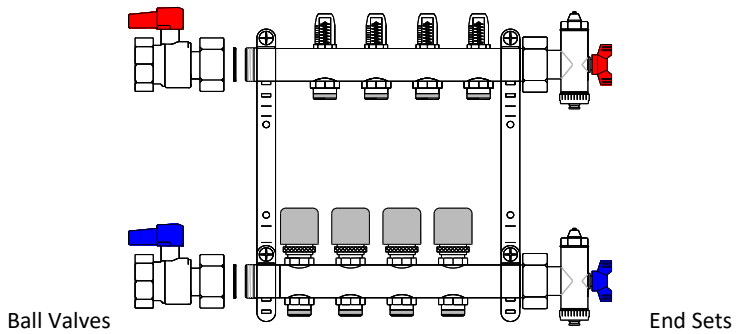
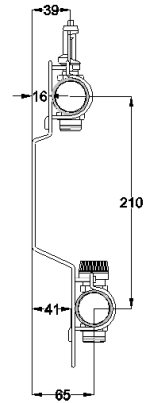
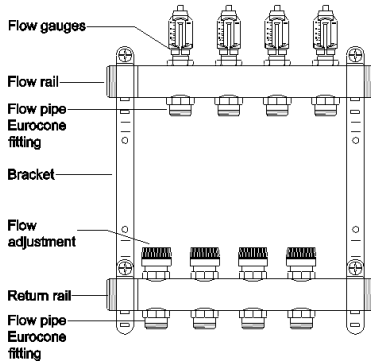


HeatMax™ UFH Manifold



2 Zone 31001

5 Zone 31007

8 Zone 31013

11 Zone 31019

3 Zone 31003

6 Zone 31009

9 Zone 31015

12 Zone 31021

4 Zone 31005

7 Zone 31011

10 Zone 31017

Installation & User Guide

Description / Overview

The HeatMax™ UFH manifold is used for the distribution and regulation of heating water to the various heating loops within your heating system.

- Made of stainless steel.
- Mounted on soundproofed and galvanised brackets.
- Flat faced 1" male connection thread at each end.
- ¾" connections for eurocones at 50mm spacing.
- Supply rail has 0-4l/min flow meters with shut off valve.
- Return rail has flow valves with shut off and flow regulation for balancing.
- Valves have M30x1.5 thread for connection of an HeatMax™ zone actuator.

How it works

The HeatMax™ manifold distributes heating water around the various underfloor heating loops within your floor; additionally, the flow rate to each loop can be regulated by individual zone valves to maintain a comfortable temperature in your home. This function can be automated with the attachment of a HeatMax™ control system including HeatMax™ master controller, zone actuators and thermostats.

CAUTION:

- ! Ensure that you mount the manifold level on the wall with enough space at the side for the HeatMax™ mixing or injection mix system or supply pump (if being used), ball valves, supply pipes and endset.

Installation

Tools required

1. An air bleed key (supplied and attached to the manifold).
2. Screwdriver to suit supplied mounting screws.
3. Electric drill.
4. 8mm Masonry drill bit.
5. Spirit level.
6. Spanner 24mm.
7. Spanner 30mm.

Step by step guide

1. Mark the preferred position of the manifold on the wall.
2. Ensure that you can mount the HeatMax™ mixing system or supply pump to one side of the manifold along with ball valves and supply pipes.
3. Ensure that the manifold is high enough to allow you to make the FlowMaster™ pipe loop connections from the floor (guide height 500mm from floor to the bottom rail).
4. Drill 4 x 8mm mounting holes in wall and insert wall plugs (supplied).
5. Fasten the manifold to the wall making sure that it is in a horizontal position.
6. Attach the Ball Valves onto the Manifold. The red valve should be fitted to the upper flow rail. Make sure you use the supplied washers. Do not use any sealant on these seals as this can lead to blocking of the internal components.
7. Attach each of the Manifold End Sets to the remaining open ends of the Manifold. The air bleed valve should point to the top. Make sure you use the washers supplied.
- 8. ENSURE ALL FLOW METERS ARE COMPLETELY OPEN BEFORE FILLING SYSTEM.**
9. Proceed with the installation of the FlowMaster™ pipe

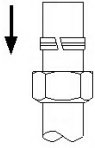
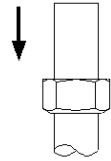
NOTE:

- ✓ All manifold locations should be in an area where there is a level of ventilation. Where manifolds are located in cupboards or enclosed areas always provide ventilation at both high and low level.

Connecting FlowMaster™ pipe to the manifold

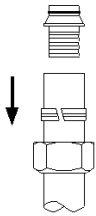
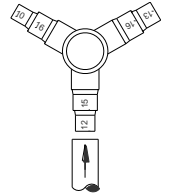
Installation of FlowMaster™ pipes

Cut the FlowMaster™ pipe at right angles and remove any sharp edges. Push the sleeve nut over the pipe.



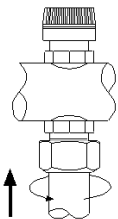
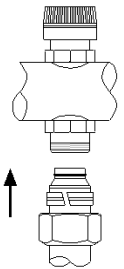
Place the clamping ring over the pipe.

Insert reamer (end marked 12mm) into pipe fully until pipe meets shoulder. Note taper on reamer to flange pipe end into a slight bell shape.

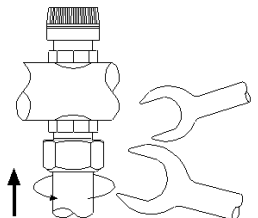


Push the ridged sleeve fitting into the pipe.

Insert the pre-assembled pipe into the valve.



Wind the sleeve nut over the thread of the valve, using your hand and pushing the pipe against the valve.

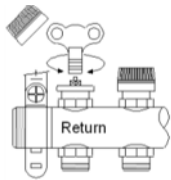
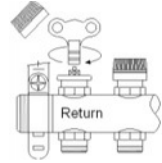


After hand tightening the eurocone onto the manifold use a pair of spanners to tighten the compression fitting a further ¼ turn.

Set-up / Commissioning

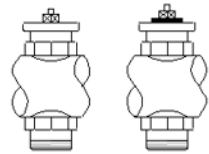
Setting the flow control:

Remove the site-protecting cap. Close the valve by turning the adjusting spindle clockwise with the air bleed key.



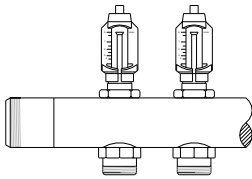
Adjust the volume flow by turning the spindle anti clockwise. The fine thread of the adjusting spindle must not be seen above the nut edge.

Correct **Incorrect**



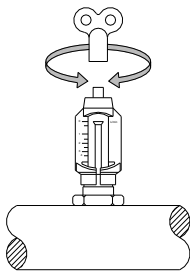
The valve is completely opened (full flow) after 2½ - 3 anti clockwise turns of the

spindle.

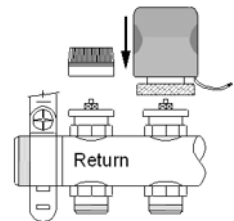


Read the volume flow from the scale of the flow meter and adjust until you get the correct flow rate as shown on the CAD plan.

Replace the site-protecting cap or connect the HeatMax™ Zone actuator to prevent ingress of dirt or changes to the settings.



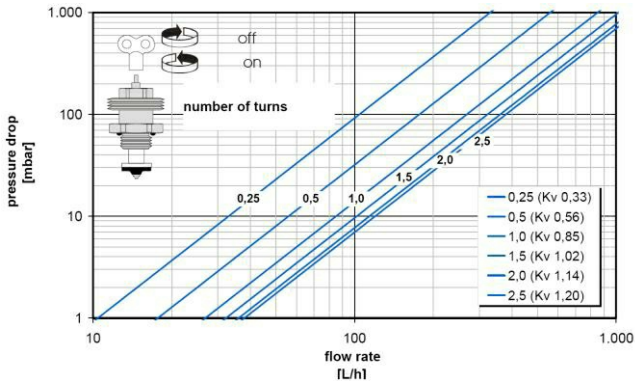
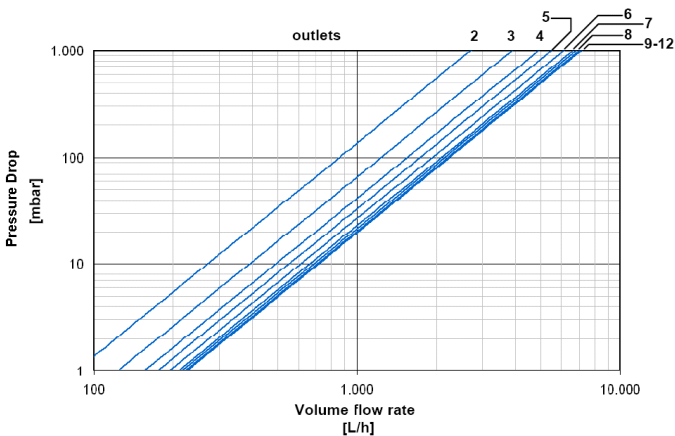
If required individual zones can be turned off with the site protecting cap, this will not affect the set flow rate. Alternatively turning the flow gauge isolation valve 2½ - 3 turns clockwise will close the valve (this valve must be fully opened when the zone is returned to use).



NOTE:

- ✓ Volume flows should be rechecked and readjusted after the initial adjustment of all manifold zones

Technical Information

Diagram 1: Adjustment of regulation valves

Diagram 2: Total pressure drop


Manifold sizes (manifold only)

Manifold zones	2	3	4	5	6	7	8	9	10	11	12
Length in mm	190	245	300	355	410	465	520	575	630	685	740

Maximum manifold sizes (manifold, mixer, ball valves and end sets), no allowance for clearances.

Manifold zones	2	3	4	5	6	7	8	9	10	11	12
Length in mm	440	480	520	570	620	670	720	780	830	880	930

Spare Parts / accessories

HeatMax™ UFH manifold ball valves 1" x 1" (pair)	33007
HeatMax™ UFH manifold endset (pair)	33031
HeatMax™ UFH manifold offset elbow (pair)	33011
HeatMax™ UFH manifold elbow (pair)	33015
HeatMax™ UFH manifold coupler (pair)	33019
HeatMax™ UFH manifold blanking plug	33027
Replacement HeatMax™ UFH manifold flow gauge	33021
Replacement HeatMax™ UFH return valve assembly	33023

Address and Contact information

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