

The Culligan® E1 Series Reverse Osmosis System



Excellent water quality is a smart business decision

The E1 Reverse Osmosis System is an economical water treatment solution, which reduces operating and post treatment costs. The E1 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 RO is part of the Culligan Matrix 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 Matrix Solutions offer options that help deliver the quality of water to meet your needs. Consult with a Culligan representative to create your solution.

*contaminants may not necessarily be in your water

EXAMPLES OF MARKETS SERVED:

- | | |
|---------------------------|--------------------|
| AGRICULTURE | LABORATORIES |
| ASSISTED LIVING | LAUNDRY |
| AUTOMOTIVE | MANUFACTURING |
| BIO-PHARMACEUTICAL | MARINE |
| BOTANICALS | MILITARY |
| BOTTLED WATER PLANTS | MULTI-UNIT HOUSING |
| CASINOS | MUNICIPALITIES |
| CHEMICAL PROCESSING | PLATING/COATING |
| COMMERCIAL BUILDINGS | PRINTING |
| DAIRIES | PULP/PAPER |
| EDUCATIONAL FACILITIES | OIL/PETROLEUM/GAS |
| ENERGY/POWER/COGENERATION | TEXTILE |
| ELECTRONICS | THEME PARKS |
| GOVERNMENT | UNIVERSITIES |
| GROCERY | VEHICLE WASH |
| FOOD/BEVERAGE | |
| HEALTH CLUBS | |
| HOTELS/LODGING | |
| HOSPITALS/HEALTHCARE | |
| INK/DYE PRODUCTION | |

Culligan Matrix Solutions Advantages:

- Simple System Integration
- Global Product Platform
- Flexible Configurations
- Quick Delivery/Easy Installation



Pre-Treatment
 Solutions



**Membrane
 Solutions**



Deionization
 Solutions



Storage Solutions



Distribution
 Solutions

System Specifications

Specification	US	Metric
Inlet Pressure (dynamic)	20-50 psig	1.4 – 3.5 bar
Maximum Operating Pressure	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, maximum	< 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, maximum	< 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 clarity
- Steam Production—Reduces scaling and maintenance
- Humidification—Reduces scaling and dusting
- Misting—Reduces scaling and help extend equipment life
- 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

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

E1 Reverse Osmosis System

Model	Nominal Capacity* (gpm/lpm)	Nominal Capacity* (gpd/m ³ /h)	Module Qty & Size	Nominal System Recovery (%)	Motor HP - KW	Dimension L x W x H (inches– millimeters)
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"	25	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"	50	1/2	37 x 10 x 37.75
	2.63	0.16			0.37	940 x 254 x 959
E1-2L	0.83	1200	(2), 2.5" x 40"	50	3/4	37 x 10 x 46.25
	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
	4.47	0.27			0.56	940 x 254 x 1175
E1-4L	1.53	2200	(4), 2.5" x 40"	50	3/4	37 x 10 x 46.25
	5.78	0.35			0.56	940 x 254 x 1175
E1-1F	1.39	2000	(1), 4 x 40	25	3/4	37 x 10 x 46.25
	5.26	0.32			0.56	940 x 254 x 159
E1-2F	2.78	4000	(2), 4 x 40	50	3/4	37 x 10 x 46.25
	10.52	0.63			0.56	940 x 254 x 159

*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.

Finally, an end-to-end solution from a single source.



Place your commercial and industrial water treatment needs in the hands of a global leader.

For over 70 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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