



HRO 6 – Series Reverse Osmosis Systems

Product Specifications

Models	HRO6-1800	HRO6-4000	HRO6-5000	HRO6-7000	HRO6-9000	-10,000	-15,000	-18,000	-20,000
Design									
Configuration	Single Pass	Single Pass	Single Pass	Single Pass	Single Pass	Single Pass	Single Pass	Single Pass	Single Pass
Feedwater TDS max (ppm) [†]	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Standard Recovery %	29	45	56	63	68	56	63	68	71
Rejection and Flow Rates^{†††}									
Permeate Flow Rate (gpd / lpd)	1,800 / 6,813	3,600 / 13,627	5,400 / 20,441	7,200 / 27,254	9,000 / 34,068	10,800 / 40,882	14,400 / 54,509	18,000 / 68,137	21,600 / 81,764
Permeate Flow Rate (gpm / lpm)	1.25 / 4.73	2.50 / 9.46	3.75 / 14.19	5.00 / 18.93	6.25 / 23.66	7.50 / 28.39	10.00 / 37.85	12.50 / 47.32	15.00 / 56.78
Minimum Concentrate Flow Rate (gpm / lpm)	3 / 11.35	3 / 11.35	3 / 11.35	3 / 11.35	3 / 11.35	6 / 22.71	6 / 22.71	6 / 22.71	6 / 22.71
Concentrate Recycle Flow Rate (gpm / lpm)	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	Up to 5 / 18.93	Up to 5 / 18.93	Up to 5 / 18.93	Up to 5 / 18.93
Connections									
Feed Connection (in)	1 FNPT	1 FNPT	1 FNPT	1 FNPT	1 FNPT	1 FNPT	1 FNPT	1 FNPT	1 FNPT
Permeate Connection (in)	3/4 FNPT	3/4 FNPT	3/4 FNPT	1 FNPT	1 FNPT	1 FNPT	1 FNPT	1 FNPT	1 FNPT
Concentrate Connection (in)	3/4 FNPT	3/4 FNPT	3/4 FNPT	1 FNPT	1 FNPT	1 FNPT	1 FNPT	1 FNPT	1 FNPT
Membranes									
Membrane(s) Per Vessel	1	1	1	1	1	1	1	1	1
Membrane Quantity	1	2	3	4	5	6	8	10	12
Membrane Size	4040	4040	4040	4040	4040	4040	4040	4040	4040
Nominal TDS Rejection %	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
Vessels									
Vessel Array	1	1:1	1:1:1	1:1:1:1	1:1:1:1:1	2:2:2	2:2:2:2	2:2:2:2:2	2:2:2:2:2:2
Vessel Quantity	1	2	3	4	5	6	8	10	12
Pumps									
Pump Type	Multi-Stage	Multi-Stage	Multi-Stage	Multi-Stage	Multi-Stage	Multi-Stage	Multi-Stage	Multi-Stage	Multi-Stage
Motor HP	1.5	1.5	1.5	1.5	3	3	3	3	3
RPM at 60 Hz	3450	3450	3450	3450	3450	3450	3450	3450	3450
System Electrical									
Standard Voltage + Amp Draw	220V, 60Hz, 1PH, 8.8A**	220V, 60Hz, 1PH, 8.8A**	220V, 60Hz, 1PH, 8.8A**	220V, 60Hz, 1PH, 8.8A**	220V, 60Hz, 1PH, 16A**	220V, 60Hz, 1PH, 16A**	220V, 60Hz, 1PH, 16A**	220V, 60Hz, 1PH, 16A**	220V, 60Hz, 1PH, 16A**
Systems Dimensions									
Approximate Dimensions* L x W x H (in / cm)	26 x 26 x 60 / 73.66 x 66.04 x 154.94	26 x 26 x 60 / 73.66 x 66.04 x 154.94	26 x 26 x 60 / 73.66 x 66.04 x 154.94	32 x 26 x 60 / 78.74 x 66.04 x 154.94	32 x 26 x 60 / 78.74 x 66.04 x 154.94	32 x 26 x 60 / 78.74 x 66.04 x 154.94	32 x 50 x 60 / 83.82 x 127 x 154.94	32 x 50 x 60 / 83.82 x 127 x 154.94	32 x 50 x 60 / 83.82 x 127 x 154.94
Approximate Weight (lbs / kg)	250 / 113.40	290 / 131.54	330 / 149.68	370 / 167.83	430 / 195.05	470 / 213.19	510 / 231.33	550 / 249.48	590 / 267.62

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 Free Chlorine (ppm)	0
Minimum Feed Temperature (°F / °C)	40 / 4	Maximum TDS (ppm)	2,000
Maximum Ambient Temperature (°F / °C)	120 / 49	Maximum Hardness (gpg)	0
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 Pressure (psi / bar)	200 / 14	Minimum pH (Cleaning 30 Minutes)	1
Maximum Feed Silt Density Index (SDI)	<3	Maximum Turbidity NTU	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.

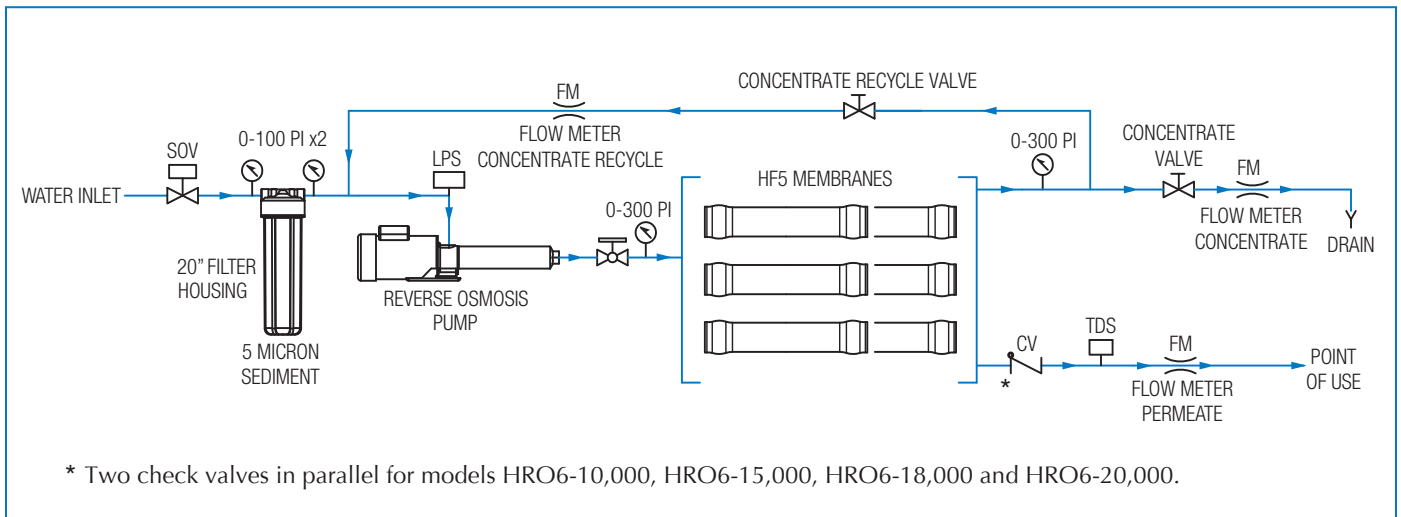
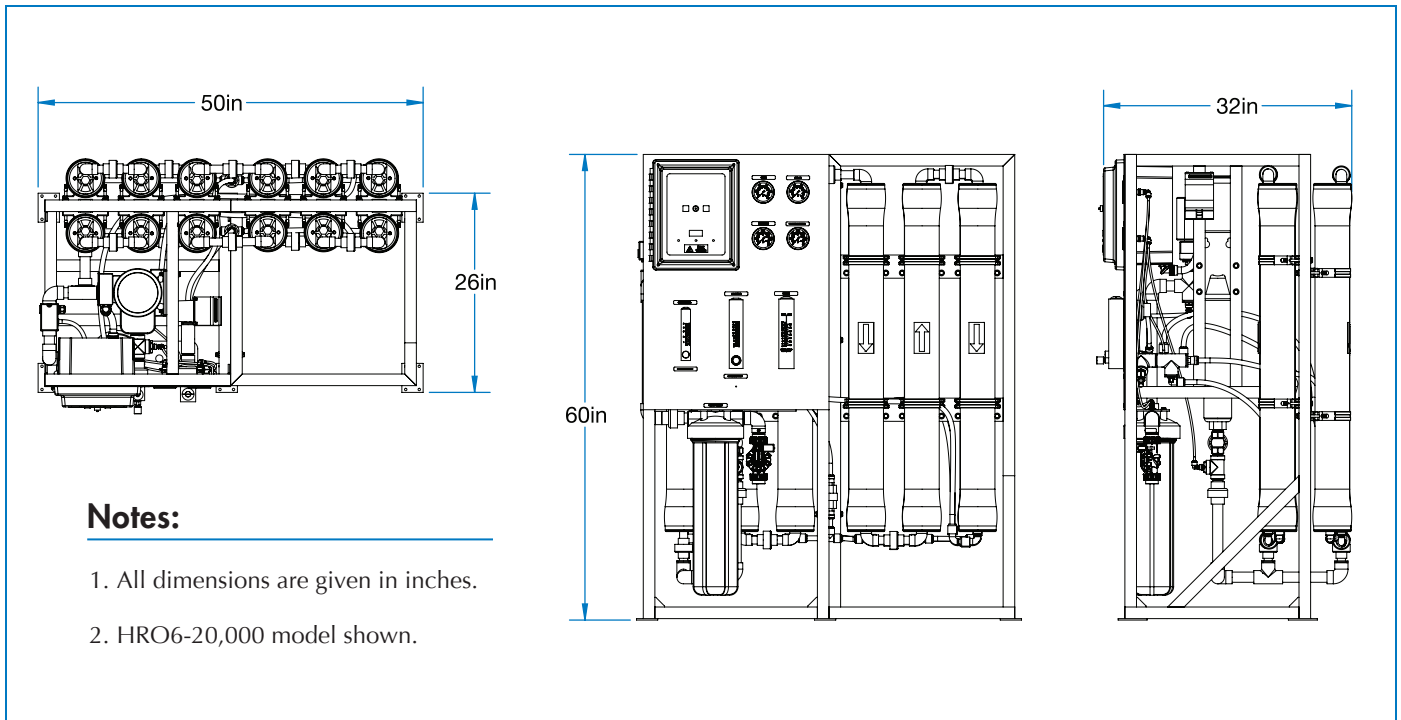
^{†††} Product flow and maximum recovery rates are based on feedwater conditions as stated above. Do not exceed recommended permeate flow. Design conditions are not identical to test conditions, please contact the manufacturer or your supplier for more information.



HELLENBRAND, INC
404 Moravian Valley Road
Waunakee, WI 53597
www.hellenbrand.com

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Hellenbrand products are not for sale or distribution into the State of California effective 8/31/18.



Array Specifications

Model	Vessel Array	Vessel Size	Vessel Quantity	Membrane Size	Membrane Quantity
HRO6 - 1800	1	4040	1	4040	1
HRO6 - 4000	1:1	4040	2	4040	2
HRO6 - 5000	1:1:1	4040	3	4040	3
HRO6 - 7000	1:1:1:1	4040	4	4040	4
HRO6 - 9000	1:1:1:1:1	4040	5	4040	5
HRO6 - 10,000	2:2:2	4040	6	4040	6
HRO6 - 15,000	2:2:2:2	4040	8	4040	8
HRO6 - 18,000	2:2:2:2:2	4040	10	4040	10
HRO6 - 20,000	2:2:2:2:2:2	4040	12	4040	12