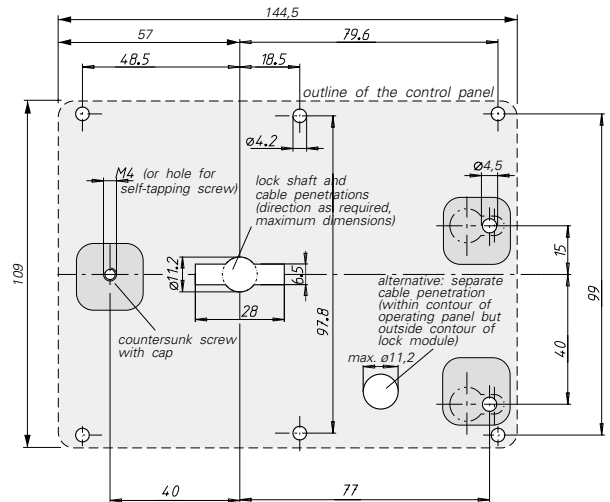


## Mounting instructions for electronic locks TeamLock 4, E2000 and E4000 (version 5.3)

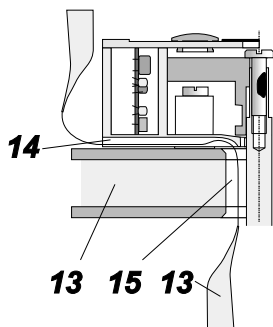
### Mounting the operating panel

Mount the operating panel control board to the level front panel of the safe door from outside. To do this, screw the two self-tapping raised cheese-head screws size M5 into the pre-drilled core holes  $\varnothing 4.5$  mm (see darkened areas) a few turns. Position the operating panel with its slide-catch slots onto the screws and shift it sideways. Secure the panel under the operation lever with the third screw joint M4. Seal the screw head with the plug-in type cap. Alternatively, on very thin doors, the operating panel can also be screwed-on using self-tapping screws at the four corners through the door mounting from inside. For applications in Sweden maneuvering organs should be mounted so as to impede access by detection means from the front (see Swedish standard SS 3492).

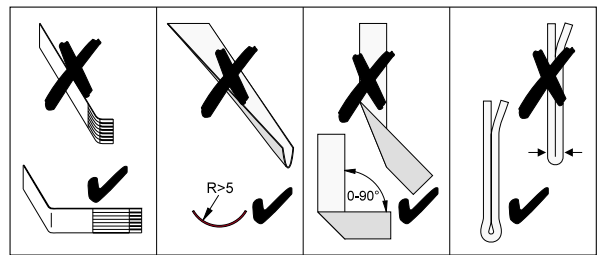


### Mounting the keypad cable

Make absolutely sure the cable is mounted without tension and without damaging the insulation. For a standard installation we recommend to lay the cable in a separate cable duct which should not have a sharp-edged or burred front or end. On some products, the cross-section of the holes for the electric cables should not exceed 100 mm<sup>2</sup>.

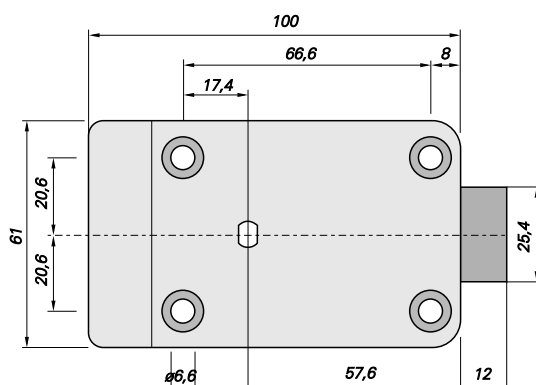
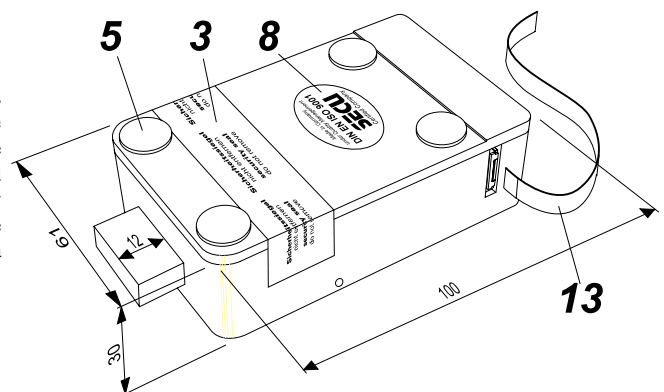


Alternatively, the keypad cable (13) can also be run through the shaft bushing (15), provided there is enough space and some type of protection is provided to stop the cable from coming into direct contact with the moving shaft itself. For this installation variant, the lock module has a bottom slot (14) to be used for leading the ingoing keypad cable under the lock module without the risk of jamming. The separate earthing cable of the operating panel on the E6000 has to be connected to the frame potential of the safe.



### Mounting the electromechanical lock module

Although the module is suitable for mounting in any direction, it is important to observe the exact orientation of the axes of lock module and control board: the maximum lateral angular displacement of the drive shaft should not exceed 2°. The lock module is to be protected against direct or indirect access from outside by mounting adequately dimensioned armouring. On locks to lock class 2 (B) and above there should be at least two layers of steel, each at least 3 mm thick, with a

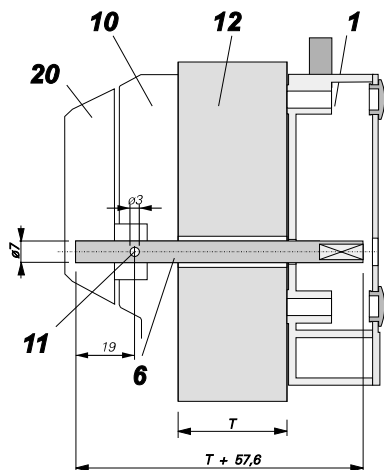


space in between, between the lock module and the outer surface of the door. Do not commence the installation unless you have taken the necessary precautions to stop foreign matter, dust or humidity entering the module. The electromechanical lock should never be oiled, greased or covered with paint. Please note that the relative air humidity should not exceed 95% (non-condensing) for the lock to work correctly. This means that if there is a concrete wall adjoining the boltwork compartment, it must be dry before mounting the lock.

The lock module (1) is mounted in four mounting positions (2), which all have to be in the same plane, by entering four screws M6 or 1/4" (4) into the four holes in the lock module. To do this, it is neither necessary to remove the lid, nor is this intended. (To make this clear we have sealed the screw with sealing tape (3).) We recommend that you fasten the module with the screws supplied with the lock. If other screws are used, please make sure the head does not exceed 4 mm in height and has a diameter of no more than 10 mm. Screws with a different head shape could interfere with the lock performance. Select the effective screw-in depth in accordance with sound engineering practice; it should not be less than 3 mm.

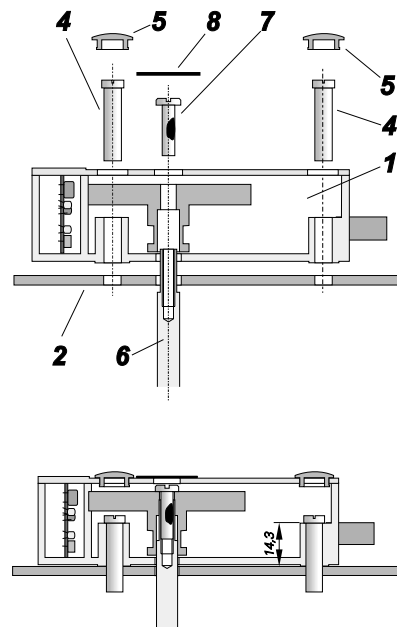
### Mounting the lock shaft

The purpose of the lock shaft (6) is to fasten the operating lever (20) on the outer operating panel (10) to the electromechanical lock module (1). If you did not specify the exact length required for your application at the time of ordering, reduce the shaft to the exact length as follows: Determine



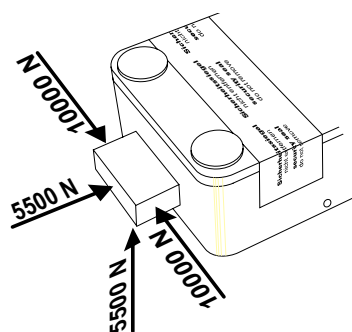
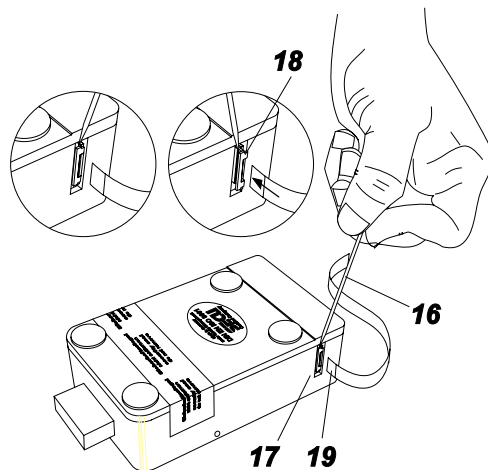
the wall thickness (T) of the safe door by measuring the distance between the two mounting surfaces (distance between outer surface operating panel and inner surface lock module) and adding 57.6 mm. The resulting figure is the total length to which the lock shaft has to be reduced (measure the shaft starting from the rounded end). Next, drill a  $\varnothing 3$  mm pin hole (11) 19 mm from the shaft end, assuring that the hole axis is perpendicular to the key faces of the shaft.

Now, join the lock shaft with the operating lever (20) by means of the enclosed locking pin (3 mm) supplied. For this purpose the operating lever has two intersecting boreholes in the fastening area: one for mounting the lock module in an upright position, the other for mounting it in a horizontal position. The joining operation completed, enter the lock shaft from the front into the bushing (15) until the key faces at the end of the shaft engage with the profiled hole inside the lock module. Secure the lock shaft to the module with the supplied size M4 screw (7) as follows: Screw the screw from the lid end of the closed lock module into the shaft end until the axial clearance of the shaft approaches zero. The screw is supplied with a coating of thread locking adhesive to lock the screw in this position. Do NOT pull the screw tight as this would obstruct the mobility of the operating lever. Complete the assembly by attaching the supplied adhesive label (8) over the screw opening on the lid of the lock module to serve as dust guard.



### Connecting the keypad cable

The final step of the lock assembling operation is to connect the keypad cable to the lock module. Earlier, the cable was entered without tension from the outer operating panel through the safe armouring plates to the area of the lock module plug (17). If the cable is too long at this point, fasten it in a loop using cable binders or adhesive tape. Make absolutely sure that it does not come into contact with the moving elements of the door mechanism. Take care not to pinch or bend the contact section (19) at the end of the cable. Prepare the cable for connection by lifting out the safety catch (18) out of the direct plug-type connector on the side of the module to the stop (approx. 1.5 mm) using a sharp object (16) such as a pin or paperclip. Enter the cable end up to the stop at a 90° angle to the side face of the lock into the plug-type connector with the contact face pointing towards the rear of the lock. Complete the electrical connection by pushing the safety catch back in. Check that the connection is still without tension. Check the lock for correction functioning several times with the safe door open.



### Bolt strength in accordance with VdS 2396

Under normal conditions of use, the maximum permissible forces acting on the bolt in both directions (push and pull) amount to 5 N.

The illustration shows the maximum forces on the bolt (acting in the opening direction and at 90° angles from all sides) the impact of which will leave the lock with its locking functions impaired (resistance against forceful attack remains intact).