

NEWPORT 400 AQUA FLEX SYSTEM

Simplified Operation, Flexible Mounting Options, Plug and Play Installation



Simplified operation, flexible mounting, plug and play installation, electronic controller and a wide range of mounting options are the key to the design of the Newport 400 watermaker. Spectra Watermakers has revolutionized the way watermakers work.

The Newport Aqua Flex System is designed with ease of installation in mind for boatbuilders, professional installers, and do-it-yourself boat owners. The system modules are pre-plumbed and pre-wired to save valuable time.

The Aqua Flex System can be mounted in dozens of configurations to meet the needs of almost any boat.

The pump/valve module may be mounted on a bulkhead or shelf mounted either vertically or horizontally. The membrane filter enclosure lid transforms into a mounting bracket for filters and electrical control box. The pump/valve module and membrane filter modules can be integrated into a single compact assembly.

Using the patented Clark high-pressure pump technology, Spectra Watermakers has developed a high-pressure pump module that is ultra quiet, vibration free, and can produce 400 gallons (1,514 liters) of water per day with a 1/2 horsepower motor. Conventional systems require 3 horsepower and two motors to produce the same amount of water.

Spectra's pump module design, with the combination of a positive displacement feed water pump and a pressure pump, can maintain the proper pressures in the membrane throughout a wide range of temperatures and conditions without any adjustment.

No more adjusting the pressures for the environment you are in. No need to change pressures for fresh water conditions or warm water conditions to colder water conditions. Because the Clark high-pressure pump maintains the proper amount of water through the membrane, there is no need for a flow control valve. This eliminates the risk of improper flows and pressures that could damage the membrane.

No need to go to the engine room to adjust the watermaker. In fact, there are no flow control valves, pressure gauges or adjustments to be made on the watermaker unit. With the MPC-3000 Electronic Controller, you can set the run time you need and forget it. The MPC-3000 controller will do everything else.

MPC-3000 Controller - One Button Operation

All functions are in one small 5.25" x3.75" control display panel located in a convenient space away from the watermaker. Multiple control display panels can be added for even more convenience.

The MPC-3000 display monitors the pre-filter condition, feed water pressure, water tank full status (via a float switch), product water quality, product water flow rate to your tanks and total system hours.

One touch to the MPC-3000 touch pad sets the watermaker in motion. The controller produces the desired amount of water or fills the tanks full, then flushes itself clean and shuts off. You can also set the controller to keep your watermaker in a fresh water storage state for as long as you like. Just set it and forget it!



The electrical control box has a built-in manual override system so the watermaker can work without the MPC-3000 electronic control. The electrical control box can also be remotely mounted to reduce the size of the watermaker.

Ultra Flexible Mounting System



Component Dimensions inches (centimeters)

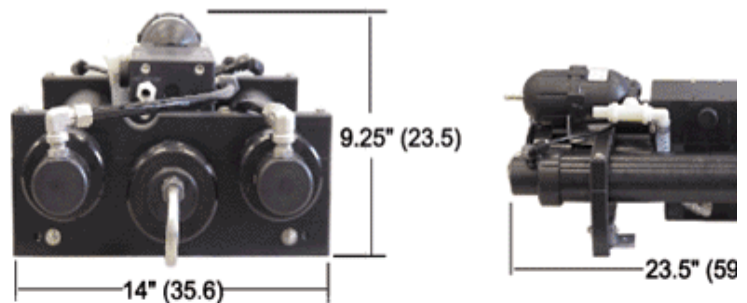


Control Panel

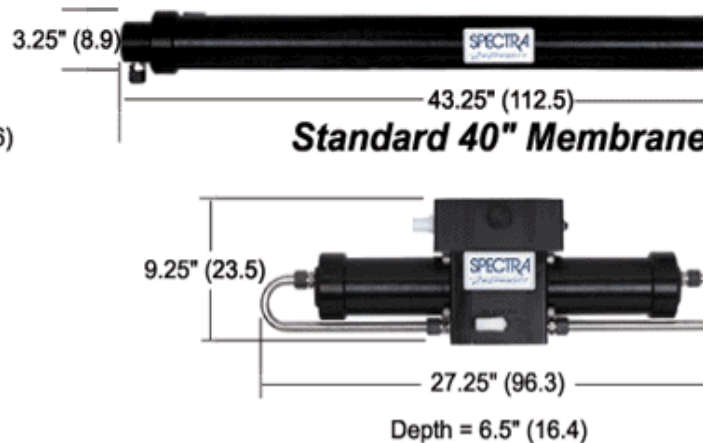
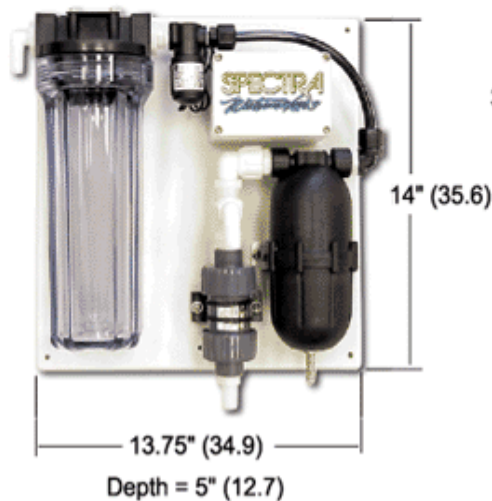
Pump/Valve Module

System Weights Lb (kg)

Complete System (Dry)	76 (34.5)
Clark Pump	18 (8.2)
Membrane 40"	13 (5.9)
Pump/Membrane Module	37 (16.8)
Pump/Valve Module	36 (16.3)
Fresh Water Flush Module	9 (4.1)



Optional 20" Pump/Membrane Mod



Newport 400 Specifications

WATER PRODUCTION (See Note 1)	Gallons per day/Hr	(Liters per day/Hr)
Output with 77°F/25°C seawater	400/17	(1,514/63)
Output with 60°F/16°C seawater	400/17	(1,514/63)
Output with 55°F/13°C seawater	380/16.5	(1,498/62.4)
POWER REQUIREMENTS (See Note 2)		
Pump Horsepower	1/3	
Watts (Single Phase 120 VAC)	350	
Watt/Hr per Gallon (DC System)	18	
Amp/Hr per Gallon (12 VDC)	1.35	
Start-up Power (watts)	1000	
Current Draw (12 VDC)	23 Amps	
Current Draw (120 VAC 50/60 Hz) /td>	5 Amps	
Current Draw (240 VAC 50/60 Hz)	3 Amps	
Inverter Requirements	1000 W or Better	
HIGH PRESSURE PUMP		
Type / Model	Pressure Intensifier / Spectra Clark High Pres	
Power Requirements	Hydraulic from Feed Water Pump	
Construction Material	Space Age Composite Materials	
Strokes per Minute	15	
Crank Case Oil	None Required	
Pump Warranty	Lifetime on Complete Pump	
Noise Level of High Pressure Pump only	5 db	
Pump Weight	18 lbs (8.16 kg)	
FEED WATER PUMP		
Type / Model	Vane Type Positive Displacement / 2.6 GPM	
Mounting Requirement	Can be mounted up to 6 feet above waterline	
Power Requirements	1/3 Horsepower AC or DC	
Construction Material	Stainless Steel / Composite	
Feed Water Thru-Hull Requirement	3/4"	
CONTROLS AND GAUGES		
Type	Spectra MPC-3000 Electronic Controller & D	
Pressure Regulating Valve	Not Required with Clark High Pressure Pump	
Feed Water Pressure Gauge	Integrated into MPC-3000 Display	
Product Flow Meter	Integrated into MPC-3000 Display	
Fresh Water Flush	Automatic after each use, Auto Re-Flush ever	
Pre-Filter Monitor	Status Displayed, Alarm for Service, Shut-Of	
Water Tank Full Monitor (up to 2 tanks)	Auto Shut-Off and System Flush When Tank	
Hour Meter	Integrated into MPC-3000 Display	
Service Valves	2 Valves for Cleaning & Storage, 1 Valve for	
MEMBRANE		
Number of Elements	Standard 1 Long membrane; Optional 2 short 1	
Type	Premium High Rejection High Yield Spiral W	
Size	Industry Standard Long 2½" x 40" or Short 2½	
Replacement Membrane	Non-Proprietary, available world-wide	
Rejection Rate (Chloride Ion)	99.6% Average	
Membrane Pressure Vessel	Spectra Free Flow Ultra Efficient Pressure Ve	
NOTES		
1 - Product Output is based on one long membrane; Sea Water at 35,000 ppm TDS;		
Power at 12/24 VDC or 120/240 VAC 60 Hz.		

Specifications subject to change without notice. © Copyright 2002 Spectra Watermakers, Inc. All Rights Reserved (11.05.01)

[Product Data Sheet, PDF format, 550K](#)



[Home](#) | [Technology](#) | [Products](#) | [Support](#) | [Contact](#)

Don't make a choice until you've considered a Spectra Watermaker!

"Astonishing low power consumption" - Practical Sailor, January 1998

Spectra Watermakers

20 Mariposa Road, San Rafael, CA 94901

Phone 415.526.2780 Fax 415.526.2787