



# Brass antifreeze valve

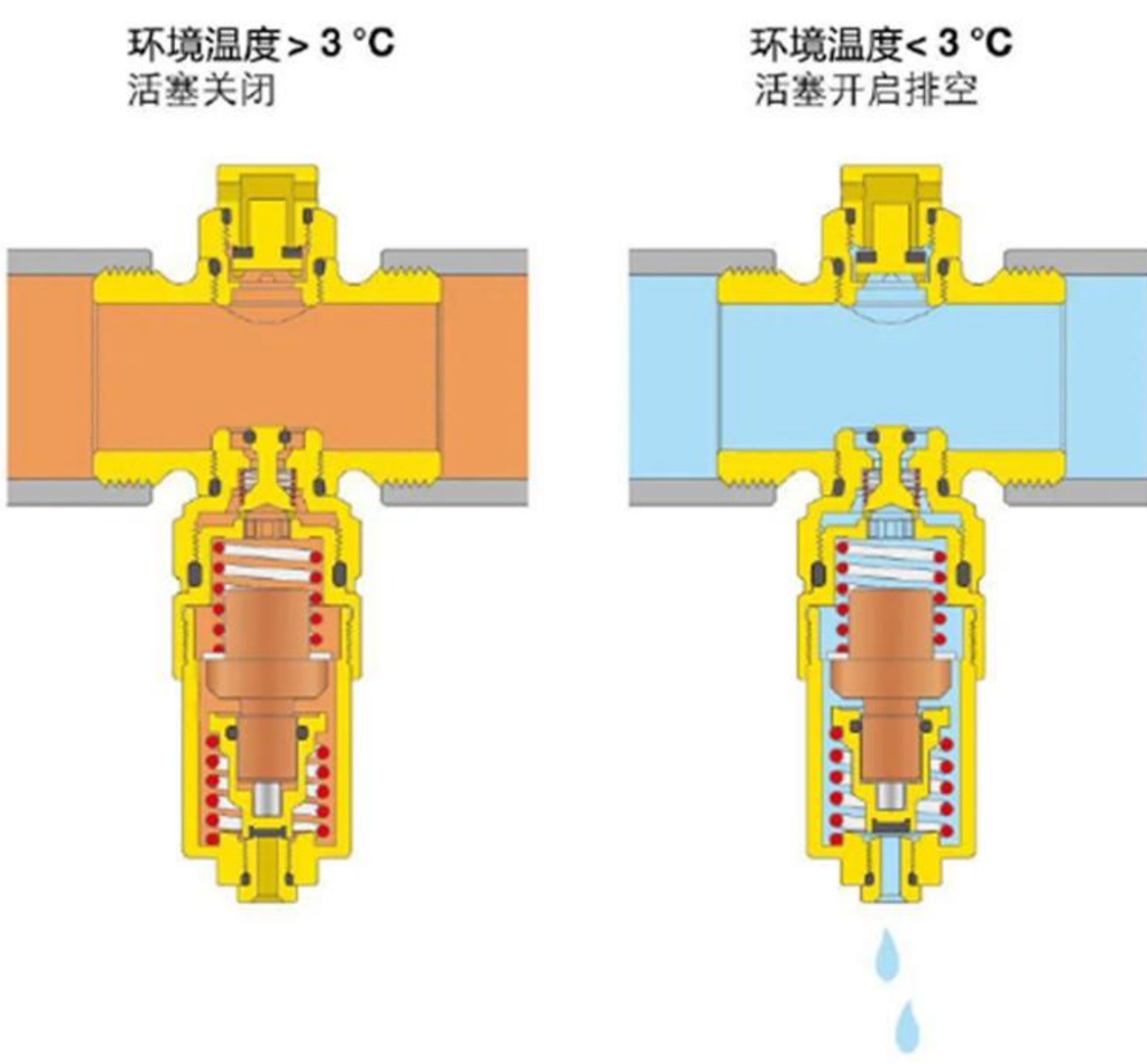
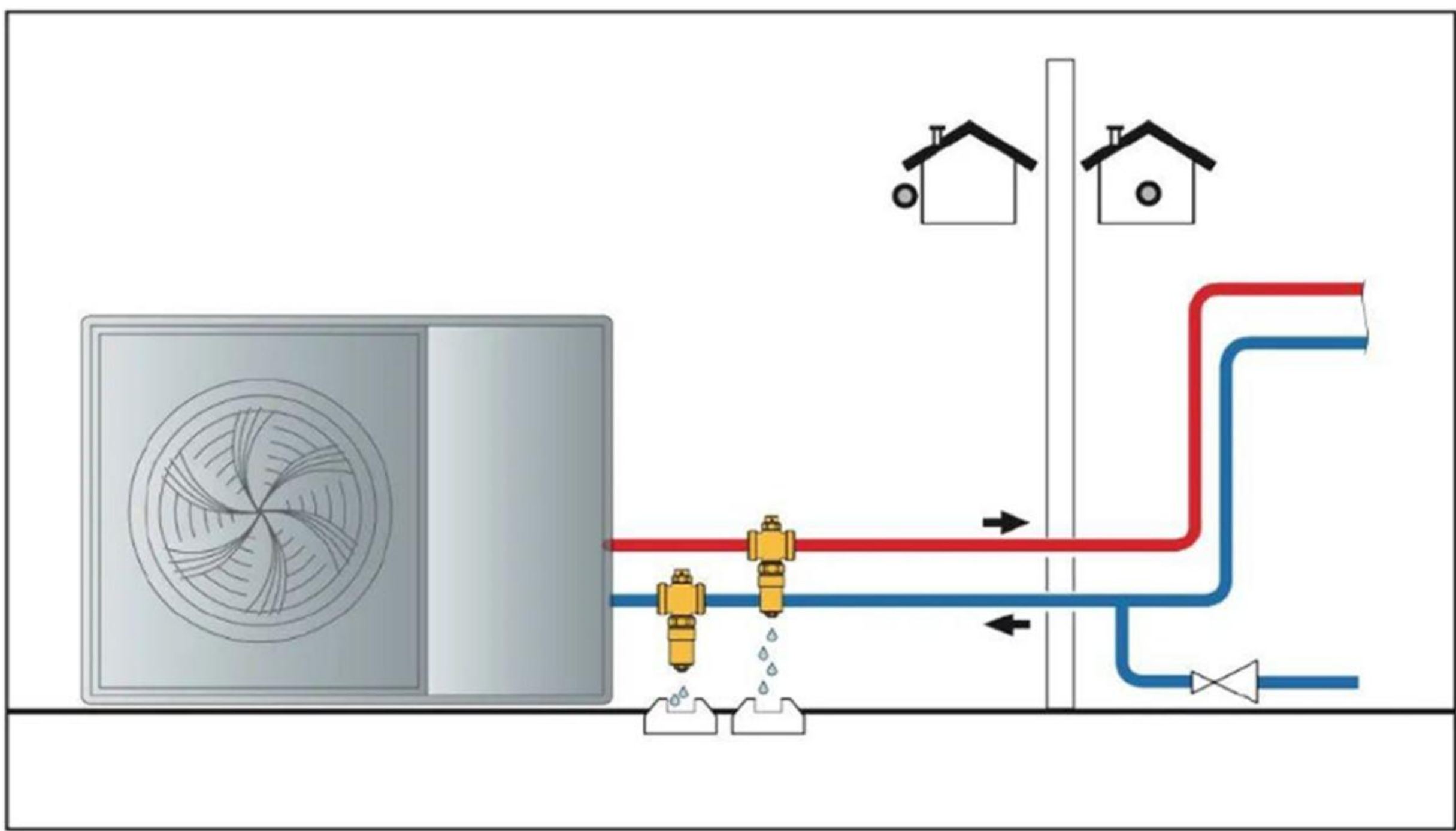
## Function:

Antifreeze valves are used in domestic water systems to prevent freezing from breaking pipes or water tanks.

When the ambient temperature is lower than the set temperature, the antifreeze element automatically opens and the water leaks into the sewer pipe, which ensures that there is always a part of the water flowing to avoid freezing.

When the ambient temperature rises or the water temperature rises, it automatically shuts down. The system is restored to the normal state.

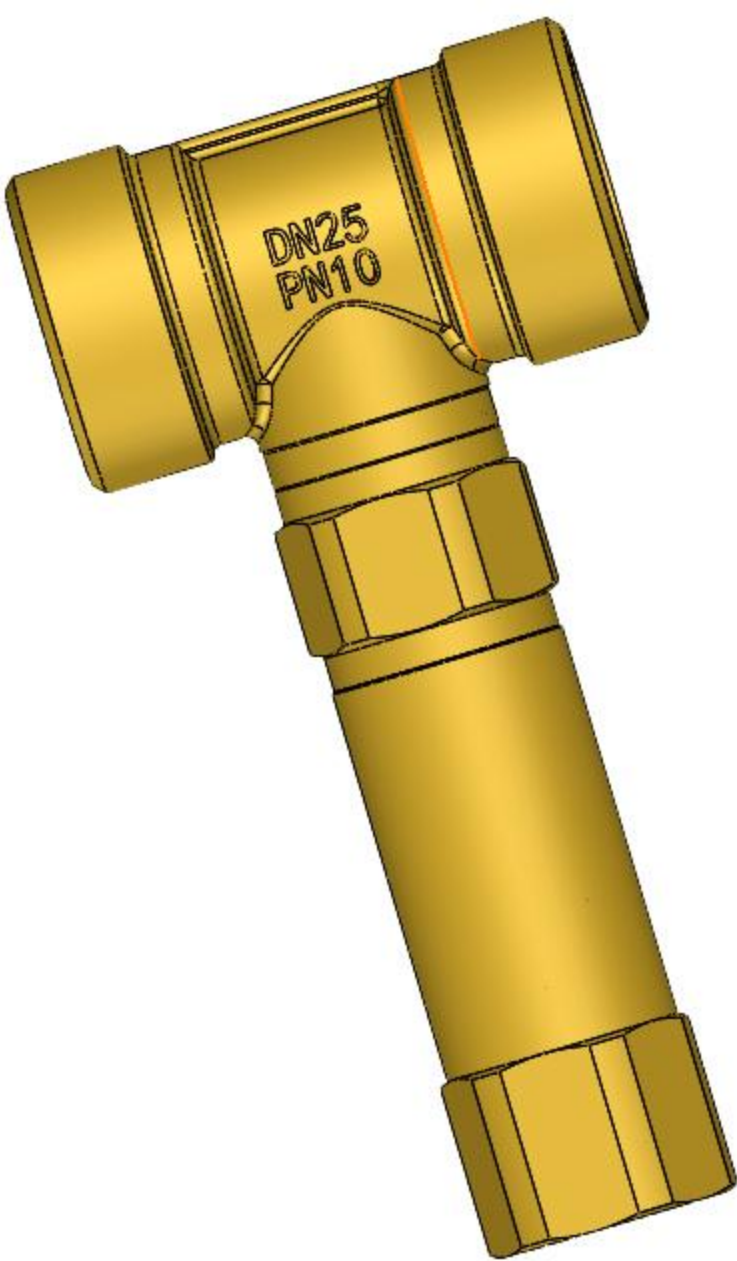
## Applicable scene:



When the heat pump is used in cold areas, the pipe exposed to the outside may freeze, the probability of this situation is not very high, but once it appears, it will cause great losses to the host and the system, which is often produced when the following problems occur at the same time:

- 1. The outdoor temperature is close to or below 0 degrees for a long time;
- 2. The outdoor pipes are not well insulated;
- 3. The system does not add antifreeze or the proportion is not enough;
- 4. The host is interrupted or powered off unexpectedly.

When these problems occur, the antifreeze valve can automatically open and empty the circulating water in the outdoor pipeline Prevent freezing and protect equipment such as main engine, pipe and valve.



## Technical specification:

sealing material

EPDM

spring

stainless steel

applicable medium

water

withstand voltage

10bar

Opening temperature

1°C

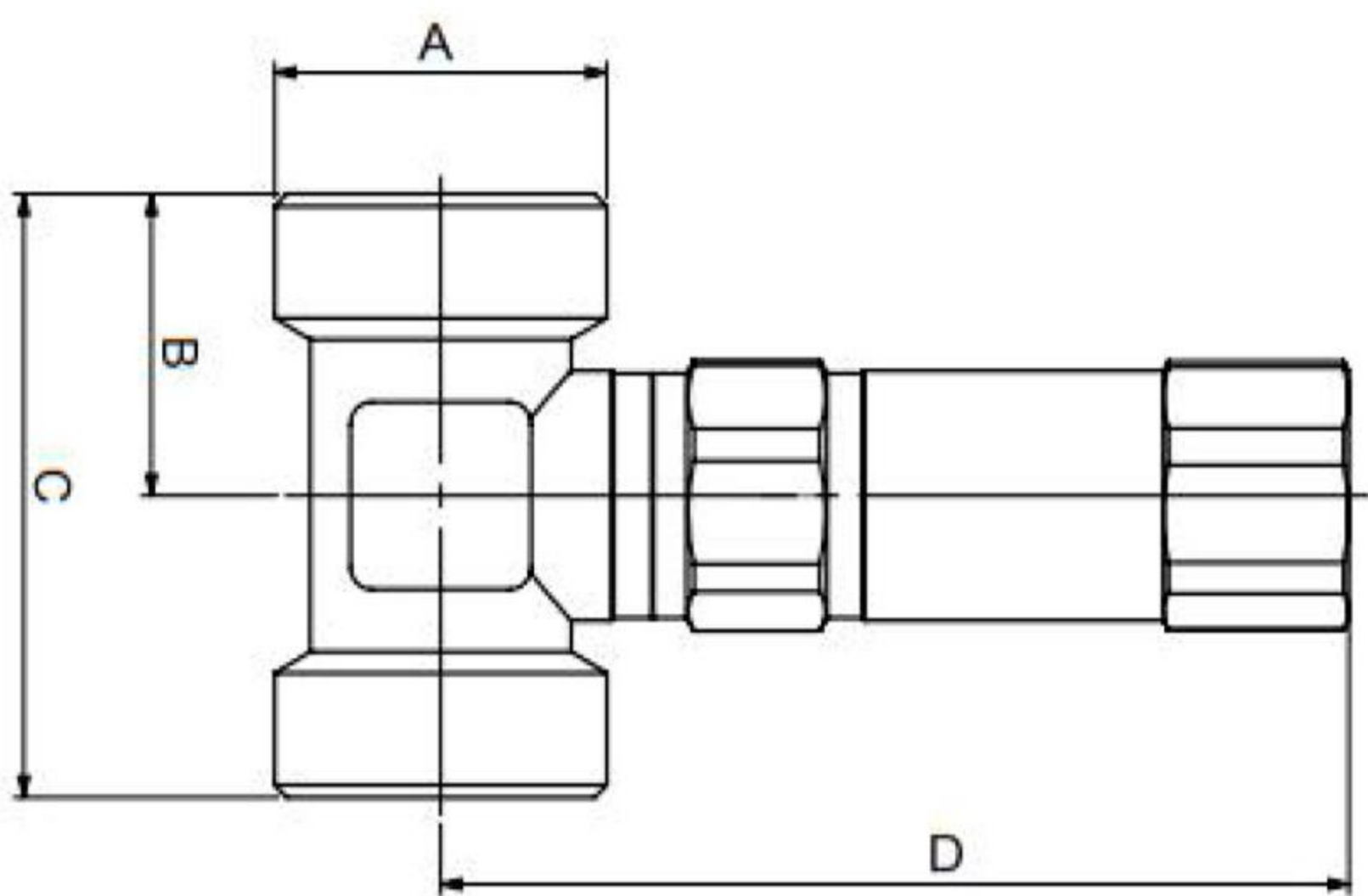
Closing temperature

4°C

temperature range

-20°C-90°C

## Structure size:



| Size | A   | B  | C  | D    |
|------|-----|----|----|------|
| G1"  | G1" | 29 | 58 | 90.5 |

## Operating principle

A thermal element in contact with the ambient temperature controls the opening and closing of the piston and seat.

When the ambient temperature is lower than When the value is set, the shrinkage of the thermal element drives the piston down to open the drainage channel, so that a small amount of water is discharged. The continuous flow of water prevents the pipes from freezing.

After the water temperature in the pipeline flows, its temperature is usually higher than the temperature of the outside air, when the temperature exceeds the set closing value When the thermal element expands, the piston is driven upward to close the drain channel.

The system is restored to normal status. For the sake of good For good antifreeze operation, ensure that the upstream of the safety antifreeze valve is a normal tap water supply pressure ring

## Way to install

The antifreeze valve must be installed vertically, the water outlet is flushed down, and the water discharge place cannot be shielded to ensure smooth drainage.

The antifreeze valve must be installed on the pipe connecting the outdoor main pipe and the indoor pipe (the pipe is most important when the heat pump is shut down due to power failure or failureEasy to freeze), the antifreeze valve can not be too close to the heat source, otherwise it will affect its normal operation.

It is recommended to install antifreeze valves on the water supply and return pipes, otherwise the outdoor pipes may still freeze.

The system must maintain pressure at all times to ensure the normal operation of the antifreeze valve.