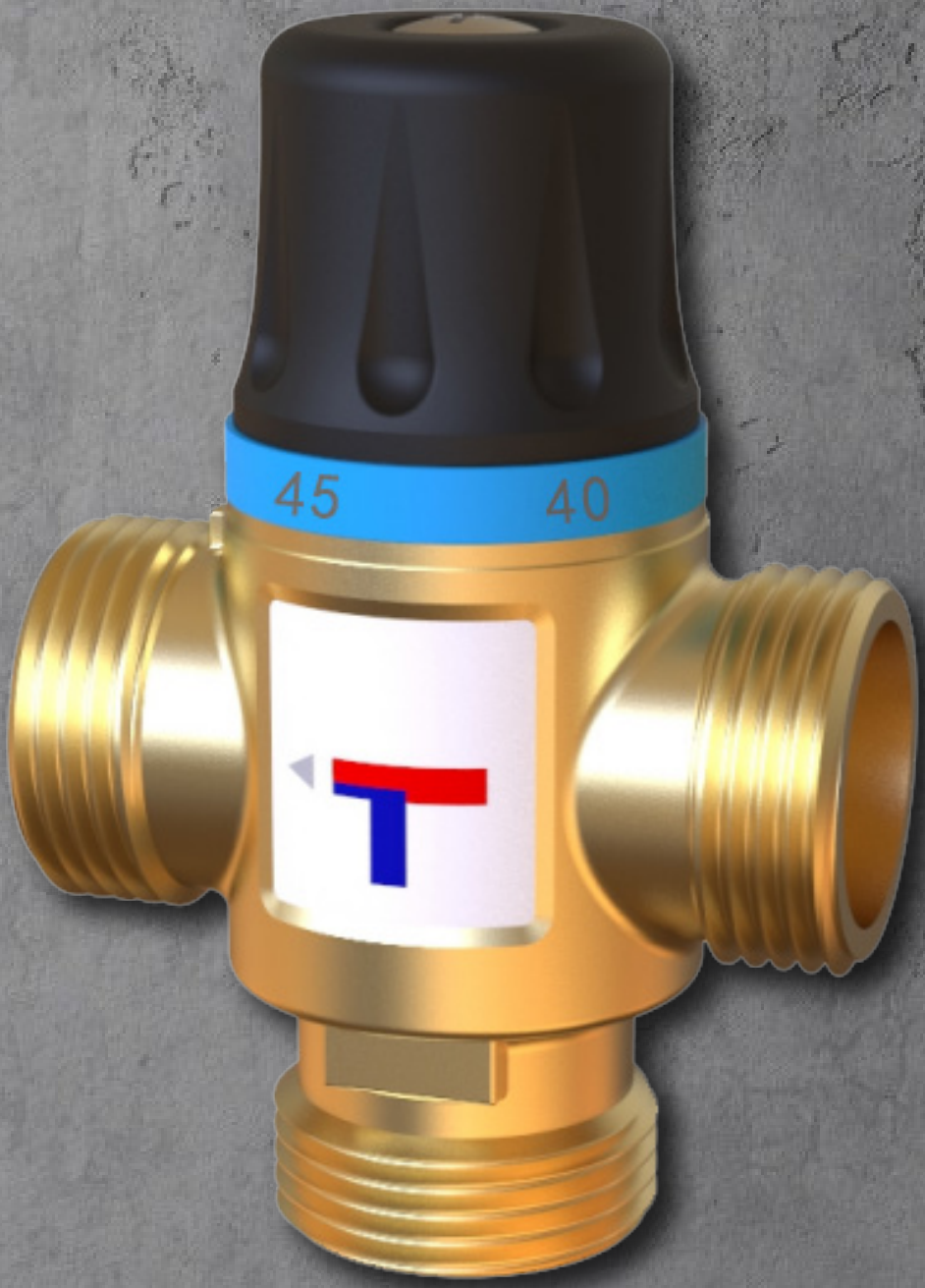


Horizontal thermostatic mixing valve user manual

910075NT

Horizontal thermostatic water mixing valve uses an internal thermal sensor to automatically adjust the ratio of hot and cold water inflow, thereby achieving the purpose of constant temperature water outflow. It is widely used in domestic hot water systems, floor heating systems, etc. Through real-time temperature control, it ensures water comfort and safety, and prevents users, floor heating pipes, floors, etc. from being scalded or damaged due to high temperatures.

Features

- Good resistance to pressure and temperature stability
- Waterproof and safe and anti-scalding
- Anti-scaling and anti-wear
- Temperature lock to prevent incorrect operation

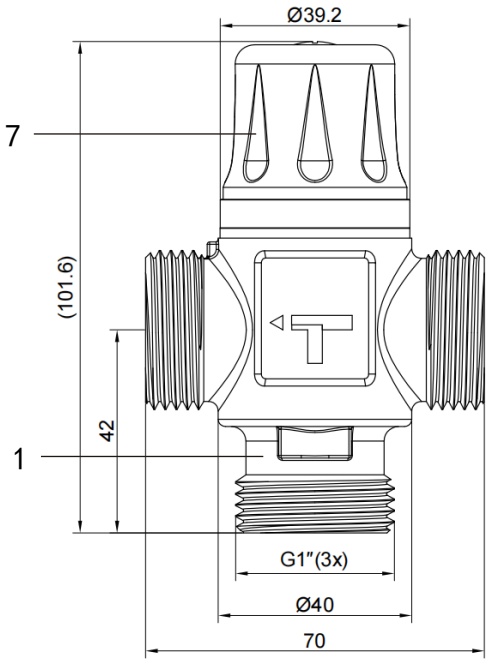
Model	Temperature Range, °C	KVS Value, m³/h	Connection Type
910075NT-1	20-43	2.5	G1" (external thread)
910075NT-2	20-55		
910075NT-3	35-60		
910075NT-4	30-70		

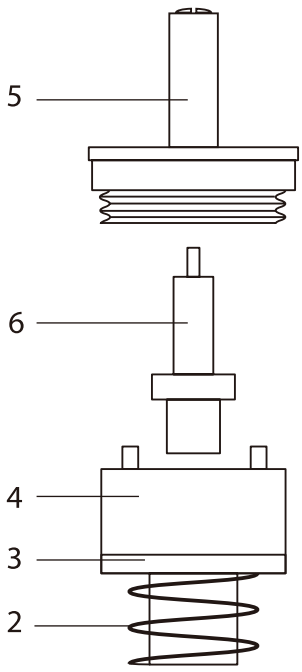
Technical parameters

Material of the valve body:brass	Hot water temperature:55℃-75℃
Temperature control accuracy:±3℃	Cold water temperature:5℃-15℃
Factory temperature setting:20℃/35℃	Flow pressure （high pressure):1-5bar
Maximum static pressure:10bar	Flow pressure （low pressure):0.2-1bar
Mixing water temperature range: 20℃-43℃/35℃-60℃	Kvs:2.5 m³/h(MAX)

Component Description

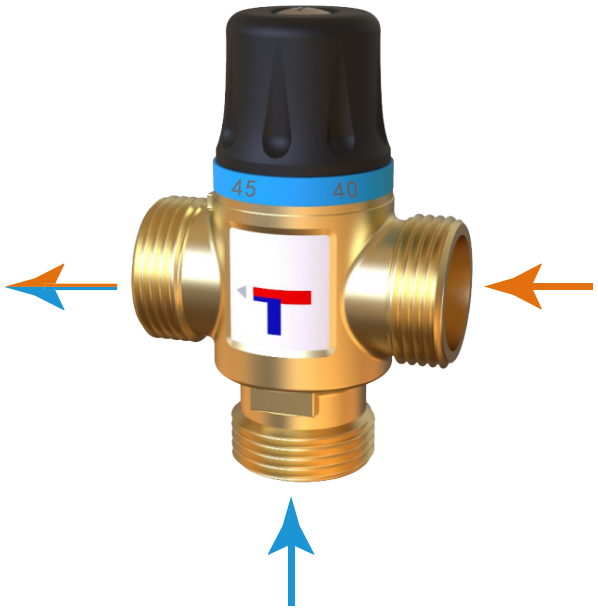
Unit: M M





1. Valve Body (Brass)
2. Spring (Stainless Steel 304)
3. Seals (EPDM Rubber)
4. Internal Cartridge (Nylon)
5. Valve Cover (Brass)
6. Thermal Element (Copper)
7. Adjustment Handle (Plastic)

Operating Principle

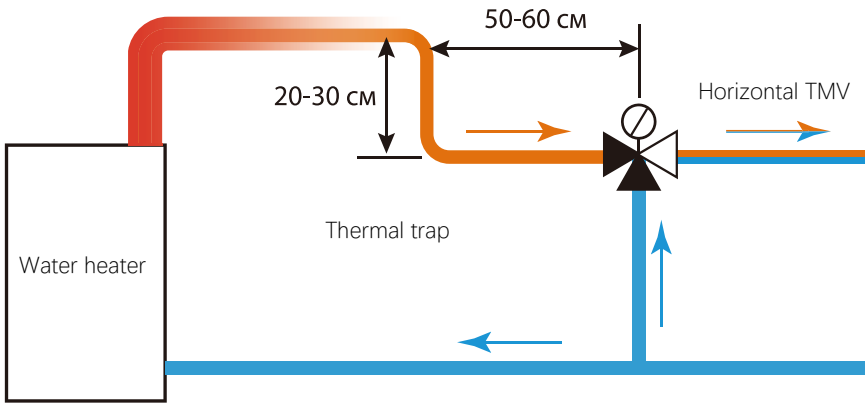


Pull the handle upward to set the target temperature. Rotating the handle adjusts the stroke of the internal nylon cartridge, thereby controlling the output water temperature. After setting, press the handle downward to lock it and prevent accidental adjustments.
The thermal element automatically responds to water temperature changes: when the temperature rises, the element's push rod extends outward, shifting the nylon cartridge to alter the hot/cold water mixing ratio. When the temperature drops, the reverse action occurs to maintain dynamic equilibrium.
Depending on the selected thermal element, the adjustable temperature range is 20℃ to 70℃.

Anti-Scald/Overheat Protection
If water temperature spikes abruptly, the valve completely shuts off the hot water inlet. Normal operation resumes once the temperature stabilizes.

Installation and commissioning

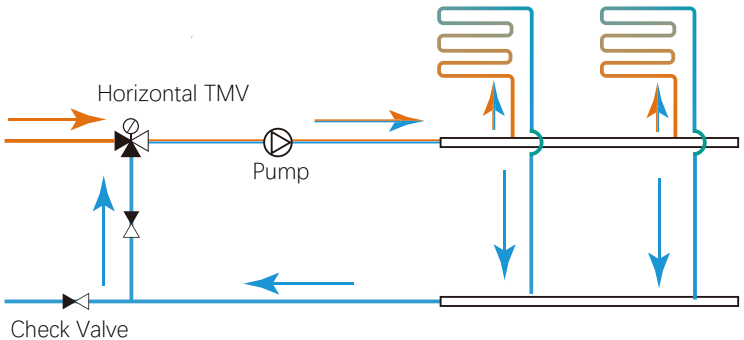
1. Before starting installation, ensure that all water supply pipes have been flushed to prevent debris from rushing into the valve;
2. According to the instructions on the label: the red end is connected to the hot water inlet, the blue end is connected to the cold water inlet, and the arrow pointing to the other end is connected to the mixed water outlet;
3. According to the scale mark on the temperature adjustment handle, pull up the handle and turn the temperature adjustment cover counterclockwise, the outlet water temperature will increase; turn the temperature adjustment cover clockwise, the outlet water temperature will decrease. After the temperature is set, press the handle to lock. temperature to prevent error operation;
4. Ensure the minimum mixed water flow rate for normal use of the thermostatic mixing valve. When the actual flow rate is lower than this flow rate, the outlet water temperature will be significantly reduced and unstable.



Heat Trap Design
If the valve is installed downstream of a domestic hot water storage tank, design a heat trap according to the diagram below. Maintain minimum clearance between the heat trap and the valve to prevent overheating caused by hot water circulation from the tank during non-draw periods.

Installation Diagram Examples

Underfloor Heating System: Maintains constant temperature supply for underfloor heating.



Noted:

1. Please read this instruction manual carefully before use, and install, debug, use and maintain according to the instructions;
2. It is the installer's responsibility to comply with local laws and regulations;
3. Ensure that the installation structure and installation hardware can safely support the use of the valve. The valve must also be installed in an easily accessible location for debugging and future maintenance.
4. Do not over-tighten any connection, otherwise damage or leakage may occur.
5. Product installation must be performed by qualified and licensed personnel. A qualified installer should ensure that appropriate equipment is selected for installation. Incorrect installation can result in burns, serious injury or death.