



# Whale Thermostatic Mixer Valve WX1599B

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## 1. Specification

|                                   |                                     |
|-----------------------------------|-------------------------------------|
| Model Number                      | WX1599B                             |
| Maximum Static Pressure           | 10 Bar (145 PSI)                    |
| Flow Pressure, Hot & Cold         | 0.5 to 5 Bar (7.25 PSI to 72.5 PSI) |
| Hot Supply Temperature            | 55 to 65°C (131 to 149°F)           |
| Cold Supply Temperature           | Equal to or less than 25°C (77°F)   |
| Maximum Input Pressure Difference | 2 Bar (30 PSI)                      |

## 2. To The User

Read the following carefully before installation. **WARNING:** Please note that incorrect installation may invalidate the warranty.

## 3. To The Installer

Check that the product is suitable for the intended application, follow these installation instructions and ensure all relevant personnel read the points listed below. Also ensure that these operating instructions are passed on to the end user.

## 4. Application

This Type II Thermostatic Mixer Valve is designed to automatically adjust and limit water outlet temperature in a marine application. The valve is adjustable between 30° and 50°C (86° and 122°F).

## 5. Warnings

1. This Thermostatic Mixer Valve is **not suitable** for pumping flammable liquids, diesel, chemicals etc.
2. With all applications, it is important that a system of safe working practice is applied to installation, use and maintenance. The electric supply **must be** turned off and water system drained prior to installation.
3. **CAUTION:** During installation while the temperature is being adjusted please be aware of hotter water coming through the system which could result in scalding

## 6. Installation

**Note:** Incorrect installation will invalidate warranty.

Preparation - Always disconnect power sources before installing.

### 6.i Location

- The Thermostatic Mixer Valve can be installed in any position on board the marine vessel.
- Install the Thermostatic Mixer Valve in a position easily accessible to allow for maintenance and testing.

### 6.ii Installation

- Prior to installation, flush all existing pipework with clean freshwater to remove any existing debris from the system.
- The Thermostatic Mixer Valve **must be** fitted in line with the hot and cold water feeds - prior to all outlets (see fig. 1 and 2).

**Note:** The mixing valve is fitted with a non-return valve on both the hot and cold water inlets.

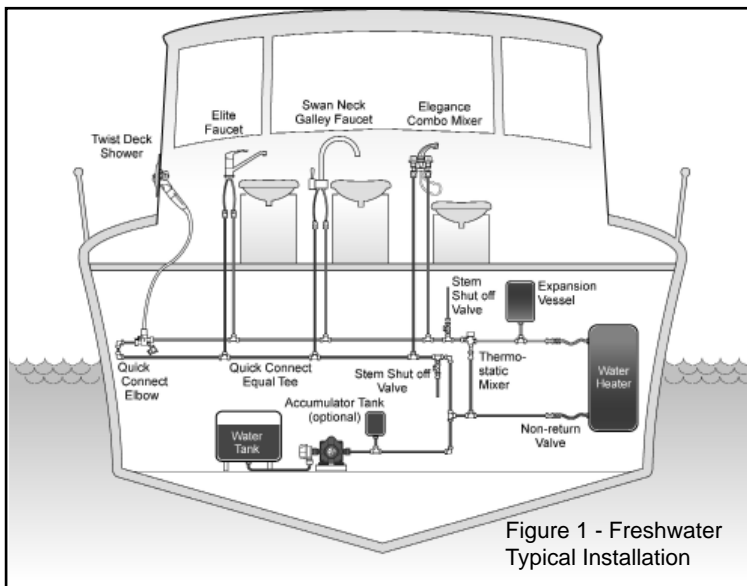


Figure 1 - Freshwater Typical Installation

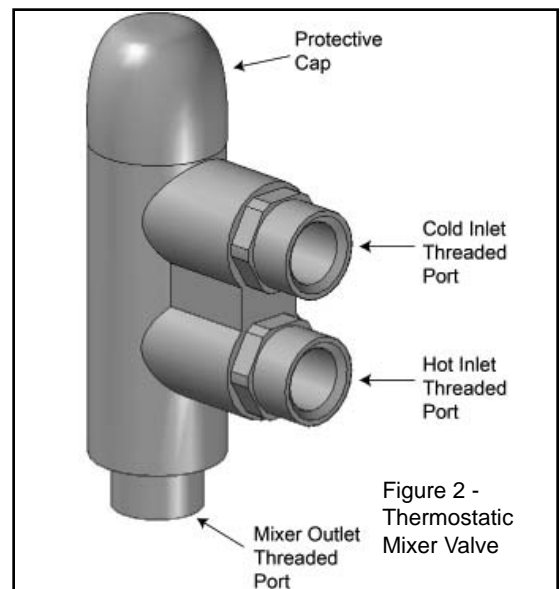


Figure 2 - Thermostatic Mixer Valve

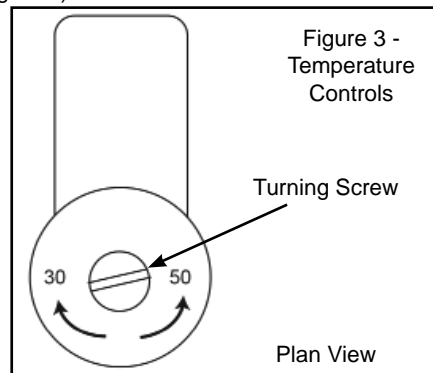
### 6.iii Setting The Temperature

**Note:** The initial factory set temperature is 50°C +/- 5 °C at 75°C hot water inlet and 15 – 20 °C cold water inlet.

- Set the outlet tap(s) to the hot water “open” position and measure the water temperature.
- Remove the protective cap from the Thermostatic Mixer Valve by turning the lid counter-clockwise (Figure 2)
- Using a flat headed screw driver, adjust the temperature by turning the spindle (Figure 3).
- **Clockwise reduces the temperature.**
- **Counter - clockwise increases the temperature.**
- Recommended outlet temperatures are as follows:

| Outlet     | Recommended Temperature  |
|------------|--------------------------|
| Bath Fill  | 44°C (111°F) ± 2°C (7°F) |
| Shower     | 41°C (105°F) ± 2°C (7°F) |
| Wash Basin | 41°C (105°F) ± 2°C (7°F) |
| Bidet      | 38°C (100°F) ± 2°C (7°F) |

**Note:** Whale® recommends that the mixer water temperature **must never** be set more than 46°C (114.8°F) to reduce the risk of scalding.



- When the optimum temperature is reached, replace the cap, turn clockwise to lock it into position and close the outlet tap(s).

### Thermostatic Mixer Valve Functionality Test

- Measure the temperature at the hot water outlet.
- Let the water run for 5 seconds and check that the water is below 46°C (114.8°F).
- **Please note**, the temperature can spike to 50°C (122°F) for 2 seconds. This is the maximum setting of the Thermostatic Mixer Valve.
- If the water is running at the set outlet temperature (as set per section 6.iii) the valve is working correctly.
- If the water temperature is not at the desired level readjust the temperature of the Thermostatic Mixer Valve, check the hot and cold water temperatures meet the specification (section 1) and repeat the test. If the desired temperature still cannot be met, please contact Whale® Support (section 9).

## 7. Maintenance

This Whale® Thermostatic Mixer Valve is designed to only require minimal maintenance.

**WARNING:** Before servicing, turn off the power and drain water from system.

### Optimal Performance

- For optimal performance, the outlet water temperature should be tested regularly to ensure temperature levels remain consistent. Whale recommends that the temperature is tested at least every 6 months.
- Flush your freshwater system with clean water to prevent a build up of residue. Residue is dependent on the type of water in your area e.g. hard or soft. Contact Whale® support for more information (section 9).

### Cold Water Isolation Test

- Open the hot water tap and isolate the cold water inlet to the thermostatic mixer valve (Figure 2).
- Wait for 5 seconds. At the outlet, if water is still flowing, check the temperature is below 46°C (114.8°F).
- If water is still flowing and is above 46°C (114.8°F), the Thermostatic Mixer Valve will need serviced or replaced. Contact Whale® Support for more information (section 9).

## 8. Winterizing

**NOTE** When winterizing, fully drain system.

Whale® does not cover damage, caused by the system not being not fully drained for winterizing.

## 11. Patents and Trademarks

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## 12. Approvals

This product is WRAS Approved. For more information please contact Whale® Support.

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