Reverse Osmosis Water Purifier

Direct flow · High Flow · 20″ Big Blue pre-filters

HF BB-1000

1,000 GPD · 2 × 500 GPD membranes

HF BB-1200

1,200 GPD · 2 × 600 GPD membranes





4
STAGE FILTRATION

Tankless
FRESH WATER
ON DEMAND

Made in Türkiye

Contents

2	Safety	**8**	Installation (continued)
3	How it works, specifications	**9**	Maintenance and filter change
4	Box contents, preparation	**10**	Membrane change, storage
5	Parts and functions	**11**	Troubleshooting
6	Flow diagram and installation	**12**	Maintenance log

This manual covers both the HF BB-1000 and HF BB-1200 models. Differences between the models are listed in the specifications table. Read the whole manual before installing the unit.

01 Safety

Cold water only

Feed water must be 5–38 ˚C. Do not connect the unit to a hot water line.

Mains water

Use microbiologically safe mains water. Well and spring water need pre-treatment.

Pressure

If mains pressure is above 4 bar, use a pressure reducer.

Location

Choose a dry, level surface that is frost-free and out of direct sunlight.

Electrical

Plug into an earthed socket. Do not touch with wet hands; do not operate with a damaged cable.

Close the valve

Before maintenance, when away for a long time or if you notice a leak, close the valve and unplug.

Users

The unit must not be used by children or persons with reduced capabilities.

Repairs

Repairs must be done by an authorised service. Use only original parts and filters.

CAUTION

Do not clean with bleach, solvents or abrasive products. They damage the membranes.

02 How it works

Reverse osmosis pushes water under pressure through a membrane with extremely fine pores. Dissolved salts, heavy metals and other contaminants cannot pass and are flushed to the drain with the waste water.

The HF BB series is **direct flow**: there is no storage tank, water is purified the moment you open the faucet.

Open the faucet
Line pressure drops; the pump and solenoid valve switch on.

→

Water is purified
Sediment and CTO filter → pump → 2 membranes → post carbon.

→

Close the faucet
The pump stops and the solenoid valve shuts off the feed water.

03 Specifications

MODEL	HF BB-1000	HF BB-1200
Capacity*	**1,000 GPD** ≈ 3,785 L/day · 158 L/h	**1,200 GPD** ≈ 4,542 L/day · 189 L/h
Membranes	2 × 500 GPD	2 × 600 GPD
Pump	1,000 GPD	1,200 GPD
COMMON FEATURES		
Pre-filters	20″ Big Blue Sediment 5 µm · 20″ Big Blue CTO carbon	
Final filter	2.5″ inline post carbon	
Tubing	3/8″ (8/10 mm)	
Controls	Solenoid valve, low and high pressure switches, 0–10 bar gauge	
Power	220–240 V AC, 50 Hz · pump 36 V DC (adapter built into the unit)	
Package / weight	360 × 455 × 820 mm · 26.5 kg	
Service life	At least 10 years with the required maintenance	
FEED WATER CONDITIONS		
Pressure	1–4 bar (above this a pressure reducer is required)	
Temperature	5–38 °C	
TDS · pH	Max. 500 ppm · pH 3–11	
Turbidity · hardness	Max. 5 NTU · max. 20 °F	

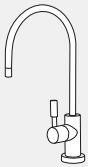
* Nominal value at 25 °C. Output depends on water temperature, pressure and TDS. Lower output in cold winter water is normal.

04 Box contents

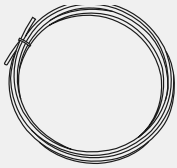
1 Purifier unit
pump adapter built in



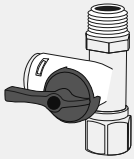
2 Faucet



3 3/8″ (8/10 mm) tubing



4 Feed water valve



5 User manual



The membranes may be fitted in the unit or packed separately. If packed separately, fit them before installation (page 10).

05 Before installation

- ☐ I have chosen a level, dry, frost-free place out of direct sunlight, with enough room to remove the filter housings.
- ☐ There is an earthed socket nearby, protected from water splashes.
- ☐ Mains pressure is between 1 and 4 bar. If it is higher, I have a pressure reducer.
- ☐ The packed unit weighs 26.5 kg; two people will carry it.

OBTAIN SEPARATELY
3/8″ drain saddle (drain clamp) · pressure reducer (recommended)

TOOLS NEEDED
Drill, 5 and 12 mm bits, spanner or adjustable wrench, PTFE tape, utility knife

06 Parts and functions

Numbers match the flow diagram (pages 6–7); the label shows where each part is supplied.

INLET AND PRE-FILTRATION

1 **Feed water valve** IN THE BOX
Supplies cold water to the unit. Close it for maintenance and long periods of non-use.

2 **Pressure reducer** OBTAIN SEPARATELY
Keeps mains pressure steady and safe; protects the unit against surges and water hammer.
Not included. Required if mains pressure is above 4 bar, recommended in all other cases.

3 **20″ Big Blue sediment filter – 5 µm** FITTED TO UNIT
First stage: traps sand, rust and sediment to protect the other filters. Replace: 6–12 months.

4 **20″ Big Blue CTO filter** FITTED TO UNIT
Reduces chlorine, odour and organics; protects the membranes. Replace: 6–12 months.

PRESSURE AND CONTROL

5 **Low pressure switch** FITTED TO UNIT
Stops the pump if water is cut off or pressure is too low, so it never runs dry.

6 **Solenoid valve** FITTED TO UNIT
Shuts off the feed when the pump stops; no water runs to drain while the faucet is closed.

7 **Pump** FITTED TO UNIT
Raises water pressure to the level the membranes need. Its adapter is built into the unit.

8 **Pressure gauge** FITTED TO UNIT
Shows the operating pressure (0–10 bar). A clear drop means the pre-filters are clogging.

11 **High pressure switch** FITTED TO UNIT
Stops the pump when the faucet is closed and restarts it when the faucet is opened.

PURIFICATION

9 **Membrane × 2** FITTED TO UNIT
Removes dissolved salts, heavy metals and contaminants; run in parallel. Replace: 12–24 months.

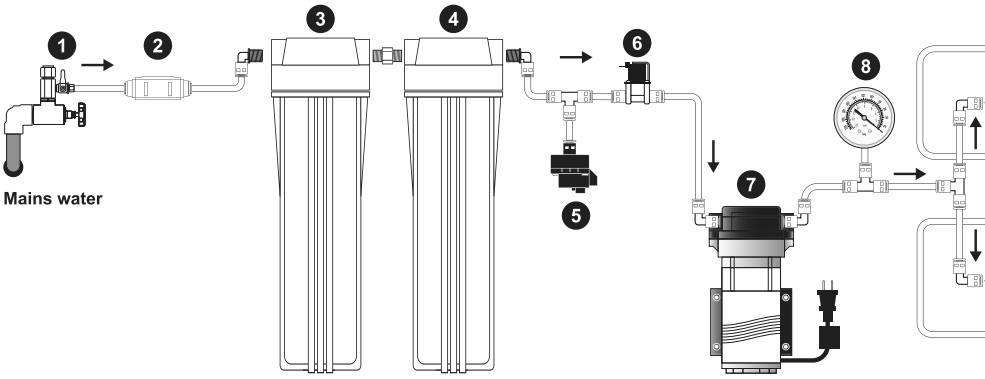
10 **Flow restrictor (flow limit) × 2** FITTED TO UNIT
Builds pressure in the membrane and limits waste water. The unit cannot purify without it.

OUTLET

12 **2.5″ post carbon filter** FITTED TO UNIT
Final stage: improves taste and odour before the faucet. Replace: 6–12 months.

13 **Faucet** IN THE BOX
Delivers purified water only. The unit starts automatically when you open the faucet.

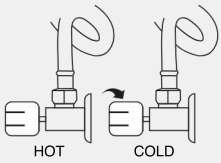
07 Flow diagram and installation



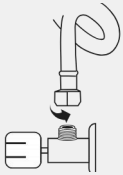
1 Feed water valve
2 Pressure reducer*
3 20" sediment filter
4 20" CTO filter
5 Low pressure switch
6 Solenoid valve
7 Pump
8 Pressure gauge

STEP 1 Water inlet (1)

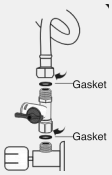
A Close the cold water angle valve under the sink.



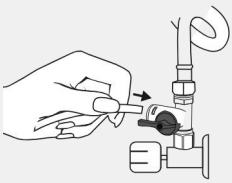
B Disconnect the flexible hose from the angle valve.



C Fit the feed water valve in between with its gaskets and tighten.

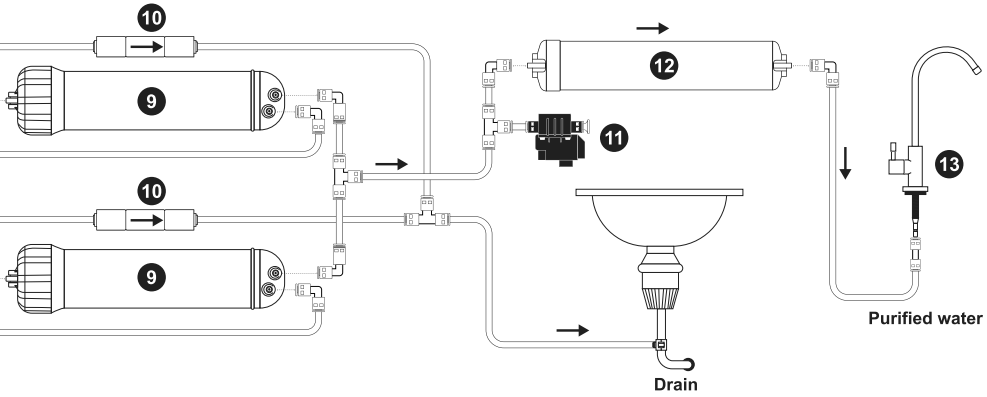


D Connect the unit's inlet tube to the valve.



* Not included. The pressure reducer (2) fits between the valve and the unit. The inlet tube connects to the inlet of the sediment filter housing (3).

Parts in the diagram



9 Membrane (2 pcs)

10 Flow restrictor (2 pcs)

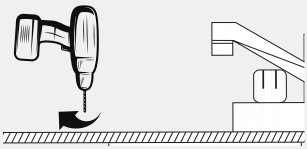
11 High pressure switch

12 2.5″ post carbon

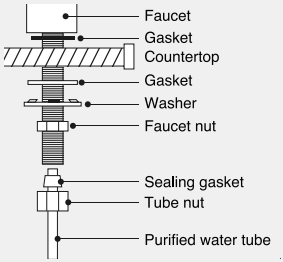
13 Faucet

STEP 2 Faucet (13)

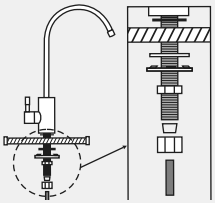
A Drill the worktop first with a 5 mm, then a 12 mm bit. Use a diamond bit for marble and granite, an HSS bit for a steel sink.



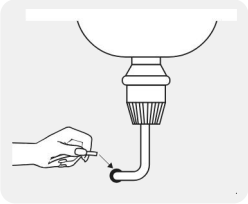
B Fit the parts in this order and tighten the nut.



C Connect the purified water tube to the faucet with the nut and gasket.



STEP 3 Drain



Fit the drain saddle (not included) to the sink drain pipe, **above the trap**. Drill the pipe through the saddle hole and connect the waste water tube.

The tube must not be kinked and must slope towards the drain. Do not remove the flow restrictors (10).

STEP 4 Connections and power

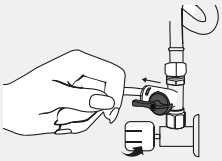
UNIT CONNECTION	CONNECT TO
Water inlet (sediment filter housing)	Feed water valve (1) / pressure reducer (2)
Purified water (post carbon outlet)	Faucet (13)
Waste water (flow restrictor outlet)	Drain saddle



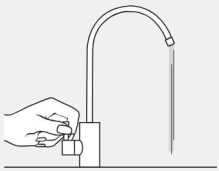
- Cut the tube to length **squarely** with a utility knife.
- Push the tube fully into the fitting. Pull back gently to check it is seated.
- When all water connections are complete, plug the unit into an earthed socket.

STEP 5 First start-up

A Open the valve. Check the filter housings and connections for leaks.



B Open the faucet; the pump starts. Let the water run for **15 minutes** without using it.



- When you close the faucet, the pump should stop within a few seconds. Write the gauge pressure in the log (page 12).
- Cloudy water in the first days is caused by air and clears by itself.
- If the unit has not been used for more than 2 days, do not use the first 1–2 minutes of water.

08 Maintenance and filter change

STAGE	FILTER	FUNCTION	REPLACE
1	20″ Big Blue sediment 5 µm	Sand, rust, sediment	**6–12 months**
2	20″ Big Blue CTO carbon	Chlorine, odour, organics	**6–12 months**
3	Membrane (2 pcs)	Dissolved solids	**12–24 months**
4	2.5″ post carbon	Taste and odour	**6–12 months**

Intervals depend on water quality and usage and are shorter under heavy use. Falling pressure, reduced flow or a change in taste means the filters are due. Replace the filters at least every 12 months.

Big Blue pre-filters

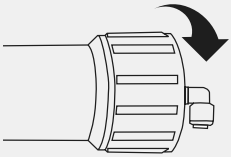
1. Unplug the unit and close the valve. Open the faucet to release the pressure.
2. Place a container or cloth under the housing. Unscrew the housing with the housing wrench, turning anticlockwise as seen from below.
3. Remove the old cartridge wearing gloves and put it in a bag. Wash the housing with warm water and a little washing-up liquid, then rinse.
4. Seat the O-ring correctly in its groove; replace it if damaged.
5. Place the new cartridge in the centre of the housing. Tighten the housing by hand first, then gently with the wrench.
6. **When changing the CTO:** disconnect the inlet tube of the solenoid valve (6), open the valve and run the water into a container for 1–2 minutes, then reconnect the tube. This keeps carbon dust out of the membranes.
7. Open the valve slowly and check for leaks. Plug in and run the faucet for 10 minutes.

Post carbon filter

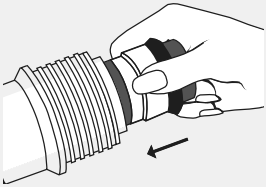
Unplug, close the valve and release the pressure. Press the collets at both ends of the filter and pull out the tubes. Fit the new filter **with its arrow pointing towards the faucet** and push the tubes fully in. Do not use the first 10 minutes of water.

09 Membrane change

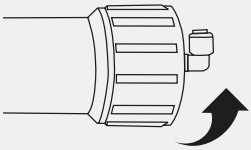
A Remove the tube and open the cap in the direction of the arrow.



B Push in the new membrane, O-ring end first.



C Close the cap firmly in the direction of the arrow.



1. Unplug the unit, close the valve and open the faucet to release the pressure.
2. Pull out the old membrane with pliers and clean the inside of the membrane housing.
3. When fitting the new membrane, the black brine seal must stay **at the cap end**.
4. Replace both membranes together. Turn the water and power back on, do not use the first **15 minutes** of water and check for leaks.

10 Cleaning and storage

- **Cleaning:** wipe the outside with a damp cloth. Wash the filter housings at each filter change. Annual disinfection by an authorised service is recommended.
- **Not in use for more than 1 month:** close the valve and unplug. Before using again, replace the filters and have the unit disinfected.
- **Transport:** close the valve, unplug and drain the water from the unit. Carry it upright; protect it from impact, heat, moisture, dust and sunlight. Do not store where it may freeze.
- **Disposal:** put used filters in a bag, tie it and dispose of it; do not cut or open the membranes. Take the pump and electrical parts to an electronic waste collection point.

11 Troubleshooting

PROBLEM	POSSIBLE CAUSE	SOLUTION
Pump does not run	Not plugged in, no power	Check the plug and socket.
	Water cut off or valve closed	Check the valve and the mains water.
	Switch, adapter or pump fault	Contact service.
No water or low flow	Pre-filters clogged	Replace the Big Blue filters.
	Tube kinked or crushed	Straighten the tubes.
	Cold feed water (winter)	Normal; output rises as water warms.
	Membranes or post carbon clogged	Replace the filters.
Pump runs or cycles with the faucet closed	Faucet not fully closed or leak on the purified water line	Check the faucet and connections.
	High pressure switch faulty	Contact service.
Waste water runs with the faucet closed	Solenoid valve dirty or faulty	Close the valve and contact service.
Low pressure on gauge	Low feed pressure, pre-filters clogged	Check mains pressure, replace the filters.
High pressure, low flow	Membranes clogged or scaled	Replace the membranes.
Cloudy or foamy water	Air in the system	Normal; clears shortly.
Bad taste or odour	Filters at end of life	Replace the filters.
	Not flushed enough after installation or filter change	Run the faucet for 15 minutes.
Leaking connections	Tube not pushed fully in or cut at an angle	Cut the tube squarely and refit.
	Housing O-ring out of place	Reseat or replace the O-ring.
Noise from the unit	Surface not level or unit touching the cabinet	Place on a level surface, clear of other objects.

IF THE PROBLEM PERSISTS
Close the valve, unplug the unit and contact an authorised service.

12 Maintenance log

MODEL

☐ HF BB-1000 ☐ HF BB-1200

SERIAL NO.

INSTALLATION DATE

.... / .... / .....

INITIAL OPERATING PRESSURE

bar

DATE	FILTER REPLACED (✓)				PRESSURE (BAR)	OUTPUT TDS	DONE BY / SIGNATURE
	SED.	CTO	MEMB.	POST			

Sed.: 20″ sediment · CTO: 20″ CTO carbon · Memb.: membranes · Post: 2.5″ post carbon