

Performance Data Sheet Reverse Osmosis System Model GXRM10RBL

Notice: This system has been tested according to NSF/ANSI 58 for reduction of the substances listed below. The concentration of the indicated substances in water entering the system was reduced to a concentration less than or equal to the permissible limit for water leaving the system, as specified in NSF/ANSI 58. Testing was performed under standard laboratory conditions, actual performance may vary.

Before purchasing a water treatment unit, it is recommended that you have your water supply tested to determine your actual water treatment needs. Actual performance may vary with local water conditions.

Do not use with water that is microbiologically unsafe or with water of unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used on disinfected water that may contain filterable cysts. This system has been tested for the treatment of water containing pentavalent arsenic (also known as As(V), As(+5) or arsenate) at concentrations of 0.30 mg/L or less. This system reduces pentavalent arsenic, but may not remove other forms of arsenic. This system is to be used on water supplies that have been demonstrated to contain only pentavalent arsenic. Treatment with chloramines (combined chlorine) is not sufficient to ensure complete conversion of trivalent arsenic to pentavalent arsenic. Please see the Arsenic Facts section of the Performance Data Sheet for further information.

This reverse osmosis system contains a carbon prefilter to protect the reverse osmosis membrane from deterioration from chlorine in the supply water. This reverse osmosis system contains a replaceable treatment component critical to the efficiency of the system. Replacement of the membrane component should be with one of identical specifications, as defined by the manufacturer, to assure the same efficiency and contaminant reduction performance. The product water should be tested periodically to verify that the system is performing satisfactorily. Consult the owner's manual for further information on installation, operating instructions, component replacement, and product warranty.

Estimated Replacement Costs

FX12P – Pre- and Post-Filters carbon elements: \$12 - \$21 FX12M – Reverse Osmosis Membrane: \$90 - \$100

For replacement parts, call toll-free 800.626.2002 (U.S), 800.663.6060 (Canada-English), 800.361.3869 (Canada-French).

General Electric Company

AP35-1312 Appliance Park, Louisville KY 40225

> General Electric Company Appliance Park Louisville, KY 40225 Rev. 3

| Contaminant | Influent Challenge Concentration (mg/L) | Maximum Product Water Concentration (mg/L) | Average Percent Reduction |
|--------------------------------------|---|--|---------------------------------|
| Arsenic ⁽¹⁾ | $0.30\pm10\%$ | 0.010 | 98.3 |
| Barium ⁽¹⁾ | $10.0\pm10\%$ | 2.0 | 95.1 |
| Cadmium ⁽¹⁾ | $0.03\pm10\%$ | 0.005 | 98.9 |
| Chromium (Hexavalent) ⁽¹⁾ | $0.3\pm10\%$ | 0.1 | 98.0 |
| Chromium (Trivalent) ⁽¹⁾ | $0.3\pm10\%$ | 0.1 | 94.4 |
| Copper ⁽¹⁾ | 3.0 ± 10% | 1.3 | 98.3 |
| Turbidity ^{(1) (3)} | 11 NTU ± 1 NTU | 0.5 NTU | 99.1 |
| Fluoride ⁽¹⁾ | 8.0 ± 10% | 1.5 | 94.0 |
| Lead ⁽¹⁾ | $0.15\pm10\%$ | 0.010 | 98.6 |
| Radium 226/228 ^{(1) (4)} | 25 pCi/L ± 10% | 5 pCi/L | 95.1 |
| Selenium ⁽¹⁾ | $0.10\pm10\%$ | 0.05 | 97.0 |
| TDS ⁽¹⁾ | 750 ± 40 mg/L | 187 | 94.7 |
| Contaminant | Influent Challenge Concentration | Reduction Requirement | Average Percent Reduction |
| Cysts ^{(1) (2)} | Minimum 50,000/mL | 99.95% ⁽³⁾ | 99.99 |
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| Operating Specifications | | |
|----------------------------------|---|--|
| Inlet Pressure (min. – max.) | 40-125 psig (2.8-7.0 kg/cm ²) | |
| Inlet Temperature (min. – max.) | 40-100 °F (5-38 °C) | |
| Maximum TDS Level | 2000 mg/L | |
| Maximum Hardness @6.9 pH | 10 grains per gallon (171 mg/L) | |
| Maximum Chlorine | 2.0 mg/L | |
| pH Range | 4-10 | |
| Daily Production Rate | 9.83 gal/day (37.2 L/d) | |
| Efficiency Rating ⁽⁵⁾ | 9.63 | |
| Recovery Rating ⁽⁶⁾ | 18.77 | |

Notes:

- (1) Tested by NSF International per NSF/ANSI Standard 58.
- (2) /mL is the number of particles per milliliter.
- (3) NTU is Nephelometric Turbidity Units
- (4) Barium is used as a surrogate based on its relationship with radium on the periodic table. pCi/L is pico-Curies per liter
- (5) Efficiency rating means the percentage of the influent water to the system that is available to the user as reverse osmosis treated water under operating conditions that approximate typical daily usage.
- (6) Recovery rating means the percentage of influent water to the membrane portion of the system that is available to the user as reverse osmosis treated water when the system is operated without a storage tank or when the storage tank is bypassed.

Arsenic Fact Sheet

Background

Arsenic (abbreviated As) can occur naturally in well water. There are two forms of arsenic: pentavalent arsenic (also called As(V), As(+5), and arsenate), and trivalent arsenic (also called As(III), AS(+3), and arsenite). Although both forms are potentially harmful to human health, trivalent arsenic is considered more harmful than pentavalent arsenic. In well water, arsenic may be pentavalent, trivalent, or a combination of both. Additional information about arsenic in water can be found on the Internet at the U.S Environmental Protection Agency (USEPA) website at: http://www.epa.gov/safewater/arsenic/index.html

Testing Your Water

Arsenic in water has no color, taste or odor. It must be measured by a lab test. Public water utilities must have their water tested for arsenic. You can get the results from your water utility. If you have your own well, you can have the water tested. The local health department or the state environmental health agency can provide a list of certified labs. The cost is typically \$15 to \$30.

Pentavalent vs. Trivalent Arsenic Removal

This system is very effective at reducing pentavalent arsenic from drinking water. This model was tested in a lab and proven to reduce 300 parts per billion (ppb) pentavalent arsenic to below 10 ppb, the USEPA standard for safe drinking water. RO systems are not as effective at removing trivalent arsenic from water. This model will not convert trivalent arsenic to pentavalent arsenic. If you have <u>free</u> chlorine residual in your water supply, any trivalent arsenic will be converted to pentavalent arsenic and removed by this Reverse Osmosis system. Other water treatment chemicals, such as ozone and potassium permanganate will also change trivalent arsenic to pentavalent arsenic. A <u>combined</u> chlorine residual (also called chloramine) may <u>not</u> convert all of the trivalent arsenic to pentavalent arsenic. Water systems using an in-line chlorinator should provide a one-minute chlorine contact time before the Reverse Osmosis system. If you get your water from a public water utility, contact the utility to find out if free chlorine or combined chlorine is used in the water system.

Maintenance

It is strongly recommended that you follow the maintenance instructions in your owners manual and have your water tested periodically to make sure the system is performing properly. See replacement element information above for recommendations on maintaining your Reverse Osmosis drinking water treatment system.



For IOWA Only

All sales in Iowa require the following signature before consummation of sale. These signatures must be retained by the seller/renter for two years minimum.

| Buyer/Renter | Date |
|-----------------------|------|
| Seller | Date |
| Seller's Address | |
| Seller's Phone Number | |

Product: General Electric Reverse Osmosis Filtration System, Model GXRM10RBL