

ANTARES

for water and fire

E.147



UK Four way thermostatic mixing valves Art E.147

Description

The four way thermostatic mixing valve Art E.147 has been specifically designed for the composition of units employed in the lowering of temperature in underfloor heating. To this purpose a connection is foreseen in preparation for a circulating pump. It can however be used for other necessities in reducing temperature through mixing a fluid with a higher temperature with another at a lower temperature. It's function is to keep a constant mixed water temperature flow to the consumer even with the variation of temperature and pressure incoming from hot and cold.

Connections Ø: ¾" F. x ¾" F. x ¾" F. x 1 ½ F. (swivel nut)

Material

- Body valve in brass UNI EN 1982 753S
- Seals EPDM
- Large screw Brass UNI EN 1982 CB753S
- Spring Stainless steel AISI 302
- Knob ABS

Characteristics

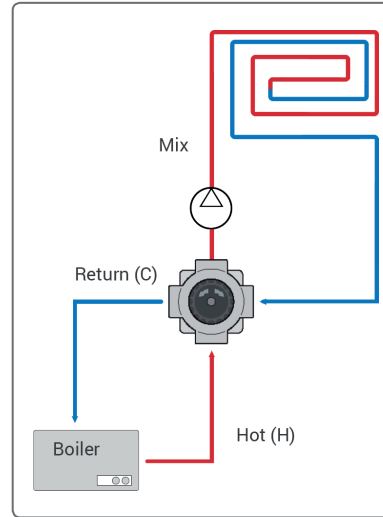
- Range of regulation: 30÷60 °C
- Working temperature: 90 °C
- Pin point: ±2 °C
- Factory pre-setting: 45 °C
- Ref. working conditions: T hot = 70 °C
T cold = 20 °C
Hot and cold pressure = 0,7 bar
- Max static pressure (structural): 10 bar
- Delivery coefficient: KV 3,5
- Conn. to system: Threaded conn. ISO 228/1
Threaded conn. UNI EN10226-1
- Compatible fluids: water for thermal systems, domestic water
water mixture with glycol (max 50%)
- Reference standard: EN1111A

Installation

We advise before installing a mixing valve, to check operating conditions of the system like pressure and temperature, to be assured that they are within the field of the mixer's working conditions.

The system where the mixer is to be installed must be drained and cleaned before installing.

We also advise to fit adequate filters on the incoming ports of mains. The non removal of eventual debris internally in the system can influence the performance and the guarantee of the supplier on the product. Should it be the case the valve is used where the water is hard or particularly harsh we advise the installation of devices for the treatment of water before the mixer. The thermostatic mixing valve can be installed in any position horizontally or vertically. It is important to have free access to the valve for maintenance.



For correct installation, keep in mind the direction of flow indicated by the letters impressed on valve body.

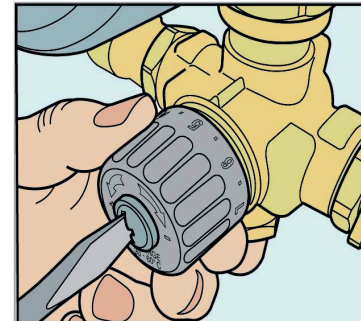
- H (HOT) – incoming hot fluid
- C (COLD) – incoming cold fluid or return (or exit of return towards boiler).
- MIX: uscita fluido miscelato

The installation on pipes is carried out via threading using common hydraulic practice.

Working and regulating the temperature

For proper use in service please follow the instructions below:

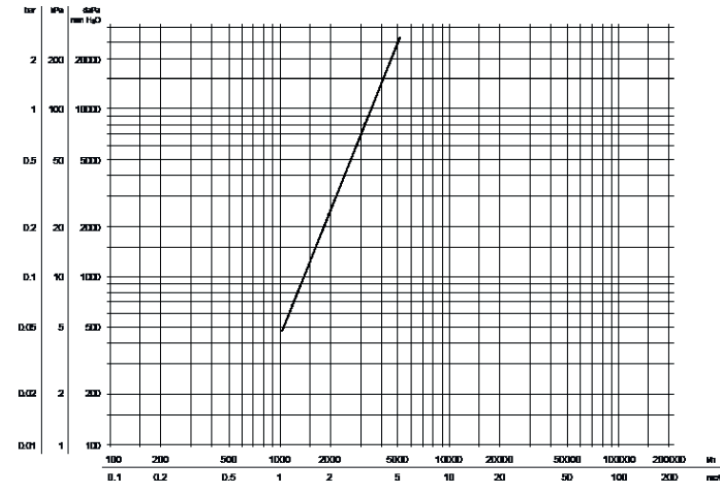
- Assure yourself that the system is clean, washing out the pipes.
- Regulation of water temperature must be done with a calibrated thermometer. To regulate temperature loosen the screw on the knob, turn the same knob clockwise or anticlockwise until desired temperature is reached. Carry out setting, block screws.



Attention: whilst carrying out regulation wait for thermometer reading to stabilise before carrying out next move. The valve is pre-set at 45°C. To simplify regulation see **graph below**.

Knob position	Min	1	2	3	4	5	6	7	8	Max
Temperature (°C)	30	34	38	41	43	45	47	50	54	60

Diagram



Maintenance

Maintenance of the system and checking the correct function of the mixer must be done at least every twelve months or more frequently when necessary. If the mixed water temperature has changed significantly with respect to previous tests, we recommend you to verify the conditions of the system as indicated in section installation and working.

Not adhering to installation instructions annuls the guarantee.

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