

Guarantee & Registration

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.

Registration

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

PRODUCT CODE: PM SQSHXDIV C

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(FI PM SQSHXDIV)

(REV.D1)

(AJ)

BRISTAN

Prism Single Control Surface Mounted Shower Valve with Rigid Riser & Diverter to Handset

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

800356/A

Specifications

General

The installation, commissioning and maintenance must be carried out in accordance with instructions supplied and be installed by qualified and competent persons.

Installations must comply with all Local and National Water Authority Regulations, and Building and Plumbing Regulations. If in doubt contact a registered plumber or the secretary, Institute of Plumbing, 64 Station Lane, Hornchurch, Essex, Rm21 6NB. Telephone: 01708 472791.

Temperature Control

Minimum cold water supply temperature: **5°C**
Maximum cold water supply temperature: **20°C**

Maximum hot water supply temperature: **85°C**
(a temperature of 60-65°C is recommended for ablutionary installations)

Note! A suitable hot water temperature control device should be installed to reduce temperatures exceeding the above maximum hot water supply temperature.

Minimum temperature differential between hot supply and outlet temperature: **10°C**
(eg. shower temperature 43°C: minimum hot supply 53°C)

Factory pre-set temperature: **43°C**

Thermostatic control range: **38-45°C**

Performance

Operating pressures for valve and kit.

Pressure (bar)	0.1	0.25	0.5	1	2	3
Valve only	8	14.5	26	29	42	52
Full kit	*	*	4.5	6	9	11

* Operating pressure not recommended, minimum of 0.5 bar (5m head) is required for adequate performance.

Please note the overhead pressures have been shown for Full kit.

Fault Finder

Fault	Cause	Rectification
No or reduced flow and/or fluctuating temperature.	<ul style="list-style-type: none"> - Shower head blocked. - Isolating valve partially closed. - Instantaneous boiler cycling on and off as flow rate/pressure too low. - Bottom cap setting incorrect. - Gravity head of water below minimum required. - Blockage in supplies/mixing valve. - Other draw offs in use causing pressure or temperature changes. - Supply pressures unequal. - Flow limiters incorrectly fitted. - Air lock in system. - Shower cross circulating. 	<ul style="list-style-type: none"> - Clear debris from shower head. - Open valve. - Adjust bottom cap setting. - Check boiler settings are correct. - Contact boiler manufacturer. - Adjust bottom cap setting. - Raise tank or fit pump. - Dismantle and check for debris. - Flush supplies before refitting. - Do not use other draw offs whilst showering. - See maximum pressure differential in Specifications. - Check Application Selection. - Check System Requirements for correct installation method. - Check non return valves and condition of seals.
Maximum outlet temperature too hot or too cold.	<ul style="list-style-type: none"> - Maximum temperature incorrectly set. 	<ul style="list-style-type: none"> - Reset maximum temperature. Refer to Instructions.
Maximum temperature too cold or runs cold after a short time (maximum temperature set or fully adjusted).	<ul style="list-style-type: none"> - Hot water is less than 10°C above the outlet temperature required. - Insufficient hot water supply or storage (running out of hot water). - Instantaneous boiler not igniting as water flow rate/pressure too low. 	<ul style="list-style-type: none"> - Adjust tank temperature to 60-65°C. Ensure hot water is up to temperature. - Check tank or heater capacities. Low capacity equals shorter showering time. - Adjust bottom cap setting. - Increase flow through system. - Increase pressure in system. - Check for blockages. - Contact boiler manufacturer.
Outlet flow too much.	<ul style="list-style-type: none"> - Flow limiters incorrectly fitted. 	<ul style="list-style-type: none"> - Check Application Selection.
Only hot or cold water at outlet	<ul style="list-style-type: none"> - Inlet supplies reversed/backwards. - Inlet supplies blocked. 	<ul style="list-style-type: none"> - Ensure supplies are connected correctly to hot and cold inlets. - Clean out debris.
Shower will not shut off or leaking from body.	<ul style="list-style-type: none"> - Seal damage or wear. - Scale build up inside mixer. - Inlet pressures above maximum recommendations. 	<ul style="list-style-type: none"> - Renew all seals. - Dismantle and check for debris - Ensure supply pressures are within Specification. - Fit pressure regulating valve if necessary.
No thermostatic fail safe.	<ul style="list-style-type: none"> - Inlet temperatures not within specification. - Piston assembly jammed. - Thermostat failure. - Debris trapped in mechanism. - Inlet supplies reversed. 	<ul style="list-style-type: none"> - Check inlet temperatures, hot supply should be 10°C higher than shower outlet temperature. - Dismantle and check for debris. - Replace thermostat. - Dismantle and check for debris. - Ensure supplies are connected correctly to hot and cold inlets.

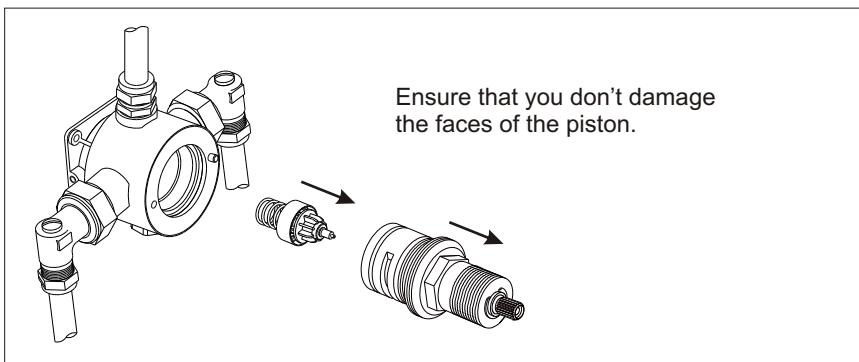
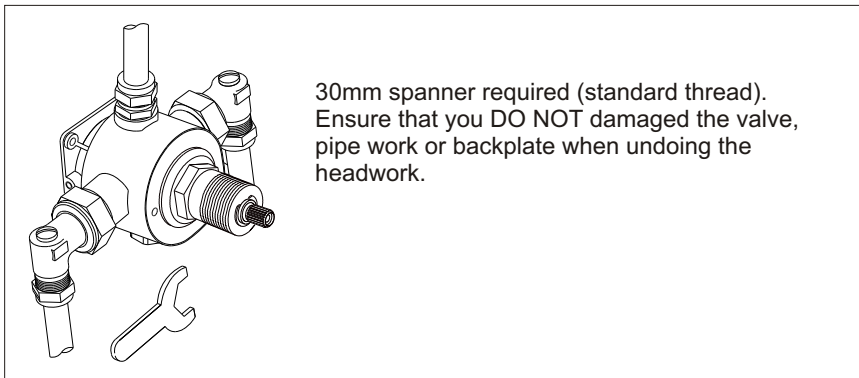
Cleaning

These finishes should be cleaned using a mild washing up detergent or soap solution, rinsed with clean water and wiped dry with a soft cloth.

Service Guide

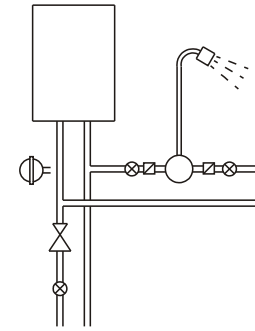
If your Thermostatic Mixing Valve fails to operate it could be the result of incorrect installation. Please refer to installation and sit requirements. If the valve has operated correctly for a time, but no longer performs acceptably, it may require servicing/cleaning. Proceed as follows;

- 1) Isolate hot and cold supplies.
- 2) Remove the headwork assembly and spline adaptor if applicable
- 3) For concealed models, you can remove the concealing surround by inserting a thin blade at the back of the plate and rotating the blade round the back, you can then proceed to pull the plate off the valve.
- 4) Unscrew the cartridge (standard right hand thread).
- 5) Remove the thermostat, distributor assembly and spring.
- 6) Remove all visible 'o' rings and washers from the body.



Compatible Systems

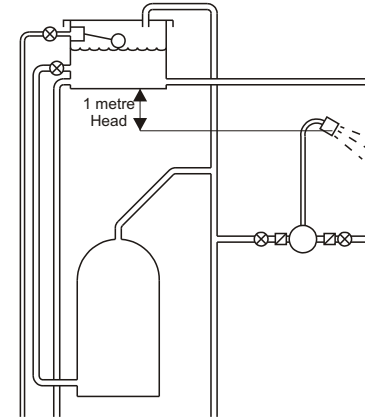
Instantaneous heated system (Gas or Electric)



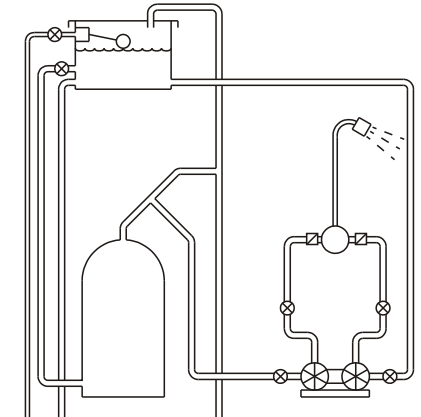
Key

- Shower inc. non-return valves
- Isolating valve
- Tempering valve
- Pressure regulating valve
- Strainer
- Expansion vessel (optional)
- Twin Impeller Pump

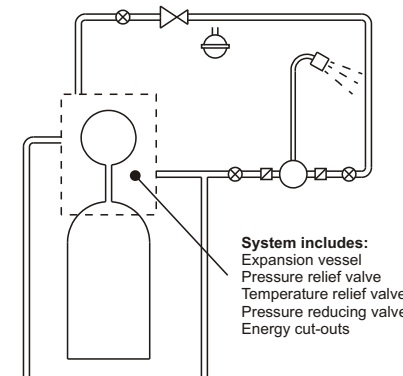
Gravity fed system



Pumped system

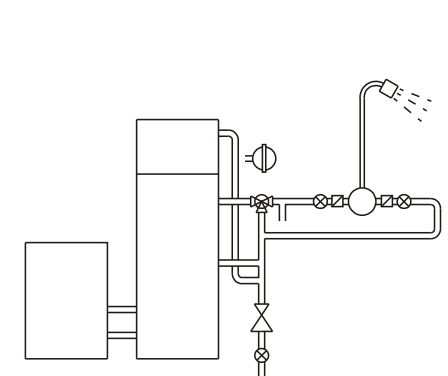


Unvented mains pressure system



System includes:
 Expansion vessel
 Pressure relief valve
 Temperature relief valve
 Pressure reducing valve
 Energy cut-outs

Mains pressurised hot water system



Compatible Systems

For optimum performance from the thermostatic mixing valve, use the table below for Recommendations for flow limiter selection.

Supply System		Flow Limiter		Comments
Cold Supply	Hot Supply	Cold	Hot	
Gravity 0.5 to 1.0 bar	Gravity 0.5 to 1.0 bar	No	No	Maximum pressure loss ratio 5:1
1 to 5 bar or Pumped	1 to 5 bar or Pumped	Green (7 litre)	Yellow (5 litre)	# Use arrangement for pumped system
Mains 1.5 to 10 bar	Gravity 0.1 to 0.2 bar	White Disc	No	
	Gravity 0.2 to 0.5 bar	Green (7 litre)	No	
	Gravity above 0.5 bar	Green (7 litre)	Yellow (5 litre)	
	Unvented Mains/ Mains Pressurised			
	Instantaneous Gas Water Heater	Green (7 litre)	*Yellow (5 litre)	
***Instantaneous Electric Water Heater	Green (7 litre)	No	**Open Bottom Cap extra ½ turn anti-clockwise	

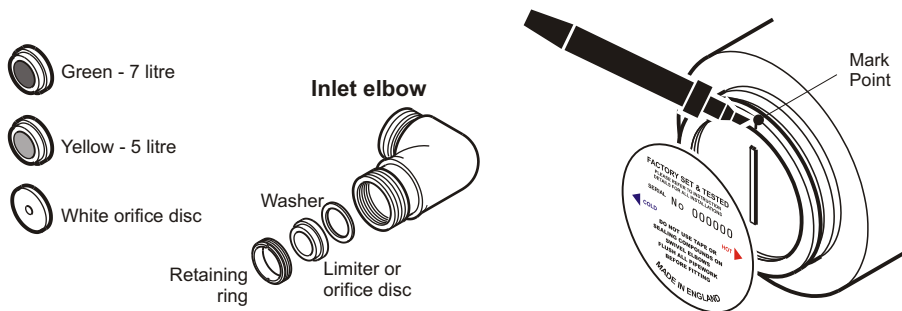
Limiters can be fitted if water economy is required.

* Yellow (5 litre) limiter may not be necessary on some gas heaters.

** The bottom cap is factory set at 3/4 turn from fully closed position.

*** **IMPORTANT!** - It is a requirement of Instantaneous Electric Water Heaters that a stable flow of water passes through the heater. This requirement can be satisfied by using a flow stabiliser (960060) fitted prior to the heater and should be adjusted to give a temperature of between 45-50°C from the heater.

Fitting limiter or orifice disc and Bottom Cap adjustment



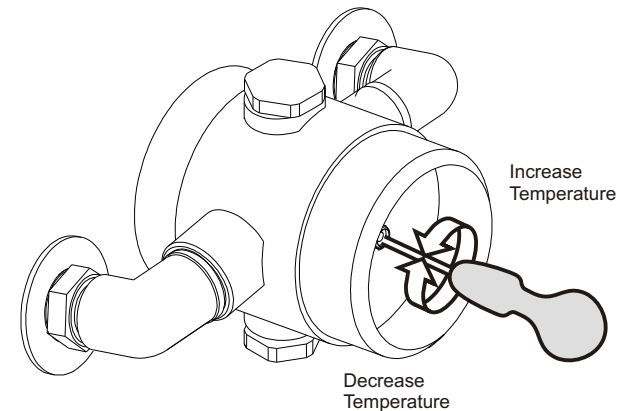
Remove wall bracket from mixing valve (see Installation). Peel off label to reveal Bottom Cap, with a marker pen, mark a point in-line with slot. Turn extra anticlockwise ½ (180°) turn using a screw driver.

Maximum Temperature Setting

The maximum mixed water temperature should be limited to ensure no undesirable temperature is obtained. If necessary adjust as follows -

- 1) Turn the knob anti-clockwise to the maximum temperature position.
- 2) Unscrew lever and remove grub screw using hexagonal key.
- 3) Pull off knob to reveal spindle.
- 4) Using a fine screwdriver through the spindle turn the adjusting screw to alter the maximum temperature.
- 5) When the desired temperature is obtained replace the knob assembly.

- Turn the adjusting screw clockwise for cooler temperature.
- Turn the adjusting screw anti-clockwise for warmer temperature.



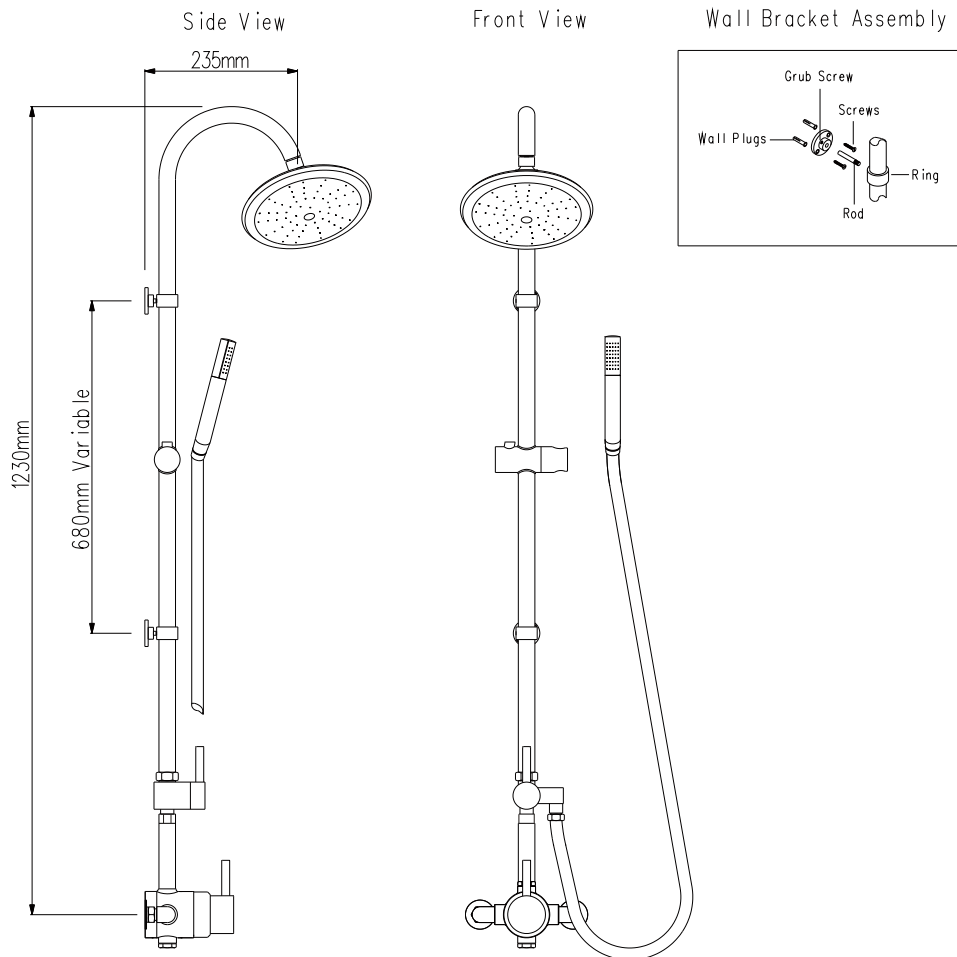
Installation

Using complete valve and kit (see fig.1 on previous page)

- 1) With the shower mixing valve installed, connect the rigid riser (with brackets and slider) onto the valve using the extension tube. Ensure all seals are correct.

Note - Prior to drilling the wall for the wall brackets ensure adequate movement can be achieved from the handset holder.

- 2) Use the brackets as a guide for the wall connection. Mark/ drill and plug holes to suit wall brackets and fix into place using fittings. Secure into place by screwing the rod into the rail and tightening the grub screw, using hexagonal key. See below.
- 3) Screw on the shower rose/ hose and handset using the washers supplied.



Installation

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Exposed Model (see fig.1, page 6)

1. Determine the routes of the hot and cold supply pipework. The mixer can be fed from the top, rear or bottom. See Dimensions below for pipe inlet centres.

Note! Ensure valve and rigid riser will fit without fouling the ceiling.

2. Install supply pipework. Accessible isolating valves are recommended for maintenance.

Note! Try fit of mixing valve to pipework, each inlet elbow can be unscrewed 1½ turns to allow for adjustment and location.

3. Remove the wall bracket from the rear of the mixer by loosening retaining grub screw on the underside of mixer with the hexagon key.
4. Use the wall bracket to mark hole positions. Drill wall and insert suitable wall plugs for fixing screws.
5. Fit bracket to wall using fixing screws. Ensure retaining hole for grub screw is at the bottom.

Important! Ensure supply pipework is flushed to clear debris before connecting mixer. Do not use sealing compounds on connections.

6. Offer mixing valve to pipework and tighten the wall bracket retaining screw.

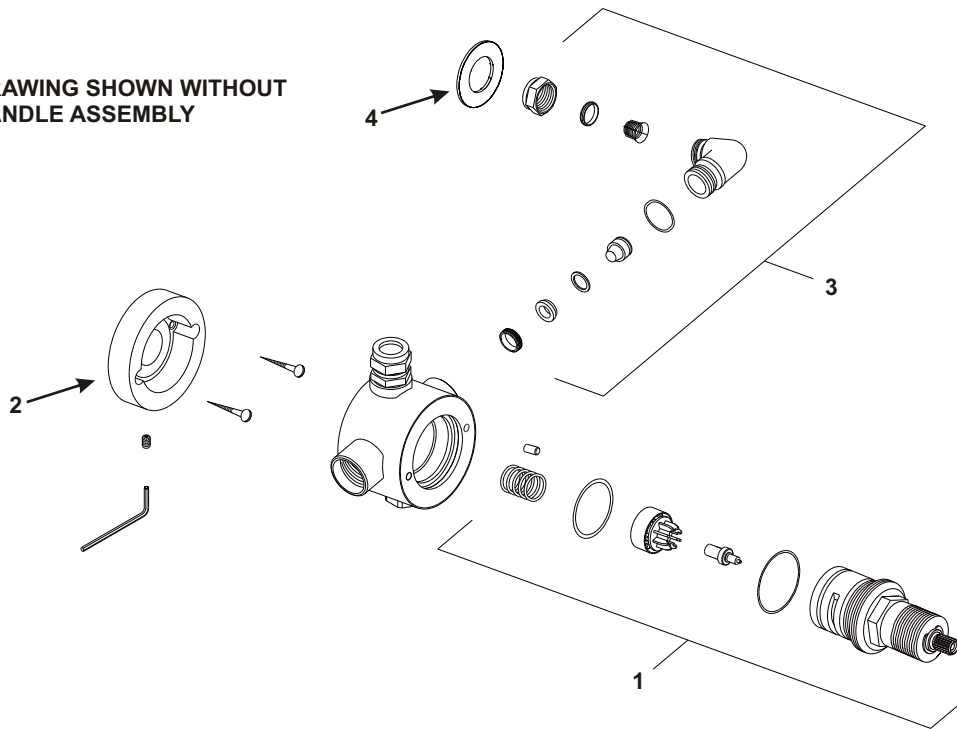


Valve Assembly

Exploded diagram showing valve components and their spare kits codes.

REF NUMBER	DESCRIPTION	PART NUMBER
1	COMPLETE CARTRIDGE ASSEMBLY	SKAK4000
2	BACKPLATE	EXP - 220019
3	COMPLETE ELBOW ASSEMBLY	SKINLET-7
4	WALL COVER PLATE	220039

DRAWING SHOWN WITHOUT
HANDLE ASSEMBLY



Please note all diagrams are for reference only and may differ in appearance of purchased product.

Fig. 1

