

Assembly and Maintenance Instructions

HZ-lock VB 19000

MA-10101



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Important information and safety measures

This assembly manual applies for the assembly of the lock only.

Refer to the manual accompanying the respective products for instructions for the fittings.

The safety features of this product are essential for compliance with EN 179. With the exception of modifications described in this manual, no other changes of any type are permitted.



This product is designed to protect human lives!



This manual and/or these instructions contain important information for assembly, maintenance, care, and disposal.

Please read this manually carefully and attentively prior to installation. Save this manual for as long as the product is in use and pass it along to the next user.

The faultless and safe function of the lock depends heavily on the proper installation, which may only be performed by qualified experts.

A locking device in accordance with EN 179 always includes:

Lock, striking plate, fitting, accessories:

These components are tested in combination and listed in the corresponding test certificates. Only the components which are indicated in the respective test certificates may be used.

Area of application EN 179:

- Door weight: max. 400kg
- Door height: max. 2500mm
- Door width: max. 1300mm

Important information and safety measures

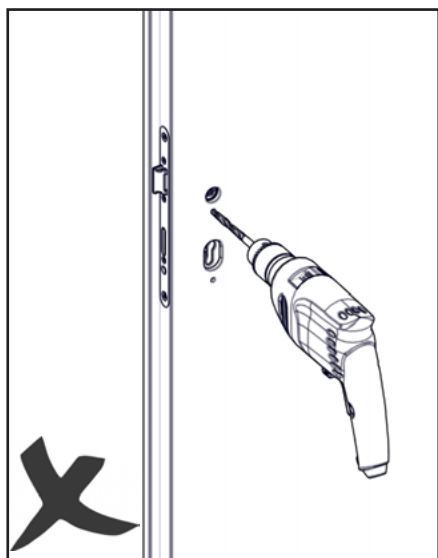
- Our products in compliance with EN 179 and EN 1125 guarantee a very high quality and safety standard. In order to ensure that this high standard is maintained, the doors must remain in faultless condition during and after assembly. The door must be tested for correct, smooth, and unimpeded opening and may not show any signs of warpage.
- With the use of profile seals and door seals, it must be ensured that they do not impair the use of the door as intended and/or the proper function of the panic door lock.
- Before the panic door lock is installed on a fire-proof or smoke protection door, it should be determined whether the panic door lock is suitable for this special door.
- Fasteners differing from those included in the scope of supply may be necessary for fastening a panic lock on various types of doors. In the process, a permanent and solid fixing means should be chosen by the installer according to the requirements.
- Panic door locks are not suitable for use on swing doors unless they have been specially designed by the manufacturer for this purpose.
- Panic door locks should normally be installed at a height of 900 mm to 1100 mm above the surface of the finished floor with the door closed. If the majority of the door users are small children, a lowering of the actuation bar height should be taken into consideration.
- If a door closer is installed, it should be ensured that the actuation of the door is not rendered unnecessarily difficult for children or physically impaired and elderly persons.
- The lock with striking plate should be fastened such that secure engagement is assured. It should be ensured that protrusion in the engaged position of the latch and bolt does not prevent the door from moving freely.
- The provided striking plates should be installed as indicated in the manual such that conformity with the tested standard element is assured.

A plate with the inscription 'Turn the handle to open' (EN 179), or a pictogram should be affixed on the inside of the door, directly above the fitting or on the fitting itself, if it has a sufficiently large and level surface for the necessary inscription.

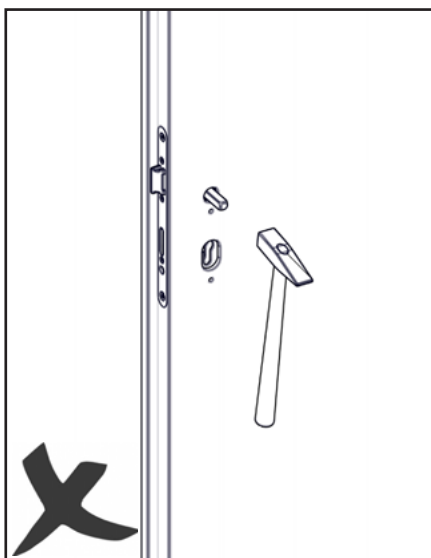
The bolt of the lock must always engage freely and without friction into the striking plate, even when pressure is exerted on the door. Fasten the striking plate (if available) in the frame. The contour of the striking plate must be adapted to the door situation as necessary. (see the contour for the striking plate recess)



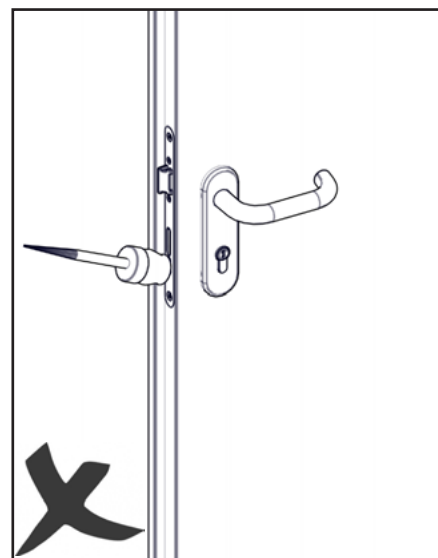
General information



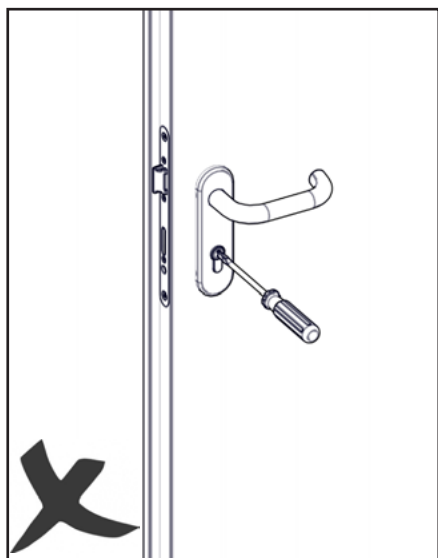
Do not drill in the lock area of the door leaf with installed lock.



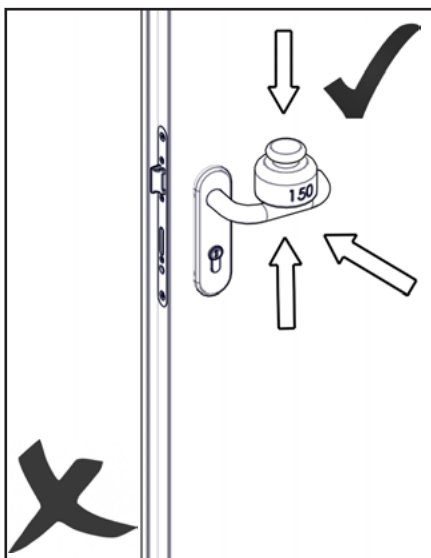
Do not use force to strike the square spindle through the lock follower.



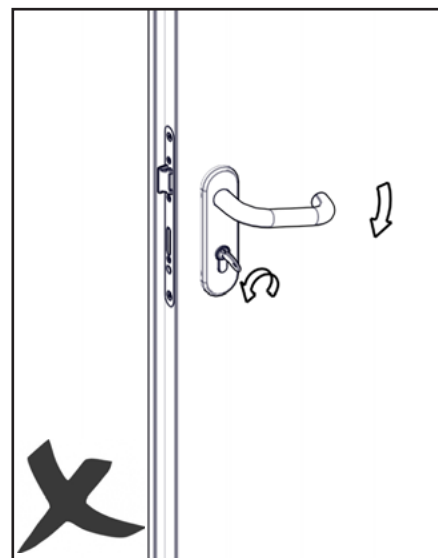
Do not paint or apply a coating to the latch and bolt.



Only open or close the lock with the appropriate key.

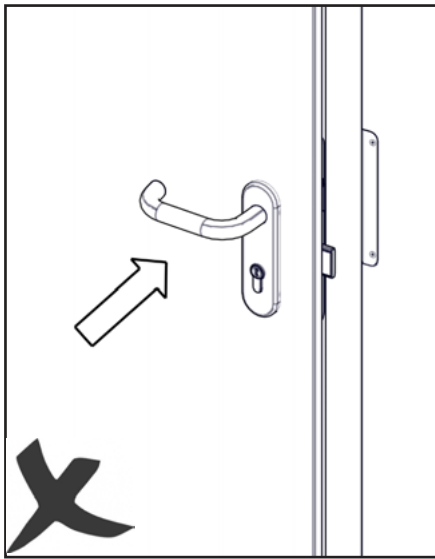


Only apply a maximum load of 150 N to the lever handle in the actuation direction.

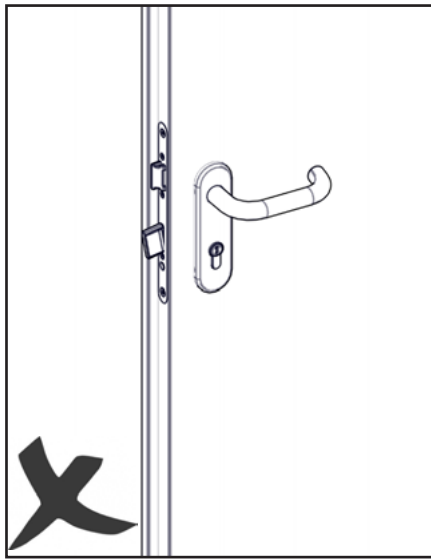


Do not actuate the lever handle and key at the same time.

General information



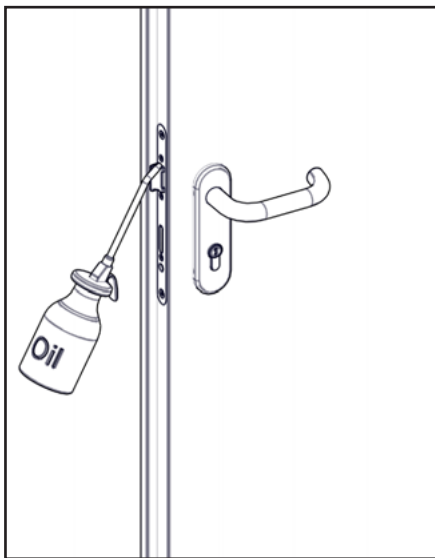
Do not engage the bolt when the door is open.



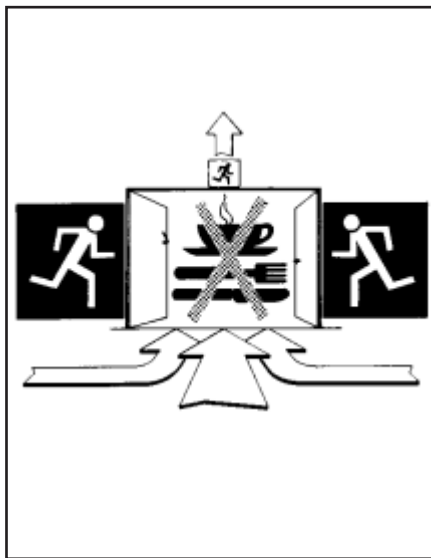
Once there are signs of the application of force, the lock must be replaced.



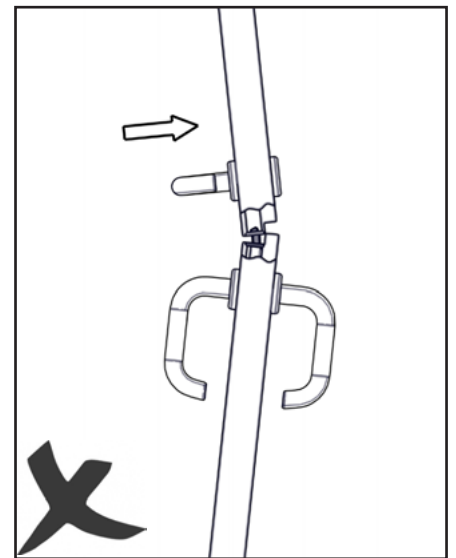
Do not carry the door leaf by the lever handle.



Locks must be lubricated at least 1 x per year according to the manufacturer's specifications (use grease or non-resinating oil).



Once there are signs of the application of force, the lock must be replaced.



Do not force double-leaf doors open with the inactive leaf.

Functional description

The HZ-lock VB 19000 multipoint locking system for burglary-resistant leaf doors fulfils all desired functions and requirements. When the door is closed by the door closer, the latch first engages in the striking plate and positions the door in the locked position, whereupon the three bolts (normally one bolt at the bottom, centre, and top) automatically extend (automatic locking). When in the extended state, the bolts are blocked from being pushed back into the lock case. The hardened lock case impedes attempts to drill into the case.

In the basic state, the lever handle on the outside is disengaged. The coupling of the lever handle to the locking mechanism normally takes place with the integrated electric magnet which can be controlled with any access control system. As long as the magnet is powered, the lock latch and the bolt are withdrawn when the handle is actuated. In the process, the bolts remain in place in each retracted position in order to open, even if they are not entirely retracted with a wide rebate gap. If there is a power failure, or for emergency opening by rescue workers, the lever handle can also be coupled by means of the security cylinder with the appropriate security key.

All required control and monitoring contacts are integrated in the HZ-lock VB 19000:

- Separate potential-free lock contacts on the inside and outside lever handles
- Potential-free switchover contact for mechanical handle coupling via the cylinder
- Bolt position contact and leaf position contact for monitoring of the correct locking (the evaluation of these contacts is strongly recommended).

The lock has satisfied testing requirements at the Material Testing Office in Dortmund in accordance with DIN 18251-3 Class 4, and thereby fulfils requirements on a lock for increased burglary resistance and high usage frequency. It has a certificate as an emergency exit lock in accordance with EN 179 with Glutz security fittings for doors weight up to 400 kg.

Suitable security fittings with suitable divided handle spindles must be used for doors for escape and rescue route applications. Use of the Glutz twin glide easyfix® bearing is preferred.

Optional: electrical release block for locking

There is a second magnet arranged at the top in the lock case of the main lock which can be used to suppress the extension of the three bolts as long as voltage is applied to the coil of the magnet.

After voltage is applied to this additional electric magnet, the three bolts and the latch are retracted with the coupled outside lever handle or the inside lever handle. Then when the doors close, only the lock latch engages and the three bolts remain retracted. If the current supply to the magnet is interrupted, the bolts extend when the door is closed.

An electric strike is used for doors with an automatic drive as a counterpiece to the lock case.

Solenoid coil: 12 or 24 VDC, 100% duty ratio, 4.8 watts

N.B. This version in does not correspond to the General appraisal certificate.

The advantages at a glance

1. Multi-functionality

- Burglary resistance up to resistance class RC4
- Automatic locking
- Control with any access control system (even with exit control)
- Emergency exit lock in accordance with EN 179 tested for doors weighing up to 400 kg
- Use on doors in rescue routes
- for all commercially available standard security cylinders with arbitrary actuator position
- Inwards / outwards changeover without opening the lock case

2. Functional safety

- Tested in accordance with DIN 18251-3, class 4 (3 doors with 500,000 door actuations each)
- The bolts automatically extend after the door has completely reached the locking position
- If the lever handle is not pressed down entirely when opening the door, the bolts remain in their respective retracted position and the door locks again automatically
- A continuous, durable forend increases the dimensional stability of the door
- Permanent three-point locking prevents deformation of the door

3. Burglary protection

- Certified suitability for door elements up to RC4
- Three blocked bolts with 20 mm forward feed
- Hardened lock case (anti-drilling protection)
- Hardened bolts
- Hardened connecting bars for the additional bolts
- Connecting bars in the forend with the spring steel rear cover
- Blocked out for standard commercially available security cylinders and security plates

4. Installation

- Modular system
- The entire lock can be embedded in the front from the forend
- Integrated cylinder fixing
- One single cable feed to the door for all control and monitoring contacts

5. Control and monitoring

- Coupling magnet can be exchanged depending on the voltage without opening the lock case
- Freewheeling diode and inverse polarity protection diode for coupling magnet permanently installed
- Reliable door monitoring by means of a door position contact and a bolt position contact
- Lever handle contact for suppression of a door burglary alarm when the door is opened with anti-panic function (without exit control)
- Potential-free switchover contact when coupling the outside lever handle by means of the key, e.g. for unlocking electric locks in rescue routes
- A highly flexible braided cable with plug-in connection to the lock is supplied

Information about the HZ-lock VB 19000 and the fittings

The following information about locks and fittings must be observed. Non-observance releases us from any liability obligation.

1. Product information and intended use

A mortice lock is a lock which is installed in the door leaf and screwed in place in a system normally based on swing doors.

A lock usually has the task of locking a door and blocking passage. Locking should be understood as holding a door locked in a manner such that it cannot be opened by pushing and pulling in a manner other than by actuation of a lever handle, etc.

Blocking should be understood as the securing of the locked door with one or multiple rigid bolts extended from the door lock which engage in the appropriate recesses of the frame and/or the striking plate openings. The bolt or bolts must be fixable in their limit position. The opening of the door without an appropriate key must also be effectively impeded.

The latch serves as the locking device. The blocking is assumed by the bolt or bolts. With the locking process of a door with HZ-lock VB 19000 security door lock, the latch first engages in the appropriate recess in the frame or in the striking plate. The control latch arranged under the latch touches the striking plate. A path length difference of these two latches triggers the blocking of the bolts and they are automatically advanced and blocked in their limit position by means of pre-tensioned springs. Therefore, the correct locking can only take place if the bolts can extend unimpeded into the appropriate recesses in the frame or in the striking plate. Please note that there is more noise with automatic locking than with mechanical locking with the key. Environmental influences, soiling, tampering, etc. can impair the automatic locking. Therefore, monitoring the correct locking is recommended for automatically locking locks.

HZ-lock VB 19000 locks are normally equipped with panic function. In this process, the latch can be retracted with the pre-locked bolts while the key is removed by means of the inside lever handle and the split lock follower with a suitable (tested) fixing system. The identification is supplemented with the word ‚panic‘.

In order to ensure use as intended, the correct combination with permissible fittings and locking mechanisms (e.g. square spindle, security plates, cylinders), and accessories (e.g. striking plate, permanent magnet, cable transition, hinge protection) with assembly according to the installation instructions and provision of maintenance also applies.

Then, locking cylinder can only be installed in the locks and fittings if they are expressly prepared for the corresponding locking cylinder. In all other cases the manufacturer, dealer, installer, or user must ensure that the locking cylinder they have chosen is suitable for the installation and intended application. Mandatory legal regulations must be observed.

General terminology, insofar as they are not explained in catalogue parts and images, are defined in DIN EN 12209, DIN EN 1627 ff. and the fittings standards. Deviations from the standard must be specified when ordering.

2. Misuse

Misuse - i.e. use of the product in a manner other than as intended - of locks occurs, for instance:

- when foreign objects and/or objects not intended by the manufacturer are inserted into the lock or into the striking plate, fault-free use is impaired,
- tampering or an attack on the lock or striking plate occurs, causing a change
- in the layout, operating method, or function,
- the extended lock bolts are used in a manner not intended by the manufacturer for the purpose of holding the door open,
- the locking elements are installed or treated after installation in a manner which impairs their function, e.g. painted,

- inappropriately high stresses and torques exceeding the normal force of hand actuation are applied to the fixing system or to the security cylinder,
- non-matching, e.g. dimensionally deviating or incorrectly installed locking mechanism is used,
- unsuitable security plates are used or they are not mounted as required and free from tilting,
- an expansion or reduction of the required rebate gap occurs when adjusting the hinges or when lowering the door,
- the door leaf, e.g. due to climatic influences, becomes deformed in a manner such that the latch and bolts can no longer extend into the appropriate recesses in the frame and/or the striking plate,
- a double-leaf door is opened by the inactive leaf,
- the user reaches between the door leaf and frame while closing doors,
- door closers are incorrectly adjusted.

3. Product performance

Insofar as the product performance is not concretely specified in our catalogues, brochures, performance descriptions, etc., the requirements for the individual locks must be agreed upon with us.

The suitability of locks depends, among other things, on the frequency of actuation, manner of actuation, environmental influences, and care.

Despite proper maintenance, locks, locking cylinders, fittings, and locking mechanisms must be replaced as soon as malfunctions occur.

4. Product maintenance

The lock latch, control latch, and the bolts must be lubricated with suitable lubricants (e.g. MOTOREX 176 GP multi-purpose grease) at least twice annually - or more frequently depending on use - without opening the lock case. The proper function of the lock, cylinder, fitting, and striking plate must be tested and assured in this connection. Observe the separate instructions for removal and instructions for maintenance. An always lightly greased latch bevel facilitates the fault-free and quiet locking of the door. Only cleansers which do not contain any corrosive components may be used.

5. Information and instruction duties

The following documentation and services are available to specialist dealers, key services, architects, planners, consulting institutions, installers, or users for fulfilment of the information and instruction duties:

- Catalogues, brochures, functional descriptions, dimensional drawings
- Manuals for installation, connection diagrams
- Advice from use and/or our field staff

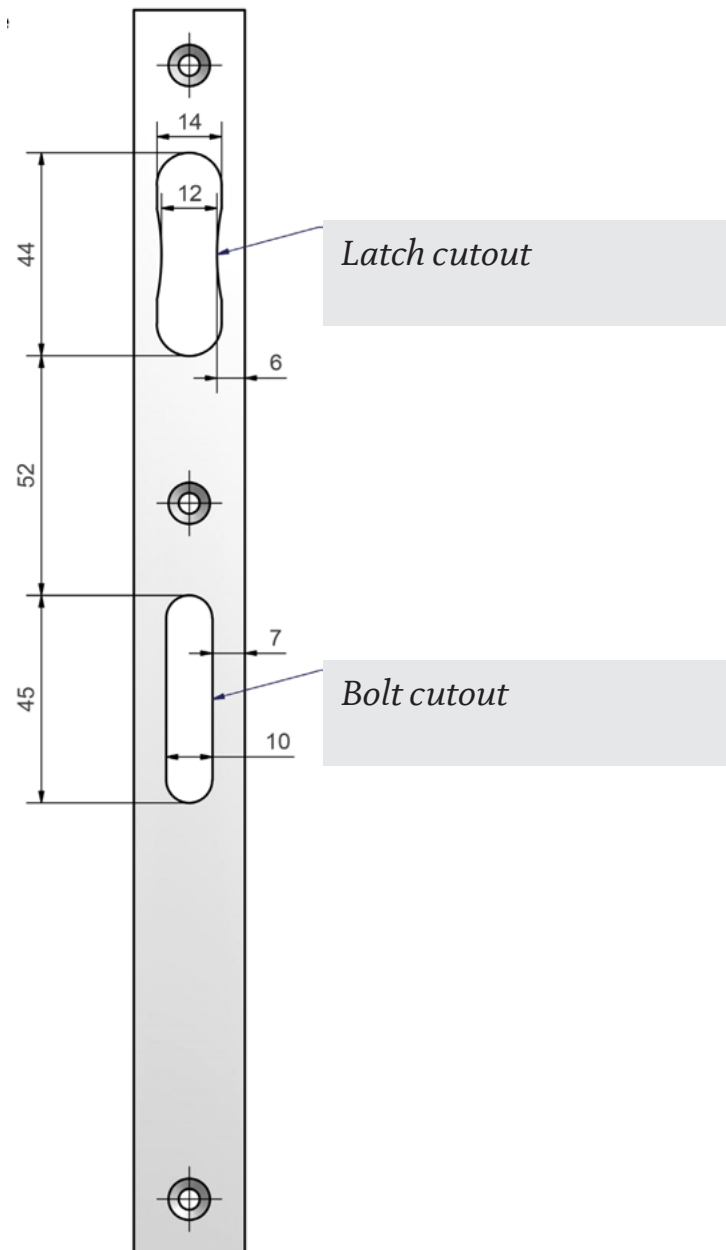
For selecting locks and for the installation, operation, and care,

- architects and planners must request and observe all required product information from us.
- Specialist dealers must observe the product information and information in the price lists, and, in particular, must request all required manuals from us and pass them along to the consumers.



Installers must observe all product information and, in particular, must request all required manuals from us and pass them along to the client and user.

Contour for striking plate recess



The lock and corresponding striking plate are a matching system which has been tested and approved according to the appropriate standards. Therefore, the HZ-lock VB 19000 may only be used in combination with a matching striking plate from Glutz. If the HZ-lock VB 19000 is used with a third-party striking plate, Glutz AG cannot guarantee the fault-free functionality of the lock.

Material thickness 3 mm

Instructions for the user and instructions for maintenance

1. Entry

In the 'blocked' basic position, the outside lever handle is disengaged from the locking mechanism and can only be actuated in no-load operation. During the time in which the access control system connects the power supply to the electromagnet in the lock, the outside lever handle is engaged with the locking mechanism. An actuation of the lever handle during this time withdraws the bolts and the latch at the same time. If the lever handle is not actuated, the handle is automatically disengaged again after the power is disconnected.

In the event of a power failure, a general defect of the electrical control, or **emergency opening** by rescue services, the door can be opened in a purely mechanical manner with the appropriate cylinder key. For this purpose, the key is turned in the security cylinder in the opening direction until the mechanical stop is reached and held in this position while the lever handle is then simultaneously actuated. (Exception: normally open version, which is unlocked in the event of a power failure.)

2. Exit

For all locks on which 'Panic' is inscribed on the forend, the inside lever handle is always permanently coupled to the locking mechanism. Actuation of the inside lever handle enables an exit at all times. In the versions with auxiliary latch and emergency door strike, as well as for disengageable handle on the insides or both sides, a green emergency button can also be mounted near the door; in this case, an exit is enabled once the emergency button is actuated, whereupon an alarm is usually triggered. (Only the versions with auxiliary latch and emergency door strike conform to EN 13637)

3. Locking

The door lock blocks the door automatically with three bolts every time it is closed. The key rotation in the cylinder is therefore unnecessary. However, in order for the automatic blocking to take place in a fault-free manner, the bolts and the latch must be able to engage unimpeded in the openings provided for this purpose in the locking plate or in the frame. Leaf position and bolt position contacts are installed in an electric lock. They enable the monitoring of the correct locking, which is strongly recommended.

4. Regular inspection and period maintenance

Over the course of time, performance limitations can occur due to environmental influences, inadvertently caused damage, wear, changes in use, etc., which must be rectified immediately.



Regular inspection, especially of doors in escape and rescue routes must be recorded in the accompanying log book 'Recurring inspection and period maintenance'.
Attachment: Acceptance report and instructions for period maintenance

The following recurring maintenance tasks must be performed at least once per month must be carried out by the owner or a contracted third party:

- Inspection and actuation of the panic door lock and lever handle coupling, disengageable inside handle, and monitoring contacts in order to ensure that all parts of the locking device are in faultless operating condition.
- It must be checked and ensured that the latch, deadbolt and locking bolts are not blocked.
- The door(s) must be tested for correct and smooth, unimpeded opening and may not show any signs of warpage.
- Ensure that all screws are firmly tightened and/or that all parts of the panic door lock are fixed in place.
- Ensure that all engaging elements are completely connected and that the contact surfaces of the latch and striking plate and the locking bolts in the closure elements are well greased.

5. Disposal

- Do not dispose of the product in local household waste.
- Return the product to Glutz or dispose of it at a local municipal collection centre for waste metal.

Assembly instructions

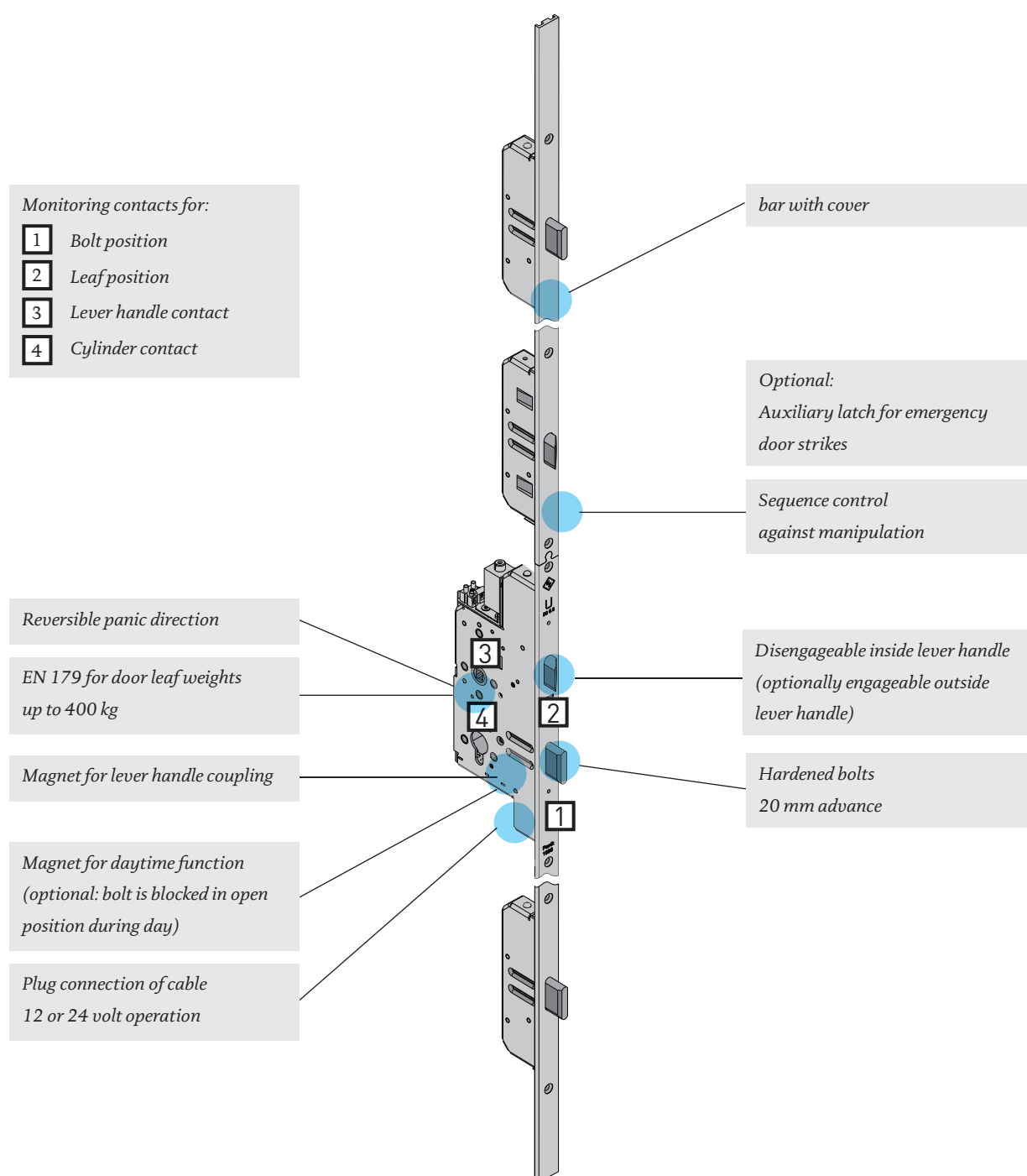
Important:

In order to ensure that all functions are fault-free, the assembly requirements must be studied and installation must take place with precision and care!

ATTENTION:

- Assemble the forend carefully!
- Do not kink connecting bars when inserting them into the main lock (automatically engaging)

To disconnect the forend extension, insert the square spindle, apply light pressure, and carefully pull apart without bending.



HZ-lock VB 19000 - multipoint lock

Specifications

With the HZ-lock VB you fulfil various requirements and functions in compliance with regulations and in a user-friendly manner:

- Burglary resistance up to RC4
- Access control
- Automatic locking
- Escape route door / rescue route (EN 179)
- Fire protection
- Door monitoring

HZ-lock VB 19000 technical data

24 x 6 mm forend

Lengths L = 2050 mm / 2150 mm / 2250 mm
 A = 773 mm / 873 mm / 973 mm
 B = 1005 mm / 1105 mm / 1205 mm

Backset 80 mm, follower 9 x 9 mm

Follower - cylinder stance RZ 74 mm, PZ 72 mm

Oval bolt - forward feed 20 mm

Solenoid coil voltage 12 or 24 VDC

Control and handle contacts, locking contacts

Monitoring contacts

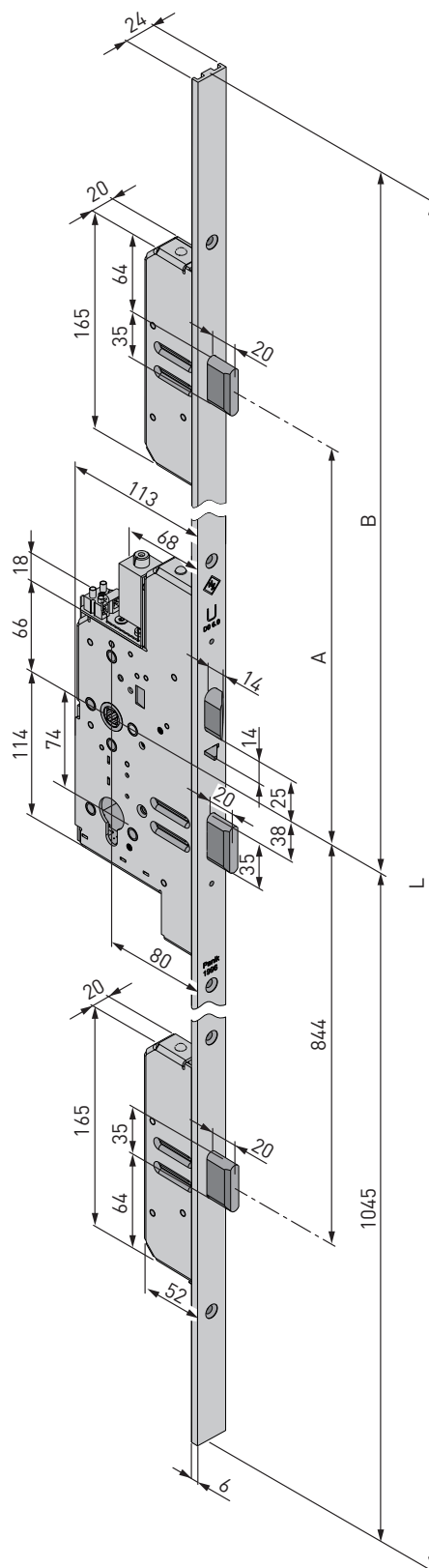
- Inside/outside lever handle
- Door position
- Door locking
- Entry with key

Quality standard

- RC4 in accordance with EN 1627-1630
- DIN 18251-3, Class 4
- EN 179 / EN 1634-1

Options

- Auxiliary latch for emergency door strikes
- Electrical release block for the lock (bolt blocking for daytime operation)
- Disengageable inside lever handle (not EN 179)
- Electrical control on both sides for entry and exit control without an escape route



Assembly requirements

Preliminary remarks

- The safety features of this product are essential for compliance with EN 179. With the exception of modifications described in this manual, no other changes of any type are permitted.
- The HZ-lock VB 19000 is suitable for door elements weighing up to 400 kg and for burglary-resistant door elements up to RC4.



HZ-lock VB 19000 with panic function: Ensure that your burglary-resistant door construction provides resistance against hammering and drilling while under attack such that an opening through which an intruder can reach cannot be created, and that the doors have a threshold at the bottom. A peephole should be omitted.

1. Door preparation

- Cut the lock pocket according to the drawing, provide supports of the lock pocket on all sides, possibly embed a forend to a depth of 6 mm; clean out all recesses and profile tubes. Wash out any sand!
- The door gap between the lock forend and striking plate must be 3 - 6 mm.
- Drill the opening for the square spindle and security cylinder.

2. Frame cutouts / striking plates

The door is only positioned with the lock latch and pressed onto the seal. The bolts must be able to engage in the striking plate openings unimpeded (at least 1 mm of play on both sides, bolt forward feed = 20 mm). The control latch must stop on the frame and/or striking plate and may not protrude into a cutout.

3. Lock installation

Cut the forend to the precise length at the top and possibly the bottom.

Extend the bolts on the main lock by pushing in the lock latch and simultaneously holding back the control latch below. The bolts are advanced when the control latch is released.

The connection of the lower lock section and the upper forend extension takes place by carefully pushing one of the two connecting bars of the forend extension into the guide grooves on the forend of the main lock until the connecting bars engage; then fit the Ω cutouts of the forend profiles together.

We recommend first fastening the upper forend extension loosely on the door with the top-most screw, then connecting the forend extension starting from the main lock, engaging the connecting bars, and sliding the lock into the prepared lock pocket. Ensure that the connecting bars in the forend do not bend at the connecting point when fitting together the lower lock section and the upper forend extension, because the lock cannot function properly with bent connecting bars. The warranty will be voided if the connecting bars are bent.

Insert the plug connector - do not retract the cable on the hinge side (cable loop below the plug connector) - and tighten the screws appropriately.

If it is necessary to loosen the upper forend extension, while the bolt is extended, press a square spindle (approx. 3mm) into the hole in the forend and carefully pull the two parts apart at the same time.

4. Cylinder installation

Depending on the cutout in the lock case, any profile cylinder in accordance with DIN 18252 or any round cylinder in accordance with EN 1303, prefix CH, can be used. The cylinder actuator can be arranged in any position. The opening in the door leaf for the security cylinder must be sufficient large. The cylinder may not touch the door leaf around its entire circumference. For the fastening of the cylinder, an Allen key (3 mm) is inserted into the hole in the forend under the bolt to a depth of approx. 60 mm to the installed forend screw and the screw is tightened. Ensure that the cylinder is correctly centred in the lock and the actuator can correctly fulfil its function.

When the cylinder is correctly positioned, the disengaged lever handle is mechanically coupled when a mechanical stop is reached by turning the key in the opening direction. Never actuate the lever handle and never extend the bolt when the Allen key is inserted.

5. Installation of the security plate / split square spindle

The HZ-lock VB 19000 together with the Glutz RR ES-2 and ES-3 security plates and the matching split square spindle has been tested as an emergency exit lock in accordance with EN 179. A stable, fixed mobile fastening of the two lever handles on the plates is important (twin glide easyfix®). The split square spindle does not support the fitting and cannot be subjected to tensile forces. Make sure that the shaft locking device is pressed exactly in the ring groove provided for this purpose. With the use of roses, the stress on the follower parts would be excessive, wherein anti-burglary resistance is not guaranteed. In this case, we make no guarantee for the lock with an unsuitable lever handle bearing.



Use of a suitable site fixing template to drill the holes for the screw connection of the inside and outside plate is recommended. The site fixing template is positioned on the lever handle and the cylinder cutout. Drill from both sides, remove the lock, drill the door leaf from both sides, and pay attention to the electrical supply cable below! Clean the lock pockets and re-install the lock.

Prepare the screws for the correct length. Neither the square spindle nor the cylinder may be canted in the lock when the screws are tightened. In the process, the door leaf may not be pulled together; spacer sleeves must be provided if necessary. After actuation, the lever handle must be automatically held in its top-most horizontal position by the integrated handle holding springs only.

6. Instructions for the user and recommendations for maintenance



The door element must be handed over to the building owner with the completely filled in acceptance report. The building owner must be instructed in the functions and the accompanying instructions must be handed over to them with written recommendations and instructions for maintenance.

The accompanying self-adhesive sticker providing instruction for opening with the key must be affixed on the outside of the door until the instruction has been followed!

Switching the panic function

from hinge side to non-hinge side and vice versa

Required tools:

- 1 Lever handle spindle part 9x9 mm
- 1 Allen key 1.5 mm
- 1 Security half or double cylinder with key

(HZ-lock VB 19000: Switching from freewheeling to panic function starting with point 7, M2 x 5 mm Allen screw required)

Procedure:

1. Fix the lower lock section with panic function at the top on a workbench.
2. Remove the round sticker with HZ symbol next to the handle follower, which will expose a round opening in the lock case.
3. Actuate the lever handle follower on the panic side with the lever handle with 9x9 mm square spindle until the screw head with the hexagon socket appears in the lock case opening and hold it in this position.
4. Unscrew and remove the screw with the 1.5 mm Allen key. Make sure that the follower is not moved further until the screw has been removed so that the screw does not fall into the lock case.
5. The lever handle can now be released again.
6. Rotate the lock (handle follower now disengaged at the top).
7. Remove the round sticker with HZ symbol next to the follower, which will expose a round opening in the lock case.
8. Insert the locking cylinder, turn the key in the opening direction until the mechanical stop is reached, and hold it in this position.
9. At the same time use the lever handle to actuate the follower until the threaded hole appears in the lock case opening and hold it in place.
10. Carefully screw in the previously removed cylinder head screw and tighten normally (without force!!!). Ensure that the follower is not moved further and that the screw does not fall into the lock case.
11. Close the two openings again to protect from dirt.



Each individual lock undergoes a testing programme in our production facility for mechanical/electrical function. The tested function can also be determined from the serial number.

In case of uncertainty, please contact the manufacturer first. A clarifying telephone conversation is usually less expensive than a lock repair.

Removing the panic function

Required tools:

- 1 Lever handle spindle part 9x9 mm
- 1 Allen key 1.5 mm

Procedure:

1. Fix the lower lock section with panic function side at the top on a workbench.
2. Remove the round sticker with HZ symbol next to the handle follower, which will expose a round opening in the lock case.
3. Insert the lever handle with 9x9 mm square spindle in the lock follower.
4. Use the lever handle to actuate the follower until a small cylinder head screw with hexagon socket (Allen screw) appears in the lock case opening and hold it in place.
5. Unscrew and remove the cylinder head screw with the 1.5 mm Allen key. Ensure that the follower is not moved further and that the screw does not fall into the lock case.
6. Close the opening again to protect from dirt.

Each individual lock undergoes a testing programme in our production facility for mechanical/electrical function. The tested function can also be determined from the serial number. In case of defective stickers and subsequent conversion, we can no longer provide any guarantee.

In case of uncertainty, please contact the manufacturer first. A clarifying telephone conversation is normally less expensive than a lock repair.



Check of electrical feedback

The following are requirements for the correct function of the door monitoring (bolt position contact and leaf position contact):

- All three bolts must be completely extended.
- The permanent magnet is correctly positioned in the frame (correct measurement under the lever handle axis depending on the magnet which is used).
- The distance between the magnet and forend may not exceed 5 mm.
- The magnet cannot come into contact with the steel parts of the striking plate or the frame.

Inspection

1. With the door open, push in the main latch, hold back the control latch, release the main latch, and the bolts extend.
2. Hold the permanent magnet 125 mm under the lever handle axis at a maximum distance of 5 mm to the forend.

If the feedback contacts are now closed, the feedback in the lock functions correctly. All of the requirements listed above must be checked and corrected if necessary.

If there is still no feedback, remove the lock, check the plug connector, and check the supply cable (possible damage due to drilling during security plate installation).

If these inspections do not lead to successful results, the lock must be replaced and/or returned to the factory for repair (replacement of the circuitry).

HZ-lock VB 19000 with auxiliary latch

The HZ-lock VB 19000 with auxiliary latch is used for the following requirements:

- Burglary-resistant door
- Doors in escape and rescue routes
- Access control or remote operation
- Exit control and/or airlock locking

An additional locking latch is integrated in the upper forend extension. It operates depending on the lock mechanism. An effeff 331 escape route strike is installed in the frame as a counterpiece. A door terminal with emergency button and possible escape route control is installed on the inside next to the door.

Airlock control

The mutual locking of the doors takes place with the escape route strike, because the inner lever handle has a panic function, which means actuation always retracts the three bolts and the lock latch, but not the auxiliary latch. Once the door has been opened, voltage is applied to the escape route strike of the other door by the airlock control unit. If necessary, the lever handle contacts installed in the lock can also be used for the airlock control.

In an emergency, the escape door strike can be unlocked by the fire alarm system or disengaged with the emergency button. The cylinder contact installed in the lock can be used for the unlocking of the escape door strike for rescue services.

Exit control

After recognition of an authorisation, the entry reader on the outside applies voltage to the coupling magnets in the lock and simultaneously unlocks the escape door strike via the 'temporary unlock' connection of the escape route control.

The exit reader only unlocks the escape door strike via the 'temporary unlock'; the door is opened via the mechanical panic function. In an emergency, the escape door strike is disengaged by pressing the emergency button.

When rescue services mechanically engage the outside lever handle with the key, they simultaneously switch a switchover contact in the lock which interrupts the power supply to the escape door strike.

Advantages

- All building code regulations for escape and rescue routes are satisfied.
- Unlike surface magnets, the escape door strike can be concealed, which can reduce the passage height under certain circumstances.
- The additional locking point above the main lock is more ideal than on the upper door edge.

Optional: Disengageable inside handle

In the basic position (de-energised), the outside lever handle is disengaged and the inside lever handle is engaged (emergency exit function of the standard HZ-lock VB 19000). With any commercially available identification system or by means of a button for remote operation, the outside lever handle can be engaged electrically. This takes place with an electromagnet in the lock which switches the outside lever handle from disengaged upon actuation, for as long as voltage is applied to the electromagnet. Actuation of the inside lever handle opens the doors mechanically at all times.

The inside lever handle is a weak point for the burglary resistance of a door element. Now testers have a hand-held drill at their disposal for resistance class RC3 and possible glazing is also tested in resistance class RC4. The door leaf or the broken safety glazing can be drilled through or punctured, enabling access to the door handle, when can enable the opening of the door within the resistance time. Threshold-free doors are also requested with increasing frequency, which enables manipulation with a door handle catch.

With the new 'disengageable inside handle' function, the HZ-lock VB 19000 provides a solution to this problem. Therefore, the inside lever handle can be disengage during non-business hours. At the same time, when the monitoring system is armed via manual switch or timer, voltage is applied to a second magnet in the lock during non-business hours, whereby the inside lever handle is disengaged and the door can no longer be opened with the inside lever handle.

In order to guarantee the ability to exit despite this, an exit button is arranged on the inside on a protected location. If this button is actuated, the power supply to the decoupling magnet is interrupted. The inside door handle is immediately re-engaged and actuation of the door is enabled.



The correct sequence must be observed in the process: emergency button first, then lever handle actuation. Otherwise, the lever handle must be moved upwards again so that it engages and the door can be opened. In the event of a power failure, the door can always be opened with the lever handle in the normal manner.

The mechanical engagement of both the outside and inside lever handles is always assured with the security cylinder.

An additional application is penal institutions and psychiatric facilities where burglary prevention and/or exit control is required.

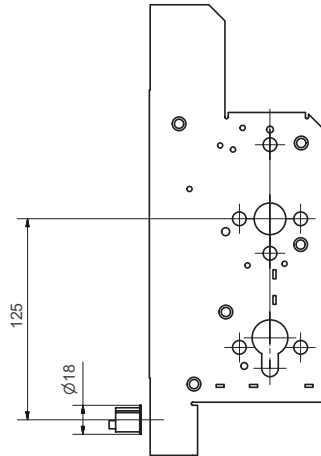


With these applications it is important to monitor the cable and the voltage to the magnet, because unimpeded access must be possible in the event of a power failure, sabotage of cables, or severed wires. For doors with exit control in accordance with EN 179, the version with the auxiliary latch and escape door strike must be used. Please contact building authorities to obtain an individual authorisation for special applications. Otherwise, the instructions for users and the maintenance instructions for the HZ-lock VB 19000 apply.

N.B. Please note that in some countries third-party property rights may exist when a disengagement of the inside lever handle only takes place when an intrusion alarm is triggered which is actively connected to the HZ-lock VB 19000.

Permanent magnet for HZ-lock BB leaf position contact

2696 - Ø15mm magnet for steel frames and individual steel striking plate brass case with adjustable magnet position

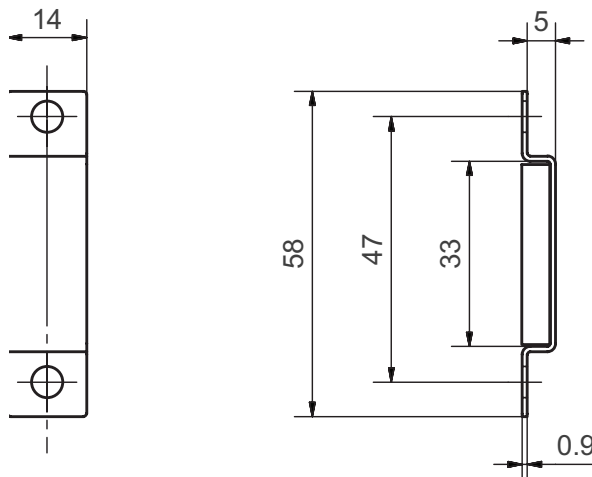


2697 Ø10 mm round magnet, height 5 mm

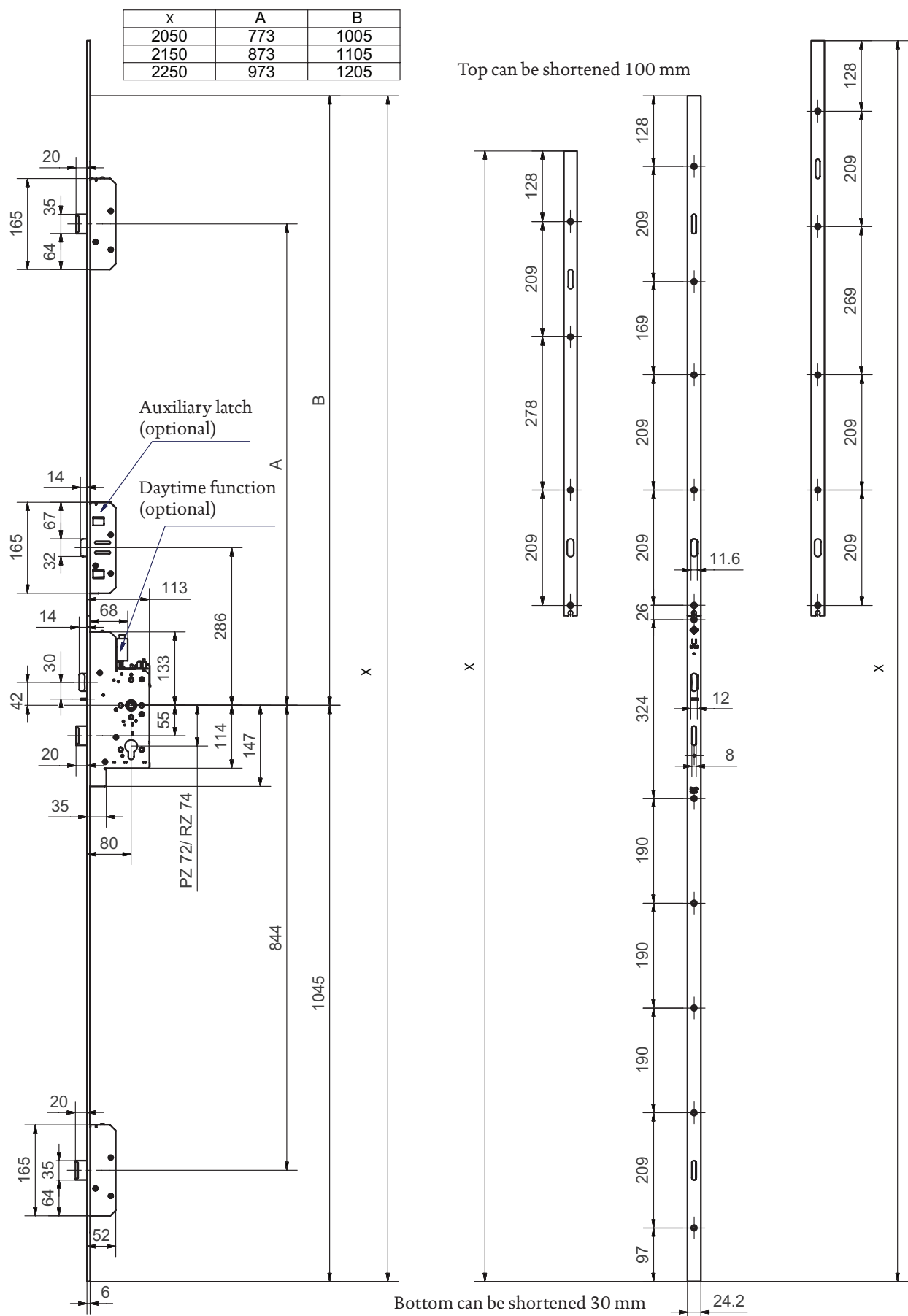
For drilling into wooden frames under individual striking plate made of non-magnetic stainless steel
Centre fastening with nickel plated brass screw



2698 Flat permanent magnet with cap profile for striking plates made of non-magnetic stainless steel



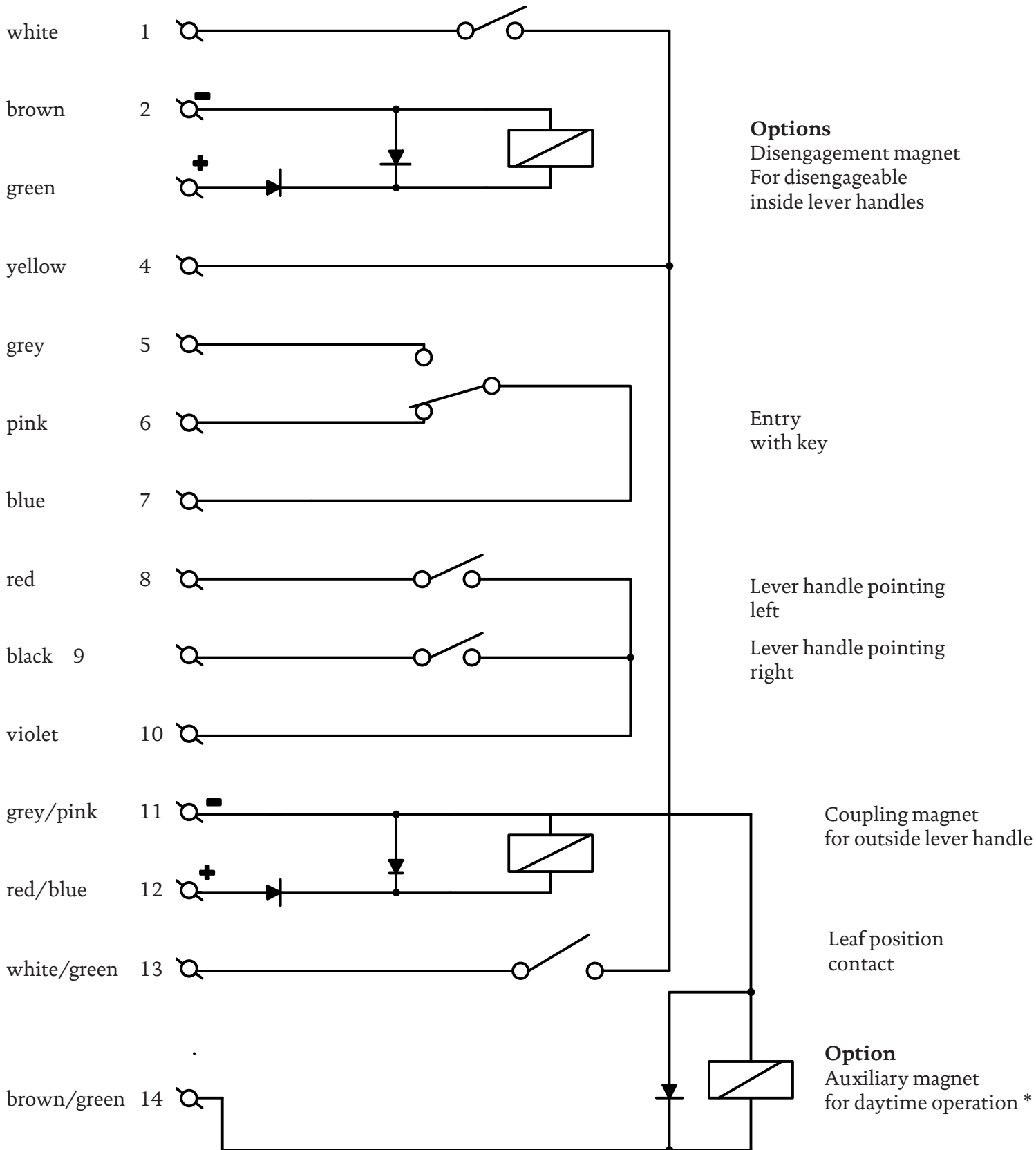
HZ-lock VB 19000 dimensional drawing



Connection diagram

DIN cable colours

Bolt position contact



* Caution:

No protection against reverse polarity due to voltage drop of the protection diode .

Electrical connections / control and monitoring functions

Connection cable	Contact	Maximum load		Function	Comments
		VDC	mA		
1	white	NO	30	300	Bolt monitoring
2	brown	-	12	340	Disengage inside handle
3	green	+	24	170	
			12	340	Option As long as voltage is applied, the inside lever handle is disengaged. (Observe voltage and polarity - inverse-polarity protection - and freewheeling diode integrated)
			24	170	
4	yellow	COM	30	300	COM for separate evaluation of bolt position and leaf position contact.
5	grey	NO	30	300	With a key rotation in the opening direction, this switchover contact is actuated and the lever handle is simultaneously mechanically engaged. With the use of an electric lock in escape and rescue routes, this contact can be used for the control of the exit locking element.
6	pink	NC	30	300	
7	blue	COM	30	300	
8	red	NO	30	300	This contact closes with an actuation of the lever handle pointing to the left. (For example: signalling of the authorised exit on the monitoring system)
9	black	NO	30	300	This contact closes with an actuation of the lever handle pointing to the right. (For example: signalling of the authorised exit on the monitoring system)
10	violet	COM	30	300	COM for lever handle contacts 8 and 9
11	grey/ pink	-	12	340	Standard As long as voltage is applied, the outside lever handle is engaged. (Observe voltage and polarity - inverse-polarity protection - and freewheeling diode integrated) De-energised open version As long a voltage is applied, the outside lever handle is disengaged.
12	red/blue	+	24	170	
13	white/ green	NO	30	300	Reed contact in the lock forend, closed by permanent magnet in the striking plate or frame, if door in the locked position (in series with bolt position, if applicable).
14	brown/ green	+	12	340	Optional As long as voltage is applied, the bolts do not extend when the door is closed. (Observe voltage and polarity - inverse-polarity protection - and freewheeling diode integrated)
			24	170	

Faults - Causes - Remedy

1. Lock functions

Fault	Cause	Remedy
1.1 The door does not lock automatically after closing, the bolts are not extended or only partially extended.	<ol style="list-style-type: none"> 1. The lock latch cannot engage in the striking plate. 2. At least one bolt cannot extend into the bolt cutout of the striking plate. 3. The latch cutout is too large; the control latch penetrates into the latch cutout. 4. The connecting bars in the forend have been bent during the assembly of the main lock and the forend extension. 5. The rebate gap is too large. 	<ol style="list-style-type: none"> 1. Increase the size of the latch cutout in the striking plate or in the frame. 2. Increase the size of the bolt cutout(s) in the striking plate or in the frame. 3. Re-position the striking plate upwards or weld the latch cutout shut. 4. Remove the lock, carefully disconnect the forend extension (see assembly direction), align the connecting bars. Severely bent bars must be replaced 5. Adjust a rebate gap of 3-6mm with the adjustable hinges or raise the striking plate.
1.2 The bolts are not blocked when the door is open and they protrude.	<ol style="list-style-type: none"> 1. The control latch is jammed. 2. There is lubricant or oil spray in the lock. 3. The control latch is bent. 	<ol style="list-style-type: none"> 1. Lightly grease and move the control latch by pressing the main latch in slightly. 2. Send the lock in for cleaning. 3. Send the HZ-lock in for repairs.
1.3 The outside lever handle does not engage.	<ol style="list-style-type: none"> 1. No voltage or incorrect voltage from the access control system. 2. Incorrect poles connected at terminals 11 and 12. 3. The springs do not raise the lever handle all the way to the upper limit position. 4. The 'Electrical control disengaging' function is active and the cylinder is turned to locking position (Only pertains to HZ-lock with this option until June 2013) 	<ol style="list-style-type: none"> 1. Measure the voltage at terminals 11(-) and 12(+) and compare with the type plate. 2. Connect correctly: + to terminal 12, — to terminal 11. If the diode is defective, send the lock in for repair 3. Check the security plate assembly (handle bearing jammed in the plate). 4. Perform a cylinder rotation with the key in the opening direction with the security key.
1.4 The lever handle cannot be engaged with the security cylinder.	<ol style="list-style-type: none"> 1. The security cylinder is not correctly positioned in the lock. 	<ol style="list-style-type: none"> 1. Loosen the cylinder fastening with the 3mm Allen key, centre the cylinder precisely in the lock, and re-tighten the screw.

Faults - Causes - Remedy

2. Control and monitoring functions

Fault	Cause	Remedy
2.1 'Door position - door locking' feedback does not work.	<ol style="list-style-type: none">1. The magnet in the striking plate is not positioned correctly or the rebate gap is too large.2. The bolts cannot extend.3. The contacts have been overloaded.4. A non-original striking plate or magnet was installed in the frame.	<ol style="list-style-type: none">1. Reposition the magnet; the correct position must be determined by trial and error.2. See faults, lock functions 1.13. Send the main lock in for repairs.4. Fit an original striking plate or magnet.
2.2 The 'Electrical connection disengaging' switchover contact does not function. (only for locks with this option until June 2013)	<ol style="list-style-type: none">1. The cylinder is not correctly positioned.2. The contacts have been overloaded.	<ol style="list-style-type: none">1. See faults, lock functions 1.42. Send the main lock in for repairs.
2.3 'Entry with key' switchover contact does not work.	<ol style="list-style-type: none">1. The cylinder is not correctly positioned.2. The contact has been overloaded.	<ol style="list-style-type: none">1. See faults, lock functions 1.42. Send the main lock in for repairs.
2.4 False alarms with authorised entry.	<ol style="list-style-type: none">1. Sequence of signals is subject to fluctuations.	<ol style="list-style-type: none">1. Increase the alarm delay time.

CE marking



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Glutz Ltd.
Glutz Segetzstrasse 13
CH-4502 Solothurn
Switzerland

Multipointlock HZ-lock VB 19000, RR 19010, RR 19015

LE/DoP-Nr. : 025E/CPR/2017-01-16

EN 179: 2008

Emergency exit devices operated by a lever handle or push pad, for use on escape routes

Ability to release
(for doors on escape routes)

fulfilled
($\leq 70\text{N}$ unloaded)

Durability of ability to release against aging
and degradation
(for doors on escape routes)

fulfilled
(200'000 cycles)

Initial test carried out and Classification reports erected by
ift Rosenheim NB-Nr. 0757-CPR-229P-6014391-5

Category of use	Durability	Door mass	Suitability for use on fire/smoke doors	Safety	Corrosion resistance	Security	Projection of operating element	Type of operation	Field of door application
3	7	7	B	1	3	3	2	A	B / D

Glutz AG

Segetzstrasse 13, 4502 Solothurn, Schweiz
Tel. +41 32 625 65 20, Fax +41 32 625 65 35
info@glutz.com, www.glutz.com

Glutz Deutschland GmbH

Schmalenhofer Strasse 61, 42551 Velbert, Deutschland
Tel. +49 2051 8013 51-0, Fax +49 2051 8013 51-15
info-de@glutz.com, www.glutz.com

Glutz GmbH Österreich

St. Oswalder Strasse 5c, 4293 Gutau, Österreich Tel.
+43 7946 20506, Fax +43 7946 20506-10
info-at@glutz.com, www.glutz.com

Glutz UK Ltd.

11 Finch Drive, Springwood Industrial Estate
Braintree CM7 2SF, United Kingdom
Tel. +44 1376 348 808, Fax +44 1376 348 848
info-uk@glutz.com, www.glutz.com

V0519

This sticker providing instruction for opening with the key must be affixed on the outside of the door until the instruction has been followed. (It is easily removed)

Attention: without latch withdrawal !

Bolts can only be pulled back using the handle and the key

To open:

Turn the key in the opening direction until the mechanical stop is reached, hold in place and then simultaneously actuate the handle