



# 4400L SYSTEM

## COMPACT HIGH PURITY WATER SYSTEM



## 2 TO 8 GPM GENERATION 20 TO 80 GPM STORAGE & DELIVERY

With exacting standards, wide range of flow rates, and numerous optional components, the 4400L high purity water system aims to standardize the notoriously unpredictable life sciences water market. The low flow rate, price-competitive system with various optional components is capable of meeting the needs of almost any low-flow rate high purity water application.

The 4400L is designed to produce up to 8 US gpm (30 lpm) at 41°F (5°C) of pure water to a storage and delivery system that can pump up to 80 US gpm (303 lpm) of high quality water to various point of use. The color touch HMI view coupled with an industrial PLC provides a robust control system for operator ease of use.

### REVERSE OSMOSIS SYSTEM

- ③ 1.0 micron graded density pre-filter
- ③ Automatic inlet/reject flush solenoids
- ③ Multi-stage 304SS centrifugal pump
- ③ 316 SS divert & flow control valves
- ③ Low pressure & high temperature switch
- ③ Feed/product conductivity Transmitters
- ③ Product & reject flow rotameters
- ③ Clean-in-place ports

### DISTRIBUTION SYSTEM

- ③ Cone bottom tank with spray ball
- ③ Digital tank level controller
- ③ Multi-stage 316 SS centrifugal pump
- ③ 0.2 micron vent & final filter
- ③ 316 SS pressure gauges
- ③ Loop return conductivity transmitter
- ③ Sample & isolation valves

### OPERATING PARAMETERS

#### Reverse Osmosis System

- ③ Feed water: potable pretreated
- ③ Feed pressure: 40-80 psi (276-552 kPa)
- ③ Operating pressure: <150 psi (<1,034 kPa)
- ③ Operating temperature: 35-95°F (2-35°C)
- ③ Production design temperature: 41°F (5°C)
- ③ Recovery range: 65-75%
- ③ Nominal rejection: 95-99%

#### Distribution System

- ③ Pump outlet pressure: <100 psi (<690 kPa)
- ③ Pump flow range: 20-80 gpm (76-303 lpm)

### TYPICAL APPLICATION

- ③ Commercial applications
- ③ Central laboratory
- ③ Boiler feed water
- ③ Humidification systems
- ③ Process ingredient water
- ③ Rinse water
- ③ Cosmetic application

### STANDARD FEATURES

#### Single Skid Design

- ③ Minimize site and electrical installation
- ③ Facilitate startup

#### 5.7" Color Touchscreen HMI and PLC

- ③ PLC data logging
- ③ Remote monitoring capabilities

# TECHNICAL DATA

| Product Specifications          |                                                          |                         |                       |
|---------------------------------|----------------------------------------------------------|-------------------------|-----------------------|
| Model                           | 4400L 2 20*                                              | 4400L 4 50*             | 4400L 6 80*           |
| Part Number                     | 2.0 US gpm (7.6 lpm)                                     | 5.0 US gpm (18.9 lpm)   | 8 US gpm (30.3 lpm)   |
| Product Flow Rate at 41°F (5°C) | 20.0 US gpm (75.7 lpm)                                   | 50.0 US gpm (189.3 lpm) | 80 US gpm (302.8 lpm) |
| Product Quality Water           | Up to 18.1 meg-ohms-cm (up to 0.05 µS/cm)                |                         |                       |
| Main Power                      | 460 or 575VAC / 3PH / 60HZ, 4 KW<br>16 KW based on model |                         |                       |
| Control Power                   | 120VAC/1PH/60HZ, 0.2 KW – 1 KW based on model            |                         |                       |
| Approximate Dimensions          | 100" x 38" x 80" (2,540mm x 965mm x 2,032mm)             |                         |                       |

\* Distribution flows can be matched with any number of RO membranes

## AVAILABLE OPTIONS

- RO product service exchange DI slip stream polishing
- Loop service exchange DI polishing
- Duplex storage tanks & distribution pumps
- Variable speed drive distribution pump(s)
- 185nm TOC reduction distribution ultraviolet system
- 254nm distribution disinfection ultraviolet system
- Ultraviolet monitoring system
- Loop high temperature / poor quality flush valve
- Control panel emergency stop circuit
- Waste reclaim system
- Ethernet communication port

<sup>1</sup> Sized on 8% reduction per pass



### CONNECTIVITY

**OPTIONAL ETHERNET AND USB**  
Send alerts and track critical data



### RESOURCE CONSERVATION

**ONGOING ENERGY SAVINGS**  
Optional VFD Pump reduces consumption



### COST OF OWNERSHIP

**FULLY CUSTOMIZABLE DESIGN**  
Choose from 11 optional components

## PROCESS FLOW DIAGRAM

