

### **Dial Thermostatic Rough**

US-DL1000RC

# Installation Instructions





### Introduction

This thermostatic valve is suitable for use with all water systems up to a maximum operating pressure of 72 psi and static pressure of 144 psi beyond which pressure-reducing valves must be installed. The minimum water pressure requirement is 14.5 psi. The outlet is controlled by a flow control cartridge, commonly used for a main shower head.

#### **IMPORTANT:**

## Read these instructions carefully before you begin and retain for future reference.

Before beginning installation, check for any damage that may have occurred during transport. **Damage claims cannot be made during or after installation.** 

### Installation notes

**NOTES:** The installation must comply with all plumbing codes including local codes. This valve is a mixing device and therefore requires the water supplies to be reasonably balanced, otherwise a pressure-reducing valve is recommended.

The valve has integral single check valve cartridges, therefore the thermostatic valve is protected against cross-flow due to unbalanced line pressures.

INSTALLATION: Turn off the main water supply before connecting to any existing pipe work.

WARNING! Please check for any hidden pipes and cables, electric or otherwise before drilling holes in a wall.







### Parts identification



### Roughing in dimensions





### Fit collars and control covers

#### Flow cartridge

- Screw collar firmly into place (1)
- Screw ring on the thermostatic body (2)
- Attach control cover (3) to the on-off valve and turn counter clockwise
- Attach chrome ring (4) on the control cover (3)
- Place the handle (5) with the screw positioned downward and tighten screw

#### Thermostatic control

- Screw collar firmly into place (6)
- Attach control cover (7) to the thermostatic cartridge, position tab of the cover to the same side as the tab on the cartridge (8-9). Do not turn the spindle, tighten screw.

**NOTE:** Pay attention to the alignment of the tabs on the control cover and on the thermostatic cartridge (8-9). If the tabs are not aligned, set temperature will not correspond to output temperature.

# 2 Installation

- Position the valve onto the wall and mark the position of the fixing lugs (x2).
- Make sure the valve is set back from the front face of the wall by the appropriate depth to allow for plasterboard, filling and tiling etc., (min. 2 7/8", max 3 5/8" (see roughing in dimensions).
- Mount casting to the wall using suitable fixings for the wall construction.
- Always leave access to the four front cartridges for servicing.





## 3 Installation

- Once the valve has been secured to the wall, a plastic dust cover can be temporarily attached to the valve with the screws supplied. This will protect the valve while additional work is completed.
- DO NOT use the dust cover as a tiling guide.
- Connect the hot and cold water supplies and the main outlet.
- DO NOT use an excessive thickness of sealing tape as this may damage the valve body and result in a concealed leak within the wall cavity.
- Once all connections have been made, remove the plastic dust cover.
- Turn on the water supplies and test all connections for water leaks.
- Remove the hot and cold check valves and flush out the installation.
- Clean the filters and refit.



### 4 Temperature control

- To set the temperature, remove the handle and unscrew the center screw of the thermostatic control cover.
- Rotate the exposed thermostatic spindle, (clockwise for cold, counterclockwise for hot), until the maximum desired temperature is set (107°F is suggested maximum 'pre-set' temperature).
- Position the tab on the back of the control cover to the same side as the stop on the cartridge.
- Push the control cover onto the splines and tighten the center screw.
- Refit the handle.
- The thermostat is now set to its new temperature and can only be increased or decreased by repeating this process.



### 5 Maintenance

**NOTE:** To avoid damage, please remove all chrome parts before maintenance takes place.

#### Thermostatic cartridges

• The 1" concealed thermostatic valve should give trouble-free service, but in the event of failure servicing is a straightforward process.

#### To remove the thermostatic cartridge

- Undo the cartridge clamp nut, (take note of the orientation of the cartridge).
- Pull the cartridge out using the temperature control knob to aid removal.
- Wash the cartridge with clean running water and make sure that any trapped debris has been removed.
- Dry and lightly grease the seals, (only use silicone grease), and replace the cartridge making sure that the recess on the body of the valve is aligned with the slot in the raised central section of the plastic cartridge. This is to make sure the stop is in the required 2 o'clock position shown.

#### Flow control cartridge

• In case of malfunctioning of the on-off cartridge, remove the cartridge and replace with a new one.

#### Filters/check valves

• The check valves stop cross flow between hot and cold water supplies.

#### To clean the check valve

- Undo and remove the check valve.
- Using a pair of grips remove the non return valve and filter.
- Wash the filter with clean running water, dry and lightly grease the seals, (only use silicone grease).

#### Care of your shower valve

- Clean surfaces gently with a soft, damp cloth using mild soap.
- We DO NOT recommend using any household cleaners as many can cause damage to the finish







### Trouble shooting

#### Symptom

- After installation the shower runs HOT or COLD and will not mix.
- Shower will not run hot enough when first installed.
- Cold water tracking through the valve into the hot water system.
- Very low flow or no flow.

#### Solution

- Hot and cold supplies are plumbed the wrong way round. The hot and cold supplies need to be re-done to the correct inlets as marked and described in the installation.
- Maximum temperature needs adjusting, see 'temperature control'.
- Check and clean the check valve cartridges and filters located under the check valves.
- Check hot and cold feeds, (the valve will shut down if either the hot or cold supply fails).

### Flow rate



### Appliance standards/codes

 IAPMO certified to meet or exceed the following: ASME A112.18.1 / CSA B125.1 ASME A112.1016-2011 / CSA B125.16-11

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