

SW7
6,000 – 8,000 GALLONS/DAY
REVERSE OSMOSIS
SEAWATER DESALINATION SYSTEMS
STANDARD SYSTEM FEATURES

Media Filter (optional)

- ✓ Fiberglass tank prefilter with manual backwash valve to reduce particles to 25 micron
- ✓ Birm multimedia filter available to remove iron contamination.

Prefiltration (standard)

- ✓ 20 & 5 micron cartridge prefilters to remove particulate matter.

- ✓ Filter housing designed for easy filter change.

Booster Pump (standard)

- ✓ Corrosion resistant booster pump of centrifugal design.
- ✓ Ensures positive water pressure to unit.
- ✓ Close coupled to totally enclosed motor to withstand saltwater environment.

High Pressure Pump (standard)

- ✓ Triplex high pressure pump driven by TEFC motor.
- ✓ Pump head placed for easy service and inspection.
- ✓ Ceramic plunger designed with SS head for long term durability.
- ✓ Pulsation dampener to extend life, reduce noise and vibration.

Reverse Osmosis Membrane – Pressure Vessel Assembly (standard)

- ✓ Spiral wound, polyamide, thin film composite reverse osmosis membrane representing state of the art technology.
- ✓ High water purity with membrane rejection of 99.6%.
- ✓ Membrane is designed for long life with easy cleaning.
- ✓ Membrane is enclosed in fiberglass pressure vessel with ratings to 1,000 psi.
- ✓ Easy to change end plug assembly with long life and durability.
- ✓ SS high pressure fittings.
- ✓ High pressure components rated at 2 times maximum operating pressure for safety.
- ✓ Test taps to sample water from each pressure vessel.

SPECIFICATIONS

Minimum Salt Rejection:	99.6%
Feed Water Pressure:	Min. – Flooded, Max – 30 psi
Max. Operating Pressure:	1,000 psi
Feed Water Temperature:	Min. - 0°C (32°F) Max. 45°C (113°F)
Max. Feed Water Salinity:	45,000 ppm TDS
Electrical:	To customer specifications (NEMA 4)
Feed Flow:	20 GPM (74 LPM)
Connections:	1 ½" Flange Inlet & Brine, 1" Flange Product
HP Pump:	20 HP

Instrumentation & Protective Features

- ✓ Easy to read gauges including product flowmeter, brine flowmeter and low and high pressure gauges.
- ✓ Start/Stop switch with built in motor overload protectors.
- ✓ Touch screen, easy to operate PLC.
- ✓ Totalizing hour meter.
- ✓ High pressure regulating valve.
- ✓ Salinity controller to automatically direct product water overboard when non-potable or to tank when potable by means of an actuated valve.
- ✓ All water tight electrical connections.
- ✓ Splash resistant electrical enclosures.
- ✓ Brine check valves ensures only first quality water to storage tank.
- ✓ Glycerine filled high and low pressure gauges for long life.
- ✓ Remote monitoring capability via internet.

Frame

- ✓ Powder coated fabricated frame.
- ✓ Open design for easy maintenance.
- ✓ Unitized in integrated components for easy maintenance or available as a modular system.
- ✓ Secure mounting tabs/holes for stability.

Connections

- ✓ Food grade tubing for contact with potable water.
- ✓ Stainless fasteners resist corrosion.

Membrane Care (optional)

- ✓ Automatic backflush system to supply freshwater to membranes upon shutdown.
- ✓ Membrane cleaning system valving and controls to facilitate chemical cleaning of membranes.

DIMENSIONS

Main Unit (Modular):	54" L x 34" W x 23" H
Membranes (Modular):	6" diameter x 98" L
Main Unit (Skid):	99" L x 51" W x 40" H
Booster Pump:	11" diameter x 20" L
Pre-filters:	8" diameter x 25" H
Standard Crate:	66" L x 48" W x 34" H & Long Tube (Modular)
Approximate Dry Wt.:	1,800 lbs. (818 kg)