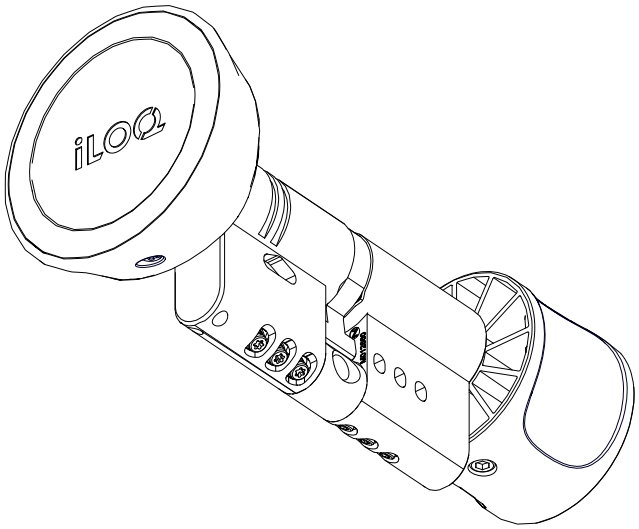
iLOQ S50

D50S.XXX(A).SD Europrofile Lock Cylinder

User Guide



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1. Safety Information

1.1 Safety signs

Sign	Description
	General notice sign. Indicates particularly important information about the installation or product.
	Read these instructions carefully before using products. This information is to ensure your safety and long lifetime of the products.

2. Overview

The iLOQ D50S Europrofile Lock Cylinders are battery-free programmable electromechanical lock cylinders for the iLOQ S50 locking system. The lock cylinders are NFC-powered, no batteries are required.

3. Before installation

3.1 Mandatory precautions

- These instructions and any maintenance instructions should be passed on by the installer to the user. If there are any deviations from the contents in foreign language versions of the documentation, the English original shall apply in case of doubt.
- iLOQ D50S cylinders must be installed and used carefully without excessive force.
- Do not modify the product in any way, except in accordance with the modifications described in these instructions.

- It is not allowed to uninstall or alter the anti-panic mechanism in any way. The functionality of the mechanism cannot be guaranteed if it has been tampered with.
- Only use the cylinders for the purpose of opening and locking doors; any other use is not permitted.
- The access key is to be kept secure so that only an authorized person can use it.
- In case of losing the access key, blocklisting of the lost key shall be done with the iLOQ Manager software and affected locks shall be reprogrammed.

3.2 General notes

- The iLOQ cylinders are successfully tested according the EN 1634-1 (EUFI29-19003368) for 120 minutes in a hinged single leaf steel door.
- Where the D50S cylinder is manufactured in more than one size, make sure that you select the correct size.
- Make sure that any seals or weather-stripping fitted to the complete door assembly, does not inhibit the correct operation of the D50S cylinder.
- Make sure that no projection of the D50S cylinder and associated parts can prevent the door from swinging freely.
- Fit all components necessary for the specific installation in order to ensure compliance with EN15684 standard.
- The cylinder must protrude less than 1 mm on the outside of the door to ensure proper operation.
- Before fitting the D50S cylinder to a fire/smoke resisting door, examine the fire certification, to ensure conformity. Consult an iLOQ sales representative for the correct configuration.
- To extend the cylinder length, only use the associated D50 cylinder extensions (AD50.Exx).
- The incorrect type of cylinder can block or hinder the panic mechanism of the panic mortise locks. Make sure that the anti-panic cylinder (D50S.7xx) is installed. Do not use other cylinder types (D50S.1xx/2xx/3xxx etc.) unless you have made sure the lock type does not need a specific cam position and the cam cannot block the panic functionality. Confirm the information from the declaration of conformity provided by the mortice lock manufacturer.
- After installation, make sure that all parts of the lock are in an operational condition. When the D50S lock cylinder is used in combination with panic locks, make sure the panic function of the mortise lock is operational and cannot be hindered.
- To meet the German VdS (VdS Schadenverhütung GmbH) requirements class CZ+ on burglary threatened doors use D50S.XX0B.SD high security cylinder installed with a VdS approved security lock furniture of class B or C. Such security lock furniture corresponds to DIN 18 257 class ES 2 and ES 3.

- To meet the Dutch SKG*** requirements use the D50S.XXXA.SD high security cylinder. Consult iLOQ sales representative for correct configuration.
- The product is designed to be maintenance-free. It doesn't require any regular maintenance. However, yearly operational/functional test is recommended.

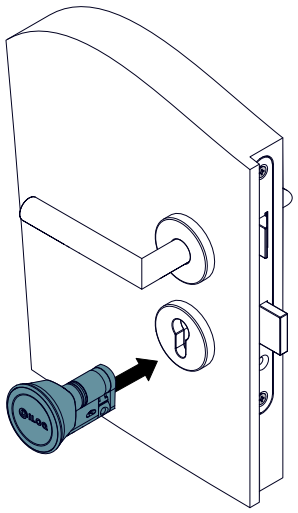
3.3 Manufacturers involvement

No liability is accepted for damage to the doors or components due to incorrect installation. We reserve the right to make modifications or further technical developments without further notice.

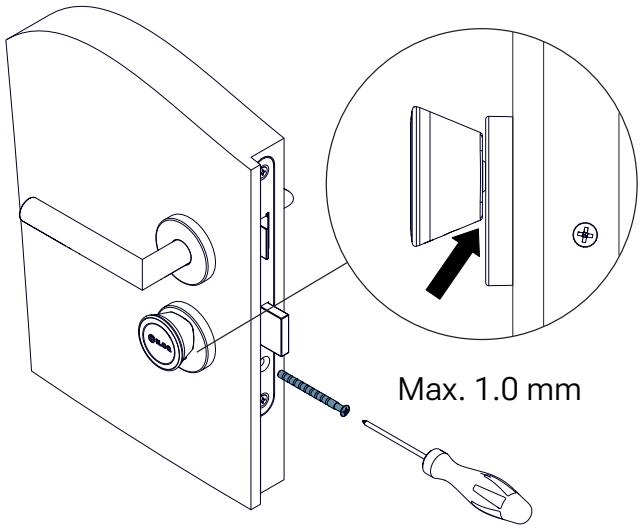
4. Installation

4.1 iLOQ D50S.1XX(A).SD series

1. Slide the lock cylinder into the lock case.
   Make sure that the cam is pointing downwards.



2. Secure the cylinder to the lock case with an iLOQ fixing screw (A10.64).
   Use a tightening torque of 0.9 ...1.1 Nm. If necessary, cut the screw to the correct length (calculation screw length: L = backset + 10 mm).

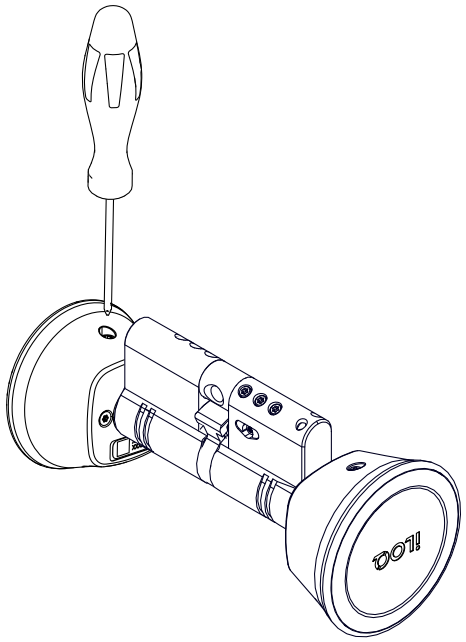


NOTE! Make sure that the cylinder frame is a maximum of 1.0 mm from the door leaf or escutcheon.

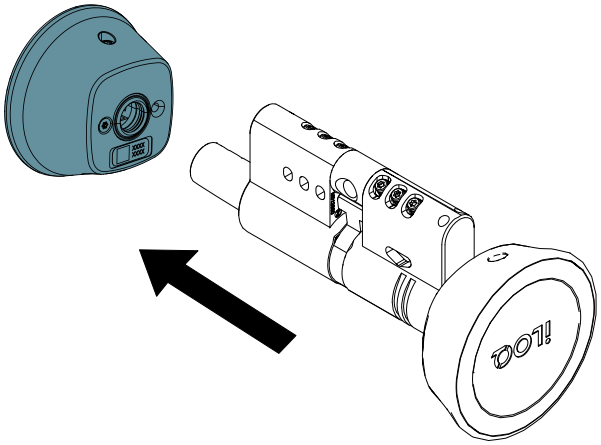
NOTE! The knob distance can be adjusted if needed.
See section “Knob change/ distance adjustment” for more information.

4.2 iLOQ D50S.2XX(A).SD series

1. Slightly loosen the fixing screw of the knob with a Torx T10 tool.
   Loosen the fixing screw just enough to be able to remove the knob, do not remove the screw completely.

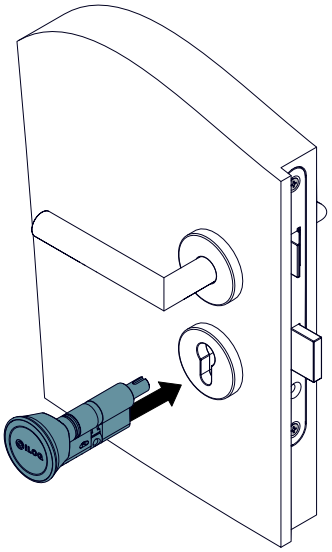


2. Remove the loosened knob from the cylinder.

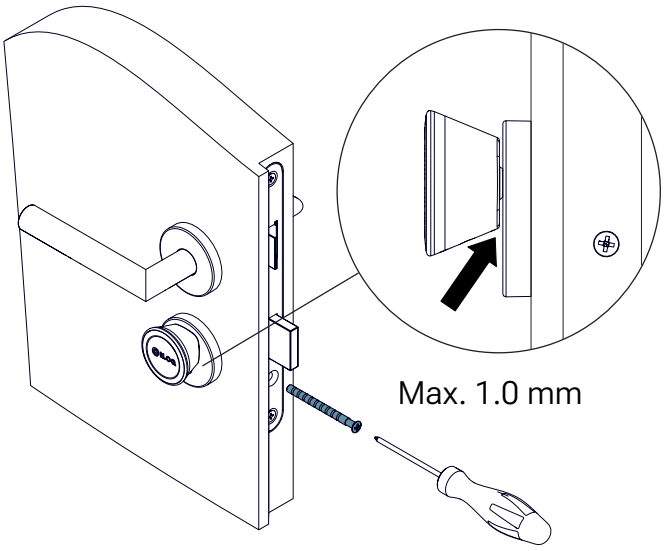


NOTE! In high-security versions, the outside lock unit is marked with the text ”Outside”.

3. Slide lock cylinder into the lock case.
   Make sure that the cam is pointing downwards.

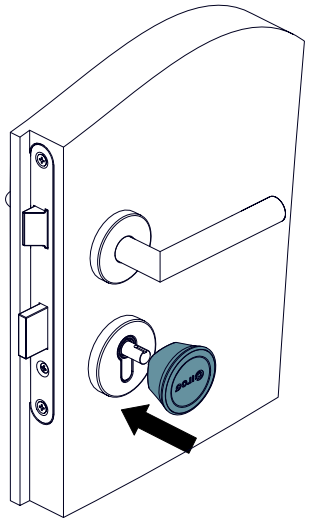


4. Secure the cylinder to the lock case with an iLOQ fixing screw (A10.64).
   Use a tightening torque of 0.9...1.1 Nm. If necessary, cut the screw to the correct length (calculation screw length: L = backset + 10 mm).



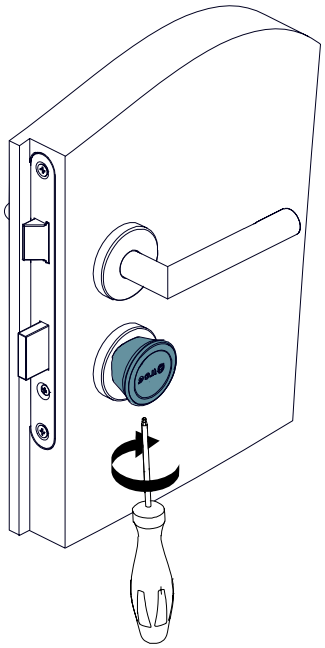
NOTE! Make sure that the cylinder frame is a maximum of 1.0 mm from the door leaf or escutcheon.

5. Slide the knob onto the knob shaft.



NOTE! The knob distance can be adjusted if needed.
See section “Knob change/distance adjustment” for more information.

6. Tighten the fixing screw.
   Use a tightening torque of 1.5 Nm.



4.3 iLOQ D50S.3XX(A).SD series

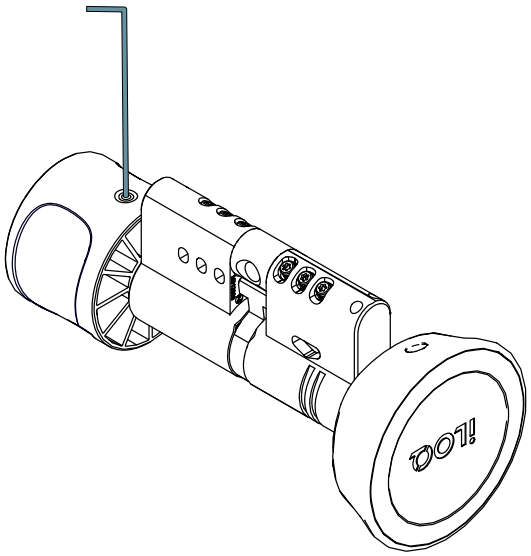
Certified Use Conditions

This cylinder achieves the SKG-star rating only if:

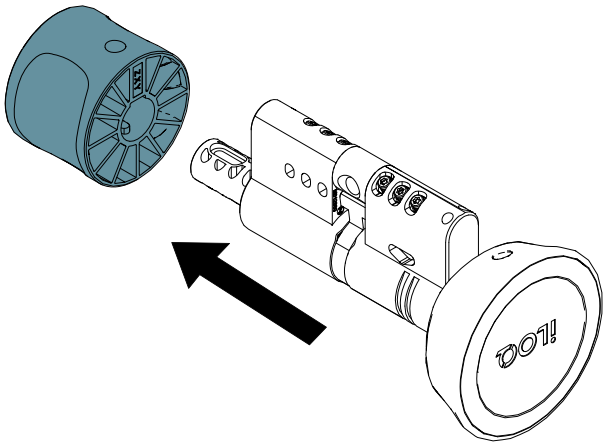
- The door element (including the side window) has at least P4A laminated glass; or
- The door element (including the side window) has a section filling that prevents a view of the knob.

A wooden door element (including the side window) that allows a view of the standard turning knob must be fitted with an SKG(V)-certified anti-drill/anti-manipulation device.

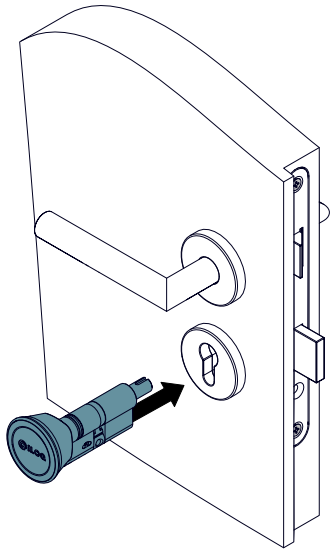
1. Slightly loosen the fixing screw of the turning knob with a 2 mm Allen key (counter-clockwise). Loosen the fixing screw just enough to be able to remove the knob. Do not remove the screw completely.



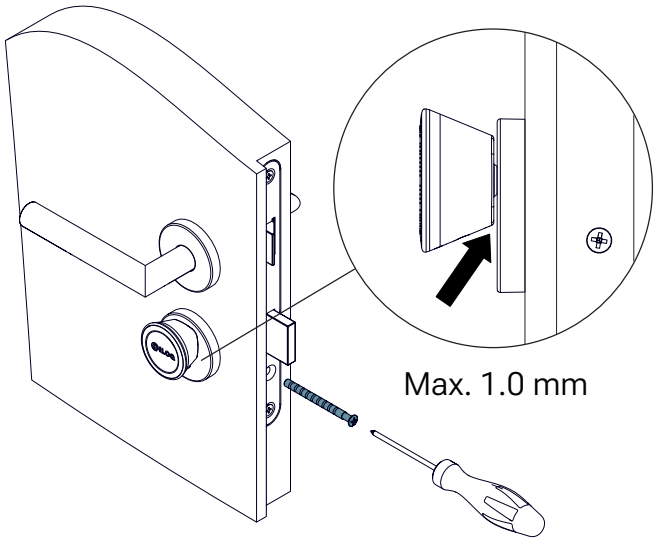
2. Remove the turning knob from the cylinder body.



3. Slide the lock cylinder into the lock case.
   Make sure that the cam is pointing downwards.



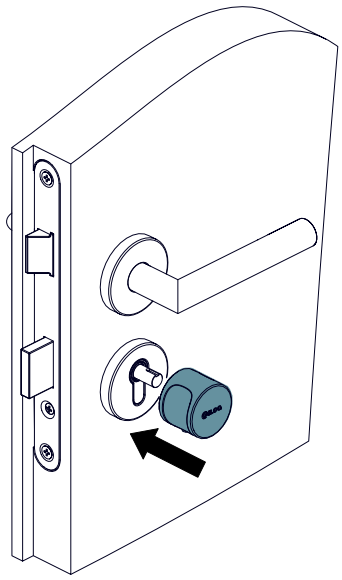
4. Secure the cylinder to the lock case with an iLOQ fixing screw (A10.64).
   Use a tightening torque of 0.9...1.1 Nm. If necessary, cut the screw to the correct length (calculation screw length: L = backset + 10 mm).



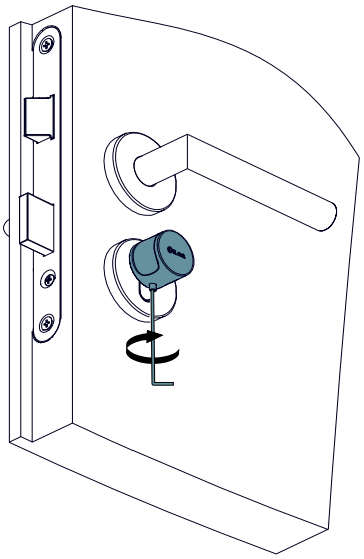
NOTE! Make sure the cylinder frame is a maximum of 1.0 mm from the door leaf or escutcheon.

NOTE! The knob distance can be adjusted if needed. See section “Knob change/ distance adjustment” for more information.

5. Slide the turning knob onto the shaft.

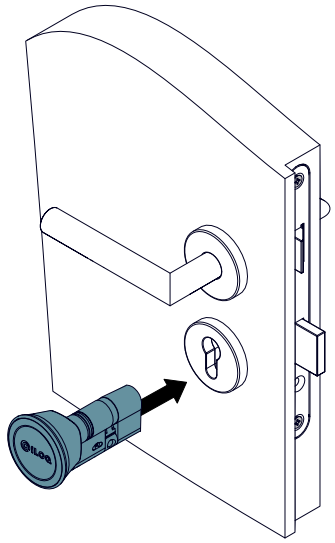


6. Tighten the screw.
   Use a tightening torque of 0.55...0.65 Nm.

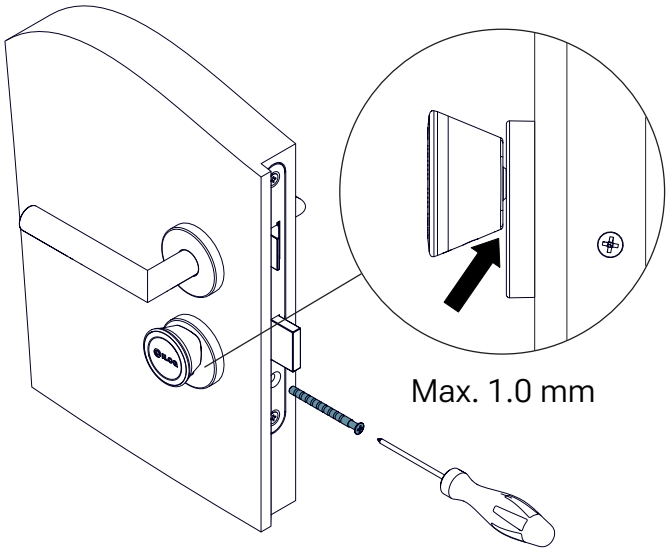


4.4 iLOQ D50S.7XX(A).SD series

1. Slide the lock cylinder into the lock case.
   Make sure that the cam is pointing downwards.



2. Secure the cylinder to the lock case with an iLOQ fixing screw (A10.64).
   Use a tightening torque of 0.9...1.1 Nm. If necessary, cut the screw to the correct length (calculation screw length: L = backset + 10 mm).



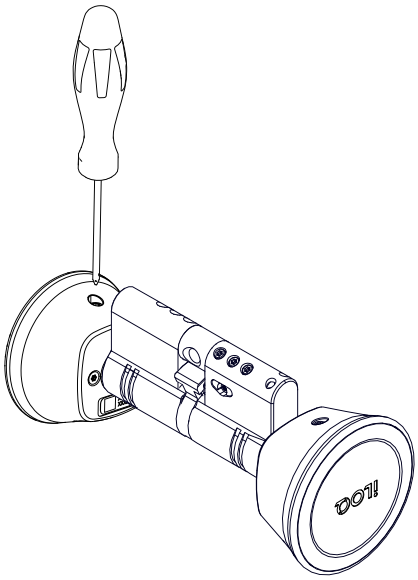
NOTE! Make sure that the cylinder frame is a maximum of 1.0 mm from the door leaf or escutcheon.

NOTE! The knob distance can be adjusted if needed. See section “Knob change/ distance adjustment” for more information.

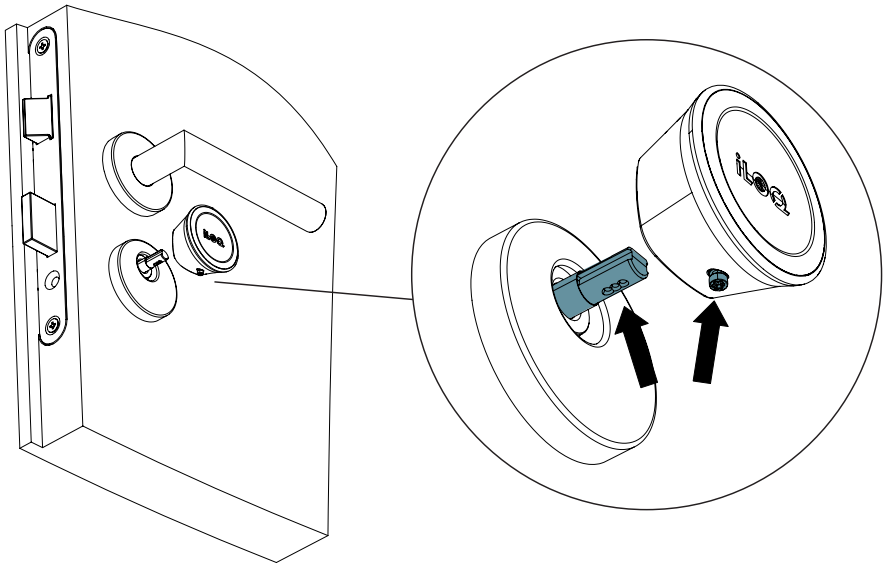
NOTE! According the standards EN179/EN1125 it is recommended to regularly verify the correct and faultlessly functionality of the panic door.

5. Knob change / distance adjustment

1. Slightly loosen the fixing screw of the knob with a Torx T10 tool.
   Loosen the fixing screw just enough to be able to remove or adjust the distance of the knob. Do not remove the screw completely.



2. Adjust the knob to the correct distance and tighten the screw, or remove the knob and replace with a new one.
   Use a tightening torque of 1.5Nm. The screw will find its way into the nearest screw hole and secure the knob into position.



6. Cylinder extensions

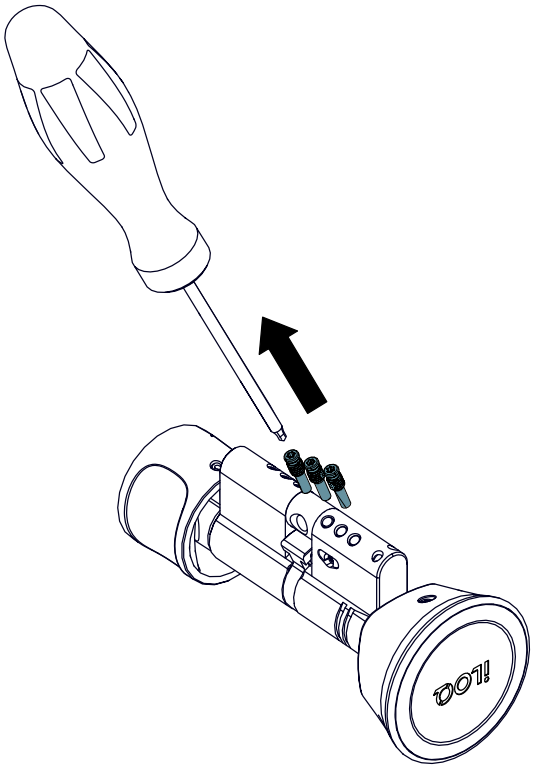
Cylinder length is easily adjustable in 5mm increments from 30 mm (basic length) to 100 mm by extension piece system.

- An extension piece can be added to both sides of the cam in all D50S cylinder configurations, except the iLOQ D50S.1XX.SD. In the D50S.1XX.SD, only the knob side is extendable.
- The D50S.5xx cylinders are no covered by this user guide, information possible to find in the dedicated user guides.
- The iLOQ D50S.7xx.SD anti-panic cylinders are only provided in a set length due to safety reasons. The length cannot be adjusted.

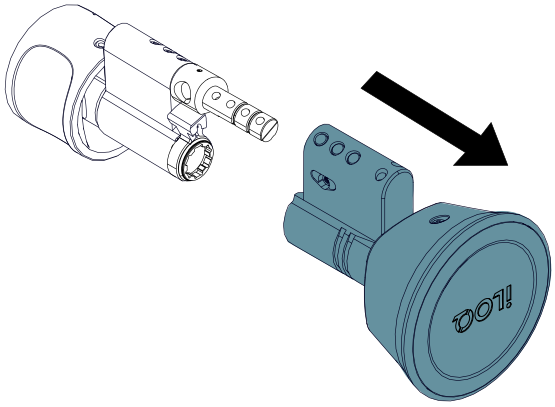
NOTE! It is not possible to chain multiple extension pieces. Only one extension piece on each side can be installed.

6.1 One side - Version 1

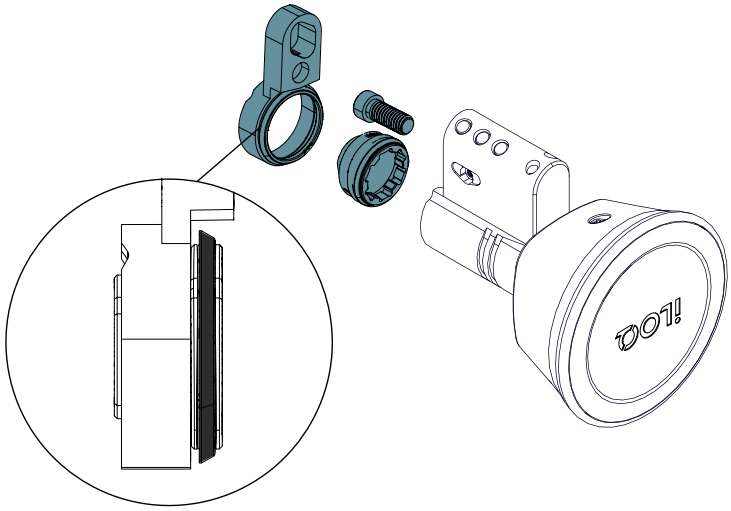
1. Remove the three fixing screws with a Torx T6 tool and set the screws aside for later use.



2. Pull the lock unit modules apart.



3. Insert first the shaft into lock unit and make sure that the seal is in the correct place. After that slide the housing carefully over the shaft.
   Secure the extension assembly with the provided screw. Use a Torx T10 tool (tightening torque 2.5 Nm).

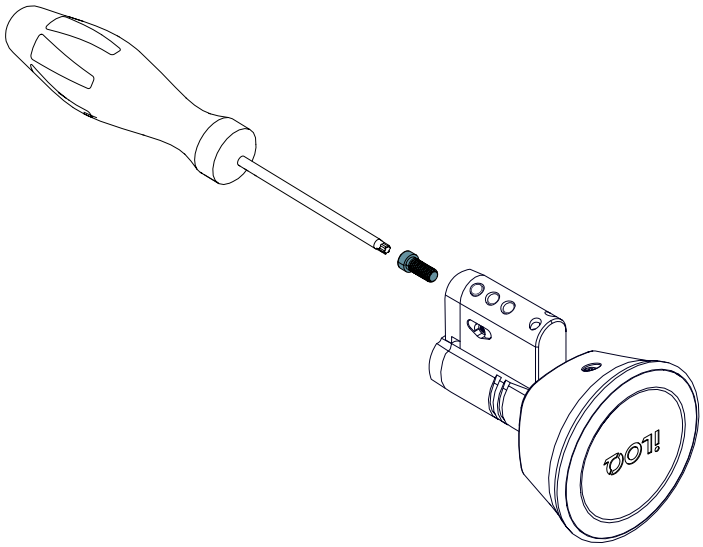


NOTE! Make sure that the O-ring is not damaged. If needed, replace with a new one (spare part kit available “A5.005”).

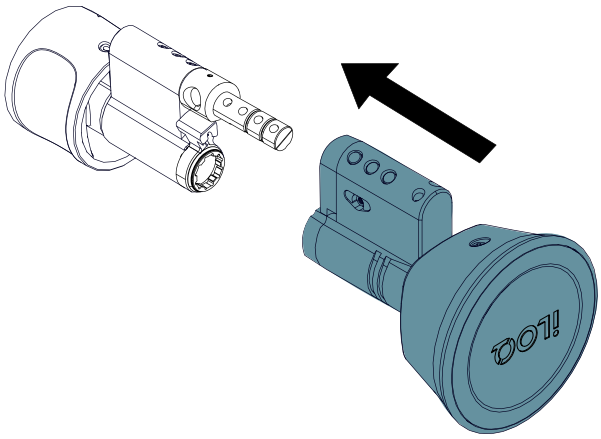
NOTE! Make sure that the assembly (cylinder housings) is aligned straight.

NOTE! Make sure that the assembly of the cylinder extension is done in a dry environment.

4. Secure the extension assembly to the knob side of the lock cylinder with the provided screw.

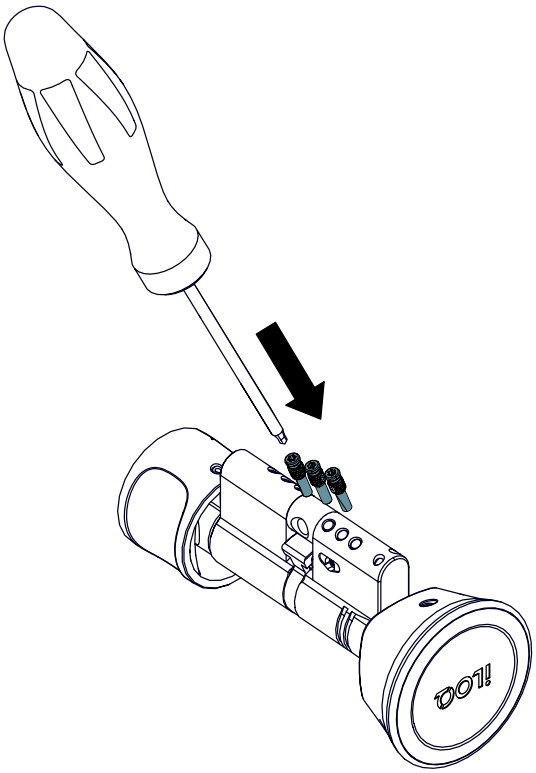


5. Slide the assembly with the extension piece onto the assembly with the backbone and align the housings.



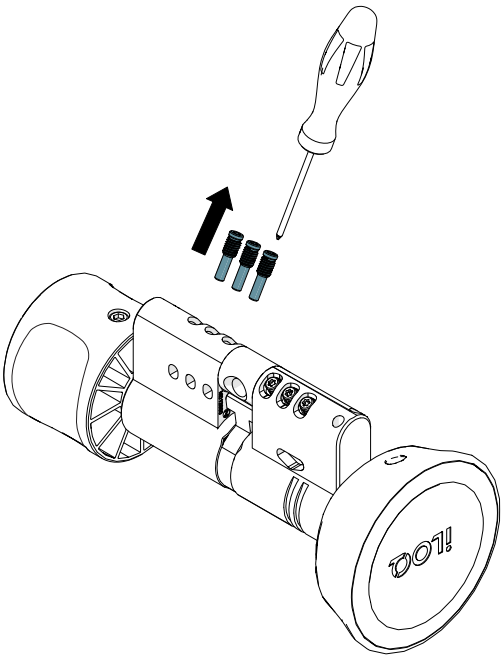
NOTE! Make sure that the assembly is aligned straight.

6. Secure the extended lock cylinder assembly with the three fixing screws set aside earlier. Use a Torx T6 tool and a tightening torque of 0.55...0.65 Nm.

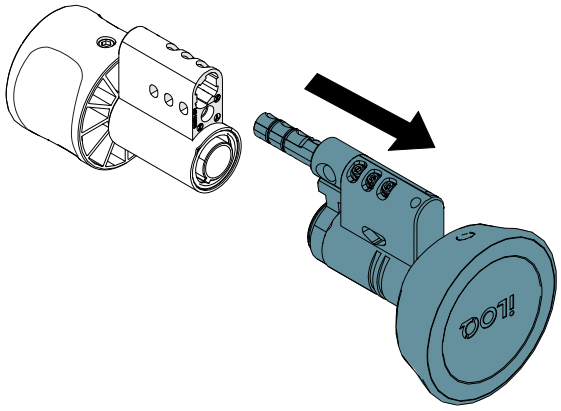


6.2 One side - Version 2 (5 - 15 mm)

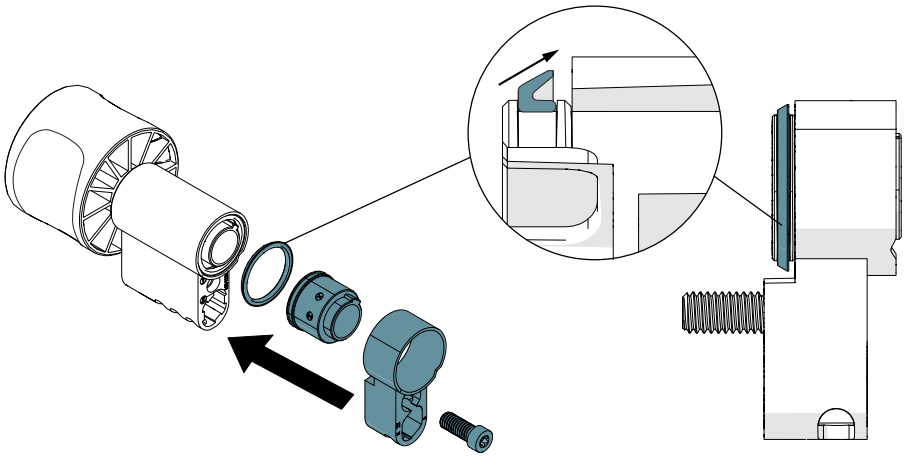
1. Remove the three body fixing screws with a Torx T6 tool and set the screws aside for later use.



2. Pull the lock unit modules apart.



3. Put the shaft into lock unit and check that the seal is in the correct place. Secure the extension assembly with the provided screw. Use a Torx T10 tool (tightening torque 2.5 Nm).

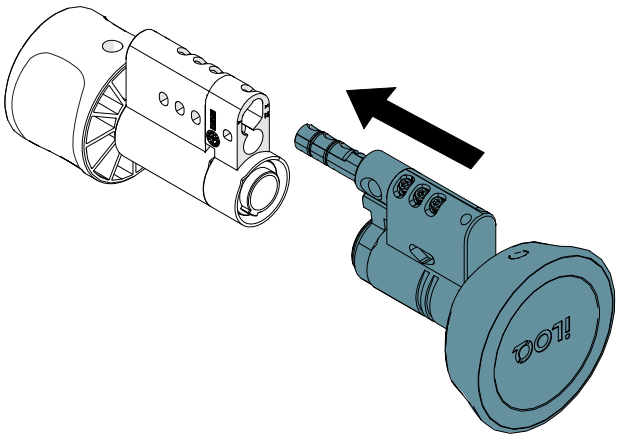


NOTE! Make sure that the conical seal is in place before assembly.

NOTE! Make sure that the assembly (cylinder housings) is aligned straight.

NOTE! Make sure that the assembly of the cylinder extension is done in a dry environment.

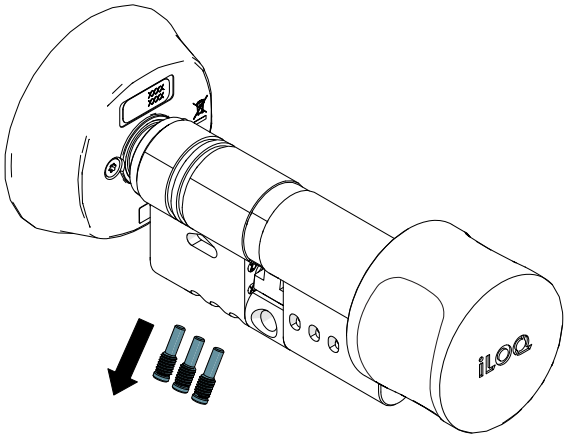
4. Slide the assembly with the backbone into the assembly with the extension piece and align the housings.



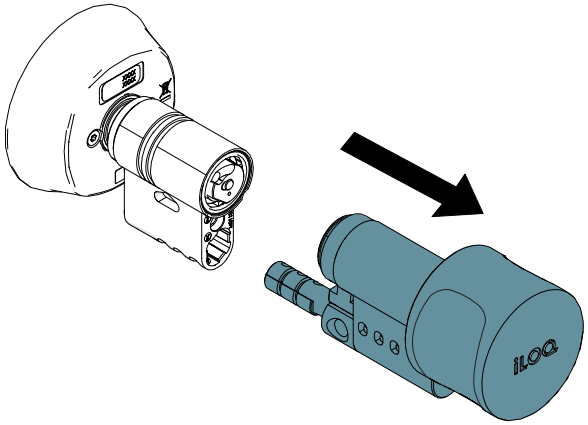
5. Secure the lock unit with the three body fixing screws set aside earlier.
   Use a tightening torque of 0.55 ... 0.65 Nm.

6.3 One side - Version 2 (20 - 30 mm)

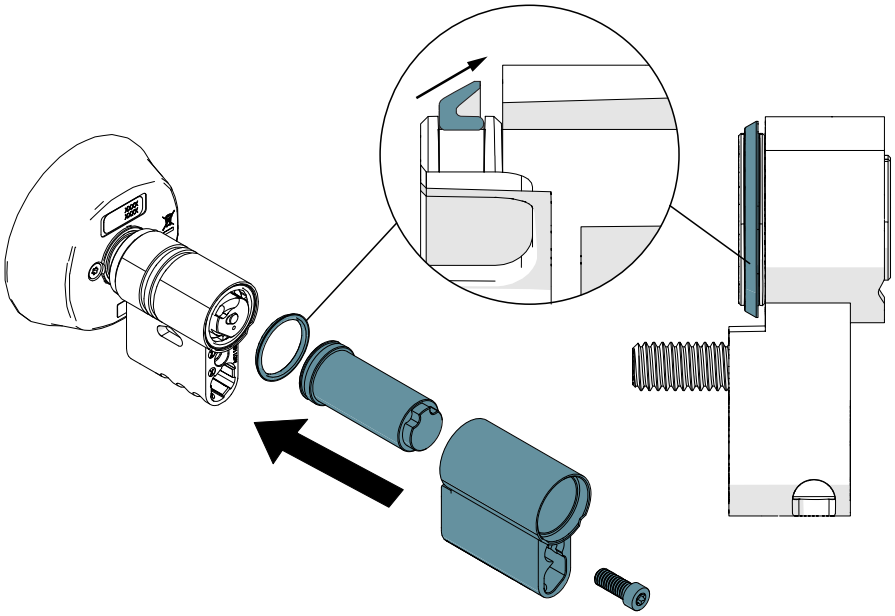
1. Remove the three body fixing screws with a Torx T6 tool and set the screws aside.



2. Pull the lock unit modules apart.



3. Slide the shaft into the lock unit and make sure that the seal is in the correct place. Secure the extension assembly with the provided screw. Use a Torx T10 tool (tightening torque 2.5 Nm).

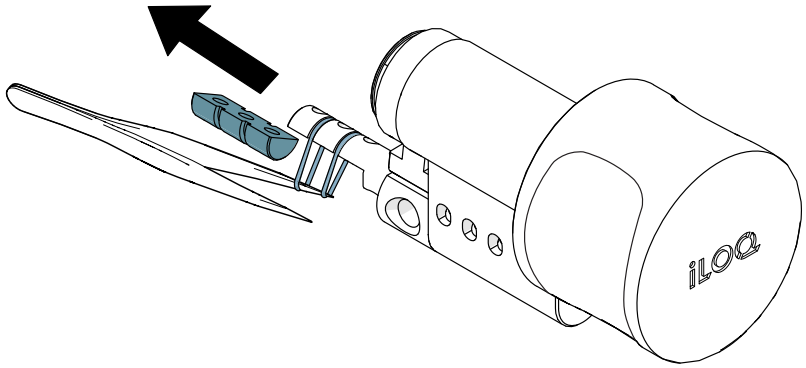


NOTE! Make sure that the conical seal is in place before assembly.

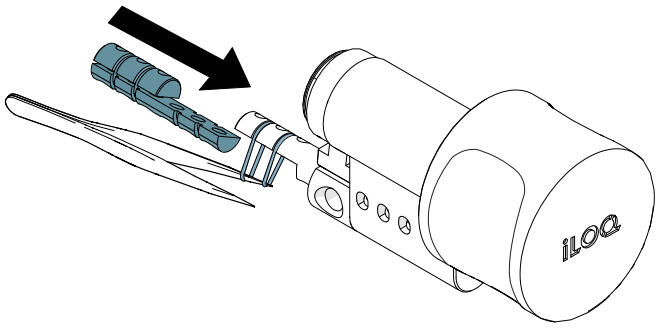
NOTE! Make sure that the assembly (cylinder housings) is aligned straight.

NOTE! Make sure that the assembly of the cylinder extension is done in a dry environment.

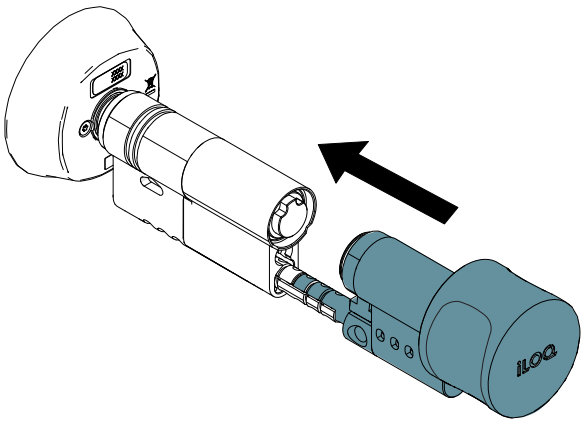
4. Stretch the two O-rings carefully by using a tweezer, and pull out the (marked) metal piece horizontally (without damaging the O-rings).
   Dispose of the removed part in accordance with local rules and regulations.



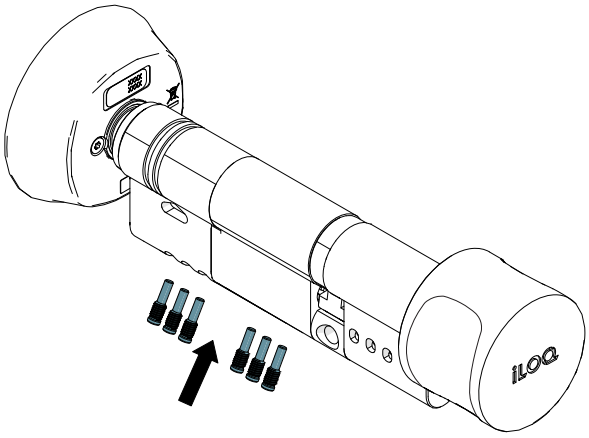
5. Install the extension to the back bone. The O-rings will secure the assembly.



6. Slide the assembly with the backbone into the assembly with the extension piece and align the housings.

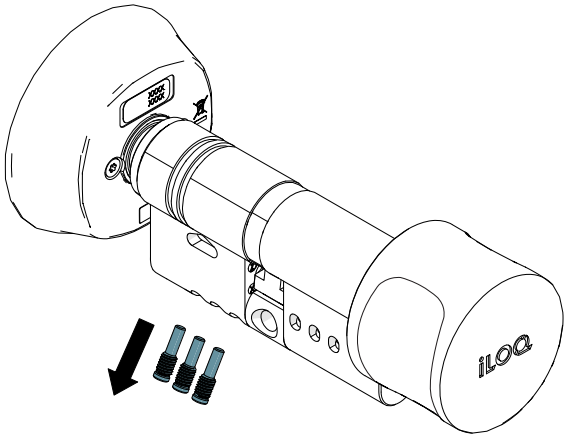


7. Secure the lock unit with the body fixing screws.
   Use a tightening torque of 0.55 ... 0.65 Nm.

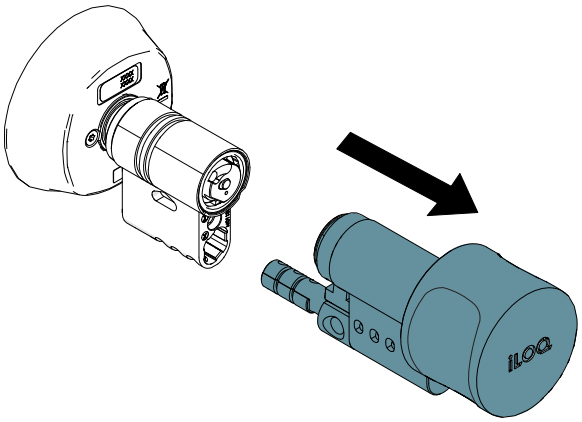


6.4 One side - Version 2 (35 - 70 mm)

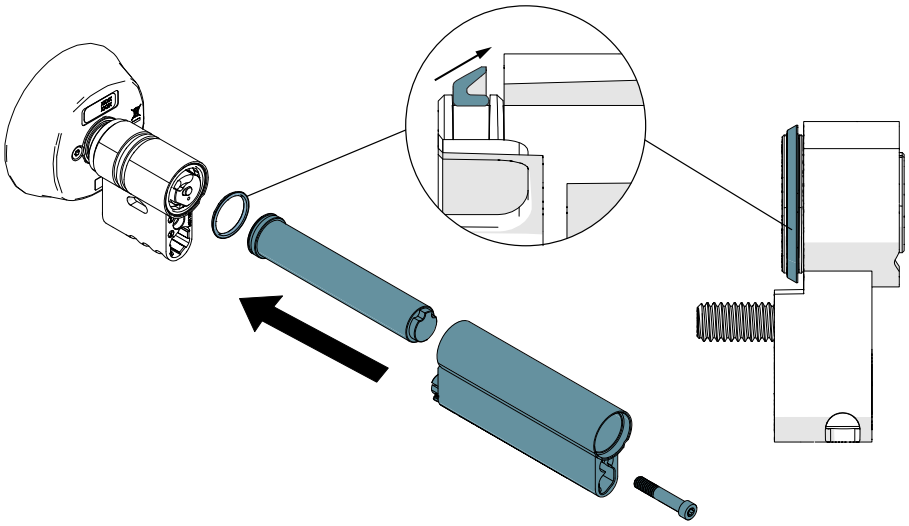
1. Remove the three body fixing screws with a Torx T6 tool and set the screws aside for later use.



2. Pull the lock unit modules apart.



3. Put the shaft into lock unit and check that the seal is in the correct place. Secure the extension assembly with the provided screw. Use a Torx T10 tool (tightening torque 2.5 Nm).

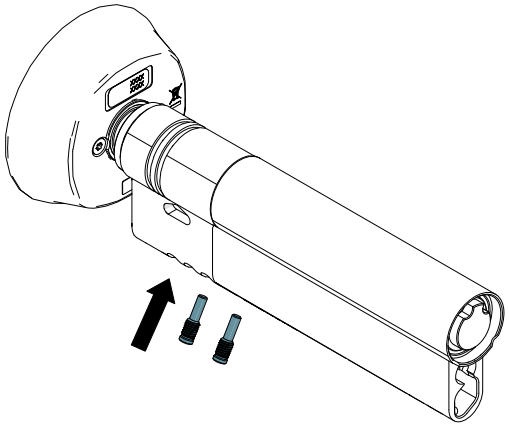


NOTE! Make sure that the conical seal is in place before assembly.

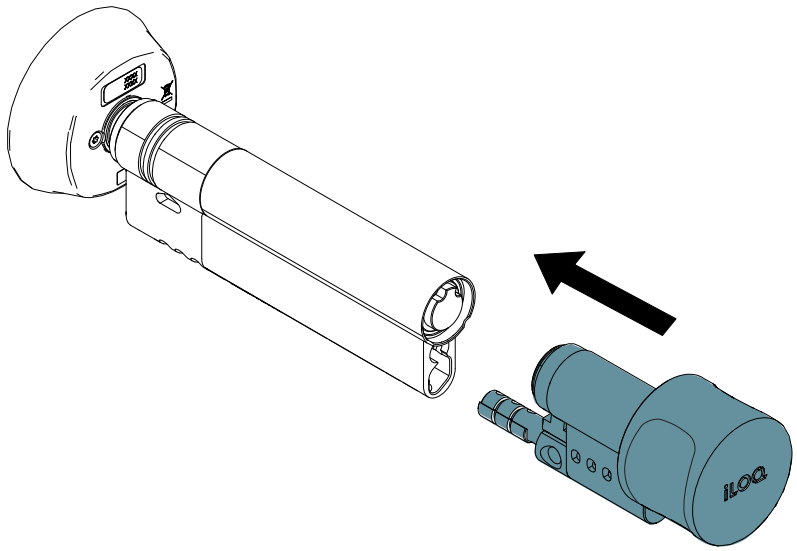
NOTE! Make sure that the assembly (cylinder housings) is aligned straight.

NOTE! Make sure that the assembly of the cylinder extension is done in a dry environment.

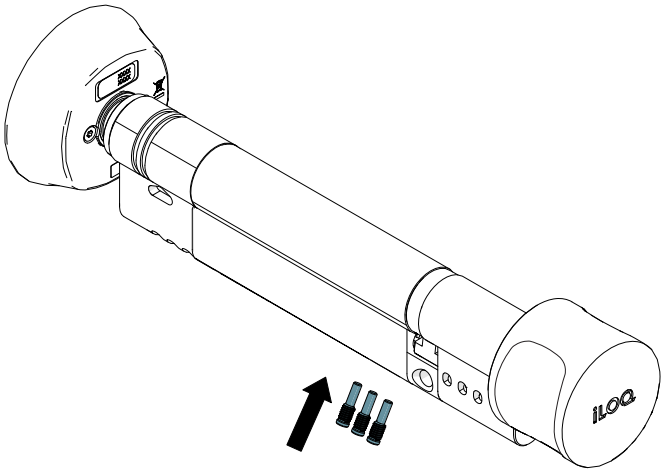
4. Secure the lock unit with the two provided screws.
   Use a tightening torque of 0.55 ... 0.65 Nm.



5. Slide the assembly with the backbone into the assembly with the extension piece and align the housings.

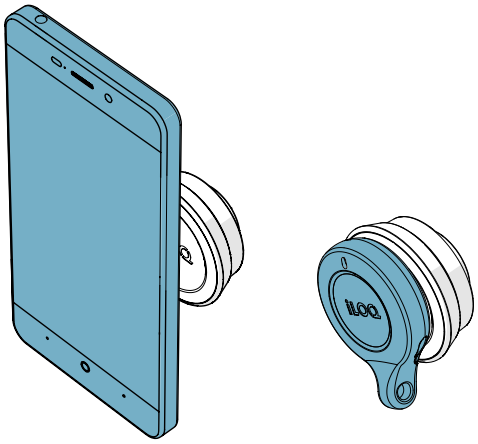


6. Secure the lock unit with the three body fixing screws set aside earlier. Use a tightening torque of 0.55 ... 0.65 Nm.



7. Instructions for use

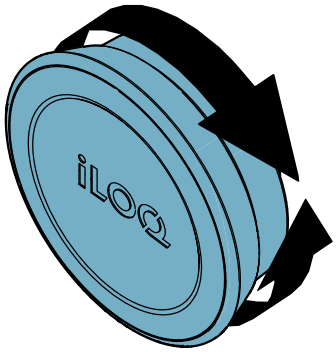
1. Hold a valid key against the knob and wait until the key shows a green light.



NOTE! Due to the large variety of Android phone models and operating system versions, iLOQ cannot guarantee that all NFC-enabled Android phones will work seamlessly with our locks.

NOTE! Before using the locks, check where the NFC antenna is located in your phone so that you know the best position to hold the phone against the knob.

2. Turn the knob to unlock the door, then open the door.



NOTE! After 5 to 15 seconds, the cylinder will automatically be locked. When the cylinder is locked, the iLOQ Reader Knob cannot be rotated.

8. After installation

Test the cylinder functionality after installation to make sure that it does not prevent the lock case from working properly.

9. Disposal of decommissioned products

	Never discard an electrical appliance in household waste. Follow the local laws and regulations for safe and environmentally friendly product disposal.
	Before discarding products, bear in mind that most iLOQ products are reusable. All programmable products can be reset to factory settings, after which they can be reused in another system.

Recycling instructions of decommissioned products are depicted below.

Decommissioned product	Sorting
Decommissioned iLOQ Lock Cylinders, keys, iLOQ fittings, mounting accessories and thumb turn knobs can be recycled as scrap metal.	
Decommissioned iLOQ products containing electronics and circuit boards, such as net bridges, door modules, key and RFID readers, and relay cards, must be recycled at an electrical and electronic equipment collection point.	
iLOQ products containing batteries and accumulators, such as key fobs, programming keys and clock circuits, should be recycled at a regional collection point for batteries and small accumulators.	
Most iLOQ packaging materials are suitable for cardboard and plastic recycling.	

10. Compliance

The products mentioned inside this user guide are in conformity with the requirements of the directives declared on this page.

CE

SIMPLIFIED EU DECLARATION OF CONFORMITY:
Hereby, iLOQ Oy declares that the radio equipment type D50S Lock Cylinders are in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: https://www.iloq.com/en/declaration-of-compliance/

Communication standard: NFC 13,56 MHz Load modulation (ASK), no transmitter.

FCC

Chapter 1, Subpart A, Part 2 of Title 47 of the Code of Federal Regulations
The conformity was assessed in accordance the following standard:
FCC - FCC Rule Part 15

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

ISED

Innovation, Science and Economic Development Canada (ISED)
The conformity was assessed in accordance the following standard:
ISED - ICES 003, Issue 7: 2020 - class B

iLOQ S50

D50S.XXX(A).SD Europrofile Lock Cylinder

User Guide

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