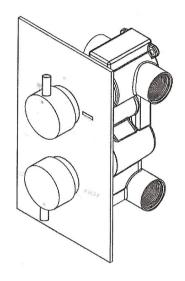
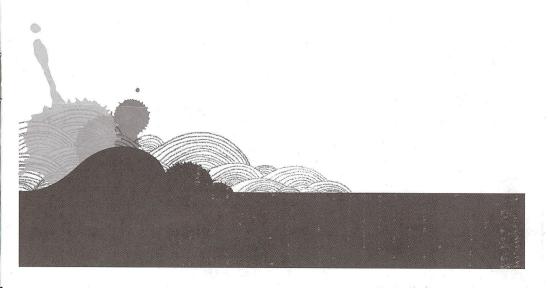
# **CONCEALED THERMOSTATIC VALVE**





## OPERATING CONDITIONS OF USE -

Before installation the operating conditions of use must be checked. The table below contains details of the necessary conditions of operation. If your water supply cannot meet these conditions then the valve cannot be guaranteed to operate as a Type 2 valve. This valve is suitable for use in both LP (BS 1287) and HP (BS 1111) operating conditions.

Please note valves must always be operated within either the range for BS 1287 or BS1111. Valves cannot operate effectively where a hot or cold pressure system crosses the boundaries of the two ranges. In the case where operating conditions such as these exist; either the hot or cold pressure will require to be reduced or boosted so as to be within a selected range.

Operating pressures above 5.0 Bar will require the installation of a pressure reducing valve.

	BS1287	BS1111	
Maximum Static Pressure	10 bar	10 bar	
Flow pressure (Hot & Cold)	re (Hot & Cold) 0.1 bar — 1 bar		
Hot Water Supply Temperature	55 − 65 °C	55 − 65 °C	
Cold Water Supply Temperature	MAX 25 °C	MAX 25 °C	
Mixed Water Temperature	MAX 46 °C		

NOTE — The mixed outlet temperature and the system hot temperature must be different by a minimum of 10°c for the shut off facility to function.

# RECOMMENDED OUTLET TEMPERATURES -

Bath Fill	44 °C *
Shower	41 °C

- ⊙ The mixed water temperature at the terminal fitting must never exceed 46 °C
- ⊙The maximum mixed water temperature can be 2°C above the recommended maximum set outlet temperatures.
- \* 46°C is the maximum mixed water temperature from valve. The maximum temperature takes account of the allowable temperature tolerances inherent in thermostatic mixing valves and temperature losses in metal baths.

It is not a safe bathing temperature for adults or children.

The British Burns Association recommends 37 to 37.5°C as a comfortable bathing temperature for children. In premises covered by the Care Standards Act 2000, the maximum mixed water outlet temperature is 43°C.

### TROUBLE-SHOOTING

Problem	Solution		
Shower will not run hot enough when first installed	Check for debris Check hot water temperature		
Cold water running back through the valve into the hot watersystem.	Check and clean the check valve cartridges and filterslocated under the check valves.		

#### TESTING METHOD -

The valve should be tested to ensure correct operation at commissioning and thereafter at intervals no greater than 12 months.

#### Notes:

- The testing will only require a normal thermometer with ascale greater than 65°C. The
  temperature sensitive element of the thermometer should always be fully inserted into the
  water flow.
- 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.

When commissioning/testing is due the following performance checks shall be carried out:

- 1. Measure the mixed water temperature and record.
- The testing will only require a normal thermometer with a scale greater than 65°C. The temperature sensitive element of the thermometer should always be fully inserted into the water flow.
- 3. Carry out a cold fail/safe shut-off test by using the isolation valve to shut off the water to the cold supply.
- 4. Wait 5 seconds, if water is still flowing check that the water temperature is below 46°C. The flow should stop or reduce to a trickle.
- 5. Open cold water isolation valve and measure mixed water temperature.

warrants this product against manufacturing defects and that it is suitable for use under the operating conditions specified in this instruction sheet.