

Kinetico HYDRO® ECO™

Tankless Reverse Osmosis System

Models:

Kinetico HYDRO® ECO™ 600 GPD

Kinetico HYDRO® ECO™ 800 GPD

Owner's manual



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Version Francaise	F1
Version Español	E1



Better water flows here.

Welcome to the Kinetico experience—where better water begins.

Water with reduced natural and man-made impurities. Water that tastes better, performs better throughout your home, and protects your plumbing, appliances, skin, and fabrics—while saving time and money along the way.

Experience life hydrated by Kinetico.

Meet the Kinetico HYDRO® ECO™ Tankless Reverse Osmosis System



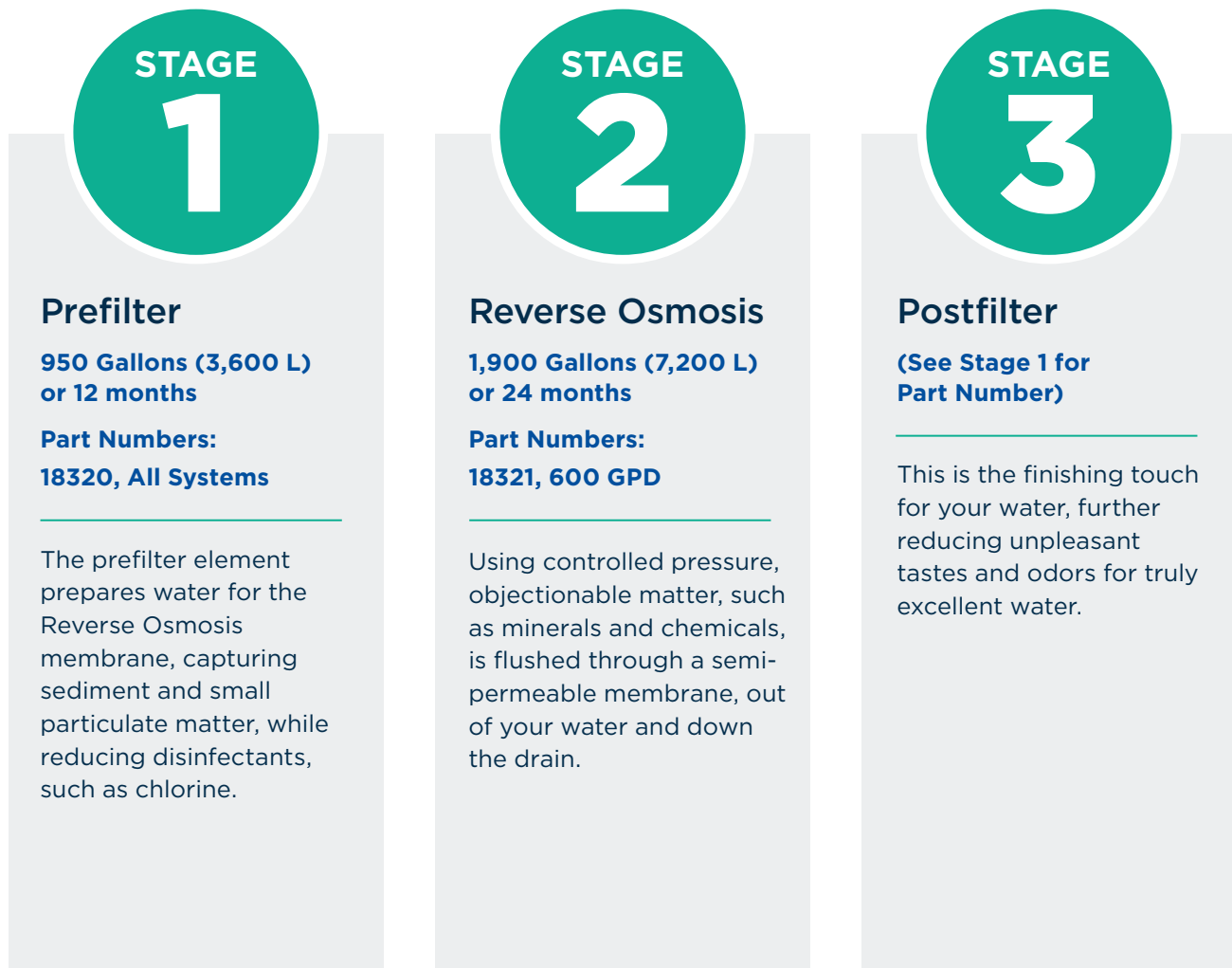
High-quality drinking water is now yours, continuously flowing without a storage tank. Your new Kinetico HYDRO® ECO™ Tankless Reverse Osmosis System is more efficient in space and water usage, plus, it reduces waste and energy consumption. You get the immediate benefits of cleaner*, better-tasting drinking water in your home.

*Cleaner means less impurities than the water that went into the Kinetico HYDRO® Eco™.

How Your Kinetico HYDRO® ECO™ Tankless Reverse Osmosis System works:

The Kinetico HYDRO® ECO™ Tankless Reverse Osmosis System offers three stages of protection. Each stage works to deliver water with significantly reduced heavy metals, chemicals, minerals, objectionable tastes, and odors.

Note: For very best results, install your tankless reverse osmosis system after a Kinetico Water Softener.



Note: To reduce maintenance, the prefilter (Stage 1) and the postfilter (Stage 3) are housed in one single cartridge.



LED Faucet

Visibly indicates filter status above the sink.

Function Key

Located on top of the system for quick and easy reference to identify LED lights.

Filter Reset & Flush Buttons

Convenient and accessible buttons allow manual flush and easy reset after filter changes.

**Cartridge 1
Combined Pre/Post
Filter Cartridge**

12 months/950 gallons
(3600 Liters)

LED System Indicator Lights

Alerts notify when to change cartridges, if a leak is detected, and when system is flushing.

**Cartridge 2
Reverse Osmosis Cartridge**

24 months/1,900 gallons
(7200 Liters)

Built-In Leak Detection

If a leak is detected, alert will appear on system and faucet, and water at the unit will be shut off.

Compact Size & Shape

Needs minimal space under sink — no tank needed.

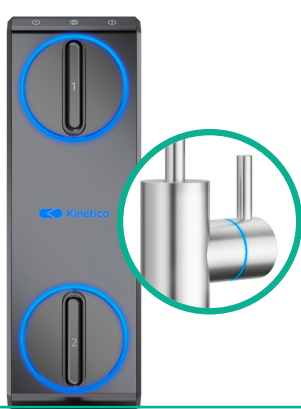
Quiet Design

Rubber feet absorb vibration and reduce noise.

Unit Operation

Cartridge Capacity LED Notifications

The Kinetico HYDRO® ECO™ system provides a continuous flow of fresh, filtered water on demand. To help keep your system operating at peak performance, the system provides user feedback through the front panel display and the faucet LED indicator. Each cartridge has an LED ring surrounding it, which communicates filter life and overall function of your tankless reverse osmosis system. In addition, the system faucet shares this same information through the LED ring near the faucet handle.

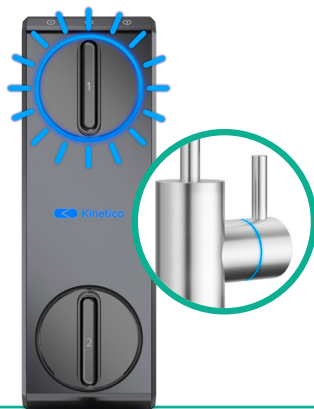


Normal operating condition, water not dispensing:

When none of the LED lights are illuminated, your system is in good operating condition.

Normal operating condition, water dispensing:

LEDs on cartridge and faucet will glow solid blue when your system is in good operating condition.



Filter near capacity:

Specific cartridge ring and faucet LED ring will begin to flash blue while water is being dispensed. This is to indicate cartridge will soon need replacement. LEDs will stop illuminating when water is not being dispensed.



Filter reached capacity:

When a cartridge capacity has been reached, that specific cartridge ring and faucet LED will illuminate solid orange while water is flowing.

The cartridge LED will remain illuminated solid orange even when the system is not dispensing water. Replace the cartridge to return your system to normal operating condition.

Note: Reduction in faucet flow is also an indication of reaching filter capacity. Change Cartridge 1 if flow reduces, regardless of LED status.

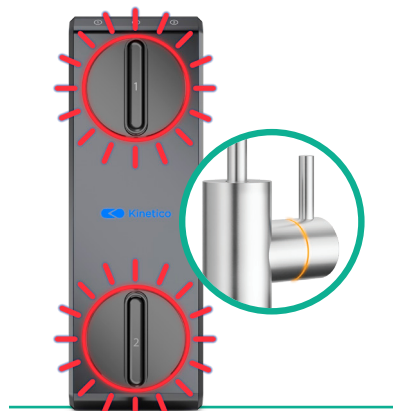
System Function LED Notifications

The LED rings around the cartridges and the faucet LED will all share information such as system flushes, leak detection and run-time protection.



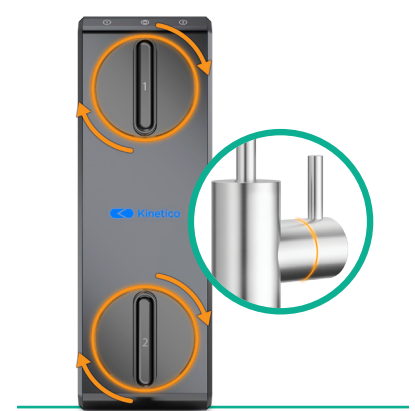
System Flushes:

Your system will perform periodic flushes to keep your drinking water fresh. While these flushes are occurring, the cartridge LEDs will glow purple. Faucet LED will not illuminate.



Leak Detection:

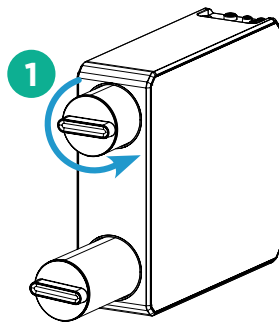
Your system is equipped with leak detection. If water is detected within the unit, the cartridge LEDs will fast-flash red and the faucet LED will fast-flash orange. The system will also provide a continuous audible beep. Determine the source of the leak, then reset, using the leak detection reset procedure (see page 10). Contact your dealer if further assistance is required.



Run-Time Protection:

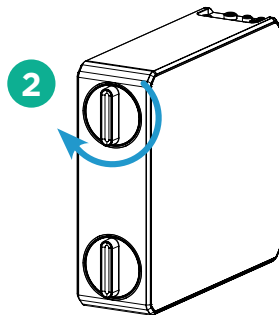
In the event your system runs continuously for a long period of time (>60 minutes) the system will enter run-time protection mode. This will shut down your system to protect the pump. When run-time protection is triggered, the cartridge LEDs will glow orange and the faucet LED will slow-flash orange. Follow the run-time protection reset procedure (see page 10) to return your unit to normal operating condition.

Cartridge Replacement

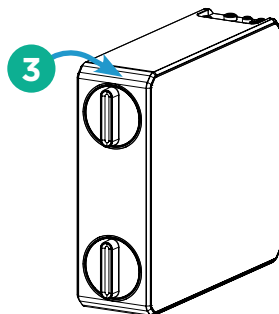


Note: It is not required to shutoff the water supply to change cartridges, there is an internal shutoff mechanism that is engaged when rotating the cartridge during removal.

- 1 Remove the cartridge by rotating 90 degrees counterclockwise. The cartridge will disengage and can be removed from the system.



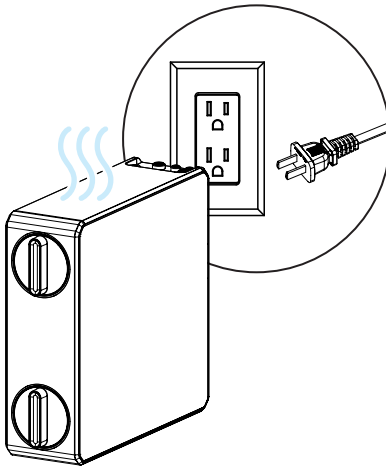
- 2 Install the new cartridge by inserting and rotating clockwise until system it is fully engaged.



- 3 Hold the appropriate cartridge reset button (1 or 2) for three seconds to reset the internal capacity counter. The system will confirm reset by audible beep and the cartridge LED ring will glow solid blue for three seconds before turning off.

It is recommended to sanitize the system after cartridge replacement. See the sanitization section for more details.

Leak Detection Reset

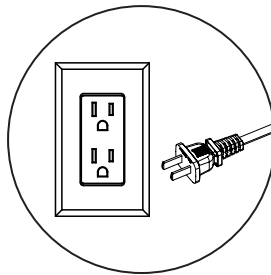


If a leak is detected by the system, it is highly recommended to contact your dealer for assistance.

When leak detection is triggered, the system will not operate until the error is addressed. Unplug the system and confirm that the internal leak sensor is completely dry. This is achieved by disassembling a portion of the system to gain access to the sensor, OR, allowing the sensor to air-dry over time.

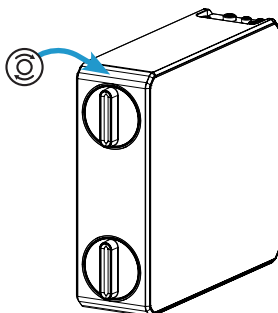
Once the sensor is dry, the system can be plugged back in and will resume normal operation.

Run-Time Protection Reset



When run-time protection is triggered, the system will not operate until the error is addressed. Unplug the system for 30 seconds and then plug the system back in. The system will resume normal operation.

Manual Flush



There may be times when a user desires the system to perform a flush. Manual flushing begins by holding the center button  for three seconds. The system will give an audible beep and the cartridge LEDs will glow purple. When the flush is complete, the cartridge LEDs will turn off.

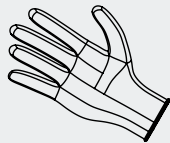
Sanitization

Sanitization is recommended after installation and at each cartridge change. Follow the steps below to sanitize the Kinetico HYDRO® ECO™ system.

REQUIRED MATERIALS



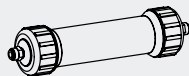
Safety Glasses



Single-Use Gloves



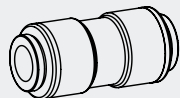
Unscented Household Bleach
(or other sanitizing media)



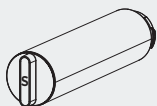
Dosing Capsule
(with 3/8" x 3/8" inlet/outlet)



Tubing Cutter

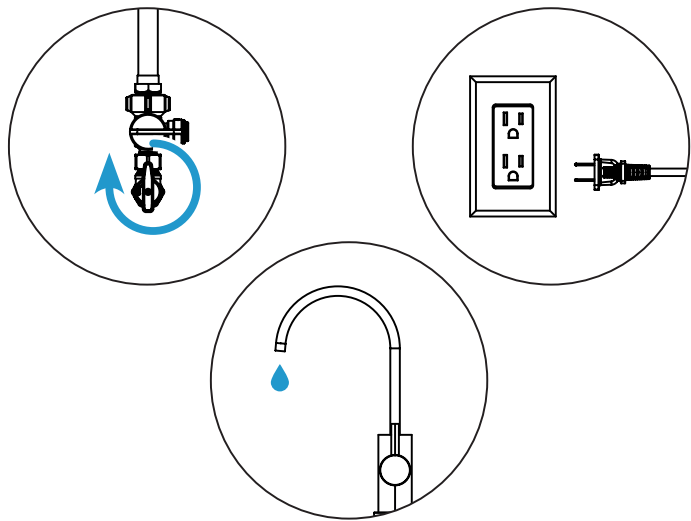


3/8" x 3/8" Coupler Fitting
(optional)

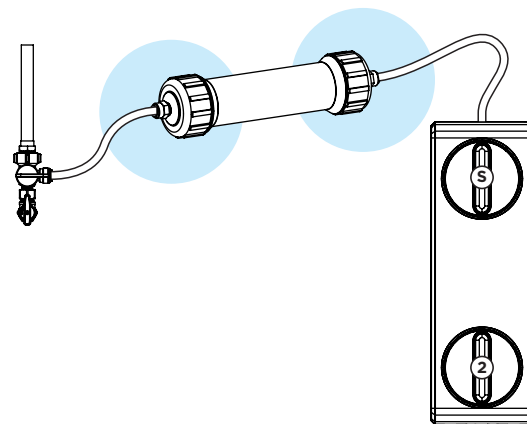


Sanitization Cartridge

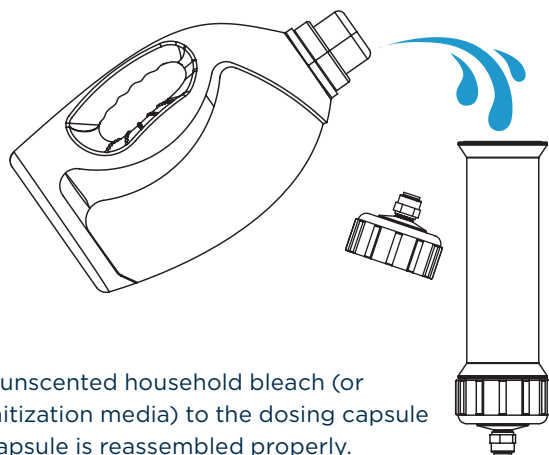
This procedure involves the use of strong oxidizing agents. Safety glasses and gloves are required.



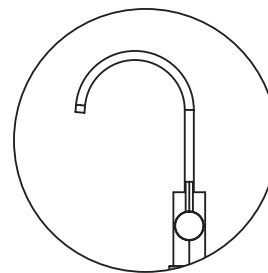
- 1 Close the supply valve to the system, unplug the system from electrical, and open the faucet to relieve pressure. Remove Cartridge 1 and replace it with the sanitization cartridge (sold separately).



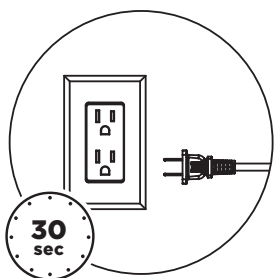
- 2 Cut the 3/8" blue supply tubing to allow splicing in the dosing capsule. Install the dosing capsule between the cut ends of the tubing.



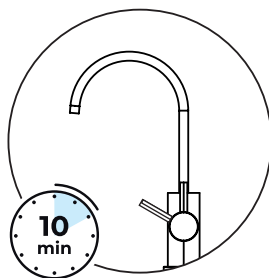
- 3** Add 25 mL of unscented household bleach (or equivalent sanitization media) to the dosing capsule and confirm capsule is reassembled properly.



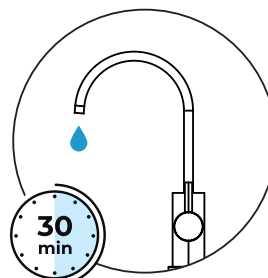
- 4** Close the faucet and open the supply valve.



- 5** Reconnect the power adapter to the electrical outlet and allow the unit to perform the startup flush (30 seconds). Once flushing is complete, open the faucet and allow water to flow for 30 seconds.

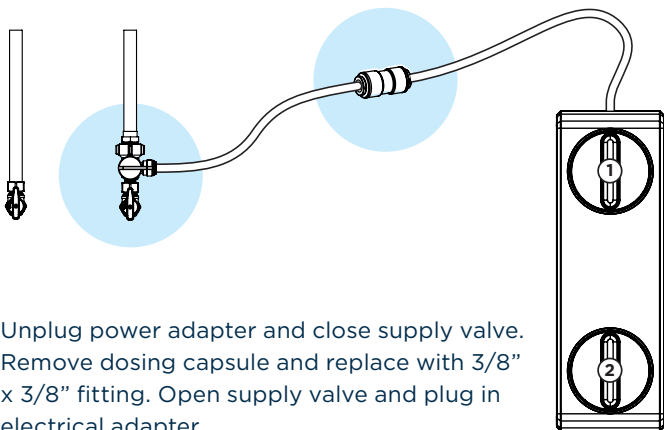


- 6** Close the faucet and allow the system to sit idle for 10 minutes.



- 7** Remove sanitization cartridge and replace with Cartridge 1. Open the faucet and allow the system to run for 30 minutes continuous.

! TAKE CARE DURING THIS STEP TO AVOID CONTACT WITH SANITIZATION FLUIDS. USE OF PROPER PPE IS REQUIRED!



- 8** Unplug power adapter and close supply valve. Remove dosing capsule and replace with 3/8" x 3/8" fitting. Open supply valve and plug in electrical adapter.



- 9** System is now sanitized and ready for use.

System Specifications

General Specifications

Minimum/Maximum Operating Temperature:	40°F - 100°F (5°C - 38°C)
Minimum/Maximum Operating Pressure:	15 psi - 100 psi (103 kPa - 689 kPa)
Maximum TDS Influent concentration:	1,500 ppm
Water Supply:	0-10 gpg hardness, 0 - 0.1 iron
pH Range:	3-11
Rated Filter Capacity (Cartridge 1):	950 gallons (3,600 L)
Rated Membrane Capacity (Cartridge 2):	1,900 gallons (7200 L)

Model Specific Information

Kinetico HYDRO® ECO™ 600 GPD

Product Water Production Rate (Daily Production Rate): 581 GPD (2,200 LPD)
Rated Service Flow: 0.5 GPM (1.89 LPM)
Recovery Rating* : 65.4%
Rejection Rate: 93.7%
Rated Power: 66 W
Electrical Input (to power adapter): 120 VAC

Kinetico HYDRO® ECO™ 800 GPD

Product Water Production Rate (Daily Production Rate): 814 GPD (3,081 LPD)
Rated Service Flow: 0.6 GPM (2.27 LPM)
Recovery Rating*: 68.4%
Rejection Rate: 96.7%
Rated Power: 90 W
Electrical Input (to power adapter): 120 VAC

* 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.



Tested and certified by WQA against NSF/ANSI Standards 42, 53, 58, and 372 for the reduction of claims specified on the Performance Data Sheet. Conforms to CSA Standard B483.1 - Drinking Water Treatment Systems.

Do not use with water that is microbiologically unsafe or 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.

WQA certified our product performance, and reviewed our manufacturing facility and procedures to assure product consistency and integrity. They also assure that our literature accurately reflects our product capabilities. The system and installation must comply with state/provincial and local laws and regulations.

Conforms to NSF/ANSI 58 for pentavalent arsenic reduction. See performance data sheet and Arsenic Facts section for an explanation of reduction performance.

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 0.050 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. Please see the Arsenic Facts section of the Performance Data Sheet for further information.

Substance Reduction 600 GPD

This system has been tested and certified by the Water Quality Association according to NSF/ANSI 42, 53, 58 and CSA B483.1 for the reduction of the substances 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 by NSF/ANSI 42, 53, 58 and CSA B483.1.

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

Kinetico HYDRO® ECO™ 600 GPD							
STANDARD NSF/ANSI 58 REDUCTION CLAIMS							
Substance	Test Pressure (psi)	Average Influent Level (mg/L)	Average Effluent Level (mg/L)	Maximum Effluent Level	Average Percent Reduction	Influent Challenge Concentration mg/L	Maximum Permissible Product Water Concentration (mg/L)
Total Dissolved Solids	50	770	48.2	73.1	93.7	750 +/- 40	187
Pentavalent Arsenic	50	0.059	0.0005	0.002	99.1	0.05 +/- 10%	0.010
Barium	50	10	0.078	0.25	99.2	10 +/- 10%	2
Hexavalent Chromium	50	0.292	0.0039	0.015	98.7	0.3 +/- 10%	0.1
Trivalent Chromium	50	0.292	0.0005	0.0005	99.8	0.3 +/- 10%	0.1
Cadmium	50	0.032	0.0009	0.005	97.1	0.03 +/- 10%	0.005
Copper	50	2.8	0.017	0.11	99.4	3 +/- 10%	1.3
Fluoride	50	7.9	0.25	0.54	96.8	8 +/- 10%	1.5
Radium 226/228	50	10	0.078	0.25	99.2	10 +/- 10%	2
Selenium	50	0.104	0.0013	0.005	98.7	0.1 +/- 10%	0.05

STANDARD NSF/ANSI 42 REDUCTION CLAIMS

Substance	Average Influent Concentration (mg/L)	Average Effluent Concentration (mg/L)	Average Percent Reduction	Percent Reduction Requirement
Chlorine Taste & Odor	1.9	0.49	74	> = 50%

STANDARD NSF/ANSI 53 REDUCTION CLAIMS

Substance	Test Pressure (psi)	Average Influent Level (mg/L)	Average Effluent Level (mg/L)	Maximum Effluent Level	Average Percent Reduction	Influent Challenge Concentration mg/L	Maximum Permissible Product Water Concentration (mg/L)
Lead pH 6.5	50	0.16	0.0001	0.0002	99.9	0.15 +/- 10%	0.005
Lead pH 8.5	50	0.147	0.0002	0.0005	99.8	0.05 +/- 10%	0.005

Kinetico HYDRO [®] ECO [™] 800 GPD							
STANDARD NSF/ANSI 58 REDUCTION CLAIMS							
Substance	Test Pressure (psi)	Average Influent Level (mg/L)	Average Effluent Level (mg/L)	Maximum Effluent Level	Average Percent Reduction	Influent Challenge Concentration mg/L	Maximum Permissible Product Water Concentration (mg/L)
Total Dissolved Solids	50	759	24.9	32.7	96.7	750 +/- 40	187
Pentavalent Arsenic	50	0.059	0.0005	0.0005	99.2	0.05 +/- 10%	0.010
Barium	50	9	0.11	1.2	98.9	10 +/- 10%	2
Hexavalent Chromium	50	0.291	0.0042	0.073	98.6	0.3 +/- 10%	0.1
Trivalent Chromium	50	0.272	0.0005	0.0005	99.8	0.3 +/- 10%	0.1
Cadmium	50	0.0321	0.0002	0.000747	99.2	0.03 +/- 10%	0.005
Copper	50	2.8	0.017	0.069	99.4	3 +/- 10%	1.3
Fluoride	50	7.9	0.25	0.32	96.9	8 +/- 10%	1.5
Radium 226/228	50	9	0.11	1.2	98.9	10 +/-	2
Selenium	50	0.101	0.0021	0.026	97.9	0.1 +/- 10%	0.05

STANDARD NSF/ANSI 42 REDUCTION CLAIMS

Substance	Average Influent Concentration (mg/L)	Average Effluent Concentration (mg/L)	Average Percent Reduction	Percent Reduction Requirement
Chlorine Taste & Odor	1.9	0.49	74	>= 50%

STANDARD NSF/ANSI 53 REDUCTION CLAIMS

Substance	Test Pressure (psi)	Average Influent Level (mg/L)	Average Effluent Level (mg/L)	Maximum Effluent Level	Average Percent Reduction	Influent Challenge Concentration mg/L	Maximum Permissible Product Water Concentration (mg/L)
Lead pH 6.5	50	0.16	0.0001	0.0002	99.9	0.15 +/- 10%	0.005
Lead pH 8.5	50	0.147	0.0002	0.0005	99.8	0.05 +/- 10%	0.005



Warnings

BE SURE TO FOLLOW ALL APPLICABLE STATE AND LOCAL CODES

WARNING: RISK OF ELECTRIC SHOCK. DISCONNECT POWER BEFORE SERVICING. WARNING: IF CONNECTION IS MADE TO A POTABLE WATER SYSTEM, THE SYSTEM SHALL BE PROTECTED AGAINST BACKFLOW.

- Not all contaminants or substances present in your water are reduced by this Kinetico HYDRO® ECO™ system. Please refer to the Performance Data Sheet Section for information on contaminants and reduction performance.
 - The system is to be supplied only with cold water.
 - This filtration system is not intended to convert wastewater or raw sewage into drinking water.
 - There is a risk of exposure to contaminants if this device is not maintained and operated as specified in the following installation manual.
 - Contaminants or other substances reduced by this filtration system may not be present in your water. Please refer to the Performance Data Sheet section for information on contaminants and reduction performance.
 - This product has a limited service life. Keep a record of the date of installation and any performed maintenance or filter replacement.
 - Kinetico recommends that a trained installer perform the installation to ensure adherence to all state and local plumbing and electrical codes. Failure to install the system as instructed will void the limited warranty.
 - Use this appliance only with the power supply provided with the product. Use of an incorrect power supply may result in electric shock, equipment damage, or fire hazards.
 - This reverse osmosis system contains a replaceable treatment component critical to the efficiency of the system. Replacement of the reverse osmosis component should be with one of identical specifications, as defined by the manufacturer, to ensure the same efficiency and contaminant reduction performance. This component is also critical for the effective reduction of total dissolved solids (TDS). Test the product water quarterly to verify that the system is performing satisfactorily. The system provides lighted alerts for cartridge capacity. These alerts signal the potential for the effluent contaminant level to exceed the EPA's maximum contaminant level under normal operating conditions.
- To restore service, replace the appropriate cartridges in the system. Annual replacement of cartridge 1 is recommended even if your system has not alerted. Biannual replacement of cartridge 2 is recommended even if your system has not yet alerted. See chart below to select cartridges for your system. These cartridges are available through your authorized Kinetico dealer. You may opt to have the product water tested at this time to verify performance. For operation and maintenance information, consult the owner's manual. Installation instructions are available for review from your authorized Kinetico dealer.
- Connect only to a circuit that is protected by a ground-fault circuit-interrupter (GFCI).
 - Do not use damaged power supplies, plugs, or loose sockets. If the power supply is damaged, it must be replaced immediately by a qualified service technician. Do not attempt to repair or modify the power supply. Failure to follow these instructions may result in fire, electric shock, or serious injury.
 - Do not touch power supply with wet hands.
 - Do not install on water supplies outside of the recommended inlet water pressure for the system.
 - Do not use in areas where flammable, explosive, volatile, or strong oxidizing agents are present.
 - This appliance is not intended for use by children or by individuals with reduced physical, sensory, or cognitive abilities unless they are under direct supervision and instructed on safe operation. Children must not play with the appliance. Cleaning and maintenance must not be performed by children without adult supervision.
 - Use only the tubing supplied with this product or approved equivalent tubing. If tubing is disconnected from a fitting, trim a small section from the end to ensure a clean, fresh connection before reinstalling. Use of non-approved tubing may result in leaks, water damage, or product failure.
 - To avoid the risk of fire, shock, or flooding damage, service is only to be provided by a qualified technician.



Warnings (continued)

If the system is installed under the kitchen counter or inside a cabinet:

- The power-supply receptacle for the appliance shall be installed in a cabinet or on a wall adjacent to the under-counter space in which the appliance is to be installed.
- There shall be an opening through the partition between the compartments that is large enough for the attachment plug to pass through. The longest dimension of the opening shall not be more than 1-1/2 inch (38 mm).
- The edges of the opening specified shall, if the partition is wood, be smooth and rounded, or, if the partition is metal, be covered with an edge protector provided for this purpose by the manufacturer.
- Care shall be exercised, when the appliance is installed or removed, to reduce the likelihood of damage to the supply cord.

Installations in the Commonwealth of Massachusetts:

The Commonwealth of Massachusetts requires installation be performed by a licensed plumber and does not permit the use of saddle valves. Plumbing code 248-CMR of the Commonwealth of Massachusetts must be followed in these cases.

Maintenance Record

Kinetico **HYDRO[®] ECO[™]** Model:

Pre/Post Filter Cartridge:

Reverse Osmosis Cartridge:

DATE	PRE/POST FILTER CARTRIDGE CHANGED	REVERSE OSMOSIS CARTRIDGE CHANGED	TDS OF TREATED WATER	SANITIZED

PART NUMBER	DESCRIPTION
18320	Cartridge 1 - Combined Pre/Post Filter Cartridge
18321	Cartridge 2 - 600 GPD Reverse Osmosis Cartridge
18322	Cartridge 2 - 800 GPD Reverse Osmosis Cartridge
18342	Faucet, Brushed Stainless
18343	Faucet, Matte Black
18344	Faucet, Chrome
18336	Power Adapter

Troubleshooting

SYMPTOM	CAUSE	ACTION
Does not dispense water	• No power to system • No/low water pressure to system • Cartridges not inserted	• Provide power to system • Confirm adequate water supply to the system • Insert cartridges fully
Reduced Faucet Flow	• No/low water pressure to system • Pre/Post Filter or Reverse Osmosis Cartridge partially clogged	• Confirm adequate water supply to the system • Replace cartridge(s)
System is running without faucet being open	• System flushing in process	• Confirm front panel shows chasing purple lights and check system again in approximately 1 hour to confirm system is off
Faucet LED is not working	• Faucet wire not connected to system	• Check and confirm faucet wire connection to system
High TDS in drinking water	• Reverse Osmosis Cartridge reached capacity	• Replace Reverse Osmosis Cartridge



Kinetico **HYDRO[®] ECO[™]**

Tankless Reverse Osmosis System

System Part Numbers:
18363 | **HYDRO[®] ECO[™] 600 GPD**
18364 | **HYDRO[®] ECO[™] 800 GPD**



**TAP INTO THE
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for product support & more!



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Newbury, Ohio 44065

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