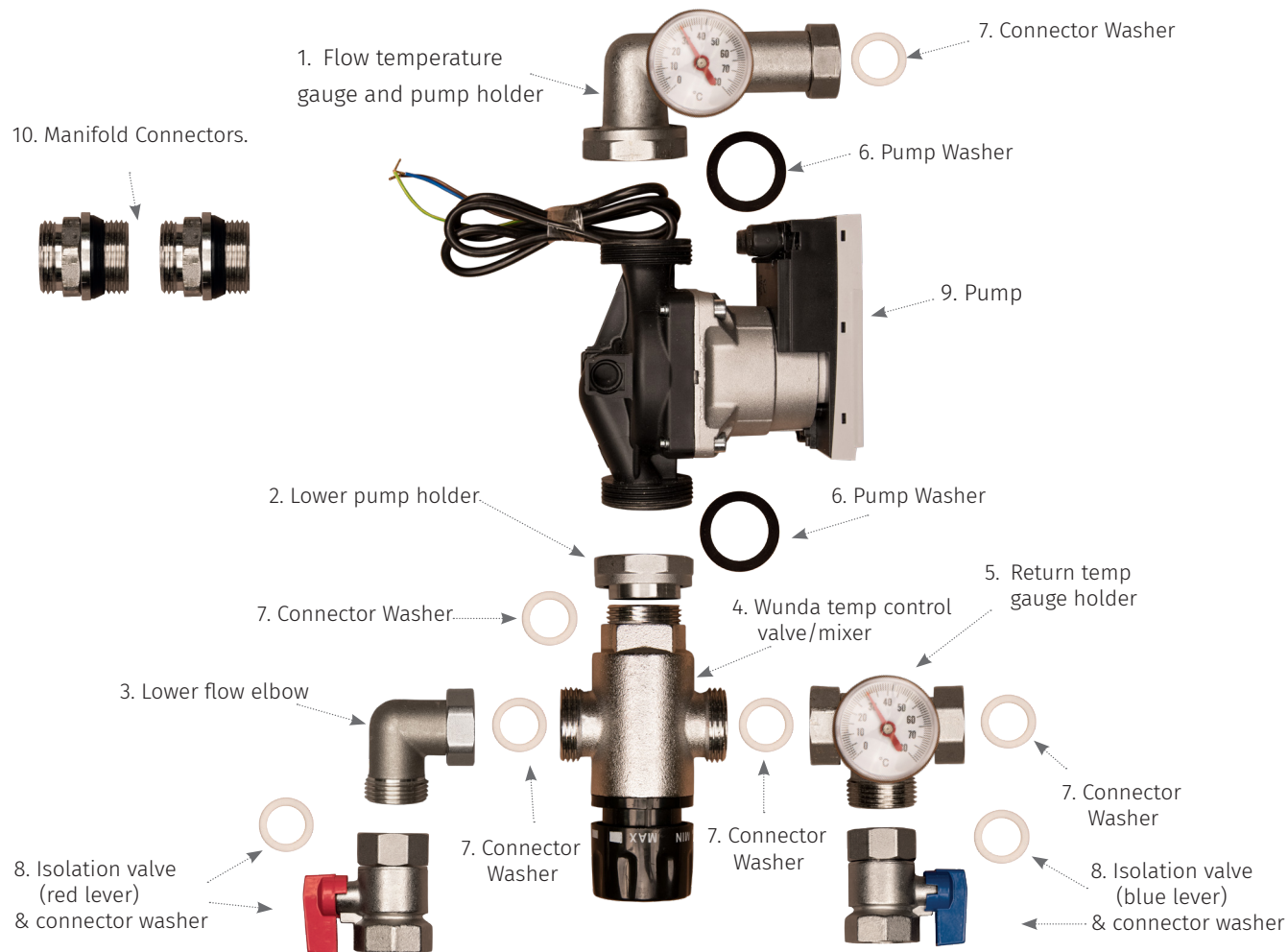


**Before you start:** Please check the manifold and pumpset box contents against the images and list below.

### Check the contents

1. Flow temperature gauge and pump holder
2. Lower pump holder
3. Lower flow elbow
4. Wunda temperature control valve/mixer
5. Return temperature gauge holder
6. Pump washers x 2
7. Connector washers x 5
8. Isolation valves – pair (optional extra) with connector washers x 2
9. Pump
10. Manifold connectors x 2

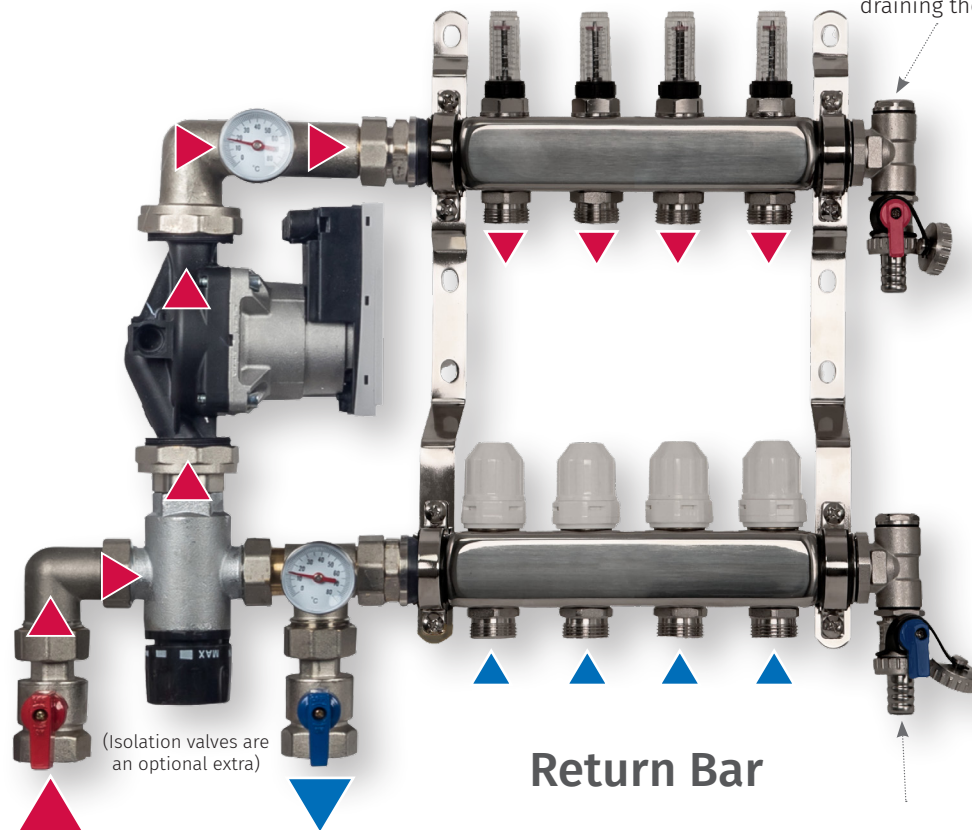


**Please note:**

Pump set not included with manifold

### Flow Bar

Manual air vent with hose attachment for filling and draining the system



### Return Bar

Manual air vent with hose attachment for filling and draining the system

## Understanding how the manifold & Pumpset work

Warm water is pumped from the heat source to the manifold and pumpset assembly. If the system requires a top up of heated water, the temperature control valve will allow more heated water into the floor heating system via a one-way valve or release cooled water back to the heat source for re-heating.

Temperature input is easily increased or decreased by turning the mixer valve control head. Closing the valve and decreases the flow temperature, opening the valve and increases flow temperature (see page 6) .

From the upper flow bar, warm water is distributed to each loop of floor heating pipe via a flow gauge. The water then returns via the return valves into the lower return bar.

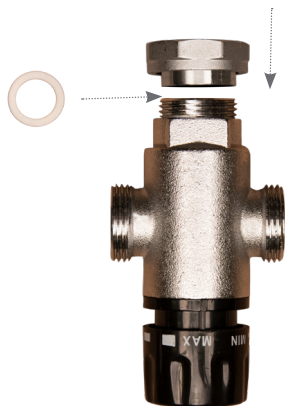
When the room reaches the required temperature the room thermostat sends a signal to the wiring centre to switch off the circulating pump and close the actuators. This shuts off the water supply to the loops of pipe in the floor and therefore shuts off the heat supply to that zone.

Before assembly of the manifold, pumpset or pressure testing, familiarise yourself with the various stages of assembly and the relevant fact sheet. We also advise to watch the online tutorials and technical support videos.

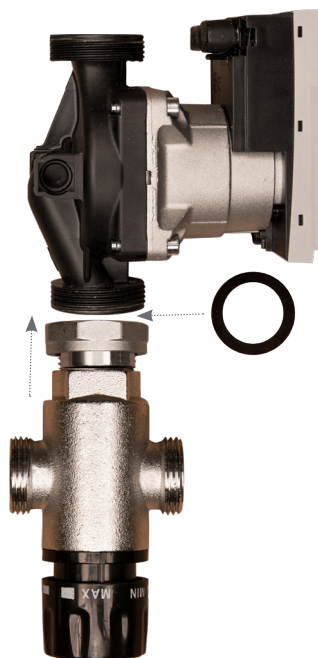
**Free Technical support - 01291634140**

Identify and familiarise yourself with each individual component. Assembly of the pump set and pump is recommended on the bench prior to fitting the complete unit to the manifold. The use of PTFE tape is not required when the supplied washers are fitted correctly, however if you wish we recommend the use of a liquid PTFE.

- 1** First connect the lower pump holder onto the temperature control mixer ensuring the correct washer is located between the two components.



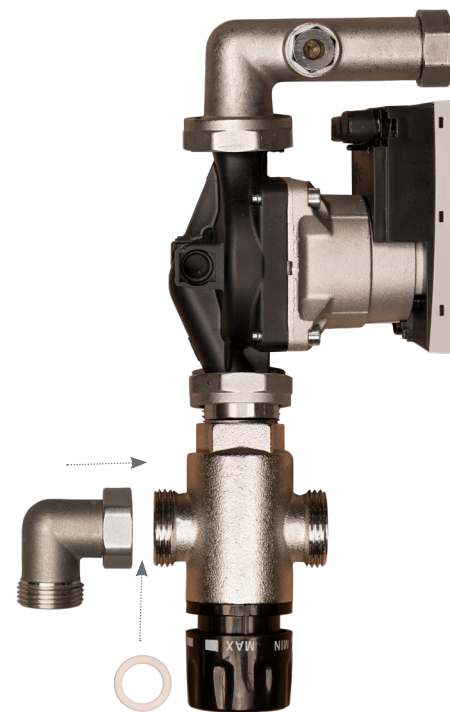
- 2** Select a pump washer (large black washer) and locate into the lower pump holder/ Wunda temperature control mixer. Again tighten by hand taking care not to cross the pump thread.



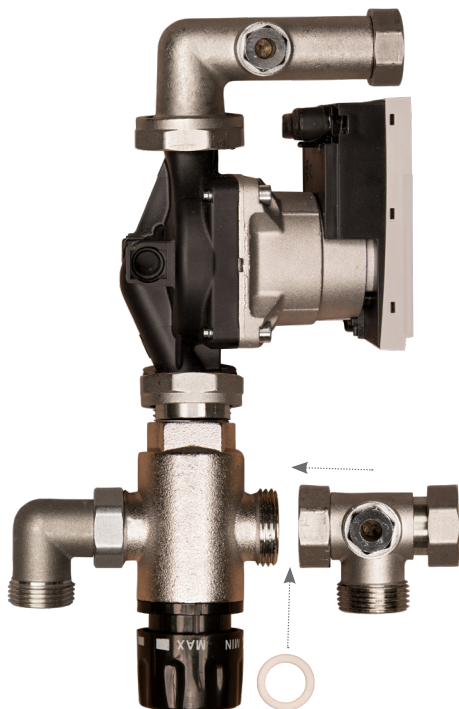
- 3** Select a pump washer (large black washer) and locate into the top flow elbow & pump holder. Tighten the pump holder onto the pump by hand, be careful not to cross the pump thread.



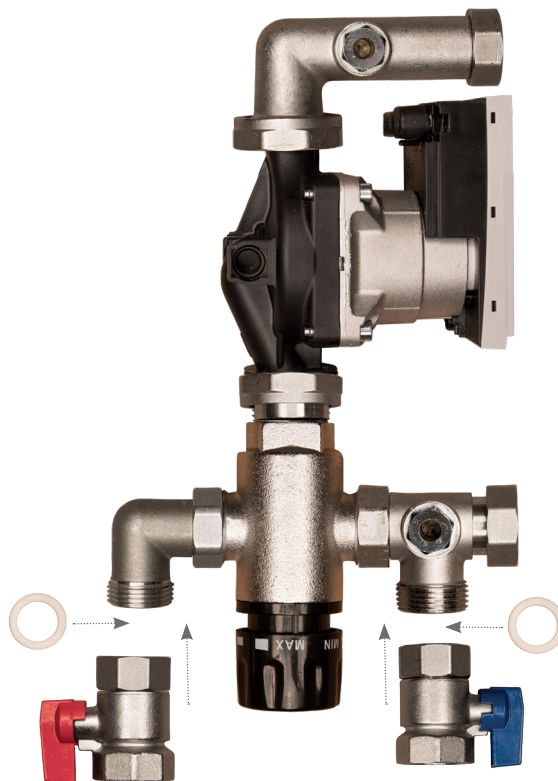
- 4** Fit a washer into the lower flow inlet elbow and screw the elbow onto the flow inlet (H) side of the temperature control mixer.



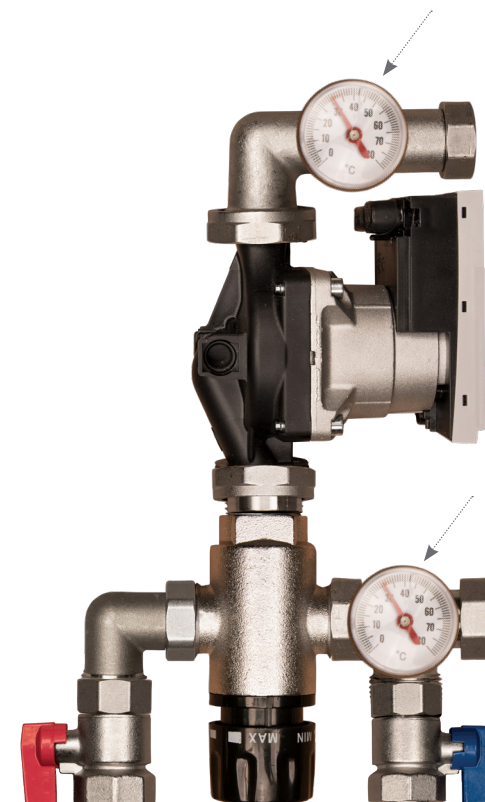
- 5** locate washer into the lower return temperature gauge holder and screw onto return port (C) side of the temperature control mixer.



- 6** Fit the two isolation valves onto the flow and return feeds ensuring washers are fitted correctly, blue tap is fitted to the return (right) and red tap is fitted to the flow (left)



- 7** This pumpset is supplied with flow and return temperature gauges which must be fitted into the flow and return temperature gauge housings.

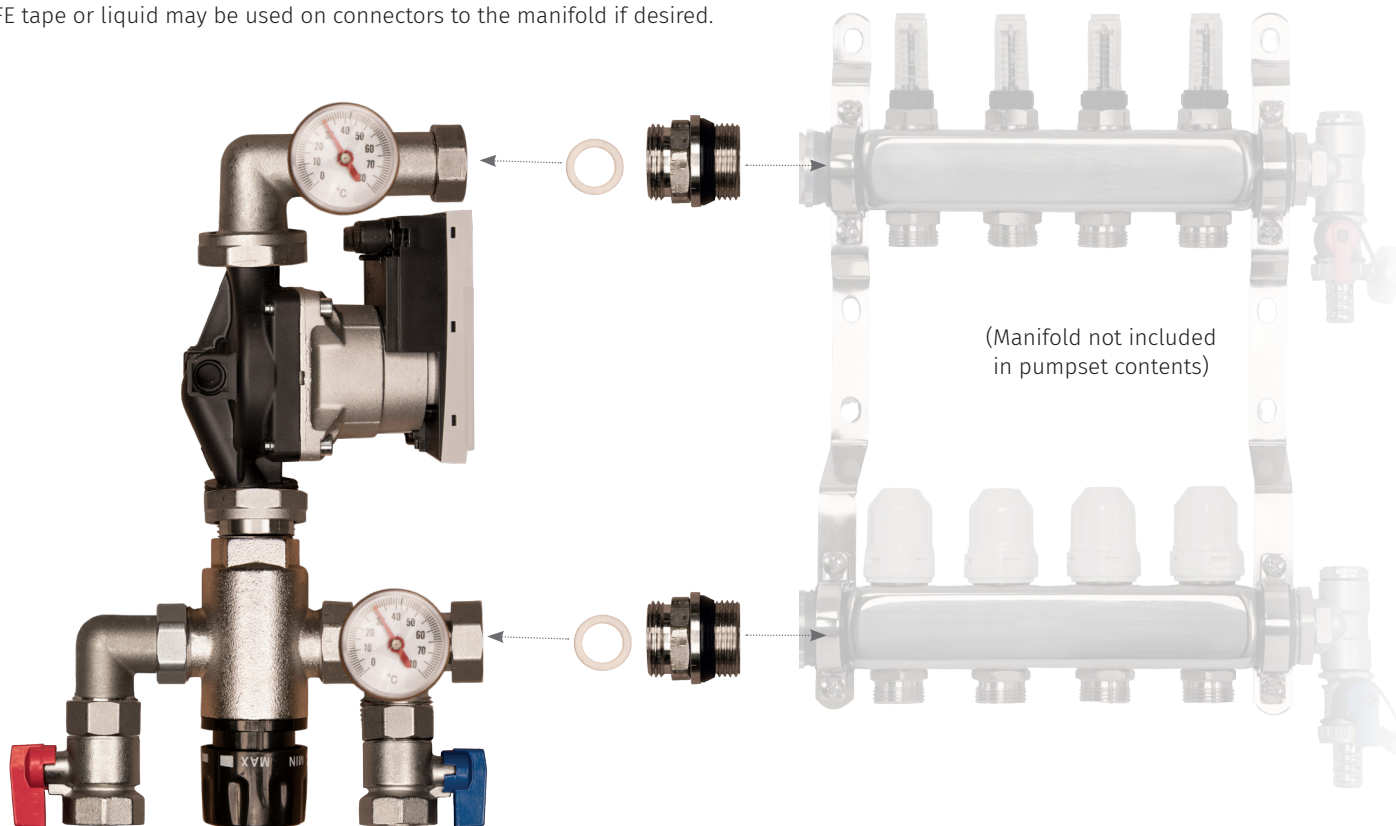


### Pumpset connection to Premium Stainless Steel Manifold\*

- 8 Two pumpset to manifold connectors are supplied and will need fitting to the left hand side of both the flow and return bars (we recommend fitting these connectors to the manifold bars before connecting the pumpset), these must be fully tightened at this stage. PTFE tape or liquid may be used on connectors to the manifold if desired.

When connecting the pumpset to the manifold ensure the supplied washers are fitted to both the flow and return of the pumpset.

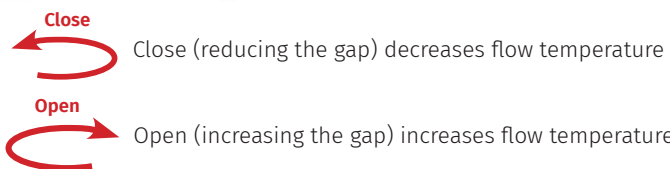
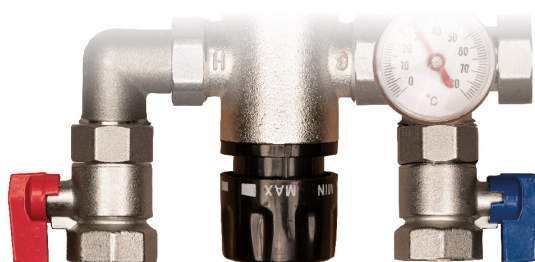
Loosely attach to the return connector and then the flow connector by hand, once both have been connected then fully tighten using a suitable spanner.





### Flow temperature setting.

To protect final floor finish and have the correct settings for floor constructions, the mixer valve must be set correctly. Flow temperature input is adjusted by turning the black temperature control knob. Clockwise reduces flow temperature and anti clockwise increase flow temperature. Temperature range 30 - 70°C



Adjust the flow temperature to suit the floor construction and floor finish.

Flow temperature is indicated by the temperature gauge on the top flow elbow.



### Guidelines for different types of floor heating

- Pipe in Overfloor panel systems 35°C\*.
- Pipe in Solid screed construction (staples, cliptrack, multipanel) 45°C\*.
- Pipe in Joisted floor construction (spreader plate) 55°C Max\*.

Check with floor finish suppliers before introducing warm water into the floor heating system as some flooring materials, in particular wood, require limiting of floor surface temperatures. Floor surface temperatures can be automatically controlled with the installation of our floor probe and correct thermostat programming.

A flow and return temperature differential of approximately 7°C is preferred. However flow input temperatures may be need to be increased or decreased seasonally in extreme weather fluctuations to adjust system performance.