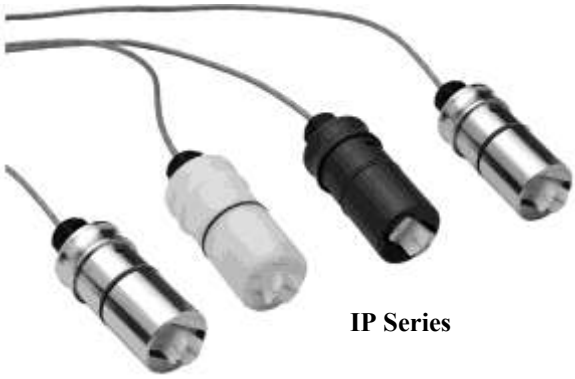
Seametrics

Industrial / Municipal

EX Series



IP Series

FT Series

DL76

- **Flow Monitoring and Control**
- **Magnetic Flow Meters (Magmeters)**
- **Paddle Wheel Flow Meters**
- **Contacting Meters**
- **Rate Indicators - 4 Displays**
- **Batch Control**
- **Data Logging**
- **4-20mA Outputs**
- **Pulse Outputs**
- **Parts & Accessories**

Contact Davies Fluid Dept. for Application Assistance

Residential Reverse Osmosis Drinking Water Systems

Residential Reverse Osmosis System

- 5 stage under the counter RO drinking water system
- Comes Complete With:
  - 3 gallon metal storage tank with bladder
  - Chrome designer faucet
  - John Guest fittings
  - 75 GPD Membrane
  - Sediment pre-filter, pre-carbon filters, post-carbon filter
  - All necessary hardware for installation
- Designed in Canada
- North American made

Rated Output	Vessels (Sumps)	Sediment Filter	Two Carbon Pre-Filters	Membrane	Carbon Post-Filter	Part Number
75 GPD	3	P5	C1 or GAC10	555693-00	K2533-KK	**PV56T75-DSG**

Residential Reverse Osmosis System - With Booster Pump

- 4 stage under the counter RO drinking water system
- Comes Complete With:
  - Aquatech booster pump
  - 3 gallon metal storage tank with bladder
  - Chrome designer faucet
  - John Guest fittings
  - 75 GPD Membrane
  - Sediment pre-filter, pre-carbon filter, post-carbon filter
  - All necessary hardware for installation
- Designed in Canada
- North American made

Rated Output	Vessels (Sumps)	Sediment Filter	Carbon Pre-Filter	Membrane	Carbon Post-Filter	Part Number
75 GPD	3	P5	C1 or GAC10	555693-00	C1 or GAC10	**PRO46T75P**

GOOD

ASSEMBLED IN THE USA

John Guest Fittings

Residential Reverse Osmosis Drinking Water Systems

Residential Reverse Osmosis System - The Water Saver

- 4 stage under the counter RO drinking water system
- Reduce water waste and save 4X the water of conventional RO's with this 1:1 ratio high recovery membrane
- Comes Complete With:
  - 3 gallon metal storage tank with bladder
  - Chrome designer faucet
  - John Guest fittings
  - 75 GPD Membrane
  - Sediment pre-filter, pre-carbon filter, post-carbon filter
  - All necessary hardware for installation
- North American made

Rated Output	Vessels (Sumps)	Sediment Filter	Carbon Pre-Filter	Membrane	Carbon Post-Filter	Part Number
75 GPD	3	P5	C1 or GAC10	4002575	C1 or GAC10	**GROHE75-D**

Residential Reverse Osmosis System - PuROTwist

- 4 stage under the counter RO drinking water system
- Cartridges twist on & off for simple replacement
- Comes Complete With:
  - 3 gallon metal storage tank with bladder
  - Standard lead free faucet
  - John Guest fittings
  - 75 GPD Membrane
  - Omnipure® filters
  - Sediment pre-filter, pre-carbon filter, post-carbon filter
  - All necessary hardware for installation
- North American made

Rated Output	Vessels (Sumps)	Sediment Filter	Carbon Pre-Filter	Membrane	Carbon Post-Filter	Part Number
75 GPD	3	Q5605	Q5633	TQ56-75FC	Q5633	**PT4000T75-NA**

Residential Reverse Osmosis Drinking Water Systems

Residential Reverse Osmosis System - Economy

- Four Stage Under Counter Reverse Osmosis Drinking Water System
- 75 GPD TFC (Thin Film Composite) Membrane
- Comes Complete With:
  - 4 gallon storage tank
  - Membrane
  - Sediment pre-filter, pre-carbon filter, post-carbon filter
  - Stainless steel product water check valve
  - Faucet assembly
  - All necessary hardware for installation
- **#E75TFC-3SF includes automatic shut off valve**
- **#EBP75TFCS-3SF includes solenoid valve and 24 volt booster pump system #92325. See following page for more information**

Rated Output	Vessels (Sumps)	Sediment Filter	Carbon Pre-Filter	Membrane	Carbon Post-Filter	Part Number
75 GPD	3	P5 or 26091	C1 or GAC10	555693-00	C1 or GAC10	**E75TFC-3SF**
75 GPD	3	P5 or 26091	C1 or GAC10	555693-00	C1 or GAC10	**EBP75TFCS-3SF**

Residential Reverse Osmosis Drinking Water Systems

Residential Faucets

Designer Faucet Standard Faucet

- Lead Free
- Non-Air Gap
- Retrofits most brands
- Quarter turn handle
- All mounting hardware is included
- Max Operating Pressure: 125 psi
- Temperature Rating: 4 to 70C (40 to 158F)
- Flow Rate: 1.0 gpm @ 35 psi
- NSF listed to ANSI NSF Std. 61

Color	Water Line Connection	Brand	Part Number
Designer Faucets			
Polished Chrome	1/4"	GWW	**FLR-575CP**
Brushed Nickel	1/4"	GWW	**FLR-522PSBN**
Standard Faucets - Long Reach			
Chrome	1/4"	GWW	**QMP102**
White	1/4"	GWW	**QPM102W**
Brushed Nickel	1/4"	GWW	**QMP102BRICKLE**
Contact Davies for More Colours Available			

Residential Pressure Tanks

Metal Tank

- White tanks
- Metal tank is NSF listed

Construction	Capacity (gallon)	Diameter	Height	Connection	Brand	Part Number
Plastic	3.2	9"	14"	1/4"	GWW	**TKE2400P**
Metal	4.4	11"	14"	1/4"	GWW	**TKE3200W**

Residential Reverse Osmosis Drinking Water Systems

Residential Booster Pump

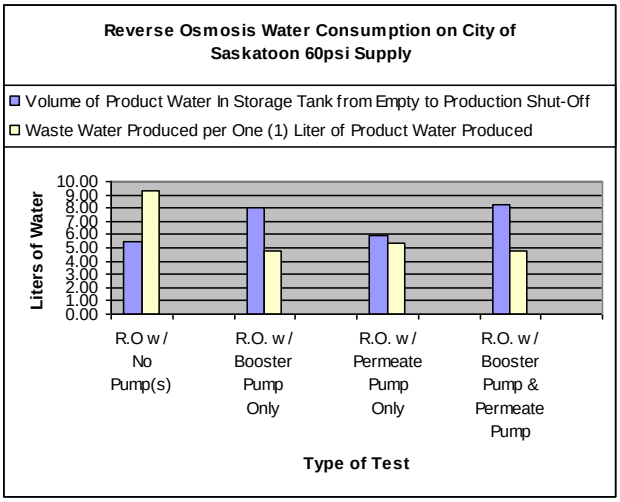
- A booster pump must be used if system pressure is below 35 psi
- Raises and maintains water pressure at the optimum level to ensure the highest rejection rate and maximum production
- Recommended Bypass Pressure: 110 psi
- Liquid Temperature: 170°F / 77°C max
- Motor: 24 VAC, permanent magnet, totally enclosed, non-ventilated, 6" 20 AWG leads
- Pump: 3 chamber diaphragm pump, self priming, capable of being run dry
- Must order pressure switch and transformer separately

Description	Brand	Part Number
Low Flow Booster Pump - Up to 50 GPD Flexible mounting plate, push to connect ports for 1/4" tubing	Aquatec	**6840-2J03-B221S**
Tank Pressure Switch - 60 psi, 1/4" JG		**PSW260-00**
Tank Pressure Switch - 40 psi, 1/4" JG		**PSW240-00**
120 Volt Transformer		**TACS114-48**

Residential Permeate Pump

- Pump forces product water into the storage tank, reducing membrane back pressure and maximizing available feed pressure
- This pump dramatically improves the efficiency of water production, reducing waste water by up to 80%. Example: If your current system requires 10 gallons of tap water to produce a gallon of pure water (10:1), adding this permeate pump should reduce this ratio below 3:1
- This pump can also bring storage tanks up to line pressure and then shut the system down when these tanks reach capacity, eliminating the need for a hydraulic shut-of valve
- Other benefits include higher delivery pressures, faster RO water production, superior water quality and extended filer/membrane life
- Requires no electricity, it is powered by energy from brine water
- Can easily be retrofitted to upgrade existing RO systems
- Effective for inlet water pressure as low as 30 psi

Description	Brand	Part Number
1/4" Permeate Pump Ideal for membranes rated 10 to 100 GPD	Aquatec	**ERP1000-JG-S**



Note: All testing was done using a 75gpd membrane, 350 flow controller and standard pre/post filter setup. City of Saskatoon supply water used for raw feed with no other water quality modifications. RO tank set for 10psi pre-charge. All testing was preformed with same setup/piping.

Residential Reverse Osmosis Drinking Water Systems

Residential Reverse Osmosis Membranes

92263

92264

92268

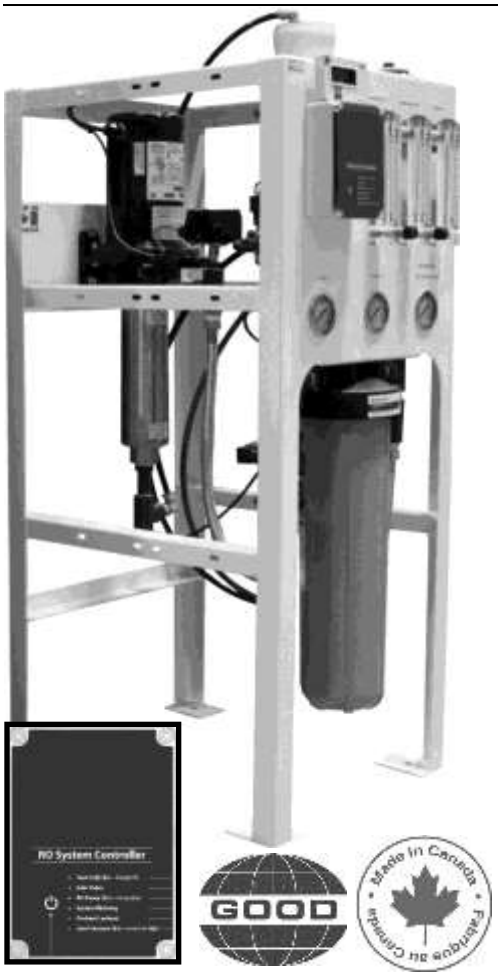
- Replacement membranes for residential reverse osmosis drinking water systems

Capacity	Description	Part Number	
		Membrane	Restrictor
24 GPD	10" TFC Membrane	**BME1812R24**	**or 92263**
36 GPD	10" TFC Membrane	**BME1812R36**	
50 GPD	10" TFC Membrane	**BME1812R50**	**069D or 92268**
75 GPD	10" TFC Membrane	**BME1812R75**	**069D or 92264**
100 GPD	10" TFC Membrane	**BME1812R100**	**069D**

NOTE: When replacing an RO membrane, always sell membrane and restrictor together. Also ensure that membrane capacity matches flow restrictor capacity.

Commercial Reverse Osmosis Drinking Water Systems

Pro Line Ultra-Series Commercial Reverse Osmosis Systems (2200 to 5200 GPD)



- State of the art, versatile systems for treating municipal and well water supplies
- Minimal energy consumption, low maintenance and excellent operating costs
- Allows for versatility in the event of feed water quality and temperature variations
- High rejection and flow rates
- Equipped with the iControls RO System Controller for precise control of auto-flush options, operation indication, pre-treatment, storage tank status & much more!

	Ultra-2600-B	Ultra-2600-D	Ultra-5200-B	Ultra-5200-D
Design				
Configuration	Single Pass	Single Pass	Single Pass	Single Pass
Feed Water Source	TDS < 2000	TDS < 2000	TDS < 2000	TDS < 2000
System Recovery w/ Recycle*	35%-50%	35%-50%	50%-75%	50%-75%
Rejection and Flow Rates				
Nominal Salt Reduction	98.50%	98.50%	98.50%	98.50%
Permeate Flow Rate*	1.8 gpm	1.8 gpm	3.6 gpm	3.6 gpm
Concentrate Flow Rate	2.0 gpm	2.0 gpm	3.0 gpm	3.0 gpm
Concentrate Recycle Flow Rate	Up to 2.0 gpm	Up to 2.0 gpm	Up to 5.0 gpm	Up to 5.0 gpm
Connections				
Feed Connection	3/4" CTS QC	3/4" CTS QC	3/4" CTS QC	3/4" CTS QC
Permeate Connection	1/2" QC	1/2" QC	1/2" QC	1/2" QC
Concentrate Connection	1/2" QC	1/2" QC	1/2" QC	1/2" QC
Membrane (Uses Membrane Part Number 3056683)				
Membrane Quantity	1	1	2	2
Membrane Size	4x40	4x40	4x40	4x40
Housings				
Housing Array	1	1	1	1
Housing Quantity	1	1	2	2
Pumps				
Pump Type	Multi-Stage	Multi-Stage	Multi-Stage	Multi-Stage
Motor HP	1/2 HP	1/2 HP	3/4 HP	3/4 HP
RPM @ 60HZ	3450	3450	3450	3450
Electrical				
Standard Voltage	110V 1ph 60hz	110V 1ph 60hz	110V 1ph 60hz	110V 1ph 60hz
SF Amps	12.4	12.4	14.5	14.5
System Dimensions				
LxWxH	27"x25"x56"	27"x25"x56"	27"x25"x56"	27"x25"x56"
Shipping Weight	135 lbs.	135 lbs.	135 lbs.	135 lbs.

Basic Model Features:

- Powder coated steel frame
- Franklin BT4 series multi-stage booster pump
- Motor thermal overload protection]
- Ultra low energy membrane
- Stainless steel membrane housing
- 5 micron sediment filter cartridge
- Pentek 20" Big Blue filter housing
- Permeate flow meter
- Concentrate flow meter with adjustable needle valve
- Recycle flow meter with adjustable needle valve
- Low pressure switch
- Pump operating pressure gauge
- Pre-filter in/out pressure gauge
- Product water check valve
- Pre-treatment lockout

Deluxe Model Upgraded Features:

- Auto flush solenoid valve & multiple programming
- Dual probe TDS meter
- Powder coated aluminum frame
- Codeline fiberglass membrane housing

* Product flow and recovery rates are based on feed water condition of 1000 ppm of TDS @ 77° F/25°C. Treatment ability of the RO system is dependent on feed water quality. Higher TDS and/or lower temperatures will reduce product flow. Performance projections should be run for each installation.

Operating Limits						
Design Temp	77°F	Min Feed Pressure	45 psi	Max Hardness GPG ^^	1	Test Parameters: Static pressure test for 5 minutes. ^ Appropriate filtration must be installed in order to prevent premature membrane fouling. ^^ Scale prevention measures must be taken to prolong membrane life.
Max Feed Temp	85°F	Max Operating Pressure	150 psi	Max pH (continuous)	11	
Min Feed Temp	40°F	Max SDI Rating	<3	Min pH (continuous)	3	
Max Ambient Temp	120°F	Max Turbidity NTU ^	1	Max pH (cleaning 30 min)	12	
Min Ambient Temp	40°F	Max Free Chlorine	0 ppm	Min pH (cleaning 30 min)	2	
Max Feed Pressure	85 psi	Max TDS	2000 ppm			

Commercial Reverse Osmosis Drinking Water Systems

Commercial Wall Mount Reverse Osmosis Systems (150 to 1200 GPD)

Standards:
- Pre-filter Housing NSF/ANSI Certified 42
- Pre-filter Cartridge NSF/ANSI Certified 42

- Commercial grade high pressure RO units for the reduction of total dissolved solids from water
- Utilizes a high rejection membrane that achieves a minimum average NaCI ionic rejection of 95% and features membrane auto flush
- **Applications:** Municipal water treatment, steam boiler and steam sterilizer make up, laboratory use, spot free rinsing, ice and beverage water, water for cooking, food processing, metal plating and finishing, as well as water for humidification. RO is also the pre-treatment of choice for ion exchange type de-ionization (DI) systems because it reduces the exhaustion rate of the DI resin by up to 95%, saving time, money and chemicals.
- **Features:** 316L stainless steel 300psi high pressure membrane housings. 304 stainless steel wall mounted support frame. Pressure gauges for pre-filter inlet / outlet and membrane feed pressure. Low feed water pressure safety switch. Microprocessor based controller with delayed auto restart after low pressure shut down. High pressure / high rejection membranes. Permeate and reject water flow meters. Adjustable reject and reject recycle valves. Permeate pressure switch and check valve. Automatic inlet solenoid valve. Membrane auto flush.
- If floor mounting is preferred, use optional floor mount kit #7100088 (PWR2864)
- **Installation Notes:** Install system after water softener. A backwashing carbon filter & a backwashing sediment filter should be installed on the RO feed water line. Use an atmospheric storage tank or pressurized bladder tank to collect the RO water. A local drain is required to accept drain water from the system. Requires 120 Volt.
- **Note:** Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system

Max Productivity	Recovery (adjustable)	Membrane Size (Qty.)	Membrane Part #	Feed Water Required (maximum)	Drain Required (maximum)	Motor HP	Dimensions WxHxD	Ship Weight	Model Number	Part Number
150 GPD	15-75%	2.5" x 14" (1)	1220978	2.4 GPM	2.4 GPM	1/2	22" x 32" x 12"	50 lbs	PWR25111011	**7100066**
250 GPD	15-75%	2.5" x 21" (1)	1206799	2.4 GPM	2.4 GPM	1/2	22" x 32" x 12"	50 lbs	PWR25112011	**7100067**
600 GPD	15-75%	2.5" x 40" (1)	1206802	2.4 GPM	2.4 GPM	1/2	22" x 52" x 12"	60 lbs	PWR25113011	**7100068**
1200 GPD	25-75%	2.5" x 40" (2)	2091542	2.4 GPM	2.4 GPM	1/2	22" x 52" x 12"	70 lbs	PWR25113021	**7100069**

System Specifications (All Models)						
Feed Water Connection	**Average Membrane Rejection**	**Pre-filter**	**Product Water Connection**	**Reject Water Connection**	**Feed Water Pressure (min)**	**Electrical Requirement**
1/2" NPT	98%	10", 5 micron cartridge	3/8" tubing OD	3/8" tubing OD	20 psi	120 VAC, 60 Hz, 8 Amps

Feed Water Guidelines:

pH	6 to 9
Hardness (maximum)	Less than 1 grain per gallon as CaCO3 (Softened) or anti-scale chemical injection if not softened
Feed Water Pressure (minimum)	20 psi
Temperature	2 to 38C (35 to 100F)
Free Chlorine (maximum)	None Allowed
Iron (maximum)	Less than .1 mg/L
Oil and H2S	None Allowed
Turbidity	Less than 1.0 NTU
Silt Density Index	Less than 5.0 SDI

Note: Feed Water must be pretreated for scale prevention (softened), de-chlorinated (carbon filter) and free of sediment

Notes:
1. Maximum production based on a feed water of 77°F, SDI<3, 1000 ppm TDS, and pH 8
2. Indivdual membrane productivity may very ± 15%
3. May be operated on other feed waters with reduced capacity
4. Percent rejection is based on membrane manufactures specifications; overall system percent rejection may be less

Commercial Reverse Osmosis Drinking Water Systems

Commercial Wall Mount Reverse Osmosis Systems (1800 to 5400 GPD)

- Commercial grade low energy RO units for the reduction of total dissolved solids from water
- Utilizes a low energy membrane that achieves a minimum average NaCI ionic rejection of 95%
- **Applications:** Municipal water treatment, steam boiler and steam sterilizer make up, laboratory use, spot free rinsing, ice and beverage water, water for cooking, food processing, metal plating and finishing, as well as water for humidification. RO is also the pre-treatment of choice for ion exchange type de-ionization (DI) systems because it reduces the exhaustion rate of the DI resin by up to 95% saving time, money and chemicals.
- **Features:** Stainless steel high pressure piping. 316L stainless steel 300psi high pressure membrane housings. 304 stainless steel wall mounted support frame. Pressure gauges for pre-filter inlet / outlet and membrane feed pressure. Low feed water pressure safety switch. Microprocessor based controller with delayed auto restart after low pressure shut down. Tank level and pre-treatment interlock inputs. Permeate and reject water flow meters. Adjustable reject and reject recycle valves. Permeate check valve. Automatic inlet solenoid valve.
- **Installation Notes:** Install system after water softener. A backwashing carbon filter & a backwashing sediment filter should be installed on the RO feed water line. Use an atmospheric storage tank with an electronic level float to collect the RO water. A local drain is required to accept drain water from the system. Requires 230 Volt.
- **Note:** Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system

Standards:

- Pre-filter Housing NSF/ANSI Certified 42

Max Productivity	Recovery (adjustable)	Membrane Size (Qty.)	Membrane Part #	Feed Water Required (at 50% Recovery)	Drain Required (maximum)	Motor HP	Dimensions LxHxD	Ship Weight	Model Number	Part Number
1800 GPD	15-75%	4" x 40" (1)	2091544	2.5 GPM	10 GPM	1	41" x 51" x 18	200 lbs	PWR40113012	**7100070**
3600 GPD	25-75%	4" x 40" (2)	2091544	5 GPM	10 GPM	1	41" x 51" x 18	250 lbs	PWR40113022	**7100071**
5400 GPD	35-75%	4" x 40" (3)	2091544	7.5 GPM	10 GPM	1.5	41" x 51" x 18	300 lbs	PWR40113032	**7100072**

System Specifications (All Models)						
Feed Water Connection	**Average Membrane Rejection**	**Pre-filter**	**Product Water Connection**	**Reject Water Connection**	**Feed Water Pressure (min)**	**Electrical Requirement**
1" NPT	98%	10" BB, 5 micron cartridge	1/2" tubing OD (1800 & 3600 GPD) 5/8" tubing OD (5400 GPD)	1/2" tubing OD	20 psi	**1800 & 3600 GPD:** 230 VAC, 60 Hz, 6 Amps, 1ø **5400 GPD:** 230 VAC, 60 Hz, 9 Amps, 1ø

Feed Water Guidelines:

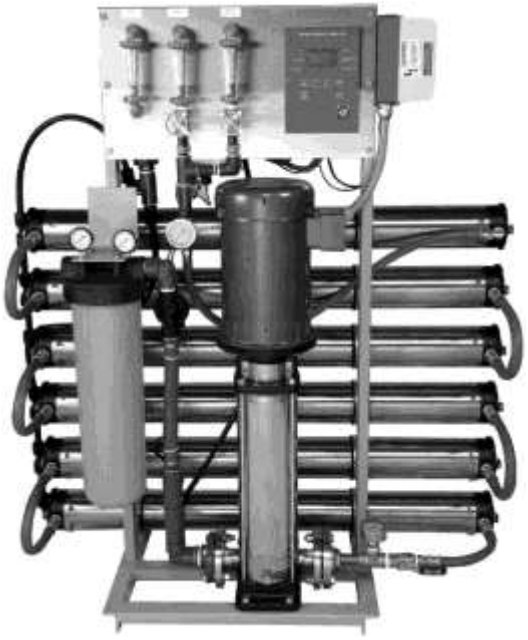
pH	6 to 9
Hardness (maximum)	Less than 1 grain per gallon as CaCO3 (Softened) or anti-scale chemical injection if not softened
Feed Water Pressure (minimum)	20 psi
Temperature	2 to 38C (35 to 100F)
Free Chlorine (maximum)	None Allowed
Iron (maximum)	Less than .1 mg/L
Oil and H2S	None Allowed
Turbidity	Less than 1.0 NTU
Silt Density Index	Less than 5.0 SDI

Note: Feed Water must be pretreated for scale prevention (softened), de-chlorinated (carbon filter) and free of sediment

Notes:
1. Maximum production based on a feed water of 77°F, SDI<3, 1000 ppm TDS, and pH 8
2. Indivdual membrane productivity may very ± 15%
3. May be operated on other feed waters with reduced capacity
4. Percent rejection is based on membrane manufactures specifications; overall system percent rejection may be less

Commercial Reverse Osmosis Drinking Water Systems

Commercial Floor Mount Reverse Osmosis Systems (3600 to 10,800 GPD)



- Commercial grade high pressure RO units for the reduction of total dissolved solids from water
- Utilizes a high rejection membrane that achieves a minimum average NaCI ionic rejection of 95% and features membrane auto flush
- **Applications:** Municipal water treatment, steam boiler and steam sterilizer make up, laboratory use, spot free rinsing, ice and beverage water, water for cooking, food processing, metal plating and finishing, as well as water for humidification. RO is also the pre-treatment of choice for ion exchange type de-ionization (DI) systems because it reduces the exhaustion rate of the DI resin by up to 95%, saving time, money and chemicals.
- **Features:** 316L stainless steel 300psi high pressure membrane housings. Powder coated carbon steel support frame. Pressure gauges for pre-filter inlet / outlet, membrane feed and reject water pressure. Low feed water pressure safety switch. Digital microprocessor based controller with delayed auto restart after low pressure shut down. Permeate water conductivity meter with high conductivity alarm output. Tank level and pre-treatment interlock inputs. High pressure / high rejection membranes. Permeate, reject recycle and reject water flow meters. Adjustable reject and reject recycle valves. Permeate check valve. Automatic inlet solenoid valve. Membrane auto flush.
- **Installation Notes:** Install system after water softener. A backwashing carbon filter & a backwashing sediment filter should be installed on the RO feed water line. Use an atmospheric storage tank with an electronic level float to collect the RO water. A local drain is required to accept drain water from the system. Requires 230 Volt.
- **Note:** Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system

Standards:
- Pre-filter Housing NSF/ANSI Certified 42

Max Productivity	Recovery (adjustable)	Membrane Size (Qty.)	Membrane Part #	Feed Water Required (at 50% Recovery)	Drain Required (maximum)	Motor HP	Dimensions LxWxH	Ship Weight	Model Number	Part Number
3600 GPD	25-75%	4" x 40" (2)	2091544	5 GPM	15 GPM	5	60" x 18" x 56"	400 lbs	PWR402113023	**7100073**
5400 GPD	36-75%	4" x 40" (3)	2091544	7.5 GPM	15 GPM	5	60" x 18" x 56"	500 lbs	PWR402113033	**7100074**
7200 GPD	42-75%	4" x 40" (4)	2091544	10 GPM	15 GPM	5	60" x 18" x 56"	600 lbs	PWR402113043	**7100075**
9000 GPD	46-75%	4" x 40" (5)	2091544	12.5 GPM	15 GPM	5	60" x 18" x 56"	700 lbs	PWR402113053	**7100076**
10,800 GPD	50-75%	4" x 40" (6)	2091544	15 GPM	15 GPM	5	60" x 18" x 56"	800 lbs	PWR402113063	**7100077**

System Specifications (All Models)						
Feed Water Connection	**Average Membrane Rejection**	**Pre-filter**	**Product Water Connection**	**Reject Water Connection**	**Feed Water Pressure (min)**	**Electrical Requirement**
1" FNPT	98%	20" BB, 5 micron cartridge	3/4" FNPT	3/4" FNPT	20 psi	230 VAC, 60 Hz, 15 Amps, 3ø

Feed Water Guidelines:

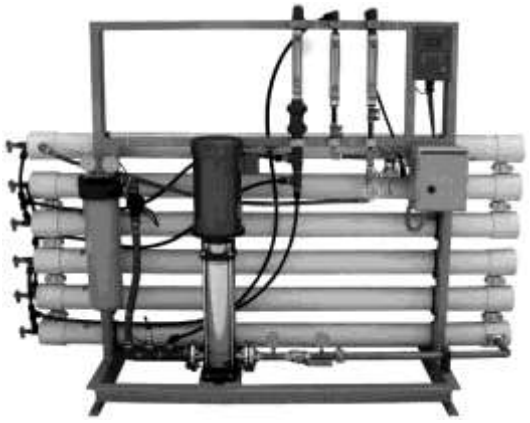
pH	6 to 9
Hardness (maximum)	Less than 1 grain per gallon as CaCO3 (Softened) or anti-scale chemical injection if not softened
Feed Water Pressure (minimum)	20 psi
Temperature	2 to 38C (35 to 100F)
Free Chlorine (maximum)	None Allowed
Iron (maximum)	Less than .1 mg/L
Oil and H2S	None Allowed
Turbidity	Less than 1.0 NTU
Silt Density Index	Less than 5.0 SDI

Note: Feed Water must be pretreated for scale prevention (softened), de-chlorinated (carbon filter) and free of sediment

Notes:
1. Maximum production based on a feed water of 77°F, SDI<3, 1000 ppm TDS, and pH 8
2. Indivdual membrane productivity may very ± 15%
3. May be operated on other feed waters with reduced capacity
4. Percent rejection is based on membrane manufactures specifications; overall system percent rejection may be less

Commercial Reverse Osmosis Drinking Water Systems

Commercial Floor Mount Reverse Osmosis Systems (10 to 15 GPM)



- Commercial grade high pressure RO units for the reduction of total dissolved solids from water
- Utilizes a high rejection membrane that achieves a minimum average NaCI ionic rejection of 97% and features membrane auto flush
- **Applications:** Municipal water treatment, steam boiler and steam sterilizer make up, laboratory use, spot free rinsing, ice and beverage water, water for cooking, food processing, metal plating and finishing, as well as water for humidification. RO is also the pre-treatment of choice for ion exchange type de-ionization (DI) systems because it reduces the exhaustion rate of the DI resin by up to 95%, saving time, money and chemicals.
- **Features:** Corrosion resistant fiberglass reinforced plastic 300psi high pressure membrane housings. Powder coated carbon steel support frame. Pressure gauges for pre-filter inlet / outlet, membrane feed and reject water pressure. Low feed water pressure safety switch. Digital microprocessor based controller with delayed auto restart after low pressure shut down. Permeate water conductivity meter with high conductivity alarm output. Tank level and pre-treatment interlock inputs. High pressure / high rejection membranes. Permeate, reject recycle and reject water flow meters. Adjustable reject and reject recycle valves. Permeate check valve. Automatic inlet solenoid valve. Membrane auto flush.
- **Installation Notes:** Install system after water softener. A backwashing carbon filter & a backwashing sediment filter should be installed on the RO feed water line. Use an atmospheric storage tank with an electronic level float to collect the RO water. A local drain is required to accept drain water from the system. Requires 230 Volt.
- **Note:** Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system

Standards:
- Pre-filter Housing NSF/ANSI Certified 42
- Membrane Housings NSF/ANSI Certified 61

Max Productivity	Recovery (adjustable)	Membrane Size / Array*	Membrane Part #	Feed Water Required (at 65% Recovery)	Drain Required (maximum)	TEFC Motor HP	Dimensions LxWxH	Ship Weight	Model Number	Part Number
10 GPM	60-75%	4" x 40" / 2:1:1	2091544	17 GPM	17 GPM	7.5	96" x 24" x 72"	800 lbs	PWR40223083	**7100078**
12.5 GPM	60-75%	4" x 40" / 2:2:1	2091544	21 GPM	21 GPM	7.5	96" x 24" x 72"	900 lbs	PWR40223103	**7100079**
15 GPM	60-75%	4" x 40" / 3:2:1	2091544	25 GPM	25 GPM	7.5	96" x 24" x 72"	1000 lbs	PWR40223123	**7100080**

*Two Elements Per Vessel

System Specifications (All Models)						
Feed Water Connection	**Average Membrane Rejection**	**Pre-filter**	**Product Water Connection**	**Reject Water Connection**	**Feed Water Pressure (min)**	**Electrical Requirement**
1" FNPT	98%	20" BB, 5 micron cartridge	1" FNPT	3/4" FNPT	20 psi	230 VAC, 60 Hz, 20 Amps, 3ø

Feed Water Guidelines:

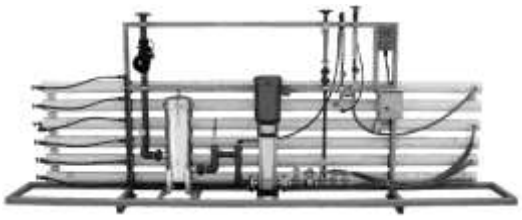
pH	6 to 9
Hardness (maximum)	Less than 1 grain per gallon as CaCO3 (Softened) or anti-scale chemical injection if not softened
Feed Water Pressure (minimum)	20 psi
Temperature	2 to 38C (35 to 100F)
Free Chlorine (maximum)	None Allowed
Iron (maximum)	Less than .1 mg/L
Oil and H2S	None Allowed
Turbidity	Less than 1.0 NTU
Silt Density Index	Less than 5.0 SDI

Note: Feed Water must be pretreated for scale prevention (softened), de-chlorinated (carbon filter) and free of sediment

Notes:
1. Maximum production based on a feed water of 77°F, SDI<3, 1000 ppm TDS, and pH 8
2. Indivdual membrane productivity may very ± 15%
3. May be operated on other feed waters with reduced capacity
4. Percent rejection is based on membrane manufactures specifications; overall system percent rejection may be less

Commercial Reverse Osmosis Drinking Water Systems

Commercial Floor Mount Reverse Osmosis Systems (20 to 30 GPM)



- Commercial grade high pressure RO units for the reduction of total dissolved solids from water
- Utilizes a high rejection membrane that achieves a minimum average NaCI ionic rejection of 97% and features membrane auto flush
- **Applications:** Municipal water treatment, steam boiler and steam sterilizer make up, laboratory use, spot free rinsing, ice and beverage water, water for cooking, food processing, metal plating and finishing, as well as water for humidification. RO is also the pre-treatment of choice for ion exchange type de-ionization (DI) systems because it reduces the exhaustion rate of the DI resin by up to 95%, saving time, money and chemicals.
- **Features:** Corrosion resistant fiberglass reinforced plastic 300psi high pressure membrane housings. Powder coated carbon steel support frame. Pressure gauges for pre-filter inlet / outlet, membrane feed and reject water pressure. Low feed water pressure safety switch. Digital microprocessor based controller with delayed auto restart after low pressure shut down. Permeate water conductivity meter with high conductivity alarm output. Tank level and pre-treatment interlock inputs. High pressure / high rejection membranes. Permeate, reject recycle and reject water flow meters. Adjustable reject and reject recycle valves. Permeate check valve. Automatic inlet diaphragm valve. Membrane auto flush.
- **Installation Notes:** Install system after water softener. A backwashing carbon filter & a backwashing sediment filter should be installed on the RO feed water line. Use an atmospheric storage tank with an electronic level float to collect the RO water. A local drain is required to accept drain water from the system. Requires 230 Volt.
- **Note:** Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system

Standards:
- Pre-filter Housing NSF/ANSI Certified 42
- Membrane Housings NSF/ANSI Certified 61

Max Productivity	Recovery (adjustable)	Membrane Size / Array*	Membrane Part #	Feed Water Required (at 65% Recovery)	Drain Required (maximum)	TEFC Motor HP	Dimensions LxWxH	Ship Weight	Model Number	Part Number
20 GPM	65-75%	4" x 40" / 2:2	2091544	31 GPM	31 GPM	10	192" x 26" x 72"	1400	PWR40243163	**7100081**
25 GPM	65-75%	4" x 40" / 3:2	2091544	39 GPM	39 GPM	10	192" x 26" x 72"	1600	PWR40243203	**7100082**
30 GPM	65-75%	4" x 40" / 4:2	2091544	46 GPM	46 GPM	10	192" x 26" x 72"	1800	PWR40243243	**7100083**

*Four Elements Per Vessel

System Specifications (All Models)						
Feed Water Connection	**Average Membrane Rejection**	**Pre-filter**	**Product Water Connection**	**Reject Water Connection**	**Feed Water Pressure (min)**	**Electrical Requirement**
2" Flange	98%	7 Round x 20" 5 micron cartridges	1.5" Flange	1" Flange	20 psi	230 VAC, 60 Hz, 30 Amps, 3ø

Feed Water Guidelines:

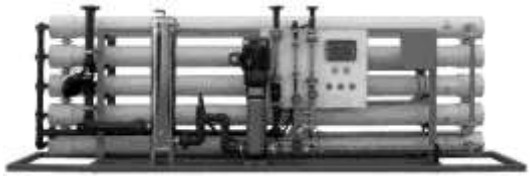
pH	6 to 9
Hardness (maximum)	Less than 1 grain per gallon as CaCO3 (Softened) or anti-scale chemical injection if not softened
Feed Water Pressure (minimum)	20 psi
Temperature	2 to 38C (35 to 100F)
Free Chlorine (maximum)	None Allowed
Iron (maximum)	Less than .1 mg/L
Oil and H2S	None Allowed
Turbidity	Less than 1.0 NTU
Silt Density Index	Less than 5.0 SDI

Note: Feed Water must be pretreated for scale prevention (softened), de-chlorinated (carbon filter) and free of sediment

Notes:
1. Maximum production based on a feed water of 77°F, SDI<3, 1000 ppm TDS, and pH 8
2. Indivdual membrane productivity may very ± 15%
3. May be operated on other feed waters with reduced capacity
4. Percent rejection is based on membrane manufactures specifications; overall system percent rejection may be less

Commercial Reverse Osmosis Drinking Water Systems

Commercial Floor Mount Reverse Osmosis Systems (40 to 100 GPM)



- Commercial grade high pressure RO units for the reduction of total dissolved solids from water
- Utilizes a high rejection membrane that achieves a minimum average NaCI ionic rejection of 99% and features membrane auto flush
- **Applications:** Municipal water treatment, steam boiler and steam sterilizer make up, laboratory use, spot free rinsing, ice and beverage water, water for cooking, food processing, metal plating and finishing, as well as water for humidification. RO is also the pre-treatment of choice for ion exchange type de-ionization (DI) systems because it reduces the exhaustion rate of the DI resin by up to 95%, saving time, money and chemicals.
- **Features:** Corrosion resistant fiberglass reinforced plastic 300psi high pressure membrane housings. Powder coated carbon steel support frame. Pressure gauges for pre-filter inlet / outlet, pump discharge, membrane feed and reject water pressure. Low feed water pressure safety switch. Digital microprocessor based controller with delayed auto restart after low pressure shut down. Permeate water conductivity meter with high conductivity alarm output and percent ionic rejection displayed. Tank level and pre-treatment interlock inputs. High pressure / high rejection membranes. Permeate, reject recycle and reject water flow meters. Adjustable reject and reject recycle valves. Permeate check valve. Automatic inlet diaphragm valve. Membrane auto flush.
- **Installation Notes:** Install system after water softener. A backwashing carbon filter & a backwashing sediment filter should be installed on the RO feed water line. Use an atmospheric storage tank with an electronic level float to collect the RO water. A local drain is required to accept drain water from the system. Requires 460 Volt.
- **Note:** Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system

Standards:
- Membrane Housings NSF/ANSI Certified 61

Max Productivity	Recovery (adjustable)	Membrane Size / Array*	Membrane Part #	Feed Water Required (at 65% Recovery)	Drain Required (maximum)	TEFC Motor HP	Dimensions LxWxH	Ship Weight	Model Number	Part Number
40 GPM	65-75%	8" x 40" / 1:1	1231789	62 GPM	62 GPM	15	186" x 26" x 72"	2500	PWR80243085	**7100084**
60 GPM	65-75%	8" x 40" / 2:1	1231789	93 GPM	93 GPM	20	186" x 26" x 72"	2800	PWR80243125	**7100085**
80 GPM	65-75%	8" x 40" / 2:2	1231789	123 GPM	123 GPM	25	186" x 26" x 72"	3200	PWR80243165	**7100086**
100 GPM	65-75%	8" x 40" / 3:2	1231789	154 GPM	154 GPM	30	186" x 26" x 72"	3500	PWR80243205	**7100087**

*Four Elements Per Vessel

System Specifications (All Models)						
Feed Water Connection	**Average Membrane Rejection**	**Pre-filter**	**Product Water Connection**	**Reject Water Connection**	**Feed Water Pressure (min)**	**Electrical Requirement**
40 GPM: 2" Flange **60 GPM:** 2.5" Flange **80 & 100 GPM:** 3" Flange	99%	7 Round x 40" 5 micron cartridges	**40 & 60 GPM:** 2" Flange **80 & 100 GPM:** 2.5" Flange	1.5" Flange	20 psi	**40 GPM:** 460 VAC, 60 Hz, 25 Amps, 3ø **60 GPM:** 460 VAC, 60 Hz, 30 Amps, 3ø **80 GPM:** 460 VAC, 60 Hz, 35 Amps, 3ø **100 GPM:** 460 VAC, 60 Hz, 40 Amps, 3ø

Notes:
1. Maximum production based on a feed water of 77°F, SDI<3, 2000 ppm TDS, and pH 7 with a feed pressure of 225 psi
2. Indivdual membrane productivity may very ± 15%
3. May be operated on other feed waters with reduced capacity
4. Percent rejection is based on membrane manufactures specifications; overall system percent rejection may be less

Feed Water Guidelines: See Previous Page

Commercial Reverse Osmosis Drinking Water Systems

Commercial Reverse Osmosis Membranes

- Replacement membranes for commercial reverse osmosis systems

Capacity	Description	Part Number
2 1/2" Diameter TFC Low Pressure Membranes		
150 GPD	2 1/2" x 14"	**1220978**
300 GPD	2 1/2" x 21"	**1206799**
600 GPD	2 1/2" x 40"	**1206802**
4" Diameter TFC Low Pressure Membranes		
500 GPD	4" x 14"	**1220979**
1000 GPD	4" x 21"	**1206812**
2400 GPD	4" x 40"	**1206813 / 1206816**

Commercial Reverse Osmosis Drinking Water Systems

Commercial Membrane Antiscalant / Dispersant

- Liquid antiscalant/dispersant designed to inhibit scale and disperse colloidal particles in cellulose acetate and thinfilm membrane separation systems
- Powerful inhibitor against a variety of carbonate and sulfate scale
- Highly effective in a wide range of feedwater types and pH ranges
- Crystal modification property distorts inorganic salt crystal growth, reducing system fouling
- Compatible with polyelectrolyte coagulants
- Threshold scale inhibition at low dosage rates allows economical system operation
- NSF Certified for use in systems producing potable (drinking) water

Description	Type	Use With	Size	Part Number
Vitec™ 3000 Antiscalant / Dispersant	Liquid	Feedwater Source: Well, Surface or Municipal	45 lb	**V3000-45**
Vitec™ 3000 Antiscalant / Dispersant	Liquid	Feedwater Source: Well, Surface or Municipal	500 lb	**V3000-500**

Commercial Membrane Cleaner

- Liquid and powder membrane cleaners
- **RoClean L811:** High pH liquid cleaner removes calcium, barium and strontium sulfate scales from spiral wound thinfilm elements
- **RoClean P111:** High pH powdered cleaner removes silt and organic foulants such as colloidal silica, clays, organic color and bacterial slime from spiral wound thinfilm elements
- **RoClean P303:** Low pH powdered cleaner removes metal foulants such as iron, manganese and aluminum and to remove calcium carbonate scale deposits from spiral wound thinfilm and cellulose acetate elements
- **RoClean P703:** Low pH powdered cleaner removes iron, manganese and aluminum deposits from spiral wound thinfilm and cellulose acetate elements
- NSF Certified (except P703)

Description	Type	Use With	Size	Part Number
High pH RO Membrane Cleaner	Liquid	Polyamide or Equivalent Membranes	45 lb	**L811-45**
High pH RO Membrane Cleaner	Powder	Polyamide or Equivalent Membranes	45 lb	**P111-45**
			90 lb	**P111-90**
Low pH RO Membrane Cleaner	Powder	Polyamide or Equivalent Membranes and Cellulose Acetate Membranes	45 lb	**P303-45**
			90 lb	**P303-90**
Low pH RO Membrane Cleaner	Powder	Polyamide or Equivalent Membranes and Cellulose Acetate Membranes	45 lb	**P703-45**

avista technologies