Diverting thermostatic valves
S105-S106

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.

Product

Art.	Code	Size	Connection
S105	93S105AD05045	G ½" M	with unions
S105	93S105AE05045	G ¾" M	with unions
S106	93S106AD0545	G ½" F	-
S106	93S106AE0545	G ¾" F	-

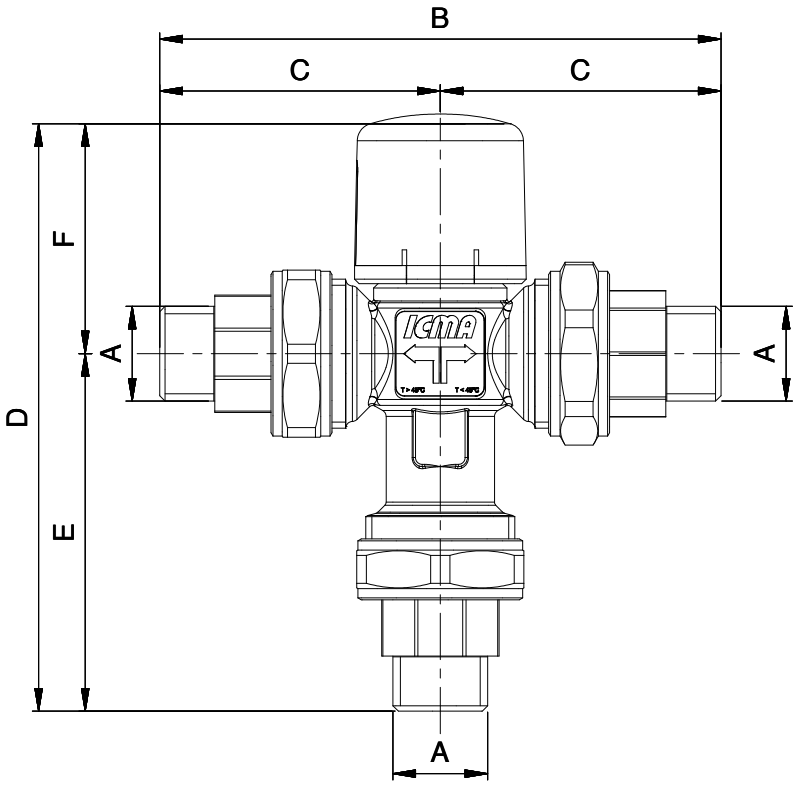
Technical features

MATERIALS	
Body:	Brass CW 617 N - UNI EN 12165
Large screw:	Brass CW 617 N -UNI EN 12165
Springs	Stainlass Steel
Lock nut:	Grivory
O-Ring:	EPDM PEROX - ((high resistance)

PERFORMANCE	
Fluid 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

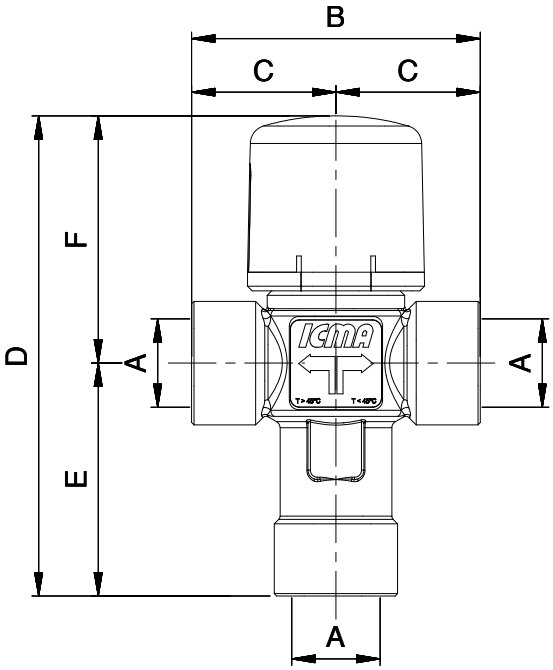
Dimensions

Art. S105



Code	93S105AD05045	93S105AE05045
A	1/2" M	3/4" M
B	124	120
C	62	60
D	132	130
E	80	77
F	52	53

Art. S106



Code	93S106AD0545	93S106AE0545
A	1/2" F	3/4" F
B	62	66
C	31	33
D	103	106
E	50	53
F	53	53

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.

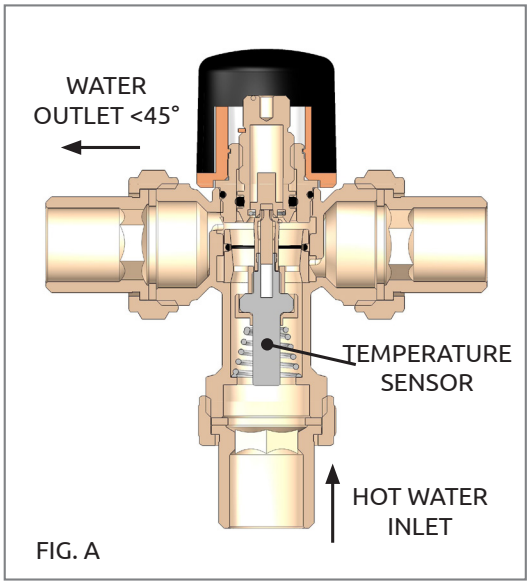


FIG. A

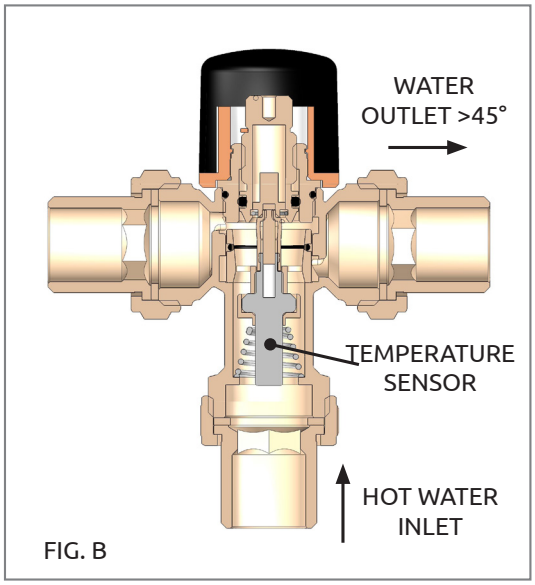
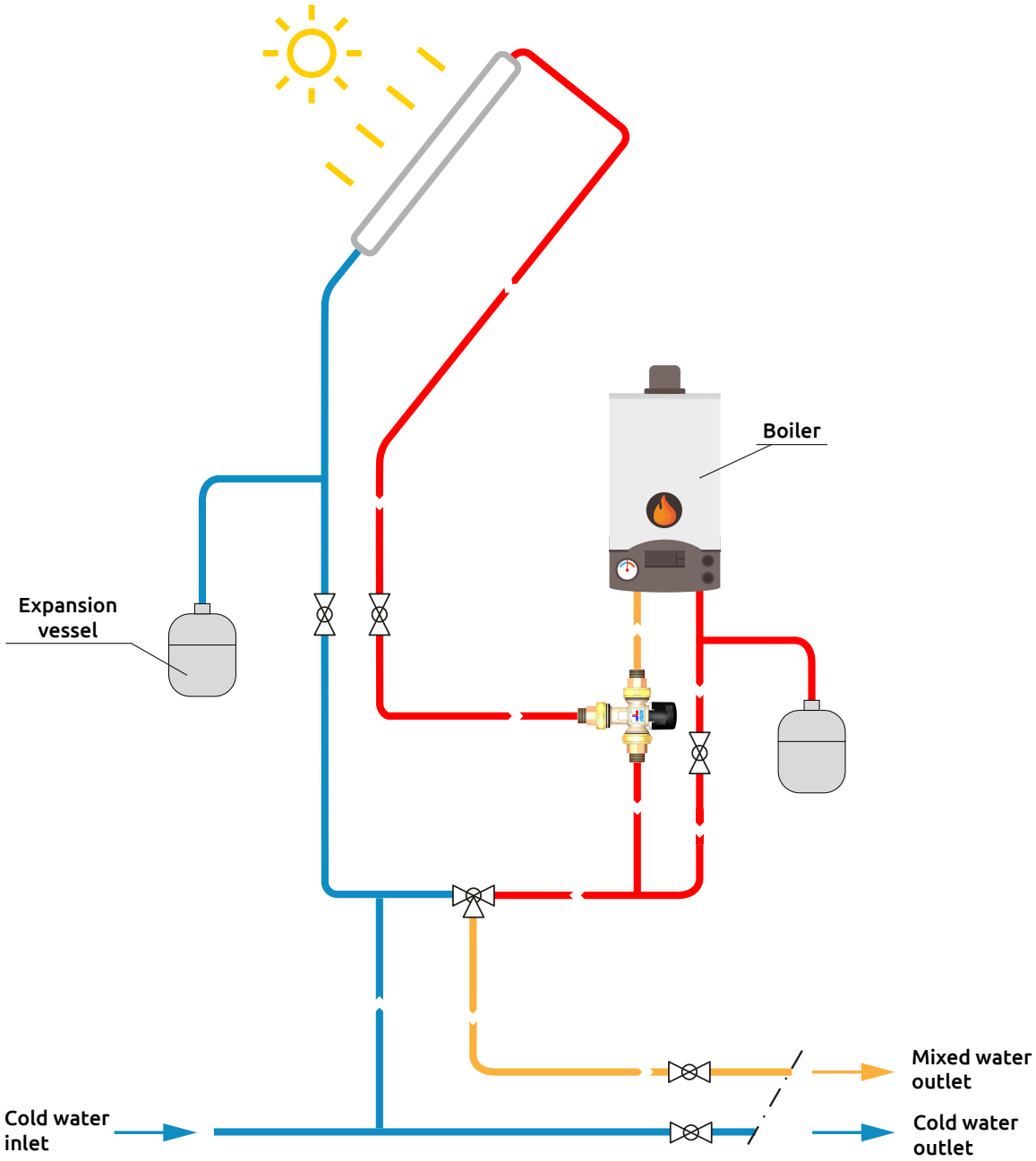


FIG. B

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



Safety

To keep internal components in good condition, avoid using detergents that contain solvents when cleaning the equipment.
Carefully read and observe the assembly and commissioning instructions before actuating the equipment in order to avoid accidents and breakdown in the system caused by improper use of the product. You are reminded that warranty rights will be lost should any unauthorized changes be made in the equipment or should tampering occur during its assembly and construction. Make sure that all safety precautions are followed. Be sure to call on qualified personnel for assistance when there is doubt with regard to use of the equipment and to making changes in parameters, or functions.