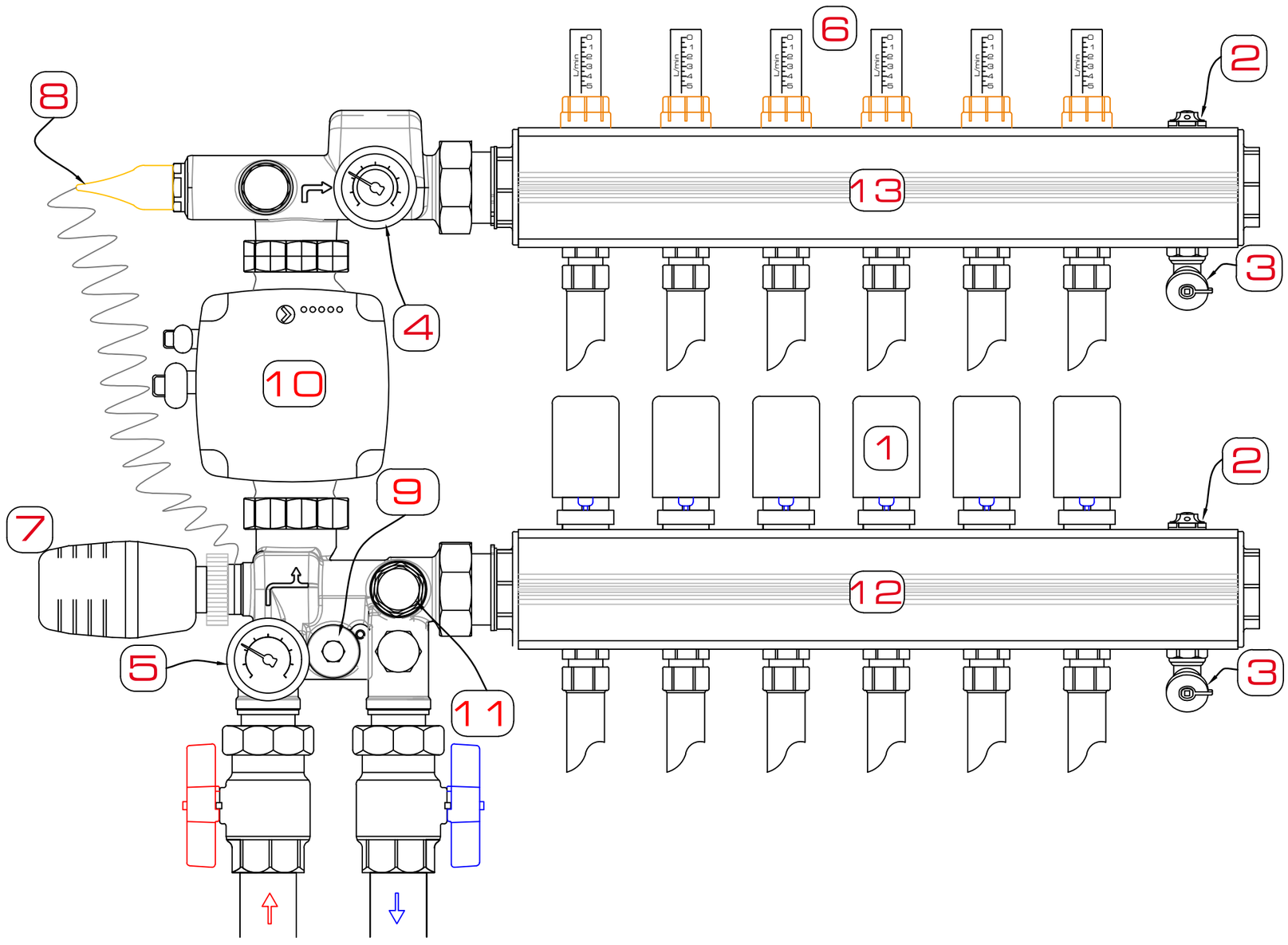
MANUAL WATER TEMPERATURE CONTROL
OPTIMIX MANIFOLD DETAIL



1 Thermo Actuators: Operated indirectly by the individual room thermostats via the wiring centre, the actuators allow flow through each individual pipe circuit in relation to a heat demand. If more than one circuit of pipe is required to fill a room, then the room thermostat for that area will indirectly control more than one actuator.

2 Air Eliminators: Situated at the highest point of the manifold blocks, the air eliminators disperse any trapped air in the system. Manifolds are pre-fitted with either manual or auto air eliminators. Once all air has been eradicated from the system, the air eliminators must be closed off, otherwise they may let by water which will invalidate system guarantee.

3 Fill/Drain Valves: Utilised for filling and pressure testing a system, as well as for maintenance if necessary. For further information on filling and pressure testing please refer to the filling and pressure testing page.

4 UFH Mix Temperature Gauge: Accurately displays the mixed flow temperature of the water entering the floor heating circuits. Highly important to ensure the correct temperature is entering the floor (typically 50-60°C)

5 System Pressure Gauge: Displays the system pressure which is utilised when filling and pressure testing. This gauge will indicate any loss in pressure once the system has been correctly pressurised. The system should br pressurised and held at 2 - 3 bar.

6 Flow Meters incorporating Balancing Valves: Accurately displays and controls the flow rates of each individual circuit. Flow rates should be set as indicated on the CAD pipe layout supplied. This is done by removing the red collar and turning the clear tube clockwise to restrict flow and vice-versa.

7 Thermostatic Head: This controls the required mixed water temperature entering the floor heating circuits via a thermo-static sensing element.

8 Thermostatic Sensing Element: This element is inserted in the flow section of the Combimix and senses the flow temperature entering the floor.

9 Primary By-pass KV Valve : Provides the means to balance the UFH circuit with any primary circuits (e.g. radiators). This valve should be set at 2.5, which will meet the requirements of most UFH systems. This Valve can be adjusted under certain circumstances to suit specialised system set-ups

10 Manifold Pump: Circulates the water from the primary circuit around the UFH circuits, thus enabling the correct flow rates to be achieved

11 Secondary By-pass valve: This valve can be used to close the Optimix primary bypass return circuit. This valve must be fully opened by unscrewing the protective hex cap and removing the locking screw. Then using a 5mm allen key, turn the valve fully anticlockwise. Reinsert the locking screw and replace hex cap once the valve has been fully opened.

12 Return Manifold Block: Connects to the return side of the heating system.

13 Flow Manilfold Block: Connects to the flow side of the heating system.