



TH-RV470

Thermostatic head

Thermostatic head intended to regulate the flow through the RV2 radiator valves.

- ✓ 8...32 °C
- ✓ Easy installation
- ✓ High accuracy
- ✓ Possibility to limit or lock the adjustment range

Function

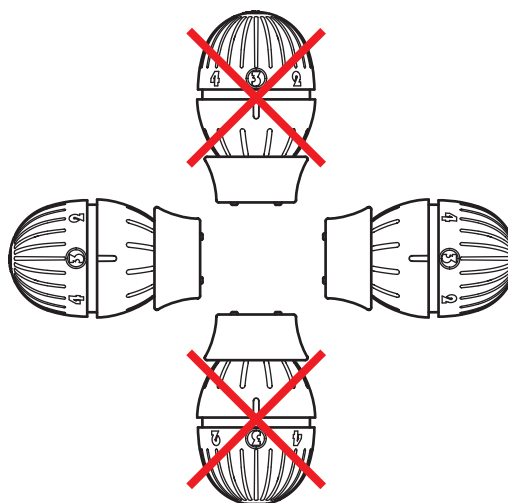
The thermostatic heads are designed to keep the room temperature constant at the set value. This is done with the help of a sensor inside the thermostatic head.

Variations in the room temperature leads to a variation in the volume of the liquid contained in the sensor inside the thermostatic head. This volume change results in the valve opening or closing, regulating the flow rate of the water entering the heating element.

When the room temperature is approaching the set value, the thermostatic head gradually closes the valve, letting through just the minimum amount of water to keep the room temperature constant.

Installation

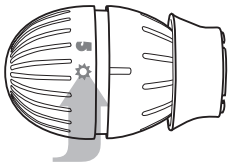
The thermostatic head must be mounted in a horizontal position.



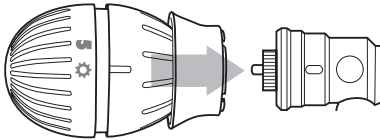
In order to prevent inaccurate temperature readings, the thermostat should be installed in a place with a representative room temperature, for example not exposed to direct sunlight, or in a cold draught.

Mounting the thermostatic head on a valve

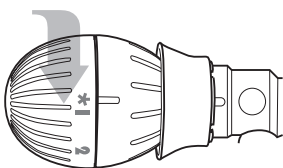
1. Turn the knob to the ☸ position (fully open).



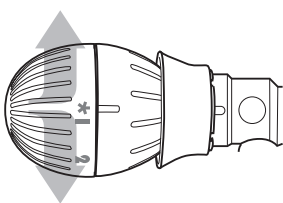
2. Connect the thermostatic head to the valve.



3. Turn the knob to position ☸ (fully closed).



4. Turn the knob to the desired position.



Adjusting the temperature

To adjust the temperature, refer to the following table which shows the numbers on the knob and their corresponding room temperatures.

Position	Room temperature setpoint (°C)
☸	8
1	10
2	15
3	20
4	25
5	30
☸	32

NB! The values shown in the table refer to optimum conditions obtained in a climatic chamber. In a regular room, these values may be altered by factors such as the type of installation, the environmental conditions and the degree of insulation in the building.

If the radiator is positioned in a place where the temperature doesn't correspond to the average room temperature, for example where there is a cold draught or in direct sunlight, the sensor can make the valve close too early or not at all. In these cases, the knob must be repositioned with the aid of a reference thermometer positioned in the middle of the room.

For example, if the head is in position 3 and the room temperature is lower than the expected 20 °C while the system is working, it means that the valve has been closed too early due to a higher local temperature by the radiator. In this case, turn the knob slightly until it is halfway between position 3 and 4.

Vice versa, if the temperature is higher than the expected 20 °C when the head is in position 3, it means the sensor is positioned where the local temperature is lower and therefore keeps the valve open. In this case, turn the knob until it is halfway between position 2 and 3.

If the thermostatic head is installed in a room that is not in use, you can ensure the best energy savings by turning the knob to position ☸ (corresponding to the 8 °C freeze protection temperature).

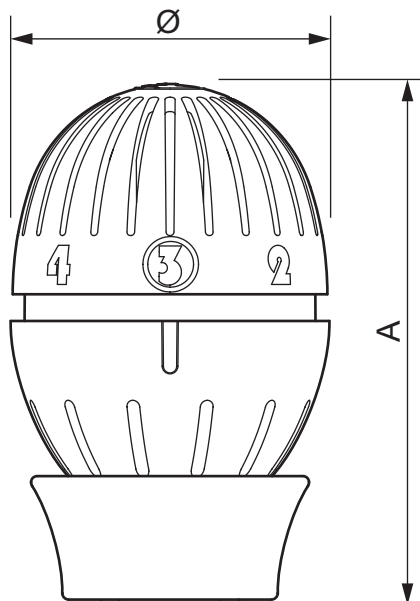
Technical data

Temperature range	5...110 °C
Hysteresis	0.4 K
Response time	26 min
Influence of the differential pressure	0.55 K
Influence of the water temperature	1.2 K
Certification	KEYMARK certification

Models

Article	Description
TH-RV470	Thermostatic head for RV2 valves

Dimensions



A	Ø
80	49

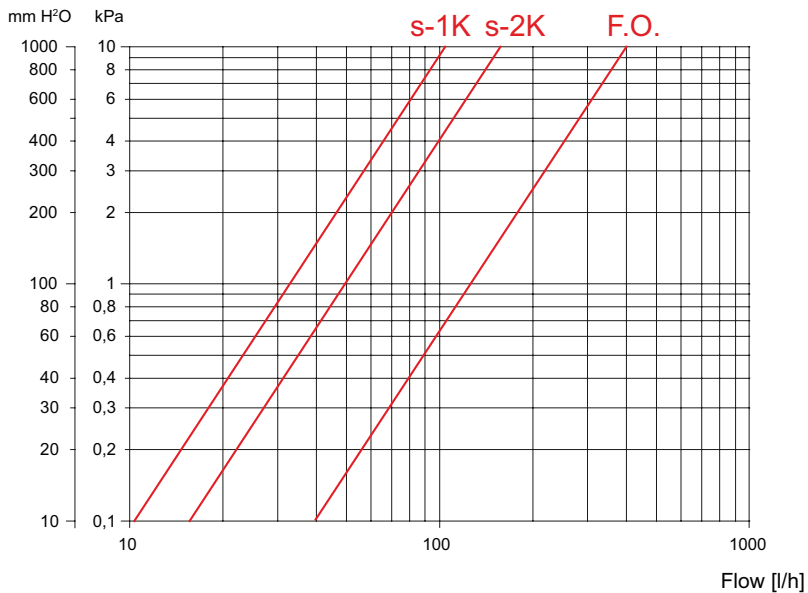
Measurements in mm unless otherwise specified.

Pressure drop

The diagrams show pressure drops with the thermostatic head in position 3 and a temperature difference between the set temperature and the actual room temperature of 1K (curve s-1K) and 2K (curve s-2K) and with the thermostatic head in fully open position (curve F.O.).

Combined with DN10 - DN15 valves

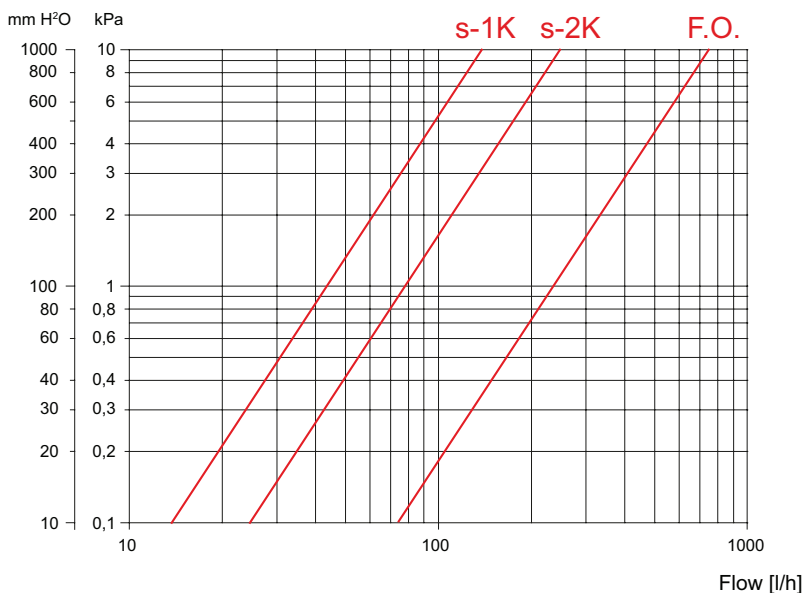
Pressure drop



Curve	Kv
s-1K	0.33
s-2K	0.51
F.O.	1.26

Combined with DN20 valves

Pressure drop



Curve	Kv
s-1K	0.44
s-2K	0.80
F.O.	2.37