

# Timber'n

## GENERAL USER MANUAL



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## INSTRUCTION OF USING A WOODEN HOT TUB

1. To maintain the tightness of wooden hot tub there are usually two or three stainless steel rings around. During the transportation the rings might get loose therefore it is required to check and to screw them if needed.
2. When using the hot tub for the first time, it is essential to fill the wooden hot tub up to 90 cm of water. All the following times it is enough to fill the wooden hot tub up to 80 cm of water.
3. The 90 cm of water for the first time is necessary in order to force the full wood expansion due to moisture. Wood generates great expansion forces.
4. The following two or three hours are very important. During this time the wood reaches its biggest expansion therefore it is needed to control the process and to loosen the stainless steel rings according to the expansion.
5. If needed to loosen the stainless steel rings, please scroll the screw 180° counterclockwise one time. If the wood still expands, repeat this action again. In all the cases, two times of scrolling is enough.
6. When the wood stops the expansion or the rings are too loose, please tight them up to the default position.
7. Please note that the heavy wood leakage is expected for 1 to 5 days. If the wooden hot tub is made of spruce, the leak decreases to a minimum, in 1-2 days. If it is made of larch the leak decreases to a minimum, in 5 days.
8. The filters (a sand filter and the UVC filter) are used to clean the water. The sand filter removes the organic particles and UVC filter kills the bacteria exposing them to ultraviolet light. It is said that by using these two filter systems together, the need for water chemicals diminishes up to 80 %. If you still feel that water additives are needed, please use [the AquaFinesse hot tub water care box \(user manual\)](#) which can be found on TimberIN and other websites. We do recommend using slow dispersing Trichloroisocyanuric acid tablets containing not more than 20 g of acid per 2000 l of water. Add the tablet as the previous had gone (dispersed). The above-described water maintenance process is recommended and safe. Use other chemicals and methods at your own risk and this will not be covered by the warranty using our hot tubs. Please filter the water up to 35 °C and keep the filter min 2 m away. After the filtration process is finished, place the filter under the wooden box which is usually delivered together with the filters.
9. Please note that wood is a natural material which will expand and shrink depending on the humidity changes. Wood cracking, discoloration and other alteration are not the defects and therefore are not covered by the warranty. Please consult the seller of how to correctly maintain the wooden hot tub.





## INSTRUCTION OF USING A FIBERGLASS OR POLYPROPYLENE HOT TUB

1. The fiberglass hot tub is to be positioned on a flat, stable, solid base.
2. We do always recommend putting the polystyrene layer under the plastic hot tub. It will reduce the energy loss and will make the water drain easier. It is not needed for fiberglass models.
3. One should fill the tub with 90 cm of water or above the stove connection before starting the fire.
4. The heater must be started just after the water covered the lower part of the chimney, otherwise the fiberglass hot tub's walls will be deformed (not the case for warranty).
5. When heating the water in the tub, one needs to stir the water occasionally. One can use into the tub when temperature of the water reaches 38-42 degrees Celsius.
6. Before using the tub, it is recommended to use the shower. It is recommended to use the shower before using the hot tub (water keeps fresh longer). Water should be changed as needed.
7. Water is released by unscrewing the drain valve after the use.
8. The fiberglass tub should be washed. It is allowed to use of all disinfectants approved by the sanitary authorities.
9. The ashes from the heater are removed with the help of a shovel and rake.
10. The filters (a sand filter and the UVC filter) are used to clean the water. The sand filter removes the organic particles and UVC filter kills the bacteria exposing them to ultraviolet light. It is said that by using these two filter systems together, the need for water chemicals diminishes up to 80 %. If you still feel that water additives are needed, please use [the AquaFinesse hot tub water care box \(user manual\)](#) which can be found on TimberIN and other websites. We do recommend using slow dispersing Trichloroisocyanuric acid tablets containing not more than 20 g of acid per 2000 l of water. Add the tablet as the previous had gone (dispersed). The above-described water maintenance process is recommended and safe. Use other chemicals and methods at your own risk and this will not be covered by the warranty using our hot tubs. Please filter the water up to 35 °C and keep the filter min 2 m away. After the filtration process is finished, place the filter under the wooden box which is usually delivered together with the filters.
11. Please note that wood is a natural material which will expand and shrink depending on the humidity changes. Due to ageing, the fiberglass can slightly change the colour (some level of discoloration might be visible), might appear the tiny dots on the surface of fiberglass due to abrasion. Mentioned wood cracking, discoloration and other alteration are not the defects and therefore are not covered by the warranty.



# A GUIDE TO USING THE HEATER A WOOD FIRED HEATER

## Lighting

1. The internal wood fired heater cannot be lit until it is at least half covered with water. External heater must be covered with water till the higher inlet before lighting it. Before lighting the heater do not forget to remove the protective film from metal parts.
2. Firewood must be placed in a heater vertically. Cardboard or flammable liquid is used to start a fire. **Heater fuel type – dry wood, fuel briquettes.**
3. An average water heating rate (2000 liters) – 8 degrees Celsius per hour. Depending on the outdoor temperature water reaches 38 degrees Celsius in 2-3 hours during the warm season and could take up to 4-6 hours during the cold season.
4. The water heats faster when the hot tub is covered. Water temperature is measured with the thermometer.

## Storage and Preservation

1. It is recommended to drain water from the hot tub for both internal and external heaters if the temperature goes below freezing point as it could cause damage to the metal.
2. The valve on the bottom of the hot tub is used for draining the water.

## Useful tips and common mistakes

1. Do not touch the chimney or metal parts when the heater is used – it will cause serious injuries.
2. Use the heater lid to regulate water temperature.
3. Make sure the heater is covered with water (see step 2) before lighting it.
4. **Heater stoke strictly prohibited any type of coal.**

## Main warranty conditions

1. You have to preserve the hot tub and its parts, otherwise the warranty won't be eligible.
2. The internal heater cannot be lit until it is at least half covered with water.
3. External heater must be covered with water till the higher inlet before lighting it.
4. When not in use, during the cold season, water should be drained from the hot tubs external or internal heater to prevent any possible damages to the heater.
5. If there are any damages please contact the seller. Photos and videos would be necessary to evaluate the damage and further actions.
6. If water chemicals or salts will be used, 316 type stainless steel will be needed. This option can be selected under each model on TimberIN websites. With this option selected, the customer will receive the heater which main construction elements constantly exposed to tub's water will be made of 316 steel. Not applicable to massage jets. Also, not applicable to all other metal or non-metal parts which are not constantly exposed to tub's water. Using chemicals or salts with 430 type of steel will result in permanent damage which will not be the subject of warranty. In time, small, corrosive-like dots might be visible on 316 type of steel parts due to oxidation and constant use. This will not result in a permanent defect causing leakage of water from the stove which would mean that the tub cannot no more serve its purpose.

## THE ELECTRIC HEATER

After the reception of the tub with the electric heater, the customer`s local electrician must inspect it before using it for the first time. The certified electrician should inspect if the electric heater was not damaged during the transportation also if the heater`s installation meets local countries` requirements for electric installation works.

By default, we install and offer the 6kW electric heater. We install it based on customer prior given requirements either on single phase 220 V 32A or 3 phases 380 V 16A (this can vary depending on situation and the power of the electric heater). The customer clearly understands and had already verified that the electric heater of such power and electric installation will be suitable for its property use. Company TimberIN will be not responsible for expenses needed changing the electric installation of the customer property to run the mention heater. The power of the electric heaters varies from 3 to 18 kW.

Two heating elements are available: Incoloy and Titanium. The maximum chlorine and chloride contents of Incoloy type of heaters are as follow 3.5 mg/l and 250 mg/l. The maximum chlorine and chloride contents of Titanium type of heaters are as follow 3.5 mg/l and 35000 mg/l. If the customer had not previously mentioned the required content values, Incoloy type of heaters will be installed by default. Failing to meet the mentioned contents will void the warranty of the product. More information: <https://www.pahlen.com/our-products/pool-heating/electric-heaters/aqua-compact/>

# THE PELLET HEATER USED FOR HOT TUBS AND SAUNAS

## INTRODUCTION

The burner operating manual (s) is intended to inform the user of the structure, operating conditions and basic characteristics of the burner. Mounted on any solid fuel boiler, this unit will automatically maintain the desired temperature of the heating system, domestic hot water, sauna or hot tub. The work of the user as a boiler developer is minimized. A properly tuned burner will never generate excess thermal energy and working with the integrated Wi-Fi module will easily serve from any mobile device with Internet access.

## MAIN FEATURES

- The burner combustion chamber is made of heat-resistant chromnickel stainless steel, which is non-corrosive, non-magnetic and suitable for use in corrosive environments up to 1100 ° C.
- A powerful fan at the end of the work will remove any slag from the lower quality pellets.
- The presence of an internal propeller stops the flame attempting to travel backwards and makes the burner work smoother.
- Color control screen, menu in most popular foreign languages (optional).
- Automatic ignition and extinguishing, three-stage power modulation + standby.
- Combustion and boiler protection.
- Low power consumption.
- Ability to connect to Wi-Fi and monitor and control burner operation from anywhere in the world.

## BURNER TECHNICAL SPECIFICATIONS AND DIMENSIONS

Burner Model BioFlame 25		
Rated power	kW	25
Heated area up to	m <sup>2</sup>	200
Maximum pellet consumption	in kg / h	5
Length of burner to mounting flange	mm	300
Burner width	mm	270
Burner height	mm	300
Electronics box depth	mm	95
Electronics box width	mm	160
Electronics box height	mm	300
Furnace length from the door	mm	170
Furnace width	mm	150
Furnace height	mm	150
Power supply	230 V AC; 50Hz ± 5%	
Degree of protection	IP 20	
Fuel type	wooden pellets 6-8 mm in diameter	

## SAFETY REQUIREMENTS

- Burner and other equipment, power outlet must be grounded.
- Other fuels are prohibited (except wood pellets 6 -8 mm in diameter)
- Ensure sufficient heater chimney draft - 20 Pa.
- It is forbidden to repair the burner by yourself, without power disconnection or insufficient cooling of the firebox (when the fireplace is being repaired).
- It is forbidden to operate the burner with the burner housing cover removed.
- It is forbidden to operate the burner with a leaking fuel supply system.
- Do not use the burner not for its intended purpose.
- Do not drop, puncture, or rotate the torch during transportation or handling.

## OTHER IMPORTANT INFORMATION

- To get started with the burner, we first need to plug its power cord into a power outlet.
- The second job we must do is fill the external fuel conveyor with pellets. After loading the pellets into their dedicated hopper, press the "menu" button to enter the "user menu". Then use the down arrow to move to the "Manual" item until it is highlighted in red. Then press the right arrow to enter this point. In the newly opened window, with the help of the "up" button, we place a check mark (activate) an external conveyor. The conveyor screw starts rotating and lifting the pellets, while the timer starts to show how long the conveyor is operating in this (manual) mode. It usually takes 200 seconds for the conveyor to fill. When the first pellets begin to crumble through the flexible hose into the burner, manual loading of the conveyor is completed by pressing the "menu" button twice.
- Once the pellets in the fuel tank have run out, the pellet level in the fuel feed screw also decreases. Burner ignition process will load low level of pellets, or even won't load at all. Therefore, it is necessary not only to fill the tank with pellets, but also to fill the fuel feed screw completely. The screw power cord with the plug on the back of it is pulled out of the burner automation socket and connected directly to the household (220 V) power socket. The propeller engine starts running without stopping. After the first pellets have started to crumble into the burner, wait for another 5-10 seconds and, after removing the cord from the household power outlet, return it to the dedicated fuel auger socket in the burner automation housing.
- Due to the abundance of pellet manufacturers and the raw materials they use, not all pellets burn uniformly. The more wooden pellets are with unnatural impurities (unpeeled wood, shredded furniture, straw), the greater the likelihood is that the burner accumulates slag. This can be counteracted by increasing the airflow of the burner fan, but it also increases the blowout of incompletely burned pellets into the boiler. It is therefore recommended to remove and clean the perforated burner plate at least once a month. If there is ash in the bottom of the furnace under the removed plate, remove them as well. All these tasks are performed after the burner is switched off and the burner has cooled down.



## OPERATING ENVIRONMENT PARAMETERS:

Water temperature: + 5 ° C ~ + 40 ° C;

Relative humidity: <90%, without reaching dew point;

Atmospheric pressure: 86 ~ 106 kPa

Altitude: Do not exceed 1000 m.

Vibrations: 10Hz <f <57Hz, Amplitude must not exceed: 0.075mm

57Hz <f <150Hz, Acceleration cannot exceed: 1G (according to IEC 60068-2-6)

## WARRANTY

The warranty is valid only with proof of purchase (invoice and sales contract).

The guarantee is provided for 24 months from the date of purchase for individuals.

The warranty period is 12 months from the date of purchase for legal entities.

**NOTE!** The guarantee applies to burners, which are connected to the Internet and the manufacturer is entitled to carry out the monitoring.

Repairs shall be carried out in accordance with the warranty service regulations in force in the Republic of Lithuania. Warranty services include the repair of defects or other defects caused by the manufacturer's fault.

### **The guarantee does not apply:**

- If the burner has been redesigned;
- If the customer has changed the service (factory) settings;
- If the manufacturer does not have online access to the customer's burner;
- The warranty does not cover naturally worn parts of the hot tub or sauna burner.

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More information how to operate burner: <https://mailchi.mp/e9e0248ab9ca/hot-tub-with-pellet-heater-user-manual>

# Timberlin

## HOT TUB ACCESSORIES



BELOW ARE THE USER MANUAL PAGES FOR ACCESSORIES

# SAND FILTRATION SYSTEM

## IMPORTANT SAFETY RULES

Read, Understand and Follow All Instructions Carefully Before Installing and Using this Product.

### READ AND FOLLOW ALL INSTRUCTIONS

#### WARNING

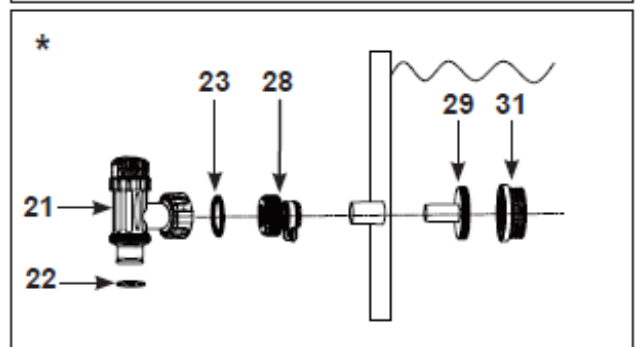
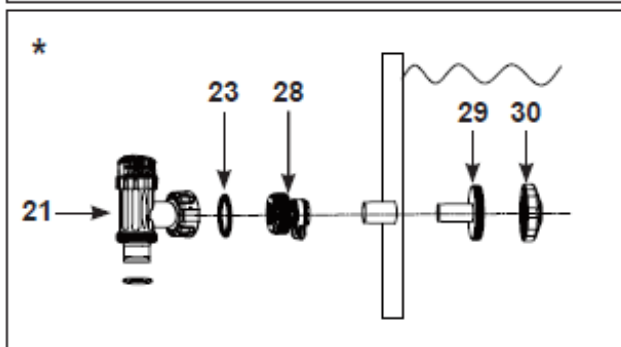
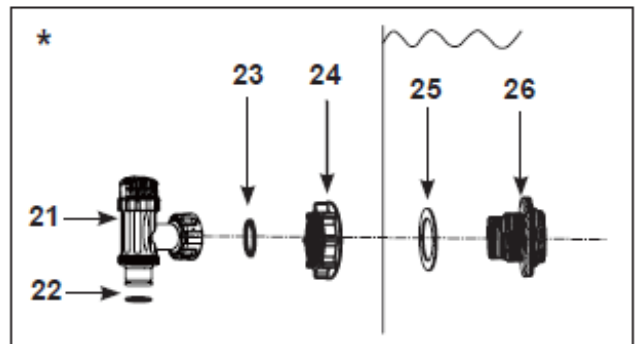
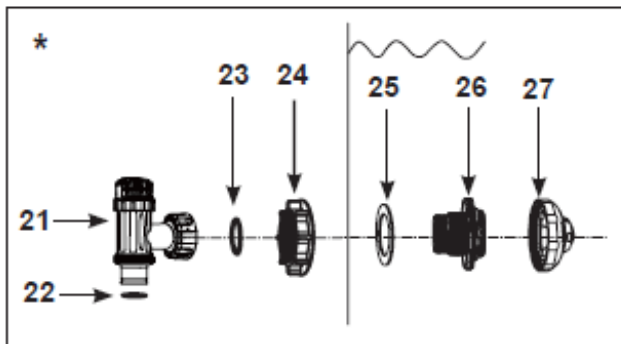
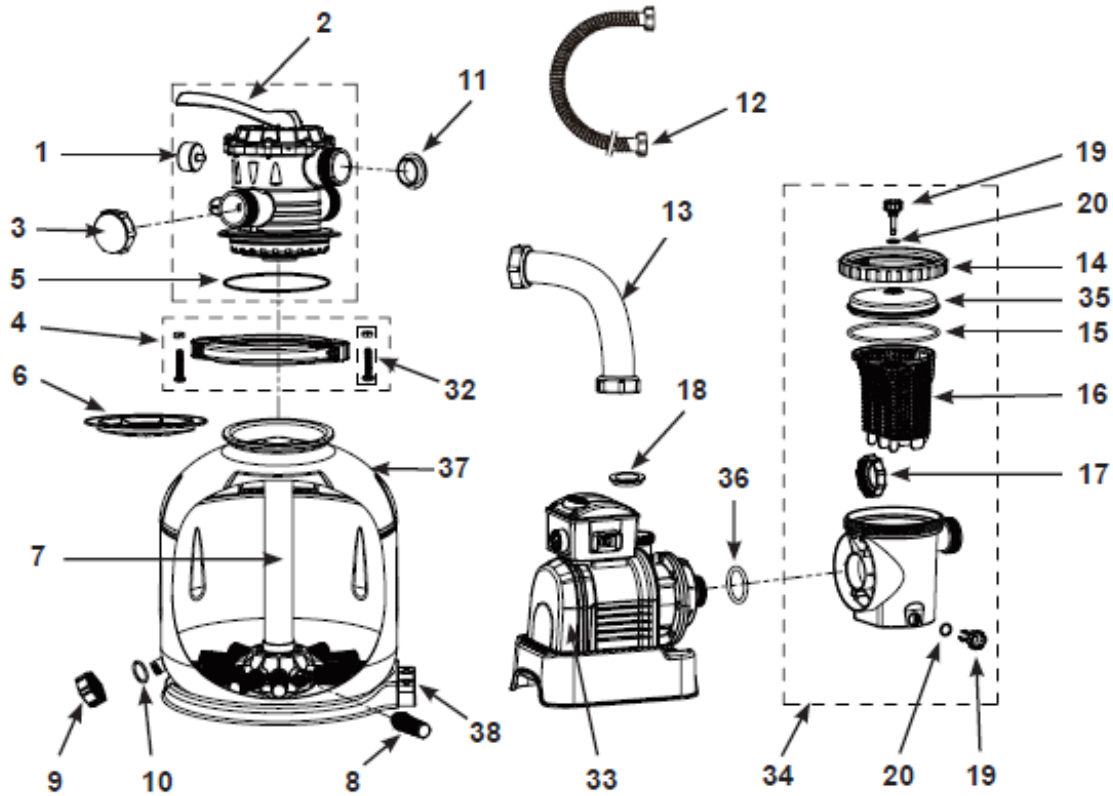
- To reduce the risk of injury, do not permit children to use this product. Always supervise children and those with disabilities.
- Children must stay away from this product and electrical cord(s).
- Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Assembly and disassembly by adults only.
- Risk of electric shock. Connect this product only to a grounding type receptacle protected by a ground-fault circuit interrupter (GFCI) or residual current device (RCD). Contact a qualified electrician if you cannot verify that the receptacle is protected by a GFCI/RCD. Use a qualified electrician to install the GFCI/RCD, which has a maximum rate of 30mA. Do not use a portable residual current device (PRCD).
- Always unplug this product from the electrical outlet before removing, cleaning, servicing or making any adjustment to the product.
- The plug must be accessible after product is installed.
- Do not bury the electrical cord. Locate the cord where it will not be damaged by lawn mowers, hedge trimmers and other equipment.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- To reduce the risk of electric shock, do not use extension cords, timers, plug adaptors or converter plugs to connect unit to electric supply; provide a properly located outlet.
- Do not attempt to plug in or unplug this product while standing in water or when your hands are wet.
- Keep this product more than 2m away from the pool.
- Keep this product more than 3.5m away from the pool (for France only).
- Keep the plug of this product more than 3.5m away from the pool.
- Position this product away from the pool, so as to prevent children from climbing on it and accessing the pool.
- Do not operate this product when pool is occupied.
- This product is for use with storable pools only. Do not use with permanently installed pools. A storable pool is constructed so that it may be readily disassembled for storage and reassembled to its original configuration.
- To reduce the risk of entrapment hazard, never enter the pool if suction strainer component is loose, broken, cracked, damaged or missing. Replace loose, broken, damaged, cracked or missing suction strainer components immediately.
- Never play or swim near suction fittings. Your body or hair may be trapped causing permanent injury or drowning.
- To prevent equipment damage and risk of injury, always turn pump off before changing the filter control valve position.
- Never operate this product above the maximum working pressure stated on the filter tank.
- Hazardous Pressure. Improper tank valve cover assembly could cause the valve cover to blow off and cause serious injury, property damage or death.
- This product is intended to be used only for the purposes described in the manual!

**FAILURE TO FOLLOW THESE WARNINGS MAY RESULT IN PROPERTY DAMAGE, ELECTRIC SHOCK, ENTANGLEMENT OR OTHER SERIOUS INJURY OR DEATH.**

These product warnings, instructions and safety rules provided with the product represent some common risks of water recreation devices and do not cover all instances of risk and danger. Please use common sense and good judgement when enjoying any water activity.

# PARTS REFERENCE

Before assembling your product, please take a few minutes to check the contents and become familiar with all the parts.





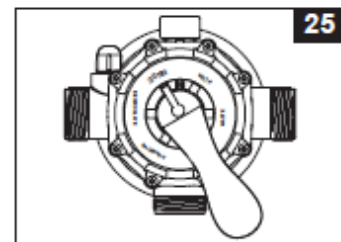
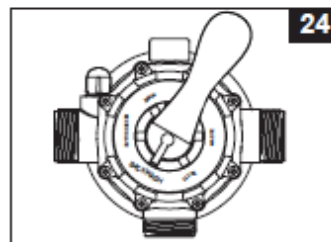
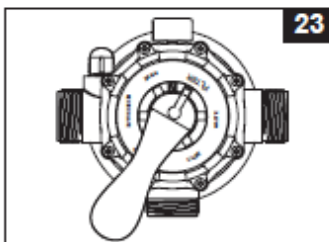
## OPERATING INSTRUCTIONS

### ⚠ WARNING

- Risk of electric shock. Connect this product only to a grounding type receptacle protected by a ground-fault circuit interrupter (GFCI) or residual current device (RCD). Contact a qualified electrician if you cannot verify that the receptacle is protected by a GFCI/RCD. Use a qualified electrician to install the GFCI/RCD, which has a maximum rate of 30mA. Do not use a portable residual current device (PRCD).
- To reduce the risk of electric shock, do not use extension cords, timers, plug adaptors or converter plugs to connect unit to electric supply; provide a properly located outlet.
- Do not attempt to plug in or unplug this product while standing in water or when your hands are wet.
- Never operate this product above the maximum working pressure stated on the filter tank.
- Always switch off pump before changing the 6-way valve position.
- Operating this product without water flowing through the system can cause a build up of hazardous pressure which can result in an explosive situation, serious injury, property damage or death.
- Never test this pump with compressed air. Never operate the system with water temperature above 35° C (95° F).

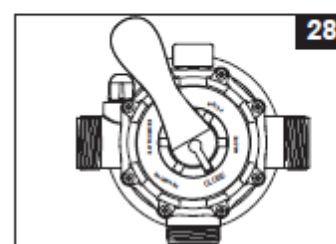
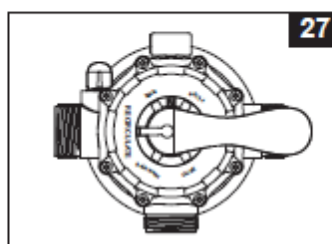
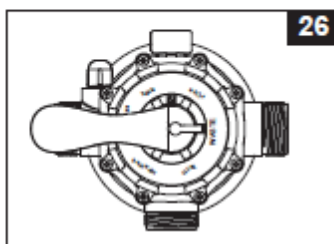
#### 6-way valve positions and function:

Valve Position	Function	Water Flow Direction
<b>FILTER</b> (see drawing 23)	Normal filtration and regular vacuuming of pool	From pump through filter media to pool
<b>BACKWASH</b> (see drawing 24)	Reverses water flow to clean filter media	From pump through filter media to valve waste/drain outlet
<b>RINSE</b> (see drawing 25)	For initial startup cleaning of the sand, and leveling the sand bed after backwashing	From pump through filter media to valve waste/drain outlet
<b>WASTE</b> (see drawing 26)	For vacuuming directly to waste, lowering pool level or to drain the pool	From pump to valve waste/drain outlet bypassing the filter media
<b>RECIRCULATE</b> (see drawing 27)	For circulating water back to pool without going through the filter media	From pump through valve to pool bypassing the filter media
<b>CLOSED</b> (see drawing 28)	Shuts off all flow to filter and pool "Do not use this setting with pump running"	





## OPERATING INSTRUCTIONS (continued)



### Initial startup and operation:

#### Before operating, be sure that:

- All the hoses have been connected and tightened securely, and correct amount of filter sand have been loaded.
- The entire system is connected to a grounding type receptacle protected by a ground-fault circuit interrupter (GFCI) or residual current device (RCD).

## ⚠ CAUTION

The filter control valve has a closed position. The pump should never be on when the valve is in the closed position. If the pump is operated with the valve closed, explosive situation could exist.

1. Turn both plunger valve handles fully counter-clockwise until they stop. This opens the valves to allow water to flow into the sand filter pump. With water flowing into sand filter pump, the water pressure will allow the air trapped inside to escape from the air release valves (19). When all the air has escaped water will flow out of the valves (19). When this occurs gently finger tighten the valves (19) in a clockwise direction.

**IMPORTANT: To prevent air lock, open the lower plunger valve (connected inlet hose) first and then the upper plunger valve (connected outlet hose). Open the air release valves, wait until water starts to flow out of the air release valves, close air release valves.**

2. Ensure the drain/waste outlet on the 6-way valve is not covered and directed to a proper draining receptacle.

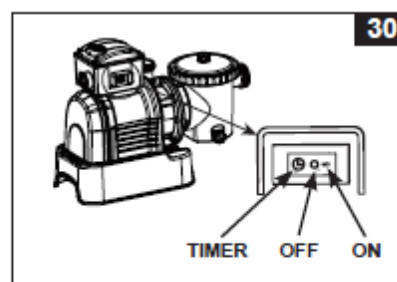
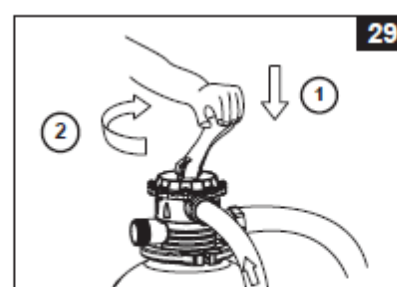
3. Ensure the pump is off, depress the 6-way valve and turn it to the "BACKWASH" position (see drawings 24 & 29).

**IMPORTANT: To prevent damage to the 6-way valve, always depress the valve handle before turning.**

**Always switch off pump before changing the 6-way valve position.**

4. Switch on the pump (see drawing 30). Water is circulating backward through the sand media and to waste/drain outlet. Backwash until a clear flow of water is observed in the waste/drain outlet or through the drain sediment window.

**NOTE: The initial backwash of the filter is recommended to remove any impurities or fine sand particles in the sand media.**



## OPERATING INSTRUCTIONS (continued)

5. Switch off the pump, change the 6-way valve to "RINSE" position (see drawing 25).
6. Switch on the pump and run the pump for about one minute to level out the sand bed after backwashing the sand media.
7. Switch off the pump, change the 6-way valve to "FILTER" position (see drawing 23).
8. Switch on the pump. The system is now operating in the normal filtering mode. Run the pump until the desired pool water clearance is obtained and no more than 12 hours per day.
9. Record the initial pressure gauge reading when the filter media is clean.

**NOTE:** During initial setup of the system, it may be necessary to backwash frequently due to unusual heavy dirt present in the water and sand. After that, as the filter removes dirt and impurities from the pool water, the accumulated dirt in the sand media will cause the pressure to rise and the flow to diminish. If there is no vacuuming device attached to the system and the pressure gauge reading is in the yellow zone it is time to backwash the sand media, see "BACKWASH" under "initial startup and operation" section.

Vacuuming device (i.e. Intex auto pool cleaner) attached to the system may also cause the flow to diminish and the pressure to rise. Remove any vacuuming device from the system and check if the pressure gauge reading has dropped from the yellow zone to the green zone.

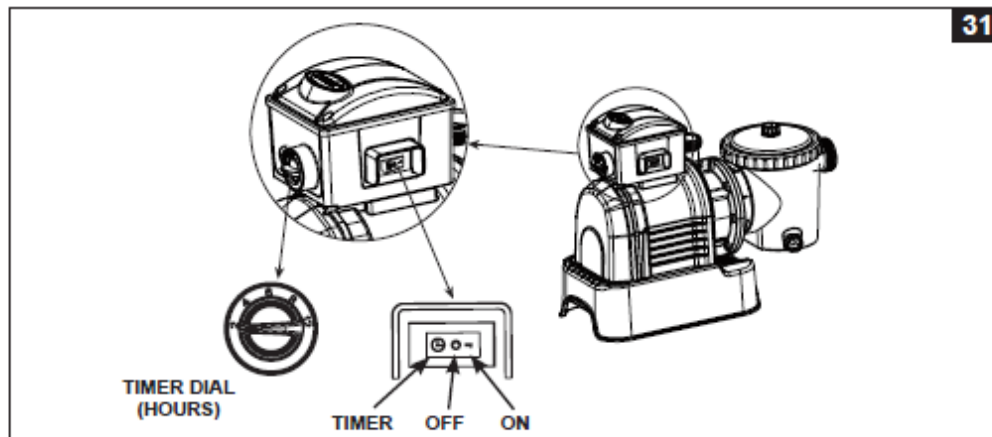
### Operating the system under "TIMER" mode or manually:

**To operate the sand filter pump in "FILTER" mode under "TIMER" control:**

- A. Set the timer dial to the desired operating hours. See operation time table (see drawing 31).
- B. Turn on the pump by pressing the switch to "⊕" position, the sand filter pump is now filtering the water and will stop after the operating hours are completed. The built-in timer will now operate for the number of hours selected at the same time each day.
- C. Operating hours can be re-adjusted if necessary. Follow step A – B.

**To operate the sand filter pump manually (without the "TIMER" mode):**

- A. Turn on the pump by pressing the switch to "-" position, the sand filter pump is now filtering the water.
- B. To turn off the pump, press the switch to "O" position.



## IMPORTANT

If you continue to experience difficulty, please contact our Consumer Service Department for assistance. See separate "Authorized Service Centers" sheet.

# AQUAFINESSE HOT TUB WATER CARE BOX



AquaFinesse® Hot Tub Water Care [ EN ]



## AquaFinesse® Hot Tub Water Care

Please read the following instructions carefully to ensure easy, environmentally friendly spa maintenance.

### Content of the AquaFinesse® box

- 2 bottles of 2 liter AquaFinesse® liquid
- 1 jar chlorine tablets/ \* or granules
- 1 dispenser / \* or measuring spoon
- 1 measuring cup
- 1 user manual

### Simply weekly treatment

1. Shake the bottle AquaFinesse® before use.
2. Add the correct amount of AquaFinesse® liquid as indicated on the bottle directly to the spa water, using the measuring cup provided. Do not overdose.
3. Open all valves and jets. Activate pumps for one minute.
4. Put one sanitising tablet into the slow release dispenser. Place in the basket above the filter, immersed in water.  
*\* If sanitising granules are used instead of the tablet, add one level spoon (provided) to the water, after each spa use.*
5. Rinse the filter(s) weekly and clean with AquaFinesse® filter cleaning tablets.

*Spa manufacturers recommend changing spa water every 3-4 months.*



### Starting up with AquaFinesse®

Before you commence usage we strongly recommend that you deep clean your spa with the AquaFinesse® Spa Clean treatment. This will loosen biofilm and remove old slime, grime and calcium from surfaces and pipe work.

### Tips

- Purchase an additional filter to enable weekly rotation.
- Leave all jets and air valves slightly open allowing the flow of water to clean pipes.
- To save energy, always cover spa when not in use.

### A new Spa

To eliminate debris from the manufacturing and storage process, new spas should be treated with a chlorine shock and/or the AquaFinesse® Spa Clean treatment before use.

### Advice on pH

Please ask your dealer for advice on pH if you live in an area which has either extremely hard or soft water.

### Important

Use AquaFinesse® only as directed. Store in original package ensuring the child safety cap is closed tightly.

### Precautionary - First aid

Keep out of reach of children. If swallowed, drink large quantities of water immediately. Do not induce vomiting. Avoid alcohol. Seek immediate medical attention.

### Recycle packaging

Once empty dispose of packaging in the normal household recycle whenever possible.  
Thank you for choosing AquaFinesse®!

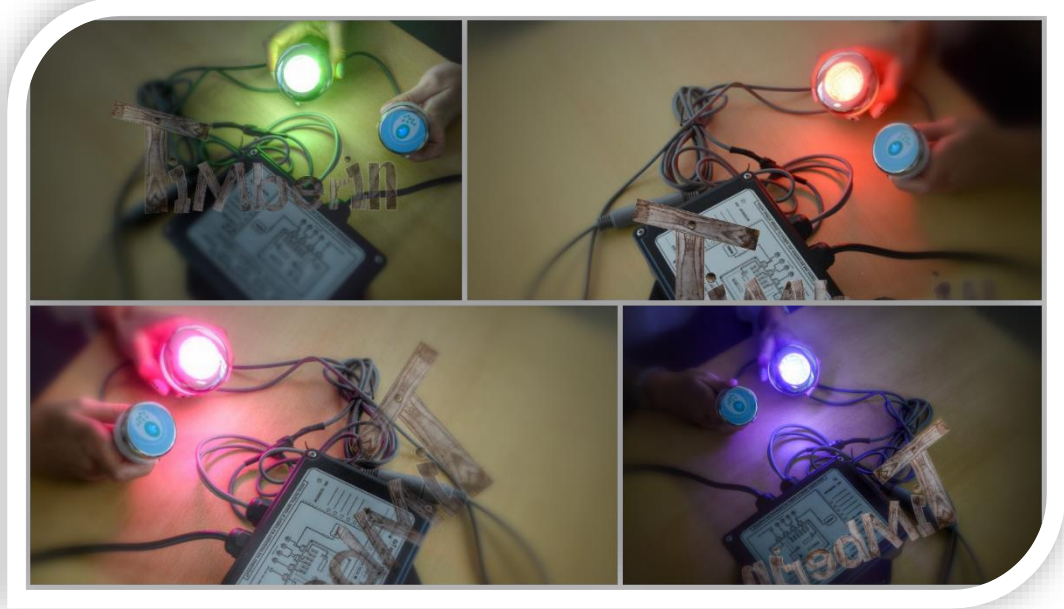
### Questions

If you have any further questions, please contact your AquaFinesse® dealer or consult the website for FAQ's: [www.aquafinesse.com](http://www.aquafinesse.com)



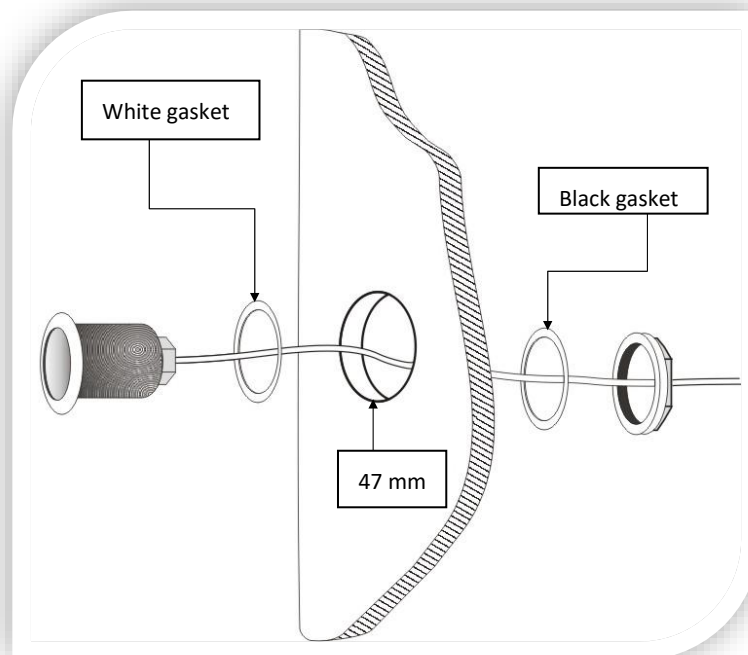
## LED LIGHT, CONTROLLER / TRANSFORMER

*LED light gives pleasant effect. The most popular choice is 2-3 units. Wall insulation is necessary to make a proper installation.*



### USAGE OF THE LIGHT:

1. Connect all couplings and accessories, before connecting the equipment to the grid.
2. To shut down the light, after you've finished using hot tub, hold the button to turn the light off, press it again to turn it back on.

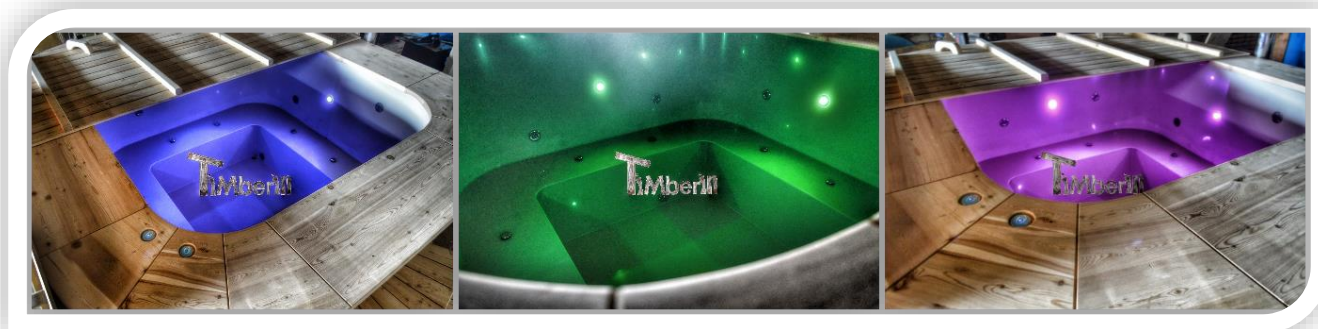




## ASSEMBLY INSTRUCTIONS

Read all information before assembling/usage.

1. Drill a  $\varnothing$  47 mm hole for the light. Refinement might be needed, in that case use sandpaper or a file.
2. The light can be used with wall thicknesses up to 60 mm.
3. Thread the wires through the hole. Assemble with the white gasket under the crown of the lamp. Also use silicone on the surface that will lie against the wall in order to prevent any leaks due to possible irregularities. **NOTE! Remove the crown from the light before beginning assembly, put it back after the silicone has dried.**
4. The black gasket is put on from behind and then the nut is tightened over it. Attach the nut using hand force only and wipe away excess silicone from the inside.
5. The control panel is assembled outside the spa/bath/pool in the same way as the light, but without the use of silicone. Largest diameter is 35 mm, thus use a  $\varnothing$  35 mm hole saw. **NOTE! Applies only if you have a control panel. Warning! The control panel is not be mounted inside the bath or in a place where it will be regularly exposed to water.**
6. Connect the PCB output cable from the light to the control panel.
7. Put the transformer somewhere safe and connect the power cable from the control panel to the transformer.
8. Connect the transformer to the grid and test the light according to the manual.



## AIR BUBBLE SYSTEM

A powerful bubble system that also has a nice massage effect. A special pump blows streams of air into the water through 6 (HT150) special air vents. The system also includes check valve, hose, connections, pressure switch for the air blower.

### BUBBLE SYSTEM PARTS:



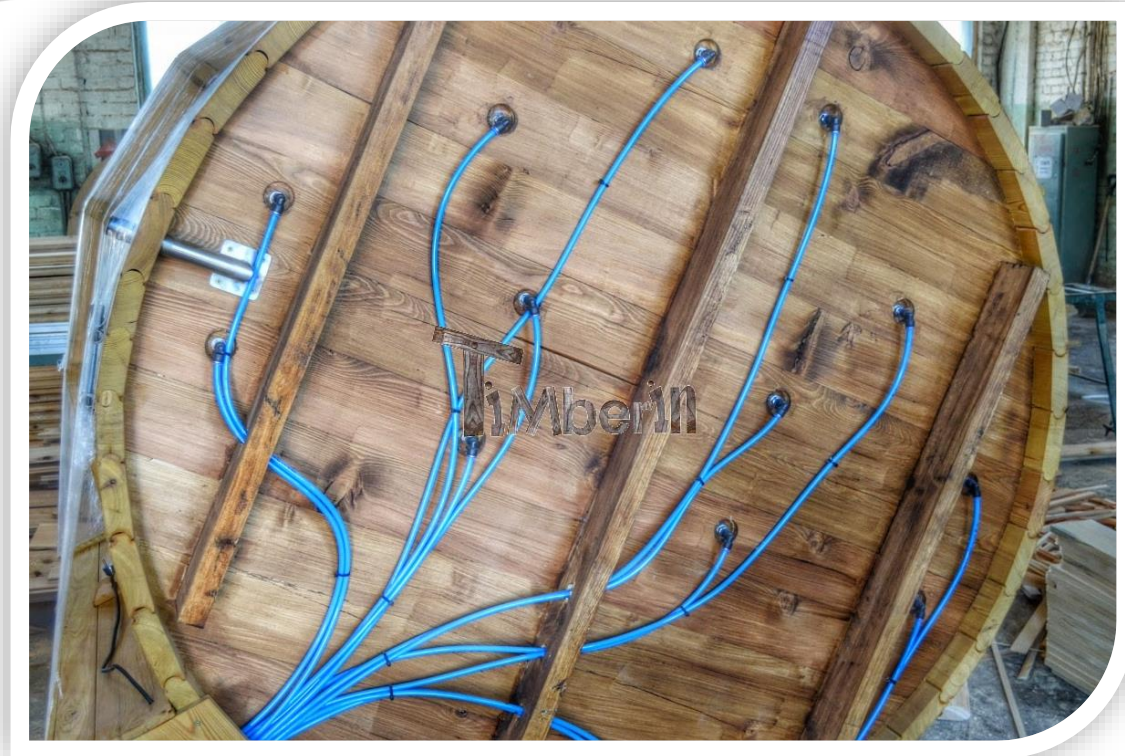
### USING A HOT TUB WITH BUBBLE SYSTEM IN THE WINTER

If you have a hot tub equipped with a bubble system and you intend to use it in the winter, then the hose and air jets have to be protected from freezing. When the air blower isn't operating but there is still water in the hot tub then the hose will fill with water all the way up to the check valve. **REMEMBER** to start the air blower after 15 minutes maximum, so that the water in the hose does not have time to freeze. When the hot tub is drained of

water the water in the hose can be removed by starting the air blower. Let the water drain from the hot tub and repeat the procedure at least three times. The base of the bubble system for the HT150 has 12 holes for air vents, which are screwed into a lower part (see picture). Note! Use Silicone or an equivalent material to seal the base of the jet from above as well as the threads. Tighten by hand. The picture below illustrates the connected hose system (Basic).

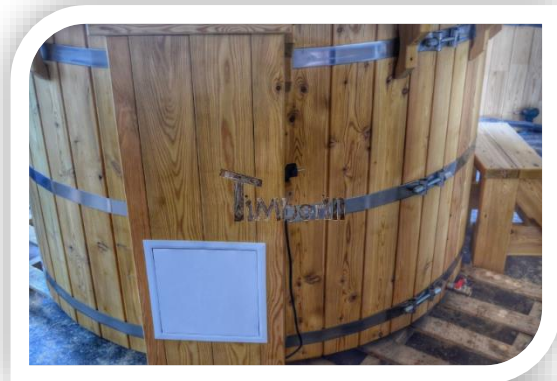


PICTURE SHOWS “HOSE KIT” ASSEMBLED AND WITH THE MIDDLE SUPPORT  
HAVING CUT-OUTS FOR VALVES



**FROST WARNING!** If the Hot Tub is emptied and there is a risk for freezing, it is very important that there is no water remaining in the system. Start the blower in case there is a bubble system installed and let it run approx. for 5 seconds. Repeat this procedure three times.

A cover shelf covers and protects the hose for the blower.



**WARNING!**

The blower must be placed at least 10 cm above the ground for the suction to work.

It should be placed horizontally or the valve connection on the air hose should face downwards preventing water getting into the pump.

The blower is controlled by a pressure valve and a pressure switch via an air hose. The power cord from the pump connects to the cord from the coupling box.



# HYDRO MASSAGE SYSTEM



Hydro massage system parts





**WHIRLPOOL BATH PUMP  
INSTRUCTION MANUAL  
LP SERIES PUMPS**

**IMPORTANT SAFETY INSTRUCTIONS**

- When installing and using this electrical equipment, basic safety precautions should always be followed, including the following:
1. **READ AND FOLLOW ALL INSTRUCTIONS**
  2. **WARNING** To reduce the risk of injury. Do not permit children to use this product unless they are closely supervised at all times.
  3. **WARNING** Risk of Electrical Shock. Connected only to grounding type receptacle protected by a ground fault circuit interrupter (GFCI). Contact a qualified electrician if you cannot verify that the receptacle is protected by GFCI.
  4. **CAUTION** Do not bury cord. Locate cord to minimize abuse from lawnmowers, hedge trimmers, and other equipment.
  5. **CAUTION** In case the running parts will injure people, don't make the electric pump running before then pipeline have been connected.
  6. **WARNING** To reduce the risk of electrical shock, replace damaged cord immediately.
  7. **WARNING** To reduce the risk of electrical shock, do not use extension cord to connect unit electric supply; provide a properly located outlet.
  8. **CAUTION** This pump is for use for fix-installed bath tub, It is not suitable for swimming pool spa.
  9. Do not install within an outer enclosure or beneath the skirt of a hot tub unless so marked.
  10. This appliance is not intended for use by young children or infirm persons unless they have been adequately supervised by a responsible person to ensure that they can use the appliance safely.
  11. Young children should be supervised to ensure that they do not play with the appliance.



This product must not be disposed together with the domestic waste. This product has to be disposed at an authorized place for recycling of electrical and electronic appliances.  
By collecting and recycling waste, you help save natural resources, and make sure the product is disposed in an environmental friendly and healthy way.

**1. GENERAL**

- These instructions are for correct installation, and optimum performance of the bath pumps, so they should be read carefully.
- These are single-stage centrifugal pumps designed to operate with compact hydromassage equipment. They are equipped with a total emptying system to prevent the discharge of residual liquid in each stopping.
- V/Hz esp: See pump nameplate.
- These units are designed to operate with clean water at a maximum water temperature of 50°C.
- Storage temperature: -10°C ~ +50°C. Relative Air Humidity: 95% Max.
- Built of top quality materials, they are subjected to strict hydraulic and electrical controls and are carefully verified.
- Correct installation is ensured by following these instructions and those of the wiring diagram; otherwise, overloads may be produced in the motor. We decline responsibility for any damage caused by not following these instructions.

**2. INSTALLATION**

- Pumps must be level installation, Dimensions and position of the pump for supporting and fixing the pump within this space (Fig. 2).
- Pump must be fixed by screw on the tub shelf, and fixed with silent block to lower the noise and vibration. Sticking and enlacing is forbidden.
- The pump will be getting hot in operating, to speed up cooling, the minimum distance between the motor of the pump and the surrounding structure should not be less than 20mm.
- The suction pipe of the pump should be as short as possible.
- The rating Label must be visible after installation.
- Parts containing live parts, except parts supplied with safety extra low voltage < 12V, must be inaccessible to a person in the bath.
- Class I appliances must be permanently connected to fixed wiring. Part including electrical components except remote control devices must be located or fixed so that they cannot enter the bath.

**3. PIPE ASSEMBLY**

- The maximum inlet water pressure ≤ 0.15 MPa.
- The suction pipes should have a diameter equal to or larger than of the discharge pipes. It can avoid the loss of the head and improve the efficiency.
- The suction and discharge pipes should not rest above the pump in any case.
- Seal all the connectors and unions well. Avoid any dripping on the motor, which would unfailingly damage it.

- Should be use the new hose module which supplements along with the bathtub, the old hose module cannot be reused.

**4. ELECTRICAL CONNECTION**

- The electrical installation should have a multiple separation system with contacts opening at least 3mm.
- For continued protection against possible electric shock this unit is to be mounted to the base in accordance with the installation instructions.
  - 1) The protection of the system should be based on a residual current device (RCD) with a rated tripping current not exceeding 30mA. The supply cable should comply with EMC standards.
  - 2) Single-phase motors have built-in thermal protection.
- The electric connection must be carried out by qualified staff following strictly the "EN60335-2-60" standard.
- Be sure that the earth cable connection is correctly made.
- Wires serving as equipotential bonding conductors shall have a cross sectional area between 2.5 mm² and 6 mm² and shall be equipped with the terminal suitable receptacle.

**5. CONTROLS PRIOR TO INITIAL START-UP**

- Verify that the pump shaft turns freely.
- Check that the mains voltage and frequency are according to the name plate.
- The hydromassage assembly should be equipped with a system to prevent the pump from starting up if a minimum water level is not present.
- Check the rotating direction of the motor, which should concur with that indicated on the fan cover.
- If the motor does not start up, try to locate the problem in the table of most common faults and their possible solutions that is provided further on.
- **THE PUMP SHOULD NEVER OPERATE DRY.**





### 6.START-UP

- Start electrically the pump only when the suction and discharge pipes are connected to the corresponding inlets and outlets.
- Apply voltage to the motor and suitably adjust the jets to obtain the desired flow.

### 7.MAINTENANCE AND CLEAN !

- Our pumps for hydromassage facilities do not require any special maintenance or programming. If the pump will be idle for a long period of time, it is recommended to disassemble, clean and store it in a dry, well ventilated place. If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person to a hazard.

### 8.TROUBLE SHOOTING GUIDE

SYMPTOM	POSSIBLE CAUSE	CHECK
PUMP DOES NO TURN	NO POWER TO PUMP	-Incoming power to the pump? -Is circuit breaker on? -Is GFCI operating properly? -Is the air switch plugged in?
	AIR SWITCH DISCONNECTED	-Is the air switch hose connected to the pump? -Is the air switch hose connected to the actuator button on the tub deck?
PUMP NOT PUMPING PROPERLY	BLOCKAGE OR LEAK	-Jets should be pointed away from the suction inlet so air is not forced into pump suction. -Is the in tub suction inlet blocked or covered? -Is there any debris in the pump housing? -Is there a leak in the piping or the pump?
	LOW VOLTAGE	-Is the proper voltage applied to the pump? -Is there an extension cord being used?

### 9.INSTALLATION DIAGRAM

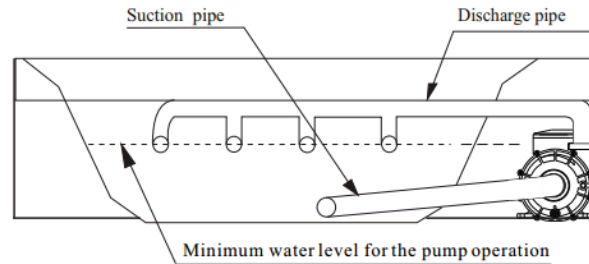


Fig.1

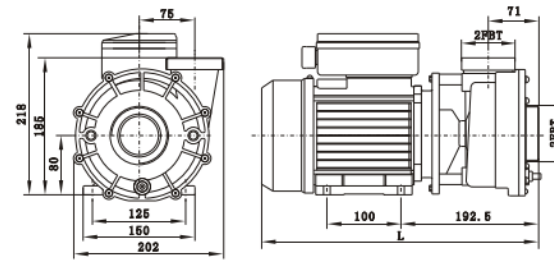
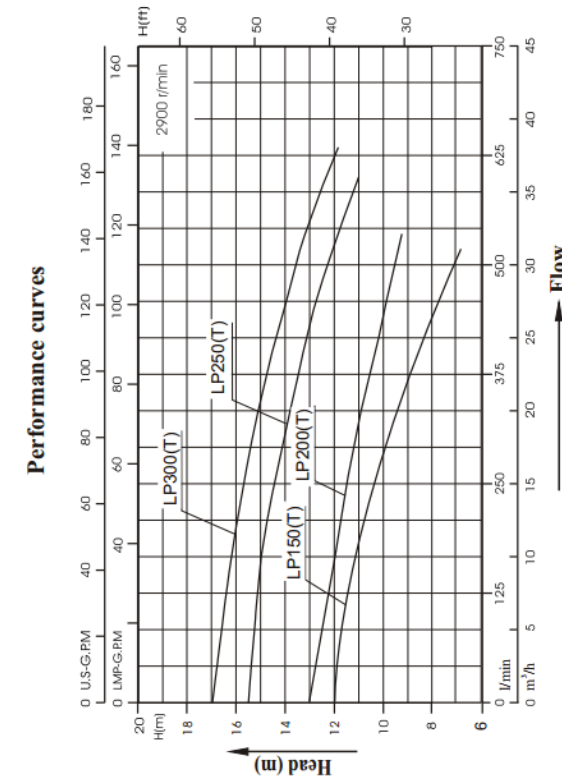


Fig.2

Model	Power(P)		L
	kW	HP	
LP150(T)	1.10	1.5	380
LP200(T)	1.50	2.0	380
LP250(T)	1.85	2.5	380
LP300(T)	2.20	3.0	395



# ELECTRIC HEATER

Electric spa heater



## Electric heater thermoplastic 3-18kW

Electric heater made of thermoplastic for extra strength. Heating element made of Incoloy 825 or titanium for extra safety in installations where there is a high risk of corrosion, e.g. salt water pools.

Supplied with a thermostat for adjusting pool temperature as well as overheating cut out and flow switch. Minimum flow 90 l/min.

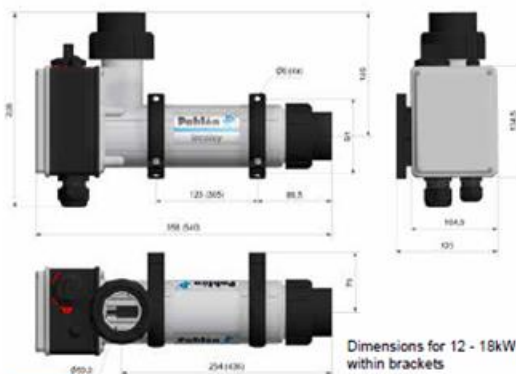
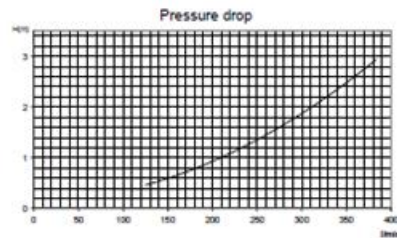
Max. pressure: 2.5 bar.

Suitable for private pools up to 100m<sup>3</sup>

For pools with high dosage of salts and chlorine, we recommend the Titanium element

## Features

- Electric heater made of fiberglass reinforced thermoplastic
- Housing of thermoplastic
- Horizontal installation, eliminates air pockets and damage to the electric heating element
- Heating elements of Incoloy 825 or titanium
- Equipped with overheating cutout and flow switch
- Union couplings for Ø 50 mm pipes



Technical data					
Heating element Incoloy 825		Heating element titanium		Ampere 3-phase	
Item no.	kg	Item no.	kg	kW	
141600	1,7	141600T	1,7	3,0	8 5
141601	1,7	141601T	1,7	6,0	15 9
141602	1,7	141602T	1,7	9,0	23 14
141603	2,2	141603T	2,1	12,0	31 18
141604	2,2	141604T	2,1	15,0	38 22
141605	2,2	141605T	2,1	18,0	46 27

44