

SPECIFICATIONS

DESALINATOR UNIT

Type: Modular Reverse Osmosis Seawater Desalinator

Model Number: AQUA-SEP® 7525275J476

Capacity: 19815 Gallons Per Day (75 Cu. Meter Per Day)

Design Data:

Temperature:
(Design Operating) 77 Degrees F (25 Degrees C)
(Operating Range) 50 - 86 Degrees F (10 - 30 Degrees C)

Feedwater Total Dissolved Solids: 36,000 PPM (**AVERAGE**)

Feedwater Flow: 34.4 GPM (130.2 LPM)

Feedwater Pressure:
(Design) 20 PSI (140 kPa)
(Range) 20 - 60 PSI (140 - 415 kPa)

Operating Pressure:
(Design) 740 PSI (5100 kPa)
(Range) 700 - 1000 PSI (4800 - 6900 kPa)

Electrical Control Power Input: 440VAC / 60Hz / 3 PH

Total Power Consumption: 22.5 KW

Multi-Media Module

Weights and Dimensional Data:

Weight-Dry (Empty): 701 Pounds (318 Kg.)
Weight-Dry (Filled): 1186 Pounds (538 Kg.)
Weight-Wet: 1627 Pounds (738 Kg.)
Holding Capacity: 53 Gallons (200 Liters)
Length: 40 inches (1015 MM)
Width: 38 inches (965 MM)
Height: 96 inches (2440 MM)

Piping Connections:

Sea Water Inlet 1 1/2" Flange (40 MM)
Multi-Media Filter Outlet 1 1/2" Flange (40 MM)
Drain 1" Flange (25 MM)

Product Control Module

Weights and Dimensional Data:

Weight-Dry:	292 Pounds	(133 Kg.)
Weight-Wet:	334 Pounds	(152 Kg.)
Holding Capacity:	5 Gallons	(19 Liters)
Length:	31 inches	(785 MM)
Width:	23 3/4 inches	(600 MM)
Height:	58 1/2 inches	(1485 MM)

Piping Connections:

Hose To Cleaning Tank	1 1/2" Flange	(40 MM)
Concentrate Return (HP Hose)	1" 37° Flare Fitting	(25 MM)
Product Return	1" Flange	(25 MM)
Reject Water Outlet	1" Flange	(25 MM)
Product Water Outlet	3/4" Flange	(20 MM)
Drain	1" Flange	(25 MM)

Cleaning Tank Module

Weights and Dimensional Data:

Weight-Dry:	300 Pounds	(136 Kg.)
Weight-Wet:	960 Pounds	(435 Kg.)
Holding Capacity:	58 Gallons	(220 Liters)
Length:	34 inches	(865 MM)
Width:	35 3/4 inches	(910 MM)
Height:	52 inches	(1320 MM)

Piping Connections:

Filtered Sea Water (From MMF)	1 1/2" Flange	(40 MM)
Cleaning Tank Return	1 1/2" Flange	(40 MM)
Fresh Water Inlet	1" Flange	(25 MM)
Outlet to Booster Pump	2" Flange	(50 MM)
Drain	1" Flange	(25 MM)

Booster Pump Module

Weights and Dimensional Data:

Weight-Dry:	748 Pounds	(339 Kg.)
Weight-Wet:	760 Pounds	(345 Kg.)
Length:	51 1/2 inches	(1305 MM)
Width:	24 inches	(610 MM)
Height:	33 inches	(840 MM)

Piping Connections:

Pump Inlet	2" Flange	(50 MM)
Pump Outlet (HP Hose)	1" 37° Flare Fitting	(25 MM)

Control Panel Module

Weights and Dimensional Data:

Weight:	86 Pounds	(39 Kg.)
Length:	27 inches	(685 MM)
Width:	14 inches	(355 MM)
Height:	34 inches	(865 MM)

Membrane Rack

Weights and Dimensional Data:

Weight-Dry:	820 Pounds	(372 Kg.)
Weight-Wet:	1020 Pounds	(463 Kg.)
Holding Capacity:	24 Gallons	(91 Liters)
Length:	113 1/2 inches	(2885 MM)
Width:	14 inches	(355 MM)
Height:	55 3/4 inches	(1415 MM)

Piping Connections:

Sea Water Inlet (HP Hose)	1" 37° Flare Fitting	(25 MM)
Reject (Concentrate) Outlet (HP Hose)	1" 37° Flare Fitting	(25 MM)
Product Outlet	1" Flange	(25 MM)

Performance:

The AQUA-SEP® Reverse Osmosis Seawater Desalinators, when operated within its design parameters, will reduce the total dissolved solids (TDS) by the values given below (+) or (-) 10%.

TYPICAL FEEDWATER IONIC COMPOSITION IN PPM		PRODUCT WATER PPM
Chloride (CL)	20,000	159
Sodium (NA+)	11,355	101
Sulfate (SO++++)	2,702	3
Magnesium (MG++)	1,300	2
Calcium (CA++)	408	1
Potassium (K+)	396	6
Carbonate and Bicarbonate	67	1
Other Dissolved Solids	122	9
TOTAL DISSOLVED SOLIDS	36,350	282