

**Operator
for swing gates**



FA01193-EN



STYLO
STYLO-ME / STYLO-RME

INSTALLATION MANUAL



WARNING!
important safety instructions for people:
READ CAREFULLY!



PREMISE

- THIS PRODUCT SHOULD ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS EXPLICITLY DESIGNED. ANY OTHER USE IS DANGEROUS. CAME S.P.A IS NOT LIABLE FOR ANY DAMAGE CAUSED BY IMPROPER, WRONGFUL AND UNREASONABLE USE
- KEEP THESE WARNINGS TOGETHER WITH THE INSTALLATION AND OPERATION MANUALS THAT COME WITH THE OPERATOR.

BEFORE INSTALLING

(CHECKING WHAT'S THERE: IF SOMETHING IS MISSING, DO NOT CONTINUE UNTIL YOU HAVE COMPLIED WITH ALL SAFETY PROVISIONS)

- CHECK THAT THE AUTOMATED PARTS ARE IN PROPER MECHANICAL ORDER, THAT THE OPERATOR IS LEVEL AND ALIGNED, AND THAT IT OPENS AND CLOSES PROPERLY. MAKE SURE YOU HAVE SUITABLE MECHANICAL STOPS
- IF THE OPERATOR IS TO BE INSTALLED AT A HEIGHT OF LESS THAN 2.5 M FROM THE GROUND OR OTHER ACCESS LEVEL, MAKE SURE YOU HAVE ANY NECESSARY PROTECTIONS AND/OR WARNINGS IN PLACE
- IF ANY PEDESTRIAN OPENINGS ARE FITTED INTO THE OPERATOR, THERE MUST ALSO BE A SYSTEM TO BLOCK THEIR OPENING WHILE THEY ARE MOVING
- MAKE SURE THAT THE OPENING AUTOMATED DOOR OR GATE CANNOT ENTRAP PEOPLE AGAINST THE FIXED PARTS OF THE OPERATOR
- DO NOT FIT UPSIDE DOWN OR ONTO ELEMENTS THAT COULD BEND. IF NECESSARY, ADD SUITABLE REINFORCEMENTS TO THE ANCHORING POINTS
- DO NOT INSTALL DOOR OR GATE LEAVES ON TILTED SURFACES
- MAKE SURE ANY SPRINKLER SYSTEMS CANNOT WET THE OPERATOR FROM THE GROUND UP
- MAKE SURE THE TEMPERATURE RANGE SHOWN ON THE PRODUCT LITERATURE IS SUITABLE TO THE CLIMATE WHERE IT WILL BE INSTALLED
- FOLLOW ALL INSTRUCTIONS AS IMPROPER INSTALLATION MAY RESULT IN SERIOUS BODILY INJURY
- IT IS IMPORTANT TO FOLLOW THESE INSTRUCTIONS FOR THE SAFETY OF PEOPLE. KEEP THESE INSTRUCTIONS.

INSTALLING

- SUITABLY SECTION OFF AND DEMARCATÉ THE ENTIRE INSTALLATION SITE TO PREVENT UNAUTHORIZED PERSONS FROM ENTERING THE AREA, ESPECIALLY MINORS AND CHILDREN
- BE CAREFUL WHEN HANDLING OPERATORS THAT WEIGH OVER 20 KG. IF NEED BE, USE PROPER SAFETY HOISTING EQUIPMENT
- ALL OPENING COMMANDS (THAT IS, BUTTONS, KEY SWITCHES,

MAGNETIC READERS, AND SO ON) MUST BE INSTALLED AT LEAST 1.85 M FROM THE PERIMETER OF THE GATE'S WORKING AREA, OR WHERE THEY CANNOT BE REACHED FROM OUTSIDE THE GATE. ALSO, ANY DIRECT COMMANDS (WHETHER BUTTONS, TOUCH PANELS, AND SO ON) MUST BE INSTALLED AT LEAST 1.5 M FROM THE GROUND AND MUST NOT BE REACHABLE BY UNAUTHORIZED PERSONS

- ALL MAINTAINED ACTION COMMANDS, MUST BE FITTED IN PLACES FROM WHICH THE MOVING GATE LEAVES AND TRANSIT AND DRIVING AREAS ARE VISIBLE
- APPLY, IF MISSING, A PERMANENT SIGN SHOWING THE POSITION OF THE RELEASE DEVICE
- BEFORE DELIVERING TO THE USERS, MAKE SURE THE SYSTEM IS EN 12453 STANDARD COMPLIANT (REGARDING IMPACT FORCES), AND ALSO MAKE SURE THE SYSTEM HAS BEEN PROPERLY ADJUSTED AND THAT ANY SAFETY, PROTECTION AND MANUAL RELEASE DEVICES ARE WORKING PROPERLY
- APPLY WARNING SIGNS WHERE NECESSARY AND IN A VISIBLE PLACE, (SUCH AS, SUCH AS THE GATE'S PLATE

SPECIAL USER-INSTRUCTIONS AND RECOMMENDATIONS

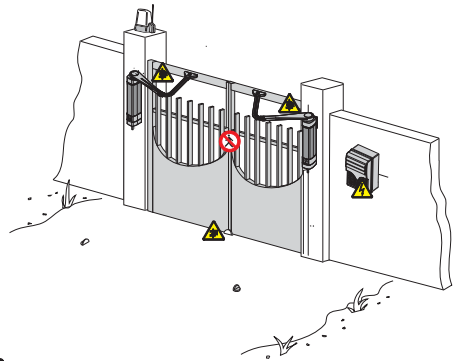
- KEEP GATE OPERATION AREAS CLEAN AND FREE OF ANY OBSTRUCTIONS. MAKE SURE THAT THE PHOTOCELLS ARE FREE OF ANY OVERGROWN VEGETATION AND THAT THE OPERATOR'S AREA OF OPERATION IS FREE OF ANY OBSTRUCTIONS
- DO NOT ALLOW CHILDREN TO PLAY WITH FIXED COMMANDS, OR TO LOITER IN THE GATE'S MANEUVERING AREA. KEEP ANY REMOTE CONTROL TRANSMITTERS OR ANY OTHER COMMAND DEVICE AWAY FROM CHILDREN, TO PREVENT THE OPERATOR FROM BEING ACCIDENTALLY ACTIVATED.
- THE APPARATUS MAY BE USED BY CHILDREN OF EIGHT YEARS AND ABOVE AND BY PHYSICALLY, MENTALLY AND SENSORY-CHALLENGED PEOPLE, OR EVEN ONES WITHOUT ANY EXPERIENCE, PROVIDED THIS HAPPENS UNDER CLOSE SUPERVISION OR ONCE THEY HAVE BEEN PROPERLY INSTRUCTED TO USE THE APPARATUS SAFELY AND TO THE POTENTIAL HAZARDS INVOLVED. CHILDREN MUST NOT PLAY WITH THE APPARATUS. CLEANING AND MAINTENANCE BY USERS MUST NOT BE DONE BY CHILDREN, UNLESS PROPERLY SUPERVISED
- FREQUENTLY CHECK THE SYSTEM FOR ANY MALFUNCTIONS OR SIGNS OF WEAR AND TEAR OR DAMAGE TO THE MOVING STRUCTURES, TO THE COMPONENT PARTS, ALL ANCHORING POINTS, INCLUDING CABLES AND ANY ACCESSIBLE CONNECTIONS. KEEP ANY HINGES, MOVING JOINTS AND SLIDE RAILS PROPERLY LUBRICATED
- PERFORM FUNCTIONAL CHECKS ON THE PHOTOCELLS AND SENSITIVE SAFETY EDGES,

EVERY SIX MONTHS. TO CHECK WHETHER THE PHOTOCELLS ARE WORKING, WAVE AN OBJECT IN FRONT OF THEM WHILE THE GATE IS CLOSING; IF THE OPERATOR INVERTS ITS DIRECTION OF TRAVEL OR SUDDENLY STOPS, THE PHOTOCELLS ARE WORKING PROPERLY. THIS IS THE ONLY MAINTENANCE OPERATION TO DO WITH THE POWER ON. CONSTANTLY CLEAN THE PHOTOCELLS' GLASS COVERS USING A SLIGHTLY WATER-MOISTENED CLOTH; DO NOT USE SOLVENTS OR OTHER CHEMICAL PRODUCTS THAT MAY RUIN THE DEVICES

- IF REPAIRS OR MODIFICATIONS ARE REQUIRED TO THE SYSTEM, 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 AND BEFORE ANY OTHER OPERATION, TO PREVENT POTENTIALLY HAZARDOUS SITUATIONS. READ THE INSTRUCTIONS IF THE POWER SUPPLY CABLE IS DAMAGED, IT MUST BE REPLACED BY THE MANUFACTURER OR AUTHORIZED TECHNICAL ASSISTANCE SERVICE, OR IN ANY CASE, BY SIMILARLY QUALIFIED PERSONS, TO PREVENT ANY RISK
- IT IS FORBIDDEN FOR USERS TO PERFORM ANY OPERATIONS THAT ARE NOT EXPRESSLY REQUIRED OF THEM AND WHICH ARE NOT LISTED IN THE MANUALS. FOR ANY REPAIRS, MODIFICATIONS AND ADJUSTMENTS AND FOR EXTRA-ORDINARY MAINTENANCE, CALL TECHNICAL ASSISTANCE
- LOG THE JOB AND CHECKS INTO THE PERIODIC MAINTENANCE LOG.

FURTHER RECOMMENDATIONS FOR ALL

- KEEP CLEAR OF HINGES AND MECHANICAL MOVING PARTS
- DO NOT ENTER THE OPERATOR'S AREA OF OPERATION WHEN IT IS MOVING
- DO NOT COUNTER THE OPERATOR'S MOVEMENT AS THIS COULD RESULT IN DANGEROUS SITUATIONS
- ALWAYS PAY SPECIAL ATTENTION TO ANY DANGEROUS POINTS, WHICH HAVE TO BE LABELED WITH SPECIFIC PICTOGRAMS AND/OR BLACK AND YELLOW STRIPES
- WHILE USING A SELECTOR SWITCH OR A COMMAND IN MAINTAINED ACTIONS, KEEP CHECKING THAT THERE ARE NO PERSONS WITHIN THE OPERATING RANGE OF ANY MOVING PARTS, UNTIL THE COMMAND IS RELEASED
- THE GATE MAY MOVE AT ANY TIME AND WITHOUT WARNING
- ALWAYS CUT OFF THE MAINS POWER SUPPLY BEFORE PERFORMING ANY MAINTENANCE OR CLEANING.



Danger of foot crushing



Danger of hand crushing






Danger! High voltage.



No transiting while the barrier is moving

KEY

-  This symbol indicates parts to read carefully.
-  This symbol indicates parts about safety.
-  This symbol tells you what to say to end users.

THE MEASUREMENTS, UNLESS OTHERWISE STATED, ARE IN MILLIMETERS.

DESCRIPTION

This product has been designed and built by CAME S.p.A.

The full range:

001STYLO-ME - 24 V DC non-reversible external gearmotor

001STYLO-RME - 24 V DC reversible external gearmotor


Mandatory accessories for STYLO-RME:

001LOCK81 - Single-cylinder blocking electro-lock

001LOCK82 - Double-cylinder blocking electro-lock

Intended use

The STYLO gearmotor is designed to automate residential and apartment block swing gates.

 Any use other than that described above and installations that differ from what is set out in this technical manual are forbidden.

Limitations of use

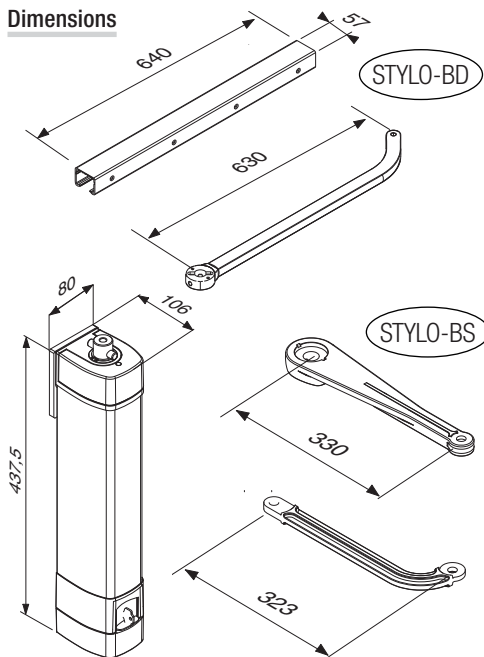
We suggest you always fit an electrolock onto swing gates for a more reliable closure.

Model	STYLO ME - STYLO RME		
Gate leaf width (m)	1.80	1.20	0.80
Gate leaf weight (kg)	100	125	150
Max gate leaf opening (°)	120 (with 001STYLO-BS arm)	135 (with 001STYLO-BD arm)	

Technical data

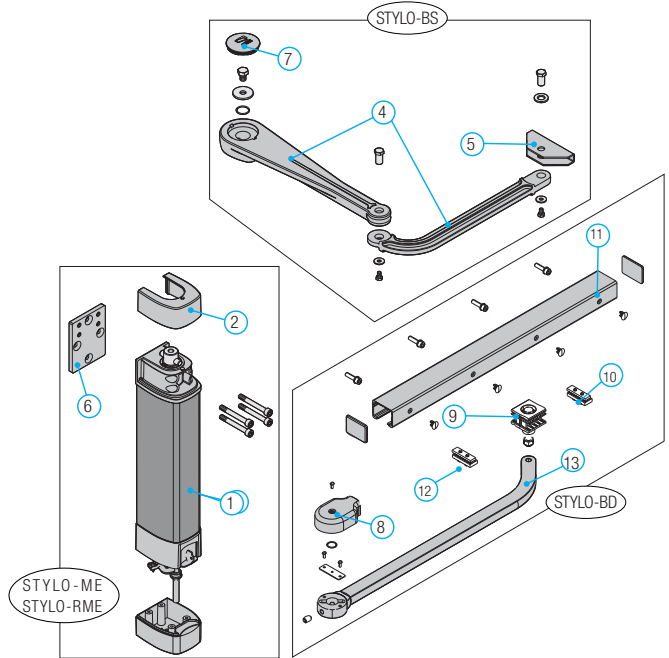
Type	STYLO ME - STYLO RME
Protection rating	IP54
Power supply	230 V AC (50/60 Hz)
Motor power supply	24 DC (50/60 Hz)
Current draw (max)	5 A
Power	48 W
Maximum torque	100 Nm
Opening time (90°)	adjustable
Duty cycle (%)	intensive use
Operating temperature (°C)	-20 - +55
Gear ratio	1/531
Weight (kg)	6.8 kg

Dimensions



Main components

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




SYSTEM FEASIBILITY

⚠ Installation must be carried out by qualified and experienced personnel in compliance with applicable regulations.

Preliminary checks

⚠ Before installing the operator:

- make sure you have set up a suitable dual pole cut off device along the power supply that is compliant with the installation rules. It should completely cut off the power supply according to category III surcharge conditions (that is, with minimum contact openings of 3 mm);
- Prepare suitable piping and ducts for routing the electrical cables, ensuring protection against mechanical damage;
-  Make sure that any connections within the container (made to ensure the continuity of the protection circuit) are fitted with additional insulation compared to the other internal conductor parts;
- Make sure the gate structure is sturdy enough, that the hinges are in proper working order and that there is no friction between the moving and fixed parts;
- Make sure there are opening and closing mechanical stops.

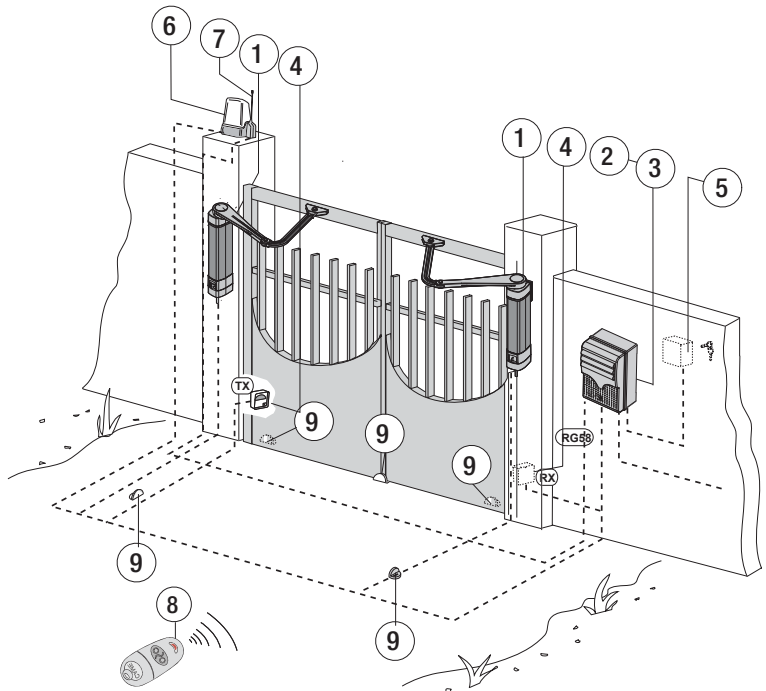
Tipos de cables y secciones mínimas

Collegamento	Tipo de cable	Longitud del cable	Longitud del cable
		1 < 15 m	15 < 30 m
Alimentación cuadro 230 V AC	H05RN-F	3G x 1,5 mm ²	3G x 2,5 mm ²
Alimentación motor/encoder (RME) 24 V DC	FROR CEI 20-22 CEI EN 50267-2-1	3 x 1,5 mm ²	3 x 1,5 mm ²
Alimentación motor/encoder (ME) 24 V DC		4 x 1,5 mm ²	4 x 2,5 mm ²
Luz intermitente		2 x 1,5 mm ²	
Emisores fotocélulas		2 x 0,5 mm ²	
Receptores fotocélulas		4 x 0,5 mm ²	
Dispositivos de mando y de seguridad		2 x 0,5 mm ²	
Antena	RG58	máx 10 m	
Came Remote Protocol (CRP)	UTP CAT5	máx 1000 m	

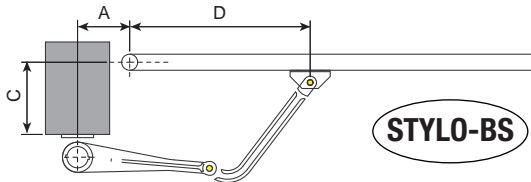
Si los cables tienen una longitud distinta con respecto a la indicada en la tabla, hay que determinar la sección de los cables con arreglo a la absorción efectiva de los dispositivos conectados y según lo establecido por la normativa CEI EN 60204-1. En caso de conexiones que prevean varias cargas en la misma línea (secuenciales), se debe volver a considerar el dimensionamiento en función de la absorción y de las distancias efectivas. Para las conexiones de productos no previstos en este manual, manda la documentación adjuntada a dichos productos.

Example of a system

1. Gearmotor unit
2. Control panel
3. Radio receiver
4. Photocells
5. External key selector
6. Flashing light
7. Antenna
8. Transmitter
9. Mechanical stop

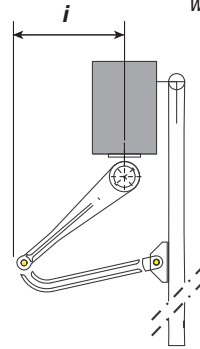


Examples of applications

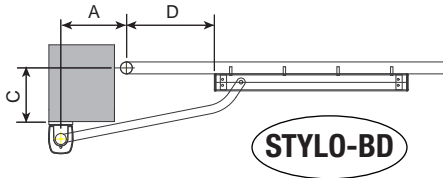


STYLO-BS

Gate-leaf opening (°)	A (mm)	C (mm)	D (mm)
90	90	0÷180	450
90	130	180	450
120	170	0	450



$i = 300$ mm max
with 90° opening



STYLO-BD

Gate-leaf opening (°)	A (mm)	C (mm)	D (mm)
90	90	0÷200	400
90	230	180	300
135	230	0	300

INSTALLATION

△ The following illustrations are only examples, given that the space for securing the operator and accessories varies depending on the overall dimensions. The installation technician is responsible for choosing the most suitable solution.

Preparation

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

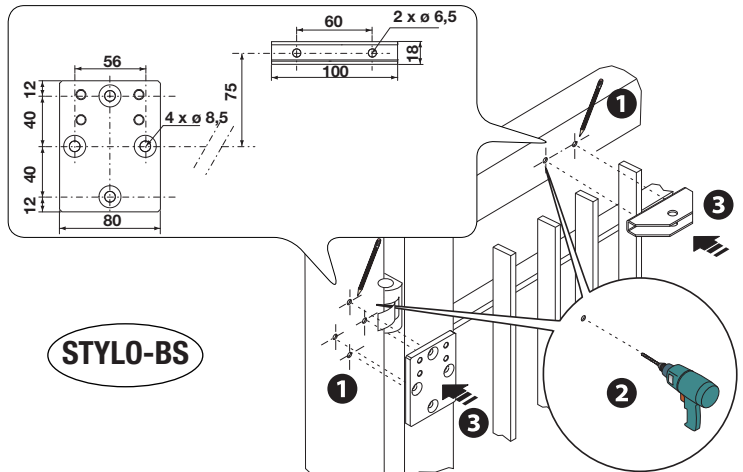
N.B. the number of tubes depends on the type of system installed and any accessories.

Securing the brackets

STYLO-BS

Trace all axes and dimensions, respecting the levels shown in the drawing ①, drill the marked points ②, then secure the gearmotor anchoring bracket to the wall or post as well as the arm mounting bracket to the gate ③.

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

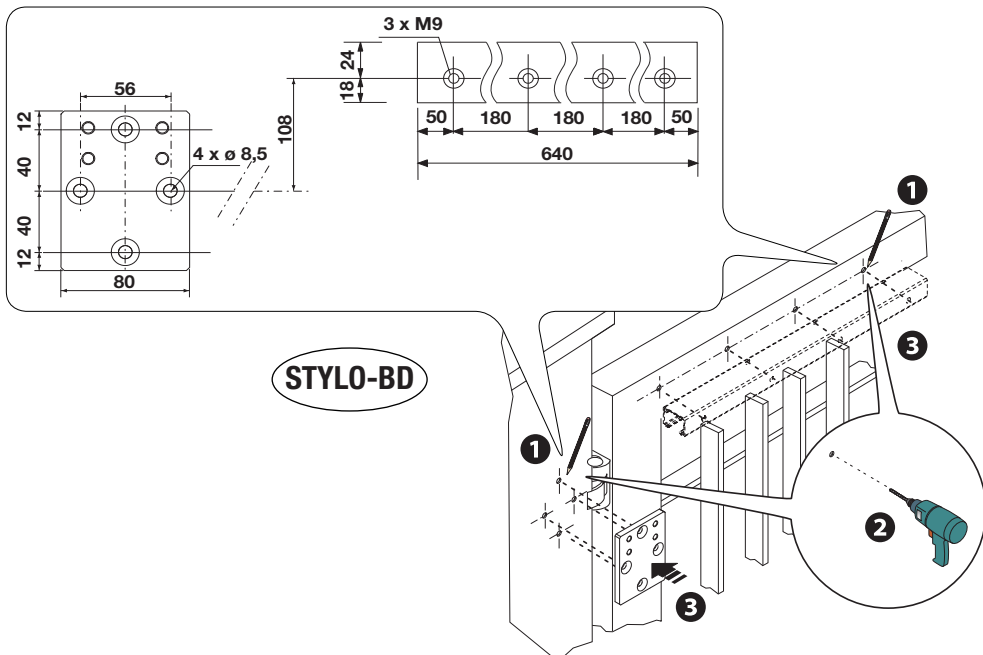


STYLO-BS

STYLO-BD

Trace all axes and dimensions, respecting the levels shown in the drawing **1**, drill the marked points **2**, then secure the gearmotor mounting bracket to the wall or post and the slide rail **3**.

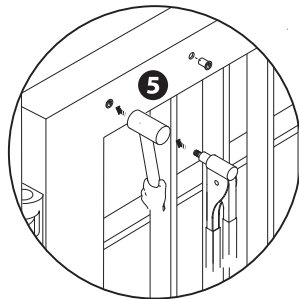
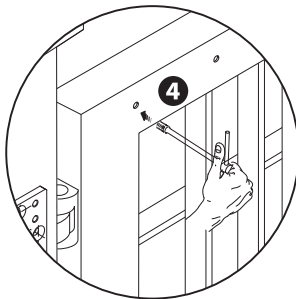
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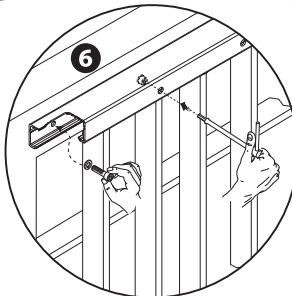
STYLO-BD

Drill the holes using an M8 male piece **4** or use the M8 threaded inserts or suitable materials for securing the rail **5**.

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

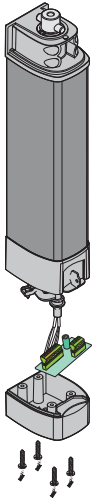


Position the slide rail in the holes and secure it using threaded cylinder head screws **6**.

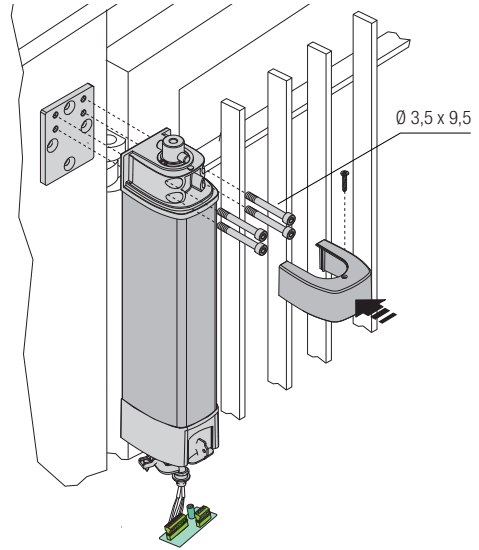


Securing the gearmotor

Remove the lower cap from the gearmotor.



Secure the gearmotor to the flange using the four bolts supplied. Secure the upper cap.



Securing the transmission arm

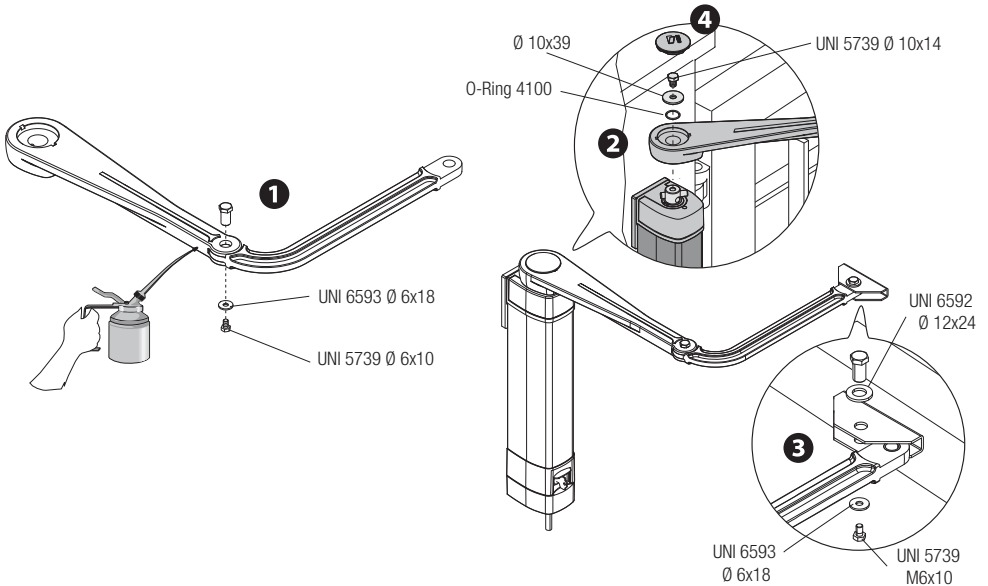
STYLO-BS

Assemble the hinged arm by joining the two half-arms with nuts and bolts. Lubricate the rotation pins **1**.

Insert the hinged arm onto the gearmotor shaft and secure it using the screw and washer **2**.

Release the gearmotor, open the gate leaf and hook the arm using the nuts and bolts **3**.

Cover the hole using the cap **4**.



STYLO-BD

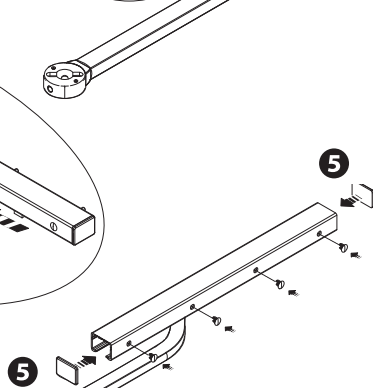
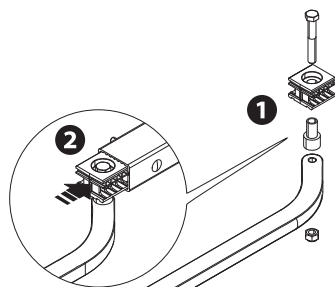
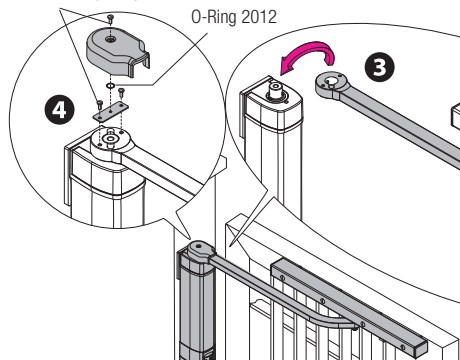
Assemble the slide guide to the transmission arm as shown in the drawing **1**.
Insert the guide into the rail **2**.

Assemble the straight arm onto the gearmotor shaft **3**. Cover the hole with the cap and secure it using the supplied screws **4**.

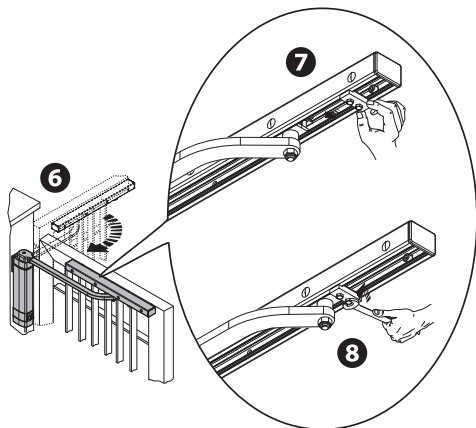
Insert the end caps of the rail and the hole covers **5**.

UNI 6954 Ø 3,9 x 9,5

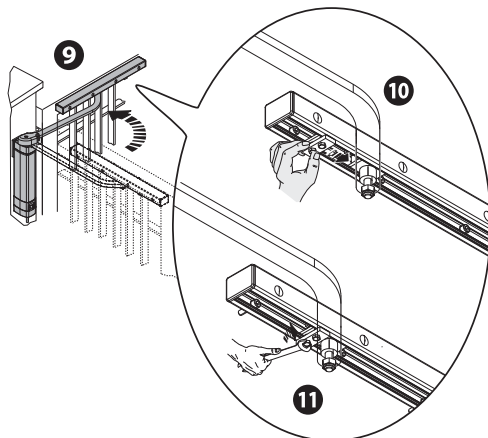
O-Ring 2012



Release the gearmotor (see paragraph on manual release). Fully open the gate leaf **9** and position the mechanical stop so that it coincides with the slide guide **10** and then secure it **8**.

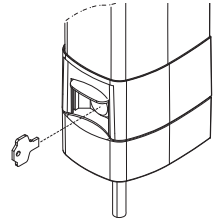


Fully close the gate leaf **9** and position the closing mechanical stop so that it coincides with the slide guide **10** and then secure it **11**.



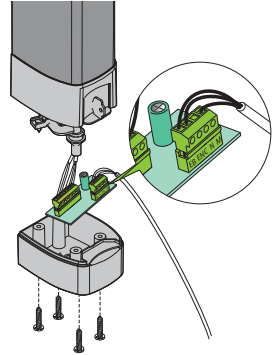
MANUAL RELEASE OF THE NON-REVERSIBLE GEARMOTOR

Cut off mains power and open the protective trap door for release. Insert the key and turn it.



ELECTRICAL CONNECTIONS

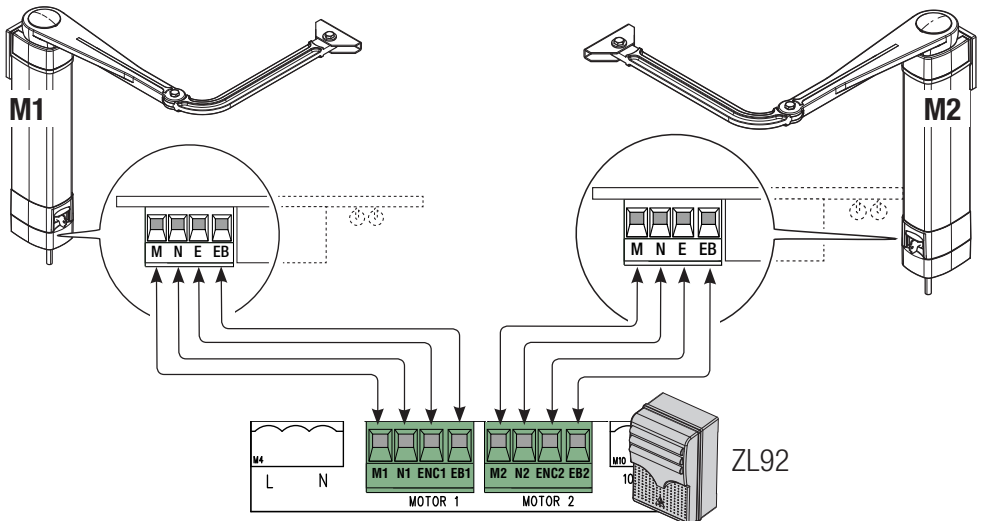
Open the lower cap and make the necessary electrical connections. Complete installation by closing the lower cap again.



Electrical connection of the STYLO ME gearmotor to the control panel

24 V (DC) gearmotor with delaying opening action

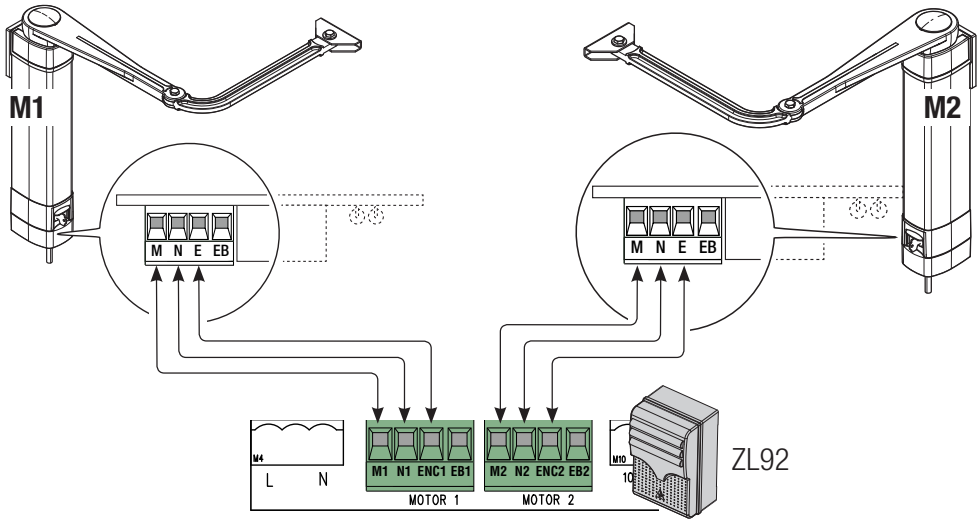
24 V (DC) gearmotor with delaying closing action



Electrical connection of the STYLO RME gearmotor to the control panel

24 V (DC) gearmotor with
delaying opening action

24 V (DC) gearmotor with
delaying closing action



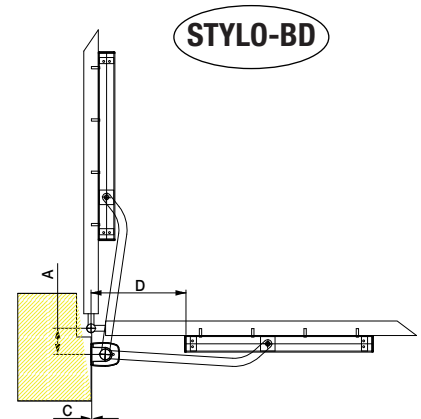
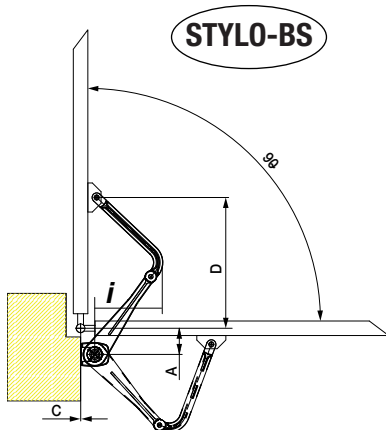
INSTALLING AND CONNECTIONS FOR OUTER OPENING

Following, are the only things that change compared to a standard installation:

Examples of applications

Gate-leaf opening (°)	A (mm)	i (mm)	C (mm)	D (mm)
90	90	285	0	450
90	180	210	0	450
120	90	125	0	450

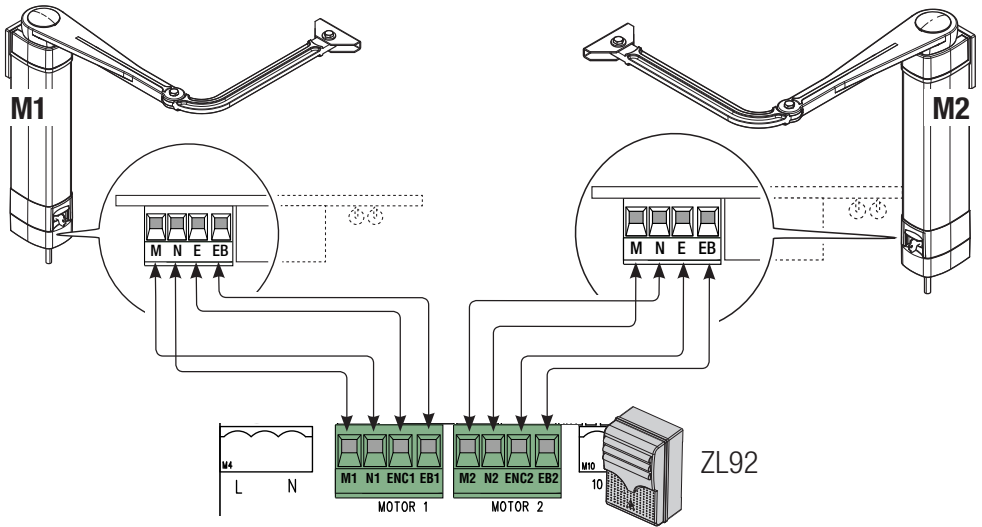
Gate-leaf opening (°)	A (mm)	C (mm)	D (mm)
90	90	0	400



Electrical connection of the STYLO ME gearmotor to the control panel

24 V (DC) gearmotor with
delaying opening action

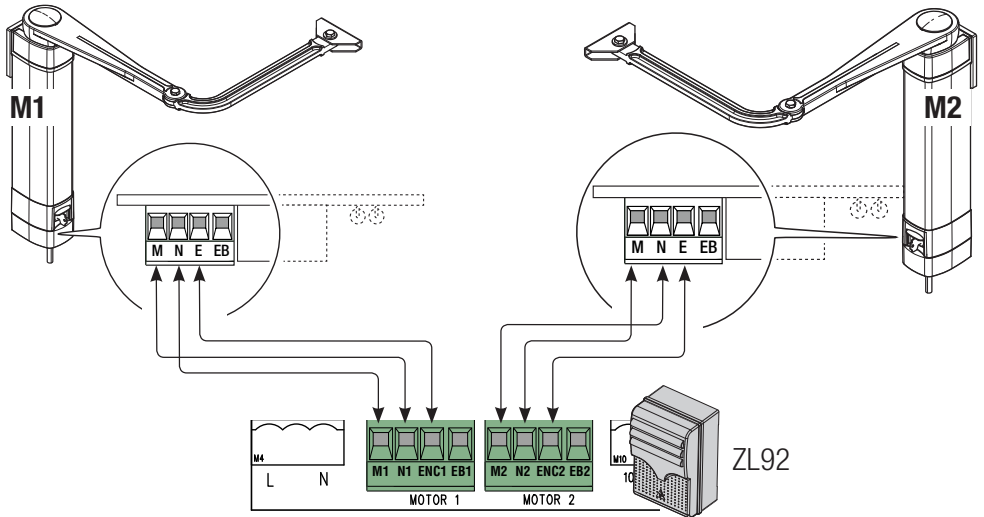
24 V (DC) gearmotor with
delaying closing action



Electrical connection of the STYLO RME gearmotor to the control panel

24 V (DC) gearmotor with
delaying opening action


24 V (DC) gearmotor with
delaying closing action



TROUBLESHOOTING

MALFUNCTIONS	POSSIBLE CAUSES	CHECKS AND REMEDIES
The gate does not open or close	<ul style="list-style-type: none"> No power supply The transmitter battery is flat The transmitter is broken The stop button is stuck or broken The opening/closing button or the key selector switch are stuck 	<ul style="list-style-type: none"> Check for power Replace the batteries Contact service Contact service Contact service
The gate opens but does not close	<ul style="list-style-type: none"> The photocells are engaged 	<ul style="list-style-type: none"> Check that the photocells are clean and work correctly Contact service
The flashing light does not work	<ul style="list-style-type: none"> The bulb has blown 	<ul style="list-style-type: none"> Contact service

MAINTENANCE

 Before any maintenance, disconnect power to prevent any possible dangerous situations that can be caused by accidental movement of the device.

Periodic maintenance log to be completed by the user (every six months)

Date	Notes	Signature

Extraordinary maintenance

⚠ The table below is used to note any extraordinary maintenance, repairs or improvements carried out by specialist companies. N.B.: Extraordinary maintenance must be carried out by specialist technicians.

Extraordinary maintenance log

Installation technician stamp	Operator name
	Date of intervention
	Technician signature
	Customer signature
Intervention carried out _____ _____ _____	

Installation technician stamp	Operator name
	Date of intervention
	Technician signature
	Customer signature
Intervention carried out _____ _____ _____	

Installation technician stamp	Operator name
	Date of intervention
	Technician signature
	Customer signature
Intervention carried out _____ _____ _____	

Installation technician stamp	Operator name
	Date of intervention
	Technician signature
	Customer signature
Intervention carried out _____ _____ _____	

DISMANTLING AND DISPOSAL

 **CAME S.p.A.** implements an EN ISO 14001 certified and compliant Environmental Management System at its plants, to ensure environmental protection.

Please continue our efforts to protect the environment, something that CAME considers to be one of the foundations in developing its business and market strategies, simply by observing brief recommendations as regards disposal:

DISPOSAL OF PACKAGING

Packaging components (cardboard, plastic etc.) can be disposed of together with normal household waste without any difficulty, by simply separating the different types of waste and recycling them.

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

DISPOSE OF PROPERLY!

DISPOSAL OF THE PRODUCT

Our products are made with different materials. Most of them (aluminium, plastic, iron, electrical cables) can be disposed of together with normal household waste. They can be recycled if collected, sorted and sent to authorised centres.

Other components (circuit boards, remote control batteries etc.), on the other hand, may contain pollutants.

They should therefore be removed and handed over to companies authorised to recover and recycle them.

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

DISPOSE OF PROPERLY!

REFERENCE REGULATIONS

The product complies to the reference regulations in effect.

CAME 

CAME.COM

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