

EXTERNAL AUTOMATION FOR SWING GATES

STYLO SERIES



INSTALLATION MANUAL

**STYLO-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 restrictions

### Intended use

 The STYLO-ME gearmotor is designed to automate residential and apartment block swing-gates in even intensive use conditions.

### Restrictions

Gate-leaf width (m)	0,8	1,2	1,8
Gate-leaf weight (kg)	150	125	100

## Description

This product is designed and built by CAME CANCELLI AUTOMATICI S.p.A. in compliance with current safety norms. Guaranteed 24 months unless tampered with.

### Technical features

**STYLO-ME**

Control board power supply: 230 AC 50/60Hz

Motor power supply: 24V DC 50/60Hz

Max draw.: 5A

Power: 48W

Maximum torque: 100Nm

Opening time (90°): adjustable

Gear ratio: 1/531

Duty Cycle: Intensive use

Protection Rating: IP54

Weight: kg

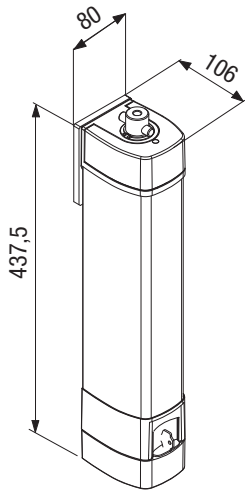
Working temperature:



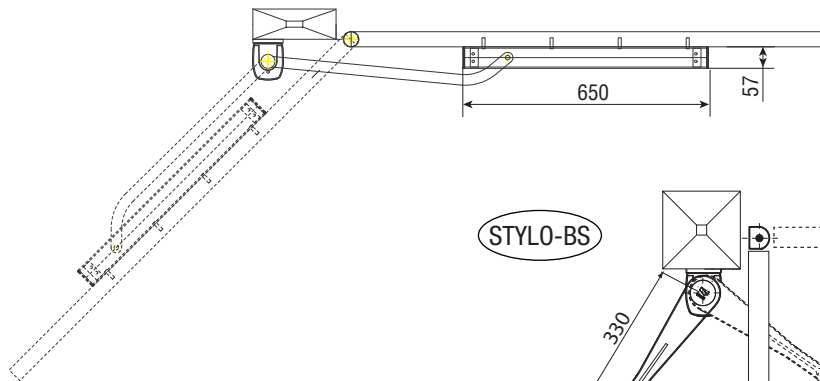
## Dimensions

STYLO-ME

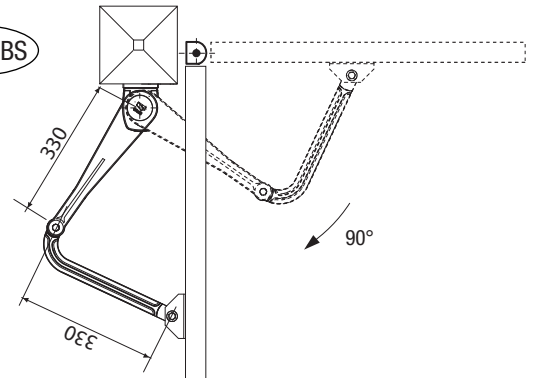
(mm)



STYLO-BD



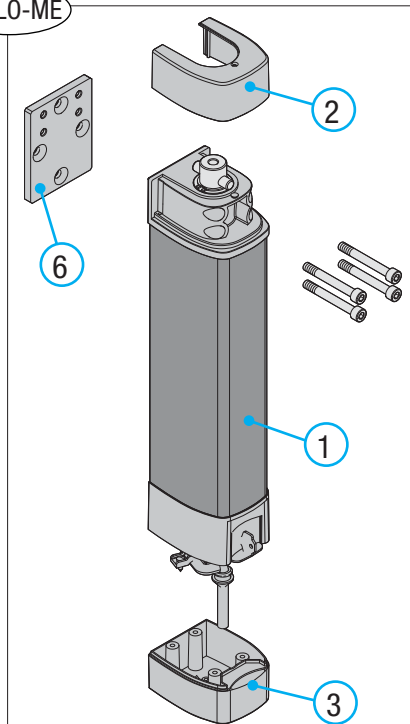
STYLO-BS



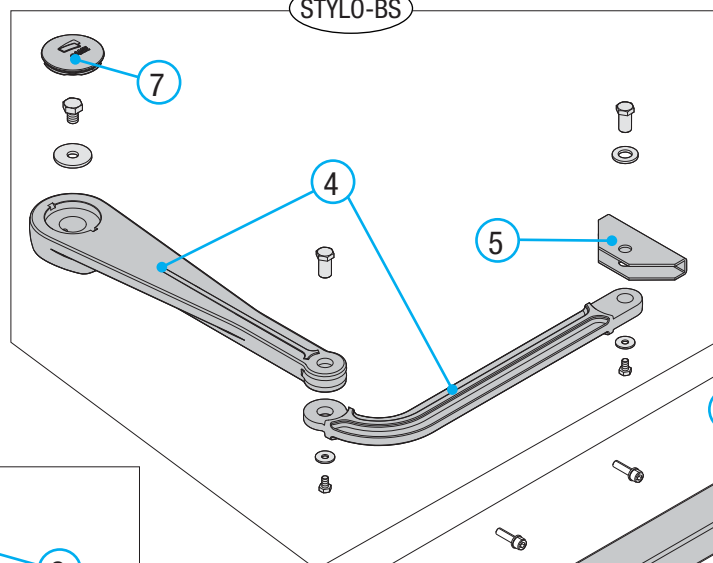
## Description of parts

- 1) Main body of the gearmotor
- 2) Upper cap
- 3) Lower cap
- 4) Hinged arm
- 5) STYLO-BS arm securing bracket
- 6) Gearmotor securing bracket
- 7) STYLO-BS cover
- 8) STYLO-BD cover
- 9) Slide guide
- 10) Opening stop
- 11) STYLO-BD slide rail
- 12) Closing stop

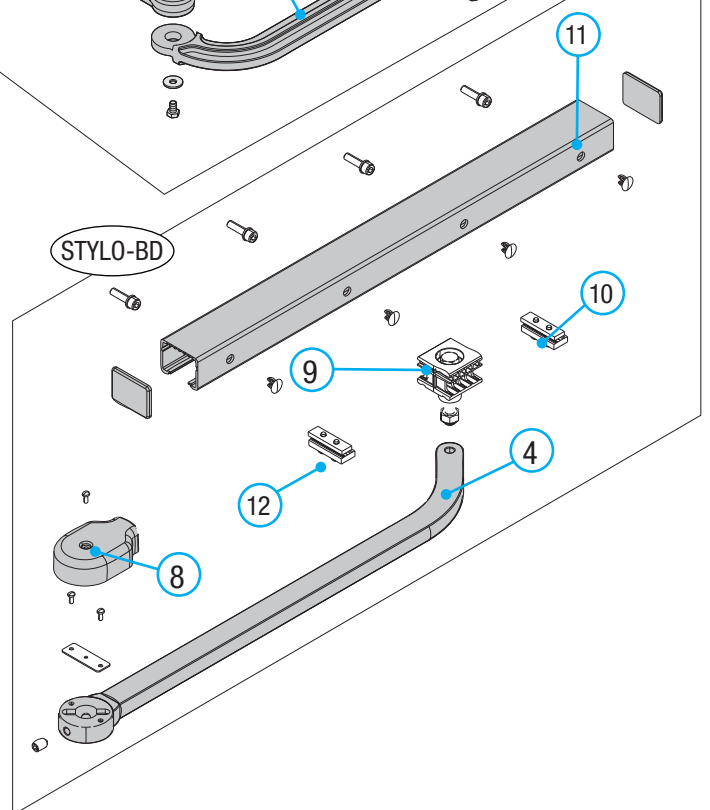
STYLO-ME



STYLO-BS



STYLO-BD




## Installation

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

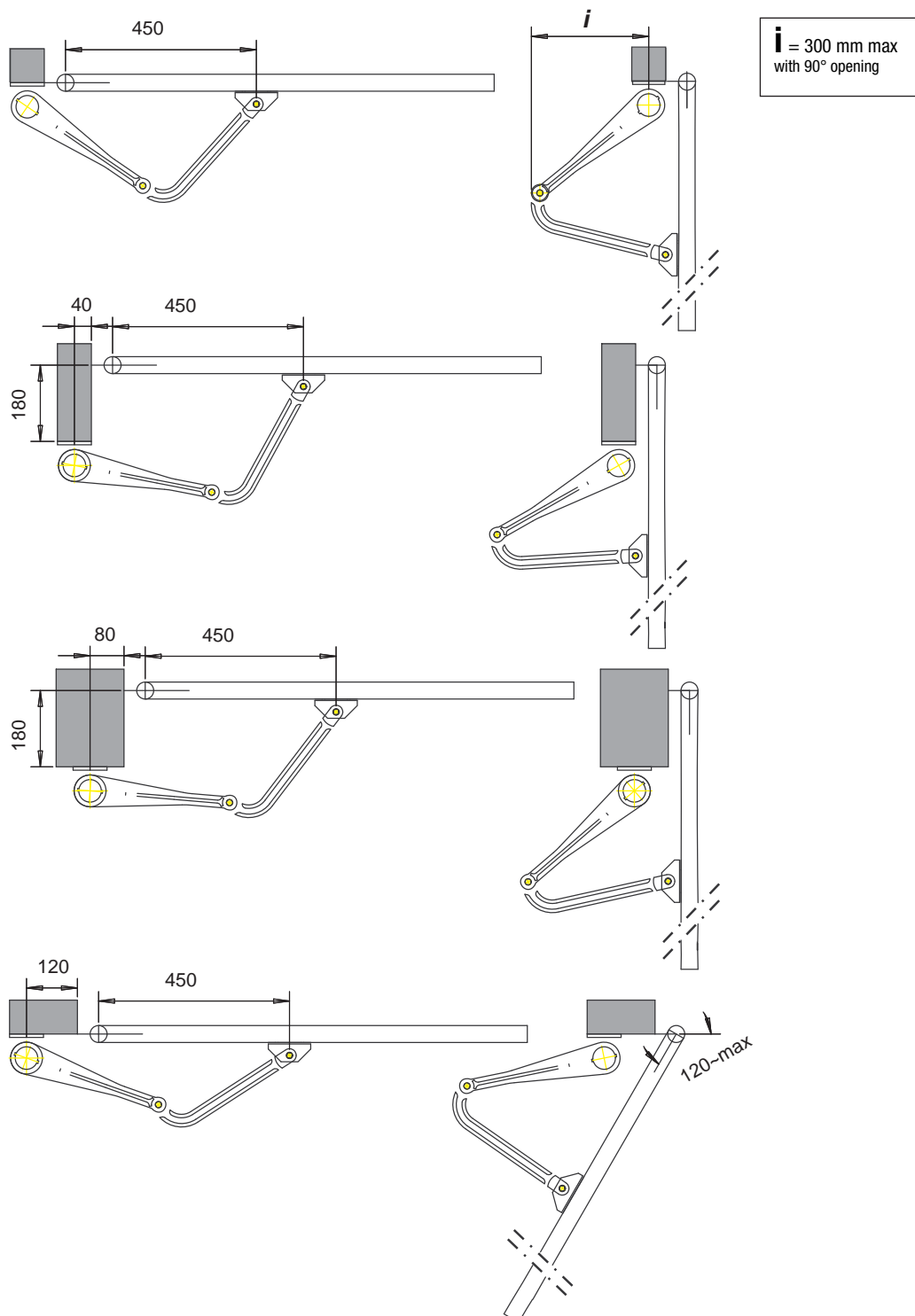
### Preliminary checks

 Before installing, do the following:

- Make sure you have 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 within the container (made for uninterruptable power supply to the protection circuit) are fitted with additional insulation compared to the other internal parts;
- Make sure the gate structure is sturdy enough, that the hinges are in proper working order and that there is no friction among the moving and fixed parts;
- Make sure there are opening and closing mechanical stops..

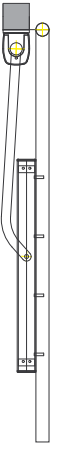
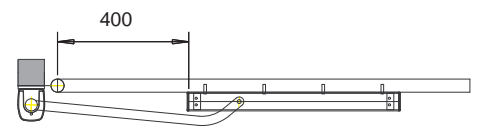
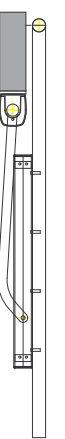
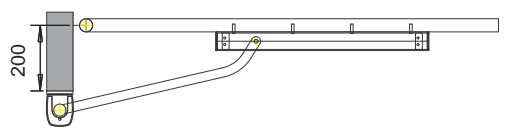
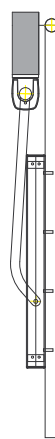
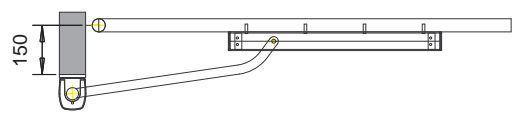
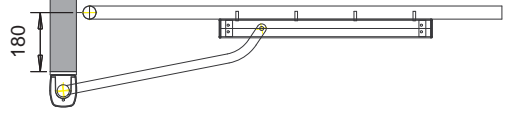
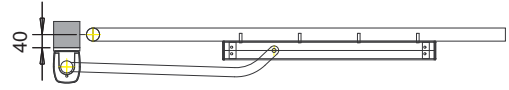
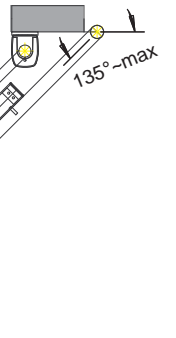
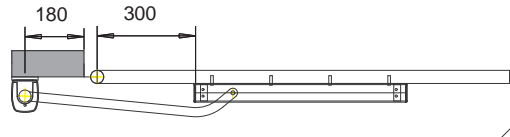
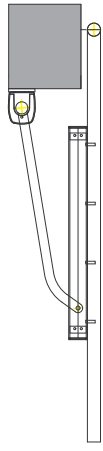
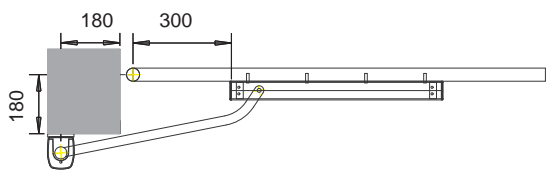
### Examples

**STYLO-BS**



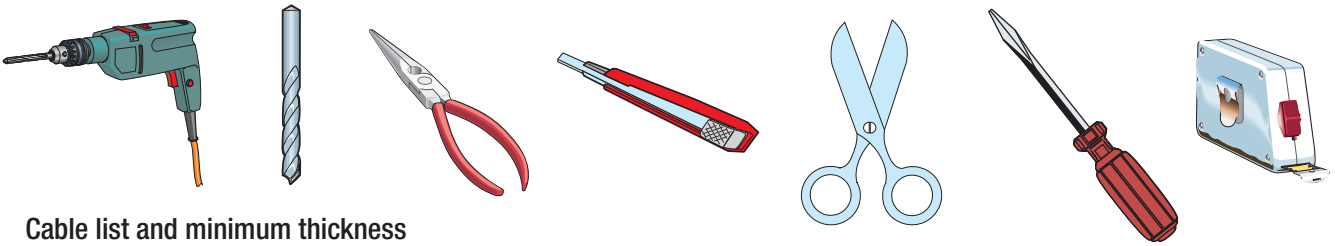
**STYLO-BD**

GATE LEAF WIDTH	GATE LEAF WEIGHT
m.	Kg.
0,80	150
1,20	125
1,80	100
A	C
40÷100	0÷150



## 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. The figure shows some examples of installer's tools.



## Cable list and minimum thickness

Connections	Type of cable	Type of cable	Length of cable 10 < 20 m	Length of cable 20 < 30 m
Control panel power supply 230V	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		4G x 1,5 mm <sup>2</sup>	4G x 1,5 mm <sup>2</sup>	4G x 2,5 mm <sup>2</sup>
Flashing light		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	RG58	max. 10 m		

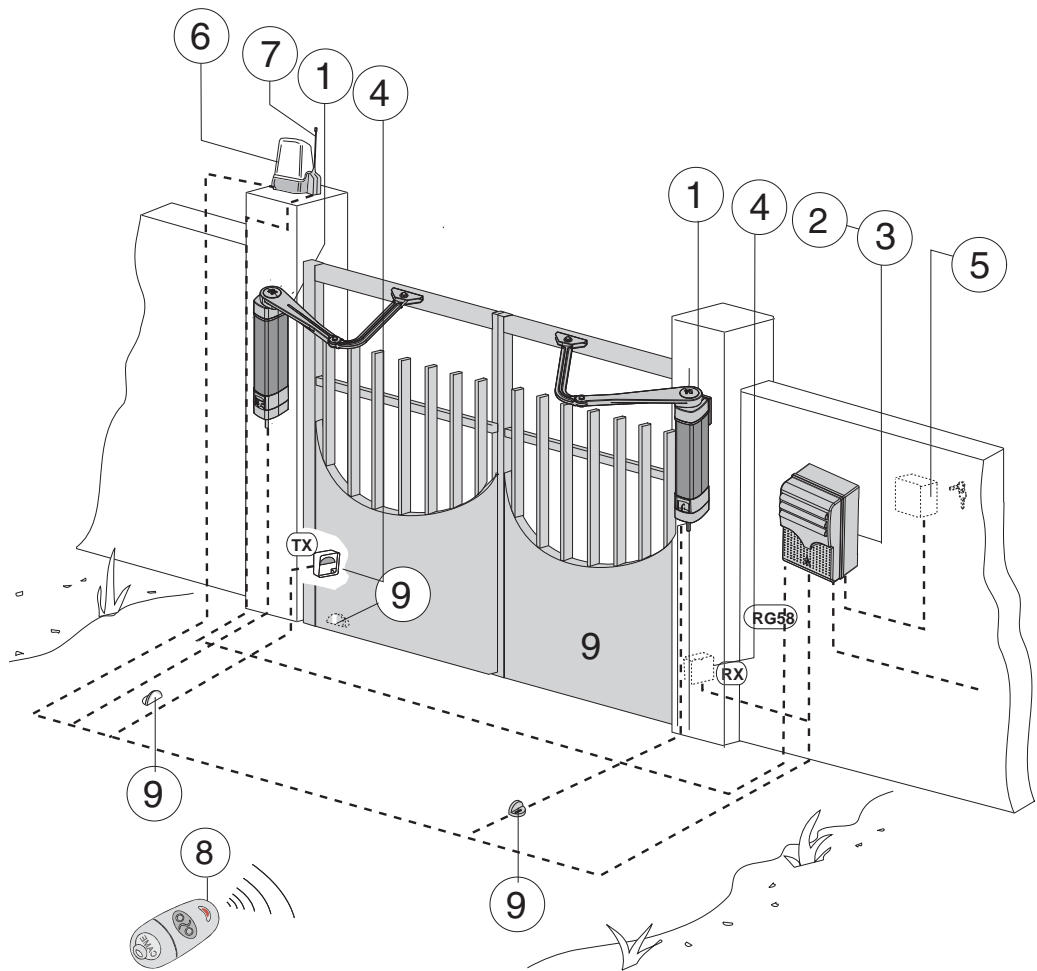
N.B.: If the cable length differs from that specified in the table, then you must determine the proper cable diameter in the basis of the actual power draw by the connected devices and depending on the standards specified in CEI EN 60204-1.

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) Gear motor unit
- 2) Control panel
- 3) Radio receiver
- 4) Photocells
- 5) External key switch
- 6) Flasher
- 7) Antenna
- 8) Transmitter
- 9) Mechanical stop



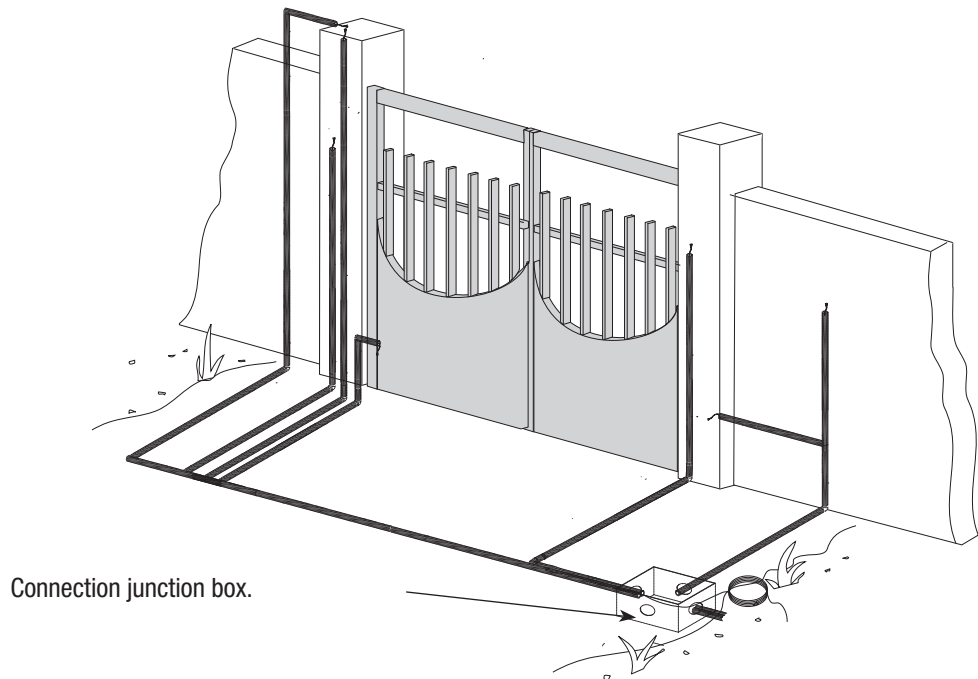


## Installing the operator

 The following illustrations are only examples, given that the space for securing the automation and accessories varies depending on the overall dimensions.

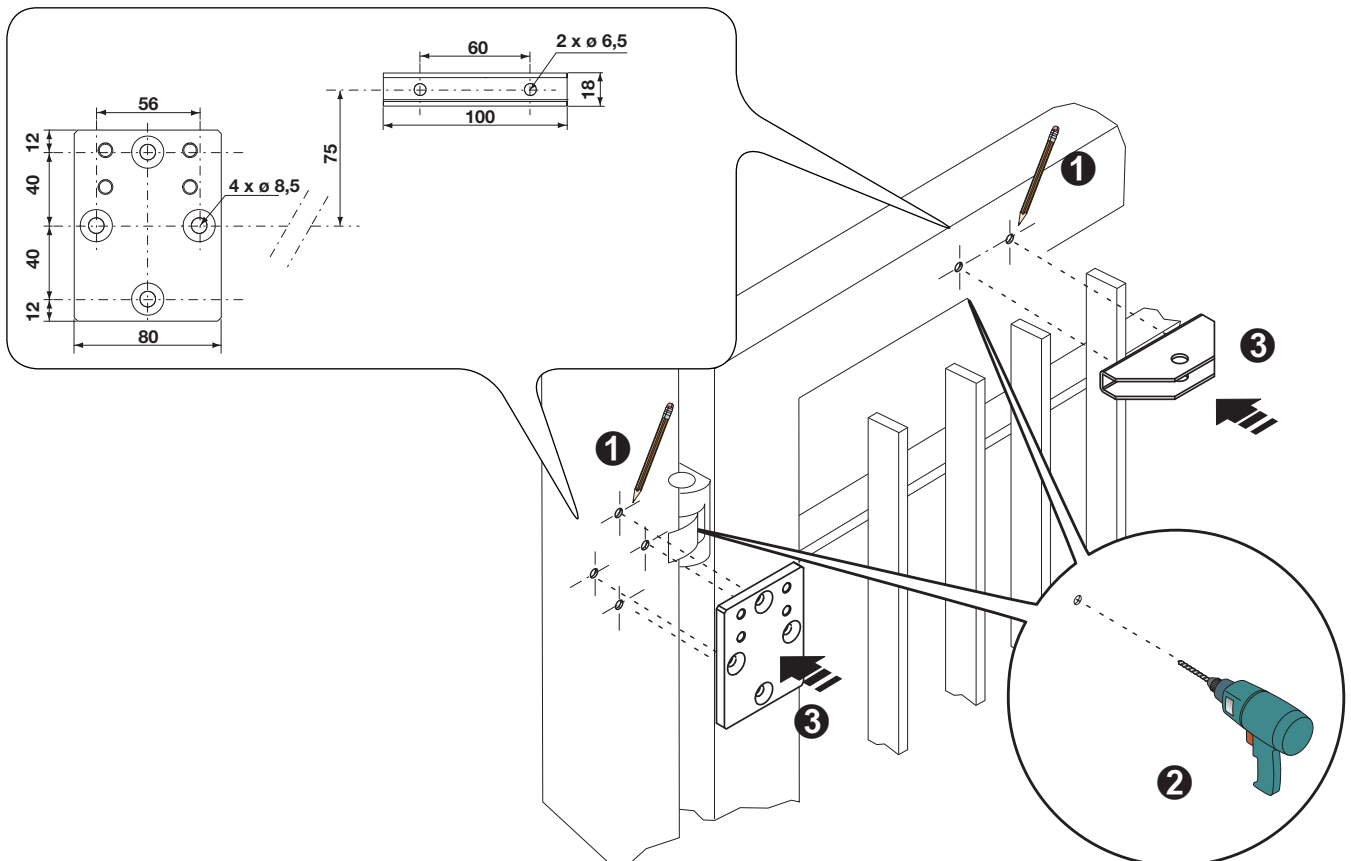
Set up corrugated tubes for the connections coming from the junction box.

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

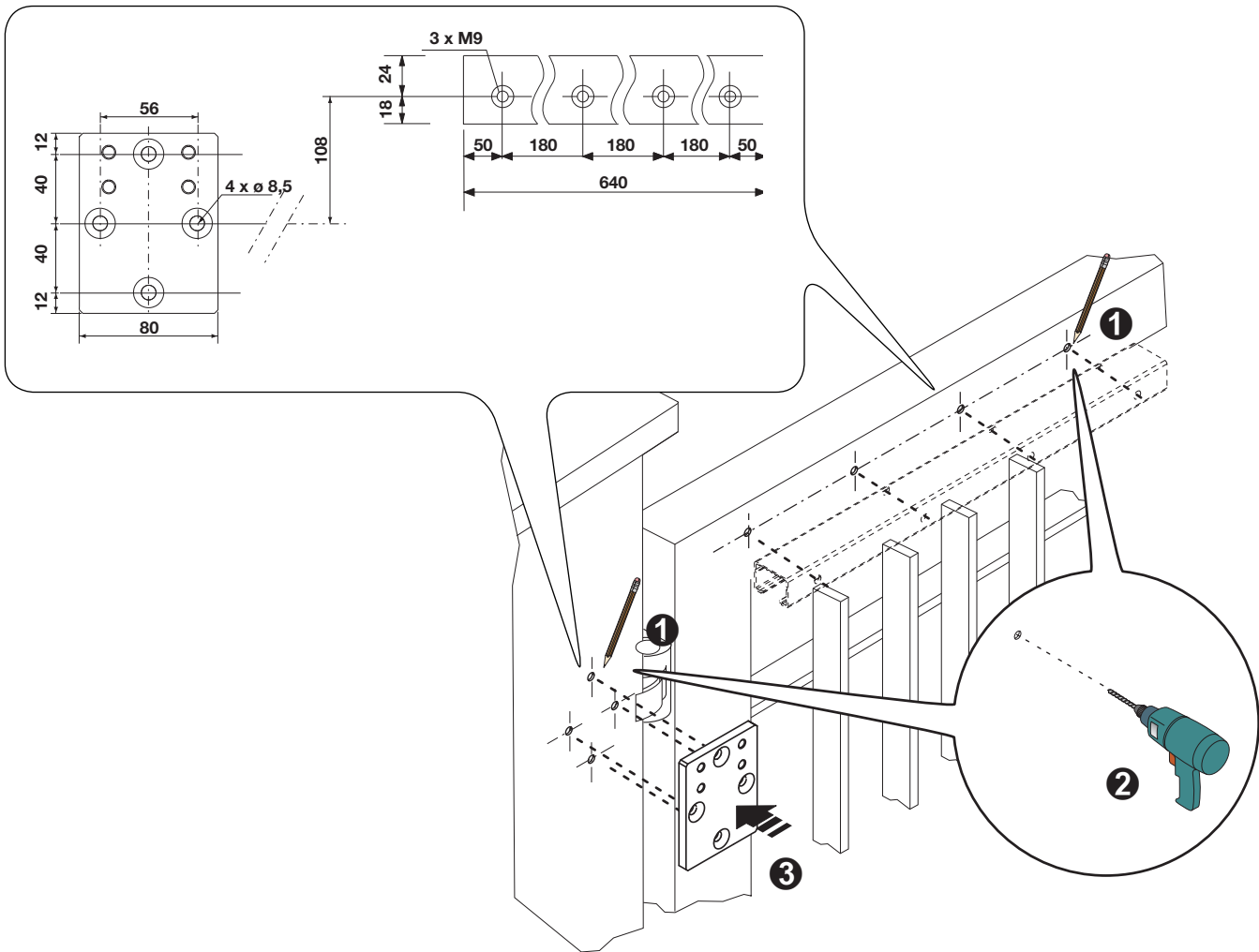


### STYLO-BS

1a) Trace all axis and dimensions, then secure the gearmotor anchoring bracket to the wall or post as well as the arm-to-gate anchoring bracket. 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.



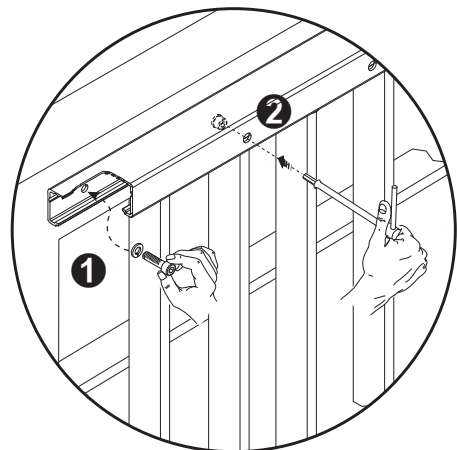
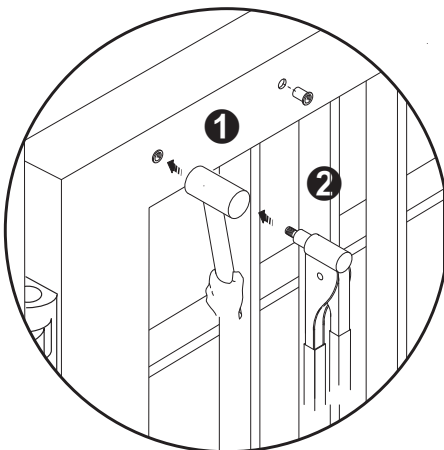
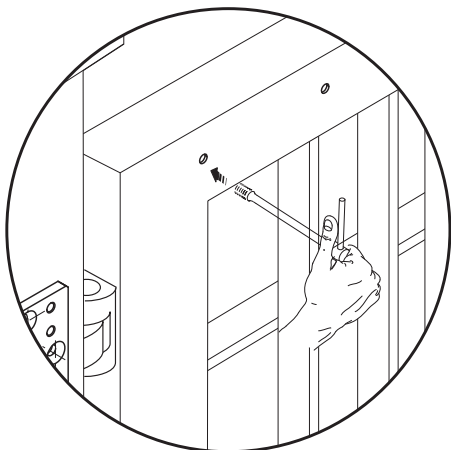
1b) position the gearmotor anchoring bracket and the slide rail following the measurements shown in the drawing.



Drill and thread the holes using an M8 male piece or use  $\varnothing 11$  mm threaded inserts or any suitable materials for the rail to hold.

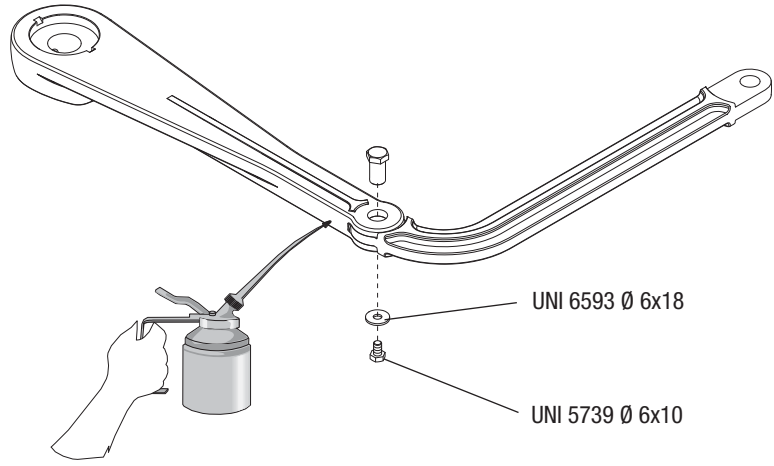
Note: the illustrations are mere examples, it is up to the installer to choose the most suitable solution depending on gate-leaf type and thickness.

Position the slide rail in the holes and secure it using threaded cylinder head screws.



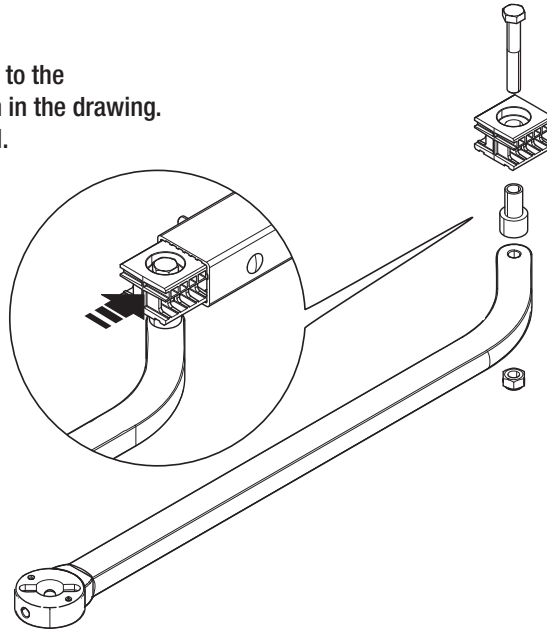
**STYLO-BS**

**2a)** Assemble the hinged-arm by joining the two half-arms with nuts and bolts. Lubricate the rotation pins.



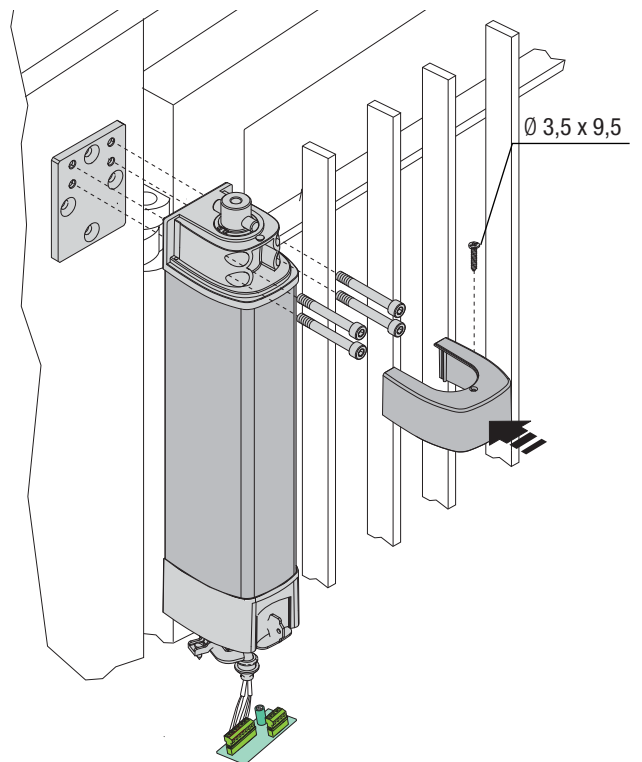
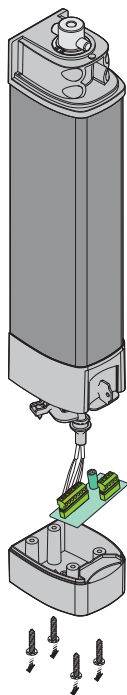
**STYLO-BD**

**2b)** Assemble the slide guide to the transmission arm as shown in the drawing. Insert the guide into the rail.



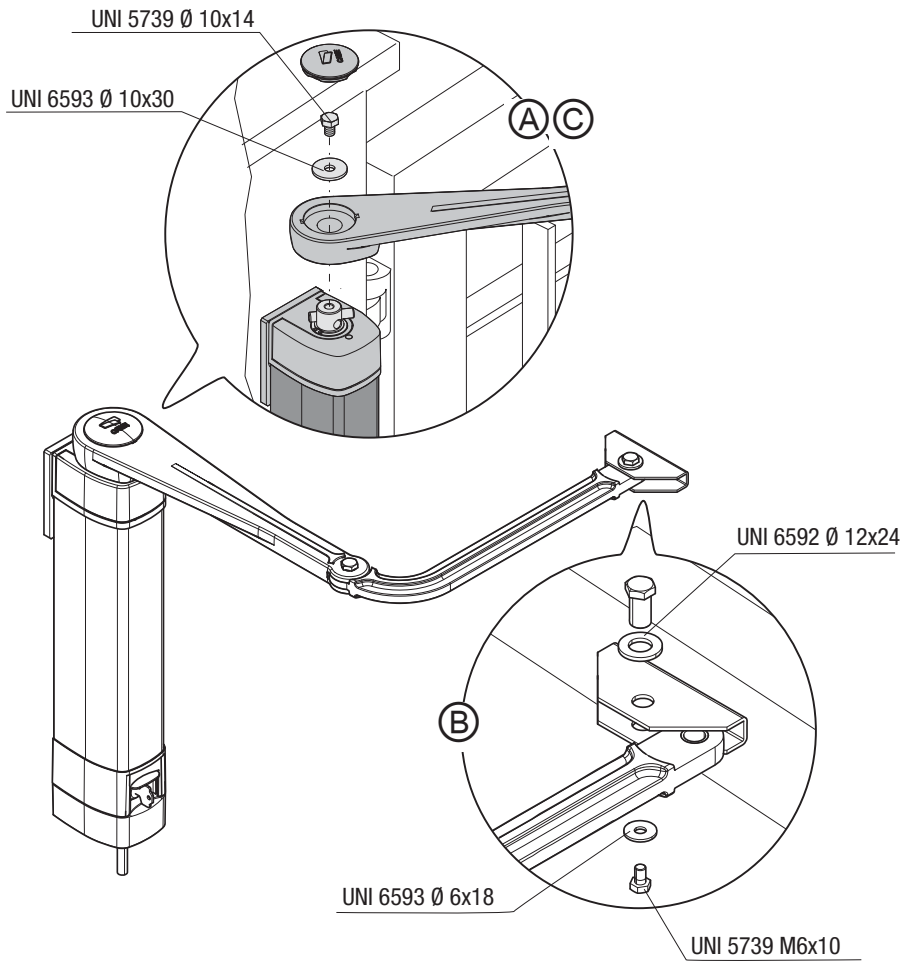
3) Remove the lower cap from the gearmotor.

4) Secure the gearmotor to the flange using the four issued bolts. Secure the upper cap.



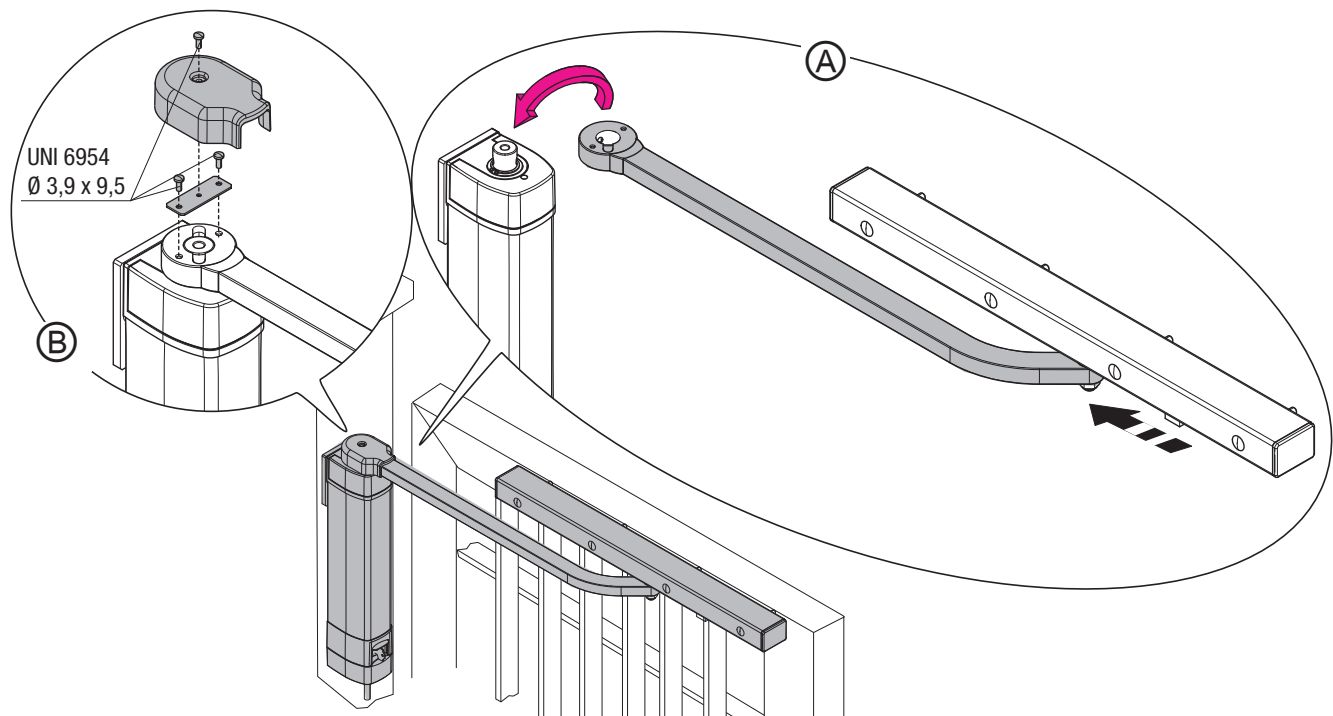
- 5a)** a) insert the hinged-arm onto the gearmotor shaft and secure it using the washer and bolt;  
 b) release the gearmotor, open the gate leaf and hook the arm using the nuts and bolts;  
 c) Cover the hole using the cap.

**STYLO-BS**

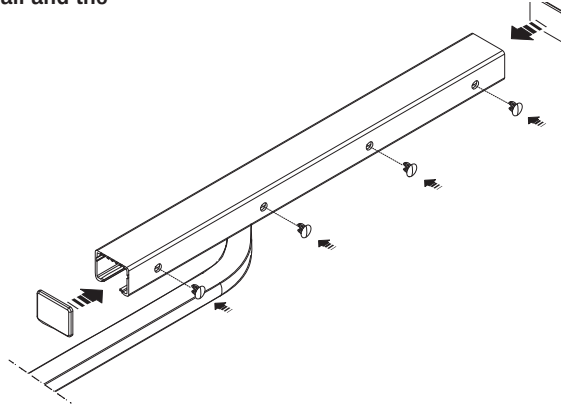


- 5b)** a) Assemble the straight arm onto the gearmotor shaft.  
 b) Cover the hole with the cap and secure it using the supplied screws.

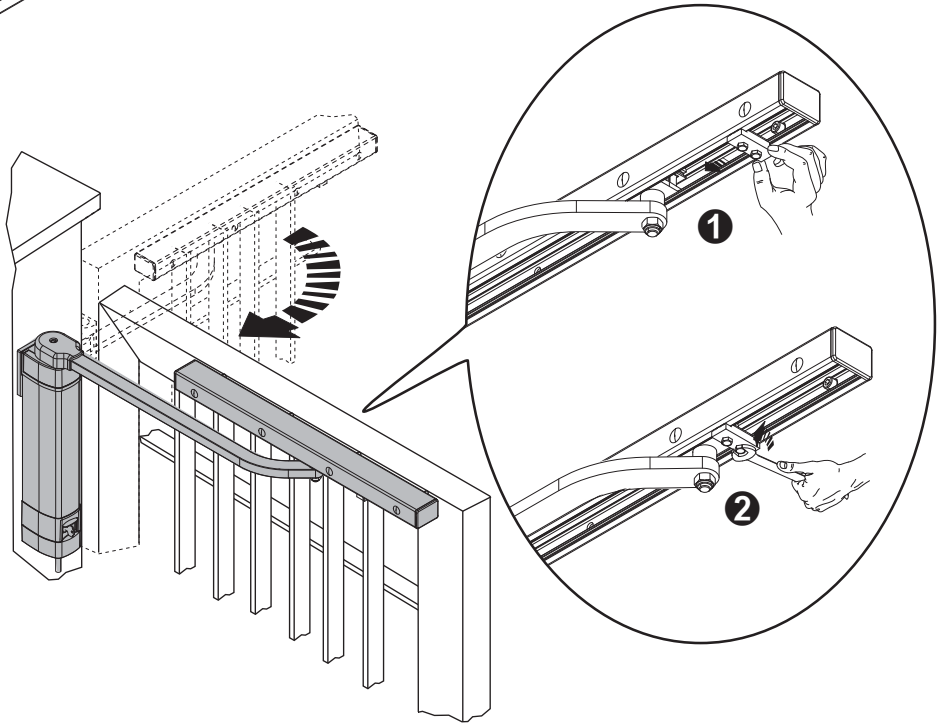
**STYLO-BD**



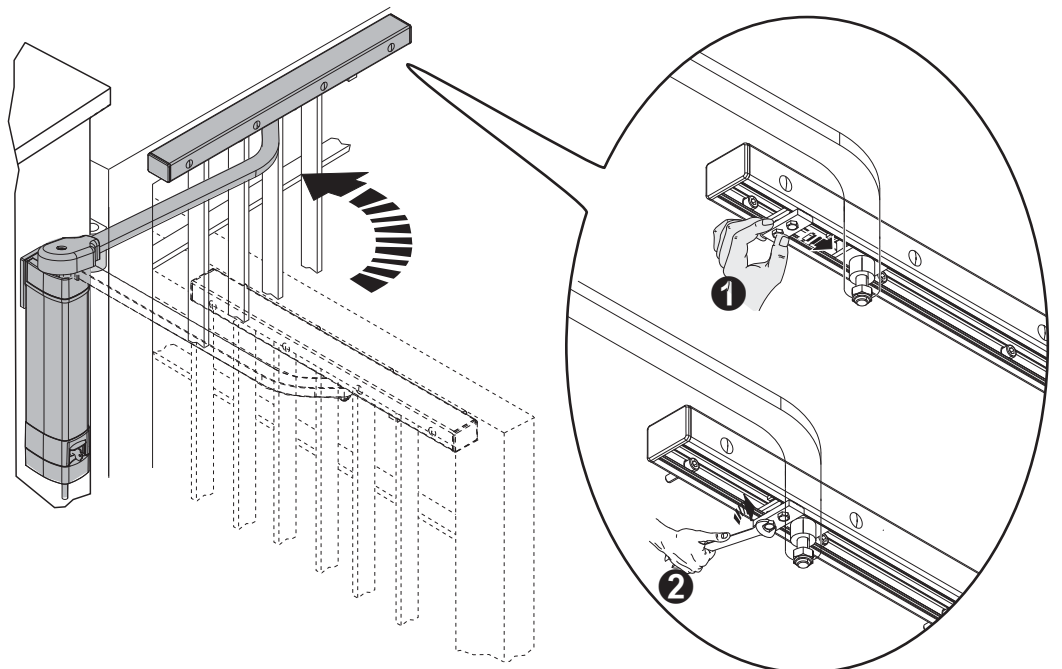
Insert the end caps of the rail and the hole covers.



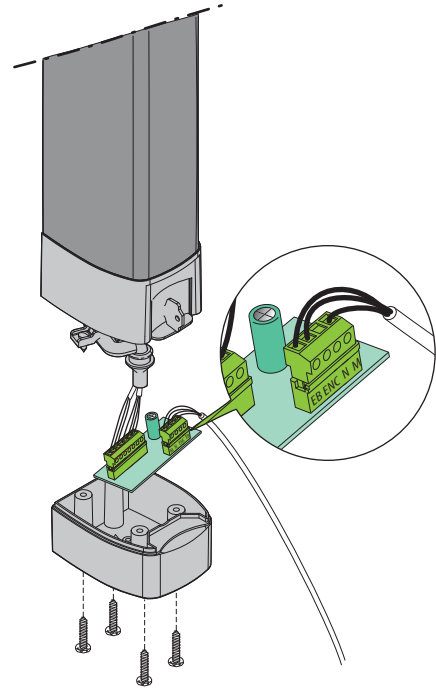
Release the gearmotor (see paragraph on manual release)  
 Fully open the gate leaf, position the mechanical stop so that it coincides with the slide guide and secure it.



Fully close the gate leaf and position the closing mechanical stop so that it coincides with the slide guide and then secure it.

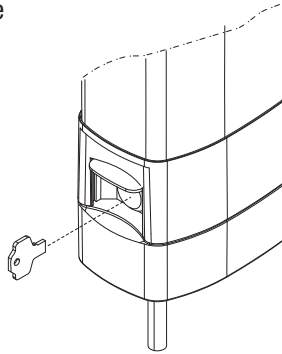


- 6** - Open the lower cap and make the necessary electrical connections;  
- Close the lower cap again..



### Manually releasing the gearmotor

Cut off the main power and open the protective trap door for release; insert the key and turn it.



## Electrical connections

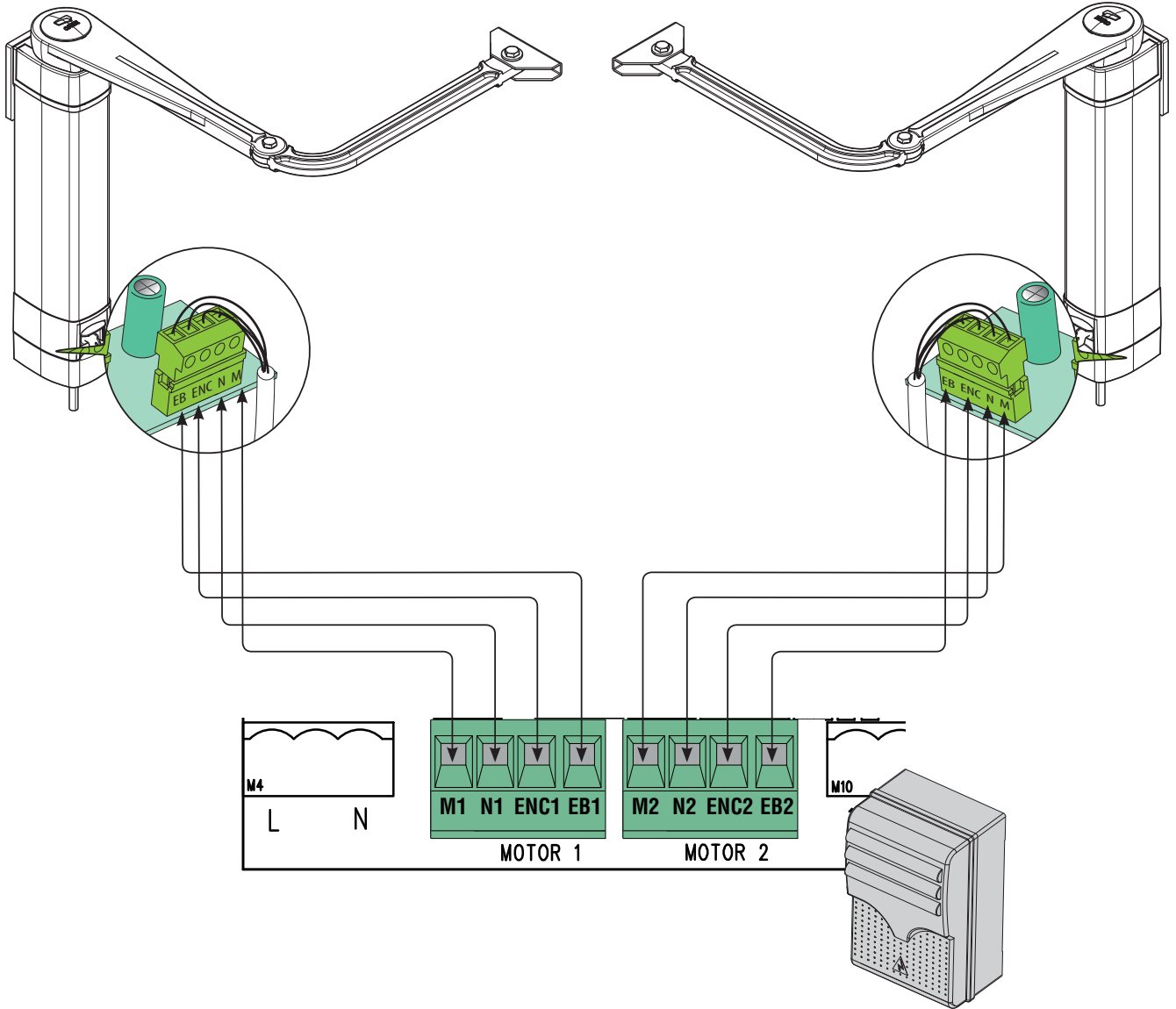
### Electric connections to the ZL92 control panel

24 V (DC) gearmotor with  
delayed opening action

**M1**

24 V (DC) gearmotor with  
delayed closing action

**M2**

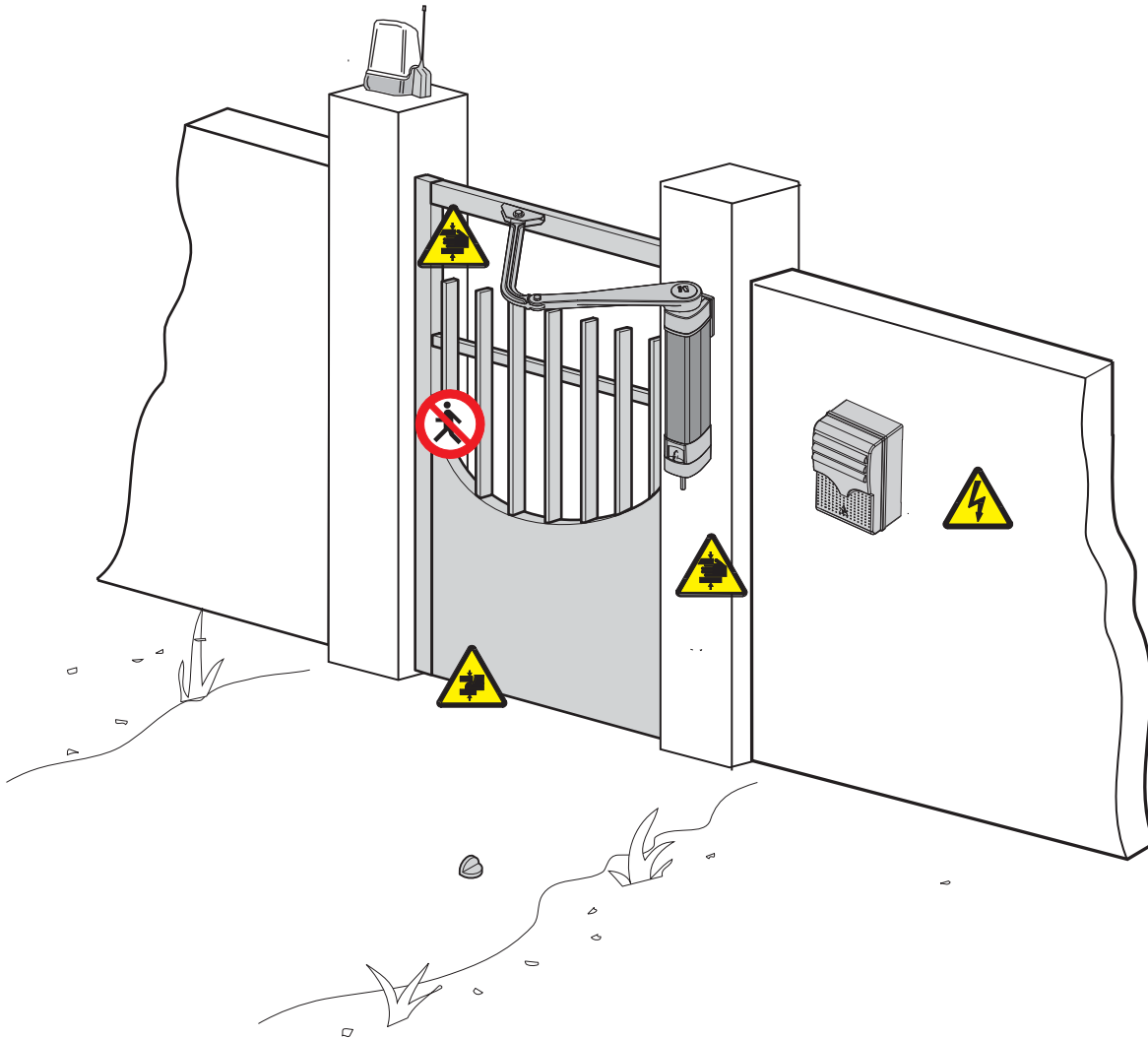


## Safety instructions

### Important safety instructions

This product must only be employed for its originally intended use. The automation installation using these gearmotors requires adequate safety systems on the gate leaves to detect any obstacles (e.g. sensitive edges), in compliance with EN12445 and EN12453 Technical Standards relative to the impact force generated by the moving gate. 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



## 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.

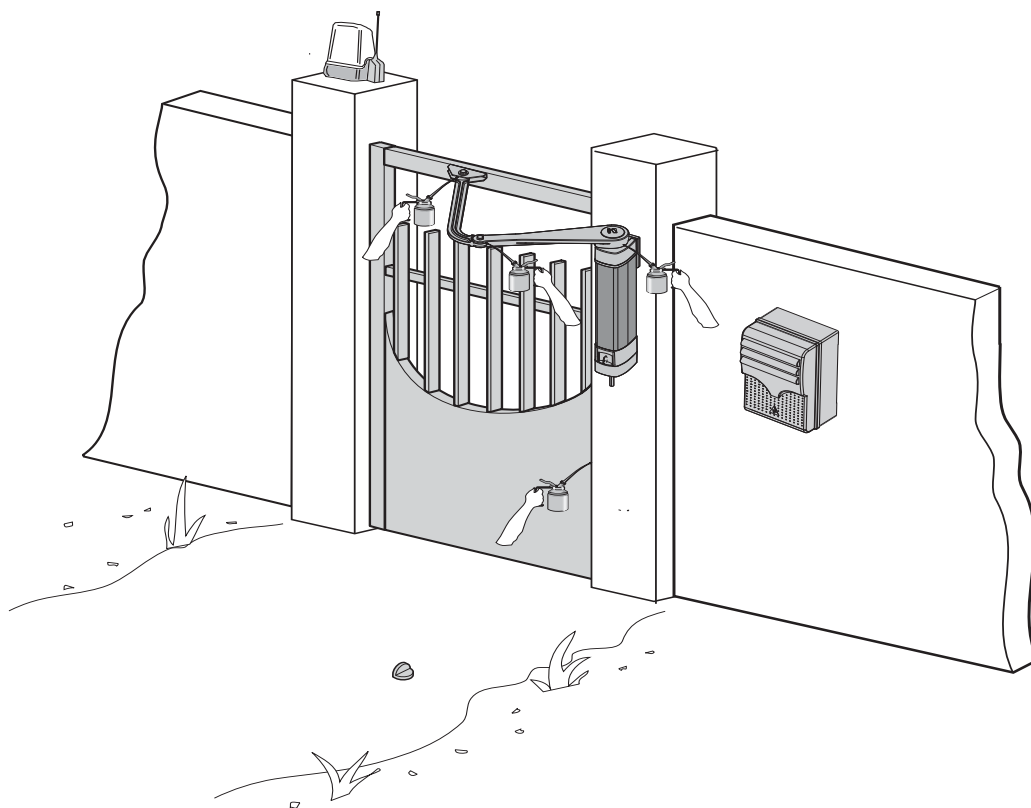
To check the efficiency of the safety devices, move an object in front of the photocells when gate is closing. If the operator inverts the motion or stops, the photocells are working properly.

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.



Make sure there are no plants within the photocell's beam, and that the gate motion is free of any obstacles.

## Trouble shooting


MALFUNCTIONS	POSSIBLE CAUSES	CHECK AND REMEDIES
The does not open nor close	<ul style="list-style-type: none"> <li>• Main power is missing</li> <li>• The transmitter battery is run down</li> <li>• The transmitter is broken</li> <li>• The stop button is stuck or broken</li> <li>• The opening/closing button or key selector switch are stuck.</li> </ul>	<ul style="list-style-type: none"> <li>• Check that the main power is on</li> <li>• Change batteries</li> <li>• Call professional assistance</li> <li>• Call professional assistance</li> <li>• Call professional assistance</li> </ul>
The opens but doesn't close	<ul style="list-style-type: none"> <li>• The photocells are engaged.</li> </ul>	<ul style="list-style-type: none"> <li>• Check that photocells are properly clean and in working orderr</li> <li>• Call assistance</li> </ul>
The flashing light doesn't work	<ul style="list-style-type: none"> <li>• The light bulb is burned.</li> </ul>	<ul style="list-style-type: none"> <li>• Call assistance</li> </ul>



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 _____	
_____	
_____	

## Phasing out and disposal

 CAME cancelli automatici s.p.a. employs a UNI EN ISO 14001 certified and compliant environmental protection system at its plants, to ensure that environmental safeguarding. We ask you to keep protecting the environment, as CAME deems it to be one of the fundamental points of its market operations strategies, by simply following these brief guidelines when disposing.

### DISPOSING THE PACKING MATERIALS

The packing components (cardboard, plastic, etc.) are solid urban waste and may be disposed of without any particular difficulty, by simply separating them so that they can be recycled.

Before actions it is always advisable to check the pertinent legislation where installation will take place.

**DO NOT DISPOSE OF IN NATURE!**

### DISPOSING OF THE PRODUCT

Our products are made using different types of materials

The majority of them (aluminium, plastic, iron, electric cables) can be considered to be solid urban waste

They may be recycled at authorised firms

Other components (electrical circuit board, remote control batteries etc.) may contain hazardous waste.

They must, thus, be removed and turned in to licensed firms for their disposal.

Before acting always check the local laws on the matter.

**DO NOT DISPOSE OF IN NATURE!**

## Conformity declaration

CE

### MANUFACTURER'S DECLARATION OF CONFORMITY

Pursuant to annex II B of the Machinery Directive 98/37/EC



CAME Cancelli Automatici S.p.A.  
via Martiri della Libertà, 15  
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--- STANDARDS ---  
EN 13241-1

EN 60335-1  
EN 60335-2-103

EN 61000-6-2  
EN 61000-6-3

Declares under its own responsibility that the equipments for automatic garage doors and gates listed below:

**STYLO-ME / STYLO-BS / STYLO-BD**

... comply with the National Law related to the following European Directives and to the applicable parts of the following Standards.

--- DIRECTIVES ---  
98/37/CE - 98/79/CE  
2004/108/CEE  
2006/95/CEE  
89/106/CEE

MACHINERY DIRECTIVE  
ELECTROMAGNETIC COMPATIBILITY DIRECTIVE  
LOW VOLTAGE DIRECTIVE  
CONSTRUCTION PRODUCTS DIRECTIVE

MANAGING DIRECTOR  
Mr. Gianni Michielan

**IMPORTANT WARNING!**  
**Do not use the equipment specified here above, before completing the full installation**  
**In full compliance with the Machinery Directive 98/37/EC**

Reference code to request a true copy of the original: **DDF B EN A001I**



English - Manual code: 119DV11 ver. 1.0 03/2010 © CAME cancelli automatici s.p.a. The data and information reported in this installation manual are susceptible to change at any time and without obligation on CAME cancelli automatici s.p.a. to notify users.

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