

ART.2900


**Antifreeze valve**

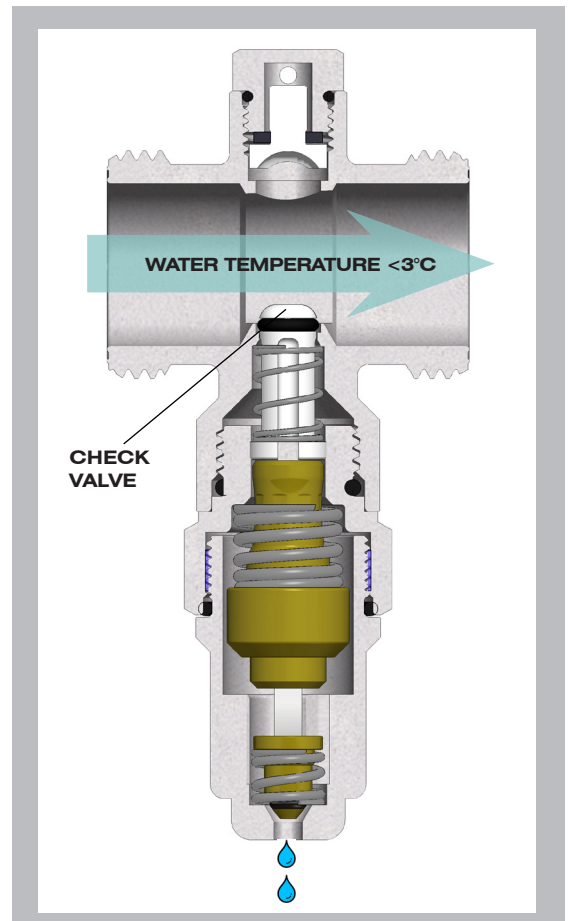
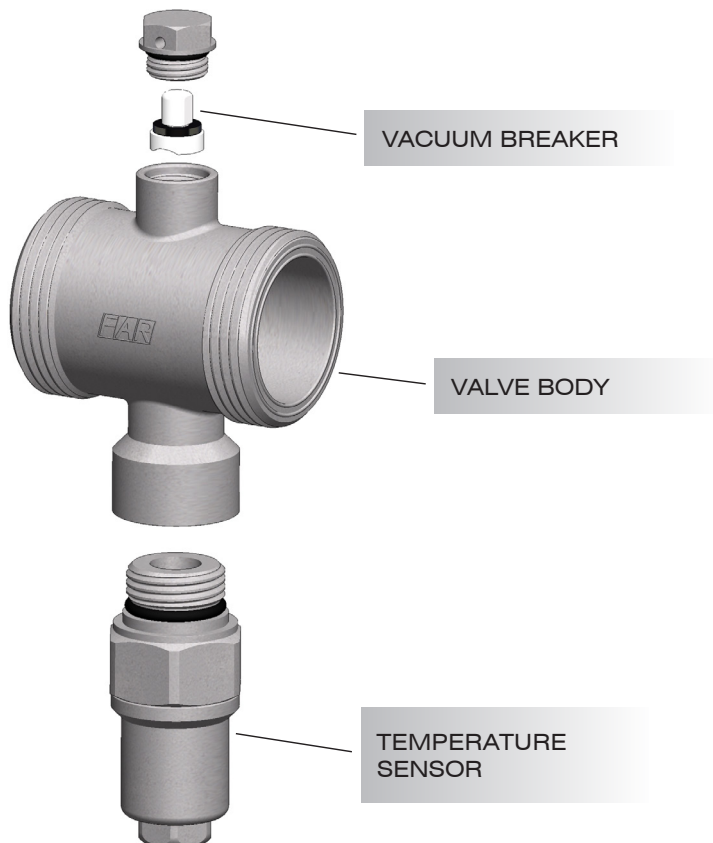
- With built-in check valve to keep the system operating
- Temperature sensor that can be inspected and replaced
- Opening temperature: 3 °C
- Liquid used: water
- Side connections: male-male
- Connection sizes: 1" - 1¼" - 1½"

**1 DESCRIPTION**

The antifreeze valve, used as an alternative to glycol, prevents the water in the heating system pipes from freezing.

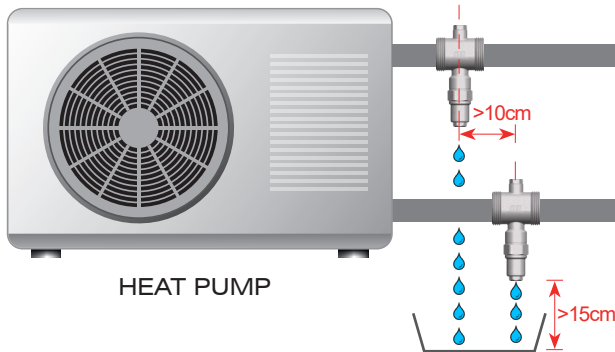
For example, in systems with a heat pump with an outdoor unit, the water in the piping can be connected with the indoor unit. During use in the wintertime, this water can freeze compromising the operation of the system or causing breakages.

The valve intervenes by means of an internal sensor at a temperature of approximately 3°C, which opens a small hole allowing water to drip out towards the outside environment, thus preventing the water in the pipes from freezing.

**2 CHARACTERISTIC COMPONENTS AND OPERATING PRINCIPLE**


## 3 INSTALLATION

The valve must be installed in a position that ensures drainage of the water, while trying to prevent blocks of ice from forming. A clearance of approximately 15-20 cm from the ground is sufficient. When positioning the antifreeze valve, the position of the delivery pipe with respect to the return pipe must also be considered, trying to offset the position of the two pipes and separating them from each other. If the antifreeze valve on the upper pipe is activated, this positioning therefore prevents the water from falling onto the underlying pipe, which could cause ice to form. It is also recommended that an installation position be chosen that allows the system to be emptied.



The antifreeze valve is installed on the delivery and/or return pipes, away from any sources of heat. The installation position must ensure complete control of the service connections.

The water drained from the antifreeze valve is routed to a suitable collection point.

## 4 MAINTENANCE

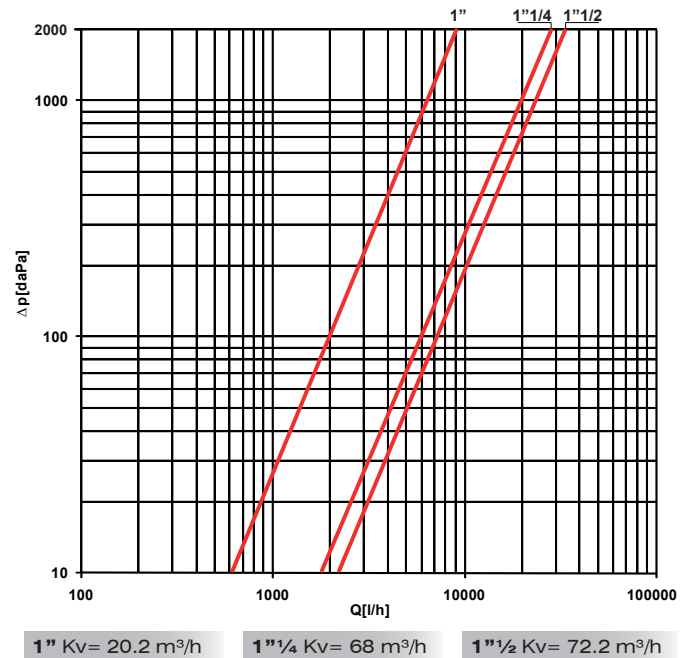
Maintenance, when the sensor of the antifreeze valve needs to be inspected or replaced, can be done without emptying the system.

This is possible thanks to the check valve inside the body of the antifreeze valve.



**⚠ The check valve ensures the seal during the maintenance procedure.**

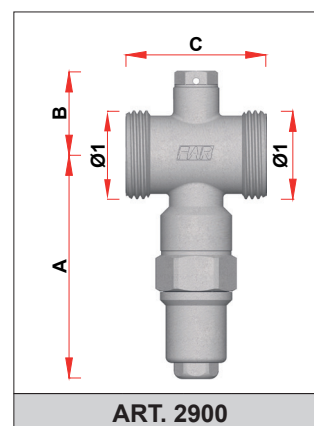
## 5 FLUID DYNAMIC PROPERTIES



## 6 TECHNICAL PROPERTIES

- Body: Brass CW617N
- Vacuum breaker cap: Brass CW614N
- Gaskets and O-rings: EPDM
- Finish: nickel plated
- Maximum operating pressure: 10 bar
- Operating temperature range: 0-75 °C
- Opening temperature: 3 °C
- Closing temperature: 4 °C
- Accuracy: ±1 °C
- Liquids used: water
- Side connections: male-male
- Connection sizes: 1" - 1 1/4" - 1 1/2"

## 7 DIMENSIONS



CODE	Ø1	A	B	C
2900 1	1"	84	32	53
2900 114	1 1/4"	91	37	59
2900 112	1 1/2"	92	38	61