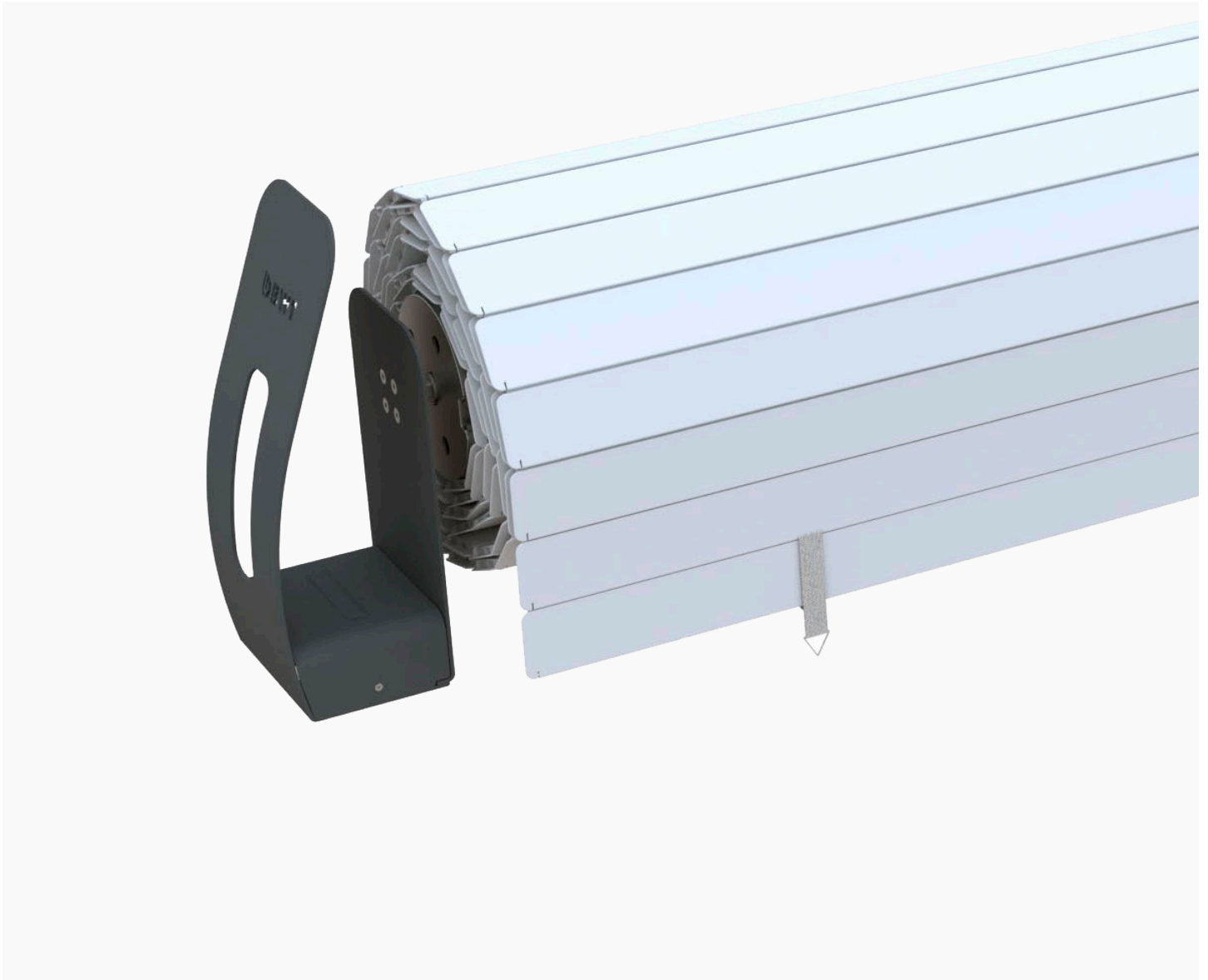


PEARL PROTECT

Above-ground automatic cover



INSTALLATION AND MAINTENANCE INSTRUCTIONS

To be read carefully and kept for future reference.

You have just acquired an automatic pool cover, thank-you for placing your trust in us. Before commencing installation and operation of the cover, please read the following document carefully, it contains important recommendations concerning the various manipulations and advice for use. Keep this manual and show it to any other users.

FOREWORD

Congratulations! You have just purchased an automatic cover made by BWT France - Pool Activity and we would like to thank you for placing your trust in us.

By choosing this cover, you have selected a cutting-edge product perfectly adapted to its function as a pool safety cover.

You also benefit from the competence and know-how of BWT France - Pool Activity, sole designer and manufacturer of every component of the cover, whose administrative headquarters are located: 48 rue de Bédée – 35137 Pleumeleuc – France.

Your installation is the last link in a chain of pool professionals.

How-ever, despite the excellent quality of every component of this cover, we cannot guarantee the user's total satisfaction unless the user scrupulously observes and applies the recommendations and instructions provided in this manual.

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RECOMMENDATIONS BEFORE INSTALLATION

1. Important safety notice

This cover is no substitute for common sense or individual responsibility. Nor is it intended to substitute the vigilance of parents and/or responsible adults which remains the key factor in ensuring the safety of young children.

Caution: safety is only assured when the cover is closed, locked and correctly installed in accordance with the manufacturer's instructions. In the event of any absence, however brief, from the home, the cover must be installed systematically.

Check that there is no person or foreign body in the pool both prior to and during opening and closing of the cover. The cover should only be opened/ closed by a responsible adult.

The automatic nature of the cover in no way dispenses with the need for vigilance when the cover is in motion. On encountering the slightest issue rolling the cover up or our, stop the movement and contact a professional. Standing, walking and jumping on the safety cover should be prohibited.

Keep the key used to activate the cover mechanism out of reach of children.

In general, implement all steps necessary to deny young children access to the pool while the cover is pending repair or during any malfunction preventing the pool from being closed and secured or in the event that the pool or equipment is temporarily unavailable.

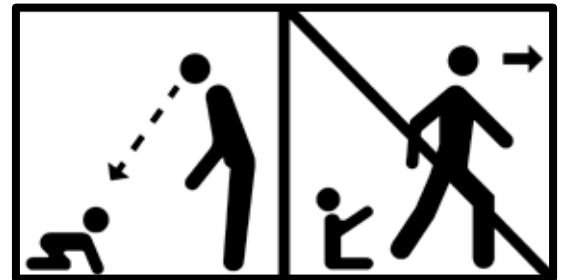
A pool can represent a serious danger to your children. A person can drown very quickly. Children near a pool require your constant vigilance and active supervision, even if they know how to swim.

The physical presence of a responsible adult is mandatory while the pool is open.

Learn first aid techniques

Memorise emergency numbers and display these close to the pool:

- Fire brigade
- Medical emergency services
- Poison treatment centre



2. Installation instructions

The Pearl Protect automatic cover is designed for pool slat aprons at most 10 m long (including the step piece) and 5.09 m wide.

According to the standard NF C15-100, a 30 mA RCD must be installed at the head of the electrical line powering the Pearl Protect automatic cover.

The motorisation system is delivered with an electrical panel; it may only be operated with this electrical panel. Any other use of the motor without the electrical panel, or vice versa, is dangerous and not advised.

The Pearl Protect automatic cover may only be operated using a mechanism described in the NF P90-308 standard, such as the key switch and the Bluetooth remote control supplied.

The automatic nature of the Pearl Protect cover in no way dispenses with the need for vigilance when the cover is in motion. On encountering the slightest issue rolling the cover up or our, stop the movement and contact a professional.

2.1. **Tools required**

- | | | |
|--------------------------------|-----------------------------|-----------------------------------|
| - Hex wrenches | - Cross head screwdriver | - Bubble level |
| - Screwdriver | - Concrete drill bit Ø5 mm | - Hammer drill |
| - Torx and Phillips drill bits | - Concrete drill bit Ø6 mm | - Disk grinder with diamond drill |
| - Flat wrenches | - Concrete drill bit Ø10 mm | - Chisel and hammer |
| - Bushings | - Measuring tape | - Hard rubber mallet |

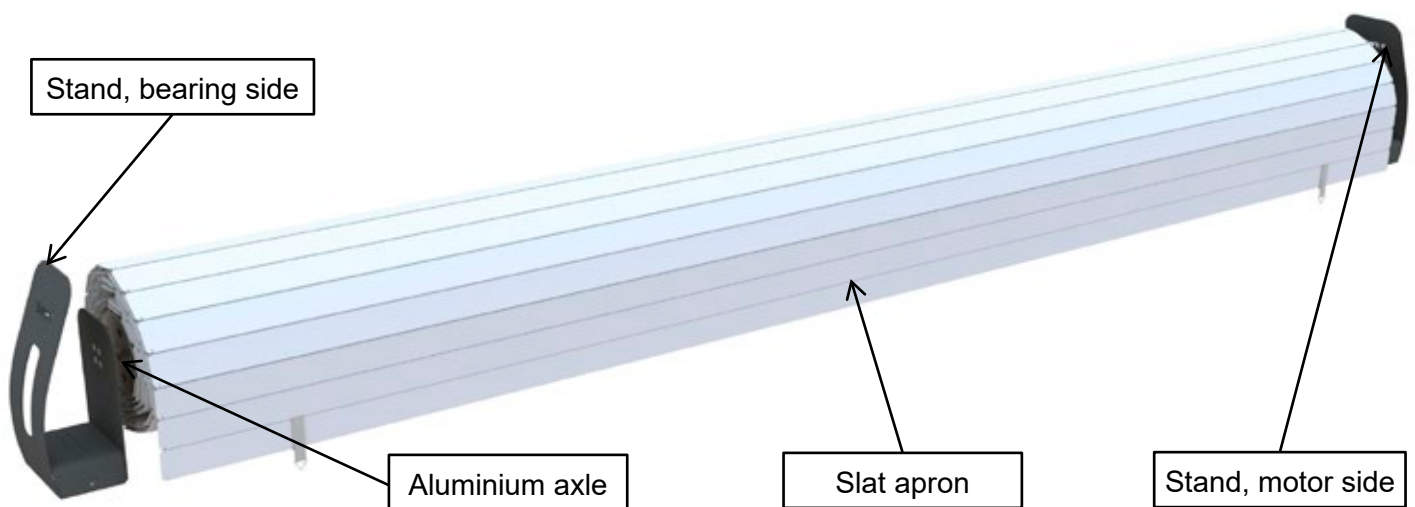
2.2. People required

Step	Number of people	Duration
Assembly of the cover axle	2	1.5 hours
Assembly of the slat apron	2	1 hour
Electrical wiring	2	1.5 hours

2.3. Waste disposal

Items such as paper, cardboard, plastic or any other recyclable material must be disposed of in at a suitable recycling centre. At the end of its life, the Waste from Electrical and Electronic Equipment (WEEE) contained in this product can be recycled.

3. Overview of the structure



4. Preparation before installation of the mechanical assembly

4.1. Check the electrical point of supply

Lay a conduit to run the H07RN-F cables between the power supply panel and the motor junction box inside the motor stand. In the case of cover with LEDs, lay a conduit for a H07RN-F 4 X 0.75 mm² or 4 X 1 mm² cable between the motor junction box and the bearing junction box.

CAUTION

Also provide a conduit for a H07RN-F 3 X 0.75 mm² or 3 X 1 mm² cable between **motor junction box in the motor stand** and the future location of the **key switch**.

Detailed explanations on the electrical installation are provided in the **POWER SUPPLY AND MOTOR DRIVE SYSTEM** chapter on page 32.

Motor / power supply panel distance	Recommended cross section for the motor power cable	
	<u>WITHOUT USING</u> the electrolyser contact	<u>WITH USE</u> of the electrolyser contact
15 m	2 X 2.5 mm ²	3 X 2.5 mm ²
25 m	2 X 4 mm ²	3 X 4 mm ²
40 m	2 X 6 mm ²	3 X 6 mm ²

4.2. Preparation of the coping

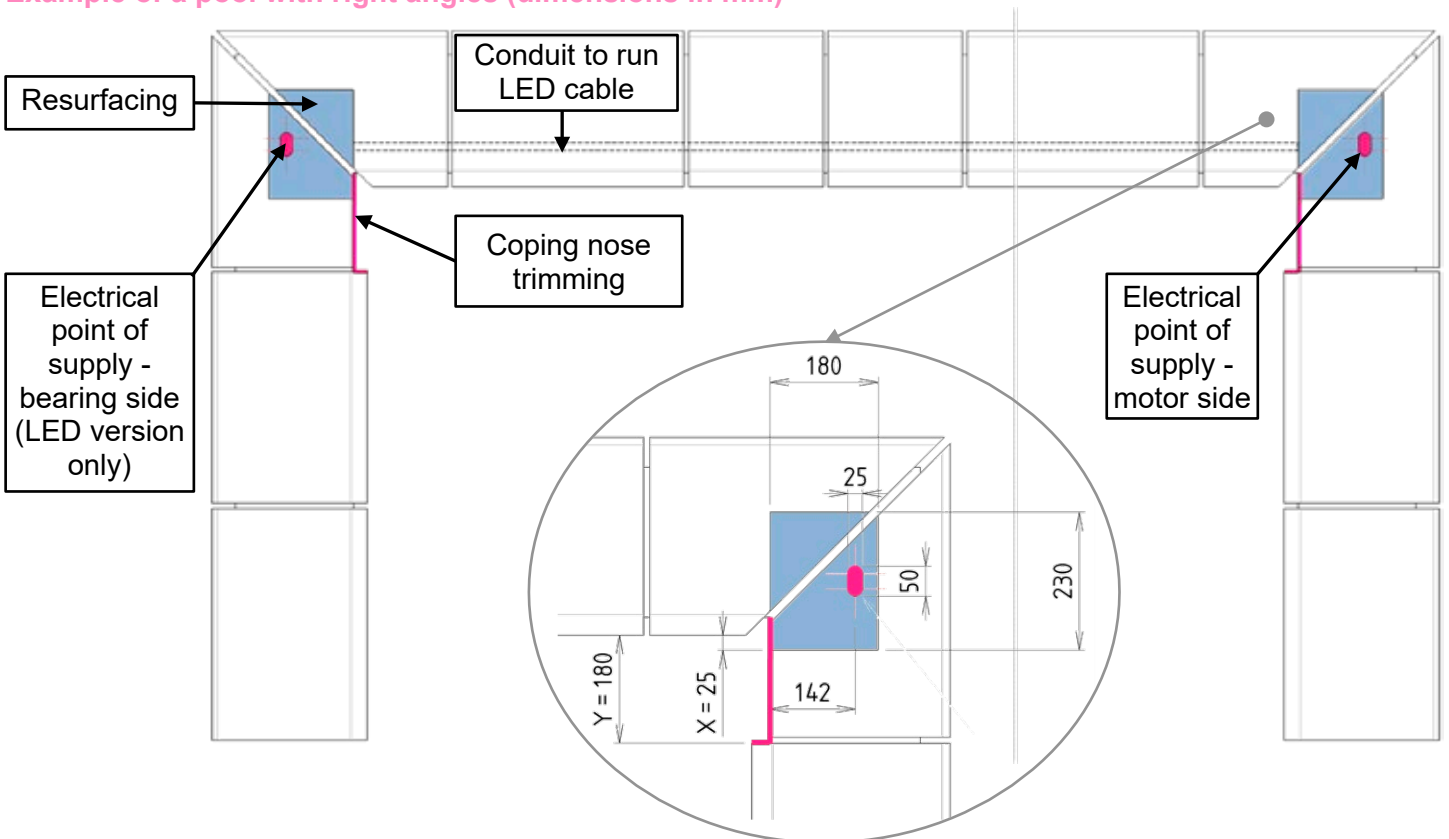
The coping will need to be resurfaced to seat the cover stands (see the blue rectangles in the diagram next page). The dimensions of the surfacing area are given in the table next page

Trim the nose of the coping on either side so that the coping is flush with the pool wall. The length of this L shaped trimming will depend on the radius of the pool (refer to the table next page to get the X and Y dimensions).

Depending on which side the motor stand is installed on, provide the corresponding electrical connection according to the diagram next page.

Radius of the pool	Right angle	15 cm radius	20 cm radius	25 cm radius	30 cm radius
Distance to be measured from	Nose of the coping	Back wall			
Location of resurfacing X in mm	25	175	225	275	325
Trimming the coping nose Y in mm	180	320	370	420	470

Example of a pool with right angles (dimensions in mm)



PEARL PROTECT MECHANICAL STRUCTURE

1. Nomenclature

1.1. Content of the crate

Ref	Description	Qty
1	Axle assembly	1
2	Slat apron	1
3	Sheet metal components	1
4	Power supply	1
5	Key switch	1
6	Set of screws and casings	1
7	Pouch of accessories	1

1.2. Sheet metal components

Ref	Description	Qty
1	Mounting plate	2
2	Contoured plate	2
3	Adaptor	2
4	Cowling	2
5	Casing	1

1.3. Power supply panel

Ref	Description	Qty
1	Pre-wired power supply panel	1
2	Key to set the ends of travel	1
3	Cowling	1
4	Lexan	1
5	Bushing Ø8 × 40	4
6	Self-tapping screw FZ 6 × 50 A2	4

1.4. Key switch

Ref	Description	Qty
1	Cabled switch	1
2	Cable gland PG9	1
3	Bushing Ø5 × 25	4
4	Self-tapping screws BZ 4 × 30	4
5	Thermoplastic screw FB 4 × 45	4
6	Keys	2

1.5. Set of screws and casings

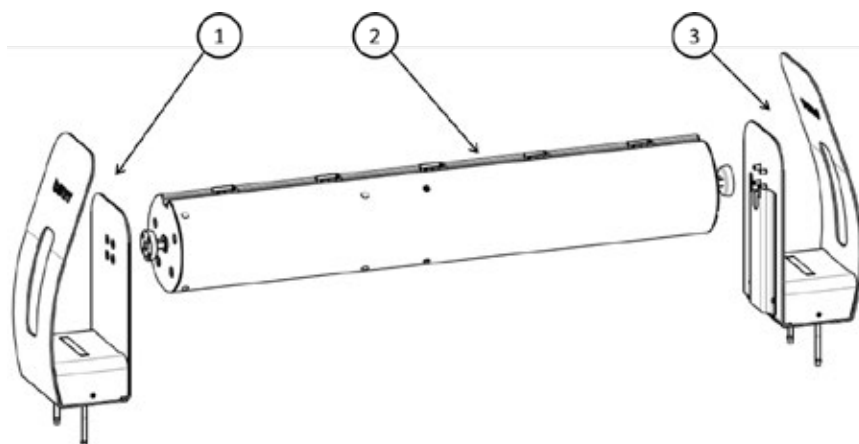
Ref	Description	Qty
1	Motor junction box with dominos	1
2	Bearing junction box with dominos (LED version only)	1
3	Washer M4 A4	2
4	Washer M6 A4	8
5	Hex socket button head screws M4 × 8 A4	2
6	Hex socket countersunk screws M4 × 12 A2	4
7	Hex socket countersunk screws 8 × 16 A4	8
8	Thermoplastic screws FX 5x10 A2 (×2 for the LED version)	4+4
9	H nut M6 A2	8
10	Express bolt M10 × 124 A4	4

1.6. Bag of accessories

Ref	Description	Qty
1	BWT polo shirt	1
2	BWT key rig	1
3	Beta pin	2
4	Instruction manual	1

2. Complete mechanical assembly

Ref	Description	Qty
1	Stand, bearing side	1
2	Axle assembly	4
3	Stand, motor side	4

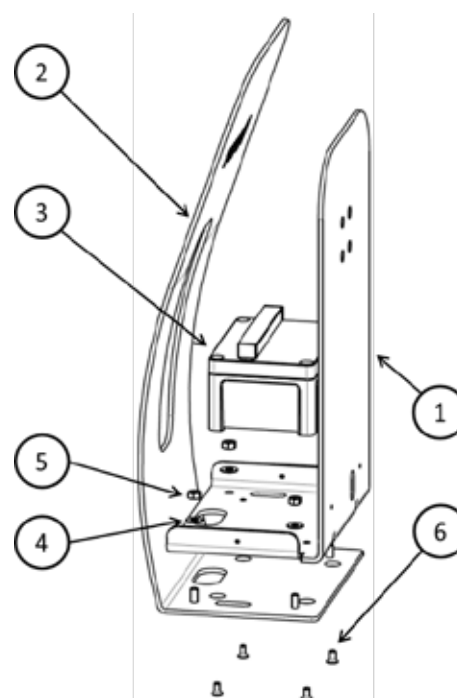


3. Bearing side end stand

Ref	Description	Qty
1	Mounting plate	1
2	Contoured plate	1
3	Bearing junction box (model with LED only)	1
4	Washer M6 A4	4
5	Nut M6 A4	4
6	Thermoplastic screw FX 5 × 10 A2	4

For models without LEDs, skip to the next step. In the case of the LED model, fasten the bearing junction box (3) to the mounting plate (1) using the screws FX 5 × 10 (6). The LED track should be located in the centre of the stand, as shown on the picture on the right.

For all models, fasten the mounting plate (1) to the contoured plate (2) using the M6 insert in the contoured plate, the washers M6 (4) and the nuts M6 (5).



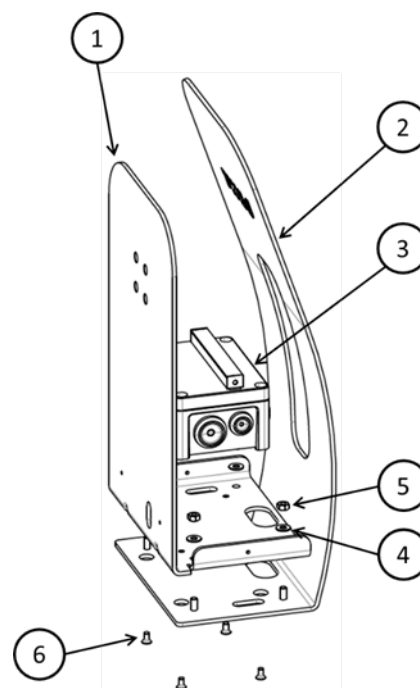
4. Motor side end stand

Ref	Description	Qty
1	Mounting plate	1
2	Contoured plate	1
3	Motor junction box	1
4	Washer M6 A4	4
5	Nut M6 A4	4
6	Thermoplastic screw FX 5 × 10 A2	4

Fasten the motor junction box (3) to the mounting plate (1) using the FX 5 × 10 screws (6). The side of the box with the cable grommet centered on the box should be placed on the pool side.

In the case of the LED model, the LED track should be located in the centre of the stand, as shown on the picture on the right.

Fasten the mounting plate (1) to the contoured plate (2) using the M6 insert in the contoured plate, the washers M6 (4) and the nuts M6 (5).



5. Mounting the axle

Ref	Description	Qty
1	Axle	1
2	Stand, bearing side	1
3	Shaft, bearing side	1
4	Stand, motor side	1
5	Shaft, motor side	1
6	Adapter	2
7	Hex socket countersunk screws M8 × 16	8
8	Cylindrical pin	2
9	Headless hex socket screws M4 × 10	2
10	Casing	1
11	Washer M4	2
12	Round head BTR screw M4 × 8	2

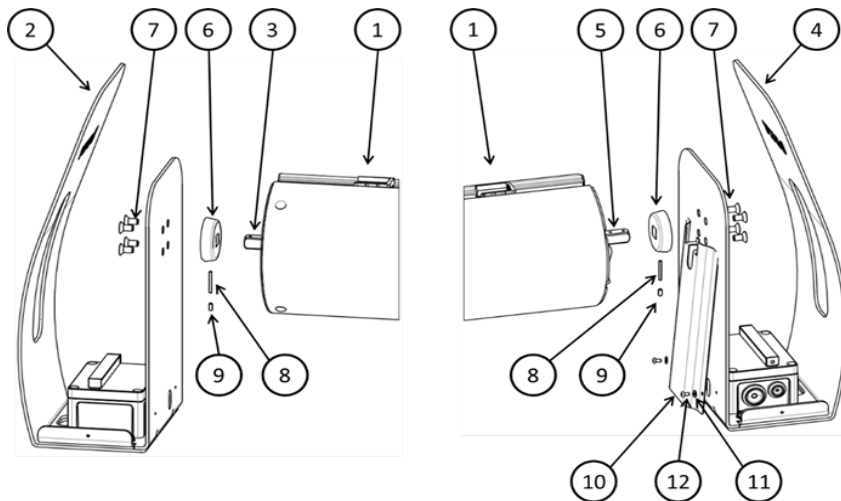
Clamp the adapters (6) onto the shafts (3 and 5) protruding from the axle (1) using the cylindrical pins (8) and headless M4 × 10 grub screws (9).

On the motor side, **the clamping elements (8 and 9) must be installed opposite the motor limit switch adjustment screws.**

Lay protective sheets on the ground and tilt the stands (2 and 4) onto their edges on these sheets. Then secure them to the axle (1) via the adapters (6) using the hex socket countersunk M8 × 16 screws (7). **The clamping elements (8 and 9) must face the base of the stands (2 and 4).**

Tilt the stands to put them back on their base.

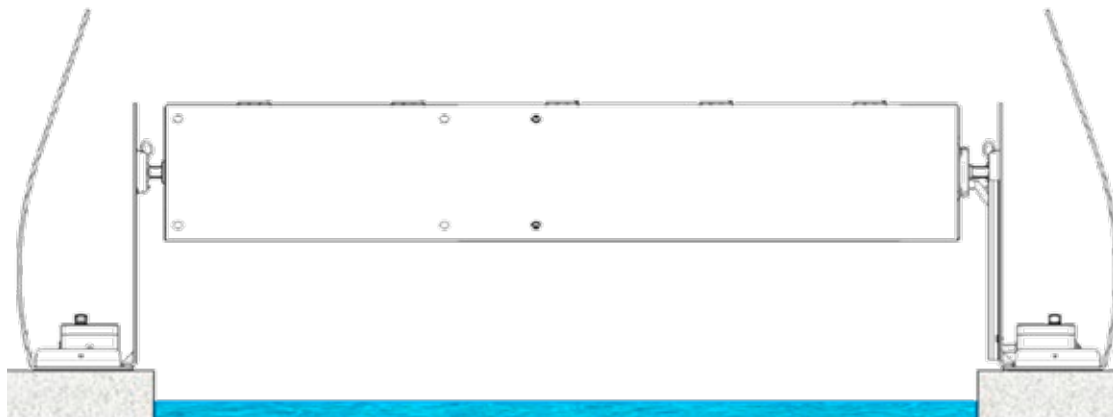
Thread the motor cable into the stand, then fasten the casing (10) to the stand (4) using washers M4 (11) and round head BTR screws M4 × 8 (12). The casing features two bent tabs: they should be placed behind the adapter (6).



6. Installation of the mechanical assembly

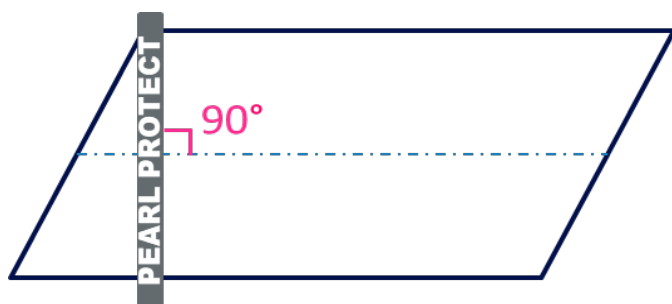
6.1. Placement on the pool

Place the assembly in position on the pool respecting the diagram below. The distance between the vertical pool wall and the edge of the stand is approximately 2 cm.

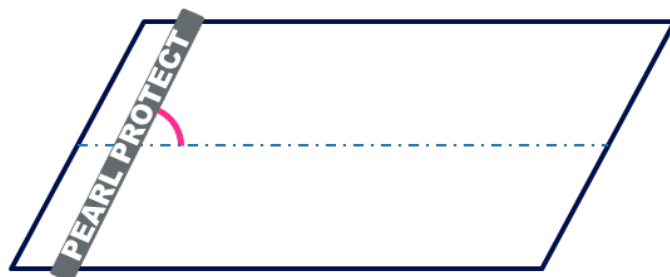


CAUTION

It is important to position the mechanical assembly at a right angle with respect to the axis of the swimming pool. Position the axle at the exit of the pool corner radius.



COMPLIANT



NON-COMPLIANT

If the pool corner radius is greater than 30 cm, it will not be possible to install a Pearl Protect cover (the width of an axle placed within the corner radius will be too narrow for the cover slats).

If the coping is not flat in the zones where the stands will be located, the structure will not be stable, this could lead to operational faults and aesthetic defects.

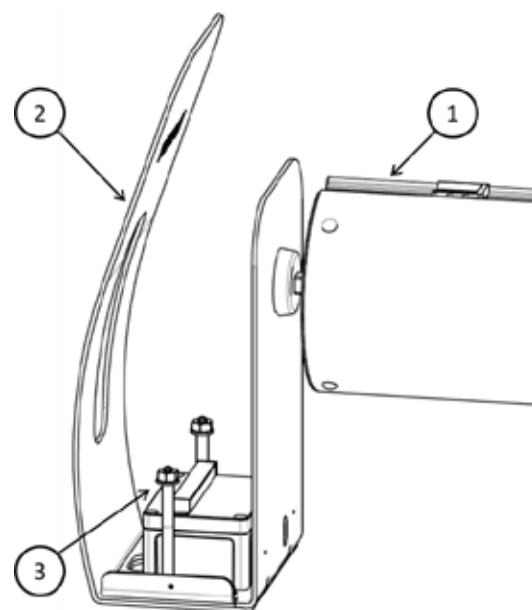
6.2. Fixing the stands to the coping

Ref	Description	Qty
1	Axle	1
2	Stand	1
3	Express bolts $\varnothing 10 \times 125$ A4	2

The stands are fastened to the coping using 2 express bolts per stand.

Once the stand positions are ideal, mark the future locations of the bolts on the coping through the two openings, and drill holes using a 10 mm drill bit.

Clean out the holes and insert the express bolts M10 \times 125 (nut at the top) using a hammer, take care to protect the top of the bolt threading and its nut. Tighten the nuts to fasten the stands to the ground.



POWER SUPPLY AND MOTOR DRIVE SYSTEM

CAUTION

The instructions set out here only concern connections to be carried out by the installer.

The electrical panel is pre-wired in the factory and should under no circumstances be modified at the risk of damage or injury.

It is of utmost importance to use cables with a cross section that is adequate for the current that they will carry. Check that connections are correctly tightened. An inadequately sized cable or loose connection could heat up and start a fire.

According to the French standard C15-100, a 30 mA residual current device must be installed at the head of the line.

1. Electrical connection of the Pearl Protect

The electrical connection of the Pearl Protect cover involves several steps:

1. Fixing and supplying 230 V power to the electrical supply panel
2. Electrical connection of the motor-side junction box
3. Wiring of the electronic board for remote control of the cover
4. Connecting the power supply to the cover motor
5. For the LED version of the Pearl Protect cover: connecting the LED track via the junction box on the bearing side stand (the LED track on the motor side stand is already connected).
6. Connection of the key switch
7. A motor function test to validate the wiring
8. Connection of the dry contact for the electrolyser if necessary.


An overview diagram of the connections is provided in section 2 of this chapter, on page 18.

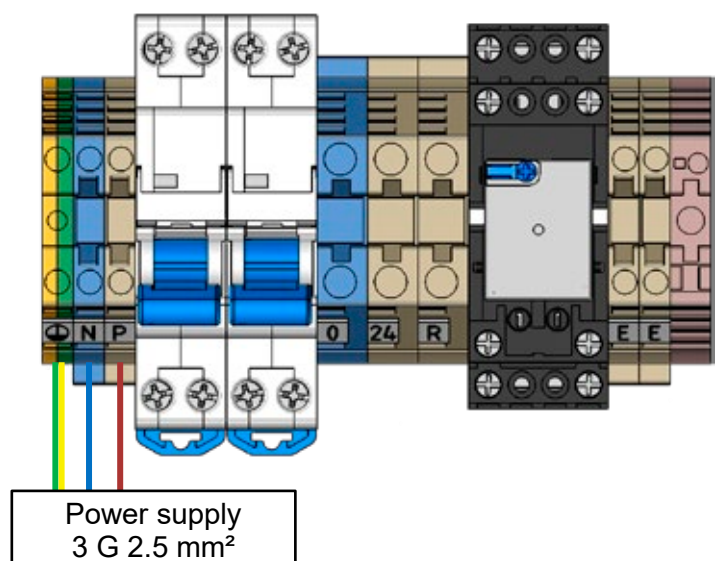
1.1. Electrical supply panel

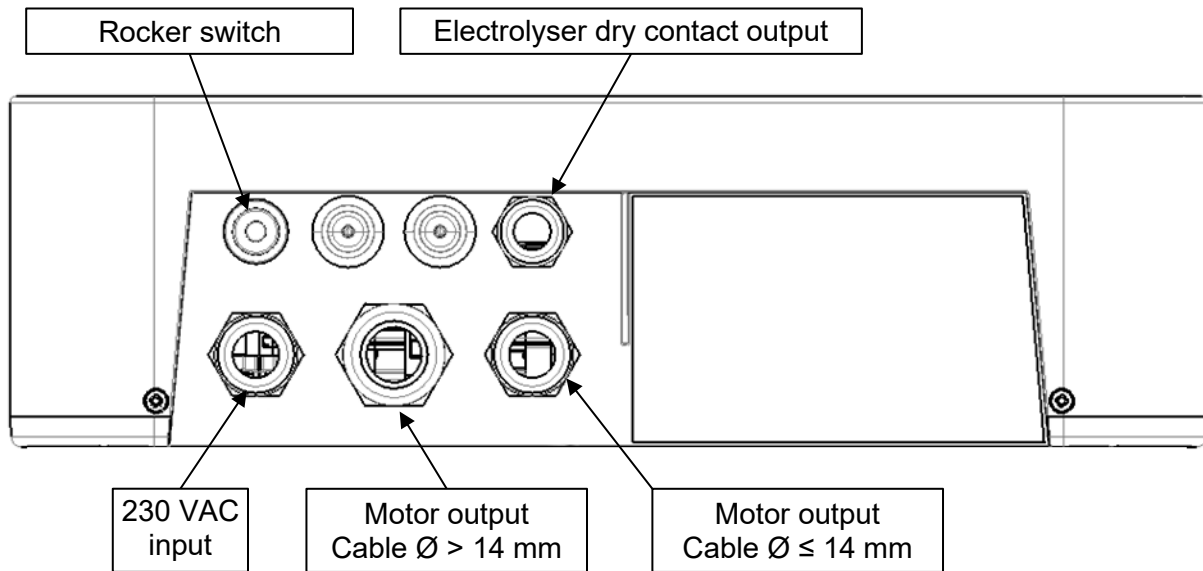
The power supply panel (see drawing hereafter) should be mounted on a wall in the technical room protected from sun and rain, and at a distance of more than 3.5 m from the pool. Mount the panel on a vertical wall or partition that can bear its weight. Use the bushings and screws supplied for that purpose. Mount the panel with the cable glands oriented downwards.

Lay a duct between the power supply panel and the junction box located on the stand on the motor side to run the cables.

The power supply panel should be wired for a 230 V, 50 or 60 Hz power supply using the earth, N and P terminals, as shown in the table below and diagram opposite.

Borne coffret	Signification	Couleur	Type of cable
	Ground	Green and yellow	H07RN-F 3 G 2.5 mm ²
N	Neutral	Blue	
P	Live	Brown	

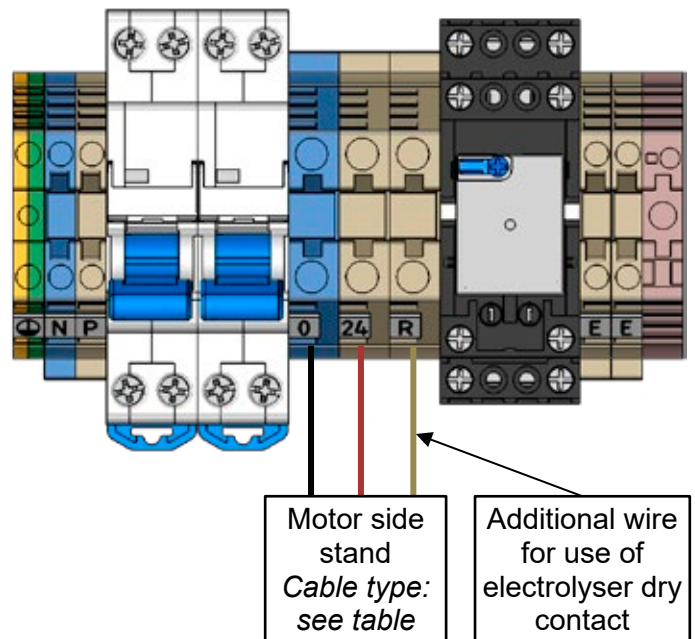




1.2. Motor-side junction box

Lay a duct between the power supply panel and the junction box located on the stand on the motor side to run the H07RN-F cables, in accordance with the recommended cross-section in the table below.

Distance stand / power supply panel	Recommended cross-section for power cable	
	<u>WITHOUT</u> use of electrolyser dry contact	<u>WITH</u> use of electrolyser dry contact
15 m	2 X 2.5 mm ²	3 X 2.5 mm ²
25 m	2 X 4 mm ²	3 X 4 mm ²
40 m	2 X 6 mm ²	3 X 6 mm ²



Open the junction box located in the motor end foot. Pierce the cover in the centre of the grommet using a small screwdriver.

CAUTION

DO NOT ENLARGE THE HOLE so that the grommet remains watertight.

Feed the power cable through the junction box.

Wire the components as indicated in the following sections, taking care to identify the model of motor you have (A or B - bearing in mind that type B is much more likely).

1.3. Bluetooth remote control

1.3.1. Bluetooth remote features

The Bluetooth remote control allows you to:

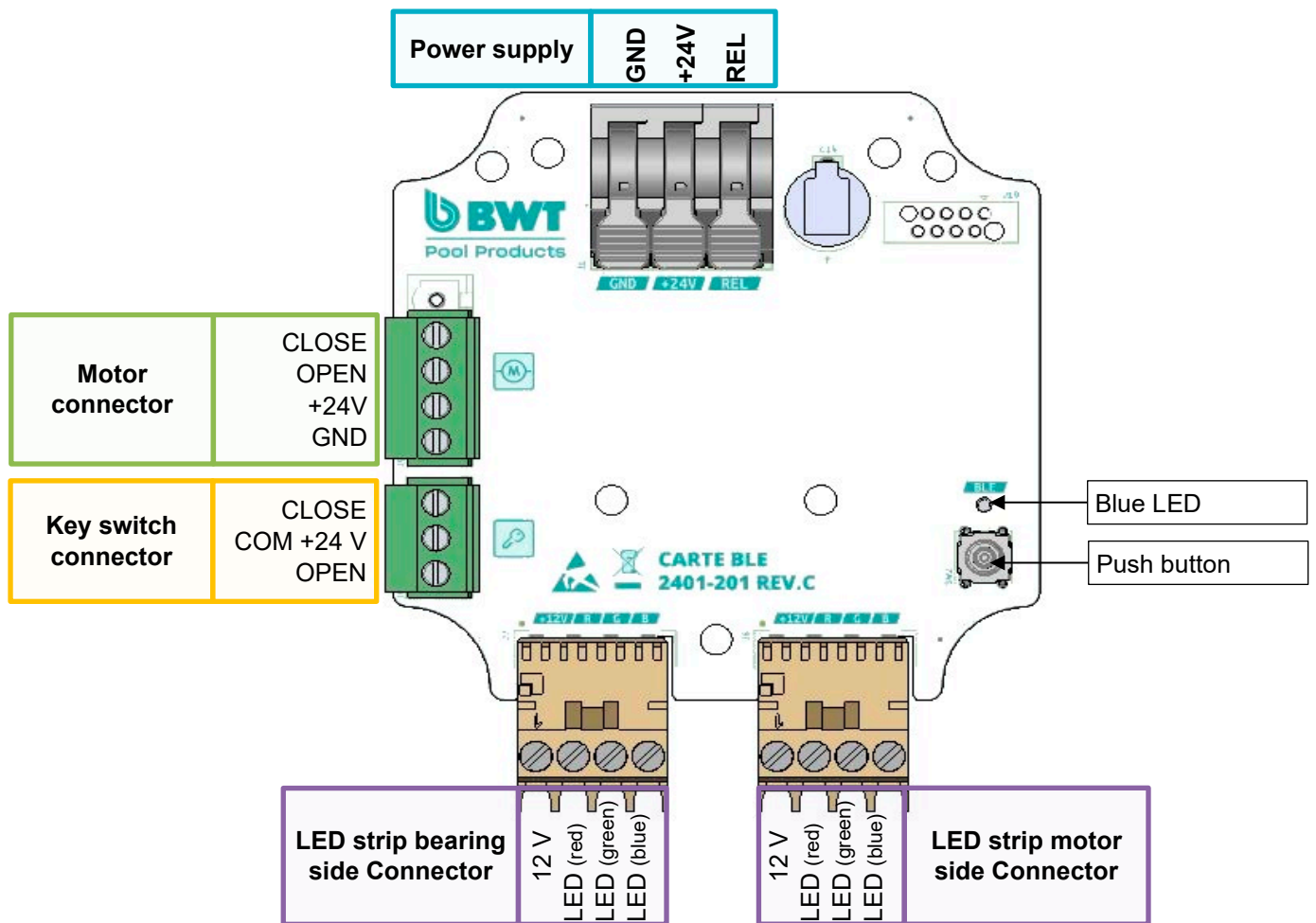
- Control the opening and closing of the cover, providing self-uphold system when opening,
- Manage the switching on, colour and intensity of the LED trips (optional) from a smartphone via the BWT Best Water App,
- Create a dry contact for the electrolyser to reduce the device's chlorine output when the cover is closed.

The motor, key control and LED strip connectors are detachable to facilitate wire connection.

The LED flashes every 10 seconds to indicate that the board is powered. When a smartphone is connected to the Bluetooth of the board, the LED flashes continuously.

Pressing the push button for 3 seconds resets the board's PIN code. The end of the 3 seconds and the reset of the PIN code are indicated by the LED flashing rapidly; the push button can then be released.

1.3.2. Bluetooth PCB diagram



1.3.3. Connecting the Electronic Board

In the motor-side junction box, connect the power supply from the Electrical power supply panel to the dedicated connector as shown opposite.

Wiring the REL connector is only necessary if the dry contact for the electrolyzer is used.

Power supply connector	Electrical supply panel connector
GND	0
+24V	24
REL	R

1.4. Motor wiring

Once you have identified the motor type using the table below, connect the motor cable to the motor connector on the Bluetooth circuit board as follows:

Motor connector	Wire colour, motor B		Wire colour, motor A	
	Motor on the right	Motor on the left	Motor on the right	Motor on the left
Close	White	Blue or green	Black	Grey
Open	Blue or green	White	Grey	Black
+24V	Red	Red	Brown	Brown
GND	Black	Black	Blue	Blue

1.5. LED strip wiring, bearing side

In the case of a cover without LEDs, skip directly to section 1.6 (Key switch wiring) below.

In the case of a cover with LEDs, the bearing side stand must be wired via the motor stand. Run a conduit between the two cover stands for the LED lighting cable connection. A 4X 0.75 mm² or 4X 1 mm² cable should be used between the two cover feet.

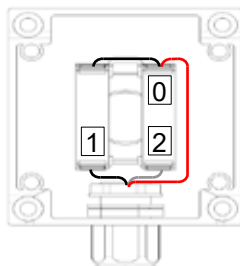
Open the junction box located in the bearing side. Thread the LED power cable through the grommet on the right of the motor junction box to the central grommet of the bearing junction box. Wire the components as shown in the table opposite.

LED strip connector	LED strip wire colour	Type of cable between the two stands
+12 V	Black	4 X 0.75 mm ² or 4 X 1 mm ²
R	Red	
G	Green	
B	Blue	

1.6. Key switch wiring

To connect the key switch, run a cable between the key switch and the junction box on the motor side stand.

The key switch must be installed in a location from which the entire pool is visible. Thus, to ensure safety, the person who unrolls the cover over the pool can make sure that no one is in the pool for the entire duration of the operation.



Key switch connector	Terminal on the key switch	Type of cable
Close	2	H07RN-F 3 X 0.75 mm ² or 3 X 1 mm ²
COM	0	
Open	1	

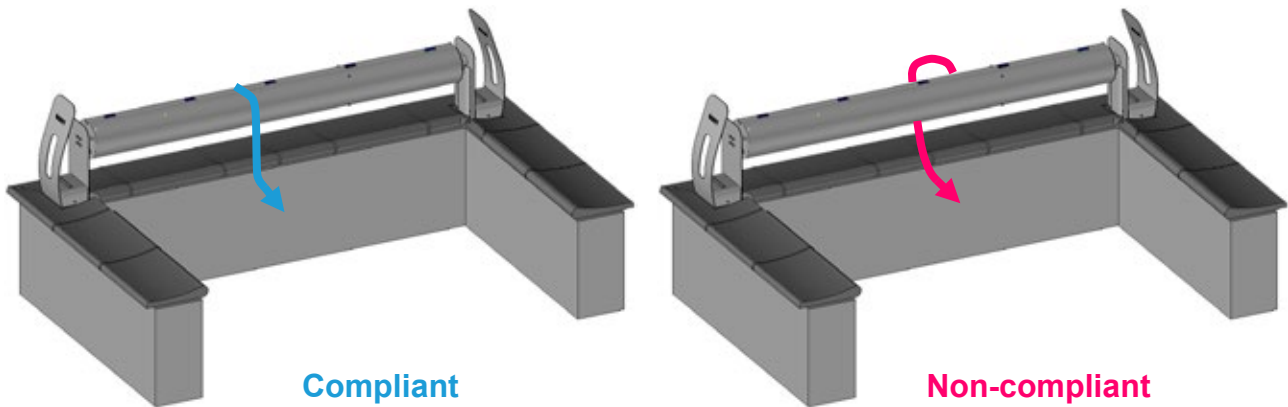
1.7. Functional test

Run a functional test of the motor by following these steps:

- Connect the electrical supply panel to the mains.
- Switch on the electrical supply panel by moving the rocker switch.
- Insert the key into the key switch and activate it to close the cover.
- Observe the key and the cover behaviour. There are four combinations between the rotational direction of the axle and the direction in which the key is turned. These possibilities are described in the table hereafter. The operations are indicated as correct (✓) or incorrect (×).

Combination	Description of operation		Necessary measures	
	Key switch turned to CLOSE the cover	Rotational direction of the axle	Swapping of wires on terminals 1 and 2 of the key switch	Swapping of wires of the terminals OPEN and CLOSE of the motor connector on the Bluetooth board
1 ×	Impulse ×	Non-compliant ×	YES	NO
2 ×	Impulse ×	Compliant ✓	YES	YES
3 ×	Stay-put contact ✓	Non-compliant ×	NO	YES
4 ✓	Stay-put contact ✓	Compliant ✓	None	

The diagram below shows the compliance of the rotational direction of the axle.



If the installation malfunctions (combination no. 1, 2, or 3):

- Be sure to make the wiring changes in the junction box with the power turned off and in a safe manner.
- Perform the test again until you observe proper operation (combination no. 4).
- Turn off the power before continuing with the wiring.

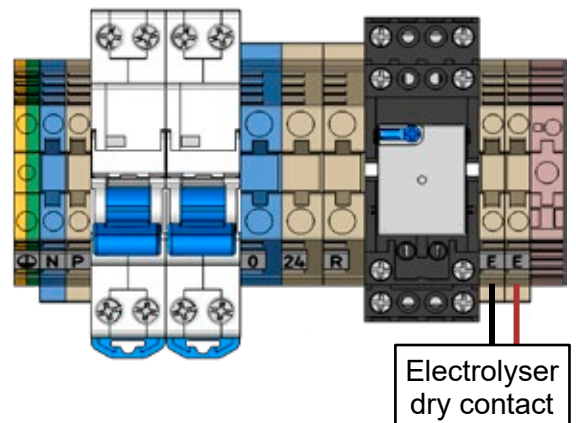
1.8. Dry contact for electrolyser

The electrical supply panel of the Pearl Protect cover is equipped with a potential-free contact closure at terminals E and E. Connecting a water treatment system such as a saltwater electrolyzer to E and E terminals allows it to be controlled. The potential-free contact is a 7A 250 VAC / 30 VDC dry contact.

To use this dry contact, a 3-wire cable must be used between the electrical supply panel and the Bluetooth electronic board located in the motor side stand (see section 1.2: Motor-side junction box on page 15 of this chapter).

This dry contact works as follows:

- When the cover begins to open, the contact opens, the electrolyzer runs normally.
- When the cover is completely closed, the contact closes, the production of chlorine by the electrolyzer is reduced depending on the particular features of the device connected.

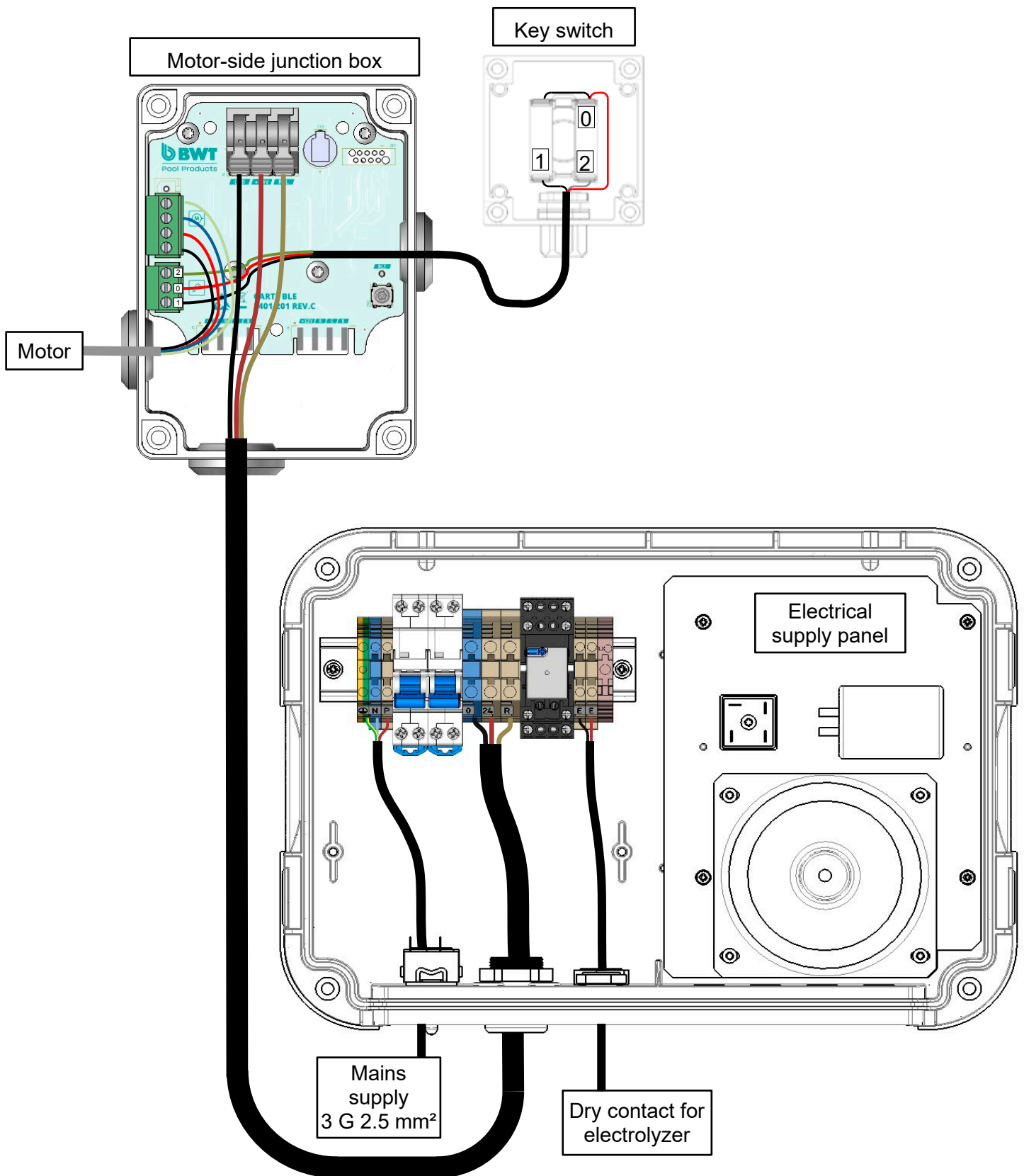


CAUTION

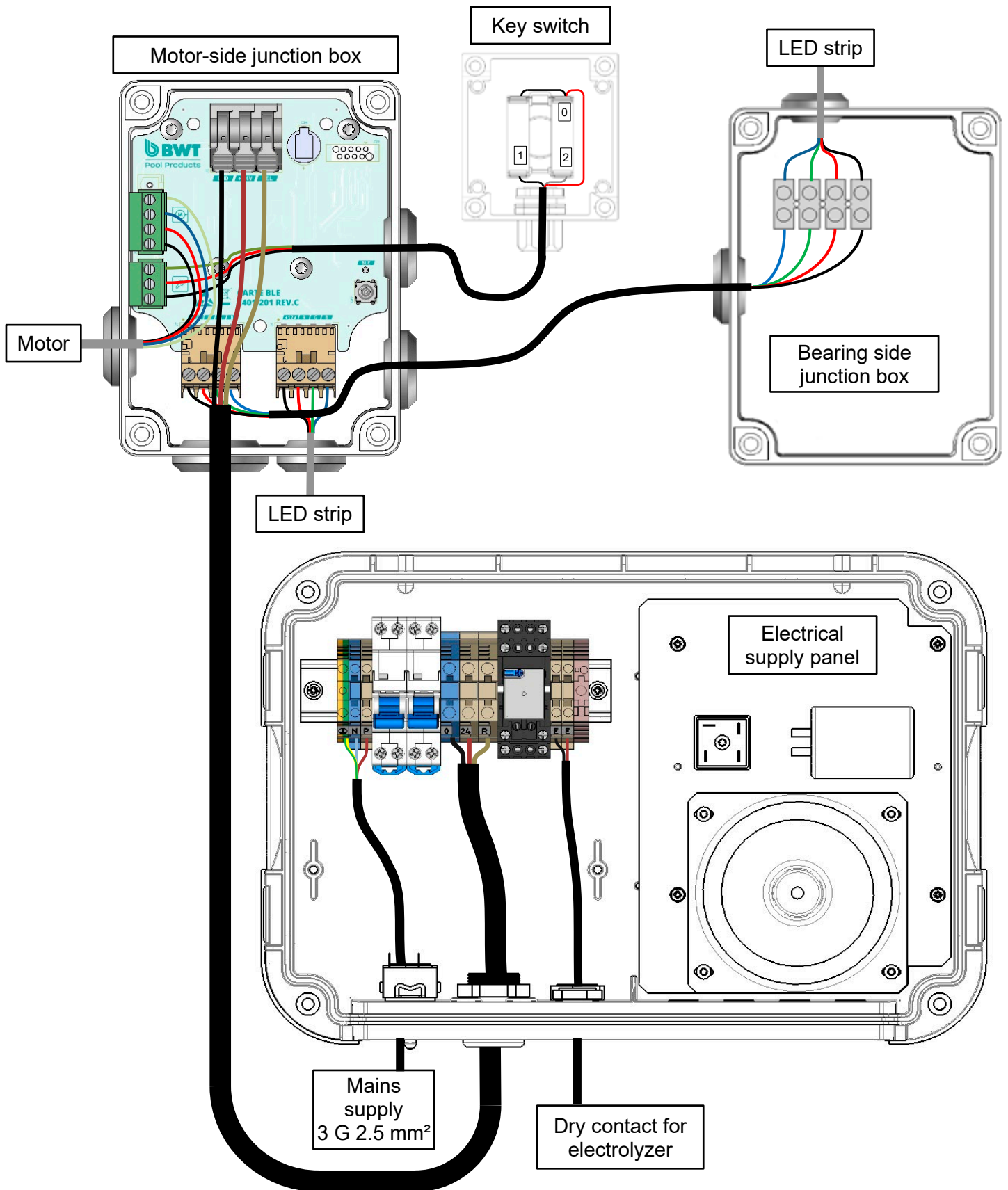
Incomplete closure will not change the dry contact status. The dry contact status only changes when the key switch is activated to open the cover, or at the end of the closing course.

2. Wiring diagram

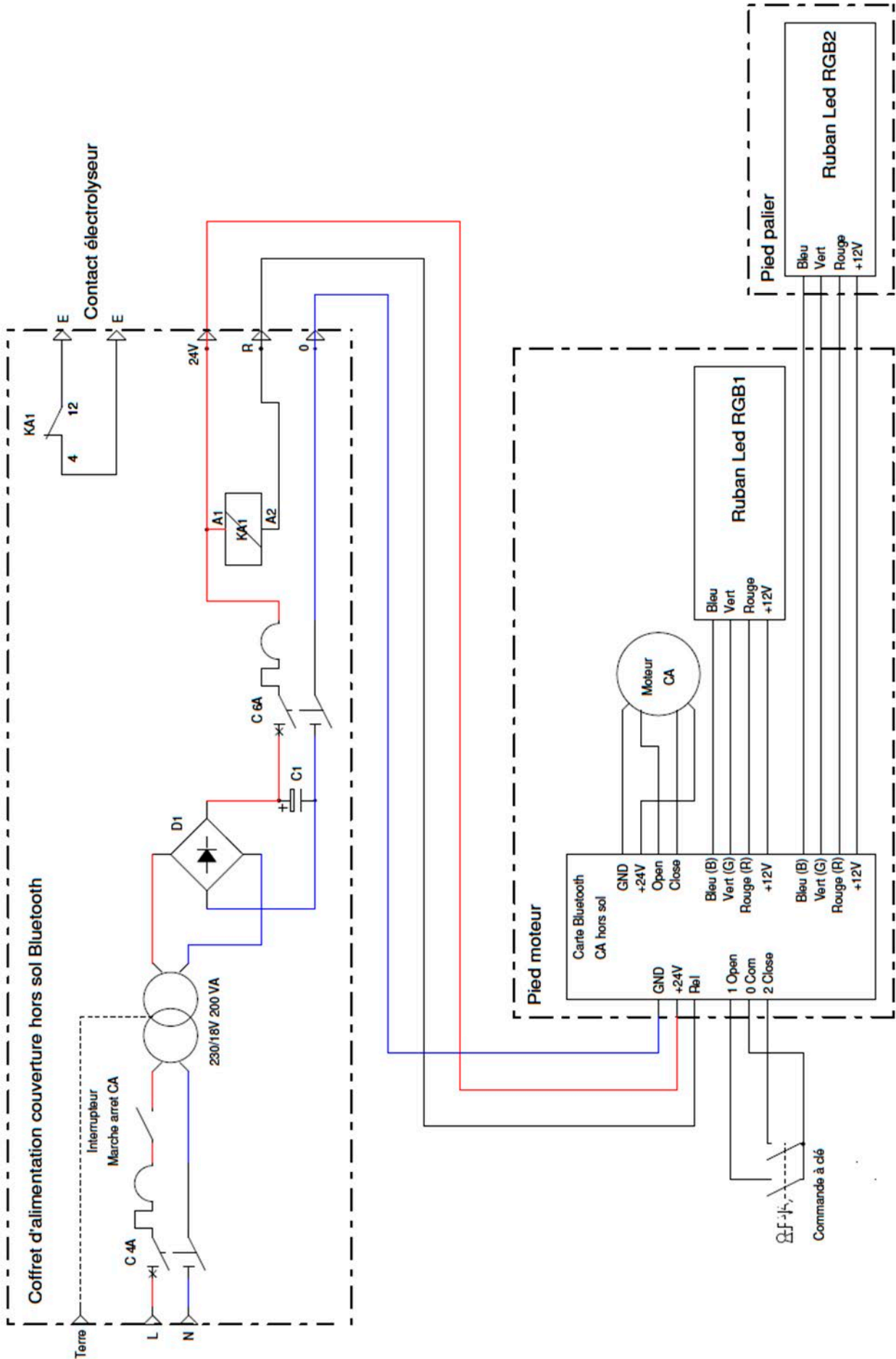
2.1. Wiring diagram, version without LED (motor B)



2.2. Wiring diagram, version with LEDs (motor B)



2.2.1. Electrical diagram



3. Programming the ends of travel

This automatic cover is equipped with mechanical ends of travel switches.

To adjust the ends of travel, use the tool provided.



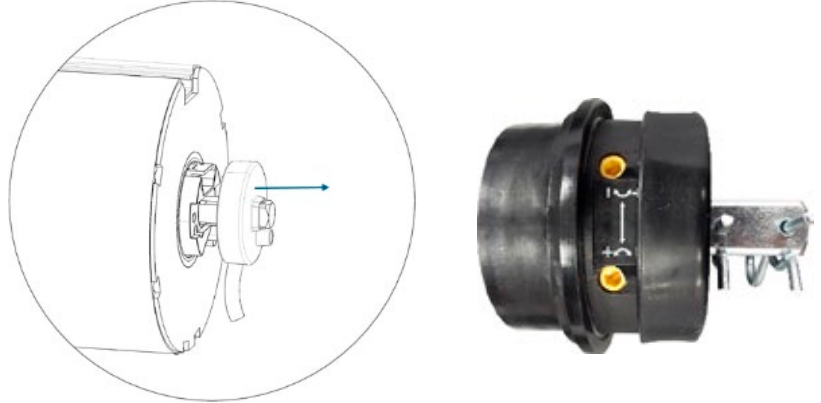
Slide the motor cover over to access the adjusting screws.

The closed position is set using the screw located on the pool side.

The open position is set using the screw located on the side opposite the pool.

Detach the cover apron from the axle.

The key is in its vertical position.



Setting the cover closed position

1. Rotate the axle until it reaches its closed position (pre-set).
2. Change the closed position such that the black clips used to fasten the slat apron to the axle are oriented towards the pool. Attach the slat apron to the axle, then modify the closed position such that the safety fastener straps are a little slack. The last slat of the cover apron should be floating on the pool.



Setting the cover open position

3. Turn the key to roll the slat cover up around the aluminium axle (open the pool).
4. If the **slat apron stops while rolling up**, loosen the screw located on the side opposite the pool. Turn the key again. Repeat this operation until the first slat of the cover apron is resting vertically above the water.
5. If the **cover rolls up too much**, turn the key to roll the cover out over the water by about 2 metres, and tighten the screw located on the side opposite the pool, then start the procedure again from step 3.



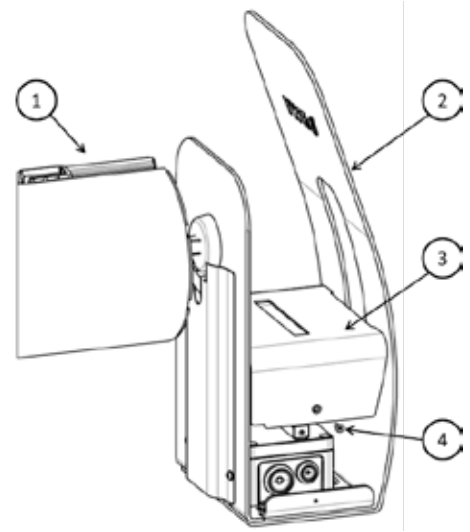
FINISHING TRIM

1. Finishing trim for structure with LED

Ref	Description	Qty
1	Axle	1
2	End stand	1
3	Cowling	1
4	Button head hex screws M4 × 12 A2	2

For each end stand, perform the following steps:

- Place the cowling (3) over the end stand (2) junction box
- Fasten the cowling (3) in position using the button head hex screws (4).

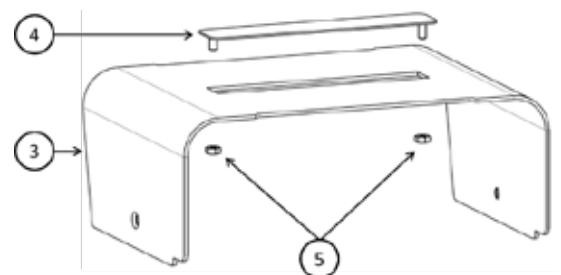
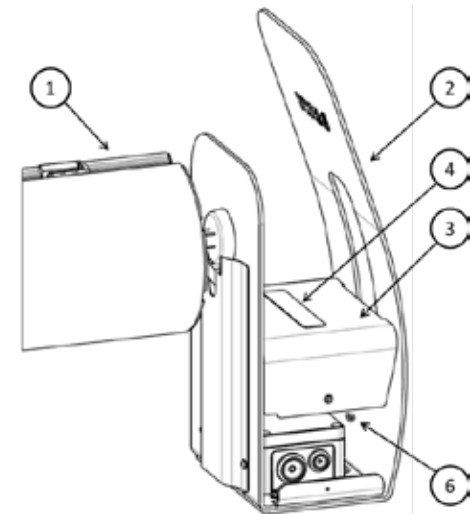


2. Finishing trim for structure without LED

Ref	Description	Qty
1	Axle	1
2	End stand	1
3	Cowling	1
4	Slot cover	1
5	H nut M4	2
6	Button head hex screw M4 × 12 A2	2

For each end stand, perform the following steps:

- Attach a slot cover (4) to each cowling (3) using two H M4 nuts (5).
- Tighten the nuts moderately at first. Adjust the position of the slot covers (4) before finishing tightening the nuts (5).
- Place the cowling (3) with its slot cover (4) attached to it on the end stand (2).
- Secure the cover (3) using the button head hex M4 screws (6).



ASSEMBLY OF THE COVER APRON

1. Preparation prior to assembly

Before proceeding with installation, check that all the necessary parts are present.

The cover apron is delivered in preassembled sections of 6 PVC slats. If the pool features steps, the slat section to cover the steps are found on top.

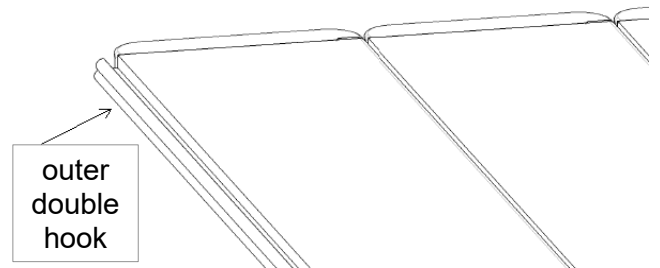
The last slat (axle side) is equipped with straps to fasten it to the axle. Check that the five U shaped pins used to attach the straps to the axle are present in the groove in the axle.

Place the crate near the pool.

2. Assembly of the slat apron

If the slats are different lengths, the slat sections will be numbered, and the order of assembly must be respected. The preassembled section labelled 1 is always the section closest to the cover axle. It is easily identified by the slanted edges of the first slat.

The outer double hook of the slat is opposite the axle



Blocking the slats in position

Once the slat apron is assembled, the tabs on the plugs will prevent the slats from sliding laterally. On slats finished with silicon, these tabs are replaced with stops inserted in the either end that serve this same function.

2.1. Slats finished with plugs

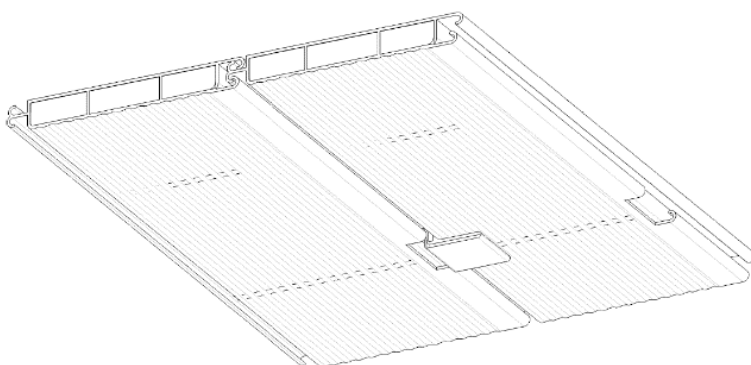
Start assembly at the notch in the male part of the slat, holding the two slat sections at an angle of approximately 150° with respect to each other (the slats may be bent while you slide them together). Slide them together as far as they will go.



2.2. Slat finished with silicon

Engage the tongue and groove of the two slat sections (the slats may be bent while you slide them together). Slide them together carefully until the slats are aligned with each other.

Place a dot of PVC glue (not supplied) on the retainer before clipping it into the notch provided under the slat apron.



2.3. Assembly of the complete cover

Place the first slat section (section with the slat equipped with axle/ slat apron connection straps) on the surface of the water.

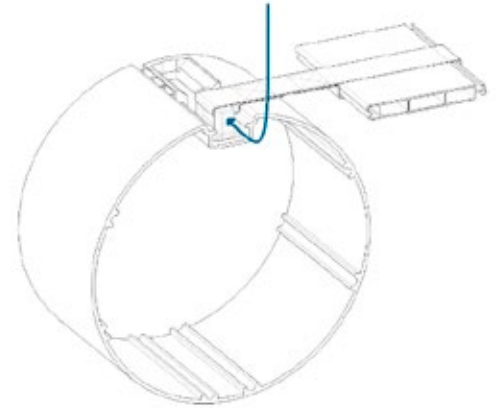
Line up the next slat section and slide it onto the first.

Push the assembled section aside on the water to proceed with assembly of the next section.

Repeat this procedure until you reach the last section equipped with the safety straps.

2.4. Attach the slat apron to the axle

Insert the black clip in the U located in the axle.



3. Accessories

3.1. Retainers for pools with step pieces (option)

If the slat apron features a section to cover submerged steps or a particular pool shape, this section will be fitted with retainers attached under the 2nd and 8th slats. These retainers block the slat apron when it is rolled around the axle and prevent it from unrolling backwards by itself.

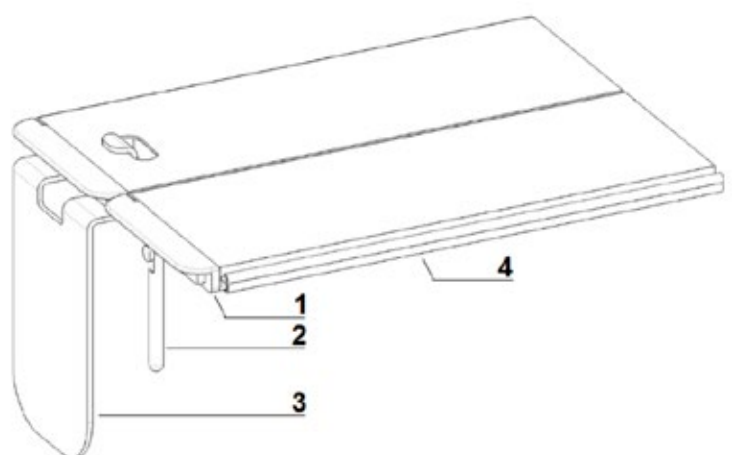


3.2. PVC slats: Guide weights for overflow pools (option)

Ref	Description	Qty
1	Slat plug	1
2	Guide weight	1
3	Overflow bracket*	1
4	Slat	1

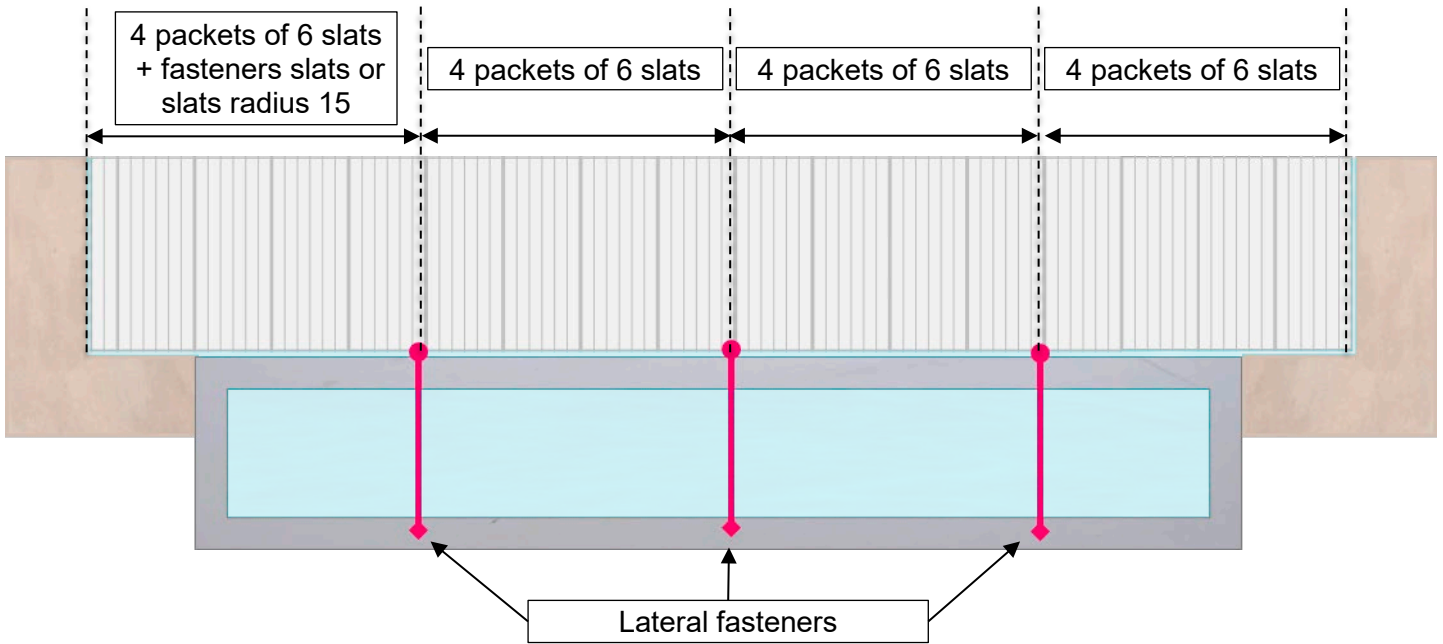
*The bracket (3) is supplied with the hasp fastener for the buffer and overflow tank.

The overflow bracket (3) is a removable part, but it plays an important role in safety. It must be put in place when the cover is rolled out over the pool and must be removed before opening the cover.



The guide weight (2) is mounted on the overflow slat in the factory. Its purpose is to guide the cover apron while it is being rolled up and rolled out.

The fasteners may be at most 1.80 m apart, which equals to 4 packets of 6 slats.



4. Cover apron safety fasteners

Regardless of the model, **the fastener straps are already attached to the first two slats of the cover apron.**

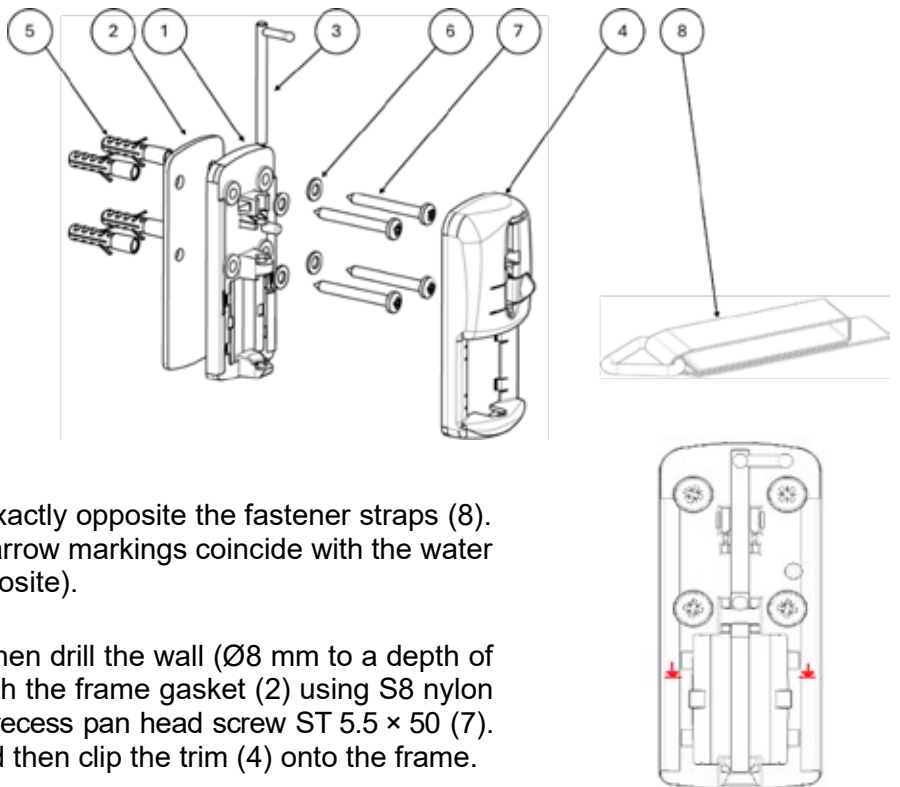
CAUTION

The use of fastening straps is essential to ensure the safety of the pool. Do not forget to release the straps before rolling up the cover. Failure to do so could result in significant damage.

4.1. Wall mounted safety fasteners

4.1.1. Wall mounted, sliding safety fasteners with trim

Ref	Description	Qty
1	Fastener frame	1
2	Frame gasket	1
3	SS slide bar	1
4	Trim	1
5	Nylon dowel S8	4
6	Washer Z8	4
7	Z cross recess pan head screw ST 5.5×50	4
8	Fastener strap	1

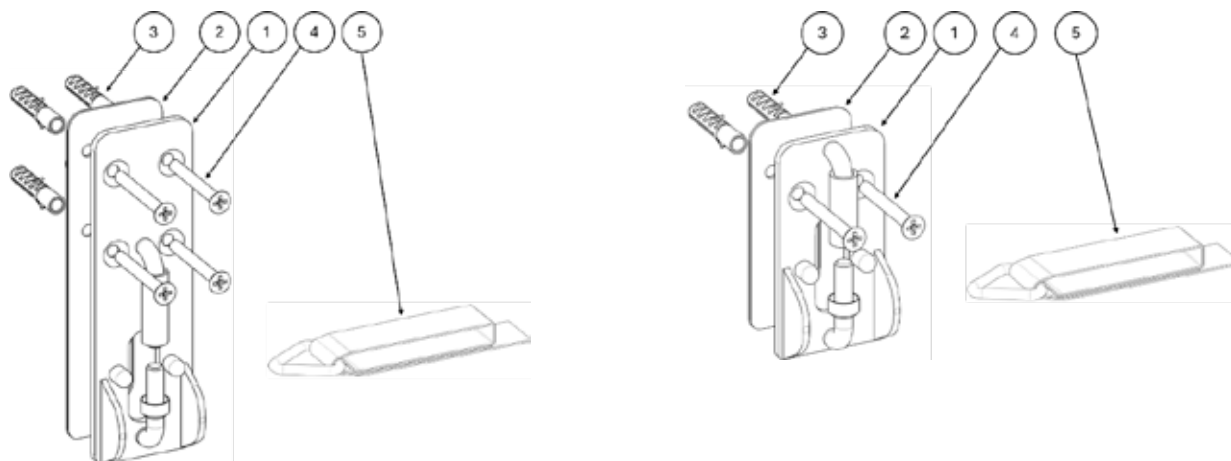


Attach the fastener frame (1) to the wall exactly opposite the fastener straps (8). Position the fastener frame such that the arrow markings coincide with the water level (see the red arrows in the image opposite).

Mark the location of the mounting holes, then drill the wall (Ø8 mm to a depth of 60 mm). Secure the fastener frame (1) with the frame gasket (2) using S8 nylon dowels (5), Z8 washers (6), and Z cross recess pan head screw ST 5.5 × 50 (7). Install the slide bar (3) in the frame (1) and then clip the trim (4) onto the frame.

4.1.2. Wall mounted, stainless steel, sliding safety fasteners

Ref	Description	Qty, standard water level	Qty, high water level
1	Fastener frame	1	1
2	Frame gasket	1	1
3	Nylon dowel S8	4	2
4	Pozidrive countersunk screw ST 5.5 × 50	4	2
5	Fastener strap	1	1



Attach the fastener frame (1) to the wall exactly opposite the fastener straps (5). Position the fastener frame such that the pins of the frame coincide with the water level.

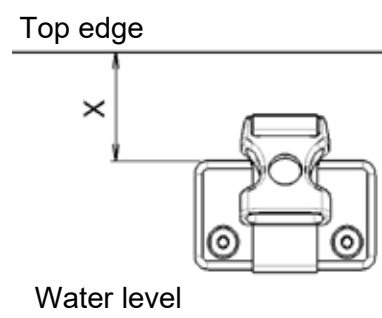
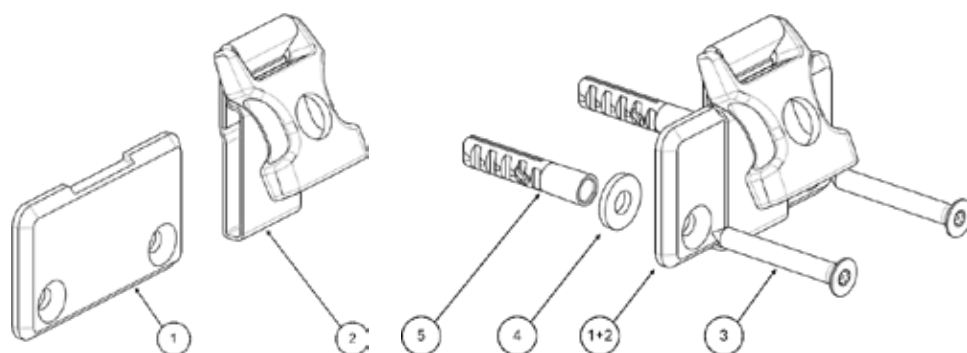
Mark the location of the mounting holes, then drill the wall ($\varnothing 8$ mm to a depth of 60 mm). Secure the fastener frame (1) with the frame gasket (2) using S8 nylon dowels (3), and Pozidrive countersunk screws ST 5.5 × 50 (4).

4.1.3. Wall mounted EZ-Clip safety fasteners

Ref	Description	Qty
1	EZ-Clip wall mounting plate	1
2	EZ-Clip wall strap	1
3	Pozidrive countersunk screw ST 5.5×45	2
4	Adhesive gasket $\varnothing 15 \times 6.5$ mm	2
5	Nylon dowel $\varnothing 8 \times 40$ mm	2

Install the strap (2) on the wall mounting plate (1) as shown in the images below.

Use the wall mounting plate as a template to mark the drill holes. The position of the plate (X) depends on the water level; the values are shown in the table hereafter.



For a water level between 50 and 60 mm, the wall mounting plate is aligned with the top edge. For a higher water level, the wall mounting plate is positioned 60 mm below the water level (e.g.: water level at 100 mm, $X = 100 - 60 = 40$ mm).

Drill the wall ($\varnothing 8$ mm to a depth of 50 mm). Apply the gaskets (4) to the back of the wall plate. Insert the wall dowels (5) into the wall and secure the plate using the Pozidrive countersunk screw ST5.5×45 (4). The wall mounting plate is positioned on top of the waterproofing layer.

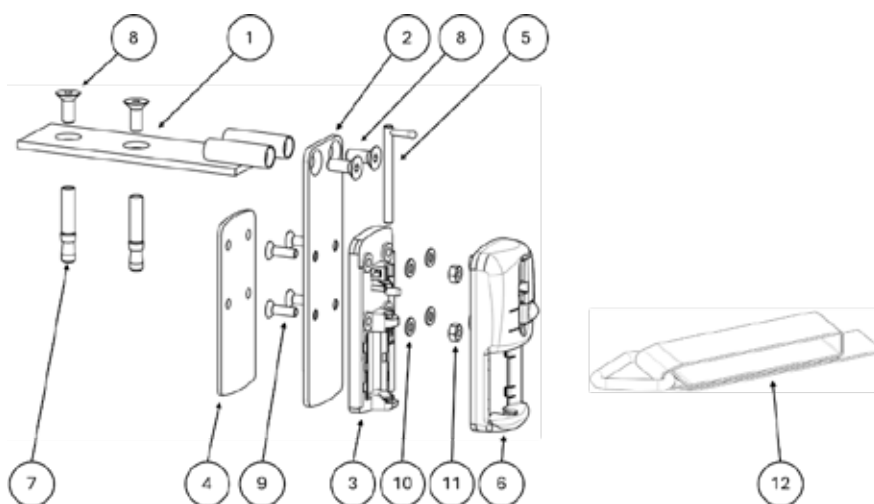
Water level	Wall mounting plate position (X)
50 mm	0 mm
60 mm	0 mm
80 mm	20 mm
100 mm	40 mm
130 mm	70 mm

4.2. Sub-coping mounted safety fasteners

4.2.1. Sub-coping, sliding safety fasteners with trim

Sub-coping mounted safety fasteners are compatible with thin walled and polystyrene block prefab pools.

Ref	Description	Qty
1	SS support bracket	1
2	SS fastener plate	1
3	Fastener frame	1
4	Fastener gasket	1
5	SS slide bar	1
6	Trim	1
7	UPAT M8 × 50 bushing	2
8	Countersunk hex socket screw M8 × 20 A4 SS	4
9	Countersunk hex socket screw M6 × 20 A4 SS	4
10	Z6 A4 SS washer	4
11	H M6 A4 SS nut	4
12	Fastener strap	1



Shape the underside of the coping (A) to accommodate the safety fastener.

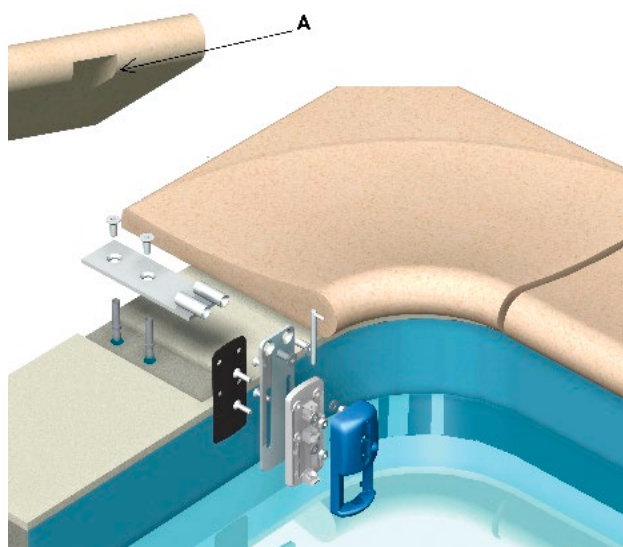
Drill holes through the fastener support bracket (1), $\varnothing 10$ mm - depth 8 mm. Clean out the holes and insert the UPAT M8 × 50 bushings (7).

Mount the fastener frame (3) on the stainless steel (SS) fastener plate (2) using 4 countersunk hex socket M6 × 20 screws (9), Z6 washers (10) and M6 nuts (11).

Glue the fastener gasket (4) to the fastener frame (3). Install the slide bar (5) in the fastener frame (3), then clip the trim (6) onto the fastener frame (3).

Mount the fastener plate (2) on the SS support bracket (1) using 2 countersunk hex socket M8 × 20 screws (8).

Mount the assembly on the previously installed UPAT bushings using the 2 countersunk hex socket M8 × 20 screws (8) left.



4.2.2. Sub-coping, stainless steel, sliding safety fasteners

The nomenclature and assembly steps are identical for the Standard water level and High water level versions.

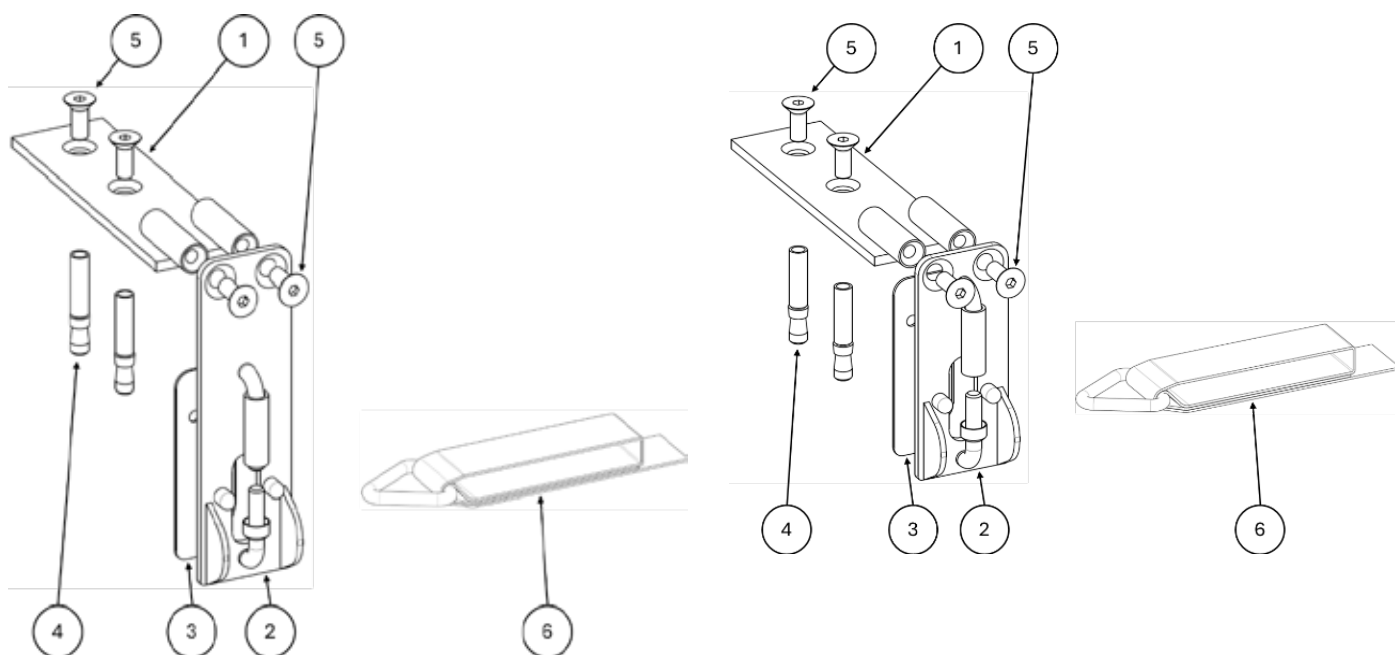
Ref	Description	Qty
1	SS support bracket	1
2	SS fastener frame	1
3	Fastener gasket	1
4	UPAT M8 × 50 bushing	2
5	Countersunk hex socket screw M8 × 20 A4 SS	4
6	Fastener strap	1

Shape the underside of the coping to accommodate the safety fastener. Drill holes through the fastener support bracket (1), Ø 10 mm - depth 8 mm. Clean out the holes and insert the UPAT M8 × 50 bushings (4).

Glue the fastener gasket (3) to the fastener frame (2).

Mount the fastener frame (2) on the SS support bracket (1) using 2 countersunk hex socket M8 × 20 screws (8).

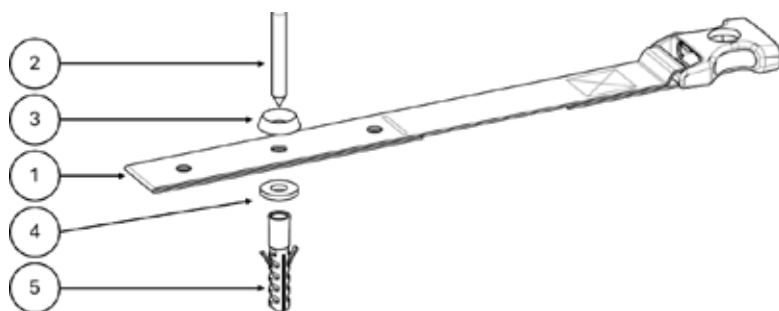
Mount the assembly on the previously installed UPAT bushings using the 2 countersunk hex socket M8 × 20 screws (8) left.



4.2.3. Sub-coping EZ-Clip safety fastener

Ref	Description	Qty
1	Sub-coping EZ-Clip strap	1
2	Pozidrive countersunk screw ST 5.5×45	1
3	Bowl washer Ø17 × 6.3 mm	1
4	Adhesive gasket Ø15 × 6.5 mm	1
5	Nylon dowel Ø8 × 40 mm	1

Use the strap (1) as a template to mark the drill holes on the top edge of the pool. The position of the female hook in relation to the water (Y) depends on the water level; the values are shown in the table hereafter.

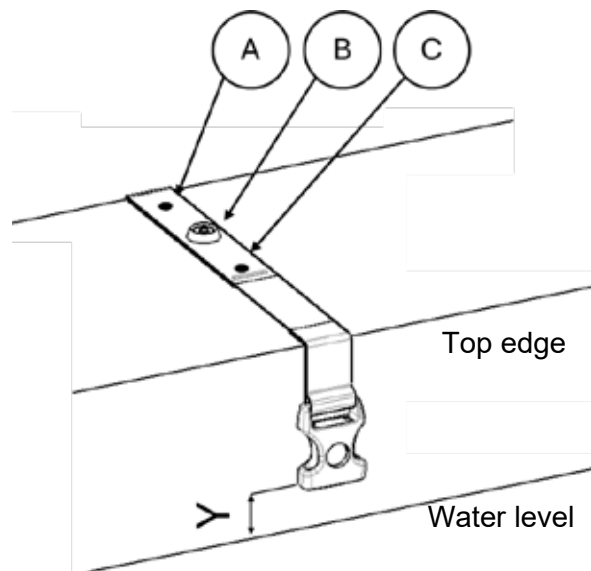


Water level	Distance plate position (Y)
50 mm	10 mm
60 mm	25 mm
80 mm	25 mm
100 mm	25 mm
130 mm	25 mm

Select the appropriate fixing hole (A, B, or C) depending on the water level, ensuring that there is sufficient concrete on either side of the hole. Then drill the Ø8 mm hole to a depth of 50 mm.

Glue the gasket (4) under the strap.

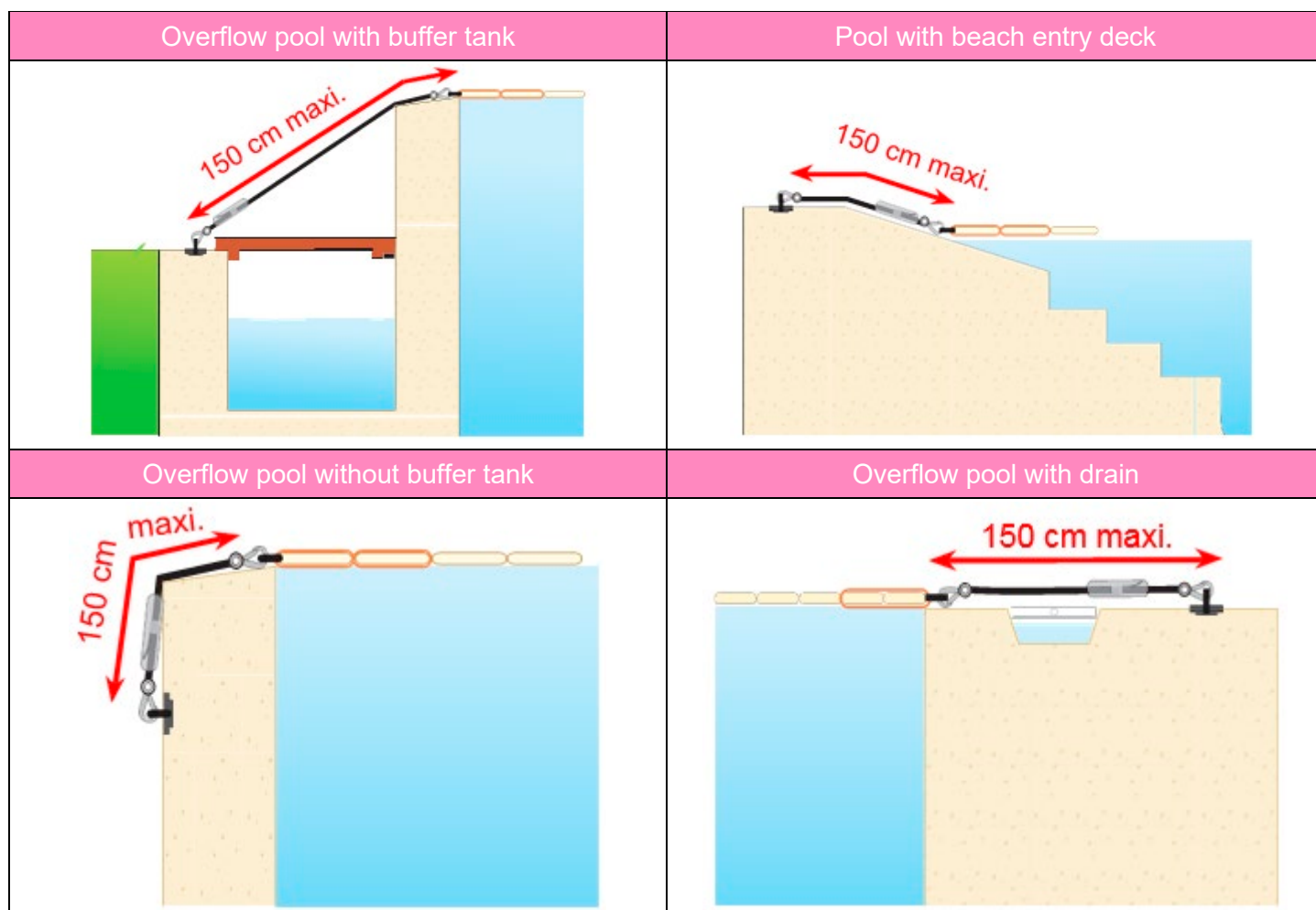
Insert the nylon dowels (5) into the hole and secure the strap using the Pozidrive countersunk screw ST 5.5×45 screw (2) and the bowl washer (3).



4.3. Adjustable strap at the end of the pool

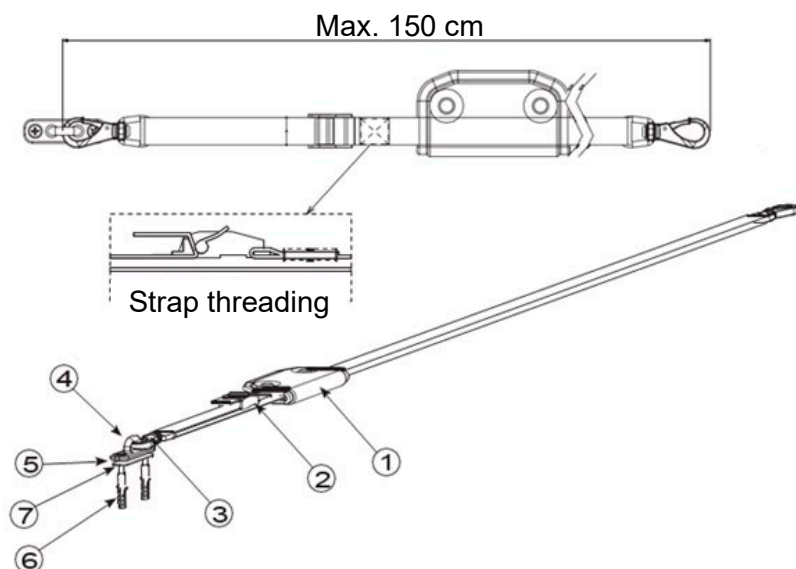
4.3.1. Strap configurations

To protect the leaktightness of the waterproofing finish, use straps with a fixed, stainless-steel hasp. Install an adjustable strap opposite each of the cover apron's safety straps.



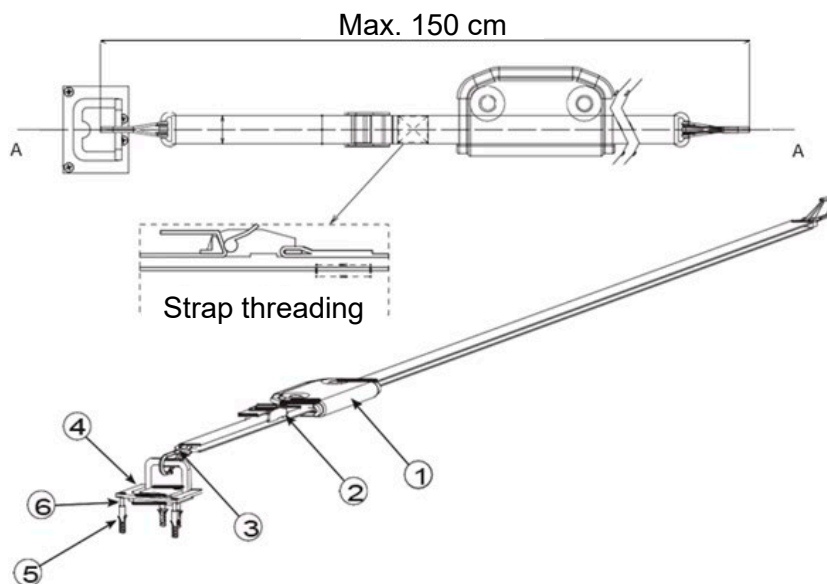
4.3.2. Stainless steel, fixed hasp fastener

Ref	Description	Qty
1	Protective sleeve	1
2	Strap and cam buckle	1
3	Hinged stainless steel carabiner	1
4	Fixed hasp	1
5	Fixed hasp gasket	4
6	Nylon S8 bushing	4
7	Pozidrive countersunk screw ST 5.5 × 50 SS A4	4



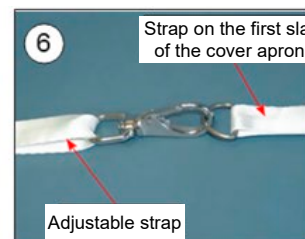
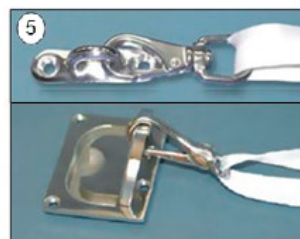
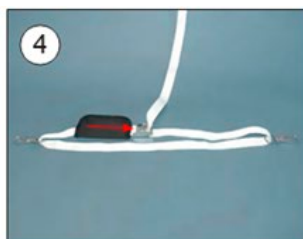
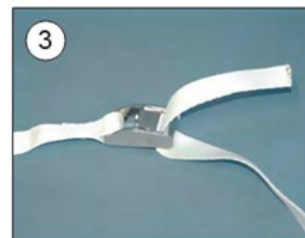
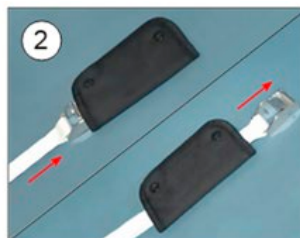
4.3.3. Stainless steel, collapsible hasp fastener

Ref	Description	Qty
1	Protective sleeve	1
2	Strap and cam buckle	1
3	Hinged SS carabiner	1
4	Collapsible hasp	1
5	Hasp gasket	4
6	Nylon S 6x30 bushing	4
7	Pozidrive countersunk screw 3.9x38 SS A4	4

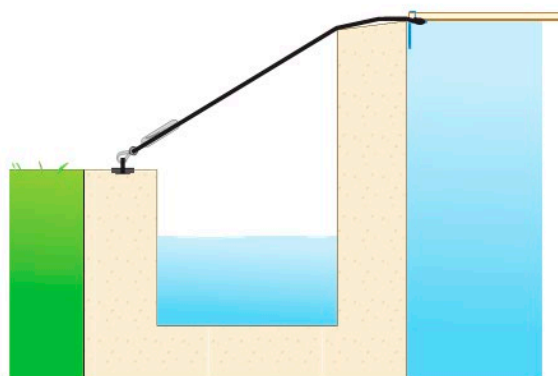
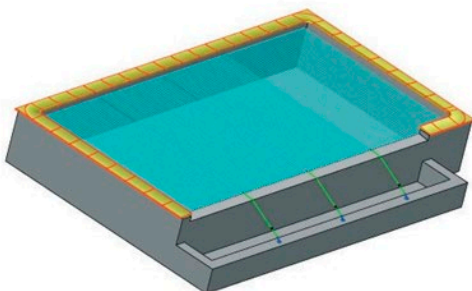


4.3.4. Attaching the strap to the hasp

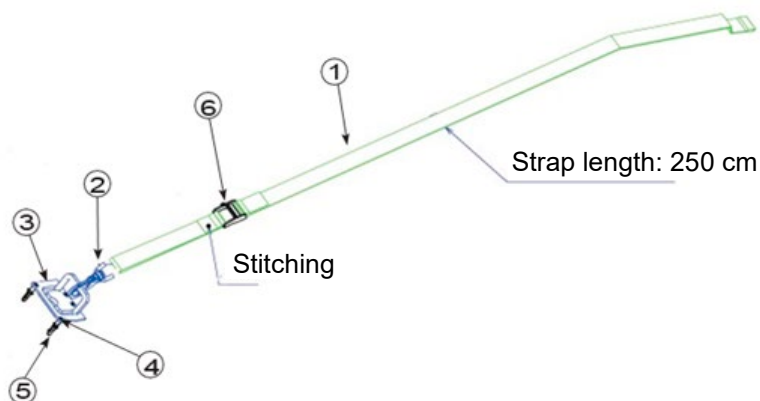
6. Thread the strap through the carabiner loops.
7. Slide the cam buckle through the sleeve and pull it out the other side.
8. Thread the end of the strap through the cam buckle catch.
9. Arrange the assembly as shown after it has been adjusted to the correct length. Slide the black sleeve over the cam buckle.
10. Attaching the carabiner to a fixed or collapsible hasp.
11. Attaching a carabiner to the strap to the first slat of the cover apron.



4.3.5. Hasp fastener for the overflow and buffer tank



Ref	Description	Qty
1	Strap	1
2	Hinged SS carabiner	1
3	Collapsible hasp	1
4	Pozidrive countersunk screw 3.9x38 SS A4	4
5	Nylon S 6x30 bushing	4
6	Cam buckle	1

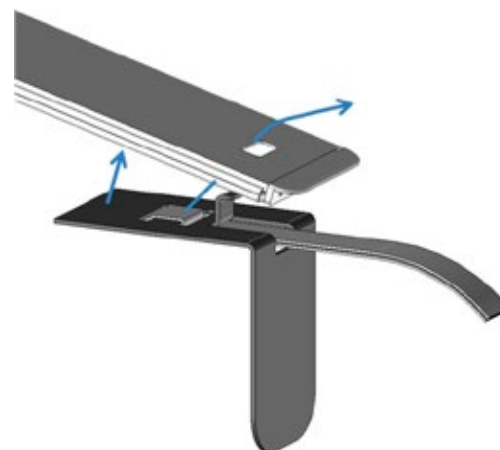


1. Thread the strap through the carabiner loops.
2. Thread the strap into the lateral fastener.
3. Thread the end of the strap through the cam buckle catch.
4. Lay out the assembly and adjust it to the correct length.
5. Attaching the carabiner to the collapsible hasp.

4.3.6. Installation of the lateral fasteners

Blocking the cover apron in position using the lateral straps:

With the cover apron rolled out fully over the pool, attach the fasteners to the perforated slats by inserting them from underneath. Next, attach the ends of the straps to the collapsible SS hasps using the carabiner.



4.3.7. Recommendations concerning the installation of hasps

Fixed stainless-steel hasp

Drill two Ø 8 mm holes and insert bushing into them. Use the support bracket as a drilling template.

If the pool is fitted with a liner or reinforced membrane, insert the fixed hasp gasket between the plate and the membrane. Use the Pozidrive countersunk screws ST 5.5x50 SS A4 supplied for the installation.

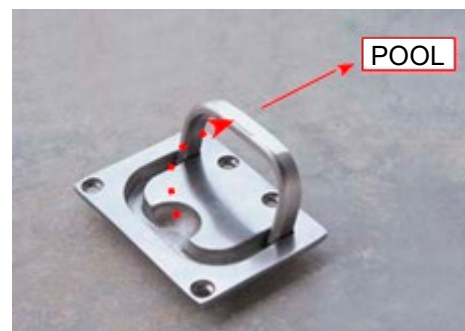
Retractable handle of the collapsible hasp

Orient the retractable handle such that it rises towards the pool (see photo).

Recessed installation: Carve out a recess for the collapsible hasp, 80 × 60 mm, depth 10 mm.

The hasp may be partially recessed by creating a recess 65 × 45mm, depth 7 mm.

Drill four holes, Ø 6 mm, using the hasp as a template and insert bushings. Use the Pozidrive countersunk screws, 3.9x38 SS A4 supplied to fasten the hasp in position.



Once the length of the strap has been adjusted

The excess length may be cut off. Leave an extra 15 to 20 cm protruding out from the cam buckle. After cutting the strap, singe the end of the strap slightly to stop it from unravelling.

OPERATING INSTRUCTIONS

1. Precautions

It is of utmost importance to check that no-one is in the pool before closing the cover. Always keep watch over the pool while the cover is in motion.

To activate the cover, insert the key into the key switch. After each manoeuvre, turn the key to its vertical position, then remove it and place it out of the reach of children.

Only an adult may manipulate the cover. Never allow children to manipulate the cover slat apron, or access to the control key.

The cover may be used year round. The cover may be used during winter, once the surface of the pool is not iced over.

NOTA BENE: Depending on the flow rate of the filtration pump, the return fittings could generate a strong current on the surface of the pool. If this current could resist closing of the cover, filtration should be stopped during this operation.

2. Safety fasteners

CAUTION

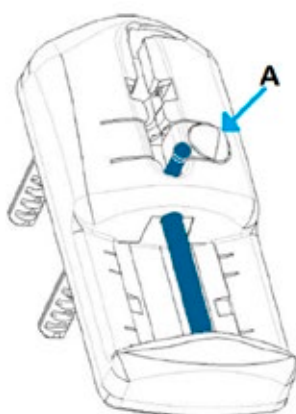
The use of fastening straps is essential to ensure the safety of the pool. Do not forget to release the straps before rolling up the cover. Failure to do so could result in significant damage.

2.1. Locking the cover apron in the safety fasteners

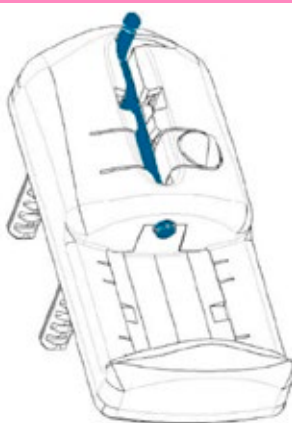
Once the cover is fully rolled out over the pool:

- For EZ-Clip safety fasteners, insert the male part of the clip fully into the female part until you hear a 'click', then check that the hook is properly locked.
- For sliding safety fasteners, release the slider (by pressing button A on versions with a trim, and by activating the metal tube on stainless steel versions) and mount the slider, then lower it through the strap ring. Slide the slider down as far as possible to ensure it is locked.

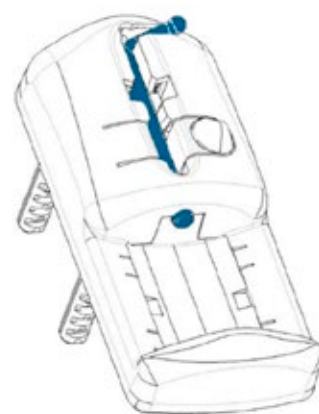
Closed position



Open position



Blocked open position



2.2. Releasing the cover apron from the safety fasteners

The straps must be released before rolling up the cover:

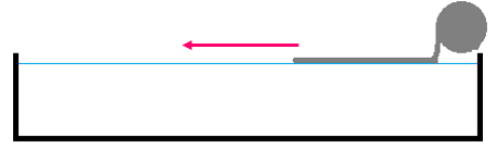
- - For EZ-Clip safety fasteners, press both sides of the fastener and the central button simultaneously to release the fastener.
- - For sliding safety fasteners, release the slider (by pressing button A on versions with a trim, and by activating the metal tube on stainless steel versions), and raise the slide bar to release the strap ring.

3. Procedures for opening and closing the cover

3.1. Procedure for closing the cover

CLOSING THE COVER = Rolling the cover out over the pool

It is absolutely vital to check that there is no-one in the pool.



Check also that there are no floating objects (floats, balls, toys, etc.), that could hinder correct movement of the cover. Turn the key switch to the “FERME” position and hold it there until the cover stops moving at its end of travel. To close the cover using the Bluetooth remote control, refer to section 4.5 (Opening and closing the cover using Bluetooth) of this chapter, on page 37.

Always keep watch over the pool while closing the cover. Never stop the cover in an intermediary position, this could entail a risk of a person being trapped if they are swimming in the pool. The person operating the cover must first check that there is nobody in the pool.

If an automatic pool cleaner is used, check that the pool cleaner hoses and/or power cable will not get caught in the cover apron as it rolls out.

In any event, swimming under the cover is strictly prohibited.

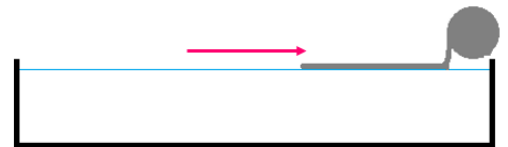
Release the key once the cover stops moving. Remove the key and store it in a place out of the reach of children.

Attach the safety straps at the end of the cover to the fasteners along the edge of the pool to secure it in position.

3.2. Procedure for opening the cover

OPENING THE COVER = Rolling the cover up around the axle.

The cover should pass over the top of the axle when rolling up.



Release the cover from the safety fasteners at the end of the pool. Failure to do will more than likely cause the cover to break.

Check that there is no object on the cover (ball, toy, etc.) that could impede the correct movement of the cover. In the case of an automatic pool cleaner, check that the pool cleaner tubes and/or power cable will not get caught in the cover apron turns as it rolls up.

Turn the key switch to the “OUVERT” position with a quick twist to open the cover. To open the cover using the Bluetooth remote control, refer to section 4.5 (Opening and closing the cover using Bluetooth) of this chapter, on page 37.

Always keep watch over the pool while the cover is in motion. Never stop the cover in an intermediary position.

When the cover stops moving, remove the key from the lock and store it in a location out of the reach of children.

4. Using the Bluetooth remote control

The Bluetooth electronic board for BWT automatic cover uses Bluetooth Low Energy 2.4 GHz and has a nominal range of 10 metres. For security reasons, it only allows one smartphone connection at a time.

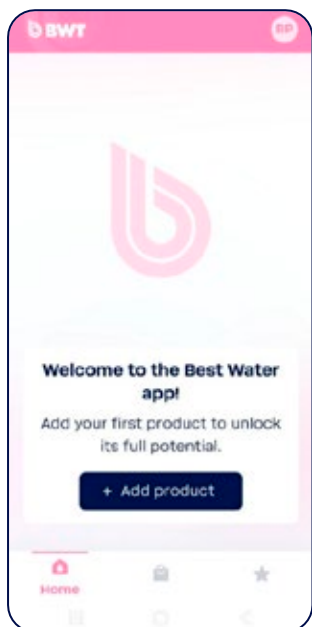
4.1. Initialising the application

Download the BWT Best Water App



Turn on the Bluetooth function on your smartphone. Launch the application and log in to a BWT account or create one. To be able to control the cover from your smartphone, the BWT Best Water App must have 'Nearby devices' permission.

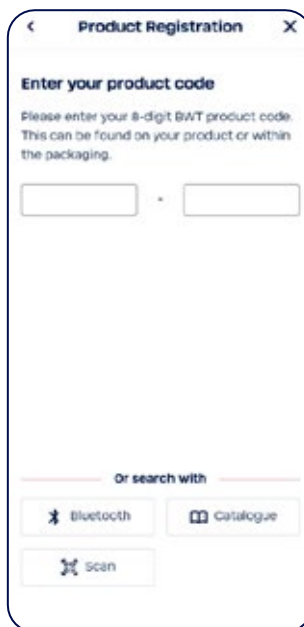
Press  to add your device



Choose which address to associate the cover with and press **Save**



Click  **Bluetooth** to scan nearby devices



The cover will appear in the list. Select it, then press **Next** in the presentation window.



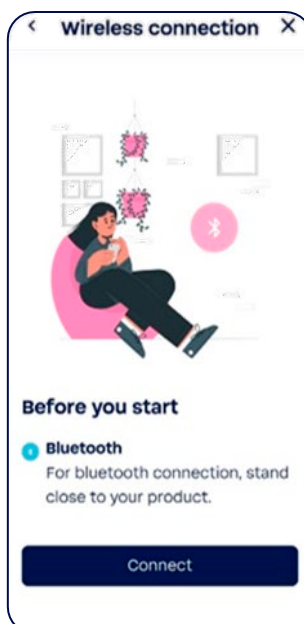
Select the location and characteristics of the pool.



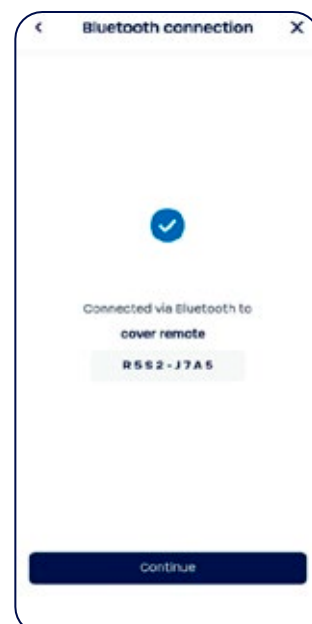
On the Service Partner selection screen, press **Skip**.



Press **Complete Setup**, then **Connect**.

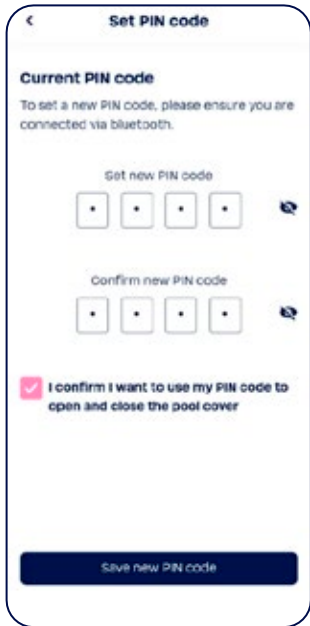


When the connection is established, press **Continue** to set up the PIN code

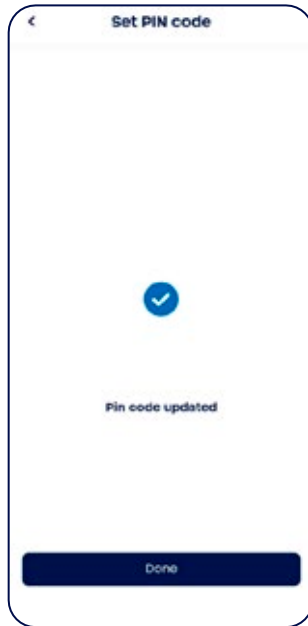


4.2. Initial setup

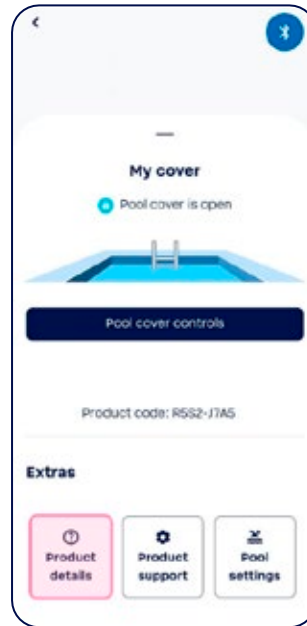
Enter a PIN code *
Read the warning and tick the confirmation box, then save the PIN code



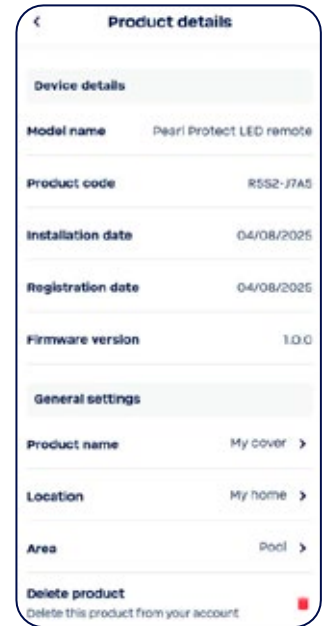
The following window will show that the PIN code has been successfully updated. Press **Done**.



To customise the cover, click on **Product Details** at the bottom left of the home page.



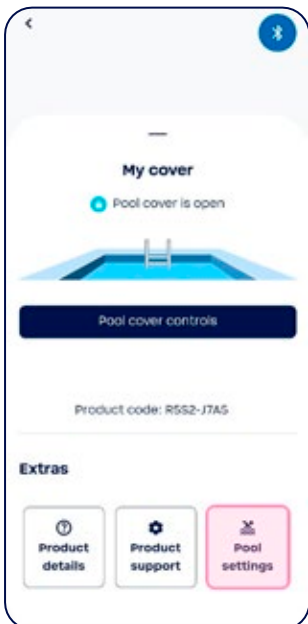
It is possible to change the product name, its location, and its zone.



* In order to comply with standard NF P90-308, it is not permitted to use the same number four times.

4.3. Changing the PIN code

The **Pool Settings** section allows you to change the password.



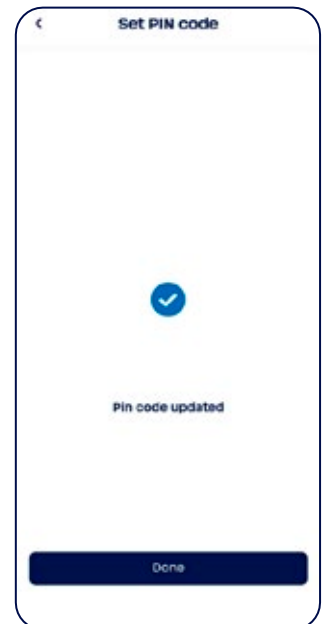
In the **PIN code** section, enter the current PIN.



Then enter the new PIN and confirm it. Confirm and save.



The application will confirm that the PIN code has been updated. Press **Done**.



4.4. Resetting the PIN code

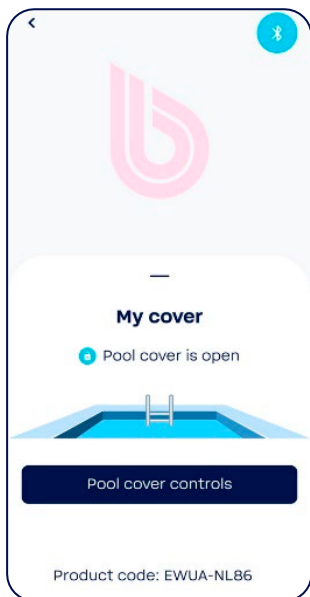
The PIN code can be reset by pressing the push button on the board for 3 seconds (see its location in section 1.3.1 (Bluetooth remote features) of the POWER SUPPLY AND MOTOR DRIVE SYSTEM chapter, page 15.

A quick flash of the blue LED on the electronic board indicates that the password has been reset and that the push button can be released. To set a new PIN code, proceed as described in section 4.3 (Changing the PIN code), bearing in mind that the current password will not be requested.

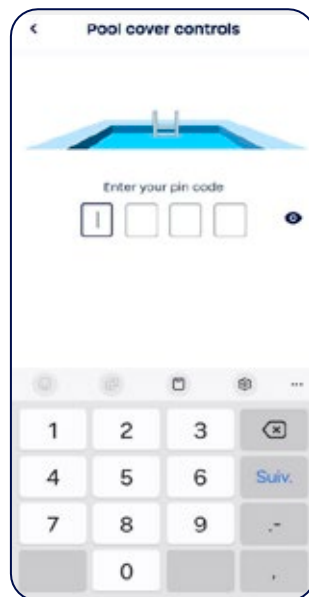
4.5. Opening and closing the cover using Bluetooth

Read the warning message and tick the box to confirm. Then press **Next**.

On the app's home page, select your cover



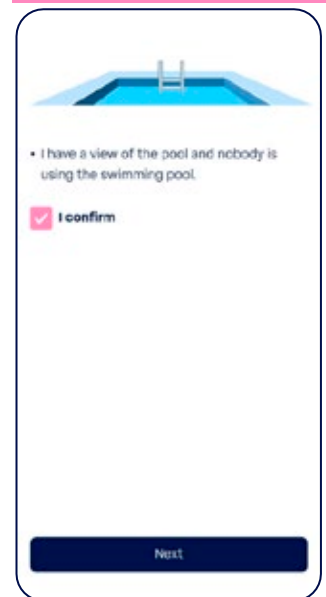
On the pool cover controls page, enter your PIN code



Opening warning message

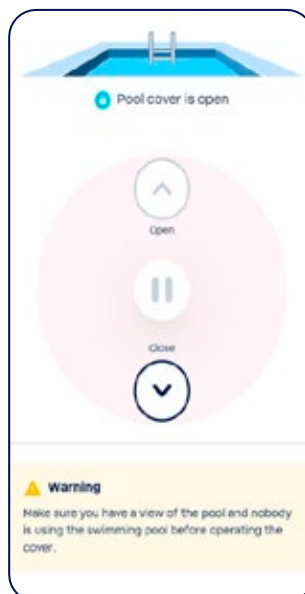
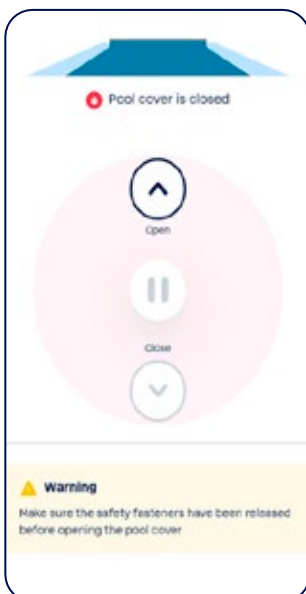


Closing warning message



Pressing the **Open** button starts the cover opening process. The cover continues to open until it is fully open or until the **Pause** button is pressed.

The **Close** button must be held down for the entire duration of the cover closing process, until the message **Cover is closed** is displayed. Otherwise, the closing process is interrupted.



NOTE: for safety reasons, the key control takes priority over the app control.


If, while the cover is opening, someone activates the key in the close position, the cover will stop and the open button on the app will be disabled.


You will then need to briefly press the close button before you can open the cover again.

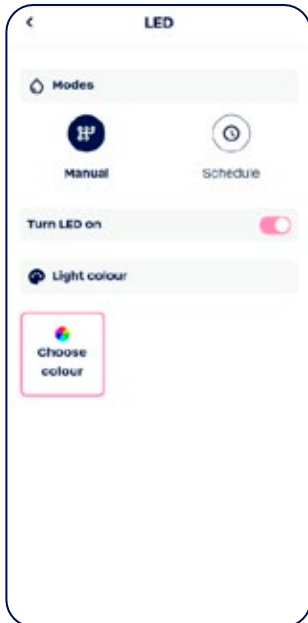
4.6. Use and programming of LEDs

The LEDs can be switched on and off manually or programmed to switch on at one or two specific times. To do this, click on LED settings.


Manual mode

Press the icon .

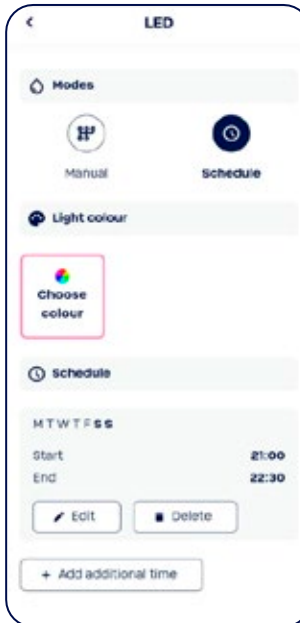
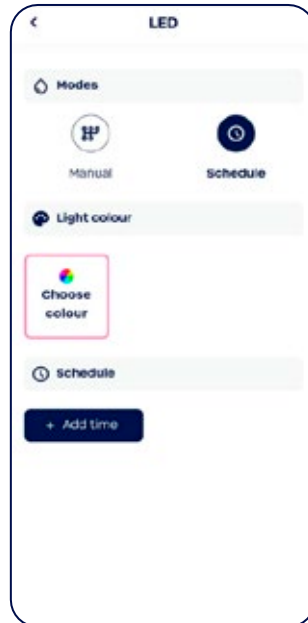
In this mode, press  to turn the LEDs ON or OFF




Time slot mode

Press the icon .

Add, edit, or delete the two slots. A slot can be applied or not applied to each day of the week.



Manual or time slot mode.

In both modes, press  Choose colour to select the colour of the LEDs and their brightness



4.7. Bluetooth troubleshooting guide

If the BWT Best Water App does not detect the Bluetooth remote control, carry out the following checks:

1. Check that Bluetooth is enabled on your smartphone and that the BWT Best Water App has permission to access "Nearby devices".
2. Check that no one else is connected to the Bluetooth remote control (reminder: the Bluetooth remote control only allows one connection at a time).
3. Check that the switch on the cover's power supply box is in the ON position.
4. Open or close the cover using the key. If the cover functions, go directly to step 6.
5. If the cover does not function, check the power supply to the box and the status of the circuit breakers, then return to step 4.
6. Turn off the power supply to the box for 2 minutes, then turn it back on. Restart the application to attempt to detect the Bluetooth remote control. If the remote control is not detected, proceed to the next step.
7. Open the Bluetooth electronic junction box in the motor side stand. The blue LED should flash about every 10 seconds. This indicates that the electronic board is available for Bluetooth connection. If this is not the case, check the motor connector on the electronic board to ensure that there is + 24 V DC between "GND" and "+24V" (refer to section 1.4 : Motor wiring of the POWER SUPPLY AND MOTOR DRIVE SYSTEM chapter on page 16). If this is not the case, check the wiring between the power supply box and the electronic board box.

If none of these steps have solved the problem, contact the installer or dealer.

5. Water quality

Check the quality of the water before filling the pool, particularly if the water is taken from a well, a lake or a river. Particular attention should be paid to detecting and reducing abnormally high concentrations of metallic ions: Avoid using water high in Iron, Copper or Manganese, etc., these metals can combine with Hydrogen Sulphide that can be released by decomposing organic or vegetable matter. This reaction can give rise to the deposition of metal sulphides that can cause staining. In an event, and in accordance with the standard NF P90-308, the materials used to manufacture the slats comprising the cover aprons were specifically designed not to have a colorimetric reaction on contact with Hydrogen Sulphide.

The T.H. (Total Hardness) is a measure of the hardness of the water, that is the concentration of Calcium and Magnesium in the water, it should be less than 250 ppm.

A higher T.H. will lead to the deposition of lime scale on the slats, which are unpleasant to look at and could hinder correct winding of the cover apron.

Furthermore, the user must only use water disinfection chemicals and systems compatible with the material used to manufacture the automatic cover and should use said in accordance with the instructions provided by the manufacturers of the aforementioned chemicals and /or systems.

For information, the most common average dosages of disinfectant products are listed in the table below:

CHLORINE	Concentration between 0.7 and 1.2 ppm.	pH between 7.0 and 7.4
BROMINE	Concentration between 1 and 2 ppm.	pH between 7.0 and 8.0

6. Maintenance

The cover must be cleaned regularly to avoid any degradation (staining, etc.) of the cover apron slats that could be caused by heavy particles left lying on the cover apron (dead leaves, miscellaneous detritus, metallic objects that could rust, etc.) or by the build-up of excessive dirt (lime scale, translucent oils, road pollution, etc.) on the cover apron.

The prolonged stagnation of organic or vegetable matter left lying on the cover apron could lead to the appearance of stains of various colours that are sometimes permanent.

Deep cleaning of the cover at least twice a year, on opening and winterizing the pool, is highly recommended. To clean the cover, use a high pressure jet of warm water and a descaling product. Use only compatible and recommended products to clean the cover. These cleaning products should under no circumstances be abrasive or PVC solvent based. Any serious infraction of these basic automatic cover maintenance rules will entail the rejection of any resulting guarantee claim.

List of bi-annual checks:

- The general condition of the cover slats,
- The condition of the safety straps,
- The condition of the straps connecting the axle to the cover,
- The condition of the safety fasteners.
- Check that the wires in the electrical panels are correctly tightened.

7. Winterizing

Frequently, a pool is not used for a several months during the winter period. In the Northern Hemisphere, pools are usually winterized between the 15th of November and the 15th of March of the following year.

While it is winterized, the pool must be protected from dirt by a “net” type winterizing cover that allows precipitation to pass through but protects the slat cover against hail and leaves, or by the WinterClean P-F profile that clips on to the edges at either side of the slats and the first slat of the cover apron to cover the gaps between the pool wall and slats.

Do not use a watertight protective cover that could come into contact with the slat cover apron and instigate the migration of various PVC components used to manufacture the slats.

If there is a risk of freezing, a row of winterizing floats should be placed on the surface of the water in the cover pit (if it is equipped with one) and across the opposite width of the pool.

The cover is rolled out over the surface of the pool and stopped before it reaches the row of winterizing floats.

In the event that the pool water freezes, under no circumstances should any stress loading be placed on the cover apron, nor should any effort be made to operate the cover, at the risk of breaking the slats and causing serious damage to the cover's mechanical components.

Similarly, never leave the cover rolled up around its axle for the entire winterizing period, this could lead to permanent deformation of the axle. The cover should be rolled up around its axle during periods of snow.

We also highly recommend that you entrust the winterizing of your pool and your automatic cover to a qualified professional, trained in the use of our products.

However, should you decide to winterize your automatic cover your-self, abide by the following recommendations:

- Do not lower the water level in the pool. Rainwater will be channelled away through the over-flow.
- Clean the cover using a high pressure jet of water. Repeat this operation when the pool and the automatic cover are put back into operation.
- Vacuum the entire pool before winterizing the filtration system.
- Place a row of winterizing floats on the surface of the cover pit or extension, parallel to the pool width, and along the opposite width. The cover is rolled out over the surface of the pool and stopped before it reaches the row of winterizing floats. Protect the skimmers with gizmos,
- Install either a winter cover that is permeable to rainwater or WinterClean profiles.
- Protect the wooden duckboarding from the elements with a suitable treatment: Lazure, varnish, paint, linseed oil, etc.
- Remove the cleaning manifold booster pump (if the pool is fitted with one) and store it in a location protected against humidity.
- Cut the power supply to the electrical panel.

8. Scope of use

The automatic covers were designed and manufactured for use with family pools. Any other use (public or semi-public pools) must be duly authorised by BWT France – POOL Activity.

Despite their excellent mechanical properties, the automatic covers cannot withstand external aggressions.

The following should therefore be avoided:

- Direct contact between the surface of the cover apron and disinfectant products (Chlorine, Bromine, etc.) likely to cause damage such as permanent discolouration, burns, blisters, etc.
- Excessive loads on the cover apron that could deform it.
- Mechanical impacts: blunt objects falling onto the cover apron, the base of a parasol, heavy hail stones, etc.

We recommend that you contact your insurance company to check if your automatic cover is covered against the risk of hail.

Furthermore, the leaktightness of the slats comprising the cover apron is key to cover protection. This leaktightness can be compromised by mechanical impacts, hailstorms, etc. Consequently, the leaktightness of the slats must be checked regularly by a responsible adult user and any defects should be repaired immediately.

This list of precautions is not exhaustive, and we highly recommend that, in case of doubt, you do nothing without first seeking the advice of the installer, with whom you should remain in frequent contact.

GENERAL GUARANTEE CONDITIONS

Please keep this manual, your invoice and your proof of purchase.

This automatic cover was designed and manufactured with great care and attention, and in accordance with the stipulations of the applicable standards in effect, and notably, the French standard NF P90-308 « Protective elements for in-ground, barrier-free, private or collective use swimming pools– Safety covers and securing devices - Safety requirements and test methods (unless specifically mentioned in the technical data specific to certain models).

Guarantees on BWT automatic covers are genuine and serious. They derive from the commitment of BWT France – POOL Activity, designer and manufacturer, whose administrative headquarters are located: 48 rue de Bédée – 35137 Pleumeleuc – France.

Important notice

The guarantees set out in the following are extended to professional clients only. End users of the pool may under no circumstances make any claim under this guarantee, as they do not enjoy any contractual relationship with BWT France – POOL Activity

Hence BWT France - Pool Activity and its installer client hereby mutually recognise each other's status as "professionals". Notwithstanding, coverage under these guarantees assumes that the professional client provided its own customer with the "Guarantee slip" appended to this document, describing the correct use and maintenance of a BWT automatic cover.

All the guarantees described in this document enter into effect on the date of reception of the guarantee slip appended to this document, duly filled out by the installer client, or failing this, after a period of 30 days following the date of delivery of the cover.

1. Guarantee on the PVC slat apron

1.1. **Guarantee covering slat leak tightness and structural integrity**

The PVC slats constituting the cover apron are covered by a 2 year guarantee on leaktightness of the slats, their articulation and their structural integrity over time.

In the event of the partial replacement of the slats constituting a BWT cover, and given the natural, gradual discolouration of said and colour variations from one batch of materials to another, variations in colour between the old slats and the new slats are normal and natural.

The following are outside the scope of this guarantee:

Any damage resulting from the failure to abide by the instructions provided in the cover civil engineering and installation documentation

Slats covers comprised of polycarbonate (PC) installed on covers stored above-ground.

Defects implicating slat leaktightness, in as far as the number of slats concerned does not constitute more than 2 % of the total number of slats comprising the BWT cover slat apron surface area.

The presence of drops of condensation inside the slats, which is not the result of any leaktightness defect but rather a natural phenomenon caused by the permeability of the material to steam.

Slat articulation defects, in as far as these are the results of:

- Calcium or Magnesium deposits, these being caused by operating the cover in pool water with a TH above 200 ppm.
- The build-up of dirt on the slat cover (dead leaves, detritus, sand, etc.), due to a lack of regular cleaning of the automatic cover.
- Incorrect setting of the ends of travel that automatically stop the rolling out and rolling up of the automatic cover.
- In the case of systems without ends of travel, impacts of the slat apron against the wall opposite the axle due to a lack of care exercised by the user.
- Rolling the cover out in the submerged cover pit, after the water level drops below the top of the separating pit wall (no water level regulation or faulty water level regulation).

Deformation of the slat apron resulting from:

- A thick layer of snow left standing on the surface of the slat apron.
- A sudden, significant drop in the water level, notably in pools that feature handrails or abutments.

Damage caused to one or more slats comprising the cover apron following:

- An attempt to open the cover while is closed and fastened in position.
- An attempt to move a cover with a submerged cover pit while the water level is too low (below the top of the pit wall) or too high (above the bottom of the beam) due to a lack of regulation of the water level and/ or overflow, or a faulty overflow or water level regulation.
- An attempt to repair or modify the cover performed by an unqualified person not an agent of BWT France - Pool Activity.
- A hailstorm, falling branches or tiles, etc. said risk being covered by home insurance usually taken out by the user of the cover.
- Friction of the slat apron.

Deformation and/or blistering of the slats constituting the slat apron, resulting from:

- The presence of a floating object (float, toy, thermometer, floating diffuser, etc.) under the cover and thus preventing the slats from remaining in contact with the water at this point.
- Storing part of the slat apron in the sunlight on the deck around the pool during assembly or a maintenance operation.

The deformation of the slat apron or slat articulations, resulting from an object (float, toy, thermometer, floating dispenser, etc.) becoming trapped in the cover as it rolls up around the axle.

1.2. Guarantee covering stains and discoloration

BWT covers are also protected by a 5-year guarantee concerning the risks of sudden, abnormal discoloration and/ or the appearance of indelible stains on the surface of the slats.

However, the guarantee may not be invoked if the stained or discoloured surface area accounts for less than 10% of the total surface area of the slat apron.

NOTA BENE: As the slats are formed by the extrusion of pigmented PVC, the gradual discolouration of the slats, caused by oxidation of the pigments by UV rays and/or disinfectants used to treat the pool water, is normal and natural.

In the event of the partial replacement of the slats comprising the BWT slat cover, and bearing in mind the aforementioned gradual discolouration process, colour variations between the old and new slats are normal and natural.

The following are excluded from the scope of the guarantee covering stains and discoloration:

Stains resulting from:

- The use of highly pigmented tanning sun creams (brown stains).
- Fumaroles resulting from the combustion of hydrocarbons (exhaust gases from motorised vehicles, planes flying overhead, fuel fired boilers, etc.).
- Smoke from wood burning chimneys.
- Tannins released by the decomposition of dead leaves.

The discolouration or staining (and deformation) of slats, attributable to the migration of components caused by prolonged contact between the cover apron and other plastic components (winter cover, sheets of PVC or polyethylene, etc.).

Stains attributable to a flagrant lack of regular maintenance/cleaning. The slats must be cleaned thoroughly at least twice a year.

Stains caused by the formation of metallic sulphides, encrusted in the PVC and resulting from the presence of micro-organisms (bacteria, fungi, etc.) and metallic ions present in the pool water or in the PVC material it-self. This risk can be precluded by continuously treating the pool water to maintain irreproachable water quality and avoiding the stagnation of decomposing organic matter on the cover.

The slight yellowing of polycarbonate slats over time, this is a natural phenomenon and therefore unavoidable.

2. Guarantee on mechanical components

2.1. Guarantee covering the motor

The motor drive system equipping BWT covers is protected by a 5 year guarantee covering the motor's leaktightness and structural integrity over time, subject to the condition that the motor was installed in accordance with the technical recommendations, and operated in accordance with the operating instructions, set out in this manual.

The following are excluded from the scope of the guarantee covering the motor:

Damage resulting from water infiltrating into the motor, due to:

- The installation of the motor in a manner that does not comply with the instructions set out in this manual.
- Partial or full dismantling of the motor.
- Submersion of a motor designed to operate only out of water.

Damage pursuant to failure to respect the electrical standards in effect in the country of installation (the most recent version of the standard NF C 15-100 in France).

Damage to the motor occasioned by lightning strikes or electrical surges, said risk being covered by the house insurance generally taken out by the user of the cover.

Excessive stress exerted on the motor due to non-compliant civil engineering or incorrect installation of the cover (friction or abnormal stress loading while rolling out/ rolling up the slat).

2.2. Guarantee on the electrical panel

The electrical panel provided with BWT covers is covered by a 5 year guarantee for correct operation, subject to the conditions that the electrical panel was installed in accordance with the technical recommendations set out in the BWT covers Installation and Operating Instruction Manual, and that it is used in accordance with the aforementioned manual.

The following are excluded from the scope of the guarantee covering electrical panels:

Damage attributable to non-compliance with the electrical standards in effect in the country of installation (the most recent version of the standard NF C 15-100 in France).

Damage to the electrical panel occasioned by lightning or electrical surges, said risk being covered by the house insurance generally taken out by the user of the cover.

Loose electrical contacts, maintenance instructions stipulating a biannual check of this point.

NOTA BENE: It is hereby recalled that BWT automatic cover electrical panel must be installed by a qualified electrician.

2.3. Guarantee on solar panel, converter, rechargeable battery and its removable charger

For the relevant cover models, solar panel, converter, rechargeable battery (and its removable charger) of the cover motor power supply are covered by a 2-year guarantee, subject to condition that they were installed in accordance with the technical recommendations, and operated in accordance with the operating instructions, set out in this manual.

The following are excluded from the scope of the guarantee covering solar panel, converter, rechargeable battery and its removable charger

Damage resulting from the full discharge of the batteries after they were disconnected from the solar panel, or the continued failure to expose the solar panels to ambient outdoor light.

Damage caused to batteries by submersion.

Damage to the solar panel attributable to a hailstorm or branches, tiles, etc. falling onto the solar panel.

2.4. Guarantee on the axle

The anodised aluminium axle provided with BWT covers is covered by a 5 year guarantee concerning its structural integrity over time subject to the conditions that said axle was installed in accordance with the technical recommendations, and operated in accordance with the operating instructions, set out in this manual.

The following are excluded from the scope of the guarantee covering the axle:

Damage resulting from the use of water treatment systems and/or products incompatible with the materials constituting the BWT cover axle, or occasioned by the use of water treatment systems and/or products other than in compliance with the instructions provided by the manufacturers of the aforementioned systems and products. The user's attention is specifically drawn to the risks of corrosion of the BWT cover axle associated with the presence of salt in the pool water, whether or not said presence is combined with the use of a salt electrolysis system.

Damage caused by excessive dosing of oxidising products (Redox potential above 750 mV).

Damage occasioned by stray current in the water, and associated with micro electrical leaks from some devices, not channelled away by the effective functional earthing of the pool water.

Damage caused by the application of abnormally high stress loading on the axle (bending or deformation).

Damage occasioned by cleaning the axle with an incompatible product (corrosive, abrasive, etc.).

Damage caused by using the automatic cover in a manner that does not comply with the instructions set out in this manual.

3. Guarantee on other elements not previously mentioned

The elements or sub-assemblies not mentioned in the previous guarantee clauses, and belonging to the nomenclature of BWT covers, are covered by a 2 year guarantee.

The following are excluded from the scope of the guarantee covering such elements and sub-assemblies:

Damage occasioned by installation, use or maintenance other than as described in the BWT cover engineering diagrams and this manual.

Damage consecutive to unusual weather events (storms, hail, tornados, flooding, etc.).

Damage caused by the use of water treatment systems or products incompatible with the materials comprising these elements and sub-assemblies or to the use or operation of said systems and products other than as recommended by their manufacturer.

Damage attributable to water parameters (pH, TH, TAC, metals, etc.) that do not comply with the recommendations set out in this manual.

4. Application of guarantees

The various guarantees extended to BWT covers by BWT France – POOL Activity are limited to the replacement or repair of some or all of the equipment recognised as defective.

The following shall under no circumstances be included in the scope of said guarantees:

- - The cost of installing and/ or removing all or part of an automatic cover,
- - Damages to compensate the temporary loss of enjoyment, irrespective of how the cover is used and the length of time for which it remains out of operation,
- - Costs incurred through consequential damages (drainage, products, water, heating, etc.).

In the event that one of the aforementioned guarantees is invoked, all steps must be immediately taken to allow technicians from BWT France - Pool Activity to identify the BWT cover and determine the cause of the damage.

Should a BWT France - Pool Activity technician intervene on site, at the request of the installer client, and it is discovered that there are no grounds for a claim under the aforementioned guarantees, we reserve the right to invoice a call out charge.

NOTA BENE: The application of some or all of the guarantees herein over shall, under no circumstances, prolong the duration of the aforementioned guarantees.

Claims may only be made on the grounds of these guarantees (reminder):

- If the BWT cover was transported and stored in its original packaging, out of sunlight and away from any heat sources and under the standard conditions set out in this manual.
- If civil engineering works and finishings (corners, coping, pool fittings, over-flow, automatic level regulation, etc.) were carried out in accordance with the Preparation for Civil Engineering and the rules of the art.
- If the cover was installed in accordance with this manual.
- If the service life and characteristics of the PVC slats have not compromised by mechanical or chemical attack attributable to usage or an environment containing materials incompatible with Polyvinyl Chloride based components.
- If the conditions governing usage of BWT automatic covers, as set out in this manual have been scrupulously adhered to.
- If the installer of the BWT cover returned the duly completed and signed guarantee slip appended to this document to BWT France - Pool Activity within a maximum of 30 days as of the date on which the cover was delivered.

More generally, any damage occasioned to the BWT automatic cover attributable to the use of said, other than in the context for which it was designed and manufactured, will not be accepted as grounds for a claim under these guarantees.

Last updated: April 2026.

Notes

Notes



GUARANTEE SLIP

Automatic covers

To be returned to your BWT France – POOL Activity agency

Cover installation date:

AUTOMATIC COVER INSTALLER

Name/ Corporate name:

Address:

Post code:

City:

Telephone:

E-mail:

Installer's signature and stamp:

AUTOMATIC COVER USER

Name:

Address:

Post code:

City:

Telephone:

E-mail:

User's signature (after having received the operating instruction that must be provided to the user by the installer):

