Rev. 10/2024

T-SHAPED THERMOSTATIC MIXER

For sanitary systems.

T-SHAPED THERMOSTATIC MIXER

For sanitary systems.

It reduces the temperature to a value that can be used by the healthcare user

Anti-scald safety in case of accidental lack of incoming cold water

PRODUCTION RANGE

Codes	Connections	Setting range	Precision	Max input temperature
2133.04.00	UNI-EN-ISO 228 of 1/2" M	30 ÷ 65 °C	± 2 °C	85 °C
2133.05.50	UNI-EN-ISO 228 of 3/4"	30 ÷ 65 °C	± 2 °C	85 °C
2133.06.00	UNI-EN-ISO 228 of 1" M	30 ÷ 65 °C	± 2 °C	85 °C
2133.07.00	UNI-EN-ISO 228 of 1"1/4 M	30 ÷ 65 °C	± 2 °C	85 °C
2133.08.00	UNI-EN-ISO 228 of 1"1/2 M	30 ÷ 65°C	± 2 °C	85 °C
2133.09.00	UNI-EN-ISO 228 of 2" M	30 ÷ 65 °C	± 2 °C	85 °C

DESCRIPTION

The **RBM thermostatic mixer** is a product consisting of:

- A thermostatic cartridge complete with an operating hand wheel for adjusting the mixing of the domestic hot water.
- Three removable fittings with male thread UNI-EN-ISO 228 (range from ½" to 2"): two for the inlet of hot and cold fluids and one for the mixed water outlet.

In production systems of domestic hot water with storage, it is necessary to diversify the production, distribution and use temperature of the water in order to:

- Contain the storage dimensions;
- Prevent the onset and proliferation of Legionnaires' disease;
- Comply with the current legislation and technical regulation on energy saving;
- Avoid using water at a temperature that causes possible burns.

In this regard, the **RBM thermostatic mixer** can be used for applications at the sampling point in order to:

- Reduce the temperature to a value that can be used by the sanitary utility;
- Have an anti-scalding safety in case of accidental absence of inlet cold water.

The **RBM thermostatic mixer** allows for the instantaneous mixing of inlet fluids and thus ensures stability on the set temperature value of the outlet fluid, both when the flow rate taken from the different utilities varies and when the pressure and temperature conditions of the primary fluids vary.

Below are some instructions for the installation of the **RBM thermostatic mixer**:

- It is advisable to precede the **RBM thermostatic mixer** with a retaining filter of the finer impurities (which could disturb the mixer operation);
- Before assembly, thoroughly wash the pipes to eliminate sand, welding residues, rust flakes, filings, metal shavings, etc;
- Avoid differences in the supply pressures of the hot and cold primary fluids. For this reason, equipment with significant pressure drops must never be connected to one of the supply branches of the **RBM thermostatic mixer**. Therefore, it is advisable to connect such equipment (e.g. a filter or a water treatment device) to the common network section, upstream of the system;
- To prevent unwanted fluid returns, install check valves;
- To regulate the outlet temperature of the mixed fluid, remember that the safety condition to prevent burns depends on many factors (water temperature, time of exposure to that temperature, age and gender of the individual). Indicatively, the maximum temperatures of the water exiting the taps to prevent burns, are summarised in the following table:

Utility	Maximum T
Bidet	38 °C
Washbasin	40 °C
Shower	40 °C
Bath tub	44 °C

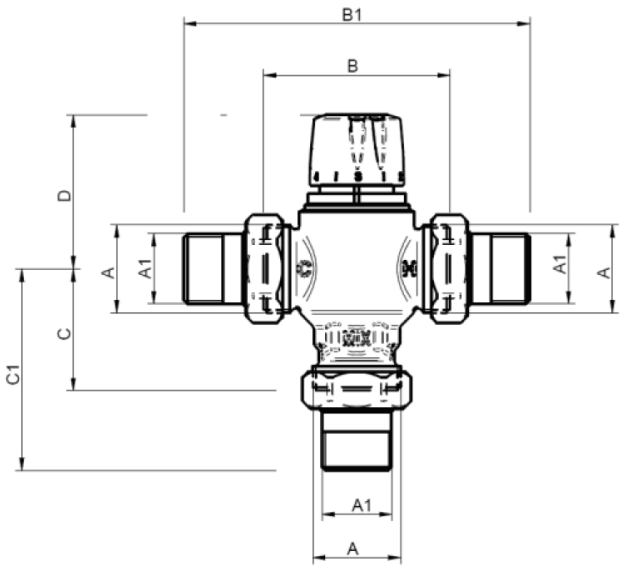
CONSTRUCTION FEATURES

Body: (vers. ½" – ¾")	Anti-dezincification alloy, chrome CW602N
Body: (vers. 1" – 1"1/4 – 1"1/2 – 2")	Chrome brass CW617
Internal parts	Brass CW617
Springs	AISI 302 stainless steel
Sealing elements	EPDM
Thermosensitive element	Wax

TECHNICAL FEATURES

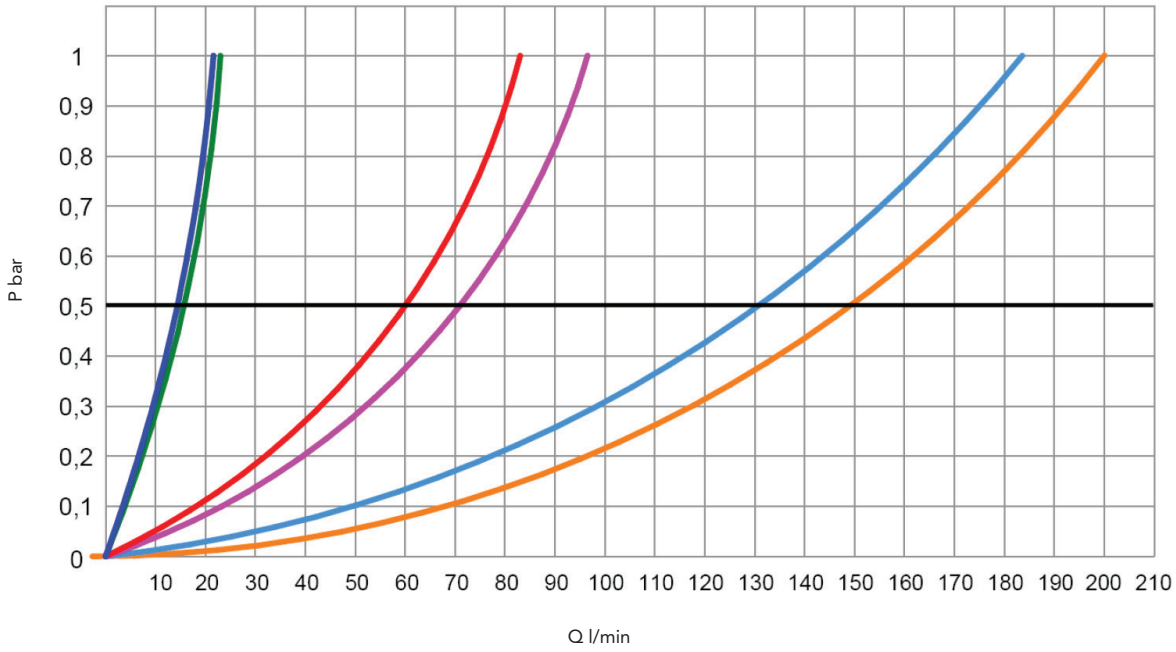
Max. dynamic P	5 bar (500 KPa)
Max. static P	10 bar (1000 KPa)
Max. imbalance between inlet pressures	2:1
Max inlet temperature	85 °C
Precision	± 2 °C
Minimum flow rate for correct operation	9 l/min (1/2" – 3/4") 15 l/min (1" – 1"1/4) 40 l/min (1"1/2 – 2")

DIMENSIONAL FEATURES



Code	A	A1	B [mm]	B1 [mm]	C [mm]	C1 [mm]	D [mm]	Kv [m³/h]
2133.04.00	G 3/4"	G 1/2"	58	104	42	65	52	1,3
2133.05.50	G 1"	G 3/4"	59	119	42,5	72,5	52	1,4
2133.06.00	G 1"1/4	G 1"	89	165	58	96	73	5,0
2133.07.00	G 1"1/2	G 1"1/4	90	183	58,5	105	73	5,8
2133.08.00	G 2"	G 1"1/2	123	217	80,5	125,5	93	11,0
2133.09.00	G 2"1/2	G 2"	123	234	81	136,5	93	12,0

FLUID DYNAMICS FEATURES



KEY

1/2" 3/4" 1" 1"1/4 1"1/2 2" Max. threshold with correct operation without noise

RBM spa reserves the right to improve and change the products described and relevant technical data at any moment and without prior notice. The information and images contained in this document are intended for information purposes only, are not binding and in any case do not exempt the user from strictly following the regulations in force and good practice standards.

RBM Spa
Via S.Giuseppe, 1 • 25075 Nave (Brescia) Italy
Tel 030 2537211 • Fax 030 2531798 • info@rbm.eu • www.rbm.eu