# Culligan



#### **Markets Served:**

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Health Clubs Hotels / Lodging

Hospitals / Healthcare Ink / Dye Production Laboratories Laundry Manufacturing Marine Military Multi-Unit Housing Municipalities Plating / Coating Printing Pulp / Paper Oil / Petroleum / Gas Textile Theme Parks Universities Vehicle Wash

# The Culligan® E1 Plus Series REVERSE OSMOSIS SYSTEM

# Excellent Water Quality is a Smart Business Decision.

The E1 Plus Reverse Osmosis System is an economical water treatment solution, which reduces operating and post treatment costs. The E1 Plus Reverse Osmosis system helps you reduce maintenance costs by reducing contaminants\* from your water that affect taste and clog equipment. Control your installation costs by using a system configured for your unique needs. Keep your operating costs low with an easy-to-use electronic controller.

The E1 Plus RO is part of the Culligan® Commercial and Industrial Solutions that combine durable and efficient equipment, systems experience, and technical experts who understand your unique requirements. From planning your system to installing your water treatment equipment, Culligan® Commercial and Industrial Solutions offer options that help deliver the quality of water to meet your needs. Consult with a Culligan® representative to create your solution.

# CULLIGAN® COMMERCIAL AND INDUSTRIAL SOLUTIONS ADVANTAGES:

- Simple System Integration
- Global Product Platform
- Flexible Configurations
- Quick Delivery / Easy Installation
- Culligan<sup>®</sup> CP+ Controller

\*Contaminants may not necessarily be in your water.











# SYSTEM SPECIFICATIONS

Specification	US	Metric	
Inlet Pressure (dynamic)	20-50 psig	1.4 – 3.5 bar	
Operating Pressure, max.	95–225 psig	6.6 — 15.5 bar	
Power Voltage Frequency Phase	115 60 Hz 1	115 60 Hz 1	
Feed Water Temperature	33–100° F	1-40° C	
Turbidity, max.	< 1 NTU	< 1 NTU	
pH Range	3-11	3-11	
Chlorine, max.	0 mg/l	0 mg/l	
Total Dissolved Solids, max.	2500 mg/l	2500 mg/l	
Silt Density Index Well Water Surface Water	< 3 < 5	<3 <5	
Iron, max.	< 0.1 mg/l	< 0.1 mg/l	
Salt Rejection, nominal	> 98 %	> 98 %	
Product Water Hardness	< 1% Raw Hardness	< 1% Raw Hardness	

#### **Examples of RO Applications**

- Ice Production / Drinking Water (Reduces scaling, improves taste and darity)
- Steam Production (Reduces scaling and maintenance)
- Humidification (Reduces scaling and dusting)
- Misting (Reduces scaling, improves taste and clarity)
- Pretreatment for High Purity Systems (Reduces regeneration requirements)
- Reclaim / Recycling (Water conservation)
- Washing and Rinsing (Improves performance, spot-free rinses)

### **Standard Features**

- Wall Mount Design
- Rotary Vane Pump
- Inlet Solenoid Valve
- Pretreatment Sediment Filter
- Concentrate and Recirculation Throttling Valves
- Pressure Indicators
- FRP Membrane Housings
- Culligan® CP+ Control Panel
  - Level Control Input
  - Pretreatment Lockout
- Startup Flush/Timed Flush
- Low Pressure Auto-Restart
- Indicator Lights

# **Optional Features & Accessories**

- Multi-Stage Pretreatment Filters
- Storage Tanks
- Level Controls
- Chemical Feed Pumps
- Ultraviolet Sterilization
- Pressurized Storage System
- Floor Stand
- Global Power Platform
- 220 v/50 HZ
- Additional Customization Available on request
- Auto Shut Down on High Product TDS



# **E1 Plus Reverse Osmosis System**

Model	Nominal Capacity* (gpm/lpm)	Nominal Capacity* (gpd/m³/h)	Module Qty & Size	Nominal System Recovery (%)	Motor HP - KW	Dimension LxWxH (in – mm)	
E1-1S	0.17	250	(1), 2.5"x 21"	25	1/3	37 x 10 x 37.75	
	0.65	0.04			0.25	940 x 254 x 959	
E1-2S	0.35	500	(2), 2.5"x 21"	50	1/3	37 x 10 x 37.75	
	1.31	0.08			0.25	940 x 254 x 959	
E1-3S	0.52	750	(3), 2.5"x 21"	50	1/3	37 x 10 x 37.75	
	1.97	0.12			0.25	940 x 254 x 959	
E1-4S	0.69	1000	(4), 2.5"x 21"	(4), 2.5"x 21" 50	1/3	37 x 10 x 37.75	
E1 <b>-</b> 45	2.63	0.16			0.25	940 x 254 x 959	
E1-2L	0.83	1200	(2), 2 <b>.</b> 5"x 40"	(2), 2.5"x 40" 50	3/4	37 x 10 x 46,25	
E I-ZL	3.15	0.19			0.56	940 x 254 x 1175	
E1-3L	1.18	1700	(3), 2.5"x 40"	50	3/4	37 x 10 x 46.25	
E 1-3L	4,47	0,27		20	0,56	940 x 254 x 1175	
F1-4I	1.53	2200	(4), 2.5"x 40"	(4) 2.5" 40"	ΓΛ	3/4	37 x 10 x 46.25
E1=4L	5.78	0.35		.5"x 40" 50	0.56	940 x 254 x 1175	
F1 1F	1.39	2000	(1), 4 x 40	(1) 4 40	25	3/4	37 x 10 x 46.25
E1-1F	5.26	0.32		(1), 4 X 4U 25	0.56	940 x 254 x 159	
E1-2F	2.78	4000	(2), 4 x 40	(2) 4 - 40	50	3/4	37 x 10 x 46.25
	10.52	0,63		50	0.56	940 x 254 x 159	

<sup>\*</sup>Nominal capacity based on new RO membranes operating on a properly pretreated feed water of 500 ppm TDS as NaCl, 77 °F (25 °C), Silt Density Index (SDI) below 3, and supplying water to atmosphere. Productivity will vary depending on the actual feed water quality and temperature.



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For over 80 years, Culligan® has made better water. Our global network, comprised of 800+ dealers and international licensees in over 90 countries, is dedicated to addressing your water-related problems. As a worldwide leader in water treatment, our sales representatives and service technicians are familiar with the local water conditions in your area. Being global and local position us to deliver customized solutions to commercial and industrial water issues that affect your business and your bottom line.

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