# Art. S105-S106 DIVERTING THERMOSTATIC VALVE



## FUNCTION

The thermostatic diverter valve is used in solar systems for the production of hot water for sanitary use.
The valve serves to divert water from the solar storage to the users.

*Art. S105*

*Art. S106*

## PRODUCTS

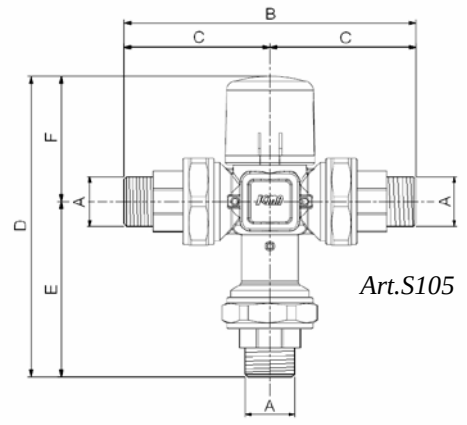
| *Art.* | *Size* | *Connections* |
|---|---|---|
| 93S105AD05 | G 1/2" Male | with unions |
| 93S105AE05 | G 1/2" Male | with unions |
| 93S106AD05 | G 1/2" Female | |
| 93S106AE05 | G 1/2" Female | |

## TECHNICAL SPECIFICATIONS

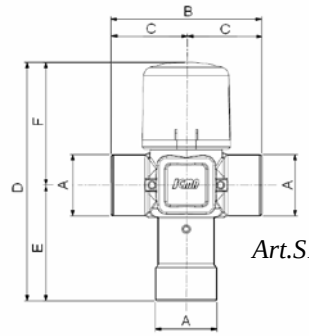
| | |
|---|---|
| Body: | Brass CW 617 N - UNI EN 12165 |
| Spindle: | Brass CW614N -UNI EN 12164 |
| Springs: | Steel INOX |
| Headwork: | Grivory |
| O-Ring: | EPDM PEROX - (high resistance) |

| | |
|---|---|
| Fluids used: | water, glycoled water |
| Max percentage of glycol: | 50% |
| Factory setting: | 45°C ±2°C |
| Max operating pressure (static): | 10 bar |
| Max operating pressure (dynamic): | 5 bar |
| Max inlet temperature: | 110°C |

## DIMENSIONS




*Art.S105*




*Art.S106*

| Article | Size | With unions | | | | |
|---|---|---|---|---|---|---|
| | A | B | C | D | E | F |
| 93S105AD05 | ½“ | 124 | 62 | 132 | 80 | 53 |
| 93S105AE05 | ¾” | 124 | 62 | 132 | 80 | 53 |

| Article | Size | | | | | |
|---|---|---|---|---|---|---|
| | A | B | C | D | E | F |
| 93S106AD05 | ½“ | 65 | 32.5 | 103 | 50 | 53 |
| 93S106AE05 | ¾” | 68 | 34 | 106 | 53 | 53 |

## SAFETY

To keep in good condition the internal parts during cleaning, do not use any detergents containing solvents. Read the assembly and start-up instructions and comply with them scrupulously before starting the system to prevent accidents and damage to the system caused by improper use. Remember that the guarantee will be forfeited in the event of any unauthorised changes or tampering with the device during assembly and construction. Comply with all safety warnings, and if you have any doubts about use or changes to parameters or functions, request the assistance of qualified service personnel.

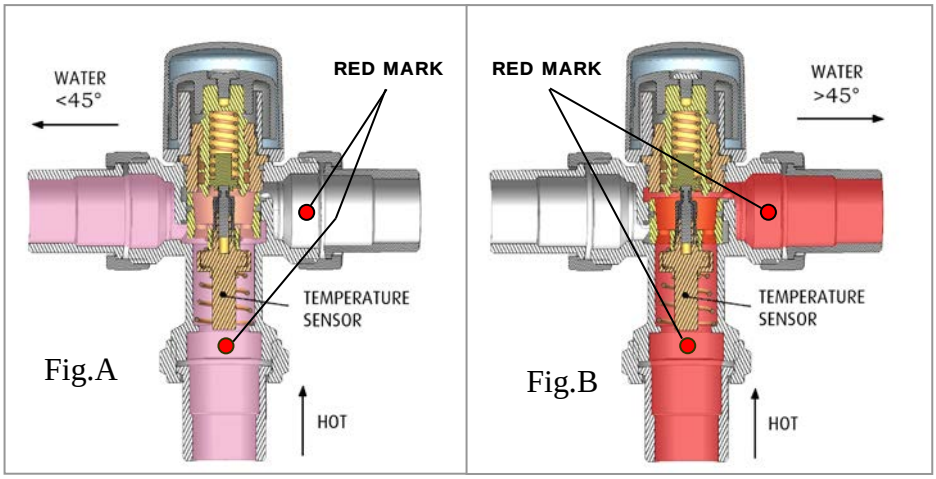
*ICMA S.p.a. via Garavaglia, 4 20012 Cuggiono (MI) – ITALIA*
*Tel. +39 02 97249134 / +39 02 97249135*
www.icmaspa.it e-mail: sales@icmaspa.it

## OPERATING PRINCIPLE

A thermostatic element is installed in the upstream water pipe. It expands or contracts, depending on the water temperature, causing the movement of a shutter that regulates the water deviation towards the two outputs.

## INSTALLATION

Before starting up, make sure all pipes are clean to prevent equipment malfunctions.
The flow diverting is shown in the figures A and B.




## STARTING UP

Starting up the diverting valve must be done by qualified personnel according to the current regulations and using suitable tools to measure temperatures.

## SETTING

Each valve is calibrated at the factory with 68°C ±4°C hot water and 3 bar inlet pressures. The variations in pressure and temperature can cause variations on the nominal values from the diverter valve. To prevent the product tampering and ensure the correct calibration of the valve, some paint is poured on the top of it. For such reason we won't consider under warranty the valves with traces of paint totally or partially removed by the rotation of the screw.

## APPLICATION DIAGRAM