

 **alido**



**P58**

**thermostatic valve**  
for domestic hot water  
circulation

# P58

## Thermostatic valve for domestic hot water circulation



### Functions:

- Hydraulic balancing of the domestic hot water installation and flow limitation in the domestic hot water circulation to the minimum required level.
- The thermostatic circulation valve regulates the flow rate depending on the supply water temperature through an internal thermostatic element. The flow rate generated by the circulation pump is transferred to the remaining elements of the installation (vertical and horizontal), resulting in thermal balancing of installation. The circulation system is designed for the required flow rate in a given branch based on the heat loss throughout the entire circuit.
- Ensuring a constant set water temperature by adapting the installation operation to the momentary, changeable demand for hot water.
- $\Delta T$  balancing for the entire hot water installation returning to the exchanger.
- The valve is equipped with a bypass enabling thermal disinfection to prevent the growth of Legionella bacteria.

### Intended for:

- Apartment building
- Commercial facilities
- Institutional buildings

### Technical Specifications:

Medium: water intended for drinking water

Max. working pressure: 1MPa (10bar)

Temperature setting range: 35°C - 60°C

Disinfection temperature: 68°C - 72°C

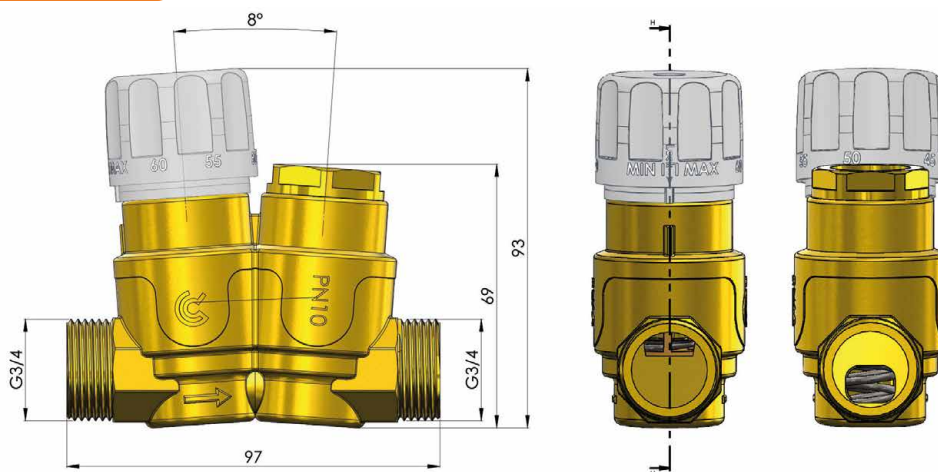
Closing temperature: 75°C

Max temperatur: 90°C

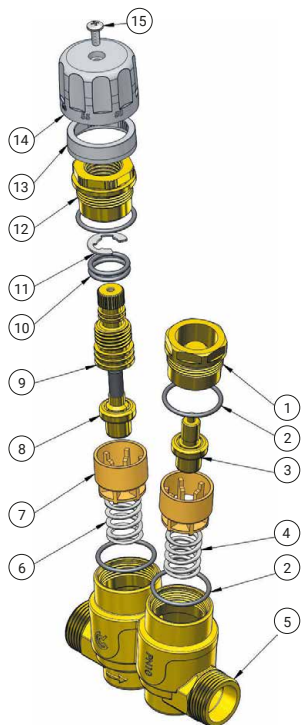
Kv = 2,3m<sup>3</sup>/h

Connection: GZ 3/4"

## Dimensions:



## Construction:

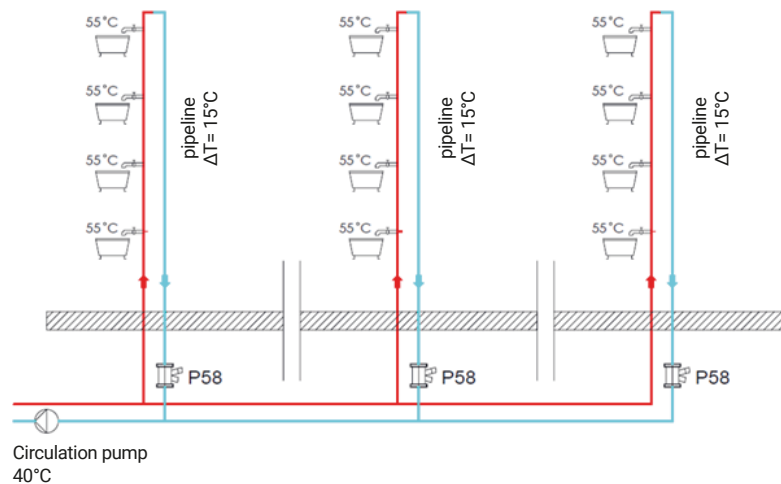


	Description	Material
1.	Thermostatic insert cap	Brass CW617N
2.	O-ring	EPDM
3.	Thermostatic insert	-
4.	Spring	Stainless Steel 1.4301
5.	Valve body	Brass DZR
6.	Spring	Stainless Steel 1.4301
7.	Plastic insert	Plastic
8.	Thermostatic insert	-
9.	Pin	Brass CW617N
10.	O-ring	EPDM
11.	Spring mounting plate	Stainless Steel 1.4301
12.	Spindle body	Brass CW617N
13.	Setting protection	PA
14.	Knob	PA
15.	M4 screw	Stainless Steel 1.4301

## Principle of operation:

Thanks to thermostatic elements, circulation valves regulate the flow rate on each riser. They operate automatically, regulating the flow depending on the temperature and maintaining the set temperature parameter for all consumption points.

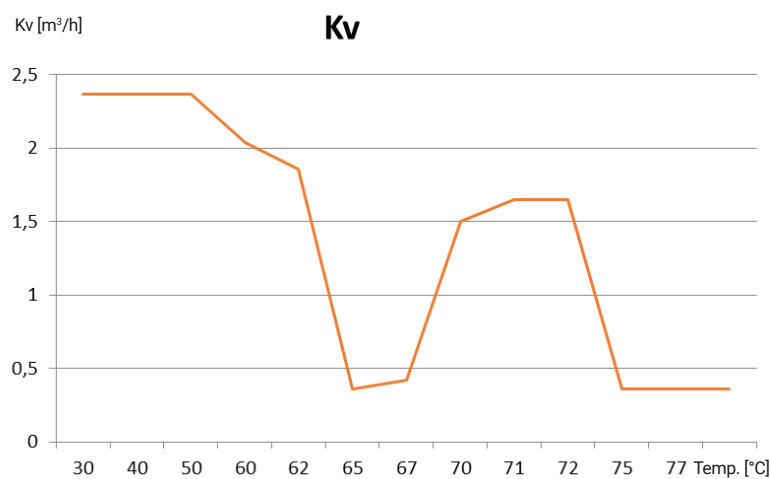
Thanks to the use of high-quality thermostatic elements, along with increasing the Kv of the valves, the flow rate created by the circulation pump is transferred to the remaining return risers of the hot water installation much more effectively, resulting in a balanced  $\Delta T$  for the entire hot water installation returning to the exchanger.



### Disinfection process:

Once the temperature reaches 65°C, the thermostatic insert limits the water flow through the valve to a minimum in the main valve chamber. From a temperature of approx. 68°C, the bypass with the second thermostatic insert automatically starts the disinfection process. The highest flow in the disinfection process occurs at temperatures of 70°C - 72°C and when this value is exceeded, it is limited. When the temperature reaches 75°C, the flow reaches minimum.

The graph shows the dependence of Kv on a given temperature:



### Equipment:

Calido S30 ball valves with a movable nut F/F and F/M 3/4" for installation on a flat gasket.

