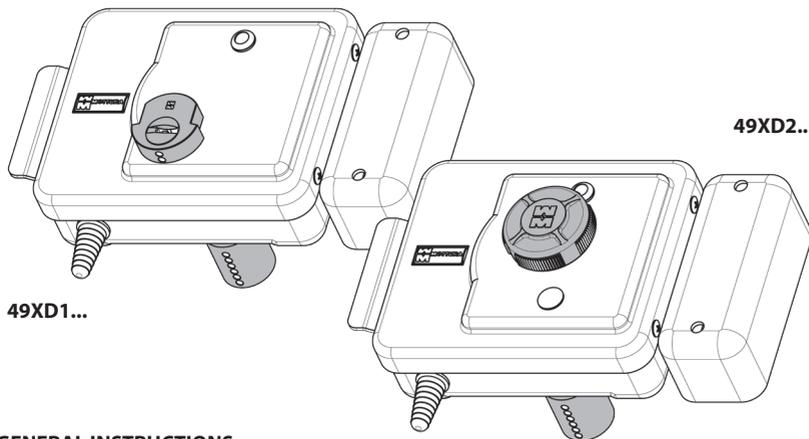


MOTORIZED LOCK FOR EXTERIOR DOORS OR GATES 49XD1... 49XD2... USER MANUAL



12/24V



Class 4 driving rain
resistance
Class 4 dust resistance

GENERAL INSTRUCTIONS

This manual is intended for technically qualified and trained installers.

Mottura Serrature di Sicurezza S.p.A. thanks you for choosing this product and reminds you:

- To read these instructions very carefully before installing this product and before doing any maintenance.
- That all assembly and connection procedures must follow good practice procedures and comply with current laws and standards.
- To NOT install this product in explosive rooms or atmospheres or in the presence of inflammable fumes/gases.
- To switch off the power supply and disconnect all live parts before doing any installation or maintenance work on the product. Take all possible precautions to eliminate the risk of electrical shock when performing installation or maintenance procedures described in this manual.
- That the installer must deliver these instructions and all of the maintenance instructions to the user.
- To keep these instructions for future reference and attach the sales receipt to validate the warranty.
- To contact authorized dealers only in case of problems.

Mottura Serrature di Sicurezza S.p.A. may change the characteristics of the products described in these instructions at any time and without notice.

WARRANTY TERMS

This product has been inspected by Mottura Serrature di Sicurezza S.p.A. and is guaranteed to be free of all manufacturing defects for the time specified by current Italian law, starting on the date of purchase indicated on the sales receipt. The warranty is in force if the sales receipt, showing details identifying the product, is exhibited to customer service personnel. The warranty covers the replacement or repair of parts found defective at origin due to manufacturing defects. Costs of shipping to and from service centres will be paid by the customer. In case of repeated malfunctions of the same type or unrepairable defects, Mottura Serrature di Sicurezza S.p.A. may, at its own discretion, replace the entire product.

The warranty on the replaced product will continue until expiration of the original warranty. If service work must be performed at the customer's premises, the customer shall – if requested – pay the authorised technical personnel travel expenses.

Risks related to product transportation shall be covered by the customer when shipped directly by the customer, and by the authorised technician when the product is picked up and shipped by the technician.

LIMITS OF LIABILITY

The warranty does not cover damage deriving from:

- negligence, carelessness or use in any manner not described in these instructions
- failure to protect the device before doing any procedure that may generate scrap or waste (welding, drilling of panels, drilling of structure, etc.) that prevents its correct functioning
- maintenance performed in any manner not described in these instructions or by unauthorised personnel
- transport without the necessary precautions and from any circumstances that cannot be attributed to manufacturing defects.

In addition, Mottura Serrature di Sicurezza S.p.A. declines all liability for any damage to persons or property deriving from failure to observe all of the precautions described herein.

N.B.: All electrical connections and mounting operations as well as subsequent service operations must be performed with the product DISCONNECTED from the power supply system.



safeguarding your security

MADE
IN
ITALY

LOCK INSTALLATION

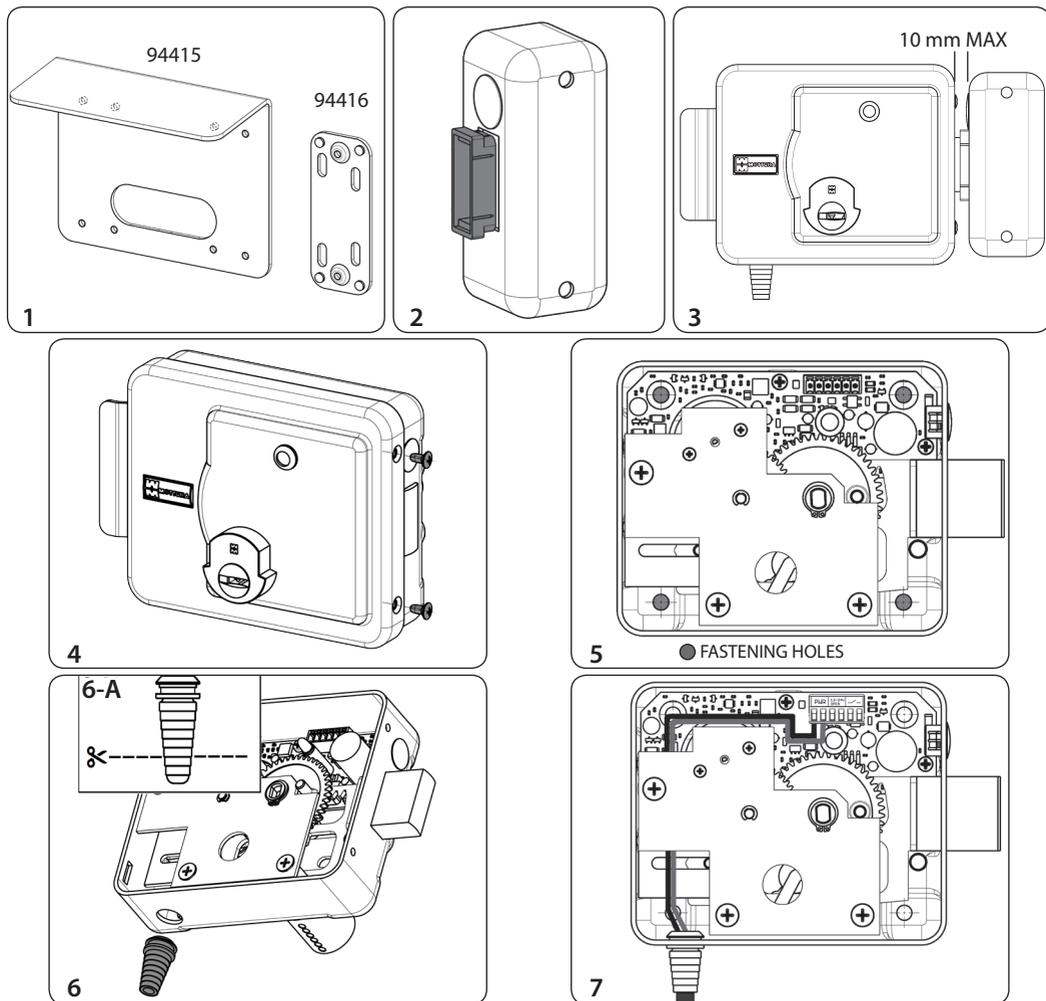
In case of a new installation use the supplied template.

Solder or fasten the optional plates (code 94415/94416 - Fig. 1) to the gate structure and temporarily position the lock and strike plate. To position the strike plate correctly, use the supplied plastic template (Fig. 2), bearing in mind that the distance between the lock and the strike plate must not exceed 10 mm (Fig. 3).

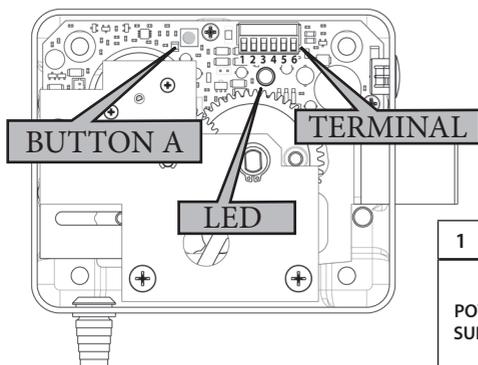
If replacing an existing electric lock, fasten the XDRIN lock using the existing plates/holes.

Mount the lock according to the following procedure:

- Unscrew the side screws and remove the cover (Fig. 4).
- Attach the lock and the strike plate using the supplied screws (Fig. 5).
- Cut the supplied graduated sleeved grommet (Fig. 6 - A) in order to have the right diameter for the entering power supply cable, then insert the grommet into its designated hole at the bottom of the lock (Fig. 6).
- Insert the cable and pull it through to the terminal block attached to the electronic board (Fig. 7) and following the electrical connection diagrams shown in these instructions.
- Replace the cover and test the lock.

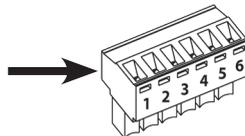


DESCRIPTION OF COMPONENTS



DESCRIPTION OF TERMINAL BLOCK PINS	
Contact° No.	Function
1	Lock power supply
2	Lock power supply
3	Wet contact command 1
4	Wet contact command 2
5	Dry contact command (GND)
6	Dry contact command

1	2	3	4	5	6
POWER SUPPLY		12 - 24V UNLOCK IMPULSE		DRY CONTACT 	



REGULATING THE GRACE PERIOD

The grace period is the amount of time within which the door must be opened, measured from the moment the button has been pressed. If the door has not been opened within the set grace period, it shall be locked automatically.

The default grace period is 10 seconds, but it may be changed from 5 to 60 seconds at 5-second increments. Grace period modification procedure must be performed while the door is open and lock is unlocked, according to the following procedure (see the components description chapter):

1. Remove the lock cover to access the internal electronic circuits;
2. Enter the programming mode by pressing the circuit button A for 3 seconds until the RED LED comes on, then release the button;
3. The GREEN LED stays lit for 1 second and the counting starts;
4. The RED LED starts flashing. Each flash indicates a 5-second increment (e.g., 3 flashes = 15 seconds), up to a maximum of 12 flashes (= 60 seconds);
5. Once the desired time has been reached, immediately press the button to confirm the new setting;
6. The RED-GREEN alternating flash confirms that programming has been completed successfully. Exiting the programming mode is automatic.

N.B.: If the system does not detect that the button has been pressed by the user during the counting (12 flashes), the procedure automatically restarts from step 3. If the button is not pressed again for another two cycles, the system exits the programming mode automatically.

WIRING DIAGRAMS

N.B.: All connections must be performed by trained technicians in conformance with current electrical safety standards and following good practice procedures.

The lock must be powered with a 12V or 24V DC or AC current (Pin 1 and 2, no set polarity). Commands can be issued using 12V or 24V DC or AC impulses through wet (powered) contacts (Pin 3 and 4) or dry (volt-free) contacts (Pin 5 and 6, no set polarity).

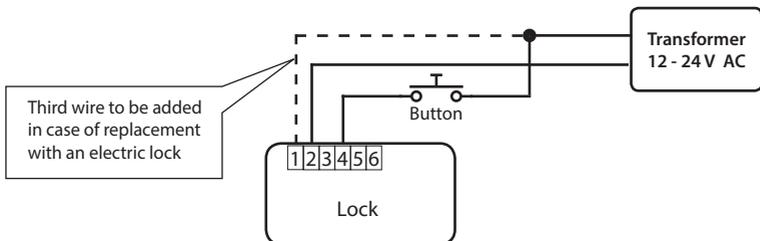
N.B.: XDRIN does not support voltages lower than 12V and greater than 24V. To power the lock, the use of Mottura Network Adapter (code 99.683) is recommended. Otherwise, your power supply device must necessarily bear the CE marking and conform to the technical specifications listed in our catalogue.

XDRIN supports the simultaneous use of commands of different types (e.g., dry-contact and voltage impulse) in the same lock. It is possible, for example, to install two buttons used, respectively, as dry contact and voltage impulse.

N.B.: Wires used for connecting the lock must be of a minimum section of 0.5mm² and must be sheathed.

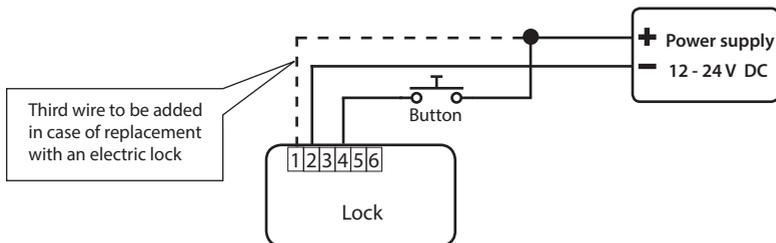
- Connection controlled by power transformer

The lock can be controlled via a wet connection coming from the lock transformer (12-24V AC). Pins 1 and 2 are used for the device power supply (no set polarity); pin 4 is used for the button input;



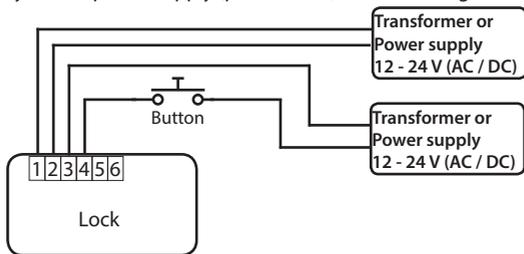
- Connection controlled by power supply

The unlock command can be an electric impulse sent to the POSITIVE pole of the lock power supply.



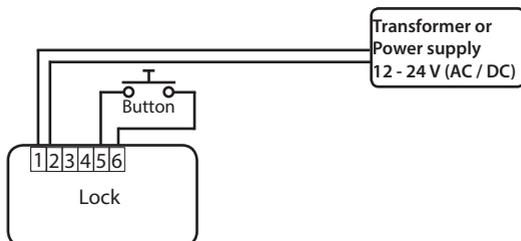
- Connection with two separate power sources

In this case, the lock's power source (12-24V AC/DC) can be different from the source of the unlocking command impulse. There is no set polarity for the power supply (pins 1 and 2) and unlocking command impulse (pins 3 and 4).



- Button connection using dry contact

In this configuration the lock is controlled using a dry (volt-free) contact. The button must therefore be connected to pins 5 and 6 of the disconnectable terminal (no set polarity). The lock can be powered by 12 to 24V DC or AC current.

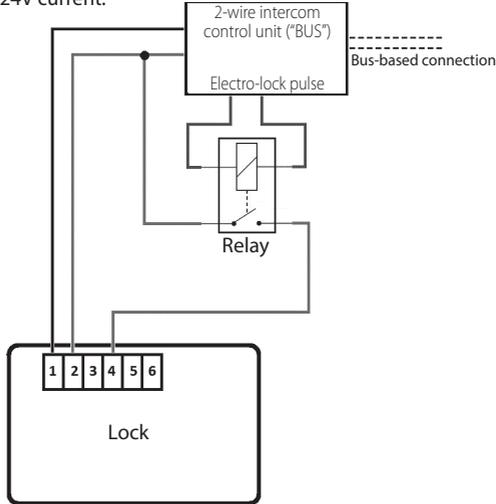


N.B.: The lock must not be operated mechanically when activated electrically.

BUS-BASED CONNECTION

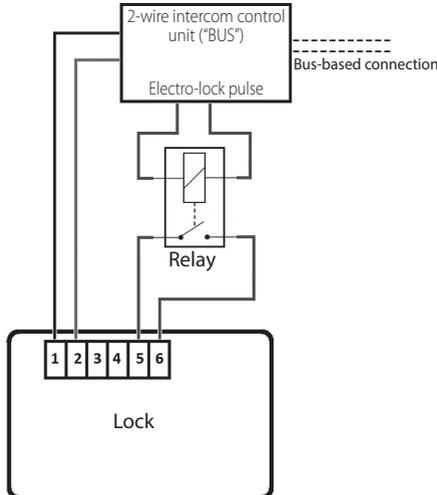
- Bus-based connection to the control unit (two wires) via a voltage pulse relay

In this configuration the lock is controlled by a positive voltage pulse on Terminal 4.
The lock can be powered by a 12 to 24V current.



- Bus-based connection to the control unit (two wires) via a dry-contact relay

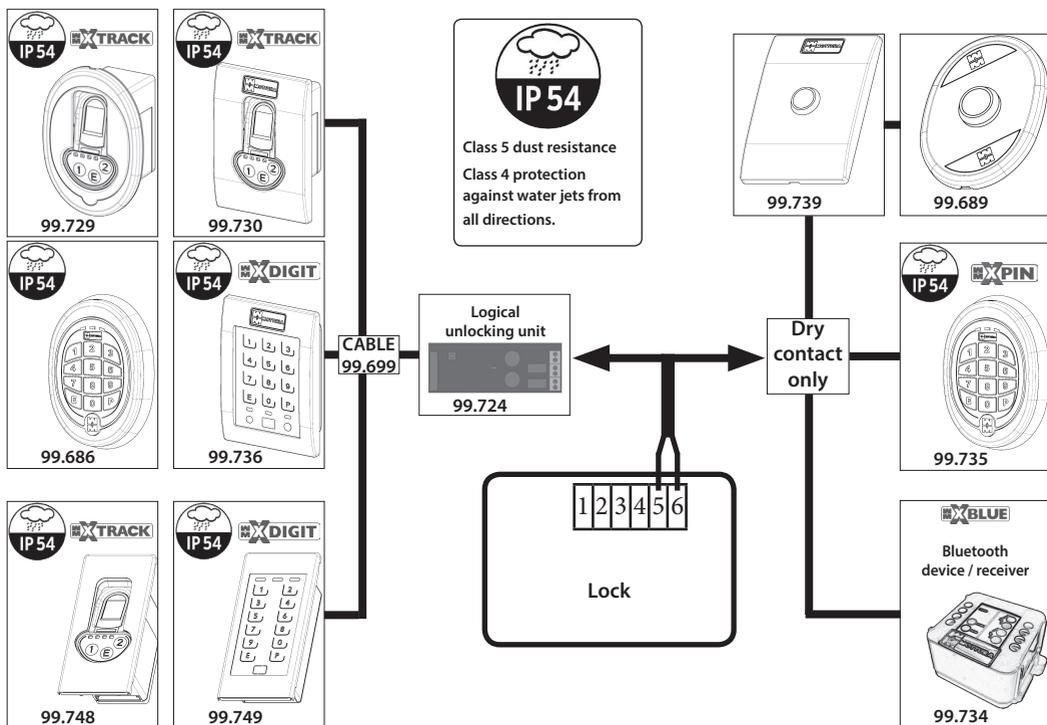
In this configuration the lock is controlled by a dry-contact (volt-free) relay.
The lock can be powered by a 12 to 24V current.



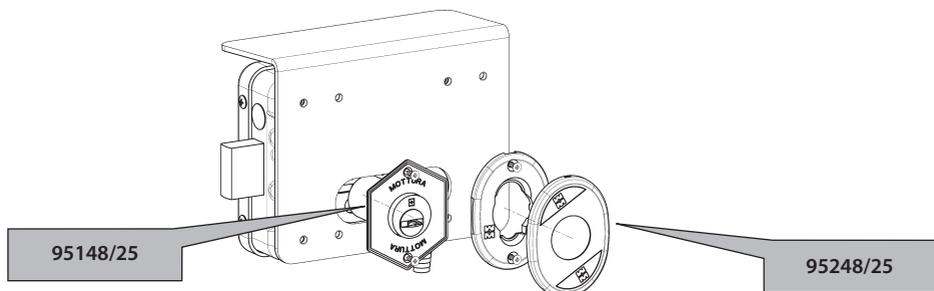
N.B.: The relay used must have electrical specifications that are compatible with the system in which it is installed.

CLOSE-DOOR DEVICE

To ensure correct operation and alignment between sensor and magnet of the XDRIN lock during closing, the door / gate should be equipped with a door-closing device.



Example of lock assembly using external escutcheons



JAMMING ERRORS

In the event of jamming due to mechanical problems that prevent proper bolting, the lock will automatically proceed to make 5 additional locking attempts. If none of the attempts has been successful and the lock remains unlocked, the jamming error shall be signalled with then continuous flashing of the red LED, which will terminate only after the user has activated the lock electrical control.

REPLACING AN EXTERNAL CYLINDER

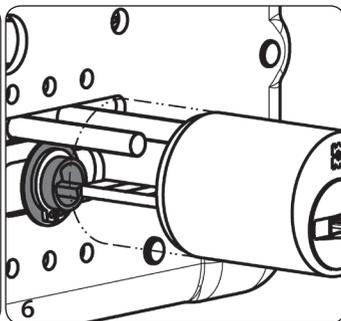
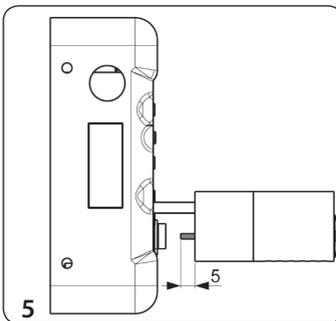
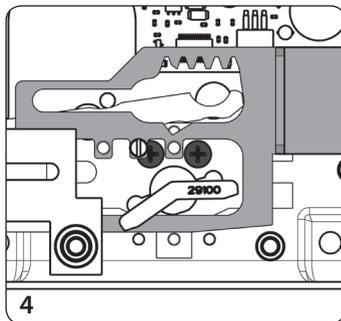
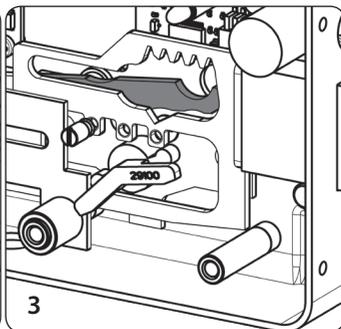
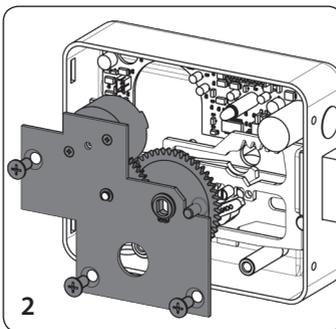
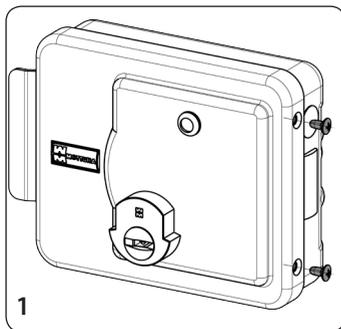
To replace the cylinder, use the supplied screws.

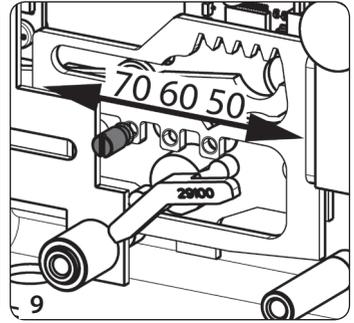
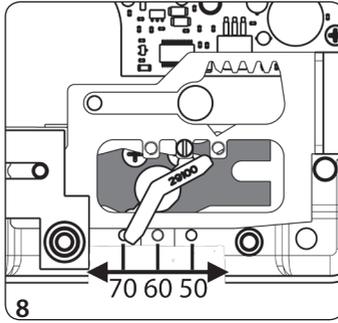
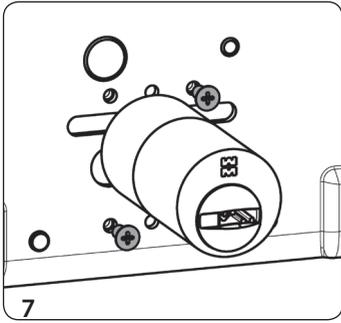
- Unscrew the side screws and remove the cover (Fig. 1).
- Remove the entire gear assembly (plate, 2 toothed wheels, motor) kept in place by 3 screws (Fig. 2) and disconnect the motor connector.
- Lift the highlighted lever (Fig. 3) and move the bolt to create the space necessary for unscrewing the screws that keep the cylinder in place (Fig. 4).
- Remove the existing cylinder.
- On the new cylinder, shorten the stem if necessary (5 mm projection from the cylinder brass spacer - Fig. 5).
- Remount the cylinder (Fig. 6).
- Reconnect the motor connector, reinsert the gear assembly, making sure that the toothed wheels are aligned correctly with the deadbolt teeth and verifying they fit by moving the assembly manually.
- Replace the cover.

This lock offers the possibility of replacing the internal and/or external cylinder with cylinders of the same type (e.g., of the same master system). If the gate thickness is greater than the cylinder length, you can use the special extension KIT (optional) code 98C47ES001.

CHANGING THE KEY ENTRY

- Unscrew the side screws and remove the cover (Fig. 1).
- Remove the entire gear assembly (plate, 2 toothed wheels, motor) kept in place by 3 screws (Fig. 2) and disconnect the motor connector.
- Lift the highlighted lever (Fig. 3) and move the bolt to create the space necessary for unscrewing the screws that keep the cylinder in place (Fig. 4).
- Loosen the screws that keep the cylinder in place, remove the 2 screws set on the box (Fig. 7) and move the plate to the desired key entry position – 50, 60 or 70 (Fig. 8), replace the 2 box screws and tighten the 2 cylinder screws.
- Insert the pin into the deadbolt (as shown in Fig. 9) according to the selected key entry position.
- Reconnect the motor connector, reinsert the gear assembly, making sure that the toothed wheels are aligned correctly with the deadbolt teeth and verifying they fit by moving the assembly manually.
- Replace the cover.





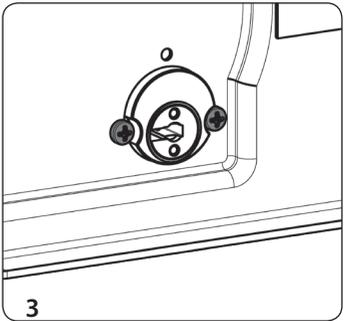
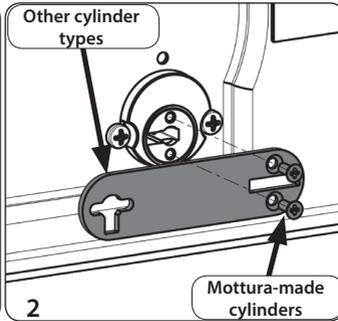
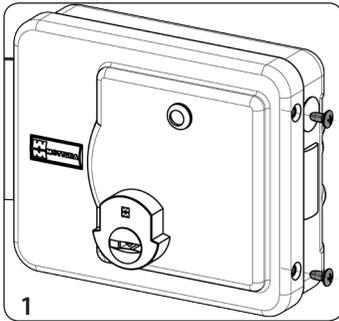
Right-hand version

REPLACING AN INTERNAL CYLINDER

Unscrew the side screws and remove the cover (Fig. 1).

Remove the tailpiece by unscrewing the two highlighted screws (Fig. 2), remove the existing cylinder by unscrewing the 2 screws (Fig. 3).

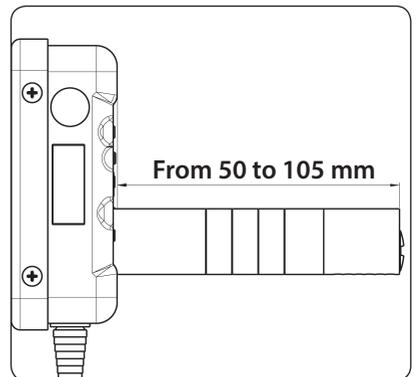
Install the new cylinder, then reassemble the tailpiece and replace the cover.

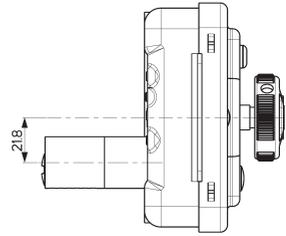
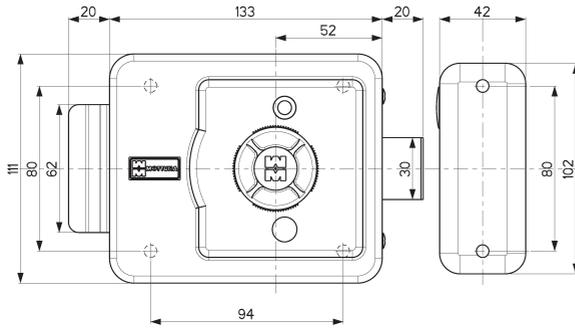


DRAWINGS AND TECHNICAL SPECIFICATIONS

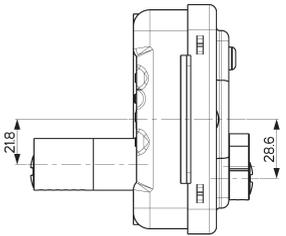
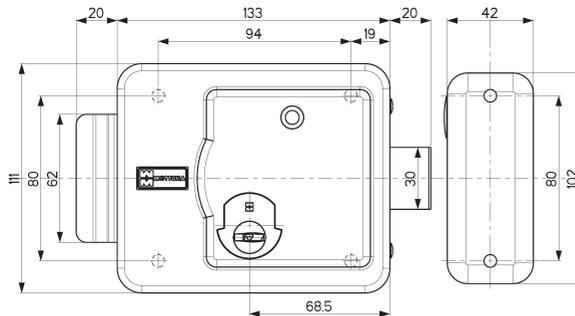
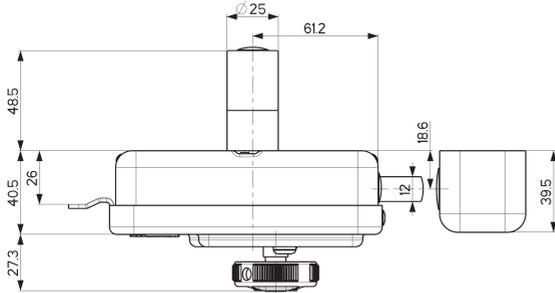
Power supply	From 12 to 24V AC/DC
Versions	Right-hand or left-hand knob/cylinder Right-hand or left-hand cylinder/cylinder
Entry	Adjustable 50 - 60 - 70 mm
Max. power absorption (during motor stall)	500mA
Holding current	30mA
Operating temperature	From -25°C to 80°C
Automatic relocking grace period	Adjustable from 5 to 60 seconds with 5-second increments
Door bolted signal	Red/green dual colour LED
Protection rating	IP44

External cylinder extension kit cod. 98C47E5001





**Internal knob version
49XD2...**



**Internal cylinder version
49XD1...**