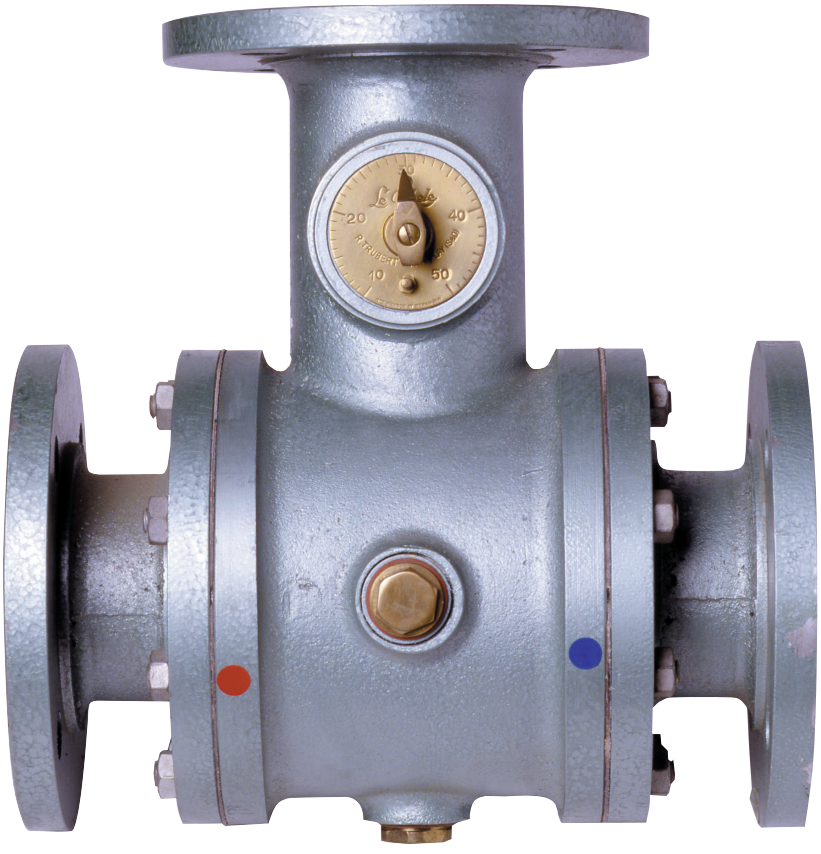
Flanged thermostatic mixing valve T70

Ultra high flow flanged mixing valve

Technical data sheet

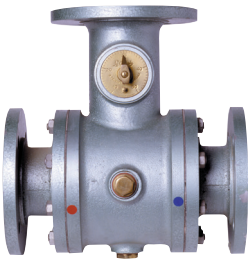


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Description

Thermostatic mixing valve recommended for all large flow applications (up to 1200 l/min.) where the temperature of the mixed water must be kept accurate, constant and modifiable at will.

- Conditions where water is used at a predetermined temperature, stable:
- Loop of sanitary hot water (adjustable temperature from 30 to 70°C),
- Supply of sanitary points of use: group showers and ranges of wash basins (adjustable temperature from 10 to 50°C).
- Bimetallic strip TECHNOLOGY : exceptional qualities of regulation and resistance to the scale (crucial factor for safety).
- Outstanding reliability and longevity.



T70

Thermostatic mixing valves specifically designed for high-flow installations

Art. number	DN			Adjustment range	Flow rate (L/min)	Points of use*	Weight (Kg)
	Size	mm	"				
22T70065	G	65	2 1/2"	10/50°C	10 à 360	1 à 36	36
22T70080	H	80	3"	10/50°C	12 à 700	1 à 70	49
22T70100	J	100	4"	10/50°C	14 à 1200	2 à 120	69
22T7006537	G	65	2 1/2"	30/70°C	10 à 360	1 à 36	36
22T7008037	H	80	3"	30/70°C	12 à 700	1 à 70	49
22T7010037	J	100	4"	30/70°C	14 à 1200	2 à 120	69

*For information only. Take the simultaneity coefficient into consideration.

Technical features	
Flanges PN	16
Maxi. static pressure	10 bar
Maxi. dynamic pressure	6 bar
Recommended dynamic pressure for optimum control	3 bar
Graduated handle	from 10 to 50ºC or 30 to 70ºC

Design

The constituent materials are resistant to corrosion and scale:
Cast iron body - Parts made of brass and bronze.
The mechanism does not have an interchangeable cartridge and has no non-return valves (to provide for the installation).
The mixing valve is supplied with 2 filter-baskets in stainless steel for each inlet flanges.

Application

This appliance is recommanded for all large flow applications where the mixed water temperature must be kept accurate, constant and modifiable at will.

- Conditions where water is used at a predetermined temperature, stable:
  Chemical Industries - Slaughterhouses - Breweries …
- Regulation of domestic water:
  Buildings - Hotels - Hospitals - Schools - Military barracks ...
- Collective showers for important facilities:
  Plants - Factories - Schools - Hospitals ...

Advantages

Commercial and industrial. Group showers and ranges of wash basins.
Master control of the temperature of hot water delivered to a whole building or a section of building.
Installation output of hot sanitary water production:

- Reduces the risk of scalding by lowering the temperature of hot sanitary water production output.

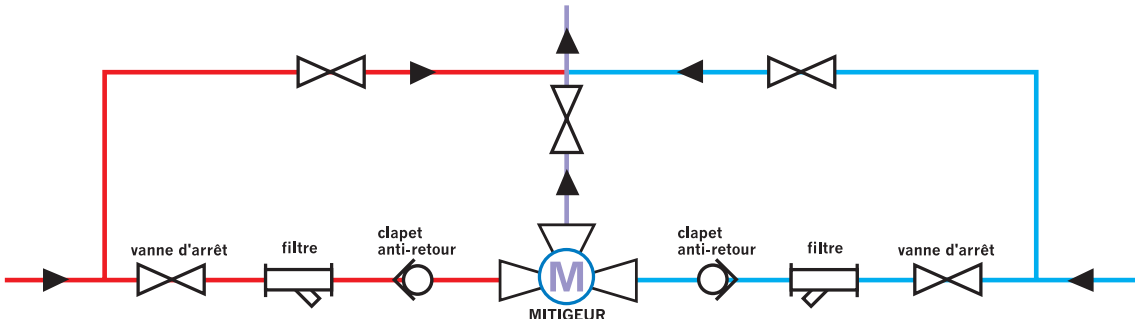
- Regulates the strong temperature variations equipment of hot sanitary water.

- Generates significant energy savings: much smaller heat losses in a loop at 55°C.

- Limit the scaling of pipes, valves, pumps, check valves, ...

This thermostatic mixing valve provides comfort and safety to large flows facilities. Notably, the risk of scalds are removed (anti-scald safety).

NB : The Δ T° Hot water/Mixed water must be minimum > 10°C and the maximum pressure difference between the inlets Hot water / Cold water should be 0.5 bar max.



General installation diagram of a large flowrate industrial thermostatic mixing valve

Installation

Connection:

- Flanged, according to PN 16.
  It is recommended to provide a bypass to easily maintain the device.

- Inlets: hot water at the left and cold water at the right.
  If reversed inlets, a special reversed device is available on request.

In principle, it is recommended not to exceed 85°C for hot water supply, in order to obtain maximum longevity of the device.
During commissioning of the valve, open the water inlets very gradually.

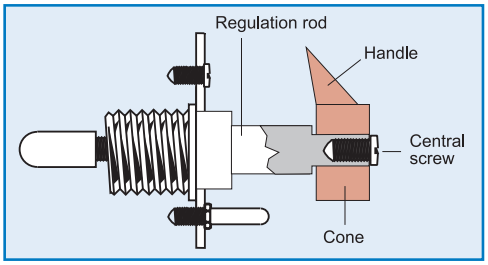
Temperature calibration:

As for all Thermostatic Mixing Valves, it's necessary to adapt the temperature presetting to the installation conditions.

- Put the handle in such a position that the mixed water has the average required temperature.
- Take the water temperature with a thermometer (e.g. 35°C).
- Loosen the screw in the center of the handle two or three turns.
  Loosen the handle, which is locked onto the cone of the regulating rod
  (a screwdriver can be used as a lever).

- Position the handle opposite the actual temperature (35°C in our example)
  and fix it again on the rod cone by hitting it with the screwdriver handle.

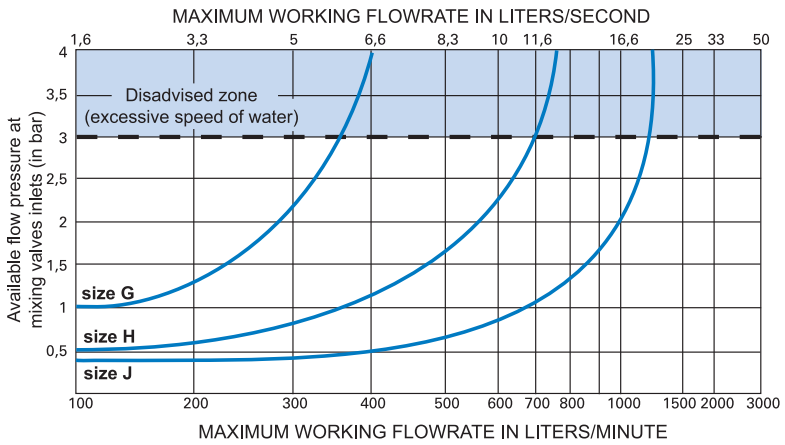
- Tighten the central screw (in the event that the scale from 10 to 50°C is
  replaced by a scale from 30 to 70°C, the regulator will always vary from the
  reading on the handle and must be displaced 20°C).



Operating

It is necessary to have a hot and cold water flow pressure of at least 0,8 bar for sizes G (DN65) and H (DN80) and 0,5 bar for size J (DN100). If the pressure of one of the two water supplies is less than 1,5 bar, the other needs to be more or less similar.

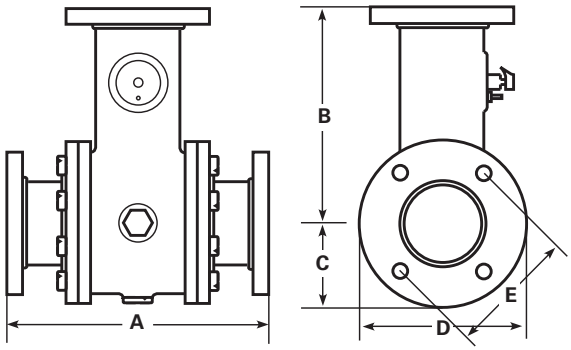
Installation:
It is necessary to provide non-return valves and a by-pass on the inlet for hot and cold (not supplied).



T70 – Headloss chart

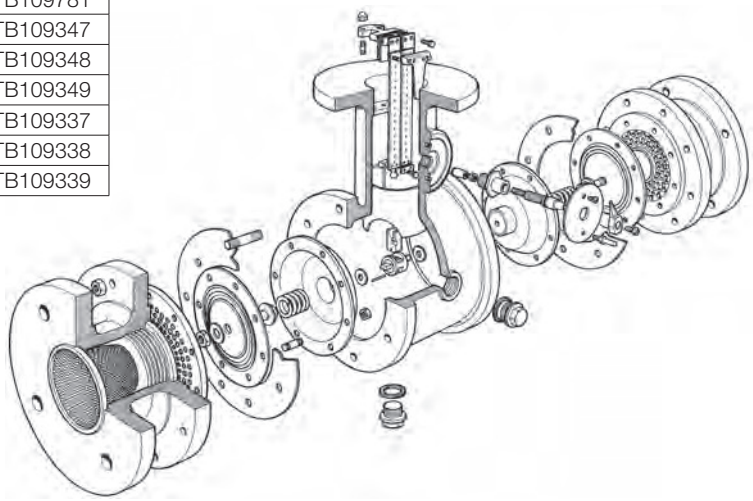
Sizing

DN	Size	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
2"1/2	G	294	215	90	185	145
3"	H	336	270	105	200	160
4"	J	404	270	125	220	180
2"1/2	G	294	215	90	185	145
3"	H	336	270	105	200	160
4"	J	404	270	125	220	180



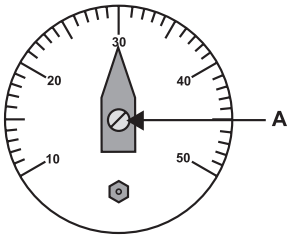
Spare parts

Designation	DN	Art. number
Distributor assembly (with 4 seals)	DN 65	22TB109786
Distributor assembly (with 4 seals)	DN 80	22TB109787
Distributor assembly (with 4 seals)	DN 100	22TB109787
Bilame assembly	DN 65	22TB109327
Bilame assembly	DN 80	22TB109328
Bilame assembly	DN 100	22TB109329
Setting screw assembly	DN 65	22TB109780
Setting screw assembly	DN 80	22TB109781
Setting screw assembly	DN 100	22TB109781
Filter	DN 65	22TB109347
Filter	DN 80	22TB109348
Filter	DN 100	22TB109349
Diaphragm (with 1 seal valve bottom)	DN 65	22TB109337
Diaphragm (with 1 seal valve bottom)	DN 80	22TB109338
Diaphragm (with 1 seal valve bottom)	DN 100	22TB109339

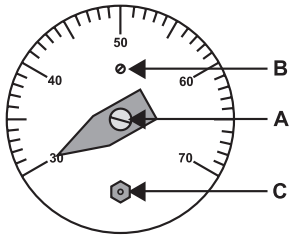


Conversion mixing valve T70 10/50°C in 30/70°C

Position the handle facing the 30°C position, then remove screw “A” whilst holding the handle. Pull the handle off by lever with a small crowbar or a screwdriver.



Once the handle is removed, undo screw ”B” and the stop ”C”. Replace the dial 10°/50°C by the 30°/70°C (art. n° 22TB100740U), re-tighten screw ”B” and the stop ”C”, then reposition the handle to face mark 30°C. Re-tighten screw ”A”. It’s done!



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