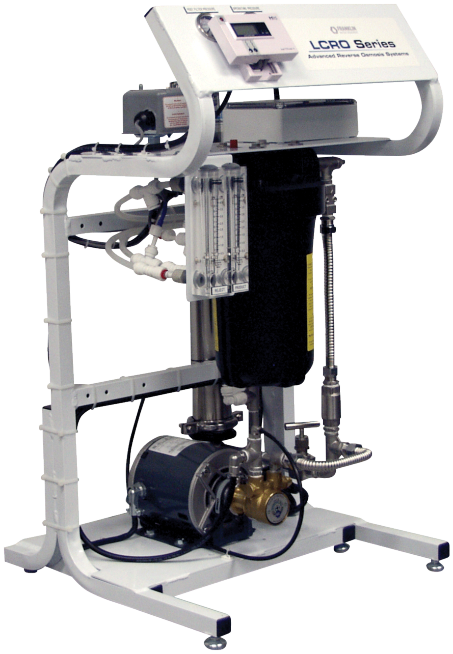
LCRO Series

Light Commercial Reverse Osmosis Systems

The LCRO series are manufactured for light commercial applications and feature a compact space–saving design. These systems come pre-assembled and ready for immediate online service with minimal set up and simple utility connections. The LCRO-350, LCRO-700 and LCRO-1200 have been engineered for capacities ranging from 350 to 1200 gallons per day. Standard features include: stainless steel membrane housings, heavy duty rotary vane pumps, stainless steel needle valves, 10“ BB 5 micron polyspun pre-filter and a powder coated aluminum frame for corrosion resistance.



Benefits:

- ***Brighter Laundry***
- ***Corrects Acid Water Conditions***
- ***Eliminates Odors***
- ***Protects Plumbing***
- ***Reduces Staining***

Product Features

- White Powder Coated Aluminum frame
- 10”, 5 Micron Polyspun Pre–Filter
- 10” Polypropylene Cartridge Housing
- Low Lead Brass Rotary Vane High Pressure Pump (350/700)
- Stainless Steel Multistage Centrifugal Pump
- ODP High Efficiency Motor
- Spiral Wound Membrane Elements
- 304 Stainless Steel Membrane Housings
- SS Integrated Needle Valve
- SS Feed / Flush Solenoid Valve
- 0 – 200 psi Operating Pressure Gauge
- 0 – 100 psi Post–Filter Pressure Gauge
- Push/Pull Fittings with Locking Safety Clips
- Low Pressure Switch for Pump Protection
- Permeate / Waste Flow Meters
- Automatic Flushing System
- Digital Programmable System Controller

OPTIONAL:

Permeate Pressure Switch (for Closed Tank Systems)

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Product Specifications

Models	LCRO-350	LCRO-700	LCRO-1200
Configuration	Single Pass		
Auto Flush	Yes		
Controller	Yes		
Feedwater Source TDS	2000		1500
Standard Recovery Rate (%)	60		
Rejection and Flow Rates †††			
Nominal Salt Rejection %	98		
Permeate Flow (gpm / lpm)	0.21/0.85	0.42/1.7	0.83/3.14
Maximum Feed Flow (gpm / lpm)	1.62/6.2	2.3/8.7	4.1/15.5
Minimum Feed Flow (gpm / lpm)	0.5/1.9	0.8/3.0	2.0/7.6
Connections			
Feed Connection (in)	3/8		1/2
Permeate Connection (in)	3/8		3/8
Concentrate Connection (in)	3/8		3/8
Membranes			
Membrane(s) Per Vessel	1	1	1
Membrane Quantity	1	2	1
Membrane Size	2.5" x 21"		4" x 21"
Vessels			
Vessel Array	1	1:1	1
Vessel Quantity	1	2	1
Pumps			
Pump Type	Rotary Vane Low Lead Brass		Multistage Centrifugal SST
Motor HP	1/3	1/2	3/4
RPM @ 60Hz	1725		
System Electrical			
Standard Voltage + Amp Draw	110v/1ph/60hz/6.6A	110v/1ph/60hz/8.3A	110v/1ph/60hz/15A
System Dimensions			
Approximate Dimensions* L x W x H (in / cm)	19.5 x 19 x 34.25 / 49.5 x 48.26 x 87		
Approximate Weight (lbs / kg)	46 / 20.9	56 / 25.4	94 / 35.1

Test Parameters: Feedwater 300 TDS Filtered, 60 psi / 4.13 bar Feed Pressure, 150 psi / 10.34 bar Operating Pressure, 77°F / 25°C, Recovery as stated, 7.0 pH. Recovery as stated.
* Does not include operating space requirements. ** Varies with motor manufacturer.

Operating Limits ††

Model	350 / 700	1200		350 / 700	1200
Maximum Feed Temperature (°F / °C)†	95/35		Maximum Turbidity (NTU)	1	
Minimum Feed Temperature (°F / °C)	40/4		Maximum Free Chlorine (ppm)	<0.1 ppm	
Maximum Ambient Temperature (°F / °C)	120/49		Maximum TDS (ppm)	<2,000	1,500
Minimum Ambient Temperature (°F / °C)	40/4		Maximum Hardness (gpg)	<6	
Maximum Feed Pressure (psi / bar)††	80 / 5.51		Maximum pH (Continuous)	9.5	
Minimum Feed Pressure (psi / bar)††	40 / 3		Minimum pH (Continuous)	5.5	
Nominal Operating Pressure (psi / bar)	150 / 10.5	130 / 8.95	Maximum pH (cleaning 30 Minutes)	11.5	
Maximum Feed Silt Density Index (SDI)	<5		Minimum pH (cleaning 30 Minutes)	3	

† Low temperatures and feedwater quality, such as high TDS levels will significantly affect the systems production capabilities and performance. Computer projections must be run for individual applications which do not meet or exceed minimum and maximum operating limits for such conditions.
†† System pressure is variable due to water conditions. Permeate flow will increase at a higher temperature and will decrease at a lower temperature.
††† Product flow and maximum recovery rates are based on feedwater conditions as stated above. Do not exceed recommended permeate flow.