Operation Manual



Magnetically coupled centrifugal pump

Ocean Runner OR 1200 Ocean Runner OR 2500 Ocean Runner OR 3500 Ocean Runner OR 6500



Circulation pumps for fresh and salt water aquariums.

In purchasing this pump you have selected a top quality product. It has been specifically developed for aquarium use and extensively tested by experts.

1. Features

The **Ocean Runner** Series of magnetically coupled centrifugal pumps are very quiet in operation. They have fully encapsulated synchronous motors and can operate completely safely either submerged or out of the water. The polished ceramic shaft and bearing is practically wear resistant, ensuring a long operating life. An integrated thermal overheat protection device prevents damage to the windings should the impeller rotation be impeded. The pumps can be easily taken apart for cleaning.

All materials are salt water resistant.

CAUTION:

Do not operate the pump without water in the impeller chamber Do not allow the pump to remain in water which may freeze

IMPORTANT NOTE:

Operate the pump only at the voltage shown on the product label



2. Table 1: Technical Data

Model	Ocean Runner OR 1200	Ocean Runner OR 2500	Ocean Runner OR 3500	Ocean Runner OR 6500
Supply requirement	230V~/50Hz	230V~/50Hz	230V~/50Hz	230V~/50Hz
see label on the pump	110V~/60 Hz	110V~/60 Hz	110V~/60 Hz	110V~/60 Hz
	230V~/60 Hz	230V~/60 Hz	230V~/60 Hz	230V~/60 Hz
Power consumption	100V+ 50(60)Hz	100V+ 50(60)Hz	100V+ 50(60)Hz	100V+ 50(60)Hz
	25 watts	38 watts	65 watts	95 watts
				at 180 cm
Maximum flow	1200 l/h (20 l/m)	2500 l/h (40 l/m)	3500 l/h (58 l/m)	6500 l/h (108 l/m)
	c. 300 gph	c. 650 gph	c. 900 gph	c.1700 gph
Maximum head	1.6 m	2.6 m	3.2 m	3.8 m
	c. 5.3ft	c. 8.6 ft	c. 10.5 ft	c. 12.5 ft
Connection pressure	1⁄2"	3⁄4"	3⁄4"	1"
side			or glue joint DN25	
(male thread)	1/2"	3⁄4''	1"	11/4"
Connection suction side				
(male thread)				
Cable length	3m (c. 10 ft)			
Protection Rating	IP68	IP68	IP68	IP68
Max. depth	1 m (c. 3 ft)			
Max. water temperature	35°C	35°C	35°C	35°C

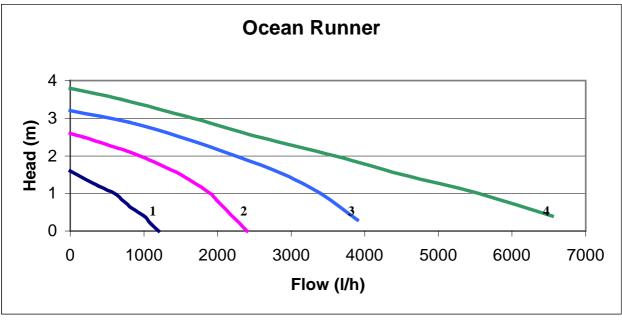


Fig 1. Operating capacity of the Ocean Runner pumps with open bore pipe

3. Connections

Suction side: The suction side may be connected with flexible hose, using the hose fitting (13) included. As another option, the male thread of the pump housing (7) can be connected to a standard PVC fitting and pipe. The relevant sizes are shown in Table 1.

Pressure side: The pressure side can be connected with a flexible hose, using the hose fitting (15/16) included. This hose fitting must also to be fitted if the pump is used as a pure current pump.

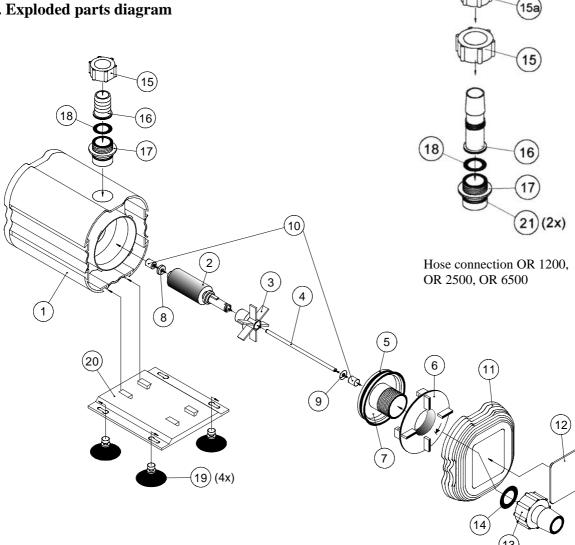
If the pump is operated as a stand alone device, the socket (17) should be glued into the pump housing using PVC glue (e.g. "Tangit") (OR 3500 only)

If the pump is used as return pump, it can be directly connected to PVC pipe. With the OR 3500 the socket is removed and the pipe glued directly into the pump using PVC glue.. If the pump is set up in this way, the pump head may not be less than 1 m. This method of plumbing gives the best results, see fig 1 (capacity). With all other pumps, a threaded connector has to be screwed on the pressure fitting of the pump. The relevant sizes are shown in Table 1.

If a hard pipe is used for connecting the pumps, we recommend the use of a short section of flexible hose to avoid vibration.

OR 1200 – 1 OR- 2500 - 2 OR 3500 – 3 OR -6500 - 4

4. Exploded parts diagram



Hose connection OR 3500

Fig 2: Parts List

- 1. motor housing
- 2. rotor / magnet
- 3. impeller
- ceramic shaft 4.
- 5. O ring
- 6. bayonet-lock
- lid of the pump housing 7.
- washer large 8.
- washer small 9.
- 10. rubber bearing

- 11. filter basket
- 12. lid of the filter basket
- 13. hose connection 1"
- 14. washer 1"
- 15. nut ³/₄"
- 16. hose connection $\frac{3}{4}$ "
- 17. adapter nipple $\frac{3}{4}$ / 25 mm for glueing
- 18. washer ³/₄"
- 19. rubber sucker (4 pcs)
- 20. holding plate

Hose connection for OR 1200, OR 2500 and OR 6500

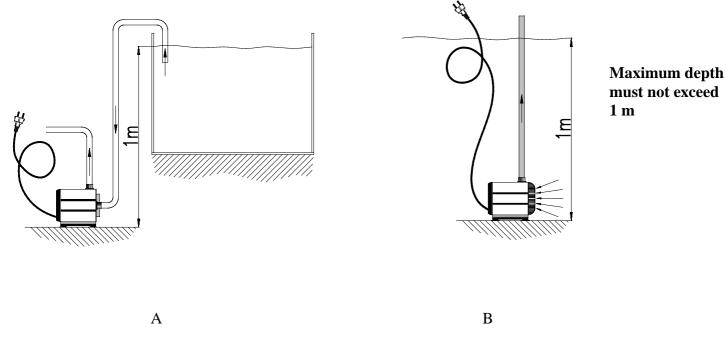
- 15. nut
- 15a. nut for hose connection
- 16. hose connection
- 17. screw-in adapter nipple
- 18. washer
- 21. O rings (2 pcs)

5. Mounting:

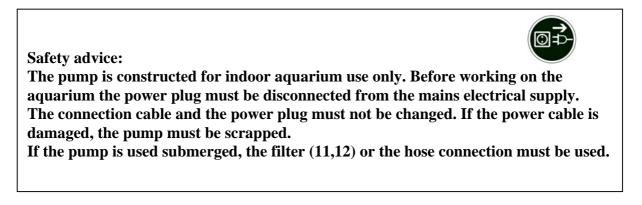
The pump may be installed submerged or out of the water. However it is not self priming and, if set up out of the water, has to be installed below the water surface level. If used submerged, we recommend removing the hose connection (13) on the suction side and fitting the filter basket (11). At no time should the pump be run dry.

The bottom plate (20) with the rubber suckers (19) can be fitted to the pump on 3 sides so the outlet positioned can be adjusted.

After setting up the pump ensure you can always reach the power plug.



Examples of (A) out of water and (B) submerged set up



6. Maintenance / Cleaning

CAUTION:

Disconnect the power before you start any work on the pump.

The pump is designed to have a low maintenance requirement and under normal conditions will be very reliable. However the filter housing and all rotating parts must be cleaned regularly (1 to 5).

Remove the pipe connections and undo the bayonet (6) on the pump housing. Now remove the suction connection (7). Caution: This part is a tight fit because it has an "O" ring seal and must be removed carefully so as not to break the ceramic shaft (4).

The complete magnet (2) and impeller (3) assembly can now be withdrawn, cleaned under running water and reassembled.

7. Failures

If the pump fails to operate check the power connection and fuse. If no fault is found, the pump may be blocked and must be cleaned – See Maintenance / Cleaning above

If the pump is noisy, the pump head (1 to 5) has to be cleaned.

If the magnet or the impeller is damaged, both can be changed. The impeller (3) can be removed from the magnet (2).

8. Warranty

Should any defect in materials or workmanship be found within twelve months of the date of purchase **CoAqua MEDIC** undertakes to repair, or at our option replace, the defective part free of charge – always provided the product has been installed correctly, is used for the purpose that was intended by us, is used in accordance with the operating instructions and is returned to us carriage paid.

Proof of Purchase is required by presentation of the original invoice or receipt indicating the dealer's name, the model number and date of purchase, or a Guarantee Card if appropriate. This warranty may not apply if any model or production number has been altered, deleted or removed, unauthorised persons or organisations have executed repairs, modifications or alterations, or damage is caused by accident, misuse or neglect.

We regret we are unable to accept any liability for any consequential loss.

Please note that the product is not defective under the terms of this Warranty where the product, or any of its component parts, was not originally designed and / or manufactured for the market in which it is used.

These statements do not affect your statutory rights as a customer.

If your **COAQUA MEDIC** product does not appear to be working correctly or still appears to be defective having followed the instructions in 6. & 7. above, please contact your dealer in the first instance.

Before calling your dealer please ensure you have read and understood the operating instructions. If you have any questions your dealer cannot answer please contact us

We reserve the right to make technical changes to this product. **AQUA MEDIC**, 09,2002