CT – Series Reverse Osmosis Systems

FLEXEON CT – Series Reverse Osmosis Systems are designed for high performance and are equipped with many standard features in a cost–efficient, compact design. **FLEXEON CT – Series Reverse Osmosis Systems** have been engineered for capacities ranging from 4,000 to 7,000 gallons per day. These models include a microprocessor controller with low–pressure monitoring and alarm, pre–treatment lockout, and tank level input. A TDS monitor, multi–stage booster pump, low energy membranes and three pre–filters are all part of the standard features. Upgrades such as feed flush and a concentrate recycle loop to increase recovery rates are also available.

CT – 7000
Reverse Osmosis System

Benefits

- Fully Equipped and Customizable
- Compact Space Saving Design
- Components Easily Accessible
- Pre–Plumbed, Wired and Assembled
- Factory Tested and Preserved
- Low Operation Costs
- Low Maintenance Costs
- Easy Maintenance and Servicing
- 1–Year Limited Warranty

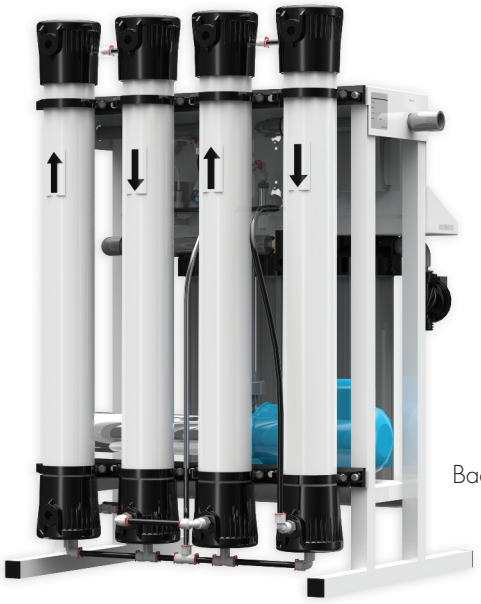
Know Higher Standards™

Features

- Minitrol Computer Controller
  - Multi Color LED Indicator Status Light
  - Pre–Treatment Lockout
  - Tank Level Input
  - Low Pressure Monitoring and Alarm
- White Powder Coated Aluminum Frame
- AXEON 5 – Micron Sediment Pre–Filter
- AXEON 10 – Micron Carbon Block Pre–Filter
- AXEON 1 – Micron Sediment Pre–Filter
- AXEON by Pentek® Single O–Ring Filter Housings
- Goulds® Multi–Stage Booster Pump
- AXEON HF1 – Series Low Energy Membrane Elements
- AXEON PVC – Series Membrane Housings
- AXEON Permeate Flow Meter
- AXEON Concentrate Flow Meter
- Feed Low Pressure Switch 15 – 30 psi
- AXEON Composite Feed Solenoid Valve
- HM Digital™ PSC – 150 TDS/Conductivity Controller
- AXEON 316L Stainless Steel Concentrate Valve
- AXEON 0 – 300 psi Pump Pressure Gauges
- AXEON 0 – 300 psi Concentrate Pressure Gauge
- AXEON 0 – 100 psi Pre–Filter Pressure Gauges
- John Guest® Push/Pull Fittings with Locking Safety Clips

CT – 7000
Reverse Osmosis System

Front



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Options

- AXEON HF4 – Series Extra Low Energy Membrane Elements
- AXEON HF5 – Series Ultra Low Energy Membrane Elements
- AXEON NF3 – Series Nanofiltration Membrane Elements
- AXEON NF4 – Series Nanofiltration Membrane Elements
- AXEON SS – Series Membrane Housings
- AXEON FRP – Series Membrane Housings
- Concentrate Recycle Valve with Flow Meter
- Goulds® Multi–Stage Stainless Steel Booster Pump
- Minitrol IF Computer Controller with Feed Flush
- S – 150 Computer Controller with Feed Flush and Dual TDS
- S – 150 Computer Controller Expander Board
- Pump Pressure Relief Valve
- High Pressure Tank Switch
- Chemical Pump Outlet
- Blending Valve
- Permeate Sample Ports
- Single Wooden Shipping Crate
- Double Wooden Shipping Crate

Product Specifications

Models	CT – 4000	CT – 5000	CT – 7000
Design			
Configuration	Single Pass	Single Pass	Single Pass
Feedwater Source[†]	TDS <2,000 ppm	TDS <2,000 ppm	TDS <2,000 ppm
Standard Recovery Rate %	48	53	62
Recovery with Concentrate Recycle %	Up to 75	Up to 75	Up to 75
Rejection and Flow Rates[†††]			
Nominal Salt Rejection %	99	99	99
Permeate Flow (gpm / lpm)	2.78 / 10.52	3.47 / 13.14	4.86 / 18.40
Minimum Feed Flow (gpm / lpm)	5.78 / 21.00	6.47 / 24.50	7.86 / 29.80
Maximum Feed Flow (gpm / lpm)	14.00 / 53.00	14.00 / 53.00	14.00 / 53.00
Minimum Concentrate Flow (gpm / lpm)	3.00 / 11.36	3.00 / 11.36	3.00 / 11.36
Connections			
Feed (in)	1 FNPT	1 FNPT	1 FNPT
Permeate (in)	1 FNPT	1 FNPT	1 FNPT
Concentrate (in)	1 FNPT	1 FNPT	1 FNPT
Membranes			
Membrane(s) Per Vessel	1	1	1
Membrane Quantity	2	3	4
Membrane Size	4040	4040	4040
Vessels			
Vessel Array	1:1	1:1:1	1:1:1:1
Vessel Quantity	2	3	4
Pumps			
Pump Type	Multi–Stage	Multi–Stage	Multi–Stage
Motor HP	1.5	1.5	1.5
RPM @ 60 Hz (50 Hz)	3450 (2900)	3450 (2900)	3450 (2900)
System Electrical			
Standard Voltage + Amp Draw	220V, 60Hz, 1PH, 8.3A**	220V, 60Hz, 1PH, 8.3A**	220V, 60Hz, 1PH, 8.3A**
High Voltage Service + Amp Draw	220V, 50Hz, 1PH, 8.9A** 220V, 60Hz, 3PH, 5.1A** 220V, 50Hz, 3PH, 6.1A** 380V, 50Hz, 3PH, 4.5A** 460V, 60Hz, 3PH, 3.5A**	220V, 50Hz, 1PH, 8.9A** 220V, 60Hz, 3PH, 5.1A** 220V, 50Hz, 3PH, 6.1A** 380V, 50Hz, 3PH, 4.5A** 460V, 60Hz, 3PH, 3.5A**	220V, 50Hz, 1PH, 8.9A** 220V, 60Hz, 3PH, 5.1A** 220V, 50Hz, 3PH, 6.1A** 380V, 50Hz, 3PH, 4.5A** 460V, 60Hz, 3PH, 3.5A**
Systems Dimensions			
Approximate Dimensions* L x W x H (in / cm)	30 x 38 x 47 / 76 x 96 x 119	30 x 38 x 47 / 76 x 96 x 119	30 x 38 x 47 / 76 x 96 x 119
Approximate Weight (lbs / kg)	235 / 106.60	250 / 113.40	265 / 120.20

Test Parameters: 550 TDS Filtered (5 – Micron), Dechlorinated, Municipal Feedwater, 65 psi / 4.50 bar Feed Pressure, 150 psi / 10.34 bar Operating Pressure, 77°F / 25°C, Recovery as stated, 7.0 pH. Data taken after 60 minutes of operation.

* Does not include operating space requirements.

** Varies with motor manufacturer.

Note 1: All 50Hz systems come standard with AXEON HF4 – Series Extra Low Energy Membrane Elements.

Operating Limits[††]

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)	2000
Minimum Ambient Temperature (°F / °C)	40 / 4	Maximum Hardness (gpg)	0
Maximum Feed Pressure (psi / bar)	85 / 6	Maximum pH (Continuous)	11
Minimum Feed Pressure (psi / bar)	45 / 3	Minimum pH (Continuous)	2
Maximum Operating Pressure (psi / bar)	150 / 10	Maximum pH (Cleaning 30 Minutes)	13
Maximum Feed Silt Density Index (SDI)	<3	Minimum pH (Cleaning 30 Minutes)	1

† 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.

AXEON WATER TECHNOLOGIES

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