

## Part Number

PWP-4000  
PWP-5000  
PWP-7000

**PRODUCT NAME:** 4,000-7,000 GPD Reverse Osmosis

- STANDARD 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
  - 5 Micron Sediment Pre-Filter
  - 10 Micron Carbon Block Pre-Filter
  - 1 Micron Sediment Pre-Filter
  - Single O-Ring Filter Housings
  - Multi-Stage Booster Pump
  - Low Energy Membranes
  - Feed Low Pressure Switch
  - Feed Solenoid Valve
  - PS-100 TDS Controller
  - 316 Stainless Steel Concentrate Valve
  - 0-300 psi Pump Pressure Gauge
  - 0-100 psi Pre-Filter Pressure Gauges
  - John Guest Push/Pull Fittings with Locking Safety Clips

## Overview

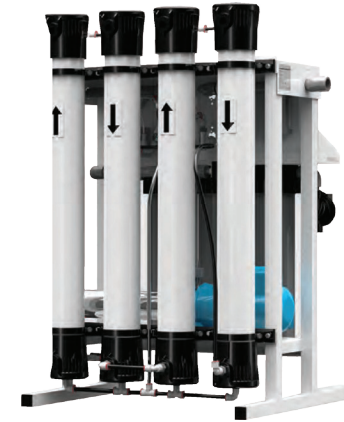
PWP Reverse Osmosis Systems are designed for overall high performance, high recovery rates, minimal energy consumption and offer great savings with low maintenance and operation costs.

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 4,000 - 7,000 gallons per day.



PWP-7000 Reverse Osmosis System (Front)



PWP-7000 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
- PS-200 Dual TDS Controller
- PSC-150 TDS/Conductivity Controller
- Multi-Stage Stainless Steel Booster Pump
- Computer Controller with Feed Flush
- Computer Controller with Expander Board
- Computer Controller with Dual TDS
- Pump Pressure Relief Valve
- High Pressure Tank Switch
- Chemical Pump Outlet
- Blending Valve
- Permeate Sample Ports
- Single Wood Crate
- Double Wood Crate

## Reverse Osmosis System Packages PWP-4,000 / PWP-5,000 / PWP-7,000

	Standard
<b>Frame</b>	
White Powder Coated Aluminum Frame	✓
<b>Controls</b>	
Computer Controller	✓
Computer Controller	
Computer Controller	
Pre-Treatment Lockout	✓
Tank Level Input	✓
LED Controller display	✓
LED Controller display	
Feed Solenoid Valve	✓
Concentrate Recycle Valve	
Feed Low Pressure Switch 15-30 psi	✓
<b>Instrumentation</b>	
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	✓
PS-100 Permeate TDS Controller	✓
Controller Permeate TDS Monitoring	
Controller Feed TDS Monitoring	
<b>Features</b>	
Feed Flush	
5 Micron Sediment Pre-filter	✓
10 Micron Carbon Block Pre-filter	✓
1 Micron Sediment Pre-Filter	✓
Single O-Ring Filter Housings	✓
Low Energy RO Membranes	✓
Extra Low Energy RO membranes	✓
PVC Membrane Housings	✓
Multi-Stage Booster Pump	
Multi-Stage Stainless Steel Booster Pump	
Permeate Sample Valves	

Specifications	PWP-4000	PWP-5000	PWP-7000
<b>Design</b>			
Configuration	Single Pass	Single Pass	Single Pass
Feed Water Source***	TDS < 2000 ppm	TDS < 2000 ppm	TDS < 2000 ppm
Standard Recovery Rate	48%	53%	62%
Recovery with Optional Concentrate Recycle	Up to 75%	Up to 75%	Up to 75%
<b>Rejection and Flow Rates</b>			
Nominal Salt Rejection %	98.5%	98.5%	98.5%
Permeate Flow* gpm (lpm)	2.78 (10.52)	3.47 (13.4)	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)
<b>Connections</b>			
Feed inch	1 FNPT	1 FNPT	1 FNPT
Permeate inch	1 FNPT	1 FNPT	1 FNPT
Concentrate inch	1 FNPT	1 FNPT	1 FNPT
<b>Membranes</b>			
Membrane(s) Per Vessel	1	1	1
Membrane Quantity	2	3	4
Membrane Size	4040	4040	2540
<b>Vessels</b>			
Vessel Array	1:1	1:1:1	1:1:1:1
Vessel Quantity	2	3	4
<b>Pumps</b>			
Pump Type	Multi-Stage	Multi-Stage	Multi-Stage
Motor HP	1.5	1.5	1.5
RPM @ 60 (50 Hz)	3450 (2900)	3450 (2900)	3450 (2900)
<b>Electrical</b>			
Standard Voltage	220V, 60Hz, 1PH, 8.3A	220V, 60Hz, 1PH, 8.3A	220V, 60Hz, 1PH, 8.3A
Voltage Options	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
<b>Systems Dimensions **</b>			
L x W x H inch (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)
Weight lb. (kg)	235 (106.6)	250 (113.4)	265 (120.2)

\* 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.