

Hydroflow Commercial 'C' Model Water Conditioner

Environmentally friendly and easy to install | No chemicals or cutting of pipework required

Hydroflow is not flow dependent: choice of model is determined by outside diameter of pipework.



Hydroflow Commercial 'C' model fits around pipework and transmits an electronic signal into the water in the pipe. The signal propagates around the entire pipe system and causes the limescale present in the water to form into loose clusters. When the water is heated these clusters form crystals in suspension in the water, which normally wash away with the flow, so that they no longer adhere to the inside of the pipework or to any other surfaces. Over time (depending on flow rate, water parameters, amount of heating etc), existing limescale which has already been formed in the system will begin to erode, again washing away with the flow of the water. Unlike water softeners, Hydroflow does not chemically alter the water. This means that the minerals are all still present. When the water is heated the minerals will form as powder. In most cases* this is washed away with the flow of water.

*If the flow rate is low, then a small amount of this powder can build up over time, for instance in the bottom of a hot water cylinder, with the amount depending on the flow rate, hardness of the water and system configuration. If desired, this powdery residue can be dealt with by an occasional drain down or cleaning of the system.

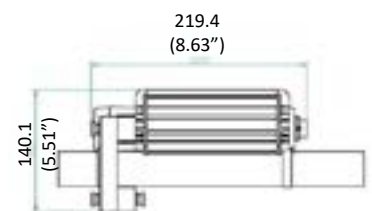
Remote Monitoring Facility

A volt-free normally-open contact closure is provided by the unit connection with a BMS (Business Management System) computer, to monitor that the unit is operating correctly. Connection to the BMS output is made via the junction box. A suitable 5 core approved cable must be used in order to make connection to the mains input and the BMS output.

Hydroflow Commercial 'C' Models

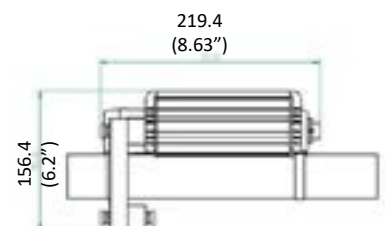
Order code: Hydroflow C32

For pipe sizes: up to max. Ø38mm
(outside diameter)—DN32
PSU input voltage: 87 – 240vAC
Frequency: 47 – 63 Hz
Weight: 4.0 kg
Ferrites: 3 × 109mm; 1 × 126mm



Order code: Hydroflow C40

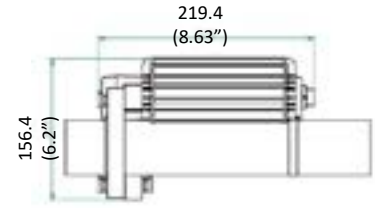
For pipe sizes: up to max. Ø45mm
(outside diameter)—DN40
PSU input voltage: 87 – 240vAC
Frequency: 47 – 63 Hz
Weight: 4.1 kg
Ferrites: 1 × 109mm; 3 × 126mm



Hydroflow Commercial 'C' Models (Cont.)

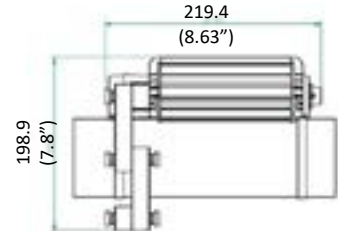
Order code: Hydroflow C50

For pipe sizes: up to max. Ø55mm
(outside diameter)—DN50
PSU input voltage: 87 – 240vAC
Frequency: 47 – 63 Hz
Weight: 4.2 kg
Ferrites: 4 × 126mm



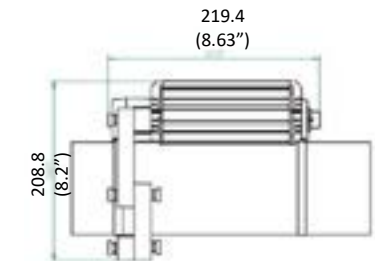
Order code: Hydroflow C65

For pipe sizes: up to max. Ø90mm
(outside diameter)—DN65
PSU input voltage: 87 – 240vAC
Frequency: 47 – 63 Hz
Weight: 4.4 kg
Ferrites: 3 × 109mm; 3 × 126mm



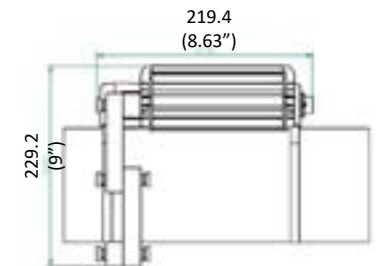
Order code: Hydroflow C80

For pipe sizes: up to max. Ø105mm
(outside diameter)—DN80
PSU input voltage: 87 – 240vAC
Frequency: 47 – 63 Hz
Weight: 4.6 kg
Ferrites: 1 × 109mm; 5 × 126mm



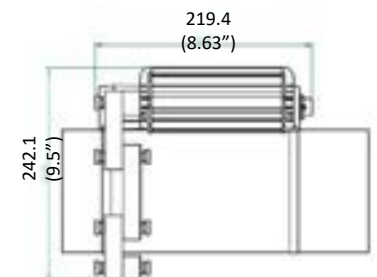
Order code: Hydroflow C100

For pipe sizes: up to max. Ø130mm
(outside diameter)—DN100
PSU input voltage: 87 – 240vAC
Frequency: 47 – 63 Hz
Weight: 4.8 kg
Ferrites: 6 × 126mm



Order code: Hydroflow C125*

For pipe sizes: up to max. Ø140mm
(outside diameter)—DN125
PSU input voltage: 87 – 240vAC
Frequency: 47 – 63 Hz
Weight: 5.0 kg
Ferrites: 7 × 109mm; 1 × 126mm



*For pipe sizes greater than Ø140mm please contact us.

Installation Guidelines

Hydroflow is best installed before the point of heat exchange or pressure change and on the outlet side of any pumps. Hydroflow is not flow dependent: choice of model is determined by pipework outside diameter. If pipework throughout the building is all new, you do not require extra unit(s) on the hot water secondary return pipe(s) to the hot water heater(s). However if the pipework is old (ie on a retro-fit job) we also recommend you fit extra unit(s) on the hot water secondary return pipe(s) to the hot water heater(s).

Location Criteria

Protecting Hot Water Heaters

Hydroflow is best fitted to the cold water supply pipe feeding a heat exchanger or calorifier. If using buffer vessel(s) prior to plate heat exchangers / hot water heaters, please ensure you fit a unit on the cold water make up pipe to the buffer vessel(s) and another unit(s) on the inlet pipe to each plate heat exchanger / hot water heater after the buffer vessel(s).....so that the water leaving the buffer vessel is re-conditioned before being heated.

Also fit another **Hydroflow** unit to the hot water re-circulating pipe to the heat exchanger or calorifier:

- if the flow of make up water is low
- if the make up water pipe is short
- if pipework is old and scaled up

DO ensure that **Hydroflow** is protected from surfaces that may exceed 55°C. Use non-metallic insulating material and select a larger model if necessary.

DO remember that **Hydroflow** descales and on retro-fit jobs, for an initial period after installation, greater than usual quantities of precipitate may be released as existing scale is broken down.

DO NOT expect **Hydroflow** to descale a pipe through which the water has almost stopped flowing.

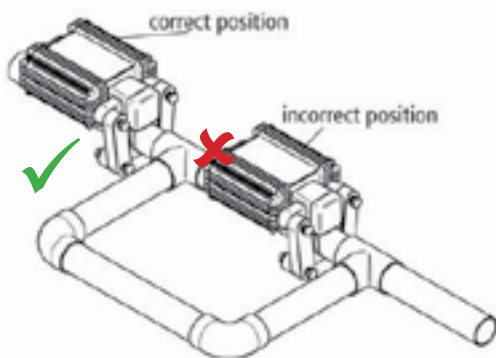
Do NOT fit **Hydroflow** on the inlet pipe to cold water storage tank. Fit unit(s) on outlet pipe(s) from cold water storage tank(s) and **AFTER** any pump / booster set(s). If in doubt, always ensure you fit a unit on the cold water make-up pipe to the hot water generator.

DO NOT think of **Hydroflow** as a water softener. **Hydroflow** treats the temporary hardness salts and not the permanent hardness salts. These can form scale when the water evaporates. A good quality water softener will remove almost all salts but it needs maintenance, can cause corrosion and can produce non-potable water.

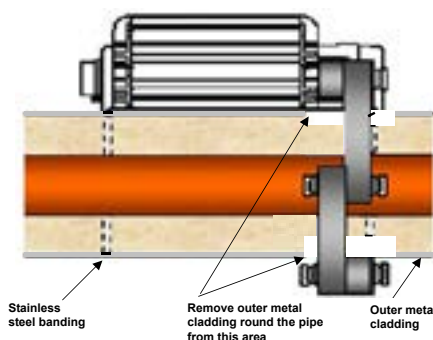
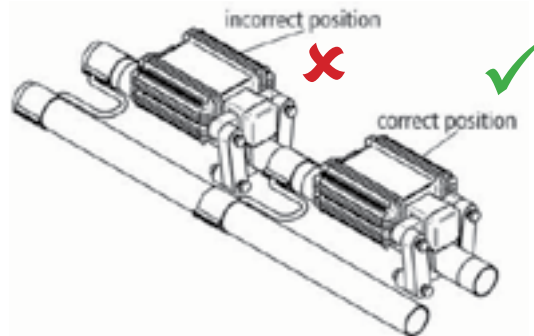
DO NOT fit **Hydroflow** before a pump (unless you deliberately only want to protect the pump) or a large filter or large volumous tanks.

DO NOT install **Hydroflow** inside a plumbing loop or an electrical loop (*see the diagrams below*).

Plumbing Loop



Electrical Loop



Fitting Commercial 'C' Model to a pipe with metal foil coated insulation

When the Hydroflow is fitted to pipe that has metal foil coated insulation it will be in an electrical loop caused by the metal foil.

To overcome this situation it is recommended that the outer metal cladding in the area where the unit is to be located is cut away around the pipe (*as shown on the drawing*).



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