

Papa Pump®



the pump that uses no fuel!

An innovative new water pump that uses the power of natural flowing water from a spring, stream or river to deliver water over long distances and to impressive heights.

**A long term water solution
for today's water needs.**



Agriculture



Off Grid Living



Commercial
& Utility



Humanitarian
& Charity

Eliminate Pump Operation Costs

Minimal Maintenance

Save Time and Money

Installing a Papa Pump

A Natural Water Source is Required.



river stream spring pond/lake

The Papa Pump requires a flow and head of water to operate, **the higher the supply head, the more efficient the pump** therefore it is important that you find the maximum head available to pump the maximum amount of water.

The minimum flow for the pump to operate efficiently is 50 litres/minute. (Smaller or irregular flows may need a SureFlow Valve to regulate.)

N.B. THE PUMP IS NOT DESIGNED TO BE SUBMERGED IN WATER

(This will not harm the pump but it will not work properly)

The water supplied to the pump must be piped from a weir or a catchment tank at a higher level via a supply tank. It is important that you use a steel galvanised pipe of the appropriate diameter and length in the section going into the pump. This is very important for efficiency.

Water Delivery Principles

The Greater the Supply Head, the More Efficient the Pump

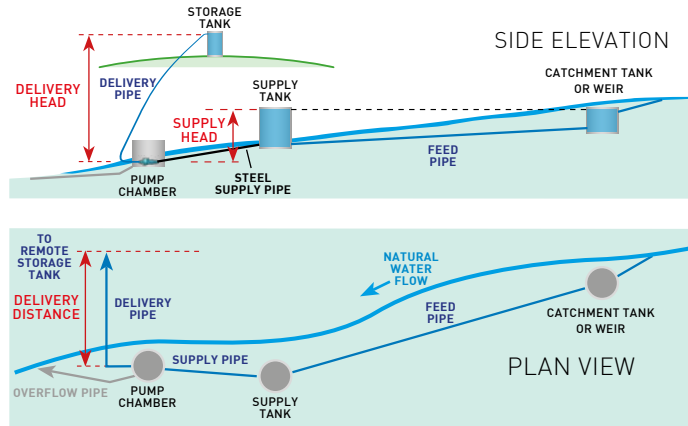
A minimum of 70% of the water is depressurised and ejected out of the exhaust port and returned to the watercourse via the overflow pipe

A maximum of 30% of the water is pressurised and delivered to higher elevations or over long distances.

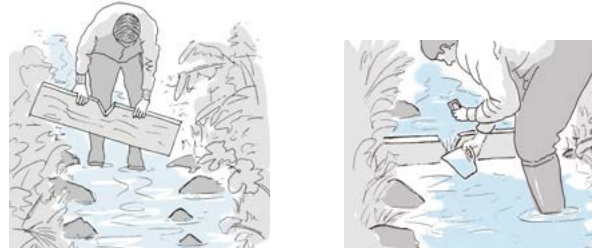
The distance water can be delivered is only slightly restricted by friction and delivery distance can often be measured in miles.

The height the water can be delivered depends on a combination of the height of the supply head and the amount of flow into the pump. With a good supply head, water can be pumped up to 150 metres plus.

Planning an installation



Measuring the Supply Flow



Dam the stream with a plank with a 'V' cut into it.

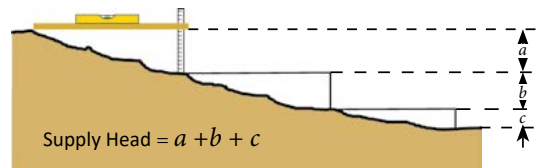
Use a litre jug and a stop watch to time how long the jug takes to fill.

Measuring the Supply Head

Water Level Method
(ideal for sites covered with undergrowth)



Step & Level Method



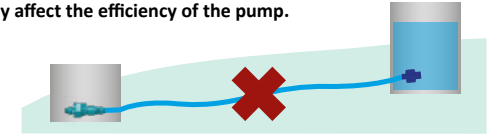
Installation Do's and Don'ts



DO NOT put the Pump directly into the stream or water.

Papa Pumps are designed to work out of the water- this protects them debris and flooding and ensures the system will last a lifetime.

DO NOT use a plastic, bent, uneven pipe for your supply pipe. It will seriously affect the efficiency of the pump.



DO use a 50mm (2") internal diameter GALVANISED STEEL PIPE - with a length at least 5 times the Supply Head. And it should have a least a 1:10 gradient.



PRESSURE VESSEL

DO NOT try to fit the pressure vessel to the system before you have set the air pressure in the pressure vessel.

DO set the air pressure in the pressure vessel to 0.5 bar BELOW THE DELIVERY HEAD PRESSURE BEFORE attaching it to the system.



RE-CHARGING THE PRESSURE VESSEL

DO NOT FULLY UNSCREW THE PRESSURE VESSEL WHILE PRESSURISED. Stop the pump and unscrew a maximum of 2 turns - Wait until water pressure is fully released before removal.

FLUSHING THE SYSTEM

DO flush the system prior to pump installation. It is very important to prevent the ingress of harmful stones and debris which will cause serious damage to the pump.

PLEASE READ THE FULL INSTALLATION GUIDE BEFORE INSTALLING YOUR PUMP

It can be downloaded from www.waterpoweredtechnologies.com/docs/installer-manual-lr.pdf

Benefits of the Papa Pump



Save

on water bills, fuel
and maintenance



Free Water

for your lifetime and
future generations



Small & Light

4kg- 30x15x16cm
non-metal composite



Eco Friendly

No pollutants
No Fossil Fuels



5yr Guarantee

Guaranteed for 5 years
Lasts a lifetime

Papa Pump Kit Contents



Papa Pump



8ltr Pressure
Vessel



Delivery Hose
Assembly



2 x Seradisc
Filters



Ball Valve



Spare Valves
and 'O' rings



Multi-Purpose
'C' Spanner



Boxed Kit includes
Installation Manual



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