

AXEON M1 – Series Reverse Osmosis Systems

Product Specifications					
Models	M1 – 4240	M1 – 6240	M1 – 8240	M1 – 10240	M1 – 12240
Design					
Configuration	Single Pass	Single Pass	Single Pass	Single Pass	Single Pass
Feedwater Source†	TDS <2,000 ppm	TDS <2,000 ppm	TDS <2,000 ppm	TDS <2,000 ppm	TDS <2,000 ppm
Standard Recovery Rate %	50 – 75	50 – 75	50 – 75	50 – 75	60 – 75
Rejection and Flow Rates†††					
Nominal Salt Rejection %	98.5	98.5	98.5	98.5	98.5
Permeate Flow (gpm / lpm)	8.30 / 31.42	12.50 / 47.32	16.70 / 63.22	20.80 / 78.74	25.00 / 94.63
Minimum Feed Flow (gpm / lpm)	14.30 / 54.00	18.50 / 70.00	22.70 / 85.93	26.80 / 101.45	31.00 / 117.35
Maximum Feed Flow (gpm / lpm)	28.00 / 106.00	28.00 / 106.00	42.00 / 159.00	42.00 / 159.00	42.00 / 159.00
Minimum Concentrate Flow (gpm / lpm)	6.00 / 22.70	6.00 / 22.70	6.00 / 22.70	6.00 / 22.70	6.00 / 22.70
Connections					
Feed (in)	1.5 FNPT	1.5 FNPT	1.5 FNPT	1.5 FNPT	1.5 FNPT
Permeate (in)	1 FNPT	1 FNPT	1 FNPT	1.5 FNPT	1.5 FNPT
Concentrate (in)	1 FNPT	1 FNPT	1 FNPT	1.5 FNPT	1.5 FNPT
CIP (in)	1 FNPT	1 FNPT	1 FNPT	1 FNPT	1 FNPT
Membranes					
Membrane(s) Per Vessel	2	2	2	2	2
Membrane Quantity	8	12	16	20	24
Membrane Size	4040	4040	4040	4040	4040
Vessels					
Vessel Array	2:2	2:2:2	3:3:2	3:3:2:2	3:3:2:2:2
Vessel Quantity	4	6	8	10	12
Pumps					
Pump Type	Multi-Stage	Multi-Stage	Multi-Stage	Multi-Stage	Multi-Stage
Motor HP	3	3	5	7.5	7.5
RPM @ 60 Hz	3450	3450	3450	3450	3450
RPM @ 50 Hz	2900	2900	2900	2900	2900
System Electrical					
Standard Voltage + Amp Draw	220V, 60Hz, 3PH, 9A**	220V, 60Hz, 3PH, 9A**	220V, 60Hz, 3PH, 14.2A**	220V, 60Hz, 3PH, 19.5A**	220V, 60Hz, 3PH, 19.5A**
Voltage Options + Amp Draw	220V, 50Hz, 3PH, 10.6A** 460V, 60Hz, 3PH, 5A**	220V, 50Hz, 3PH, 10.6A** 460V, 60Hz, 3PH, 5A**	220V, 50Hz, 3PH, 16.1A** 460V, 60Hz, 3PH, 7A**	220V, 50Hz, 3PH, 22.9A** 460V, 60Hz, 3PH, 9.7A**	220V, 50Hz, 3PH, 22.9A** 460V, 60Hz, 3PH, 9.7A**
Systems Dimensions					
Approximate Dimensions* L x W x H (in / cm)	31 x 100 x 64 / 78.74 x 254 x 162.56	31 x 100 x 64 / 78.74 x 254 x 162.56	31 x 100 x 64 / 78.74 x 254 x 162.56	31 x 100 x 64 / 78.74 x 254 x 162.56	31 x 100 x 64 / 78.74 x 254 x 162.56
Approximate Weight (lbs / kg)	1060 / 480.81	1150 / 476.27	1260 / 571.53	1350 / 612.35	1450 / 657.71

Test Parameters: 550 TDS Filtered (5 – Micron), Dechlorinated, Municipal Feedwater, 65 psi / 4.50 bar Feed Pressure, 80 psi / 5.5 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.

Operating Limits††

Maximum Feed Temperature (°F / °C)	85 / 29	Maximum Turbidity (NTU)	1
Minimum Feed Temperature (°F / °C)	40 / 5	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)	200 / 14	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.

