

# 3M™ ScaleGard™ High Flux Reverse Osmosis System for Food Service

3M™ ScaleGard™ High Flux Reverse Osmosis System produces 800 – 1200 gallons per day\* of Recipe Quality Water™ for great tasting hot or cold beverages. The system also reduces the scale that can build-up in valuable equipment, such as combi-ovens, steamers, and espresso machines, to help maintain peak performance and avoid costly maintenance.

The ScaleGard High Flux reverse osmosis systems are available in two base models delivering a high instantaneous flow rate of RO quality water nominal 0.50 gpm (800 gpd)\* using a single RO-cartridge and 0.83 gpm (1200 gpd)\* using twin RO-cartridges. Equipped with a precision TDS blending valve and a large display menu, this wall-mountable system allows operators to dial in the desired level of dissolved minerals for the perfect cup of coffee, espresso, or cold beverage. At under half the height\*\* and a smaller width compared to the ScaleGard HP reverse osmosis system, the ScaleGard High Flux reverse osmosis system offers a space-saving compact design.

The system also incorporates a diagnostic monitoring system with a large display panel that alerts the operator when the system requires maintenance. This feature helps to ensure that the system is performing properly. The 3M™ ScaleGard™ High Flux Reverse Osmosis System incorporates an expandable, modular design that allows the system to grow with business needs. Simply add RO and Pre-Filter expansion heads to increase the RO water production or extend the life of the pre-filters.

## Product Benefits:

- 77% water efficiency achieved without a water softener\*\*
- Easily accessible TDS blending valve with live outlet reading on display panel for precise adjustment
- Compact size at only 16" high x 14" wide x 6" deep\*\* includes integrated manifold, switches, and valves
- Available in two base models, delivering 800 (single membrane) and 1200 (dual RO modules) GPD\*
- 800 GPD is also expandable to 1200 GPD to meet increased water demand needs.\* Pre-filter and membrane expansion sets sold separately.
- Built-in pump for high production rate per RO-module and unique low-noise and vibration design
- Sanitary quick change pre-filter cartridge with Integrated Membrane Pre-Activated Carbon Technology ("I.M.P.A.C.T.") media which includes chlorine protection to reduce corrosion and protects the RO membrane
- Easy-to-install and easy-to-service with easy to navigate modern, large-screen display menu

## Product Specifications:

- Power Supply: 100–240V 50/60Hz
- Rated Power (Watts) 180 W
- Min. Inlet Water Pressure 30 psi (207 kPa)
- Max. Working Pressure 125 psi (862 kPa)
- Water Temperature: 40–100°F (4.4–37.8°C)
- Nominal RO Daily Production 800 GPD (3028 LPD) for the single RO and 1200 GPD (4542 LPD) for twin RO\*

\* Nominal production rate of membrane when running to atmosphere (i.e., with empty tank) at 77° F and 60 PSI is 800 gallons/day (3028 liters/day) and 1200 gallons/day (4542 liters/day). Water efficiency and production vary based on pressure (fullness) of storage tank, incoming water pressure and temperature.

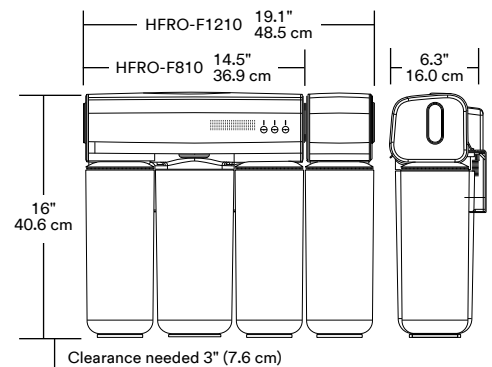
\*\* 3M ScaleGard High Flux Reverse Osmosis System HFRO-F810 (800 GPD, single RO cartridge).



HFRO-F810



HFRO-F1210



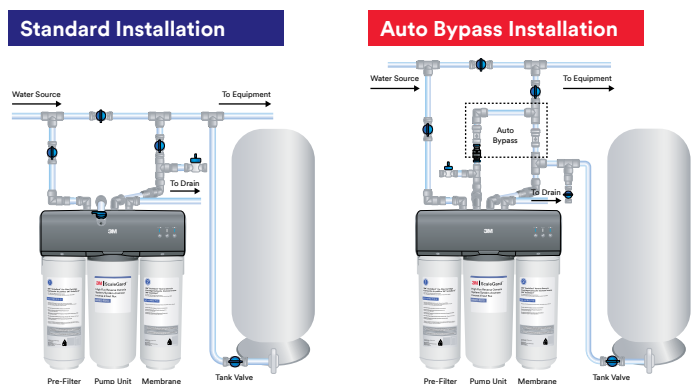
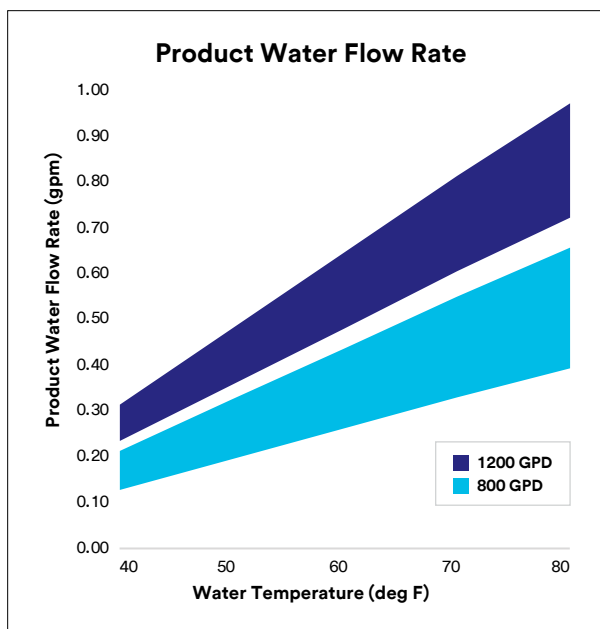
## Product specifications:

Finished Goods SKU	SAP ID	Model Name and Number	Description	Electrical	Certifications	Reduction Claims
<b>Systems</b>						
XA003902591	7100325927	3M™ ScaleGard™ High Flux Reverse Osmosis System HFRO-F810 (US/Canada – Plug Type B)	Single RO System with install and auto bypass kits	110V	NSF 42, 53, 58*, 372 CSA B483.1	Chlorine, Taste, Odor, Particulate, Cyst, TDS, Bacteria**
XA003902583	7100325928	3M™ ScaleGard™ High Flux Reverse Osmosis System HFRO-F1210 (US/Canada – Plug Type B)	Twin RO System with install and auto bypass kits	110V	NSF 42, 53, 58*, 372 CSA B483.1	Chlorine, Taste, Odor, Particulate, Cyst, TDS, Bacteria**
<b>Replacement Filters</b>						
XA003902542	7100325929	3M™ ScaleGard™ High Flux Reverse Osmosis Replacement Pre-Filter SG-HFRO P10-SI (USAC)	Replacement Cartridge, Pre-Filter	N/A	NSF 42, 53, 372 CSA B483.1	Chlorine, Taste, Odor, Particulate, Cyst, Bacteria**
XA003902534	7100325931	3M™ ScaleGard™ High Flux Reverse Osmosis Replacement Membrane SG-HFRO M18 (USAC)	Replacement Cartridge, RO	N/A	NSF 58*	TDS
<b>Add-ons</b>						
XA003902567	7100325930	3M™ ScaleGard™ High Flux Reverse Osmosis Pre-Filter Expansion Kit, SG-HFRO P10-SI EXP	Add-on Pre-Filter	N/A	NSF 42, 53, 372 CSA B483.1	Chlorine, Taste, Odor, Particulate, Cyst, Bacteria**
XA003902559	7100325932	3M™ ScaleGard™ High Flux Reverse Osmosis System Membrane Expansion Kit, SG-HFRO M18-EXP	Add-on RO Membrane	N/A	NSF 58*	TDS

\*Tank 5598408 (20 gal) or 5598409 (40 gal) required for NSF 58 certification; Sold separately.  
 \*\*Tested and verified with *E. coli* ATCC (11229) by manufacturer's laboratory.

Spare Part SKU	SAP ID	Spare Part Description
XA-0039-0283-1	7100336945	SG-HFRO Install Kit
XA-0039-0284-9	7100336944	SG-HFRO Auto Bypass Kit
XA-0039-0285-6	7100336946	Replacement Pump Assembly for HFRO-F810
XA-0039-0286-4	7100336953	Replacement Pump Assembly for HFRO-F1210
XA-0039-0287-2	7100336947	SG-HFRO Port Caps Set
XA-0039-0288-0	7100336949	SG-HFRO Connector Set
XA-0039-0289-8	7100336948	HFRO F810 Solenoid Valve Set
XA-0039-0290-6	7100336950	HFRO F1210 Solenoid Valve Set
XA-0039-0291-4	7100336955	SG-HFRO Pressure Switch Set

Spare Part SKU	SAP ID	Spare Part Description
XA-0039-0292-2	7100336951	SG-HFRO System Door Assembly
XA-0039-0293-0	7100336906	SG-HFRO System Dual TDS Probe Set
XA-0039-0294-8	7100336905	SG-HFRO Pre-Filter Head Assembly (A3 Key)
XA-0039-0295-5	7100336907	SG-HFRO Reverse Osmosis Head Assembly (A5 Key)
XA-0039-0296-3	7100336954	SG-HFRO System PCB Main Assembly
XA-0039-0297-1	7100336908	SG-HFRO System Pressure Gauge Attachment
XA-0039-0298-9	7100336952	SG-HFRO System Check Valve
XA-0039-0299-7	7100336909	SG-HFRO Power Adapter Type B (US/Canada)



### IMPORTANT: Installation Tips

- Consider installing the twin RO system (HFRO-F1210) for higher water demands to help refill the tank faster and reduce the pump runtime
- Consider installing a tank of appropriate size to help provide water to meet peak water demand considering that colder water takes more time to refill the tank than 77 deg F
- Consider installing the autobypass to automatically switch to supply of non-RO water filtered using the prefilter when tank runs out of RO-water. The autobypass switches back automatically to RO water when tank is adequately refilled.
- Periodically check the water production rate and TDS reduction to verify the performance of the system.

**Product Selection and Use:** Many factors can affect whether a Solventum product is appropriate for a particular application and how it performs, including local water and plumbing conditions. Customer is solely responsible for determining whether a Solventum product meets customer's specific application requirements, including testing incoming source water quality and comparing it to the product's capabilities described in the Performance Data Sheet. Failure to properly evaluate, select, use or maintain a Solventum product, or to meet applicable regulations or instructions, may result in personal injury from exposure to contaminants AND/OR property damage due to water leakage or flooding.

**Limited Warranty, Limited Remedy, and Disclaimer:** Solventum warrants that this product (excluding filter cartridge or filter membrane) will be free from defects in material and manufacture for the period of one (1) year from the date of purchase. No warranty is given as to the service life of any filter cartridge or membrane as it will vary with local water conditions and water consumption. Except as required by law, Solventum MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. This warranty does not cover failures resulting from misuse, alterations, failure to follow instructions or damage not caused by Solventum. This warranty does not cover labor. If the Solventum product does not conform to this warranty, then the sole and exclusive remedy is, at Solventum's option, replacement of the Solventum product or refund of the purchase price. This warranty gives you specific legal rights, and you may have other rights which may vary from state to state, or country to country. For warranty questions or service, please call 866.990.9785. Proof of purchase must accompany any warranty claim. Limitation of Liability: Except for the limited remedy stated above, and except to the extent prohibited by law, Solventum will not be liable for any loss or damage arising from or related to the Solventum product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability.

Solventum Corporation  
 3M Center, Building 275-6W  
 2510 Conway Avenue East  
 Maplewood, MN 55144  
 Phone 1-800-243-6894  
 1-203-237-5541  
 Web [www.Solventum.com](http://www.Solventum.com)

**Solventum, formerly 3M Health Care**

©Solventum 2025. All rights reserved. Solventum, the S logo, ScaleGard and Recipe Quality Water are trademarks of Solventum or affiliates. 3M is a trademark of 3M.  
 70-2016-0429-8