REVERSE OSMOSIS



BLS SERIES, 3,000 TO 9,000 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. BLS systems are manufactured using the highest quality components and materials for exceptional performance and reliable operation.







BLS 6000



BLS 9000

BLS 3000, 6000, 9000 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
- On/Off Standby Switch

- 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

Econo Models Include

- Minitrol RO Controller
- Fixed Rejection (50%)
- Manual Membrane Flush

Standard Models Include

- S-150 RO Controller
- Adjustable Rejection Valve
- Manual Membrane Flush
- In/Out Pre-Filter Gauges
- Product/Reject Flow Meters
- Digital TDS Display

Optimum Models Include

- S-150 RO Controller
- Adjustable Rejection Valve
- Automatic Membrane Flush
- In/Out Pre-Filter Gauges
- Product/Reject Flow Meters
- Digital TDS Display

Optional Features Include

- 20 inch, 10 micron, Carbon Pre-Filter
- Stainless Steel Pump
- Expanded S-150 RO Controller
- Product Pressure Switch & Relief Valve *
- Export/Domestic Highly Secured Crating
- TDS Digital Monitor

- 220V, 50Hz, 1-Phase
- 120V, 60Hz, 1-Phase
- 460V, 60Hz, 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).



REVERSE OSMOSIS



BLS SERIES, 3,000 TO 9,000 GPD COMMERCIAL RO SYSTEM SPECIFICATIONS

	BLS 3000	BLS 6000	BLS 9000
Operating Specifications			
Flow Capacity, GPD *	3,000	6,000	9,000
Flow Capacity, GPM *	2.08	4.17	6.25
Flow Capacity, LPD *	11,356	22,712	34,068
Flow Capacity, LPM *	7.8	15.8	23.7
Typical Recovery	70%	70%	70%
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	3.15 GPM (11.9 LPM)	6.30 GPM (23.8 LPM)	9.45 GPM (35.7 LPM)
Nominal Feed Water Flow During System Flush	10 GPM (37.8 LPM)	13 GPM (49.2 LPM)	16 GPM (60.5 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	20 PSI @ 10 GPM	20 PSI @ 10 GPM	35 PSI @ 16 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	O.O 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	61H×25W×21D	61H×25W×21D	61H×25W×21D
Weight, Lb	200	250	300
Feed Water Inlet Connection	3/4" FNPT	3/4" FNPT	3/4" FNPT
Reject Water to Drain Connection	1/2" Tube	1/2" Tube	1/2" Tube
Product Water to Storage Connection	1/2" Tube	1/2" Tube	1/2" Tube
Filter Housing, Inches	(1) 20" Big BLue	(1) 20" Big Blue	(1) 20" Big BLue
Membrane Housings, Inches	(1) 4 × 40 SS	(2) 4 × 40 SS	(3) 4 × 40 SS
Membrane Elements, Inches	(1) 4 × 40 XLE	(2) 4 × 40 XLE	(3) 4 × 40 XLE
Pump, 60 Hz	High Pressure Booster	High Pressure Booster	High Pressure Booster
Pump, 50 Hz	High Pressure Booster	High Pressure Booster	High Pressure Booster
Motor, 60 Hz	3/4 HP, 1 Phase	1 HP, 1 Phase	1.5 HP, 1 Phase
Motor, 50 Hz	1.5 HP, 1 Phase	2 HP, 1 Phase	2 HP, 1 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).

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

Low Feed Water Pressure Switch: System shuts down at 15 PSI (1.0 Bar) decreasing pressure.

Product Water Pressure Switch: System shuts down at 45 PSI (3.1 Bar) and starts at 25 PSI (1.7 Bar).

Max. System Operating Pressure: 175 PSI (12.1 Bar)

