



priceless pool protection



Tube motor

Installation manual



priceless pool protection

TUBE MOTOR / INSTALLATION MANUAL

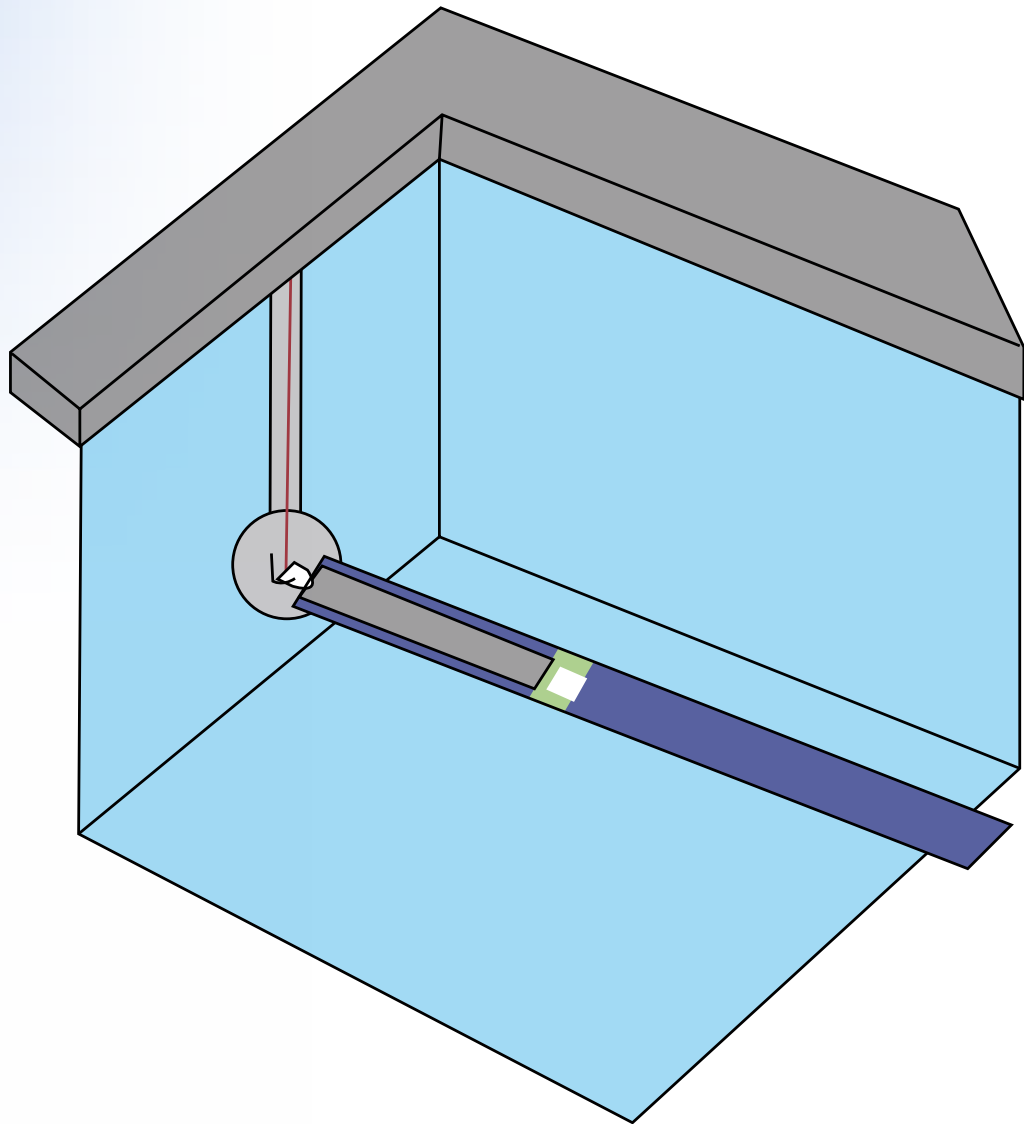


**Never expose the slats to the sun
unless they are lying on the
surface of the water!**

CONTENTS

Tube motor with cable duct	04
Tube motor with wall duct	09
Tube motor with suspension sytem	14
Tube motor with pre-assembled elements / cast-in elements	19
Fitting slats	25
Connection diagram tube motor - Aqua ECB	26
Connection diagram key switch	27
Connection set tube motor	28
Diameter slat roll and niche dimensions	29
Installation guide rollers	30
Universal wiring diagram	31
Operating and maintenance instructions	32

TUBE MOTOR WITH CABLE DUCT



ATTENTION!

Ensure that the cable of the tube motor can never be damaged! The connection between the tube motor cable and the control box must be made in a junction box and be sealed with resin. Failure to seal it with resin voids the warranty.

FITTING THE MOTOR FLANGE



Refer to the diagrams on page 29 to determine the position of the flange.



Mark the drill holes for the motor flange. Pins on top.



Drill holes with 11 mm bit. At least 80 mm deep.



TIP! A bit of grease inside of the WAKO plug prevents the entry of dust that makes the bolts difficult to turn.



First thread the WAKO plugs onto the bolts (with neoprene washers), then apply sealant to the seal.



Position the motor flange and tap the bolts until they are flush with the flange.



Tighten the bolts securely.

FITTING THE BEARING FLANGE



Mark the dimensions of the motor flange.



Mark the drill holes for the bearing flange.



Drill holes with 11 mm bit. At least 80 mm deep.



TIP! A bit of grease inside of the WAKO plug prevents the entry of dust that makes the bolts difficult to turn.



First thread the WAKO plugs onto the bolts (with neoprene washers), then apply sealant to the seal.



Position the bearing flange and drive in the bolts until they are flush with the flange.

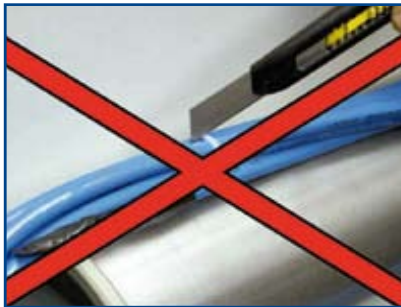


Tighten the bolts securely.



Attach the bearing shaft with bolt and self-locking nut.

FITTING WINDING TUBE



Do not cut the control cable loose with a blade.



Cut the cable loose with wire cutters.



Slide the winding tube over the bearing shaft.



Slide the winding tube over the U-profile.



Fit the bolt.



Secure the bolt with the crown nut.



Measure the distance from the top of the flange to the edge of the pool.



Saw the cable conduit to length, measured from the end with the mounting holes.



Remove burrs from sawed-off end to prevent damage to cable.



Mark the mounting holes and drill them.

ATTENTION!

Make sure the profile fits flush against the wall. If necessary, drill additional holes along the length.



Install an electrical conduit through which the cable can pass under the coping (so the motor can be replaced in the future if necessary).



Slide the cable conduit behind the pins on the flange.



Screw the cable conduit securely in place.

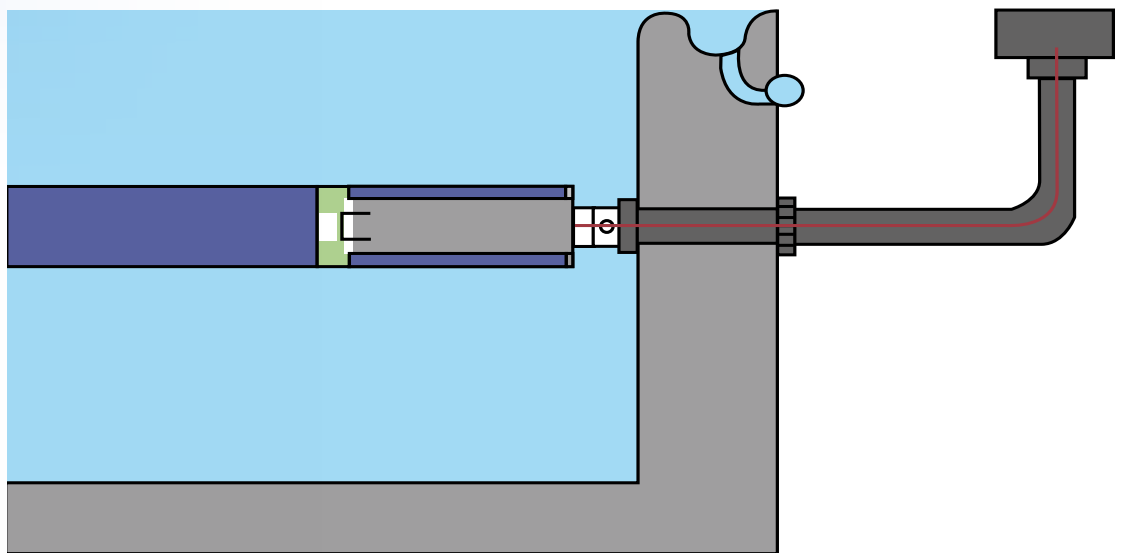


Attach the straps to the winding tube.

TIP!

Attach the first two slats to the straps so they will float to the top. Of course there must be at least some water in the pool, otherwise the heat may cause the slats to deform.

TUBE MOTOR WITH WALL DUCT



ATTENTION!

Ensure that the cable of the tube motor can never be damaged! The connection between the tube motor cable and the control box must be made in a junction box and be sealed with resin. Failure to seal it with resin voids the warranty.

FITTING THE WALL DUCT



Refer to the diagrams on page 29 to determine the position of the recess.



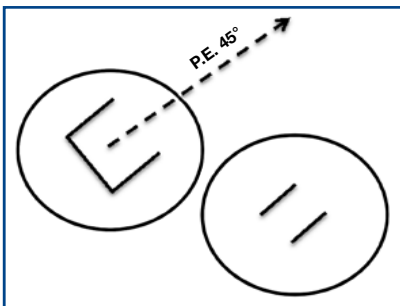
Drill a 35 mm diameter recess.



Check the dimensions.



Place the wall duct and mark the holes.



ATTENTION!

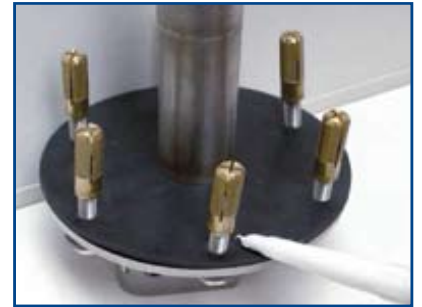
If the tube cannot be lifted straight upward out of the pool (e.g. due to a niche or fixed platform above the cover), mount the flange so the tube can be removed by swinging it out at an angle of, per example, 45°.



Drill holes with 11 mm bit.
At least 80 mm deep.



TIP! A bit of grease inside of the WAKO plug prevents the entry of dust that makes the bolts difficult to turn.



First thread the WAKO plugs onto the bolts (with neoprene washers), then apply sealant to the seal.



Position the motor flange and drive in the bolts until they are flush with the flange.



Tighten the bolts securely.

ATTENTION!

PE / PP SWIMMINGPOOL



MOTOR SIDE



BEARING SIDE

POLYESTER SWIMMINGPOOL



MOTOR SIDE



BEARING SIDE

FITTING THE BEARING FLANGE



Mark the dimensions of the motor flange.



Place the bearing flange and mark the holes.



Drill holes with 11 mm bit. At least 80 mm deep.



TIP! A bit of grease inside of the WAKO plug prevents the entry of dust that makes the bolts difficult to turn.



First thread the WAKO plugs onto the bolts (with neoprene washers), then apply sealant to the seal.



Position the bearing flange and drive in the bolts until they are flush with the flange.

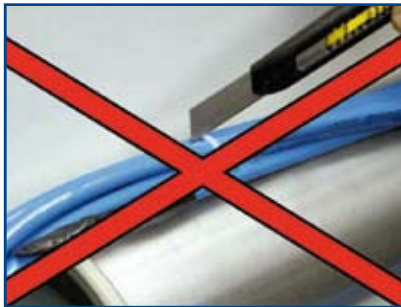


Tighten the bolts securely.



Attach the bearing shaft with bolt and self-locking nut.

FITTING WINDING TUBE



Do not cut the control cable loose with a blade.



Cut the cable loose with wire cutters.



Slide the winding tube over the bearing shaft.



Carefully feed the cable of the tube motor through the hole.



Slide the winding tube over the U-profile. **ATTENTION!** Continue to feed the cable through so it won't be damaged.



Fit the bolt.



Secure the bolt with the crown nut.

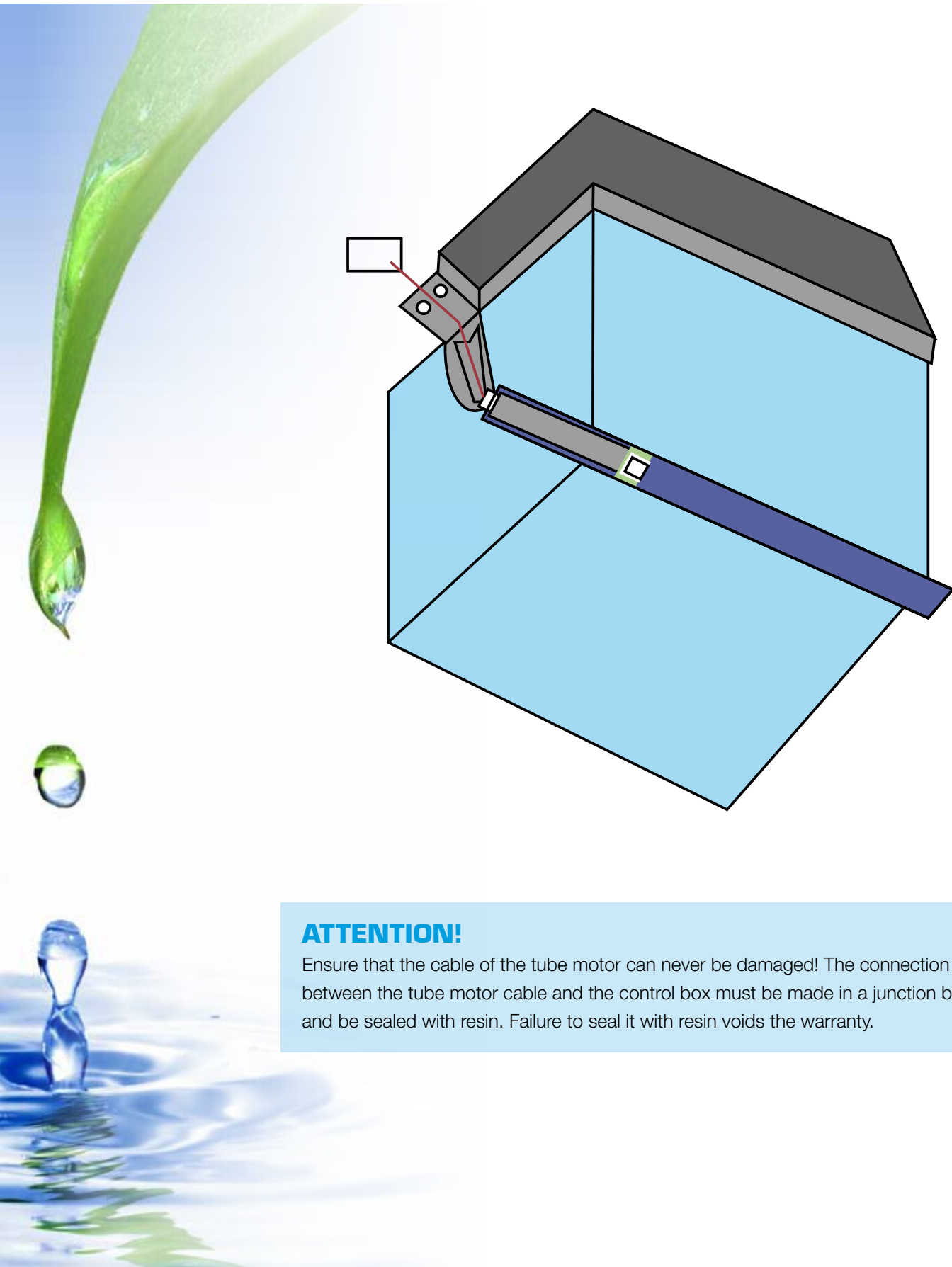


Attach the straps to the winding tube.

TIP!

Attach the first two slats to the straps so they will float to the top. Of course there must be at least some water in the pool, otherwise the heat may cause the slats to deform.

TUBE MOTOR WITH SUSPENSION SYSTEM



ATTENTION!

Ensure that the cable of the tube motor can never be damaged! The connection between the tube motor cable and the control box must be made in a junction box and be sealed with resin. Failure to seal it with resin voids the warranty.

FITTING THE SUSPENSION PLATE ON MOTOR SIDE



Refer to the diagrams on page 29 to determine the position of the centre of the suspension plate.



Position the suspension plate in the correct position.



Mark the holes. Select either the front row or the back row of holes.



Drill holes with 11 mm bit.
At least 80 mm deep.



TIP! A bit of grease inside of the WAKO plug prevents the entry of dust that makes the bolts difficult to turn.



First thread the WAKO plugs onto the bolts (with washers).



Position the suspension plate and drive in the bolts until they are flush with the suspension plate.



Tighten the bolts securely.

FITTING THE SUSPENSION PLATE ON BEARING SIDE



Copy the dimensions from the suspension plate on the motor side.



Position the suspension plate in the correct position.



Mark the holes. Select either the front row or the back row of holes.



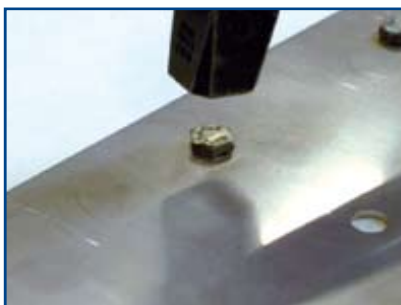
Drill holes with 11 mm bit.
At least 80 mm deep.



TIP! A bit of grease inside of the WAKO plug prevents the entry of dust that makes the bolts difficult to turn.



First thread the WAKO plugs onto the bolts (with washers).



Position the suspension plate and drive in the bolts until they are flush with the suspension plate.



Tighten the bolts securely.



Attach the bearing shaft with bolt and self-locking nut.

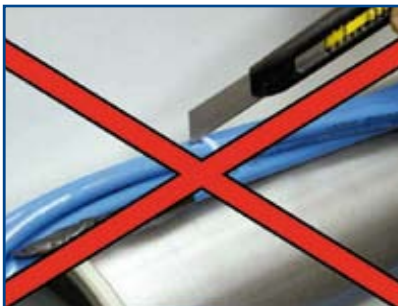


ATTENTION!

Do not forget to install the slide-on ring. This prevents the plates from coming loose from the wall and damaging the system.

Place the slide-on ring over the bearing shaft and push it all the way against the U-profile.

FITTING WINDING TUBE



Do not cut the control cable loose with a blade.



Cut the cable loose with wire cutters.



Remove the cable conduit.



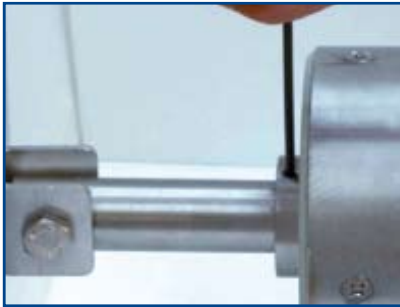
Slide the winding tube over the bearing shaft.



Slide the winding tube over the U-profile.



Fit the bolt and secure it with the crown nut.



Slide the slide-on ring against the end of the tube and secure it firmly.

ATTENTION!

Do not forget to install the slide-on ring.



Install an electrical conduit through which the cable can pass under the edge tile (so the motor can be replaced in the future if necessary).



Attach the cable conduit.

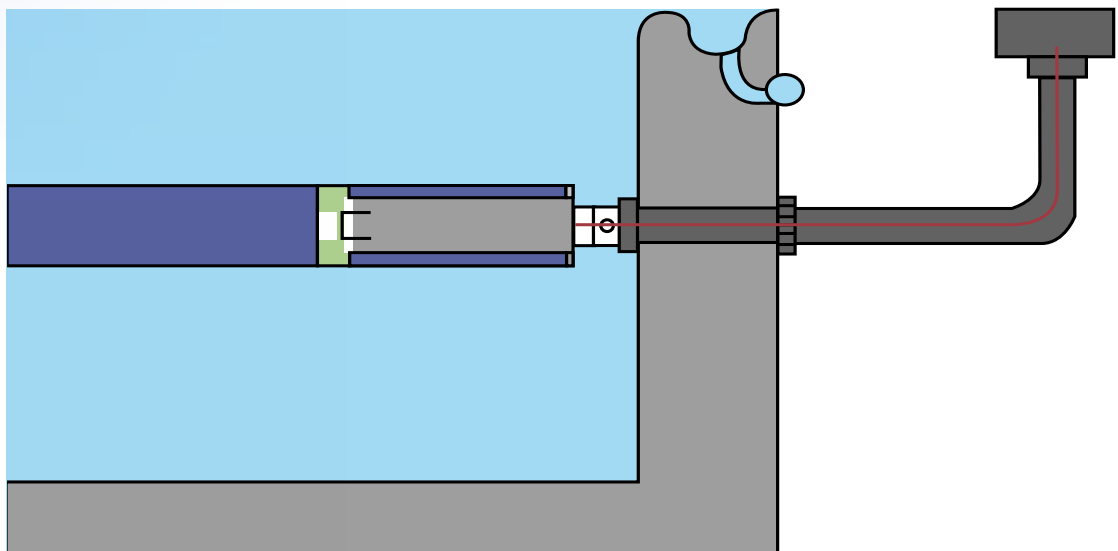


Attach the straps to the winding tube.

TIP!

Attach the first two slats to the straps so they will float to the top. Of course there must be at least some water in the pool, otherwise the heat may cause the slats to deform.

TUBE MOTOR WITH PRE-ASSEMBLED ELEMENTS / CAST-IN ELEMENTS



ATTENTION!

Ensure that the cable of the tube motor can never be damaged! The connection between the tube motor cable and the control box must be made in a junction box and be sealed with resin. Failure to seal it with resin voids the warranty.

FITTING THE PRE-ASSEMBLED ELEMENT ON MOTOR SIDE



Refer to the diagrams on page 29 to determine the position of the recess.



Drill a 35 mm diameter recess.



Check the dimensions.



Position pre-assembled element on motor side and mark 4x countersunk holes.



Drill holes with 11 mm bit.
At least 80 mm deep.



TIPP! A bit of grease inside of the WAKO plug prevents the entry of dust that makes the bolts difficult to turn.



First thread the WAKO plugs onto the countersunk bolts, then position the pre-assembly flange and drive in the bolts until they are flush with the flange.



Tighten the bolts securely.

FITTING THE PRE-ASSEMBLED ELEMENT ON BEARING SIDE



Copy the dimensions from the motor side.



Position pre-assembled element on bearing side and mark 4x countersunk holes.



Drill holes with 11 mm bit. At least 80 mm deep.



TIP! A bit of grease inside of the WAKO plug prevents the entry of dust that makes the bolts difficult to turn.



First thread the WAKO plugs onto the countersunk bolts, then position the pre-assembly flange and drive in the bolts until they are flush with the flange.



Tighten the bolts securely.

ATTENTION!

CAST-IN ELEMENTS



MOTOR SIDE



BEARING SIDE

FITTING THE FLANGES AFTER THE LINER IS IN PLACE



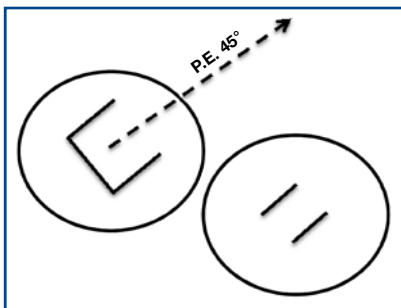
Find the centre hole of the motor side and cut it out carefully.



Mark the 6 mounting holes.

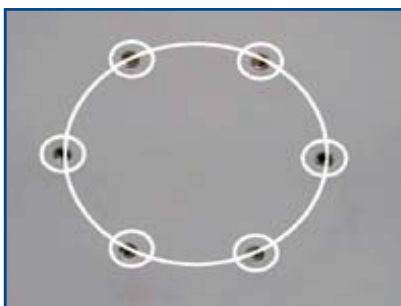


Cut through the liner with an 8 mm punch.



ATTENTION!

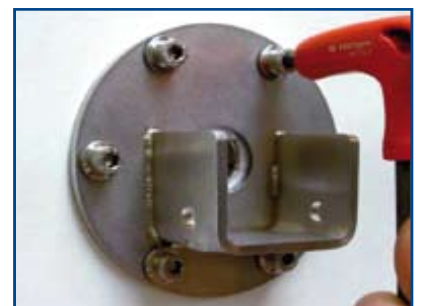
If the tube cannot be lifted straight upward out of the pool (e.g. due to a niche or fixed platform above the cover), mount the flange so the tube can be removed by swinging it out at an angle of, per example, 45°.



Apply sealant to the liner around and between the holes.



Secure the motor flange using the short M8 bolts with neoprene washers.



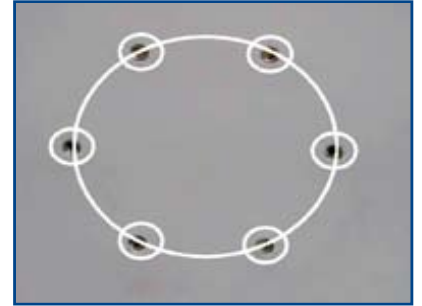
Tighten the bolts securely.



Mark the 6 mounting holes.



Cut through the liner with an 8 mm punch.



Apply sealant to the liner around and between the holes.



Secure the flange on the bearing side using the short M8 bolts with neoprene washers.



Tighten the bolts securely.



Attach the bearing shaft with bolt and self-locking nut.

FITTING WINDING TUBE



Do not cut the control cable loose with a blade.



Cut the cable loose with wire cutters.



Slide the winding tube over the bearing shaft.



Carefully feed the cable of the tube motor through the hole.



Slide the winding tube over the U-profile. ATTENTION! Continue to feed the cable through so it won't be damaged.



Fit the bolt.



Secure the bolt with the crown nut.



Attach the straps to the winding tube.

TIP!

Attach the first two slats to the straps so they will float to the top. Of course there must be at least some water in the pool, otherwise the heat may cause the slats to deform.

FITTING SLATS

ATTACHING SLATS



Place the lower hook in the lower groove.



Click the upper hook in the upper groove.



Flex the slats up and down so they click further in each other.

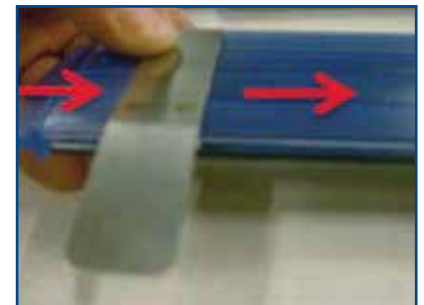
FITTING DIRECTIONAL GUIDE BRACKET



Place the end of the bracket 3 mm into the slat (the bracket is attached to the second slat from the end).



Open the groove of the slat with a screwdriver and slide the bracket over the slat.



Slide the bracket further over the slat (the same applies to brackets for above-pool installations, but then with the brackets on the underside of the slat).

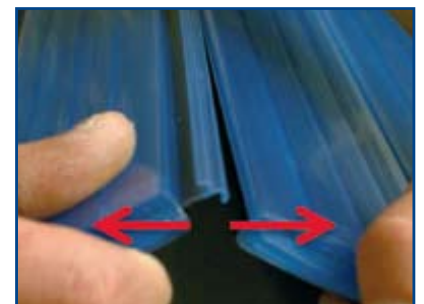
DETACHING SLATS



Remove the upper hook from the upper groove.



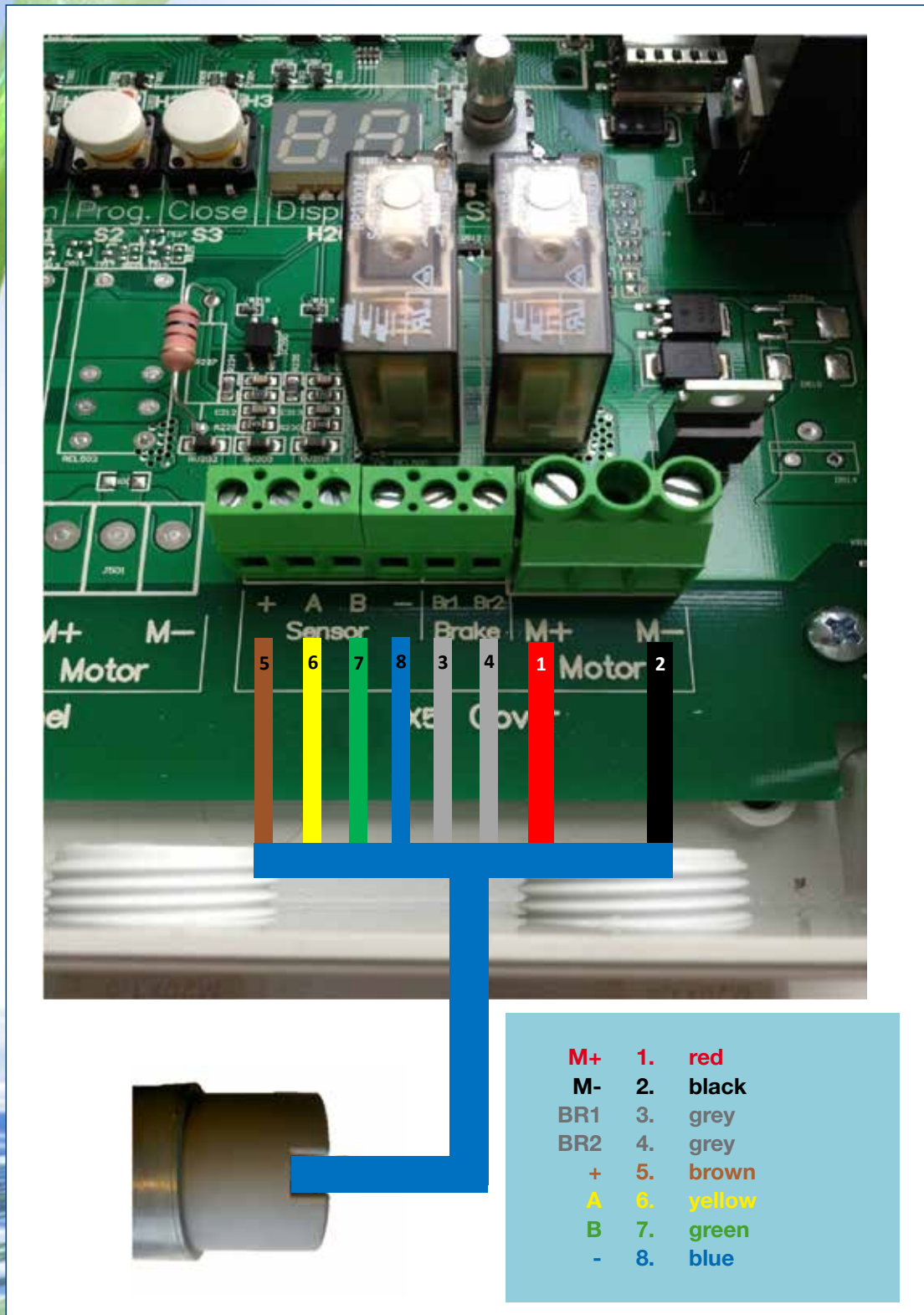
Place a thin, flat screwdriver between the hook and the groove and slide it toward the other end of the slat so the hook comes loose from the groove.



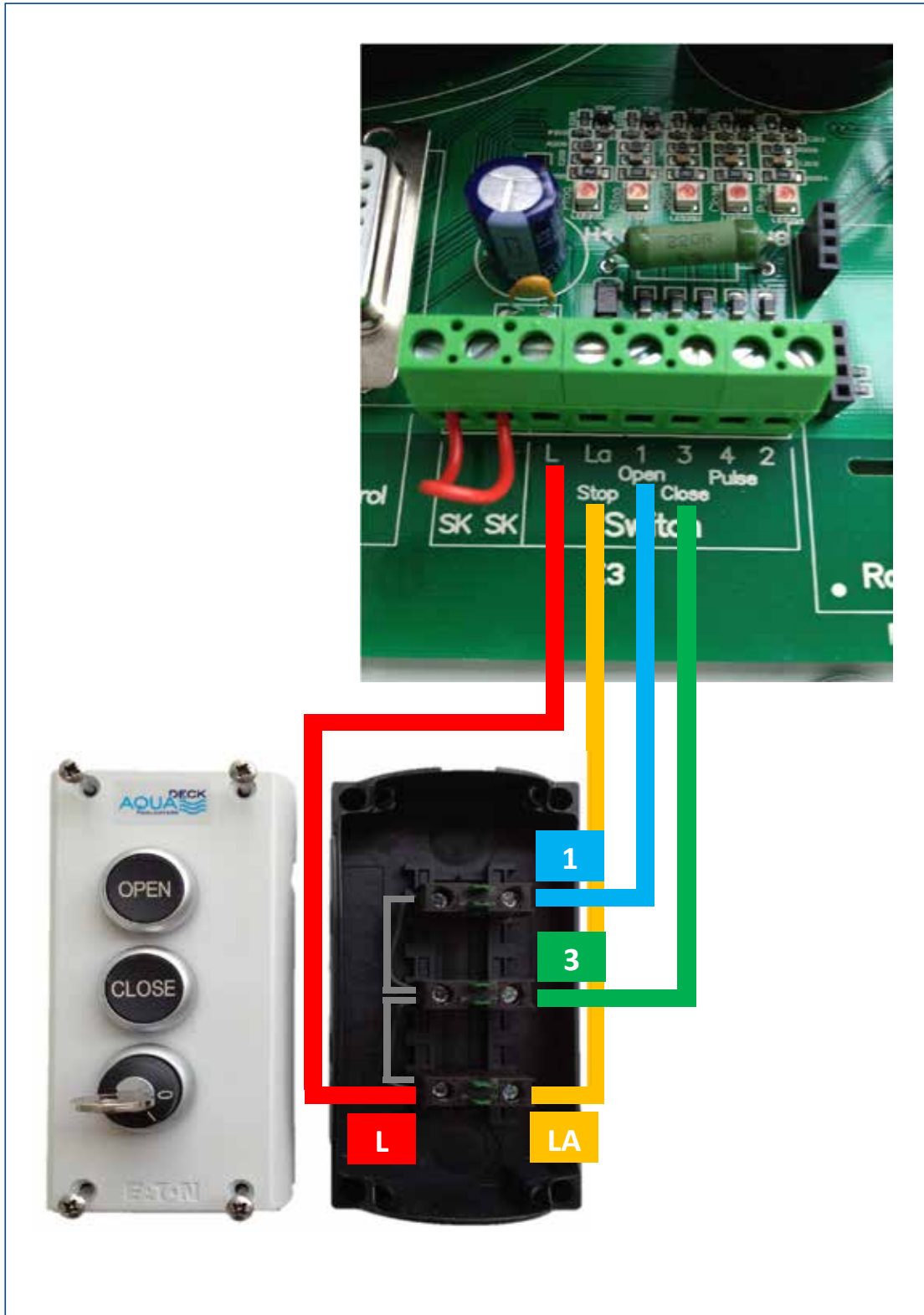
Remove the lower hook from the lower groove and pull the slats apart.

Condensation may collect inside the transparent and solar slats.

CONNECTION DIAGRAM TUBE MOTOR - AQUA ECB

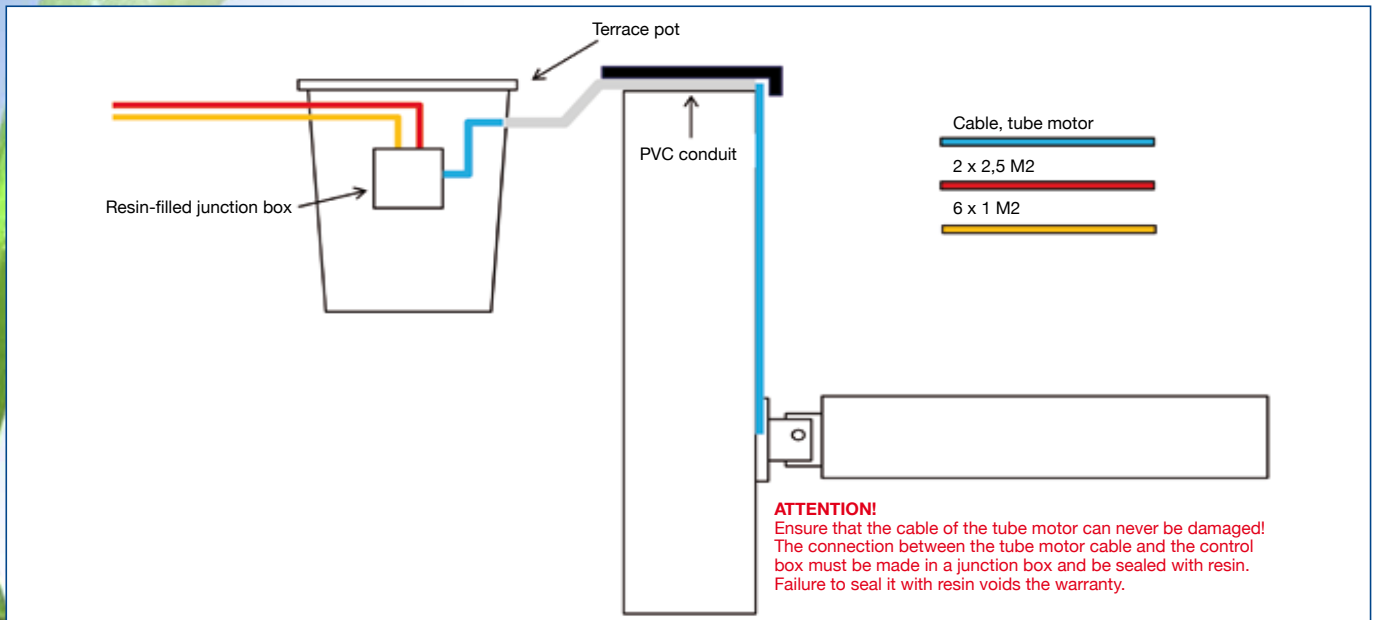


CONNECTION DIAGRAM KEY SWITCH



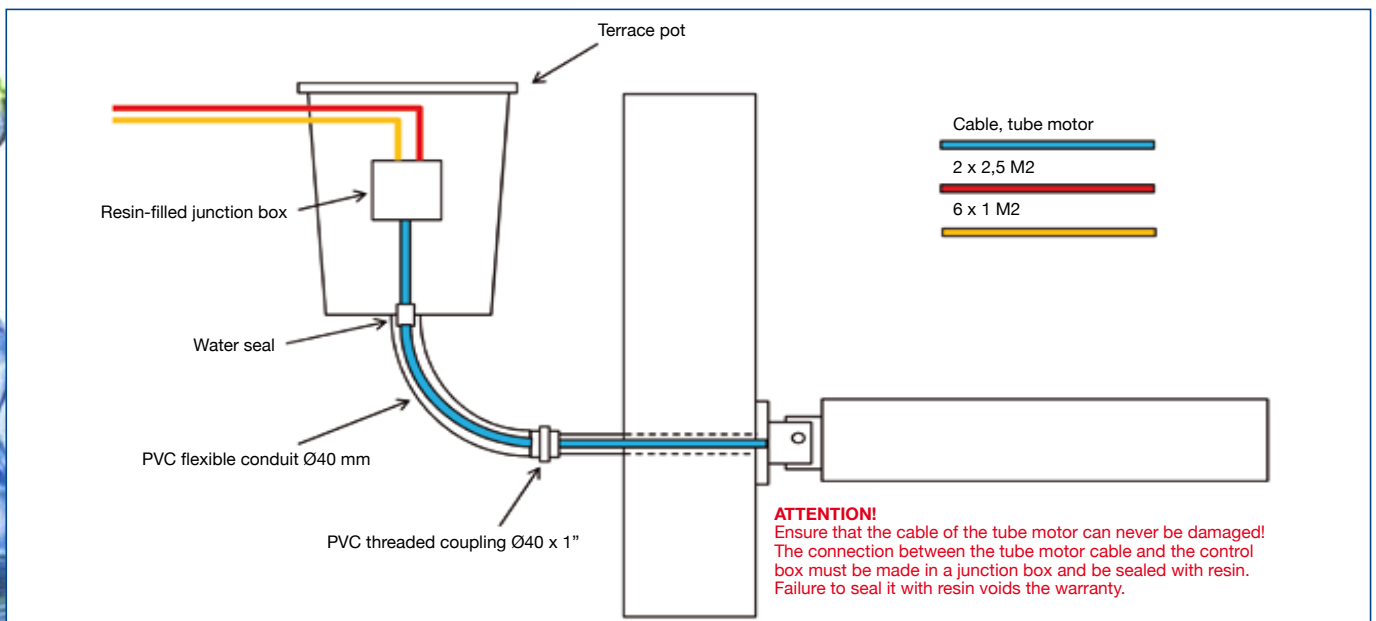
CONNECTION SET TUBE MOTOR

Cable duct and suspension system



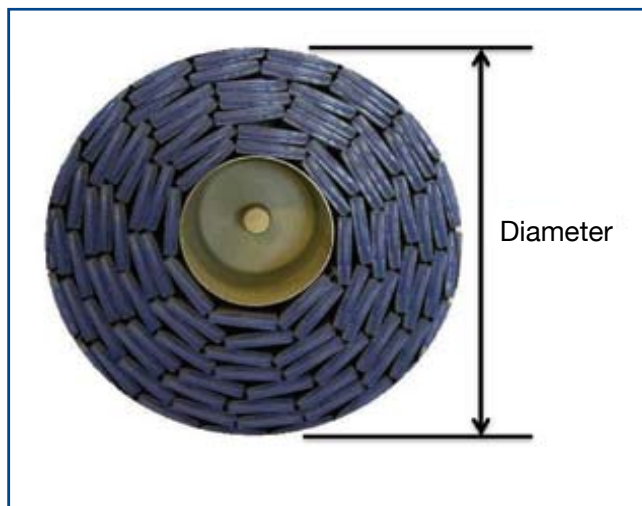
TIP: Always coil up an extra 50 cm of cable in the terrace pot. If repairs must be made, this will allow installation of a new junction box.

Wall duct and cast-in/pre-assembled elements

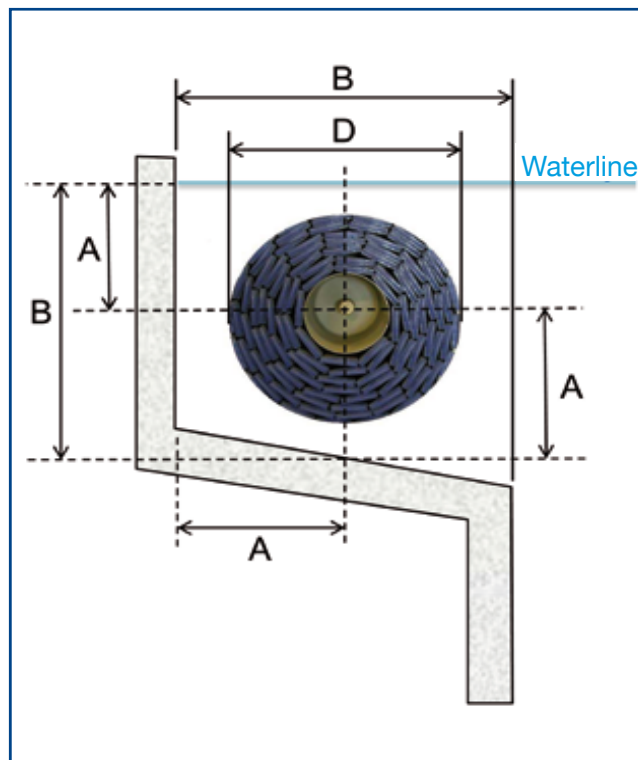


TIP: Always coil up an extra 50 cm of cable in the terrace pot. If repairs must be made, this will allow installation of a new junction box.

DIAMETER SLAT ROLL



DIMENSIONS IN-POOL NICHE



LENGTH OF POOL IN METRES	DIAMETER IN MM
5	Ø 373
6	Ø 407
7	Ø 434
8	Ø 476
9	Ø 494
10	Ø 510
11	Ø 520
12	Ø 548
13	Ø 568
14	Ø 584
15	Ø 600
16	Ø 615

D	A	B
400	250	500
450	275	550
500	300	600
550	325	650
600	350	700
650	1375	750

INSTALLATION GUIDE ROLLERS



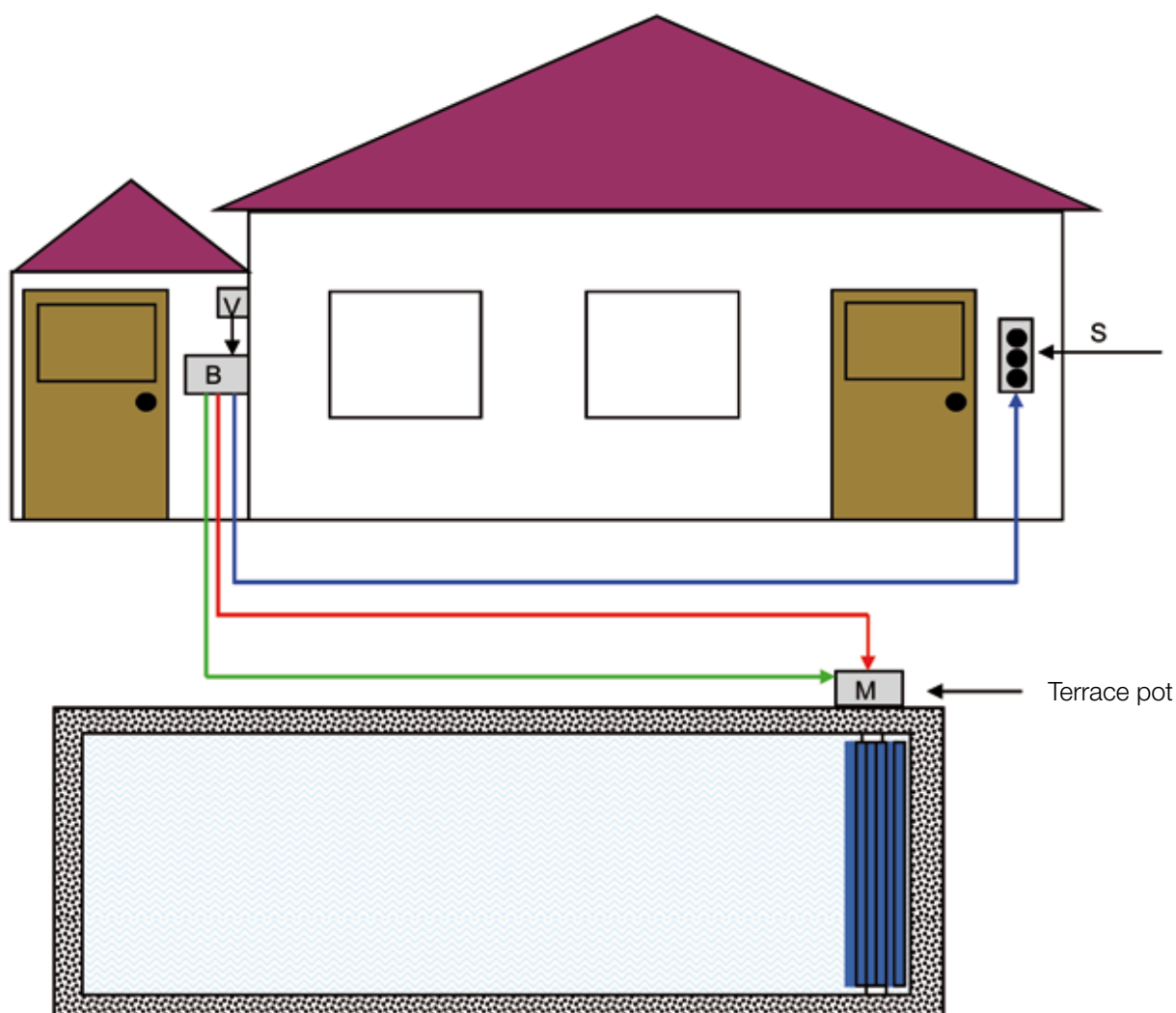
Always place the guide rollers between two straps to prevent snagging or damage of the straps.

Do not allow the guide rollers to extend too far at the front (max. 2-3 mm), otherwise the slats may jam when rolling them up.

Recommended number of guide rollers:

- Every 600 mm.
- Between each pair of straps (e.g. 7 straps = 6 guide rollers).

UNIVERSAL WIRING DIAGRAM



- S = Key switch —————→ 4 x 0,75 mm² for length < 50 m
- M = Motor 24 V —————→ 2 x 2,50 mm² for length < 25 m
- M = Motor limit switch —————→ 6 x 1,00 mm² for length < 25 m
- B = Control box 24 V
- V = Power supply 220 V

The wiring diagram above is suitable for: Tube motor, Aqua Mat 120, 250 and JR.

- > Before you begin making the electrical connections, it is recommended that you read all the information thoroughly so you will not be surprised later (e.g. cable selection).
- > Always use a terrace pot with a resin-filled junction box inside.
- > Place the control box in a dry, dust-free area.
- > Ensure that a person standing at the key switch has a good view of the water surface so he or she can respond immediately if a problem occurs.

OPERATING AND MAINTENANCE INSTRUCTIONS

CAUTION!
Keep the pump running during sunlight hours. Otherwise too much heat will build up in the slats.

It is recommended that you carefully read the following operating and maintenance instructions for your Aquadeck slatted cover.

OPERATION

Make sure you always have a complete overview of the swimming pool during operation (consider this carefully when using a remote control).

Before opening or closing, make sure there are no obstacles present that could block the operation of the cover, such as lawn chairs, an automatic vacuum cleaner hose or pool toys. In an emergency, you can stop the cover with the key switch.

ATTENTION! EXTREMELY IMPORTANT!

The Solar and transparent covers not only retain the heat in the pool but also convert solar energy to heat through the special design of the cover slats. This heat is transferred to the pool as the water circulates. If the Solar or transparent slatted cover is not lying on the water, it must be protected from sunlight; otherwise the heat may cause the slats to deform.

SAFETY

You can prevent operation by turning the key switch to the O-position and removing the key so unauthorized persons cannot operate the cover. To create a safer environment, it is recommended that you install grip rails. This will prevent entry at the location in question.

INSTRUCTIONS FOR WINTER STORAGE OF SLATTED COVER

- Above-pool: Roll up the slatted cover under the protective cover. Make sure the slatted cover is clean and that all leaves and contaminants have been removed. Install a winter pool cover.
- In-pool: If the filter will continue to run, leave the slats on the water. Make sure the slatted cover is clean and that all leaves and contaminants have been removed. Then install a 'solid' winter pool cover. Do not use a net-type cover. This type allows sunlight to pass through, which will promote the growth of algae inside the slats during the winter.

If the water level is reduced, the filter is protected against freezing. Follow the instructions given above. Remove motors fitted in a motor well and store them in a frost-free location.

With a slat roll niche behind the pool: The slat roll niche must be either completely filled with water or completely empty. It must never be half-filled. This results in damage at the frost line. Switch off the power supply to the control box.

CAUTION!
 Keep the pump running during sunlight hours. Otherwise too much heat will build up in the slats.

ATTENTION

Do not replace or move slats at low temperatures.

STORAGE OF THE SOLAR / TRANSPARENT COVER

The cover may only be stored in areas that are not exposed to sunlight.

FITTING THE SOLAR / TRANSPARENT COVER

The cover must be placed on the water during a period of cloudy weather or in the evening hours. If this is not possible, the cover must be brought from an area protected from sunlight and placed immediately on the water. In this case it is important that the slats do not sit in the sun for any length of time before they are placed on the water, otherwise they will become deformed.

IF THE SOLAR / TRANSPARENT COVER IS LYING ON THE WATER

The water circulation (filter system) must be switched on all day long, otherwise heat will accumulate under the cover, causing the slats to age more quickly and possibly become deformed.

ATTENTION Ensure that pumps with variable frequency drive have sufficient capacity to maintain water circulation under the cover so the slats are cooled sufficiently. This prevents deformation of the slats.

THE WATER LEVEL UNDER THE SOLAR / TRANSPARENT COVER

If the pool is equipped with a safety provision (hand rail, etc.), the pool must remain full at all times. If the water level becomes too low, the cover will hang on the safety provision along both sides and sag in the middle. The ends of the slats that are no longer cooled by the water will heat up, which can lead to permanent deformation. This also applies to pools with slanted walls.

CAUTION!
Keep the pump running during sunlight hours. Otherwise too much heat will build up in the slats.

IF THE SOLAR / TRANSPARENT COVER IS ROLLED UP

'Above-pool' covers are rolled up above the water level, preventing the slatted cover from coming into contact with the water. For this reason, the winding system must be enclosed on three sides. If no protective cap has been ordered, you must build an enclosure before installation of the slatted cover. The enclosure must not allow any sunlight or heat through, and it must not be in direct contact with the slatted cover because this will result in the transfer of heat from the enclosure to the slatted cover. This would result in the accumulation of heat and deformation of the slats.

CLEANING OF THE SLATS

The cover must be cleaned. This must be done on a cloudy day, in the early morning hours or after sunset. Due to evaporation of the water on the slats, mineral build-up may develop on the top surface of the slats. This can be easily removed with Aquadeck slat cleaner. **Recommendation:** at least 2x per season.

In an area with many trees, algae may develop in the links of the cover. This can be removed with hypochlorite (liquid chlorine). Thin this with water to a 50% solution and pour it over the entire cover with a watering can. This will cause the algae to burn inside the links.

EMPTYING THE POOL WITH SOLAR / TRANSPARENT COVER

If the pool is emptied, rolled-up covers must be protected from the sun. In this case it is recommended that a sun- and heat-resistant film be erected on a frame placed over the winding system. This prevents the film from coming in direct contact with the slatted cover and prevents a build up of heat.

FINAL REMARK

We accept no liability for damage that results from improper handling of the cover.



home enjoyment

with an eye for safety

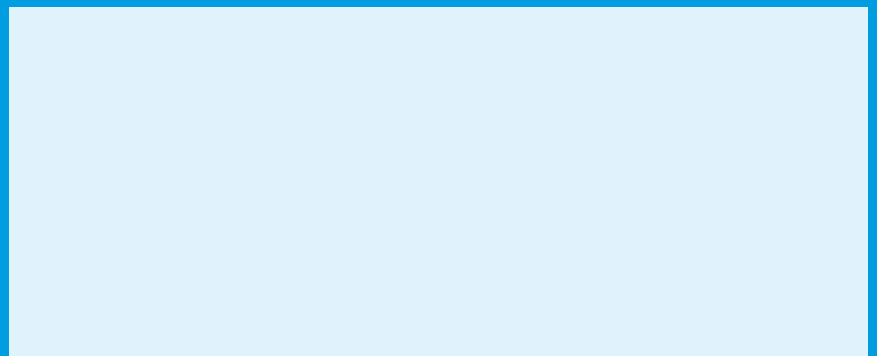
Aquadeck® offers undisputed quality in pool covers and is located in Budel, The Netherlands. Professionalism, all-round hospitality, the guarantee of top quality and support are key values that are consistently lived up to and delivered. Aquadeck® supplies its products to a carefully selected dealer network in Europe.



priceless pool protection



Your dealer:



De la Minestraat 2
6021 PJ Budel
The Netherlands
T +31 (0)495 430 317
F +31 (0)495 495 555
info@aquadeck.nl

www.aquadeck.eu

Made in Holland

A MEMBER OF  Pollet Pool Group