

# N-SERIES REVERSE OSMOSIS SYSTEMS

**AXEON® N-Series Reverse Osmosis Systems** are designed as a competitive and turn-key solution for capacities ranging from 2,000-16,000 gallons per day. Ideal for water purification applications for private residences, restaurants, cafes, car washes, hydroponics, misting and more.

## BENEFITS

- Ready for Immediate Delivery
- Compact Design
- Instrumentation Easily Accessible
- Pre-Plumbed, Wired and Assembled
- Easy Maintenance and Servicing
- Low Operation and Maintenance Costs
- Individually Tested
- 1-Year Limited Warranty
- Assembled in the U.S.A.

## FEATURES

- AX-8000 Computer Controller
  - LCD Backlit Display
  - Pre-Treatment Lockout
  - Feed Flush
  - TDS & Temperature Monitoring
  - Low and High Pressure Monitoring and Alarm
  - Manual Flush
  - Tank Level Input
- Permeate Flow Meter
- Concentrate Flow Meter with Integrated Stainless Steel Needle Valve
- Concentrate Recycle Flow Meter with Integrated Stainless Steel Needle Valve
- Pre and Post Filter 0-100 psi Panel Mounted Glycerin Filled Gauges
- Pump Discharge 0-300 psi Panel Mounted Glycerin Filled Gauges

**N-16000**  
Reverse Osmosis  
System



- AXEON XE1-Series 4" x 40" Membrane Elements (100 psi)
- AXEON FRP Membrane Housings
- AXEON SDF-Series 4.5" x 20" Diameter 5-Micron Sediment Pre-Filter
- Pentair® Big Grey Filter Housings
- Grundfos® Multi-Stage Stainless Steel Booster Pump
- Chemical Injection Port and Electrical Connection
- Normally Closed Composite Feed Solenoid Valve with Manual Bypass
- Stainless Steel Throttle Valve
- Feed Low Pressure Switch
- High Pressure Tank Switch
- Parker®/Seatech® Push/Pull Quick Connect Fittings
- Black Powder Coated Aluminum Frame
- Optional Front Cover
- Optional Permeate Flush Kit

# SPECIFICATIONS

MODELS	N-2000	N-4000	N-6000	N-8000	N-12000	N-16000
<b>Design</b>						
Configuration	Single Pass	Single Pass	Single Pass	Single Pass	Single Pass	Single Pass
Feedwater TDS max (ppm) <sup>A</sup>	2,000	2,000	2,000	2,000	2,000	2,000
Standard Recovery %	32	48	58	65	58	65
<b>Flow Rates<sup>B</sup></b>						
Permeate Flow (gpd / lpd)	2,000 / 7,570	4,000 / 15,141	6,000 / 22,712	8,000 / 30,283	12,000 / 45,425	16,000 / 60,566
Permeate Flow (gpm / lpm)	1.39 / 5.26	2.78 / 10.52	4.16 / 15.75	5.56 / 21.05	8.33 / 31.53	11.11 / 42.06
Minimum Concentrate Flow (gpm / lpm)	3 / 11.36	3 / 11.36	3 / 11.36	3 / 11.36	6 / 22.72	6 / 22.72
Concentrate Recycle Flow (gpm / lpm)	Up to 2 / 7.57	Up to 5 / 18.93	Up to 5 / 18.93	Up to 5 / 18.93	Up to 5 / 18.93	Up to 5 / 18.93
<b>Connections</b>						
Feed (in)	1 FNPT	1 FNPT	1 FNPT	1 FNPT	1 FNPT	1 FNPT
Permeate (in)	1/2 QC	1/2 QC	1 FNPT	1 FNPT	1 FNPT	1 FNPT
Concentrate (in)	1/2 QC	1/2 QC	1 FNPT	1 FNPT	1 FNPT	1 FNPT
<b>Membranes</b>						
Membrane Per Vessel	1	1	1	1	1	1
Membrane Quantity	1	2	3	4	6	8
Membrane Size	4040	4040	4040	4040	4040	4040
Nominal TDS Rejection %	98.50	98.50	98.50	98.50	98.50	98.50
<b>Vessels</b>						
Vessel Array	1	1:1	1:1:1	1:1:1:1	2:2:2	2:2:2:2
Vessel Quantity	1	2	3	4	6	8
<b>Pumps</b>						
Pump Type	Multi-Stage	Multi-Stage	Multi-Stage	Multi-Stage	Multi-Stage	Multi-Stage
Motor HP	1.5	1.5	2	2	2	2
RPM at 60 Hz	3480	3480	3480	3480	3480	3480
<b>System Electrical</b>						
Standard Voltage + Amp Draw <sup>C</sup>	220V, 60HZ, 1PH, 8.5A	220V, 60HZ, 1PH, 8.5A	220V, 60HZ, 1PH, 11.0A	220V, 60HZ, 1PH, 11.0A	220V, 60HZ, 1PH, 11.0A	220V, 60HZ, 1PH, 11.0A
<b>System Dimensions</b>						
Approximate Dimensions <sup>D</sup> L x W x H (in / cm)	25 x 16 x 55 / 63.50 x 40.60 x 140	25 x 16 x 55 / 63.50 x 40.60 x 140	32 x 24 x 55 / 81.30 x 61 x 140	32 x 24 x 55 / 81.30 x 61 x 140	32 x 24 x 55 / 81.30 x 61 x 140	32 x 24 x 55 / 81.30 x 61 x 140
Approximate Weight (lbs / kg)	120 / 55	130 / 59	180 / 82	210 / 95	240 / 109	270 / 123

**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.

- 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 standard recovery rates are based on feedwater conditions as stated above. Do not exceed the 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)	2,000
Minimum Ambient Temperature (°F / °C)	40 / 4	Maximum Hardness (gpm)	0
Maximum Feed Pressure (psi / bar)	85 / 6	Maximum pH (continuous)	11
Minimum Feed Pressure (psi / bar)	45 / 3	Maximum pH (continuous)	2
Maximum Operating Pressure (psi / bar)	200 / 14	Minimum pH (cleaning 30 minutes)	13
Maximum SDI Rating	< 3	Minimum pH (cleaning 30 minutes)	1

E. If any of the feed water parameters are not within the limits given, consult your local dealer or distributor for assistance.

800-320-4074

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