



Glockemann Aquarius Water Pump

HOW TO INSTALL AND MAINTAIN

Welcome to the Aquarius Water Pump. It is important to provide us with measurements of your proposed site before buying so that we can assess whether the pump should perform effectively and so that we can assemble it with the ideal sizes of bores and pistons to give maximum output.

The three most Important points to establish before you install an Aquarius are:

1. Ensure there is sufficient **water flow**.
2. Establish the **Drop** (or Fall) over the six metres upstream from your site, and the size of your Drive tube.
3. Establish the **Delivery Height** by measure the actual distance from the start of the delivery line to your water tank and the vertical height from the pump to the tank.

Our website gallery features several videos of the Aquarius operating in a variety of locations.

KEY THREE POINTS

1. Water Flow

It is especially important that you know how much water you have flowing to your pump. The easy way to find this is by using a container such as a one litre bottle or a 40 litre can. Hold the container under the stream surface or the water flow (e.g. from a weir). Measure the time that this takes to fill the container. If for instance your one litre bottle fills in one second, that indicates water flow of more than 60 litres a minute, and if a 20-litre container fills in 10 seconds then the water flow is 120 litres per minute. To be on the safe side you need TWO LITRES a SECOND, or 120 LITRES A MINUTE.

2. Correct Drop or Fall

The way to do this is by using a garden hose. Have one person stand at the intake point of the drive tube" and position a second person where the pump will be, about six metres downstream, to hold the hose. Fill the garden hose with running water. Then raise the hose vertically until the water stops running out of it. Measure the distance from the water surface at the intake point to the top of the hose. THIS WILL GIVE YOU THE FALL.

3. Delivery Line / Tank

It is very important to know the distance from the PUMP to the TANK, and the only true way to measure this is with a GPS, such as the Garmin which is one of the most popular brands. This will tell you the distance and the height to the tank.

OTHER IMPORTANT POINTS

DRIVE TUBE

USE a 65mm or 100 mm plastic drive tube. You can buy these through your local hardware store.

Make sure that you place a screen in front of the intake to keep out leaves, sticks, fish etc. A popular option is to use a one metre length of PVC piping the same size as the drive tube. Get an end cap to put over the end of the PVC, and drill holes into the hose along about half of the one metre pipe, then attach the end of the section with the holes to the bottom of the intake. In some cases you can use a 50mm poly pipe as a drive tube if you have some 50mm polypipe, you could try this before purchasing a 65mm or a 100mm plastic pipe.

THE IMPORTANCE OF HAVING THE RIGHT MEASUREMENTS

The Aquarius pump can be fitted with a choice of three sizes of **bores** and **pistons**. A guide to choosing the correct size is:

- 35mm for extremely high heights up to 60 metres;
- 45mm for the average height, say up to 35 metres; and
- 60 mm for large volumes without a lot of height, say 25 metres.

The higher the drop or fall, the better the pump will work. The maximum drop or fall is three metres. The minimum working drop or fall is 0.3 metres, but this will not deliver much water in a day.

HOW TO START THE PUMP

Wind the throttle out this will stop all the water coming out of the exhaust valve. Hold it closed for about ONE MINUTE, which will expel all the AIR that is in the pump and drive tube. When you think this is long enough, start screwing the throttle in with a few turns, then press down the throttle and water will come out of the it. If the water does not flow, wind the throttle in a little further till the flow starts. You will find that the pump will have a nice smooth movement. If this is not the case, wind in or out till the pump is running properly.

The pump can sit in water up to half way so that the intake valve can suck or pick up water. If it is not sitting in the flow of water, then the intake side of the pump can have a pipe attached to the valve and water can be siphoned at the water source to the pump. Alternatively, the pump can sit on the bank or a rock with a pipe attached to the valve on the intake side, so that water is siphoned from the water source to the pump.

The pump has two tie-down points, one on each side. Rope or chain should be used to tether it to say a rock in case of flooding.

DIFFERENT SIZE DELIVERY LINES

It is important to use the right size hose to maximise pump output.

- For a short Delivery Height of 25 metres, use a 50mm hose
- For a height of 40 metres, use a 37mm hose
- For up to 65 metres, use a 25mm hose

WHEN ORDERING PARTS

Refer to the Parts List page of our website (via the Glockemann Pumps page), which has an illustration of all the pump parts for the Aquarius.

Always quote the bore size in your pump when ordering parts.

Freight is always charged to the end user from Mareeba to you.

Contact us or your preferred Agent or Dealer to order the parts.

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