

# L1-SERIES REVERSE OSMOSIS SYSTEMS

**AXEON® L1–Series Reverse Osmosis Systems** are a cost-effective solution for light commercial reverse osmosis applications such as coffee, tea, food preparation, misting, hydroponics, detailing and more.

AXEON L1-Series Reverse Osmosis Systems feature a compact wall mount space saving design and comes pre-assembled and ready for immediate service with simple utility connections. These systems are available in capacities of 200 and 300 gallons per day and feature a single pump design for reliable performance. Each model is engineered with quality AXEON components including fiberglass (FRP) membrane housings, extra low energy membranes, pressure gauges, filters and housings.



**L1–300** Wall Mount Reverse Osmosis System

#### **FEATURES**

- AXEON HF4-Series Extra Low Energy Membrane Elements
- AXEON FRP-Series 300E Fiberglass Membrane Housing
- AXEON 5-Micron Sediment Pre-Filter
- AXEON 10-Micron Carbon Block Pre-Filter and Post-Filter
- Pentair® 10" Slim Line Cartridge Housings
- AXEON 0-300 psi Glycerin-Filled Pump Pressure Gauge
- AXEON 0-100 psi Glycerin-Filled Pre-Filter Pressure Gauge
- AXEON 0-100 psi Glycerin-Filled Permeate Pressure Gauge

- Aguatec<sup>®</sup> Tank High Pressure Switch
- Composite Feed Solenoid Valve
- Aquatec Auto Flush Timer Valve
- Aquatec High Flow Booster Pump
- John Guest® Push/Pull Fittings with Locking Safety Clips

#### **OPTIONS AND UPGRADES**

- 10" and 20" Floor Stands
- AXEON HF5-Series Ultra Low Energy Membrane Elements
- AXEON SS-Series Membrane Housing
- HM-Digital® DM-2 Dual TDS Monitor

### **SPECIFICATIONS**

MODELS	L1-200	L1-300	
Design			
Configuration	Single Pass	Single Pass Single Pass	
Feedwater Source <sup>A</sup>	TDS < 1,000 ppm	TDS < 1,000 ppm	
Standard Recovery Rate %	40	50	
Rejection and Flow Rates <sup>B</sup>			
Nominal Salt Rejection %	98.5	98.5	
Permeate Flow (gpm / lpm)	0.14 / 0.53	0.21 / 0.79	
Minimum Concentrate Flow (gpm / lpm)	0.21 / 0.79	0.21 / 0.79	
Connections			
Feed FNPT (in)	3/8 QC	3/8 QC	
Permeate FNPT (in)	3/8 QC	3/8 QC	
Concentrate FNPT (in)	1/4 QC	1/4 QC	
Membranes			
Membrane Per Vessel	1	1	
Membrane Quantity	1	1	
Membrane Size	2514	2521	
Vessels			
Vessel Array	1	1	
Vessel Quantity	1	1	
Standard Pump			
Pump Type	Aquatec 8800	Aquatec 5800	
System Electrical			
Standard Voltage + Amp Draw	110V, 60Hz, 1PH, 4.0A	110V, 60Hz, 1PH, 4.0A	
High Voltage Service + Amp Draw	220V, 50Hz, 1PH, 2A	220V, 50Hz, 1PH, 2A	
System Dimensions			
Approximate Dimensions <sup>C</sup> L x W x H (in/cm)	9 x 18 x 19 / 22.9 x 45.7 x 48.3	9 x 27 x 19 / 22.9 x 68.6 x 48.3	
Approximate Weight (lbs/kg)	42 / 19.1	50 / 22.7	

Test Parameters: 550 TDS Filtered (5-Micron), Dechlorinated, Municipal Feedwater, 65 psi / 4.50 bar Feed Pressure, 100 psi / 6.9 bar Operating Pressure, 77°F / 25°C, Recovery as stated, 7.0 pH. Data taken after 60 minutes of operation.

## OPERATING LIMITSD

Design Temperature (°F / °C)	77 / 25	Maximum Turbidity (NTU)	1
Maximum Feed Temperature (°F / °C)	85 / 29	Maximum Free Chlorine (ppm)	0
Minimum Feed Temperature (°F / °C)	40 / 4	Maximum TDS (ppm)	1,000
Maximum Ambient Temperature (°F / °C)	120 / 49	Maximum Hardness (gpg)	1
Minimum Ambient Temperature (°F / °C)	40 / 4	Maximum pH (continuous)	11
Maximum Feed Pressure (psi / bar)	85 / 6	Minimum pH (continuous)	2
Minimum Feed Pressure (psi / bar)	45 / 3	Maximum pH (cleaning 30 minutes)	13
Maximum Operating Pressure (psi / bar)	110 / 7.5	Minimum pH (cleaning 30 minutes)	1
Maximum Feed Silt Density Index (SDI)	< 3		

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



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. Does not include operating space requirements.