

# APPLIED<sup>®</sup> SYSTEMS USA

## Series SY Watermakers – 150 to 4,000 GPD (0.57 to 15 M<sup>3</sup>/D) Seawater Systems

AMI Watermaker SY series systems convert seawater to drinking water. Their compact design makes them ideal for use on yachts, boats, cruise ships, and resorts.

### Key Features

- Over 40 Years of Experience is Reflected in Our Quality
- Compact, Heavy Duty, Powder Coated Frame
- Proven components used throughout the system
- Conservatively engineered for reliable long-term performance
- Factory tested to ensure trouble-free operation



### Standard Equipment

- Feed Booster Pump
- Thin Film Composite AMI Membranes
- FRP Membrane Housings
- Stainless Steel High Pressure Pump
- Permeate and Concentrate Flow Meters
- Low and High Pressure Safeguards
- Compact Aluminum Frame with Powder Coated Finish
- Tank Level Controls for Automatic On/Off with Tank Level
- Stainless Steel Back Pressure Control
- 5 Micron Sediment Filter and Housing
- Liquid Filled System Pressure Gauge
- Product TDS with Digital Display Readout
- **Optional Fresh Water Divert:** Monitors Permeate Quality and Diverts to drain if it falls below a pre-set set point

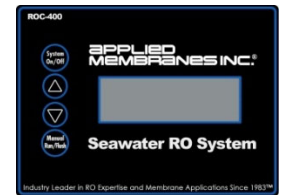
### Microprocessor Controller for Automatic Operation

#### Monitors and/or Controls:

- Inlet valve
- Delayed start-up of high pressure pump
- Low pressure and high pressure switches
- On/Off with storage tank level
- Permeate TDS with alarm set-point
- Water Temperature
- Operating Hours
- Fresh water flush (flush kit optional)
- Pretreatment lock-out

#### Controller Features:

- Permeate Quality (TDS)
- Water Temperature
- Operating Hours
- Operating Status
- Alarm Condition



ROC400

#### LED Display:

- Backlit LED Display
- Multi-function Keypad
- Visual and Audible Alarm
- Programmable Time Delays, Set-Points and Flush Modes
- Visual Indicator Alarm Light
- Low Pressure Automatic Restart

Model No.	System Capacity		Membrane Elements		Line Sizes (NPT, Inches)			System Dimensions (in/cm)			Approx. Shipping Weight (Lb/Kg)
	GPD	m <sup>3</sup> /day	Qty.	Size (Dia. x L)	Inlet	Perm.	Conc.	Width	Depth	Height	
<b>SY-12521</b>	150	0.57	1	2.5 x 21	3/4	3/8	3/8	36/91	19/48	17/43	110/50
<b>SY-22521</b>	300	1.1	2	2.5 x 21	3/4	3/8	3/8	36/91	19/48	17/43	110/50
<b>SY-12540</b>	400	1.5	1	2.5 x 40	3/4	3/8	3/8	54/137	32/81	17/43	130/60
<b>SY-22540</b>	800	3.0	2	2.5 x 40	3/4	3/8	3/8	54/137	32/81	17/43	140/65
<b>SY-32540</b>	1,200	4.5	3	2.5 x 40	3/4	3/8	3/8	54/137	32/81	17/43	150/70
<b>SY-42540</b>	1,600	6.0	4	2.5 x 40	3/4	3/8	3/8	54/137	32/81	17/43	180/80
<b>SY-24A</b>	2,000	7.6	2	4 x 40	3/4	1/2	3/4	65/165	43/110	30/76	603/274
<b>SY-34A</b>	3,000	11.3	3	4 x 40	3/4	1/2	1/2	65/165	43/110	30/76	682/310
<b>SY-44A</b>	4,000	15.1	4	4 x 40	3/4	1/2	1/2	65/165	43/110	30/76	759/345

### Notes and Voltage/ Ordering Information

- All dimensions and weights are approximate and subject to change. Performance Based on 35,000 ppm seawater at 77°F (25°C). Recovery in the range of 10-15%. Operating pressure 800-1000 psi (57-71 kg/cm<sup>2</sup>).
- **Voltage:** Please add our voltage codes to the end of the model number when ordering. Example: SY-12514-236.
  - Voltage Codes:
    - **116** = 110v, 1ph, 60hz (Not available for SY-24A, SY-34A, SY-44A)
    - **216** = 220/230v, 1ph, 60hz
    - **215** = 220/230v, 1ph, 50hz
    - **236** = 220 or 230v/ 3ph/ 60hz
    - **235** = 220v/3ph/50hz

**APPLIED MEMBRANES INC.<sup>®</sup>**  
 Industry Leader in RO Expertise and Membrane Applications Since 1983™



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AMI's Series SY Seawater RO Systems are available with a wide variety of optional add-on accessories. All assemblies include hardware and mounting equipment for easy upgrade to your new or existing system installation.

### Plankton Filter

Removes plankton and other large particles from the feed water to provide additional protection and extended life of the system prefilter. 100 Micron 10" Filter Cartridge in a clear housing on a powder coated mounting bracket. Includes isolation valves for easy cartridge change.  
Model # A629



### Fresh Water Flush

To prolong membrane life by flushing the system with fresh water at each shutdown and every 24 hours. Includes a 10" Big Blue Carbon Filter & Housing to remove chlorine from water. Also includes mounting bracket, piping and electrical connections.  
Model # A633 and A634 (w/ Booster Pump)



### Oil Water Separator

Protects the RO System & Membranes from oily or polluted water. 20" Filter Cartridge in a Big Blue housing on a powder coated mounting bracket. Includes isolation valves for easy cartridge change.  
Model # A630



### Remote Control Panel

The Touch Pad Remote Control unit allows for remote starting & stopping of the watermaker, alarm & monitoring.

- Permeate TDS  
60Hz Part# A242, 50Hz Part# A243
- Feed or Permeate pH  
60Hz Part# A244, 50Hz Part# A245



### Commercial Prefilter

The commercial sized filter cartridge has a dual-micron rating for extended life, and will provide longer intervals between changing the system prefilter. The outer layer will trap particles larger than 75 Micron, while the inner layer traps particles of 25 Micron. 20" Filter Cartridge in a Big Blue housing on a powder coated mounting bracket. Includes isolation valves for easy cartridge change.  
Model # A711



### Membrane Preserving Cartridges

Preserve system and membranes in-place for extended periods of system shut-down.

Cartridge for 10" Std.: C-C2510-A88

### Membrane Cleaning Cartridges

Clean membranes without removing them from your system, reduce downtime, maintain system performance at a higher level, and prolong membrane life.

10" Std. (removes Scale): C-C2510-A11

10" Std. (removes organics): C-C2510-A22



### Media Filter

Removes suspended solids larger than 30 microns to greatly extend prefilter life and provide additional protection to the system. The 8x16" media tank is mounted on a powder coated frame with in/out pressure gauges and a valve for manual backwash.  
Model # W-MB0818



### Replacement Filters

We carry a large range of filters and housings manufactured under the AMI<sup>®</sup> label. These high quality products use the same materials and produce similar performance specifications as the equivalent filters of other well-known brands.



### pH Neutralizer

Neutralizes the pH of the Fresh Water stream from the RO system. AMI calcite filters are self-limiting: they will correct pH only enough to reach a non-corrosive equilibrium, and will not over-correct. 10" Calcite Filter Cartridge in a blue housing on a powder coated mounting bracket. Includes isolation valves for easy cartridge change.

### Ultraviolet (UV) System

Ultraviolet Water System for the fresh water stream to sterilize 99.8% of all micro-organisms including reproducing bacteria and viruses.

See website for our full line of UV System products



### Modular Configuration Available

Also available in space-saving modular configuration. See our Voyager Modular brochure for details



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