AQUABAR FIREWALL®

Mains-Fed Floorstanding Water Cooler

End User Manual

Warnings

Before using this machine, please read this manual. Please follow the instructions for proper operation and to prevent risk and damage. This manual is part of the product. It contains important information on safety as well as the installation, use and disposal of the product. Please familiarize yourself with all the included information before using the product. The product may only be used as described in this manual. Use grounded power socket with correct voltage.
To reduce risk of injury and property damage, user must read this entire guide before installing and using this dispenser. Failure to execute the instructions in this manual may result in personal injury or damage to property. When operating this dispenser always exercise basic safety precautions including the following:

Prior to use, this dispenser must be installed in accordance with this manual. This dispenser is intended for potable water dispensing only. Do NOT use other liquids. Never use any liquid in the dispenser other than known and microbiologically safe water.

Do not use if plug or cable are damaged.

The power cord should be positioned so that it is not likely to be pinched, shrunk, walked on, kinked, wetted or tripped over. If the power cord is damaged, it must be replaced by the manufacturer, its maintenance department or similar professionals to avoid danger.

The appliance must be protected by a residual current device (RCD). Never unplug by pulling power cable, always hold the plug.

The disconnection of the electrical supply must be possible either by unplugging the plug or by means of a two-pole mains switch placed upstream of the socket. Check that the voltage on the rating plate corresponds to that of the installation location. To protect against electric shock, do not immerse plug or cable in water or any other liquid. Do not operate with wet hands.

Do not install the unit close of sources of ignition. Any malfunction of the systems must be promptly reported to the Culligan Customer Service, immediately discontinuing use of the system.

Culligan is not responsible for the consequences of continued use of a system that has shown anomalies. This appliance is not intended to be used by individuals (including children) with reduced physical, sensory or mental capabilities, or who lack experience and knowledge, unless they are under supervision or have been instructed to use the appliance by an individual responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

Never leave the product unattended when children and/or animals are around. The product may be put out of balance and may fall, hurt or in worst case even cause fatal injuries. Mount the product on a floor stand that meets the minimum requirements for stability. Do not place the system on top of other appliances. Do not place other electrical appliances in the immediate vicinity of the water dispenser. Keep the areas around the product dry to prevent people from slipping on wet surfaces.

Warnings during installation

• Ensure all Local, State, and Federal Laws and Codes including health and safety guidelines are met when installing Culligan Equipment. Only qualified service technicians should attempt installation and service of Culligan Equipment.
• The product can be installed in the following places: indoor environment.
• Do not place objects on the water dispenser.
• The installation must be carried out only by qualified and authorized personnel, and with the best state of the art in compliance with what is reported in the technical manual.
• Do not place the dispenser on other objects.

• Check that the machine is well leveled and that it rests on a floor or surface capable of supporting its weight and in an environment suitable for its size and use.
• Before any maintenance or cleaning operation, unplug the machine from the power outlet or disconnect the power supply.
• Installation in outdoor environments exposed to rain or snow is prohibited. Check all relevant parameters (ambient temperature, electricity, water mains pressure) before installation, making sure that all parameters are in line with the technical requirements of the product and in line with the applicable local regulations.
• The machine is not suitable for installation where there are jets of water for cleaning.
• Do not place the machine near sources of heat, flames or the like and damp surfaces
• The dispenser must be placed on a flat, level and dry surface with an adequate capacity for the weight of the product.
• Maximum temperature of the installation environment 32 °C.

The area chosen for installation must be clean, dry and ventilated, with the equipment placed away from heat sources.

WARNING: *during handling or maintenance, always keep the machine in a vertical position. The machine can only be tilted to the rear. Do not tilt or lay the machine on its right, left or front side. This operation could compromise the operation of the compressor.*

WARNING *ELECTRICAL SHOCK HAZARD. Always unplug (isolate from power supply) to prevent electrical shock except where electrical tests are specified.*

WARNING *IMPROPER SUPPLY OR CONNECTION CAN RESULT IN RISK OF SHOCK. Connect to a 13 amp 230V 50Hz properly earthed outlet. Ensure polarity is correct and always use a 3-prong outlet. Consult a qualified electrician if you have any questions.*

WARNING *USE ONLY Culligan SUPPLIED POWER CORD. Locate system within 1m of power supply. Never use an extension cord or adapter. Do not use a damaged power cord or plug. Keep power cord out of heavy traffic areas and away from heat sources. Do not, under any circumstances, remove ground prong or alter the power cord. Never pull the power plug from the outlet with a wet hand or allow the plug to get wet.*

WARNING USE A WATER PRESSURE REGULATOR. Culligan will not be responsible for injury or damage caused by excessive water pressure. Operating pressure must be 2 Bar to 3.5 Bar (29 psi to 50 psi.

WARNING USE UV STABLIIZED SUPPLY LINES. Feed the unit with a potable ambient or cold water supply only. Feed water over 40ºC (105ºF) can damage the treatment components. Water block devices and external leak detectors are strongly recommended. Locate the unit as close to the water supply and the electrical connections as possible.

WARNING STORE UNIT EMPTY. ALWAYS SANITIZE BEFORE USE.
The unit must be completely drained and sealed before storing to avoid stagnation and reduce microbiological contamination (potential bacterial growth). Sanitize before use to eliminate any potential microbiological contaminants

Environmental characteristics

The intended operating environment must have the following characteristics:
• Temperature: +16 / + 32°C
• Maximum relative humidity: 50%

The dispenser cannot be used in open areas and/ or exposed to atmospheric agents, or places with corrosive and/or abrasive powders, vapors or fumes, with risk of fire or explosion, and, in any case, where the use of explosion-proof components is prescribed. Never exposed to direct sunlight, heat sources, or ambient air temperature above 32ºC (90ºF) or below 16ºC (61ºF). Install indoors and keep unit away from excessive humidity. Never expose to freezing temperatures.

Ensure there is adequate clearance around the unit to allow refrigeration system condenser to dissipate heat. Warmer environments require more clearance around the unit. Minimum clearance around all surfaces of the machine is 10 cm for proper heat dissipation and efficient operation.

Before each installation the product must be sanitized by an authorized technician.

ATTENTION: *if environmental conditions other than those prescribed are encountered during installation, or if they undergo variations over time, the Culligan Assistance Centre must be contacted immediately before using the dispenser for the necessary checks.*

Please look at the technical specifications and operating limits at the Description of the Unit Chapter to ensure that the location where the unit will be installed fulfills the installation requirements in terms of environmental temperature, mains pressure among other operation requirements.

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

This product contains no CFCs or HFCs, which contribute to global warming.

The refrigerating system is filled with HC R290 – Propane: a natural gas with low global warming potential. HC R290-Propane gas is highly flammable, it is therefore essential to ensure that the refrigerant circuit pipes are not damaged.

ATTENTION*: R290 is flammable gas, do not damage the refrigeration circuit. If damage occurs, keep away from sources of ignition, ventilate area and call service provider.*

Electrical safety

This water cooler is designed, manufactured and marketed in compliance with:

- DIRECTIVE 2014/30/EU of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility.
  Published on 29/3/2014 at Official Journal of the European Union
- DIRECTIVE 2014/35/EU of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits.
  Published on 29/3/2014 at Official Journal of the European Union
- DIRECTIVE 2011/65/EU of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.
  Published on 1/7/2011 at Official Journal of the European Union.

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

Safety Warnings

This manual contains sections regarding safety conditions, preceded by specific words:

NOTE: *This word is used to indicate information deemed important regarding installation, operation and maintenance of the system.*

WARNING: *This word is used to indicate a hazard which, if ignored, could cause injury, or damage to the premises and people.*

Instructions to take into account

Read and understand this manual and its safety instructions before using this product. Failure to do so can result in serious injury or death. Follow all the instructions.

This will avoid fire, explosions, electric shocks or other hazards that may result in damage to property and/or severe or fatal injuries.

The product shall only be used by persons who have fully read and understand the contents of this user manual. Keep all safety information and instructions for future reference and pass them on to subsequent users of the product.

Obtaining Documentation and Information

The latest version of the User Manual and Technical Manual can be accessed and downloaded by scanning the QR code below, or visiting our support website: **technical.culligan.eu**

If you are reading product documentation on the internet, any comments can be sent to Culligan customer service. Contact details are available on the support website.

Serial number

Every machine has a serial number which is located on a sticker on the back of the machine.

NOTE: *Do not remove or damage the serial numbers. These must be provided upon request for guarantees, repairs or replacements.*

This publication is based on information available at the time of printing. Subsequent updates may give rise to modifications and changes not stated in this publication.

NOTE: *To reflect ongoing research and development, the manufacturer reserves the right to change product specifications and the content of this technical documentation without prior notice.*

Contents

Introduction

Before installing the product

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

The product shall only be used according to the instructions as described in this manual. All use other than described in this manual is seen as unintended use.

The product shall be used with original accessories and original components.

Before any handling, installation, ordinary and extraordinary maintenance of the systems, close the water supply tap and turn off the On/Off switch. Reconnect the hydraulic and electrical system to conclude the maintenance and the functional check.

Please look at the technical specifications and operating limits at the Description of the Unit Chapter to ensure that the location where the unit will be installed fulfills the installation requirements in terms of environmental temperature, mains pressure among other operation requirements.

It is important to emphasize that, in the case of direct sale and/or rental of dispensing systems intended for providing drinking water in public establishments and/or premises subject to HACCP, the direct and indirect responsibility for the dispensing of water (food safety) lies with the purchasing user in the role of FBO (Food Business Operator), as required by Regulation EC 852/04 on hygiene and food safety self-control.

Finally, we recommend verifying with the competent local authorities (ATS/AUSL/ASL) any mandatory requirements related to the drinking water dispensing equipment installed on the water supply networks.

Intended use

These water dispensers coolers were designed to provide large quantities of ambient, cold and sparkling water.
They are easy to use and manufactured using top quality materials, offering the utmost hygiene and ease of maintenance.

This equipment is intended to dispense drinking water that complies with the local and European applicable Drinking water Regulations. It is intended for community centers, cafeterias, restaurants, hotels and bars, offering a valid alternative to water in bottles. The appliance is not suitable for use in open places.

Description of the unit

Aquabar Firewall is a water dispenser designed for the delivery of food-grade filtered still or sparkling water, at room temperature or chilled.

It is intended for community centers, cafeterias, restaurants, hotels and bars, offering a valid alternative to water in bottles.

It is constituted by a water-cooling unit that incorporates an internal carbonating device, combined with the Culligan Carbon Block filtration system.

The filtration system has been designed to resolve the common problems of water quality, ensuring the elimination of all traces of impurities, as well as of unpleasant odors and flavors caused specifically by the presence of chlorine. The operating limits and the filter specifications are shown on the technical data sheet supplied with the Carbon Block EVO pre-filtration kit.

The Culligan Carbon Block microfiltration treatment is supplied with all models and is installed separately, in the under-sink space, using the supplied support bracket.

It is available in the following electronic versions with two dispensing taps:

- **Aquabar Firewall CS**
- **Aquabar Firewall CA**

The cabinet version is installed in a visible position, on the floor.

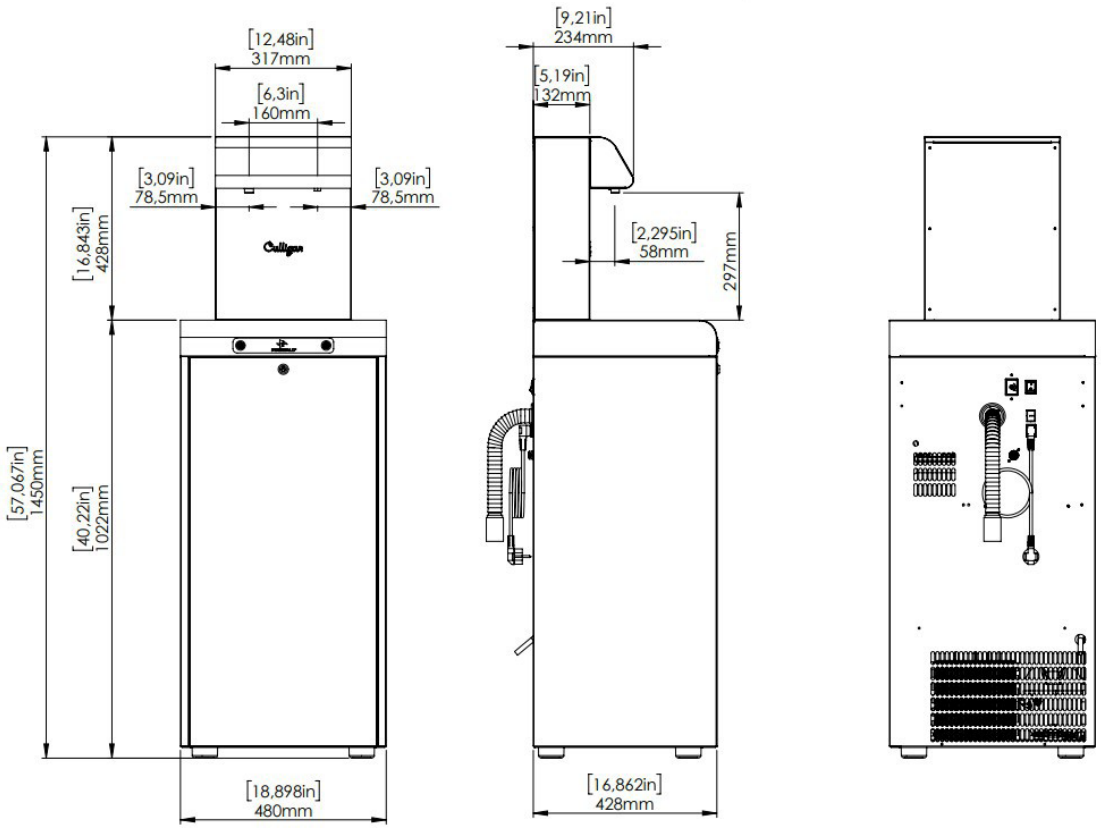
This series of professional dispensers is designed using highest-quality Italian components and deploys “ice bank” technology, supplying 80 litres of refrigerant capacity and thus satisfying the requirements of small-,medium- and large-scale catering operations.

The range stands out for its elegant styling, compactness, silent operation and low level of electrical consumption. Moreover, it is exceptionally easy to install and to run.

Floor-standing model available in electronic versions.

Aquabar Firewall

Technical specifications and operating limits



	AQUABAR FIREWALL
Single-phase supply voltage +/- 10%	230V 50Hz
Max electrical consumption	CS 530W – 2.3A CA 400W – 1.75A
Ambient running temperature	16 – 32 °C
Refrigerant gas	R290
Ventilated air condenser	Yes
Water pump type (CS model)	Membrane
Carbonating system (CS model)	Saturator
Temperature Min – Max*	5 – 12 °C
Operating pressure	2 – 3.5 bar
Refrigerant capacity	80 Lt/h
Ice bank capacity	14 Lt
Ice bank	5 Kg

	AQUABAR FIREWALL
CO_2 operating pressure Min – Max	3.5 – 4 bar
Net weight	42 Kg
Gross weight	48 Kg
Dispenser dimensions WxDxH (mm)	480 x 428 x 1450
Packaging dimensions WxDxH (mm)	520 x 474 x 1562
Warehouse storage temperature	Min 2 °C – Max 40 °C

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

NOTE: *The flow rate in litres/hour relates to the refrigerant capacity. The instant flow rate at the dispensing tap is around 2,7 litres/minute.*

Aquabar Firewall

A compact system that is entirely made of stainless steel. The cooling technology is high insulation ice bank. The appliance is equipped with supply buttons offering two types of water: cold water and ambient water (CA model), or cold water and sparkling water (CS model).

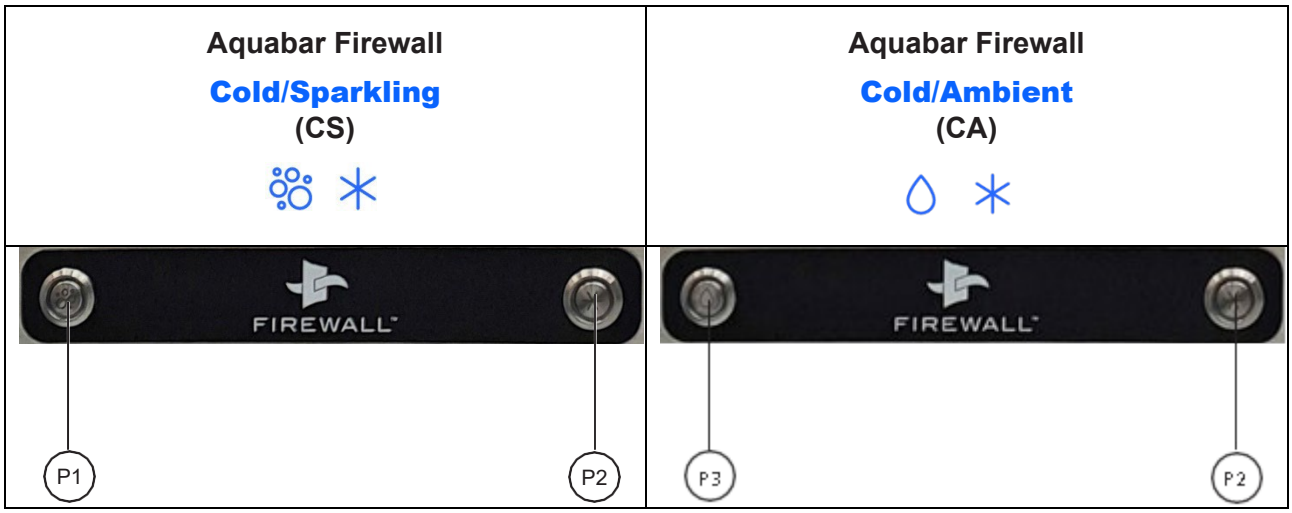
Front view

No	Description
1	Cold sparkling water dispensing nozzle (CS version) or ambient water dispensing nozzle (CA version)
2	Cold water dispensing nozzle
3	Drip tray with grid
4	Dispensing buttons
5	Feet
6	Front panel security lock

Rear view

No	Description
1	Drip tray waste pipe Ø 40mm
2	Ice bank overflow waste pipe joint Ø 8mm
3	Drinkable water inlet pipe joint Ø 8mm
4	IEC power cord plug
5	Power button
6	Adjustable thermostat

Description of the keypad



P1 button: Cold sparkling water

P2 button: Cold water

P3 button: Ambient water

Water Supply

Using the buttons positioned on the front of the machine, it is possible to supply the two types of water indicated by the buttons: sparkling, cold and ambient water.

Two dispensing mode are available:

1- the appliance dispenses water with a quick push of the button and stops dispensing with a second quick push of the button.
2- the appliance dispenses water only while the button is pressed

The appliance is factory set to the first mode (quick push).
When you turn on the machine, if the buttons flash 3 times, the quick push mode is active, if, instead, they flash 2 times, the second mode is active (button pressing). If you want to switch from one mode to the other, turn the machine off and on again by pressing the power button and the two dispensing buttons at the same time for about 5 seconds, observing the flashes described above. A dispensing timeout of 60 seconds is active in all dispensing modes.

Alarms

Firewall Alarm: the button for the damaged firewall flashes until the appliance is turned off. In this case, the water supply from the damaged firewall is interrupted.

Lack of water alarm on the carbonator: if there is no water inside the carbonator, the sparkling dispensing button starts flashing and the dispensing of sparkling water is blocked.

Pre-installation instructions

Warnings during installation

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• Maximum temperature of the installation environment 32°C.

The area chosen for installation must be clean, dry and ventilated, with the equipment placed away from heat sources.

WARNING: *during handling or maintenance, always keep the machine in a vertical position. The machine can only be tilted to the rear. Do not tilt or lay the machine on its right, left or front side. This operation could compromise the operation of the compressor.*

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WARNING USE UV STABLIIZED SUPPLY LINES. Feed the unit with a potable ambient or cold water supply only. Feed water over 40ºC (105ºF) can damage the treatment components. Water block devices and external leak detectors are strongly recommended. Locate the unit as close to the water supply and the electrical connections as possible.

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The unit must be completely drained and sealed before storing to avoid stagnation and reduce microbiological contamination (potential bacterial growth). Sanitize before use to eliminate any potential microbiological contaminants

Environmental characteristics

The intended operating environment must have the following characteristics:
• Temperature: +16 / + 32°C
• Maximum relative humidity: 50%

The dispenser cannot be used in open areas and/ or exposed to atmospheric agents, or places with corrosive and/or abrasive powders, vapors or fumes, with risk of fire or explosion, and, in any case, where the use of explosion-proof components is prescribed.

Never expose to direct sunlight, heat sources, or ambient air temperature above 32ºC (90ºF) or below 16ºC (61ºF). Install indoors and keep unit away from excessive humidity. Never expose to freezing temperatures. Ensure there is adequate clearance around the unit to allow refrigeration system condenser to dissipate heat. Warmer environments require more clearance around the unit. Minimum clearance around all surfaces of the machine is 10 cm for proper heat dissipation and efficient operation. Before each installation the product must be sanitized by an authorized technician..

ATTENTION: *if environmental conditions other than those prescribed are encountered during installation, or if they undergo variations over time, the Culligan Assistance Centre must be contacted immediately before using the dispenser for the necessary checks.*

Please look at the technical specifications and operating limits at the Description of the Unit Chapter to ensure that the location where the unit will be installed fulfills the installation requirements in terms of environmental temperature, mains pressure among other operation requirements.

Customer's Water Connection

WARNING: To connect the water cooler to the mains water supply, you will need to use a new set of connectors (joints, gaskets and pipes).

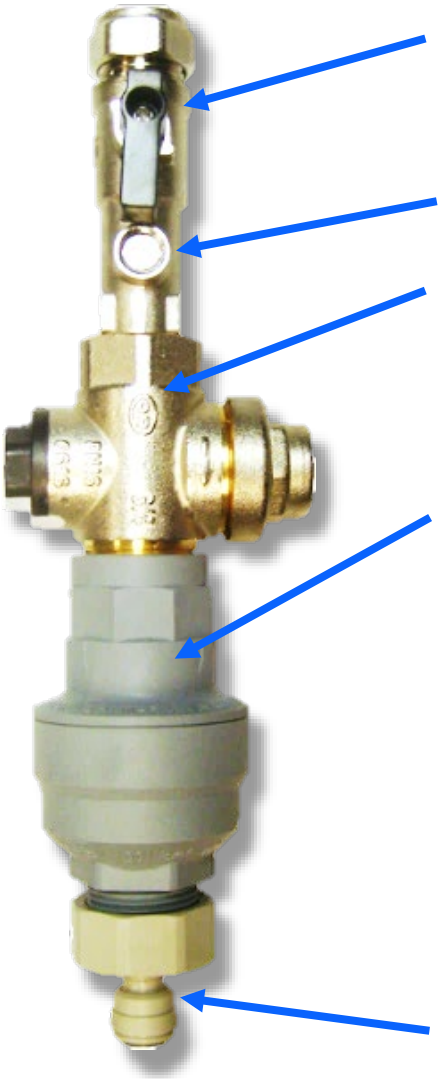
Do not use a set of connectors that has already been used elsewhere.

The water pressure entering the unit must be between a minimum of 2,0 bar (0.20 MPa) and a maximum of 3,5 bar (0.35 MPa).

Installation Rail

WARNING! ALWAYS USE INSTALL RAIL. It is required to use an installation rail for the installation of any Culligan Water Treatment System. Failure to use an installation rail can result in damage due to excessive pressures over a prolonged period of time and no additional leak protection. Please check local water bylaws, in some countries an installation rail is a legal requirement. Not provided with the equipment, but mandatory.

NOTE ALWAYS INSTALL VERTICALLY. Do not install installation rail horizontally as this will affect the performance of the water block.



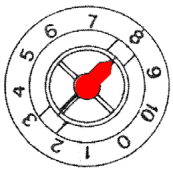
Water inlet – 15mm compression fitting

Isolation valve – Quarter turn to isolate.

Double check valve – only allows water to flow one way, no adjustment needed.

Pressure Reducing Valve – Reduces the pressure from any high pressure down to 3bar +/- 0.5bar. The pressure reducing valve is an essential part of the installation rail and ensures that the Culligan Water Treatment System is not exposed to high pressures over a prolonged period of time.

Water block – The water block will shut the flow of water in the event that a leak has taken place. This works by measuring the velocity of water and shutting off water flow. Adjustment and reset can be made by pressing or turning the red dial located on the front face of the water block.



Adjustment Settings: **1.3 to 13.2 gallons (6-60Litres)**

*Note Every notch increases the set volume by 1.5 +/- gallons (5 +/- litres)

Pressure Requirements: **10 - 125 PSI (0.7 - 8.6 bar)**

Ambient Temperature: **35 - 140°F (2 - 60°C)**

Fluid Temperature: **35 - 158°F (2 - 70°C)**

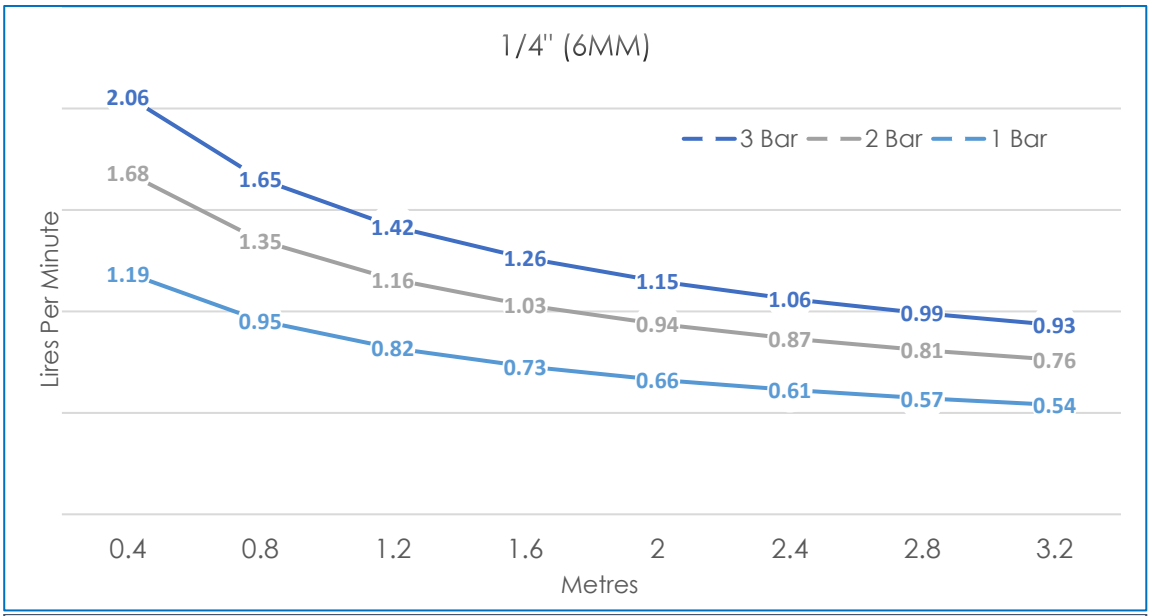
Flow Rate: **0.53 - 7.9 GPM (2 - 30 Lpm)**

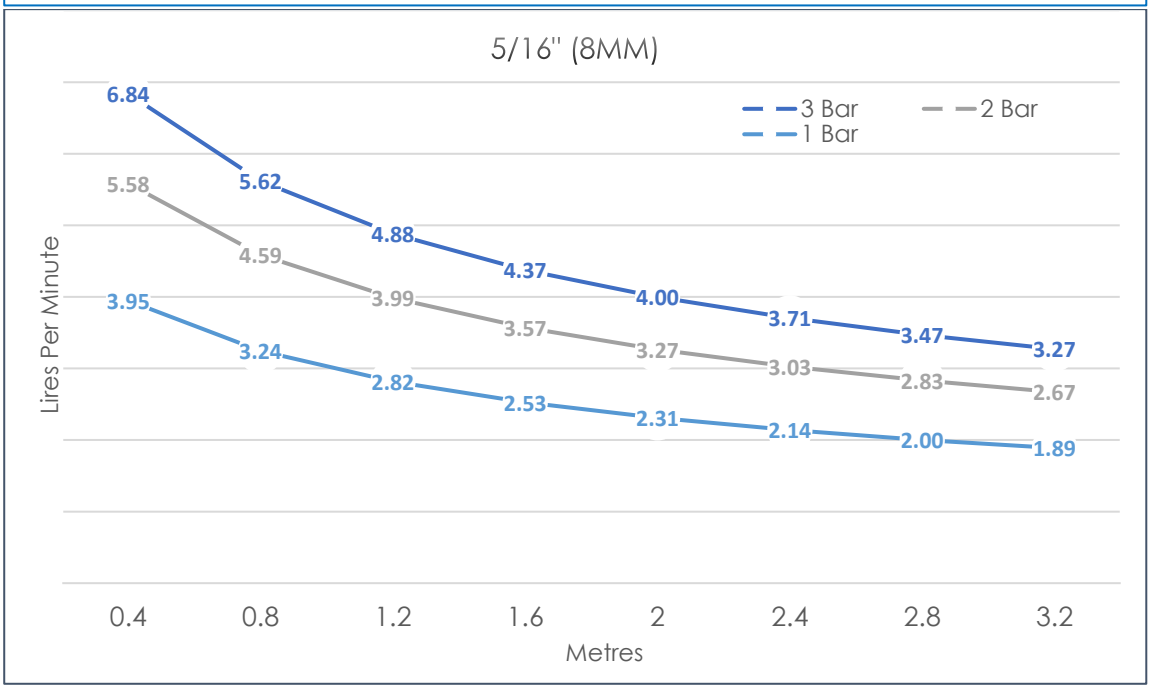
Resistance to Bursting: **725.19 PSI at 77˚F (>50 bar at 25˚C)**

¾" to ¼" adaptor (John Guest) – Allows the connection of ¼" PE pipework from the install rail to the bulkhead of the machine.

Pipe Sizing

It is important to ensure the correct incoming flow rate and pressure is available to the machine and that the pipework size is not undersized for the required flow rate to supply the machine. The below chart will help indicate the adequate size of pipework required for the installation. Please also refer to the technical specifications in this manual for the minimum and maximum pressure and flow rate values.





Culligan water treatment filters

These filters have been designed to resolve common water-quality problems by eliminating traces of impurities, as well as unpleasant odours and flavours caused by the presence of chlorine.

Please refer to the Culligan water treatment filters Technical data sheet and instructions of its installation maintenance, use and replacement frequencies for better performance of the water treatments. Not provided with the equipment.

Volumetric counter

At every maintenance or change of filters you must read and record the volume of water that has passed through the system.

Customer's Electrical connection

WARNING: The connections must comply with local regulations. The grounding of the unit is a legal requirement.

The dispenser complies with the current EU safety regulations and therefore has CE marking.

Culligan declines any liability for injury or damage due to a connection to a power grid not complying with the laws and regulations in force in the country of installation. In particular, the electric line to which the dispenser is connected must be equipped with a high sensitivity differential switch (cutout switch), with tripping current not exceeding 30mA, and a grounding system in accordance with the current regulations and legislation.

In any case, make sure the power grid characteristics satisfy those of the dispenser, given on the Technical data sheet.

WARNING: *Do not locate multiple portable socket-outlets or portable power supplies at the rear of the appliance.*

Pre-Assembly instructions

- Prepare the water supply point.
- Install the T-piece with sampling tap.
- Install the water rail and the flow meter are not supplied by the equipment manufacturer but must be installed to the hydraulic system.
- After the flowmeter, install the water treatment following filter manufacturer's technical data sheet.

WARNING: Never flush the Carbon of a new filter directly to the unit connection. Always discharge flushing water coming from a new filter in a separate bucket. You must discharge the volume of water indicated by the filter manufacturer before the filter exit is installed into the inlet fitting of the unit.

- Continue with the hydraulic connection to the inlet fitting IN/H_2O of Aquabar Firewall.
- Fill the tank inside the ice bank with water, leaving about 1-2 cm of free space from the exit point of the overflow (in systems that provide said overflow).
- Prepare the CO_2cylinder for carbonation following the instructions of the CO_2 gas bottle Precautions before Installation section. Fasten it securely to a wall, away from heat sources and in vertical position. Only Food degree (SSA or similar category) CO_2 gas bottles must be used.
- Mount the pressure reducer on the CO_2 gas bottle following the CO_2 line connection section.
- Connect the pressure regulator of the CO_2 cylinder to the entry point of CO_2, using the flexible PE hose.
- Slowly open the valve on the CO_2 cylinder completely, check the progressive filling of the line. Control the CO_2 pressure gauge regulator.
- Adjust the CO_2 pressure by loosening or tightening the screw or knob, following adjusting the carbonation section and making sure there are no leaks.

In the case of leakage, close the valve on the CO_2 cylinder and vent the residual pressure in the line by adjusting the CO_2 pressure regulator. Repair the leak, then reapply pressure.

CO_2 gas Bottle Precautions Before Installation

WARNING! Only competently trained people who fully understand the safety precautions associated with handling gas bottles should attempt to handle, connect or replace CO_2 gas bottles.
Always ensure the CO_2 gas bottle is 'Food Grade'.

WARNING! The CO_2 gas bottle must have a strap or chain to secure the CO_2 gas bottle in position and fitted on a flat surface.

WARNING! Due to calibration reasons, it is advised that the CO_2 regulator is changed every 5 years

The storage facilities must be dry, cool and well-ventilated, and must not contain any sources of heat such as steam pipes, radiators, etc.

Make sure that the correct size of cylinder is installed for the room size**.**

WARNING: *If the room where you install the CO_2 cylinder is smaller than the specified volume below, or you do not have available smaller CO_2 cylinder you must not install it till you have the correct size.*

CO_2 Bottle	Min. Room Volume (m3)
425g	7.2
2 Kg	34
6 Kg	102
7.5 Kg	127

- *The cylinders must not be placed in direct sunlight, or kept close to sources of heat or in any case in environments where the temperature may reach or exceed 50°C.*
- *Do not put or leave cylinders near service elevators, under walkways or in places where heavy objects subject to handling may collide with them and cause them to fall.*
- *When handling large cylinders (> 4kg) indoors, use suitable carts fitted with safety chains to reduce the risk of accidents resulting from muscular injuries. Always ensure that the safety cap is fitted and securely in place.*
- *Store full cylinders in different areas from empty cylinders.*
- *Do not pour the contents into other recipients.*
- *Do not cancel any markings or render them illegible; do not remove labels or tags applied by suppliers.*
- *Do not carry out repairs on the containers or tamper with them in any way.*
- *Since the specific weight of carbon dioxide is higher than that of air, the concentration of carbon dioxide is higher at the lowest levels of rooms that do not have sufficient air flow (especially in trenches, tunnels, etc.).*

WARNING: *In storage facilities, the cylinders must be stored vertically and attached to the walls using chains or other appropriate harnesses, to prevent them from overturning. The CO_2 cylinders must be protected against heat, since the pressure level increases very rapidly when the temperature rises.*

Temperature (°C)	Absolute pressure (bar)
5	40,5
20	58,5
35	116,5
50	215,9

Thermostat

The thermostat (6, page 12) is set in the position 5 to control the ice bank.

If you want to avoid the formation of ice in the bank, turn the thermostat screw at least two numbers anti-clockwise.

In the case of freezing of the water circuit, turn off the unit and keep it off for at least 8 hours.

Maintenance

ATTENTION: *this equipment requires regular maintenance in order to guarantee the potability requirements of the treated water and the maintenance of the work and quality standards declared by the manufacturer.*

Important

• For reasons of safety and compliance with the regulations, repairs and maintenance must only be carried out by a qualified technician or at a Culligan Service Centre.
• In case of malfunction, do not manipulate or tamper with the internal parts of the distributor. Contact the Culligan Service Centre.
• In case of a fault, disconnect the power and contact the Culligan Service Centre.
• Interventions not specified in this manual must only be carried out by specialized personnel or Culligan Service Centre.
• Lack of maintenance can result in breakage or deterioration of the pipes, even causing bacterial growth.
• No responsibility is assumed for interventions not covered by this manual. In case of such interventions, the warranty may be revoked. Interventions that may be necessary and not specifically indicated in the manual can only be carried out by the Culligan Service Centre.

ATTENTION: *All maintenance operations must be carried out with the dispenser turned off and the water feed and power disconnected. Make sure to unplug the equipment. Interventions on the dispenser that are unauthorized and/or performed by unqualified personnel during the warranty period will automatically void the warranty.*

• There are a few practical guidelines to keep the Aquabar Firewall dispenser efficient.
• The following activities are to be carried out daily by the Food Safety Operator from where the unit is installed:
Empty and clean the drip tray. Sanitize the dispensing spouts daily by spraying the product (e.g., Cleaning Safe) as instructed in the dedicated section.

The scheduled routine maintenance will be carried out by the Culligan Service Centre or an authorized Culligan Centre. **As a general rule, this operation should be performed at least once a year.**
Different services may be required based on operating conditions. For example, raw water with high sediment, chlorine, turbidity, or hardness may require more frequent servicing.

NOTE: For daily cleaning of the system, only use a disposable paper cloth and a sanitizing detergent for food use. Do not use cloths or sponges already used for other household cleaning, even if they are food-grade. Used sponges, cloths, or unwashed hands can cause contamination of the dispensing spouts of the system and compromise the quality of the dispensed water.

In case of prolonged periods of non-use of the system, contact the Culligan Service Centre, which will perform a general check and sanitize the system before putting it back into operation.

Daily care of the dispenser

Materials needed for daily cleaning:

- Disposable paper towel
- Sanitizing detergent certified for food contact use

Procedure:

- Clean the exterior of the system
- Rinse and dry with a new paper towel

Materials required for the daily sanitation:

- Disposable gloves
- Disposable paper towel
- Sanitizing detergent for use with food *Cleaning Safe Culligan*, sanitizing alcoholic detergent without rinsing

Procedure:

- Wash your hands thoroughly and wear disposable gloves
- Empty and clean the drip tray
- Spray the sanitizing product over the entire surface of the system, including taps and spouts
- The product evaporates after a few seconds and does not require rinsing

Shutdown

Temporary shutdown

The machine can remain unused or turned off for an extended period. In such cases, when intending to use it again, proceed as follows:

- if the dispenser has been off/unused for more than 72 hours but less than 5 days, dispense at least 5 liters of water;
- if the dispenser has been left off/unused for more than 5 days, proceed to sanitize the dispenser according to the methods described above.
- Sanitize the dispenser as required;
- The dispenser must be managed in full compliance with the hygiene regulations, to ensure the quality of the dispensed product.

Disposal, Waste and Recyclability

Information to manage electric and electronic equipment waste.

Crossed out wheelie bin denotes that waste electrical and electronic equipment and batteries must not be disposed of as unsorted municipal waste but collected separately. This symbol appearing on the product, batteries, accumulators or package or documentation indicates that the product and batteries or accumulators must not be collected, recovered or disposed of together with household waste at the end of its life cycle.

This unit is marked in compliance with European Directive 2012/19/UE on Waste Electrical and Electronic Equipment (WEEE). By ensuring that the product is scrapped correctly, you are helping to prevent potential negative consequences for the environment and for health. The symbol on the unit indicates that the product should not be treated as domestic waste but should be taken to a dedicated recycling centre for electrical and electronic equipment.

The disposal of materials (waste and exhausted) must also be done in full compliance with all current environmental regulations. Consumables, such as cartridges and filter materials, deriving from maintenance at private customers, must be transferred to the undifferentiated collection directly by the customer; on the other hand, for materials deriving from maintenance at companies, the contractual agreements between the parties and the procedures for attributing the CER code and disposal required by current environmental legislation must be respected

For more information on the treatment, recovery and recycling of this product, please contact the appropriate local office, the waste disposal service or the reseller from which the product was purchased.

Packaging materials

The packaging materials are 100% recyclable. Please recycle each material at the proper bin. Please follow the local guidelines on waste disposal. For safety reasons keep the packaging material out of the reach and sight of children.
Packaging is made of environmentally friendly materials, which may be disposed of through your local recycling facilities. By disposing of the packaging and packaging waste in the proper manner, you help to avoid possible hazards for the environment and public health.

Information on natural and ecological refrigerant gas

This product contains no CFCs or HFCs, which contribute to global warming.
The refrigerating system is filled with HC R290 – Propane: a natural gas with low global warming potential. HC R290-Propane gas is highly flammable, it is therefore essential to ensure that the refrigerant circuit pipes are not damaged.

ATTENTION*: R290 is flammable gas, do not damage the refrigeration circuit. If damage occurs, keep away from sources of ignition, ventilate area and call service provider.*

Troubleshooting and Repair

Problem	Possible cause	Solution
1 - The cooler does not dispense water.	A - Mains water supply not open	Open the mains water supply tap
	B - Ice on the refrigerated water line of the ice bank	Disconnect power supply to Aquabar Firewall then wait for pipes to defrost
	C - No electric power supply	Check the electric plug and socket.
	D - Firewall is not working or is damaged	Check that the firewall is connected and also the firewall sensor. If it is damaged, replace the lamp or sensor (contact qualified technician)
2 - The cooler is supplying too little water.	A - Blocked filter.	Check the litre-counter (contact qualified technician)
	B - Low water pressure at inlet.	Contact the technical assistance service.
3 - The water is not cold enough.	A - Check the temperature set on the Thermostat	Lower the temperature but turning the lever on the thermostat
	B - The ventilation grill could be blocked by dust.	Clean the grill with a brush or compressed air
	C - Lack of space for correct ventilation around the back or the side of the unit	Make sure that the unit is not resting against the wall but that there is sufficient space for ventilation
4 - The machine does not supply sparkling water	A - Lack of CO_2	Replace the CO_2 cylinder
	B - Electronic control unit failure	Replace the control unit
	C - Pump failure	Replace the pump
5 - When withdrawing sparkling water the cooler dispenses it in spurts	A - Possible excess of pressure from the CO_2 cylinder	Reduce the pressure if the CO_2 gas by turning the know of the regulator anticlockwise until a constant flow of sparkling water is achieved
		Regulate the compensation nut
6 - When withdrawing sparkling water the machine only dispenses gas	A - The pump is blocked	Turn off the power supply for 30 seconds the restart the machine
7 - When withdrawing sparkling water the machine dispenses water that has too little carbonation	A - Insufficient pressure from the CO_2 Cylinder	Increase the pressure of CO_2 by turning the lever or nut of the regulator clockwise (towards +) until correct level of carbonation is achieved

HACCP Manual

This section contains the analysis of hazards and the assessment of food risks evaluated on the simplified flow sheet shown below, according to the provisions of Regulation EC 852/04.

The assessment of food risks evaluated using the H.A.C.C.P. method takes into account the current and binding National and European legislation for the design, installation, and sanitation of water dispensing systems for human consumption, where the water supply comes from water networks with a certified potability index by a managing entity (Water Utility).

All materials in direct contact with the dispensed water are suitable for contact with drinking water, concerning the materials and objects that can be used in fixed systems for the collection, treatment, supply, and distribution of water intended for human consumption.

Regulatory References:

The following decrees and laws were considered in the preparation of this self-control manual:

- Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety.
- Regulation (EC) No 852/2004 of the European Parliament and of the Council on the hygiene of foodstuffs.
- Regulation (EC) No 1935/2004 of the European Parliament and of the Council on materials and articles intended to come into contact with food and its amendments.
- Regulation (EC) No 764 of the European Parliament and of the Council of 9 July 2008 laying down procedures relating to the application of certain national technical rules to products lawfully marketed in another Member State.
- Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services.
- Directive 2004/41/EC concerning food safety and implementing European Community regulations in this sector.
- Acqua Italia Association - CPI Manual (Correct Hygienic Practices) for the distribution of refined, chilled, and/or carbonated water from automatic dispensing units.
- Directive (EU) 2020/2184 of the European Parliament and of the Council of 16 December 2020 on the quality of water intended for human consumption (recast).
- REG (EU) No. 1169/2011 on the provision of correct information to consumers.

Definitions and Terminology:

HACCP (Hazard Analysis-Critical Control Point):
A method of analyzing hygiene and food hazards present at a Critical Control Point (CCP).

Critical Control Point (CCP):
A point, phase, or procedure at which control can be applied, and a record can be kept to prevent, eliminate, or reduce a hazard to an acceptable level for food safety.

Monitoring:
A planned sequence of observations or measurements of a control parameter to assess whether a CCP is under control.

Critical Limit:
A value that separates acceptability from unacceptability.

Control Measure:
Actions and activities that have been used to eliminate hazards or reduce their impact to acceptable levels.

Risk:
An estimation of the likelihood of a hazard occurrence.

Hazard:
A biological, chemical, or physical agent or condition with the potential to cause harm.

HACCP Plan:
A written document that outlines the procedures to ensure control of a specific process, based on the main activities.

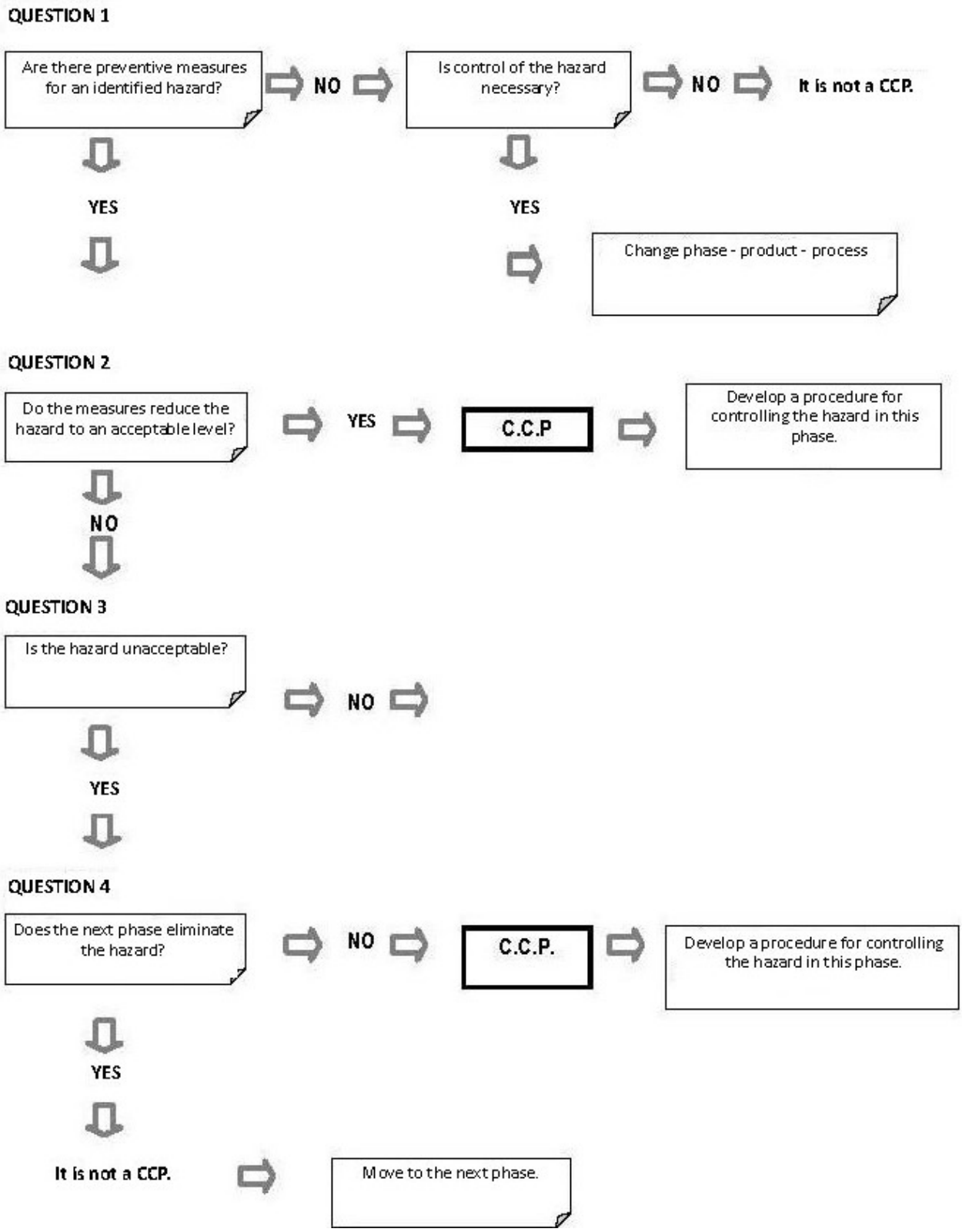
Verification:
The use of methods, procedures, or tests, in addition to those used in monitoring, to determine whether the HACCP method is valid or requires modifications and revalidation.

Cleaning:
The removal of visible dirt, food residues, or waste using a brush and a damp cloth or sponge with the use of detergents and water.

Disinfection:
A physical or chemical method to reduce the number of microorganisms on a surface to a non-hazardous level for health, without causing damage to food.

POU (Point of Use):
Devices for improving the organoleptic and microbiological quality of drinking water, which are directly connected to the end user's water supply.

Decision tree

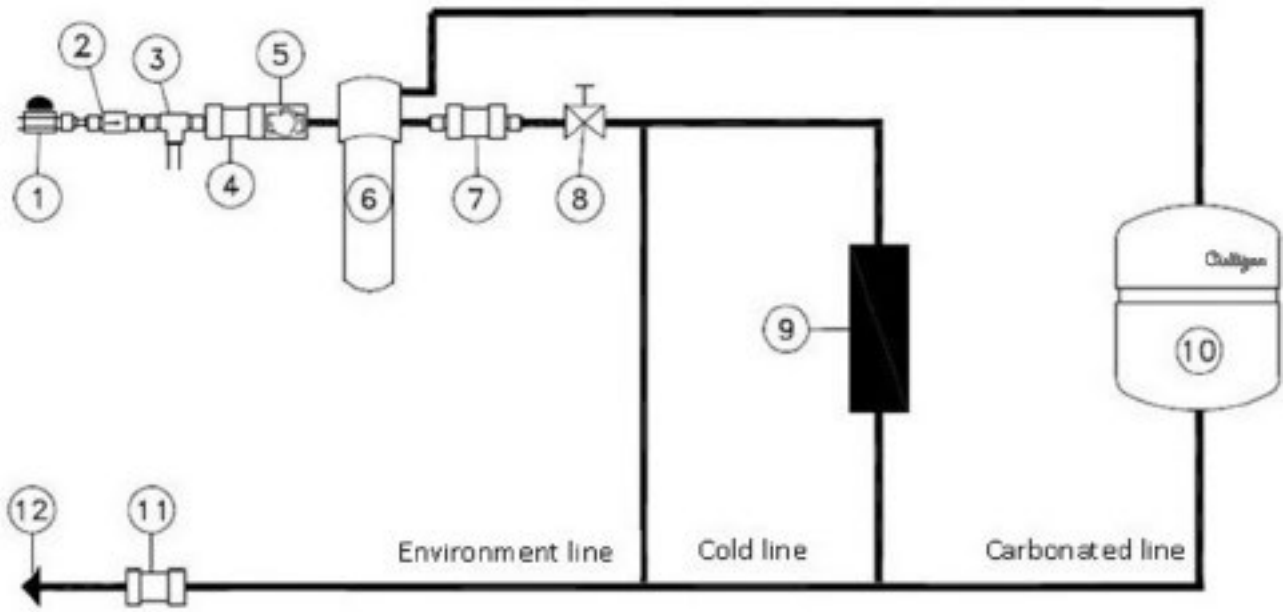


Phase		Risk	CP CCP	Preventive measures	Limits	Monitoring		Corrective actions
						Method	Frequency	
1.	Connection to the water supply	Bacterial contamination.	CP	Strictly follow the procedures and technical operating instructions provided in the installation manual (GMP). After the equipment installation, flush the hydraulic circuits by running water for at least 6 minutes. Once the system is connected to the water supply, before dispensing water, perform a complete sanitization using the "Cleaning Plus" product.	DLgs 18/2023 And all local provisions transposing the above Directive and all technical requirements relating to equipment for the treatment of water intended for human consumption	Perform a visual inspection before filling.	During the initial installation.	If abnormalities are present, repeat the installation procedures. If hydrogen peroxide residues are present, continue rinsing.
		Backflow of water into the supply network with possible bacterial contamination of the supply network.		Install a check valve immediately downstream of the primary water intake point.	DLgs 18/2023 And all local technical requirements relating to equipment for the treatment of water intended for human consumption	Manual installation verification.		Install the valve according to operating instruction.
2.	Filtration through activated carbon Carbon Block and Culligan Pure	Risk: Bacterial proliferation, depletion of adsorption capacity with possible release of chemical pollutants and subsequent microbial proliferation.	CP	Replace the filter cartridge following manufacturer's instructions (at least once a year or when it reaches the maximum water volume specified in the manual) and indicated by the volumetric alarm. Perform sanitization using the product "Cleaning Plus" and let it act for at least 15 minutes, following the operational instructions in the user and maintenance manual. Install the Culligan Pure Ultrafiltration device downstream of the filter	Directive 2020/2184 And all local provisions transposing the above Directive and all technical requirements relating to equipment for the treatment of water intended for human consumption	Visual inspection of the flow meter.	Once a year.	In case of exceeding the limit values (blockage), replace the filter and repeat the sanitization process.
3.	Accumulation of water for cooling and subsequent carbonation Microbial multiplication.	Microbial multiplication.	CP	Perform periodic maintenance with sanitization using the Cleaning Plus kit. Use foodgrade CO2.	Directive 2020/2184 And all local provisions transposing the above Directive and all technical requirements relating to equipment for the treatment of water intended for human consumption	Visual inspection.	Once a year.	Apply a sanitization cycle as part of the periodic maintenance process.

Phase		Risk	CP CCP	Preventive measures	Limits	Monitoring		Corrective actions
						Method	Frequency	
4.	Dispensing of refined water	Biological contamination from the dispensing point (nozzle), facilitated by contact with the surrounding environment and the gradual deposition of calcium salts on the edges.	CP	Along with periodic sanitization, perform sanitization using the "Cleaning Plus" mixture. Allow the product to act for at least 15 minutes in the hydraulic circuit by inserting the appropriate cleaning cartridge (containing the mixture) in place of the activated carbon filter, following the instructions provided in the user and maintenance manual. Rinse thoroughly after treatment by allowing water to flow for at least 6 minutes.	Directive 2020/2184 And all local provisions transposing the above Directive and all technical requirements relating to equipment for the treatment of water intended for human consumption	Visual inspection.	Once a year.	In case of exceeding the limit values, perform an additional sanitization.
		UV-C system in Block (optional)	CCP	Replacement of UV-C terminal and registration of non-compliance NC	Directive 2020/2184 And all local provisions transposing the above Directive and all technical requirements relating to equipment for the treatment of water intended for human consumption	Visual inspection and recording in the periodic maintenance manual		In case of blockage, sanitize after resuming or replacing the UV lamp.

Schematics

Technical operating scheme:



KEY:

1. Water supply tap with Isolation tap and double check valve (included with the installation kit)
2. Water Pressure reducer (included within the equipment BOM)
3. Stainless steel tap for sampling with flame treatment (not included within the equipment)
4. Waterblock (not included within the equipment)
5. Flow meter (not included within the equipment)
6. Filter Housing (for Carbon filter)
7. Culligan Pure Ultrafiltration (optional)
8. Electrovalve
9. Water cooling coil
10. CO_2 Carbonator
11. UV out (optional)
12. Dispensing tap