

# **OCS** Feed Mixing Valve 4200



### **Technical data**



#### **Thermostatic Valve Combination**





 $\ensuremath{\varnothing}$  22 dimensions are in the parenthesis.



## General

Valve group includes all operations, required by the authorities, when connecting the boiler into the mains. Therefore, it can also be used in contact with the hot water loops of the boilers.

The valve operates by the aid of mass thermostat and a spring as its reacting force. These two move a two headed plate between hot and cold water inlets, according to the adjusted temperature, so that the spring opens and the thermostat closes the hot water inlet. Due to the previous, if the running of cold water stops, the thermostat automatically closes also the hot water inlet. The temperature of mixed water can be adjusted between  $+37^{\circ}\text{C} - +65^{\circ}\text{C}$ .

## Installation

The valve operates in all positions. (Note! When used, the vacuum breaker must be upwards). A 300 mm thermal barrier must be noted in the installation, the valve must not be installed directly on top of the boiler. Installation according to the diagram.

Safety valve is to be equipped with a blow-off pipe (overflow pipe). During the installation you must take care that it does not disturb the blow force of the valve. The blow-off pipe is lead to the sewerage, e.g. through a floor drain.



## Use

The functionality of the safety valve must be checked by launching it time to time by twisting the red cap counterclockwise.

Waterproofness is stated after the testing. A safety valve which is installed in connection with a boiler, drops water as the cold water warms up and expands at the same time, or whenever hot water is used, or a boiler is heated. In order to prevent the temperature regulator piston from getting stuck, the temperature regulating handle should be twisted from a end position to another from time to time.

#### Note!

The safety valve drops time to time, when installed in connection with the boiler. Dropping is due to the heat expansion – it is not a fault, which should be fixed, but an indication that the valve is working.

## Maintenance

Since there are always impurities in the water, which may have harmful effect on the functioning of the mixing valve, the mixing valve must be cleansed when needed.

## Disassembly

- If needed, turn off the heat
- Turn off the water and empty the boiler from water if needed (drain and filling valve 8).
- Remove the hand wheel (5)
- Open the cover (4). Remove the thermostat (3), the piston (2).
- Carefully clean the frame interiors without scratching the coating
- Clean the extracted parts.
- Check and replace damaged parts.

## Assembly

- Assemble the valve in opposite order without locking the hand wheel.
- Turn on the water.
- Ensure the tightness of the valve group.
- Turn on the heat.

## Adjusting the temperature

The temperature of the mixed water is chosen by hand wheel and temperature meter (adjustment range  $+37^{\circ}\text{C} - +65^{\circ}\text{C}$ ).

The valve is adjusted to the temperature range by twisting the fully open shaft approximately 1 ¼ rounds towards closing. After this, the fine adjustment is done by twisting the shaft towards opening step by step and by reading the temperature meter. One full round consists the valve's adjustment range (+37°C - +65°C). Place the handle on its position so that the reading of the handle is 1 = +37°C.





- 2 Piston
- 3 Thermostat
- 4 Cover
- 5 Handwheel
- 6~ Vacuum breaker G  $^{1\!\!/_2}$  (accessory)
- 7 Safety valve (10 bar)
- 8 Drain valve

Note! O-rings are made of EPDM rubber. For lubrication, you must use grease for O-rings, e.g. Oras no. 911311.

