



# CONSERV™ HE-3 HIGH EFFICIENCY REVERSE OSMOSIS (RO) SYSTEM

IoT-enabled system that delivers filtered RO blended water for multiple foodservice applications



## APPLICATIONS

- ◆ Mineral Reduction System for Foodservice Applications, Including; Coffee Brewers, Espresso, Steamers, Combi Ovens, and Ice
- ◆ Ideal for: Chain Food & Beverage Retailers, Specialty Coffee and Institutional Foodservice

## SYSTEM DETAILS

- ◆ **Conserv HE-3 System:** EV9977-50
- ◆ **MR-600F Cartridge:** EV9627-22
- ◆ **SEN+ Cartridge:** EV9692-66
- ◆ **SEN Cartridge:** EV9692-65

# EVERPURE® CONSERV™ HE-3 HIGH EFFICIENCY REVERSE OSMOSIS SYSTEM

EV9977-50

## FEATURES • BENEFITS

- ◆ System Tested and Certified by NSF International against NSF/ANSI Standard 58 for the reduction of Total Dissolved Solids (TDS); and NSF/ANSI Standards 42 and 53 for the reduction of Chlorine Taste & Odor, and Cyst
- ◆ Expandable to meet higher water demands of up to 880 gallons, providing sufficient capacity to serve multiple applications
- ◆ The tailored blending process removes just the right amount of dissolved solids from the incoming tap water to achieve the desired final water quality
- ◆ High recovery reverse osmosis technology yields significant savings in water and sewer charges with a minimal environmental footprint
- ◆ Reduces limescale buildup that can cause excessive machine downtime and increased maintenance costs
- ◆ System operation can be tailored to the incoming water quality at each location to maximize recovery
- ◆ Smaller footprint than the Everpure MRS-600HE-II Reverse Osmosis System
- ◆ The system's cartridges are embedded with a proprietary bacteriostatic technology that effectively inhibits the growth of bacteria on the filter media that can decrease product life
- ◆ Able to connect to Pentair Everpure CES-9100TS E-30C Softener for additional performance alerts via Pentair remote monitoring technology

## REMOTE MONITORING TECHNOLOGY

- ◆ Exclusive Pentair remote monitoring technology enables real-time online performance monitoring of installed systems. This can help improve response to water changes and reduce equipment downtime through preventative maintenance.
- ◆ Historical and real-time data visualization of, and ability to set email and text alerts for:
  - ◆ Inlet/Outlet/RO Pressure
  - ◆ Inlet/RO/Blend TDS
  - ◆ Inlet/Outlet Flow
  - ◆ Recovery
  - ◆ Rejection
  - ◆ Cartridge Life
  - ◆ Bypass
  - ◆ Lockout
  - ◆ Pressure Drop
  - ◆ Flow Total
  - ◆ RO Life
  - ◆ Tank Fill
  - ◆ Tank/RO Pump Error
  - ◆ Low Salt/ Softener Connect (Only for Pentair Everpure CES-9100TS E-30C Softener)

## INSTALLATION TIPS

- ◆ Choose a mounting location capable of safely supporting the full weight of the system when in operation.
- ◆ Delimiting of existing water using equipment is recommended.
- ◆ Never use saddle valve for connection.
- ◆ Use 1/2" (12.7 mm) minimum water line.
- ◆ Install vertically with cartridges hanging down and allow 3" (76 mm) on all sides of unit for cover removal and service access.
- ◆ The product water tubing/piping and associated fittings connecting the RO product outlet to the equipment being serviced should be suitable for use with high purity water.
- ◆ Monitor connected via ethernet wire

## OPERATION TIPS

- ◆ Change filter cartridges on a regular one (1) year preventative maintenance program.
- ◆ Change RO cartridges on a regular one (1) year preventative maintenance program when no softener is present. Change cartridges when capacity is reached.
- ◆ Change RO cartridges on a regular two (2) year preventative maintenance program when using an Everpure TKO prefilter and water softener.
- ◆ Always flush the filter cartridge at time of installation and cartridge change.
- ◆ Refer to Installation, Operation & Maintenance Manual for cartridge flushing and RO startup.

## SIZING

- ◆ The water inlet must supply a minimum of 2.0 gpm (7.6 Lpm) @ 50 psi (3.5 bar, 3.5 MPa)
- ◆ Daily Production Rate: 443.68 gpd (1,680.19 Lpd) nominal (plus tap water addition for processor with blend).
- ◆ Total daily production rate will vary based on tap water TDS, RO percent rejection, and desired blend water TDS. Contact Everpure for assistance estimating this total.
- ◆ Service Flow Rate: No pressure is in tank. Flow is not dependent on tank level. Provides maximum blended flow of 3.0 gpm.

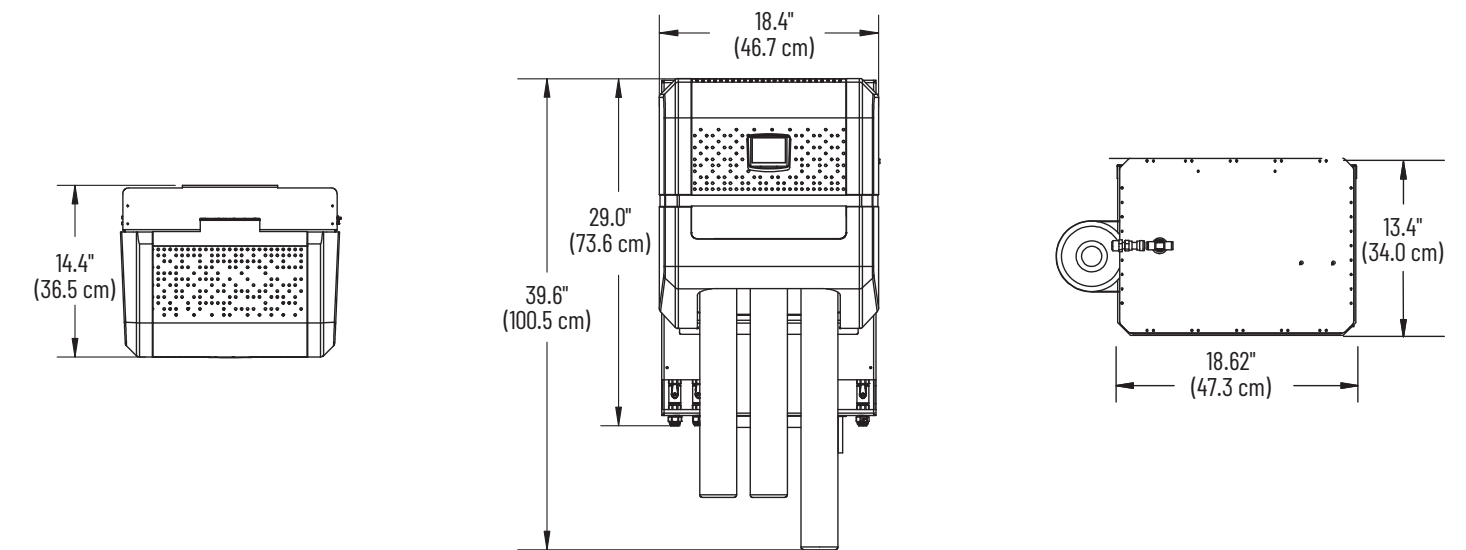
## SPECIFICATIONS

- ◆ **Dynamic Operating Pressure Requirements**  
50 - 80 psi (3.5 - 5.5 bar, 0.35 - 0.55 MPa), non-shock  
Pressure below 50 psi (4.5 bar, 0.45 MPa) may affect blend system\* performance.
- ◆ **Maximum Static Pressure**  
100 psi (6.9 bar, 0.69 MPa), non-shock
- ◆ **Operating Environment Temperature**  
60-100°F (15.5-37.8°C)†
- ◆ **Daily Production Rate**  
443.68 gpd (1,680.19 Lpd) nominal (plus tap water addition for processor with blend). Total daily production rate will vary based on tap water TDS, RO percent rejection, and desired blend water TDS. Contact Everpure for assistance estimating this total.
- ◆ **Efficiency Rating**  
74.23%
- ◆ **Overall Reduction/Rejection**  
90.70%
- ◆ **Recovery Rating**  
74.23%
- ◆ **Plumbing Connections**
  - Inlet/Outlet  
1/2-inch O.D. tube ("push-in" quick-connect)
  - Reject  
1/4-inch O.D. tube ("push-in" quick-connect)
- ◆ **Electrical: Rated Voltage and Power Cord Type**  
EV9977-50: USA 110-120 VAC/60 Hz NEMA 5-15P
- ◆ **Service Flow Rate**  
No pressure is in tank. Flow is not dependent on tank level. Provides maximum blended flow of 3.0 gpm.
- ◆ **Wattage**
  - Standby: 25 W
  - Flush: 600 W
  - Run/Fill: 1200 W
- ◆ **Branch Circuit Protection**  
15 Amp minimum. To minimize personnel shock hazards, install on a GFI, RCD, or equivalent protected circuit.
- ◆ **Connectivity Connections:**
  - Ethernet port - type CAT5
  - Softener port - type 4 pin RJ11
- ◆ **Minimum Water Supply**  
@ 50 psi (3.5 bar, 3.5 MPa)
- ◆ **Overall Dimensions**
  - **System:**  
39.6"H x 18.4"W x 14.4"D (100.5cm x 46.7cm x 36.5cm)  
Add 3" (7.6 cm) on all 4 sides for cover removal and service access.
  - **Tank:**  
27.9"H x 18.62"W x 14.4"D (70.8 cm H x 47.3 cm W x 34.0 cm D)

- ◆ **Shipping Weight**  
50 lbs (22.7 kgs)
- ◆ **Operating Weight**  
90 lbs (49.9 kgs) (not including external storage tank)
- ◆ **Influent Water Characteristics**
  - **Total Dissolved Solids**  
0-1,000 ppm (0-1,000 mg/L)
  - **pH**  
6-9
  - **Free Chlorine**  
0-3 ppm (0-3 mg/L)
  - **Chloramines**  
0-3 ppm (0-3 mg/L)
  - **Turbidity**  
0-1 NTU
  - **Silica**  
SiO<sub>2</sub> < 20 ppm
  - **Iron and Manganese**  
0-1 ppm (0-1 mg/L)
  - **Bacterial Quality**  
Potable
  - **Total Hardness (without softening)**  
<1 grain

\* Blend system not performance tested or certified by NSF.

† If the incoming soft water temperature is less than 60°F (15.5°C), a tempering valve should be used. Otherwise, there will be a reduction in RO production.



System Tested and Certified by NSF International against NSF/ANSI Standard 58 for the reduction of Total Dissolved Solids (TDS); and NSF/ANSI Standards 42 and 53 for the reduction of Chlorine Taste & Odor, and Cyst.

## WARRANTY

Everpure water treatment systems by Pentair® (excluding replaceable elements) are covered by a limited warranty against defects in material and workmanship for a period of five years after date of purchase. Everpure replaceable elements (filter cartridges and water treatment cartridges) are covered by a limited warranty against defects in material and workmanship for a period of one year after date of purchase. See printed warranty for details. Pentair will provide a copy of the warranty upon request. EPA Est. No. 002623-IL-002

The contaminants or other substances removed or reduced by this drinking water system are not necessarily in your water. 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 with disinfected water that may contain filterable cysts. Since the conditions under which our products may be used are beyond our control, we cannot accept any liability with respect to the improper installation, application and/ or use of our products.

EPA Est. No. 002623-IL-002



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