



Shown here is the 8400B-144K RO Machine. This system will produce 100 USgpm of high purity water.

The Biolab 8400B Series Reverse Osmosis Systems are designed to produce up to 300 USgpm (68 m³/h) of pure water. The 8400B 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.....	FRP
Low Pressure Pipe.....	Sch. 80 PVC
High Pressure Pipe.....	Stainless Steel
Control Enclosure.....	NEMA 4
Pump.....	Stainless Steel

Standard Features

- 1.0 - micron pre-filters
- Pneumatic inlet shut-off valve
- Multi-stage centrifugal pump, TEFC 460/3/60Hz
- Three variable flow meters
- Programmable auto-flush feature
- Digital system control
- Adjustable reject recirculation

Typical Applications

- Boiler feed water
- Humidification systems
- Automotive paint processes
- Process ingredient water
- Rinse water
- Power / Co-Generation
- Ion exchange pre-treatment

8400B Series
 Reverse Osmosis Systems

8400B Series Reverse Osmosis Machine Specifications @25° C

Model Number	Stock Number	Permeate gpm (m ³ h)	Concentrate gpm (m ³ h)	Motor hp	Elements (Array)	Inlet Inch (cm)	Permeate Concentrate	Pre-Filters # x Height	Dimensions H x W x D
8400B-32K	2H8B28A-2RO	22 (4.9)	7 (1.9)	15	4 - (1x1)	2 (5.1)	1 1/2 (3.8)	3 x 30"	77" x 114" x 38"
8400B-48K	3H8B28A-2RO	33 (7.5)	11 (3.0)	20	6 - (2x1)	2 (5.1)	1 1/2 (3.8)	4 x 30"	77" x 114" x 38"
8400B-64K	4H8B28A-2RO	44 (9.9)	15 (4.1)	25	8 - (2x2)	2 (5.1)	2 (5.1)	4 x 30"	77" x 114" x 38"
8400B-72K	3L8B28A-2RO	50 (11.3)	17 (4.6)	20	9 - (2x1)	3 (7.6)	2 (5.1)	7 x 30"	84" x 160" x 45"
8400B-96K	4L8B28A-2RO	65 (14.7)	22 (6.0)	25	12 - (2x2)	3 (7.6)	2 (5.1)	7 x 30"	84" x 160" x 45"
8400B-120K	5L8B28A-2RO	80 (18.1)	27 (7.36)	30	15 - (3x2)	4 (10.2)	3 (7.6)	12 x 30"	84" x 160" x 45"
8400B-144K	6L8B28A-2RO	100 (22.7)	33 (9.0)	30	18 - (3x3)	4 (10.2)	3 (7.6)	22 x 30"	84" x 160" x 60"
8400B-158K	5V8B28C-2RO	110 (25.0)	37 (8.4)	40	20 - (4x5)	4 (10.2)	3 (7.6)	22 x 30"	84" x 200" x 45"
8400B-180K	5X8B28C-2RO	125 (28.4)	42 (9.5)	50	25 - (5x5)	4 (10.2)	3 (7.6)	22 x 30"	95" x 245" x 48"
8400B-216K	5Y8B28C-2RO	150 (34.1)	50 (11.4)	60	30 - (6x5)	4 (10.2)	3 (7.6)	22 x 30"	95" x 286" x 48"
8400B-288K	10V8B28C-2RO	200 (45.4)	66 (15.0)	75	40 - (4x10)	6 (15.2)	4 (10.2)	36 x 30"	95" x 200" x 55"
8400B-360K	10X8B28C-2RO	250 (56.8)	83 (18.9)	100	50 - (5x10)	6 (15.2)	4 (10.2)	36 x 30"	95" x 245" x 55"
8400B-432K	10Y8B28C-2RO	300 (68.1)	100 (22.7)	125	60 - (6x10)	6 (15.2)	4 (10.2)	52 x 30"	95" x 286" x 61"

Note: All dimensions are approximate, contact us for estimated weights.

Feed Water Requirements

The Biolab 8400B 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, we recommend 48" of end clearance and a minimum of 12" for the front and back.
- 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, 208/3/60, 230/3/60, 575/3/60.
- Minimum dynamic operating pressure of 30 psig for proper system operation. The max operating pressure is 90 psig.
- A clean dry air source is required for proper operation.

For More Information

Contact one of our application specialists at USA (800) 346-0365 or Canada (800) 268-5035, or visit www.mcpur.com



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