

DO NOT DISCARD - GIVE THIS MANUAL TO THE OWNER AFTER INSTALLATION

- Installation must conform to all local plumbing codes and regulations.
- Do NOT use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.
- Connect system to cold water supply only! Water temperature must not exceed 100°F/38°C.
- Do NOT solder plumbing connections attached to the filter housing or inlet valve. High temperature will damage these components.
- Do NOT over-tighten fitting connections into inlet valve or housing outlet. Always back-up valves and fittings with a wrench to avoid turning the valve.
- Allow a minimum of 3" under the housing to allow for sump removal and filter replacement.
- Do NOT mount the system near a heat source or above the electrical wiring or any device or area that would be adversely affected by water.
- Do NOT mount the system behind equipment. The unit must be easily accessible for filter replacement.
- Failure to change cartridges per recommended intervals with OptiPure replacement cartridges may lead to system failure and property damage.
- FLUSH the FXWS-12B System after connection to water supply BEFORE connection to downstream equipment for 10-15 minutes at full flow to drain to remove color.

Introduction

Your new OptiPure FXWS-12B system will cleanse and condition the tap water providing optimum water characteristics for specified applications. The result is reduced equipment maintenance requirements, longer equipment life and improved quality and consistency of your products. Proper system installation and routine filter changes will ensure years of trouble-free operation and performance.

The OptiPure System is built with the finest and most advanced materials and each system is quality inspected and pressure tested prior to shipment. With proper installation and routine maintenance, you will have years of trouble-free operation.

Please refer to this manual when performing routine filter changes. The instructions make periodic maintenance quick and easy, and ensure that you will receive maximum benefit from your system.

System Specifications & Dimensions

Inlet/Outlet Connections: 3/4" FNPT
All systems flow left (inlet) to right (outlet)

Operating Specifications

Maximum Pressure: 100 psi/7 bar
Maximum Temperature: 100°F/38°C

Capacity: Change filters at capacity rating or at least every 6 months or when more than one grain of hardness is evident after the system.

Before Installation

1. Flush water supply lines to avoid plugging filter with installation debris and resin from solder joints.
2. Check water pressure requirements for equipment being serviced by water system.
3. Determine site of installation, space required, and mounting hardware required. Wall must be structurally sound for mounting filter system. Mount into studs whenever possible. Allow enough clearance (at least 3") below filter housings for changing.
4. Use 2-3 wraps of quality Teflon tape for sealing pipe joints. Do not over-tighten fittings, this may cause cracking.
5. Read through instructions before installing water system.
6. Obtain appropriate adapters to go from 3/4" FNPT to supply and equipment.
7. Use hardness test strips included with the FXWS-12B to test the hardness of the water before and after the FXWS-12B and document below.

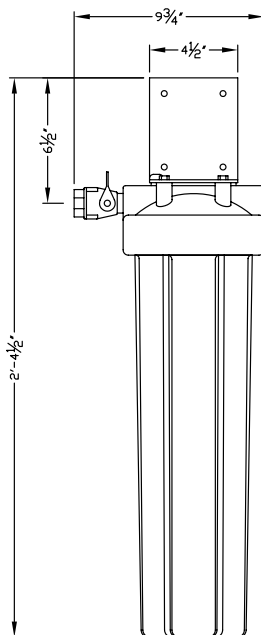
Feed Water Hardness: _____

Treated Water Hardness: _____

Model FXWS-12B

Capacity: 5,200 Grains

Service Flow Rate: 2.0 gpm/7.5 lpm



Installation Precautions

- Do NOT install the system backwards with the feed water line connected to the outlet.
- Do NOT use liquid pipe compounds for fitting connections. USE two to three wraps of teflon tape.
- Do NOT allow system to freeze. Turn off water supply to housing and drain housing if temperature falls below 32°F.
- Do NOT install system in direct sunlight or where system is exposed to harsh chemicals, or where it may be subjected to being struck by moving equipment, carts, mops or any other item that may cause damage.
- IF water hammer is evident, install water hammer arrestors before OptiPure unit.

Installation Procedure

1. Turn off all equipment to be fed by the OptiPure System.
2. Locate water supply cut-off valve and turn off.
3. Install a 1/2" full-flow ball valve on the water supply side that will feed the water system.
4. Anchor the OptiPure System on a wall stud or suitable mounting material spanning wall studs.
5. Run a suitable line from the 1/2" full-flow ball valve at the tap water source to the inlet ball valve on the left side of the OptiPure system. Use 2-3 wraps of teflon tape and brace the inlet ball valve on the system with a wrench when connecting the feed water line. NOTE: DO NOT OVERTIGHTEN CONNECTION FITTING INTO BALL VALVE.
6. Select the appropriate size tubing for the equipment being fed and connect it to the outlet of the OptiPure System. NOTE: DO NOT connect the tubing to the equipment at this time. Prior to making connection to the equipment this line will be used to facilitate flushing the system. As an option, a drain valve in a tee on the outlet side of the OptiPure system could be provided in the line to facilitate flushing when changing filters.
7. With OptiPure inlet valve closed, slowly open the 1/2" full-flow ball valve at the tap water source. Check for leaks.
8. If a drain valve was not installed on the outlet side of the system, hold the tubing that will connect to equipment in a clean bucket or over sink or drain. Open the system inlet feed valve and allow water to flush through system for 10-15 minutes at the specified system flow rate to allow air and any color to escape. NOTE: NO ACTIVATION IS REQUIRED FOR THE OPTIPURE SYSTEM TO PERFORM PROPERLY. FLUSHING IS RECOMMENDED TO ALLOW AIR TO ESCAPE THE SYSTEM AND REMOVE ANY COLOR PRIOR TO CONNECTING TO EQUIPMENT.

9. Make certain that the end of the tubing to be connected to the equipment is clean and sanitized.
10. Connect tubing to equipment. Open all water supply valves and check for leaks.
11. If there are no leaks, turn on equipment and check for normal operation.
12. Attach the Service Log to the Installed OptiPure System and fill in install date.

Operation

With adequate pressure, normal operation of the OptiPure System is completely automatic. Dependable operation involves only monitoring of outlet pressure, periodic filter changes and service documentation.

Installation Date: _____ Projected Filter Change Date: _____

Hardness Conversion: 1 grain per gallon equals 17.1 ppm or mg/L, e.g. 10 gpg is equal to 171 mg/L of hardness.

The formula to determine cartridge life span is:

$$\text{Grains capacity of filter/grains per gallon} = \text{gallons softened}$$

Example:

FXWS-12B installed on feedwater with 10 gpg, the expected life span would be:

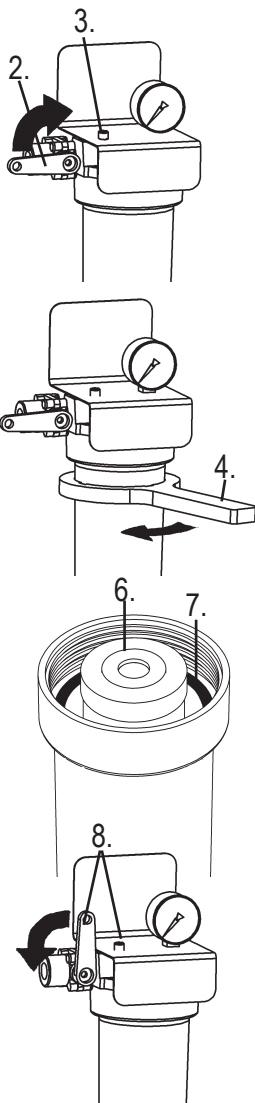
5200 grains/10 grains = 520 gallons of softened water.

The higher the grains per gallon, the lower the capacity of the cartridge.

Filter Cartridge Replacement Procedure

IMPORTANT: Determine whether all equipment connected to the OptiPure System must be turned off prior to shutting off water supply from filters.

1. If required, turn off equipment.
2. Turn OFF water to OptiPure System by closing Inlet Ball Valve.
3. Press the red button to release pressure.
4. Remove housing(s) - use filter wrench if necessary.
5. Clean inside of housing sumps with warm water. If desired, disinfect housings using a teaspoon of household bleach in a filter bowl of water. Let stand 5 minutes, and then discard and thoroughly rinse sump.
6. Insert new cartridges into filter housings. Match cartridge model numbers to model numbers on the system bracket.
7. Make certain the O-ring is properly positioned and reinstall filter housings (hand tighten only - the filter wrench is not required). Check O-ring for damage and replace if damaged or distorted.
8. Slightly open the inlet ball valve; push the red pressure relief button to release trapped air until a small amount of water comes out - release the red button and fully open the ball valve.
9. Open the flush valve downline from the filter housing (if equipped) and flush the new cartridges to drain or bucket for TEN (10) minutes or until water runs clear. If no flush valve is present, disconnect line from equipment to flush to drain.
10. **VERY IMPORTANT:** With water supply inlet valve OPEN and water flow confirmed, turn on connected equipment. Failure to supply water to equipment may cause serious damage.
11. Record filter change.



Replacement Filter Cartridges

OptiPure Filter Systems are designed, tested, and certified with OptiPure filter cartridges with proven performance, size and operating capacities. Use of replacement cartridges other than those specified will void warranties and certifications, and may compromise equipment protection, water quality and cartridge life.

Maintenance

The only routine maintenance your OptiPure System should ever require is periodic filter cartridge changes or replacement sump O-rings. Filter changes are necessary for optimum performance of your foodservice equipment. If the system sizing recommendations have been followed the OptiPure System is designed to provide a six (6) month filter-replacement interval on most tap water.

Filter Change Frequency

Several situations will mandate filter changes. Complete filter sets should be changed when any of the following apply:

- Six (6) Months have passed since unit installation or previous filter change.
- Reduced water flow.
- Water hardness is greater than 1 Grain (17.1 mg/L) after the system.

NOTE: If used on an espresso machine that has an automatic cleaning cycle, the amount of water used daily must be subtracted from the total gallon throughput. In addition, these figures are the calculated capacity. In cases where the water has above-normal sediment or chlorine, the rated capacity of the cartridge may be reduced. To achieve the maximum protection for the equipment, it is recommended that the hardness level be monitored until a standard can be established.

Part #	Replacement Parts
600-10014	Filter Sump
600-99004	O-Ring
520-12010	Valve, Inlet Ball
600-99009	Wrench, Housing
600-99205	Pressure Relief Button Kit
180-80106	Test Strip, Hardness
160-52914	(Optional) Flush Valve Kit 3/4"

System	Cartridge	Qty
FXWS-12B	WS-20B	1

OptiPure warrants the quality of workmanship of their system components and assembly, except for replacement cartridges and membranes, for a period of 60 months. OptiPure Systems are designed, tested and certified with OptiPure cartridges. Use of replacement cartridges or parts other than those specified will void warranties and certifications, and compromise equipment protection, water quality and cartridge life.

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