

REVERSE OSMOSIS

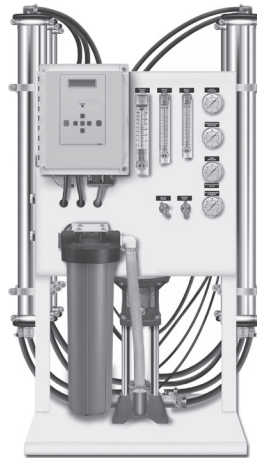


BLS SERIES, 12,000 TO 18,000 GPD COMMERCIAL RO SYSTEMS

BLS Series RO Systems are engineered to economically produce high purity water while providing the flexibility to choose system features to meet your application specifications. Units are available as skid mounted, pre-wired, and pre-piped with pre-treatment and post-treatment equipment for a complete water purification package. Skid mounted systems provide maximum efficiency of floor space and reduced installation time and costs.



BLS 12000



BLS 15000



BLS 18000

BLS 12000, 15000, 18000 Features

- 5 micron Sediment Pre-Filtration
- Pentek® 20-inch Slim Line Housing
- Low Feed Water Pressure Safety Switch
- Storage Tank Float Control Connection
- Pretreatment Lockout Connection
- Digital TDS Monitor
- On/Off Standby Switch
- Product Water Flow Meter
- Reject Water Flow Meter
- Water Recirculation Flow Meter
- Adjustable Reject Water Needle Valve
- Adjustable Water Saving Recirculation Loop
- Pre- and Post-Filter Pressure Gauges
- Operating Pressure Gauge
- Feed Water Solenoid Valve
- Sta-Rite® High Pressure Booster Pump
- Product Water Check Valve
- John Guest® Safety Locking Clips
- 230V, 60Hz, 1-Phase Electrical
- Powder Coated Frame
- Factory Tested for Quality
- Assembled in the USA
- One Year Limited Warranty

Standard Models Include

- S-150 RO Controller
- Manual Membrane Flush

Optimum Models Include

- S-150 RO Controller
- Automatic Membrane Flush
- Post-Membrane Pressure Gauge

Optional Features Include

- Product Pressure Switch & Relief Valve *
- Stainless Steel Pump
- Expanded S-150 RO Controller
- 230V, 60Hz, 1-Phase
- 230V, 60Hz, 3-Phase
- TDS Digital Monitor
- 460V, 60Hz, 3-Phase
- 380V, 50Hz, 3-Phase

* NOTE: When ordering a BLS Series RO System, the customer must choose between a product water pressure switch (for water storage in a pressurized tank) or a water level float kit (for water storage in an atmospheric tank). See BLS Series Parts List (Form 1259).

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BLS SERIES, 12,000 TO 18,000 GPD COMMERCIAL RO SYSTEM SPECIFICATIONS

	BLS 12000	BLS 15000	BLS 18000
Operating Specifications			
Flow Capacity, GPD *	12,000	15,000	18,000
Flow Capacity, GPM *	8.33	10.42	12.50
Flow Capacity, LPD *	45,425	56,781	68,137
Flow Capacity, LPM *	31.5	39.4	43.3
Typical Recovery	75%	75%	75%
Design Rejection Rate	98 to 99%	98 to 99%	98 to 99%
Typical Operating Pressure	165 PSI (11.3 Bar)	165 PSI (11.3 Bar)	165 PSI (11.3 Bar)
Nominal Feed Water Flow During Operation	11 GPM (41.6 LPM)	14 GPM (52.9 LPM)	17 GPM (64.3 LPM)
Nominal Feed Water Flow During System Flush	18 GPM (68.1 LPM)	32 GPM (121.1 LPM)	36 GPM (136.2 LPM)
Maximum Product Water Back Pressure	50 PSI (3.4 Bar)	50 PSI (3.4 Bar)	50 PSI (3.4 Bar)
Feed Water Parameters			
Temperature Range, °F	40 to 90°F	40 to 90°F	40 to 90°F
Temperature Range, °C	5 to 30°C	5 to 30°C	5 to 30°C
Minimum Pressure	35 PSI @ 18 GPM	35 PSI @ 32 GPM	35 PSI @ 36 GPM
Maximum Pressure	85 PSI (5.8 Bar)	85 PSI (5.8 Bar)	85 PSI (5.8 Bar)
Maximum TDS	2,000 PPM	2,000 PPM	2,000 PPM
Maximum Chlorine Tolerance	0.1 PPM	0.1 PPM	0.1 PPM
Maximum Hardness	10 GPG (171 PPM)	10 GPG (171 PPM)	10 GPG (171 PPM)
Maximum Iron, Dissolved	0.5 PPM	0.5 PPM	0.5 PPM
Maximum Oil Tolerance	0.0 mg/l	0.0 mg/l	0.0 mg/l
Maximum Silt Index	5	5	5
Maximum Turbidity	1 NTU	1 NTU	1 NTU
pH Range	3 to 10	3 to 10	3 to 10
Minimum Pre-Filtration	5 Micron	5 Micron	5 Micron
Design Specifications			
Dimensions, Inches	60H x 24W x 30D	60H x 24W x 30D	60H x 24W x 30D
Weight, Lb	450	525	600
Feed Water Inlet Connection	1" FNPT	1" FNPT	1" FNPT
Reject Water to Drain Connection	3/4" FNPT	3/4" FNPT	3/4" FNPT
Product Water to Storage Connection	3/4" FNPT	3/4" FNPT	3/4" FNPT
Filter Housing, Inches	(1) 20" Big Blue	(1) 20" Big Blue	(1) 20" Big Blue
Membrane Housings, Inches	(4) 4 x 40 SS	(5) 4 x 40 SS	(6) 4 x 40 SS
Membrane Elements, Inches	(4) 4 x 40 XLE	(5) 4 x 40 XLE	(6) 4 x 40 XLE
Standard Pump, 60 Hz	High Pressure Booster	High Pressure Booster	High Pressure Booster
Optimum Pump, 60 Hz	Vertical Centrifugal	Vertical Centrifugal	Vertical Centrifugal
Standard Pump, 50 Hz	Vertical Centrifugal	Vertical Centrifugal	Vertical Centrifugal
Optimum Pump, 50 Hz	Vertical Centrifugal	Vertical Centrifugal	Vertical Centrifugal
Standard Motor, 60 Hz	1.5 HP, 1 Phase	2 HP, 1 Phase	3 HP, 1 Phase
Optimum Motor, 60 Hz	3 HP, 3 Phase	3 HP, 3 Phase	3 HP, 3 Phase
Standard Motor, 50 Hz	3 HP, 3 Phase	4 HP, 3 Phase	4 HP, 3 Phase
Optimum Motor, 50 Hz	3 HP, 3 Phase	4 HP, 3 Phase	4 HP, 3 Phase

* System production may vary depending upon incoming water temperature and chemistry. Based on feed water with 500 mg/L NaCl and temperature of 77°F (25°C).

NOTE: If the RO system is used with chlorinated water, a carbon filter is required. BLS systems are designed for use on potable water sources only.