

# Installation, Operation & Maintenance Manual

For FX Series Model: FX-22B -to Reduce Particulate, Chlorine, Taste & Odor For FXI & SX2 Series Models: FXI-22B, SX2-22B -to Reduce Particulate, Chlorine, Taste, Odor & Scale

# 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, above electrical wiring or above 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.

## FOR SX2-22B ONLY:

- SX2-22B SYSTEM MUST BE INSTALLED IN A VERTICAL AND UPRIGHT POSITION.
- SX2-22B SYSTEM MUST NOT BE USED IN CONJUNCTION WITH POLYPHOSPHATE OR ANY
  OTHER SCALE INHIBITOR.

#### Introduction

Your new OptiPure FX-, FXI- or SX2-Series FoodService Filtration System will cleanse and condition the tap water, providing optimum water characteristics for specified applications. Results include reduced equipment-maintenance requirements, longer equipment life and improved quality and consistency of your products. Proper system installation and routine filter changes ensure years of trouble-free operation and performance.

The OptiPure System is built with the finest and most advanced materials. Each system is quality inspected and pressure-tested prior to shipment. With proper installation and routine maintenance, you should 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 should 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: 125 psi/8.6 bar Maximum Temperature: 100°F/38°C For SX2-22B only: Min Temp: 35°F/2°C

## Capacity:

FX-22B & FXI-22B: Change filters at gallon rating or at least every 6 months or when pressure gauge needle enters the red zone on the outlet gauge while water is flowing through the filter system under normal operating conditions.

SX2-22B: Change the CTO (pre-filter) cartridge at gallon rating, or at least every 6 months or when pressure gauge needle enters the red zone on the outlet gauge while water is flowing through the filter system under normal operating conditions. The SCLX2 cartridge does not have a grain removal capacity; however, naturally occurring organics present in the water will gradually degrade the effectiveness of this cartridge. Change the SCLX2 cartridge at least once a year.

Model FX-22B

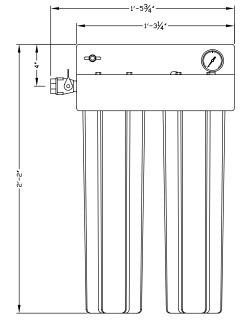
Capacity: 100,000 gals./378,541 L Service Flow Rate: 5.0 gpm/18.9 lpm

Model FXI-22B

Capacity: 100,000 gals./378,541 L Service Flow Rate: 2.5 gpm/9.5 lpm

Model SX2-22B

Capacity (chlorine, taste & odor reduction at 3 gpm): 50,000 gals./189,271 L
Service Flow Rate: 4.0 gpm/15.1 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. Locate water supply cut-off valve and turn off.
- FOR SX2-22B ONLY: Determine if water line has an existing water treatment system. Is so, examine system for use of polyphospate or other scale inhibitors. ScaleX2 will not be effective if used in conjunction with other scale inhibitors. Remove the scale inhibitors from the water line or discontinue installation.
- 3. Install a 1/2" full-flow ball valve on the water supply side that will feed the water system.
- Anchor the OptiPure System on a wall stud or suitable mounting material spanning wall studs.FOR SX2-22B ONLY: System must be vertical and upright.
- 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 minutes at the specified system flow rate to allow air and any carbon fines 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 CARBON FINES 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.

# Pressure Gauge Monitoring

Periodically monitor the pressure gauge on the OptiPure unit. If the needle on the gauge ever enters the red zone, it may be an indication that the filters have become clogged with sediment. Ideally, the pressure should never drop into the red zone.

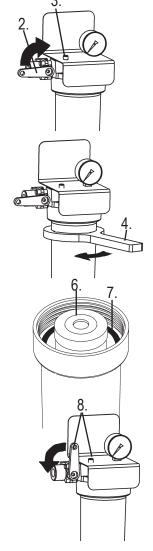
#### Filter Cartridge Replacement Procedure

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.
- 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.
- Insert new cartridges into filter housings. Match cartridge model numbers to model numbers on the system bracket.
- 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.
- 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, temporarily 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 (or twelve [12] months for a SCLX2-4 cartridge) have passed since unit installation or previous filter change.
- · Reduced water flow.
- · Pressure gauge needle enters the red zone or drops below pressure required for equipment operation.

If filter change frequency is less than 6 months due to pressure drop, it may be necessary to add additional prefiltration or evaluate system sizing recommendations.

Part #	Replacement Parts	
600-10014	20" BB Filter Sump	
600-99004	O-Ring	
520-12010	Valve, Inlet Ball 3/4"	
530-20019	Gauge, Pressure	
600-99009	Wrench, 20BB Housing	
600-99205	Pressure Relief Button Kit	
160-52914	(Optional) Flush Valve Kit 3/4"	

System	Cartridge	Qty
FX-22B	CTO-20B	2
FXI-22B	CTOS-20B	2
SX2-22B	CTO-20B SCLX2-4 SX22BRK*	1 1 1

<sup>\*</sup> Replacement cartridge kit for SX2-22B includes one each of both cartridges.



The ScaleX2 Cartridge in the SX2 Series Systems is tested and certified by NSF International against NSF/ANSI Standard 42 for material requirements only.

NOTE: Testing was performed under standard laboratory conditions; actual performance may vary. It is recommended that you have your water supply tested to determine your actual water treatment requirements.

For further information regarding OptiPure Certified systems, visit the NSF website at www.NSF.org.

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 may compromise equipment protection, water quality and cartridge life.

# OptiPure, a division of AQUION

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