

DOM<sup>®</sup>

ENIQ<sup>®</sup>

ELS<sup>®</sup>



tapkey

 -Pro



# CONTENT

|   |           |
|---|-----------|
| <b>Scope of supply</b>                                    | <b>4</b>  |
| <b>Functional description</b>                             | <b>5</b>  |
| <b>For your own safety</b>                                | <b>8</b>  |
| <b>Important information</b>                              | <b>8</b>  |
| <b>Additional information<br/>for the Pro cylinder EE</b> | <b>11</b> |
| Installation situation Pro cylinder EE                    | 13        |
| <b>Installation</b>                                       | <b>13</b> |
| Preparation for installation                              | 14        |
| Installation in core pulling protection fittings          | 14        |
| Pro cylinder readable on one side                         | 15        |
| Pro cylinder with CPP version<br>readable on one side     | 17        |
| Pro cylinder readable on both sides                       | 21        |
| Pro cylinder with CPP version<br>readable on both sides   | 24        |
| Pro half cylinder   | 27        |
| Pro half cylinder<br>for pivoted lever handles            | 29        |
| Pro cam lock  | 30        |
| Pro cylinder EE   | 33        |
| Pro cylinder EE without inside knob                       | 34        |
| <b>Commissioning</b>                                      | <b>35</b> |

|  |           |
|--|-----------|
| <b>Operation</b>   | <b>36</b> |
| Status messages  | 37        |
| Acknowledgement of terminations                                | 37        |
| Opening and locking  | 37        |
| Setting the engagement time                                    | 38        |
| Setting up locking or programming media                        | 39        |
| Delete locking or programming media                            | 40        |
| Delete all locking or programming media                        | 42        |
| <br>   |           |
| <b>Programming and management<br/>with software</b>            | <b>43</b> |
| <br>   |           |
| <b>Maintenance</b>   | <b>44</b> |
| Additional maintenance instructions<br>for the Pro cylinder EE | 45        |
| Changing the batteries   | 46        |
| <br>   |           |
| <b>Disassembly</b>   | <b>52</b> |
| <br>   |           |
| <b>Storage/Care</b>  | <b>52</b> |
| <br>   |           |
| <b>Disposal</b>  | <b>53</b> |
| <br>   |           |
| <b>Technical data</b>  | <b>53</b> |
| <br>   |           |
| <b>Warranty</b>  | <b>54</b> |

# SCOPE OF SUPPLY

Depending on the order:

## **Pro cylinder readable on one side**

- Basic length 30/30 mm
- Maximum installation length (without knobs): 80/80 mm + if necessary core pulling protection (8,5 mm)
- 1x fixing screw; battery pack (pre-assembled)

or

## **Pro cylinder readable on both sides**

- Basic length 30/30 mm
- Maximum installation length (without knobs): 80/80 mm + if necessary core pulling protection (8,5 mm)
- 1x fixing screw; 2x battery pack (pre-assembled once); 1x fixing bracket included

or

## **Pro half cylinder & Pro half cylinder for pivoted lever handles**

- Basic length 30
- Maximum installation length (without knobs): 80 mm
- 1x fixing screw; battery pack (pre-assembled)

On request: installation lengths greater than 80 mm, additional designs according to technical datasheets.

or

## **Pro cam lock**

- Basic length 29,4 mm
- Maximum installation length (without knobs): 29,4 mm
- 1x hex-nut SW30; 2x hex-nut SW14; 1x Cam path delimiter; 1x Cam

### Optionally available

- Master Card, Programming Card, RF wake-up card, RF online card, battery change card, service/maintenance card, constantly open card, constantly closed card in ISO cheque card format
- Knob tool
- Fixing bracket
- Battery pack
- Special key EE IM
- Torx screwdriver T6
- Transponder in different designs (tag, ISO card, clip tag, etc.)
- “ENiQ® Access Management” or “ELS” management software for PC or laptop
- USB radio stick for programming and management with software
- PC desktop reader for reading and writing locking media into software
- ENiQ® EasyFlex Booklet (only for the ENiQ® family)
- Please refer to the current price list for additional accessories

## FUNCTIONAL DESCRIPTION

All the access control components and therefore the Pro cylinder leave the factory in a neutral state. They are only “initialised” i.e. assigned to a Master Card shortly before installation. From this moment onwards, programming can only be performed on the terminal device from this Master Card or from a Programming Card authorised with this Master Card. Therefore, the owner of the Master Card exclusively decides on assignments and the allocation of authorisations. As an alternative, authorisations can be stored on the transponders.



Please note: Keep the Master Card in a safe place to which only authorised persons have access. The Master Card does not have a locking function! If the Master Card is lost, you must contact your dealer. Extensive reprogramming will be required.

### **Pro cylinder, readable on one side**

The standard version of the Pro cylinder offers complete security, flexibility and convenience. The cylinder meets the current state of the art and offers maximum protection against attempts at electronic and mechanical manipulation.

Locking media (users) can be managed with numerous access control functions (daily and weekly schedules, etc.). The event storage function ensures the traceability of door openings. Transponder-based identification takes place on the outside of the door. From the inside, the door is always used with the mechanical knob, without identification.

### **Pro cylinder, readable on both sides**

The characteristics remain the same as the Pro cylinder readable on one side, with the exception that the outside and inside knobs are both electronic and rotate freely in this design. As a result, identification using the transponder is always necessary before entering through the door – regardless from which side. This allows you to use the cylinder as an entrance and exit control device, for example. By assigning different authorisations for the outside and inside, flows of people through a property can be controlled in a targeted way and areas can be clearly separated from each other.

### **Pro cylinder EE**

With the Pro cylinder EE, the cam is advanced to a defined position when the cylinder goes into idle state. This can be necessary when using the Pro cylinder EE in escape door devices according to DIN EN 179 / 1125, as an undefined cam position may result in the blocking of the lock in some locks available on the market. In order to assess this, the EC certificates of conformity of the lock manufacturers must be inspected. According to standards DIN EN 179 and DIN EN 1125, monthly maintenance and a monthly function test are required.

The standard version of the Pro cylinder EE offers complete security, flexibility and convenience. The cylinder meets the current state of the art and offers highest possible protection against attempts at electronic and mechanical manipulation.

Locking media (users) can be managed with numerous access control functions (daily and weekly schedules, etc.). The event storage function ensures the traceability of door openings. Transponder-based identification takes place on the outside of the door. From the inside, the door is always used without identification.

### **DIN EN 179 and DIN EN 1125**



Caution: Functional reliability can only be ensured when installing in escape door systems that meet standards DIN EN 179 (emergency exit devices)

and DIN EN 1125 (panic exit devices). In every case, make sure that the Pro cylinder EE is entered in the EC certificate of conformity of the escape door lock manufacturer.

DIN EN 179: Escape door locks according to DIN EN 179 are intended for emergencies in which panic situations are improbable. If it can be anticipated that persons will press against the door leaf in case of panic, a panic exit device according to DIN EN 1125 should be used.

DIN EN 1125: Panic exit devices according to DIN EN 1125 are intended for use at location in which panic situations may arise. In panic situations, the behaviour of individual persons is different that that of a group of people. If two or more persons rush to an escape door, probably in dark and/or smoky conditions, it is possible that the first person to reach the door will not necessarily activate the panic lock and instead press against the surface of the door (door under pressure) while other persons attempt to activate the horizontal operating bar manually or using bodily pressure.

For further information on escape door systems, see DIN EN 179 and DIN EN 1125.

### **Intended use ENiQ® Pro & ELS Pro cylinder EE**

The Pro cylinder EE must be used according to its intended use. In order to ensure the device is used as intended:

- The information and instructions required for this purpose must be shared with the operator of the system or representatives thereof.
- The installation of these locking cylinders must be carried out by persons qualified in escape and rescue routes according to the applicable installation instructions. Other applicable DIN or EN standards must be followed.
- The locking cylinders must be used according to their defined task.
- The locking cylinders must be handled according to their maintenance and care instructions (see chapter Maintenance).
- The locking cylinders may no longer be used once they reach their wear limit.

The manufacturer assumes no liability for personal injury or damage resulting from improper installation, maintenance, operation or use.

# FOR YOUR OWN SAFETY

Always observe the notes and safety instructions.

Some sections of these Installation and Operating Instructions are set apart by pictograms. Memorise these pictograms and their meanings:



Caution: This sign marks a danger note or indicates an action that may cause damage to the Pro cylinder or other objects or personal injury.



Please note: This sign gives you useful information about installation or operation.

## IMPORTANT INFORMATION



Caution: Locking media do not belong in the hands of small children. Small parts may be swallowed.



Caution: Material damage due to improper storage. If you store the Pro cylinder for an extended period prior to installation, store all the components in their original packaging in a dry, dust-free location in room temperature (see also chapter Storage/Care).



Caution: The Pro cylinder may not be used in potentially explosive atmospheres.



Caution: If you replace the knobs on your Pro cylinder, you may only use the original knobs of the Pro cylinder in order to ensure functionality.





Caution: Damage due to improper installation and operation. Read these instructions completely and carefully prior to installation and commissioning. Following the instructions step by step. The manufacturer assumes no liability for damage resulting from improper installation or operation. Do not use any sharp objects.



Caution: Damage due to improper use. Never throw or drop the Pro cylinder. Never use force during installation.



Caution: Material damage due to improper door operation. Do not open the door with the knob of the Pro cylinder. To open the door, always use the door handle.



Caution: Material damage due to stiff locks or doors becoming stuck. Service worn locks or replace them with new locks where necessary. Service any doors under tension. The knobs must move freely after installation.



Please note: For a VdS-compliant installation, the Pro cylinder must be protected with a burglar-resistant doorplate with Class B or C. Such doorplates correspond with DIN 18257 Class ES2 – ZA or ES3 – ZA.



Caution: The product should not be altered in any way except in agreement with the changes described in these instructions.



Caution: For an installation compliant with DIN EN15684, other required components may have to be adjusted in order to ensure compliance with this European standard.



Caution: The selection of the right size (external/internal installation length) is of decisive importance for the Pro cylinder. Ask your specialist retailer / dealer / electronics partner how you can properly determine the installation length of the cylinder.



Caution: The instructions should be followed exactly during installation. The person who carries out the installation should share these instructions and any instructions related to maintenance with the user.



Caution: Before a Pro cylinder (and variants) is installed in a fire-/smoke-resistant door the fire certification should be inspected to ensure compliance.



Caution: In the event of electrostatic discharge (sparks or breakdown), electronic components may be destroyed. For this reason, avoid electrostatic charges prior to the (dis)assembly of the knob sleeve or touch a conductive, grounded object (e.g. water pipe or heating) beforehand to remove electrostatic charge from your body. Never touch the electronics components with your fingers.



Caution: Always keep the authorised locking media in a safe place that is only accessible to authorised persons.



Caution: If you lose a locking medium, you must delete/lock it immediately.



Caution: The Pro cylinder may not be oiled or greased. Do not use any acids at or in the device. Make sure no humidity can get into the device.



Caution: Always store the Pro cylinder a suitable distance (>10cm) away from the Master Card in order to prevent accidental initialisation.



Watch your fingers when installing the electronic knobs and mechanical knobs on the Pro cylinder as well as during installation of the cylinder itself. Your fingers can become crushed if there is not enough space between the device parts or e.g. the door frame. When using tools, make sure you use them properly. Improper use can lead to injuries to limbs or other body parts such as the eyes.

## ADDITIONAL INFORMATION FOR THE PRO CYLINDER EE



Caution: To ensure the device functions as intended, the installation must be carried out very carefully by qualified personnel in due consideration of all installation instructions.



Caution: Prior to the installation of the Pro cylinder EE, ensure that the doors and locks have been properly installed and exhibit no warping. Service worn locks or replace them with new locks where necessary. Service any doors under tension or readjust them as the case may be. After installation, the knobs must move freely and may not scrape on the fittings. The knobs must always return to their neutral position on their own after being rotated (cam flush; see Figure 46 on page 33).

After assembling the Pro cylinder EE, it is essential to ensure that the escape door system functions properly.



Caution: Make sure that no safety-relevant signs or pictograms are concealed or destroyed through the installation of the Pro cylinder EE. If necessary, replace signs or pictograms or have them fit at another location.



Caution: Make sure that the escape door can swivel freely after the installation of the Pro cylinder EE.



Caution: The following figures show the installation situation with standard door handles. The installation situations also apply to panic bars according to DIN EN 1125 and for handles or push pads according to DIN EN 179. However the order of installation remains the same and must be adhered to under all circumstances. The instructions must always be followed. When in doubt, please contact the manufacturer.



Caution: After each installation, carry out a functional test. The inside knob must always return to its neutral position on its own after being rotated (cam flush; see Figure 46 on page 33). If you are using a Pro cylinder EE without inside knob, you must test the device when the outside knob is engaged.



Caution: Immediately after installation, a check should be made as to whether the escape door lock can be opened with a single hand movement in every cylinder position (0-360°). In addition, always observe the information provided by the lock and fittings manufacturers.

# INSTALLATION SITUATION

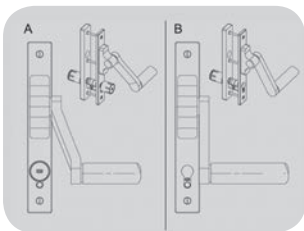
## PRO CYLINDER EE



Caution: Prior to installation, you must ensure that the inside knob of the Pro cylinder EE does not restrict the functioning of the panic bar (acc. to DIN EN 1125) or the handle (acc. to DIN EN 179). Make sure there is enough space between the inside knob and the panic bar / handle so that the panic bar / handle can be activated completely and the door can be unlocked with a single hand movement without difficulty. Otherwise, you have to use a Pro cylinder EE without inside knob. Always observe the information provided by the respective lock and fittings manufacturers.



Please note: The following figure shows the installation situation with panic bar according to DIN EN 1125. The installation situation also applies to the door handle or push pads according to DIN EN 179.



**A:** The spacing between the panic bar and the inside knob must be selected so as not to restrict the functioning of the panic bar or potentially crush the fingers.

**B:** This installation situation requires the use of a Pro cylinder EE without inside knob.

Fig. 1: Example of panic bar

## INSTALLATION

Proceed according to the installation sequence described and observe the notes and figures.



Caution: For safety-relevant doors, the cylinder may not protrude by more than 3 mm.

# PREPARATION FOR INSTALLATION

If you wish to install a large quantity, we recommend that you carry out the initialisation prior to installation. If you wish to program with the Master Card, Programming Card or software, you can also set up programming and locking media before you install the Pro cylinder. Follow the steps below:



Fig. 2: Collective initialisation

- 1 Arrange the open packages.
- 2 Hold the Master Card or Programming Card in front of the package and conveniently carry out the programming as described in detail starting on page 35.
- 3 With cylinders readable on both sides, we recommend only initialising the knob electronics already installed. The second knob electronics should not be initialised until after installation of the whole cylinder.

## INSTALLATION IN CORE PULLING PROTECTION FITTINGS

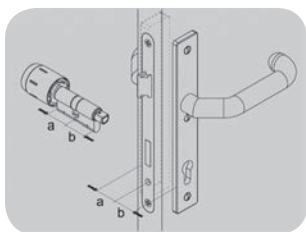


Please note: If you wish to install the Pro cylinder in core pulling protection fittings or a safety fitting or rosette, prepare the fittings in such a way that the coupling shaft of the Pro cylinder fits through the opening of the fittings. Due to the variety of fittings available on the market, the individual fittings are not illustrated here.

# PRO CYLINDER READABLE ON ONE SIDE



Please note: Always install and program the Pro cylinder with the door open so that you do not lock yourself out.

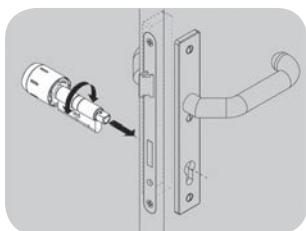


- ① Measure the thickness of the door with fitting.
- ② Ensure that the basic length of the Pro cylinder is adapted to the measured thickness: Note the division into outside (a) and inside (b).

Fig. 3: Measure the thickness



Please note: Ideally, the door with fitting should be a little thinner than the cylinder body of the Pro cylinder, so that the knobs do not scrape on the fitting and move freely. The cylinder must not project from the fitting more than 3 mm on security-relevant doors.



- ③ Remove the old locking cylinder if necessary (not illustrated).
- ④ Carefully remove Pro cylinder with pre-assembled outside knob from the packaging.
- ⑤ Align the cam flush with the cylinder body.
- ⑥ Carefully slide Pro cylinder through the fitting from the outside with the inside forwards.

Fig. 4: Insert the Pro cylinder



Please note: It is preferable to install the Pro cylinder readable on one side from the outside. If it is necessary to install from the inside, disassemble the knob sleeve and electronics in the reverse order described in cylinder installation, both sides (Fig. 17 - Fig. 23).

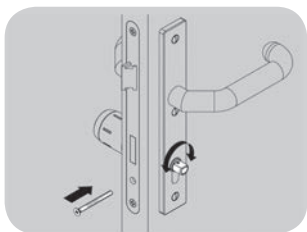


Fig. 5: Align cam

7 Turn the inner side so that you can feel the correct position of the cam and align the Pro cylinder.

8 Fix the Pro cylinder with the screw as soon as you feel the correct position. Do not completely tighten the screw yet.

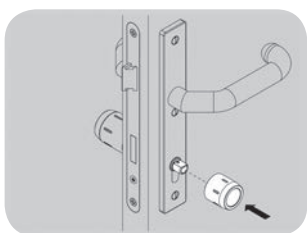


Fig. 6: Insert inside knob

9 Insert the inside knob accurately until it reaches the end position.



Caution: Do not tighten the screw with a cordless screwdriver without torque control, because you could damage the Pro cylinder with the tool.

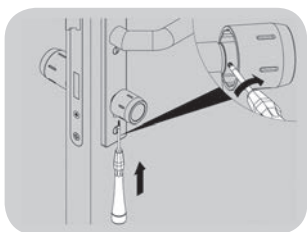


Fig. 7: Tighten inside knob

10 If necessary, turn the inside knob with the shaft, thus enabling free access of the screwdriver to the set screw.

11 Hand-tighten the set screw M3 (Torx T6) to the right with the screwdriver (approx. 4 revolutions).

12 Check that both knobs turn freely without scraping on the fitting.

13 Tighten the screw.





Please note: Keep the original packaging so that you can store the Pro cylinder safely at any time.

## PRO CYLINDER WITH CPP VERSION READABLE ON ONE SIDE



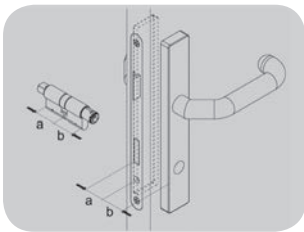
Please note: Always make sure that you insert a cylinder with core pulling protection into the cylinder hole from the inside to the outside. The side with core pulling protection belongs on the outside.



Caution: In general, you should always install the knob electronics first and then connect the battery in order to prevent damage to the electronics.



Please note: The installation of protective fittings or rosettes with round hole is described below; their core covers generally have to be removed before installation.



- ① Measure the thickness of the door with fitting.
- ② Ensure that the basic length of the cylinder is adapted to the measured thickness: Note the division into inside (a) and outside (b).

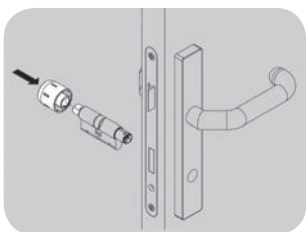
Fig. 8: Measure the thickness



Please note: Ideally, the door with fitting should be a little thinner than the cylinder body of the cylinder, so that the knobs do not scrape on the fitting and move freely.

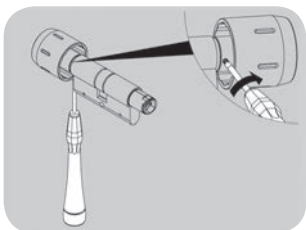


Please note: Always install and program the cylinder with the door open so that you do not lock yourself out.



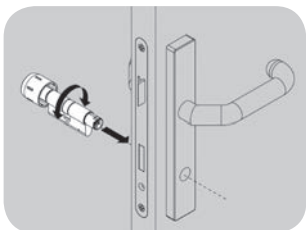
- 3 Insert the inside knob accurately until it reaches the end position.

Fig. 9: Insert inside knob



- 4 If necessary, turn the inside knob with the shaft, thus enabling free access of the screwdriver to the set screw.
- 5 Hand-tighten the set screw M3 (Torx T6) to the right with the screwdriver (approx. 4 revolutions).

Fig. 10: Tighten inside knob



- 6 Remove the old locking cylinder if necessary (not illustrated).
- 7 Align the cam flush with the cylinder body.
- 8 Carefully slide the cylinder through the fitting from the inside with the outside forwards.

Fig. 11: Insert the cylinder



Caution: Do not tighten the screw with a cordless screwdriver without torque control, because you may damage the cylinder with the tool.

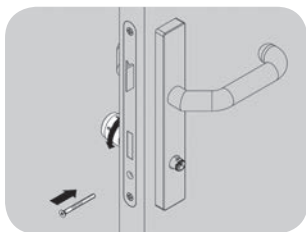


Fig. 12: Align cam

- 9 Turn the inside knob so that you can feel the correct position of the cam and align the cylinder.
- 10 Fix the cylinder with the screw as soon as you feel the correct position. Do not completely tighten the screw yet.



Caution: Avoid electrostatic charges prior to the (dis)assembly of electronic components or touch a conductive, grounded object (e.g. water pipe, heating) beforehand to remove electrostatic charge from your body. Never touch the electronics components with your fingers.



Caution: The battery cable must not be connected to the electronics holder when you push the electronics holder in place. If the battery connector should already be connected to the electronics holder, always remove the battery connector from the electronics holder first.

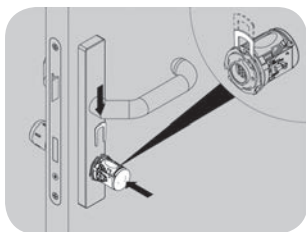


Fig. 13: Mount electronics holder

- 11 Slide the electronics holder accurately onto the coupling shaft until it reaches the end position. Secure the electronics with the fixing bracket.

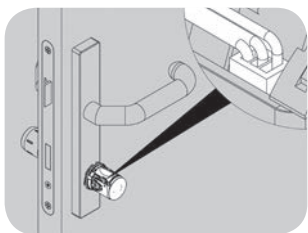


Fig. 14: Connect battery



Please note: The battery connector has a torsion-resistant guide lug.

Insert the battery connector into the battery socket.

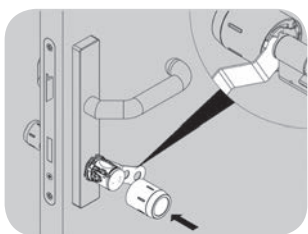


Fig. 15: Side on knob sleeve

12 Place the knob tool on the bayonet fitting.

13 Slide the knob sleeve accurately over the electronics holder. The knob sleeve can only be slid on in one position. The two drive cams on the electronics holder have different widths.



Fig. 16: Locking the bayonet fitting

14 Lock the bayonet fitting using the knob tool.

15 Check that both knobs turn freely without scraping on the fitting.

16 Tighten the screw.



Please note: Keep the original packaging so that you can store the cylinder safely at any time.

# PRO CYLINDER READABLE ON BOTH SIDES



Caution: In general, you should always install the knob electronics first and then connect the battery in order to prevent damage to the electronics.



Caution: Avoid electrostatic charges prior to the (dis)assembly of electronic components or touch a conductive, grounded object (e.g. water pipe, heating) beforehand to remove electrostatic charge from your body. Never touch the electronics components with your fingers.



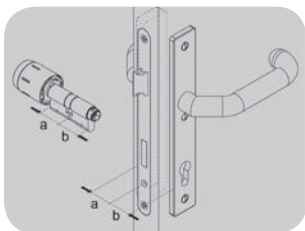
Please note: Both sides of the Pro cylinder readable on both sides have the same electronic and mechanical safety mechanisms (e.g. drilling protection). There are no differences between the inside and the outside. In case of length differences between the outside (a) and the inside (b), bear in mind the installation direction according to your installation situation.



Please note: Ideally, the door with fitting should be a little thinner than the cylinder body of the Pro cylinder, so that the knobs do not scrape on the fitting and operate smoothly. The cylinder must not project from the fitting more than 3 mm on security-relevant doors.



Please note: Always install and program the Pro cylinder with the door open so that you do not lock yourself out.



- ① Measure the thickness of the door with fitting.
- ② Ensure that the basic length of the Pro cylinder is adapted to the measured thickness: Note the division into outside (a) and inside (b).

Fig. 17: Measure the thickness

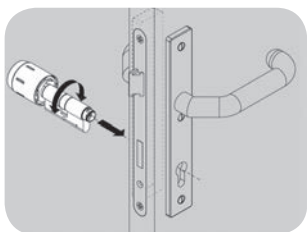


Fig. 18: Align cam

3 Remove the old locking cylinder if necessary (not illustrated).

4 Carefully remove Pro cylinder with pre-assembled outside knob from the packaging.

5 Align the cam flush with the cylinder body.

6 Carefully slide Pro cylinder through the fitting with the side without reading knob forwards.



Fig. 19: Insert the Pro cylinder

7 Hold authorised transponder in front of the outside knob if necessary, in order to engage the cam and align the Pro cylinder.

8 Fix the Pro cylinder with the screw as soon as you feel the correct position. Do not completely tighten the screw yet.

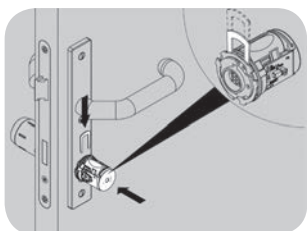


Fig. 20: Mount electronics holder

9 Slide the electronics holder accurately onto the coupling shaft until it reaches the end position. Secure the electronics with the fixing bracket.

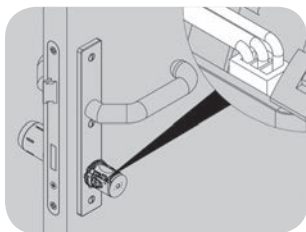


Fig. 21: Connect battery



Please note: The battery connector has a torsion-resistant guide lug.

- 10 Insert the battery connector of the battery pack which has already been fitted into the battery socket.



Caution: Do not damage the battery cable when fitting the knob.

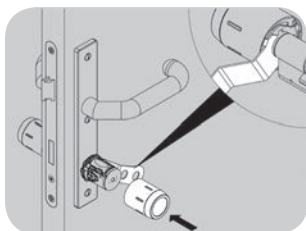


Fig. 22: Side on knob sleeve

- 11 Place the knob tool on the bayonet fitting.

- 12 Slide the knob sleeve accurately over the electronics holder. The knob sleeve can only be slid on in one position. The two drive cams on the electronics holder have different widths.

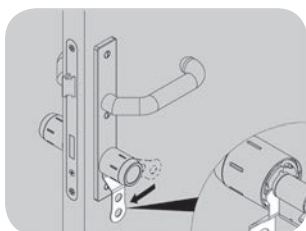


Fig. 23: Locking the bayonet fitting

- 13 Use a knob tool to turn the bayonet fitting anti-clockwise, thus locking it.

- 14 Check that both knobs turn freely without scraping on the fitting.

- 15 Tighten the screw.



Please note! Keep the original packaging so that you can store the Pro cylinder safely at any time.

# PRO CYLINDER WITH KZSV VERSION READABLE ON BOTH SIDES



Caution: In general, you should always install the knob electronics first and then connect the battery in order to prevent damage to the electronics.



Please note: Both sides of the Pro cylinder readable on both sides have the same electronic and mechanical safety mechanisms (e.g. drilling protection). Always make sure that you insert a cylinder with core pulling protection into the cylinder hole from the inside to the outside. The side with core pulling protection belongs on the outside.



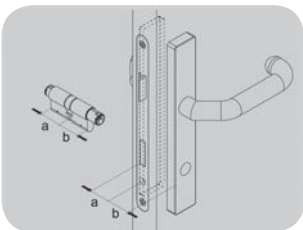
Please note: Ideally, the door with fitting should be a little thinner than the cylinder body of the Pro cylinder, so that the knobs do not scrape on the fitting and operate smoothly. The cylinder must not project from the fitting more than 3 mm on security-relevant doors.



Please note: Always install and program the Pro cylinder with the door open so that you do not lock yourself out.



Please note: The installation of protective fittings or rosettes with round hole is described below; their core covers generally have to be removed before installation.



- 1 Measure the thickness of the door with fitting.
- 2 Ensure that the basic length of the cylinder is adapted to the measured thickness: Note the division into inside (a) and outside (b).

Fig. 24: Measure the thickness





Please note: Install the inside knob in the same way as the outside knob of the cylinder with CPP readable on one side (see the chapter Pro cylinder with CPP readable on one side from Figure 13).

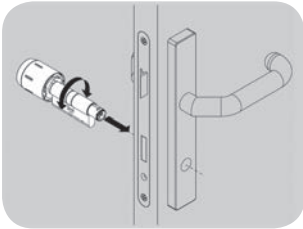


Fig. 25: Align cam

- 3 Remove the old locking cylinder if necessary (not illustrated).
- 4 Align the cam flush with the cylinder body.
- 5 Carefully slide the cylinder through the fitting from the inside, with the side without reading knob forwards.

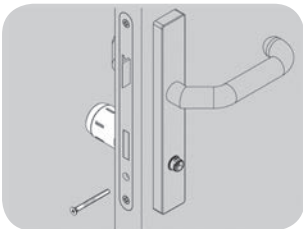


Fig. 26: Insert the cylinder

- 6 Hold authorised transponder in front of the inside knob if necessary, in order to engage the cam and align the cylinder.
- 7 Fix the cylinder with the screw as soon as you feel the correct position. Do not completely tighten the screw yet.



Caution: Avoid electrostatic charges prior to the (dis)assembly of electronic components or touch a conductive, grounded object (e.g. water pipe, heating) beforehand to remove electrostatic charge from your body. Never touch the electronics components with your fingers.

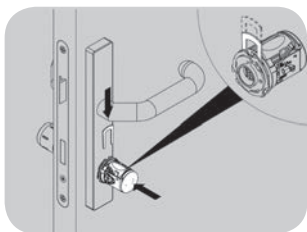


Fig. 27: Mount electronics holder

- Slide the electronics holder accurately onto the coupling shaft until it reaches the end position. Secure the electronics with the fixing bracket.

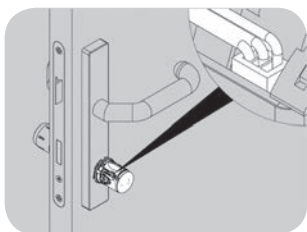


Fig. 28: Connect battery



Please note: The battery connector has a torsion-resistant guide lug.

- Insert the battery connector into the battery socket.

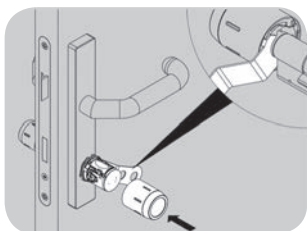
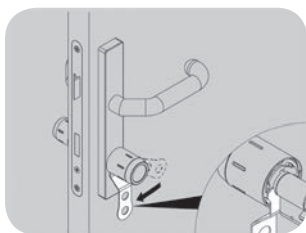


Fig. 29: Side on knob sleeve

- Place the knob tool on the bayonet fitting.
- Slide the knob sleeve accurately over the electronics holder. The knob sleeve can only be slid on in one position. The two drive cams on the electronics holder have different widths.



- ⑫ Lock the bayonet fitting using the knob tool.
- ⑬ Check that both knobs turn freely without scraping on the fitting.
- ⑭ Tighten the screw.

Fig. 30: Locking the bayonet fitting

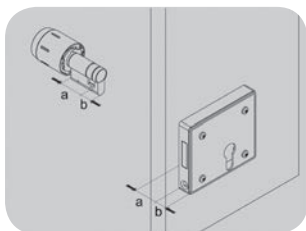


Please note: Keep the original packaging so that you can store the cylinder safely at any time.

## PRO HALF CYLINDER



Please note: Ideally, the door with fitting should be a little thinner than the cylinder body of the Pro cylinder, so that the knob does not scrape on the fitting and operates smoothly. The cylinder must not project from the fitting more than 3 mm.



- ① Measure thickness of the door with lock housing.
- ② Ensure that the basic length of the Pro cylinder is adapted to the measured thickness.

Fig. 31: Measure the thickness

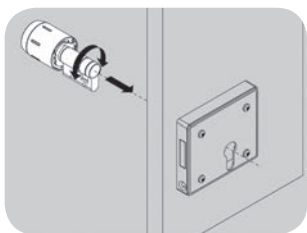


Fig. 32: Align cam

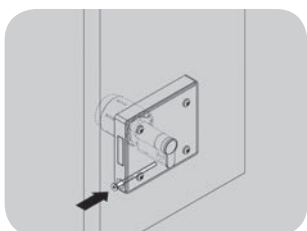


Fig. 33: Fix the Pro cylinder

Remove the old locking cylinder if necessary (not illustrated).

- 3 Carefully remove Pro cylinder with pre-assembled outside knob from the packaging.
- 4 Align the cam flush with the cylinder body.
- 5 Carefully slide Pro cylinder through the fitting.
- 6 Hold authorised transponder in front of the knob if necessary, in order to engage the cam and align the Pro cylinder.
- 7 Fix the Pro cylinder with the screw as soon as you feel the correct position.
- 8 Check that the knob turns freely without scraping on the fitting.
- 9 Tighten the screw.

# PRO HALF CYLINDER FOR PIVOTED LEVER HANDLES

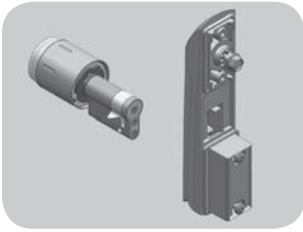


Fig. 34

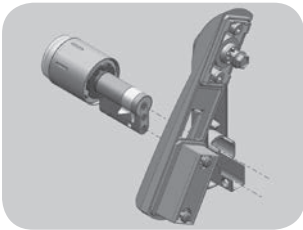


Fig. 35

① Open the pivoted lever handle for installation and remove the old cylinder if necessary.

② Align the cam flush with the cylinder body. Please push the cam with constant pressure while inserting the cylinder.

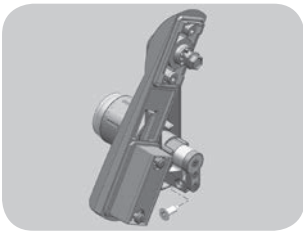


Fig. 36

③ Now screw the cylinder and the pivoted lever handle together using the screw.

# PRO CAM LOCK



Caution! The Pro cam lock can only be installed in doors up to 25 mm thick.



Please note! We can supply you with cams in different lengths, with different offsets and with rakes. If the cam delivered is not suitable for your installation situation, please contact your specialist retailer.

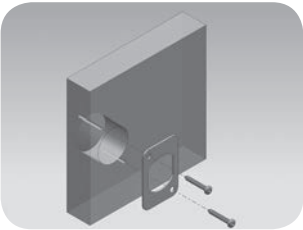


Fig. 37

- 1 Remove the old cylinder if necessary
- 2 If required, prealign the door with a baseplate and remove any shavings.



Please note! A baseplate is only required for wooden doors.

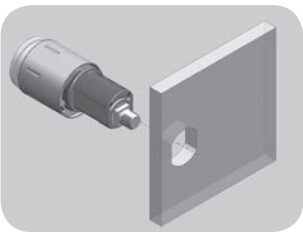


Fig. 38

- 3 Push cam lock 382 carefully through the door from the outside.

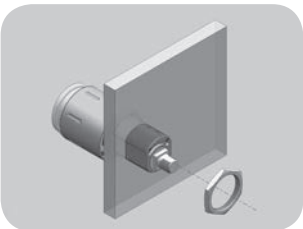


Fig. 39

- 4 Fix the cam lock 382 in place using the hexagon nut size 30 provided.

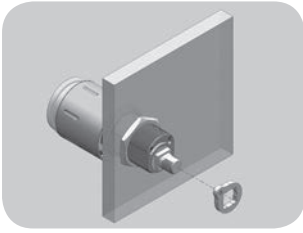


Fig. 40

- 5 Fit the cam travel limiter in such a way that the pin of the limiter engages in the groove of the lock body.



Note: The cam travel limiter restricts cam travel to a rotation up to 90°.



Caution! Together with the cam, the cam travel limiter determines the direction of closure of the lock.

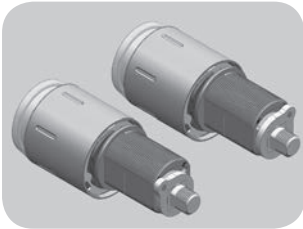


Fig. 41

- 6 You specify the direction of closure of the cylinder using the cam travel limiter.

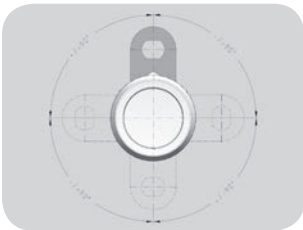
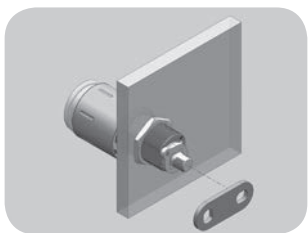


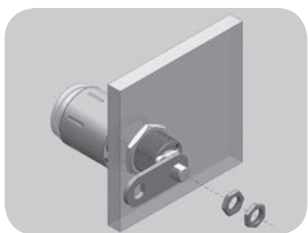
Fig. 42

- 7 Choose the necessary cam hole and position necessary for the installation situation. The square and cross hole in the cam delivered gives you a choice of 4 positions.



- 8 Move the cam in the required position up to the back of the cylinder core.

Fig. 43



- 9 Fix the cam with the two size 14 hexagon nuts and tighten the hexagon nuts using a low force.

Fig. 44



Fig. 45



## PRO CYLINDER EE



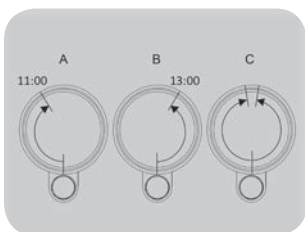
Please note: The installation follows the same steps as that of the Pro cylinder as described starting on page 13. Observe the following information and follow the installation description on page 13. Then execute the functional test described here.



Caution: The figures starting on page 13 show the installation situation with standard door handle. When installing a **Pro cylinder EE**, the installation sequence also applies for the installation situation with panic bars according to DIN EN 1125 and handles or push pads according to DIN EN 179. The order of installation remains the same and must be adhered to under all circumstances. The information must always be observed. When in doubt, please contact the manufacturer.



Caution: After each installation, carry out a functional test. The knobs must return to their neutral position on their own after being rotated (cam flush).



**A/B:** Turn the inside knob a little more than a fourth of a revolution in a clockwise or counter-clockwise direction (11 o'clock or 1 o'clock position): The knob must return to the neutral position on its own in both cases (see Fig. C).

Fig. 46: Functional test

If the knob fails to turn back, realign the Pro cylinder EE and check the lock for any defects.

**C:** If you move the inside knob by approximately one half-turn, the knob will remain in this position for design reasons (dead centre area).



Caution: After installation, make sure the escape door lock can be securely unlocked and opened according to the specifications of the lock and fittings manufacturers.

# PRO CYLINDER EE WITHOUT INSIDE KNOB



Please note: The installation follows the same steps as that of the Pro half cylinder as described starting on page 27. Observe the following information and follow the installation description starting on page 27. Then execute the functional test described here.



Caution: The figures starting on page 27 show the installation situation without door handle. When installing a **Pro cylinder EE**, the installation sequence also applies for the installation situation with panic bars according to DIN EN 1125 and handles or push pads according to DIN EN 179. The order of installation remains the same and must be adhered to under all circumstances. The information must always be observed. When in doubt, please contact the manufacturer.



Caution: After each installation, carry out a functional test. The outside knob must return to its neutral position on its own after being rotated (cam flush).

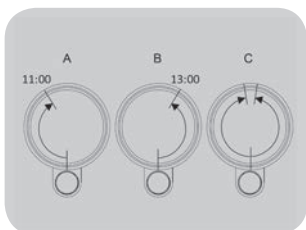


Fig. 47: Functional test

**A/B:** Turn the outside knob when engaged a little more than a fourth of a revolution in a clockwise or counter-clockwise direction (11 o'clock or 1 o'clock position): The knob must return to the neutral position on its own in both cases (see Fig. C).

If the knob fails to turn back, realign the Pro cylinder EE and check the lock for any defects.

**C:** If you move the outside knob by approximately one half-turn, the knob will remain in this position for design reasons (dead centre area).



Caution: After installation, make sure the escape door lock can be securely unlocked and opened according to the specifications of the lock and fittings manufacturers.

## COMMISSIONING

If you have installed the Pro cylinder properly, you can put the Pro cylinder into operation.



**tapkey :**



**ENiQ<sup>®</sup>**

**ELS<sup>®</sup> :**



Caution: In order to put the Pro cylinder in operation without using the ENiQ<sup>®</sup> Access Management or ELS software you only need the Master Card. This is to set the system's identification. This is a one-off process which must be performed for each reading knob. Keep the Master Card in a safe place to which only authorised persons have access. The Master Card does not have a locking function! If the Master Card is lost, you must contact your dealer. Extensive reprogramming will be required. When the ENiQ<sup>®</sup> Access Management or ELS software is used, commissioning can also be carried out without a Master Card.



Please note: Programming with the master and Programming Card is carried out on each reading knob. Carry out programming only when the door is opened so you do not lock yourself out.



Please note: The Pro cylinder automatically detects transponders upon approaching the reading knob. In rare cases, environmental factors in the form of interference fields or the use of transponders not approved by DOM Sicherheitstechnik may result in the failure of the DOM ENiQ<sup>®</sup> cylinder to detect transponders.

Follow the steps below to initialise the Pro cylinder:

Hold the Master Card directly in front of the reading knob:  
The green LEDs flash twice briefly and once long. The reading knob then indicates its initialisation by means of the signal sequence red, green, yellow, blue and violet. Finally, the red LED lights up twice briefly and once long.

With the Pro cylinder readable on both sides, repeat the operation on the other reading knob.



Please note: With the Pro cylinder readable on both sides, programming is independently carried out on each knob. The authorisation of the locking media can be programmed differently on the two sides.

## OPERATION

Now you can use the Master Card to set up Programming Cards which you can use in turn to set up locking media.



Please note: The master and Programming Cards do not function as locking media.

### **Master Card**

The Master Card has the following functions:

- Initialisation of the Pro cylinder
- Setting the engagement time
- Set-up or deletion of individual locking media and programming media (Programming Cards)
- Simultaneous deletion of all locking media and programming media (Programming Cards, software solutions)

### **Programming Card**

The Programming Card has the following functions:

- Set-up or deletion of individual locking media
- Deletion of all locking media

### **Locking medium (key fob, Clip Tag, card, etc.)**

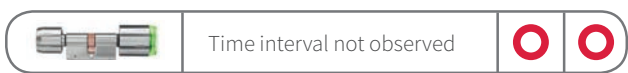
- Locking and opening

# STATUS MESSAGES

Programming with Master or Programming Card is performed on each reading knob. All events which take place during programming are stored at the respective reading knob. If a locking medium is held in front of one of the reading knobs of the Pro cylinder readable on both sides, the status message only occurs on this reading knob.

## ACKNOWLEDGEMENT OF TERMINATIONS

In general, if one of the time windows specified in the various programming modes (removal or presentation of Master or Programming Card and locking medium) is not observed, a termination occurs. Such a termination is acknowledged by two flashes of the red LED.



## OPENING AND LOCKING

To open or lock the door, you must only hold an authorised locking medium a short distance in front of the relevant knob.

Authorised transponder:



The Pro cylinder is engaged and the green LED flashes during the set engagement time. Once the clutching time has expired, the red LEDs flash once.

Unauthorised transponder:



The Pro cylinder is not engaged. The red LEDs flash four times.

# SETTING THE ENGAGEMENT TIME



Please note: The engagement time denotes the period for which the Pro cylinder can be actuated after presenting an authorised transponder. In delivery condition, the engagement time is 5 seconds. With the Pro cylinder readable on both sides, you must set the engagement time for each side.

All you need is the Master Card. Follow the steps below.

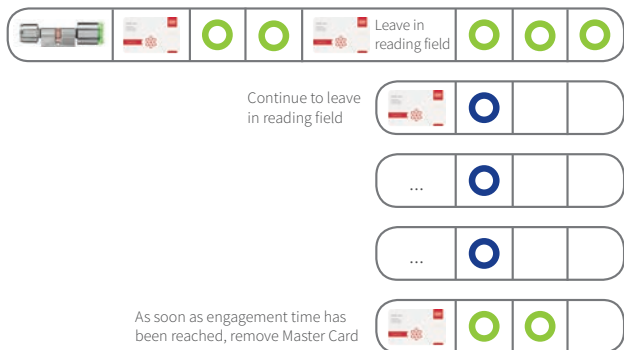
1. Hold the Master Card flat a short distance in front of the reading knob. The presentation of the card is confirmed by two green flashes.
2. Now hold the Master Card in front of the reading knob again and leave the Master Card in the reading field of the reading knob.

The green LEDs will flash three times. The blue LEDs will then flash at one-second intervals. Each flash corresponds to 1 second of engagement time. Hold the Master Card in front of the knob for the desired engagement time (max. 30 seconds).

3. Remove the Master Card as soon as the desired engagement time has been reached.

The green LEDs will flash twice as a confirmation.  
The engagement time is now set.

Set the engagement time:



# SETTING UP LOCKING OR PROGRAMMING MEDIA

You need the master or Programming Card and the media that you wish to set up.



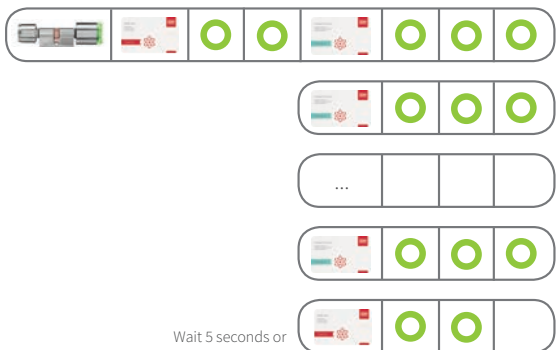
Please note: You can set up a maximum of 5 Programming Cards. Once you have set up a Programming Card, you can also continue the further programming with the Programming Card.

Follow the steps below:

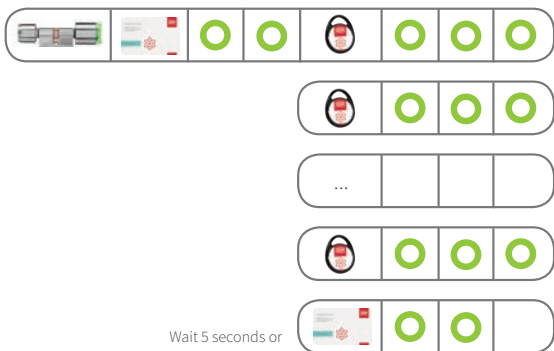
1. Hold the master or Programming Card flat a short distance in front of the reading knob. The presentation of the card is confirmed by two green flashes.
2. Then present the programming media or transponders that you wish to set up: The presentation of each programming medium or transponder is confirmed by three green flashes.

The programming process is terminated after a pause of 5 seconds or by presenting the master or Programming Card.

Set up programming media:



Set up locking media:



## DELETE LOCKING OR PROGRAMMING MEDIA

You need a master or Programming Card and the media that you wish to delete.

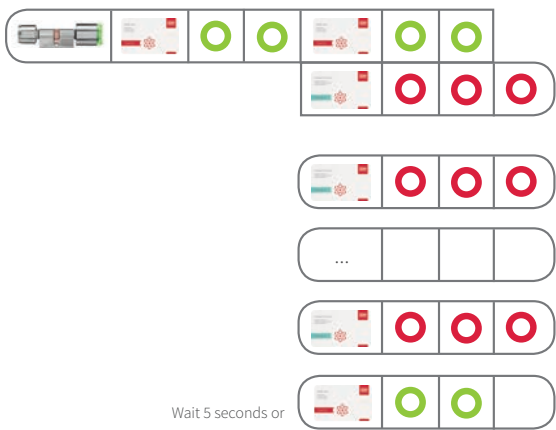
Follow the steps below:

1. Hold the master or Programming Card flat a short distance in front of the reading knob twice: The presentation of the card is confirmed each time by two green flashes.
2. Then present the programming media or transponders that you wish to delete: The presentation of each programming medium or transponder is confirmed by three red flashes.

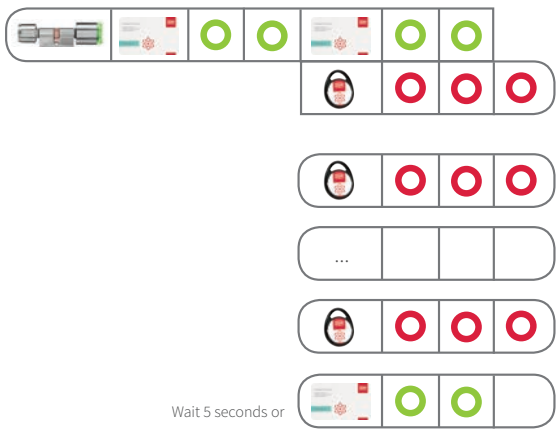
The programming process is terminated after a pause of 5 seconds or by presenting the master or Programming Card.



Delete programming media:



Delete locking media:



# DELETE ALL LOCKING OR PROGRAMMING MEDIA

If you have lost a locking medium, you can no longer individually delete this locking medium (without the ENiQ® Access Management or ELS software). In this case, you must delete all locking media and set up the existing locking media again. You only need a Programming Card to do this.



Please note: If you use the Master Card instead of the Programming Card, all programming media will also be deleted.

Follow the steps below:

3. Present the Programming Card twice, holding it flat a short distance in front of the reading knob: The presentation of the card is confirmed each time by two green flashes.
4. Present the Programming Card a third time, holding it flat a short distance in front of the reading knob. The red LEDs will flash twice as a confirmation.

All locking/programming media have been deleted.

Delete all locking media:



Delete all locking and programming media:



Please note: You must now set up the locking media that you wish to reauthorize again (see page 39).

# PROGRAMMING AND MANAGEMENT WITH SOFTWARE

The Pro cylinder has a radio interface by means of which data can be exchanged with a PC/laptop.

There are two ways to do this:

„Offline“: Using a USB radio stick connected to the USB interface of the PC or laptop.

„Online“: Using an RF NetManager to integrate the Pro cylinder into a network and communicate with it directly.

You can also operate each Pro cylinder online later without having to modify the cylinder in any way or to replace it.

If you have ENiQ® Access Management software or ELS software, you have the option of managing and programming your Pro cylinder. You can manage locking media and authorisations as well as use additional functions that are only available via software.

These include, among others:

- Read-out of the event memory
- Definition of time profiles
- Deletion of individual locking media that are no longer available
- ...

In addition, using the software is more convenient and organised in comparison with using Master Card programming.

# MAINTENANCE

The Pro cylinder is maintenance-free. The energy supply of the Pro cylinder is provided by a battery pack consisting of 2 lithium batteries (3 V). A low battery warning indicates that the battery pack must be changed.



Please note: The energy supply of the Pro cylinder readable on both sides is provided by two battery packs each consisting of 2 lithium batteries (3 V). The low battery warning functions independently on the two sides.

The Pro cylinder is equipped with a three-stage warning system.



Please note: Up to 500 opening operations are still possible in warning stages 1 and 2. In warning stage 3, only one opening operation is possible with the master or Programming Card.

## First warning stage:

Before indicating an unauthorised or authorised transponder and if applicable before engagement, the red and green LEDs flash alternately. Finally, the blue LEDs flash once.



Engagement then occurs.

## Second warning stage:

The authorised transponder must be presented twice. The low battery warning appears (first) each time the transponder is presented. The blue LEDs flash twice.



Engagement then occurs.

## Third warning stage:

Engagement occurs immediately after presenting the master or Programming Card. Once the transponder is recognised, the low battery warning appears once. The blue LEDs flash three times and engagement does not occur.



# ADDITIONAL MAINTENANCE INSTRUCTIONS FOR THE PRO CYLINDER EE



Caution: Maintenance inspections and inspections of the function and ease of movement of the Pro cylinder EE must be carried out in intervals of no longer than one month by the operator or by an agent authorised by the operator (see also DIN EN 179 or DIN EN 1125 Annex C). Maintenance may only be carried out by trained and qualified personnel.



Caution: It is essential that you observe the maintenance instructions of the door, lock and fittings manufacturers. In order to guarantee the ongoing functionality of the Pro cylinder EE, make sure the maintenance intervals prescribed by the manufacturers are always complied with.



Caution: It must be indicated to the operator and representatives of the operator that, according to DIN EN 179 and DIN EN 1125, safety-relevant escape door components must be checked on a monthly basis for tightness and wear. Defects must be remedied by a certified specialist.



Caution: Inspect safety-relevant fitting components to ensure their tight fit and check them for wear on a regular basis. Re-tighten fixing screws and replace faulty parts as needed.



Caution: After changing the batteries of the Pro cylinder EE, inspect the escape and rescue route according to the specifications of the lock and fittings manufacturers and carry out a functional test (see page 33).



Please note: Use the service-maintenance card to record your maintenance procedures in the software.

# CHANGING THE BATTERIES

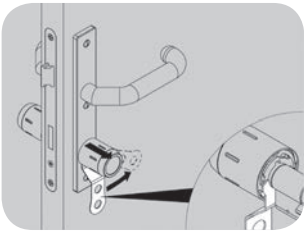
Follow the steps below to change the battery pack:



Caution: In the event of electrostatic discharge (sparks or breakdown), electronic components may be destroyed. For this reason, avoid electrostatic charges prior to the (dis)assembly of the knob sleeve or touch a conductive, grounded object (e.g. water pipe, heating) beforehand to remove electrostatic charge from your body. Never touch the electronics components with your fingers.

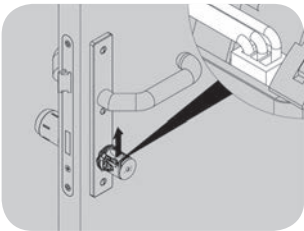


Please note: Only use the 3.0 Volt lithium battery pack from DOM Sicherheitstechnik which is already pre-assembled with the connection cable.



- 1 Unlock the bayonet fitting using the knob tool and carefully pull off the knob sleeve.

Fig. 48: Removing the knob sleeve



- 2 Pull the battery connector from the battery socket and remove the old battery pack. (Make sure you pull on the connector and the three cables at the same time, not only on one or the cables.)

Fig. 49: Removing the battery pack

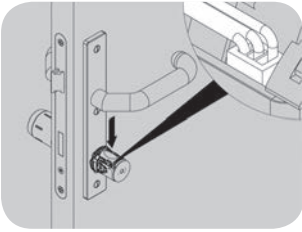


Fig. 50: Inserting the battery pack

- 3 Insert a new battery pack.



Please note: The battery connector has a torsion-resistant guide lug.

- 4 Insert the battery connector into the battery socket.



Caution: Do not damage the battery cable when fitting the knob.

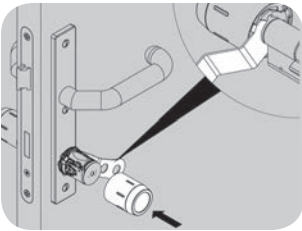


Fig. 51: Fitting the knob

- 5 Place the knob tool on the bayonet fitting.

- 6 Slide the knob sleeve accurately over the electronics holder. The knob sleeve can only be slid on in one position. The two drive cams on the electronics holder have different widths.



Fig. 52: Locking the bayonet fitting

- 7 Lock the bayonet fitting using the knob tool. Present an authorised transponder in order to check whether the cylinder is working perfectly after the batteries have been changed.



Caution: After changing the batteries of the Pro cylinder EE, inspect the escape and rescue route according to the specifications of the lock and fittings manufacturers and carry out a functional test.

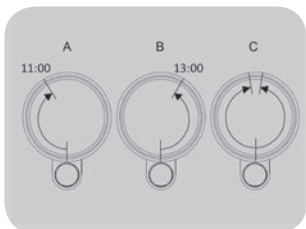


Fig. 53: Functional test

**A/B:** Turn the outside knob when engaged or the inside knob a little more than a fourth of a revolution in a clockwise or counter-clockwise direction (11 o'clock or 1 o'clock position): The knobs must return to their neutral position on their own in both cases.

If the one of the knobs fails to turn back, realign the Pro cylinder EE and check the lock for any defects.

**C:** If you move the knob by approximately one half-turn, the knob will remain in this position for design reasons (dead centre area).



# PADLOCK

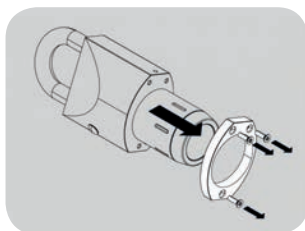
Follow the steps below to change the battery pack:



**Caution:** In the event of electrostatic discharge (sparks or breakdown), electronic components may be destroyed. For this reason, avoid electrostatic charges prior to the (dis)assembly of the knob sleeve or touch a conductive, grounded object (e.g. water pipe, heating) beforehand to remove electrostatic charge from your body. Never touch the electronics components with your fingers.

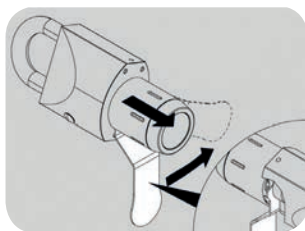


**Please note:** Only use the 3.0 volt lithium battery pack from DOM Sicherheitstechnik which is already pre-assembled with the connection cable.



- 1 Undo the Torx screws (Torx T10) and remove the protective cap.

Fig. 54: Removing the protective cap



- 2 Unlock the bayonet fitting using the knob tool and carefully pull off the knob sleeve.

Fig. 55: Removing the knob sleeve

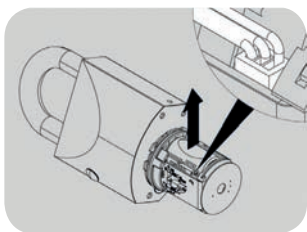


Fig. 56: Removing the battery pack

- 3 Pull the battery connector from the battery socket and remove the old battery pack.

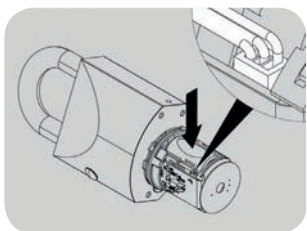


Fig. 57: Inserting the battery pack

- 4 Insert a new battery pack.



Please note: The battery connector has a torsion-resistant guide lug.

- 5 Insert the battery connector into the battery socket.



Caution: Do not damage the battery cable when fitting the knob.

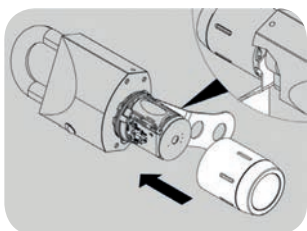
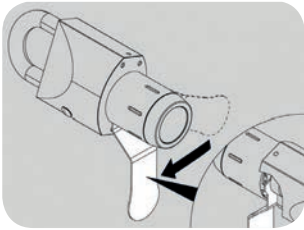


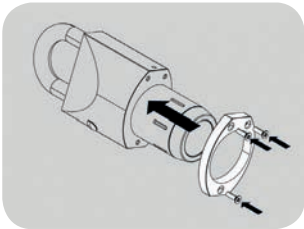
Fig. 58: Fitting the knob

- 6 Place the knob tool on the bayonet fitting.
- 7 Slide the knob sleeve accurately over the electronics holder. The knob sleeve can only be slid on in one position. The two drive cams on the electronics holder have different widths.



- 8 Lock the bayonet fitting using the knob tool.

Fig. 59: Locking the bayonet fitting



- 9 Set the protective cap in place and tighten the Torx screws (Torx T10) by hand.

Fig. 60: Fitting the protective cap

## DISASSEMBLY

Disassembly is basically carried out in the reverse order of installation.



Caution: Avoid electrostatic charges prior to the (dis)assembly of electronic components or touch a conductive, grounded object (e.g. water pipe, heating) beforehand to remove electrostatic charge from your body. Never touch the electronics components with your fingers.



Caution: Material damage due to improper storage. If you store the ENiQ® cylinder for an extended period prior to installation, store all the components in their original packaging in a dry, dust-free location.



Caution! If you remove the electronic knob, always make sure you disconnect the battery connector first and leave it in this state for storage.

## STORAGE/CARE

If you store the Pro cylinder for an extended period prior to installation or after use, store it in their original packaging in a dry, dust-free location in room temperature.



Please note: Because the Pro cylinder is delivered with the battery pack inserted, you should not store the cylinder any longer than necessary.



Caution: Material damage can be caused by the use of aggressive detergents. Do not use aggressive detergents, graphite or oil. Clean the housing and locking media only using a soft, damp leather cloth without detergent.

## DISPOSAL

Please note that the Pro cylinder consists in part of electronic components that require special disposal. When disposing of the DOM ENiQ® cylinder, please always comply with all local environmental protection regulations.

You can return the components of your Pro cylinder to the manufacturer in the original packaging.

## TECHNICAL DATA



Please note: You can find the current Technical Datasheets on the website of DOM Sicherheitstechnik GmbH & Co. KG [www.dom-group.eu](http://www.dom-group.eu)

## WARRANTY

The period of limitation for rights of the customer due to defects is twelve months from delivery of the delivery item to the customer. For claims for damages by the purchaser for reasons other than defects in the delivery item or in respect of the purchaser's rights in the case of fraudulently concealed or wilfully caused defects, the statutory periods of limitation apply. The limitation period regulations of Sec. 479 of the German Civil Code (BGB) remain unaffected.

If you have any queries in addition to the information provided in these Installation and Operating Instructions, please contact your national branch directly.

## PUBLISHER

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## IMPORTANT NOTE

This documentation is updated at regular intervals. The publisher is always grateful to receive notification of any errors or suggestions in respect of this documentation.

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