

Type 2 Approved Valves (UK Installations) – Installation, Commissioning and in service test requirements

This information is supplementary to and must be read in conjunction with the assembly instructions, technical product information and clean and care instructions supplied with your thermostatic mixing valve.

- The installation must comply with the requirements of the Water Supply (Water Fittings) Regulations 1999.
- Unless otherwise stated the approval designation is High Pressure Shower (HP-S).
- The thermostatic mixing valve shall be installed in such a position that maintenance, commissioning and testing can be undertaken.
- The fitting of isolation valves is required as close as practicable to the water supply inlets of the thermostatic mixing valve.
- The fitting of strainers (supplied) is required into the water supply inlets of the thermostatic mixing valve (as shown in the assembly instructions).

Conditions of use for Type 2 valves

	High Pressure
Maximum static pressure – Bar	10
Maximum dynamic (flow) pressure (hot & cold) – Bar	0.5 to 5
Hot supply temperature – °C	55 to 65
Cold supply temperature – °C	≤ 25

Valves operating outside these conditions cannot be guaranteed by the Scheme to operate as Type 2 valves.

When commissioning the thermostatic mixing valve check the following:

1. The designation of the thermostatic mixing valve matches the application.
2. The supply pressures are within the valves operating range.
3. The supply temperatures are within the valves operating range.
4. Isolating valves are provided.

If all these conditions are met, proceed to set the temperature as stipulated in the installation instructions.

It is a requirement that Type 2 approved valves shall be verified against the original set temperature results once a year. When commissioning/testing is due check the supply temperatures and pressures are still appropriate and then the following performance test shall be carried out.

Cold water isolation test:

The purpose of the cold-water isolation test is to ensure that the thermal performance of the TMV is adequate at the time of installation and annually thereafter.

Procedure:

1. Operate the TMV and achieve a normal flowrate for the application and record the initial mixed water outlet temperature.
2. Isolate the cold-water supply to the valve.
3. Collect the water discharged from the TMV outlet for 5 seconds.
4. Continue to collect the water discharged from the TMV outlet in a second vessel for a further period of 30 seconds.
5. Re-open (restore) the cold-water supply and after 30 seconds measure the mixed water temperature.

Acceptance criteria (shower):

- The volume collected in the first period of 5 s shall not exceed 200 ml.
- The volume collected in the second period of 30 s shall not exceed an additional 300 ml.
- After restoration of the cold-water supply (30 s) the mixed water outlet temperature shall not differ by more than 2°C from the initial set mixed water temperature.

Note, if there is residual flow during the commissioning or annual verification (cold water supply isolation test), then this is acceptable providing the temperature of the water seeping from the valve is no more than 2°C above the designated maximum mixed water outlet temperature setting of the valve. Temperature readings should be taken at the normal flow rate after allowing for the system to stabilise.

The sensing part of the thermometer probe must be fully submerged in the water that is to be tested.

Any TMV that has been adjusted or serviced must be recommissioned and re-tested in accordance with the manufacturers' instructions.