

## 8010 – ANTI-SCALD ADJUSTABLE THERMOSTATIC MIXING VALVE FOR SOLAR THERMAL SYSTEMS



### FUNCTION:

The 8010 series is used in solar heating systems for hot water application. It is designed to maintain the set temperature of the mixed water supplied when there are variations of temperature and pressure conditions (incoming hot and cold water) or water's flow rate.

The series has also an anti-scald function which prevents from accidental scalds by shutting off the hot water flow in case of a failure of cold water supply. This series can be used continuously at high temperatures of incoming hot water from the solar storage tank.

The controlling element of the automatic thermostatic mixing valve is the temperature sensor. It is fully immersed in the water outlet passage. As the sensor reacts to the changes of water temperature, it regulates continuously the proportion of cold and hot water coming into the valve. The flow of cold and hot water is controlled by a piston which slides into a cylinder located between the hot and cold inlets. The temperature of the mixed water in the outlet is always determined by the settings.

### TECHNICAL SPECIFICATIONS:

Temperature range of outlet: 35 — 55°C

Accuracy:  $\pm 2^\circ\text{C}$

Max. hydrostatic pressure: 10 bar

Max. dynamic pressure: 5 bar

Max. temperature: 100°C

Max. inlet pressure ratio (H/C or C/H): 2:1

Min. temperature difference between hot and mixed water: 10°C

Min. flow rate to ensure stable temperature: 4 l/min

Connector size: 1/2" M

#### Material:

- Body: DZR brass, chrome plated
- Seals: EPDM
- Springs: stainless steel
- Cartridge: brass

#### Resistance to high temperature:

The components inside the valve are made of high resistance material and can work continuously with temperature of 100°C.

#### Resistance to scale:

The elements inside the mixing valve are made of special anti-scale materials (low friction). It prevents the deposit of scale for long term working performance. This product is also equipped with filters at the inlets of cold and hot water to optimize the resistance to scale.

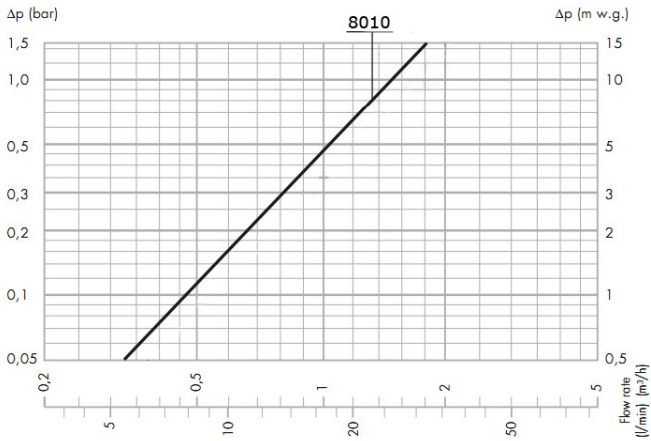
#### Check valves:

This series integrates check valves in the hot and cold water inlets to prevent undesirable fluid backflow.

#### Anti-scald:

The series has an anti-scald function.

## HYDRAULIC CHARACTERISTICS:



Code	Ø	Kv (m³/h)
8010	1/2"	1,5

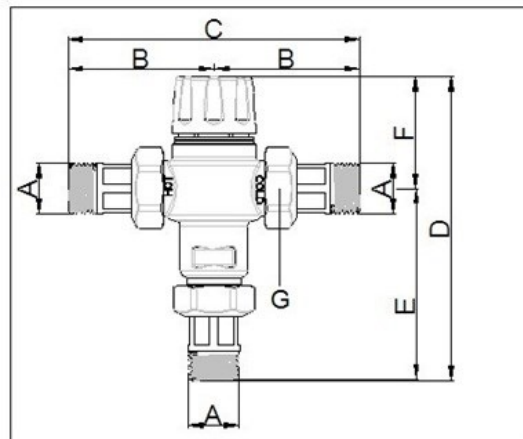
## INSTALLATION:

The pipework must be flushed out before the installation of the mixing valve to prevent impurities to stay in. The installation of the valve can be done horizontally or vertically.

## APPLICATION DIAGRAMS:



## SIZES:



Code	A	B	C	D	E	F	G	Weight (kg)
8010	1/2"	62*	124*	123*	81*	42*	3/4"	0,608

(\*mm)