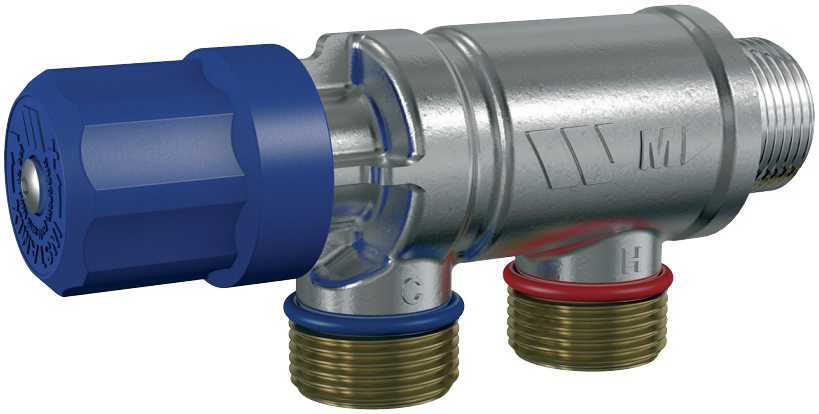
INSTAmix®

Thermostatic mixing valve

Technical data sheet



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Description

The INSTAmix® thermostating mixing valve is a compact mixing valve designed to supply general purpose applications with tempered water not exceeding a set temperature. Equipped with two parallel inlets considered convenient for many system configurations.

INSTAmix® is ideal for many applications: anywhere needing a supply of water at a temperature pre-set on site.

- Easily installed thermostatic mixing valve.
- Locking cap preventing the end user from adjusting the temperature.
- Fitted with 2 check valves NF approved.
- Temperature: accurate to within 1,5°C of chosen temperature between 35 and 45°C (with balanced dynamic pressure).
- Outstanding reliability.
- Immediate fail-safe in case of cold or hot water interruption (mixing valve cut-off with residual flow).
- Nickel plated finish (self-colour brass on request).
- Can be installed in any position provided that you respect the direction of flow of the water indicated by the arrow engraved on the body.

Technical features

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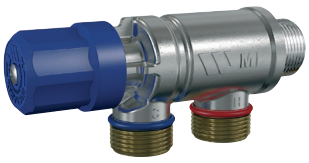
Maximum pressure	6 bar
Operating pressure	0,2 to 5 bar
Hot temperature supply *	52°C – 85°C
Cold temperature supply *	5°C – 20°C
Temperature setting range	30 to 60°C (factory pre-set at 38°C)
Flow rate at 3 bar (dynamic pressure at mixer inlet on cold and hot water)	40 l/min
Flow mini.	25 l/min

* differential minimum hot/mix temperature must be 10°C.

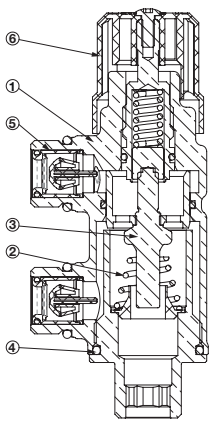
Part number



Part number	Body	Connections	Flow		Setting range	Weight
			at 1 bar	at 3 bar		
2297600	DN15	M/M/M 1/2”	25 l/min	40 l/min	30/60°C	0,448 kg
2297601	DN20	M/M/M 3/4”	25 l/min	40 l/min	30/60°C	0,456 kg

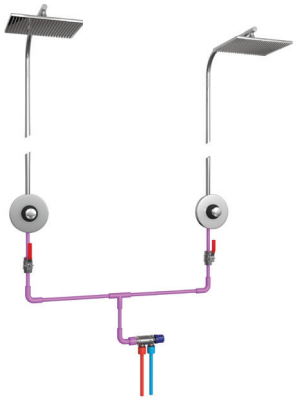
Nomenclature and materials

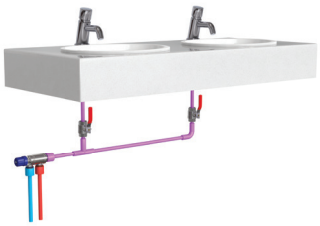
N°	Designation	Materials
1	Body	Brass
	Finish	Nickel plated
2	Spring	Stainless steel
	Others brass parts	Brass
3	Piston	Coated brass
4	O-ring	EPDM & NBR
5	Check valve CO15	Plastic (seat, valve) + EPDM (seal) + Stainless steel (spring)
6	Head	Plastic

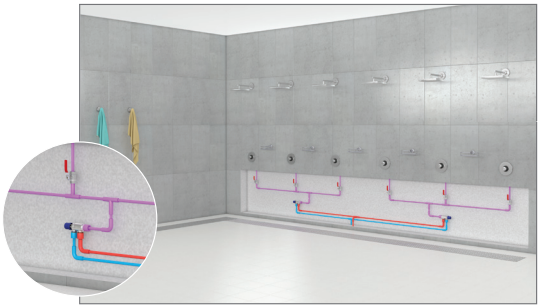


Application

The INSTAmix® thermostatic mixing valve is suitable for many applications:
- Homes
- Schools
- Restaurants
- Laboratories
- Car stations
- Commercial buildings …







Installation

Before commissioning check that:
- The designation of the thermostatic mixing valve matches the application that is to say the hot temperature and the supply pressures
- The thermostatic mixing valve will be installed in such a position that maintenance and testing of the TMV can be undertaken
- Strainers are installed on the hot and cold connectors
- Isolating valves are installed on the hot and cold connectors

If conditions are at variance, an assessment of risk should be carried out

NOTE : We would recommend the fitting of servicing valves with integral drain plug.

To ensure proper performance of the thermostatic controller, the isolation valves should always be fully open during operation. Before installing the thermostatic controller, you should thoroughly flush out the hot and cold water supply pipes to remove any dirt which may be in the system. The Instamix thermostatic mixing valve is designed for use in domestic hot water systems, where the water temperature must be kept exact, constant and modifiable at will. To guarantee efficient operation of your systems, optimizing energy performance and extending product life, it is recommended to ensure the quality of the water used. This helps limit damage caused by scaling, corrosion and fouling. Water quality has an impact on the proper operation of all your fittings. We recommend that you check your water hardness regularly and keep it between 15 and 20°f. Water with a TH of between 25 and 50°f is highly susceptible to scaling, and often forms heterogeneous deposits that lead to corrosion. In contrast, water that is too soft is corrosive, eating away at pipe walls and encouraging the formation of leaks. There are very soft waters (<10°f), soft waters (10 to 20°f), hard waters (20 to 30°f) and very hard waters (>30°f). The precision, sensitivity and durability of a thermostatic mixing valve can only be guaranteed if it is perfectly maintained and correctly selected and sized beforehand. If the recommend level of water hardness is exceed, water treatment solutions are available on the market as a preventive measure.

Setting

The thermostatic controller is supplied factory pre-set at 38°C.

However, it may be necessary to adjust the product on site, depending on installation conditions.

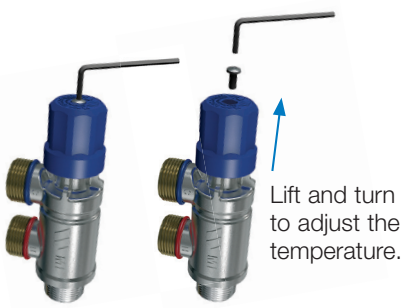
With both the hot and cold supplies turned fully on and the terminal fitting open, adjust the temperature to the required setting.

To adjust the temperature supply:
- Simply unscrew the locking screw on the top of the handwheel, set the valves and lock with the screw.
- To increase the temperature, turn anti-clockwise.
- To decrease the temperature, turn clockwise
- Once the desired temperature has been reached, lower the cap and tighten the locking screw.

The temperatures and pressures must be stabilised and checked before commissioning.

NOTE : After adjustment replace the cap to lock the valve in position and prevent tampering.

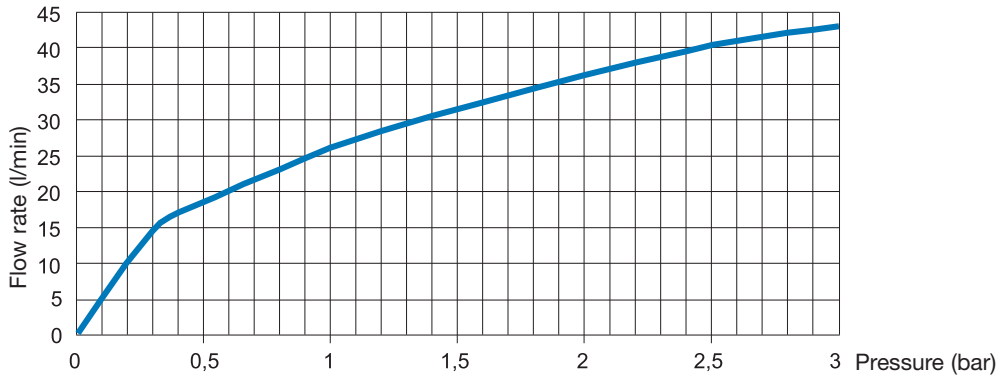
NOTE : After the system has been inactive for a long period, it is advisable to operate the mixing valve in both directions if you notice a malfunction in the mixed water setting.



Operating

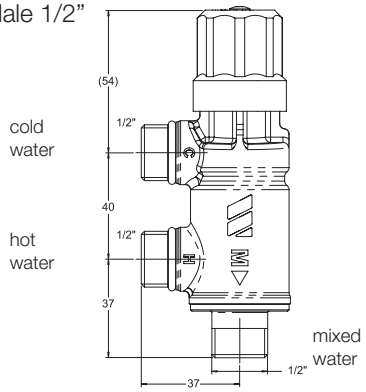
Flow curve as a function of balanced cold/hot water inlet pressures

Factory pre-set at 38°C.

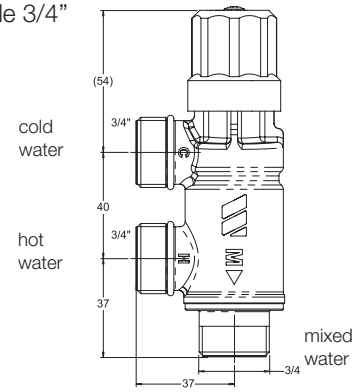


Sizing (mm)

Male 1/2”



Male 3/4”



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