

Function

ICMA four-way thermostatic mixing valves are devices used to reduce and stabilize the water temperature. They are used in heating systems equipped with any type of heat generator, such as wall-mounted boilers, wood-burning fireplaces or heat pumps. The thermostatic element installed inside ensures a constant mixing temperature when the pressure and / or temperature of the hot and cold water at the inlet varies.



Products

ART.	SIZE	CODE	TEMPERATURE
786	DN20	93786AE052050	20-50°C
786	DN20	93786AE053070	30-70°C

Technical Features

TECHNICAL DATA:

Application fluid:	Water and glycol solutions
Maximum percentage of glycol:	50%
Maximum working pressure:	10 bar
Operating temperature:	20-50 ° C or 30-70 ° C

MATERIALS:

Body:	Brass CB753S
Thermostatic element:	Various
O-ring:	EPDM Peroxide
Piston:	Brass CW617N - EN 12165
Cartridge:	Brass CW617N - EN 12165
Stick:	Brass CW617N - EN 12165
Spring:	Stainless Steel
Seal:	EPDM Peroxide
Shell:	Brass CW617N - EN 12165
Flyer:	Acetalica caric. glass 25%

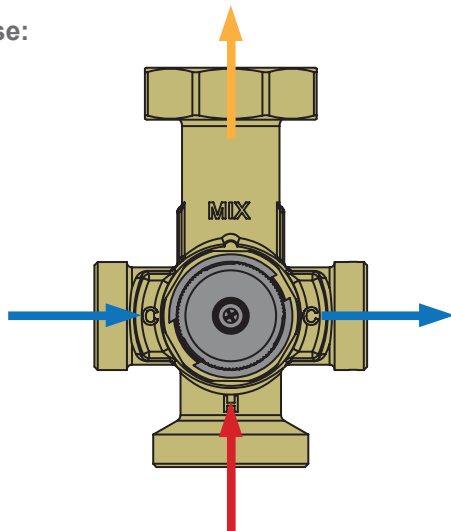
CONNECTIONS:

Pump connection:	G 1"1/2 F
Delivery Connection:	G 1"1/2 M
Return Connection:	G1" M

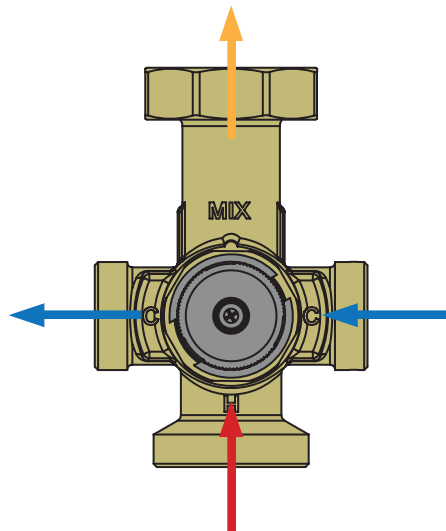
Operating Thermostatic Mixer

Return inlet from left side

4 ways use:



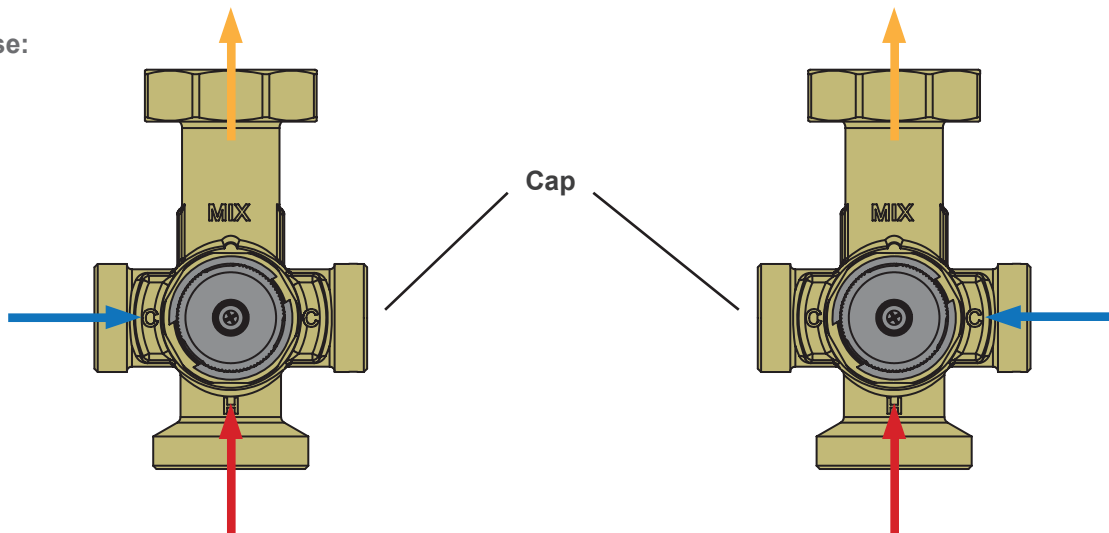
Return inlet from right side



The return fluid flows through the mixer.

In part it is used for mixing the temperature of the supply water and partly returns to the boiler.

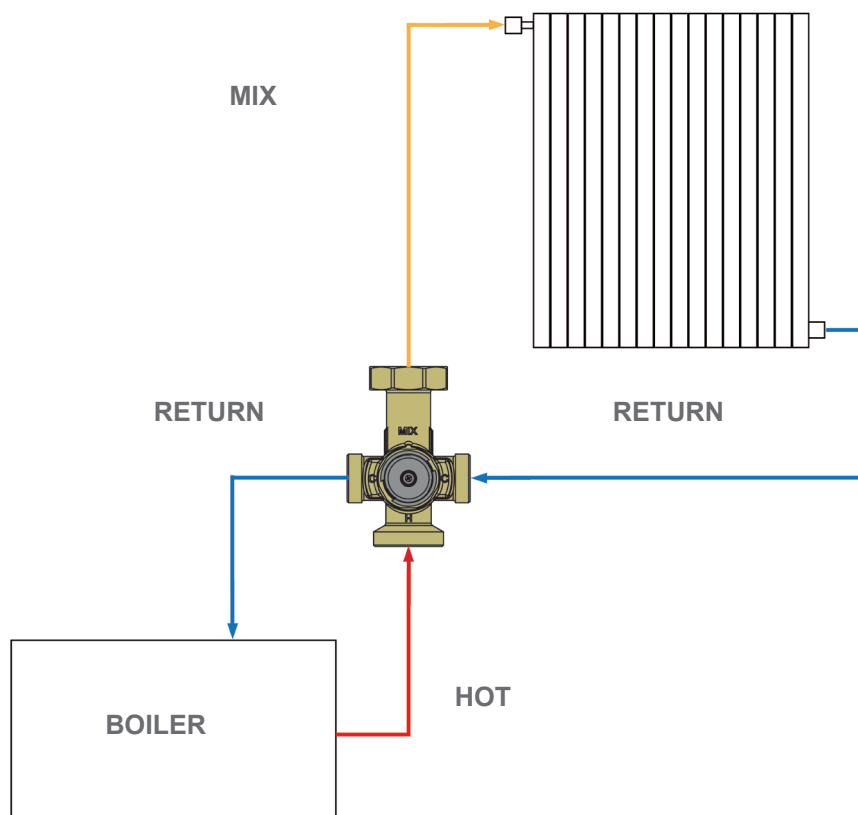
3 ways use:



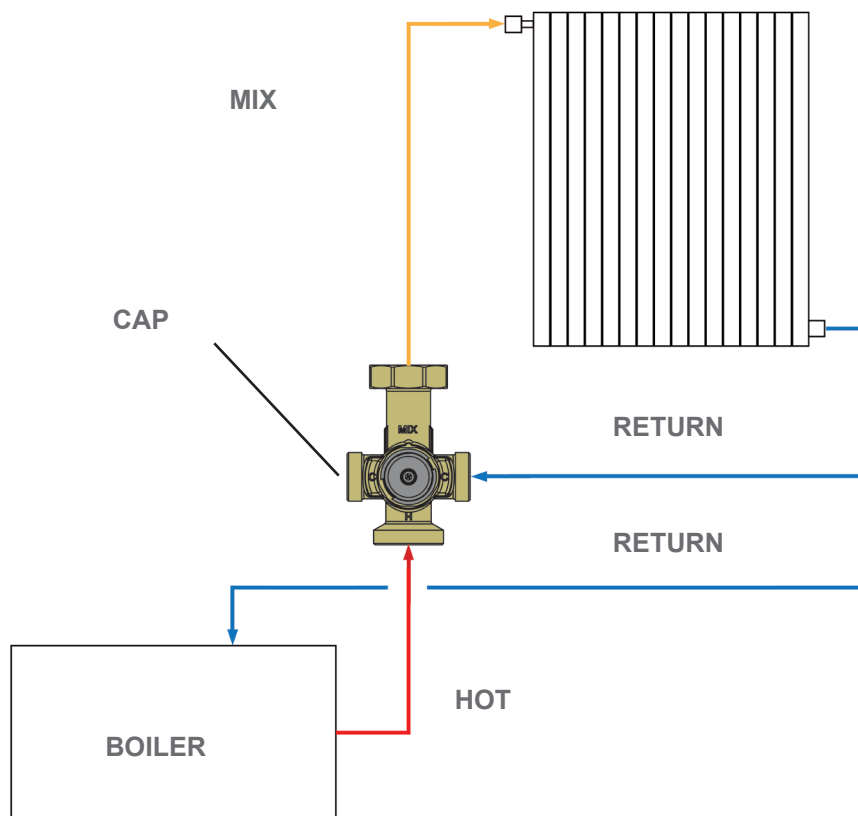
The return fluid is blocked in the mixer by a plug located on the opposite side with respect to the inlet connection. The cold water conveyed in this way is used to be mixed together with the delivery water from the boiler. The return to the boiler is managed by a circuit with a branch upstream of the thermostatic mixer.

Application Scheme

4 ways use:



3 ways use:



Temperature Setting

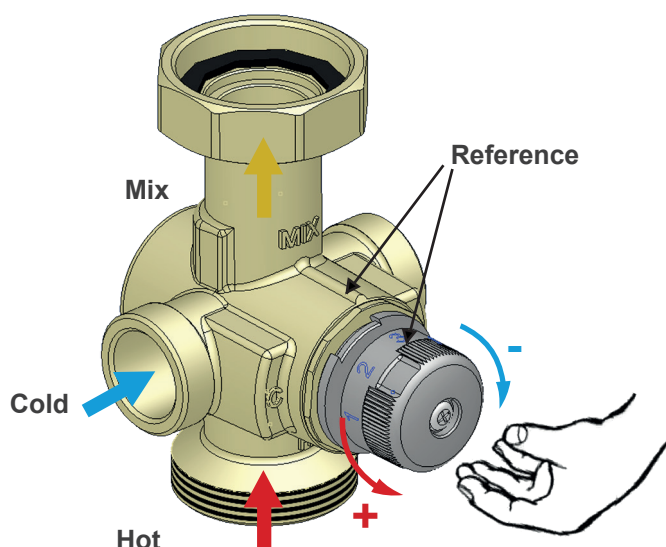
For a regular operation of the mixer, follow the instructions below:

- Make sure the system is cleaned by washing the pipes;
- The fluid temperature must be adjusted using a calibrated thermometer.

Turn the handle clockwise or counterclockwise until you reach the desired temperature.

The valve is factory set at 40 ° C at 0.1 bar of ΔP between output and input. To facilitate temperature adjustment, refer to the tables below.

RANGE 20°-50°		RANGE 30°-70°	
Position	°C	Position	°C
1	20°C	1	30°C
2	25°C	2	35°C
3	30°C	3	40°C
4	35°C	4	50°C
5	40°C	5	55°C
6	45°C	6	60°C
7	50°C	7	70°C



Maintenance

The maintenance of the system and the relative verification of the correct functioning of the mixer must be carried out every 12 months or even less in case of special needs. If the temperature of the mixed water should change significantly compared to the previous tests, it is recommended to check the conditions of the system as indicated in the section above.

Failure to comply with the installation and commissioning instructions invalidates the product warranty.

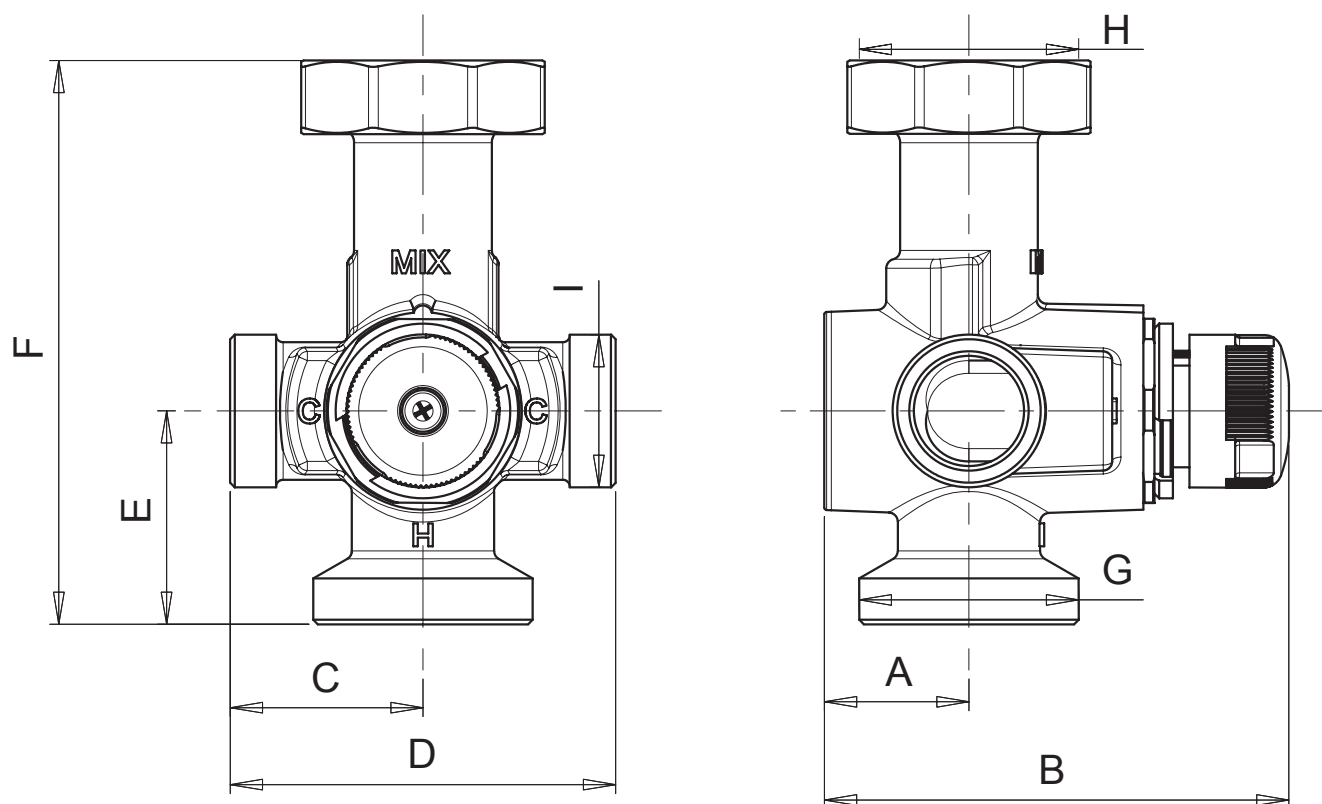
Accessories

To block the return fluid, you can apply the cap with G1 thread with code 87201AF05.

It can be applied both on the branch on the right and on the left depending on the plant requirements.

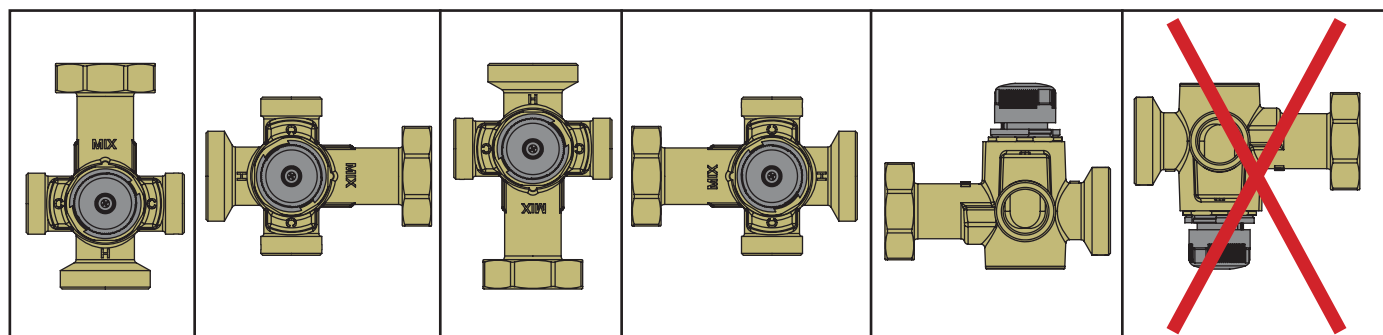


Dimensions



CODE	A	B	C	D	E	F	G	H	I
93786AE052050	31,5	101	42	84	46,5	123	G1"1/2 M	G1"1/2 F	G1" M
93786AE053070	31,5	101	42	84	46,5	123	G1"1/2 M	G1"1/2 F	G1" M

Installation



Pressure Loss

DIAGRAMMA DELLE PERDITE IC ARICO
PRESSURE DROP DIAGRAM

