

# SWADLING

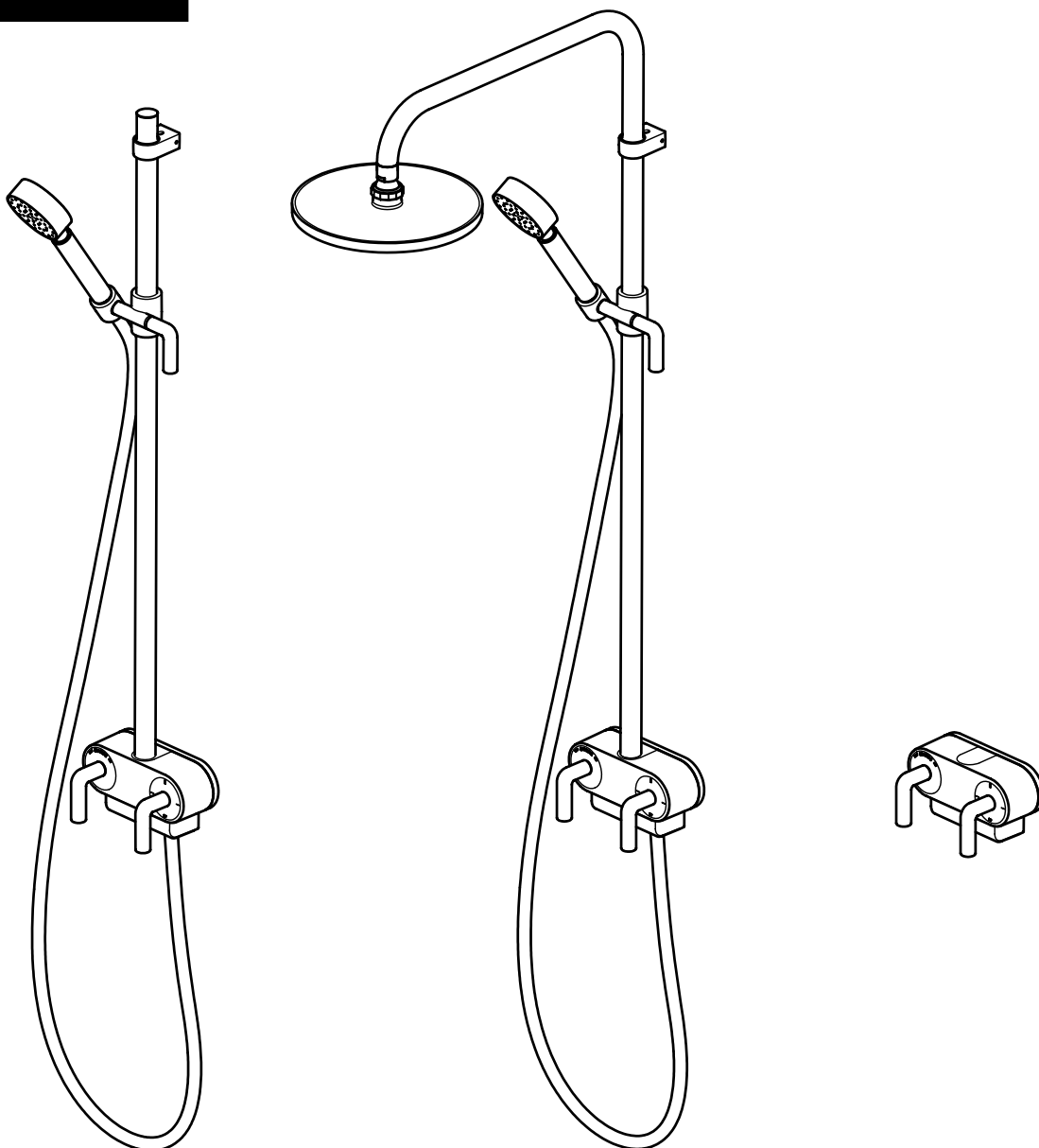
MAKING WATER WORK

**ABSOLUTE2 EXPOSED THERMOSTATIC SHOWER VALVE**  
**CONTEMPORARY DESIGN 2/2001, 2/2021, 2/2221**  
**RETRO DESIGN 2/2002, 2/2022, 2/2222**

INSTALLATION

PARTS LIST

MODELS SHOWN 2/2001 , 2/2021, 2/2221



## 1. IMPORTANT

Before disposing of the carton and/or commencing assembly, please check all the parts to ascertain that none are missing and they are all undamaged. No claim for missing/damaged parts will be accepted once the packing carton has been disposed of and/or assembly has commenced.

In case of query contact your Stockist with details of model number, finish and serial number.

**Please read complete installation instructions before fitting.**

### Specification.

The exposed shower valve will operate correctly with water pressures between 0.1 bar to 5 bar.

For operational pressures above 5 bar fit pressure reducers. The valve is suitable for standing water pressures up to 9 bar.

Optimum performance when inlet pressures are nominally balanced to within 10% of each other during flow.

Optimum performance is obtained when water **temperature differentials** of **20°C** or more exist between hot and cold.

Temperature accuracy will be reduced at temperature differentials below **12°C**.

Recommended minimum Cold Water supply temperature: 3°C.

Recommended Maximum Hot Water supply Temperature 60-65°C

The shower mixer can accept temporary elevated temperatures to 85°C without damage for reasons of general safety, Hot water storage temperatures should be maintained between 60-65°C.

The valve is suitable for all water systems including

Gravity fed

Pumped Systems

Combination Boilers

Condensing Boilers

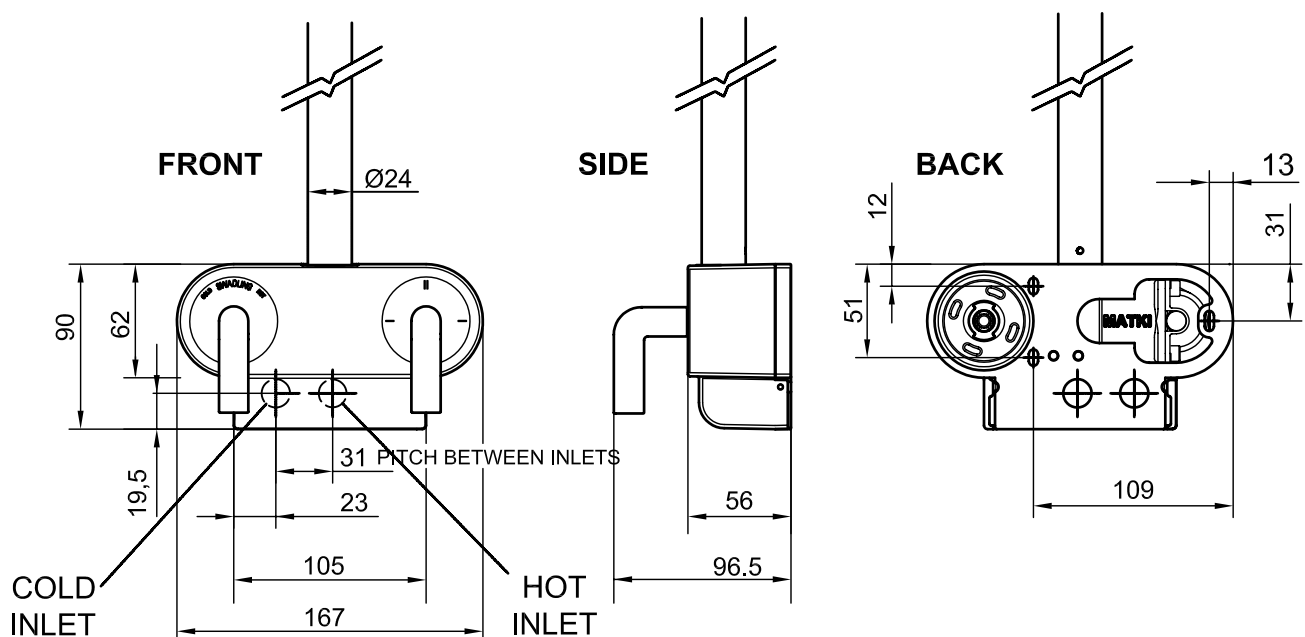
Mains Pressure fed Systems

We recommend that to maximise flow rates in low pressure Gravity fed systems that HOT and COLD supply pipework to the shower valve is 22mm reducing to 15mm close to the inlets.

**Fit isolation valves to both HOT and COLD inlet supplies.**

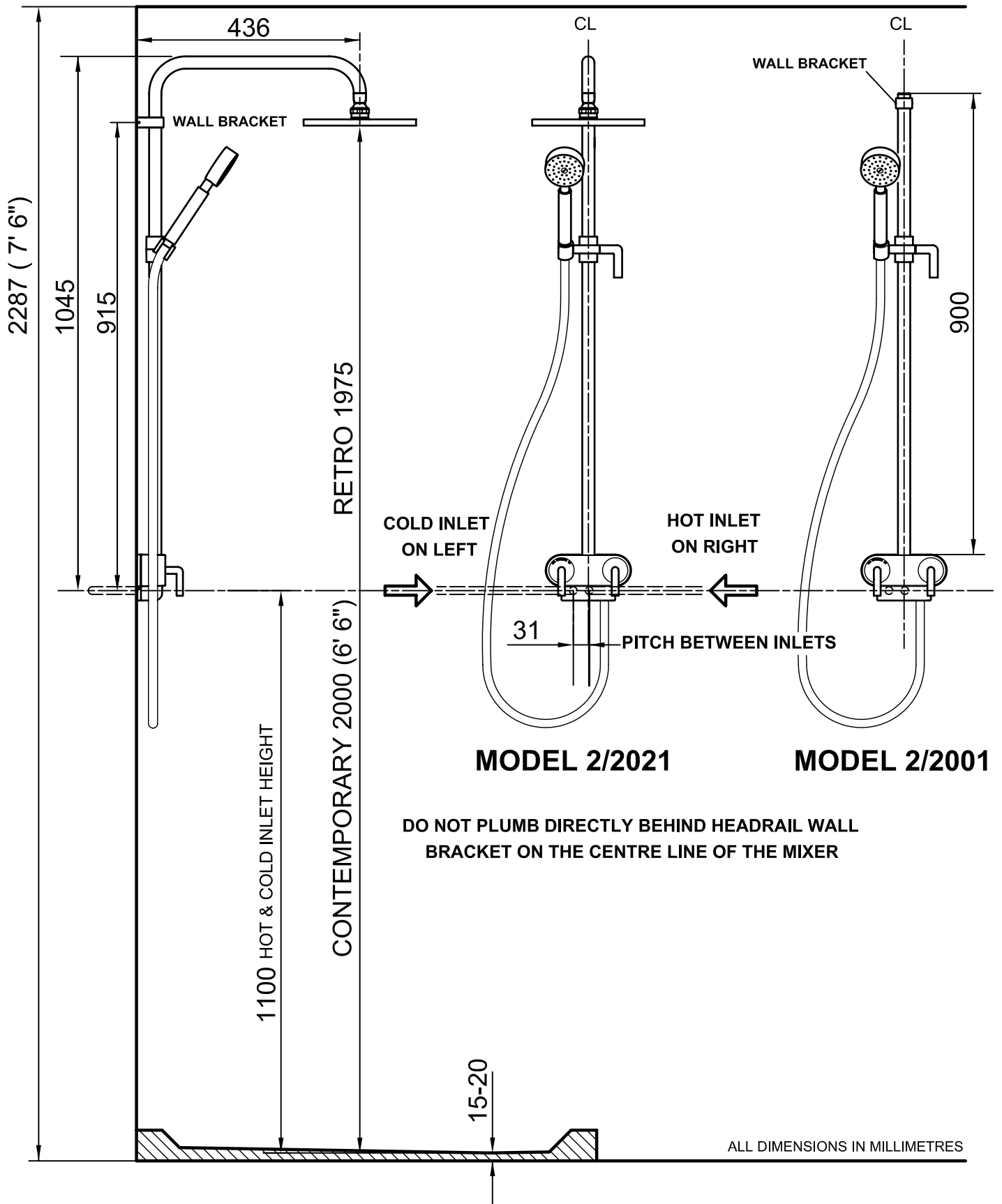
**Most problems with any thermostatic shower valve are caused by debris from new pipework getting into the thermostat when it is first installed. It is important to flush out all new pipework before commissioning.**

## VALVE DIMENSIONS



ALL DIMENSIONS IN MILLIMETRES

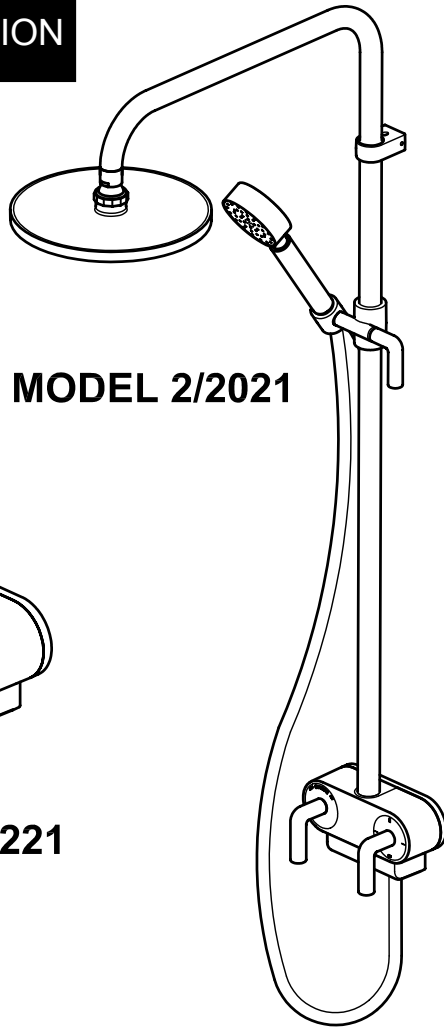
## 2. DIMENSIONS



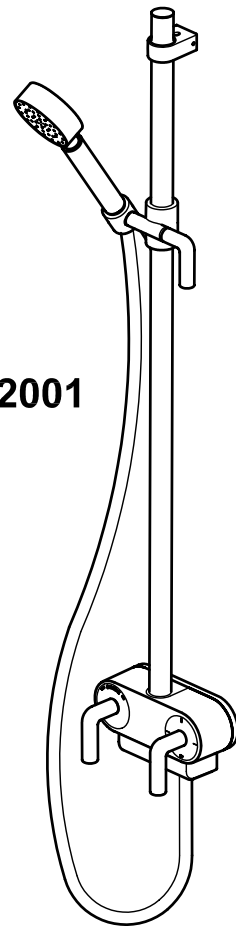
Plumb the **hot & cold** inlets to the required height. As a guide this should be 1100mm from the internal standing area of the shower tray to achieve approximately 2000mm 6' 6" to the underside of the overhead shower head. The height of the overhead shower is not adjustable once fitted, increase the plumbing height of the hot and cold inlets to suit installations that require more overhead clearance, please consider the users height.

Note the guide height is based on a 60mm high shower tray with an approximate depth in the base of the tray of 15-20mm. Please allow for additional height if a raised tray is used or if the overhead shower head is installed over a bath.

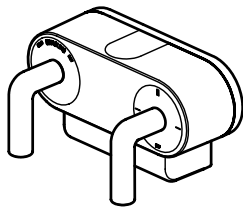
### 3. CONFIGURATION



**MODEL 2/2021**



**MODEL 2/2001**



**MODEL 2/2221**

OVERHEAD RAIL OUTLET / SLIDE RAIL ADAPTER

TEMPERATURE CONTROL

VALVE

COLD INLET

WALL PLATE

HOT INLET

FLOW CONTROL

M6 x 40  
Socket cap screws

15mm INLET COMPRESSION FITTINGS  
WITH NON RETURN VALVES

HAND SHOWER OUTLET

M4 x 6  
Socket set screws  
VALVE COVER PLATE

The exposed shower valve is supplied with an integral diverter, on/off flow control.

This has been factory set to control mixed water to the outlets for the model supplied.

For model **2/2001** exposed shower valve the on /off flow control will only control mixed water to the hand shower outlet.

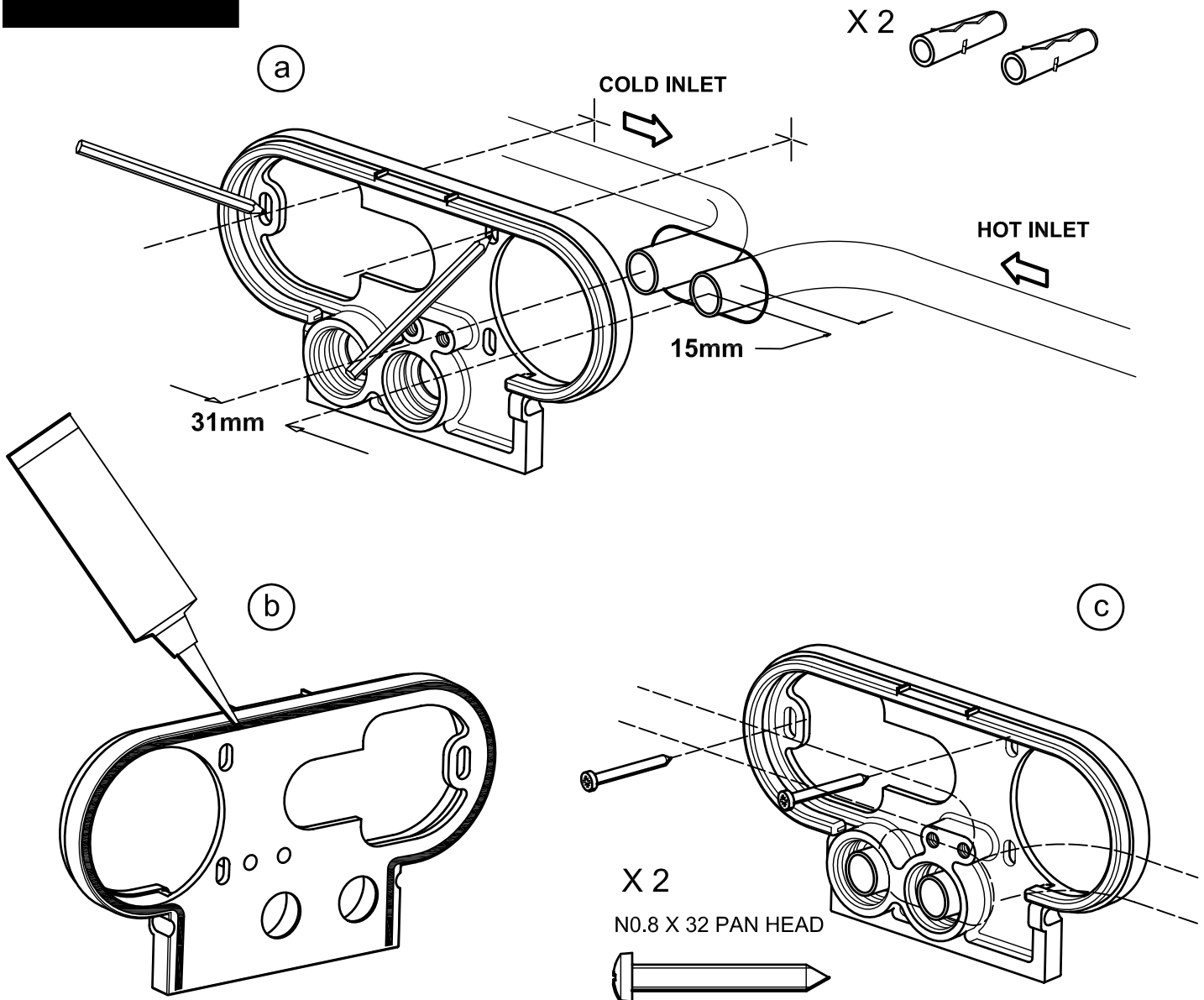
For model **2/2221** exposed shower valve the on /off flow control will only control mixed water to the hand shower outlet or with a wall elbow the outlet could be used to plumb a fixed shower head.

For model **2/2021** exposed shower valve the flow control is also a diverter and will control the flow of mixed water to the hand shower or overhead or to both outlets together. **See 7.Operation.**

**The Absolute2 exposed shower valve can only be plumbed horizontally in the configuration shown.**

The Hot & Cold inlets are 15mm compression fittings. The **cold** inlet is on the left and the **hot** inlet is on the right.

## 4. PLUMBING



**IMPORTANT :** The cold inlet is on the left and the hot inlet is on the right, do not plumb the hot inlet vertically to the centre line of the slide rail to ensure that it does not clash with the overhead / slide rail wall bracket fixing screw. **See 1.Dimensions**

Plumb the hot and cold inlets with 15mm tube. The two inlets are pitched 31mm between centres. Allow 15mm of tube on both inlets to protrude from the finished tiled surface to connect the valve wall plate compression fittings to the hot and cold inlets. **(a)**

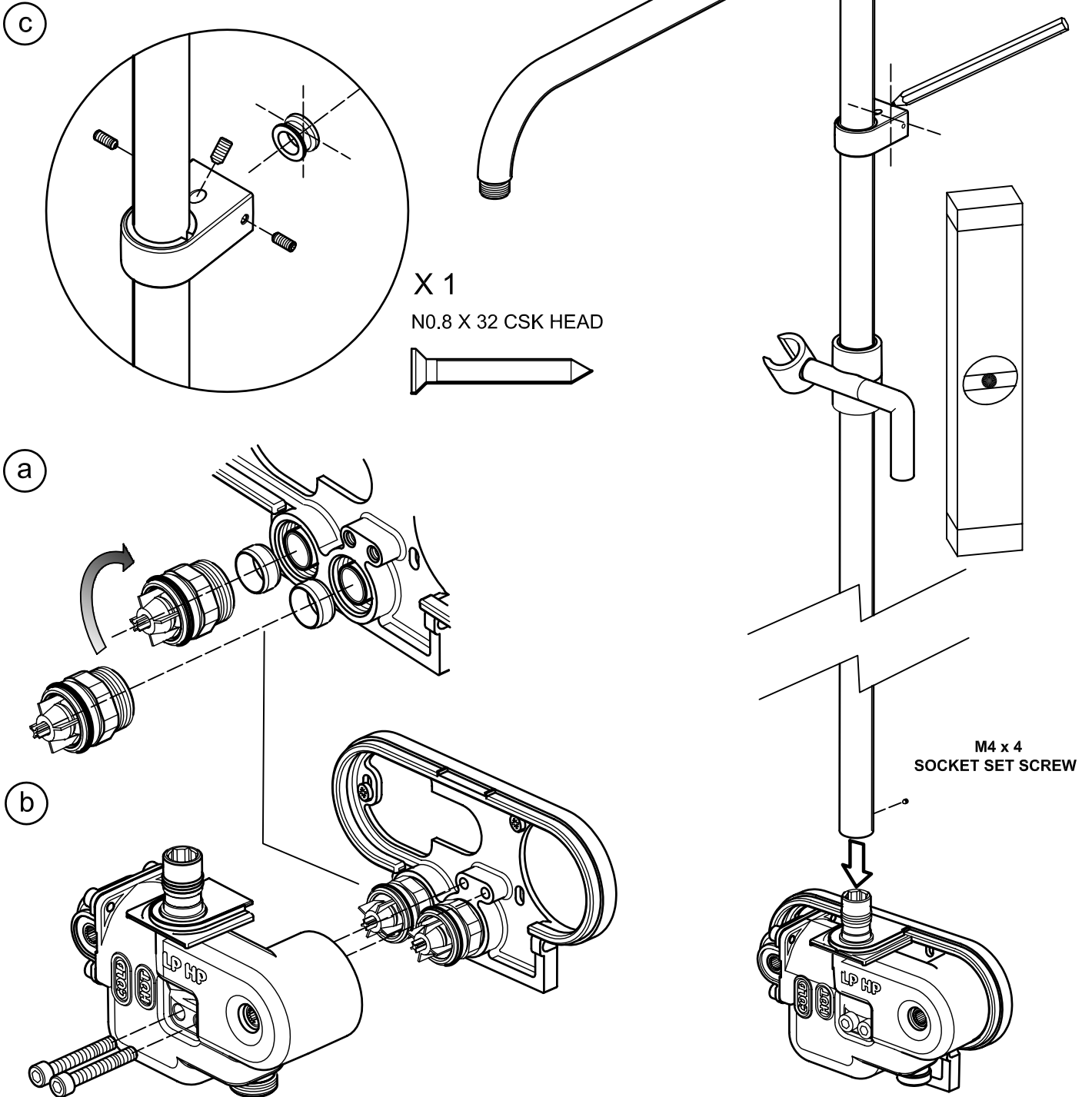
**Before fitting the wall plate flush out both the hot and cold inlet supply pipe work thoroughly.**

The exposed valve is supplied assembled, to separate the wall plate the valve cover and mixer will need to be removed from the wall plate. Firstly remove the valve cover by loosening the M4 x 6 socket set screws in the bottom sides of the valve cover with the 2mm Allen key supplied. Remove the valve from the wall plate by removing the M6 x 40 socket cap screws with the 5mm Allen key supplied. **See 3. Configuration.**

To prevent damage store the removed components in the valve packaging.

Unscrew the compression fittings and compression rings from the wall plate. Fit the wall plate over the inlet tubes level the wall plate and mark the fixing holes for the wall plate. Drill and fit the wall plugs supplied, clean the area. **(a)** Apply a thin bead of silicon sealant on the back face of the wall plate around the outside rim. **Do not apply** sealant to the bottom edge of the plate, in the event of an internal leak this will allow for drainage and detection. **(b)** Clean off any excess silicon when the silicon has cured. Fix the wall plate using the No.8 x 32 pan head screws supplied, adjust the wall plate for level using the slots in the plate. **(c)**

## 5. FITTING VALVE AND RAIL



Fit the 15mm compression rings over the inlet tubes, tighten the inlet compression fittings one at a time until tight. Be careful not to damage the o ring seal on the top of the compression fitting. **(a)** Fit the valve to the wall plate by pressing firmly onto the compression fittings and securing with the 2 x M6 x 40 socket cap screws with the 5mm Allen key supplied. **(b)**

For model **2/2221** move to 6. Testing

For models **2/2001** and **2/2021** Overhead / slide rail the installation of the rail and wall bracket are the same.

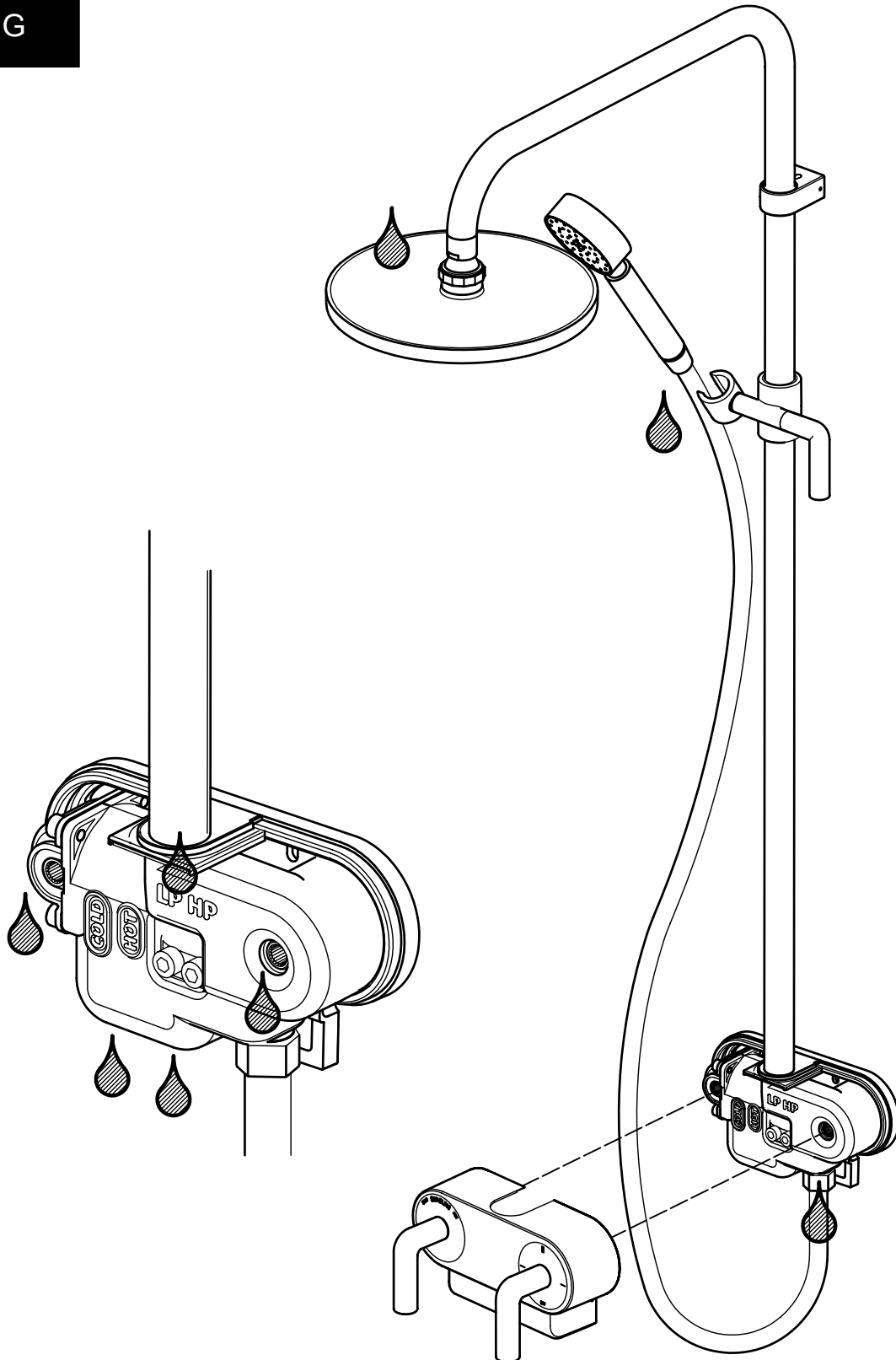
Push fit the overhead rail / slide rail onto the top of the valve. Level the rail for vertical and mark the centre position of the slide rail wall bracket. As a guide the position for the wall bracket is shown (See 2. Dimensions) this can be adjusted vertically to suit tiling or the preferred position. Remove the rail from the valve. Before drilling the fixing hole for the rail wall bracket cover the valve and top outlet with the mixer packaging to prevent debris from getting into the valve outlet.

Drill and fit the wall plug supplied, clean the area. Secure the wall bracket wall plate with the No. 8 x 32 Csk screw supplied.

Push fit the overhead / slide rail to the top of the shower valve. Secure the wall bracket to the wall plate with the 2 x M4 x 8 socket set screws in the sides of the wall bracket with the 2mm Allen key supplied. Rotate the rail so that it is perpendicular to the wall and tighten in position using the M5 x 10 socket set screw in the top of the wall bracket. **(c)**

Secure the rail to the top of the valve using the M4 x 4 socket set screw in the back of the overhead / slide rail.

## 6. TESTING



Fit the Overhead shower head to the rail. Tighten the nut end of the hand shower hose to the bottom outlet on the valve. Tighten the hand shower to the hose and fit the hand shower into the slide rail holder.

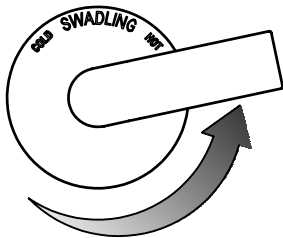
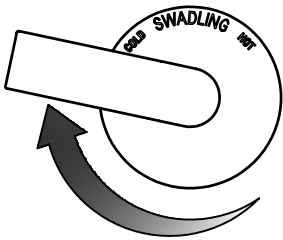
Turn on the water supplies. Fit the valve cover plate **temporarily** to the valve wall plate to test the operation of the valve. Carefully guide the handle spindles into the splined shaft in the temperature and flow control cartridges and around the top outlet plate and push the valve cover into position.

1. Test the operation of the flow control to the hand shower and overhead( as required). See 7. Operation
  2. Test the operation of the temperature control from hot to cold.
  3. Check the inlet compression joints between the valve and wall plate for leakage.
  4. Check the joint between the overhead rail and valve for leakage.
  5. Check the hose connections to the valve and hand shower for leakage.
  6. Check the joint between the overhead shower head and rail for leakage.
- See 7. Trouble Shooting, if required.

## 7. OPERATION

### TEMPERATURE CONTROL

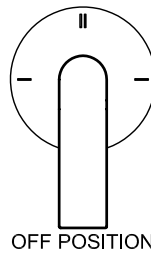
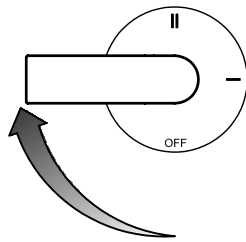
ROTATE CLOCKWISE FOR COLD



ROTATE ANTICLOCKWISE FOR HOT

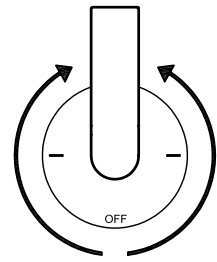
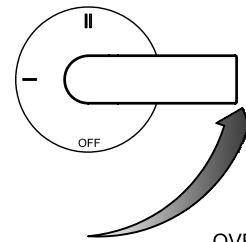
### FLOW CONTROL- HAND SHOWER AND OVERHEAD SHOWER

ON OVERHEAD SHOWER



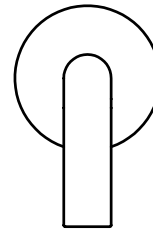
OFF POSITION

ON HAND SHOWER

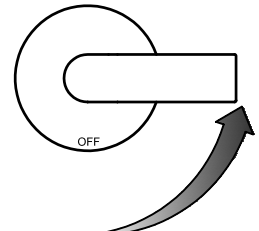


OVERHEAD AND HAND SHOWER

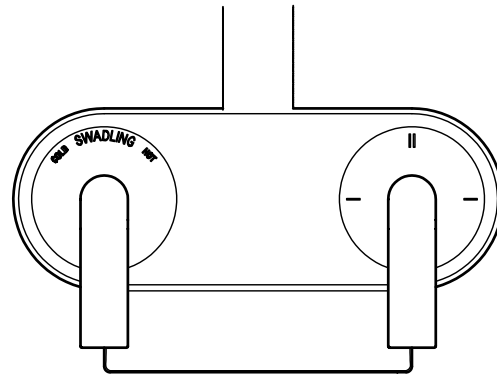
### FLOW CONTROL - HAND SHOWER ONLY



OFF POSITION



ON POSITION



## TROUBLE SHOOTING

### Visual check

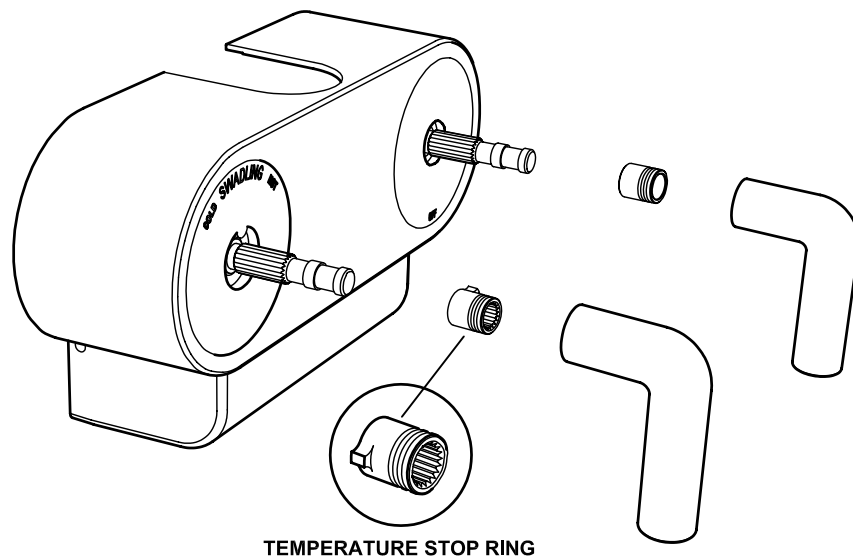
- 1. Fault, water leaking between Valve and wall plate from compression fittings.**  
Inlet joints not seated correctly in valve o-rings not squeezed into inlet evenly.  
Damaged o-rings on inlet joints - Replace with spare o-rings supplied in the kit of parts.  
Compression fittings not tightened sufficiently.
- 2. Fault, water leaking from centre of flow control on valve.**  
Fault in Diverter Cartridge, replace Diverter Cartridge.
- 3. Fault, water leaking from temperature control on valve.** See 9.Maintenance
- 4. Fault, water leaking from valve casting.** Replace valve.
- 5. Fault, water leaking from joint between overhead rail and valve.**  
Damaged o rings on overhead rail outlet adapter, replace o-rings. See 10. Parts List

### Shower Valve Performance

- 6. Fault, Shower runs Hot when turned to cold, and Cold when turned to hot**  
Hot and cold inlet supplies plumbed to wrong inlets.
- 7. Fault, Shower will not run hot when first installed.**  
See 8.Final fit Valve cover, Setting the Temperature.
- 8. Fault, Shower only runs cold or luke warm when first installed.**  
Thermostat may have debris trapped in COLD side of thermostat. See 9.Maintenance.  
Fault with thermostatic element. Replace with new thermostatic element.
- 9. Fault, Shower only runs HOT.**  
Thermostat may have debris trapped in HOT side of thermostat. See 9. Maintenance.  
Fault with thermostatic element. Replace with new thermostatic element.
- 10. Fault, cold water cross tracking through valve into hot water system.**  
Non return valves / may need cleaning or replacement. See 9. Maintenance.
- 11. Fault, Shower lets by or constant drips.**  
Diverter cartridge may need replacing, diverter cartridge clamp nut has not been fully tightened .  
See 9. Maintenance.
- 12. Fault, very low flow or no flow, gravity fed installations.**  
No pressure due to very low pressure or blocked filters or pipework.
- 13. Fault, no or very little flow, pump fed installations.**  
Flow rate may be insufficient to activate booster pump flow switches.

Please see 10. Parts List, to identify parts and part numbers for replacement items.

## 8. FINAL FIT VALVE COVER



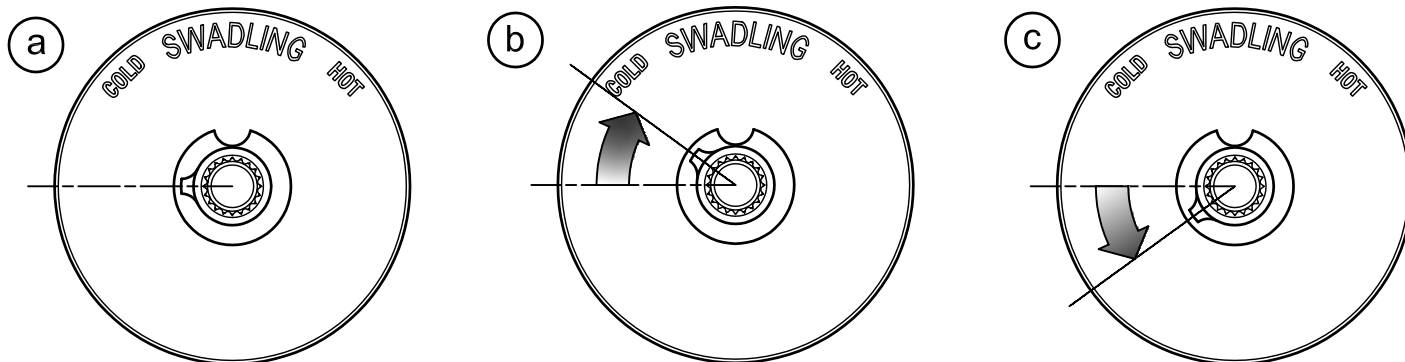
Before the final fit of the valve cover plate remove the control handles from the plate.

Loosen the M4 socket set screw under the handle to remove the handles from the spindles using the 2mm Allen key supplied in the kit of parts. For the Retro handle unscrew the ceramic lever to loosen the M5 socket set screw in the handle.

The temperature control handle has a separate temperature stop ring which is factory fitted under the handle on the spindle. Firstly remove the temperature stop ring to set the maximum temperature.

Fit the valve cover to the wall plate carefully guiding the handle spindles into the splined temperature and flow control. Secure the valve cover to the wall plate with the M4 x 6 socket set screws in the bottom sides of the valve cover.

## SETTING THE TEMPERATURE



**Important :** The maximum hot water temperature must be checked and reset if necessary, prior to the mixer being commissioned to avoid scalding. Check that the hot water system is operational and that the hot water supply has reached the optimum temperature.

The recommended **maximum** hot water temperature from the valve should not exceed **42 °C**.

Temporarily fit the handle back on the temperature control spindle, rotate to the full cold position and remove the handle.

As a guide refit the temperature stop ring onto the handle spindle in the position shown relative to full cold. (a)

In optimum operating conditions this should be approximately 42 °C, however this position may vary due to fluctuating hot and cold supply inlet temperatures. Test the valve for correct thermostatic operation check the maximum temperature with a thermometer and adjust the position of the temperature stop ring as required before securing the handle.

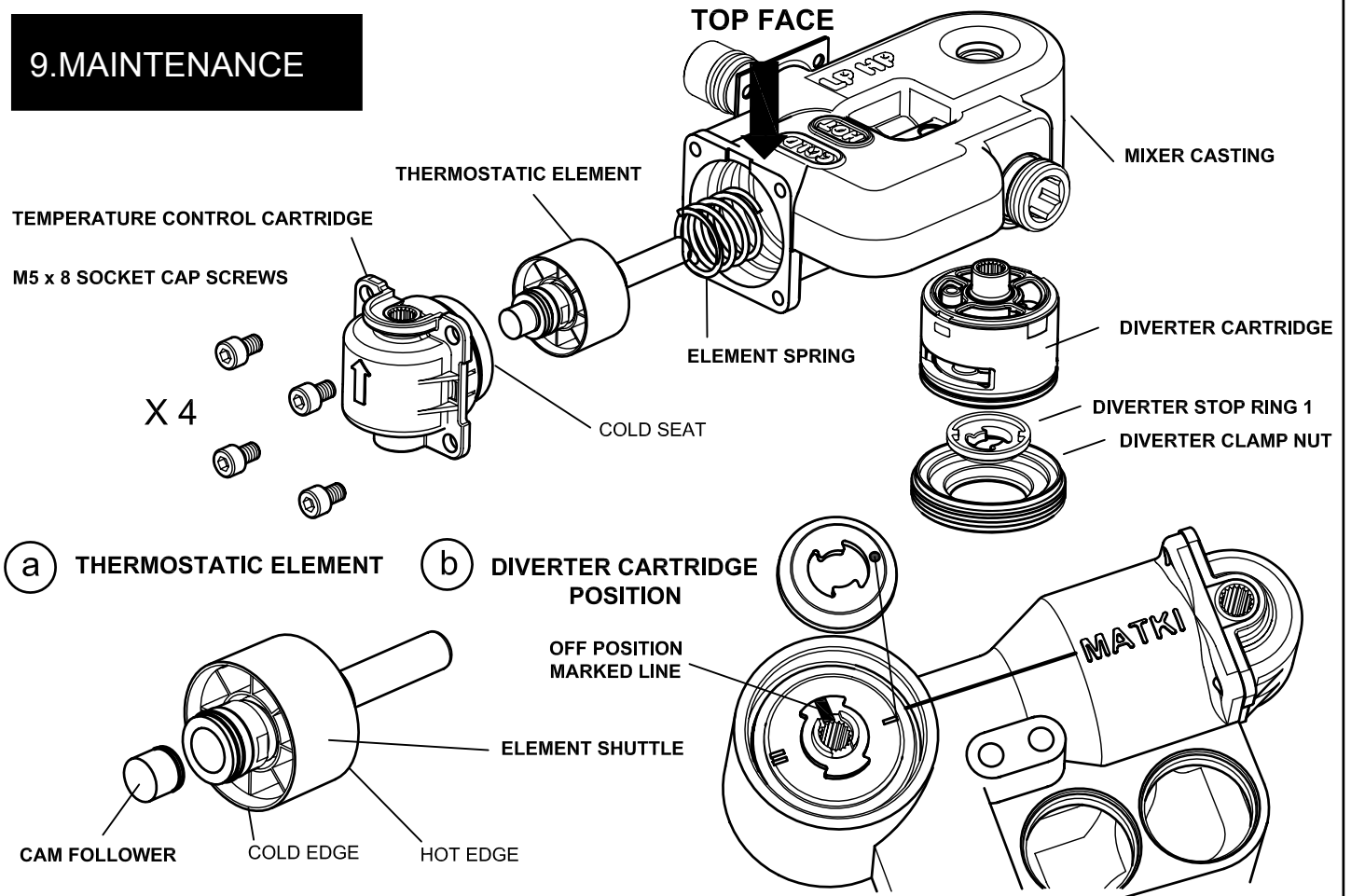
**To increase the maximum hot temperature,** fit the stop ring on the spindle spline **closer to cold**. (b)

**To decrease the maximum hot temperature,** fit the stop ring on the spindle spline **closer to hot**. (c)

When the correct maximum temperature is set, fit the handle with the lever aligned to the full **cold** position.

Turn the flow control to off. There is a handle spacer under this handle, fit this handle with the lever aligned to the **off** position.

## 9.MAINTENANCE



**IMPORTANT. Before commencing maintenance on the valve turn off the hot and cold inlet supplies. When maintenance is complete ensure that the valve is checked and fully commissioned before use.**  
 Before removing the valve cover firstly unscrew the M4 x 4 socket set screw on the back of the overhead rail and M5 x 10 socket set screw in the top of the rail wall bracket to lift and remove the rail from the valve top outlet. Remove the valve cover by loosening the M4 x 6 socket set screws in the bottom sides of the cover. Remove the valve by unscrewing the M6 x 40 socket cap screws securing the valve to the wall plate.

**NON RETURN VALVES. (See 5. Fitting Valve). Fault 1.** Damaged o-rings on compression fittings/ non return valve. Replace o rings with part 1602 AF(supplied in the parts kit SB 2/5250).

**Fault 10.** Remove and clean any debris and limescale from the gauze filter on the bottom of the part. Clean the non return valves by depressing the plunger and blowing through and refit, or replace with new non return valve part SB1400

**SHOWER VALVE PERFORMANCE (Please see 7.Trouble Shooting for fault references).**

**Fault 9.** Remove the valve as above and carefully remove the M5 x 8 socket cap screws from the black temperature control cartridge on the valve body to access the thermostatic element.

The black temperature control cartridge has a rubber seat on the bottom face which is the **cold** seat.

Check for limescale or debris on this seat remove all traces of debris and de-scale as required using a propriety de-scaler. Check for limescale on the cold edge of the thermostatic element shuttle, descale as required.

**Fault 10.** The **hot** seat is located inside the valve casting check for traces of debris on this seat and on the hot edge of the thermostatic element shuttle. **(a)** Flush out the valve body to remove any debris and de-scale the shuttle as above.

Alternatively if faults 8 & 9 are not resolved replace with a new thermostatic element assembly SB 2/5211.

**Important,** on refitting the thermostatic element assembly remember to fit the element spring into the valve first then the thermostatic element ensuring that the cam follower is positioned in the end of the thermostatic element.

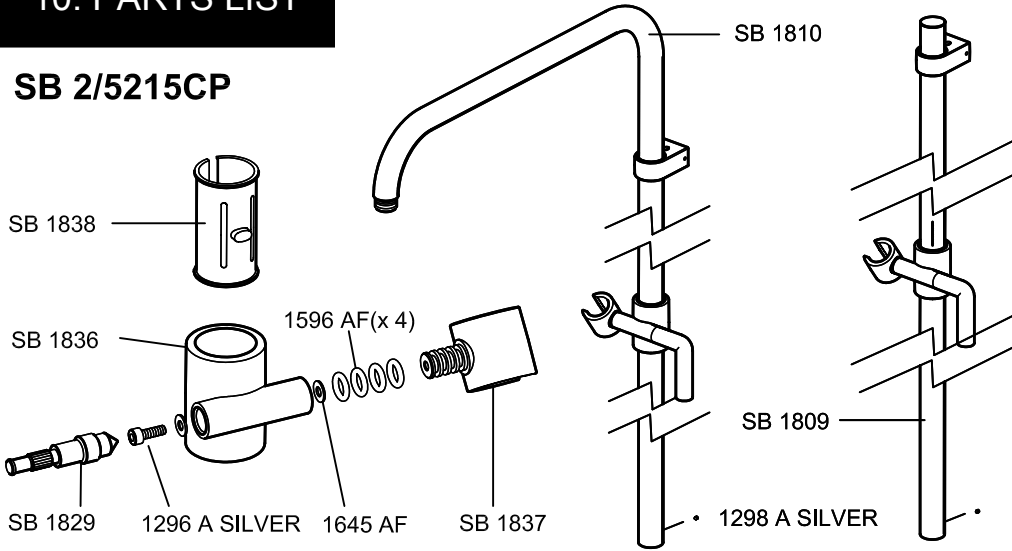
Refit the temperature control cartridge with the arrow on the cartridge pointing upwards to the top face of the valve casting

**Fault 12.** Unscrew the Diverter Clamp Nut on the bottom of the valve to access the Diverter Cartridge.(Insert a flat bladed screwdriver into one notch on the Diverter clamp nut and gently tap in an anticlockwise direction to loosen the nut). Remove the diverter cartridge and replace as required. **Important,** the diverter cartridge should be in **off** position when re- fitted. The **off** position of the Diverter cartridge has been marked at the factory with a black marked line across the top of the green diverter housing and on one edge of the white central diverter spindle.The Diverter cartridge is in the off position when the marks are aligned.

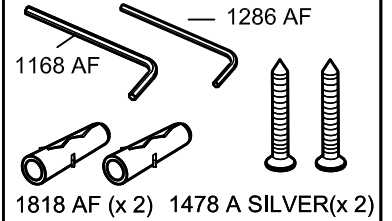
**For flow control of hand shower outlet only,** fit the diverter stop ring with the **1 dot** aligned to the single recessed line in the green diverter housing. **(b) For flow control to both overhead and hand shower,** fit the diverter in the **off** position, no stop ring is required. The Diverter cartridge can only be fitted in one way please ensure that the guide peg on the bottom of the cartridge locates into the single hole in the valve casting. As a guide the single recessed line on the top of the diverter housing is positioned on the right and aligned with the Matki logo on the valve casting. **(b)** Replace the Diverter Clamp nut, tighten the nut in a clockwise direction, the nut **can not** be overtightened, the nut will be flush to the valve casting when tight.

# 10. PARTS LIST

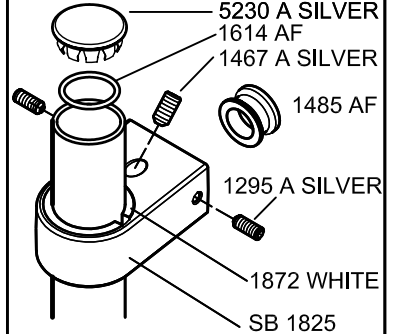
## SB 2/5215CP



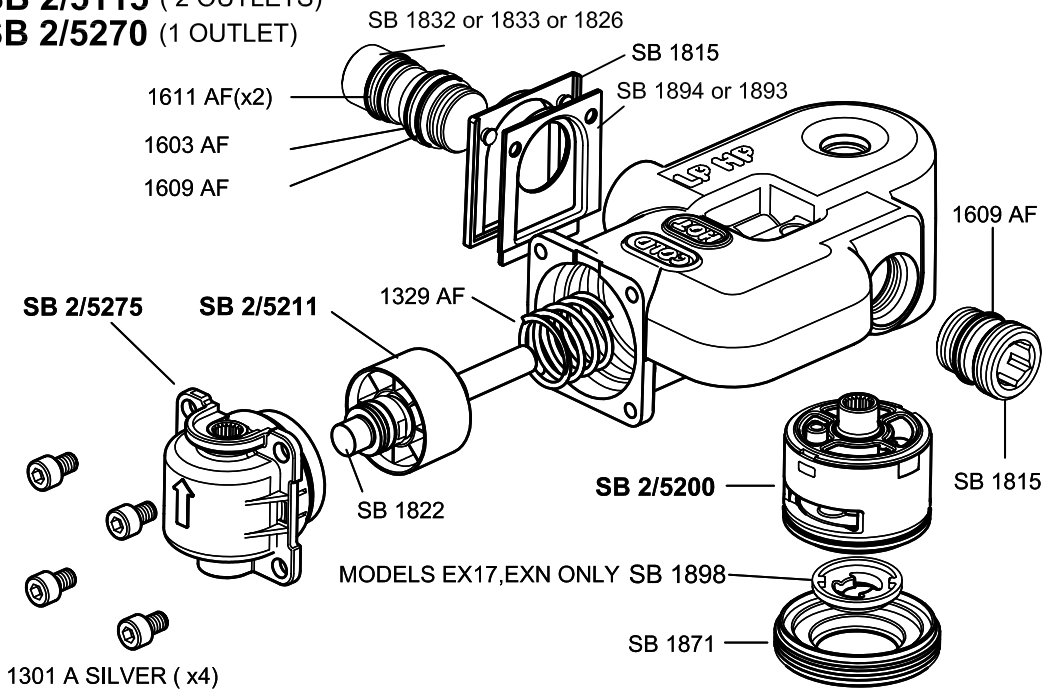
## SB 2/5245



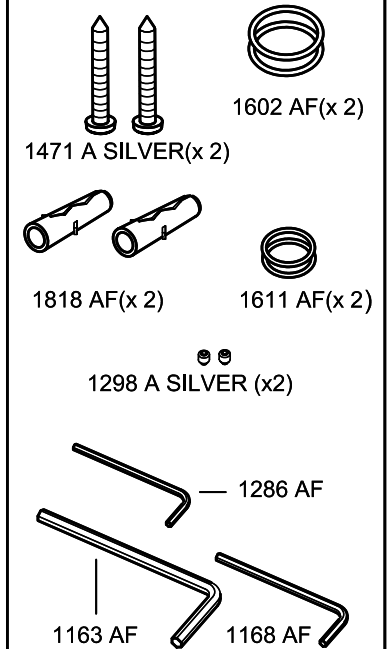
## SB 2/5220CP



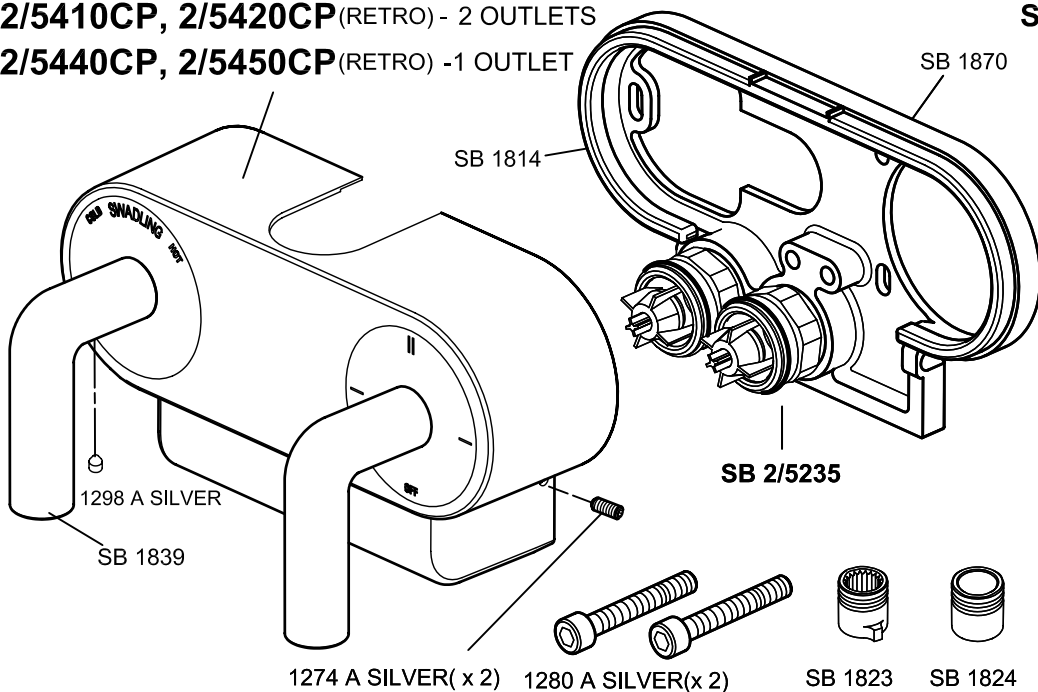
## SB 2/5115 (2 OUTLETS) SB 2/5270 (1 OUTLET)



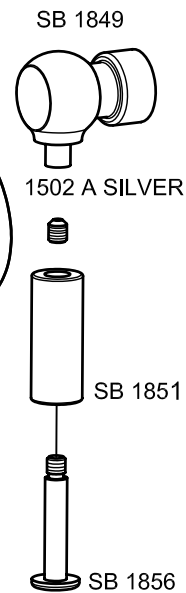
## SB 2/5250



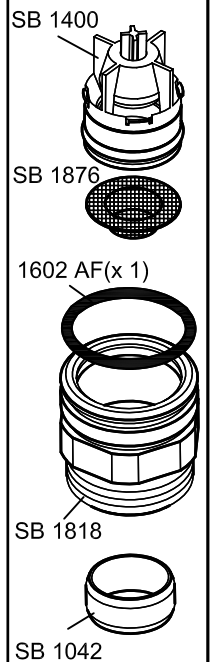
## 2/5410CP, 2/5420CP (RETRO) - 2 OUTLETS 2/5440CP, 2/5450CP (RETRO) - 1 OUTLET



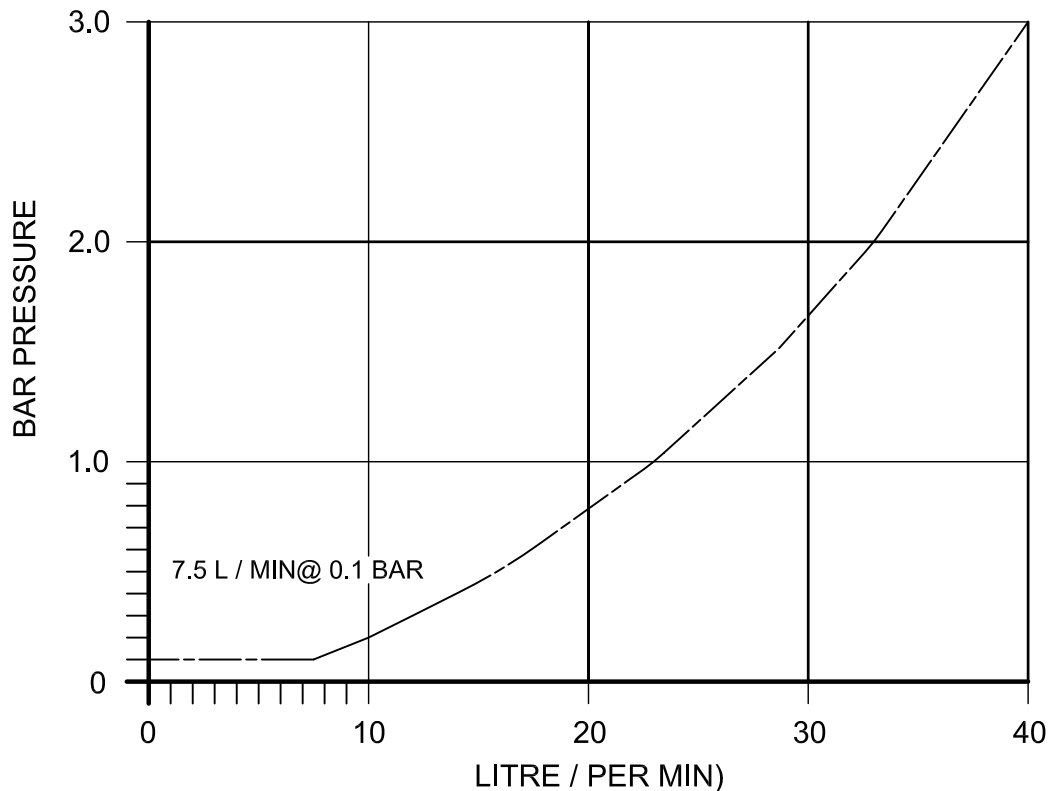
## SB 2/5340CP



## SB 2/5235



## FLOW RATES THERMOSTATIC VALVE ( FOR OPEN OUTLETS 1 & 2)



## CARE AND GUARANTEE

### Important care of your product

The controls and plate should be maintained by wiping with a soft, damp, clean cloth then polished using a dry duster. **NO** abrasive powder, detergents or polishes should be used. Cleaner containing alcohol, acid or corrosive chemicals should not be used.

**Note**, some household bleaches and denture cleaners can damage plated or coloured finishes and if splashed onto a fitting should be immediately washed off with cold water. If these instructions are followed we believe this fitting will give many years of satisfactory use.

We have a policy of continuous improvement and reserve the right to change specification without notice.

**Guarantee** - The Swadling Absolute2 shower valve is guaranteed for a period of 5 years against defects of materials and workmanship from date of purchase, subject to correct installation, maintenance and use in accordance with this instruction leaflet. Please retain proof of purchase. During the guarantee period parts will be replaced or repaired at our option. No labour costs will be reimbursed unless prior agreement has been obtained from Swadling Brassware in writing. This guarantee is offered as an extra benefit and does not affect your statutory rights as a consumer in any way whatsoever.