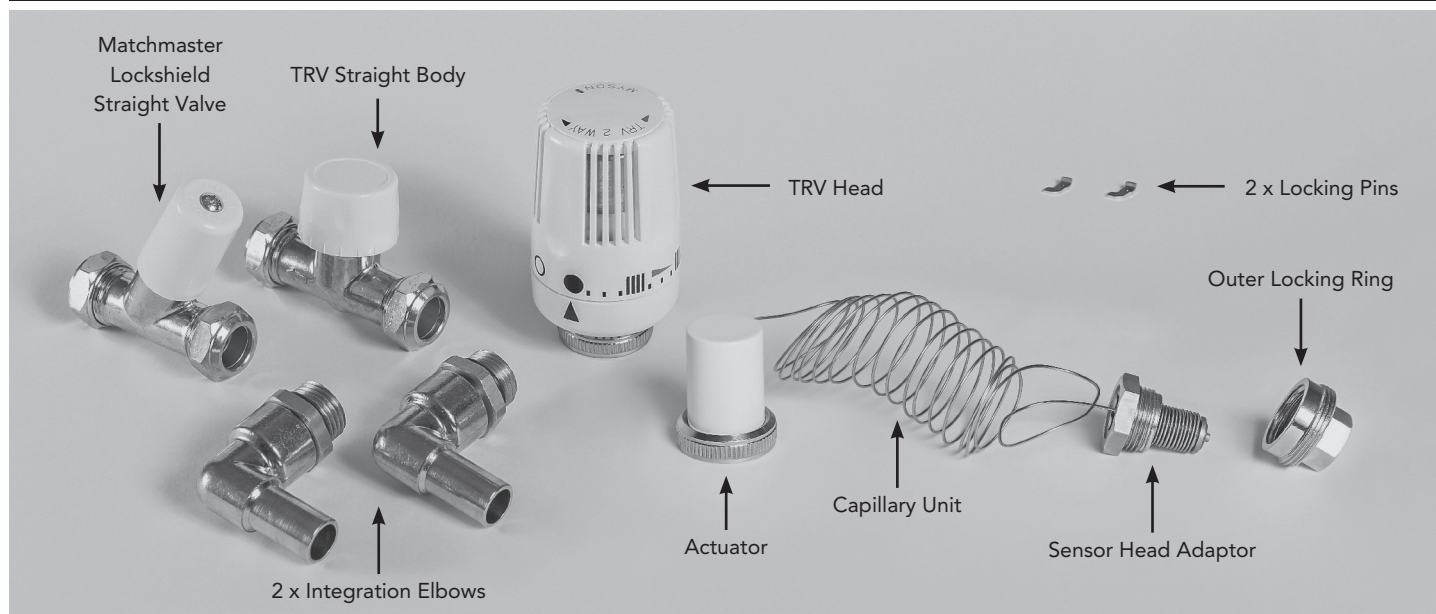


# FITTING INSTRUCTIONS FOR THE UNIVERSAL CLOSE COUPLED TRV KIT FOR LST RADIATORS

## PACK CONTENTS



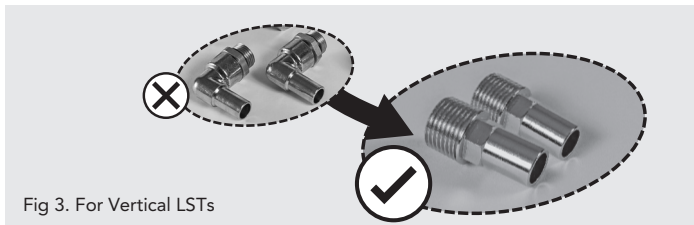
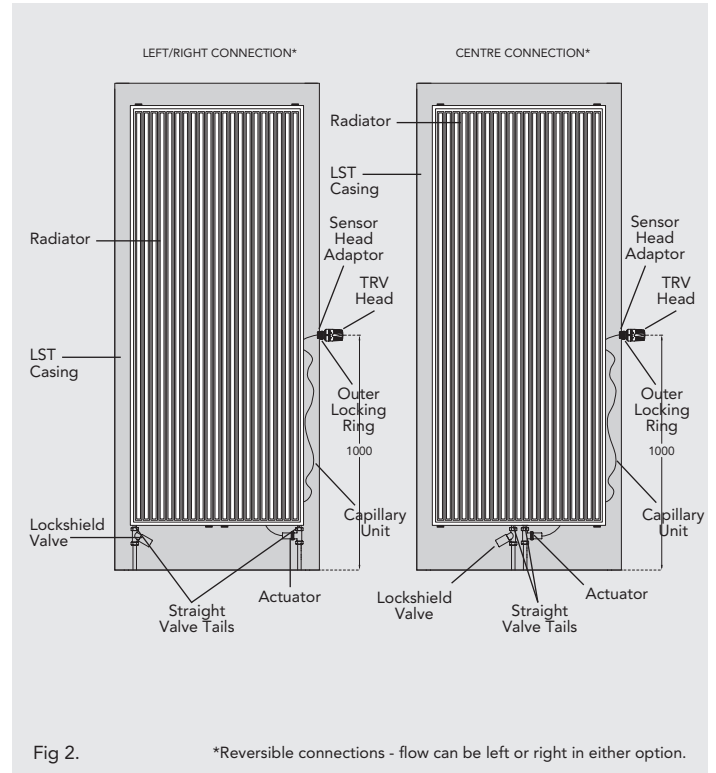
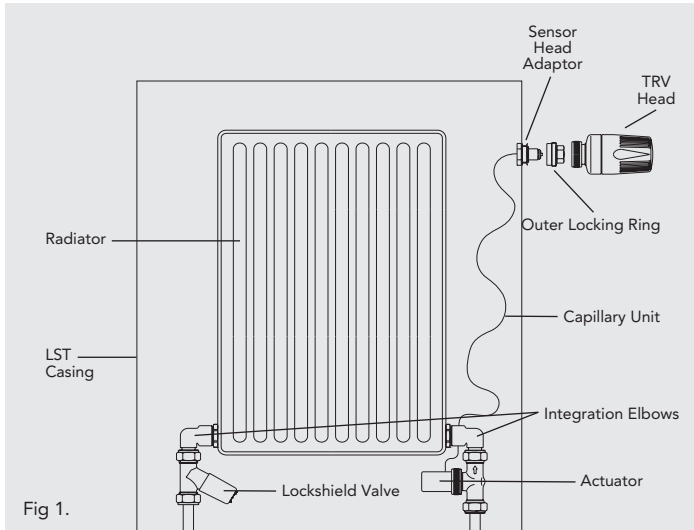
## Application

This kit allows a TRV to be mounted directly onto the LST casing making it an integral part of the radiator. The straight valve body is fitted to the radiator and is coupled to the TRV head by a flexible capillary unit.

The arrangement offers a choice of position for both the TRV valve body and the TRV head. For example the valve can be at one end of the radiator and the TRV head at the other. Access for adjustment, cleaning and maintenance are retained without the need to disconnect the TRV head or alter its setting.

## Fitting

1. The Universal Close Coupled TRV kit is suitable for all types of LST radiators. See Fig 1.
    - a. **PLEASE NOTE: For use with Vertical LST radiators, the integration elbows are to be replaced with straight valves tails which are supplied with the Vertical LST radiator. See Fig. 2 and Fig 3.**
  2. Unpack the close coupled kit/capillary unit and identify the respective ends (actuator and sensor head adaptor. NB, the sensor head adaptor and outer locking ring are connected together) The actuator is to be connected to the TRV straight body and the two-piece, sensor head adaptor and outer locking ring, fits to the LST casing for mounting the TRV head. The capillary length is 1.8m.
  3. The TRV head can be fitted to either the right or left hand side of the LST casing. The LST casing comes with a 23mm diameter knock out, on either side, which needs to be removed. To remove the knock out, simply support the LST casing, use a hammer and a suitable sized punch, strike the knock out firmly to break its seal. If necessary, twist or flex the knock out for final removal.
  4. Using the supplied integration elbows or straight valves tails (for Vertical models), carry out the installation of the LST radiator in accordance with the fitting instructions, see Fig 1 and 2.
  5. Separate the outer locking ring from the sensor head adaptor. **TAKE CARE NOT TO DAMAGE THE CAPILLARY OR THE EXPOSED SENSOR, AND DO NOT ALTER THE POSITION OF THE INTERNAL LOCKING RING.**
  6. Fit the sensor head adaptor through the prepared hole in the LST casing, from the inside and add the outer locking ring on to the sensor head adaptor from the outside of the LST casing. Use a suitable sized spanner to firmly lock the assembly together.
  7. Carefully release the clip holding the capillary unit and leave as loose coils. Fit the actuator onto the TRV straight body.
  8. Fit the LST casing on to its mounting brackets and fit the TRV head to the outside of the LST casing, on to the outer locking ring. Set the TRV head to the fully open position (black dot in line with the indicator) and ensure that it engages correctly with the hexagonal section of the adaptor.
- A Theft Resistant ring or a Theft Resistant Collar (available as accessories for Thermostatic Radiator valves) may be fitted if required. It is recommended that satisfactory operation of the system is first verified before fitting these accessories.



## Temperature Locking and Limiting

Your Thermostatic Radiator valve has a locking or limited range adjustment facility to prevent unauthorised adjustment in public areas or by children in the home.

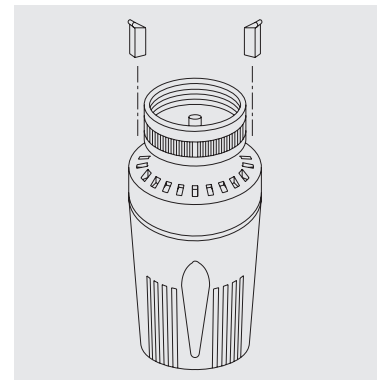
### Locking

Set the Selector to the required level. Insert the first locking pin into the opening in line with the 'circular black' marking. Without altering the set position insert the second locking pin into the opening in line with the 'black dot' marking.

### Limiting

**High Limit** - Set the valve temperature to the highest required level; insert the first locking pin into the opening in line with the 'black dot' marking.

**Low Limit** - Set the valve temperature to the lowest required level, insert the second locking pin into the opening in line with the 'circular black' marking.



## Technical Information

Maximum operating static pressure	10bar	Frost Setting	8°C
Maximum water temperature	120°C	Limiting and Locking	Ca 1°C
Hysteresis	<0.5K	Maximum Differential Pressure	0.6bar
Setting Range	8 - 28°C		
Normal Setting	Ca 20°C		

## Siting of TRV's

A TRV should be positioned where it is able to sense the air temperature changes in the room. It should not be in direct sunlight or in a location that does not allow adequate circulation of air, such as behind curtains or

doors or in the corner of a room. In situations where optimum positioning is not possible a Remote Sensor or a Remote Adjuster should be used.

## Automatic By-Pass Valves (ABV's)

It is recommended that a Automatic By-Pass Valve be fitted between the flow and return immediately after the pump in systems having Thermostatic Radiator Valves installed. Where a combination boiler is installed, or the pump head capacity is greater than 0.6bar (6m water gauge) it is essential that an Automatic By-Pass Valve is fitted.

In larger systems it may be necessary to fit more than one ABV in order to prevent the differential pressure in any one leg of the system exceeding the stated maximum.