Automatic balancing valve for radiant heating system Series MH

Main features:

- Connection G1” to the return manifold
- Calibration pressure drop 20kPa-55KPa
- Mechanical lock for calibration
- Compact size
- High reliability
- High reactivity response and precision
- Retrofit solution

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Description

Valve Series MH is a device for hydraulic balancing and flow control in radiant heating systems.
The possibility of adjustment of the pressure drop makes it adaptable to different installations and different flow.
Valve Series MH is a solution that allows eliminating flow fluctuations and consequently temperature variations in the branches of the heating system, ensuring a better comfort.

MH

Axial balancing valve. Connection: inlet G 1" union nut, outlet G 1" male thread. Including capillary pipe with connections G 1/8" male thread[1].

Type	Part no.	DN	Adjustment range	Weight (g)
MH	MH001WB	G 1"	20-55KPa	1200

[1] connecting the capillary pipe to the supply pipe requires a G 1/8" female thread connection on site.
Watts offers accessories AS-MH as well as KH-MH.

Technical features	
Max pressure	8 bar
Operating temperature	5-80°C
Max Δp	2 bar
Adjustment range	20-55KPa
Kvs	5,6
Max flowrate	2500 l/h

Materials	
Upper and bottom cap	Brass – CB753S
Central Body	PA6 + 30%FV
Spring	AISI302
Balancing Piston	Brass – CW617N
Shutter	Noryl
Hand Wheel	ABS

Application

It is known that the distribution of the radiant heating networks should have a well-defined flow at the design stage and should then correspond to the values calculated during the exercise.
In an unbalanced radiant heating distribution system perturbation due to external sources, e.g. increase the flow rate and pressure of the main pump, or internal, e.g. exclusion of some branches of the radiant system, can lead to an imbalance generating a variation in the home interior comfort.

The installation of the valve Series MH on a distribution manifold for radiant heating system allows, once the initial calibration is performed, to ensure a correct distribution of the flow rate with immediate comfort and benefits in energy saving.

Operation

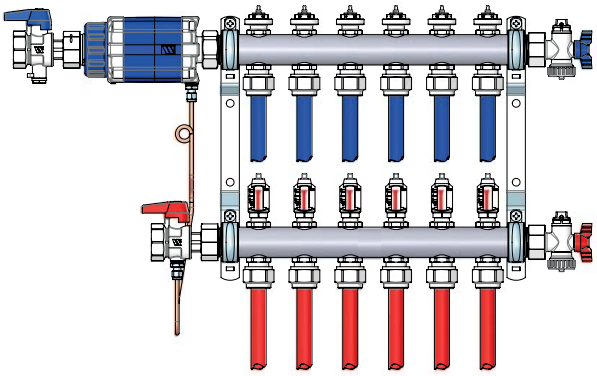
The balancing valves for radiant heating systems Series MH maintain a constant pressure differential between the supply and return branch of the manifold. The pressure difference can vary significantly due to lboth, external and internal load variations of the radiant heating system. The valve Series MH allows re-balancing and maintaining of the pre-set differential pressure constant by means of a balancing piston.

Installation

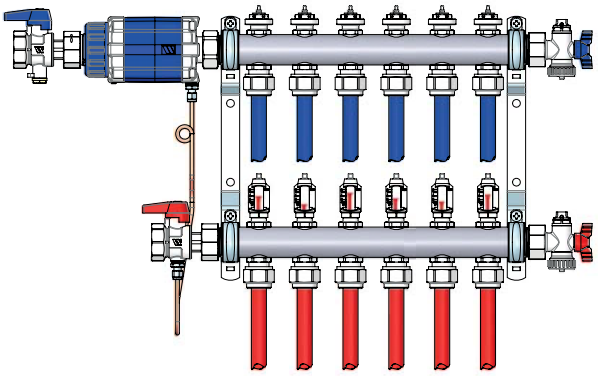
The valve Series MH has a G1" nut that allows the connection to the return branch of a manifold with G1" male thread.
The capillary pipe must be connected between the pressure outlet provided on the bottom cap of the valve Series MH and the pressure outlet provided on the ball valve on the inlet manifold or a specific pressure outlet.

Calibration

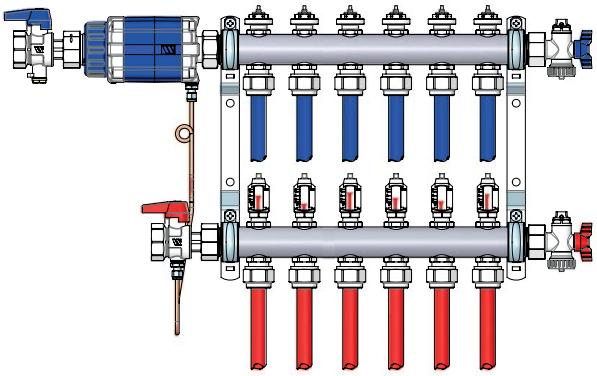
Connect the valve Series MH with the capillary pipe to the return manifold with the ball valve or a specific pressure outlet connector.

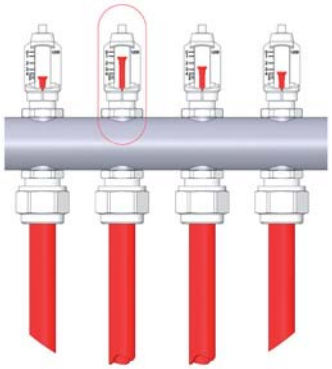


Start the system, verify total air expulsion. At this time the branches will be unbalanced.

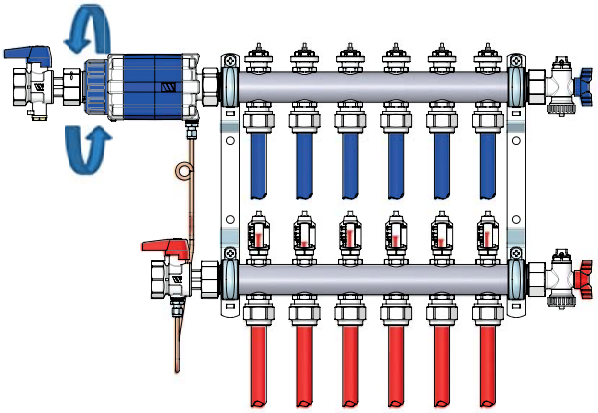


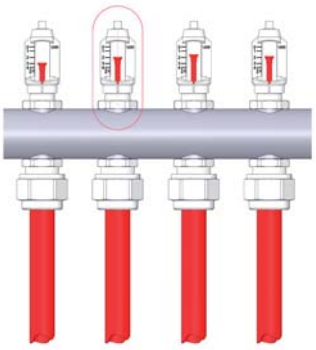
Locate the branch with the lowest flow.



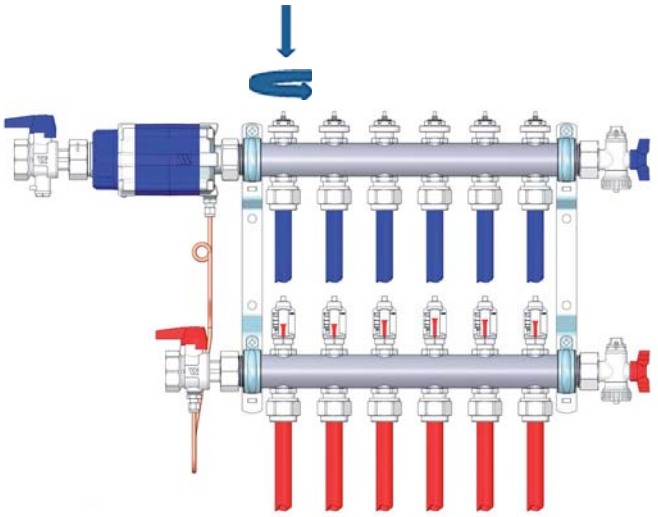


Turn the valve adjustment knob to bring the value of the selected branch flow to the desired value.



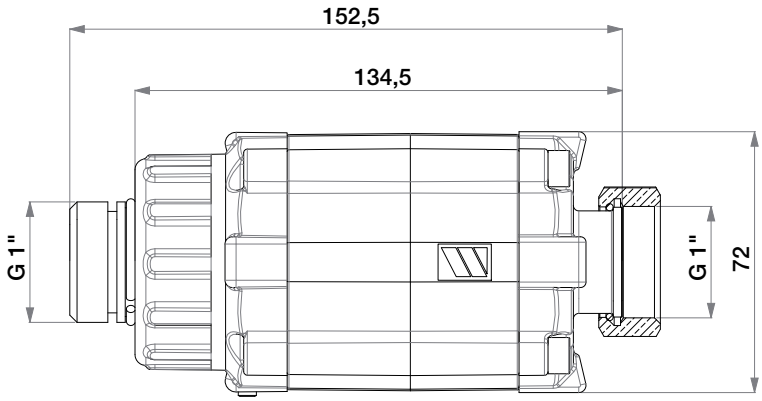


Then act on the adjustment of the manifold valves to vary the flow rate of the other branches.



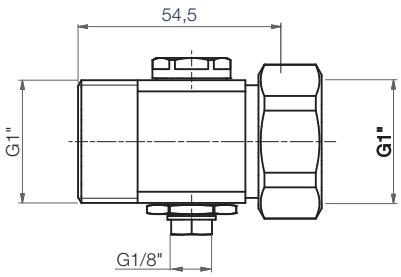
Overall dimensions (mm)

MH

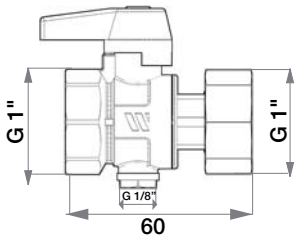


[1)]Required accessories

AS-MH
connection fitting



KH-MH
ball valve



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