

Part Number

PWP-10000

PWP-15000

PWP-20000

PRODUCT NAME:

10,000-20,000 GPD Reverse Osmosis

STANDARD FEATURES:

- Computer controller
- LCD Backlit Display
- Pre-Treatment Lockout
- Tank Level Input
- Low Pressure Monitoring and Alarm
- Controller Permeate RDS Monitoring
- Feed Flush
- White Powder Coated Aluminum Frame
- 10 Micron Filter Bag
- Bag Filter Housing
- 5 Micron Sediment Pre-Filter
- Single O-Ring Filter Housing
- Multi-Stage Booster Pump
- Low Energy Membranes
- PVC Membrane Housings
- Permeate Flow Meter
- Concentrate Flow Meter
- Feed Low Pressure Switch
- Feed Solenoid Valve
- 316 Stainless Steel Concentrate Valve
- 0-300 PSI Pump Pressure Gauges
- 0-100 PSI Pre-Filter Pressure Gauges
- Single Wood Crate

Overview

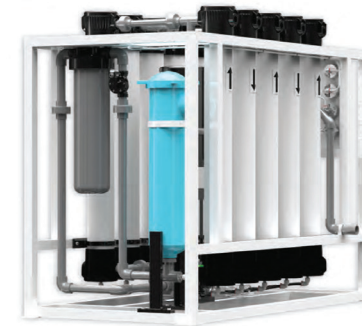
PWP Reverse Osmosis Systems are designed for overall high performance, high recovery rates, minimal energy consumption and offer great savings with low maintenance and operation costs.

PWP Reverse Osmosis Systems feature a space saving expandable design, exceptional pre-filtration, quality components to suit most applications.

PWP Reverse Osmosis Systems have been engineered for capacities ranging from 10,000 - 20,000 gallons per day.



PWP-20000 Reverse Osmosis System (Front)



PWP-20000 Reverse Osmosis System (Back)

Operating Limits

Maximum Feed Temperature °F (°C)	85 (29.00)	Maximum Free Chlorine ppm	0
Minimum Feed Temperature °F (°C)	40 (4.44)	Maximum TDS ppm	2000
Maximum Ambient Temperature °F (°C)	120 (48.89)	Maximum Hardness gpg † †	0
Minimum Ambient Temperature °F (°C)	40 (4.44)	Maximum pH (continuous)	11
Maximum Feed Pressure psi (bar)	85 (5.86)	Minimum pH (continuous)	5
Minimum Feed Pressure psi (bar)	45 (3.10)	Maximum pH (cleaning 30 min)	12
Maximum Operating Pressure psi (bar)	150 (10.34)	Minimum pH (cleaning 30 min)	2
Maximum SDI Rating SDI	<3		
Maximum Turbidity NTU	1		

Test Parameters: 550 TDS Filtered (5 Micron), De-Chlorinated, Municipal Feed Water, 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.

† † Scale prevention measures must be taken to prolong membrane life.

FEATURES & BENEFITS:

- Fully equipped and customizable
- Expandable and lightweight design
- 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
- CE compliant
- 1-year limited warranty
- Made in the USA

OPTIONS & UPGRADES:

- Extra Low Energy Membranes
- Ultra Low Energy Membranes
- Nanofiltration Membranes
- Stainless Steel Membrane Housings
- Fiberglass Membrane Housings
- Concentrate Recycle Valve with Flow Meter
- pH Controller
- ORP Controller
- Multi-Stage Stainless Steel Booster Pump
- S150 Computer Controller Expander Board
- S150 Computer Controller Feed TDS Monitoring
- Pump Pressure Relief Valve
- High Pressure Tank Switch
- Chemical Pump Outlet
- Blending Valve
- Permeate Sample Ports
- Double Wood Crate

Reverse Osmosis System Packages PWP-10,000 / PWP-15,000 / PWP-20,000

	Standard
Frame	
White Powder Coated Aluminum Frame	✓
Controls	
Computer Controller	✓
LCD Controller Display	✓
Pre-Treatment Lockout	✓
Tank Level Input	✓
Feed Solenoid Valve	✓
Concentrate Recycle Valve	
Feed Low Pressure Switch 15-30 psi	✓
Instrumentation	
Permeate Flow Meter	✓
Concentrate Flow Meter	✓
Concentrate Recycle Flow Meter	
316 Stainless Steel Concentrate Valve	✓
0-100 psi Pre-Filter In Pressure Gauge	✓
0-100 psi Pre-Filter Out Pressure Gauge	✓
0-300 psi Pump Pressure Gauge	✓
0-300 psi Final Concentrate Pressure Gauge	✓
Controller Permeate TDS Monitoring	✓
Controller Feed TDS Monitoring	
Features	
Feed Flush	✓
10 Micron Filter Bag	✓
5 Micron Sediment Pre-Filter	✓
Single O-Ring Filter Housing	✓
Low Energy RO Membranes	✓
Extra Low Energy RO Membranes	
PVC Membrane Housings	✓
Multi-Stage Booster Pump	✓
Multi-Stage Stainless Steel Booster Pump	
Chemical Pump Outlet	
Permeate Sample Valves	

Specifications	PWP-10000	PWP-15000	PWP-20000
Design			
Configuration	Single Pass	Single Pass	Single Pass
Feed Water Source***	TDS < 2000 ppm	TDS < 2000 ppm	TDS < 2000 ppm
Standard Recovery Rate †	55%	55%	55%
Recovery with Optional Concentrate Recycle	Up to 75%	Up to 75%	Up to 75%
Rejection and Flow Rates			
Nominal Salt Rejection %	98.5%	98.5%	98.5%
Permeate Flow* gpm (lpm)	6.94 (26.27)	10.42 (39.44)	13.89 (52.57)
Minimum Feed Flow gpm (lpm)	12.94 (49.00)	16.42 (62.1)	19.89 (75.30)
Maximum Feed Flow gpm (lpm)	28.00 (106.00)	28.00 (106.00)	28.00 (106.00)
Minimum Concentrate Flow gpm (lpm)	6.00 (22.71)	6.00 (22.71)	6.00 (22.71)
Connections			
Feed inch	2 FNPT	2 FNPT	2 FNPT
Permeate inch	1 FNPT	1 FNPT	1 FNPT
Concentrate inch	1 FNPT	1 FNPT	1 FNPT
Membranes			
Membrane(s) Per Vessel	1	1	1
Membrane Quantity	6	8	10
Membrane Size	4040	4040	4040
Vessels			
Vessel Array	2:2:2	2:2:2:2	2:2:2:2:2
Vessel Quantity	6	8	10
Pumps			
Pump Type	Multi-Stage	Multi-Stage	Multi-Stage
Motor HP	3	3	5
RPM @ 60 (50 Hz)	3450 (2900)	3450 (2900)	3450 (2900)
Electrical			
Standard Voltage	220V, 60Hz, 1PH, 16.0A	220V, 60Hz, 1PH, 16.9A	220V, 60Hz, 3PH, 14.7A
Voltage Options	220V, 50Hz, 1PH, 17.0A 220V, 60Hz, 3PH, 18.1A 220V, 50Hz, 3PH, 19.1A 380V, 50Hz, 1PH, 5.3A 460V, 60Hz, 3PH, 4.6A	220V, 50Hz, 1PH, 17.0A 220V, 60Hz, 3PH, 18.1A 220V, 50Hz, 3PH, 19.1A 380V, 50Hz, 1PH, 5.3A 460V, 60Hz, 3PH, 4.6A	220V, 50Hz, 3PH, 15.9A 380V, 50Hz, 1 PH, 8.5A 460V, 60Hz, 3PH, 7.5A
Systems Dimensions**			
L x W x H inch (cm)	49 x 33 x 54 (125 x 84 x 137)	55 x 33 x 54 (140 x 84 x 137)	61 x 33 x 54 (155 x 84 x 137)
Weight lb. (kg)	350 (159)	400 (181)	450 (204)

* Product Flow rates and recovery are based on equipment test parameters

** Does not include operating space requirements

*** Treatment ability of the RO system is dependent on feed water quality. Performance projections must be run for each installation.

† Low temperatures and high feed water TDS levels will significantly affect systems production capabilities. Computer projections should be run for individual applications which do not meet or exceed minimum and maximum operating limits.