



## 700 Series Portable

### REVERSE OSMOSIS SYSTEM

650 to 2600 ml/min

#### Standard Features

- Specially designed for quiet operation.
- Advanced performance monitoring includes percent rejection and a digital display of product water total dissolved solids as mg/L. For added safety, an audible alarm with adjustable set points is incorporated into the TDS monitor. The monitoring and instrumentation meets the standards recommended by the Association for the Advancement of Medical Instrumentation (AAMI).
- Panel-mounted pressure gauges continuously display important prefilter, pump, and product pressures.
- Space-efficient design for easy portability.
- Chemically compatible with 1% Minncare<sup>®</sup> Cold Sterilant disinfectant solution.
- Stainless steel RO pump and pressure vessels are used for maximum strength, reliability, and longevity.
- Thin film RO membranes for high quality & long life.
- Incoming water solenoid allows for easy changing of the pre-filter element and system cleaning/disinfecting without disconnecting the incoming water supply.
- Product water recirculation returns the excess product water into the feed stream, which reduces stress on the RO membranes, conserves water, inhibits bacterial growth, and lowers operating costs.
- Easy to expand design allows for additional membranes to be added, increasing the capacity up to 2600 ml/min at 77 °F (25 °C); (see operating parameters). Mar Cor Purification strongly suggests operating only one dialysis machine per 700 Series RO because the life of the pump and membranes will be significantly decreased.
- FDA registered manufacturer meets stringent medical device requirements.

## Medical Device



- Listed as certified by CSA to Canadian and U.S. medical electrical standards. The 700 Series RO has been tested to and demonstrates compliance with CAN/CSA C22.2 No. 601.1-M90 (Safety of Medical Electrical Equipment, Part I; General Requirements for Safety) and UL STD 2601-1 (Safety of Medical Electrical Equipment Part I; General Requirements for Safety).

#### Optional Features

Mar Cor Purification offers a complete line of system components and accessories including:

- Replacement Prefilters
- 36" (91 cm) Tall Cabinet
- Pretreatment Cart
- AAMI Water Analysis
- Disinfectant Tank
- Hardness & Total Chlorine Test Kits
- Carbon Tanks, Sediment Filters & Water Softeners
- High and Low pH Cleaners

## 700 Series RO Specifications

| Model  | 701                           | 702  | 703  | 704  | 704 (Cold) <sup>1</sup> |
|--|-------------------------------|--|------|------|-------------------------|
| <b>Production Rate</b>   |                               |  |      |      |                         |
| ml/min   | 656                           | 1312   | 1968 | 2624 | 2060                    |
| L/hr   | 39                            | 79   | 118  | 157  | 124                     |
| gallons/hr   | 10.4                          | 20.8   | 31.2 | 41.6 | 32.7                    |
| <b>Recovery Rate</b>   | 17%                           | 29%  | 38%  | 45%  | 45%                     |
| <b>Dry Weight</b>  |                               |  |      |      |                         |
| lbs  | 55                            | 73   | 79   | 85   | 90                      |
| kg   | 25                            | 33   | 36   | 39   | 41                      |
| <b>Power Required</b>  | 115/230 V, 60/50 Hz, 8/5 amps |  |      |      |                         |
| <b>Dimensions</b>  | (Short Cabinet)               | Depth - 14" (36 cm)   Height - 26" (66 cm)   Width - 18" (46 cm) |      |      |                         |
|  | (Tall Cabinet)                | Depth - 14" (36 cm)   Height - 36" (92 cm)   Width - 18" (46 cm) |      |      |                         |
| <p>NOTE: Initial product flow rate based upon membrane manufacturers' specifications of pretreated feed water, 200 PSI (14 bars) applied pressure, 77°F (25°C) incoming water temperature, 1,000 ppm (mg/L) NaCl, 10% recovery and 1 PSI (0.07 bars) product pressure. Membrane flux may vary ± 10%. Product water flow rates specified @ 40°F (5°C). Operation of the 704 (Cold) Series RO unit at temperatures above 55°F (13°C) will result in shortened membrane life. <sup>1</sup>Cold water option available in tall cabinet only.</p> |                               |  |      |      |                         |

## Feedwater Requirements

|  |   |                           |
|--|---|---------------------------|
| <b>pH</b>  | Operating: 5.5-10.5   | Cleaning: 2-11            |
| <b>pH with Chloramines</b>   | Operating: 5.5-8.5  | Cleaning: 2-11            |
| <b>Temperature</b>   | 35-90°F (1.7-32°C)  |                           |
|  | Water production decreases approximately 1.5% per 1°F (3% per 1°C) incoming water temperature drop. |                           |
| <b>Inlet Pressure (Dynamic)</b>  | Minimum: 30 PSI (2 bars)  | Maximum: 100 PSI (7 bars) |
| <b>Inlet Water Flow</b>  | Minimum: 2 gpm (7.6 L/m)  |                           |
| <b>Total Hardness</b>  | 100 ppm (mg/L) (pH dependent)   |                           |
| <b>Silt Density Index (SDI)</b>  | <5  |                           |
| <p>Note: Detailed analysis of the feed water will dictate the components, if any, needed in pre- or post-treatment of the 700 Series RO unit. This will help assure a constant supply of water, meeting AAMI Dialysis Water Quality Standards.</p> |   |                           |



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