

Timber'n

GENEREL BRUGERVEJLEDNING



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BRUGSANVISNING TIL VILDMARKSBAD I TRÆ

1. Vildmarksbade i træ holdes som regel sammen af to eller tre ringe i rustfrit stål, der sidder tæt til omkring karret. Under transporten kan ringene godt blive løse, og det kræves derfor, at man tjekker dem og skruer dem fast om nødvendigt.
2. Når man bruger vildmarksbadet for første gang, er det vigtigt at fylde trækarret med vand til en dybde på 90 cm. Når man efterfølgende bruger vildmarksbadet, er det nok at fylde trækarret til en dybde på af 80 cm.
3. Vanddybden på 90 cm ved første brug er nødvendig for at sikre, at alt træet udvider sig ved kontakt med vandet. Træ har enorm udvidelseskraft.
4. De efterfølgende to-tre timer er meget vigtige. I dette tidsrum udvides træet maksimalt, så det er vigtigt at holde øje med processen og løsne ringene af rustfrit stål i takt med udvidelsen.
5. Hvis der bliver behov for at løsne de rustfrie stålringe, skal du køre skruen 180° mod uret en enkelt gang. Hvis træet fortsat udvider sig, skal du gentage dette. I alle tilfælde vil det være nok at vende skruen to gange.
6. Når træet ikke længere udvider sig eller hvis ringene er for løse, skal de strammes til standardpositionen.
7. Bemærk venligst, at man kan forvente større lækager i træet i 1 til 5 dage. Hvis vildmarksbadet er lavet af gran, vil lækagen blive minimal på 1-2 dage. Hvis det er lavet af lærk, vil lækagen blive minimal på 5 dage.
8. Filtrene (et sandfilter og UVC-filtret) bruges til at rense vandet. Sandfiltret fjerner de organiske partikler og UVC-filtret slår bakterier ihjel ved at udsætte dem for ultraviolet lys. Det siges, at hvis man bruger disse to filtreringssystemer sammen, reduceres behovet for kemikalier i vandet med op til 80%. Hvis du alligevel synes, du har brug for tilsætningsstoffer i vandet, kan du bruge [AquaFinesse vandpleje til vildmarksbade \(brugervejledning\)](#), som kan fås hos TimberIN og på andre hjemmesider. Vi anbefaler at bruge langsomt opløsende TCCA-tabletter, der højst indeholder 20 g syre pr. 2000 liter vand. Kom en ny tablet i, når den foregående er helt væk (opløst). Den ovenfor beskrevne vedligeholdelsesproces anbefales og er sikker. Brug af andre kemikalier og metoder sker på egen risiko og vil ikke være dækket af garantien på vores vildmarksbade. Vandet skal filtreres op ved op til 35°C og med filtret på mindst 2 meters afstand. Efter filtreringsprocessen er færdig placeres filtret under den trækasse, der som regel leveres sammen med filtrene.
9. Vær opmærksom på, at træ er et naturmateriale, der udvider sig og skrumper alt efter ændringer i luftfugtigheden. Revner, misfarvning og andre ændringer er ikke fejl og er derfor ikke dækket af garantien. Man bedes henvende sig til sælgeren for anvisninger om korrekt vedligeholdelse af vildmarksbadet.



BRUGSANVISNING FOR VILDMARKSBAD AF GLASFIBER ELLER PLAST

1. Vildmarksbade af glasfiber skal stå på et fladt, stabilt, solidt underlag.
2. Vi anbefaler altid at lægge et lag polystyren under vildmarksmade i plast. Det vil reducere energitab og vil gøre det lettere at dræne vandet. Det er ikke nødvendigt for glasfiber modeller.
3. Man bør fylde karret med 90 cm vand eller højere end tilslutningen for ovnen, før man tænder op.
4. Ovnen skal tændes lige efter vandet dækker den nederste del af skorstenen, da væggene på et vildmarksbad i glasfiber eller vil blive misformet (ikke dækket af garantien).
5. Når man varmer vandet i karret, skal man røre rundt i vandet fra tid til anden. Man kan bruge karret når temperaturen på vandet når 38-42 grader Celsius.
6. Før vildmarksbadet bruges, anbefales det at gå i bad. Ved at tage brusebad, før man går i vildmarksbadet, holdes vandet rent længere. Vandet bør skiftes efter behov.
7. Vandet lukkes ud ved at skrue på drænventilen efter brug.
8. Vildmarksbade af glasfiber bør vaskes. Man kan bruge enhver form for desinficerende middel, der er lovligt.
9. Aske fra ovnen fjernes ved hjælp af en skovl og en rive.
10. Filtrene (et sandfilter og UVC-filtret) bruges til at rense vandet. Sandfiltret fjerner de organiske partikler og UVC-filtret slår bakterier ihjel ved at udsætte dem for ultraviolet lys. Det siges, at hvis man bruger disse to filtreringssystemer sammen, reduceres behovet for kemikalier i vandet med op til 80%. Hvis du alligevel synes, du har brug for tilsætningsstoffer i vandet, kan du bruge [AquaFinesse vandpleje til vildmarksbade \(brugervejledning\)](#), som kan fås hos TimberIN og på andre hjemmesider. Vi anbefaler at bruge langsomt opløsende TCCA-tabletter, der højst indeholder 20 g syre pr. 2000 liter vand. Kom en ny tablet i, når den foregående er helt væk (opløst). Den ovenfor beskrevne vedligeholdelsesproces anbefales og er sikker. Brug af andre kemikalier og metoder sker på egen risiko og vil ikke være dækket af garantien på vores vildmarksbade. Vandet skal filtreres op ved op til 35°C og med filtret på mindst 2 meters afstand. Efter filtreringsprocessen er færdig placeres filtret under den trækasse, der som regel leveres sammen med filtrene.
11. Vær opmærksom på, at træ er et naturmateriale, der udvider sig og skrumper alt efter ændringer i luftfugtigheden. Med alderen kan glasfiber ændre farve (der kan blive synlig misfarvning), og små prikker kan fremkomme på overflader af glasfiber på grund af slitage. Som nævnt er revner i træ, misfarvning eller andre ændringer ikke fejl og er derfor ikke dækket af garantien.



BRUGSANVISNING TIL OVNE BRÆNDEFYRET OVN

Belysning

1. Den indre brændefyrede ovn må ikke tændes, før den er mindst halvt dækket til af vand. For ydre varmeovne skal vandet dække det højeste indtag, før man tænder op. Husk at fjerne beskyttende film fra ovnens metaldele, før du tænder op.
2. Brænde skal placeres lodret i ovnen. Pap eller brændbare væsker må kun bruges til at tænde op. **Brændstof egnet til ovnen – tørt træ, briketter.**
3. Den gennemsnitlige opvarmningshastighed for vandet (2000 liter) – 8 grader Celsius i timen. Afhængigt af udetemperaturen vil vandet nå 38 grader Celsius på 2-3 timer i de varme måneder, mens det kan tage op til 4-6 timer i de kolde måneder.
4. Vandet opvarmes hurtigere, når vildmarksbadet er dækket. Vandtemperaturen måles med termometret.

Opbevaring og vedligeholdelse

1. Det anbefales at dræne vandet fra vildmarksbadet for både indre og ydre ovne, hvis temperaturen falder til under frysepunktet, da dette kan skade metallet.
2. Ventilen i bunden af vildmarksbadet bruges til at dræne vandet.

Nyttige fif og almindelige fejltrin

1. Rør ikke ved skorstenen eller metaldele, når ovnen er i brug – dette vil forårsage alvorlig personskade.
2. Brug ovnens låg til at regulere vandtemperaturen.
3. Sørg for at ovnen er dækket med vand (se trin 2), før du tænder op.
4. **Det er strengt forbudt at bruge nogen som helst form for kul i ovnen.**

Vigtigste garantibetingelser

1. Du skal beholde vildmarksbadet og alle dets dele, da garantien ellers vil være ugyldig.
2. Indre ovne må ikke tændes, før de er mindst halvt dækket til med vand.
3. Ydre ovne skal dækkes med vand ved det højeste indtag, før man tænder op.
4. Når vildmarksbadet ikke er i brug i de kolde måneder, skal vandet drænes fra den ydre eller indre ovn for at undgå eventuelle skader på ovnen.
5. I tilfælde af skader, bedes man kontakte forhandleren. Fotografier og video kan være nødvendige for at evaluere skaden og afgøre videre foranstaltninger.
6. Hvis man vil bruge kemikalier eller salt i vandet, får man brug for rustfrit stål af 316 typen. Denne mulighed kan vælges for hver enkelt model på TimberINs hjemmesider. Når denne mulighed vælges vil kunden modtage en ovn, hvor de dele, der konstant udsættes for vand i badet, er lavet af stål af type 316. Dette gælder ikke massagedyser. Det gælder heller ikke alle andre metalliske eller ikke-metalliske dele, der ikke konstant udsættes for vandet i karret. Brug af kemikalier eller salt med stål af type 430 vil resultere i permanente skader, der ikke vil være dækket af garantien. Med tiden kan små, rustlignende prikker blive synlige på ståldele af type 316 på grund af oxidering og konstant brug. Dette vil ikke resultere i permanente problemer med vand, der lækker fra ovnen, hvilket betyder, at karret ikke længere kan bruges som tiltænkt.

ELEKTRISK OVN

Efter modtagelse af et vildmarksbad med en elektrisk ovn, skal kunden få en lokal elektriker til at inspicere ovnen, før den bruges for første gang. En autoriseret elektriker skal sikre, at den elektriske ovn ikke er blevet beskadiget under fragten, samt om ovnens installation opfylder individuelle landes krav for elinstallationer.

Som standard installerer og tilbyder vi en 6kW elektrisk ovn. Vi installerer den baseret på kundens forudbestemte krav om enfaset 220 V 32A eller trefaset 380 V 16A (dette kan variere afhængigt af situationen og den elektriske ovns strømforsyning). Kunden forstår til fulde og har allerede bekræftet, at en elektrisk ovn med den valgte effekt og elinstallation vil være egnet til det sted, den skal bruges. Som firma vil TimberIN ikke bære ansvaret for omkostninger forbundet med at ændre den elektriske installation på kundens ejendom for at drive den ovennævnte ovn. Effekten for elektriske ovne varierer mellem 3 til 18 kW.

Der fås to varmelegemer: Incoloy og Titanium. Det maksimale indhold af klorin og klorid for ovne af Incoloy typen er som følger: 3,5 mg/l og 250 mg/l. Det maksimale indhold af klorin og klorid for ovne af Titanium typen er som følger: 3,5 mg/l og 35000 mg/l. Hvis kunden ikke på forhånd angiver, hvilket indhold, der er tale om, bliver en ovn af Incoloy typen installeret som standard. Hvis man ikke overholder førnævnte grænser vil dette gøre garantien på produktet ugyldig. Flere oplysninger: <https://www.pahlen.com/our-products/pool-heating/electric-heaters/aqua-compact/>

PILLEOVN TIL BRUG MED VILDMARKSBADE OG SAUNAER

INDLEDNING

Brænderens betjeningsvejledning er beregnet til at give brugeren information om brænderens struktur, brugsforhold og grundlæggende egenskaber. Når den installeres på hvilken som helst kedel, der fyres med fast brændsel, vil denne enhed automatisk holde den ønskede temperatur for varmesystemet, varmt vand til boligen, saunaer eller vildmarksbade. Brugers arbejde med vedligeholdelse af kedlen mindskes. En korrekt indstillet brænder vil aldrig generere for meget termisk energi, og ved hjælp af det indbyggede Wi-Fi modul, er det nemt at kontrollere fra hvilken som helst mobil enhed med adgang til internettet.

PRIMÆRE FUNKTIONER

- Brænderens forbrændingskammer består af varmebestandigt rustfrit stål i kromnikkel, som ikke korroderes, ikke er magnetisk, og som er egnet til brug i korroderende miljøer op til 1100°C.
- En kraftig blæser vil i slutningen af processen fjerne eventuelle slagge fra piller af lavere kvalitet.
- Tilstedeværelsen af en indre propel forhindrer flammen i at bevæge sig baglæns, så brænderen fungerer mere problemfrit.
- Farvekontrolskærm, menu på de fleste populære fremmedsprog (valgfrit).
- Automatisk tænd og sluk, trefaset strømmodulering + standby.
- Forbrændings- og kedelbeskyttelse.
- Lavt energiforbrug.
- Kan sluttes til Wi-Fi, så man kan overvåge og kontrollere brænderens funktion fra hele verden.

TEKNISKE SPECIFICATIONER OG MÅL FOR BRÆNDEREN

Brænder Model BioFlame 25		
Nominal effekt	kW	25
Varmer arealer på op til	m ²	200
Maksimum pilleforbrug	i kg/t	5
Brænderens længde til monteringsflangen	mm	300
Brænderens bredde	mm	270
Brænderens højde	mm	300
Elektronikboksens dybde	mm	95
Elektronikboksens bredde	mm	160
Elektronikboksens højde	mm	300
Ovnens længde fra døren	mm	170
Ovnens bredde	mm	150
Ovnens højde	mm	150
Strømforsyning	230 V AC; 50Hz ± 5%	
Beskyttelsesgrad	IP 20	
Brændstoftype	Træpiller på 6-8 mm i diameter	

SIKKERHEDSKRAV

- Brænder og andet udstyr, stikkontakten skal være jordet.
- Andet brændstof er forbudt (bortset fra træpiller på 6-8 mm i diameter)
- Sørg tilstrækkelig skorstenstræk til ovnen - 20 Pa.
- Det er forbudt at reparere brænderen selv, uden strømafbrydelse eller med utilstrækkelig nedkøling af ildkassen (når ildstedet repareres).
- Det er forbudt at bruge brænderen uden dækslet til brænderkabinettet.
- Det er forbudt at bruge brænderen med lækager i brændstofsystemet.
- Brug ikke brænderen til andre formål, end den er beregnet til.
- Pas på ikke at tabe, punktere eller dreje blæselampen ved transport eller håndtering.

ANDRE VIGTIGE OPLYSNINGER

- Før brænderen bruges, skal strømkablet først sluttes til en stikkontakt.
- Det næste, der skal gøres, er at fylde den eksterne brændstoftransport med piller. Efter pillerne er lagt i den dertil beregnede tragt, trykkes der på "Menu" knappen for at tilgå "brugermenuen". Brug derefter den nedadgående pil for at tilgå "Manual", så dette punkt fremhæves i rødt. Tryk på højrepilen for at tilgå dette punkt. I det vindue, der således åbnes, placeres et flueben ved hjælp af "Up" knappen for at aktivere ydre pilletransport. Transportskruen begynder at dreje, hvorved den drejer og løfter pillerne, mens timeren begynder at vise, hvor længe pilletransporten har kørt i dette (manuelle) modus. Det tager som regel 200 sekunder, før transporten er fyldt. Når de første piller begynder at smuldre gennem den fleksible slange ind i brænderen, afsluttes den manuelle transport ved at trykke på "Menu" knappen to gange.
- Når der ikke er flere piller i brændstofbeholderen, mindskes niveauet af piller i transportskruen også. Brænderens optændingsproces vil hente en mindre mængde piller eller slet ingen. Derfor er det ikke blot nødvendigt at fylde beholderen med piller, men transportskruen skal også fyldes helt op. Skruens strømforsyningsledning med stik trækkes ud af brænderens automatiseringsstik og forbindes direkte med en husholdningsstikkontakt (220 V). Propelmotoren begynder at køre uden at standse. Efter de første piller begynder at smuldre ind i brænderen, venter du 5-10 sekunder længere, og efter at have taget ledningen ud af husholdningsstikkontakten, returneres den til det dertil beregnede snegludtag i brænderens automatiseringskabinet.
- På grund af de mange forskellige pillefabrikanter og de råvarer de bruger, er det ikke alle piller, der brænder jævnt. Jo flere unaturlige urenheder træpillerne indeholder (træ med bark, findelte møbler, halm), desto større sandsynlighed for, at brænderen samler slagter. Dette kan modvirkes ved at øge luftstrømmen fra brænderens ventilator, men dette øger også blæsning af piller, der ikke forbrændes helt, ind i ovnen. Det anbefales derfor at fjerne og rengøre den perforerede brænderplade mindst en gang om måneden. Hvis der er aske i bunden af ovnen, når pladen tages ud, bør den også fjernes. Alle disse opgaver foretages, efter brænderen er slukket og har haft tid til at køle af.

PARAMETRE FOR DRIFTSMILJØET:

Vandtemperatur: + 5°C ~ + 40°C;

Relativ luftfugtighed: <90%, uden at nå dugpunktet;

Atmosfærisk tryk: 86 ~ 106 kPa

Højde: Ikke højere end 1000 m.

Vibrationer: 10Hz <f <57Hz, amplitude må ikke overstige: 0,075mm

57Hz <f <150Hz, accelerationen må ikke overskride: 1G (ifølge IEC 60068-2-6)

GARANTI

Garantien er kun gyldig med købsbevis (faktura og salgskontrakt).

Garantien gælder i 24 måneder fra købsdatoen for privatpersoner.

Garantiperioden er 12 måneder fra købsdatoen for retmæssige enheder.

BEMÆRK! Garantien dækker brændere, der er tilsluttet internettet og fabrikanten har ret til at foretage overvågningen.

Reparationer skal foretages i henhold til de garantiservicebestemmelser, der gælder i Republikken Litauen. Garantiservice omfatter reparation af defekter eller andre fejl, der er fabrikantens skyld.

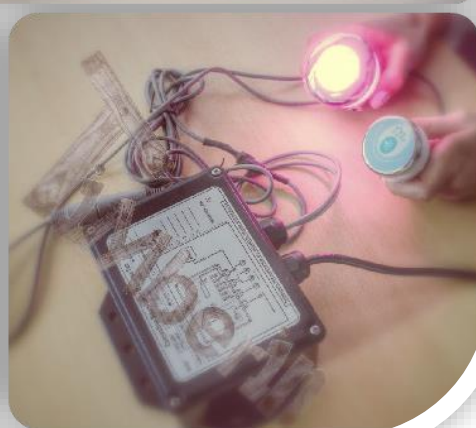
Garantien gælder ikke:

- Hvis brænderen er blevet ombygget;
- Hvis kunden har ændret på service (standard) indstillingerne;
- Hvis fabrikanten ikke har online adgang til kundens brænder;
- Garantien dækker ikke naturligt slidte dele af vildmarksbade og saunabrændere.

Flere oplysninger om betjening af brænder: <https://mailchi.mp/e9e0248ab9ca/hot-tub-with-pellet-heater-user-manual>

Timberlin

TILBEHØR



**NEDENFOR ER BRUGERMANUAL SIDER TIL
TILBEHØR (DE FLESTE ER PÅ ENGELSK)**

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

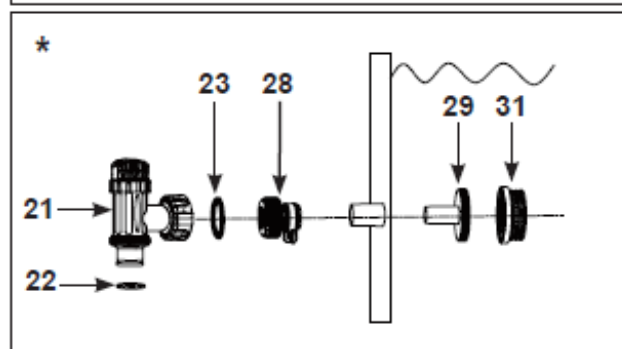
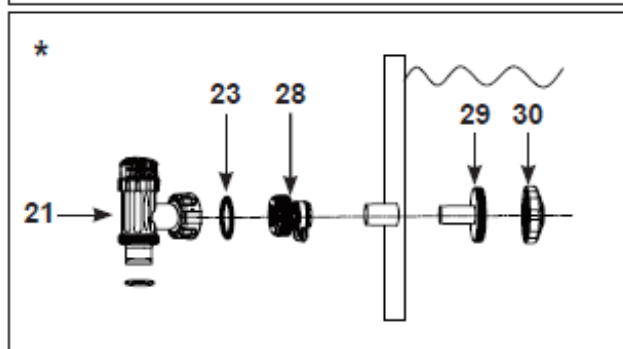
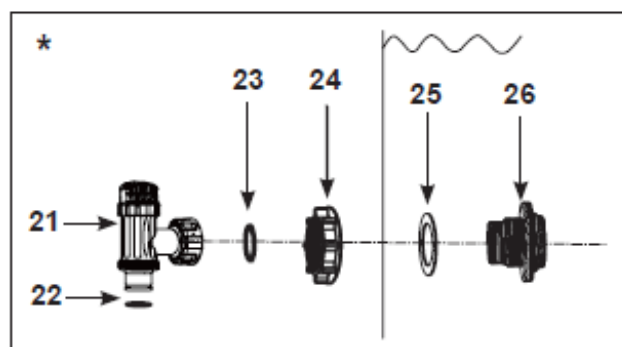
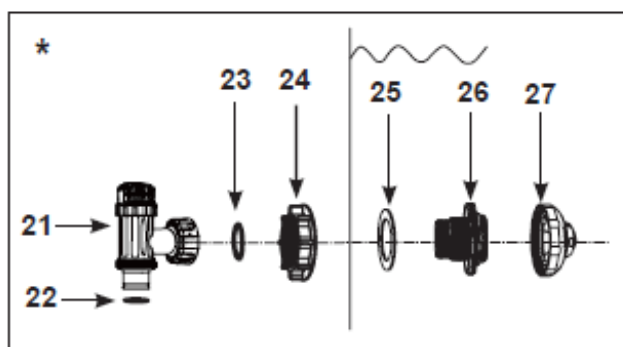
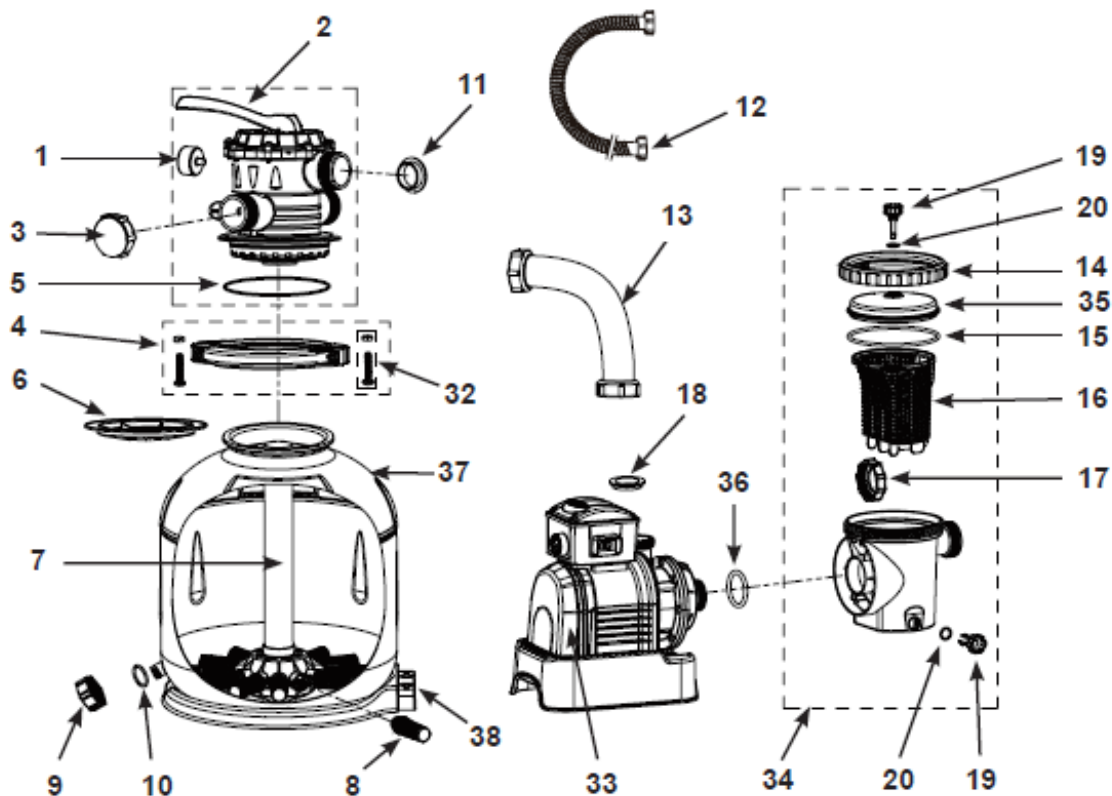
- To reduce the risk of injury, do not permit children to use this product. Always supervise children and those with disabilities.
- Children must stay away from this product and electrical cord(s).
- Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children 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.



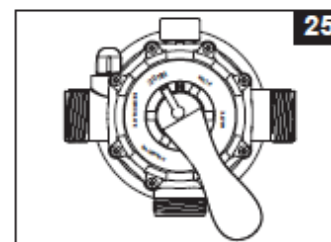
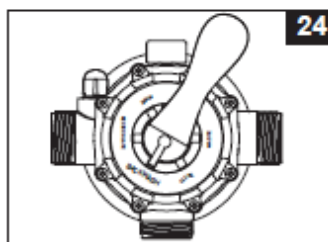
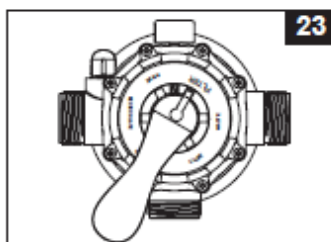
OPERATING INSTRUCTIONS

WARNING

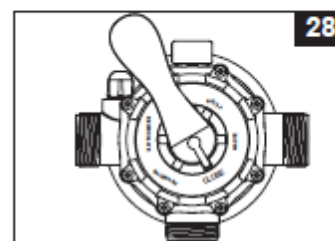
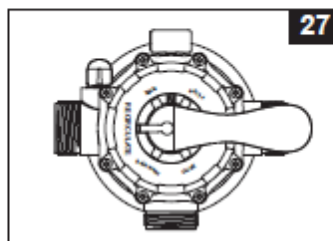
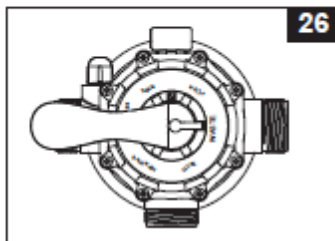
- Risk of electric shock. Connect this product only to a grounding type receptacle protected by a ground-fault circuit interrupter (GFCI) or residual current device (RCD). Contact a qualified electrician if you cannot verify that the receptacle is protected by a GFCI/RCD. Use a qualified electrician 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
FILTER (see drawing 23)	Normal filtration and regular vacuuming of pool	From pump through filter media to pool
BACKWASH (see drawing 24)	Reverses water flow to clean filter media	From pump through filter media to valve waste/drain outlet
RINSE (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
WASTE (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
RECIRCULATE (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
CLOSED (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.

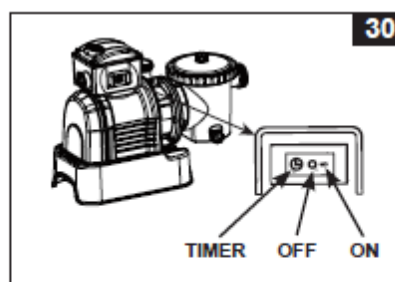
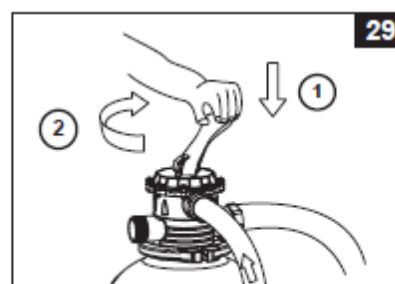
3. Ensure the pump is off, depress the 6-way valve and turn it to the "BACKWASH" position (see drawings 24 & 29).

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.

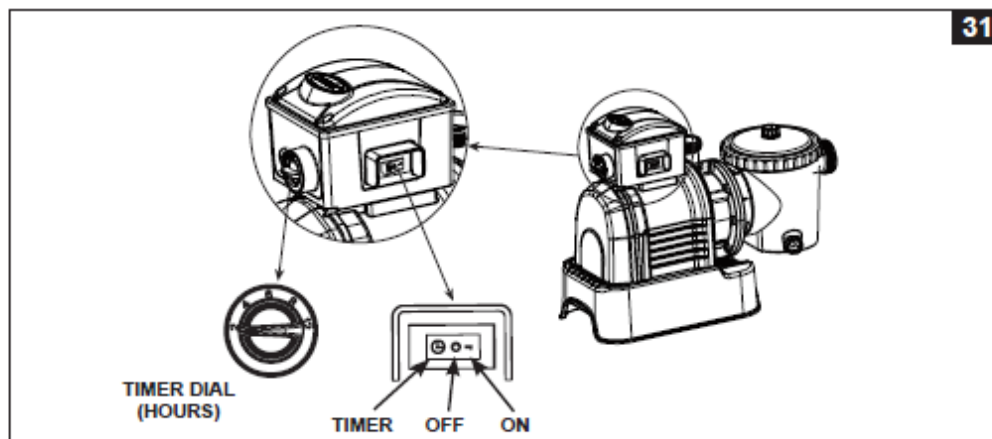
Operating the system under "TIMER" mode or manually:

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

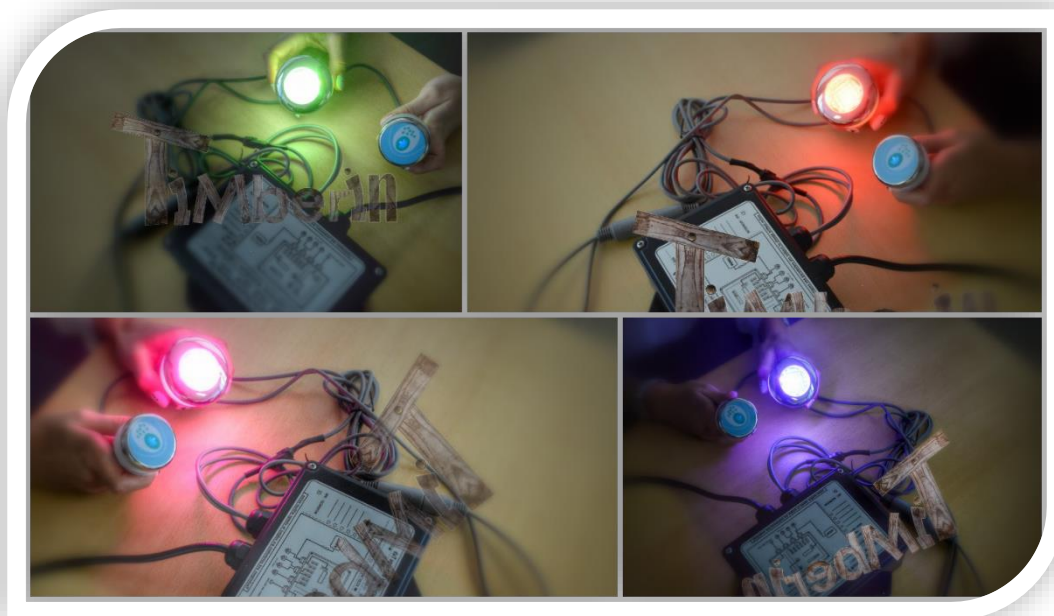
Once empty dispose of packaging in the normal household recycle whenever possible.
Thank you for choosing AquaFinesse®!

Questions

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

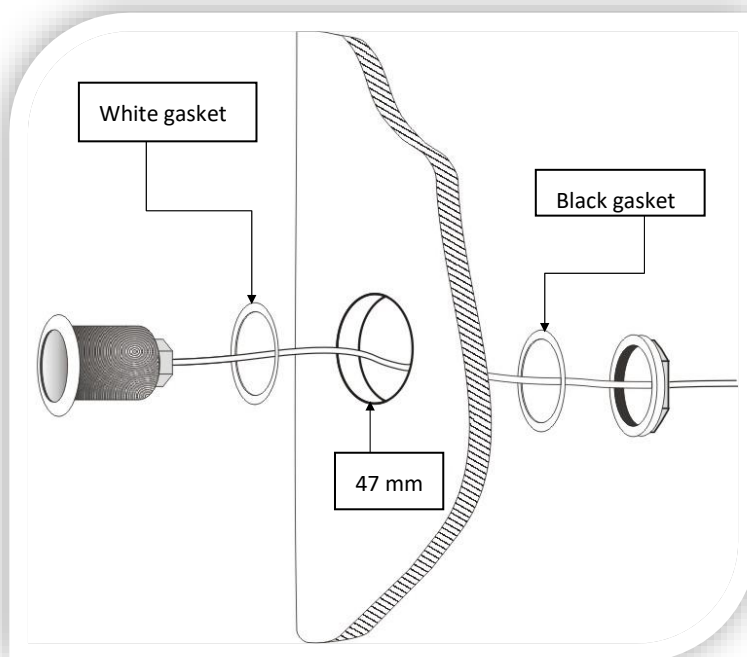
LED LIGHT, CONTROLLER / TRANSFORMER

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:

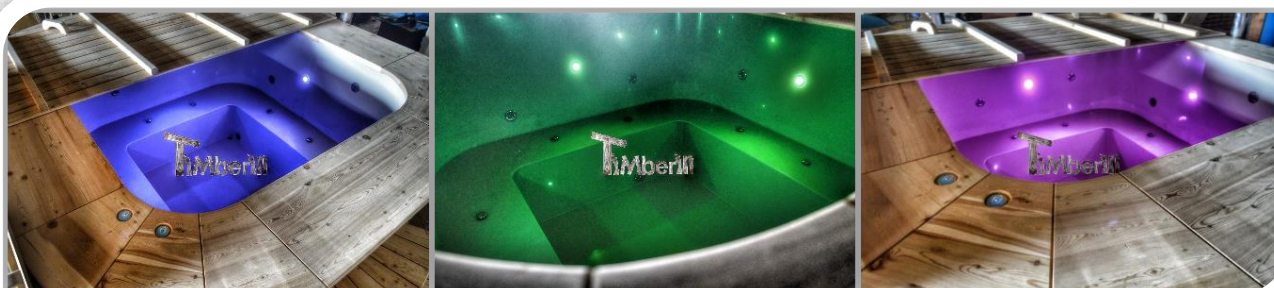
1. Connect all couplings and accessories, before connecting the equipment to the grid.
2. To shut down the light, after you've finished using hot tub, hold the button to turn the light off, press it again to turn it back on.



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 used 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.**

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.

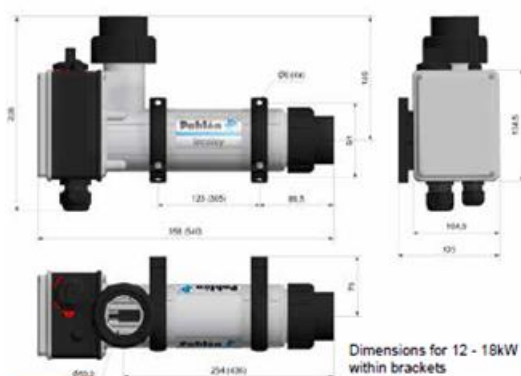
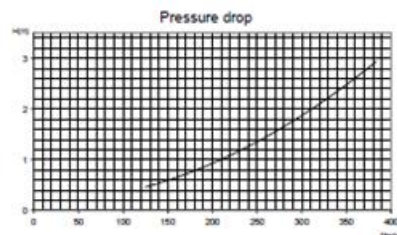
Max. pressure: 2.5 bar.

Suitable for private pools up to 100m³

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