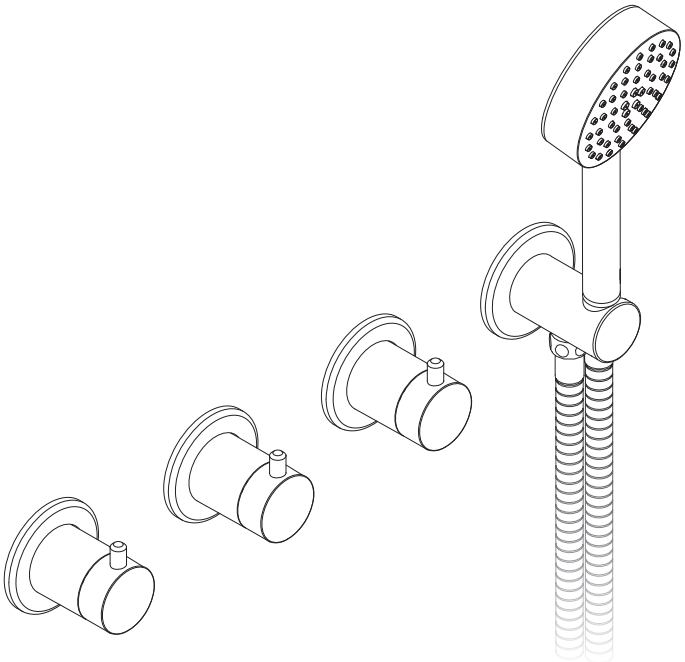
COALBROOK



MAESTRO SHOWER VALVES

3050 | 3051 | 3052 | 3053 | 3054
3061 | 3062 | 3064

IMPORTANT INFORMATION

Installation
We recommend that Coalbrook products are fitted by a fully qualified professional plumber. They should be installed correctly and in accordance with all local water regulations. All products and connections should be accessible for routine servicing.

Operating pressure
Minimum: 0.5 bar.
Maximum: 5.0 bar.

If the maximum safe water temperature and pressure settings are exceeded, damage and injury can result.

System suitability
This Coalbrook product is potentially suitable for every possible application, type of boiler and water supply pressure. However, for full 'power' shower performance, it is advisable to fit a water pump if the supply pressure is below 1 bar. For systems with combination boilers, it is not advisable to fit pumps (refer to boiler manufacturer).

Recommended supply temperatures
HOT: See duty of care section
COLD: 10/15°C

Water quality
In hard water areas, a suitable water treatment system should be provided to prevent limescale (calcium) deposits, which may affect the long term performance of the cartridges. Exterior surfaces should be gently wiped with a dry, soft cloth after use to minimise water stains and limescale deposits.

It is important that the outlets/holes in the handshower head are kept free of limescale. If limescale is allowed to form, it will reduce water flow and may result in damage. We recommend regular cleaning to prevent the formation of limescale.

Servicing
We recommend periodic servicing to help maintain the best performance from your shower.

Making connections

Parallel fittings (direct to valve)
Direct connections to the valve inlets and outlets should only be made using parallel fittings.

Tapered fittings (use adaptors)
Parallel to tapered adaptors must be used to convert the connections when using tapered fittings. These should be securely fitted to the valve using a suitable thread sealing compound to make a watertight joint.

Tapered fittings must NOT be connected directly to the valve without the use of adaptors.

All connections should be pressure tested before the valve is concealed behind the wall.

Flushing system
It is most important to flush out all pipework thoroughly before connecting the product. Failure to do so is the single most common cause of cartridge failure and water restriction.

IMPORTANT INFORMATION

Supply connections
The hot water supply must be connected to the thermostatic valve port identified with a 'H', and the cold water supply to the port identified with a 'C'.

Balancing flow
If there is a significant difference in water pressures between the hot & cold supplies, we recommend an in-line flow suppressor/regulator (not supplied) is fitted. This should be fitted to whichever has the greater flow rate, in an accessible position close to the valve.

Non-return valves
To protect your water system, non-return/check valves are fitted. These can be removed and cleaned if required.

Safety/Anti-scald
This thermostatic valve not only maintains a constant temperature to approximately plus or minus 1°C, but will automatically shut down completely on failure of either hot or cold supplies.

Temperature setting
Once the installation has been completed the 'safe temperature' must be checked and set. The valve is factory set, but the working temperature may differ depending on the hot & cold water temperatures supplied to the valve.

Setting the 'safe temperature'
To avoid damage, when setting the 'safe temperature', the thermostatic cartridge spindle must be turned by hand only. The spindle will require only minor adjustment. **Turning the spindle to the end of its travel and forcing it beyond this point will cause internal damage to the thermostatic cartridge.**

Always fit the 'temperature stop' before fitting the thermostatic control handle. One of the functions of the temperature stop is to prevent the thermostatic cartridge spindle being turned beyond the end of its travel. **Failure to fit the temperature stop will result in damage to the thermostatic cartridge.**

Duty of care

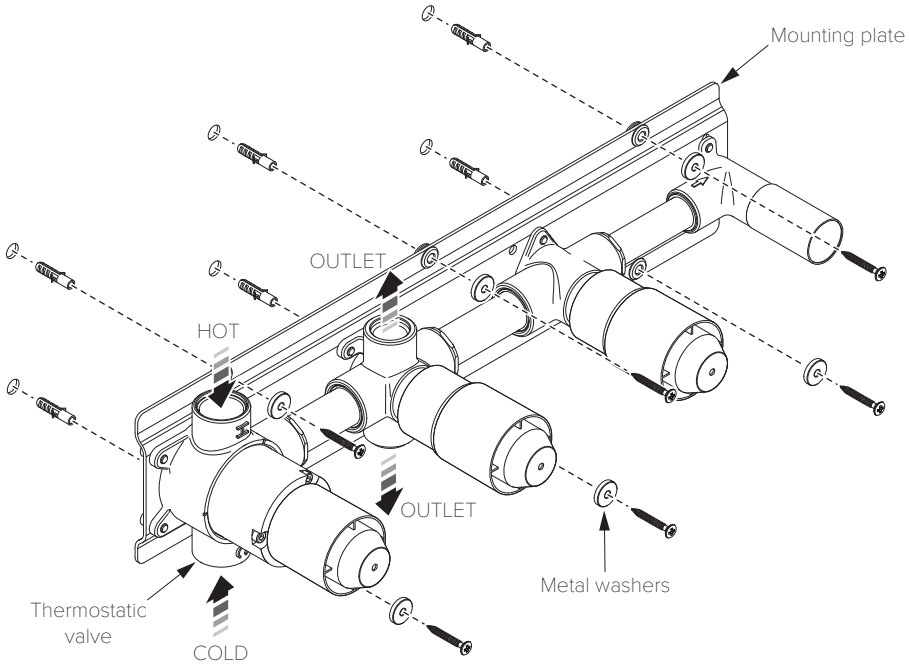
Legislation
Legislation dictates recommendations and guidelines on health and safety, including safe hot water temperatures. The emphasis is on regulatory and design criteria, and the responsibility for meeting such guidelines being that of a suitably appointed responsible person.

How hot water temperatures affect the skin
65°C – A partial thickness burn in about 2 seconds
60°C – A partial thickness burn in about 5 seconds
55°C – A partial thickness burn in about 15 seconds
50°C – A partial thickness burn in about 90 seconds

Safe temperature
The age, mental, and physical capabilities of persons occupying the property will affect the 'safe temperature' setting of the hot water supply. For specific details please refer to local building regulations, current legislation, relevant standards and codes of practice.

SHOWER VALVE INSTALLATION (STEPS 1 - 5)

Shown with 3051 model



1. Place the shower valve onto the mounting surface. Shower valves without a handshower can be mounted vertically, if required. Use a spirit level to ensure valve(s) is/are level. We recommend that the spirit level is placed across the protective covers. Mark the hole locations. Ensure that all available mounting holes are used.

2. Select appropriate fixings/screws for the mounting surface. Drill holes using a suitable drill bit for the fixings/wall plugs, then secure the shower valve in place ensuring that the metal washers are in place.

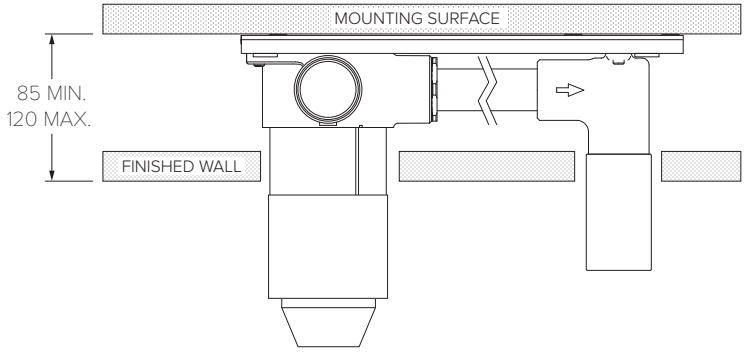
3. Ensure that the water supplies have been thoroughly flushed before connection is made to the shower valve. Connect the hot and cold water supplies to the G3/4 inlets of the thermostatic valve. The HOT water supply must be connected to the thermostatic valve port identified with a 'H', and the cold water supply to the port identified with a 'C'.

4. The shower valve has G1/2 outlets. Outlets that are not used can be capped using a blanking plug (Usually fitted to the bottom outlet as supplied).

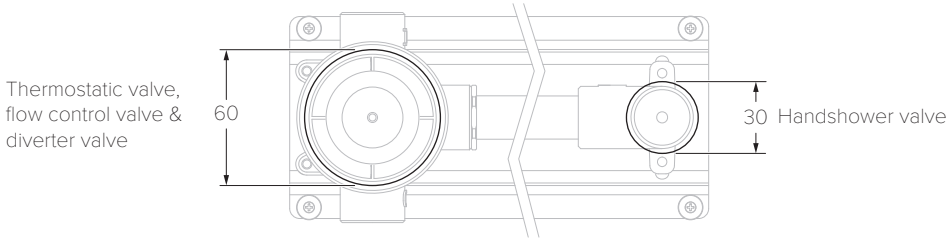
5. Check all connections for leaks and ensure the protective covers are securely assembled before concealing the pipework and continuing installation.

SHOWER VALVE INSTALLATION (STEPS 6 - 7) (mm)

Shown with thermostatic valve & handshower valve



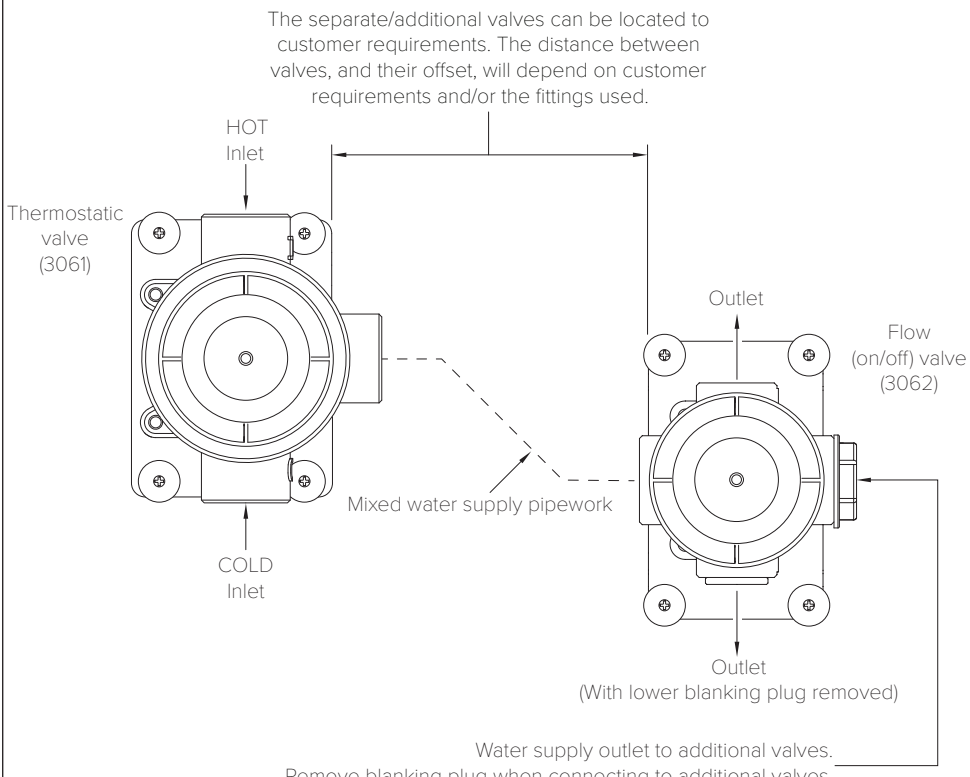
For servicing, the clearances shown below are required in the finished wall surface

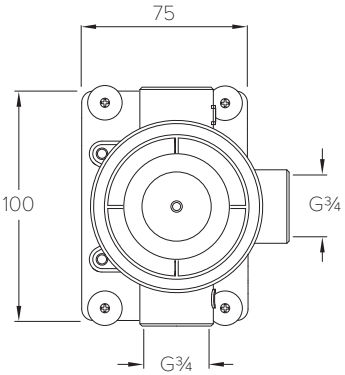


6. The shower valve must be installed to comply with the minimum and maximum measurements shown in the above diagram. Please note that the minimum and maximum mounting depths are measured from the mounting surface to the finished wall surface.

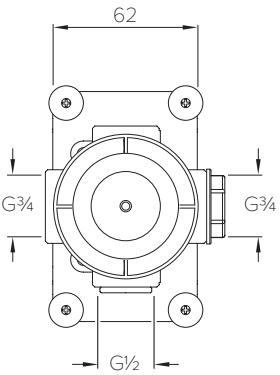
7. Ensure the finished wall apertures allow for adequate servicing access. Please refer to the dimensions shown in the above diagram.

SEPARATE/ADDITIONAL VALVE INSTALLATIONS (mm)

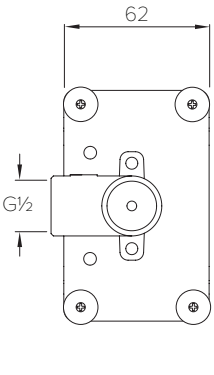




Thermostatic valve (3061)



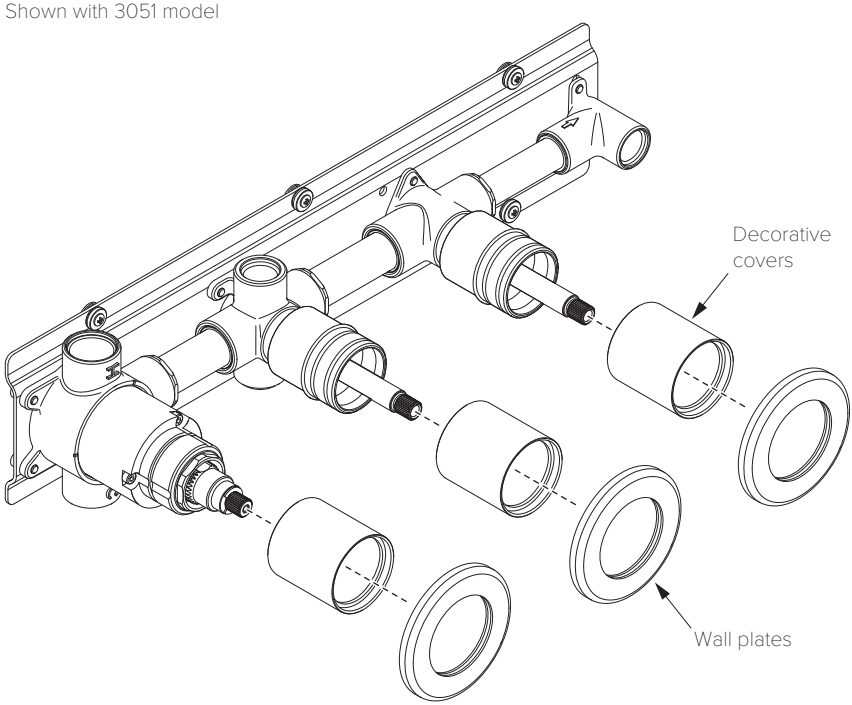
Flow (on/off) valve (3062)



Handshower valve (3064)

DECORATIVE COVERS & RINGS INSTALLATION

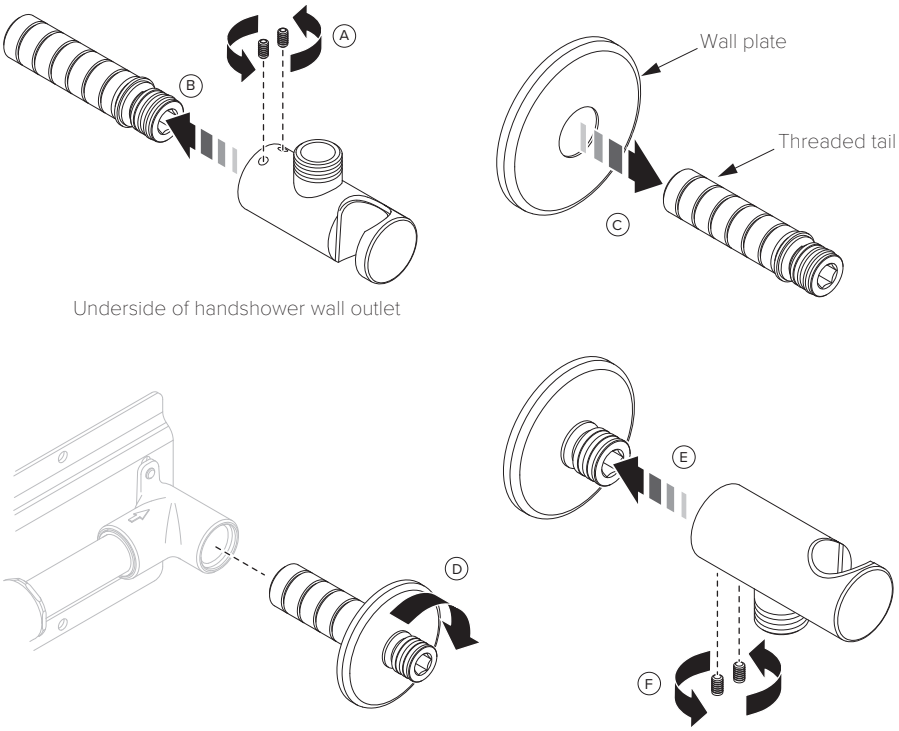
Shown with 3051 model



1. With the finished wall surface completed, remove and discard the protective covers.
2. Gently push the decorative covers onto the valves until they reach a stop.
3. Ensure the 'O' rings are present in the central recesses of the wall plates. Remove the paper backing from the wall plate gaskets. If plain wall plates (without graphics) are fitted, ensure that the gap in the wall plate gasket is at the bottom of the wall plate. Slide the wall plates over the previously installed decorative covers. Use suitable sealant if necessary.

HANDSHOWER WALL OUTLET INSTALLATION

Shown with outlet from 3051 model



1. After removing the wall outlet from its packaging, use a suitable hexagonal key to unscrew and remove the two grub screws (A) from the underside. Remove the threaded tail (B).

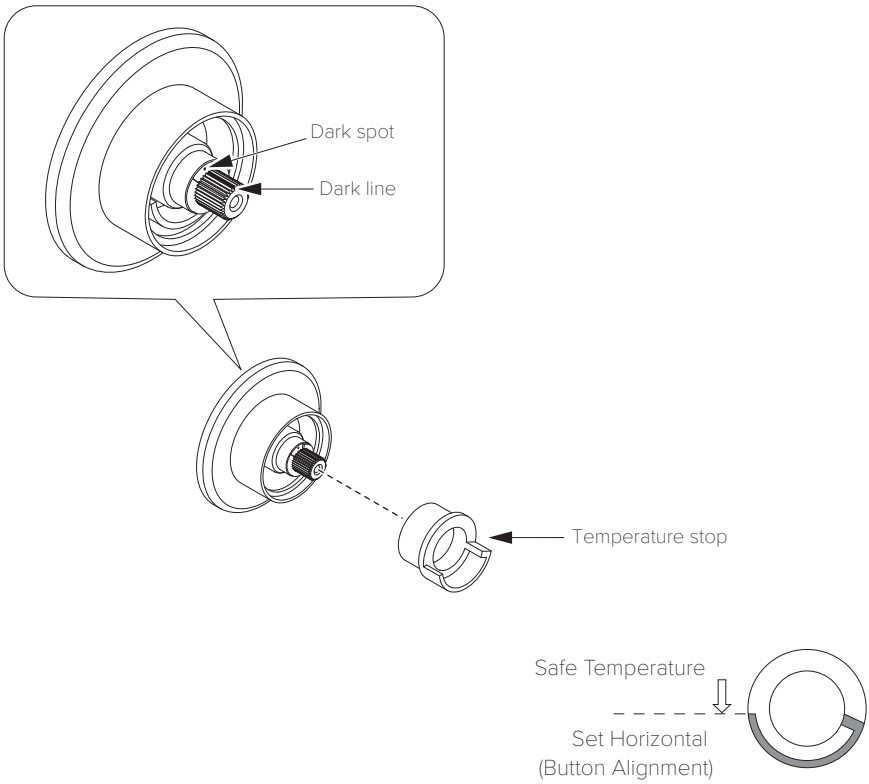
2. To aid cutting, the threaded tail has cutting points/recesses along its length. Cut the threaded tail to the required length.

3. Remove the paper backing from the wall plate gasket. Slide the wall plate onto the threaded tail (C).

4. Apply a suitable sealant or sealing tape to the threaded tail. Screw the threaded tail into the shower valve (D). To aid in this, the end of the threaded tail has a hexagonal recess. Be careful not to over-tighten the threaded tail. Sealant can be applied to the rear of the wall plate if required.

5. Locate the wall outlet onto the threaded tail (E). Ensure that it is aligned correctly, then secure it in place using the two previously removed grub screws (F) and a suitable hexagonal key.

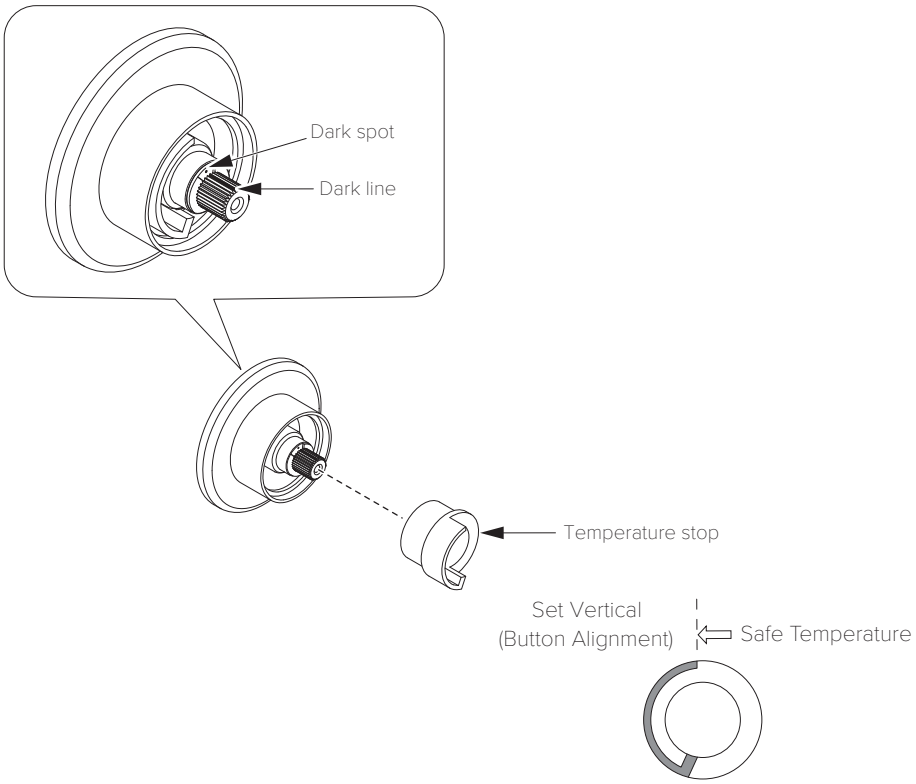
SETTING THE THERMOSTATIC CARTRIDGE & TEMPERATURE STOP (BANK, DECCA & ZURICH)



1. Before fitting the thermostatic control handle, the temperature stop must be assembled onto the thermostatic cartridge. Turn the spindle on the thermostatic cartridge (by hand only) until the water temperature reaches 38°C. This should be set as the 'Safe temperature'. Turning the spindle to the end of its travel and forcing it beyond this point will cause internal damage to the thermostatic cartridge. For guidance, there is a dark line on the cartridge spindle and a dark spot on the cartridge body. When aligned, these give an approximate 38°C setting.

2. Remove and rotate the temperature stop as shown in the diagram above. Locate the temperature stop onto the thermostatic cartridge with the safe temperature locator in a horizontal position.

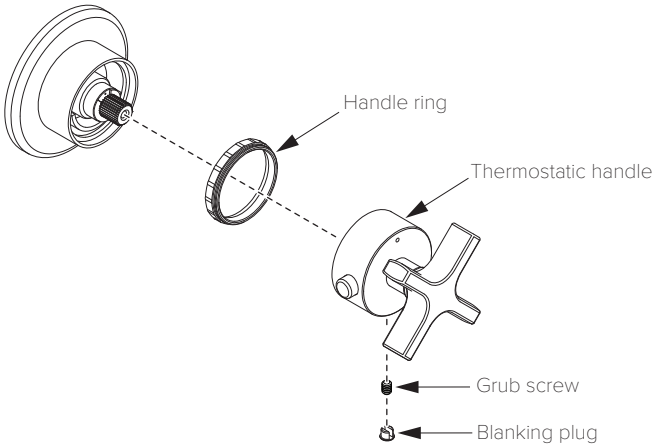
SETTING THE THERMOSTATIC CARTRIDGE & TEMPERATURE STOP (DOMO)



1. Before fitting the thermostatic control handle, the temperature stop must be assembled onto the thermostatic cartridge. Turn the spindle on the thermostatic cartridge (by hand only) until the water temperature reaches 38°C. This should be set as the 'Safe temperature'. Turning the spindle to the end of its travel and forcing it beyond this point will cause internal damage to the thermostatic cartridge. For guidance, there is a dark line on the cartridge spindle and a dark spot on the cartridge body. When aligned, these give an approximate 38°C setting.

2. Remove and rotate the temperature stop as shown in the diagram above. Locate the temperature stop onto the thermostatic cartridge with the safe temperature locator in a vertical position.

BANK THERMOSTATIC HANDLE INSTALLATION



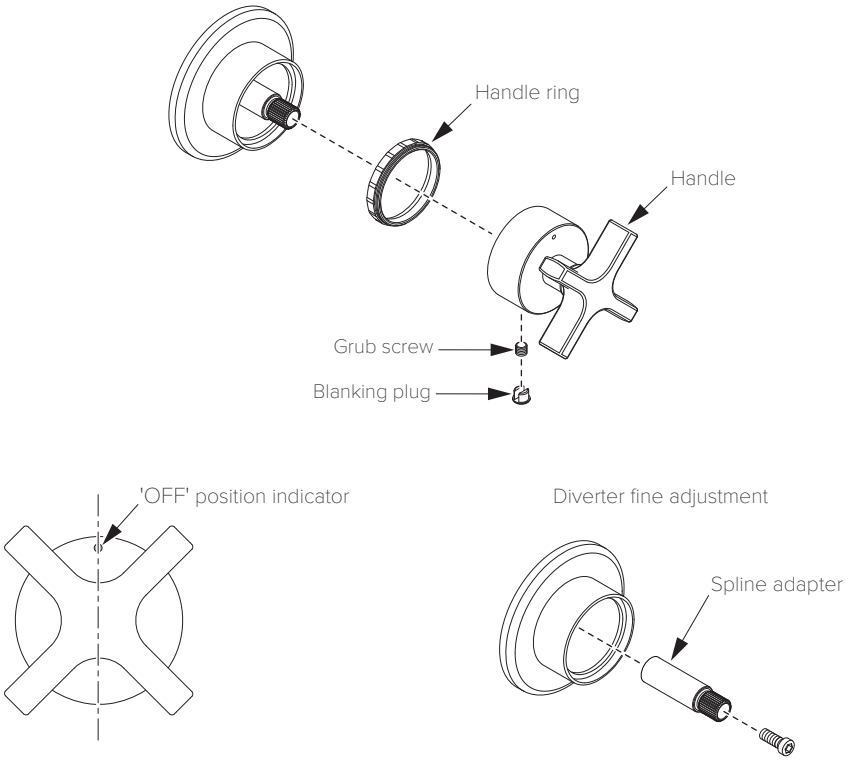
1. Locate the handle ring into the thermostatic handle.

2. Locate the thermostatic handle onto the cartridge splines.
   Ensure the handle's button is set horizontally at the safe temperature position as shown in the diagram above.

3. Secure the thermostatic handle using the grub screw and a suitable hexagonal key.

4. Check that the handle is secure, then conceal the grub screw by gently pushing the blanking plug into the grub screw hole.

BANK DIVERTER VALVE & FLOW VALVE HANDLE INSTALLATION



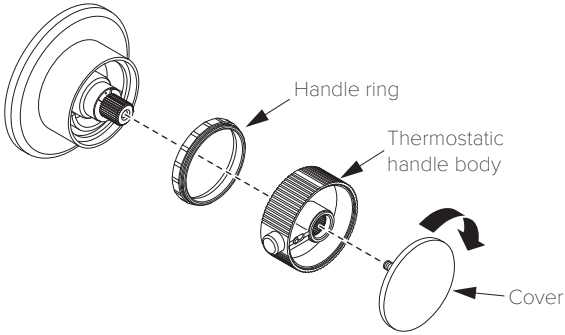
1. Align the 'Off' position indicator and handle as shown in the diagram above. This will ensure that the 'Off' position indicator remains visible.

2. Locate the handle ring into the handle.

3. Flow valves:
   Locate the handle onto the cartridge splines and secure using the grub screw and a suitable hexagonal key.
   Diverter valves:
   Locate the handle onto the cartridge splines. If the handle alignment is not as required, fine adjustment is possible. Remove the handle, then using a suitable hexagonal key, unscrew and remove the spline adaptor fixing screw. Gently pull the spline adaptor until clear of restriction, rotate a very small amount, and push back into place. Reposition incrementally until an improved handle alignment is achieved. With the desired alignment achieved, fit and tighten the spline adaptor fixing screw. Locate the handle onto the cartridge splines and secure using the grub screw and a suitable hexagonal key.

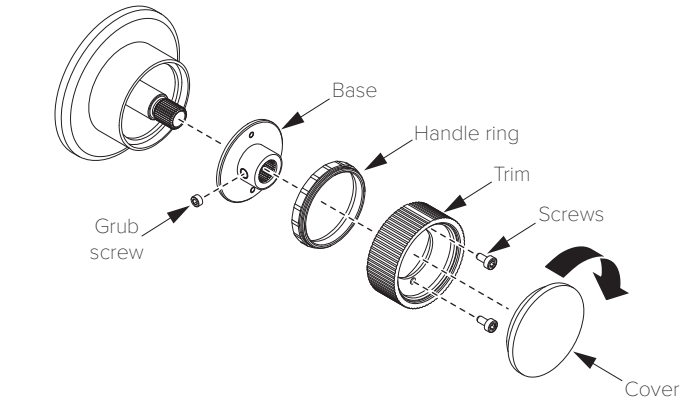
4. Check that the handle is secure, then conceal the grub screw by gently pushing the blanking plug into the grub screw hole.

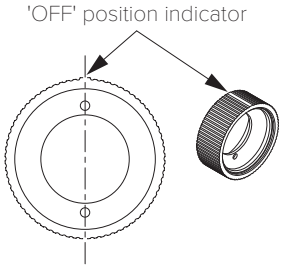
DECCA THERMOSTATIC HANDLE INSTALLATION

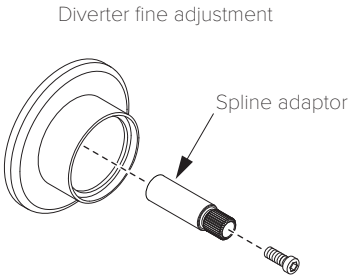


1. Locate the handle ring into the thermostatic handle body.
2. Locate the thermostatic handle body onto the thermostatic cartridge splines. Ensure that the lever is set horizontally at the safe temperature position as shown.
3. Screw the cover onto the thermostatic handle body.

DECCA DIVERTER VALVE & FLOW VALVE HANDLE INSTALLATION







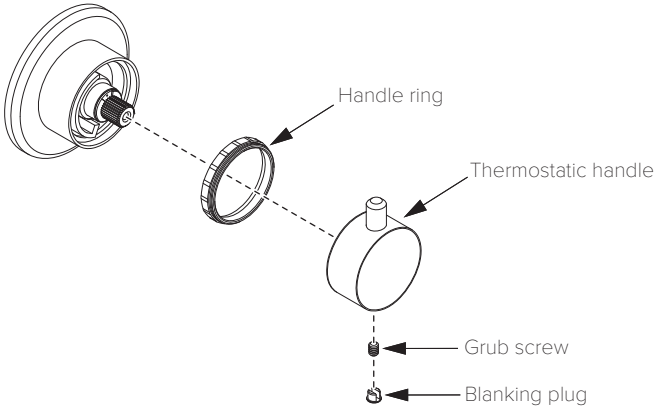
1. Align the 'Off' position indicator as shown in the diagram above.

2. Flow valves:
   Rotate the handle base until the two small holes are vertical. Locate the handle base onto the cartridge splines and secure using the grub screw and a suitable hexagonal key.
   Diverter valves:
   Rotate the handle base until the two small holes are vertical. Locate the handle base onto the cartridge splines. If the handle base alignment is not as required, fine adjustment is possible. Remove the handle base, then using a suitable hexagonal key, unscrew and remove the spline adaptor fixing screw. Gently pull the spline adaptor until clear of restriction, rotate a very small amount, and push back into place. Reposition incrementally until an improved handle base alignment is achieved. With the desired alignment achieved, fit and tighten the spline adaptor fixing screw. Locate the handle base onto the cartridge splines and secure using the grub screw and a suitable hexagonal key.

3. Locate the handle ring into the handle trim.

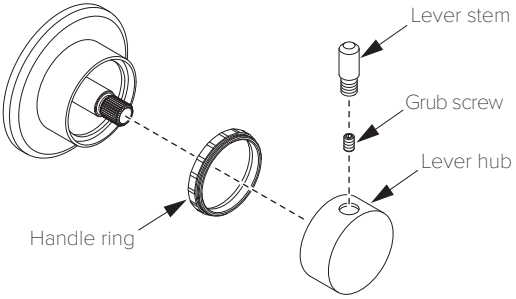
4. Secure the handle trim to the base using the two screws provided, then screw the cover onto the handle trim.

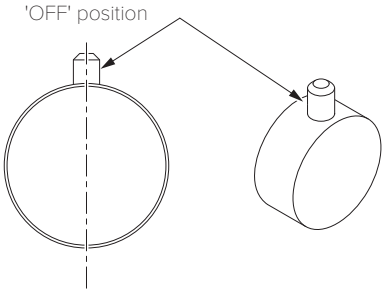
DOMO THERMOSTATIC HANDLE INSTALLATION

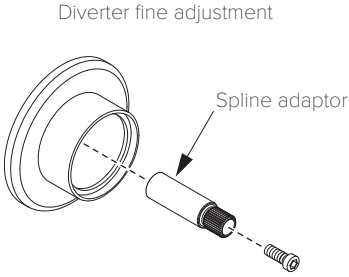


1. Locate the handle ring into the thermostatic handle body.
2. Locate the thermostatic handle onto the thermostatic cartridge splines. Ensure the lever is set vertically at the safe temperature position.
3. Secure the thermostatic handle using the grub screw and a suitable hexagonal key.
4. Check that the handle is secure, then conceal the grub screw by gently pushing the blanking plug into the grub screw hole.

DOMO DIVERTER VALVE & FLOW VALVE HANDLE INSTALLATION







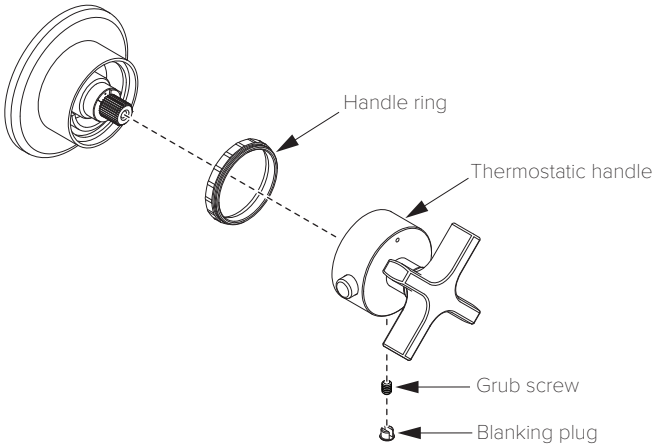
1. Locate the handle ring into the lever hub.

2. Align the lever hole in the lever hub vertically as shown in the diagram above.

3. Flow valves:
   Locate the lever hub onto the splines of the cartridge and secure using the grub screw and a suitable hexagonal key.
   Diverter valves:
   Locate the lever hub onto the splines of the cartridge. If the hub alignment is not as required, fine adjustment is possible. Remove the lever hub, then using a suitable hexagonal key, unscrew and remove the spline adaptor fixing screw. Gently pull the spline adaptor until clear of restriction, rotate a very small amount, and push back into place. Reposition incrementally until an improved lever hub alignment is achieved. With the desired alignment achieved, fit and tighten the spline adaptor fixing screw. Locate the lever hub onto the splines of the cartridge and secure using the grub screw and a suitable hexagonal key.

4. Screw the lever stem into the lever hub.

ZURICH THERMOSTATIC HANDLE INSTALLATION



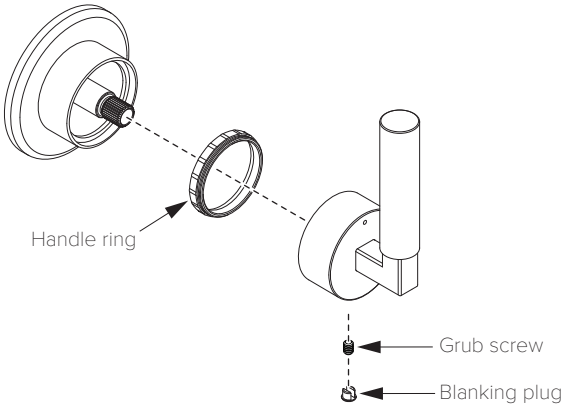
1. Locate the handle ring into the thermostatic handle.

2. Locate the thermostatic handle onto the thermostatic cartridge splines.
   Ensure the button is set horizontally at the safe temperature position as shown.

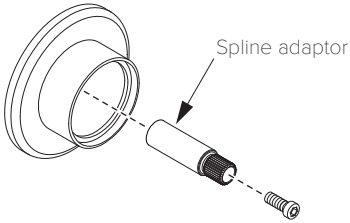
3. Secure the thermostatic handle using the grub screw and a suitable hexagonal key.

4. Check that the handle is secure, then conceal the grub screw by gently pushing the blanking plug into the grub screw hole.

ZURICH DIVERTER VALVE & FLOW VALVE HANDLE INSTALLATION



Diverter fine adjustment

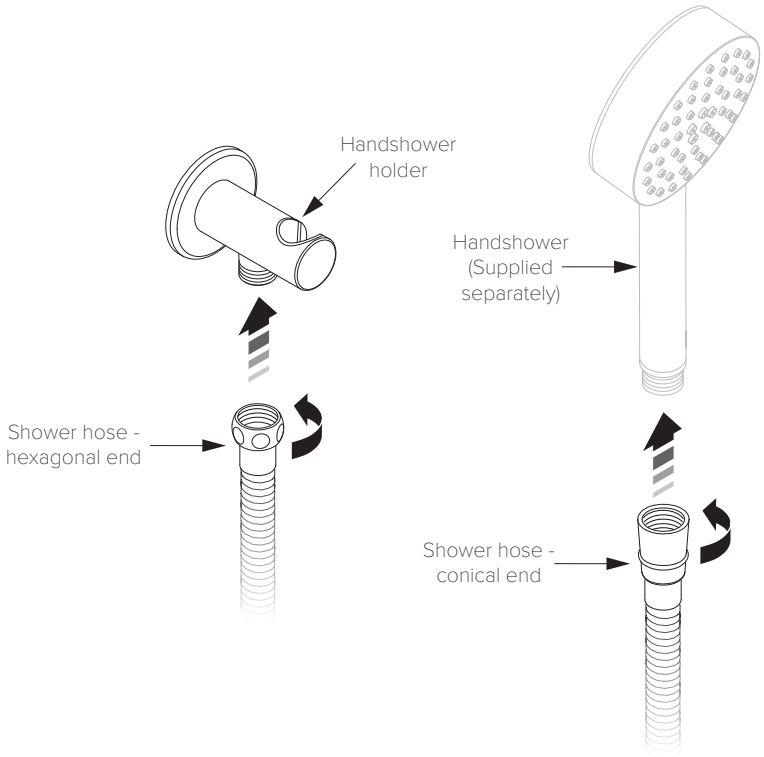


1. Locate the handle ring into the handle body.

2. Flow valves:
   Locate the handle onto the cartridge splines and secure using the grub screw and a suitable hexagonal key.
   Diverter valves:
   Locate the handle onto the cartridge splines. If the handle alignment is not as required, fine adjustment is possible. Remove the handle, then using a suitable hexagonal key, unscrew and remove the spline adaptor fixing screw. Gently pull the spline adaptor until clear of restriction, rotate a very small amount, and push back into place. Reposition incrementally until an improved handle alignment is achieved. With the desired alignment achieved, fit and tighten the spline adaptor fixing screw. Locate the handle onto the cartridge splines and secure using the grub screw and a suitable hexagonal key.

3. Check that the handle is secure, then conceal the grub screw by gently pushing the blanking plug into the grub screw hole.

HOSE CONNECTION



1. Use the provided shower hose to connect the handshower to the holder. Screw the conical end of the hose onto the threaded end of the handshower. Screw the hexagonal end of the shower hose onto the outlet port on the handshower holder.

2. Check the operation of the shower valve and handshower.

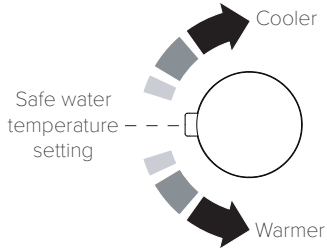
3. Check for leaks.

SHOWER VALVE OPERATION

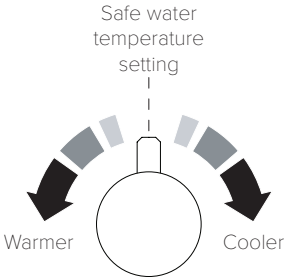
THERMOSTATIC VALVE

Press the button to increase water temperature above the 'safe temperature'.
Important: Always return the button to the 'safe water temperature' setting, or lower, after use.

BANK, DECCA & ZURICH
(Shown with Decca handle)

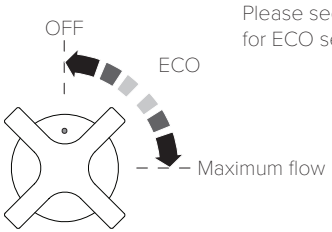


DOMO



FLOW (ON/OFF) VALVE

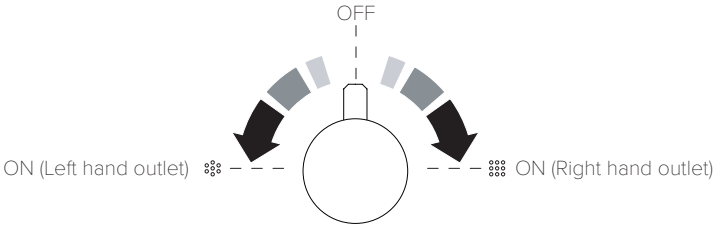
(Shown with Bank handle)



Please see next page for ECO settings

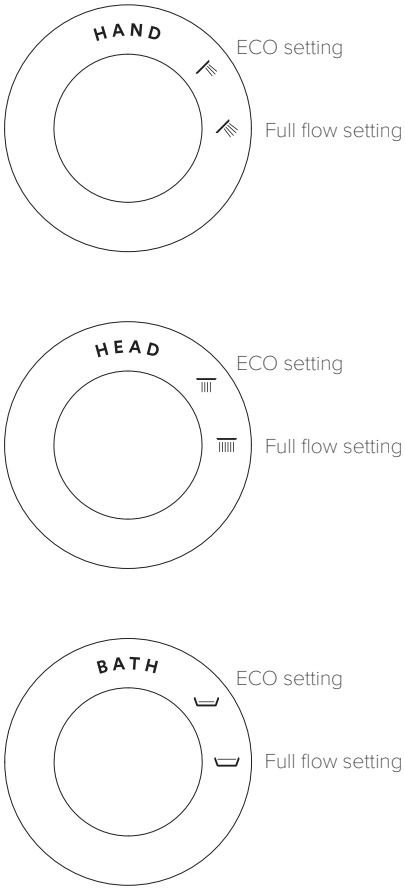
DIVERTER VALVE

(Shown with Domo handle)



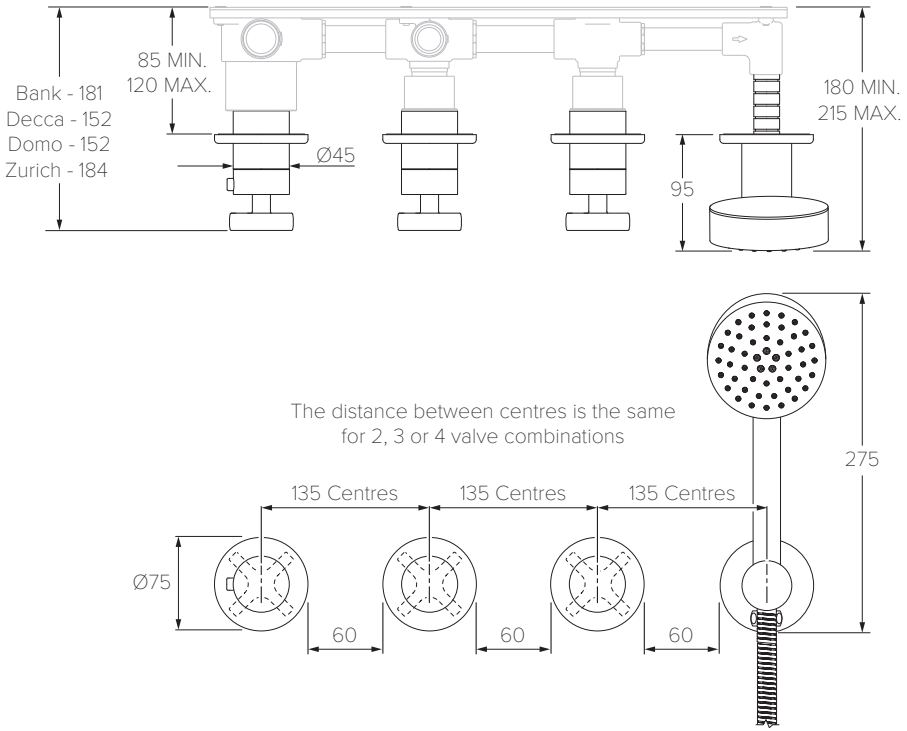
FLOW (ON/OFF) VALVE ECO SETTING

When turning a flow (on/off) valve there is a mid-way stop point. This is the ECO setting. The flow rate at this setting is approximately 75% of the full flow setting.



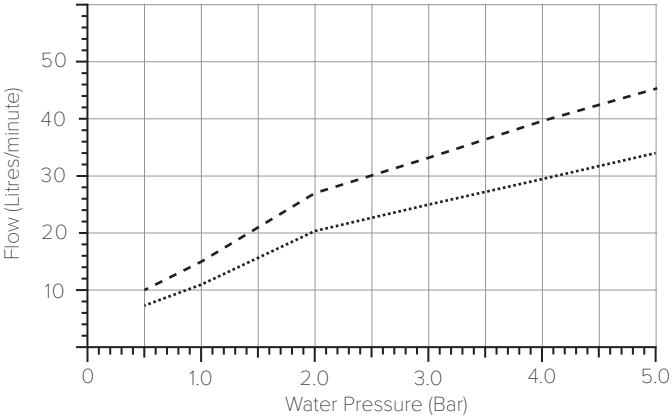
SPECIFICATION DIAGRAM (mm)

Shown with BA3051 model



TYPICAL FLOW RATE FOR 3050 MODEL

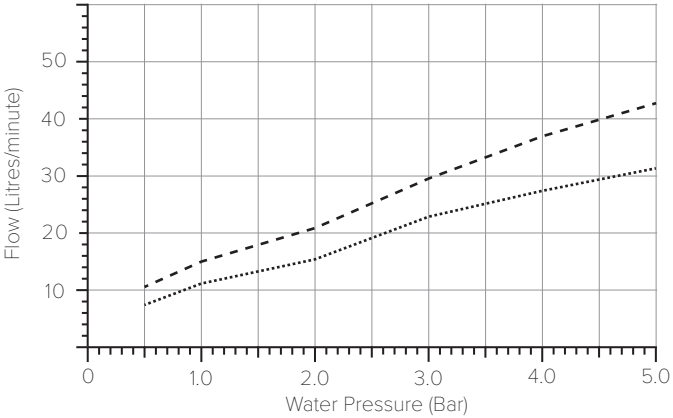
Flow rates shown are free-flowing and may vary subject to restrictions created by installation, pipework layout or application.
The following data shows the flow rate from any individual outlet. The flow rate is uniform across all oulets.



Water Pressure (Bar)	Full flow rate (Litres/minute) - - - - - -	ECO flow rate (Litres/minute) .....
0.5	10.0	7.5
1.0	14.9	11.2
2.0	26.9	20.1
3.0	33.1	24.8
4.0	39.8	29.8
5.0	45.3	33.9

TYPICAL FLOW RATE FOR 3051 MODEL

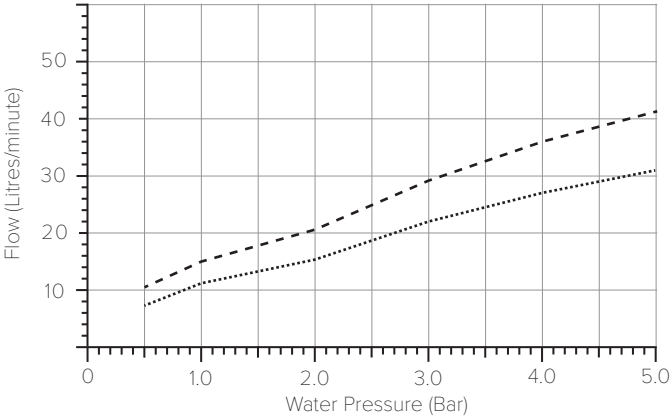
Flow rates shown are free-flowing and may vary subject to restrictions created by installation, pipework layout or application.
The following data shows the flow rate from any individual outlet. The flow rate is uniform across all oulets.



Water Pressure (Bar)	Full flow rate (Litres/minute) - - - - - -	ECO flow rate (Litres/minute) .....
0.5	10.3	7.7
1.0	15.1	11.3
2.0	20.6	15.5
3.0	29.8	22.4
4.0	36.4	27.3
5.0	42.3	31.7

TYPICAL FLOW RATE FOR 3052 MODEL

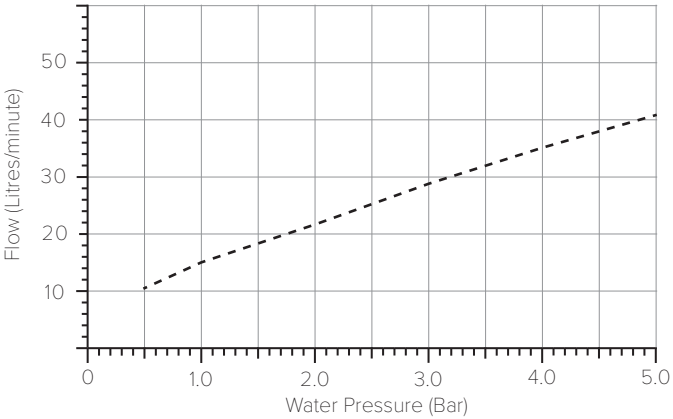
Flow rates shown are free-flowing and may vary subject to restrictions created by installation, pipework layout or application.
The following data shows the flow rate from any individual outlet. The flow rate is uniform across all oulets.



Water Pressure (Bar)	Full flow rate (Litres/minute) - - - - - -	ECO flow rate (Litres/minute) .....
0.5	10.1	7.6
1.0	14.9	11.2
2.0	20.5	15.4
3.0	29.3	22.0
4.0	36.0	27.0
5.0	41.3	31.0

TYPICAL FLOW RATE FOR 3053 MODEL

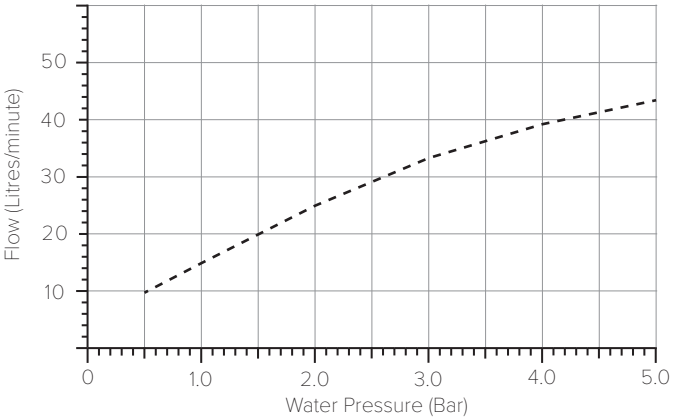
Flow rates shown are free-flowing and may vary subject to restrictions created by installation, pipework layout or application.
The following data shows the flow rate from any individual outlet. The flow rate is uniform across all oulets.



Water Pressure (Bar)	Full flow rate (Litres/minute)
0.5	10.2
1.0	14.9
2.0	21.9
3.0	28.8
4.0	35.1
5.0	40.7

TYPICAL FLOW RATE FOR 3054 MODEL

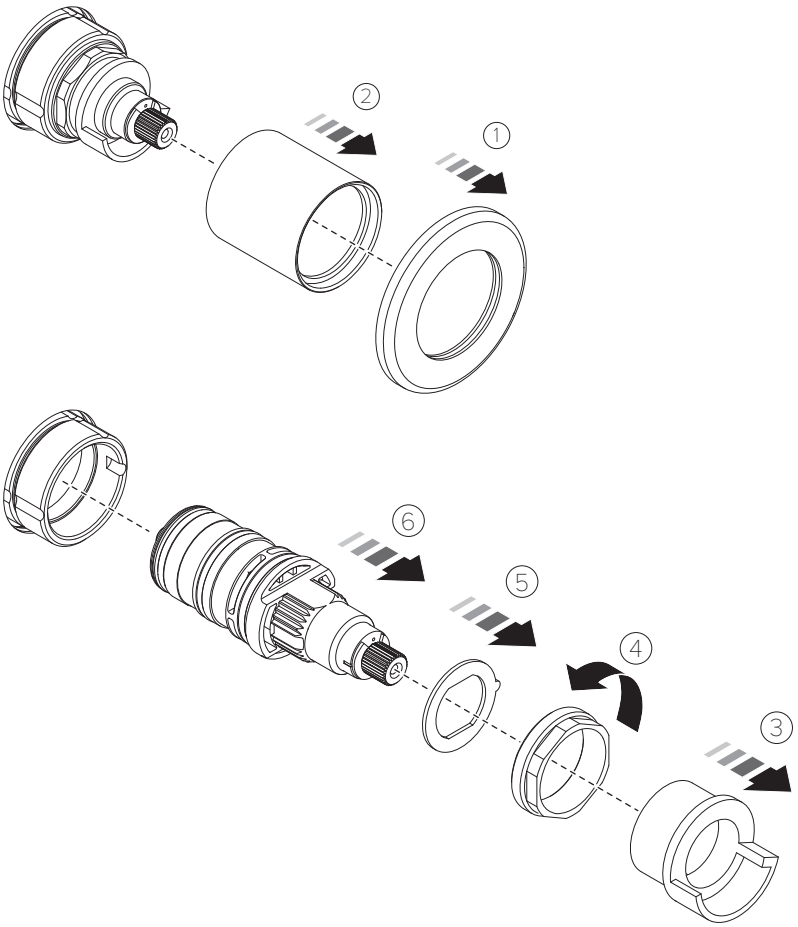
Flow rates shown are free-flowing and may vary subject to restrictions created by installation, pipework layout or application.
The following data shows the flow rate from any individual outlet. The flow rate is uniform across all oulets.



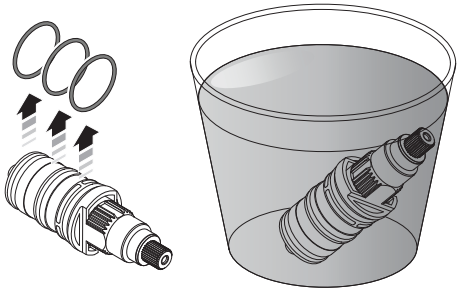
Water Pressure (Bar)	Full flow rate (Litres/minute)
0.5	9.8
1.0	14.4
2.0	24.4
3.0	33.2
4.0	39.2
5.0	43.7

SERVICING – THERMOSTATIC CARTRIDGE REMOVAL

Important: Isolate the hot and cold water supplies before removing the thermostatic cartridge.



SERVICING – DE-SCALING THE THERMOSTATIC CARTRIDGE

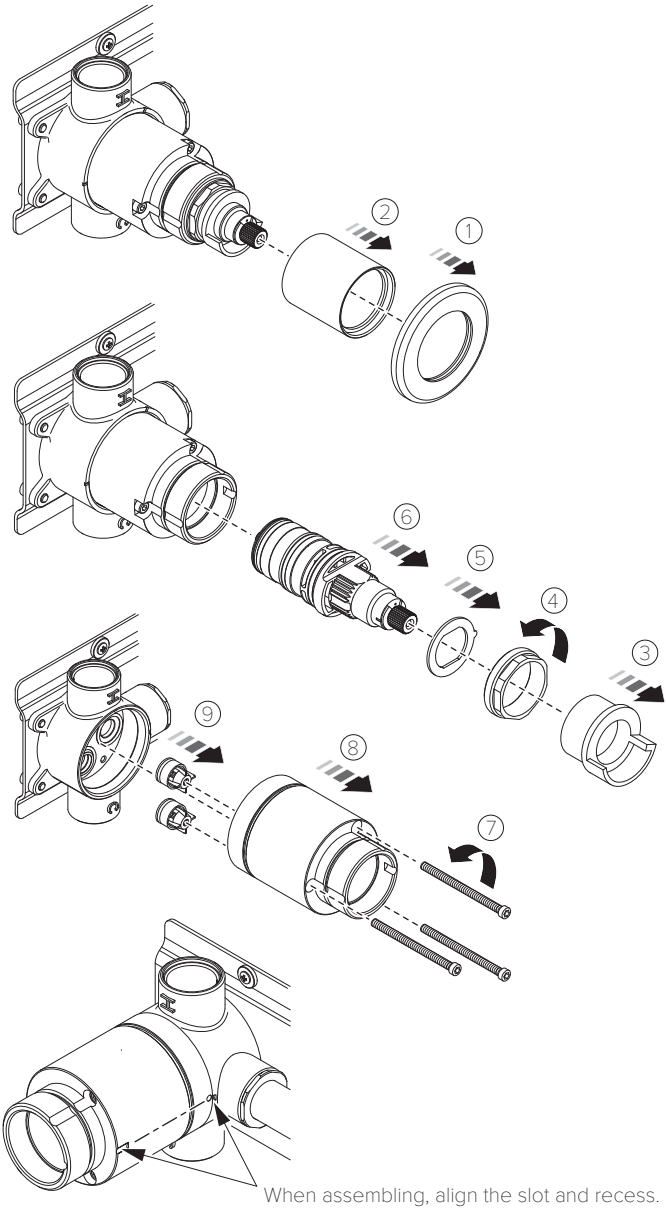


1. After removing the thermostatic cartridge check the 'O' rings for damage (i.e. cuts or tears). Gently remove the 'O' rings before soaking the cartridge in de-scaling fluid. Soak the cartridge according to the instructions on the de-scaling fluid packaging. Rinse under cold water.

2. Carefully replace the 'O' rings before fitting the cartridge.

SERVICING – NON-RETURN/CHECK VALVE REMOVAL

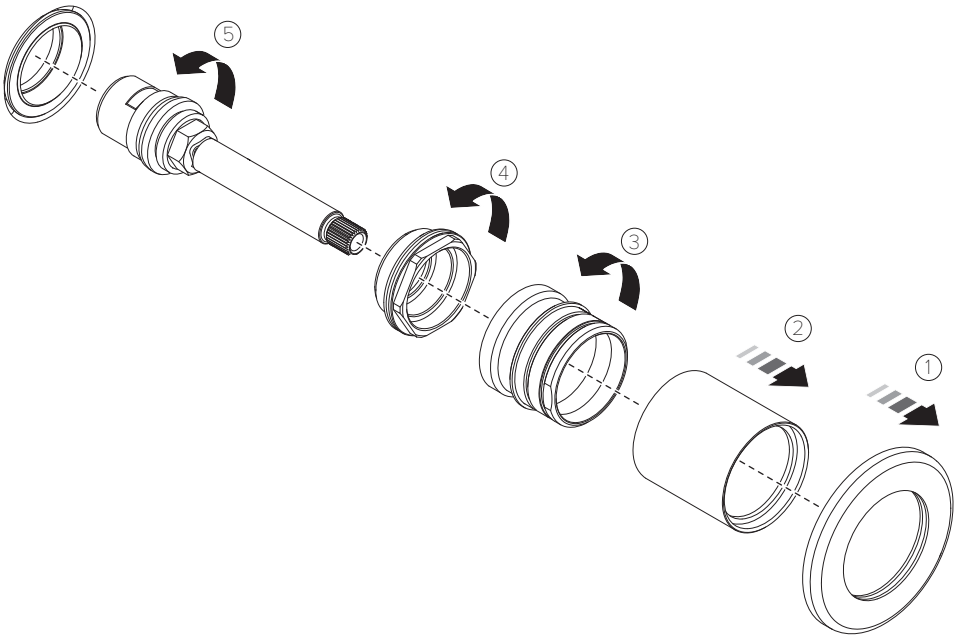
Important: Isolate the hot and cold water supplies before removing the thermostatic cartridge.



When assembling, align the slot and recess.

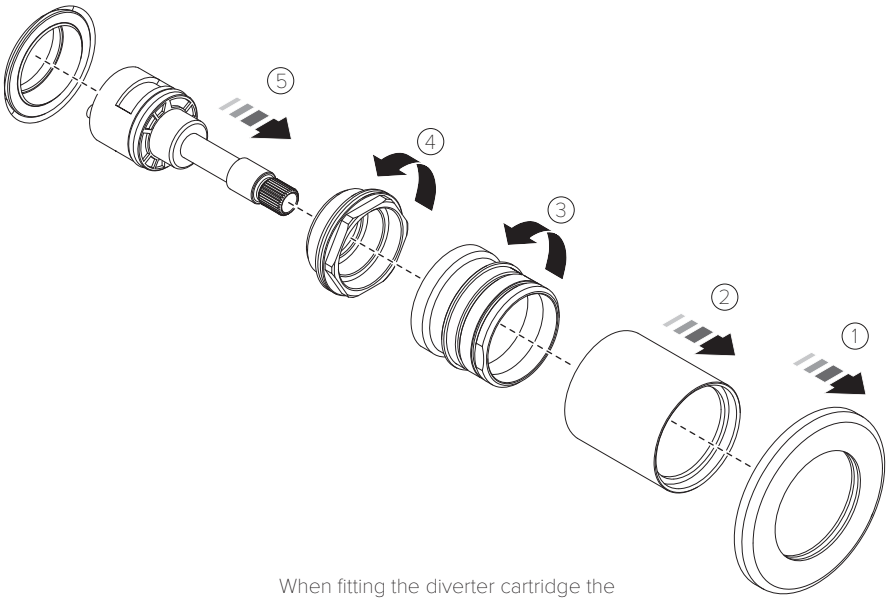
SERVICING – FLOW CARTRIDGE REMOVAL

Important: Isolate the hot and cold water supplies before removing the flow cartridge.

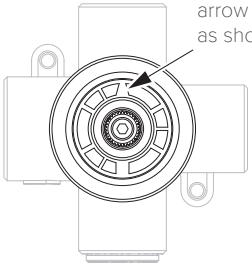


SERVICING – DIVERTER CARTRIDGE REMOVAL

Important: Isolate the hot and cold water supplies before removing the diverter cartridge.



When fitting the diverter cartridge the arrow head/angled form should be located as shown.



When fitting the diverter trim, please make reference to the handle fitting sections earlier in this guide.

NOTES

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COALBROOK

V1.1225