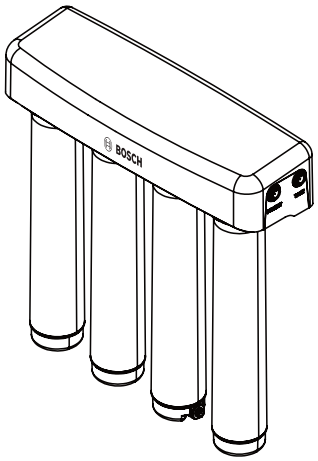
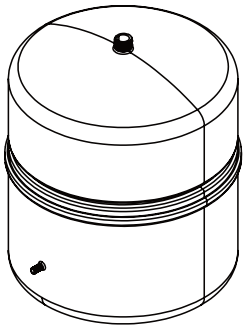
Water Filtration 4000
4-Stage Reverse Osmosis System

Performance Data Sheet

BOSCH

Overview and Certifications





IAPMO R&T WATER QUALITY PLATINUM SEAL IAPMO RESEARCH AND TESTING®

C IAPMO C TM

Basic Product Information				
Model	**Water Filtration 4000 (RO4-80T-CP)**			
Bosch Part Number	7738007509			
Replacement Cartridges	Reverse Osmosis Membrane	Sediment Pre-Filter	Carbon Block CTO Filter	Carbon Block VOC Filter
Replacement Part Numbers	7738007514	7738007513	7738007513	7738007513
Replacement Frequency	2 years	6 mo. or 230 gal.	6 mo. or 230 gal.	6 mo. or 230 gal.
Daily Production Rate (per test data)	29 GPD (Gallons per day)			
Operating Pressure Range	40 - 80 psi (275.8 - 551.6 kPa)			
Operating Temperature	40 - 90 °F (4.4 - 32.2 °C)			
Efficiency Rating [1]	18%			
Recovery Rating [2]	28%			
Certification	The RO4-80T-CP has been certified by IAPMO R&T to NSF/ANSI/CAN 372 for low lead compliance and to NSF/ANSI 42, NSF/ANSI 53, NSF/ANSI 58, NSF/ANSI 401 and CSA B483.1 for the reduction of substances listed in the performance data sheet as substantiated and verified by test data.			
Features & Benefits				
Installation Location	Point-of-use product, install under sink			
Power Options	No electricity needed			
Service	Filter cartridges can be serviced and replaced			

[1] *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 daily usage.*

[2] *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.*

Testing Data

Testing performed under NSF/ANSI Standards 42, 53, 58 and 401. The RO4-80T-CP has been tested according to NSF/ANSI 42, 53, 58,and 401 for the reduction of 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 permittable limit for the water leaving the system, as specified in NSF/ANSI 42, 53, 58 and 401. The following data applies when all cartridges are working together in the Water Filtration 4000 system.

	Influent Challenge Concentration	Percentage Reduction [or product water concentration] Requirement	Actual Minimum Chemical Reduction Percent [or product water concentration]	Actual Average Chemical Reduction Percent
NSF/ ANSI 42				
Chlorine Taste & Odor	2.0 ± 10% mg/L	>= 50%	89.1%	95.5%
Chloramine	3.0 ± 10% mg/L	[<= 0.5 mg/L]	89.1%	95.5%
Particulate Class I (≥ 0.5 um to <1 um)	at least 10,000 particles/ ml	>= 85%	> 99.9%	> 99.9%
NSF/ ANSI 53				
Asbestos	10^7 to 10^8 fibers / L	>= 99%	> 99%	> 99%
Cyst	min 50,000 / L	> 99.95%	> 99.99%	> 99.99%
Lead pH 6.5	0.15 ± 10% mg/L	[0.010 mg/L]	> 99.3%	> 99.3%
Lead pH 8.5	0.15 ± 10% mg/L	[0.010 mg/L]	> 99.4%	> 99.4%
Mercury pH 6.5	0.006 ± 10% mg/L	[0.002 mg/L]	> 96.6%	> 96.6%
Mercury pH 8.5	0.006 ± 10% mg/L	[0.002 mg/L]	> 96.7%	> 96.7%
MTBE	0.015 ± 20% mg/L	[0.005 mg/L]	66.9%	86.6%
Perfluorooctanoic Acid (PFOA) & Perfluorooctane Sulfonate (PFOS)	1.5 ± 10% ug/L	[0.07 ug/L]	95.8%	> 95.8%
Turbidity	11 ± 1 NTU	[<= 0.5 NTU]	99.0%	99.1%
VOC (chloroform surrogate)	0.300 ± 10% mg/L	>= 95%	96.7%	99.6%
NSF/ ANSI 58				
Arsenic V (Pentavalent)[3]	0.30 ± 10% mg/L	[0.010 mg/L]	99.3%	99.6%
Barium	9.6 ± 10% mg/L	[2.0 mg/L]	99.0%	99.2%
Cadmium	0.03 ± 10% mg/L	[0.005 mg/L]	97.6%	99.2%
Chromium (Hexavalent)	0.28 ± 10% mg/L	[0.1 mg/L]	98.9%	99.5%
Chromium (Trivalent)	0.31 ± 10% mg/L	[0.1 mg/L]	99.3%	99.4%
Copper	3.0 ± 10% mg/L	[1.3 mg/L]	98.6%	99.2%
Fluoride	7.8 ± 10% mg/L	[1 mg/L]	91.1%	94.3%
Selenium	0.09 ± 10% mg/L	[0.05 mg/L]	97.8%	98.6%
Total Dissolved Solids (TDS)	753 ± 41 mg/L	[187 mg/L]	94.4%	96.0%
NSF/ ANSI 401				
Phenytoin	200 ± 20% ng/L	[<= 30 ng/L]	95.5%	> 95.6%
Ibuprofen	400 ± 20% ng/L	[<= 60 ng/L]	95.3%	> 95.4%
Naproxen	140 ± 20% ng/L	[<= 20 ng/L]	96.3%	> 96.4%
Estrone	140 ± 20% ng/L	[<= 20 ng/L]	96.3%	> 96.5%
Bisphenol A	2000 ± 20% ng/L	[<= 300 ng/L]	98.8%	> 98.9%
Nonyl phenol	1400 ± 20% ng/L	[<= 200 ng/L]	97.5%	> 97.5%
Meprobamate	400 ± 20% ng/L	[<= 60 ng/L I	94.7%	94.7%
Atenolol	200 ± 20% ng/L	{ <= 60 ng/L I	94.2%	94.2%
Carbamazepine	1400 ± 20% ng/L	[<= 200 ng/L]	98.6%	98.6%
Diethyltoluamide (DEET)	1400 ± 20% ng/L	[<= 200 ng/L]	98.7%	98.7%
Metolachlor	1400 ± 20% ng/L	[<= 200 ng/L]	98.6%	98.6%
Trimethoprim	140 ± 20% ng/L	[<= 20 ng/L]	96.7%	96.7%
Linuron	140 ± 20% ng/L	[<= 20 ng/L]	96.6%	96.6%
Tris(2-chloroethyl)phosphate (TCEP)	5000 ± 20% ng/L	[<= 700 ng/L]	98.0%	98.0%
Tris(1-chloro-2-propyl)phosphate (TCPP)	5000 ± 20% ng/L	[<= 700 ng/L]	97.8%	97.8%

[3] This system has been tested for the treatment of water containing pentavalent arsenic {also known as As(V), As{+5), or arsenate) at a concentration 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 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. Refer to the ""Arsenic Reduction"" section of the Installation and Operation Instructions for more information.

The compounds certified under NSF/ANSI 401 have been deemed as "incidental contaminants/emerging compounds." Incidental contaminants are those compounds that have been detected in drinking water supplies at trace levels. While occurring at only trace levels, these compounds can affect the public acceptance/perception of drinking water quality.

Organic Chemicals Included By Surrogate Testing				
Chemical	Drinking Water Regulatory Level (MCL/MAC) mg/L	Influent Challenge Concentration mg/L	Chemical Reduction Percent	Maximum Product Water Concentration mg/L
Alachlor	0.002	0.050	> 98%	0.001
Atrazine	0.003	0.100	> 97%	0.003
Benzene	0.005	0.081	> 99%	0.001
Carbofuran	0.04	0.190	> 99%	0.001
Carbon Tetrachloride	0.005	0.078	98%	0.0018
Chlorobenzene	0.1	0.077	> 99%	0.001
Chloropicrin		0.015	99%	0.0002
2,4-d	0.07	0.110	98%	0.0017
Dibromochloropropane (DBCP)	0.0002	0.052	> 99%	0.00002
O-Dichlorobenzene	0.6	0.080	> 99%	0.001
P-Dichlorobenzene	0.075	0.040	> 98%	0.001
1,2-Dichloroethane	0.005	0.088	95%	0.0048
1,1-Dichloroethylene	0.007	0.083	> 99%	0.001
Cis-1,2-Dichloroethylene	0.07	0.170	> 99%	0.0005
Trans-1,2-Dichloroethylene	0.1	0.086	> 99%	0.001
1,2-Dichloropropane	0.005	0.080	> 99%	0.001
Cis-1,3-Dichloropropylene		0.079	> 99%	0.001
Dinoseb	0.007	0.170	99%	0.0002
Endrin	0.002	0.053	99%	0.00059
Ethylbenzene	0.7	0.088	> 99%	0.001
Ethylene Dibromide (EDB)	0.00005	0.044	> 99%	0.00002
Haloacetonitriles (HAN) Bromochloroacetonitrile Dibromoacetonitrile Dichloroacetonitrile Trichloroacetonitrile		0.022 0.024 0.0096 0.015	98% 98% 98% 98%	0.0005 0.0006 0.0002 0.0003
Haloketones (HK) 1,1-Dichloro-2-propanone 1,1,1-Trichloro-2-propanone		0.0072 0.0082	99% 96%	0.0001 0.0003
Heptachlor (H-34, Heptox)	0.0004	0.025	> 99%	0.00001
Heptachlor Epoxide	0.0002	0.0107	98%	0.0002
Hexachlorobutadiene		0.044	> 98%	0.001
Hexachlorocyclopentadiene	0.05	0.060	> 99%	0.000002
Lindane	0.0002	0.055	> 99%	0.00001
Methoxychlor	0.04	0.050	> 99%	0.0001
Pentachlorophenol	0.001	0.096	> 99%	0.001
Simazine	0.004	0.120	> 97%	0.004
Styrene	0.1	0.150	> 99%	0.0005
1,1,2,2-Tetrachloroethane		0.081	> 99%	0.001
Tetrachloroethylen	0.005	0.081	> 99%	0.001
Toluene		0.078	> 99%	0.001
2,4,5-tp (Silvex)	0.05	0.270	99%	0.0016

Organic Chemicals Included By Surrogate Testing- Continued				
Chemical	Drinking Water Regulatory Level (MCL/MAC) mg/L	Influent Challenge Concentration mg/L	Chemical Reduction Percent	Maximum Product Water Concentration mg/L
Tribromoacetic Acid		0.042	> 98%	0.001
1,2,4-Trichlorobenzene	0.07	0.160	> 99%	0.0005
1,1,1-Trichloroethane	0.2	0.084	95%	0.0046
1,1,2-Trichloroethane	0.005	0.150	> 99%	0.005
Trichloroethylene	0.005	0.180	> 99%	0.0010
Trihalomethanes (includes): Chloroform (surrogate chemical) Bromoform Bromodichloromethane Chlorodibromomethane	0.080	0.300	95%	0.015
Xylenes (total)	10	0.070	> 99%	0.001

Not all water will contain contaminants listed.

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

Filter usage must comply with state and local laws.

Filter is only to be used with cold water.

System is not intended to convert wastewater or raw sewage into drinking water.

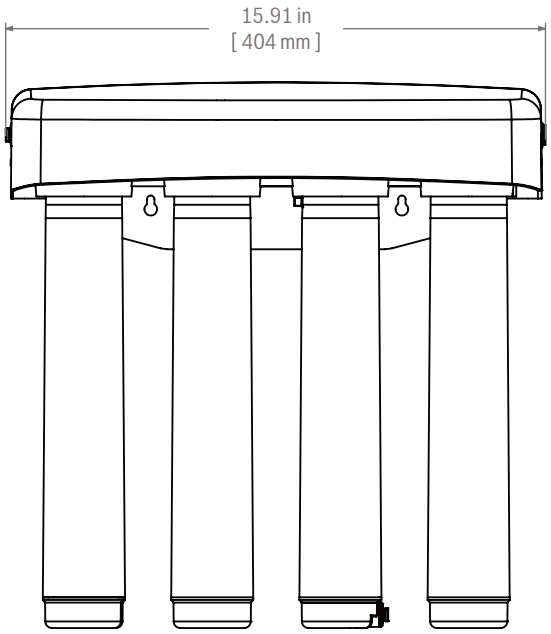
Do not use water that is microbiologically unsafe or of unknown water quality without adequate disinfection before or after the system.

Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts.

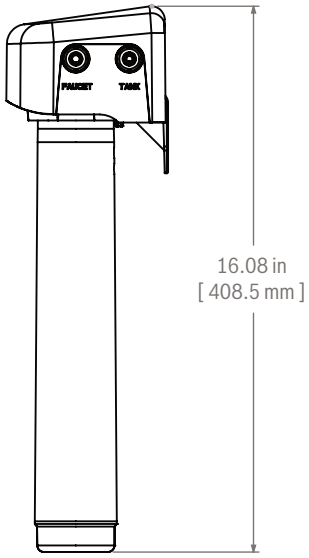
See Installation and Operation Instructions for general installation conditions and needs as well as manufacturer's limited warranty.

Dimensions

Top View

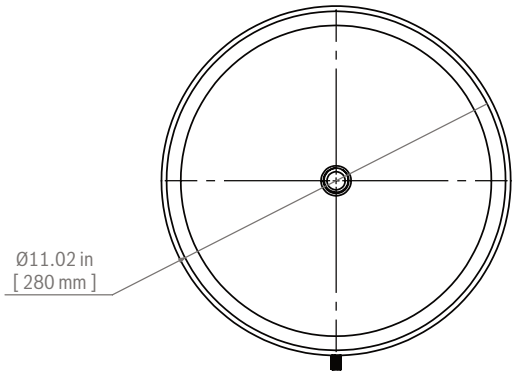


Front View

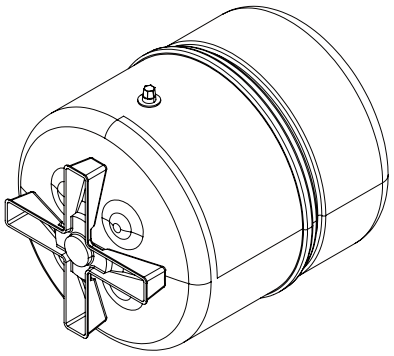


Side View

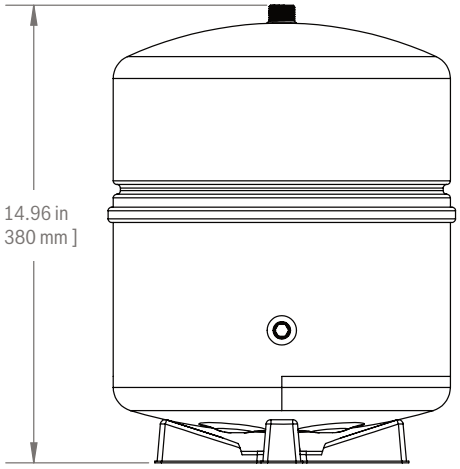
Dimensions - RO Tank



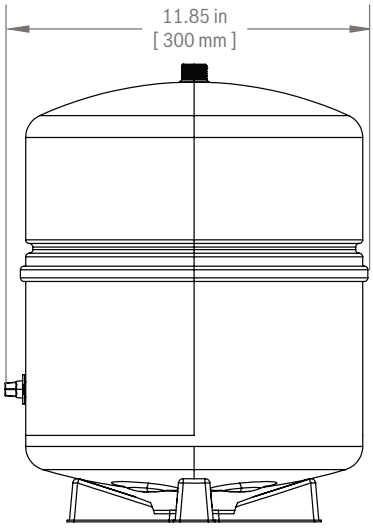
Top View

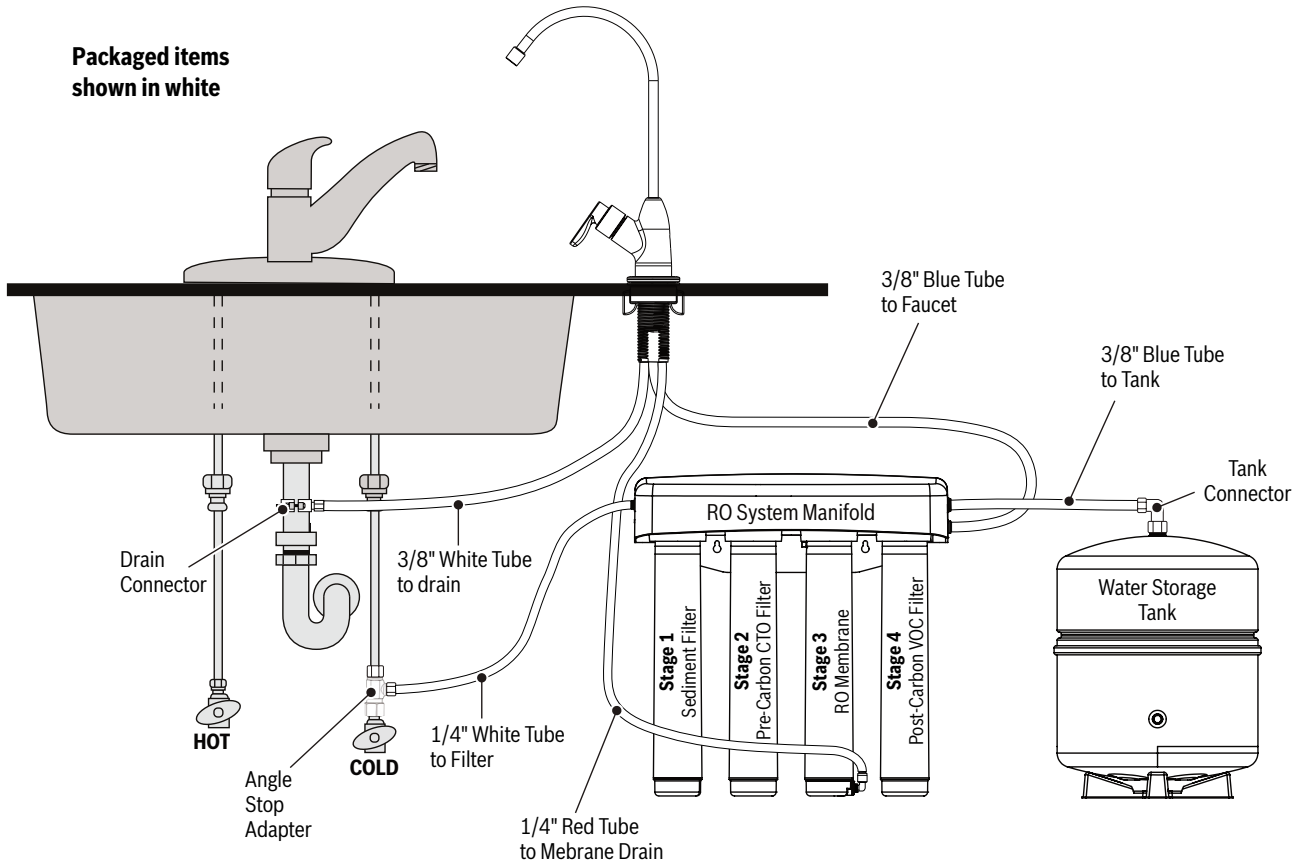


RO Tank with Stand



Front View with Stand



Side View with Stand

Installation Example