



23G RO System

Reverse Osmosis System 3,000 to 16,500 GPD

Hemodialysis providers and patients around the world rely on the 23G reverse osmosis machine for push button simplicity and reliability. The 23G RO is registered with the FDA as a Class II Medical Device and is designed and tested to meet AAMI grade water standards according to ANSI/AAMI/ISO 13959:2009 for RO product water.

Standard Features

- Quiet TEFC high efficiency pump
- Free standing design makes installation and maintenance easy
- Auto inlet shut-off valve
- Autoflush system
- Unique expandable frame to increase output
- Adjustable Flow Block
- Quality tested spiral wound elements
- Quick-connect permeate manifold service ports
- Centralized, user friendly monitoring panel
- Permeate divert to ensure high quality product
- Chemically compatible with 1% Minncare® Cold Sterilant disinfectant solution

Operating Parameters

- Recovery: 50-75%
- Control Voltage: 115 VAC 60 Hz; 220 VAC 50 Hz Single-Phase
- Motor Voltage: 208, 230, 460 VAC 60 Hz; 220, 380 VAC 50 Hz 3-Phase
- Membrane: HR (PA) Thin Film Composite
- Rejection Ionic: 95-98% (Assumes typical water with mono & polyvalent salt mix)
- Connections: 1-inch (2.5 cm) FNPT
- Materials: All Wetted Materials are Stainless Steel or Inert Plastic

Medical Device



ECM-100 Controller

- System Status Lights: Run, alarm, permeate divert, status lights and auxiliary lights
- Alarm Message Center: Alarm messages, maintenance reminders, interfaces with system operations and displays date and time
- RO operating data
- High-contrast LCD module with LED backlighting
- User-adjustable alarm limits and timers

Available Options

- Remote alarm
- Chemical feed system
- Clean-In-Place (CIP)
- pH monitor
- Expansion kits
- Locking casters
- Single-Phase motor

Technical Data

23G Series RO Specifications

Standard Model@ 77°F (25°C)

Capacity - gpd	3,000 ¹	4,500 ¹	6,000	7,500	9,000	10,500	12,000	13,500	15,000	16,500
Capacity - m3/d	11.4	17.1	22.7	28.4	34.1	39.8	45.5	51.2	56.9	62.5
Power - hp	5	5	5	5	5	7.5	7.5	7.5	7.5	7.5
Power - kw	3.7	3.7	3.7	3.7	3.7	5.6	5.6	5.6	5.6	5.6

¹50% Recovery Available Only

Feedwater Requirements

Free Chlorine Level	(Min.) 0.0 ppm (mg/L)	(Max.) <0.1 ppm (mg/L)
pH	(Min.) 5.8	(Max.) 10.0
Pressure	(Min.) 20 PSI (1.4 bar)	(Max.) 60 PSI (4.1 bar)
Temperature	(Min.) 35°F (2°C)	(Max.) 85°F (29°C)

- Langlier Saturation Index (LSI) as calculated on concentrate total dissolved solids (TDS) must be negative.
- Permeate flows vary with temperature; all model capacities nominally rated at 77°F (25°C).

The 23G At A Glance



Self-Diagnostics

At the heart of the 23G RO is the ECM-100. This solid state controller / monitor is user-friendly. The liquid crystal display (LCD) makes it easy to see operating parameters.



Everything is conveniently displayed in one easy-to-find location. The unique Alarm Message Center identifies individual alarms and helps facilitate corrective action.

You can also program the 23G Controller (ECM-100) to remind you to perform scheduled maintenance and disinfection.



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