



APRICUS PUMP STATION TECHNICAL GUIDE

A technical reference for the
Apricus Pump Station for installers

Version 1.1

“The customer agrees to and accepts all related charges incurred as a result of a warranty request for service where the fault is outside the Apricus Warranty Policy” – WARRANTY AGREEMENT

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Disclaimer and Warning

Professional Standards

Work may require licences and qualifications. Apricus Australia advises that if you do not have the appropriate licence or qualification that you engage a suitably licensed and qualified professional to carry out the work.

All work performed must meet the relevant authority guide lines and standards, including AS/NZS 3500 and any manufacturer's guidelines, and no practice mentioned in this guide supersede the relevant standards and occupational health and safety guidelines.

Safety

Before performing any work it is advised that a risk assessment and work method statement is complete for the appropriate works.

Please exercise extreme caution and safety when working on solar hot water systems, on a roof, or with electricity. Always wear the appropriate personal protective equipment, and ensure all risk prevention measures are taken.

Water pumping through pipelines can be scalding hot. Heat pipes themselves can become extremely hot and cause serious burns upon contact. Particular care should be taken when bleeding air or water, as there is a risk of the manifold, pump or valve to expel scalding hot water.

Disclaimer

The procedures mentioned herein are a guide only. Apricus Australia bears no responsibility for any injuries and/ or damage caused to persons and/ or property while undertaking works mentioned in this guide.

If at any point you are unsure as to a course of action, or if you bear a responsibility for any works, or you cannot understand a procedure mentioned in this guide, please contact;

Apricus Australia on 1300 277 428

Or alternatively, your local Relationship Manager, who will direct you to a member of the technical team.



Customer Service

Customer service is extremely important to Apricus Australia. Our ability to provide successful services is determined by the quality of people in the installation team. Your role is highly valued and crucial to our success.

Customer Service Checklist – Before Install Work

- Greet customer with business card
- Treat Customer with respect and courtesy
- Talk to customer about installation procedure
- Check accessibility of site, e.g. locked gate, dogs, etc.
- Assess job site & risks

Customer Service Checklist – After Install Work

- Clean site and leave area tidy
- Explain to customer the basic operation of the system and what has been installed.
- Leave your details and card
- Sign and complete all forms
- Inform customer of completion and say farewell



Before You Begin Installation

The Apricus Pump Station Kit is supplied with

- Pump Station (Lid and Base Plate)
- Grundfos Pump with Unions
- Apricus Controller with Sensor Leads
- 1x Apricus controller spare parts
- Tempering Valve
- 1x Check Valve
- 1x Flow Meter
- 1x Flow Meter Hex Socket
- 2x Kinko Nuts
- 2x Copper Olives
- 4 x Screws & Green Plugs
- User Guides/Manuals

Checklist of Equipment required for Installation of Pump Station:

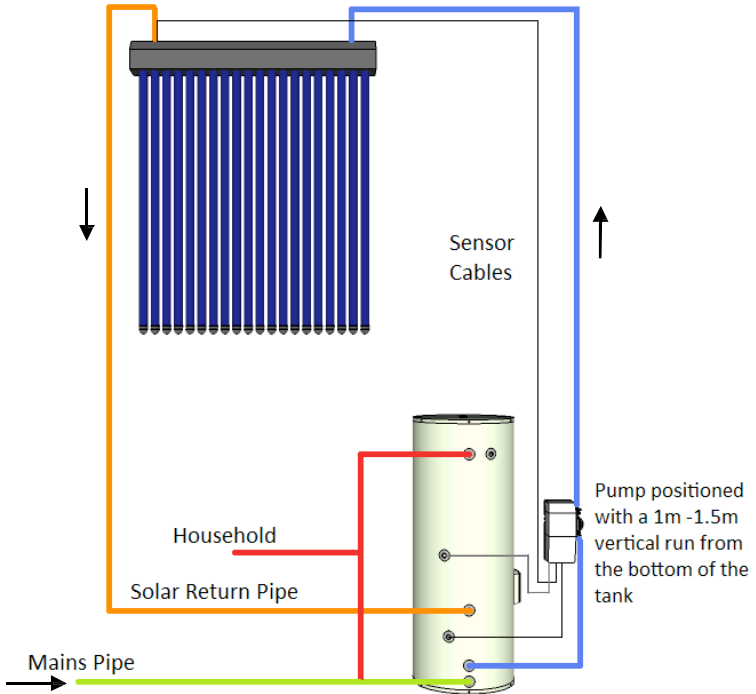
New System Install*

- Pump Station Kit
- Screwdriver (Phillips head & Slotted/Flathead)
- Shifting Spanner & Multi-Grip
- Pink Teflon Tape
- Thermal Heat paste
- Silicone
- 3m Test Sensor
- Spirit Level

*Preferably installed on the wall but can be placed on the tank if necessary.

Overview

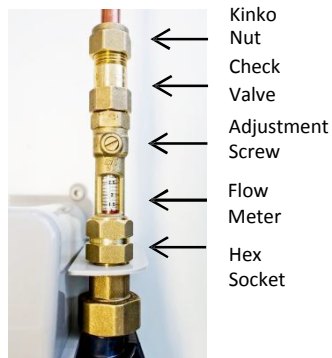
The diagram below demonstrates how the Pump Station is connected to the Solar Hot Water (SHW) System.



Installing the Apricus Pump Station

- 1) Remove the Pump Station Cover from the base plate.
- 2) Position base plate on the wall making sure there is a clearance height of **1m to 1.5m** on the vertical wall on either side of the pump.
- 3) With a spirit level and pen mark screw holes on the wall for base plate.

- 4) Drill holes for green plugs (supplied)
- 5) Insert Green plugs into the drilled holes.
- 6) Fix base plate to wall with the 4 screws and rubber isolators (supplied).
- 7) Plumb in flow lines to the circulation pump.



- 8) Fit sensor leads to the correct sensor ports:

S2= Bottom Tank Sensor

S3 = Top Tank Sensor

- 9) Plug in the Controller power adaptor

- 10) Operate solar flow return line by setting pump on 'High' (Speed 3) to remove any air within the pipe work.

- 11) Test for water leaks around the pipe works and brassware.

When the tank sensor is increasing in temperature, **unplug pump**.

- 12) Set pump speed to LOW (Speed 1) and then re-attach the pump plug.

- 13) Check that all temperature readings on the controller are functioning with the parameters of the product.

- 14) Set the maximum flow rate on the adjustment screw of the flow meter in accordance to the table below:

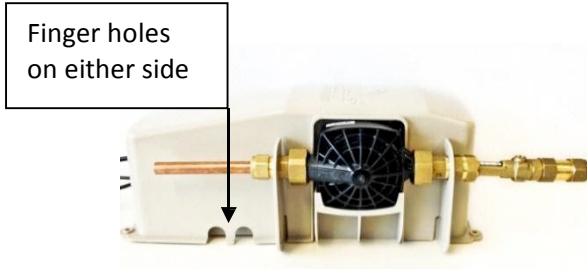
System Size	10 tubes	20 tubes	22 tubes	30 tubes	40 tubes	44 tubes
Aperture Area (m ²)	0.94	1.88	2.07	2.82	3.76	4.14
Max Flow Rate (L/min)	0.7	1	1.5	2	2.5	2.5

Each tube as 0.094m² of aperture area



Using Your Apricus Pump Station

1) To open the pump station lid, place two fingers at the top and bottom finger holes at either ends of the pump station.



2) Pull finger holes outwards first and then towards ones self to remove pump station lid from base to reveal the pump and controller.



3) Once, the pump station lid has been removed the controller can be viewed for temperature readings and fault findings*.

The pump can also be viewed and monitored for pump speeds and flow rates through the flow meter.

*Refer to controller guide booklet for troubleshooting guides.