

# CERO-Series Reverse Osmosis Systems

The **Coast Pump CERO-Series Membrane Systems** are state-of-the-art, versatile systems for treating municipal and brackish water supplies with flow rates ranging from 2,000 to 8,000 gallons per day. Minimal energy consumption, low maintenance and operation costs make CERO Reverse Osmosis Systems the right choice.

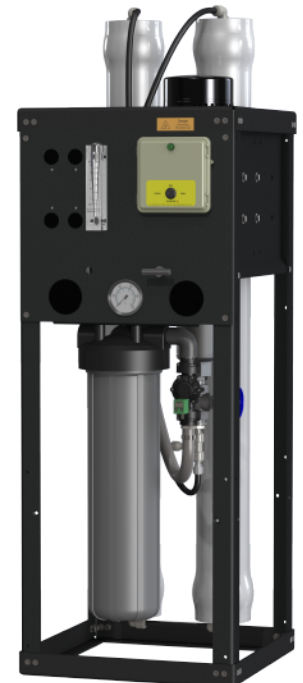
Big on features but not on space, **CERO-Series Systems** feature a robust, innovative design that allows for versatility in the event of feed water quality and temperature variations. Standard features include a C21 On/Off switch controller with a feed flush for simple control of the system. HF4-Series Extra Low Energy Membranes are standard on all systems, and offer high rejection and flow rates for quality system performance. Systems also feature a heavy duty 1/2 HP or 1 HP stainless steel multistage booster pump for superior performance and corrosion resistance.

## Features

- HF4-4040 Spiral Wound Thin-Film Composite Membranes
- FRP Fiberglass Membrane Housings
- 4.5" x 20" Single O-Ring Pre-Filter Housing
- 5 Micron Sediment Pre-Filter
- Multistage Stainless Steel Centrifugal Pump
- Motor Thermal Overload Protection
- Pump Operating Pressure Gauge
- Powder Coated Aluminum Frame
- Low Pressure Switch
- Solenoid Valve with Bypass
- Stainless Steel Concentrate Valve



**CERO 2,000 GPD**  
Reverse Osmosis System



**CERO 4,000 GPD**  
Reverse Osmosis System



**CERO 6,000 GPD**  
Reverse Osmosis System



**CERO 8,000 GPD**  
Reverse Osmosis System

Product Specifications						
	CERO-2000	CERO-2000HP	CERO-4000	CERO-4000HP	CERO-6000	CERO-8000
<b>Design</b>						
Configuration	Single Pass	Single Pass	Single Pass	Single Pass	Single Pass	Single Pass
Feed Water Source (TDS)	2000 ppm	8000 ppm	2000 ppm	8000 ppm	2000 ppm	2000 ppm
System Recovery *	15% – 30%	15% – 30%	30% – 50%	30% – 50%	30% – 50%	30% – 60%
<b>Rejection and Flow Rates</b>						
Nominal Salt Rejection	99%	99%	99%	99%	99%	99%
Permeate Flow Rate*	1.39 gpm	1.39 gpm	2.78 gpm	2.78 gpm	4.17 gpm	5.56 gpm
Concentrate Flow Rate (Minimum)	3.00 gpm	3.00 gpm	3.00 gpm	3.00 gpm	3.00 gpm	3.00 gpm
<b>Membranes</b>						
Membranes Per Vessel	1	1	2	2	3	4
Membrane Quantity	1	1	2	2	3	4
Membrane Size	4040	4040	4040	4040	4040	4040
<b>Vessels</b>						
Vessel Array	1	1	1:1	1:1	1:1:1	1:1:1:1
Vessel Quantity	1	1	2	2	3	4
<b>Connections</b>						
Feed Connection	3/4" FNPT	3/4" FNPT	3/4" FNPT	3/4" FNPT	3/4" FNPT	3/4" FNPT
Permeate Connection	1/2" MNPT	1/2" MNPT	1/2" MNPT	1/2" MNPT	1/2" MNPT	1" MNPT
Concentrate Connection	1/2" FNPT	1/2" FNPT	1/2" FNPT	1/2" FNPT	1/2" FNPT	1/2" FNPT
<b>System Dimensions</b>						
Approx. Dimensions (L x W x H)	18" x 18" x 45"	18" x 18" x 45"	18" x 18" x 45"	18" x 18" x 45"	18" x 18" x 45"	18" x 18" x 45"
Approx. Weight	100 lbs.	100 lbs.	120 lbs.	120 lbs.	140 lbs.	160 lbs.
<b>Pumps</b>						
Pump Type	Multi-Stage	Multi-Stage	Multi-Stage	Multi-Stage	Multi-Stage	Multi-Stage
Motor HP	1/2 HP	1 HP	1/2 HP	1 HP	1 HP	1 HP
RPM @ 60 HZ	3450	3450	3450	3450	3450	3450
<b>Electrical</b>						
Standard Voltage	110V or 220V 1Ph 60Hz	220V 1Ph 60Hz	110V or 220V 1Ph 60Hz	220V 1Ph 60Hz	220V 1Ph 60Hz	220V 1Ph 60Hz

\* Product flow rates and recovery are based on a feedwater temperature at 77°F and ppm TDS. Treatment ability of the RO system is dependent on feed water quality. Lower temperatures and/or higher TDS will reduce product flow.

## Operating Limits

Design Temperature	77°F	Max. Turbidity NTU	1
Max. Feed Temperature	85°F	Max. Free Chlorine ppm	0
Min. Feed Temperature	40°F	Max. TDS ppm ^	2000
Max. Ambient Temperature	120°F	Max. Untreated Hardness GPG ^^	1
Min. Ambient Temperature	40°F	Max. pH (Continuous)	11
Max. Feed Pressure psi	85	Min. pH (Continuous)	3
Min. Feed Pressure psi	45	Max. pH (Cleaning 30 Min.)	12
Max. Operating Pressure psi ^	150	Min. pH (Cleaning 30 Min.)	2
Max. SDI Rating	<3		

**Test Parameters:** Static pressure test for 5 minutes.

^ CERO-2000HP and CERO-4000HP are high pressure RO systems and may work with feed water TDS up to 8000 ppm and up to 200 psi.

^^ Scale prevention measures must be taken to prolong membrane life.