



**HIGH  
PERFORMANCE  
FILTRATION**



## **High Flow Inline Undersink Water Filter SKU: H1-CBG-14EP-SS**

**Please read through the entire instruction manual fully before commencing installation.**

### **IMPORTANT NOTE TO THE PLUMBER BEFORE COMMENCING INSTALLATION OF THIS SYSTEM**

**CAUTION: DO NOT USE WITH WATER THAT IS MICROBIOLOGICALLY UNSAFE OR WITH WATER OF UNKNOWN QUALITY WITHOUT ADEQUATE DISINFECTION BEFORE OR AFTER THE SYSTEM.**

**THIS SYSTEM IS NOT CERTIFIED TO BE BACTERIOSTATIC AND WILL NOT REDUCE THE BACTERIAL CONTENT OF THE WATER. BACTERIAL CONTENT MAY INCREASE UNLESS SUPPLEMENTARY TREATMENT IS PROVIDED.**

**THIS SYSTEM IS CERTIFIED FOR CYST REDUCTION AND MAY BE USED ON DISINFECTED WATER THAT MAY CONTAIN FILTERABLE CYSTS.**

**If the property does not already have a 500 kPa Pressure Limiting Valve (PLV) fitted to the mains water supply line (as per AS/NZS 3500 compliance requirements), a 500 kPa PLV must be installed on the property, or between the Cold Water Stop Valve and the Filter System to limit the incoming pressure to a maximum of 500 kPa (70 PSI). Failure to install a PLV may void warranty. If a Cold-Water Line Stop Tap (Isolation Valve) is not already fitted at the point of installation, the plumber should install one.**

**This system is designed to be installed under the sink by way of connection between the Cold-Water Inlet and a standard kitchen tap. This system features Stainless Steel Braided Flexi Hose. DO NOT bend, kink or put stress on the Stainless-Steel Braided Flexi Hose. Ensure the installation location is suitable for both installation and maintenance.**

**DO NOT USE THREAD SEALANT – ONLY THREAD TAPE OR FITTING WITH O-RINGS ARE PERMITTED.**

**Note: There may be extra filters in the box if the customer has pre-purchased Replacement Filters in advance. These eventually will need to be changed in the future, according to the filter maintenance schedule stated in these instructions.**

# Contents

Technical Overview .....	3
I. Important Notes .....	3
II. Before You Purchase/Open .....	3
III. Space Requirements.....	3
IV. Before You Begin Installation.....	3
V. What does this filter do? .....	3
Installation Introduction.....	4
I. Feed Water Connection .....	4
II. Installation.....	4
System Start Up & Operation.....	5
I. Plumber Commissioning Steps .....	5
II. Turning the System On/Off.....	6
Maintenance.....	6
I. Replacement Parts.....	6
II. Replacement Cartridges .....	6
III. Testing Filters .....	6
Troubleshooting.....	7
Additional Extras.....	7
I. Water Hammer Arrestor .....	7
III. Replacement Parts.....	8

# Technical Overview

## I. Important Notes

**For correct operation of this appliance, it is essential to observe the manufacturer's instructions.** Installation must be carried out by a qualified plumber or authorised technician to comply with Australian Plumbing Codes. This system is certified to WaterMark Standards AS/NZS 3497:2021 under Certificate Number 23247. WaterMark Certification is the level of certification required by law for a licensed plumber in Australia to install a water filter system.

**You will find most answers to your queries can be found in this instruction manual – please thoroughly read through this manual from front to back including the troubleshooting page before contacting customer support.**

## II. Before You Purchase/Open

The system requires specific working conditions to be met before installation, some of which are listed below. If these conditions are not met, the system may not be suitable for the application and may not function as specified.

These systems are designed for use in home applications on Mains Water or Tank Water. For applications where raw water supplies are used (E.g. Bore Water) please contact the manufacture for technical assistance to determine if your application is suitable for this system.

Feed Water Conditions	Min	Max
Inlet Pressure	350 kPa	700 kPa
Temperature	4.5°C	38°C
pH Level	2	11
TDS	0 mg/L	2,000 mg/L
Iron	0 mg/L	0.3 mg/L
Manganese	0 mg/L	0.1 mg/L
Hardness	0 mg/L	200 mg/L

## III. Space Requirements

System Dimensions (Approx): Height: 37cm, Width: 10cm, Depth: 11cm

This system can be mounted onto a wall. The distance between the middle of the mounting screw holes is approximately 6.3 to 6.4cm.



## IV. Before You Begin Installation

All components that come pre-assembled will need to be thoroughly checked before installation. Due to transit, fittings and other components may be loosened, unseated or damaged – ensure fittings, tubing and filters are inspected before continuing.

## V. What does this filter do?

The HPF CBG Quick Change Cartridge features a 0.5 Micron rating, and is certified for the reduction of waterborne parasitic cysts such as Giardia and Cryptosporidium. In addition, it also contains ScaleStop for scale inhibition, and a Carbon Block for the reduction of common water disinfection chemicals such as Chlorine, Tastes and Odours. This system is certified by IAPMO R&T to NSF/ANSI 42 for Material & Safety Requirements, and to NSF/ANSI 53 for the Reduction of Cysts. This system is NOT designed to remove Bacteria, Fluoride or other dissolved salts or minerals from water.

**CAUTION: DO NOT USE WITH WATER THAT IS MICROBIOLOGICALLY UNSAFE OR WITH WATER OF UNKNOWN QUALITY WITHOUT ADEQUATE DISINFECTION BEFORE OR AFTER THE SYSTEM.**

**THIS SYSTEM IS NOT CERTIFIED TO BE BACTERIOSTATIC AND WILL NOT REDUCE THE BACTERIAL CONTENT OF THE WATER. BACTERIAL CONTENT MAY INCREASE UNLESS SUPPLEMENTARY TREATMENT IS PROVIDED.**

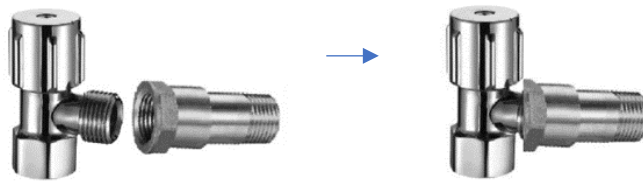
**THIS SYSTEM IS CERTIFIED FOR CYST REDUCTION AND MAY BE USED ON DISINFECTED WATER THAT MAY CONTAIN FILTERABLE CYSTS.**

# Installation Introduction

## I. Feed Water Connection

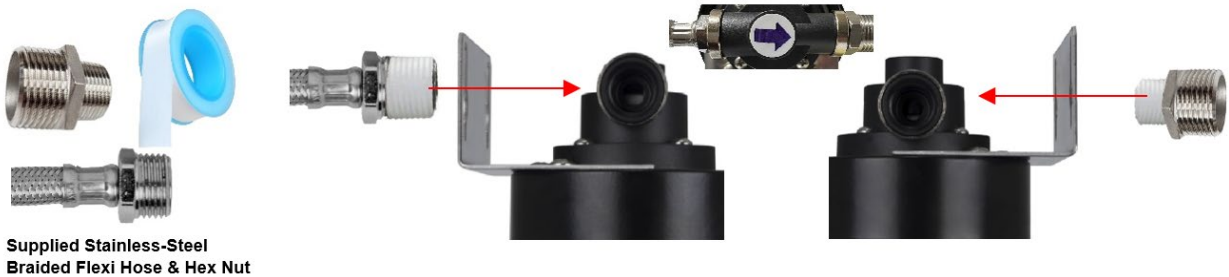
**If the premises does not already have a 500 kPa Pressure Limiting Valve (PLV) fitted to the mains water supply line (as per AS/NZS 3500 requirements), a 500 kPa PLV must be installed on the property, or between the Cold Water Stop Valve and this Filter System to limit the incoming pressure to a maximum of 500 kPa (70 PSI). Failure to install a PLV may void warranty. If a Cold Water Stop Valve (isolation valve) is not already fitted, the plumber should install one.**

Locate the connection between the kitchen tap & cold-water line. Shut off the incoming water and bleed pressure from the line by opening the kitchen tap. Disconnect the pre-existing kitchen tap's Stainless-Steel Braided Flexi Hose from the Cold-Water Stop Tap (Inlet) and install the 1/2" Stainless Steel Check Valve (supplied) as per the below diagram. If a PLV is required, install it directly after the Cold Water Stop Tap and before the Check Valve. You are ready to commence Assembly & Installation.

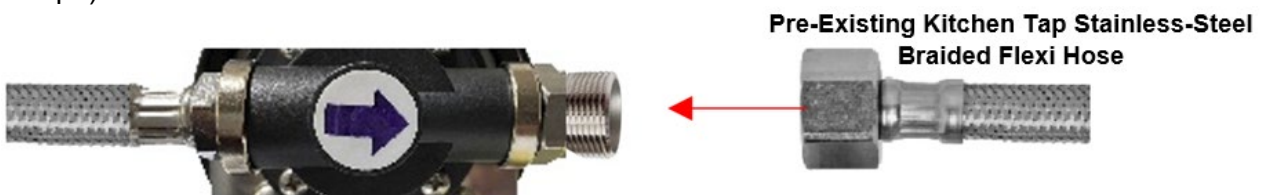


## II. Installation

1. Observe the direction of flow on the top of the cap. Use the thread tape (supplied) to wrap the male 3/8" Male Threaded side of the Stainless-Steel Braided Flexi Hose (supplied), then screw this into the left side of the Filter Head Cap. Do the same on the right side with the 3/8" to 1/2" Hex Nut (supplied).



2. Refer to the pre-existing hose, which connects to the existing kitchen tap. This hose should bear a 1/2" Female Thread. If it has an internal o-ring, you may screw this directly onto the 1/2" Male Hex Nut on the Filter Head Cap. DO NOT apply thread tape to this connection if it already contains an o-ring seal. If you do not have a braided hose with an o-ring seal, use the appropriate method (i.e. thread tape) to seal the connection.



3. Next, install the 1/2" Female side of the Stainless-Steel Braided Flexi Hose (which you have just connected to the Filter Head Cap), onto the male end of the Check Valve. DO NOT apply thread tape to this connection if it already contains an o-ring seal. If there is no o-ring, use the appropriate method (i.e. thread tape) to seal the connection.



- Remove the plastic wrapping and cap from the filter cartridge. Insert the cartridge into the head cap as per the diagram below, pushing the cartridge firmly up into the head cap until you meet firm resistance, then twisting to the right to lock.



**You are now ready to turn the water on.**

## System Start Up & Operation

### I. Plumber Commissioning Steps

When you are confident that the system is correctly installed, do the following steps to start up the system and commence the flushing procedure.

- Turn on the kitchen tap (cold water line) – this helps bleed air from the system when you introduce the feed water.
- Smoothly turn on the Cold-Water Stop Tap (Inlet) under the sink, allowing water to enter the system. It is common to hear and see sputtering as the water makes its way through the system, forcing out the air. **Check for leaks. If there are leaks, shut off the water, fix them first, then continue.**
- When the water first comes out of the tap, it will be grey and discoloured – this is normal as the carbon fines are flushed out of the dry filters. **NOTE: Air bubbles are also common in the water – it gives the water a ‘milky’ appearance. This will eventually dissipate as the air is flushed from the system – this can sometimes take a few days to stop completely. The water is still safe to drink.**

4. Continue flushing the filter for 10 to 15 minutes or until the water runs clear. The main aim is to ensure there are no particulate in the water (air bubbles are ok). To test if the cloudiness is only air, pour into a clear glass and let it sit for 60 seconds – the water should turn clear without any debris.
5. While the filter is new, there may be some slight taste issues with the water (such as a metallic or 'chemical like' taste). This is normal and is the reaction that activated carbon has with water when the filters are new. Flushing the filters will help reduce the time until the water is back to normal taste. The metallic taste is usually due to the initially high pH – this is only temporary and is usually resolved within 1 week from installation, if not sooner.

## II. Turning the System On/Off

If for any reason the system needs to be turned off – for example if leaking occurs or you are going away for over 48 hrs, follow the below steps to shut down the system.

1. Turn off the Cold Water Stop Tap under the sink.
2. Briefly open the Faucet tap to bleed out excess line pressure and then close it again.

To start the system, open the Under Sink Cold Water Inlet. If the system has not been used for over 48 hours, discard the first 45 seconds' worth of water. If the system has been shut down for over 1 week, flush the system for 5 minutes.

## Maintenance

### I. Replacement Parts

Braided Flexi Hose should be replaced periodically (about every 3 – 5 years).

### II. Replacement Cartridges

Cartridges have a varying life span but generally can be replaced under the following guidelines under normal working conditions: every 16,000 Litres or every 12 months. NOTE: Contaminants such as sediment or excessive hardness may reduce the lifespan of the filter. Usage will also be a factor for filter changes – if your pressure begins to slow down through the filters it can be an indication that the filters are blocking and may be due for a replacement.

### III. Testing Filters

Simple Free Chlorine testing can be done after the filters to determine if the filters are still removing chlorine adequately from your drinking water. These types of tests are generally inexpensive however for best results, lab tests are recommended. The filters we use for our Undersink Systems are generally high in volume capacity so you will usually either end up with a blocked filter (from sediment) or at the 12-month mark. You will not normally get to a point that the filter will no longer remove chlorine\* to an acceptable standard.

Problem	Possible Cause(s)	Solution
Water coming out very slowly or not at all	<ol style="list-style-type: none"> <li>1. Water Supply is off or disconnected</li> <li>2. Filter has a blockage</li> <li>3. Insufficient Water Pressure</li> <li>4. Water Quality</li> </ol>	<ol style="list-style-type: none"> <li>1. Turn on the water supply and ensure there are no obstructions to the water flow.</li> <li>2. Check the water pressure or replace the filter if it has become blocked.</li> <li>3. Filtration requires water pressure; we suggest a minimum working pressure of 350 kPa for adequate flow and minimal pressure loss.</li> <li>4. Ensure that the water quality is suitable for the selected cartridges. These filters are generally not for filtering harsh water such as dam or river water due to organic loading, clay and silt. Low micron filters also are prone to blocking on water supplies that contain high sediment so ensure the filter has adequate pre-filtration.</li> </ol>
High pH Reading	<ol style="list-style-type: none"> <li>1. GAC Filter</li> </ol>	<ol style="list-style-type: none"> <li>1. If you have a GAC or Block filter (Carbon), this will naturally increase the pH of the water. pH is the measure of Hydrogen in the water and this hydrogen will vent off the water if you leave it to stand and the pH will then drop back down to the normal level.</li> </ol>
Strange taste to the water (New System)	<ol style="list-style-type: none"> <li>1. Residue</li> <li>2. pH Alteration</li> <li>3. Contamination</li> </ol>	<ol style="list-style-type: none"> <li>1. Carbon can cause a fine black residue and slightly sweet or astringent flavour when the filter is new. Flush the filter system until the taste and residue issue resolves.</li> <li>2. As previously stated, Activated Coconut carbon will react with the water when new and will increase the pH. People who are not accustomed to higher pH water may notice a strange taste/sensation due to the large variance of pH. Flushing the system will help stabilise the pH from the system and also allowing the water to stand before drinking can also help allowing the water to 'vent' the pH</li> <li>3. Bacterial contamination is highly unlikely, but not impossible. If there is a strong 'foul smell' or organic taste to the water, it is possible that there is some form of contamination. Contact us straight away so we can rectify (or diagnose) the problem if there is one present.</li> </ol>
The TDS Is Higher than the inlet water (or the same).	<ol style="list-style-type: none"> <li>1. New Filter</li> <li>2. No Effect on Dissolved salts</li> </ol>	<ol style="list-style-type: none"> <li>1. While filters are new, it is normal for the TDS to be elevated while the system is flushing. Continue flushing the system &amp; contact support if the high TDS persists longer than 1 week.</li> <li>2. Standard filtration has little to no affect at reducing the salts in the water. In some cases the TDS can reduce however it is not uncommon for the TDS to stay the same or slightly rise (as the system is new) due to the fines from the filter.</li> </ol>
Flow has suddenly slowed down to a trickle	<ol style="list-style-type: none"> <li>1. Blocked filters</li> </ol>	<ol style="list-style-type: none"> <li>1. Check the feed water conditions &amp; cartridges and replace the filters if they are passed the recommended change times.</li> </ol>

## Additional Extras

### I. Water Hammer Arrester

Sioux Chief shock arresters are designed for use in hydraulic hammer arresting applications. They are built to reduce or eliminate hydraulic shock, otherwise known as water hammer. They do this by absorbing pressure surges within water or other fluids that are suddenly stopped or forced in other directions by fast closing valves. Sioux Chief shock arresters are best used at the point of shock and should be installed as close to the valve or piping where the shock originates from. Sioux Chief shock arresters are designed with the latest diaphragm technology. A high-grade diaphragm is sealed inside the vessel creating a barrier between fluid and air chambers. The air chamber acts as a cushion which compresses when system pressure suddenly increases or surges as a result of hydraulic shock.



The water hammer arrestor is installed either at your washing machine or your dishwasher inlet.

### III. Replacement Parts

#### Check Valve (Backwash Prevention Valve)

GT18-4                                      ½" Female BSP to 3/8" Male BSP Stainless Steel Dual Check Valve

#### Head Cap

AH-M-EPA                                    3/8" NPTF Adaptor Head with Stainless Steel Bracket

#### Consumables/Miscellaneous

H1-CBG-14EP-SS                        Replacement Filter Cartridge

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