

SeaPRO E-Series

500 m³/day (92 gpm) Seawater Desalination Machine

General Features

- Major components skid-mounted for easy installation and dependable operation
- Variable frequency drive (VFD) for high pressure pump optimal control, energy efficiency and constant water production
- Simple manual control for the system, and Hand/Auto control for remote starting and stopping of the system

Operating Parameters

Recovery	40%
Design temp.....	25°C (77°F)
Operating range	15-32°C (59-90°F) ¹⁾
Design Feed TDS.....	45,000ppm
System Nominal rejection.....	99%
Minimum inlet pressure	2 bar (30 PSIG)

¹⁾ Varying the operating temperature may affect permeate rate

Materials of Construction

High-pressure piping.....	Sch 40 SS Duplex 2205
Low-pressure piping.....	Sch 80 PVC-U DIN PN10/16
Frame.....	Anti-corrosion treated carbon steel
Frame Finish	2-coat epoxy painted & blue finish
Enclosures.....	IP55 carbon steel
Membranes	440 sq. ft. SWRO, 99.5% rej.
Membrane Housing	FRP 8in-1200psi-6M (82 bar)
Cartridge Filters.....	5-micron nominal, Hytrex
Cartridge Filter Housing	PVC

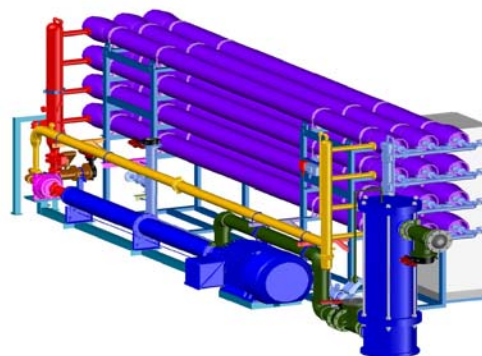


Figure 1. SeaPRO-E-36 General Layout (reference only)

- Standard package includes energy recovery device for operating cost savings
- Flow and Conductivity 4-20mA signals available for remote monitoring/recording

Table 1: Standard Instrumentation

Flow (magnetic)	Permeate, Concentrate
Conductivity	Permeate
Pressure Switch	Feed LP, Feed HP, Concentrate, Permeate
Pressure Indicators	Pump suction, Pump discharge, ERD HP discharge, ERD LP discharge, Permeate, Concentrate

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Table 2: Pump and Motor

HP Pump Model	MSS-5035
Manufacturer	FEDCO
Quantity	1
HP Pump Motor	110 kW

Table 3: Energy Recovery Device

Model	HPBe-60
Manufacturer	FEDCO
Quantity	1

Options:

Contact sales for pricing and lead time.

- 35% Recovery
- Alternate high pressure pump manufacturers
- Pressure transmitters for remote monitoring/recording
- Control circuit transformer for 110 VAC, 1-phase, 60 Hz operation

Table 4: Model SeaPRO-E-36 Specifications

Systems Flow Rates	
Permeate rate:	500 m3/day (92 gpm)
Concentrate Rate:	750 m3/day (138 gpm)
Feed Rate:	1250 m3/day (230 gpm)
Membrane Elements and Housings	
Membranes Quantity:	36
Memb. Housing Style:	6 housings – 6M long
Banking Arrangement:	6 in parallel
Cartridge Filtration	
Cartridge Filter Housing:	20FTPV-4 or equivalent
Filter Length:	40" (127 cm)
Filter Quantity:	20 per change out
Installation and Utility Requirements	
Inlet:	DIN DN100 PN10/16 flange
Permeate:	DIN DN65 PN10/16 flange
Concentrate:	DIN DN80 PN10/16 flange
Power:	380/420 VAC, 3-phase, 50/60Hz
General Dimensional Information	
<u>System Footprint:</u>	
Width:	7010 mm (276 inches)
Depth:	2287 mm (90 inches)
<u>Membrane Skid Size:</u>	
Height:	1950 mm (77 inches)
Width:	5968 mm (235 inches)
Depth:	1849 mm (73 inches)