Performance Data for the Drinking Water Systems GXRQ18NBN and GNRQ18NBN						
Models	Replacement Element	Operating Pressure Range	Operating Temperature range	Recovery Rating	Efficiency Rating	Daily Production Rate (DPR)
GXRQ18NBN & GNRQ18NBN	FQ18MN & FQ18PN	40-100 psi (275-689 kPa)	40-100°F (5-38°C)	21.18%	10.63%	14.76 gal/day (55.9 liters/day)
Manufactured by: GE Appliances Louisville, KY 40225 800.432.2737						

VOCs (by surrogate testing using chloroform)	Drinking water regualtory level (MCL/MAC) ug/L	Influent/ Unfiltered (µg/L)	Effluent/ Filtered (µg/L)	Percent Reduction
Alachlor	2.0	50	1.0[3]	>98%
Atrazine	3.0	100	3.0[3]	>97%
Benzene	5.0	81	1.0[3]	99%
Carbofuran	40	190	1.0[3]	>99%
Carbon Tetrachloride	5.0	78	1.8[4]	98%
Chlorobenzene	100	77	1.0[3]	99%
Chloropicrin	NA	15	0.2[4]	99%
2,4-D	70	110	1.7[4]	98%
Dibromochloropropane (DBCP)	0.2	52	0.02[3]	>99%
o-Dichlorobenzene	600	80	1.0[3]	99%
p-Dichlorobenzene	75	40	1.0[3]	98%
1,2-Dichloroethane	5.0	88	4.8[5]	95[5%]
1,1-Dichloroethylene	7.0	83	1.0[3]	99%
cis-1,2-Dichloroethylene	70	170	0.5[3]	>99%
trans-1,2-Dichloroethylene	100	86	1.0[3]	99%
1,2-Dichloropropane	5.0	80	1.0[3]	99%
cis-1,3-Dichloropropylene	NA	79	1.0[3]	99%
Dinoseb	7.0	170	0.2[4]	99%
Endrin	2.0	53	0.59[4]	99%
Ethylbenzene	700	88	1.0[3]	99%
Ethylene Dibromide (EDB)	0.05	44	0.02[3]	>99%
Haloacetonitriles (HAN):	NA			
Bromochloroacetonitrile	NA	22	0.5[4]	98%
Dibromoacetonitrile	NA	24	0.6[4]	98%
Dichloroacetonitrile	NA	9.6	0.2[4]	98%
Trichloroacetonitrile	NA	15	0.3[4]	98%
Haloketones (HK):	NA			
1,1-dichloro-2-propanone	NA	7.2	0.1[4]	99%
1,1,1-trichloro-2-propanone	NA	8.2[6]	0.3[4]	96%
Heptachlor	0.4	25	0.01[3]	>99%
Heptachlor Epoxide	0.2	10.7[6]	0.2[6]	98%
Hexachlorobutadiene	NA	44	1.0[3]	98%
Hexachlorocyclopentadiene	50	60	0.002[3]	>99%
Lindane	0.2	55	0.01[3]	>99%
Methoxychlor	40	50	0.1[3]	>99%
Pentachlorophenol	1.0	96	1.0[3]	99%
Simazine	4.0	120	4.0[3]	97%
Styrene	100	150	0.5[3]	>99%
1,1,2,2-Tetrachloroethane	NA	81	1.0[3]	99%
Tetrachloroethylene	5.0	81	1.0[3]	99%
Toluene	1,000	78	1.0[3]	99%
2,4,5-TP (silvex)	50	270	1.6[3]	99%
Tribromoacetic acid	NA	42	1.0[3]	98%
1,2,4-Trichlorobenzene	70	160	0.5[3]	>99%
1,1,1-Trichloroethane	200	84	4.6[4]	95%
1,1,2-Trichloroethane	5.0	150	0.5[3]	>99%
Trichloroethylene	5.0	180	1.0[3]	>99%
Chloroform (THM)	80	300	15	95%
Bromoform (THM)				
Bromodichloromethane (THM)				
Chlorodibromomethane (THM)				
Xylenes (total)	10,000	70	1.0[3]	99%

NSF/ ANSI 42	Minimum Reduction	Overall % Reduction	Results
Chlorine Taste and Odor	<0.5 mg/L	97.5	Pass

NSF P473	Influent challenge concentration	Maximum permissible concentration	Overall % Reduction	Results
Perfluorooctanoic acid (PFOA) & Perfluoroctane sulfonate (PFOS)	1.5±10% ug/L	0.07 ug/L	97.4%	Pass

NSF/ANSI 53	Influent Challenge concentration	Maximum permissible concentration	Overall % Reduction	Results
VOC Surrogate Test	300 ug/L	99.8%	99.8	Pass
MTBE	5ug/L	97.8%	97.8	Pass

Filter Performance Data	
Flow Rate	0.8 gallons per minute (3.03 liters per minute)
Capacity	240 gallons (908 Liters)

[1]Tested by Spectrum Labs, a qualified independent laboratory, against accepted industry protocol.

Testing was performed under standard laboratory conditions, actual performance may vary.

This system has been tested according to NSF/ANSI 58 for the reduction of substances listed above. The concentration of the indicated substances was reduced to a concentration less than or equal to the permissible limit for water leaving the system as specified in standards 53, 58,401 and Protocol P473.

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.

Recovery rating means the percentage of the 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.

Do not use with water that is microbiologically Insafe or of unknown quality without adequate disinfection before or after the system. This system is certified for cyst reduction and may be used on disinfected water that may contain filterable cysts.

This system is acceptable for treatment of influent concentrations of no more than 27mg/L nitrate and 3 mg/L nitrite in combination measured as N and is certified for nitrate/nitrite reduction only for water supplies with a pressure of 40 psig (276 kPa) or greater.

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 reduce other forms of arsenic. This system shall be used on water supplies containing a detectable free chlorine residual at the system inlet or on water supplies that have been demonstrated to contain only pentavalent arsenic. Treatment with chloramine (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.

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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)

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

These systems are very effective at reducing pentavalent arsenic from drinking water. These models were tested in a lab and proven to reduce 300 parts per billion (ppb) of pentavalent arsenic to below the USEPA standard of 10 ppb for safe drinking water. RO systems are not as effective at reducing trivalent arsenic from water. These models will not convert trivalent arsenic to pentavalent arsenic. If you have free chlorine residual in contact with your water supply for at least one minute any trivalent arsenic will be converted to pentavalent arsenic and reduced by this RO. Other water treatment chemicals such as ozone, and potassium permanganate will also change trivalent arsenic to pentavalent arsenic. A combined chlorine residual (also called chloramine) may not convert all the trivalent arsenic. 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 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.

C IAPMO ®

Models GXRQ18NBN and GNRQ18NBN tested and certified by IAPMO R&T against NSF/ANSI Standard 42,53,58 and 401 and conformance to NSF P473 for reduction of claims specified on the Performance Data Sheet.

NSF

Models GXRQ18NBN and GNRQ18NBN tested and certified by NSF International against NSF/ANSI Standard 42,53 ,and 58 for reduction of claims specified on the Performance Data Sheet and at www.nsf.org.

GE APPLIANCES

Models GXRQ18NBN & GNRQ18NBN

Substance	Maximum Concentration	Maximum permissible product water concentration	Overall % Reduction	Results
Asbestos	10^7 to 10^8 fibers/L	99% reduction	>99.9%	Pass
Arsenic (pentavalent)	0.30 mg/L ± 10%	0.010 mg/L	98.2%	Pass
Barium	10 mg/L± 10%	2.0 mg/L	97.8%	Pass
Cadmium	0.03 mg/L± 10%	0.005 mg/L	98.1	Pass
Chromium (VI)	0.3 mg/L± 10%	0.1 mg/L	97.0%	Pass
Chromium (III)	0.3 mg/L± 10%	0.1 mg/L	98.3%	Pass
Copper	3.0 mg/L± 10%	1.3mg/L	98.8%	Pass
Cysts	≥50,000 #/mL[4]	99.95%	99.99%	Pass
Lead	0.15 mg/L± 10%	0.010 mg/L	99.1%	Pass
Fluoride	8.0 mg/L	1.5 mg/L	96.5%	Pass
Nitrate plus Nitrite (as N)	30 mg/L± 10%	10.0 mg/L	75.4%	Pass
Nitrate (as N)	27.0 mg/L± 10%	10.0 mg/L	74.9%	Pass
Nitrite (as N)	3.0 mg/L± 10%	1.0 mg/L	80.9%	Pass
Radium 226/228	25 pCi/L± 10%	5 pCi/L	80%	Pass
Selenium	0.10 mg/L± 10%	0.05 mg/L	98.0%	Pass
Turbidity	11 ± 1 NTU	0.5 NTU	99.0%	Pass
TDS	750 mg/L± 40	187 mg/L	90.6%	Pass
Ammonium[1]	1.2 mg/L± 10%	-	90%	Pass
Bicarbonate[1]	300 mg/L± 10%	-	96%	Pass
Bromide[1]	1.5 mg/L± 10%	-	89%	Pass
Chloride[1]	800 mg/L± 10%	-	92%	Pass
Magnesium[1]	30 mg/L± 10%	-	97%	Pass
Sodium[1]	350 mg/L± 10%	-	88%	Pass
Sulfate[1]	800 mg/L± 10%	-	98%	Pass
Tannin[1]	3.0 mg/L± 10%	-	97%	Pass
Zinc[1]	15 mg/L± 10%	-	98%	Pass

NSF/ANSI 401*	Influent challenge concentration (ng/L)	Maximum permissible product water concentration (ng/L)	Overall % Reduction	Results
Atenolol	200 ± 20%	60	94.2%	Pass
Bisphenol A	2,000 ± 20%	300	96.3%	Pass
Carbamazepine	1,400 ± 20%	200	98.9%	Pass
DEET	1,400 ± 20%	200	95.4%	Pass
Estrone	140 ± 20%	20	90.1%	Pass
Ibuprofen	400 ± 20%	60	95.9%	Pass
Linuron	140 ± 20%	20	92.5%	Pass
Meprobamate	400 ± 20%	60	97.2%	Pass
Metolachlor	1.400 ± 20%	200	97.8%	Pass
Naproxen	140 ± 20%	20	92.0%	Pass
Nonyl phenol	1,400 ± 20%	200	97.1%	Pass
Phenytoin	200 ± 20%	30	94.2%	Pass
TCEP	5,000 ± 20%	700	96.9%	Pass
TCPP	5,000 ± 20%	700	97.8%	Pass
Trimethoprim	140 ± 20%	20	90.0%	Pass

***These systems have been tested according to NSF/ANSI 401 for reduction of substances listed above. 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 401.**

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