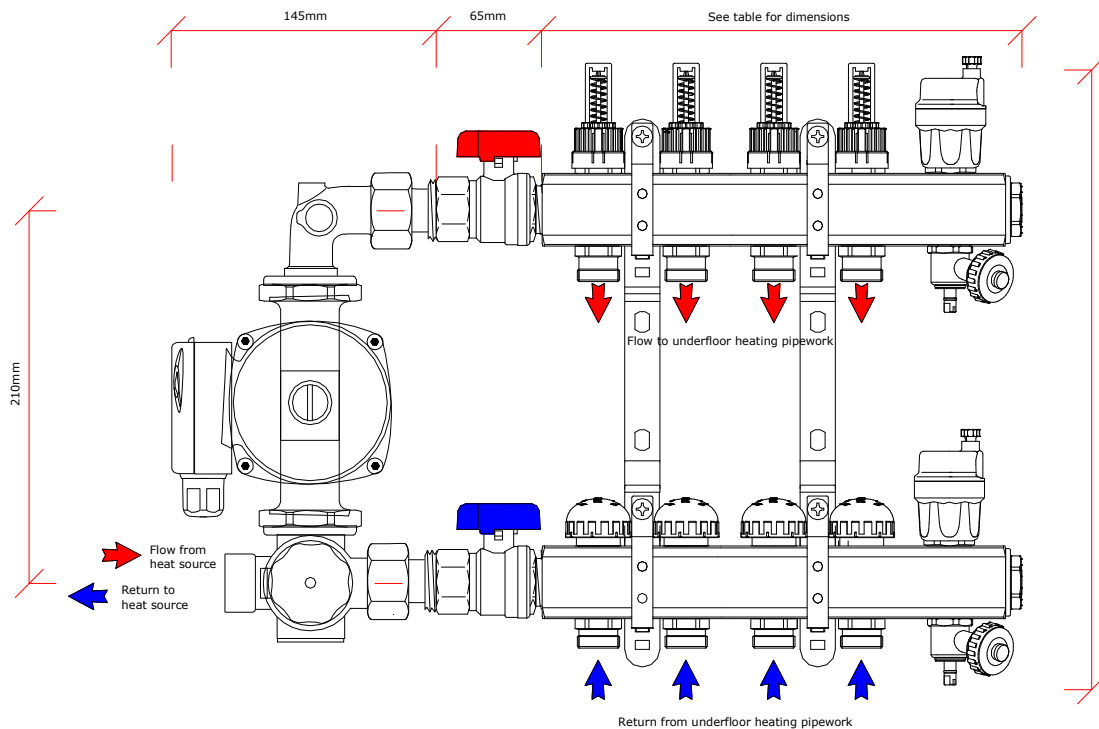


Document Title: Pro Underfloor – Control Pack



Overview

Water based underfloor heating (UFH) systems work by turning your entire floor into one large low temperature radiator which is heated via a network of pipes that are embedded within the floor. Since your floor (the 'radiator') is so large it only needs to run at a low temperature to heat your room. This means that the water that flows around your floor needs to be at a far lower temperature than a traditional radiator system. The above arrangement acts as a blending, circulating and distribution point for your UFH system.

Control Pack

The Control Pack is a preassembled unit designed to be easily fixed (via the ball valves) to the UFH Manifold. The unit will blend the primary hot water with the return water from the UFH to the temperature that is determined by the control valve. A pump is used to circulate the water around the secondary UFH system. The blending valve is factory set at 35°C but can easily be adjusted (range 35-65°C) via the control head below the pump. The unit has a maximum output of 14kW.

The Manifold

The manifolds have 1" connections on the main in/outlets and have 24/19 Monoblocco connections for the UFH Pipe. Prior to fitting the connectors to the manifold the pipe is to be bevelled by inserting the beveling tool and rotating the tool three full turns.

This will put a 45° chamfer on the pipe and the pipe will be ready to take the fitting. The flow manifold (top header) includes balancing and isolation valves. Depending on the position of the white locking cap, when adjusted, it will either regulate the flow (you will see the flow change in the glass window) or isolate the circuit. If ever the need arises, system maintenance can take place without losing the regulated flow which is determined at commissioning stage, hence the system will never need to be re-commissioned after the initial commissioning process. The manifold also includes fill and drain points and automatic air vents to aid installation.

Thermal Actuators

The manifolds are supplied with blue caps on the return manifold (bottom header) which isolate the UFH return water. The blue caps can be removed to allow for either 24 or 240V thermal actuators to be fitted.

Manifold Dimensions

Ports	Width
1	122
2	172
3	222
4	272
5	322
6	372
7	422
8	472