# **HYDRONAUT**

## **INSTALLATION**

The manufacturer has the right to modify the products without previus notice for as far as their characteristics are not really changet by this.

# **Technical information**

Maximum working pressure	2 bar
Maximum working temperature	35°C
Voltage	220 V
Protection	IP 44
Isolation	F

Weight
8,6kg
9,5kg
10,6kg
11,5kg

The sound pressure level of the pump is lower than 70 dB (A)  $\,$ 

# **Applications**

Only to be used to circulate swimming pool water.

#### Instalation instructions

Please note: There can be specific needs to use pumpsnearly swimming pools, garden ponds or such places. Install the pump as near to the pool as practical.

Use a direct and short suction line with continuous slope in order to avoid long priming times.

The pump should be placed on a flat, solid foundation, high enough to prevent flooding of the

motor.Install the filter and pump in a sheltered location, ensuring ventilation and adequate acces for servicing. Do not mount electrical control directly over pump. Provide adequate floor drainage to prevent flooding. The pump must be installed with the sft horizontal and with the trnsparent cover uppermost. It must be possible to remove the transparent cover so that the filter basket can be removed for cleaning. Size all piping adequately and keep the number of elbows to a minimum. Independently support the pipe near the suction and discharge of the pump in the

Independently support the pipe near the suction and discharge of the pump in the order to reduce the strain on the pump.

Avoid overtightening pipe connections. Use only pipe sealants formulated for lastics. Do not use petroleumbased products.

It is essential that the suction line is free of air leaks. The suction line should always be at least the same size as the suction intel of the pump.

# **Operation**

Starting and priming instructions

Before starting the pump fill pump strainer with water to suction pipe level. Lubricate the lid O-ring with silicone each time it is removed. Energize the motor, the pump will prime. The priming time depends on the suction lift and distance to the pool. Five minutes is a reasonable time. Pump will not lift more than 2,5 metre. If pump deos not prime, see troubleshooting guide.

#### Maintenance

The striner basket should be periodically removed and cleaned. Never operate the pump without its strainer basket.

#### Winterizing

Protect the pump from freezing. Remove all plugs and drain the pump and all piping. Store drains and plugs in the striner basket. Remove the pump to a dry and warm room. Do not wrap the motor with plastic covering as condensation may damage the pump. In instalation where the pump can not be drained, a 40% propalene glycol, 60% water solution will protect to –46°C. Do not use other anti – freeze solutions, these are all highly toxic and will damge the pump.

#### Elektrical connection

The electrical motor must be wired by a professional according to the instalation instructions of your local electricity company.

BY INSTRUCTION OF THE PUMPS A MOTOR SECURITY HAS TO BE FORESEEN AT THE INSTALATION. THE SECURITY HAS TO BE TUNED IN TO THE NOMINAL POWER OF THE MOTOR.

# Single phase

0,25kW/230V - 2.8A

0,37kW/230V - 3.2A

0.55kW/230V - 3.9A

0,75kW/230V - 5.0A

The supply voltage should be within + 5% of the design voltage, specified on the nameplate of the motor.

MAKE SURE THAT YOU INTERRUPT THE POWER SUPPLY TO THE CABLES WHEN CONNECTING THE CABLES OF THE PUMP.

The connection to the electric mains must be checkedregularly for damges. The device may not be operated if the mains box is damged. The connection to the mains may exclusively be replaced by the manufacturer or aknowledgend expert.

Every motor must be pernamently grounded. An earth safety or circuit breaker switch with a sensitivity of 30mA should certainly always be included in the installation. The wiring size and the type of fuses (minimum H05RB-F) should be selected in accordance with the motor capacity.

CONNECTIONS THAT DO NOT CONFORM TO THE ABOVE-MANTIONED SAFETY INSTRUCTIONS ARE NOT COVERED BY THE WARRANTY.

#### Servicing

The pump is deisgned to operate for many years without servicing. If a failure does occur, it most likely will be a moving part of the pump.

CAUTION: ALWAYS DISCONNECT THE POWER SUPPLY TO THE PUMP BEFORE SERVICING.

# Trouble shouting guide

# Pump will not prime

- 1.No water in strainer pot
- 2.Stariner pot is not tight
- 3.Damage lid O-ring
- 4. Water level is below skimmer
- 5.Strainer basket or skimmer basket is clogged
- 6.Closed valve in piping systém
- 7. Air leak in suction line

#### Motor does not turn

- 1.Power switch is off
- 2. Circuit breaker has tripped
- 3. Pump is off-mode of a timer controlled circuit
- 4. Motor terminal connections are incorrect
- 5.Motor shaft is locked by bad bearing
- 6.Impeller is locked by debris.

# Low flow-high filter pressure

- 1. Filter is dirty
- 2. Restiction in return line

#### Low flow-low filter pressure

- 1.Strainer basket or skimmer basket is clogged
- 2.Clogged impeller
- 3. Air leak in suction line
- 4. Restriction in suction line

## Noisy pump

- 1. Air leak in suction
- 2. Foreing matter in pump housing
- 3. Cavitation