

Commercial RO Systems

BLS 12000-18000 Series

MODELS AVAILABLE

- BLS 12000 (12000 gpd/8.0 gpm*)
- BLS 15000 (15000 gpd/10.1 gpm*)
- BLS 18000 (18000 gpd/12.5 gpm*)

BLS 12000 - 18000 RO SYSTEMS

- ◆ Energy Saving, High Flow Membrane Elements
- ◆ Stainless Steel Membrane Pressure Vessels
- ◆ Automatic Feed Water Shut-Off Valve
- ◆ 20" BB Sediment 5-Micron Pre-Filter
- ◆ Low Inlet Pressure Protection Switch
- ◆ System Operating Pressure Gauge
- ◆ Inlet & Outlet Pre-Filter Gauges
- ◆ Reject Water Recirculation Loop
- ◆ Storage Tank Float Control Connection
- ◆ Product Water Check Valve
- ◆ Pre-Treatment Lockout Connection
- ◆ 12 Month (One Year) Limited Warranty

Choose From Two Feature Packages To Fit Your Application

STANDARD MODEL FEATURES

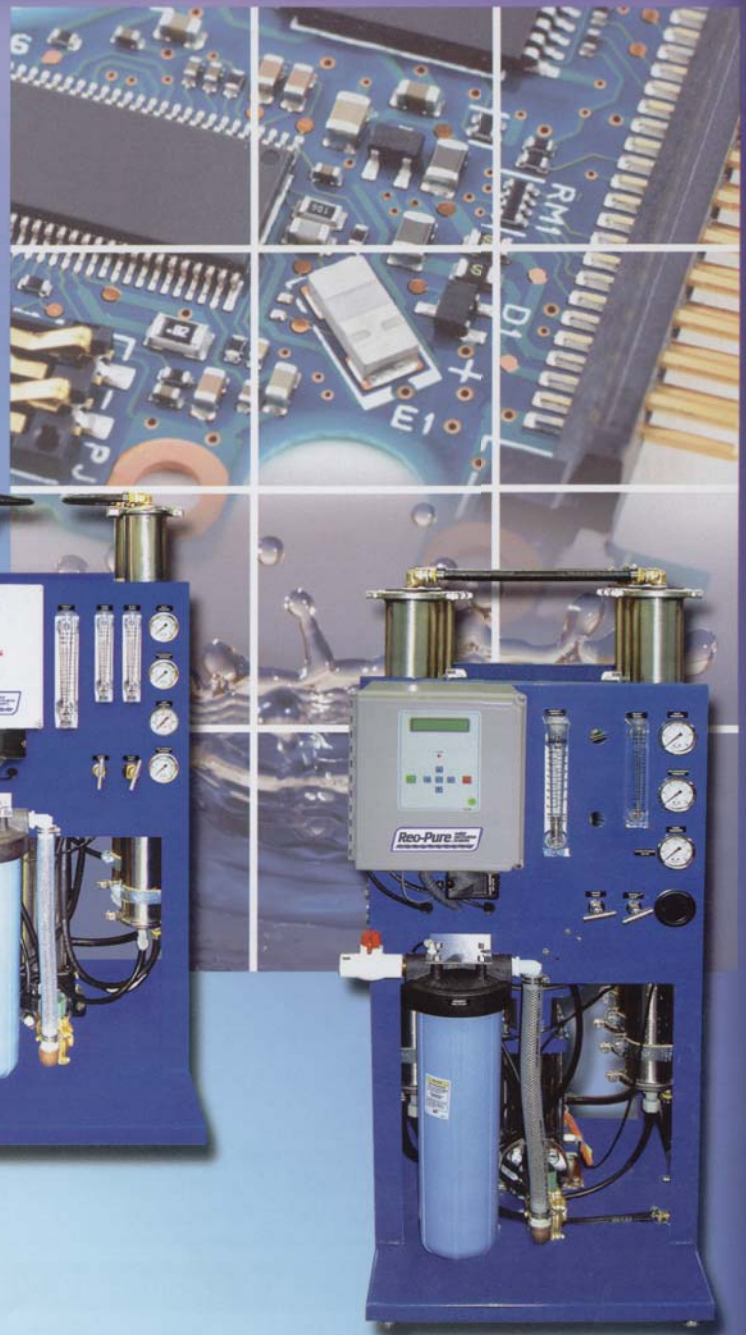
- ◆ S-150 Microprocessor Based Controller
- ◆ High Pressure Booster Pump
- ◆ 220V, 60Hz, 1-Phase
- ◆ Adjustable Reject Water Control Valve
- ◆ Product & Reject Water Flow Meters
- ◆ Manual Membrane Flush
- ◆ Pre-Treatment Lockout Connection

OPTIMUM MODEL FEATURES

- ◆ Upgraded S-150 Microprocessor Based Controller
- ◆ Vertical Multi-Stage Centrifugal Pump
- ◆ 230V, 60Hz, 3-Phase
- ◆ Adjustable Reject Water Control Valve
- ◆ Product & Reject Water Flow Meters
- ◆ Reject Water Recirculation Flow Meter
- ◆ Automatic Membrane Flush
- ◆ Manual Feed Water Shut-Off Valve
- ◆ Post-Membrane Pressure Gauge
- ◆ Pre-Treatment Lockout Connection

Additional features available: Stainless Steel Pump and/or Frame, CIP (Clean-In-Place) Connection Ports, Product Water Safety Pressure Switch with Relief Valve, 460V/60Hz/3-Phase, 380V/50Hz/1-Phase, and others upon request.

* 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. (77°F).



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BLS 12,000 - 18,000 OPERATING SPECIFICATIONS			
	BLS 12,000	BLS 15,000	BLS 18,000
Flow Capacity	12,000 GPD / 8 GPM*	15,000 GPD / 10 GPM*	18,000 GPD / 12.5 GPM*
Typical Recovery	75%	75%	75%
Design Rejection	95-99%	95-99%	95-99%
Number of Vessels	(4) 4" x 40" S.S.	(5) 4" x 40" S.S.	(6) 4" x 40" S.S.
Number of Membrane Elements	(4) 4" x 40"	(5) 4" x 40"	(6) 4" x 40"
Typical Operating Pressure	165 PSI	165 PSI	165 PSI
Nominal Feed Water Flow During Operation	11 GPM	14 GPM	17 GPM
Nominal Feed Water Flow During Sys. Flush	18 GPM	32 GPM	36 GPM
Temperature Range	40-90°F (5-30°C)	40-90°F (5-30°C)	40-90°F (5-30°C)
Minimum Feed Water Pressure	35 PSI @ 18 GPM	35 PSI @ 32 GPM	35 PSI @ 36 GPM
Maximum Feed Water Pressure	85 PSI	85 PSI	85 PSI
Maximum Feed Water TDS	2,000 PPM	2,000 PPM	2,000 PPM
Chlorine Tolerance	< 0.1 PPM	< 0.1 PPM	< 0.1 PPM
Maximum Hardness	10 GPG	10 GPG	10 GPG
Maximum Iron	0.5 PPM (Dissolved)	0.5 PPM (Dissolved)	0.5 PPM (Dissolved)
Oil Tolerance	0.0 mg/l	0.0 mg/l	0.0 mg/l
Feed Water Silt Index	< 5	< 5	< 5
Feed Water Turbidity	< 1 NTU	< 1 NTU	< 1 NTU
Maximum Product Water Back Pressure	50 PSI	50 PSI	50 PSI
pH Range	3 - 10	3 - 10	3 - 10
Minimum Pre-Filtration*	5 Micron	5 Micron	5 Micron

* 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. (77°F).
NOTE! If the R.O. system is used with chlorinated water, a carbon filter is required.

BLS 12,000 - 18,000 SYSTEM DIMENSIONS & CONNECTIONS			
	BLS 12,000	BLS 15,000	BLS 18,000
Depth	30"	30"	30"
Width	24"	24"	24"
Height	60"	60"	60"
Weight	450 Lbs.	525 Lbs.	600 Lbs.
Feed Water Inlet	1"	1"	1"
Reject Water To Drain	3/4"	3/4"	3/4"
Product Water To Storage	3/4"	3/4"	3/4"

BLS 12,000 - 18,000 DESIGN SPECIFICATIONS						
Model	Production GPD/LPD*	Oper. Press.	Filter Housing	Membrane Element	Pump / Motor 60 Hz	Pump / Motor 50 Hz
BLS 12,000 STD	12000 / 45420	165 PSI	20" BB	4x40 (4)	HP Booster #3060726	Vert. Centrifugal #304110
BLS 15,000 STD	15000 / 56775	165 PSI	20" BB	4x40 (5)	HP Booster #3067028	Vert. Centrifugal #304111
BLS 18,000 STD	18000 / 68130	165 PSI	20" BB	4x40 (6)	HP Booster #3060729	Vert. Centrifugal #304111
BLS 12,000 OPTI	12000 / 45420	165 PSI	20" BB	4x40 (4)	Vert. Centrifugal #306901	Vert. Centrifugal #304110
BLS 15,000 OPTI	15000 / 56775	165 PSI	20" BB	4x40 (5)	Vert. Centrifugal #306904	Vert. Centrifugal #304111
BLS 18,000 OPTI	18000 / 68130	165 PSI	20" BB	4x40 (6)	Vert. Centrifugal #306904	Vert. Centrifugal #304111

BLS 12,000 to 18,000 TEST CONDITIONS

OPERATING PRESSURE: 165 PSI
 FEED WATER TDS: 500 PPM as NaCl
 DESIGN TEMPERATURE: 77°F (25°C)
 MEMBRANE: Energy Saving High Flow Composite Polyamide
 DESIGN RECOVERY: 75%



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