

### **Data sheet**

# **Thermostatic Mixing Valve**

### Description



The TVM-W is a self-acting mixing valve, which provides mixed water at a constant temperature. It is used for instant supply of water at a required temperature in domestic hot water applications.

- The quick reaction of the thermostatic elements ensures accurate temperature
- It is suitable for single outlets (e.g. baths, basins, showers and bidets) or small numbers of grouped outlets.
- Its robust and non-complex construction provides superior reliability, improved safety, energy efficiency and user comfort. If the cold supply fails, a total and fast flow shut-off results in greater safety for the enduser. Simplified design and construction, with fewer components, ensures superior reliability, longevity and safety.
- The TVM-W ensures a high level of protection from scalding, which is important especially in hospitals, schools or multi family houses (e.g. in case of legionella disinfections).

### Main data:

- Setting temperature in the range 35 ... 70 °C
- Preset and locked at 50 °C
- Locking function locks the set temperature
- DN 20 and DN 25
- Shuts off flow if the hot or cold supply fails
- Maintains the temperature by varying supply conditions
- integrated non-return valves

## **Ordering**

Туре	DN	Connection	Temp. range (°C)	<b>E</b> (l/min)	<b>k</b> <sub>vs</sub> 1)	Code No.
TVM-W	20	G 1	35 70	35	2.1	003Z3145
	25	G 11/4	35 70	55	3.3	003Z3146

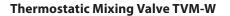
E = extracted (outlet) quantity at  $\Delta p = 1.0$  bar

1) with check valve

# **Accessories and spare parts**

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Туре	Max. pressure (bar)	Max. temperature (°C)	Code No.			
Non-return valve DN 20		90	003Z3137			
Non-return valve DN 25	10	90	003Z3138			
Thermostatic e	003Z3139					
Fitting set DN	003Z3134					
Fitting set DN	003Z3135					

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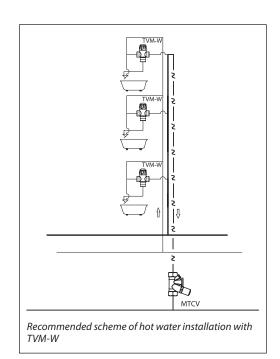


# **Technical data**

Factory temperature presseting		50			
Cold water supply temperature  Hot water supply temperature  Temperature stability (depend on pressure and temperature)		10			
		70			
		± 3			
Max. hot water temperature		90 1)			
Max. operating pressure		10			
Min. operating pressure	bar	0.5			
Constant inlet pressure diferential 2)		2			
Supply pressure, (dynamic)		5			
Materials					
Body	DZR + antilimescale treatment				
Plastic cap		Polystyrene			
Spring		SS steel 1.4301 (inoxydable)			
Sealing		EPDM			

<sup>&</sup>lt;sup>1)</sup> 100 °C without Non-return valve <sup>2)</sup> Between cold and worm inlets

# **Applications**

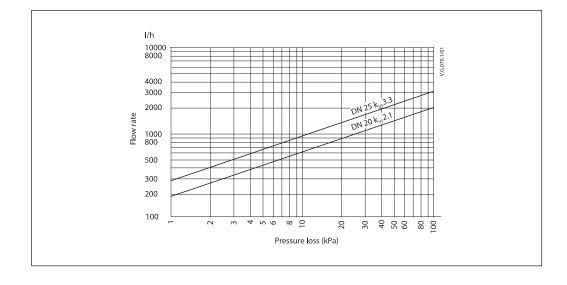


220V/50Hz  $Recommended\ installation\ of\ hot\ water\ and\ circulation\ system.$ 

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### Pressure diagram



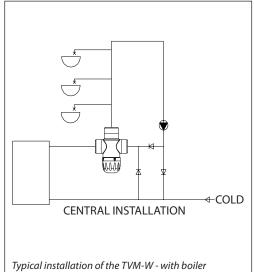
#### Installation

By mixing hot and cold water to achieve the desired temperature, the valve effectively provides a greater volume of hot water from the given tank size.

High temperature water storage prevents the growth of legionella bacteria.

The valve can be installed in any position into the riser:

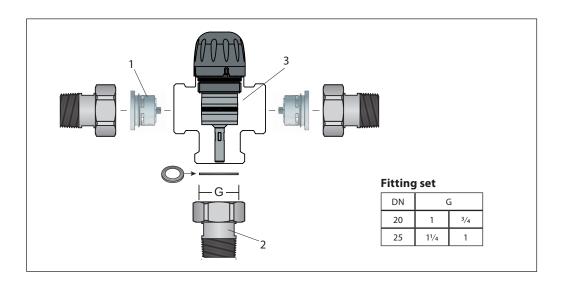
- In situations where the hot pressure may exceed the cold pressure and on pumped systems, non-return valves must be fitted to both hot and cold inlets.
- A TVM-W will provide optimum performance when installed with hot and cold supplies of equal dynamic pressure, i.e. pressure under flow conditions.
- In order to ensure the correct function of the failsafe and optimum performance it is recommended that the hot supply temperature is at least 10 °C higher than the set temperature.



Typical installation of the TVM-W - with boiler application.

### **Spare parts**

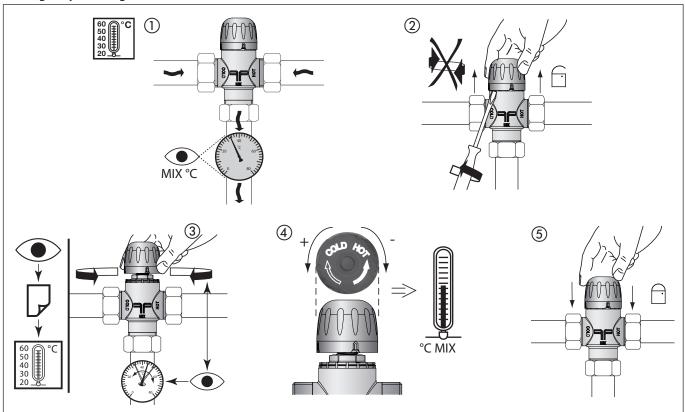
- 1. Non-return valve
- 2. Fitting set
- 3. Thermostatic element



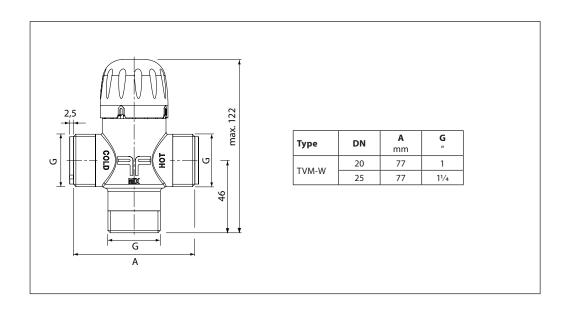
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# Locking the presetting



# **Dimensions**



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