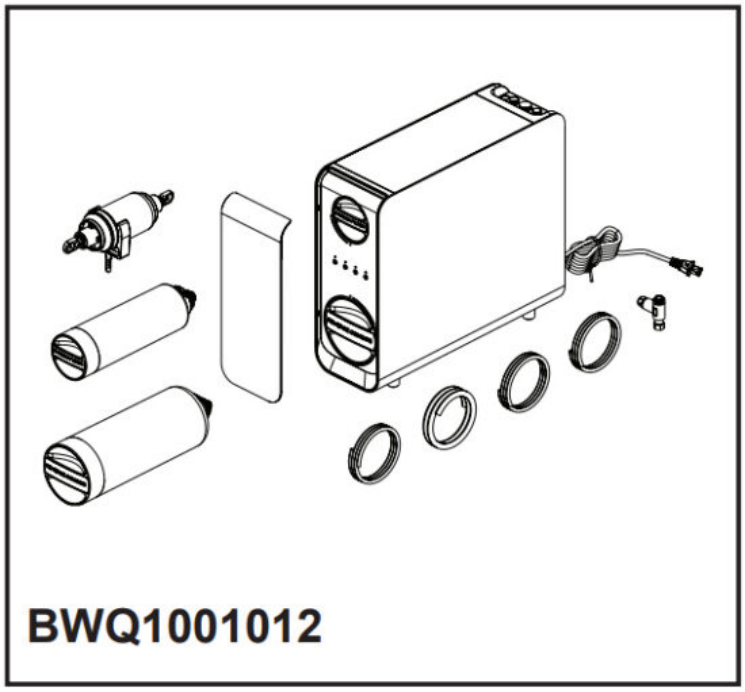
BRIZO BWQ1001012 Tankless Reverse Osmosis System Owner's Manual

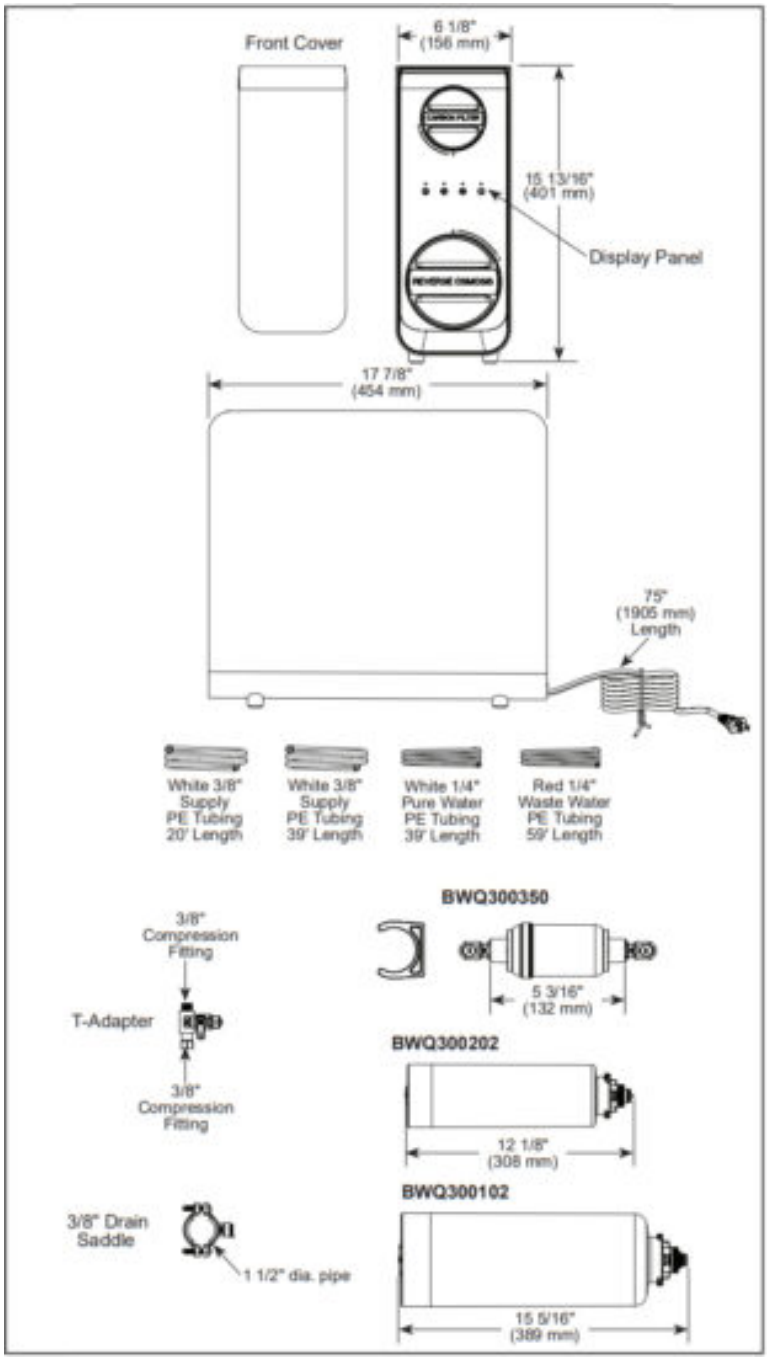
BRIZO®

PRISTIVE™
TANKLESS REVERSE
OSMOSIS SYSTEM

Contents

BWQ1001012 Tankless Reverse Osmosis System





Brizo Kitchen & Bath Company reserves the right (1) to make changes in specifications and materials, and (2) to change or discontinue models, both without notice or obligation. Dimensions are for reference only. See current full-line price book or **www.brizo.com** for finish options and product availability.

STANDARD SPECIFICATIONS:

- For cold water installation only
- PRISTIVE™ Tankless Reverse Osmosis Water Filtration System offers 6 Stages of filtration using 3 cartridges:
  – Pre-Filter (BWQ300350) Recommended Lifespan – 3,960 gallons or 6 years* whichever comes first
  – Reverse Osmosis Filter (BWQ300102) Recommended Lifespan – 1,320 gallons or 2 years* whichever comes first
  – Carbon Filter (BWQ300202) Recommended Lifespan – 1,320 gallons or 2 years* whichever comes first
  (Filter life dependent on usage)
- Optional 7th Stage of filtration using the remineralizer cartridge (BWQ300300) available for enhanced taste and pH balance
- Key Specifications:

– Feed Water Pressure: 20-80 PSI (0.14-0.6 MPa)
– Feed Water Temperature: 41-100˚F (5-38˚C)
– Daily Production Rate: 800 GPD (3028 L/day)
– Rated Capacity: 1320 gallons (5000 Liters)
– Rated Filtered Water Flow Rate: 0.56 GPM (2.10 L/min)
– System Recovery Rating: 74%

- Certified reduction of more than 90 contaminants from drinking water when tested against NSF standards, including: lead, total PFAS, arsenic, bacteria, chlorine, chromium, copper, TDS, mercury, microplastics, pharmaceuticals, and heavy metals
- Tankless under sink installation and compact design
- 2.5 : 1 Filtered-to-waste ratio
- Integrated filter life tracking and leak detection
- Requires 120VAC power supply outlet
- Recommended installation with a Brizo Reverse Osmosis Beverage Faucet with integrated airgap
- For specific performance claims refer to the Performance Data Sheet section (page 2 and 3)
- Refer to the installation manual for more specific installation and electrical requirements

WARRANTY

- This Brizo® reverse osmosis system is warranted to the original consumer purchaser or commercial user, as applicable, to be free from defects in material and workmanship for the applicable period specified below:
  – Reverse Osmosis Machine and Components: Five (5) years from the date the product was received by the original consumer purchaser or their authorized representative (installation contractor, etc.)
  – Pre-Filter, Filter Cartridge and Remineralizer: Thirty (30) days from the date that the product is received by the original purchaser or their authorized representative (installation contractor, etc.)
- Please go to **www.brizo.com** for the complete details of our limited warranty.

COMPLIES WITH:
This system has been certified by IAPMO R&T against:
ASSE 1086, NSF/ANSI 372, 42, 53, 58, 401, and Protocol P231 for the reduction of substances for specific performance claims as verified and substantiated by test data. Refer to the Performance Data Sheet for more information.
PERFORMANCE DATA SHEET PRISTI VE™ TANKLESS REVERSE OSMOSI S SYSTEM*

PERFORMANCE DATASHEETPRISTIVE™TANKLESS REVERSE OSMOSIS SYSTEM*							
Model	**Replacement**	**Operating Pressure Range**	**Operating Temperature Range**	**Recovery Rating****	**Rated Flow**	**Daily Production (DPR)**	**Rated Capacity**
BWQ100101 2	BWQ300102 Reverse Osmosis Filter Cartridge BWQ300202 Carbon Filter Cartridge	20 – 80 PSI (0.14 – 0.6 Mpa)	41 – 100 ˚ F (5 – 38 ˚ C)	≥ 74%	0.56 GPM (2.10L /min)	800 GPD (3028 L/day)	1320 Gallons (5000 L)
This system has been tested accordingto NSF/ANSI 42, 53, 58 and 401 for reduction of the substances listed below. The concentration of the indicated substances in water enteringthe system was reduced to a concentration less than or equal to the permissible limit for water leavingthe system, as specified in NSF/ANSI 42, 53, 58 and 401.							

*While testing was performed under standard laboratory conditions, actual performance may vary.
**Recovery Rating means the percentage of the influent water to the membrane portion of the system that is available to the user as RO treated water when the system is operated without a storage tank or when the storage tank is bypassed.

Applies To	**Applicable Standard**	**Substance**	**Influent Challenge Concentration**		**Maximum Permissible Product Water Concentration**		**Minimum Permissible % Reduction**	**Average Product Water Concentration**		**Average Product Contaminant % Reduction**
B	**NSF/ANSI 42**	chloraminea	3.0 ± 10%	mg/L	–	mg/L	≥ 80%	0.13	mg/L	95.6%
		chlorineb	2.0 ± 10%	mg/L	–	mg/L	≥ 50%	0.09	mg/L	95.6%
		particulate, Class I particles 0.5 to <1 µm	>10,000	particles/mL	–	–	≥ 85%	–	–	96.5%
	NSF/ANSI 53	per- and polyfluoroalkyl substances (PFAS)c								
		total PFASd,e	2.16 ± 20%	µg/L	0.02	µg/L	–	0.006	µg/L	99.7%
		chloroform (chemical surrogate for VOC)	0.300 ± 30%	mg/L	–	mg/L	95.0%	0.0032	µg/L	98.9%
		atenolol	200 ± 20%	ng/L	30	ng/L	–	1.0	ng/L	99.5%
		Bisphenol A(BPA)	2000 ± 20%	ng/L	300	ng/L	–	92.3	ng/L	95.5%
		carbamazepine	1400 ± 20%	ng/L	200	ng/L	–	10.0	ng/L	99.3%
		DEET(diethyltoluamide)	1400 ± 20%	ng/L	200	ng/L	–	10.0	ng/L	99.3%

WQ300202	**NSF/ANSI 401**	estrone	140 ± 20%	ng/L	20	ng/L	–	4.0	ng/L	97.4%
		ibuprofen	400 ± 20%	ng/L	60	ng/L	–	15.4	ng/L	96.1%
		linuron	140 ± 20%	ng/L	20	ng/L	–	1.0	ng/L	99.3%
		meprobamate	400 ± 20%	ng/L	60	ng/L	–	1.3	ng/L	99.7%
		metolachlor	1400 ± 20%	ng/L	200	ng/L	–	17.8	ng/L	98.8%
		microplastics, particles 0.5 to <1 µmf	>10,000	particles/mL	–	–	85.0%	–	–	96.8%
		naproxen	140 ± 20%	ng/L	20	ng/L	–	4.5	ng/L	97.0%
		nonylphenol	1400 ± 20%	ng/L	200	ng/L	–	34.6	ng/L	97.6%
		phenytoin	200 ± 20%	ng/L	30	ng/L	–	9.3	ng/L	95.5%
		TCPP (tris(1-chloro-2-propyl) phosphate)	5000 ± 20%	ng/L	700	ng/L	–	29.6	ng/L	99.4%
		trimethoprim	140 ± 20%	ng/L	20	ng/L	–	1.0	ng/L	99.3%
BWQ300102i	**NSF/ANSI 58**	arsenic (pentavalent)g	0.30 ± 10%	mg/L	0.01	mg/L	–	1.8	µg/L	99.4%
		asbestos, fibers greater than 10 µm	107 to 108	fibers/L	–	–	99.0%	–	–	99.999%
		barium	10.0 ± 10%	mg/L	2	mg/L	–	73.2	µg/L	99.2%
		cadmium	0.03 ± 10%	mg/L	0.005	mg/L	–	1.0	µg/L	97.0%
		chromium (trivalent)	0.3 ± 10%	mg/L	0.1	mg/L	–	1.0	µg/L	99.7%
		chromium (hexavalent)	0.3 ± 10%	mg/L	0.1	mg/L	–	6.0	µg/L	98.0%
		copper	3.0 ± 10%	mg/L	1.3	mg/L	–	1.1	µg/L	99.97%
		fluoride	8.0 ± 10%	mg/L	1.5	mg/L	–	0.7	mg/L	91.1%
		lead	0.15 ± 10%	mg/L	0.005	mg/L	–	1.0	µg/L	99.3%
		mercury	0.006 ± 10%	mg/L	0.002	mg/L	–	0.1	µg/L	98.1%

nBWQ10010 12		nitrate (as N)h	27.0 ± 10%	mg/L	10	mg/L	–	0.1	mg/L	99.8%
		nitrate plus nitrite (both as N)h	30.0 ± 10%	mg/L	10	mg/L	–	0.1	mg/L	99.8%
		nitrite (as N)h	3.0 ± 10%	mg/L	1	mg/L	–	0.1	mg/L	96.7%
		radium 226/228	25 ± 10 %	pCi/L	5	pCi/L	–	5.0	pCi/L	80.0%
		selenium	0.10 ± 10%	mg/L	0.05	mg/L	–	4.4	µg/L	95.6%
		TDSi	750 ± 40	mg/L	187	mg/L	–	51.5	µg/L	93.3%
		per- and polyfluoroalkyl substances (PFAS)c								
		total PFASd,e	2.16 ± 20%	µg/L	0.02	µg/L	–	0.01	µg/L	99.5%
		turbidity	11 ± 1	NTU	0.5	NTU	–	0.4	NTU	96.8%
	NSF	bacteriaj	10000000/mL		– –		99.9999%	– –		99.99991 %
		cystj	10000000/L		– –		99.9%	– –		99.998%
		virusj	10000000/L		– –		99.99%	– –		99.99987 %

a. As monochloramine (measured as Cl2/ L) .
b. Reduction as calculat ed based on chlorami ne as the surrogate chemical .
e. Th is effluent value is based on the MCLs or health advisories in force in several New En gl and St at es for a total PFAS level of 0.02 µg/L.
f. Th ere is no rated capacity for mi croplast ics due to the broad variat ion in the quant ity of particulat e matter found in drinking water.
g. Th is syst em has been test ed for the treatment of water cont aining pentavalent arsenic (also known as As(V), As(+5), or arsenat e) at concent rations of 0.30 mg/L or less. Th is syst em reduces pent avalent arsenic, but may not remove ot her forms of arsenic. Th is system is to be used on water supplies cont aining a detectable free chlorine resi dual or on water supplies that have been demonstrat ed to cont ain only pent avalent arsenic. Tr eat ment with chlorami ne (combined chlorine) is not sufficient to ensure complete conversi on of trivalent arsenic to pent avalent arsenic. Pl ease see the Ar senic Facts sect ion of the Inst allation Inst ructions for furt her informat ion
h. Th is syst em is accept able for treat ment of influent concentrat ions of no more than 27 mg/L ni trat e and 3 mg/L ni trite in combinat ion measured as N and is cert ified for ni trat e / ni trite reduc tion only for water supplies with a pressure of 210 kPa (30 psig) or gr eater.
i. Th is reverse osmosi s syst em cont ains replaceable treat ment components critical for effective reduc tion of TD S. Th e product wat er shall be test ed per iodically to verify that the syst em is performing satisfactorily.
j. Th is syst em is not intended to convert wast ewat er or raw sewage into drinki ng water.
d. Th e test mi xt ure for total PFAS is made up of PFOA (500 ppt), PFOS (1,000 ppt), PFHxS (300 ppt), PFNA (50 ppt), PFHpA (40 ppt), PFBS (260 ppt), and PFDA (10 ppt).
c. For PFAS, the indi vi dual influent tolerance is ± 30%.

Volatile Organic Chemicals (VOCs) included by surrogate testing of chloroform

Applies To	Applicable Standard	Chemical	Drinking water regulatory level a (MCL/MAC)		Influent challenge concentration b		Chemical reduction percent	Maximum product water concentration	
		alachlor[c]	0.002	mg/L	0.05	mg/L	> 98	0.001	mg/L
		atrazine[c]	0.003	mg/L	0.1	mg/L	> 97	0.003	mg/L
		benzene[c]	0.005	mg/L	0.081	mg/L	> 99	0.001	mg/L
		carbofuran[c]	0.04	mg/L	0.19	mg/L	> 99	0.001	mg/L
		carbon tetrachloride[d]	0.005	mg/L	0.078	mg/L	98	0.0018	mg/L
		chlorobenzene[c]	0.1	mg/L	0.077	mg/L	> 99	0.001	mg/L
		chloropicrin[c]	—	—	0.015	mg/L	99	0.0002	mg/L
		2,4-D[d]	0.07	mg/L	0.11	mg/L	98	0.0017	mg/L
		dibromochloropropane (DBCP)[c]	0.0002	mg/L	0.052	mg/L	> 99	0.00002	mg/L
		o-dichlorobenzene[c]	0.6	mg/L	0.08	mg/L	> 99	0.001	mg/L
		p-dichlorobenzene[c]	0.075	mg/L	0.04	mg/L	> 98	0.001	mg/L
		1,2-dichloroethane[e]	0.005	mg/L	0.088	mg/L	95 e	0.0048	mg/L
		1,1-dichloroethylene[c]	0.007	mg/L	0.083	mg/L	> 99	0.001	mg/L
		cis-1,2-dichloroethylene[c]	0.07	mg/L	0.17	mg/L	> 99	0.0005	mg/L
		trans-1,2-dichloroethylene[c]	0.1	mg/L	0.086	mg/L	> 99	0.001	mg/L
		1,2-dichloropropane[c]	0.005	mg/L	0.08	mg/L	> 99	0.001	mg/L
		cis-1,3-dichloropropylene[c]	—	—	0.079	mg/L	> 99	0.001	mg/L
		dinoseb[d]	0.007	mg/L	0.17	mg/L	99	0.0002	mg/L
		endrin[d]	0.002	mg/L	0.053	mg/L	99	0.00059	mg/L
		ethylbenzene[c]	0.7	mg/L	0.088	mg/L	> 99	0.001	mg/L
		ethylene dibromide (EDB)[c]	0.00005	mg/L	0.044	mg/L	> 99	0.00002	mg/L

BWQ300202	**NSF/ANSI 53**	haloacetonitriles (HAN)[c] bromochloroacetonitrile[c] dibromoacetonitrile[c] dichloroacetonitrile[c] trichloroacetonitrile[c]	—	—	0.022 0.024 0.0096 0.015	mg/L	98 98 98 98	0.0005 0.0006 0.0002 0.0003	mg/L
		haloketones (HK)[c] 1,1-dichloro-2-propanone[c] 1,1,1-trichloro-2- propanone[c]	—	—	0.0072 0.0082	mg/L	99 96	0.0001 0.0003	mg/L
		heptachlor (H-34, Heptox)	0.0004	mg/L	0.025	mg/L	> 99	0.00001	mg/L
		heptachlor epoxide[f]	0.0002	mg/L	0.0107 f	mg/L	98	0.0002	mg/L
		hexachlorobutadiene[c]	—	—	0.044	mg/L	> 98	0.001	mg/L
		hexachlorocyclopentadiene[c]	0.05	mg/L	0.06	mg/L	> 99	0.000002	mg/L
		lindane[c]	0.0002	mg/L	0.055	mg/L	> 99	0.00001	mg/L
		methoxychlor[c]	0.04	mg/L	0.05	mg/L	> 99	0.0001	mg/L
		pentachlorophenol[c]	0.001	mg/L	0.096	mg/L	> 99	0.001	mg/L
		simazine[c]	0.004	mg/L	0.12	mg/L	> 97	0.004	mg/L
		styrene[c]	0.1	mg/L	0.15	mg/L	> 99	0.0005	mg/L
		1,1,2,2-tetrachloroethane[c]	—	—	0.081	mg/L	> 99	0.001	mg/L
		tetrachloroethylene[c]	0.005	mg/L	0.081	mg/L	> 99	0.001	mg/L
		toluene[c]	1	mg/L	0.078	mg/L	> 99	0.001	mg/L
		2,4,5-TP (silvex)[d]	0.05	mg/L	0.27	mg/L	99	0.0016	mg/L
		tribromoacetic acid[c]	—	—	0.042	mg/L	> 98	0.001	mg/L
		1,2,4-trichlorobenzene[c]	0.07	mg/L	0.16	mg/L	> 99	0.0005	mg/L
		1,1,1-trichloroethane[d]	0.2	mg/L	0.084	mg/L	95	0.0046	mg/L
		1,1,2-trichloroethane[c]	0.005	mg/L	0.15	mg/L	> 99	0.0005	mg/L
		trichloroethylene[c]	0.005	mg/L	0.18	mg/L	> 99	0.0010	mg/L

		trihalomethanes (includes): chloroform (surrogate chemical) bromoform bromodichloromethane chlorodibromomethane	0.08	mg/L	0.3	mg/L	95	0.015	mg/L
		xylenes (total)[c]	10	mg/L	0.07	mg/L	> 99	0.001	mg/L

a Th ese harmonized values were agreed upon by representatives of U.S. EPA and Heal th Canada for the purpose of eval uating products to the requiremen ts of this standard.
b Influent chal lenge levels are average infl uent concen trat ions determined in surrogat e qualification testing.
c Maxi mum product water level was not observed but was set at the detection limit of the an al ysis.
d Maxi mum product water level is set at a value determined in surrogat e qual ificat ion testing.
e Chem ical reduction percen t and maxi mum product water level calculat ed at chloroform 95% breakthroμgh point as determined in surrogate qual ificat ion testing.
f Th e surrogate test results for heptachlor epoxide demonstrat ed a 98% reduction. Th ese data were used to calculat e an upper occurrence concen trat ion that would produce a maxi mum product water level at the Maxi mum Contam inen t Level (MCL).

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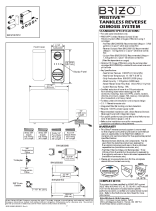
Documents / Resources

	BRIZO BWQ1001012 Tankless Reverse Osmosis System [pdf] Owner's Manual BWQ1001012, BWQ1001012 Tankless Reverse Osmosis System, Tankless Reverse Osmosis System, Reverse Osmosis System, Osmosis System, System

References

- brizo.com
- User Manual