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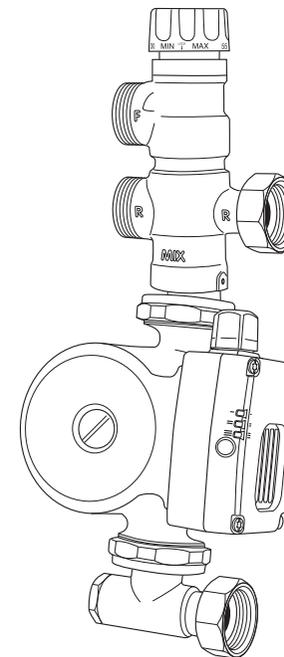
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Installation and Maintenance Instructions

Underfloor Heating Control Pack



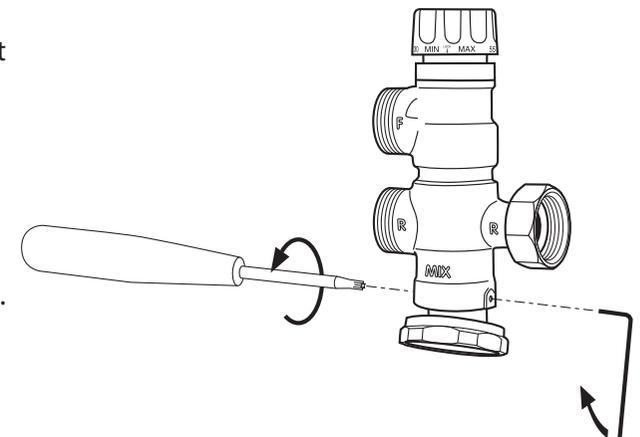
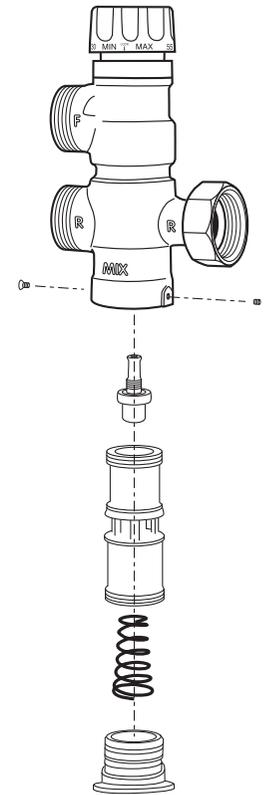
Polypipe UFH thermostatic mixer pump & elbow provides temperature controlled mixed water to an underfloor heating system

Slide the piston/
thermostat assembly
and spring out of
the valve body, clean
all internal surfaces
of the valve with a
weak solution of scale
remover.

Using a silicon based
waterproof grease,
lightly lubricate the
external surface of the
piston thermostat.

After cleaning,
re-assemble the UFH
mixer valve, ensuring
the components are
returned in the correct
order.

Re-set the valve
as laid out in the
commissioning section.

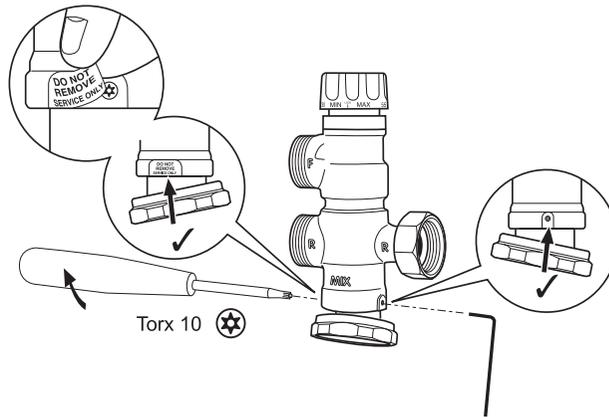


Section 8 - Maintenance

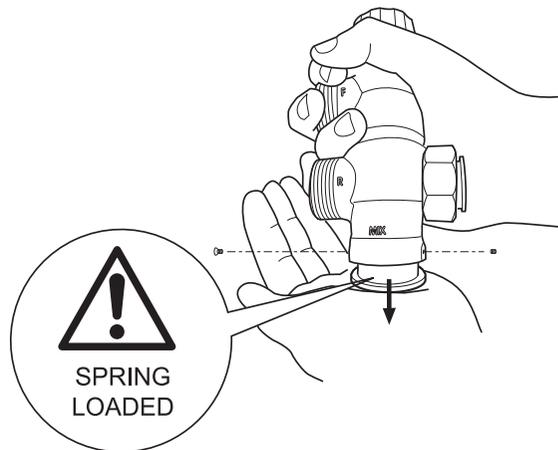
Isolate the flow and return to the Polypipe UFH mixer valve.

To clean or replace the internals of the UFH mixer valve, first remove the valve from it's installation position.

Using the 1.5mm allen key (provided) loosen the grub screw at the base of the mixer valve by the flange connection, then on the opposite side of the valve remove the adhesive sticker to reveal a securing screw.



BEWARE this is a spring loaded swivel flanged connection, therefore whilst holding the flange securely, use a T10 security torx screw to remove this securing screw, allowing for the swivel flange connection to be removed from the body of the valve.



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Section 1 - General Information

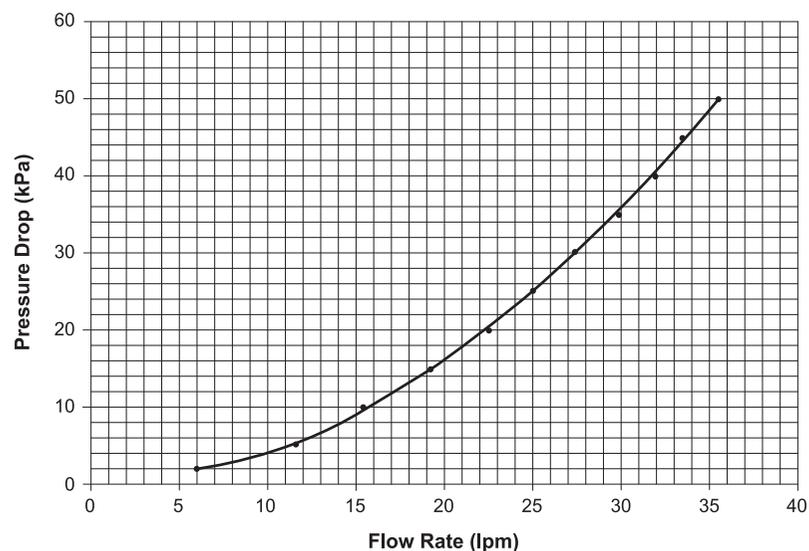
The Polypipe underfloor heating control pack is a purpose built thermostatic control valve designed to mix flow and return water within an underfloor heating system to a stable, adjustable temperature. The control pack is pre-fabricated so it can "bolt on" to a manifold that has 210mm centres.

Section 2 - Technical Specification

Specification

Maximum pressure:	10 bar
Maximum temperature:	85°C
Adjustable control range:	25°C to 60°C
Factory pre-set :	45°C

Pressure Drop Graph



Section 6 - Wiring

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. All wiring should be undertaken by a qualified installer and must conform to IEE regulations.

Section 7 - Commissioning

The UFH mixer valve supplied as part of the Polypipe underfloor heating control pack has a temperature setting range of 25 - 60°C. Min, Max and incremental indicators are shown on the adjustment cap. The temperature control is factory set to 45°C with the cap in the adjustable position.

Initial setting of the thermostatic blending valves (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.

These initial settings can then be adjusted to provide the correct comfort level. A maximum floor surface temperature of 29°C should not be exceeded as this may lead to feelings of discomfort.

With timber floor finishes including strip laminate products the maximum floor temperature of 27°C should not be exceeded as this may result in excessive shrinkage of the material, but please always follow floor manufacturers instruction.

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.

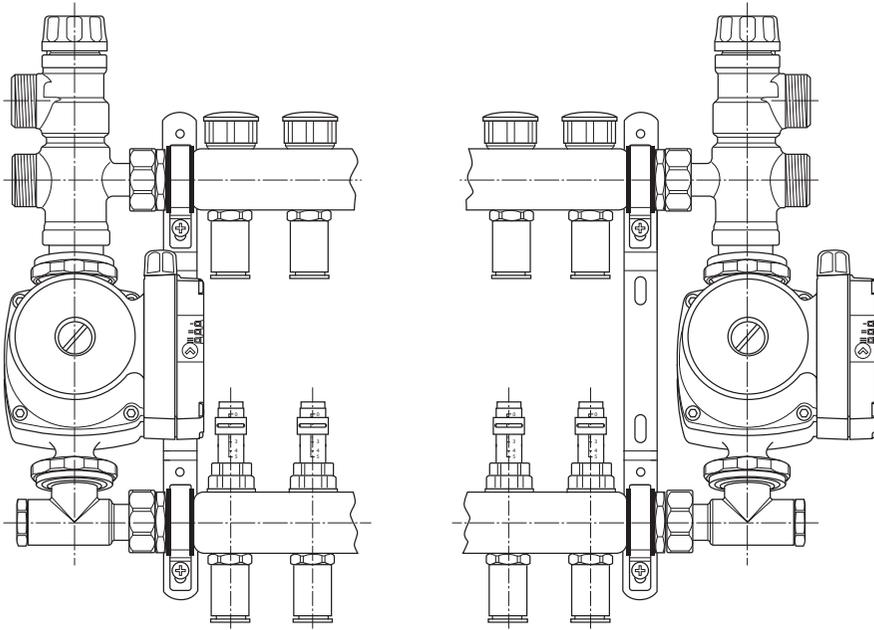
With the Polypipe underfloor heating control pack pre-assembled in the correct orientation for installation.

Offer up the control pack to the UFH manifold, ensuring that the flow and return bars on the manifold are the correct way around to match the control; the return bar should be at the top and the flow bar on the bottom.

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.

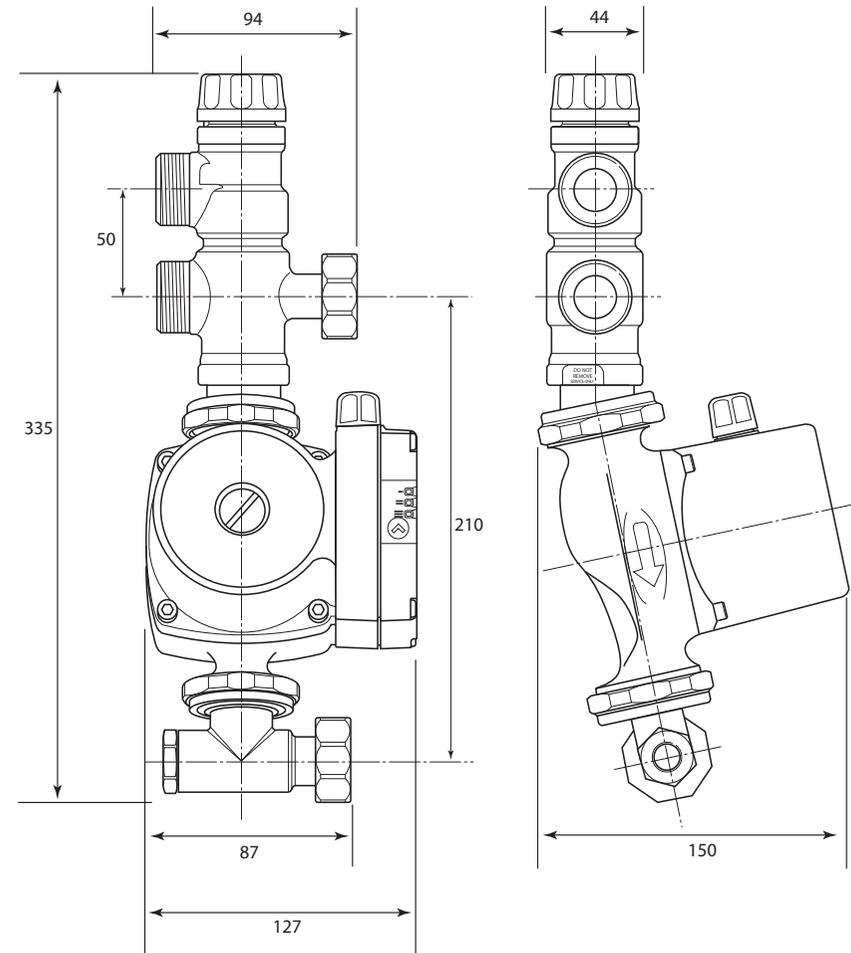
Polypipe underfloor heating control pack shown connected to a underfloor heating manifold in both the left and right hand installation orientations.



Standard Right Installation

Alternative Left Installation

Section 3 - Dimensional Information

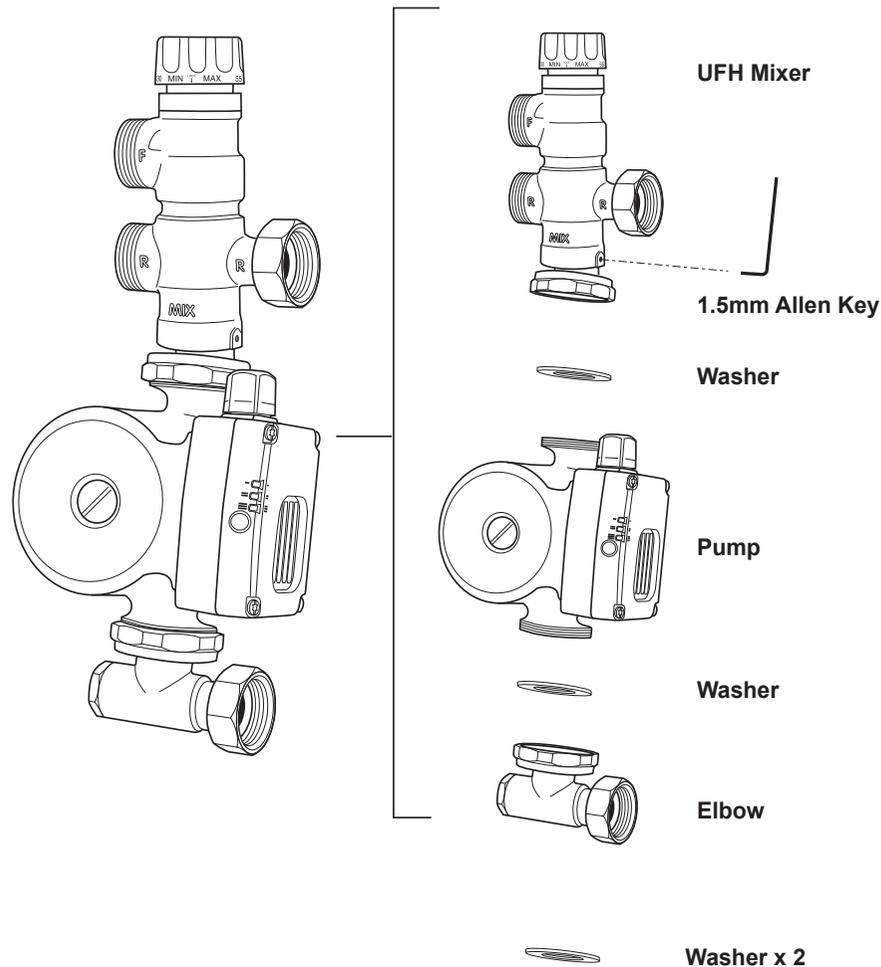


All dimension are shown in mm unless otherwise stated

Section 4 - Pack Contents

Before commencing the installation please check that all of the Polypipe underfloor heating control pack components are present.

The control pack comes pre-assembled with a UFH mixer valve, Grundfos 'A' rated pump and pump elbow, and the complete kit should include:



Section 5 - Installation Guidance

First fix the distribution manifold to the wall leaving enough room beside the manifold to fit the control pack (see dimensions).

If the standard orientation of the Polypipe underfloor heating control pack, is not suitable for your application, you can unscrew the components and reverse the pack to allow the control to sit on the opposite side of the UFH manifold, if this is more convenient for the installation.

To reverse the pack follow these steps:

1. Loosen the nut on the elbow and rotate the elbow 180° to face the opposite direction, then re-tighten
2. Remove the UFH mixer valve from the pump retaining the sealing washers
3. Using the 1.5mm allen key (supplied) loosen the exposed grub screw at the base of the mixer close to the flange connection. DO NOT remove the sticker or loosen the screw on the opposite side.
4. By putting force on the bottom of the flange and rotating this connection you can swivel the fitting 180° which should then 'click' into it's new position with a clear sound, then re-tighten the grub screw
5. Re-connect the UFH mixer to the pump using the sealing washer to form a water tight seal.

