

GARDENING | IRRIGATION  
POND | FOUNTAIN



# ECO+ PLUS™

## ELITE SERIES

### COMMERCIAL GRADE

# UTILITY SUBMERSIBLE PUMP

## INSTRUCTIONS FOR INSTALLATION AND MAINTENANCE

727192 | 1530 GPH



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**WARNING: *Read entire instruction manual carefully before using.***



**REMOVE THE POWER PLUG FROM THE ELECTRICAL SOCKET BEFORE HANDLING THE PUMP TO AVOID ELECTRIC SHOCK.**



The pump must always be activated when it is immersed in water. If all of the water is evacuated, the pump must be deactivated immediately by removing the plug from the electrical socket. **ABSOLUTELY AVOID DRY OPERATION.**



Do not use in swimming pools, ponds or basins where people are present.  
Do not use for pumping hydrocarbons (petrol, diesel fuel, combustible oils, solvents).  
Do not pump continuously for long periods of time unless in the case of emergency.



Always clean the pumps before storage. See the chapter "Maintenance and Cleaning".

1. **PUMPABLE LIQUIDS** - Max. particle size Ø.20 inch.  
The pump is watertight and must be immersed in liquid.

|                                                         |   |
|---------------------------------------------------------|---|
| Fresh water                                             | ● |
| Rainwater                                               | ● |
| Clear waste water                                       | ● |
| Dirty water                                             | ○ |
| Waste water containing solid particles with long fibers | ○ |
| Fountain water                                          | ● |
| River or lake water                                     | ● |

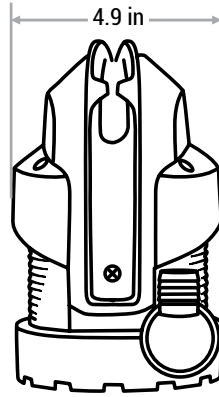
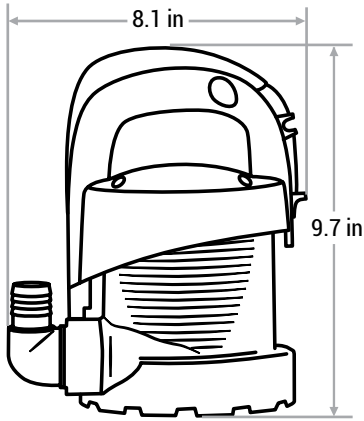
● Suitable  
○ Not suitable

2. **TECHNICAL SPECIFICATIONS**

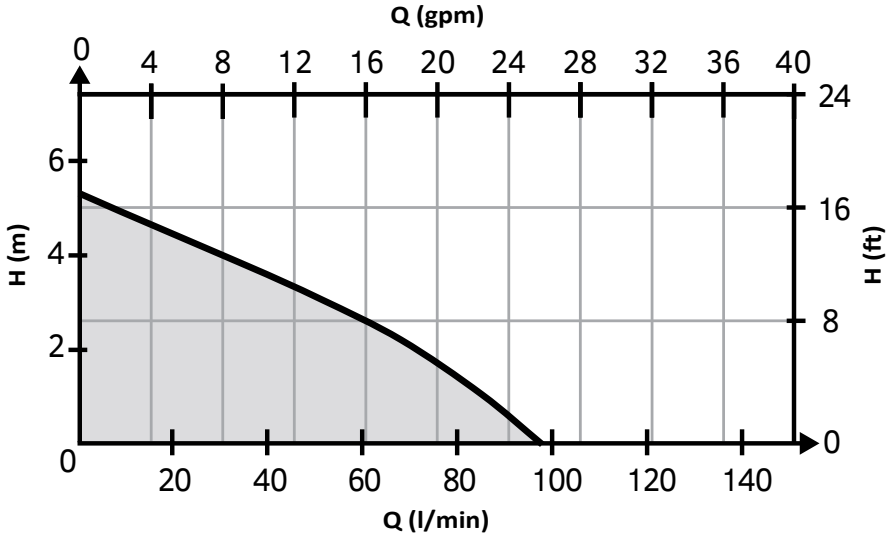
- Supply voltage: 115 – 120V, see electrical data plate
- Delayed line fuses (115 – 120V version): indicative values (Ampere)
- Storage temperature: 14° F – 104° F

| <b>TECHNICAL SPECIFICATIONS</b>                 |                                                                                                     |
|-------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Electrical data</b>                          | <b>Power</b> 240 Watt                                                                               |
|                                                 | <b>Voltage</b> 115 V-120 V AC                                                                       |
|                                                 | <b>Frequency</b> 60Hz                                                                               |
|                                                 | <b>Amps</b> 2                                                                                       |
| <b>Hydraulic data</b>                           | <b>Flow rate max.</b> 25.5 gpm   5800 l/h                                                           |
|                                                 | <b>Max. pressure</b> 8.1 psi   0.6 Bar                                                              |
|                                                 | <b>Max. head</b> 18 ft   5.5 m                                                                      |
|                                                 | <b>Max. working pressure</b> 87 psi   6 Bar                                                         |
|                                                 | <b>Low suction capability (MAN)</b> 0.08-0.12 in   2-3 mm                                           |
|                                                 | <b>Dimension of particles</b> 0.2 in   5 mm                                                         |
| <b>Dimensions/weight Range of use/materials</b> | <b>Pump dimensions</b> 8.1 in x 5.9 in x 9.7 in<br><i>See illustration</i> 205 mm x 150 mm x 245 mm |
|                                                 | <b>Length of power cable</b> 32.8 ft   10 m                                                         |
|                                                 | <b>Net weight</b> 8.25 lbs   3.75 kg                                                                |
|                                                 | <b>Liquid range temperature</b> 32°-95° F   0°-35° C                                                |
|                                                 | <b>Max. ambient temperature</b> 104° F   40° C                                                      |
|                                                 | <b>DNA / DNM NPT</b> 1¼ in M / 1¼ in F                                                              |
|                                                 | <b>Impellers</b> 1                                                                                  |

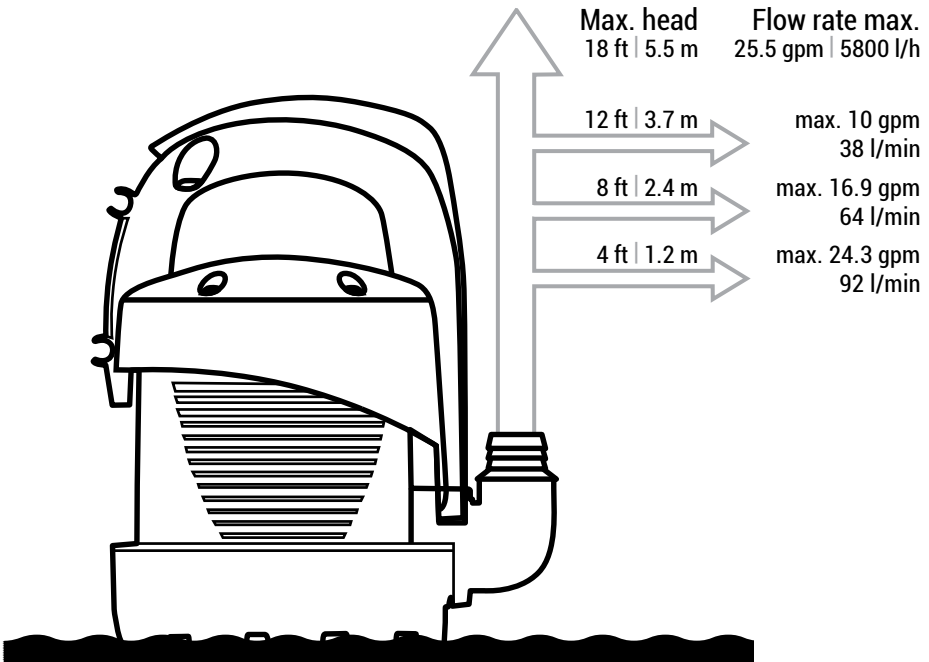
## FITTINGS AND DIMENSIONS



# PERFORMANCE CURVE



Very low suction capability down to 1/16 in (45 mm).  
Includes 32 ft power cord for deep installation.



 **THE PUMP MUST BE SUPPORTED BY A BASE. NEVER SUSPEND THE PUMP FROM PIPES.**

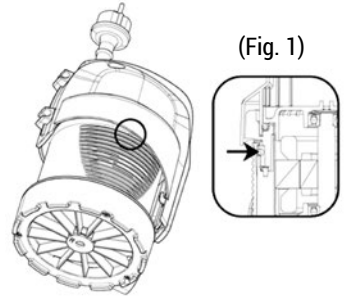
### 3. MANAGEMENT

- 3.1 Storage:** Pump must be stored in a dry, dust free covered area that is free from vibrations. Keep the pump in its original packaging until time of installation.
- 3.2 Transport:** Avoid subjecting the pump to needless impacts and collisions.

### 4. WARNINGS

**Do not carry pump by the power cable. Always carry the pump using the handle.**

- Never allow the pump to run dry.
- There is a venting hole to prevent pump from cavitation when starting the pump. It is normal for a small amount of water to come out of the pump during operation. (Fig.1).
- The sealing device contains a non-toxic lubricant which may alter the characteristics of pure water in the unlikely event of leaks.



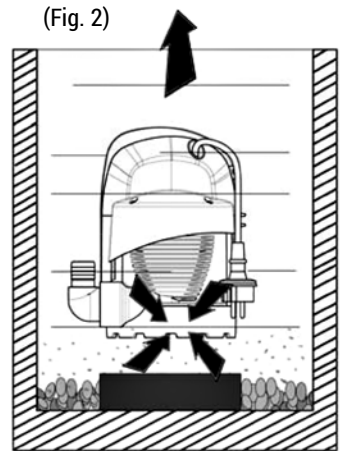
(Fig. 1)

### 5. INSTALLATION

**The electrical system must be compliant with local codes.**

Screw on the elbow with hometail fitting provided in the packaging. For the clear water version there are two fittings, one 25 mm (0.98") and one 30 mm (1.18"); if you want to use a pipe with a larger diameter, change the elbow coupling. Use a pipe tightening clamp to secure the pipe to the fitting.


- If the bottom of the trap where the pump is to be placed is particularly dirty, a raised support should be provided so as to avoid blocking of the suction grid (Fig.2)
- Totally immerse the pump in the water.
- Ensure that the minimum dimensions of the trap in which it is housed are as follows:  
**Min. base dimensions 18.11"x18.11" (460x460 mm)**  
**Min. height 15.75" (400 mm)**
- The dimensions of the trap must always be in relation to the quantity of water arriving and to the flow of the pump, so as not to subject the motor to excessive starts/hour. It is strongly recommended not to exceed 20 starts/hour.



(Fig. 2)

 **ALWAYS INSTALL THE PUMP IN VERTICAL POSITION.**

## 6. ELECTRICAL CONNECTION

 The length of the power cable limits the maximum depth of pump immersion. Follow the indications on the technical data plate and technical specifications on page 3.

## 7. START-UP

### Automatic operation (A):

- 1) Insert the plug of the power cable in a 115 – 120V power socket.
- 2) The pump will start up; ensure that it is immerse in the liquid to be pumped.

**Attention:** The pump will not automatically switch off once it reaches the minimum level. It must be switched off manually by the user, either by taking the power out of the socket. The maximum suction level is reached only during manual operation.

## 8. PRECAUTIONS

**RISK OF FREEZING:** when the pump remains inactive at a temperature lower than 32° F, it is necessary to ensure that there is no water residue which could freeze causing cracks in the plastic parts. If the pump has been used with substances that tend to form deposits, or with water containing chlorine, rinse after use with a powerful water jet in order to avoid the formation of deposits or coatings which would reduce the performance of the pump.

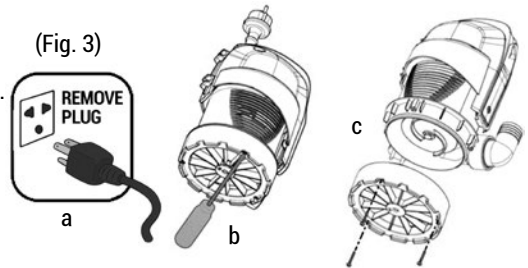
## 9. MAINTENANCE AND CLEANING

In normal operation the pump does not require any type of maintenance. In any case, all repair and maintenance work must be carried out only after having disconnected the pump from the power supply. When restarting the pump, ensure that the suction filter is always fitted so as not to create the risk or possibility of accidental contact with moving parts.

### 9.1 Cleaning the suction grid

(Fig. 3)

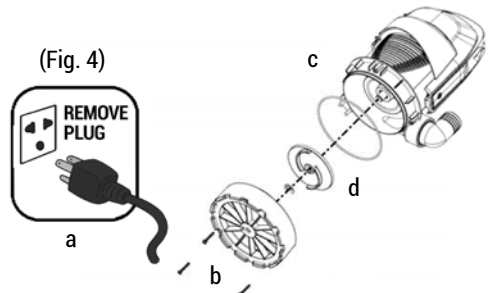
- Switch off electric power to the pump (a).
- Drain the pump.
- Unscrew the screws on the filter (b).
- Remove the suction grid (c).
- Clean and reassemble the suction grid.



### 9.2 Cleaning the impeller

(Fig. 4)

- Switch off electric power to the pump (a).
- Drain the pump.
- Unscrew the screws on the filter (b).
- Remove the suction grid (c).
- Wash the pump with clean water to remove possible impurities between the motor and the pump jacket (d).
- Clean the impeller (d).
- Check that the impeller can turn freely.
- Reassemble parts in inverse order of disassembly.



## 10. TROUBLESHOOTING



### DISCONNECT THE PUMP FROM THE POWER SUPPLY BEFORE TROUBLESHOOTING.

If there is any damage to the power cable or pump, necessary repairs or replacements must be performed by the manufacturer, authorized dealer, or by an equally-qualified party in order to prevent any risks.

| ISSUE                                          | POSSIBLE CAUSES                                                                                                                                                                                                                                                                                  | REMEDIES                                                                                                                                                                                                                                                                                                                       |
|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The motor does not start or make any noise.    | <ul style="list-style-type: none"> <li>A. Check if voltage is reaching motor.</li> <li>B. Check the protection fuses.</li> <li>C. Switch is not activated by the float.</li> </ul>                                                                                                               | <ul style="list-style-type: none"> <li>A. Check if plug is inserted correctly.</li> <li>B. If burnt out, change them.</li> <li>C. Increase the depth of the trap.</li> </ul>                                                                                                                                                   |
| The pump does not deliver flow.                | <ul style="list-style-type: none"> <li>A. Suction grid or hose are blocked.</li> <li>B. The impeller is worn or blocked.</li> <li>C. The head required is higher than the pump's performance.</li> <li>D. Presence of air.</li> <li>E. Water level is lower than the suction minimum.</li> </ul> | <ul style="list-style-type: none"> <li>A. Remove the obstructions or straighten the hose if it is twisted.</li> <li>B. Replace the impeller or remove the obstruction.</li> <li>C. Replace pump with a pump with a higher head.</li> <li>D. Wait at least 1 minute until it is eliminated.</li> </ul>                          |
| The flow rate is insufficient.                 | <ul style="list-style-type: none"> <li>A. Check suction grid for blockage.</li> <li>B. Check the impeller and the delivery pipe for blockage or encrusted.</li> <li>C. Ensure the check valve is not partially blocked.</li> </ul>                                                               | <ul style="list-style-type: none"> <li>A. Remove any obstructions.</li> <li>B. Accurately clean the check valve.</li> </ul>                                                                                                                                                                                                    |
| The pump stops after running for a short time. | <ul style="list-style-type: none"> <li>A. The thermal overload protection device stops the pump.</li> </ul>                                                                                                                                                                                      | <ul style="list-style-type: none"> <li>A. Check that the fluid being pumped is not too dense.</li> <li>B. Check that the water temperature is not too high.</li> <li>C. Make sure there is no solid particles blocking the impeller.</li> <li>D. Make sure power supply complies with the technical specifications.</li> </ul> |



## LIMITED WARRANTY

When purchased from an authorized Hawthorne dealer, this product is covered by a **LIMITED WARRANTY available at [hawthornegc.com/warranties](http://hawthornegc.com/warranties)**. You can also obtain the Terms of Sale and Limited Warranty by calling Hawthorne toll free at 1-888-478-6544 or writing Hawthorne at: Hawthorne Hydroponics LLC, 3204 NW 38th Circle, Vancouver, WA 98660, Attn: Customer Service.

### PRODUCT WARRANTY SCHEDULE

| PRODUCT           | WARRANTY PERIOD         |
|-------------------|-------------------------|
| 727192 - 1530 GPH | 2 year limited warranty |

# PLANNING GRID

