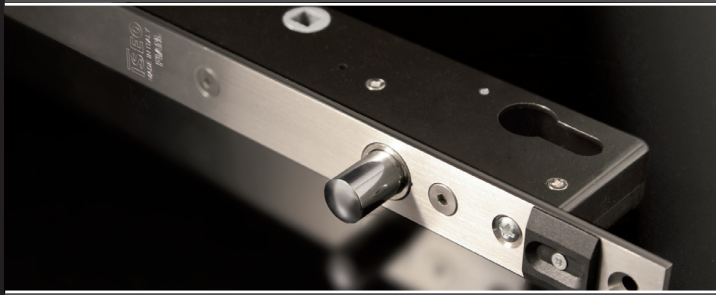
THESIS 2.0



INSTALLATION MANUAL

ISEO®
UN MONDO PIÙ SICURO

Dear Customer,

We appreciate your trust in using our products. The research and the experience acquired by FIAM have led to the creation of a product that currently offers the best results in terms of reliability and performance.
Thesis 2.0 is available in versions NC and NO (normally closed and normally open, should a power supply not be available).
It may be set up vertically or horizontally, and is available with three different softwares, to function in “stand alone,” “manual interlocking,” or “automatic interlocking” modes.

Please feel free to consult our product manual or contact us for any technical or commercial questions you may have: we would be happy to provide you with all the information you need.
To get to know our product better and take advantage of all of its functions, please read and save this manual: it will be useful for any likely future operations as well as routine maintenance.

INDEX

GB

WARNINGS

- Failure to comply with the instructions laid out in this manual will affect the proper functioning of the lock, with consequent loss of warranty.
- This product can only be used for what it was specifically designed to do. Any other use is considered irregular and dangerous.
- Provisions should be made to ensure that a suitable isolation and protection switch be placed upstream of the power supply.
- Do not use the lock as a drilling template.
- Do not paint or lubricate the lock.
- Always ensure the bolt is clean and free of friction. In case the valve needs to be cleaned, do not use products that can leak into the lock.
- We recommend you equip the door with a door closer to prevent rebound when closing the door.
- If there is no power supply, the NC version of the solenoid lock can only be opened mechanically through the cylinder or the handle (where applicable). On the other hand, the NA version of the solenoid lock cannot be mechanically closed if there is no power supply.
- FIAM srl. is not required to comply with warranty conditions if the product has been subjected to changes, repairs or alterations by unauthorized personnel.
- For manufacturing and commercial reasons, or to improve the quality of its product, FIAM srl reserves the right to make any changes it deems appropriate to the product and its instruction manual without prior notice.

1. TECHNICAL CHARACTERISTICS

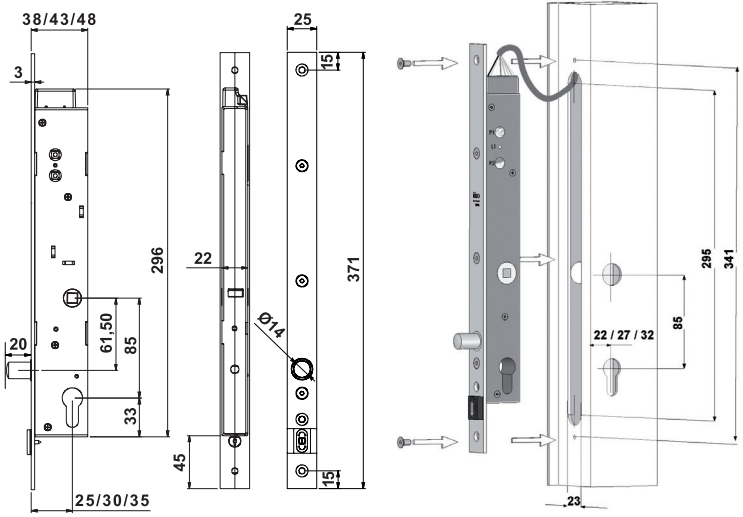
- Entry: 25/30/35 mm.
- Available in version NC (normally closed) and NO (normally open) in the absence of a power supply.
- Available with activation software for single door, for bidirectional manual interlocking, and for bidirectional automatic interlocking (the communication between the interlocking locks is encrypted).
- DC Voltage power supply: 8 to 30VDC
- Maximum supply current during operation: 1A
- Minimum supply current: 8 to 30VDC, 15W
- "LOCKBUS" communication channel: multi-point serial interface (3 wires: power/data)
- Opening control: optically isolated input 8 to 24VDC/12VAC
- Signal relays: voltage and maximum applicable current 24VDC 1A/120VAC 0.5A
- Courtesy time: programmable from 1 to 180 seconds (default: 15 seconds)
- Locking time at closing of the door: programmable from 1 to 60 seconds (default: 1 second)
- Temperature range of operation: -20°C to +60°C (-4°F to 140°F)
- Storage temperature: -25°C to +70°C (-13°F to 158°F)
- Protection system (IP grade) IP44
- Reference standards: EN 14846:2008
- Classification: 3 C 8 0 0 G 3 0 1
- Packaging dimensions: width 38.5 cm - depth 10 cm - height 4 cm
- Package weight: 1.4 kg
- Package contents: Lock, striking plate, multilingual instruction booklet (IT/GB/FR/DE/ES), screws, connector with rubber protection, 8mm handle bracket (if envisioned).

GB

1.1 DIMENSIONS AND LOCK INSTALLATION

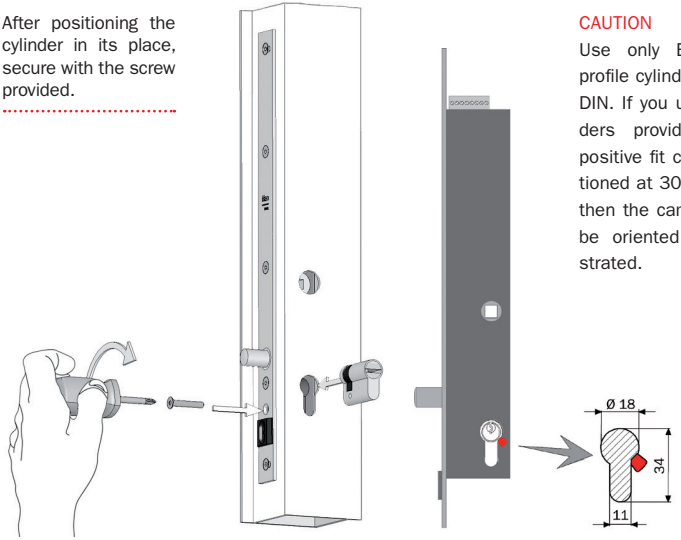
CAUTION

Take care to avoid damaging the cable during installation (see notes on pages 12 and 13)



1.2 LOCK AND CYLINDER INSTALLATION

After positioning the cylinder in its place, secure with the screw provided.



CAUTION

Use only European profile cylinders, cam DIN. If you use cylinders provided with positive fit cam positioned at 30° or 45°, then the cam should be oriented as illustrated.

The position shown should be achieved with the key disconnected. Non-compliance with what is indicated above will compromise the correct functioning of the lock.

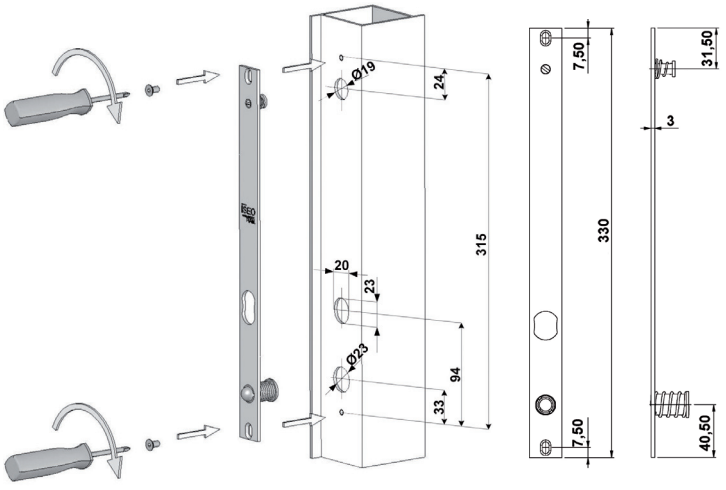
GB

1.3 DIMENSIONS AND INSTALLATION OF THE STRIKING PLATE

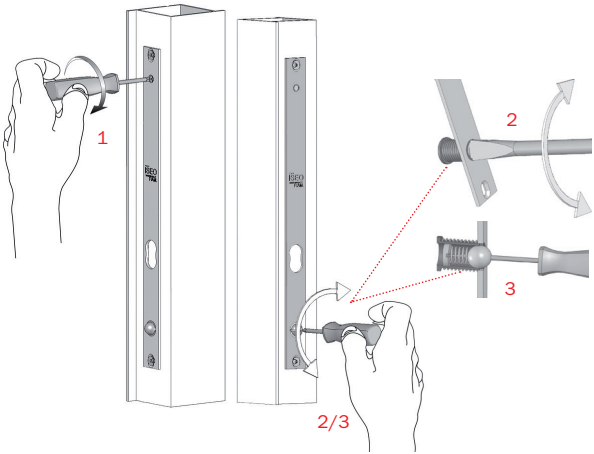
NOTE

Correctly secure the striking plate so that once the installation is complete and the door is closed, the bolt does not scrape against the striking plate itself.

Failure to use the door's alignment sphere (supplied) will compromise the correct functioning of the lock.



1.4 STRIKING PLATE ADJUSTMENTS



- Adjust the “door positioning” sensor (1) to a maximum distance of 5 mm from the front of the lock. Distances greater than this will compromise the correct functioning of the lock in the automatic closing phase of the bolt.

- Adjust the protrusion of the door (2) alignment sphere working a screwdriver in a clockwise or counter-clockwise direction.

- Adjust the thrust force of the sphere (3). To this end, insert a small screwdriver into the sphere’s opening until you reach the screw placed on the brass cap. Turn counter-clockwise to increase the pressure of the thrust, or in a clockwise direction to diminish it.

NOTE

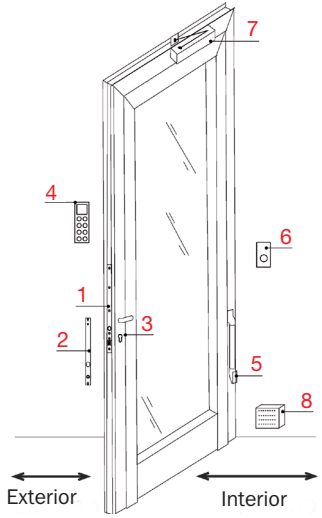
Be careful not to excessively turn the screwdriver clockwise (3), as you may run the risk of unscrewing the rear cap, which holds the spring in place, inserted in the group.

GB

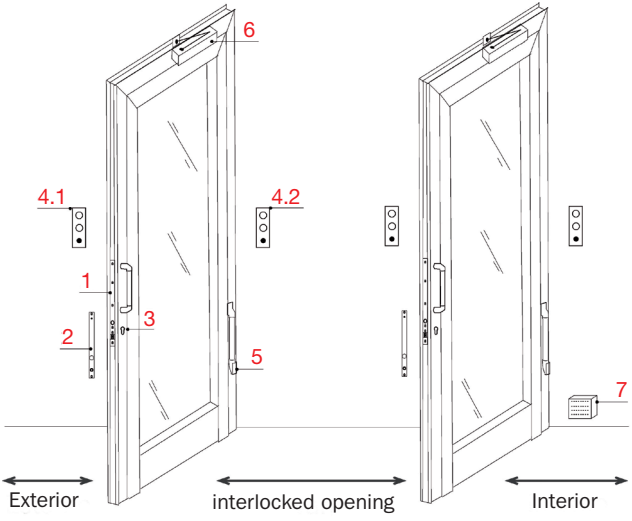
Application example (single door)

1. Thesis 2.0 lock
2. Lock striking plate
3. Cylinder
4. Stylos series keyboard
5. Conduit
6. Opening button
7. Spring-loaded damper
8. Power supply

The image on the left serves only as an example of this product in use.
Please consult the catalogue to see all available accessories for the series Thesis 2.o, or contact us for any technical or sales questions.



Manual or automatic interlocking example



1. Thesis 2.o lock
2. Lock striking plate
3. Cylinder
4. Indicator light with push-button
5. Conduit
6. Door-closer
7. Power supply

GB

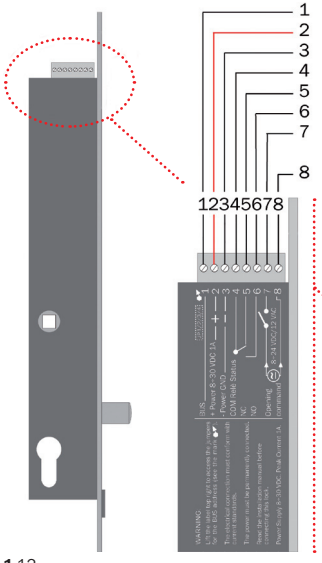
CAUTION

In the case that automatic interlocking is installed, the indicator lights at the openings (4.2) are not equipped with an opening button.

NOTE

The communication channel guarantees an encrypted exchange between the Thesis 2.o locks.

2. ELECTRICAL CONNECTIONS

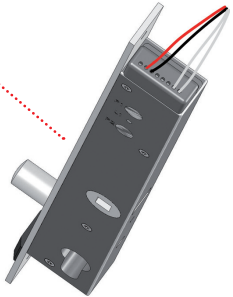


1 "LOCKBUS" Communication Channel
2 Positive - power supply 8 to 30VDC 1A (+)
3 Negative - power supply GND (-)
4 Relay Common contact signal (COM)
5 Normally closed relay contact signal (NC)
6 Normally open relay contact signal (NO)
7
8

± POWER SUPPLY

8 to 24VDC/12VAC ≃ OPENING command
Optically isolated entry

T1 Opening push button (not included)



CAUTION

Minimum cross-section of the power lines in relation to the installation length:

Up to 10m	section 0.5 mm
10 to 40m	section 0.75 mm
40 to 50m	section 1 mm
50 to 75m	section 1.5 mm
75 to 100m	section 2.5 mm

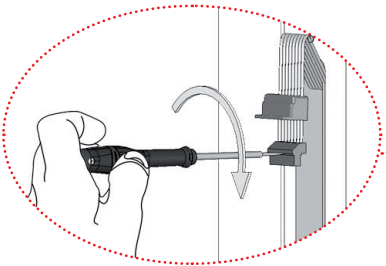
Take care not to damage the cables while fastening the lock to the frame.

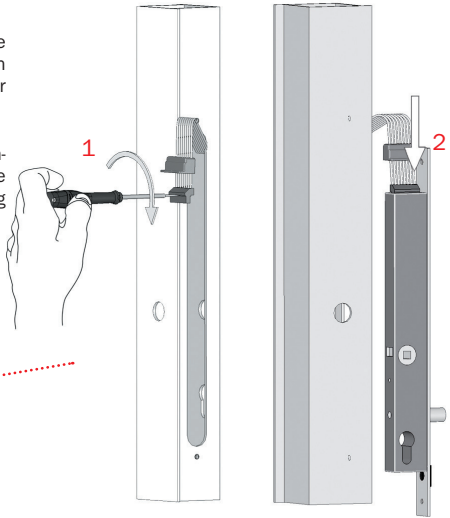
2.1 FASTENING THE CABLES AND THE CONNECTOR

CAUTION

To protect the electronic circuit from external factors, please place the black rubber cap between the cables and the green connector (the black rubber cap and the removable connector are both included).

After fastening the cables to the green removable connector (1), insert the latter into the permanent connector on the upper part of the lock (2). Cover the connectors with the black rubber cap, anchoring it to the lock with the screw that is provided.





GB

3. FUNCTIONING MODES

3.1 Funzionamento TOTAL

If the opening command is of less than 1 second, the lock opens and stays open with the door shut for the duration of the preset courtesy time. If the door is opened before the courtesy time elapses, then the next time the door closes the lock will release the locking valve and will secure the passage.

3.2 FREE functioning

If the opening command is active (state), the lock ignores the preset courtesy time and holds back the unlocking bolt until the opening command is deactivated. In this mode, access to the passage is always ensured: each time the door closes the lock does not close (“daytime” mode).

4. RELAY CONFIGURATIONS

If the lock is used in a local setting (single door), it is possible to configure the relays using the jumpers included in order to obtain one of the following signals:

"SECURED DOOR STATUS" (bolt out and door closed)
Note: this setting has already been preset by the manufacturer in all the locks that use the "standard" setting software.

"BOLT IN" (bolt in opened position)
Cut power, insert the jumpers JP1/JP2 as shown and restart power.

"DOOR STATUS" (closed door)
Cut power, insert jumpers JP1/JP2/JP3 as shown and restart power.

"MOTORISED DOOR OPENER COMMAND" (with bolt in, 1 second pulse)
Cut power, insert jumpers JP1/JP3 as shown and restart power.

GB

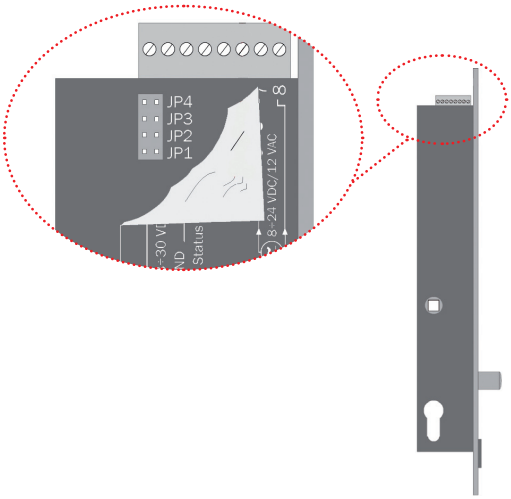
4. RELAY CONFIGURATIONS

4.1 Configuration and access to the programming relay

Peel off label (illustration on the side) to access the Jumper Configuration (JP1/2/3/4).

Once done, reposition the label.

NOTE
If jumper JP1 is off, the relay is configured directly by the settings of the lock software.



5. SETTING THE “COURTESY” AND “DELAYED CLOSURE” TIMINGS

GB

5.1 Setting the “courtesy time” (T1)

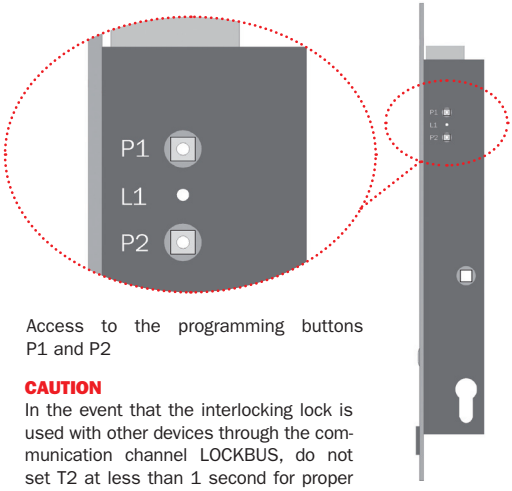
To modify the courtesy time of the lock, preset by the manufacturer at 15 seconds, proceed as follows:

- position the powered lock to be with the bolt in set back condition with the door open (both bolt and door in open position);
- press button P1 for the desired duration, between 1 and 180 seconds (while programming, the L1 LED will flash at 1 second intervals).

5.2 Setting the “delayed closure” at the closing of the door (T2)

To modify the “delayed closure” at the closing of the locking door, preset by the manufacturer at 1 second, proceed as follows:

- position the powered lock to be with the bolt in set back condition with the door open (both bolt and door in open condition);
- press button P2 for the desired duration, between 1 and 60 seconds (while programming, the L1 LED will pulse at 1 second intervals).



Access to the programming buttons P1 and P2

CAUTION

In the event that the interlocking lock is used with other devices through the communication channel LOCKBUS, do not set T2 at less than 1 second for proper functioning.

6. CONNECTIONS OF MANUAL OR AUTOMATIC INTERLOCKING

To obtain a manual or automatic interlocking between two Thesis 2.0 solenoid locks equipped with the appropriate software and connected with an encrypted communication channel, proceed as follows:

1. Connect the PIN1 of both locks (communication channel) with each other, as well as the corresponding PIN2 and PIN3 with the same power source, but do NOT power: we recommend that you do not insert the connectors already wired in each lock (see figure shown on the side).

2. Insert the jumper JP1 in both non-powered locks. To briefly access the jumper configuration remove the label (page 16).

3. Insert the JP4 jumper in one of the two locks

4. Locate the lock with jumper JP4 and by pressing either of the two buttons of the same, only power this lock (insert the wired connector). Wait at least 2 seconds before releasing the button.

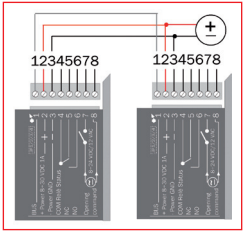
5. Keeping the previously configured lock ON (step 4), locate the lock without the JP4 jumper; while pressing either of the two buttons, start power on this lock as well (insert the wired connector). Wait at least 2 seconds before releasing the button.

After a few seconds, the communication between the two locks will be activated, and both locks will operate in the interlocking mode laid out by the software (manual or automatic).

NOTE

The above procedures are performed with the doors in opened position.

Example of connection between two locks interlocked



NOTE

If required by the specifications of the system, connect the indicator lights to the relay of the “secured door status” of each lock (PIN 4/5/6) and the corresponding opening button (PIN 7/8 optically insulated entry). Anticipate the use of an adequate power supply (one lock alone consumes 15W).

7. CONFIGURATION OF THESIS 2.0 WITH STYLOS LINE

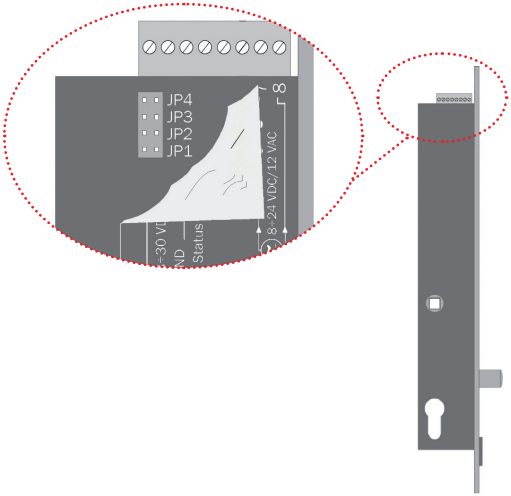
GB

7.1 Configuration and access to address bus jumper.

Remove the label (illustration on the side) to access to the configuration jumpers (JP1/2/3/4).

After completing this operation replace the label.

JUMPERS	BUS ADDRESS
JP4 ☐ JP3 ☐ JP2 ☐ JP1 ☐	ADDRESS 1
JP4 ■ JP3 ■ JP2 ☐ JP1 ☐	ADDRESS 3
JP4 ☐ JP3 ☐ JP2 ■ JP1 ☐	ADDRESS 5
JP4 ■ JP3 ■ JP2 ■ JP1 ☐	ADDRESS 7



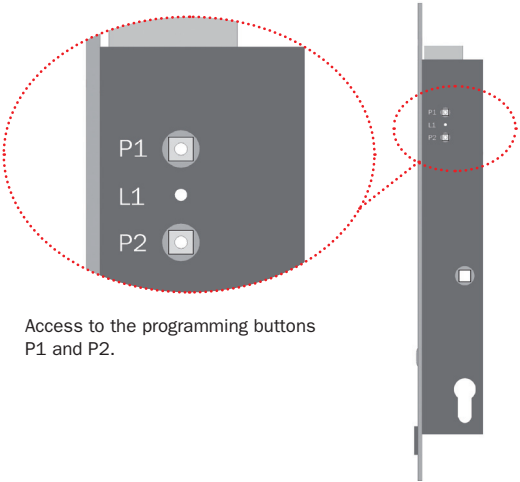
7. CONFIGURATION OF THESIS 2.0 WITH STYLOS LINE

7.2 Access to the programming buttons

CAUTION
Position the lock to be with the bolt and the door in opened position

The electrical connectoins are described on page 12

LEGEND:
P1/PP2= Programming buttons
L1= LOCKBUS LED type I/II



Access to the programming buttons P1 and P2.

Iseo Serrature s.p.a.
Via San Girolamo 13
25055 Pisogne (BS)
ITALY
Tel. + 39 0364 8821
iseo@iseo.com

Fiam s.r.l.
Via Don Fasola 4
22069 Rovellasca (CO)
ITALY
Tel. + 39 02 96740420
info.fiam@iseo.com

www.**iseo**.com

ISEO Zero1
ELECTRONIC SUPPORT SERVICE

iseozero1@iseo.eu
MONDAY-FRIDAY 8am-12pm/1pm-5pm

ISEO®

www.iseo.com

Code 6000750000002 - Print 03/2012