

**77014 / 65041**

**Submersible Water Pumps  
Automatic  
Users Manual**

Carefully read this entire Instruction Manual before using this product

front cover



Please read these operating instructions carefully and ensure they are strictly followed. Please retain these instructions for future reference.

### 77014 Plastic Clean Water - Automatic

#### PRODUCT DESCRIPTION

1. Electrical cable
2. Handle
3. Bracket for float switch
4. Universal connecting piece
5. Float switch
6. Intake port

#### TECHNICAL INFORMATION

|                             |                      |
|-----------------------------|----------------------|
| Nominal power:              | 400 W                |
| Rated voltage /frequency:   | 240V - 50Hz          |
| Max. pumping height:        | 8 m                  |
| Max. flow rate:             | 9,000 l/h            |
| Max. particle size:         | 5 mm                 |
| Max. immersion depth:       | 5 m                  |
| Max. pumping pressure:      | 0.8 bar              |
| Cable 10 m H05RN-F 3 Gx:    | 0.75 mm <sup>2</sup> |
| Dia pump connecting pieces: | 1" & 1 1/4"          |

### 65041 Plastic Dirty Water - Automatic

#### PRODUCT DESCRIPTION

1. Electrical cable
2. Handle
3. Bracket for float switch
4. Universal connecting piece
5. Float switch
6. Intake port

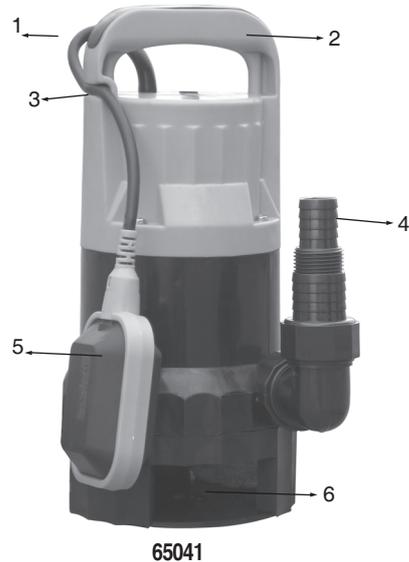
#### TECHNICAL INFORMATION

|                             |                      |
|-----------------------------|----------------------|
| Nominal power:              | 400 W                |
| Rated voltage /frequency:   | 240V - 50Hz          |
| Max. pumping height:        | 6 m                  |
| Max. flow rate:             | 9,000 l/h            |
| Max. particle size:         | 30 mm                |
| Max. immersion depth:       | 5 m                  |
| Max. pumping pressure:      | 0.6 bar              |
| Cable 10 m H05RN-F 3 Gx:    | 0.75 mm <sup>2</sup> |
| Dia pump connecting pieces: | 1" & 1 1/4"          |

Plastic Clean Water - Automatic



Plastic Dirty Water - Automatic



## **SAFETY INSTRUCTIONS**

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Please note: Before assembling and putting the pump into operation, in all cases read through the operating manual. For safety reasons, those persons who have not read through the operating manual may not use the pump. The pump is intended for use ONLY by adults who have fully read and understand these instructions. Whenever Water and Electric are in the same place there are risks of electrocution and serious injury or death. Always disconnect the pump RCCB from the mains before placing your hand in the water to service maintain or clean the pump. The pump is ONLY intended for use with water or water based (aqueous solutions ) which have a content of at least 90% water. DO NOT use this pump for flammable, toxic , corrosive or irritant fluids.

- a) The user is responsible towards third parties with regard to the use of the pump (water installations, etc.)
- b) Only operate on connections with residual current circuit breakers! Your pump is fitted with an RCCB as standard. If removed for pump installation, it must be replaced before the pump is switched on.
- c) Before putting into operation, a qualified electrician must check that the required electrical safety measures are place.
- d) The electrical connection is to be made via an electrical socket.
- e) Check the voltage. The specified technical information on the label must correspond to the voltage of the electrical equipment.
- f) During the operation of the pump, persons may not remain in the pumped medium.
- g) The temperature of the fluid to be pumped may not exceed 35°. In the event that extension cables are used, they must be exclusively made out of rubber, type H07 RN-F, and in compliance with norm DIN 57282 or DIN 57245. Never handle, lift or carry the pump connected to electrical power by the cord. Make sure that the connection power outlet is kept away from water and moisture and that the power plug is protected from moisture.
- h) Before putting the pump into operation, check that the electrical cord and electrical residual current circuit breaker are not damaged.
- i) Always pull out the residual current circuit breaker from the electrical socket before performing work on the pump.
- j) In the event that the pump is to be installed in a storm drain, one must subsequently close the storm drain with a cover in order to safeguard the safety of pedestrians.
- k) Reinforce the mounting of the discharge pipe with the use of a pipe clip. Adhere to the maximum immersion depth (See: Technical Information). The owner (user)of the pump has the duty to take precautionary measures (installation of an alarm device, back-up pump, etc.)for the avoidance and prevention of potential damages (such as flooded rooms, etc.) due to faulty pump operation (because of breakdowns or defects).On sandy or silty ground it is necessary to let the pump run hanging by a rope or chain or to situate the pump on a suitable base in order to prevent the sinking of the intake section.
- l) In the event that the pump is damaged, the repair should only be made by an authorised service agent. Only original replacement parts must be used.
- m) The failure to correctly use, clean and maintain the pump or to modify the pump or its accessories in any way other than that described in these instructions will prevent use for accepting any responsibility for damages , loss or injury. The following illustrate some of the cases where claims be refused :-
  - Inappropriate repairs not made by an authorised agents service agent
  - Use of other than original replacement parts.
- n) The connecting cable of this device may not be replaced. In the event of damage to the cable, the device should be scrapped.
- o) Note this product has internal lubricant which may escape contaminating the water , consequently the pump is not suitable for ponds with fish or other aquatic organisms In addition the pump can only be used to with water that is NOT for drinking at a later date
- p) The pump must always be powered via a residual-current-operated protective device (RCCB) with a rated current of not more than 30 mA.

The same rules apply for the accessories.

## **ELECTRICAL SAFETY**

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Connection to the electrical socket. The pumps may only be connected to electrical sockets, which are equipped with a residual current circuit breakers and earthing in working order for safety, your pump is fitted with an RCCB. The pump is put into operation by inserting the power plug into an appropriate electrical socket.

### Safety point for your RCCB

Please test the instrument before you use it  
Notice:

1. Insert the plug into the socket
  2. Press the "RESET" button. The working indication on light will become red.
  3. Press the "T" button. The working indication light should go out.
  4. Press the "RESET" button to start.
- Please do not use this instrument when there is a fault in the above-mentioned process test.  
Test before use it.



### PUTTING THE PUMP INTO OPERATION

Attach the hose (Fig. C and D). Screw the provided accessories onto the pump as illustrated in Fig. A. 32 mm, 25 mm, 19mm and 13mm hoses can be attached to the universal connecting piece (4). The 19mm and 13mm hoses are attached with the use of special connecting pieces (Fig. C). It is recommended to secure the 32 mm and 25 mm hoses with hose clamps.

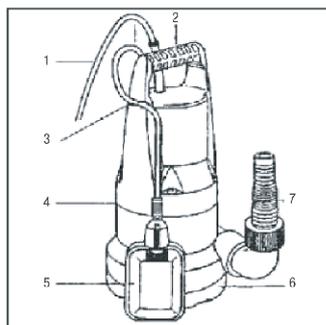


Fig. A

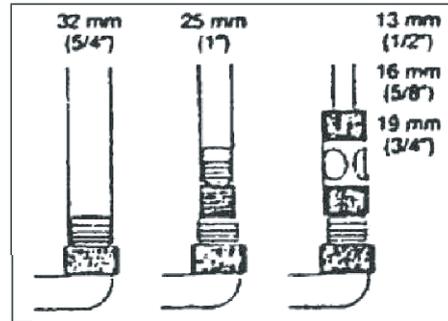


Fig. C

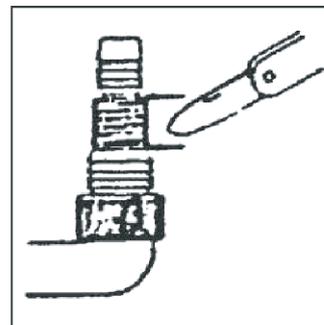


Fig. D

Components of the universal connecting piece, which you need (for example, with 32 mm hoses), can be removed with a knife from the universal connecting piece (Fig. D). You will achieve optimal results with a 32 mm hose. Please note: A spiral hose significantly impairs the pumping height and flow rate. Use only flat hoses!

The on and off switching levels can vary. The specified values are average values and do not apply if the float switch is not affixed to the bracket for the float switch (3) .

## UTILISATION / RANGE OF APPLICATIONS

Electric submersible pumps are used in the following areas:

Draining of cisterns, rainwater reservoirs, wells, ponds, swimming pools and storm drains.  
Draining of flooded cellars, boats and yachts.  
For aeration and water circulation.

### **Please Note:**

#### **Special Instructions:**

Avoid the intake of larger stones!  
maximum percentage of 5% solid materials for dirty water pump.

Basically, all other fluids are not permitted. Not suitable for biological wastewater treatment plants and cesspools.

No flammable fluids, gaseous or explosive substances may be pumped using these pumps.  
The maximum temperature of pumped fluids may not exceed 35°C in continuous operation.

The pump is supplied complete with a H05 RN-F electrical cable with a RCCB and 1 1/4 fitting for 32mm hose. Attach the necessary discharge pipe and reinforce the seal with a pipe clip. Water flow, among other things, also depends on the diameter of the discharge pipe. A large diameter means a greater flow rate, while a smaller diameter has a lower flow rate as a consequence. Immerse the pump in the fluid to be pumped out (Check the maximum discharge head.)

### **Please Note! Prevent the Pump from Dry Running.**

The pump is put into operation when the RCCB is plugged in and switched on. Note if using any external 3 pin plug socket ensure that when the RCCB is fitted the socket is still weather proof. In the event that the pump is lifted or handled, this must be done by the attached handle, not by the connecting cable. In the event that the pump is submerged, if necessary, a rope or something similar, which is tied to the handle, must be used.

On silty, sandy or pebbly ground, the pump run must be hung by a rope or chain or situated on a suitably wide base plate in order to allow it to work submerged. Sand and other abrasive substances reduce the service life of the components as well as the pump gaskets and should therefore be avoided. In freezing temperatures, the pumped liquid should be removed from the pump.

Exposure of the pump to the risk of freezing must be avoided in all cases. The pump must be drained and be taken to a place protected against freezing temperatures. In order to make the draining of the pump easier, it is recommended to let the air escape by submerging the pump with the outlet connections directed upwards.

**Note: Please put the pump into the water at an angle so that the air at the bottom of the pump can escape.**

### **Setting of the On / Off Switching Points:**

The on or off switching point of the float switch can be set by means of a change of the float switch in the float switch fixing / pivot point. Please, check the following before putting it into operation:

The float switch must be attached in such a way that the ON and OFF switching point levels can be reached with little expenditure of energy. Check this by putting the pump in a tank filled with water and carefully lifting the float switch by hand and then letting it sink. In this way, you can see whether the pump switches itself on and off.

Make sure that the space between the float switch head and float switch fixing / pivot point is not too small. In the event of too small a space, faultless functioning is not ensured.

When setting the float switch, make sure that the float switch does not touch the bottom before the pump is switched off. Please note! Risk of dry running.

### Overloading Protection / Thermal Motor Switch

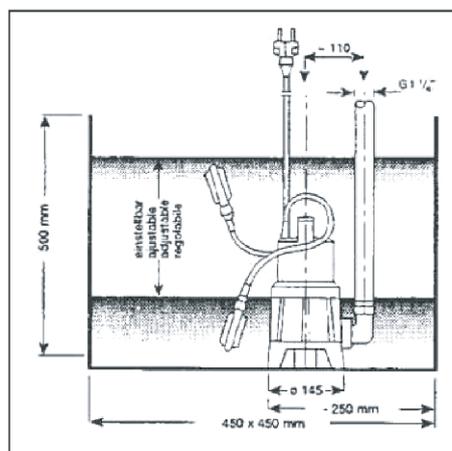
The submersible pump is equipped with a thermal motor switch. In the event that the motor becomes overheated, the motor switch automatically switches the pump off. The cooling period amounts to 25 minutes and subsequently, the pump switches on again automatically. In the event that the motor switch operates, it is absolutely essential to find and eliminate the cause (Also see; Troubleshooting Guide). The information given here may not be considered as instructions for "home-made" repairs because repairs require specific technical expertise. In the event of potential malfunctions, one must always contact customer service.

### Maintenance and Care

Before performing any maintenance work on the pump, one must always disconnect the electrical connection (pull the power plug out of the electrical outlet.) and make sure that the pump does not put itself into operation. With the exception of the following described cases, the pump must be sent to authorised agent when it requires repair. Sand and other abrasive substances cause premature wear and the reduction of pump performance. Work on the electrical components of the pump may be performed exclusively by authorised agent (this also applies to the electrical cable and float). The submersible pumps require practically no maintenance. The bearings are self-lubricating bearings. The occasional cleaning of the filter base is sufficient so that further maintenance work is not necessary. Only original replacement parts must be used.

### Example of a Pump Installation in a Storm Drain, See Fig. 2.

Observe the minimum installation dimensions as given in Fig.2.



### GUARANTEE

This product has been constructed to high quality standards and is guaranteed for against manufacturing faults for a period of 12 months from the data of purchase. Normal wear and tear, including accessory wear, is not covered under guarantee. This guarantee is invalid if the pump has been overloaded or subject to neglect, improper use or an attempted repair other than by an authorised agent. Heavy duty daily professional or hire sage are not guaranteed. Damage caused by failure to follow the maintenance schedule is not covered by this guarantee.

## TROUBLESHOOTING GUIDE

| <b>Problem:</b>   | <b>Possible Causes:</b>   | <b>Remedy:</b>  |
|---|---|---|
| The pump switches itself off because of overheating. (thermal motor switch) | The water level is too low.   | Submerge the pump more deeply.  |
|   | Clogged by drawn-in particles - Foreign matter jammed in the pump rotor.  | Check and clean the pump.   |
|   | The temperature of the pumped fluid is too high.<br>It may not exceed +35° C in continuous operation.   | Reduce the temperature of the fluid.<br>Wait for approx. 26 minutes for the motor to cool (motor switch). |
| The pump runs, but takes in nothing.  | The water level is below the minimum intake level.  | Switch the pump off.  |
|   | Air bubbles can accumulate with the immersion of the pump or its automatic operation because of an inappropriate positioning of the float switch. | Let the air out by tilting the pump and again submerging it in water.                                     |
|   | This occurs at the minimum water level when the pump does not stop, but instead takes in air.   | Remove impurities.  |
|   | Intake filter clogged.  | Clean the pipe.   |
|   | Discharge pipe clogged.   | Newly position and clean the pipe.  |
| Reduction in the quantity of water delivered.                               | The discharge pipe is bent, kinked or its diameter is reduced.  | Straighten the pipe.<br>Increase the diameter.  |
|   | The base / rotor is dirty.  | Clean.  |
|   | Partially clogged./   | Pull the power plug out of the socket.  |
| The pump does not start or Stops suddenly during operation.                 | The float is not functioning.   | Check the cord/plug/fuses.<br>Please note:Send the pump to customer service.                              |
|   | The motor switch did not switch itself on.  | The temperature of the fluid is too high, a maximum of +35° C.  |
|   | The rotor is jammed.  | The intake section is clogged.<br>Clean.  |
|   | The overheating protection switches off the pump because it is overheated.  | Check the power source. Pull the power plug out of the electrical socket and clean the impeller.          |
|   | No electrical power.  | Make sure that the permitted highest temperature limit of +35° C is not exceeded.                         |
|   | Dirt particles (for example, pebbles) have settled in the intake port.  | Check the fuse and electrical connections. Clean the intake port. Check the power source.                 |

## **Declaration of Conformity**

We, Importer  
**SFD Ltd BA22 8RT**

Declare that the product  
**Automatic submersible Water Pumps**

Complies with the essential health and safety requirements of the following directives:  
**89/336/EEC** – EMC Directive.  
**73/23/EEC, 93/68/EEC** – Low Voltage Directive

Standards and technical specifications referred to:

**EN60335-1:2002+A1+A11+A12**

**EN60335-2-41:2003+A1**

**EN50366:2003**

**EN55014-1:2000+A1+A2**

**EN55014-2:1997+A1**

**EN61000-3-2:2000+A2**

**EN61000-3-3:1995+A1**

### **Authorised Signatory**

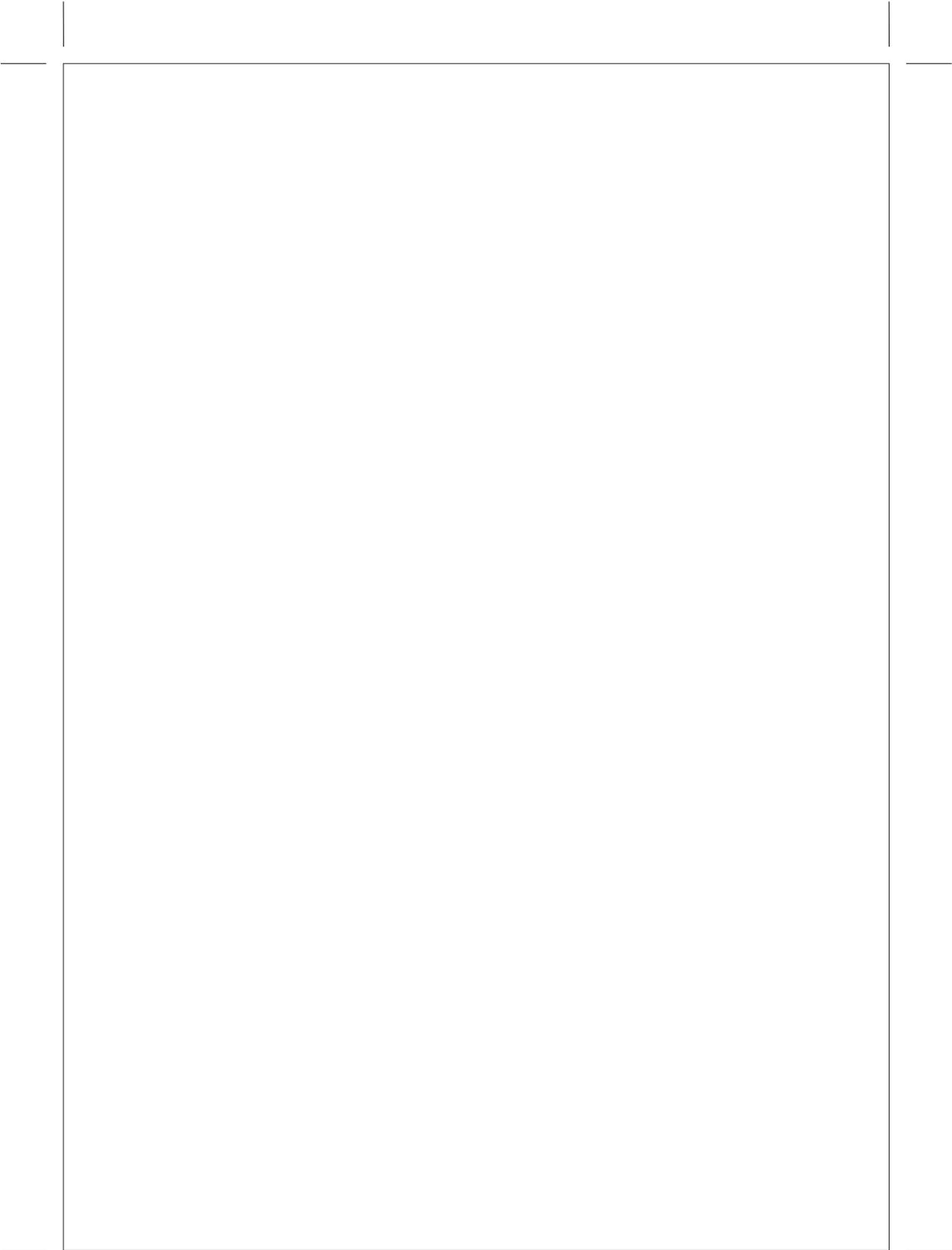
Date: 01/03/07

Signature: 

Name:  
SFD Ltd BA22 8RT  
Quality Manager



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