

Vortex Submersible Pump - 7575150-VF Operation Manual

Congratulations on your purchase of your Bromic Waterboy submersible Vortex sump pump.

This manual contains essential information on the installation, operation and maintenance of the pump. Please read it thoroughly and follow these instructions in order to install and use the pump correctly. Failure to follow these instructions may result in motor overcharging and other malfunctions. Bromic is not liable should instructions not have been followed.

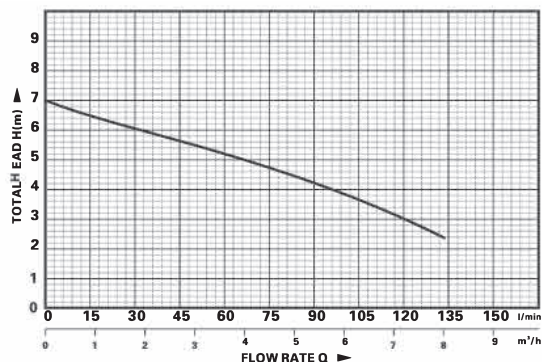
Specification

- Maximum operating depth 5m below water level;
- Continuous duty when fluid temperature under +40°C;
- Value of PH in fluid 4-10;
- Maximum kinematic viscosity: $7 \times 10^{-7} - 23 \times 10^{-6} \text{ m}^2/\text{s}$;
- Maximum density: $1.2 \times 10^3 \text{ kg/m}^3$

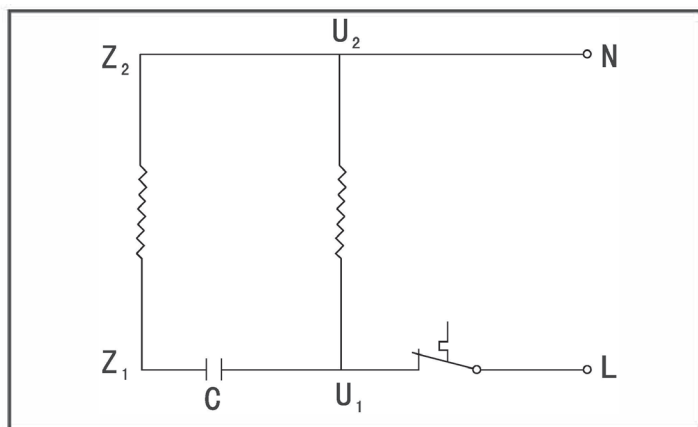
Technical data (the data will be some change under different voltage and frequency)

Model	Power Input (kw)	Discharge (mm)	Voltage / Frequency (V/hz)	Max Flow (L/min)	Max Head (m)	Max. Suspended Solid (mm)	Weight (kg)	Packing (cm) H x W x D
7575150-VF	0.34	40,32,25	220-240/50	133	7	Φ 15	9	23.5x21.5x38.5

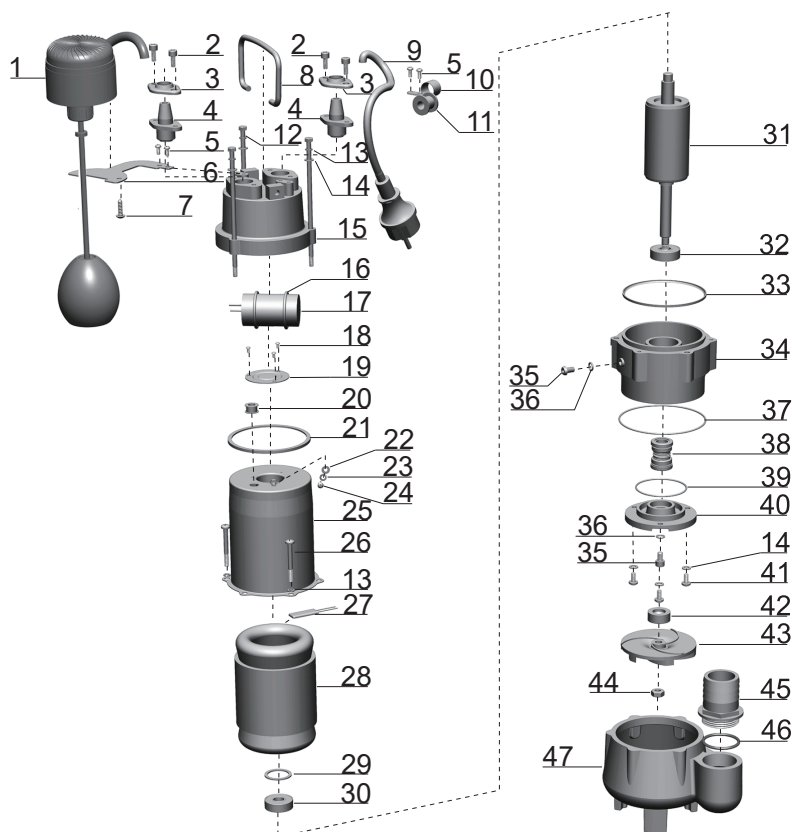
Performance Curve



Circuit Diagram



Part View



No.	Description	No.	Description
1	Vertical float switch	25	Motor housing
2	Hex cap screw	26	Phillips screw
3	Cable flange	27	Motor protector
4	Cable protector	28	Stator
5	Phillips Screw	29	Wave washer
6	Vertical float bracket	30	Lower bearing
7	Self-tapping screw	31	Rotor
8	Handle	32	Lower bearing
9	Power cord	33	Seal washer
10	Cable clamp	34	Oil chamber
11	Cable gland	35	Button head screw
12	Hex head bolt	36	Seal washer
13	Spring washer	37	O ring
14	Washer	38	Mechanical seal
15	Capacitor cover	39	O ring
16	O ring	40	Oil chamber cover
17	Capacitor	41	Phillips screw
18	Phillips screw	42	Oil seal
19	Pressure plate	43	Impeller
20	Wire protector	44	Hexagonal nut
21	Seal washer	45	Outlet connector
22	Washer	46	O ring
23	Serrated lock washer	47	Pump casing
24	Phillips screw		

Installation Guidelines

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

1. Before installation, carefully check whether there is physical damage on any part of the pump including electrical cable and plug. Contact the seller if damage is found.
2. Ensure the pump is disconnected from the power source before installing.
3. Ensure the site's power supply meets requirement as stated on the rating label. Pump must be earthed.
4. Ensure fittings and joints are watertight.
5. Adjust the vertical float switch to a desired triggering height (starting position of the pump).
6. Tie a rope on the handle to move the pump up and down. Never drag the electrical cable as it may cause electrical hazard.
7. The power supply connected to the pump must be protected by RCD or other protective device according to Australian standard and regulations.
8. Do not touch or move the pump before disconnecting it from the power supply.
9. Ensure all electrical connection is away from water or area subject to flooding.
10. If the pump is idle for a long period of time, it must be removed, cleaned and stored in a dry&cool place.
11. The pump must be installed by qualified technician.











Notes:

- The maximum total head of the pump is 7m
- Pollution of the liquid could occur due to leakage of lubricants
- A protective device (RCD) must be installed with pump (residual operating current <30mA)

Troubleshooting

Fault	Possible Cause	Solutions
The motor does not start	No or incorrect power supply	Ensure power supply is as per rating label
The motor does not start	Fuse or thermal relay disconnected	Consult service provider
Flow is insufficient	Water inlet blocked	Remove blockage
Flow is insufficient	Total manometric head higher than expected	Verify geometric head and reposition
Flow is insufficient	Discharge pipe not joined properly	Check the joint, ensure there is no leak
Flow is insufficient	Source water level is low	Reposition pump or stop pumping
Flow is insufficient	Impeller is worn out or blocked	Try to remove the blockage or contact dealer
Others		Consult service provider

Warnings

-  Danger: Keep the pump equipment away from children.
-  Danger: Do not operate the pump in locations classified as hazardous.
-  Warning: The pump is designed to handle soft particles no larger than 15mm in diameter. Larger particles may cause permanent damage.
-  Warning: The pump is designed for water only, used on chemicals or corrosive liquid will damage the pump and void warranty.
-  Warning: Do not use the pump for liquid exceeding 40°C.
-  Warning: Never run the pump dry, dry operation will permanently damage the pump and void the warranty
-  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
-  The pump must not be used when people are in the water
-  The pump must be supplied through a residual current device (RCD) having a rated residual operating current not exceeding 30mA
-  Disconnect the pump from the supply mains before carrying out user maintenance such as cleaning the filter

Warranty

Please visit our webpage for warranty details-
(<https://bromicgroup.com/warranty-information/>)
Read all relevant documentation before operating the pump.
Failure to follow instructions may result in warranty being voided

WATERBOY™