

8005 – ADJUSTABLE THERMOSTATIC MIXING VALVE FOR SOLAR THERMAL SYSTEMS



FUNCTION:

The 8005 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 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.

The fittings placed at the inlets of cold and hot water have a built-in filter.

TECHNICAL SPECIFICATIONS:

Temperature range of outlet: 30 — 65°C
 Accuracy: $\pm 2^\circ\text{C}$
 Max. hydrostatic pressure: 14 bar
 Max. dynamic pressure: 5 bar
 Min. dynamic pressure: 0,2 bar
 Max. temperature: 100°C
 Max. inlet pressure ratio (H/C or C/H): 2:1
 Connector size: 3/4" M

Min. temperature difference between hot and mixed water: 15°C

Min. flow rate to ensure stable temperature: 5 l/min

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.

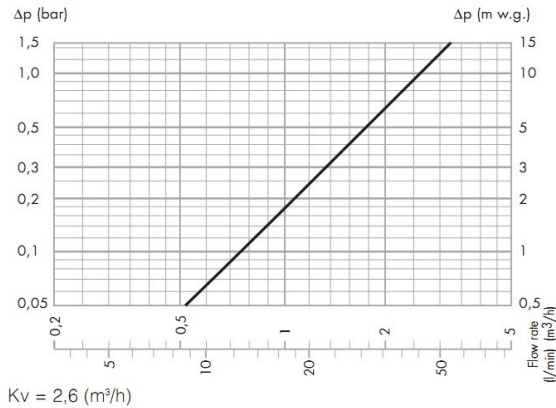
Resistance to scale:

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.

TEMPERATURE ADJUSTMENT TABLE:

Position	Min./Max.	1	2	3	4	5	6	7
Temperature (°C)	27/67	32	38	44	49	53	58	63

HYDRAULIC CHARACTERISTICS:



INSTALLATION:

The pipework must be flushed out before the installation of the mixing valve to prevent impurities to stay in. We recommend to install filters at the inlets of cold and hot water. The installation of the valve can be done horizontally or vertically. In systems with thermostatic mixing valves, we recommend to install check valves to avoid accidental reverse water flow.

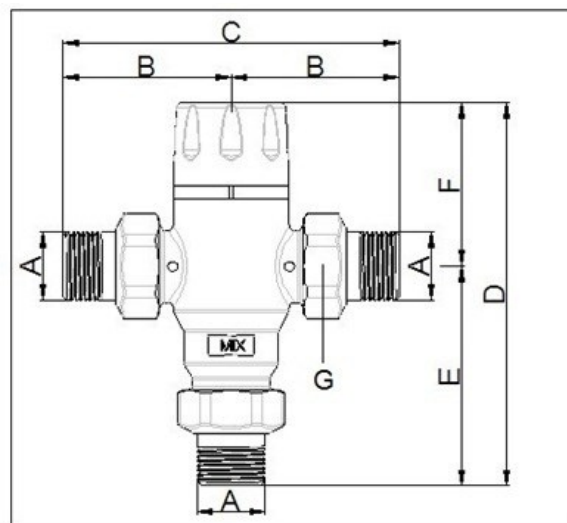
LOCKING THE SETTING:



After setting the temperature, the setting can be locked at the desired value using the control knob.

In order to do this, unscrew the lock screw on the upper part of the control knob, remove the knob and put it back on so that the internal reference couples with the protrusion on the knob carrier ring nut.

SIZES:



Code	A	B	C	D	E	F	G	Weight (kg)
8005	3/4"	67,5*	135 *	151*	88*	63*	1"	1.114

(*mm)

APPLICATION DIAGRAMS:

