

VIVOSUN

POND WATER PUMP

VERSATILE AND POWERFUL

OPERATIONAL INSTRUCTIONS



SP608



SPB613



SP620
SP633

Product Description

This high-efficiency pump is equipped with a single-phase alternating-current motor (a split-tube motor with capacitor). It is totally waterproof (IP68), embedded in solid plastic resin and provides overload protection.

For full technical data, please refer to the type plates below.

Area of Application

Garden ponds, fish ponds, outdoor and patio fountains, and many more areas! These pumps are designed for the transport of water through fountain jets, filter systems, brooks, waterfalls, etc., as well as for the aeration and circulation of water.

SP608

Watts: 110 Amps: 0.85 Voltage: 120V 60Hz
Hose Power: 0.156HP Inlet/ Outlet: 1" Flexible Tube: 1" or 1 1/4"

Flow Rate (gph)	1982	1850	1700	1560	1370	1160	925	660	345	0
Head (ft)	0	1.64	3.28	4.92	6.56	8.20	9.84	11.48	13.12	14.75

SPB613

Watts: 130 Amps: 1.2 Voltage: 120V 60Hz Hose Power: 0.18HP
Inlet/ Outlet: 1 1/2" Flexible Tube: 1" or 1 1/4" or 1 1/2" or 2"

Flow Rate (gph)	3567	3380	3180	2960	2710	2380	1980	1450	830	0
Head (ft)	0	1.64	3.28	4.92	6.56	8.20	9.84	11.48	13.12	14.75

SP620

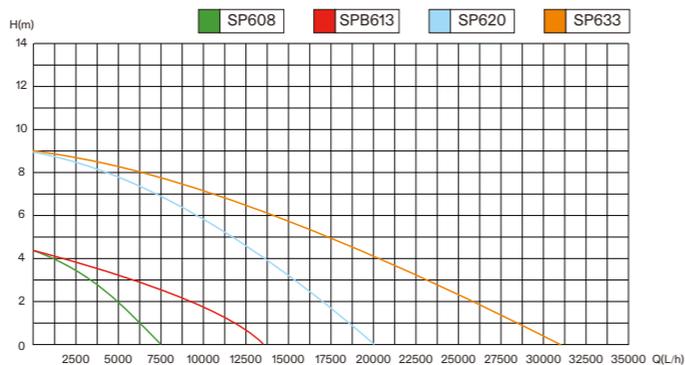
Watts: 400 Amps: 3.5 Voltage: 120V 60Hz Hose Power: 0.55HP
Inlet/ Outlet: 1 1/2" Flexible Tube: 1" or 1 1/4" or 1 1/2" or 2"

Flow Rate (gph)	5284	4950	4600	4120	3600	2970	2310	1550	800	0
Head (ft)	0	3.28	6.56	9.84	13.12	16.40	19.68	22.96	26.24	29.50

SP633

Watts: 500 Amps: 4.5 Voltage: 120V 60Hz
Hose Power: 0.68HP Inlet/ Outlet: 2" Flexible Tube: 2" or 2 1/2"

Flow Rate (gph)	8190	7720	7180	6580	5800	5090	4030	2860	1550	0
Head (ft)	0	3.28	6.56	9.84	13.12	16.40	19.68	22.96	26.24	29.50



Safety Measures

Before use, check whether the mains connection and plug are intact. The mains voltage and current type must match the data on the type plate.

The pump has to be connected to a regular safety plug socket through a residual current device (RCD, 30mA).

The connection box should be located in an area away from water. It should be at least 2m away from the edge of the pond (see Fig.1).

- Keep the plug dry!
- Pull out the mains plug before commencing any work on the pump, fountain, or pond. DO NOT run the pump when people are in the water!
- Disconnect the pump first!

-Important: If the mains connection or the motor housing are damaged, the pump cannot be used anymore. It cannot be repaired by any unlicensed operators.

-Never pick up or transport the pump by holding the cable!

Start-Up (See Fig. 1+2)

Important: Do not let the pump run dry. This could damage the appliance.

-Immerse the pump completely in your pond.

This causes the pump body to fill with water.

-A water level of approx. 30cm is required for submersible use in order to prevent the pump from taking in air.

-The water temperature shouldn't exceed 40°C.

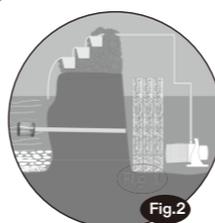
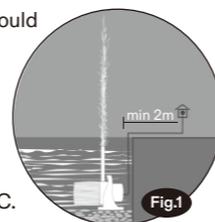
-The pump is switched on by plugging it into the socket.

-To prevent the pump becoming unnecessarily dirty, place it above the mud in your pond, in a stable, horizontal position (like on a brick)!

-A range of accessories may be fitted onto the pump's threaded connections.

-The filter caps deliver sufficient suction protection in clear water.

-In order to prevent blocking the fountain nozzles, it may be necessary to use the filter sponge and filter basket.



Non-Submersible Use (See Fig.3)

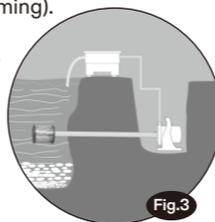
The pump can be used for non-submersible applications.

-Position the pump below the water level at the pond's side so that the water can be fed to the pump (not self-priming).

-Remove the filter cover.

-Connect the suction hose and pressure hose to the pump.

The connection should be waterproof. Fill the suction hose and pump with water before switching-on.



Overheating

The pump's thermal overload trip prevents it from overheating. If the pump overheats, it must be allowed to cool down.

When cool, the pump will automatically start working again.

Check the following operating conditions:

- Is the water supply sufficient?
- Is the filter clogged?
- Is there dirt in the pump housing?
- (If so, follow the cleaning instructions below)
- Are the hoses or jets clogged?
- Has the pump cooled down sufficiently?

As soon as the problem is solved, you can start the pump again.

Disassembly / Assembly (See Fig.4)

1. Follow all safety measures. Disconnect the pump!
2. Loosen the 4 screws ①.
3. Remove the pump housing ⑤ from the motor housing ②.
4. Remove the rotor assembly ③ from the motor housing (see Fig. 5)
5. Clean the shaft hole with a long pin (see Fig. 6)
6. Clean all parts using clear water and a soft sponge.
7. Mounting:

-Push the rotor assembly into the motor housing.

-Make sure the rotor assembly is free and turns easily.

-Check the position of the Sealing ring ④ in the pump housing.

-Plug the filter basket ⑥ ⑦ into the pump housing.

-Plug the filter basket ⑥ ⑦ into the pump housing.

Maintenance

In order to prolong your pump's service life and to keep it in good operating condition, regular maintenance and cleaning are recommended.

This can be done quickly and easily by anyone (see "Disassembly / Assembly").

When first using your pump, check performance everyday, and if necessary clean the filters.

-Since servicing intervals (complete cleanup) will vary depending on pond pollution, repeat periodic service on your pump in accordance with the requirements given.

Should you determine that they are damaged or parts are worn out, replace them.

Important: When used in calcareous water, the rotor assembly and the stainless steel split-tube in the motor housing should be cleaned at more frequent regular intervals.

To reduce the risk of electric shock, use only on portable self-contained fountains no larger than 5 feet in any dimension. Use in freshwater or seawater with a concentration of less than 3%.

Fittings

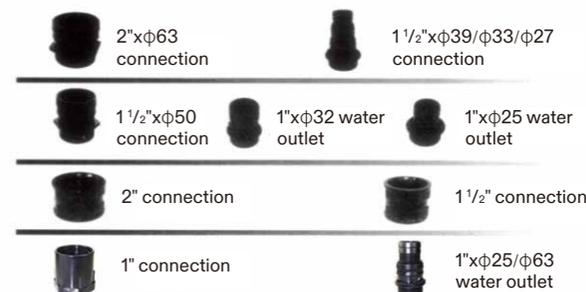
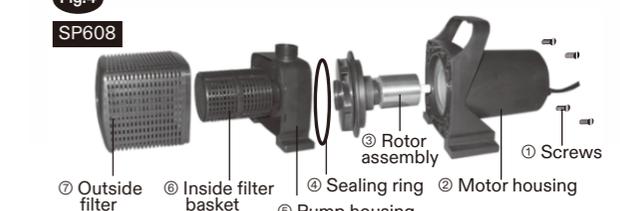
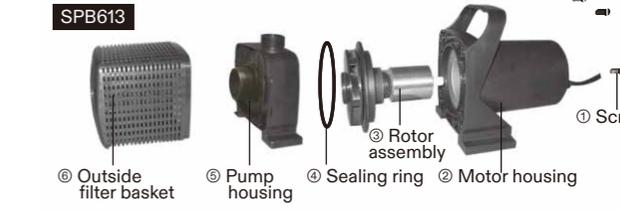


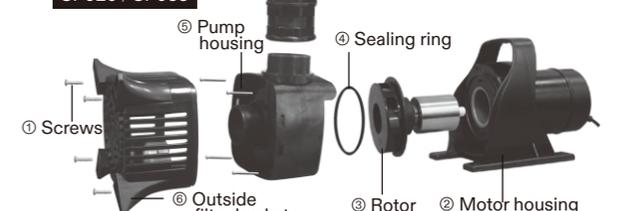
Fig.4



SP608



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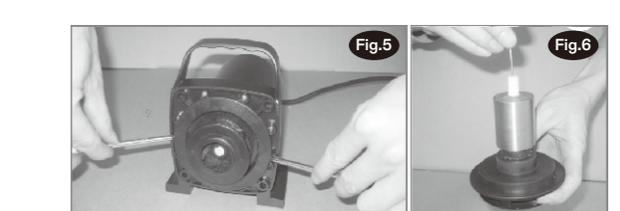


Fig.5 Fig.6

Designed by VIVOSUN in California.
Made in China