

# Commercial RO Systems BLS 400-2400 Series



## BLS 400 - 2400 DESIGN SPECIFICATIONS

	<b>BLS 400</b>	<b>BLS 800</b>	<b>BLS 950</b>	<b>BLS 1900</b>	<b>BLS 2400</b>
Flow Capacity GPD*	400 GPD	800 GPD	950 GPD	1900 GPD	2400 GPD
Flow Capacity GPM*	0.28 GPM	0.56 GPM	0.66 GPM	1.32 GPM	1.67 GPM
Typical Recovery	50%	50%	50%	50%	50%
Design Rejection Rate	95% - 99%	95% - 99%	95% - 99%	95% - 99%	95% - 99%
Number of Membrane Vessels	(1) 2.5x21 SS	(2) 2.5x21 SS	(1) 2.5x40 SS	(2) 2.5x40 SS	(1) 4x 40 SS
Number of Membranes	(1) 2.5x21	(2) 2.5x21	(1) 2.5x40	(2) 2.5x40	(1) 4x40
Typical Operating Pressure	165 PSI	165 PSI	165 PSI	165 PSI	100 PSI
Nominal Feed Water					
Flow During Operation	0.56 GPM	1.12 GPM	1.32 GPM	2.64 GPM	3.33 GPM
Nominal Feed Water					
Flow During System Flush	2.1 GPM	2.1 GPM	4.33 GPM	4.33 GPM	5.33 GPM
Minimum Feed Water Pressure	20 PS I@ 2.1 GPM	20 PS I@ 2.1 GPM	20 PS I@ 4.33 GPM	20 PSI @ 4.33 GPM	20 PS I@ 5.33 GPM

\* System production may vary depending upon incoming water temperature and chemistry. Based on feed water with 500 mg/L NaCl and temperature of 25°C.

## BLS 400 - 2400 FEED WATER PARAMETERS

Temperature Range	40-90°F (5-30°C)
Minimum Feed Water Pressure	20 PSI
Maximum Feed Water Pressure	85 PSI
Maximum Feed Water TDS	2,000 PPM
Maximum Chlorine Tolerance	0.1 PPM
Maximum Hardness	10 GPG
Maximum Iron	0.5 PPM (Dissolved)
Maximum Oil Tolerance	0.0 mg/l
Maximum Feed Water Silt Index	5
Maximum Feed Water Turbidity	1 NTU
Maximum Product Water Back Pressure	50 PSI
pH Range	3 - 10
Minimum Pre-Filtration	5 Micron

NOTE! If the R.O. system is used with chlorinated water, a carbon filter is required. BLS Systems are designed for use on potable water sources only.

## BLS 400 - 2400 SYSTEM DIMENSIONS & SERVICE CONNECTIONS

	<b>BLS 400</b>	<b>BLS 800</b>	<b>BLS 950</b>	<b>BLS 1900</b>	<b>BLS 2400</b>
Depth	14"	14"	18"	18"	18"
Width	17"	17"	18"	18"	18"
Height	35"	35"	60"	60"	60"
Weight	80 Lbs.	90 Lbs.	100 Lbs.	110 Lbs.	110 Lbs.
Feed Water Inlet	3/8"	3/8"	1/2"	1/2"	1/2"
Reject Water To Drain	3/8"	3/8"	1/2"	1/2"	1/2"
Product Water To Storage	3/8"	3/8"	1/2"	1/2"	1/2"

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Model	Production GPD/LPD*	Oper. Press.	Filter Housing	Membrane Element	Pump 60 Hz	Pump 50 Hz	Motor 60 Hz	Motor 50Hz
BLS 400	400 / 1514	165 PSI	20" SL	(1) 2.5x21	Rotary Vane #3033501	Rotary Vane #3030401	1/3 HP, 1Ph #3100337	1/3 HP, 1Ph #3100337
BLS 800	800 / 3028	165 PSI	20" SL	(2) 2.5x21	Rotary Vane #3033501	Rotary Vane #3030401	1/3 HP, 1Ph #3100337	1/3HP, 1Ph #3100337
BLS 950	950 / 3596	165 PSI	20" SL	(1) 2.5x40	Rotary Vane #3030801	Rotary Vane #3030901	3/4 HP, 1Ph #31007572	3/4 HP, 1Ph #31007572
BLS 1900	1900 / 7192	165 PSI	20" SL	(2) 2.5x40	Rotary Vane #3030801	Rotary Vane #3030901	3/4 HP, 1Ph #31007572	3/4 HP, 1Ph #31007572
BLS 2400	2400 / 9084	100 PSI	20" SL	(1) 4x40	Rotary Vane #3031001	N / A	3/4 HP, 1Ph #31007572	N / A