

## 4400C Series RO

### Reverse Osmosis System 60 Hz 4,000 to 24,000 GPD

The Biolab 4400C Series Reverse Osmosis Systems are designed to produce up to 17 US gpm (3.86 m<sup>3</sup>/h) of pure water. The 4400C Series provides high quality product water, user-friendly controls, durable construction, and easy installation. All systems are built to exacting standards under ISO 9001:2008.

#### Operating Parameters

- Operating Pressure: 250 psig (1724 KPA)
- Maximum Recovery: 75%
- Nominal Rejection: 95-99%
- Operating Temperature: 2-35°C (35-95°F)
- Minimum Inlet Pressure: 30 psig (210 KPA)
- Design Temperature: 25° C (77° F)

#### Standard Construction

- Frame: Powder Coated Steel
- Membrane Elements: TF Polyamide
- Membrane Housing: Stainless Steel
- Low Pressure Pipe: Sch. 80 PVC
- High Pressure Pipe: Stainless Steel
- Control Enclosure: NEMA 4/12
- Pump: Stainless Steel

#### Typical Applications

- Commercial Applications
- Clean Sterilize Reuse (CSR)
- Central Laboratory
- Boiler Feed Water
- Humidification Systems
- Process Ingredient Water
- Rinse Water
- Ion Exchange Pre-Treatment



#### Standard Features

- 1.0 - micron graded density pre-filter
- Automatic inlet shut-off valve
- Multi-stage 316SS centrifugal pump, TEFC
- Three variable flow meters
- Stainless steel pressure gauges
- Programmable auto-flush feature
- Digital system control
- Adjustable reject recirculation
- Clean-In-Place valving
- Automatic permeate divert system add-on
- Up to 75% recovery

# Technical Data

## Product Specifications

### 4400C 60 Hz Specifications @ 25°C

Model Number	Stock Number	Permeate gpm (lpm)	Concentrate gpm (lpm)	Motor hp	Elements Number	Inlet in (mm)	Permeate in (mm)	Concentrate in (mm)	Weight lbs (kg)
4400C-4K	22C16B-2RO	2.8 (10.5)	0.8 (3.0)	2.0	2	3/4 (1.9)	1/2 (1.3)	1/2 (1.3)	438 (199)
4400C-6K	32C16B-2RO	4.2 (15.9)	1.3 (4.9)	3.0	3	3/4 (1.9)	1/2 (1.3)	1/2 (1.3)	481 (218)
4400C-8K	42C16B-2RO	5.6 (21.2)	1.8 (6.8)	3.0	4	3/4 (1.9)	3/4 (1.9)	3/4 (1.9)	506 (230)
4400C-10K	52C16B-2RO	6.9 (26.1)	2.3 (8.7)	5.0	5	3/4 (1.9)	3/4 (1.9)	3/4 (1.9)	593 (269)
4400C-12K	62C16B-2RO	8.3 (31.4)	2.8 (10.6)	5.0	6	1 1/2 (3.8)	3/4 (1.9)	3/4 (1.9)	627 (284)
4400C-16K	82C16B-2RO	11.0 (41.6)	3.7 (14.0)	5.0	8	1 1/2 (3.8)	1 (2.5)	1 (2.5)	721 (327)
4400C-18K	92C16B-2RO	12.5 (47.3)	4.2 (15.9)	7.5	9	1 1/2 (3.8)	1 (2.5)	1 (2.5)	764 (347)
4400C-20K	102C16B-2RO	14.0 (53.0)	4.7 (17.8)	7.5	10	1 1/2 (3.8)	1 (2.5)	1 (2.5)	783 (355)
4400C-24K	122C16B-2RO	17 (64.4)	5.7 (21.6)	7.5	12	1 1/2 (3.8)	1 (2.5)	1 (2.5)	832 (377)

Note: All weights and dimensions are approximate.

Feed Water Requirements*	Specifications
Feed Water Source	Potable Tap
Maximum Silt Density Index	< 3
Maximum Chlorine Free	< 0.1 ppm
Operating Temperature Range	2-35°C (35-95°F)
Operating pH Range	2.0-11.0
Total Dissolved Solids	<1,000 ppm
Softened or Langelier Index	Negative
Iron / Manganese	< 0.1 ppm

\*If any of the feed water parameters are not within the limits given, consult one of our application specialists for assistance.

System Dimensions	
Height	77.5"
Width	38"
Depth	29"

## Ordering Information

4400C Part Number Matrix

Number of RO Elements

2 3 4 5 6 8 9 10 12

Membrane Type

2 - Thin Film Composite

Application Type

C - Commercial / Industrial

Housing Type

1 - 304 SS

Electrical Requirements

2 - 230/1/60    5 - 115/1/60    8 - 460/3/60  
 3 - 380/3/50\*    6 - 208/3/60    9 - 575/3/60  
 4 - 420/3/50\*    7 - 230/3/60

Pump Type

B - 316SS\*

Panel Options

2 - Digital with conductivity    3 - PLC controller

Unit Type

RO - Reverse Osmosis Systems

	2	C	1		B	-		RO
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\* Pump horse power will change

## Installation Considerations

- For proper serviceability, there should be 18" of space around the system, including front, back, and sides.
- The system should be installed on a firm, level surface and have a drain with suitable capacity.
- Minimum dynamic operating pressure of 30 psig is required for proper operation. The maximum pressure is 90 psig.



Mar Cor Purification  
 4450 Township Line Road  
 Skippack, PA 19474-1429  
 Tel: (484) 991-0220  
 Toll Free: (800) 346-0365  
 Fax: (484) 991-0230

Mar Cor Purification  
 14550 28th Avenue North  
 Plymouth, MN 55447  
 Tel: (484) 991-0220  
 Toll Free: (800) 633-3080  
 Fax: (763) 210-3868

Mar Cor Purification  
 3250 Harvester Road - Unit 6  
 Burlington, ON L7N 3W9  
 Tel: (905) 639-7025  
 Toll Free: (800) 268-5035  
 Fax: (905) 639-0425

Mar Cor Purification  
 Sourethweg 11  
 6422 PC Heerlen  
 The Netherlands  
 Tel: (+31) 45 5471 471  
 Fax: (+31) 45 5429 695

Mar Cor Purification  
 1A International  
 Business Park, #05-01  
 Singapore 609933  
 Tel: (+65) 6227 9698  
 Fax: (+65) 6225 6848