

Instruction manual
Electrically operated mortise lock
Touch to open



Smart Entrance

BY POLLMEIER

OPERATING INSTRUCTIONS

Touch to open electric mortise lock

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1 General

Please read through the present operating instructions carefully before fitting or using the product. They contain important instructions on safety which help to avoid risks, errors and malfunctions. Keep the instructions in a safe place.

The manufacturer's warranty is voided in any case of change, extension and modification (mechanical or electrical) of the electric mortise lock, opening the casing, or damage caused by use of force.

The scope of supply includes:

- Electrical mortise lock
- Strike plate
- four AAA micro alkaline batteries (1.5 V)
- Countersunk screw, fully threaded 4.5 x 30 - T20
- Countersunk screw, fully threaded 3.5 x 25 - T15

Parts required for fitting:

- SE-certified door handle from the BGT Pollmeier GmbH supply program (see section 7)

Optional accessories:

- Closing button

1.1 Declaration of Performance

Declaration of Performance as per Annex III of (EU) Ordinance no. 305/2011 (Building Product Ordinance)

1. Type:	Electrically operated mortise lock Touch to open - EES2
2. Use:	Motorised actuation of the latch in single-leaf, interior wooden doors
3. Manufacturer:	Baugruppentechnik Pollmeier GmbH, Hövelrieger Str. 26, D-33161 Hövelhof
4. Authorised person:	. / .
5. System for evaluation and verification of performance:	4
6. Harmonised standard:	
7. Declared performance:	EN 14846:2008

Feature	Performance
Use category:	N/A*
Continuous operability and load on latch	R
Door mass and closing force	4
Suitability for use in fire protection/smoke protection doors	0
Safety	None
Corrosion resistance, temperature, humidity	0
Protection and drill open resistance	0
Protection of electrical function	0
Protection against electrical manipulation	1

* In deviation from the standard, as safety latch is installed

8. Legally binding declaration

The performance of the above mentioned product as per no. 1 complies with the declared performance as per no. 7. The manufacturer stated above is exclusively responsible for creating this declaration in compliance with (EU) Ordinance no. 305/2011.

Hövelhof, 1 June 2017

1.2 EC Declaration of Conformity

EC Declaration of Conformity BGP 01-2017 pursuant to the EC Machinery Directive 2006/42/EC

Baugruppentechnik Pollmeier GmbH, Hövelrieger Str. 26, 33161 Hövelhof, Germany, hereby declares in sole responsibility that the following machine

Designation:	Touch to open
Type:	electric mortise lock - EES2
Serial number:	See product label

to which this Declaration relates, complies with all applicable provisions of EC Directive 2006/42/EC – Machinery Directive.

The machine also complies with the provisions of EU Directive 2004/108/EC - Electromagnetic Compatibility - and adheres to the protection objectives of the Low Voltage Directive 2006/95/EC as per Annex I, no. 1.5.1 of Machinery Directive 2006/42/EC.

The technical documentation exists in full; the operating instructions which belong to the machine exist in the original version.

The person authorised for compiling the technical documentation is:

Development Department, Baugruppentechnik Pollmeier GmbH, Hövelrieger Straße 26, D-33161 Hövelhof, Germany

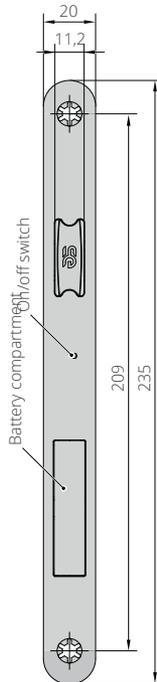
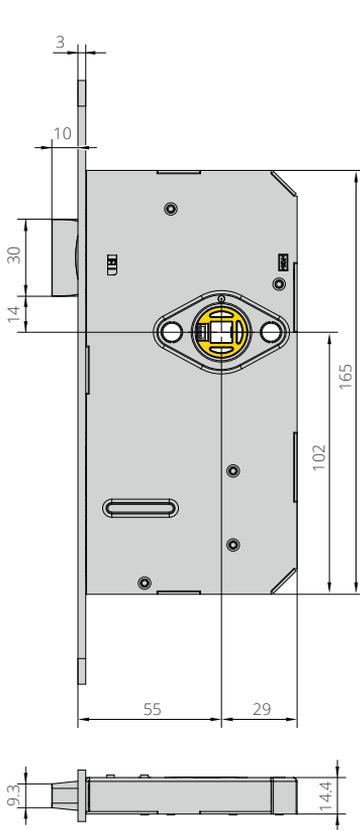
Hövelhof, 1 June 2017



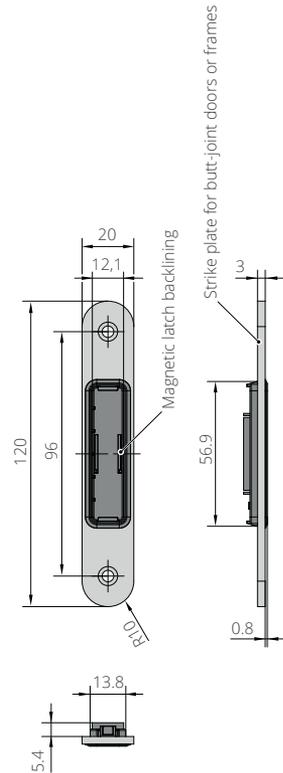
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2.1 Technical Data

Electrically operated mortise lock



Strike plate



Door lock dimensions:

Strike plate dimensions:

Weight:

Protection class:

Power supply:

Width: 84 mm / depth: 20 mm / height: 209 mm

Width: 8.4 mm / depth: 20 mm / height: 120 mm

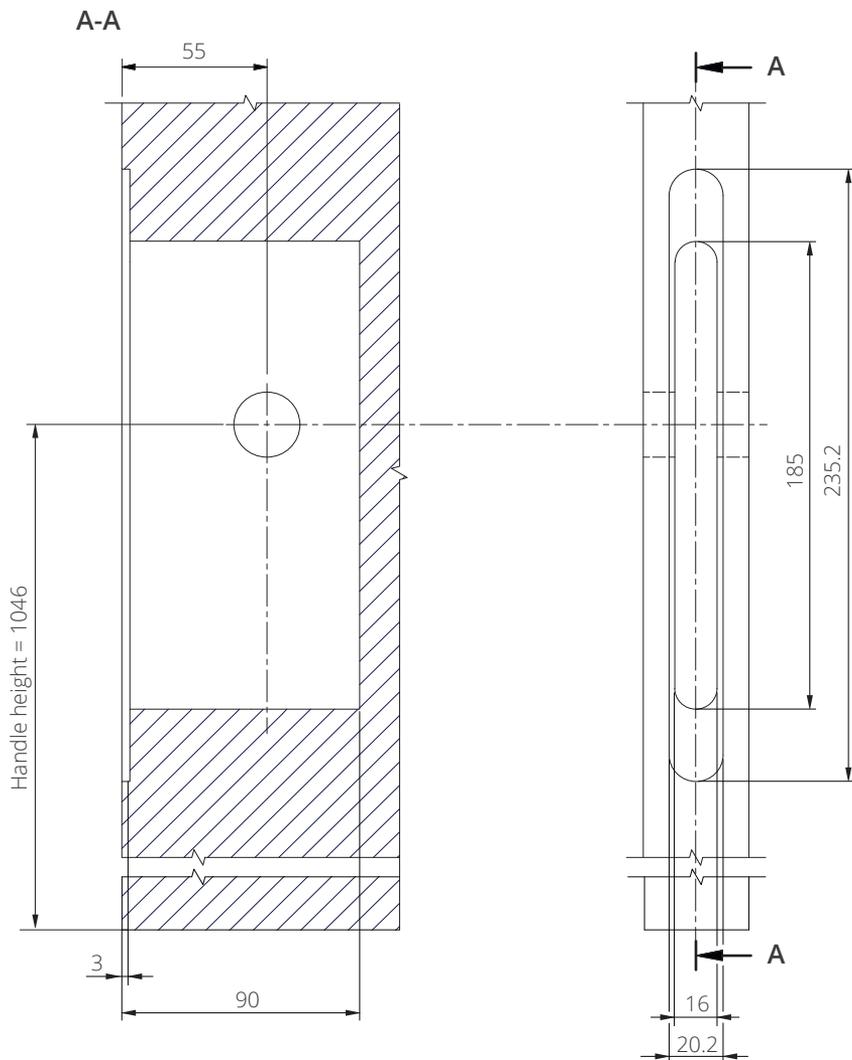
443 g incl. batteries / 397 g without batteries

IP 20

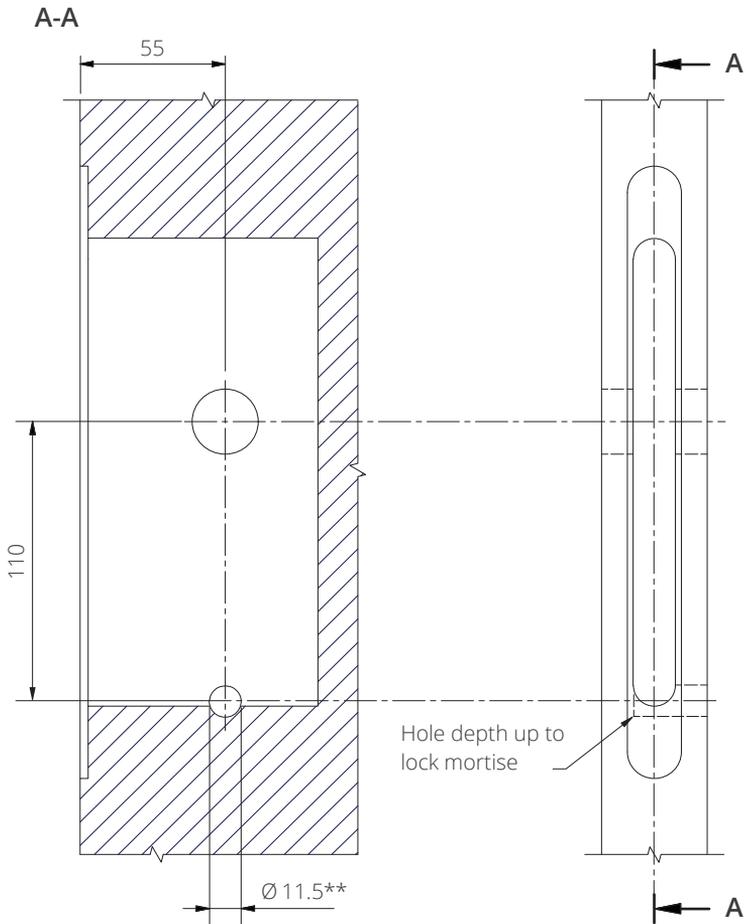
4 x AAA micro alkaline batteries (1.5 V)

2.2 Hole Dimensions

Hole milling dimensions for mortise lock



Milling dimensions for closing button



* Only applies to honeycomb filling and tubular inlay. With solid wood: $\text{Ø} 12$ mm

2.3 Function

When the door is closed, the latch is pulled out of the lock by the magnetic strike plate and snaps into place in the strike plate.

When the door handle is touched with a part of the body (preferably the hand), the locking part (latch) on the lock is electrically retracted. The motor overcomes the magnetic attraction force and pulls the latch out of the strike plate. The door can be open by pushing or pulling.

3 Security

The A-rated emitted sound pressure level is less than or equal to 70 dB(A). There is no risk from noise.

The maximum effective value of the weighted acceleration to which the entire body is exposed is less than 0.5 m/s². The overall vibration value to which the upper body limbs are exposed is less than 2.5 m/s². Thus, there is no risk due to vibration.

3.1 Intended Use

- The lock is designed for occasional use in private interior rooms by persons who handle the technology carefully.
- The lock is exclusively designed for fitting in single-leaf wooden room doors, but not in combination with steel frames.
- The door weight must not exceed 100 kg.
- Only use handles licensed by Baugruppentechnik Pollmeier GmbH in conjunction with the electric mortise lock as the function cannot otherwise be guaranteed (see section 7).
- Always use the same handle design on both sides of the door.
- Only use the lock in undamaged condition without defects. Exclusively use the supplied batteries, or equivalent (type AAA 1.5 V micro alkaline batteries).

3.2 Unintended Use

Any use of the electric mortise lock other than the intended use will void your warranty. Baugruppenteknik Pollmeier GmbH accepts no liability for any damage caused in this way. For this reason, you must comply with the following directions:



Caution! Use of the electric mortise lock in doors that are located on an identified escape and emergency route or in smoke or fire protection doors is not intended and not permitted.



Caution! Do not use the electric mortise lock for frequently used doors in public buildings or rooms to which access needs to be secure.



Caution! Do not insert objects into the lock's openings! Do not force open the lock case!



Caution! Do not use the lock in saunas or steam rooms!



Caution! One-sided handle installation is forbidden. Always fit a handle on each side of the door!

4.1 Fitting the Lock with Closing Button

Before fitting, check all parts for completeness and signs of damage. If you see any damage that could impair the lock's functionality, do not fit the lock under any circumstances!

Fitting must be performed by a skilled person. If a component does not fit in its specified position, you will need to modify the door or frame receptacle. Do not apply force when fitting the lock!

Before installing the electric lock, check the door to make sure that it is correctly hung and not warped.



Caution! The lock must be in as-delivered condition on fitting (latch blocked). If in doubt, detain the latch with an adhesive strip to avoid locking yourself in!



Caution! If the lock is no longer in as-delivered condition, switch it off. Do not restart until the handle is fitted on the lock to avoid inadvertent locking in.

If you wish to retrofit the closing button, the lock must first be detached. To remove the door, switch off the lock, remove the handles and, using suitable tools, remove the screws from the lock. You can now remove the lock from the door.

1. An additional hole needs to be drilled 110 mm below the handle hole to allow the closing button to be attached. For doors with honeycomb filling or tubular inlay, use an 11.5 mm drill bit; for solid wood, use a 12 mm drill bit. Drill from the side at which the door is due to shut. To prevent damage to the opposite side's surface, only drill to the end of the lock mortise. Refer here to the illustration with dimensions in section 2.2.

2. Push the closing button with the connector forwards into its hole. Connector adhesion is only necessary on solid wood doors with a hole diameter of 12 mm. Next, guide the wire upwards back out of the drilled handle hole, as shown in Fig. 1.3. Hold the wire tight (but do not strain) as you slide the lock into its mortise and fasten with two countersunk screws, 4.5 x 35 (included) as shown in Fig. 1. Use suitable tools to tighten the screws hand-tight.

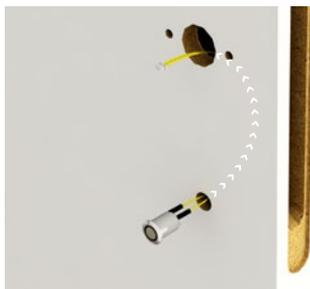


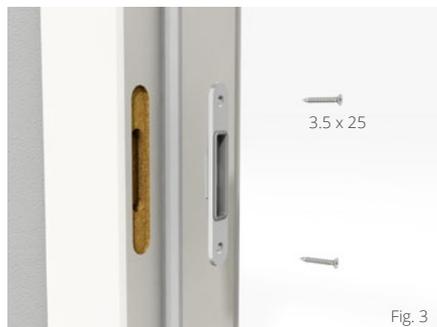
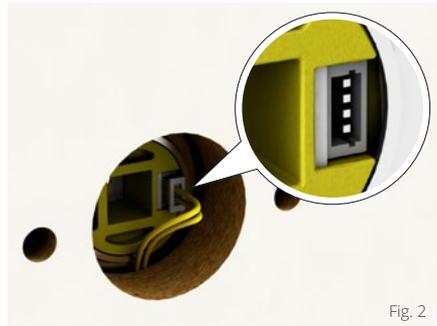
Fig. 1

4. Now insert the four-pin connector upright into the socket on the electronic mortise lock. The connector and socket are coded, allowing only one opportunity to insert it (see Fig. 2). If the connector is not easy to insert, do not use force but rotate it once on its axis and try again.

5. Now fit the strike plate (see Fig. 3) in the recess intended for it on the frame and screw in the countersunk screws 3.5 x 25 (in scope of supply) flush using a suitable tool. Turning upside down lets you adjust the play between the latch and the backlining by 1 mm.

6. After installing the strike plate, make sure there are no foreign bodies. If needed, remove any metal chips magnetically attracted to it with a cloth or brush.

7. Now fit the handle and insert the batteries as described in section 4.2. The lock automatically detects closing button is and it can be used immediately.



4.1 Fitting the Mortise Lock Without Accessories

Before fitting, check all parts for completeness and signs of damage. If you see any damage that could impair the lock's functionality, do not fit the lock under any circumstances!

Fitting must be performed by a skilled person. If a component does not fit in its specified position, you will need to modify the door or frame receptacle. Do not apply force when fitting the lock!

Before installing the electric lock, check the door to make sure that it is correctly hung and not warped.



Caution! The lock must be in as-delivered condition on fitting (latch blocked). If in doubt, detain the latch with an adhesive strip to avoid locking yourself in!



Caution! If the lock is no longer in as-delivered condition, switch it off. Do not restart until the handle is fitted on the lock to avoid inadvertent locking in.



1. Insert the lock into the recess intended for it and fasten with two countersunk screws, 4.5 x 35 (included) as shown in Fig. 1. Use suitable tools to tighten the screws hand-tight.

2. Then fit the strike plate (see Fig. 2) in the frame (use countersunk screws 3.5 x 25 for this). Turning upside down lets you adjust the play between the latch and the backlining by 1 mm.

3. After installing the strike plate, make sure there are no foreign bodies needed, remove any metal chips magnetically attracted to it with a cloth or brush. Then proceed to fit the handle. Read the instructions for the handle to do so.

4.2 Inserting Batteries



Caution! Never insert an empty battery holder into the lock. On closing the door, the lock would immediately engage; in this case, opening is only possible via emergency release.

1. Insert four new 1.5 V AAA Micro Alkaline batteries into the compartment. Pay attention to correct polarity (see Fig. 1).



Fig. 1

2. You can then insert the battery holder into the lock and close by applying light pressure; the holder latches audibly (see Fig. 2).

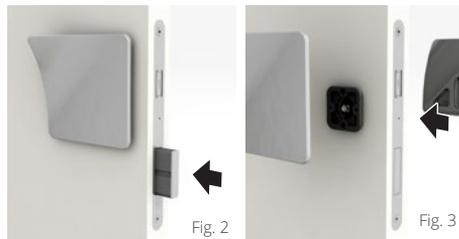


Fig. 2

Fig. 3

3. Before the lock is ready for use, it needs to calibrate. To do so, release the latch, which you may have secured with adhesive tape and then press the on/off switch (see Fig. 3). You will hear a long acoustic signal.

4. Now close the door within 10 sec. Do not touch the SE handles to avoid falsifying the measurement results. (If the door is not closed within 10 sec., the lock switches off again for security reasons.)

5. The calibration process starts. This takes about 20 sec. and is accompanied acoustically by a sequence of eight short beeps. This is followed by a long beep: the calibration process has now been completed.

6. Now touch the SE handle. The lock opens and is in operation mode. (If the handle is not touched within 20 sec., the lock automatically opens again for security reasons, and switches itself off. In this case, repeat steps 3 to 6 to be able to use the lock.)

5 Operation and Maintenance

An acoustic signal will indicate any need to intervene during operation or installation. The following overviews show the various audible signals and their meanings.

All audible signals during installation

Type of audible signal	Operating state	Request
One long beep	Starting calibration	Close door
	End of calibration	Touch SE handle
Short beep/2.5 sec.	Calibration in progress	Do not touch SE handle
Beep sequence: short, short, long	Device switching off	-

All audible signals during operation

Type of audible signal	Operating state	Request
Double beep/5 min.	Batteries exhausted	Replace batteries

All audible signals with closing button

If you have fitted a closing button and want to lock the door, close the door and press the closing button. The LED ring flashes and a long beep notifies you that the door is closed. If the handle is moved from outside or inside while the door is shut, a short double beep sounds and the LED ring flashes. Press the closing button again to unlock. You can re-open the door after a short beep.

Type of audible signal	Operating state	Meaning
Long beep	Door is closed	Closing process successful
Double beep	Door is closed	Handle has been moved
Short beep	Door is open	Unlocking process successful

Except for the batteries, all the components of the electric mortise lock are manufactured to be wear and maintenance free for the lock's service life. However, this assumes careful use. Avoid the use of force which could cause damage to the lock! Do not attempt to open the casing; there are no user-serviceable parts on the inside!

5.1 Troubleshooting

If the lock unexpectedly fails to work, first check the following points:

Malfunction	Possible cause	Possible solution
Lock beeps twice periodically approx. every 5 min. and the latch remains in the lock	Batteries exhausted	Replace batteries (see 5.4)
Noise on opening/closing	Foreign body on latch or in strike plate	Clean, carefully remove object (see 5.3)
	Lock not correctly seated in lock case	Reposition & fasten lock
Lock fails to open or close correctly	Latch bent or broken due to use of force	Replace lock
Lock fails to close	Batteries exhausted	Replace batteries (see 5.4)
	Batteries inserted incorrectly (wrong polarity)	Insert batteries as specified
	Lock not switched on	Press on/off switch to activate the lock. (see 4.2)
	Wrong door handle, latch has been blocked	Replace handle with SE-certified handle and press the on/off switch after fitting
	Handle fitted too tightly	Loosen the handle slightly
	Lock not designed for door (left- or right-handed)	Replace lock
	Electronics problem in lock/overload/motor defective	Replace lock
Lock slow to open	The latch does not make central contact with the	Rotate the strike plate through 180°
		Press in the door seals
		Adjust the door hinges
Lock not opening	Internal, transient malfunction	Remove handle, unlock the latch mechanically by turning the square key in the direction of the handle movement, fully dismantle the handle, press the on/off switch (this reboots the lock)
		Unlock the latch from the outside of the hinge with a plastic card (see 5.2)
		The latch is equipped with a safety clip. Prise open the door from the inside of the hinge, applying serious force (1 kN) around the handle area (see 5.2).

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If it proves impossible to resolve the problem, please remove the lock and contact Baugruppenteknik Pollmeier GmbH. Expert staff is available to help you.

5.2 Emergency Release

Emergency door release is not necessary in normal operation and with proper use. Safety mechanisms have been installed in the lock that provide for automatic unlocking if normal operation is compromised. You always have the following two options to unlock the door to guarantee that the door can always be opened.

Emergency release on the outside of the hinge



Insert a plastic card in the crack of the door at the lock's height, using it to feel for the top edge of the latch (see Fig. 1). Next, slide the bottom of the card into the recess on the side of the latch. Now pull down vertically up to stop on the door edge (see Fig. 2). The latch is now pushed in and the door can be opened. Only remove the card from the recess once you have opened it.

Emergency release on the inside of the hinge



In the event of emergency, if you cannot remove the door handle on the inside of the hinge, prise open the door, applying serious force around the handle area (see Fig. 3, p. 12). With 1 kN of force, the safety clip on the latch will yield and the door will open (see Fig. 4, p. 12).

5.3 Cleaning

Due to protected installation and the wear-free design, cleaning is only rarely required. To clean, wipe the lock and the strike plate with a dry cloth. Do not use chemicals, cleaning agents, solvents or objects for mechanical cleaning!

Carefully remove any metal chips on the latch or strike plate with a soft cloth or a brush.

5.4 Replacing the Batteries

When the batteries are exhausted, the lock outputs an audible signal, retracts the latch and changes to lock mode to avoid blocking the door. This state is indicated by a double peep, which the lock emits periodically at an interval of 5 min. Follow these steps to replace the batteries:



Caution! To replace the batteries, the lock must be switched off or in lock mode (latch retracted) in case of weak batteries. If in doubt, detain the latch with an adhesive strip to avoid locking yourself in!



Caution! Never insert an empty battery holder into the lock. On closing the door, the lock would immediately engage; in this case, opening is only possible via emergency release.

1. Start by opening the door. A brief push on the battery holder causes the battery holder (see Fig. 1) to move out of the compartment so that you can pull it out of the lock.

2. Dispose of the old batteries responsibly and insert four new 1.5 V AAA Micro Alkaline batteries into the holder.



Fig. 1

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Touch to open electric mortise lock

attention to correct polarity (see Fig. 2)

3. You can then insert the battery holder into the lock and close by applying light pressure; the holder latches audibly.



4. Before the lock is ready for use, it needs to calibrate. To do so, release the latch, which you may have secured with adhesive tape and then press the on/off switch (see Fig. 3). You will hear a long acoustic signal. 5. Now close the door within 10 sec. Do not touch the SE handles to avoid falsifying the measurement results. (If the door is not closed within 10 sec., the lock switches off again for security reasons.)



6. The calibration process starts. This takes about 20 sec. and is accompanied acoustically by a sequence of eight short beeps. This is followed by a substantially longer beep: the calibration process has now been completed.

7. Now touch the SE handle. The lock opens and is in operation mode. (If the handle is not touched within 20 sec., the lock automatically opens again for security reasons, and switches itself off. In this case, repeat steps 4 to 7 to be able to use the lock.)

6 Removal and Disposal

To remove the door, switch off the lock, remove the handle and, using suitable tools, remove the screws from the lock and the strike plate. You can now remove the parts from the door or the frame. Then remove the batteries as described in section 4.2.



Caution! Never store the lock for an extended period of time with the batteries fitted. Leaking batteries could damage the electronics!



Do not dispose of the batteries or lock as domestic waste. Instead hand them in at an appropriate collection point (retailer, recycling depot or mobile recycling vehicle).

7 Approved Handles

To keep the electric mortise lock in perfect working condition at all times, only SE-certified handles are approved for the lock. When purchasing your handle, please watch out for the SE mark, which ensures compatibility with the Smart Entrance technology.

There are a variety of designs available for you to choose from when selecting your handle. Not every variant is suitable for rebated doors, however. Please ensure before fitting that your handle can be used on the door in question.



Smart Entrance

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