

ZIP HYDROCHILL

High capacity chiller systems



IT'S WATER. REFRESHED.

MODEL NUMBER:

HC20 range



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PRECAUTIONS AND GENERAL RECOMMENDATIONS



- HydroChill is for internal use.
- Keep away from water jets.
- Always connect the HydroChill to a water main that supplies wholesome (cat 1) drinking water.
- Before first use, the HydroChill must be sanitised by an

authorised technician.

- After installation, ensure that the unit is not resting on the power cable.
- Check that the unit is level and that it is resting on a surface with sufficient load bearing capacity, in an environment that is suitable for its size and use.
- Before any maintenance or cleaning operation is carried out, remove the mains plug from the socket or disconnect the electrical power supply.
- Ensure that the product is not sited close to sources of heat.
- To guarantee adequate ventilation, leave at least 10cm clearance envelope of space around the HydroChill.
- Install the HydroChill in a clean, dry, well-ventilated environment. The HydroChill is designed to function in environments with a temperature range of between 5°C and 32°C - Climate Class N.
- Take care not to damage the cooling fluid circuit, it is filled with R290 gas, which is highly flammable. It is essential to ensure that the tubes of the refrigerant circuit are not damaged.
- Ensure that it is possible to disconnect the electrical power supply either by removing the mains plug or via a double pole isolation switch with a contact separation of at least 3mm in all poles.
- **The Appliance must be protected by an RCD or RCBO.**
- Check that the voltage shown on the rating plate corresponds to the voltage being supplied at the installation site.
- The HydroChill must not be cleaned with a water jet. Do not position other electrical equipment in the immediate vicinity of the HydroChill.
- Turn off the main water inlet isolation valve if the HydroChill is not to be used for a long period.
- Keep the areas surrounding the HydroChill dry, to avoid the risk of slipping.
- CO₂: You can have serious health problems if breathing air containing concentrations of CO₂ up to 15000ppm (1.5%) for more than 10 minutes. Proper ventilation must be provided to ensure that, in case of escape, concentrations of CO₂ remain below this level.
- **If the supply cable is damaged, it must be replaced by a Zip service technician or similarly qualified person in order to avoid a hazard.**
- **Do not use extension leads or adapters.**
- **This appliance is not intended to be used by persons (including children**

PRECAUTIONS AND GENERAL RECOMMENDATIONS

aged from 8 years) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they are given supervision or instruction concerning use of the appliance by a person responsible for their safety.

- **Children should be supervised to ensure that they do not play with the appliance.**
- **The appliance is only to be installed in locations where it can be overseen by trained personnel.**
- **This equipment is to be installed in compliance with the local plumbing regulations.**
- **Water pipe connections and fixtures directly connected to a wholesome (cat 1) water supply shall be sized, installed, and maintained in accordance with local regulations.**
- This manual is based on information available when approved for printing. Continuing design refinements could cause changes that may not be included in it, visit www.zipwater.co.uk

BEFORE INSTALLING THE HYDROCHILL

- Congratulations for choosing a HydroChill.
- We have designed and manufactured this product with great care to ensure that it will dispense water of the highest quality.
- In order to get the most out of your HydroChill, please read the instructions in this manual and retain the manual for future reference.

APPROVALS

This HydroChill is designed, manufactured and marketed in compliance with:

- The safety objectives of the Machinery Directive 2006/42/C.
- The protection requirements of the Electromagnetic Compatibility Directive 2014/30/EU.

The electrical safety of the product is ensured only when it is properly connected to an efficient, legally compliant grounding circuit.

PRODUCT DESCRIPTION



Spout tap models



Push button models

HydroChill — a new water-cooler with a modern and elegant design.
The main features of the unit are as follows:

Modern design using strong materials and a front plexi-glass panel with elegant lighting.

Highly insulated ice-bank

Cooling serpentine coil made with AISI grade 316 stainless steel for wholesome water.

2 supply options chilled and sparkling water or chilled and ambient water

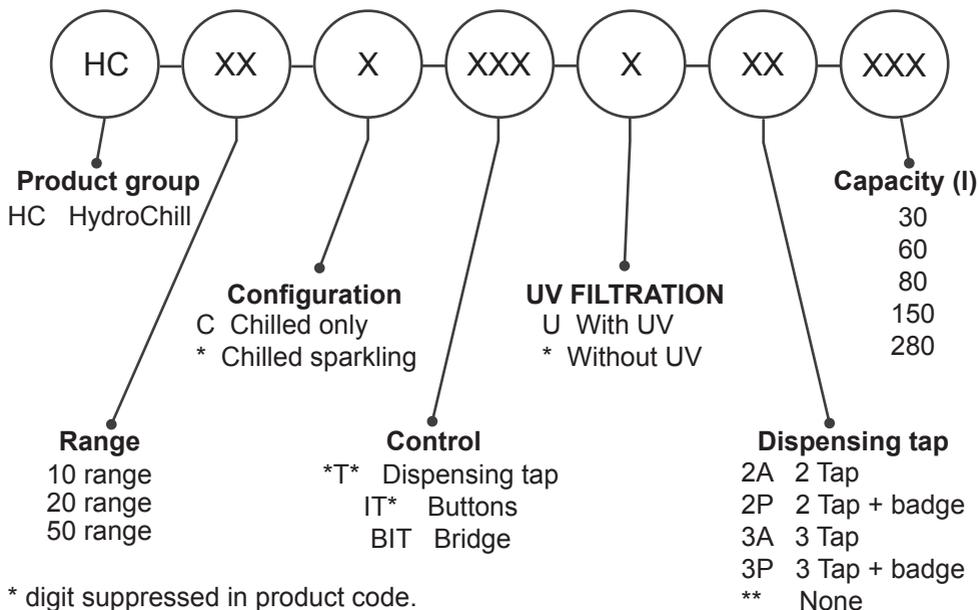
Body and internal fabrication parts made entirely from stainless steel.

Professional carbonator and dispensing taps made with AISI 316 stainless-steel.

Easy opening for maintenance.

Dispensing point for bottles of up to 320mm height.

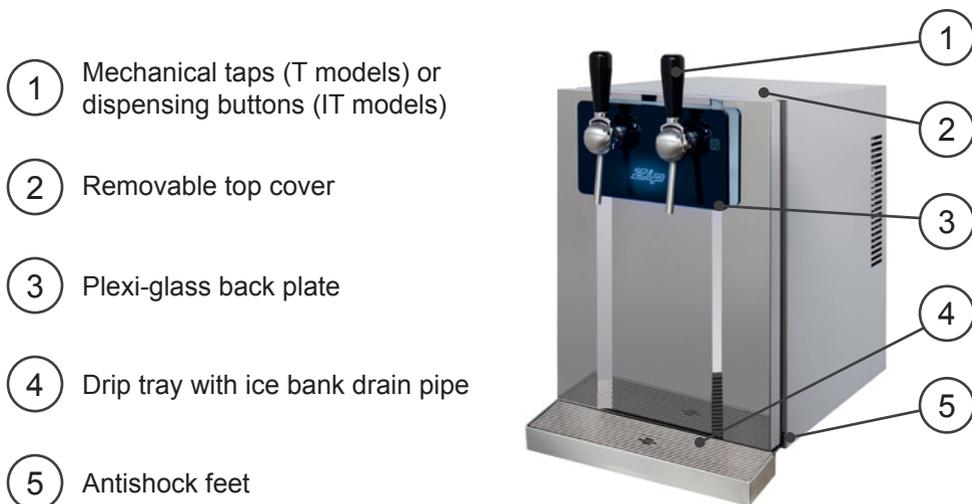
Explanation of HydroChill range product code



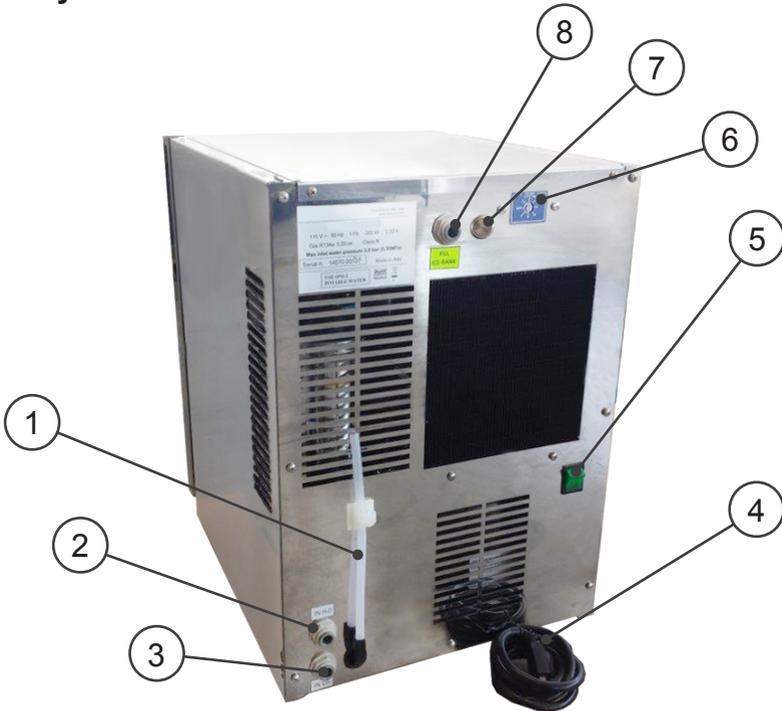
Example

HC50CBITU280 Is a HC50, chilled only, bridge tap, with UV, 280 litre capacity.

Front of HydroChill (T model shown)

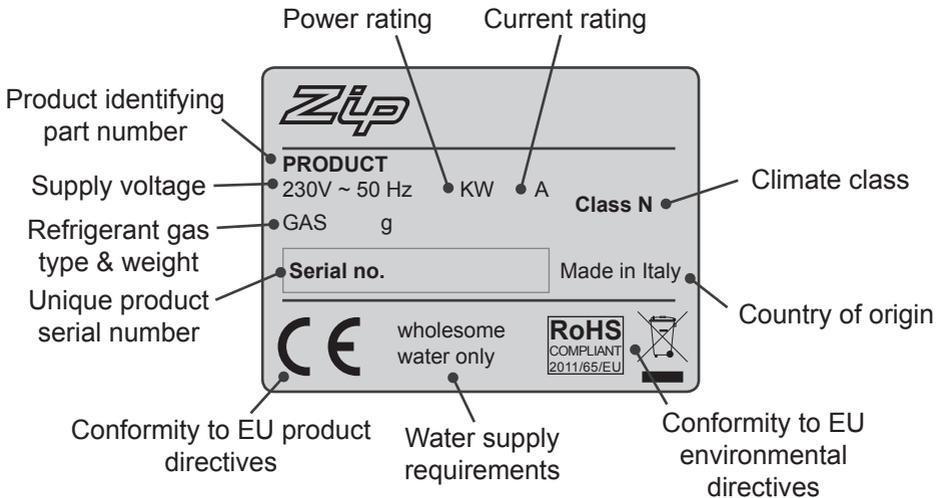


Rear of HydroChill

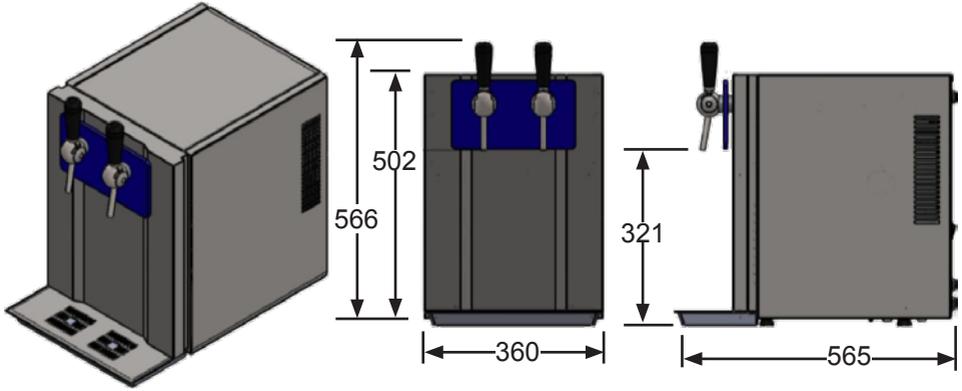


- 1 Ice bank level
- 2 Wholesome (cat 1) water inlet pipe fitting Ø8 mm
- 3 CO₂ inlet pipe fitting Ø8 mm
- 4 Power cable
- 5 Power switch
- 6 Adjustable thermostat
- 7 Energy Saving button (IT 80 model)
- 8 Ice bank inlet pipe fitting Ø8 mm

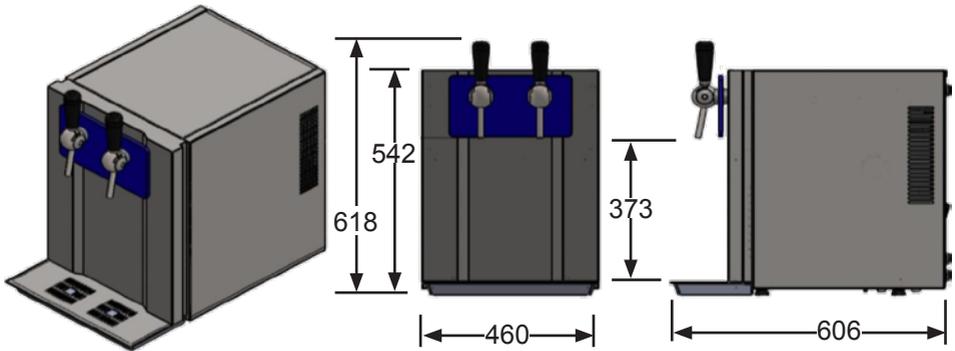
Rating plate



80 litre models



150 litre models



TECHNICAL DATA

Technical Data Sheet	80	150
Cooling capacity, l/h	80	150
Continuous supply, l	45	80
Cold water temperature°C	5 - 12 *	
Cooling technology	Ice bank - Single coil	Ice bank - Double coil
Ice bank capacity, l	14	18
Ice bank, kg	5	8
Pump	Professional membrane carbonation pump	Professional rotary carbonation pump
Condensation	Forced ventilation	
Adjustable thermostat	Yes	
Refrigerant gas	R290	
Electricity supply, V	230 - 50 Hz	
Compressor power, HP	1/5	1/3
Power, W	530 W - 2.3 A	875 W - 3,8 A
Inlet water Pipe, mm (")	Ø 8 (5/16)	
Inlet water pressure, bar (MPa)	2.5 bar (0.25) - 3.5 bar (0.35)	
Inlet CO ₂ pipe, mm (")	Ø 8 (5/16)	
Dispensing height, mm	321	373
Dimensions WxDxH (mm)	360x565x566	460x606x618
Net weight (kg)	35	44
Gross weight (kg)	38	49

* rated at a room temp. of 25°C and inlet water temp. of 20°C

Unpacking

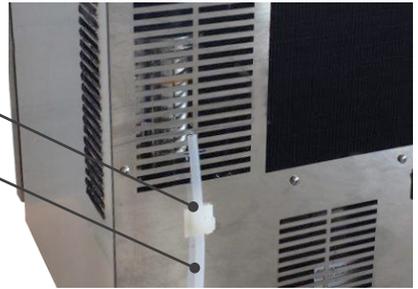
- Remove the plastic straps.
- Lift the internal cardboard box up and out of the cage.
- Once you have unpacked the HydroChill, check to ensure that it is not damaged.
- If the HydroChill has been shipped horizontally or at an angle, it will be necessary to wait at least 8 hours before setting it up, in order to allow the cooling circuit to reset itself.
- Ensure that the unit is installed and connected to the mains water and electricity supplies by a qualified technician, in compliance with the manufacturer's instructions and the local safety regulations.



Note there are no user serviceable part inside the HydroChill.

Siting the product

- Wear safety gloves when handling the HydroChill.
- Site the HydroChill away from sources of heat.
- Ensure surface is level.
- Leave at least 10 cm around the HydroChill to allow for adequate ventilation.
- Sanitise the HydroChill before first use see page 24.
- Tighten the tap knobs, (BT models) and position the drip tray (4).



Filling the ice bank

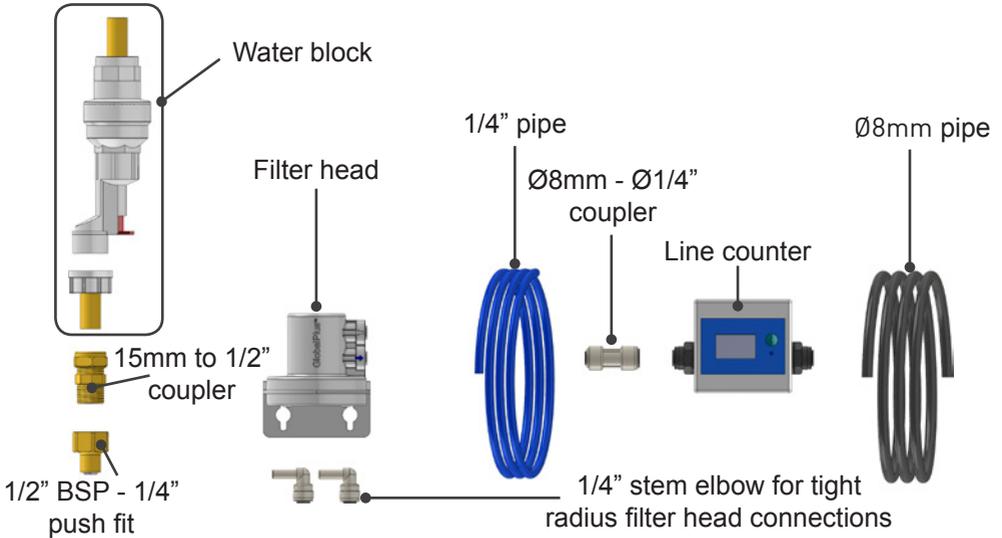
- Fill with wholesome (cat 1) water via the rear fitting (1).
- Stop filling the ice bank once you reach the max level (2) on the ice bank level pipe (3).
- If you exceed the limit, water comes out from the frontal drip tray (4).
- Once you have filled the ice bank, avoid moving the HydroChill.
- If you have to move the HydroChill, remember to empty the ice bank first.

Emptying the ice bank

Empty the ice bank through the ice bank level pipe (3).



Water supply connection kit

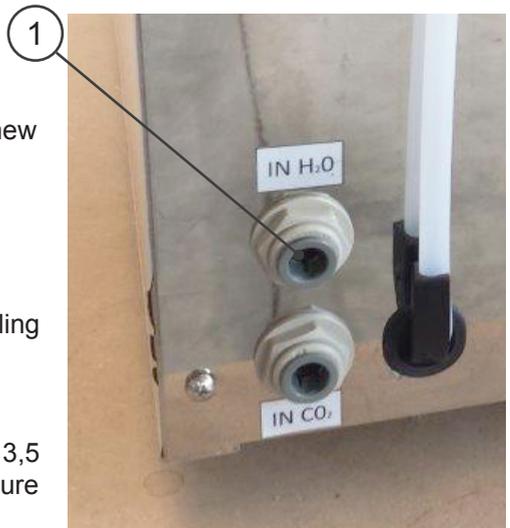


Connection to the mains water supply

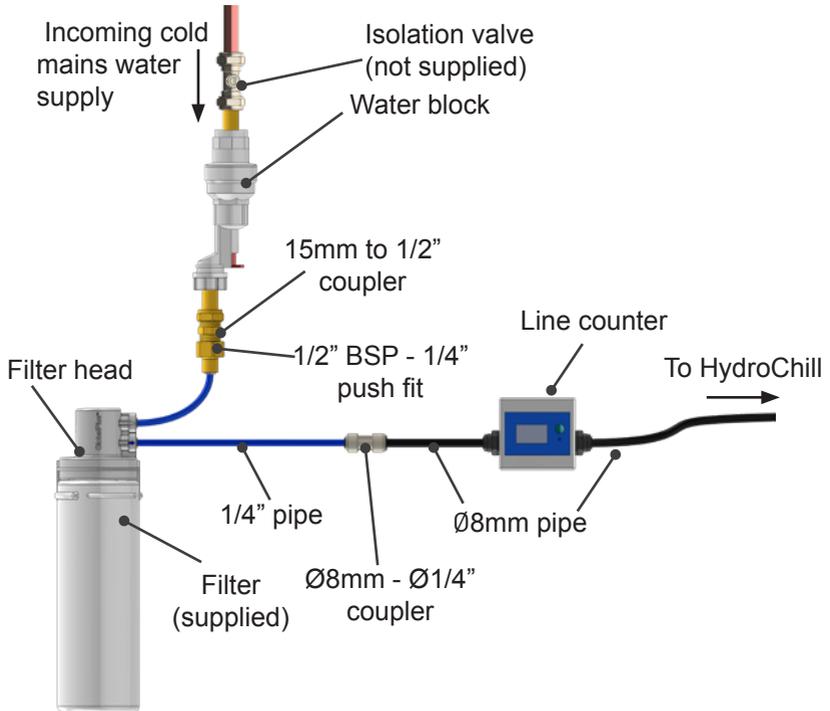


WARNING (also see precautions pages 3 & 4)

- To connect the HydroChill to the mains water supply, always use a new set of connectors, pipes & fittings.
- Mains water pressure limits, see Technical data page 11.
- Check that the mains pressure is between 2.5 bar and 3,5 bar.
- To enhance the quality of the sparkling water dispensed, an incoming flow rate in excess of 3.5 l/min is recommended.
- If the water pressure is higher than 3,5 bar it is necessary to install a pressure reducer.



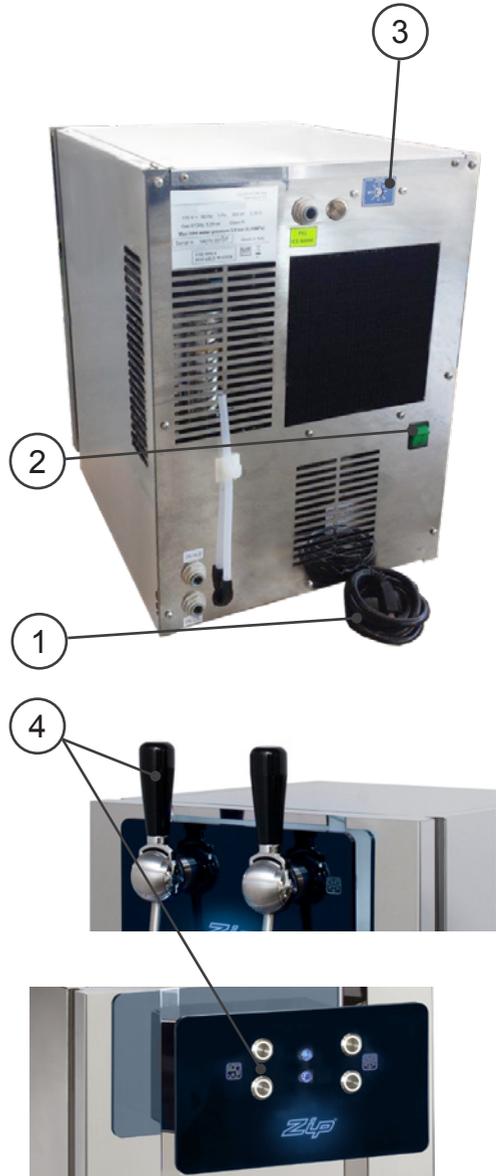
Water supply connection detail, assembled



- Connect Ø8mm incoming water tube (1) to the inlet system, (see page 14 & above) .
- Once the pipes are attached, turn on the tap. Ensure there are no leaks.
- Before drinking the water from the system sanitise the appliance & thoroughly purge of the system by dispensing water for 5 minutes, dispense from all taps.

Electrical connection

- The connections must comply with local regulations.
- The HydroChill must be earthed.
- Connect the power cable **(1)** to a mains socket.
- Turn the HydroChill on by selecting the “I” position on the power switch **(2)**.
- The ice-bank pump, compressor and fan are now activated.
- Dispense sparkling water **(4)** in order to release any air in the circuit and to allow the pump to fill the carbonator with water.
- After around 1-2 minutes, the sparkling water pump stops.



Thermostat

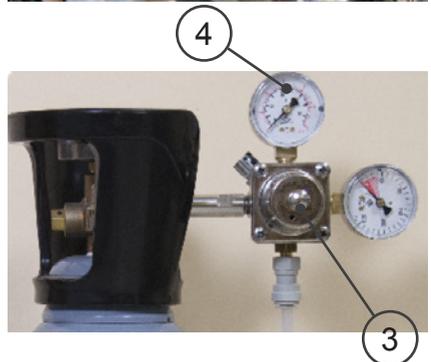
- The thermostat **(3)** is set in the maximum position to control the ice bank.
- To avoid the formation of ice in the bank, turn the thermostat screw at least 1/4” anti-clockwise.
- In the case of freezing of the water circuit, turn off the unit and keep it off for at least 12 hours.

Installing the CO₂ cylinder (sparkling models) (Not supplied by Zip)



WARNING (also see precautions pages 3 & 4)

- The area must be properly ventilated.
- The CO₂ cylinder must be used in a vertical position, and must be restrained safely, to prevent it falling over.
- Double check that the cylinder is the correct CO₂ gas for this application :E290 food-grade carbon dioxide.
- Once the unit is connected to the mains water and electricity supplies , install the CO₂cylinder.
- Attach the regulator & CO₂ pipe to the cylinder valve.
- Insert the CO₂ inlet tube from the cylinder into the fitting (1). To be sure to remove any air in the hydraulic circuit and to achieve a good level of carbonation, before opening the valve on the CO₂ cylinder pull the ring of the remote safety valve (2) until water comes out of it.
- When the cylinder is open, to increase or decrease the level of carbonation of the water, you need to adjust the screw (3) on the pressure reducer.
- Turning it clockwise increases the level of carbonation.
- We recommend that you do not exceed 4 bar of pressure (4).
- To achieve a good level of carbonation, you need to wait until the water is sufficiently cold – i.e. at least one hour after installation.



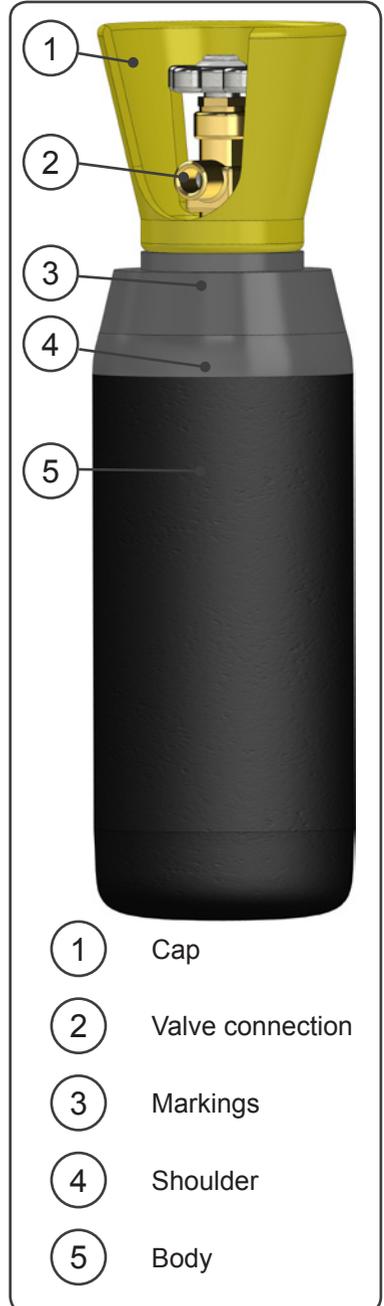
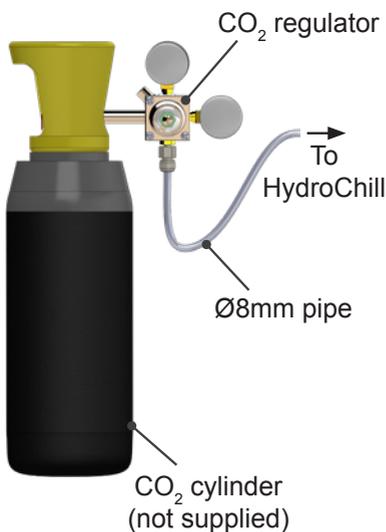
General CO₂ cylinder safety guidelines



WARNING (also see precautions pages 3 & 4)

- All of the cylinders must be fitted with a valve protector cap, which must be tightly secured at all times when the cylinder is not in use.
- The cylinders must be handled with care. It is essential to avoid: Clashes with other cylinders or surfaces; dropping the cylinders; or subjecting them to mechanical stress.
- All of the above may compromise their integrity and resistance.
- The cylinders must not be lifted by the cap, or dragged, rolled or slid along the floor even if only being moved for short distances.
- An appropriate hand cart or other suitable means of transport should be used.
- Do not use magnetic lifters, slings or rope to lift the cylinder.

CO₂ connection (sparkling models)

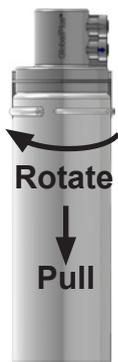


Filter removal, replacement & flush

Insert filter



Remove filter



Caution Water will drip as the cartridge is removed. Do not tilt the cartridge as water may spill from it if tilted.

- Isolate the water supply.
- Unpack replacement cartridge and remove sanitary cap, write today's date where shown on the label. Avoid touching the filter o-rings and filter opening as this may cause bacterial contamination of the cartridge.
- Align the front cartridge label to the left (as shown in the "insert filter" diagram adjacent), and push the new cartridge up into the filter head.
- Turn the cartridge a quarter turn anticlockwise until it comes to a complete stop and locks, with the front label facing forward.
- Turn on the water supply.
- Flush the filter by dispensing chilled or ambient water for 5 mins.
- When completed, clean up and dispose of old cartridge and packaging.



WARNING

If the HydroChill is switched off for a long period of time (e.g. more than a weekend), run water through the chilled water outlet for at least 5 minutes before consumption.



WARNING

The light emitted by the ultraviolet lamp may cause serious burns to the eyes and skin.

Installation, repair and maintenance shall only be performed by personnel qualified to work on UV products.

Sterilizing UV filter

- Alongside the external filter, it is also possible to fit a UV-C ($\lambda=254$ nm) sterilizing filter on the dispensing point.
- The UV-C light emitted by the special 4W mercury vapour lamp is lethal for all micro-organisms (bacteria, viruses, mould, algae, etc.); for this reason, water treated with the UV-C sterilizer will be micro-biologically pure.

Technical data

- Material AISI 304 and quartz tube
- Power rating 24V AC
- Power consumption 4Wh
- Maximum capacity of the lamp 9.000 h (max 12 months)

The UV sterilizer complies with European quality and safety guidelines.

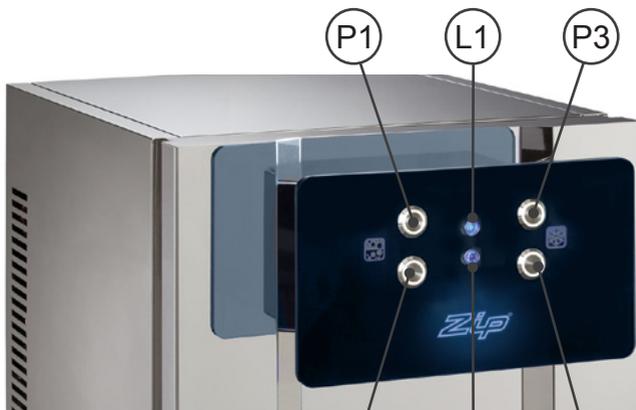
Dispensing operation (T models)

Pull forward the tap handle to dispense.
Push it back to stop.



- ① Filtered sparkling water ② Filtered chilled water

Dispensing operation (IT models)



- ① P1 Filtered sparkling water
② P2
③ P3 Filtered chilled water
④ P4

- Blue LED (stand by):
① L1 Fast flashing - Little or no water at the inlet
Slow flashing - Little or no CO₂ at the inlet
Green LED:
② L2 Fixed - ENERGY SAVING mode active
Flashing - Programming mode active

Dispensing operation

- The HydroChill (IT models) is equipped with a volumetric dispensing system. The dispensing quantities are easily programmable during installation.
- Turn on the HydroChill, the default settings are as follows:
the upper buttons dispense 200 ml of water
the lower buttons dispense 1000 ml of water.

Button functions

- Sparkling water upper dispenser button (**P1**)
 - Chilled water upper dispenser button (**P3**)
 - Sparkling water lower dispenser button (**P2**)
 - Chilled water lower dispenser button (**P4**)
-
- The pre-set quantity of water is dispensed, but you can stop the dispensing process at any time by pressing the button again.

Setting the quantities (products with portion control option)

- Using the volumetric dispensing functionality, you can customise the pre-set quantities dispensed by each of the 4 buttons. Normally, the upper buttons are used for the dispensing of small quantities, with the lower buttons being used for the dispensing of larger quantities.
- To enter the programming mode, press and hold (for > 4 seconds) the following combination of buttons: (**P5**) (see page 23) + (**P3**) + (**P4**) (Energy saving button + the two chilled water buttons). When you enter the programming phase, you will hear three consecutive beeps.
- In this phase, LED (**L1**) + (**L2**) start to flash.
- To set the maximum dispensing limit for a specific button, press the button in question to start the dispensing process and press it again once you have reached the desired quantity.
- Repeat the process for the remaining buttons.
- To exit from the programming mode, press and hold (for > 4 seconds) the following combination of buttons: (**P5**) + (**P3**) + (**P4**) (Energy saving button + the two chilled water buttons), save the data and set the new limits.
- The maximum settable quantity for each button is around 3,0 litres, which equates to a 65-second dispense.

Functionality with alarms activated

No water alarm

- This alarm is triggered when the pump sends the no water signal. In this case, the associated blue LED (**L1**) starts to flash quickly and the sparkling water dispensers do not work. The other dispensers continue to work as normal.
- To reset the alarm, turn the unit off and back on again.

No gas alarm

- This alarm is triggered when the CO₂ pressure switch sends the no gas signal. In this case, the associated blue led l.1 Starts to flash slowly and all of the dispensers continue to work as normal.
- To reset the alarm, connect a new CO₂ cylinder.

Energy saving (stand by)

- The function is activated pressing button (**P5**) for < 4 seconds.
- The energy saving (stand by) mode slows down the activation time of the compressor; the compressor functions for 30 minutes every 8 hours.
- When the unit is on stand by, the green LED (**L2**) Is on and LED (**L1**) Is off.
- When it is not on stand by, the LED (**L2**) is off.
- Once the stand by function has been activated, it can be deactivated using button (**P5**) or any other button for the dispensing of water.



General guidelines

- The HydroChill should be sanitised at first installation or
- When the hydraulic components are being replaced, or
- When the filter is being changed, or in any case at least once a year.
- This operation must be carried out by a Zip qualified technician who has completed specific training courses on hygiene and sanitisation.

External cleaning of the unit



Read the precautions and general recommendations, page 3

- To clean the HydroChill, use a soft cloth and a dedicated stainless steel cleaner.
- To remove lime-scale use a proprietary cleaning agent (citric acid or similar).
- **DO NOT USE** alcohol or solvent based products or excessively acidic solvents that can ruin the surface of the steel.

Cleaning the drip tray

- When it is necessary to clean the drip tray, use a diluted lime-scale cleaner (citric acid or similar).
- The drip tray can also be washed in the dishwasher.

Cleaning the dispensing nozzles

- On a daily basis, spray a diluted hydrogen peroxide solution (e.g. Cooler Clean) onto the nozzles., or use sanitisation wipes, available from Zip - call 0345 6 005 005.

Cleaning the keypad

- Before cleaning the keypad, it is essential to turn off the HydroChill to avoid accidental dispense.
- Clean with a soft cloth and alcohol-free glass-cleaning products.
DO NOT USE water to clean the HydroChill, or abrasive detergents.

End of life disposal



The use of this crossed out wheeled bin logo indicates that this product needs to be disposed of separately to any other household waste.

Within each of the European Union member countries, provisions have been made for the collection and recycling of unwanted electrical and electronic equipment.

In order to preserve our environment we ask that you dispose of this product correctly. Please contact Zip Customer Service for advice on 0345 6 005 005.

Packaging materials

The packaging materials are 100% recyclable. Please follow the local guidelines on waste disposal. For safety reasons keep the packaging material out of the reach and sight of children.



Information on the natural, eco-friendly refrigerant gas used in this HydroChill

This product contains no CFCs or HFCs, which contribute to global warming. Indeed, it is the first water cooler on the market to use natural refrigerant.

The refrigerating system is filled with HC R290 – Propane: a natural gas that does not contribute to global warming and that, thanks to its specific characteristics, allows for substantial energy savings to be made.

WARRANTY

The Zip appliance you have chosen is precision-built from the finest materials available and should give many years of trouble free service.

Certain warranties may be implied by law into your contract with Zip. The warranty provided below is additional to these implied warranties and nothing set out below shall limit your statutory rights or rights at law.

Zip Water UK warrants that, should any part fail within 24 calendar months of installation, that part will be repaired or replaced free of charge by Zip or its Distributor or Service Provider, except as set out below, provided the appliance is installed and used strictly in accordance with the instructions supplied, and that failure is not due to accident, misuse, abuse, unsuitable water conditions, or to any alteration, modification or repair by any party not expressly nominated by Zip. No costs are payable by the customer other than any mileage or travelling-time charges incurred by a Zip Service Provider or the cost of removal, cartage and re-installation of any component of the appliance if it needs to be returned for repair to Zip or its Distributor.

This warranty does not cover damage resulting from non-operation of the appliance or consequential damage to any other goods, furnishings or property.

Zip does not exclude, restrict or modify any liability that cannot be excluded, restricted or modified or which cannot, except to a limited extent, be excluded, restricted or modified as between the owner or user and Zip under the laws applicable.

Furthermore, this warranty does not displace any statutory warranty, but, to the extent to which Zip is entitled to do so, the liability of Zip under any statutory warranty will be limited at Zip's option to the replacement of the appliance or supply of equivalent appliance, the payment of the cost of replacing the appliance or acquiring an equivalent appliance, or the payment of the cost of having the appliance repaired or the repair of the appliance.

Note It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.

To ensure you have the latest revision of this instruction manual, please visit www.zipwater.co.uk to download the latest copy.

IMPORTANT No liability is accepted for incorrect use of this product.

NOTES



IT'S WATER. REFRESHED.



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