

UNDERGROUND/EXTERNAL AUTOMATION FOR SWING GATES

MYTO SERIES



INSTALLATION MANUAL  
**MYTO ME**



English

EN

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# **WARNING!**

## **Important instructions for the safety of people:**

# **READ CAREFULLY!**



### **Foreword**

• Use of the products must be restricted to its intended use (i.e. that for which it was expressly built for). Any other use is to be considered dangerous. Came Cancelli Automatici S.p.A. is not liable for any damage resulting from improper, wrongful or unreasonable use • Keep these warnings with the installation and use manuals issued with the automated system.

### **Before installing**

*(preliminary check: in case of a negative outcome, do not proceed before having complied with the safety obligations)*

• Make sure that the parts you intend to automate are in good working order, and that they are properly balanced and aligned. Also, make sure that proper mechanical stops are already in place • If the operator will be installed at a height of less than 2.5 m from the ground or other access level, check whether you will need any protections and/or warnings • Any gate leaves, fitted with pedestrian entrances, onto which you will install an operator, must have a blocking mechanism when the gate is in motion • Make sure that the opening of the automated gate is not an entrapment hazard as regards any surrounding fixed parts • Do not mount the operator upside down or onto any elements that may fold under its weight. If needed, add suitable reinforcements at the points where it is secured • Do not install onto gates on either an upward or downward slope (i.e. that are not on flat, level ground) • Check that any lawn watering devices will not wet the gearmotor from the bottom up.

### **Installation**

• Carefully section off the entire site to prevent unauthorised access, especially by minors and children • Be careful when handling operators that weigh more than 20 Kg (see installation manual). In such cases, employ proper weight handling safety equipment • All opening commands (e.g. buttons, key selectors, magnetic detectors, etc.) must be installed at least 1.85 m from the gate's area of operation perimeter - or where they cannot be reached from the outside of the gate. Also, the direct commands (e.g. push button, or proximity devices, etc.) must be installed at a height of at least 1.5 m and must not be accessible to the public • All 'maintained action' commands, must be placed where the moving gate leaves, transit areas and driveways are completely visible • If missing, apply a permanent label that shows the position of the release mechanism • Before delivering to the client, verify that the system is EN 12453 (impact test) standard compliant. Make sure that the operator has been properly adjusted and that the safety and protection devices, as well as the manual release

are working properly • Where necessary and in plain sight, apply the Warning Signs (e.g. gate plate).

### **Special instructions and advice for users**

• Keep the gate's area of operation clean and clear of any obstacles. Trim any vegetation that may interfere with the photocells • Do not allow children to play with the fixed command devices, or in the gate's area of operation. Keep any remote control devices (i.e. transmitters) away from the children as well • Frequently check the system, to see whether any anomalies or signs of wear and tear appear on the moving parts, on the component parts, on the securing points, on the cables and any accessible connections. Keep any joints (i.e. hinges) lubricated and clean, and do the same where friction may occur (i.e. slide rails) • Perform functional tests on photocells and sensitive edges, every six months. Keep glass panels constantly clean (use a slightly water-moistened cloth; do not use solvents or any other chemical products) • If the system requires repairs or modifications, release the operator and do not use it until safety conditions have been restored • Cut off the power supply before releasing the operator for manual openings. See instructions • Users are FORBIDDEN to carry out ANY ACTIONS THAT THEY HAVE NOT BEEN EXPRESSLY ASKED TO DO OR SO INDICATED in the manuals. Any repairs, modifications to the settings and extraordinary maintenance MUST BE DONE BY THE TECHNICAL ASSISTANCE STAFF • On the periodic maintenance log, note down the checks you have done.

### **Special instructions and advice for all**

• Avoid working near the hinges or moving mechanical parts • Stay clear of the gate's area of operation when in motion • Do not resist the direction of movement of the gate; this may present a safety hazard • At all times be extremely careful about dangerous points that must be indicated by proper pictograms and/or black and yellow stripes • When using a selector or command in 'maintained action' mode, keep checking that there are no people in the area of operation of the moving parts. Do this until you release the command • The gate may move at any time without warning • Always cut the power when cleaning performing maintenance.

## Legend of symbols



This symbol tells you to read the section with particular care.



This symbol tells you that the sections concern safety issues.



This symbol tells you what to say to the end-users.

## Intended use and limits to use

### Intended use

The MYTO ME automation is designed to power swing gates for residential or apartment block use.



Installation executed in a manner other than as instructed in this technical manual are prohibited.

### Limits to use

Max. gate weight 200 Kg, max. gate-leaf width 1.80 with a max. gate-leaf opening of 110° (see installations).

## Description

This product is engineered and manufactured by CAME cancelli automatici s.p.a. and complies with current safety regulations. The automation is made up of a fixing / foundation casing, a gearmotor, a transmission arm with slide guide and slide rail.

### Technical features

Control panel power supply: 230 V AC 50/60 Hz

Motor power supply: 24 V DC 50/60 Hz

Max. draw: 10 A

Power: 240 W

Max Torque: 260 N

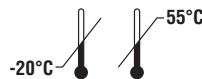
Gear ratio: 1/1396.5

Duty cycle: intensive use

Protection rating: IP67

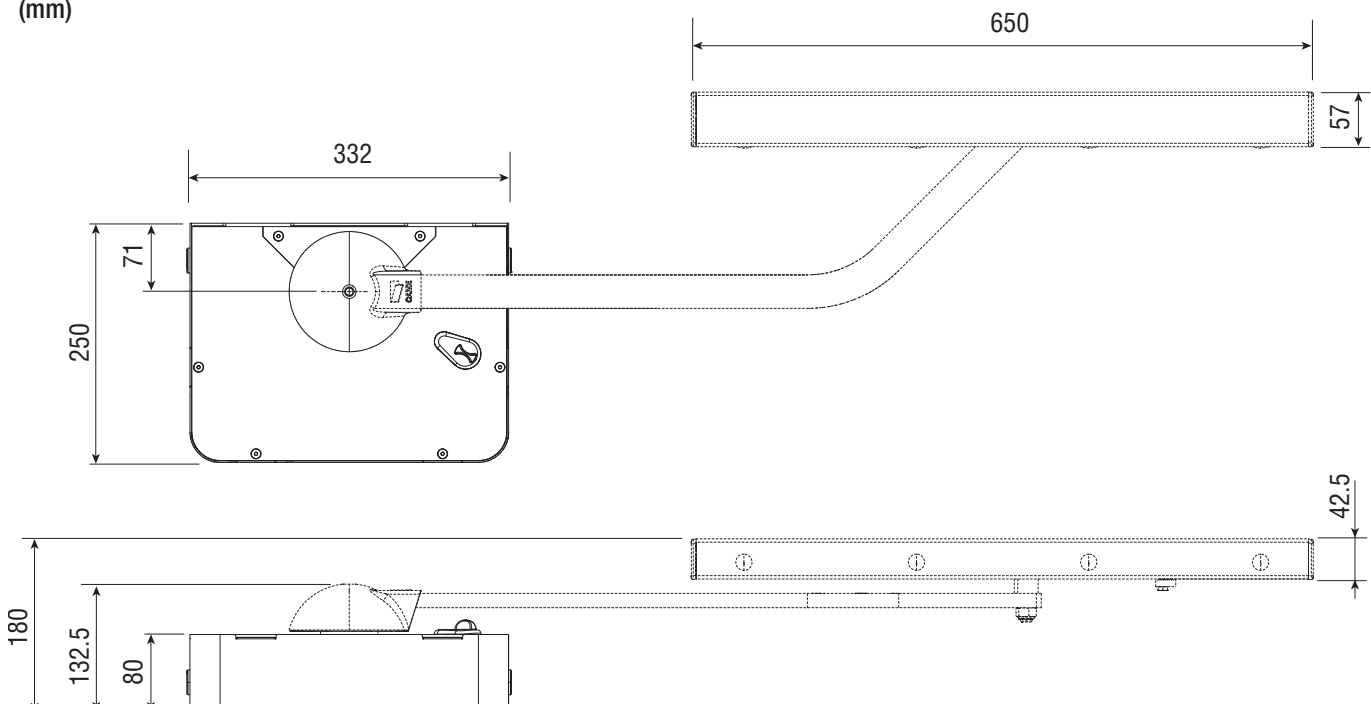
Weight: 6,1 Kg

Insulation class: I

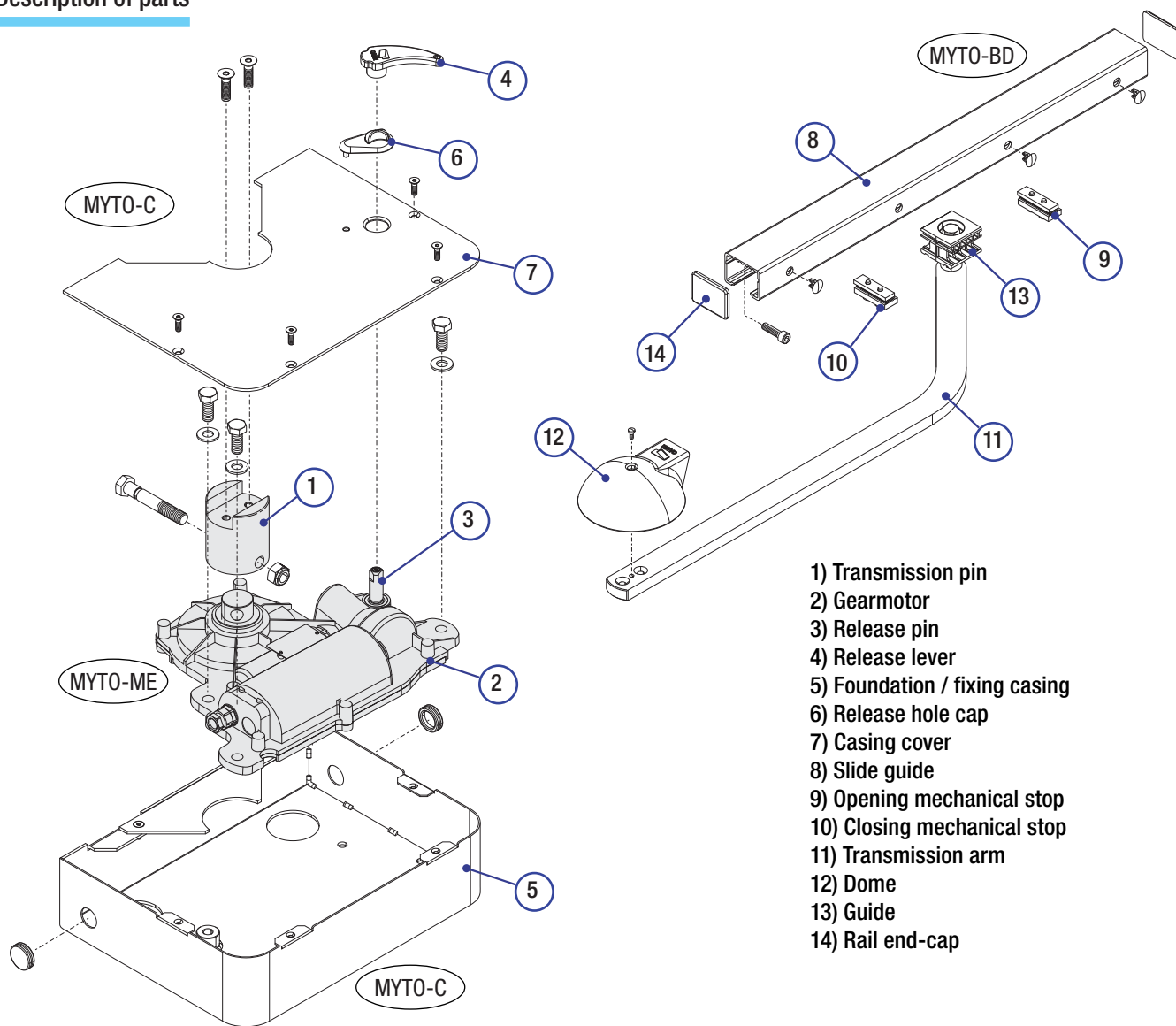


### Dimensions

(mm)

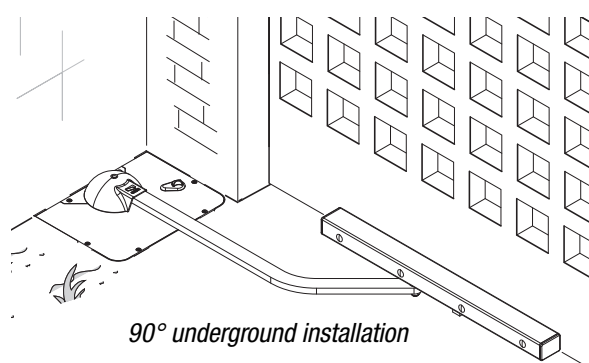
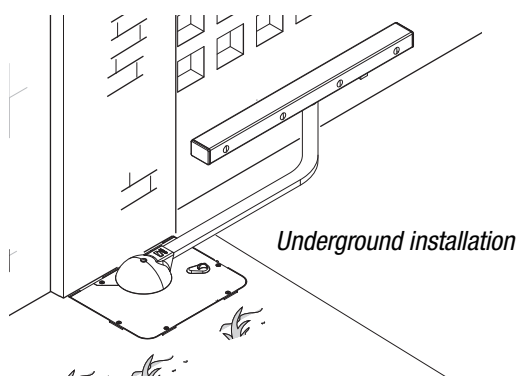
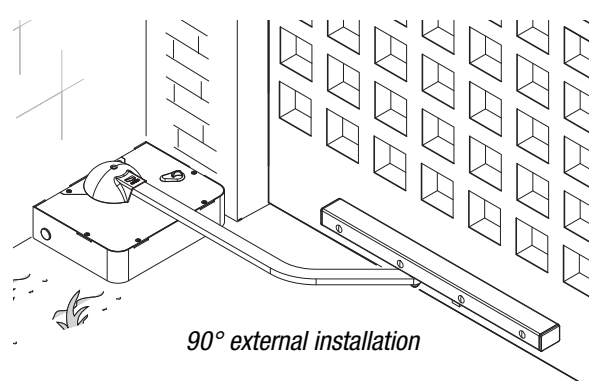
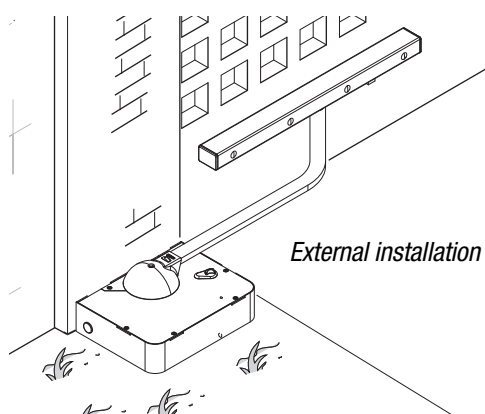


## Description of parts



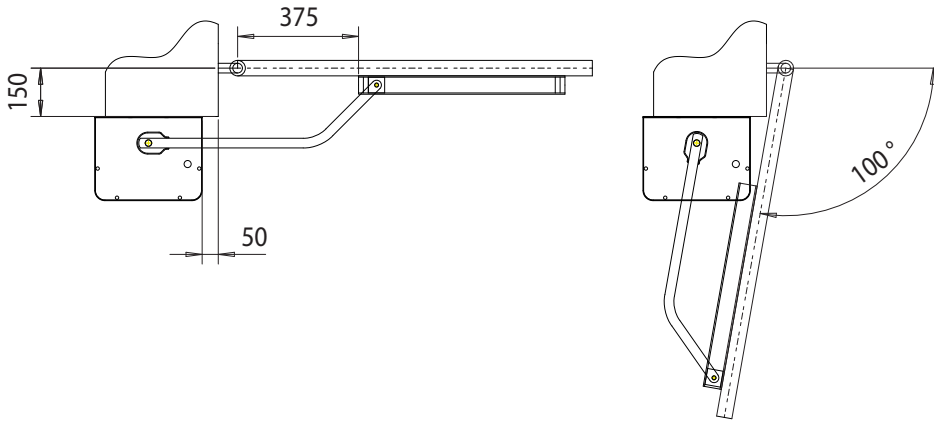
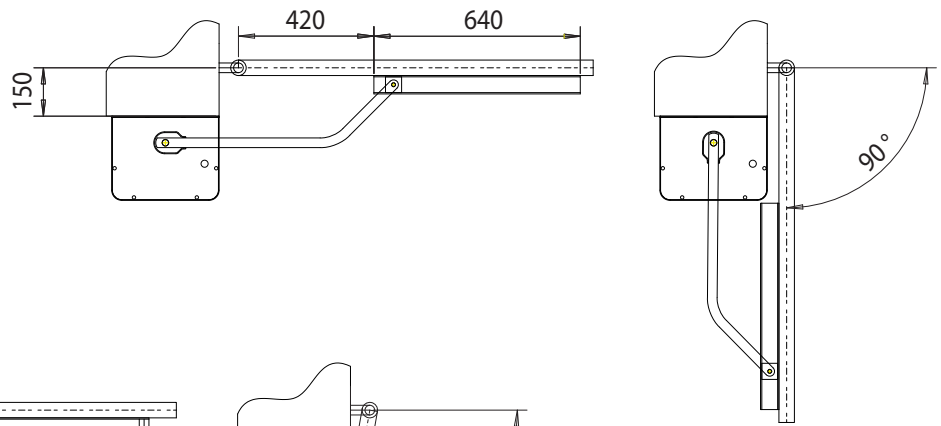
- 1) Transmission pin
- 2) Gearmotor
- 3) Release pin
- 4) Release lever
- 5) Foundation / fixing casing
- 6) Release hole cap
- 7) Casing cover
- 8) Slide guide
- 9) Opening mechanical stop
- 10) Closing mechanical stop
- 11) Transmission arm
- 12) Dome
- 13) Guide
- 14) Rail end-cap

## Installation examples



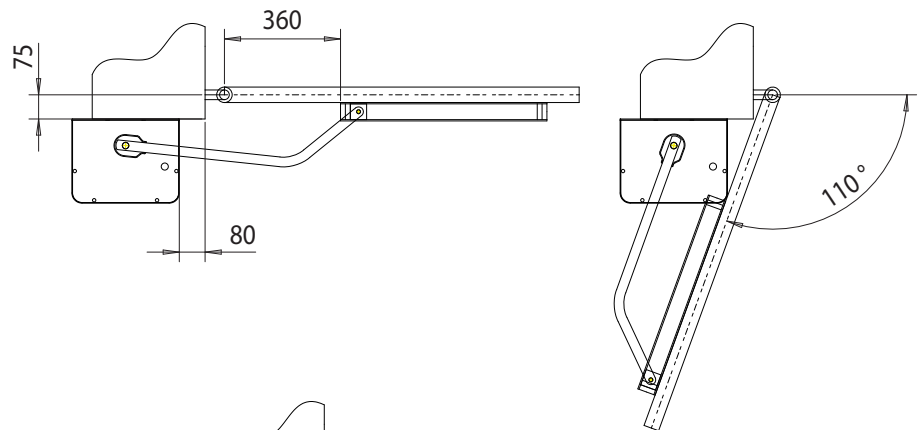
## External installations

Opening gate leaf at max 90°

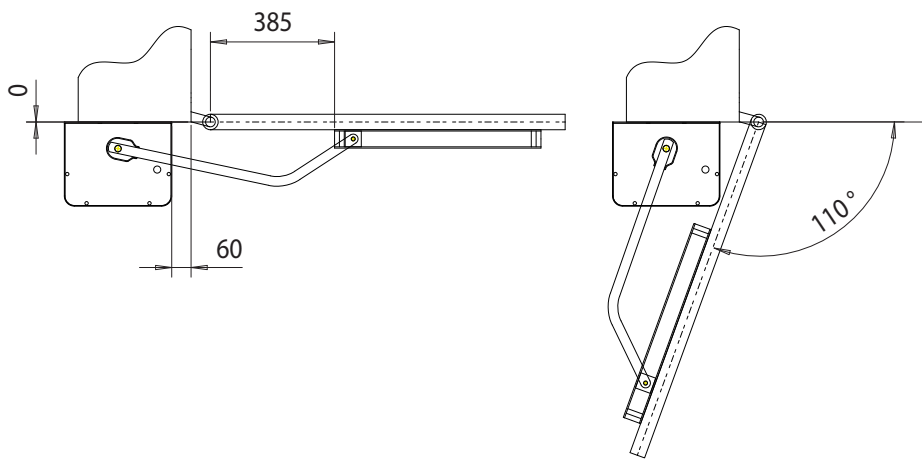


Opening gate leaf at max 100°

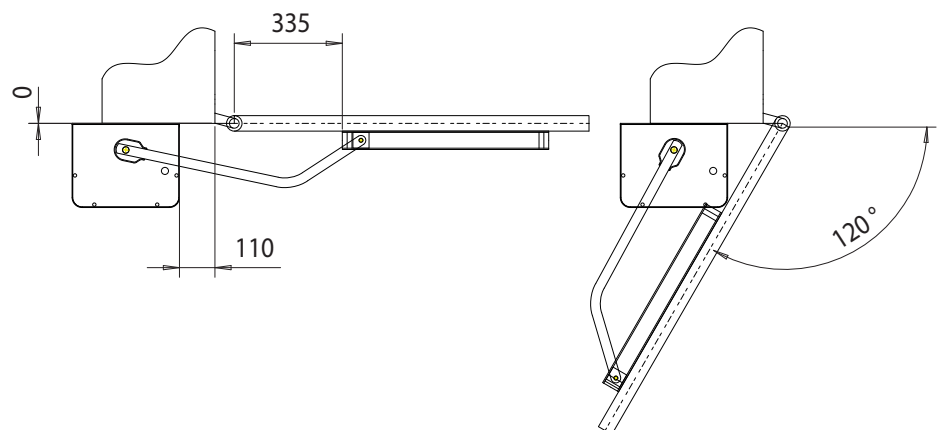
Opening gate leaf at max 110°



Opening gate leaf at max 110°

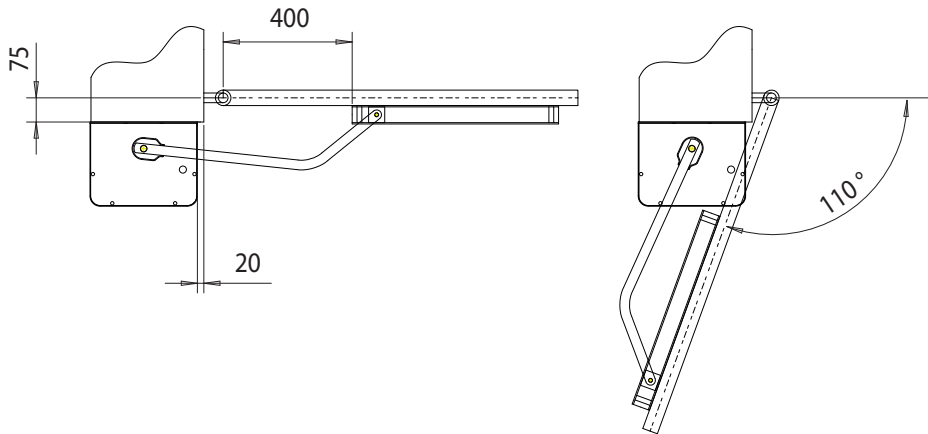
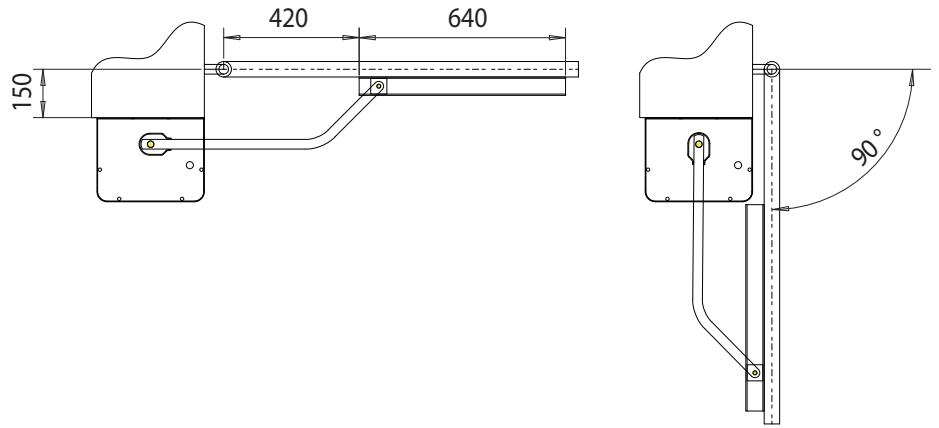


Opening gate leaf at max 120°



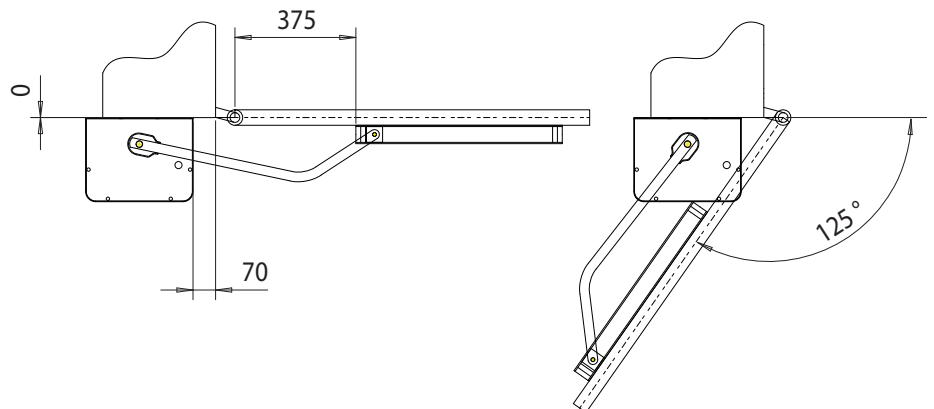
## Underground installations

Opening gate leaf at max 90°



Opening gate leaf at max 110°

Opening gate leaf at max 125°



## Installation




Installation must be carried out by expert qualified personnel and in full compliance with current regulations.

### Preliminary checks

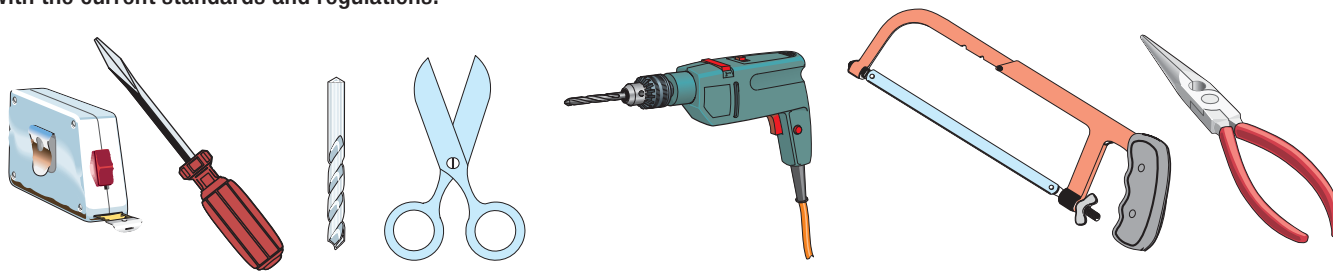


Before installing, do the following:

- Make sure you have a suitable omni-polar cut-off device with contacts more than 3 mm apart, and independent (sectioned off) power supply.
- Make sure you have suitable tubing and conduits for the electrical cables to pass through and be protected against mechanical damage.
- Fit tubing to drain away any water leaks which may cause oxidation.
-  Make sure that any connections inside the case (that provide continuance to the protective circuit) be fitted with extra insulation as compared to the other conductive parts inside;
- Make sure the structure of the gate is sturdy, the hinges work and that there is no friction between moving and non-moving parts.
- Make sure there is a mechanical stop for opening and closing.

## Tools and materials

Make sure you have all the tools and materials you will need for the installation at hand to work in total safety and compliance with the current standards and regulations.



## Type and section of cables

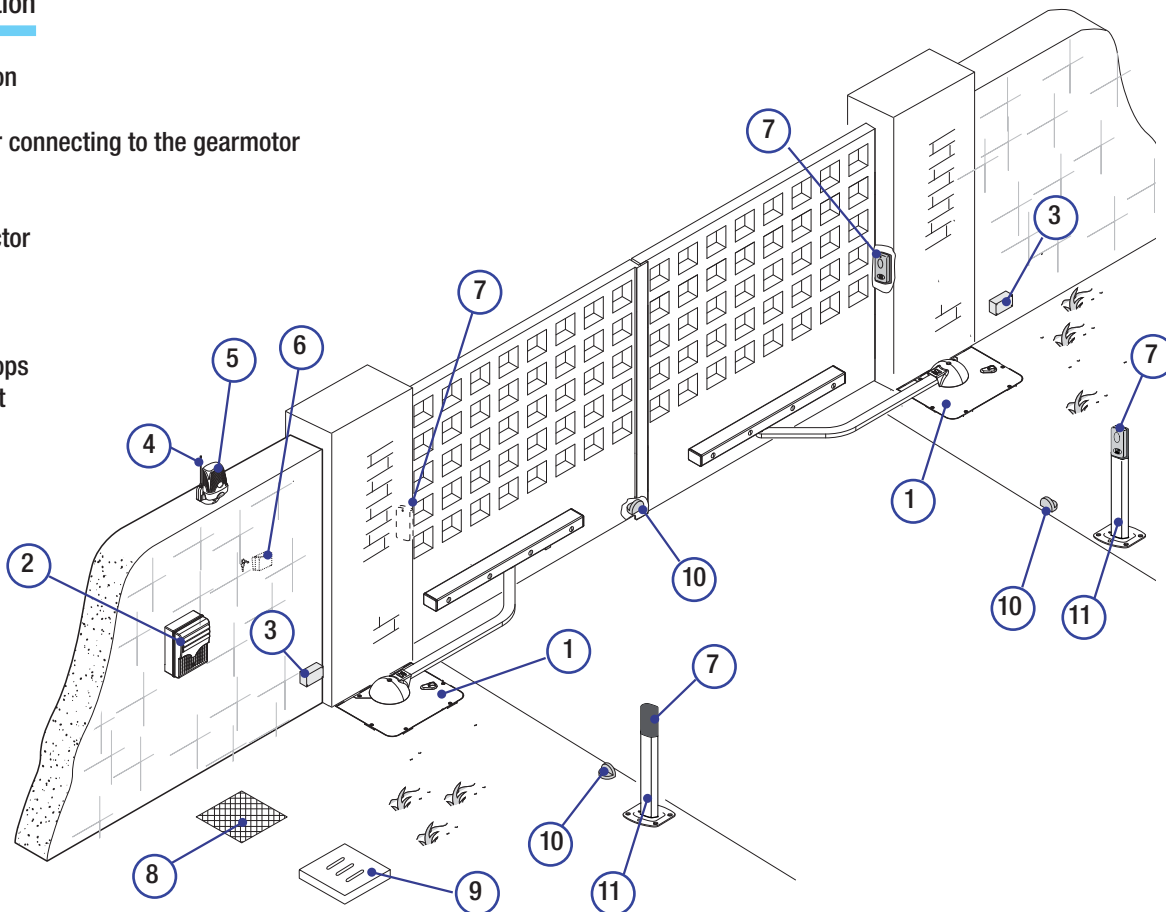
Connection	Type of cable	Length of cable 1 < 10 m	L. of cable 10 < 20 m	L. of cable 20 < 30 m
Control panel power supply 230	FROR CEI 20-22 CEI EN 50267-2-1	3G x 1,5 mm <sup>2</sup>	3G x 2,5 mm <sup>2</sup>	3G x 4 mm <sup>2</sup>
Motor power supply 24V		3 x 1 mm <sup>2</sup>	3 x 1,5 mm <sup>2</sup>	3 x 2,5 mm <sup>2</sup>
flashing lamp		2 x 0,5 mm <sup>2</sup>	2 x 1 mm <sup>2</sup>	2 x 1,5 mm <sup>2</sup>
Photocell transmitters		2 x 0,5 mm <sup>2</sup>	2 x 0,5 mm <sup>2</sup>	2 x 0,5 mm <sup>2</sup>
Photocell receivers		4 x 0,5 mm <sup>2</sup>	4 x 0,5 mm <sup>2</sup>	4 x 0,5 mm <sup>2</sup>
Accessories power supply		2 x 0,5 mm <sup>2</sup>	2 x 0,5 mm <sup>2</sup>	2 x 1 mm <sup>2</sup>
Control and safety devices		2 x 0,5 mm <sup>2</sup>	2 x 0,5 mm <sup>2</sup>	2 x 0,5 mm <sup>2</sup>
Antenna connection	RG58	max. 10 m		

N.B.: If the cable length differs from that specified in the table, then you must determine the proper cable diameter in the basis of the actual power draw by the connected devices and depending on the standards specified in CEI EN 60204-1.

For connections that require several, sequential loads, the sizes given on the table must be re-evaluated based on actual power draw and distances. When connecting products that are not specified in this manual, please follow the documentation provided with said products.

## Standard installation

- 1) MYTO automation
- 2) Control panel
- 3) Junction box for connecting to the gearmotor
- 4) Antenna
- 5) Flashing light
- 6) Keyswitch selector
- 7) Photocells
- 8) Junction pit
- 9) Drainage ditch
- 10) Mechanical stops
- 11) Photocells post



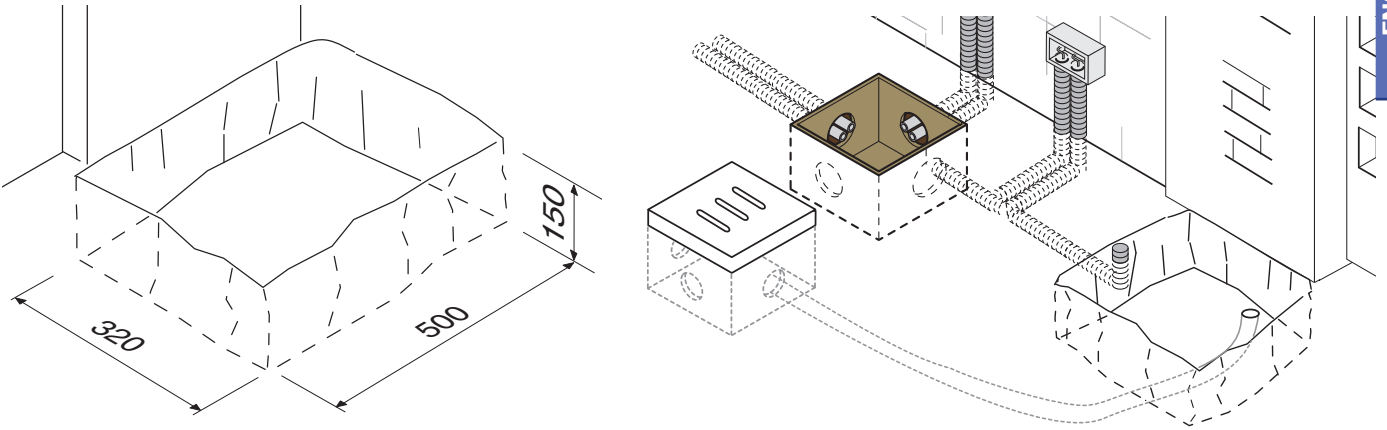


## Setting up the fixing /foundation casing

**⚠** The following illustrations are also shown in the MYTO-C instruction sheet (for underground installation). Some examples are given, in that the space available for anchoring the operator and accessories varies depending on the overall dimensions. It is up to the installer, thus, to choose the most suitable solution.

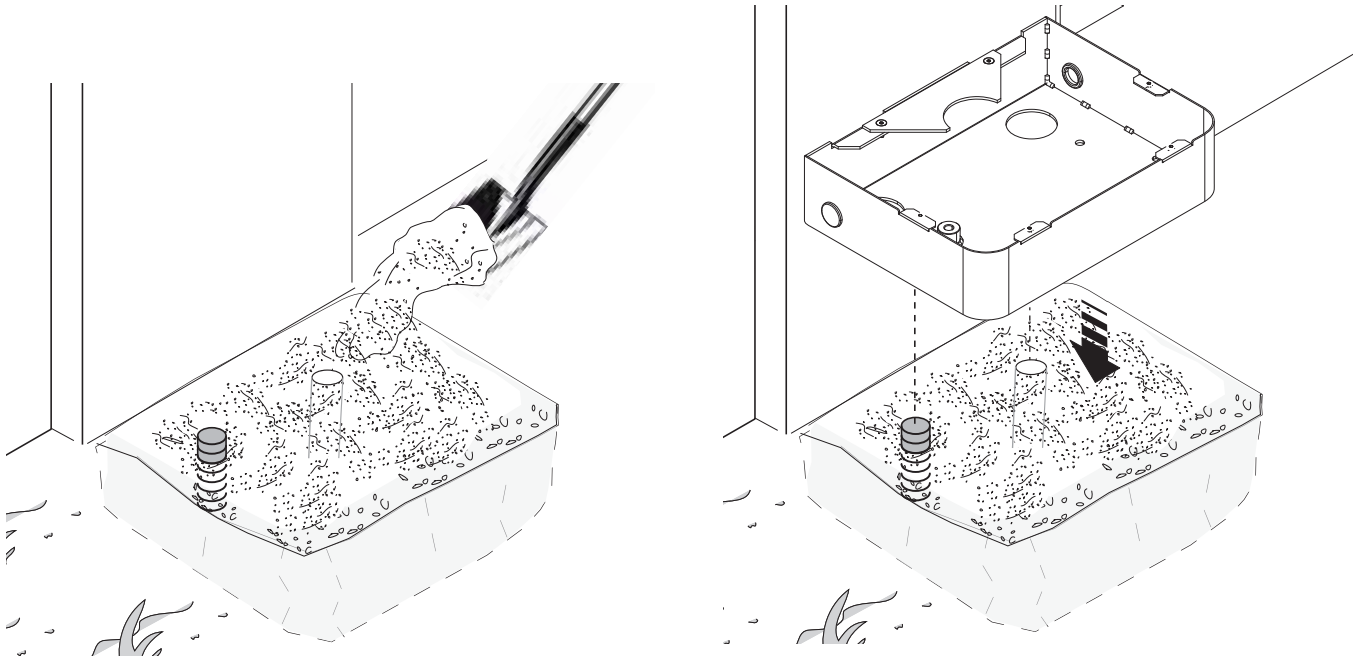
Dig a pit for the box, set up junction boxes and corrugated tubes for connections coming from the junction box as well as a drainage tube.

N.B.: the number of tubes depends on the type of system installed and any accessories.

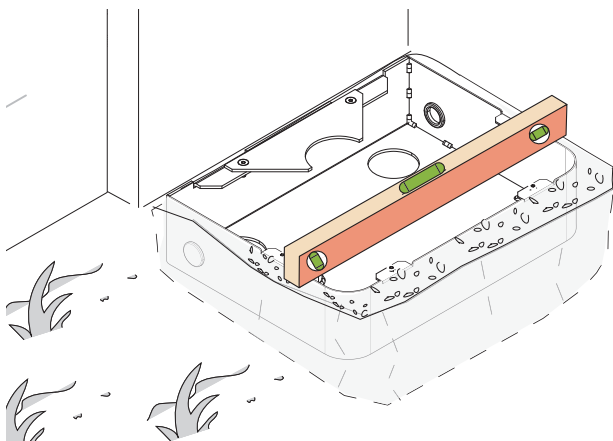


Fill the hole with cement

Sink the box making sure the corrugated and drainage tube run through the holes you have set up.

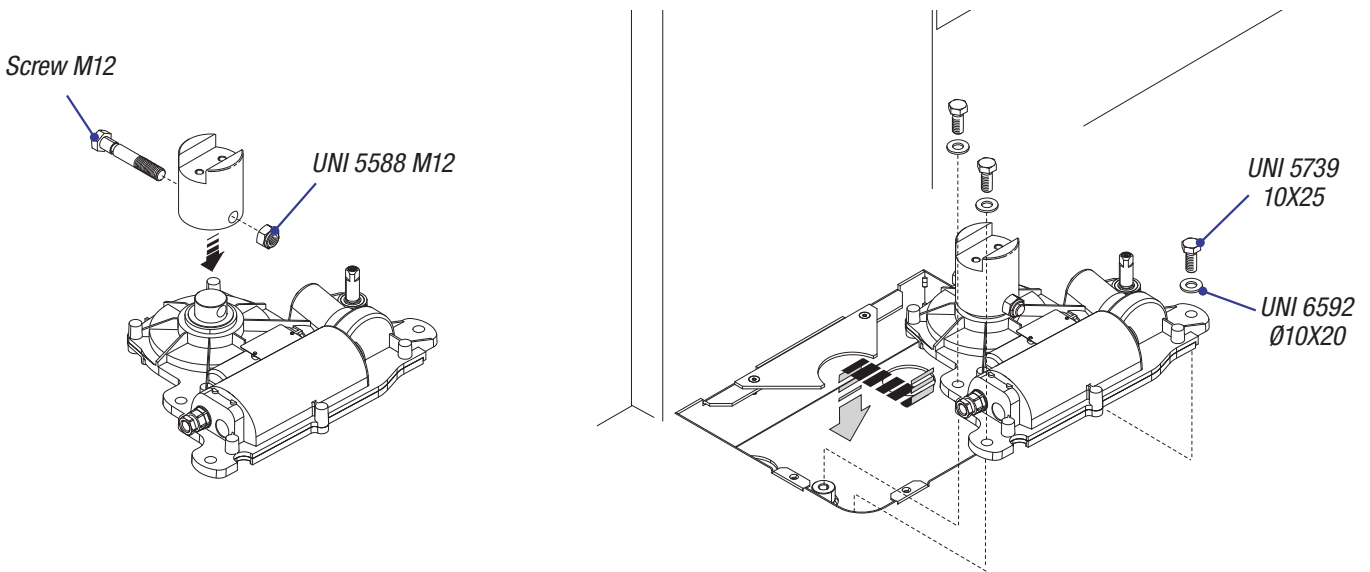


Level the box with the ground and wait for it to dry for at least 24 hours.  
Clean the inside of the box of any cement residue.



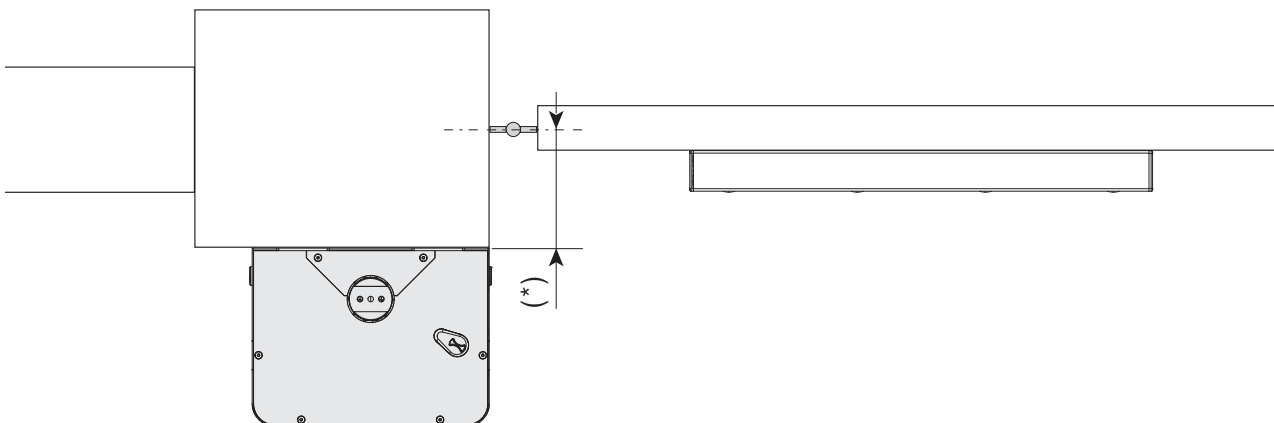
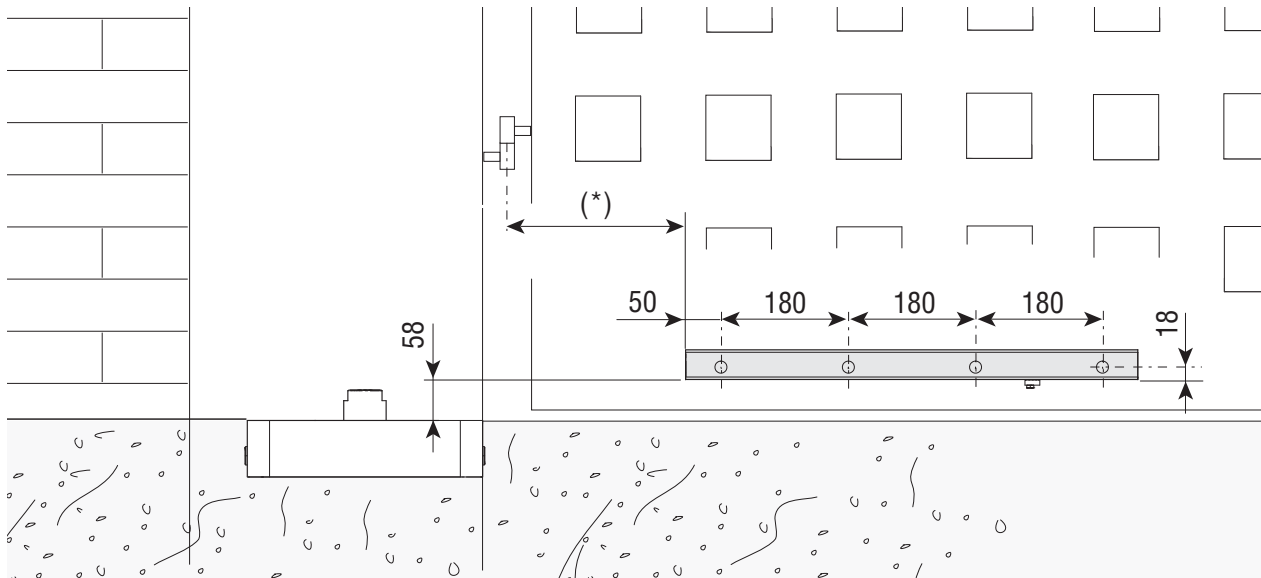
## Installation of the automation

Insert the pin into the gearmotor shaft and secure it using nuts and bolts. Insert the gearmotor into the box and secure it using the hexagonal nuts and washers.



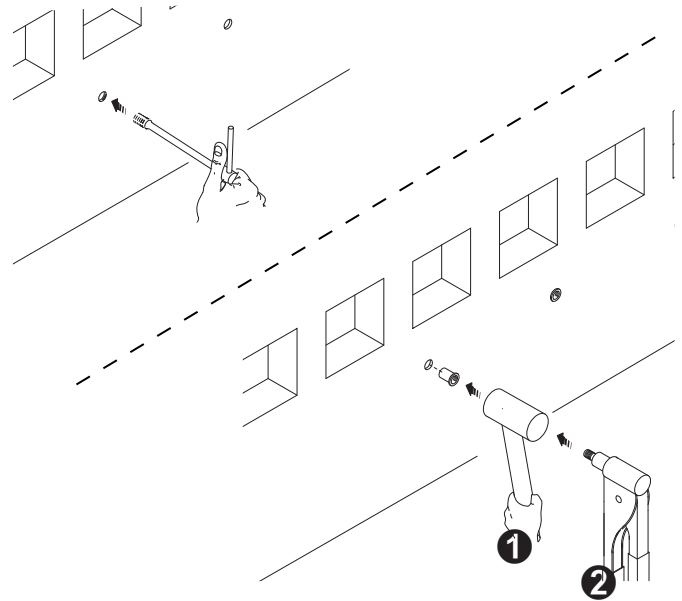
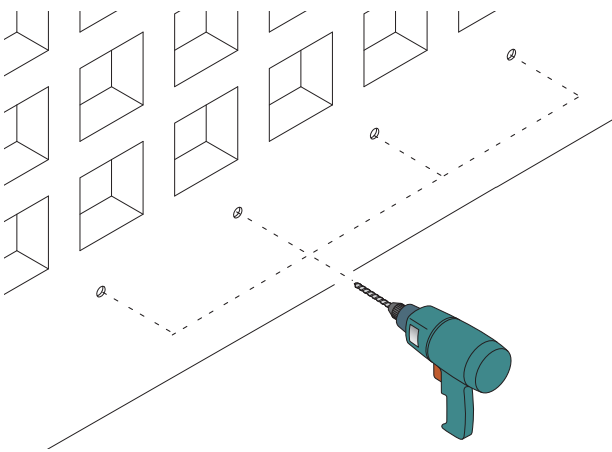
Position the slide rail onto the gate leaf and mark the spots where to secure it, making sure the measurements given in the drawing are respected.

Note: the measurements marked with (\*) vary depending on the type of installation (below or above ground) and on the gate-leaf opening angle (see Chapt. on installation examples)

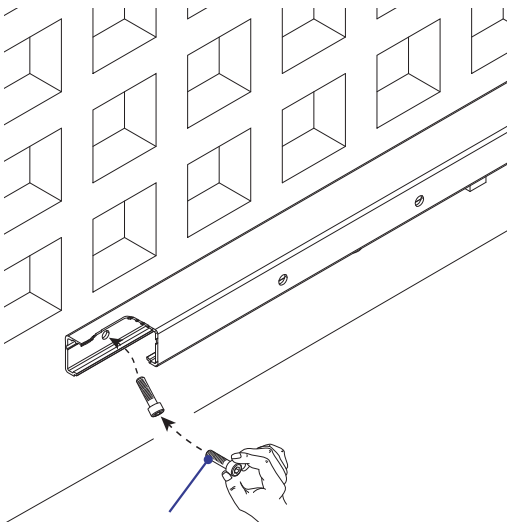


Drill holes at the points you have marked. Thread the holes using an M8 male or use M8 threaded inserts or other suitable materials that guarantee proper hold to the rail.

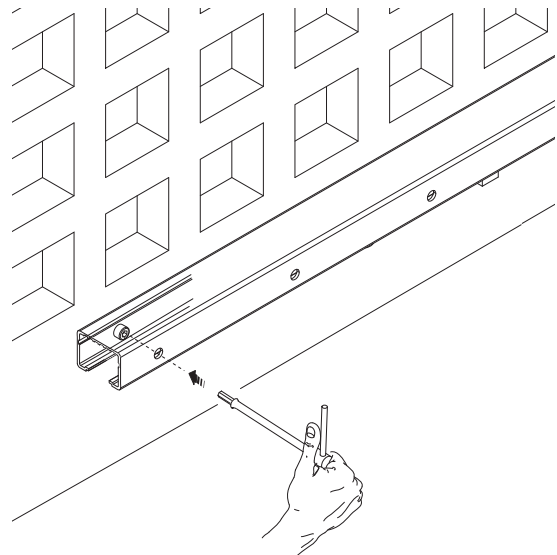
Note: the illustrations are mere examples, it is up to the installer to choose the most suitable solution depending on gate-leaf type and thickness.



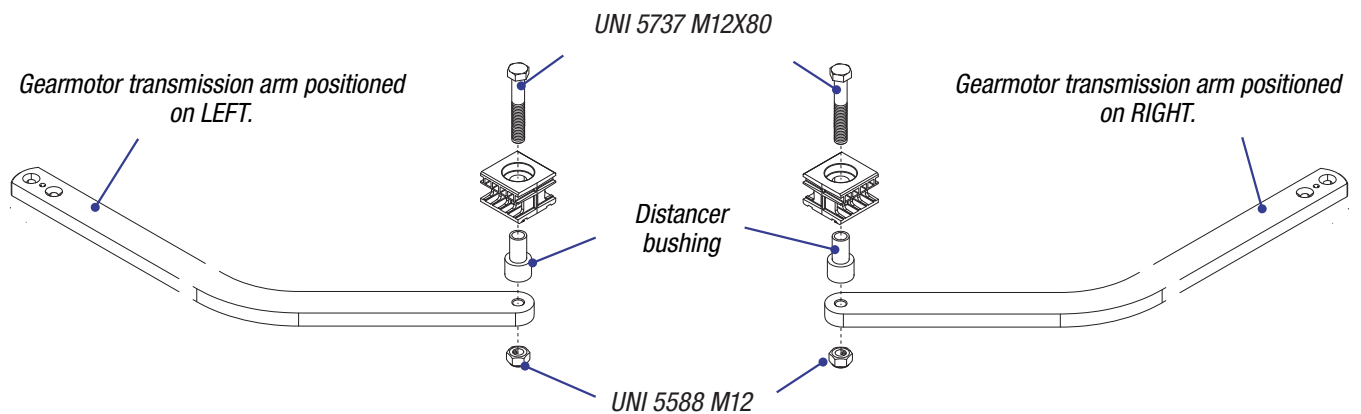
Position the rail against the holes and secure it using the cylinder head screws.



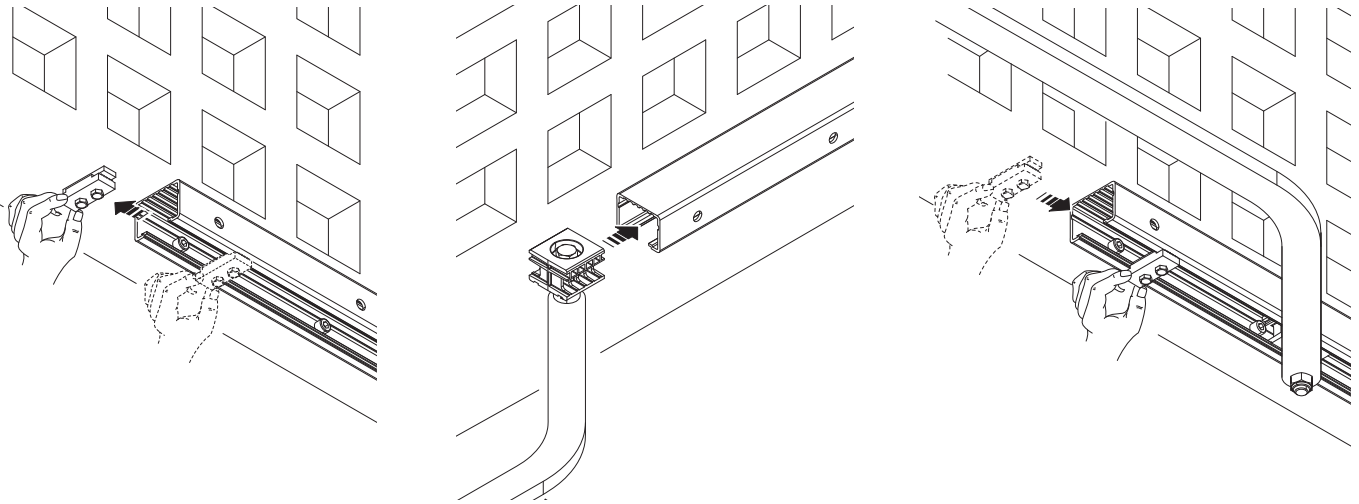
UNI 5931 M8X20



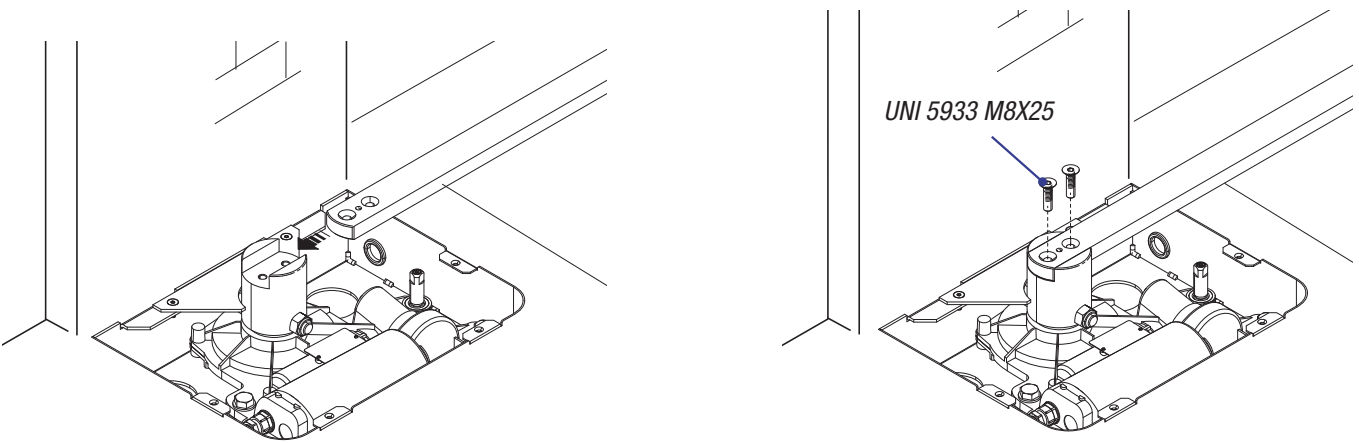
Assemble the slide guide with the LEFT transmission arm, so that is in symmetry with the RIGHT-hand one (see drawing).



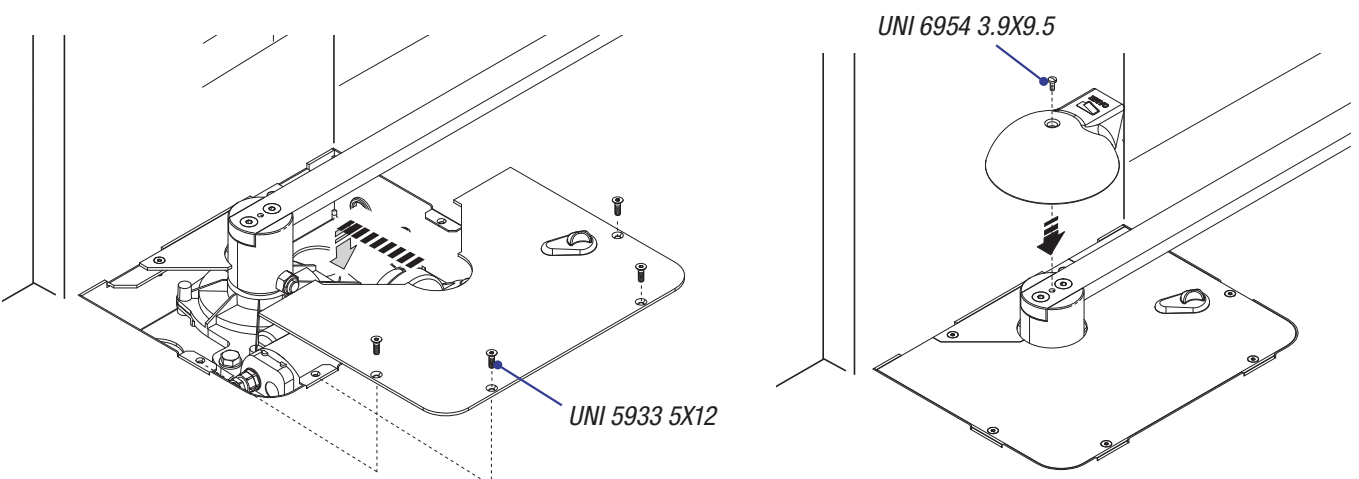
Remove the closing mechanical stop from the rail. Insert the slide guide and insert back the stop.



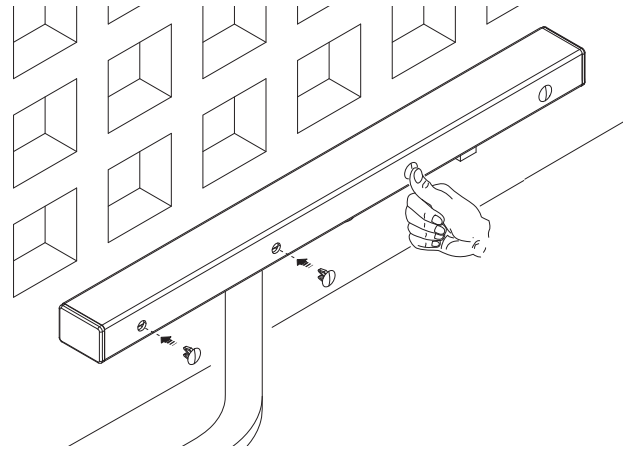
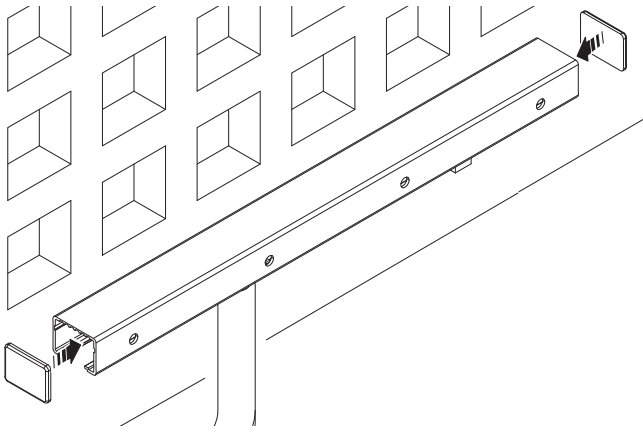
Position the transmission arm onto the bushing and secure it using the countersunk screws.



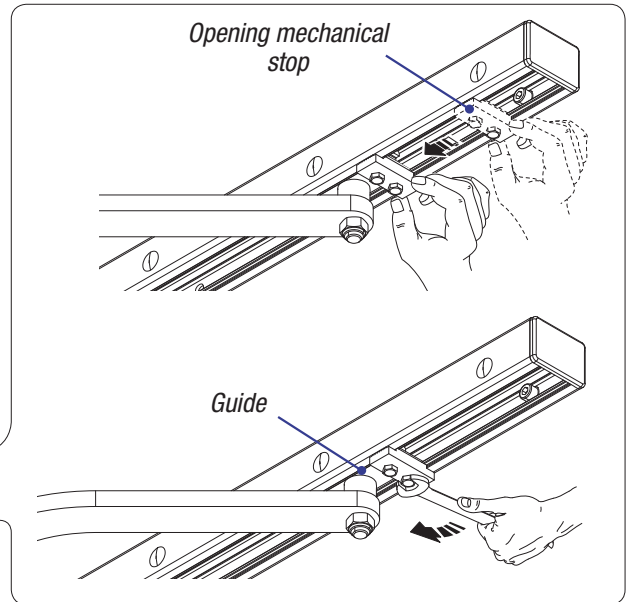
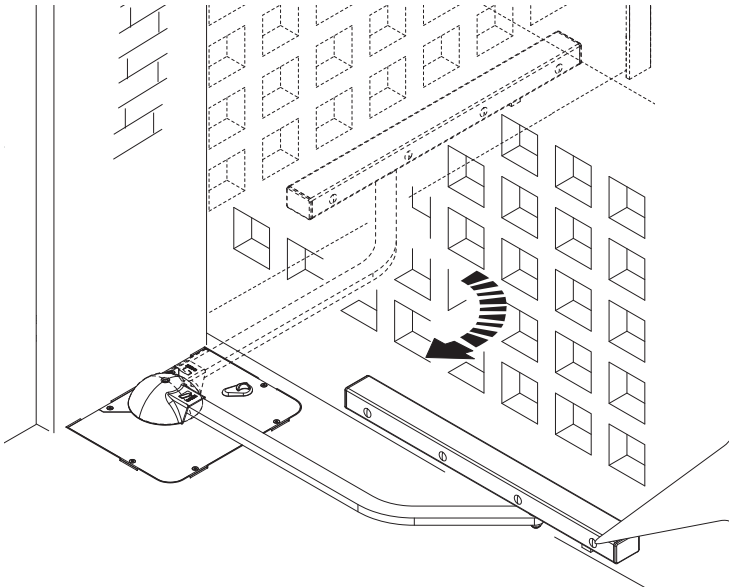
Secure the box cover using the countersunk screws. Secure the cap above the pin using a self-threading screw.



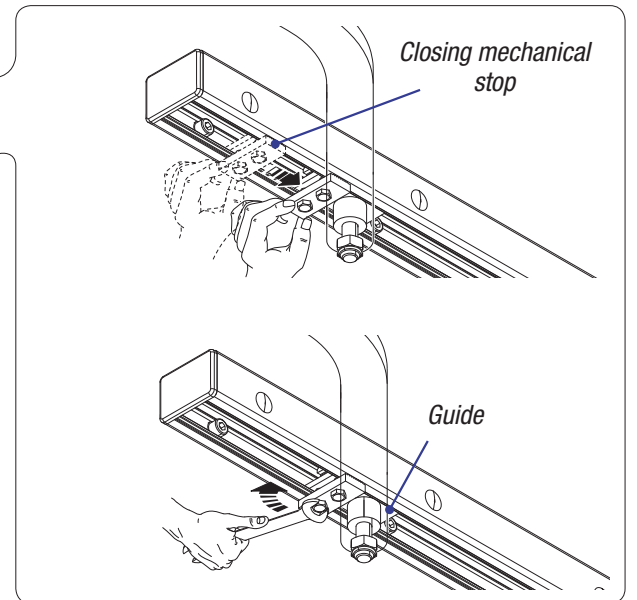
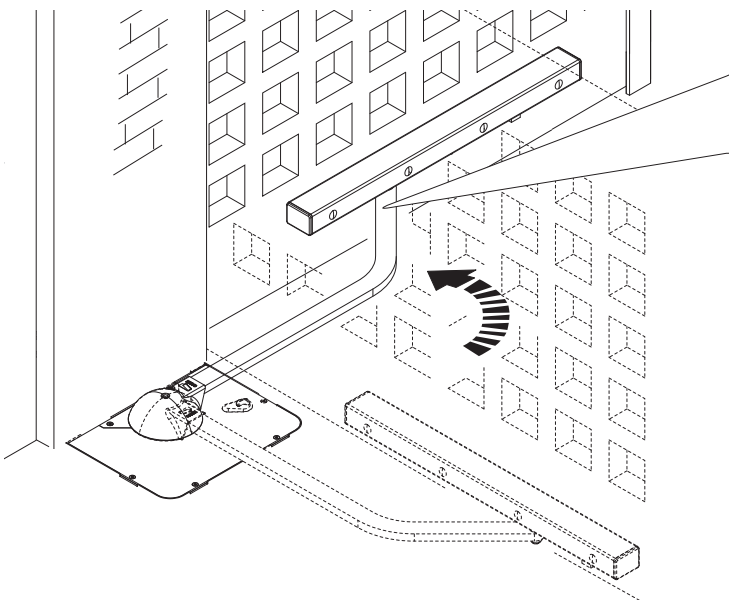
Insert the rail end caps onto both ends of the slide rail, as well as the hole caps.



Release the gearmotor (see paragraph on manually release). Place the gate leaf in the fully open position, place the opening mechanical stop against the slide guide and secure it.



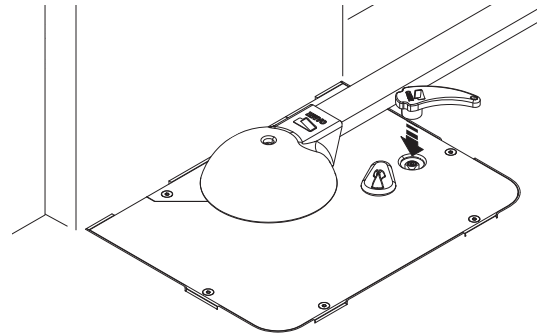
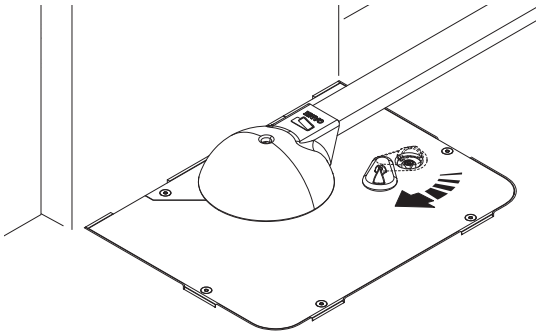
Place the gate leaf in the fully closed position and place the closing mechanical stop against the slide guide and then secure it.



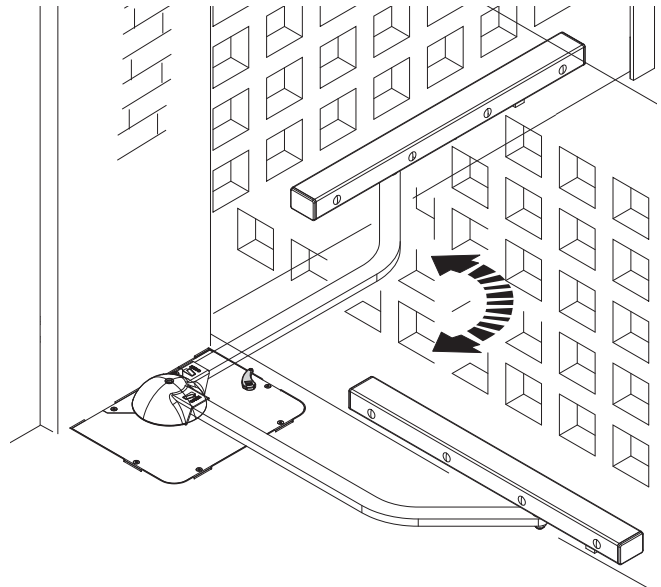
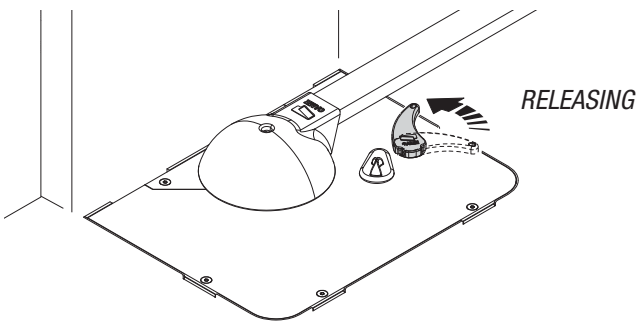
## Releasing and locking the gearmotor

Turn the release cover and insert the lever onto the release pin.

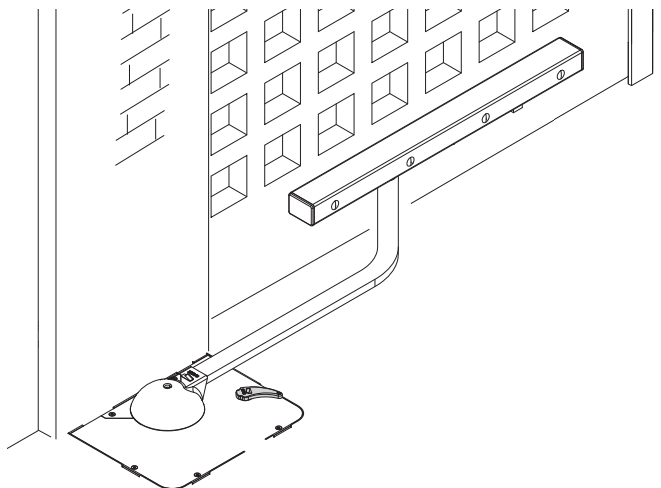
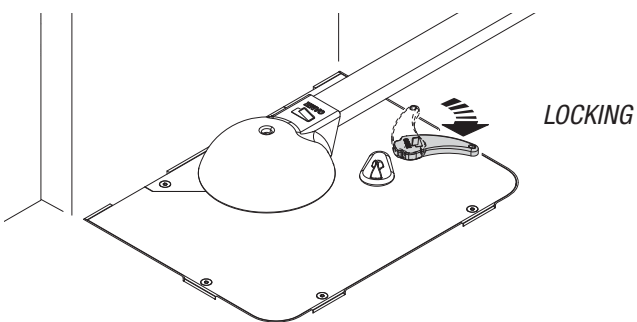
ENGLISH



Turn the release lever counter-clockwise until the endstop point.



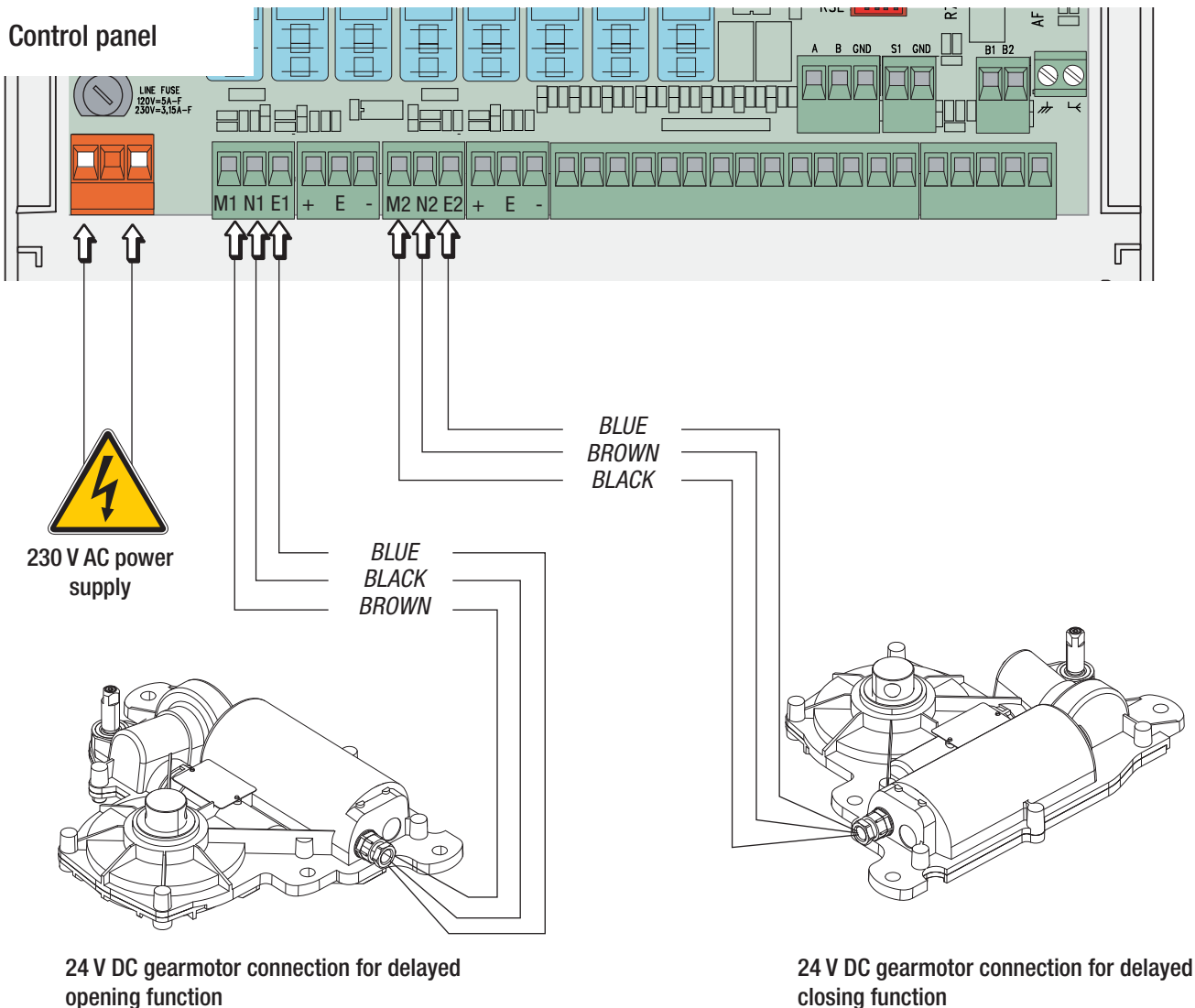
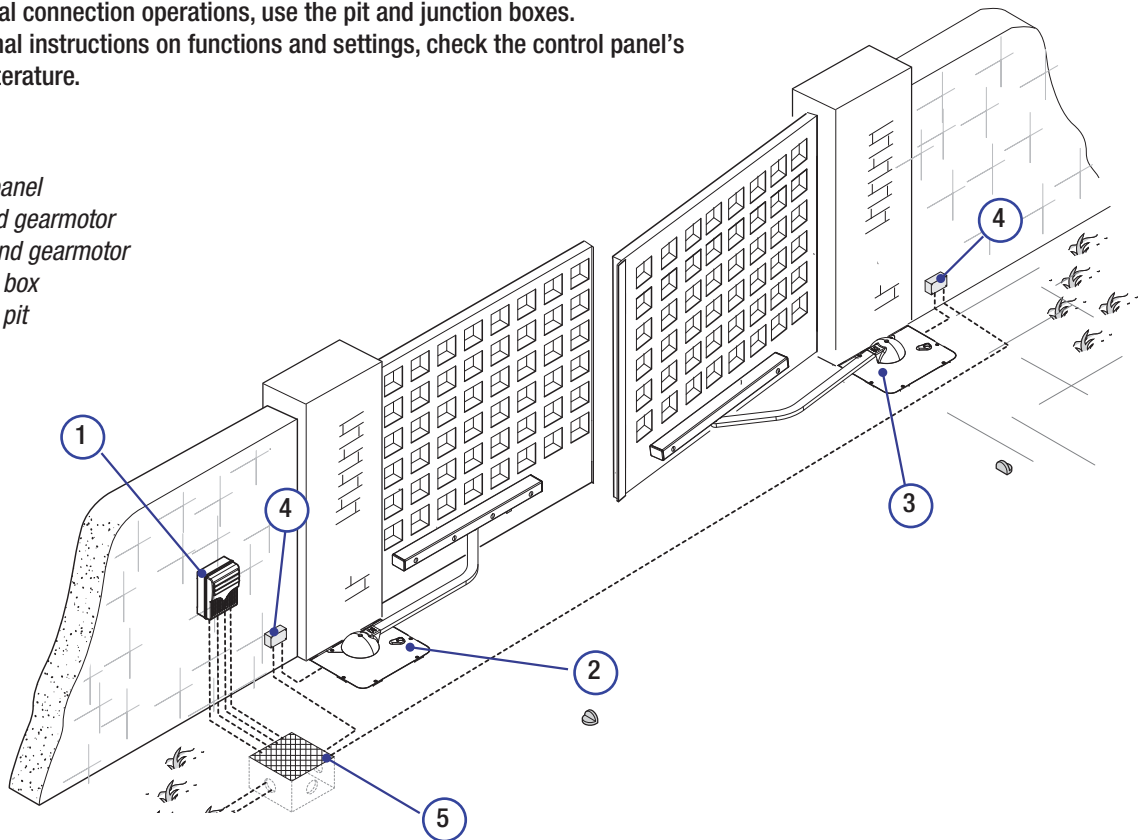
To lock the motor back up, turn the level to the initial point.



## Connecting to the control panel

For electrical connection operations, use the pit and junction boxes.  
For additional instructions on functions and settings, check the control panel's technical literature.

- 1) Control panel
- 2) Left-hand gearmotor
- 3) Right-hand gearmotor
- 4) Junction box
- 5) Junction pit

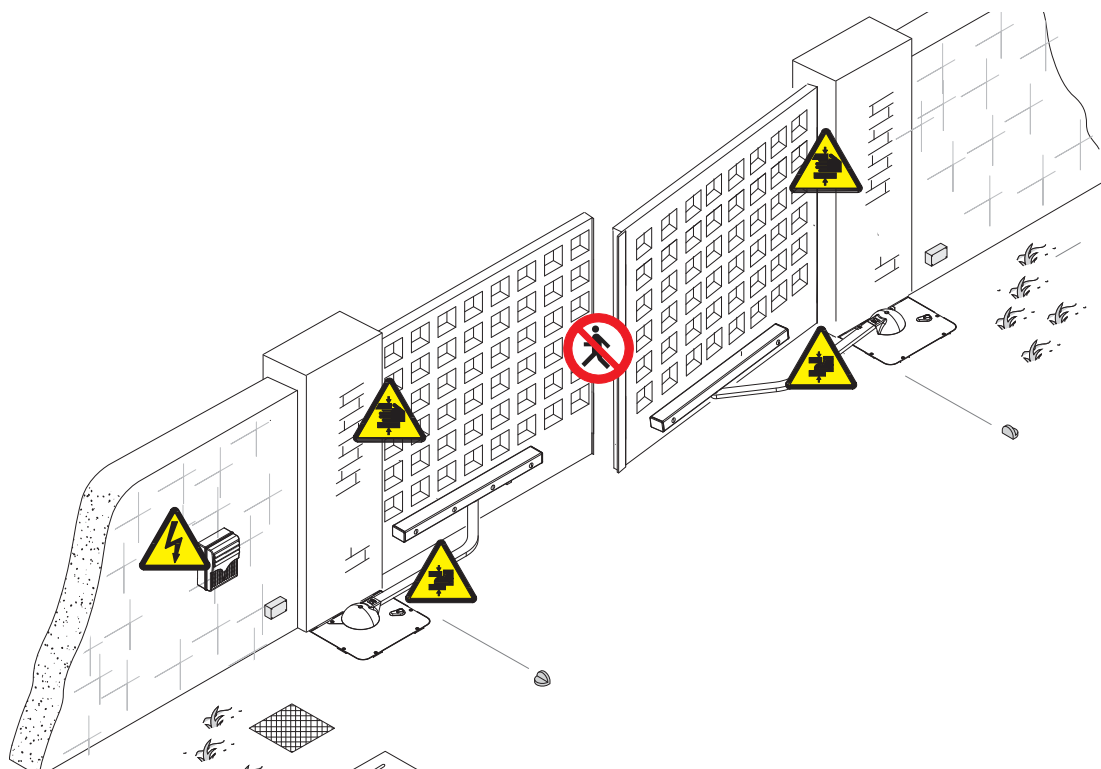


## Safety instructions

### Important safety instructions

This product must only be employed for its originally intended use. Any other use is wrong and potentially dangerous. The manufacturer cannot be held liable for any damages resulting from wrongful, erroneous or negligent uses.

Avoid working close to the hinges or other moving mechanical parts. Stay out of the opening/closing arc when operator is in motion. Do not exercise force against the motion of the operator as this could result in potentially dangerous situations.



Do not allow children to play or loiter within the opening/closing arc of the operator.

Keep remote controls and any other command device out the reach of children, to prevent operator from being activated by accident. In the event of anomalous behaviour, stop using the operator immediately.



Danger of crushing hands



Danger! High voltage



Danger of crushing feet



No transit during operation

## Maintenance

### Periodic maintenance

 Periodic maintenance to be carried out by the end-user is as follows: wipe clean the glass surface of the photocells; check that the safety devices work properly; remove any obstructions.

We suggest checking the state of lubrication and tightness of the anchoring screws on the operator.

To check the efficiency of the safety devices, move an object in front of the photocells when gate is closing. If the operator inverts the motion or stops, the photocells are working properly.

This is the only maintenance procedure to be carried out with the power source connected.

Before performing any maintenance procedures, cut off the main power, to prevent possible accidents due to gate movement.


To clean the photocells use a water dampened cloth. Do not use solvents or other chemical products which may ruin the devices.

In the event of any strange vibrations or squeaking, lubricate the joints with grease, as shown in the diagram.





## Extra-ordinary maintenance

 The following table serves to note down any extraordinary maintenance, repairs or improvements performed by specialised firms.

N.B.: Any extraordinary maintenance must be performed by specialised technicians.

### Extra-ordinary maintenance log

Installer's stamp	Operator name
	Date of job
	Technician's signature
	Requester's signature
Job performed _____ _____	

Installer's stamp	Operator name
	Date of job
	Technician's signature
	Requester's signature
Job performed _____ _____	

Installer's stamp	Operator name
	Date of job
	Technician's signature
	Requester's signature
Job performed _____ _____	

Installer's stamp	Operator name
	Date of job
	Technician's signature
	Requester's signature
Job performed _____ _____	

## Demolition and disposal

 In its premises, CAME cancelli automatici s.p.a. implements an Environmental Management System certified in compliance with the UNI EN ISO 14001 standard to ensure environmental protection.

Please continue our efforts to protect the environment—which CAME considers one of the cardinal elements in the development of its operational and market strategies—simply by observing brief recommendations as regards disposal:

### DISPOSAL OF PACKAGING

The packaging components (cardboard, plastic, etc.) are all classifiable as solid urban waste products and may be disposed of easily, keeping in mind recycling possibilities.

Prior to disposal, it is always advisable to check specific regulations in force in the place of installation.

### PLEASE DISPOSE OF PROPERLY!

### PRODUCT DISPOSAL

Our products are made up of various types of materials. Most of them (aluminium, plastics, iron, electrical wires, etc.) may be disposed of in normal garbage collection bins and can be recycled by disposing of in specific recyclable material collection bins and disposal in authorized centres.

Other components (electrical boards, remote control batteries, etc.), however, may contain polluting substances.

They should therefore be removed and given to qualified service companies for proper disposal.

Prior to disposal, it is always advisable to check specific regulations in force in the place of disposal.

### PLEASE DISPOSE OF PROPERLY!



MANUFACTURER'S STATEMENT

Pursuant to attachment II B of Machine Directive 98/37/CE



CAME Cancelli Automatici S.p.A.
Via Martiri della Libertà, 15
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tel (+39) 0422 4940 - fax (+39) 0422 4941
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IMPORTANT WARNING!

It is forbidden to operate the product/s, which is/are the object of this statement, before completion and/or incorporation, in full compliance of the Law on Electromagnetic Compatibility.

Hereby declares itself liable, as concerns the following gate and garage-door automation products, called:

UNDERGROUND/EXTERNAL AUTOMATION FOR SWING GATES
MYTO ME

... comply with the essential requisites and with the pertinent laws and regulations, as set forth by the following Directives and with the applicable parts of the reference Standards shown below.

- 98/37/CE - MACHINE DIRECTIVE
2006/95/CE - LOW VOLTAGE DIRECTIVE
89/106/CEE - CONSTRUCTION MATERIALS DIRECTIVE
2004/108/CE - ELECTROMAGNETIC COMPATIBILITY DIRECTIVE

- EN 13241-1 EN 12635 EN 61000-6-2
EN 12453 EN 12978 EN 61000-6-3
EN 12445 EN 60335-1 EN 60204-1

THE MANAGING DIRECTOR
Mr. Gianni Michielan

Handwritten signature of Gianni Michielan

Reference code to request copy of the original: DDF B EN A001m



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