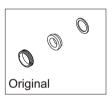
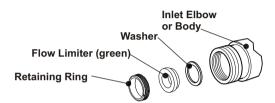
#### **FLOW LIMITER**

The valve is supplies with two green flow limiters but will run without them however we recommend that these be fitted if:

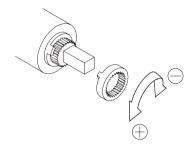
- 1 The valve is on nominally equal pressures and water economy is important, fit a flow limiter in both elbows.
- 2 The ratio of hot pressure exceeds 5:1, fit a flow limiter in the higher pressure elbow.
- 3 With combination boilers both flow limiters should be fitted to avoid taking excess Flow from the boiler.





# **Maximum temperature setting**

You are able to set the maximum mixed water outlet temperature by removing the grey ring located on the top of the cartridge. Turning it clockwise will decrease the outlet temperature or anti-clockwise to increase the outlet temperature.



(FI PBSHW) (Rev. D2) (AJ)



# pressure balancing valve

# Installation, Care and Maintenance Advice

**Exposed Or Concealed Models** 

#### Installer

Please hand these instructions to the owner of the premises once the installation has been completed.

PRODUCT CODE: JPBSHCVO C/JPBSHXVO C

PM PBSHCVO C / PM PBSHXVO C

Model may differ from diagrams shown.

If you have any problems with your purchase please contact the manufacturer

Bristan Limited Birch Coppice Business Park Dordon, Tamworth Staffordshire B78 1SG

 Web site:
 www.bristan.com

 Telephone:
 +44 (0) 870 4425553

 Facsimile:
 +44 (0) 870 4425554

 Email enquire@bristan.com

800245/F



## Please read these instructions carefully.

#### **IMPORTANT**

The plating on the pressure balance valve and accessories is easily damaged. Immediately after installation, *COVER UP* the mixer and accessories to avoid accidental damage from subsequent work being done elsewhere in the room.

Plaster, grout, sealants and dust will cause permanent stains or scratches.

Wrap a clean sheet, or better still secure bubble pack around the items using adhesive tape to protect against knocks and contamination.

#### SITE REQUIREMENTS

Your pressure balance valve is designed specifically for use with modulating combination boilers, instantaneous gas water heaters and high pressure hot and cold water supplies.

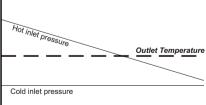
Minimum pressure: 0.5 bar (5m head) with flow rate of 7 L/min

Maximum pressure: 8 bar

## **OPERATING CHARACTERISTICS**

To operate the pressure balance shower valve the lever needs to be lifted up to allow the water to flow through the valve. With the hot water at about 65°C and the cold at 16°C an acceptable showering temperature is achieved in the mid blend position, rotate the lever anti-clockwise to increase the temperature and clockwise to lower the temperature. If the control lever is pushed down in any position the unit will shut off.

This graph shows how the pressure balance valve performs when the hot supply pressure is decreased, the same would also happen if the cold supply pressure would decrease.



## **Performance**

Pressure (bar)	0.5	0.75	1	2	3	4	5	6	7	8
Flow (L/min)	7	8.5	10	13.5	17.5	19.5	22	24	26	27.5

#### **GUARANTEE**

This product is guaranteed against faulty materials and workmanship for 5 years from date of purchase. For the guarantee to be valid, the unit must be installed by a competent person, in accordance with the instruction booklet.

Any part found to be defective during the guarantee period, will (at our option) be repaired or replaced, free of charge, provided the unit has been installed, and properly used in accordance with the instruction booklet.

This guarantee does not affect your statutory rights.

**Service Policy** (Available in UK and ROI only) Please contact the Customer Service Department on telephone number below.

Have following information prepared, to help identify the product: Model type, Date of purchase, unit product code (see front page).

The Customer Service Department will attempt to diagnose the cause of the fault and advise the necessary action to resolve the problem over the phone.

If the fault can not be resolved customer services will determine whether a Masco Care Engineer is required for a site visit.

The cost incurred and payment methods, if required, will be advised over the phone.

If the problem is not product related or is a component not of our manufacture, a fixed fee will be made to cover Site Visit costs. Additional costs for parts used to rectify the non-product related problem may be imposed.

During the visit, yourself or a responsible person should be present at all times. Charges will be made if the Service Engineer or Agent can not gain site access at the prearranged time.

Ensure water and/or electricity supplies have adequate isolation to the unit. If the unit is concealed, serviceable access should be available. If servicing difficulties arise from not making the provisions detailed, additional time related costs or a recall charge will be imposed.

Customer Service Department +44 (0) 870 4425553



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#### SURFACE MOUNTED / RECESSED DIAGRAM

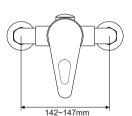
#### SURFACE MOUNTED

- 1) Use the exposed backplate as a template for the fixing holes.
- 2) Drill and plug the wall to suit, screws are provided.
- 3) Fit the grubscrew loosely to the backplate and secure the backplate to the wall.
- 4) Locate the valve body to the wall and lock with the grubscrew. Fit the outlet adaptor to the valve exchange with the blanking plug for top outlet.
- 5) Connect the inlet pipes to the valve with compression fittings, please ensure the hot supply is connected to the inlet port 'H'.

## **RECESSED**

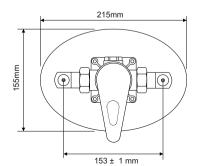
It is essential that when installing a concealed mixing valve, full access to the valve can be achieved for servicing purposes. Isolating valves are supplied as standard on concealed models and should be fitted with the filter plate provided.

Rear access to the mixing valve is always preferred wherever possible (e.g... an airing cupboard or panelled walls), as this removes the need to disturb any tiling or decorating features at the front of the valve.

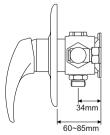


# Surface mounted version





## **Recessed version**



#### **INSTALLATION**

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

#### **GENERAL**

- 1) Before commencing it is advisable to install isolating valves on both hot and cold supplies for flushing out and servicing purpose.
- 2) It is important that both supply pipes are flushed before connecting mixing valves to ensure no pipe/plumbing debris enters the mixing valve.
- 3) A simple way of flushing out the pipes is to fit the outlet adaptor to the pipe and secure with the compression nut and olive, fit the hose to the adaptor and flush out pipes to the waste.
- 4) We recommend fitting the strainers to ensure no debris enters the mixing valve.
- 5) In hard water areas the mixing valve may require frequent cleaning and servicing.

#### PIPE POSITION

Before mounting the valve to the wall, the position for the pipe work should be decided. Three inlet positions - top, bottom and rear are possible simply by rotating the elbows in the valve body (only on exposed versions). With the elbow screwed fully against the valve body it can be unscrewed a maximum of 1.5 turns to allow for lateral tolerance. See 'SURFACE MOUNTED / RECESSED DIAGRAM' for dimensions.

#### **WATER BYLAWS**

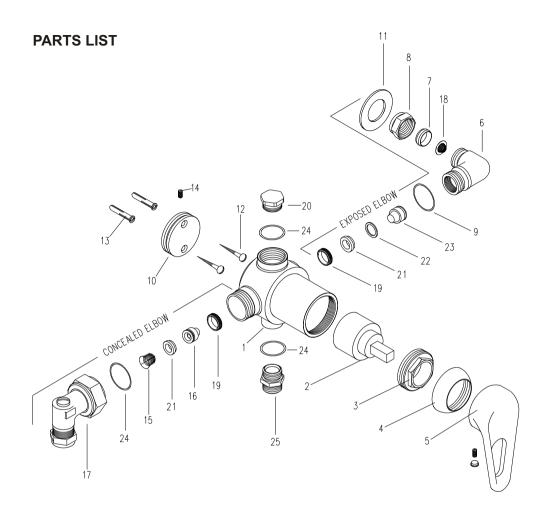
When connecting a mixing valve to gravity hot supply and mains cold current water company regulations will apply.

"Shower installation in all respects must meet with the requirement of Water Bylaws". If in doubt you should contact your local Water Authority for advice or a registered member of the Institute of Plumbers Tel: 01708 472791 for a list of your nearest plumbers.

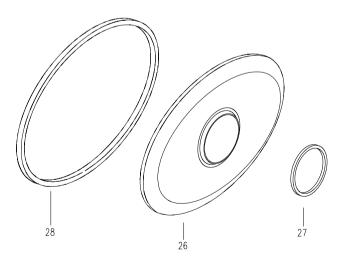


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KEY No.	DESCRIPTION	KEY No.	DESCRIPTION
1.	BODY 150221, 150220 FOR EXPOSED	16.	CHECK VALVE -CONC'D
2.	CARTRIDGE	17.	ISOLATION ELBOW
3.	STOP THREAD	18.	FILTER
4 .	UNDER LEVER CAP	19.	FILTER RETAINER
5.	LEVER	20.	OUTLET PLUG
6.	ELBOW	21.	FLOW LIMITER-GREEN
7.	COMPRESSION RING	22.	FLAT WASHER
8.	15mm COMP NUT	23.	CHECK VALVE
9.	O RING	24.	O RING
10.	BACKPLATE	25.	ADAPTOR
11.	WALL COVER PLATE	26.	CONCEALING PLATE
12.	No 8 WOODSCREW	27.	INNER SEAL
13.	RAWPLUG	28.	OUTER SEAL
14.	M5*5mm GRUBSCREW		
15 .	MESH FILTER		



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