

DORMA Installation Manual XS-Fitting Pro

1. General.	3	3. Commissioning	15
1.1 Correct use	4	3.1 Initialisation	16
1.2 Further Sources of Information	4	3.2 Establishing Wireless Connection	16
1.3 Disposal	4	3.3 Optical Signals	17
1.4 Functional Discription	5	4. Operation	18
1.5 Package Contents	5	5. Maintenance	19
1.6 Required for Installation	6	5.1 Batteries.	19
2. Assembly	7	5.2 Tamper alarm	21
2.1 Door requirements.	7	EC Declaration of Conformity	22
2.2 Preparation	9	6. Technical Data	24
2.3 Mounting plate	11		
2.4 Final assembly	14		

The information provided in these installation instructions may be modified without prior notification.

All previous versions cease to be valid with the publication of these instructions.

The information in these installation instructions has been compiled in good faith and based on the best knowledge available to us. DORMA accepts no liability for the correctness and completeness of the details provided.

In particular, DORMA cannot accept liability for any consequential damages due to incorrect or incomplete information.

The recommendations for installation made in this manual are based on the assumption that prevailing basic conditions are favourable. DORMA accepts no liability for the perfect functioning of XS-Fitting Pro in external, non-system environments.

Despite every effort to prevent mistakes, they can never be completely avoided. Therefore, we would be grateful to receive notification of any errors or omissions.

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1.1 Correct Use

The XS-Fitting Pro is a mechatronic access control unit for installation on internal doors.

The XS-Fitting Pro may only be used for opening doors.

Installation on fire and smoke protection doors is only permitted with components approved by DORMA and a separate fire protection kit. Proof of suitability in conjunction with the fire or smoke protection door concerned is required.

Installation in the direction of escape on emergency and escape doors is not permitted.

However, it can be used as an outside access device in conjunction with emergency exit door latches, i.e. installation against the direction of escape, on doors along escape and rescue routes.

Proof of suitability for use with the respective emergency exit door latch is required for use as an outside access device.

Use for any other purpose than that described is not permitted.

1.2 Further Sources of Information

Further documents are available on request.

User Manual XS-Manager

Describes the configuration of the XS components.

1.3 Disposal

The device was manufactured using recyclable materials and components.

When disposing of the device and the packaging, please ensure environmentally friendly recycling.

Information for EU Countries

European Directive 2002/96 EC applies to this device. This means that this product must not be disposed of with normal household waste. We, the manufacturer, will take back our electric and electronic products and dispose of them for you free of charge. Correct disposal of your old equipment protects people and the environment from possible harmful consequences.

Batteries

This device requires alkaline batteries for operation.

According to European directive 2006/66/EC, disposable and rechargeable batteries must not be disposed of with normal household waste.

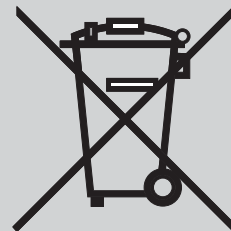
Please check your local regulations for separate disposal of batteries. Correct disposal of batteries protects people and the environment from possible harmful consequences.



Mandatory legal regulations must be observed and may mean that use on doors that are subject to special requirements is not permitted.



This device is categorised as class 2 radio equipment according to R&TTE directive 1999/5/EC. The frequency bands are not harmonised. In some countries, use may not be permitted or may be subject to restrictions. Cf. Technical Data.



1.4 Functional Description

XS Fitting Pro can be installed in place of the door fitting and put into operation without the need for any wiring. The power supply is provided by batteries. XS Fitting Pro reads ID card data using a contactless process. XS Fitting Pro authorisations are checked in different ways, depending on the type of operating mode. The different operating modes are as follows:

Offline:

In offline mode, an internal database is used to check authorisations.

Access on Card (AoC):

Access permissions are saved onto the ID card. The ID card user retrieves the current permissions from a central, online AoC station and these permissions are then transmitted to the ID card.

Online:

In online mode, XS Fitting Pro is connected to an access control terminal via the XS Traffic Point radio node. Permissions are checked by the access control terminal.

If the check proves positive, the door handle is unlocked. When in standby mode or if the booking is negative, the door handle remains blocked and the door remains locked.

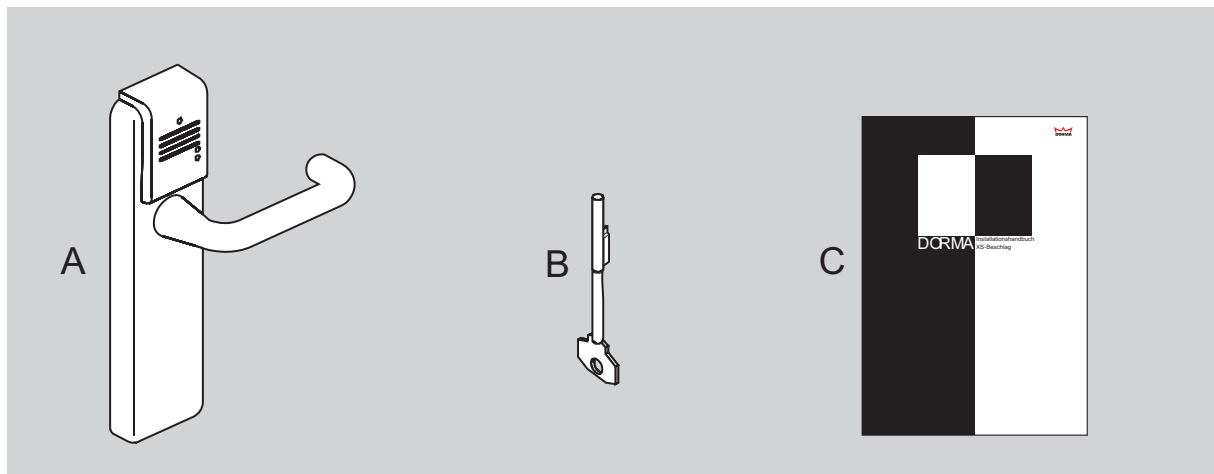
Data reconciliation for offline mode and initialisation is performed via a wireless interface. Communication with this interface is via a netbook or notebook.

The XS Manager communication software installed on the netbook allows data to be exchanged between XS Fitting Pro and the access control software on the PC (host).

1.5 Package Contents

- A 1x XS-Fitting Pro
- B 1x Cylinder with key

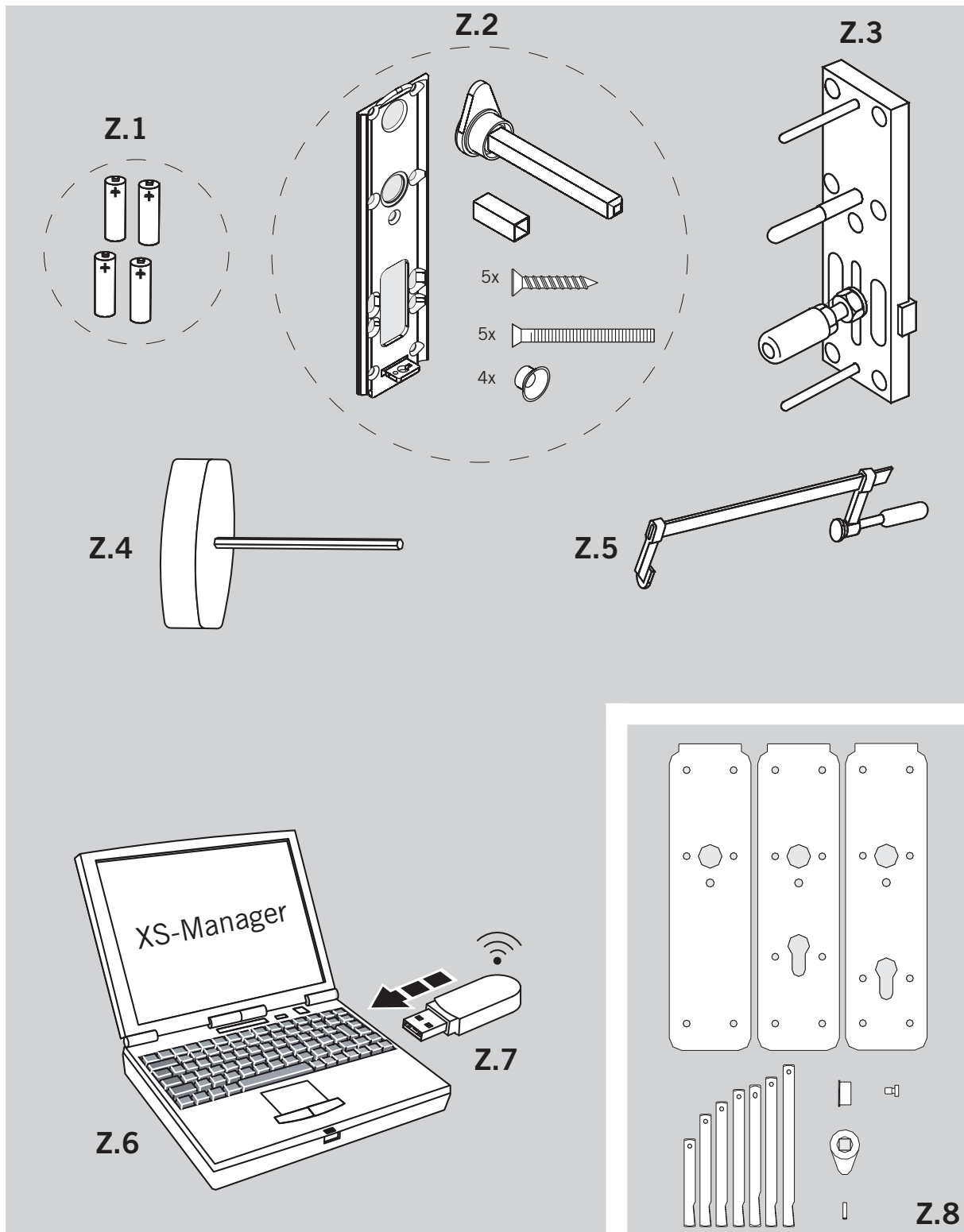
- C 1x Manual



1.6 Required for installation

- Z.1 1x battery set, order no. 19000070400130
- Z.2 1x installation kit (depending on door thickness)
- Z.3 1x drilling gauge, order no. 19191400
- Z.4 1x Allen key 2 mm

- Z.5 1x screw clam
- Z.6 Netbook with XS-Manager
- Z.7 USB-RF-Stick, order no. 1900070402707
- Z.8 Fire-/ smoke protection kit, order no. 19167498



2.1 Door requirements

2.1.1 Door thickness

32 - 105mm

2.1.2 Profile cylinder

For an XS-Fitting Pro without profile-cylinder bore, the profile cylinder may protrude up to 17 mm.

2.1.3 Latch pins (a)

8 mm or 9 mm latch pins may be used. The latch pin should extend 35 mm into the handle on the other side.

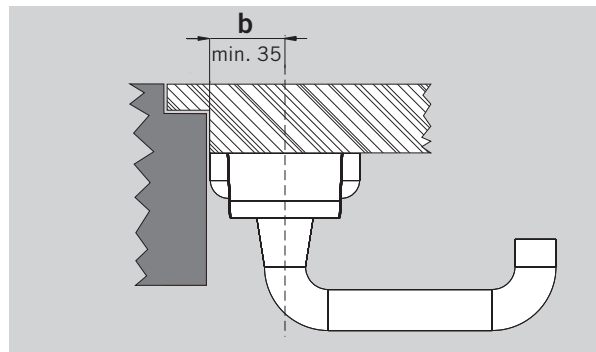
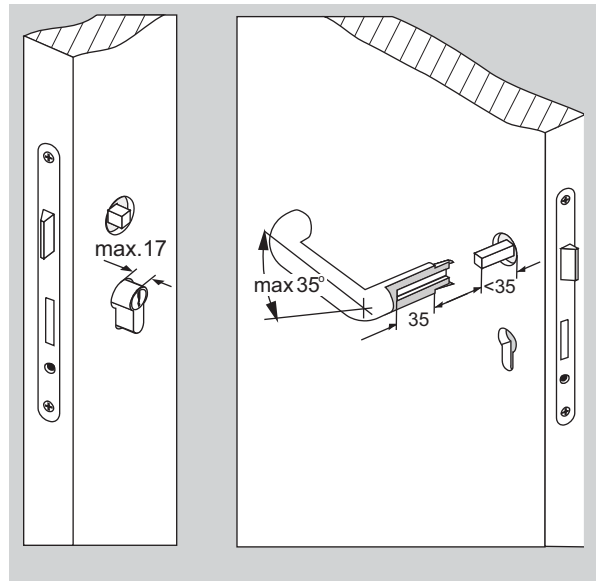
2.1.4 Backset (b)

The backset must be at least 35 mm.

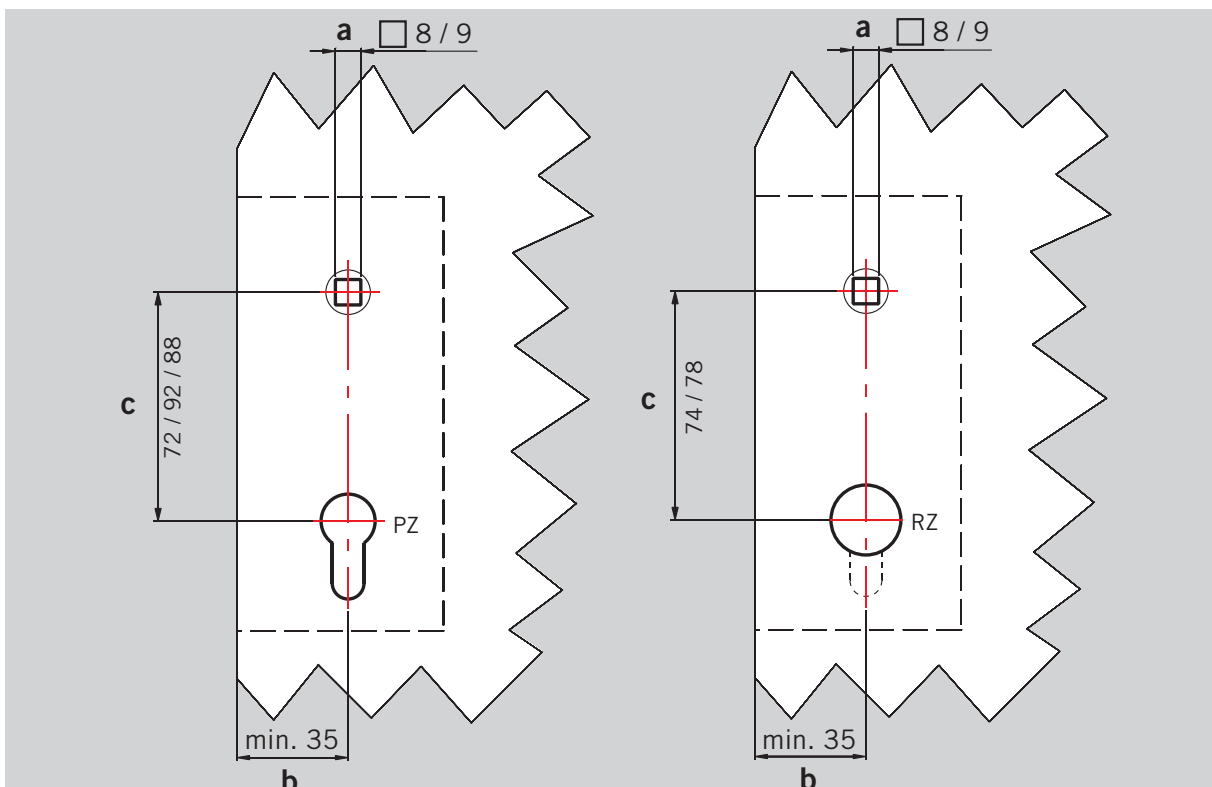
If the backset for the XS-Fitting Pro is too small, there is a danger that the body of the XS-Fitting Pro can come into contact with the rebate.

2.1.5 Centre-to-centre dimension (c)

With the XS-Fitting Pro, the centre-to-centre dimension may vary between 72 and 92 mm.



The IBL-I interior plates are only suitable for centre-to-centre dimensions of 72 mm or 92 mm.
For other dimensions, roses must be fitted.

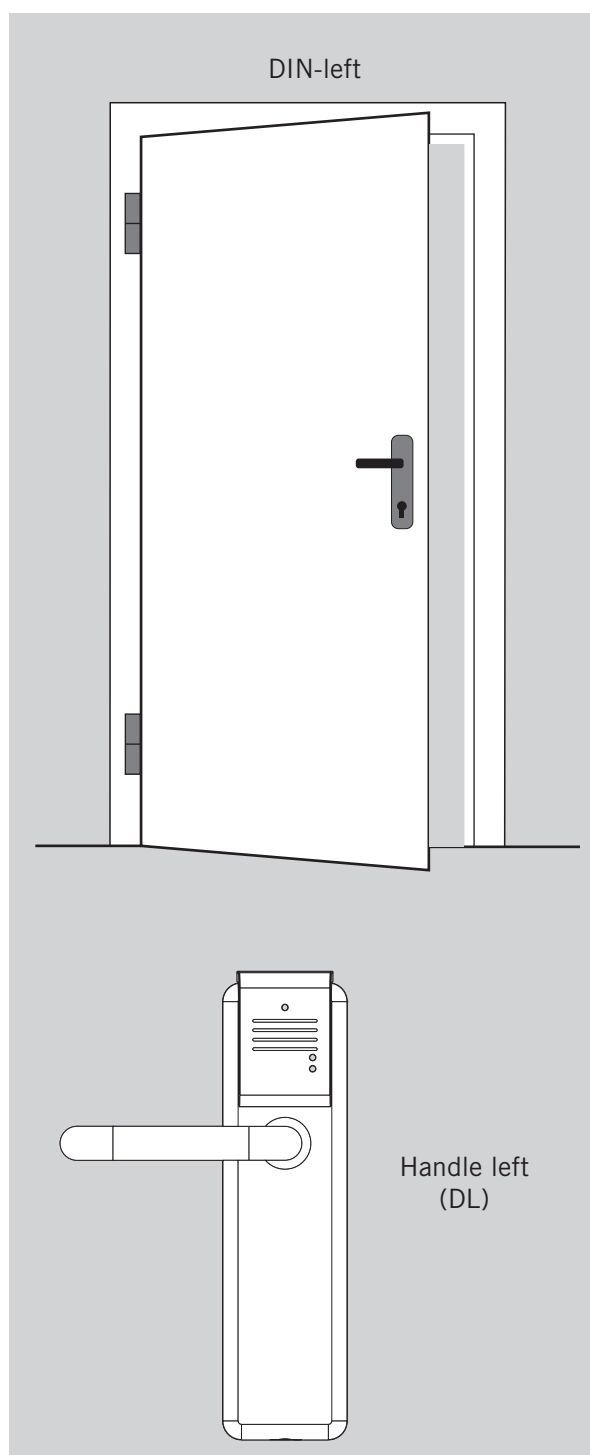
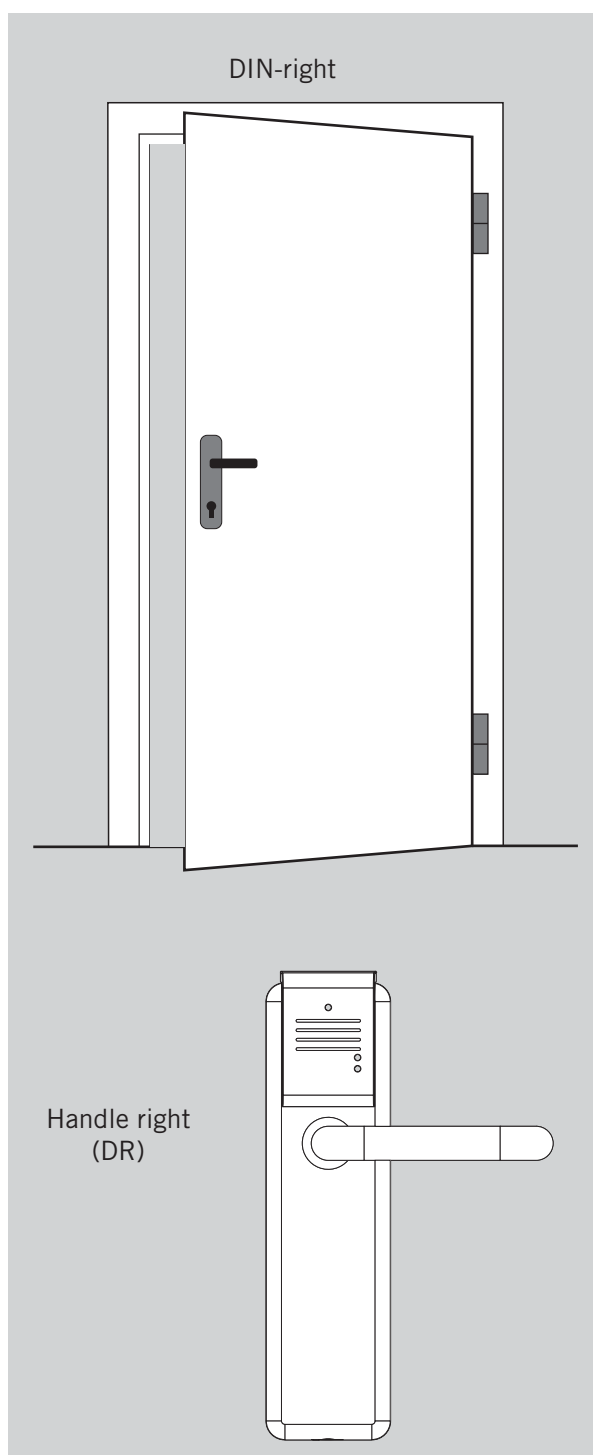


2.1.6 Opening direction

Depending on the model, XS Fitting Pro is suitable for use on both left-handed and right-handed doors..



The handle direction depends on the model used and cannot be changed at a later stage.



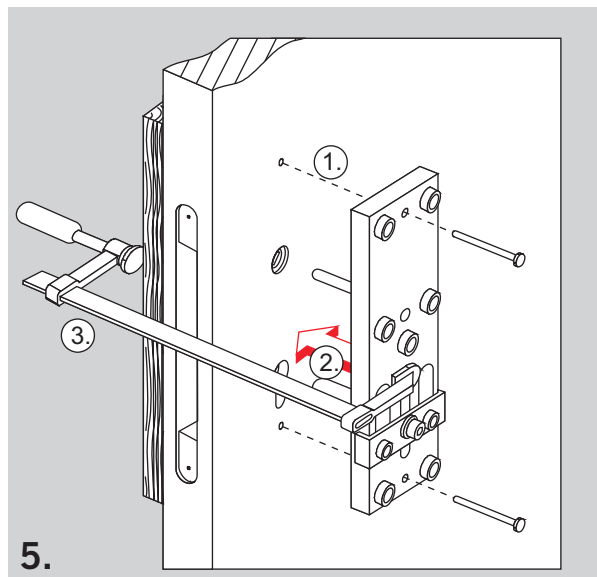
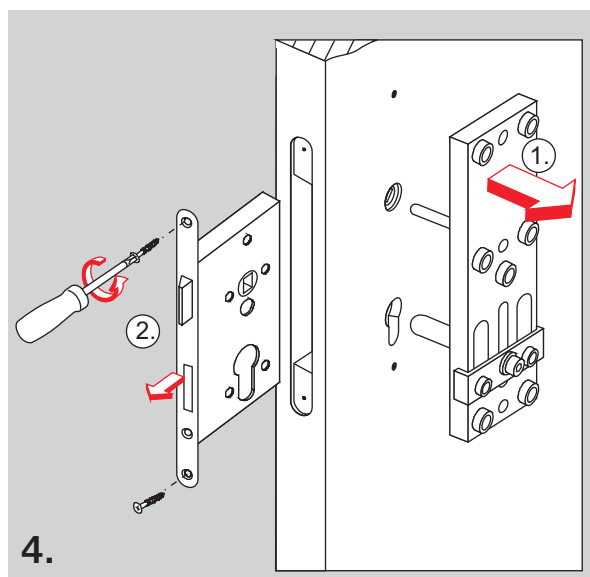
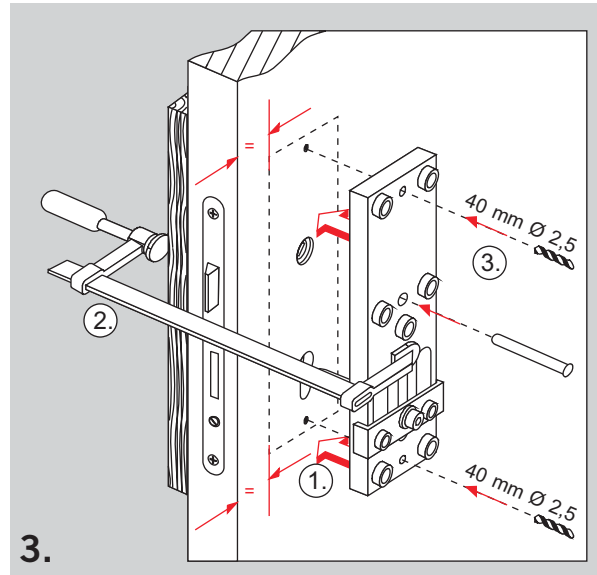
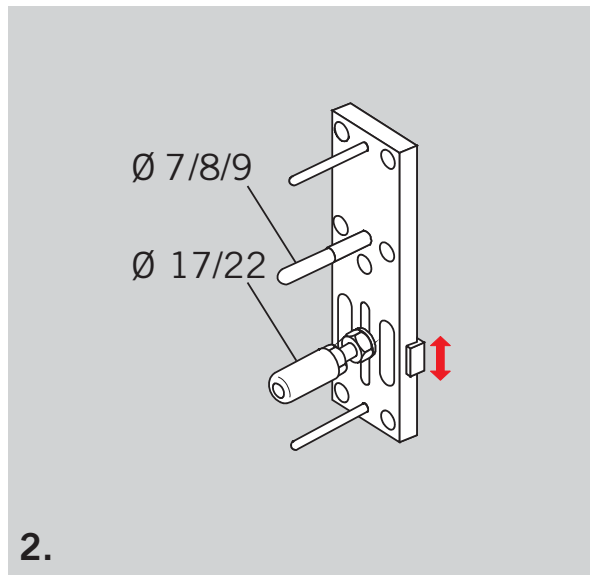
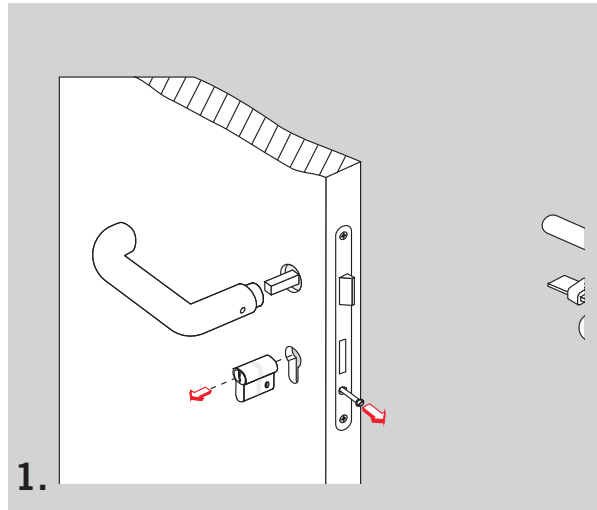
2.2 Preparation



Use the drilling gauge to drill the mounting holes

2.2.3 Drilling gauge

1. Remove the existing handle and profile cylinder
2. Set centres distance
3. Drill centring holes
4. Remove drilling gauge and lock
5. Fasten drilling gauge into place



2.2.2 Installation on Fire and Smoke Protection Doors



Only XS-Fitting Pro s with fire protection handles may be installed on fire and smoke protection doors. This is indicated on the nameplate.

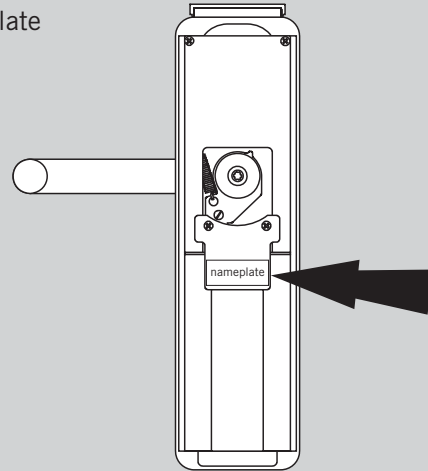


Installation is only permitted in combination with a fire protection kit. The installation is described in separate instructions supplied with the fire protection kit.



Proof of suitability in conjunction with the fire or smoke protection is required.

nameplate



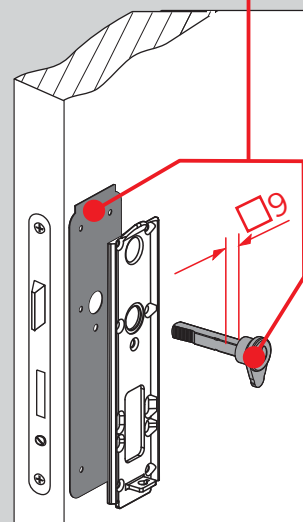
Code	Handle	Installation at Fire and Smoke Protection Doors permitted
01	Standard	No
02	8155 FS	Yes
03	8906 FS	Yes
04	8998 FS	Yes
05	8830 FS	Yes
08	8100 FS	Yes

BL-0-D#-PX#-###-##-##
 4x Mignon 1,5V ##
 XXXXXXXX-XXXXX-XXX XX



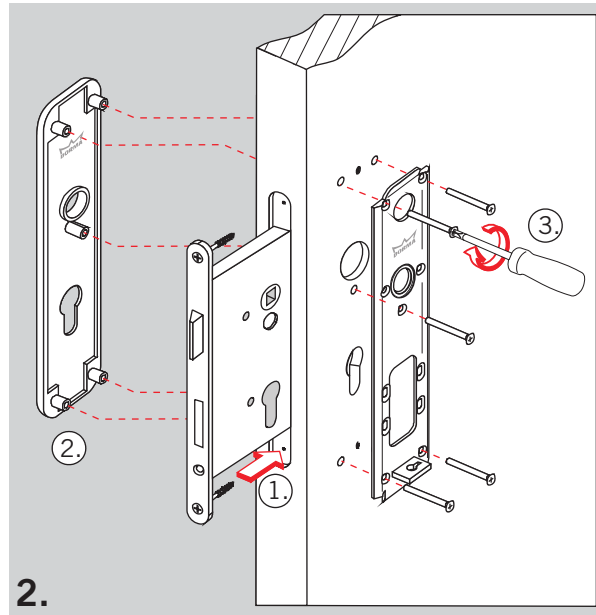
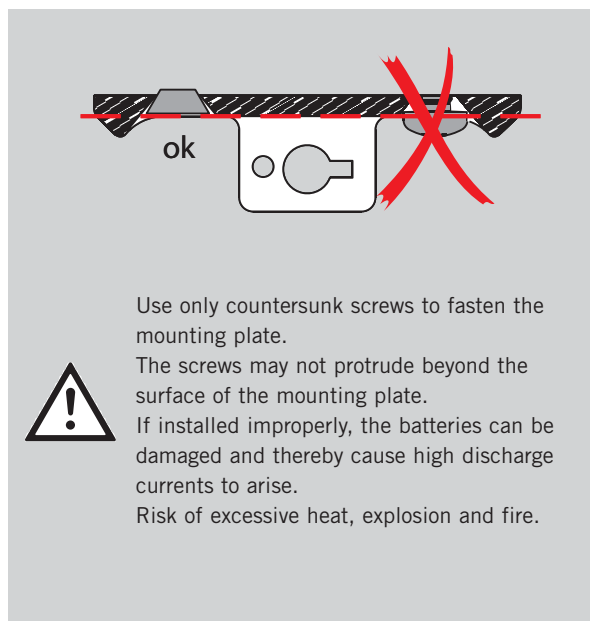
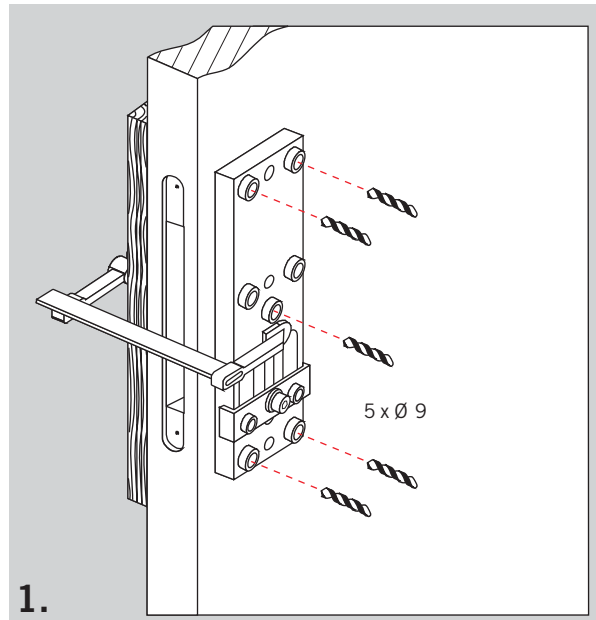
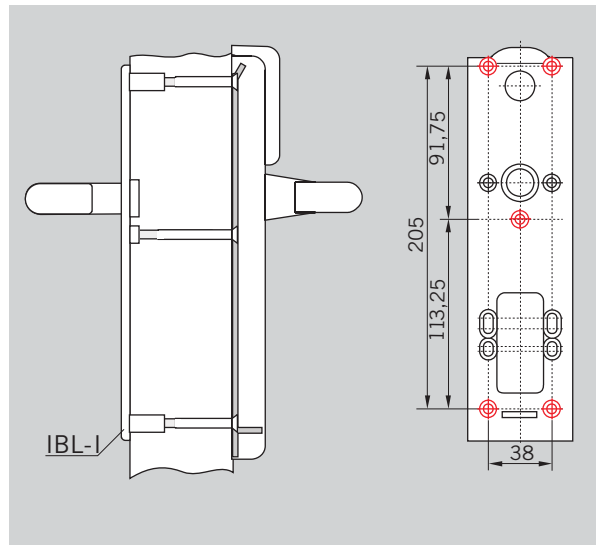
Instruction
 Fire protection kit

Fire-/ smoke protection kit

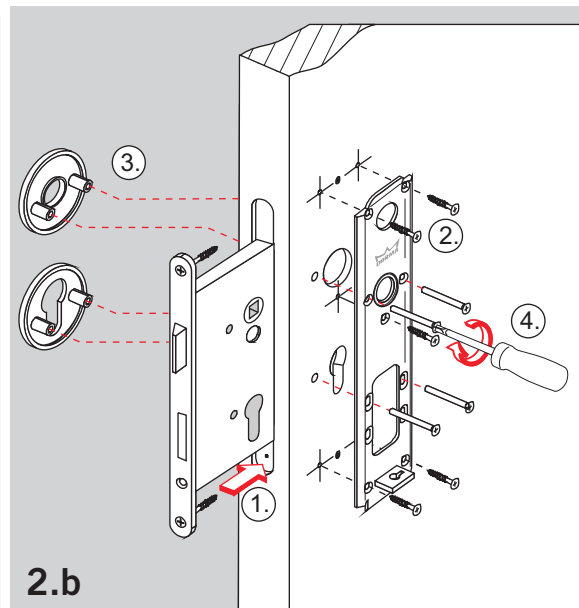
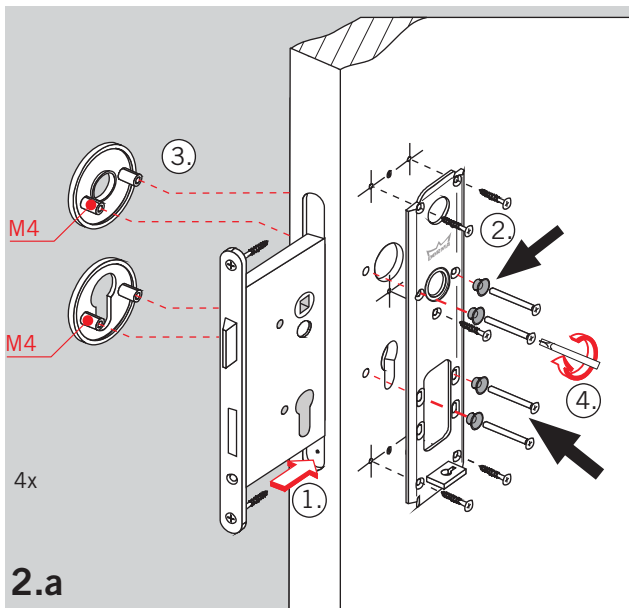
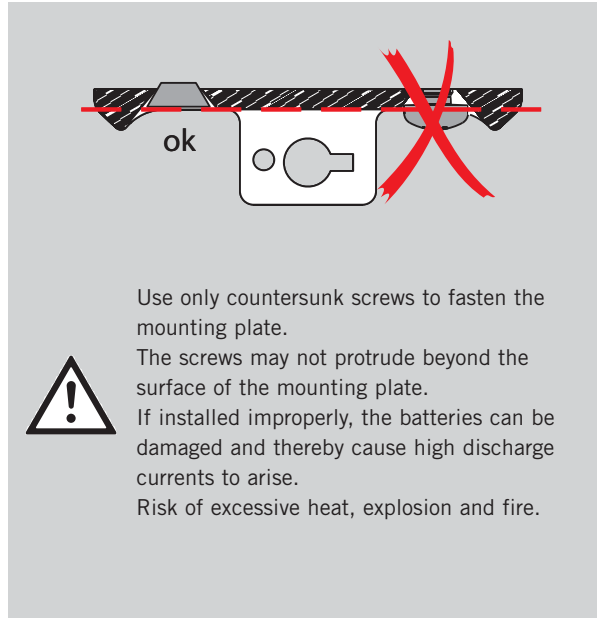
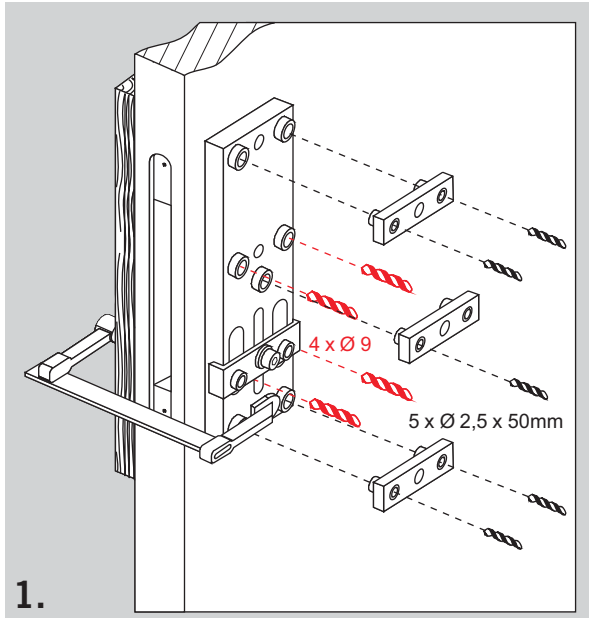
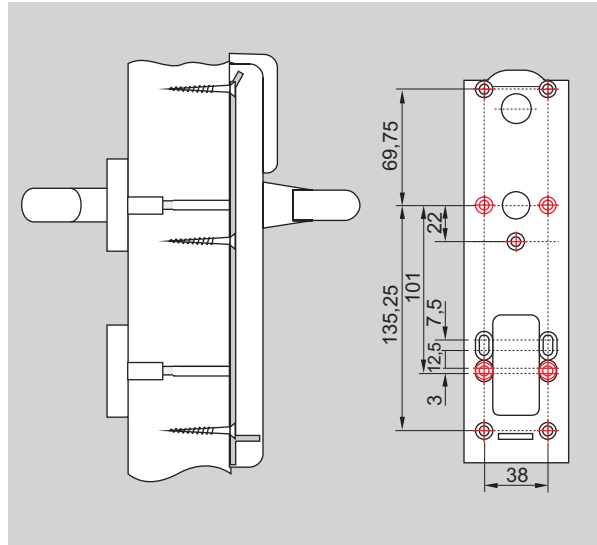


2.3 Mounting plate

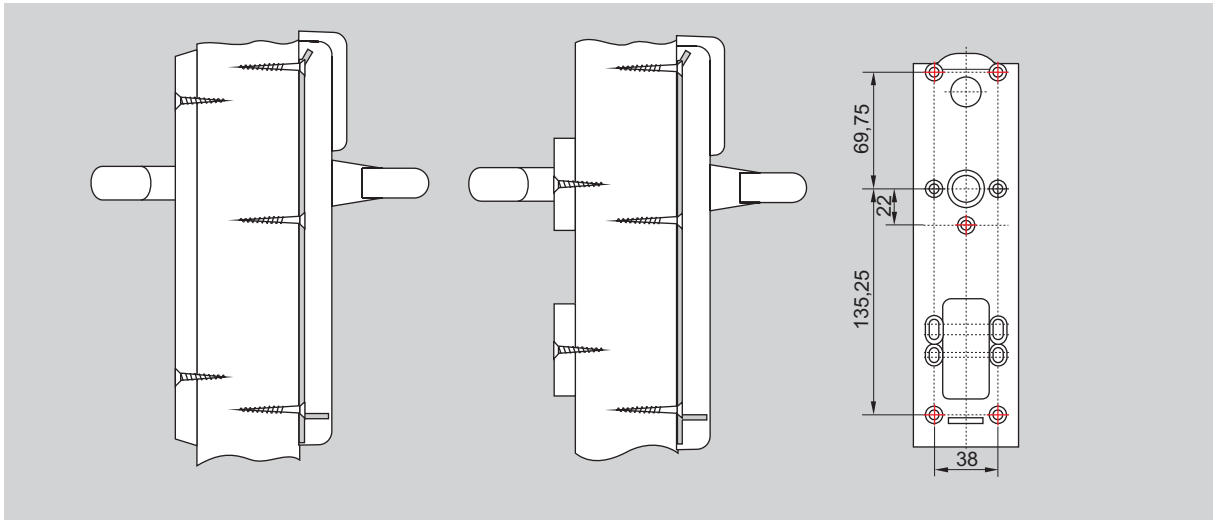
2.3.1 Long backplate screwed through



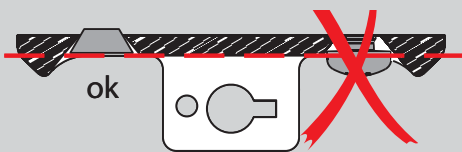
2.3.1 Rose screwed through



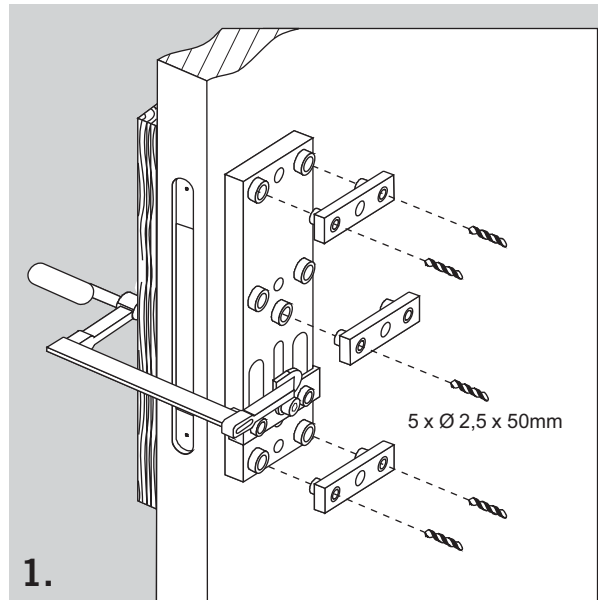
2.3.1 Long backplate or rose not screwed through



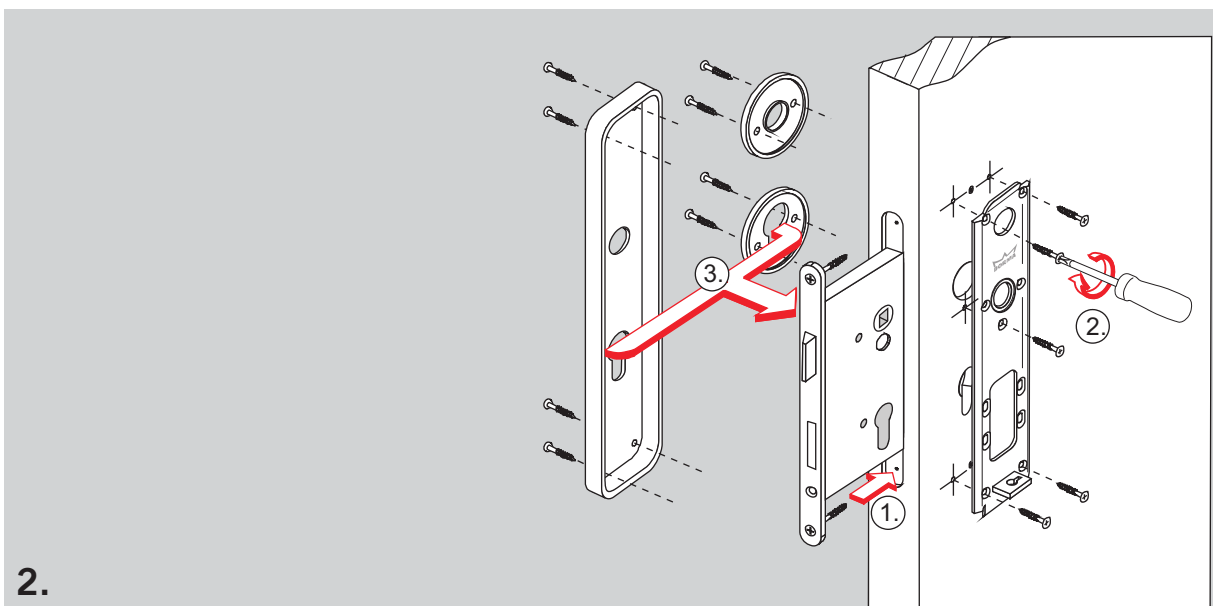
We recommend screwing through simple doors, such as those made with a flaxboard core.



Use only countersunk screws to fasten the mounting plate.
The screws may not protrude beyond the surface of the mounting plate.
If installed improperly, the batteries can be damaged and thereby cause high discharge currents to arise.
Risk of excessive heat, explosion and fire.

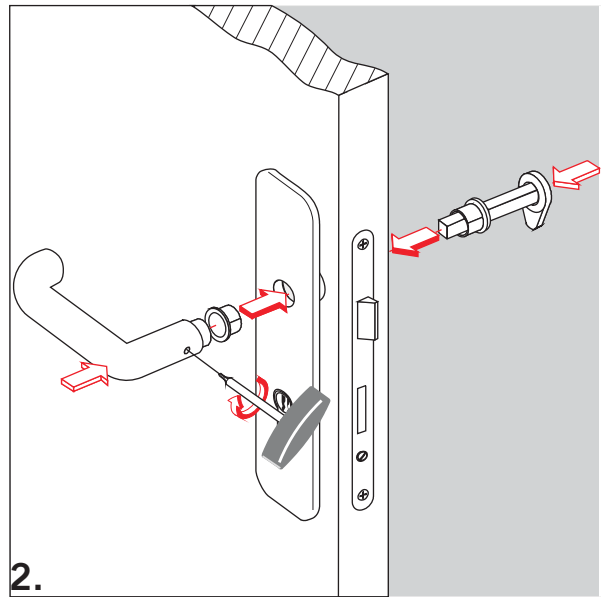
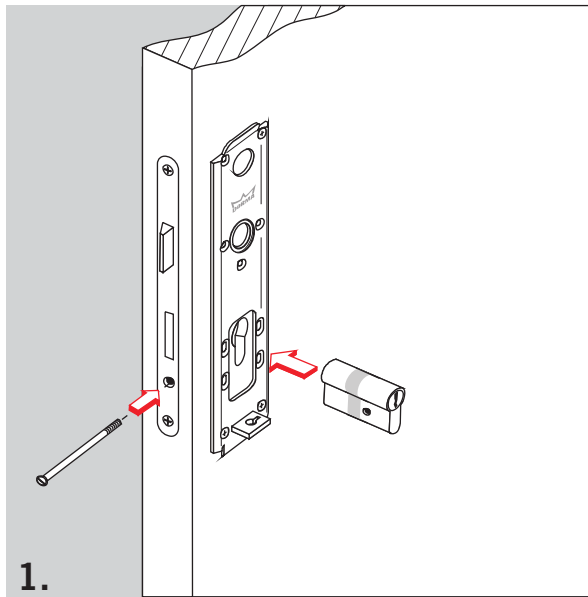


1.



2.

2.4 Final assembly



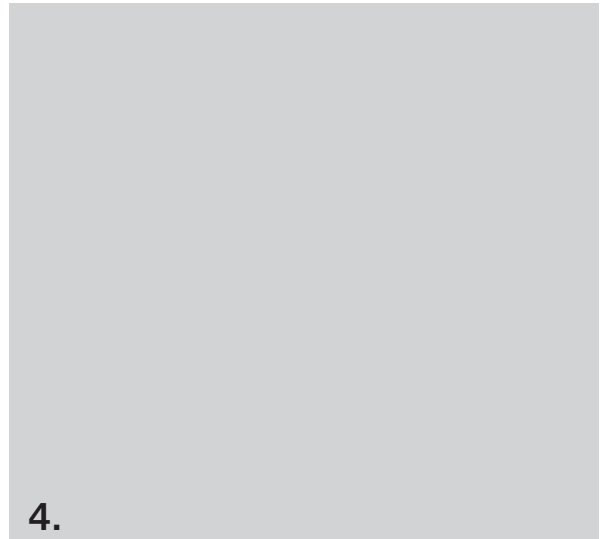
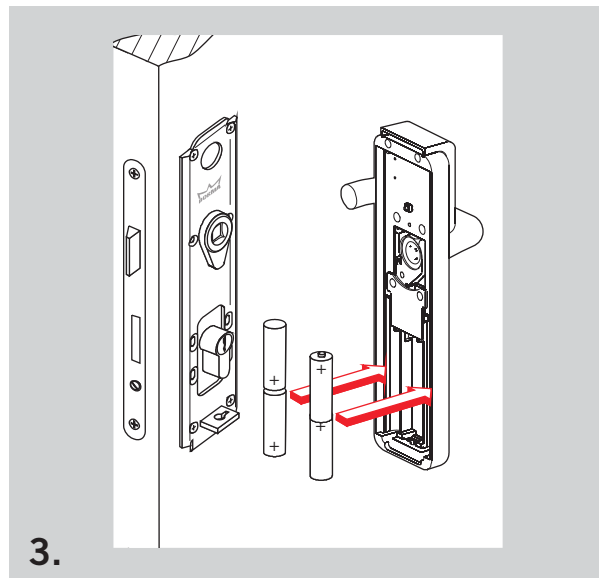
Only ever use unused, brand new batteries!

In order to ensure that the system operates without problems we recommend that only batteries of type **Energizer Ultra+ 1,5V** be used.

Rechargeable batteries and disposable batteries with differing voltage must not be used.

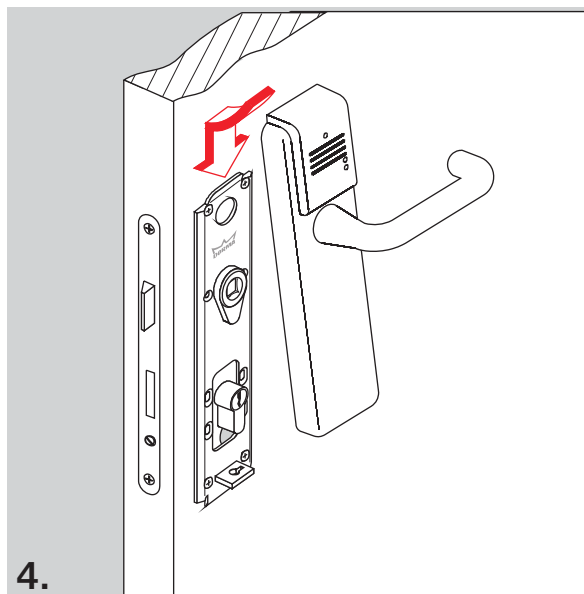


Do not use electrically conductive tools to insert/remove the batteries.
If the batteries are handled improperly, high discharge currents can arise.
Risk of excessive heat, explosion and fire.

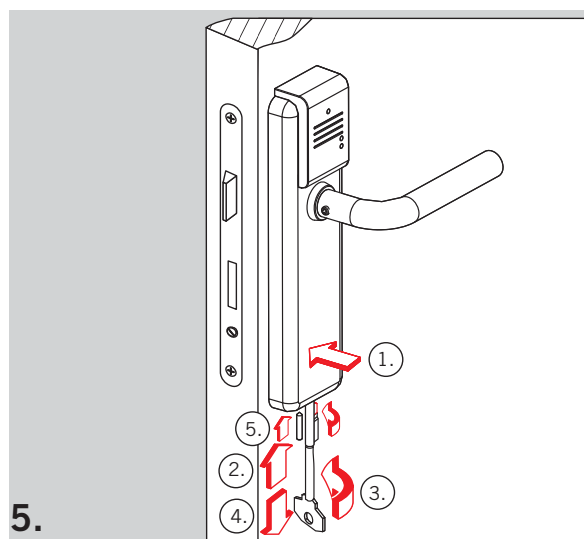




During fitting, make sure that no components are damaged.



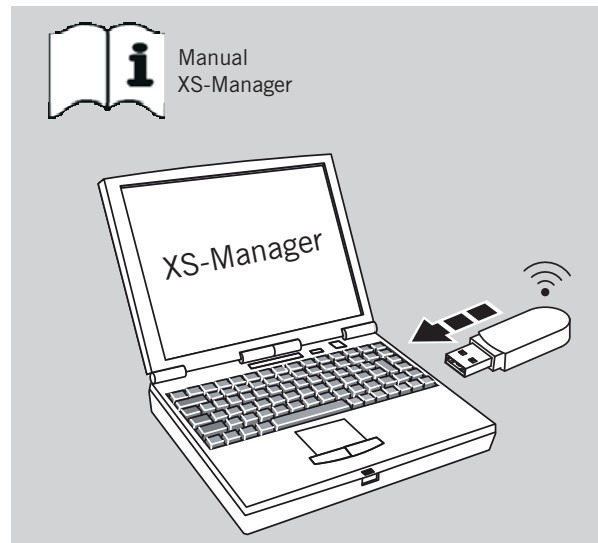
The grub screw (5.5) must be tightened with a torque of 0.8 Nm.



3.1 Initialisation

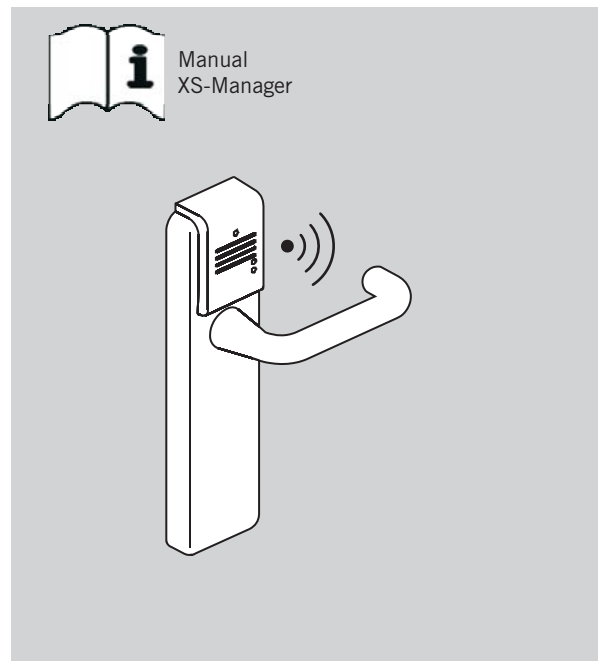
In order to put the XS-Fitting Pro into operation, a netbook with a USB-RF-Stick and installed XS Manager is required. The XS-Fitting Pro must be configured and initialised before it can be put into operation.

In order to do this, the door must be created in the host system and the data synchronised with XS Manager. During initialisation, the XS-Fitting Pro is assigned a unique identification number. Once the XS-Fitting Pro has been initialised, you need to upload access data, such as ID card numbers of authorised ID cards, from the host system. The XS-Fitting Pro is then ready for use.



3.2 Establishing Wireless Connection

You first need to start the XS Manager application, which will search for all available XS-Fitting Pro and list them. You can then select an XS-Fitting Pro from this list. The selected XS-Fitting Pro can be indicated by a blue flashing light. A blue flashing light indicates connection with XS Manager.



3.2 Optical Signals



Function	Signalling	Note
Positive booking	1x	Access is granted
Positive booking in Battery Warning Level 1	1x 4x	Access is granted
Positive booking in Battery Warning Level 2	1x 4x	Access is delayed 3 sec
Positive booking in Battery Warning Level 3	1x 4x	Access is delayed 6 sec
Negative booking	1x	Access is denied
Office released	2x	Access is granted permanently
Office released ended	1x 1x	
Selected for wireless connection	5x	Shows which cylinder XS-Manager is currently addressing
Wireless connection		Connection with XS Manager
Power On	1x	After the supply voltage has been put on
Motor blocked	3s	
Tampering attempt		The XS-Fitting Pro was removed from the mounting plate. This signal ceases after the XS-Fitting Pro is replaced
Launching / De-launching only by Legic reader system (PX51)	1x	

4. Operation

Use with badges with lock permissions (cards or transponder tags).

4.1 Standard access function

Hold the badge in front of the XS-Fitting Pro .

The door is unlocked for the programmed door open time and then locked again automatically. During this time, the door can be opened using the door handle in the usual way.

4.2 Office release

If the office release function is set in the access programme of the XS-Fitting Pro for a specified period, this function can be activated for that particular period by holding a badge with the relevant authorisation to the XS-Fitting Pro for approx. 3 seconds. During these 3 seconds, the green LED flashes twice.

The door remains unlocked until the programmed time and then locks automatically.

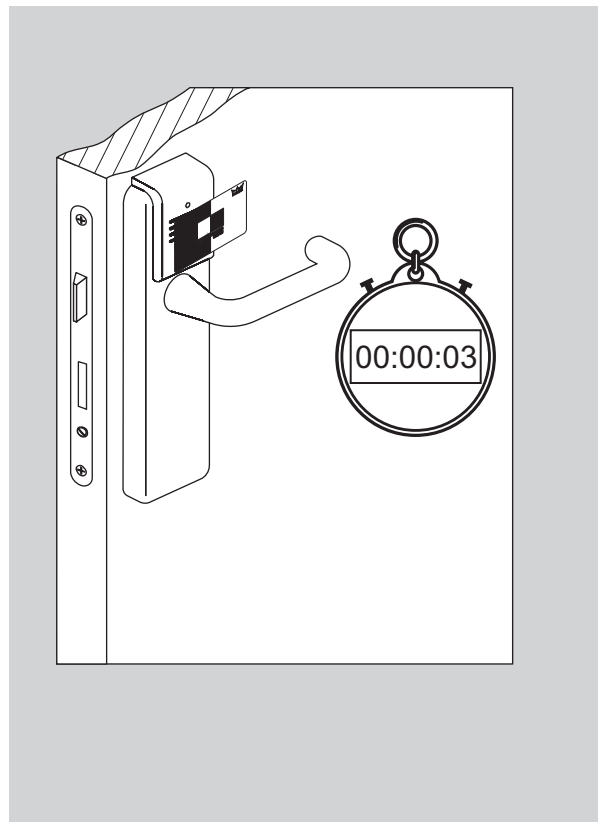
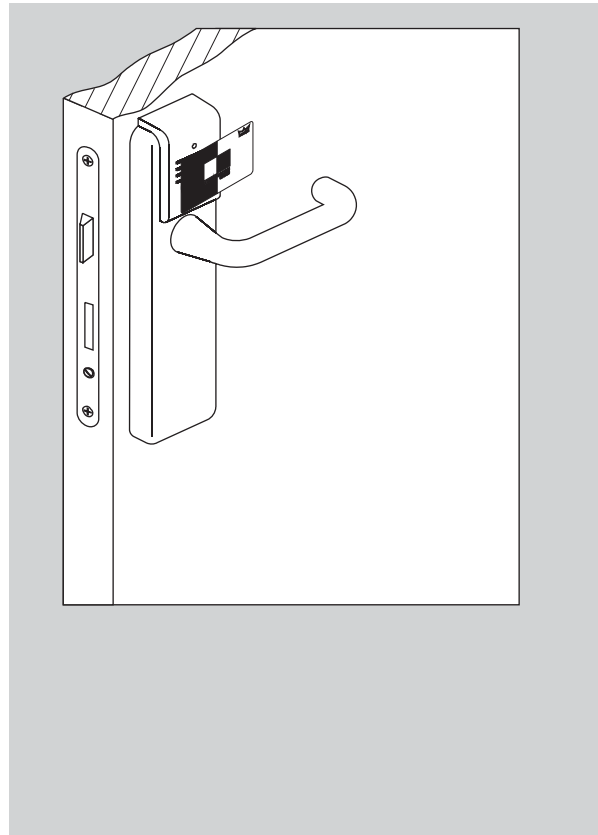
4.3 Reset office release

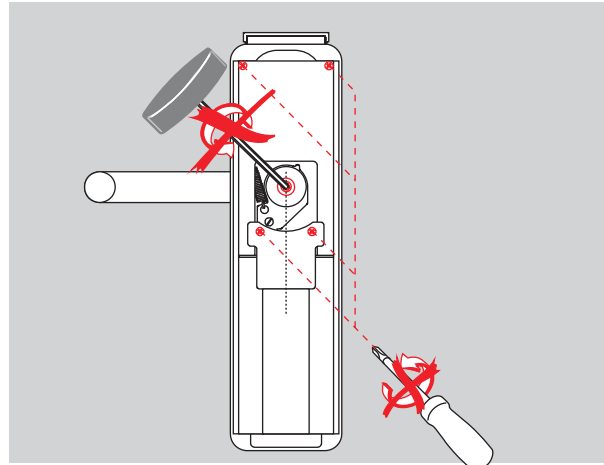
During the office release time, the door can be locked again by holding a badge with the relevant authorisation to the XS-Fitting Pro .

It remains possible to re-activate office release within the programmed office release time.

4.4 Permanent release

If permanent release is programmed for a period, the door is unlocked at the beginning and locked again automatically at the end of this period. Permanent release cannot be influenced by users. In this case, the door remains unlocked during the entire period





5.1 Batteries

5.1.1 Changing the batteries

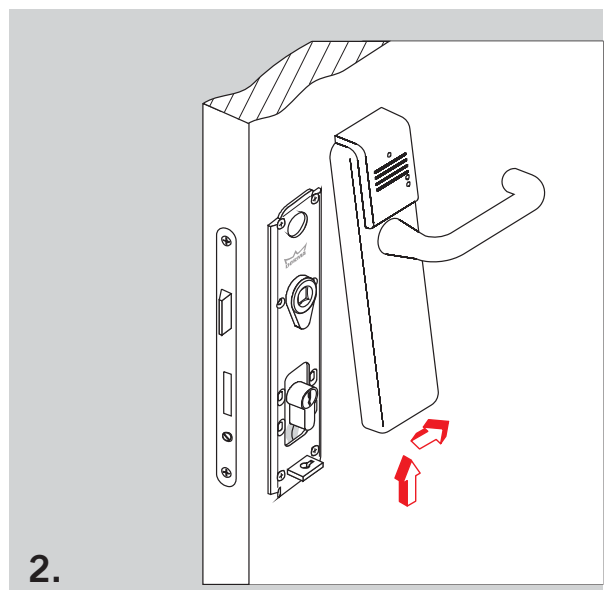
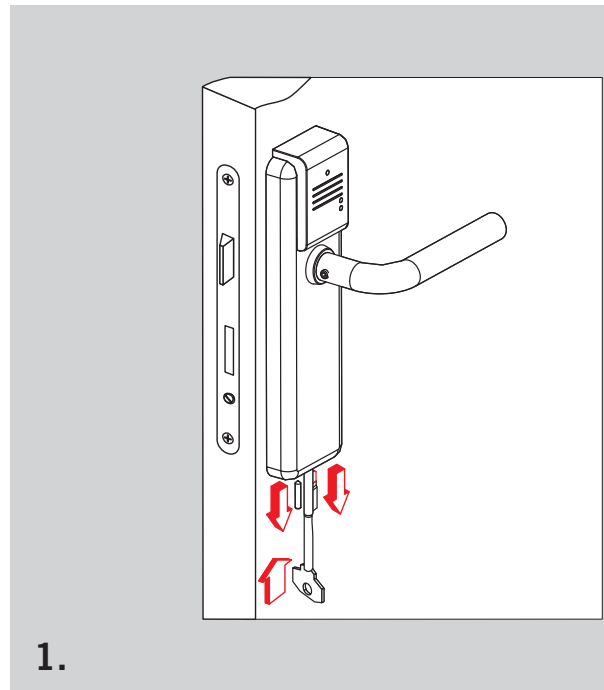
1. Remove the XS-Fitting Pro from mounting plate
2. Change the batteries
 - Check the polarity of the batteries!
3. Put the XS-Fitting Pro on the mounting plate and lock



Only ever use unused, brand new batteries!

In order to ensure that the system operates without problems we recommend that only batteries of type **Energizer Ultra+ 1,5V** be used.

Rechargeable batteries and disposable batteries with differing voltage must not be used.

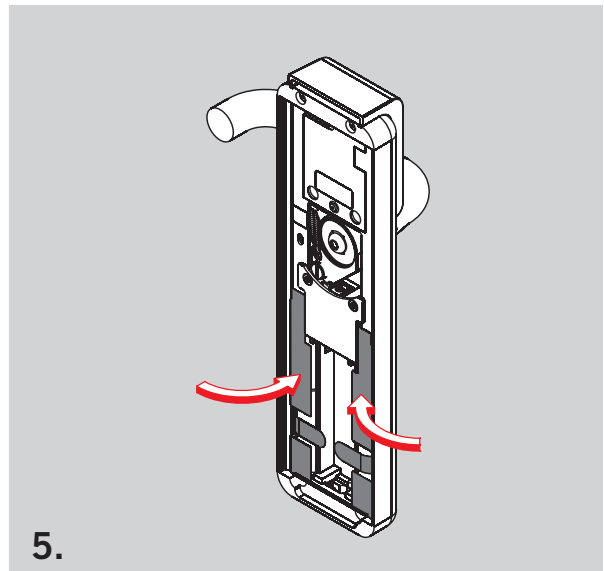
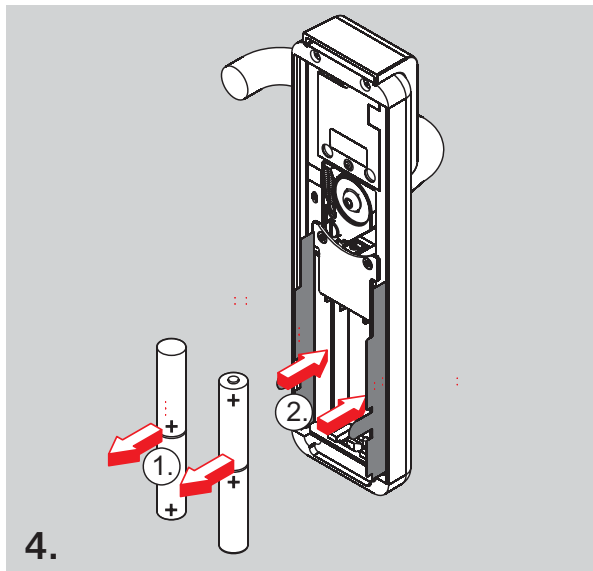
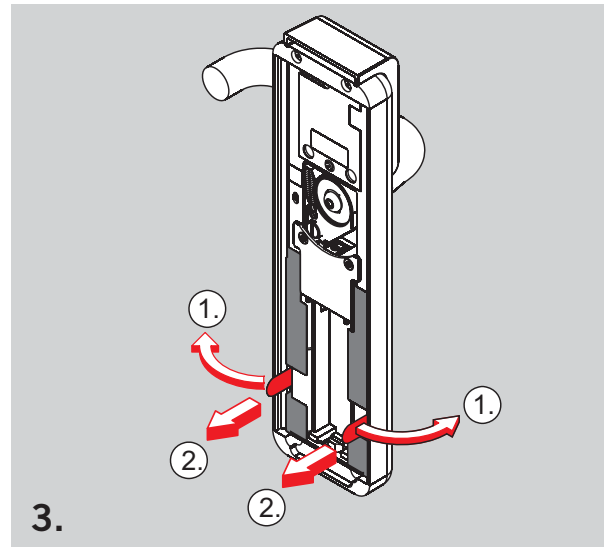




Do not use electrically conductive tools to insert/remove the batteries. If the batteries are handled improperly, high discharge currents can arise. Risk of excessive heat, explosion and fire.

3.1 Open up the bracket

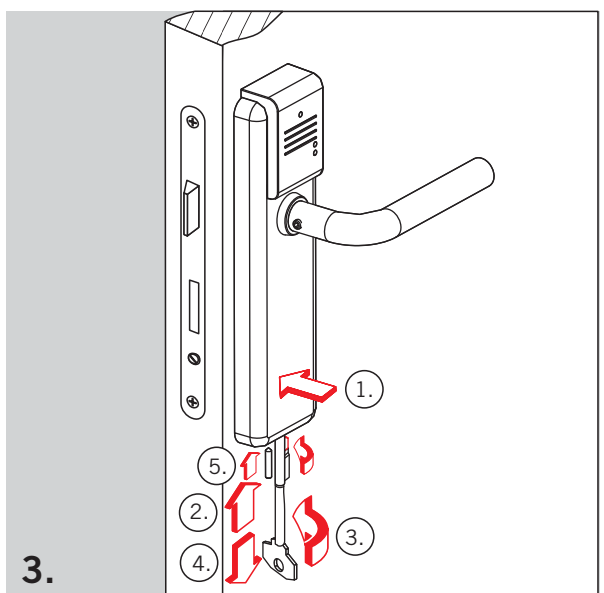
3.2 Pull on bracket gently, so that you can remove the batteries



The grub screw (3.5) must be tightened with a torque of 0.8 Nm.



The battery status must be reset in XS manager after the batteries have been replaced.



5.1.2 Battery warnings

The XS-Fitting Pro uses a series of changing signals during the opening process to indicate that the batteries capacity will soon no longer be sufficient to ensure proper operation. There are three warning levels.

First warning level:

When a badge is held in front of the XS-Fitting Pro , the lock permission is issued as programmed. The LED will light green and subsequent flash reed four times when the door is unlocked.

Second warning level:

If the battery capacity is further reduced, then there will also be a delay of 3 seconds before the XS-Fitting Pro unlocks the door. The signal is the same as stage 1

Third warning level:

If the battery capacity is further reduced, then there will also be a delay of 6 seconds before the XS-Fitting Pro unlocks the door. The signal is the same as stage 1.



Batteries must be replaced immediately with new ones as soon as any of the battery warnings occurs.

1.	1x	4x	Access is granted
2.	1x	4x	Access is delayed 3 sec
3.	1x	4x	Access is delayed 6 sec

5.2 Tamper alarm

If the XS-Fitting Pro is removed from the mounting plate, a visual alarm signal is emitted. This signal ceases after the XS-Fitting Pro is replaced.

DORMA Time + Access GmbH
Mainzer Straße 36-52
53179 Bonn
Germany

als verantwortlicher Hersteller für das nachfolgend bezeichnete Erzeugnis

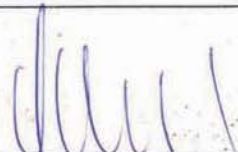
Bezeichnung	XS-Beschlag Pro
Bestimmungsgemäße Verwendung	Der XS-Zylinder Pro ist eine elektronische Schließeinheit zum Einbau in DIN-Türschlösser mit Europrofil-Zylindern oder in Türschlösser mit Schweizer Rundprofil vorgesehen. Zum konfigurieren des XS-Zylinders Pro oder generell zur Kommunikation mit einer übergeordneten Zentrale ist der XS-Zylinder Pro mit einem Funkmodul ausgestattet.
Ausstattung	Nahfeldleser Mifare DESFire, Legic Advant (13,56 MHz)
Ab Serien Nummer	0406630001
Geräteklasse	Funkanlage der Klasse 2
Frequenzband (Unterklasse)	865,0 – 870,0 MHz (Non-Specific Short Range Device) 13,553 – 13,567 MHz (Mifare DESFire, Legic Advant, Inductive applications)

erklärt hiermit die Übereinstimmung, der nach oben genannter Bezeichnung und Ausstattung gefertigten Exemplare, unter Voraussetzung der bestimmungsgemäßen Verwendung, mit den wesentlichen Schutzanforderungen folgender Richtlinie des Rates zur Angleichung der Rechtsvorschriften der Mitgliedstaaten der EG:

Richtlinie	Datum	Titel
1999/5/EG	03/1999	Funkanlagen und Telekommunikationsendeinrichtungen und die gegenseitige Anerkennung ihrer Konformität – kurz: R&TTE-Richtlinie

Die Konformität wird in Bezug auf folgende angewandte harmonisierte Europäische Normen erklärt:

Fundstelle	Ausgabe- datum	Richtlinienbezug
EN 60950-1/A12	2011-02	1999/5/EG, R&TTE-Richtlinie Artikel 3 (1) a) Gesundheit und Sicherheit
EN 50364	2001-10	1999/5/EG, R&TTE-Richtlinie Artikel 3 (1) a) Gesundheit und Sicherheit
EN 62479	2010-09	1999/5/EG, R&TTE-Richtlinie Artikel 3 (1) a) Gesundheit und Sicherheit
EN 301489-1 V1.8.1	2008-04	1999/5/EG, R&TTE-Richtlinie Artikel 3 (1) b) Elektromagnetische Verträglichkeit
EN 301489-3 V1.4.1	2002-08	1999/5/EG, R&TTE-Richtlinie Artikel 3 (1) b) Elektromagnetische Verträglichkeit
EN 300220-2 V2.3.1	2010-02	1999/5/EG, R&TTE-Richtlinie Artikel 3 (2) Effektive Nutzung des zugewiesenen Funkspektrums
EN 300330-2 V1.5.1	2010-02	1999/5/EG, R&TTE-Richtlinie Artikel 3 (2) Effektive Nutzung des zugewiesenen Funkspektrums



B. Schuck
Senior Department Manager



Bonn, 18.04.2012

125 kHz in pipeline

Power supply

4 Batteries
Energizer Ultra+, LR6, 1.5 V

Battery

Operating life at room temperature (20 °C)
Typical number of locking cycles: 30,000
Typical operating life when not operated: 4 years

The specified number of cycles relates to the times that the UID from the respective ID card type is read. Different configurations of reader properties may reduce the number of cycles by up to 40%.

Data Retention

10 years without battery

Date / time:

Clock buffering when battery replaced: usually 1 minute
Clock drift at room temperature: ±10 minutes/year
At +5 °C and +65 °C: -50 minutes/year.

Wireless Interface

865 - 870MHz
Range: max. 10 m
Compliance with ETSI EN 300 220

Signalling

1 x LED (red, green, blue, yellow)

Anti-tamper monitoring

Available

Number of Permissions

Depends on the access control system

Reader systems

The following reader systems are available, depending on the model:

- MIFARE (Classic, DESFire)
- LEGIC (prime, advant)
- Transmission frequency: 13.56 MHz
- Read range: 2 cm ¹⁾

HITAG (HITAG1, HITAG2, EM4102, EM4150)
in pipeline

- Transmission frequency: 125 kHz
- Read range: 2 cm ¹⁾

¹⁾ With reference ID card in credit card format
Compliance with ETSI EN 300 330

Ambient Conditions

Operating temperature: +5 °C to +50 °C
Storage temperature: -20 °C to +70 °C
Humidity: 0 to 80%, non-condensing
Tested to DIN IEC 60068-2-1/2/3

Protection rating

IP30

Dimensions

66 x 248 x 79 2) (w x h x d)
2) Depends on handle fitted

Colour:

Stainless-steel look; front: anthracite

Weight

1,800g, including batteries

Door dimensions

Door thickness: 32-105 mm
Backset: >= 35 mm
Centres distance: 72-92 mm

General Design

Device with internal power supply as per EN 60950-1.
Human exposure to electromagnetic fields as per EN 50364 and EN 62479

Use of the device is permitted in the countries listed below.

AT	BE	CY	CZ	DK
EE	FI	FR	DE	GR
HU	IE	IT	LV	LT
LU	MT	NL	PL	PT
SK	SI	ES	SE	GB
BG	RO			
ISO 3166 Code				



We reserve the right to make technical modifications and improvements to promote the progress of our equipment.

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