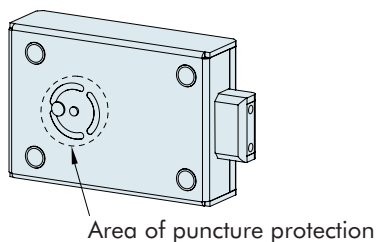
- The **maximum and constantly** bolt load against **bolt closing direction** may not exceed 2.5 N.

2.4 Bolt support load lock 1819 / 1821 / 1824



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

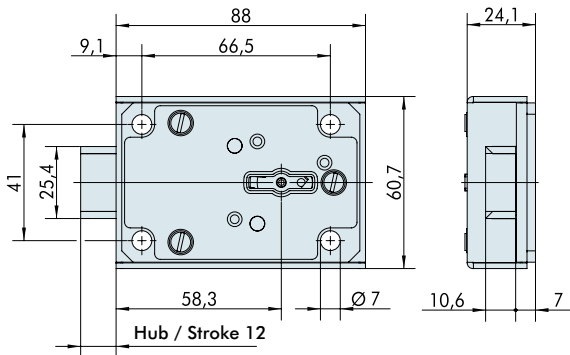
2.5 Puncture protection lock 1819 / 1821 / 1824



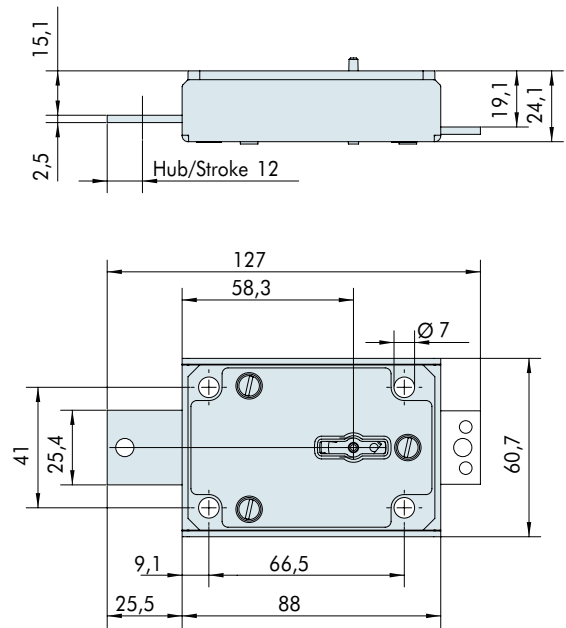
- The puncture protection should not be obstructed by other components.

3 Dimensions lock 1819 / 1821 / 1824

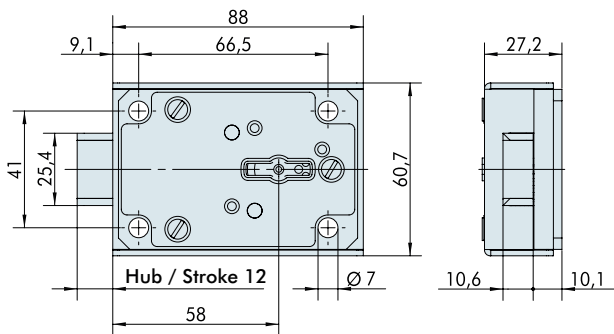
3.1 Key lock 1819 with square bolt



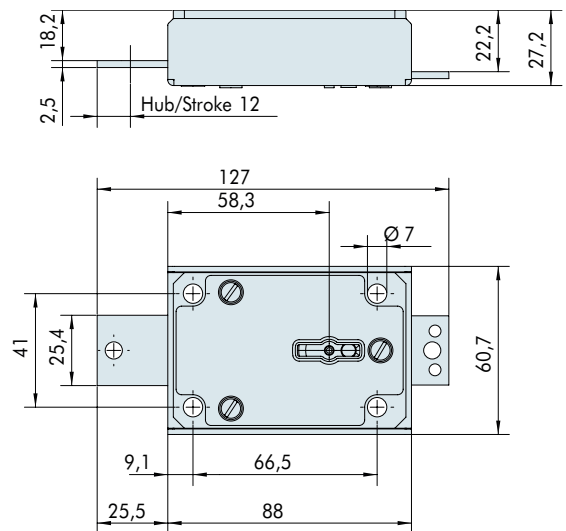
3.1.1 Key lock 1819 with flat bolt



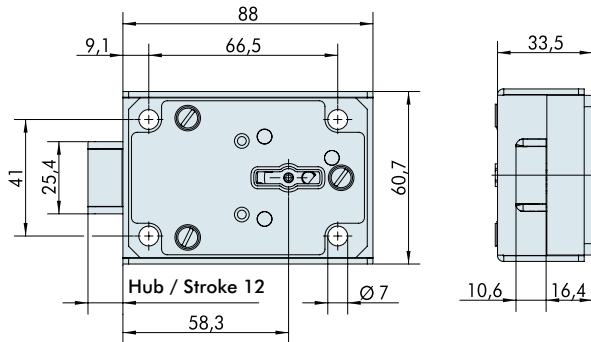
3.2 Key lock 1821 with square bolt



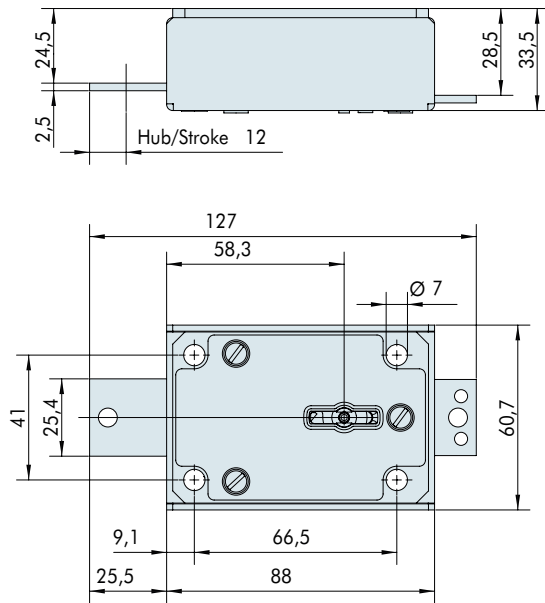
3.2.1 Key lock 1821 with flat bolt



3.3 Key lock 1824 with square bolt



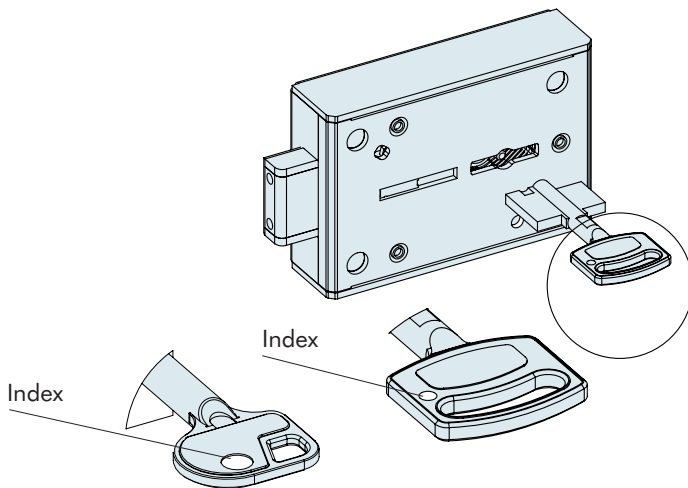
3.3.1 Key lock 1824 with flat bolt



4 Operating notes

- 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.

4.1 Operating the lock



- 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. The key lock is locked in the other direction.
- 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.