

# LC – SERIES REVERSE OSMOSIS SYSTEMS

**AXEON® LC – Series Reverse Osmosis Systems** are manufactured for light commercial applications and feature a compact space-saving design. The versatile design allows for either wall-mounted or freestanding operation. The LC – Series Systems come preassembled and ready for immediate online service with minimal set up and simple utility connections.

**AXEON LC – Series Reverse Osmosis Systems** have been engineered for capacities ranging from 750 to 1,500 gallons per day and feature a Fluid-O-Tech™ Low Lead Brass Rotary Vane Pump designed for enhanced performance.

## FEATURES

- White Powder Coated Steel Bracket
- AXEON 2.5" x 20" 5-Micron Sediment Pre-Filter
- AXEON 2.5" x 20" 10-Micron Carbon Block Pre-Filter (on LC – 750)
- Pentair® 20" Slim Line Cartridge Housings
- Fluid-O-Tech™ Low Lead Brass Rotary Vane High Pressure Pump
- ODP High Efficiency Carbonator Motor
- AXEON HF5 – Series Ultra Low Energy Membrane Elements
- Permeate Flow Meter
- Concentrate Flow Meter with SS Integrated Needle Valve
- Concentrate Recycle Flow Meter with SS Integrated Needle Valve
- Feed Solenoid Valve
- 0-300 psi Pump Pressure Gauge
- 0-100 psi Post-Filter Pressure Gauge



**LC-1500**  
Reverse Osmosis System

- 0-100 psi Permeate Pressure Gauge
- John Guest® Push/Pull Fittings with Locking Safety Clips
- Low Pressure Switch for Pump Protection
- Permeate High Pressure Switch
- HM Digital® DM-2 Dual TDS Meter
- 20" Floor Stand

## OPTIONS AND UPGRADES

- Fluid-O-Tech™ Stainless Steel Rotary Vane Pump
- Blending Valve

# SPECIFICATIONS

MODELS	LC – 750	LC – 1500
<b>Design</b>		
Configuration	Single Pass	Single Pass
Feedwater Source (ppm) <sup>A</sup>	TDS < 1,000	TDS < 1,000
Standard Recovery Rate %	Up to 75	Up to 75
<b>Flow Rates<sup>B</sup></b>		
Permeate Flow (gpm / lpm)	0.52 / 1.97	1.04 / 3.94
Minimum Feed Flow (gpm / lpm)	2.22 / 8.40	2.74 / 10.37
Maximum Feed Flow (gpm / lpm)	Up to 8 / 30.3	Up to 8 / 30.3
<b>Connections</b>		
Feed (in)	1/2 QC	1/2 QC
Permeate (in)	3/8 QC	3/8 QC
Concentrate (in)	3/8 QC	3/8 QC
<b>Membranes</b>		
Membrane Per Vessel	1	1
Membrane Quantity	1	2
Membrane Size	3018	3018
Nominal TDS Rejection %	98	98
<b>Vessels</b>		
Vessel Array	1	1:1
Vessel Quantity	1	2
<b>Pumps</b>		
Pump Type	Rotary Vane 401 Low Lead Brass	Rotary Vane 601 Low Lead Brass
Motor HP	1/3	1/2
RPM @ 60Hz	1725	1725
<b>System Electrical</b>		
Standard Voltage + Amp Draw <sup>C</sup>	110V, 1 PH, 50 / 60Hz, 6.6A	110V, 1 PH, 50 / 60Hz, 8.2A
<b>System Dimensions</b>		
Approximate Dimensions <sup>D</sup> L x W x H (in / cm)	17 x 13 x 34 / 43.18 x 33.02 x 86.36	17 x 13 x 34 / 43.18 x 33.02 x 86.36
Approximate Weight (lbs / kg)	50 / 22.68	60 / 27.22

**Test Parameters:** 550 TDS Filtered (5-Micron), Dechlorinated, Municipal Feedwater, 65 psi / 4.50 bar Feed Pressure, 70 psi / 4.83 bar Operating Pressure, 77°F / 25°C, Recovery as stated, 7.0 pH. Data taken after 60 minutes of operation.

- A. 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.
- B. Product flow and maximum recovery rates are based on feedwater conditions as stated above. Do not exceed recommended permeate flow.
- C. Varies with motor manufacturer.
- D. Does not include operating space requirements.

## OPERATING LIMITS<sup>E</sup>

Maximum Feed Temperature (°F / °C)	85 / 29	Maximum Turbidity (NTU)	1
Minimum Feed Temperature (°F / °C)	40 / 4	Maximum Free Chlorine (ppm)	0
Maximum Ambient Temperature (°F / °C)	120 / 49	Maximum TDS (ppm)	Up to 1,000
Minimum Ambient Temperature (°F / °C)	40 / 4	Maximum Hardness (gpg)	1
Maximum Feed Pressure (psi / bar)	70 / 4	Maximum pH (continuous)	11
Minimum Feed Pressure (psi / bar)	40 / 3	Minimum pH (continuous)	2
Maximum Operating Pressure (psi / bar)	90 / 6	Maximum pH (cleaning 30 minutes)	13
Maximum Feed Silt Density Index (SDI)	< 3	Minimum pH (cleaning 30 minutes)	1

E. System pressure is variable due to water conditions. Permeate flow will increase at a higher temperature and will decrease at a lower temperature.