Mixing Valve Control Pack

Data Sheet

PRODUCT INFORMATION

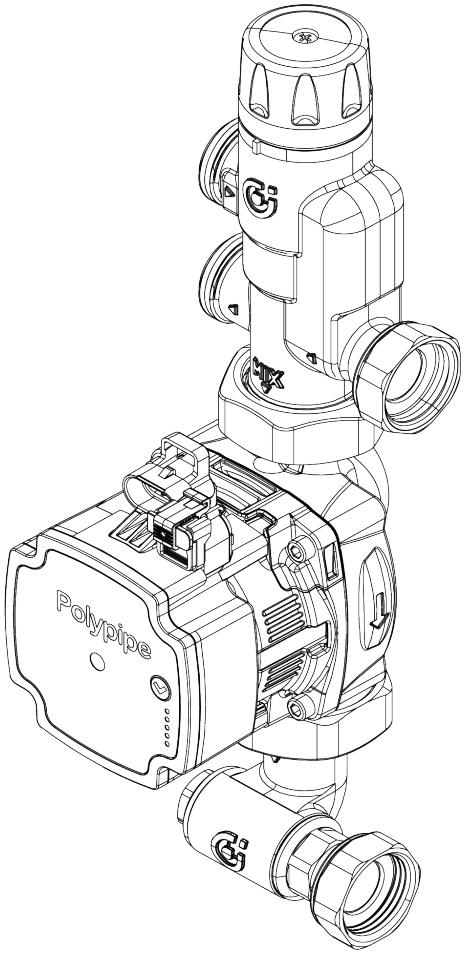
ISSUE 3 – MARCH 2023

Product Code: UFHSPP1

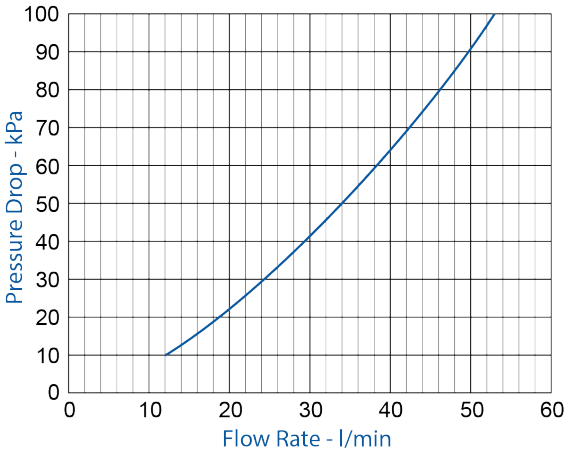
These installation and operating instructions are intended for the Polypipe UFH mixing valve control pack and must be read and understood prior to proceeding with installation and commissioning.

The Polypipe UFH control pack is designed to supply temperature controlled hot water to the underfloor heating system.

The control pack is pre-fabricated so it can be easily attached to a manifold (supplied separately) that has 210mm centres.



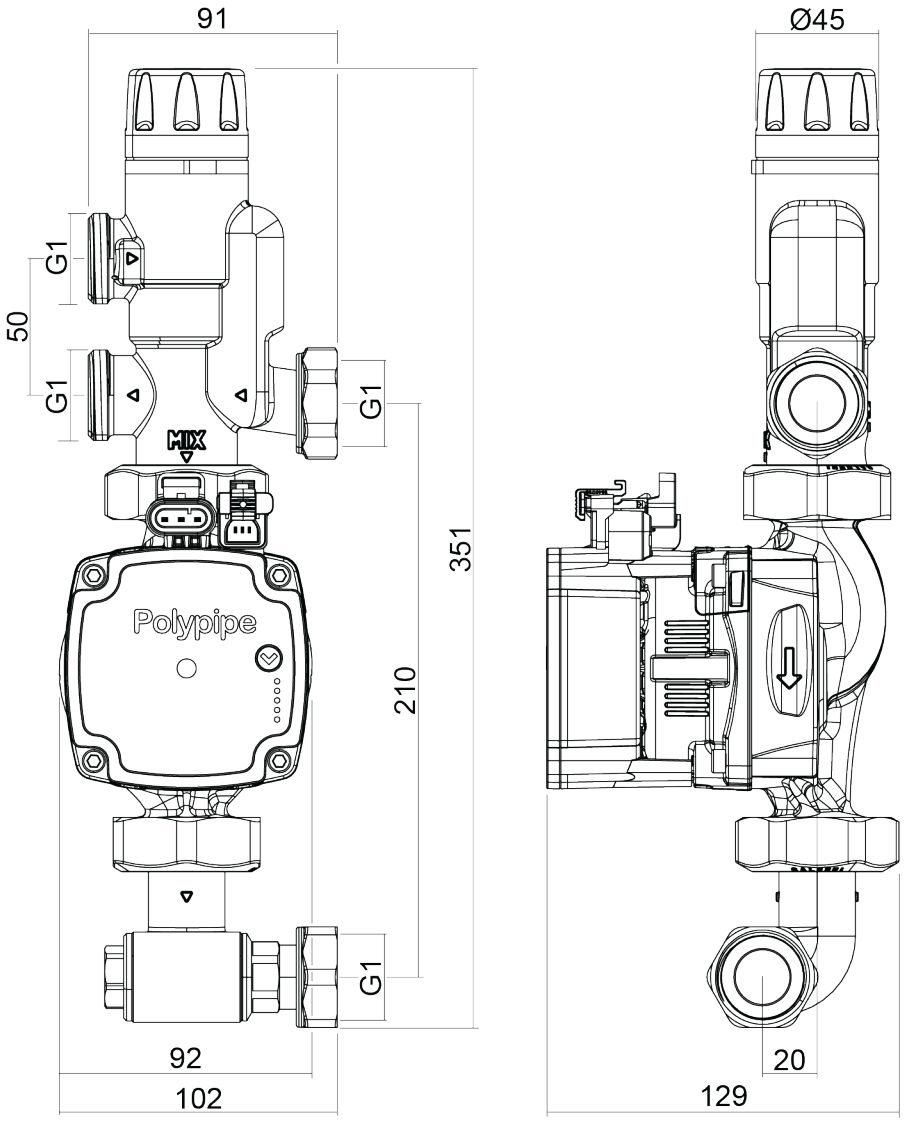
Pressure Drop Graph



Key Design Information	
Medium:	water or glycol solution
Maximum glycol percentage: 30%	30%
Maximum working pressure:	10 bar
Maximum working temperature:	90°C
Adjustable control temperature range:	20 to 64°C
Pre-set temperature:	MIN (20°C)
Finish:	Nickel plated
Thread connections:	BS EN ISO 228-1
Kv value:	3.2 m3/hr (Dp = 1 bar: Tmix = 42°C)

Dimensions

Please Note: All dimensions are measured in millimetres **(mm)**



Maintenance

Isolate the flow and return to the Polypipe UFH control pack. The mixer body can be left attached to the manifold should maintenance and cleaning be required.

To clean the internals of the UFH mixer valve, first unscrew the retaining screw, pull off the control knob and shroud.

With a suitably sized spanner unscrew the retaining bush and remove it from the body.

Carefully pull out the stem and shutter from the body.

Clean all external surfaces with a weak solution of scale remover. Examine all surface and 'O' rings for signs of damage, replace as necessary.

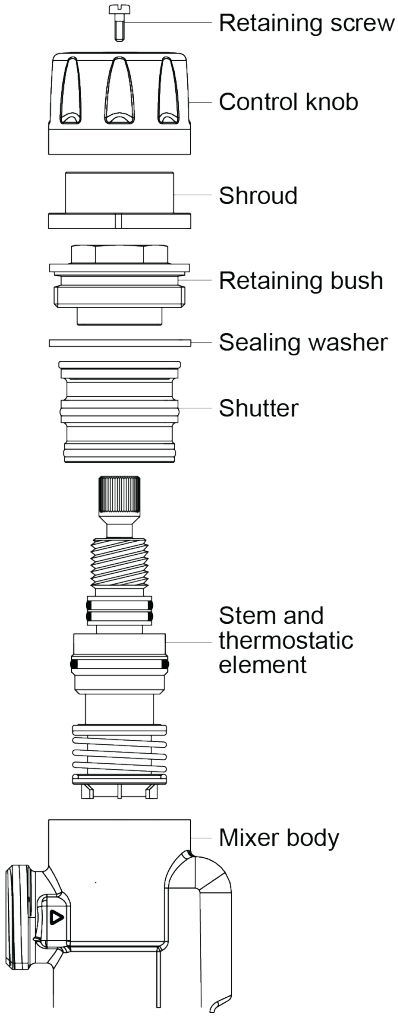
Using a silicon based waterproof grease lightly lubricate all external surfaces and moving components.

Re-assemble the mixer in the reverse order taking care not to damage and 'O' ring seals.

Re-commission the mixer following the procedure in the Commissioning section.

A replacement mixing valve with bottom elbow can be purchased under UFHSPP1RV.

Replacement Polypipe pump can be purchased under PB970026 if required for replacement.



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PRODUCT INFORMATION | ISSUE 3 – MARCH 2023

Wiring

All wiring should be undertaken by a qualified installer and must conform to IEE regulations.
A fused spur should be provided adjacent to the manifold to provide power to the pump and two port zone valve if fitted.
To comply with IEE regulations, the pump on the Manifold Control Pack must be provided with an earth.
Connect the power cable to the pump and to the fused connection box.

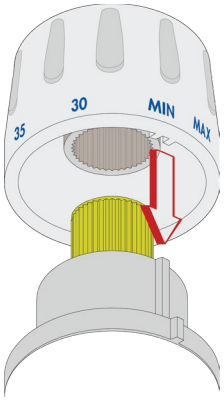
Commissioning

The UFH mixing valve supplied as part of the Polypipe underfloor heating control pack has a temperature setting range of 20 - 64°C. The indicator on the adjustment cap has MAX, MIN and incremental intermediate temperatures as shown.

MAX 55 50 45 40 35 30 MIN

The temperature control is factory set to 20°C with the cap in the adjustable position.
Initial setting of the thermostatic mixing valve (after the heat up/screed drying period) should provide the following temperatures:

Screeded Floors: 40-45°C
Timber Floors: 55-60°C



Please note: These temperatures are for guidance only and the designers recommendation should be followed.

As a general guide to floor temperatures;

Tile floors can be heated to a maximum of 29°C. Timber and laminate flooring to a maximum of 27°C. Always refer to the flooring manufacturer for guidance.

To adjust the temperature simply rotate the temperature control handle to the required setting, as indicated on the cap, use a hand-held thermometer to gain an accurate temperature reading.

Once set the temperature can be locked by removing the control knob and positioning as shown.

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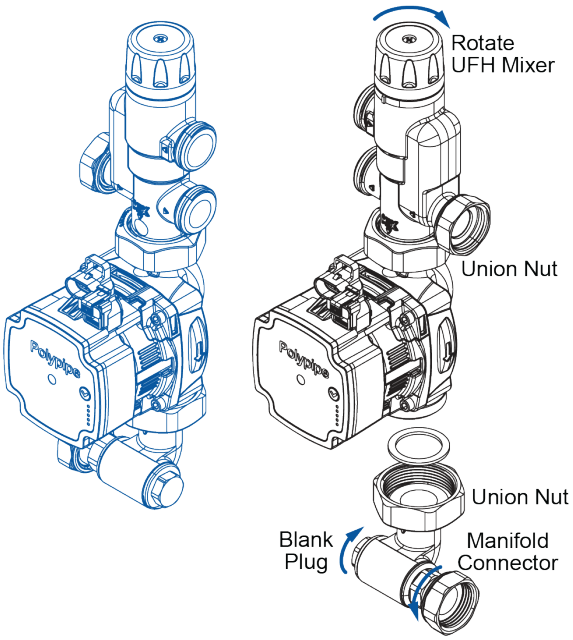
ISSUE 3 – MARCH 2023

Installation

First fix the distribution manifold to the wall leaving enough room beside the manifold to fit the control pack (see dimensions on page 2). If the standard orientation of the Polypipe UFH control pack, is not suitable for your application the pack can be reversed to allow the control to sit on the opposite side of the manifold, if this is more convenient for the installation.

To reverse the pack follow these steps:

1. Using a suitably sizes spanner loosen the upper union nut and rotate the UFH mixer 180° to face the opposite direction then re-tighten.
2. Using the lower union nut remove the elbow from the pump.
3. Using a suitably sized spanner remove the manifold connector and blank plug from the elbow.
4. Reverse ends for the manifold connector and blank plug, fit into the elbow, re-tighten and refit to the pump ensuring the sealing washer is re-fitted.



Warning!
The Polypipe UFH Control pack is loosely connected, all connections must be tightened to seal.

The UFH manifold should be securely attached to the wall or mounting surface, ensuring that the flow and return bars on the manifold are the correct way around to match the control; the return bar at the top and the flow bar below.

With the Polypipe UFH control pack assembled and all connections tightened to seal in the correct orientation, connect the elbow to the flow bar by means of the 1” union nut onto the flat faced union connection, remembering to fit the 1” fibre washer to form a water tight seal.

Connect the UFH mixer valve to the return manifold by means of the 1” union nut onto the flat faced union connection again remembering to fit the 1” fibre washer.

The Polypipe UFH control pack is shown connected to a underfloor heating manifold in both the left and right hand installation orientations.

