TECHNICAL DATASHEET

FRENZY COOL CHROME
FRENZY THERMOSTATIC COOL CHROME SURFACE MOUNTED BAR SHOWER VALVE WITH ADJUSTABLE RISER KIT

Product Specification

Product Code: FZ SHXMMCTFF C
Finish: Chrome
Product Type: Contemporary
Construction: Body is of brass construction
Valve Type: ¼ Turn ½” ceramic disc valve
Cartridge Type: Thermostatic Cartridge
Supply: Suitable for all plumbing systems [Preferably balanced]
Inlet Connections: 15mm compression connections
Outlet Connection: G ½
Working Pressures: Min 0.2bar, Max 5.0bar
Maximum Static Pressure 10.0bar
Dimensions for Fitting: 150mm inlet centres

Additional Information

• Unique Cool Chrome technology ensures the bar valve stays cool to the touch while in use.
• Dual control – Flow and temperature are controlled separately, giving accurate control of both
• Thermostatic cartridge maintains showering temperature to +/- 1ºC by compensating for changes in the incoming water temperature and pressure giving the stable outlet temperature
• Factory set to a maximum of 38ºC to eliminate the ability to select an unsafe temperature – this is adjustable to suit user preference and up to a maximum of 46ºC.
• Flow control handle incorporates an eco button to save water, this can be overridden by the user.
• Supplied with WMNT10 C fast fit connections.
• Supplied with 1.5m hose, riser rail, hose retainer and multi function handset with rub clean nozzles.
• Chrome plated to BS EN 248

Technical Advice: For further information please call 0844 701 6273 or email customercare@bristan.com

Guarantee: 5 years covering manufacturing faults.

Compliance/Approvals

Manufactured to comply with WRAS

Flow Rates (litres per minute)

<table>
<thead>
<tr>
<th>System</th>
<th>Pressure (bar)</th>
<th>0.2</th>
<th>0.5</th>
<th>1.0</th>
<th>1.5</th>
<th>2.0</th>
<th>3.0</th>
<th>4.0</th>
<th>5.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open Outlet</td>
<td></td>
<td>4.2</td>
<td>7.5</td>
<td>11.2</td>
<td>13.7</td>
<td>15.8</td>
<td>19.4</td>
<td>22.4</td>
<td>25.0</td>
</tr>
</tbody>
</table>

Bristan, Birch Coppice Business Park, Dordon, Tamworth, B78 1SG
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The information contained on this page was correct at date of issue. Fitting dimensions are provided as a guide only. Some variation may occur due to manufacturing tolerances. Bristan pursues a policy of continuing improvement in design and performance of its products and so reserves the right to change specifications without prior notice.
9. Guarantee & Registration

9.1 Guarantee

All products are manufactured to the highest standards and 5-year guarantee covers any defect in manufacture.

Any part found to be defective during the above guarantee period will be replaced without charge providing that the product has been installed in accordance with our instructions, used as intended and maintained/serviced as recommended. In the unlikely event that any problems are encountered with this product's performance on installation, you must obtain guidance/authorisation from our Customer Service Department before any remedial action is taken and be able to supply proof and date of purchase.

The guarantee excludes damage caused by accident, misuse or neglect and does not cover the following:

- Those components subject to wear and tear such as 'O' rings and washers etc,
- Damage caused by faulty installation,
- Damage caused by any waterborne debris,
- Damage caused by improper cleaning products,
- Damage caused by the use of non-Bristan parts,
- The product being used for a purpose other than intended.

The company reserves the right, in the event of a claim not covered by the guarantee, to charge the claimant for parts and labour at current rates. This guarantee is given in addition to and does not affect your statutory rights.

In the interests of continuous product development we reserve the right to alter the specification as necessary.

9.2 Registration

To register your product with us please complete and return the enclosed registration card.

PRODUCT CODE: N SHXDIV C

TELEPHONE HELP LINE: 0844 701 6273

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1901 Thermostatic Shower
Surface Mounted
With Rigid Riser and Diverter

Fitting Instructions

Before starting any installation project please consider:

Prior to drilling into walls, check there are no hidden electrical wires, cables or water supply pipes with the aid of an electronic detector. If you use power tools do not forget:

- Wear eye protection
- Unplug equipment after use

Please keep these instructions for future reference and the request of replacement parts
1. Introduction

Your Bristan dual control shower fitting is a thermostatic mixer incorporating a wax capsule thermostat to ensure constant showering temperatures.

This valve has been designed to comply with BS EN 1111:1999 and BS EN 1287:1999, manufactured to the highest quality standards and is a 'Water Regulations Advisory Scheme' approved product.

These instructions are for your guidance to a safe and successful installation and should be left with the user.

2. Specification

*Inlet Connections:* 15 mm compression, with 152mm (+/- 1) between centres.

*Water Pressures:* Min. 0.2 bar - Max. 5 bar - Max. Pressure ratio 5:1

(Maximum differential between the hot and cold pressures should not exceed 5:1 ratio)

*Maximum Outlet Temp:* Factory set to 41c (can be re-set to suit site conditions).

**Hot and Cold Supply Temperature**

*Minimum recommended Hot:* 60c

*Maximum Hot Supply:* 80c

*Maximum Cold Supply:* 25c

**Note:** The inlet hot water temperature must be at least 10c above the required blend temperature.
3. Pack Contents Check List

Surface Mounted, Rigid Riser and Diverter

1x Valve
1x Rigid riser kit and Diverter
1x Packing kit
1x Hose
1x Handset

4. Installation

4.0 It is recommended that measuring the distance between inlet centres is required prior to installation; due to the differential outlined in Specification (page 2).

4.1 Pre-Installation (See Fig. 2, page 10)

4.1.1 Identify all components and check for completeness, particularly before arranging fitting.
4.1.2 This mixer should be installed in compliance with Water Regulations. For further details contact your Local Water Authority.
4.1.3 This mixing valve is suitable for use with the following systems:

- Gravity Fed Hot & Cold (Nominally Equal Pressure)
- Gravity Fed Hot & Mains Cold (Differential Pressure, 5:1 max ratio)
- Unvented Systems
- Gas combination Boiler
- Pumped System

Please Note: On gravity systems the minimum distance from the underside of the cold water storage tank to the showerhead must be 1 metre.
4.1.4 Prior to installation identify the supply system and the approximate supply pressures, and using the following table determine if flow limiters are required.

<table>
<thead>
<tr>
<th>Cold Supply</th>
<th>Hot Supply</th>
<th>Fit to Elbows</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1 to 1 Bar (1 to 10mtr head)</td>
<td>0.1 to 1 Bar (1 to 10mtr head)</td>
<td>Nothing</td>
<td>Nothing</td>
</tr>
<tr>
<td>1 to 5 Bar (10 to 50mtr head)</td>
<td>2 to 5 Bar (10 to 50mtr head)</td>
<td>Green 7 Litre Limiter</td>
<td>Yellow 5 Litre Limiter</td>
</tr>
<tr>
<td>Gravity 0.1 to 0.2 Bar (1 to 2mtr head)</td>
<td>White</td>
<td>White</td>
<td>White</td>
</tr>
<tr>
<td>Gravity 0.2 to 0.5 Bar (2 to 5mtr head)</td>
<td>Green 7 Litre Limiter</td>
<td>Nothing</td>
<td></td>
</tr>
<tr>
<td>Gravity 0.5 Bar+ (5mtr head)</td>
<td>Green 7 Litre Limiter</td>
<td>Yellow 5 Litre Limiter</td>
<td></td>
</tr>
<tr>
<td>Mans (1.5 to 10 Bar)</td>
<td>Unvented Hot Water Storage System (Shower Coil)</td>
<td>Green 7 Litre Limiter</td>
<td>Yellow 5 Litre Limiter</td>
</tr>
<tr>
<td>Combi-Burner/Instantaneous Gas Water Heater</td>
<td>Electric Unvented *** Instantaneous Heater</td>
<td>Yellow 5 Litre Limiter</td>
<td>Nothing</td>
</tr>
<tr>
<td>Any Vented (Open Outlet) Heater, Gas or Electric, E.G. 'Normal' Electric Shower</td>
<td>DO NOT USE WITH MIXER VALVE: THIS WOULD BE EXTREMELY DANGEROUS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.1.5 The flow limiters can be found in the packing kit, and are installed into the elbows as follows, refer to the relevant component diagram for your product. Loosen the elbow retaining screw (24) using the allen key provided and pull the elbow from the body. If a flow limiter is required, fit one of the thin washers (16) followed by the flow limiter (15), large diameter first. If only fitting the orifice disk, the thin washer is not required. Screw in the retaining ring (14). Re-fit elbow and tighten the retaining screw.

4.1.6 To aid future servicing, we strongly recommend the fitting of isolating valves to both supplies as close to the mixer as possible.

4.1.7 Filters are supplied and should be fitted to the inlet elbows prior to installation. To prevent problems caused by prematurely blocked filters, or damage to the valve, the inlet pipework should be flushed before installing the mixing valve.

8. Cleaning and Maintenance

8.1 Cleaning

Your fitting has a high quality finish and should be treated with care to preserve the visible surfaces. All surface finishes will wear if not cleaned correctly, the only safe way to clean your mixer is to wipe with a soft damp cloth. Stains can be removed using washing up liquid. All bath cleaning powders and liquids will damage the surface of your fitting, even the non-scratch cleaners.

8.2 Regular maintenance

We advise that the valve is regularly serviced, particularly in hard water areas. It is also important to clean the handset regularly in hard water areas to maintain an even spray/flow of water.

8.3 Cartridge Maintenance (See Fig. 2)

8.3.1 Remove the temperature control handle (4) as in section 5. setting.

8.3.2 Mark the position of the temperature stop (5) relative to the flow control (7) to aid re-fitting. Pull off temperature stop, remove circlip (6) and pull off flow control.

8.3.3 Unscrew cartridge (9), anti-clockwise and remove. Remove thermostatic element (10), and piston assembly (11). The piston assembly should not be dismantled further. Care should be taken not to damage the sealing faces of the piston and cartridge if these items are to be re-used.

8.3.4 Soak cartridge in de-scaling solution and rinse in clean water. Wash piston assembly in clean warm water.

8.3.5 Examine all seals and re-place if necessary. A seal kit (SK1850-1), or a complete cartridge kit (SK1850-2) including piston assembly, is available.

8.3.6 Using a silicon based grease, lightly grease all seals.

8.3.7 Re-assemble piston and cartridge assemblies into body in reverse order.

8.3.8 Using flow control, turn off valve, (fully clock-wise). Re-fit flow control with handle pointing down and stop pin against stop so that no, or very little clock-wise movement is possible. The built in stops allow 270°, 3/4 of a turn movement. Open valve fully anti-clockwise and check. Re-fit handle if necessary.

8.3.9 Re-fit circlip and temperature stop.

8.3.10 Turn on flow, fully anti-clockwise, allow temperature to stabilise and adjust as required. See section 5.
4.2 Valve Installation

4.2.1 Before mounting the valve to the wall, the position for the pipework should be decided. Three inlet positions, top, bottom and rear are possible simply by rotating the elbows in the body. The valve is designed to be installed with the hot supply on the left, cold on the right and Bristan logo facing up when viewed from the front. This may be reversed if required by inverting the valve body, but the supplies must be connected following this rule. A serial label on the reverse of the body also indicates hot and cold inlet position.

Ensure enough room has been left to fit the height of the rigid riser into.

4.2.2 Using the backplate as a template, mark, drill and plug the wall. If the wall is tiled, to avoid the possibility of cracking we recommend that the end of the plug (27) be sunk below the tile and the gap filled with silicon sealant. Secure the backplate to the wall with screws provided.

4.2.3 Locate valve body in backplate and secure with grub screw (29).

4.3 Rigid Riser Installation

(See Fig. 1)

4.3.1 Assemble arm, vertical tube, diverter and extension tube. Attach outlet adaptor to the shower outlet.

4.3.2 Offer the assembled rigid riser up to the shower and attach to the outlet adaptor. Making sure the riser is square use the fixing holes to mark position of the fixing screws.

4.3.3 Remove rigid riser assemble from the shower valve and drill haoles to suit wall plugs (if required). Attach the arm to the wall using the fixings supplied.

4.3.4 Mark out the hight of the wall bracket assembly and the fixing holes using the flange as a template. Ensure full adjustment of the handset bracket will still be achieveable when the riser is assembled. Once certain on the above drill the two holes to suit wall plugs (if required) and attach the wall bracket flange and spigot to the wall. Screw the wall bracket to the spigot to the correct distance from the wall.

4.3.5 Remove the shower valve from its backplate and slide the vertical tube through the wall bracket with the handset bracket inplace. Assemble the diverter, extension tube and valve, re-locating the shower valve into its back plate and re-securing. Check that all the cone nuts are tight.

4.3.6. Turn on supplies and run shower checking all joints for leaks.

Note: The wall bracket shown above should be fitted towards the bottom of the rail to ensure there is sufficient support at both ends. Please refer to the location of the wall bracket on page 07.
5. Maximum Temperature Setting  
(See fig 2)

The maximum showering temperature has been factory set to approximately 41°C with nominally equal supply pressures. This temperature can be re-set as follows.

5.1 Turn on the water supplies and fully open the flow control by turning the large handle fully anti-clockwise. Allow the water to run for a short time to achieve a steady temperature.
5.2 Adjust the temperature to maximum by turning the small handle fully anti clockwise.
5.3 Remove the temperature handle assembly by removing either the indice (1) and retaining screw (2). The handle may then be pulled from the spindle. The indice is simply pulled from the 1901 handle.
5.4 Turn the spindle (8) clockwise to reduce the temperature, or anti-clockwise to increase the temperature.
5.5 Re-fit the handle assembly so that the stop pin is against the stop (5) giving no more anti-clockwise movement. This is the maximum position. Re-fitting is the reverse of 5.3.

6. Operation

6.1 On/Off - Flow control
The flow control handle (7) turns through 270 degrees, 3/4 turn, anti-clockwise to achieve full flow, and clockwise to reduce and shut off the flow.

6.2 Temperature Control
The small handle (4) controls the outlet temperature. Turning the handle clockwise reduces the temperature and anti-clockwise increases the temperature.

Do not attempt to force the handles past their stops as this may result in damage.

7. General Fault Diagnosis
If your valve fails to function correctly, the following should be checked:

7.1 Check that the hot and cold connections are the correct way around. Hot on the left, cold on the right with Bristan logo facing up when viewed from the front.

7.2 Ensure that the hot water temperature is adequate, the recommended minimum temperature is 60°C

7.3 Ensure filters are clean, allowing adequate flow of water to the valve.