



Shown here is the 4400B-8K RO Machine. This system will produce 5.6 USgpm of high purity water.

**The Biolab 4400B Series Reverse Osmosis Systems** are designed to produce up to 21 USgpm (4.77 m<sup>3</sup>/h) of pure water. The 4400B Series provides high quality product water, user-friendly controls, durable construction, and easy installation. All systems are built to exacting standards under ISO 9001:2000.

**Operating Parameters**

- Operating Pressure.....250 psig (1724 KPA)
- Maximum Recovery.....75%
- Nominal Rejection.....95-98%
- Operating Temperature.....35-95° F (2-35° C)
- Minimum Inlet Pressure.....30 psig (210 KPA)
- Design Temperature.....77° F (25° C)

**Materials of Construction**

- Frame.....Epoxy coated steel
- Membrane Elements.....TF Polyamide
- Membrane Housing.....Stainless Steel
- Low Pressure Pipe.....Sch. 80 PVC
- High Pressure Pipe.....Stainless Steel
- Control Enclosure.....NEMA 4
- Pump.....Stainless Steel

**Standard Features**

- 1.0 - micron pre-filter
- Automatic inlet shut-off valve
- Multi-stage centrifugal pump, TEFC 208/3/60Hz
- Three variable flow meters
- Auto-flush feature
- Analog system control
- Adjustable reject recirculation

**Typical Applications**

- Commercial Applications
- Clean Sterilize Reuse (CSR)
- Central Laboratory
- Boiler feed water
- Humidification systems
- Process ingredient water
- Rinse water
- Ion exchange pre-treatment

## 4400B Series Reverse Osmosis Machine Specifications @25° C

Model Number	Stock Number	Permeate gpm (m <sup>3</sup> /h)	Concentrate gpm (m <sup>3</sup> /h)	Motor hp	Elements	Inlet Inch (cm)	Permeate Inch (cm)	Concentrate Inch (cm)	Weight Lbs. (kg)
4400B-2K	12B16A-1RO	1.3 (0.29)	0.7 (0.16)	1.5	1	3/4 (1.91)	1/2 (3.81)	1/2 (1.27)	295 (179)
4400B-4K	22B16A-1RO	2.8 (0.58)	0.8 (0.18)	2.0	2	3/4 (1.91)	1/2 (3.81)	1/2 (1.27)	338 (199)
4400B-6K	32B16A-1RO	4.2 (0.95)	1.3 (0.30)	3.0	3	3/4 (1.91)	1/2 (3.81)	1/2 (1.27)	381 (218)
4400B-8K	42B16A-1RO	5.6 (1.27)	1.8 (0.41)	3.0	4	3/4 (1.91)	3/4 (1.91)	3/4 (1.91)	406 (230)
4400B-10K	52B16A-1RO	6.9 (1.56)	2.3 (0.52)	5.0	5	3/4 (1.91)	3/4 (1.91)	3/4 (1.91)	493 (269)
4400B-12K	62B16A-1RO	8.3 (1.88)	2.8 (0.64)	5.0	6	1 1/2 (3.81)	3/4 (1.91)	3/4 (1.91)	527 (284)
4400B-14K	72B16A-1RO	9.5 (2.15)	3.2 (0.73)	5.0	7	1 1/2 (3.81)	3/4 (1.91)	3/4 (1.91)	561 (300)
4400B-16K	82B16A-1RO	11 (2.49)	3.7 (0.84)	5.0	8	1 1/2 (3.81)	1 (2.54)	1 (2.54)	621 (327)
4400B-18K	92B16A-1RO	12.5 (2.83)	4.2 (0.95)	7.5	9	1 1/2 (3.81)	1 (2.54)	1 (2.54)	664 (347)
4400B-20K	102B16A-1RO	14 (3.18)	4.7 (1.07)	7.5	10	1 1/2 (3.81)	1 (2.54)	1 (2.54)	683 (355)
4400B-24K	122B16A-1RO	17 (3.86)	5.7 (1.29)	7.5	12	1 1/2 (3.81)	1 (2.54)	1 (2.54)	732 (377)
4400B-30K	152B16A-1RO	21 (4.77)	7.1 (1.61)	10	15	1 1/2 (3.81)	1 (2.54)	1 (2.54)	824 (419)

Note: All weights and dimensions are approximate.

### System Dimensions

4400B-2K to 4400B-24K: 77.5" high x 38" wide x 29" deep.

4400B-30K: 77.5" high x 58" wide x 29" deep.

### Feed Water Requirements

The Biolab 4400B reverse osmosis machines require the following feed water conditions: | pH: 3 - 11 | Langelier Index: <0.5 |  
| Free Chlorine (ppm): <0.1 | Fouling Index: <3 | Iron / Manganese (ppm): <0.1 | TDS (ppm): <1500 |

### Installation Considerations

- For proper serviceability, it is recommended that there be 18" of space around the system. This includes front, back, and sides. A minimum of 12" is required.
- The system should be installed on a firm, level surface.
- A drain with suitable capability to handle the concentrate flow rate is required.
- Other RO machine voltages: 380/3/50, 420/3/50, 230/3/60, 460/3/60, 575/3/60.
- Minimum dynamic operating pressure of 30 psig for proper system operation. The max operating pressure is 90 psig.

### For More Information:

Contact one of our application specialists at USA (800) 346-0365 or Canada (800) 268-5035, or visit [www.mcpor.com](http://www.mcpor.com)



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