

APPLIED[®] SYSTEMS

Series L – 300 to 19,000 GPD RO Systems

USA

**Reverse Osmosis Systems 300 to 19,000 Gallons/Day
For feed water TDS 500 to 1000 PPM**

Designed to produce low dissolved solids water from tap or well water, these RO systems use high efficiency reverse osmosis membranes. Part of the L-series family (other systems include XL and HL series), these RO systems are designed to work at pressures of 200-250 psi for higher TDS water and use TW reverse osmosis membranes. The TW RO membranes offer higher salt removal and the higher operating pressure overcomes the loss of membrane flow due to higher TDS level.

These reverse osmosis systems use the proven, reliable components and are mounted on a sturdy powder-coated metal frame. There are numerous design details learned from years of experience that are incorporated in our water filtration systems. Our process and fluid design ensures an optimum membrane life and minimizes the membrane fouling.

Key Features

- 38 years of experience is reflected in our quality
- Compact, Heavy Duty, Powder Coated Frame
- Proven components used throughout the system
- Conservatively engineered for reliable long term performance
- Factory tested to ensure trouble-free operation

Applications

- Spot Free Rinse/Car Wash
- Water Stores
- Whole House
- Labs
- Large Office
- Institutions
- Ice Makers
- Humidification
- Misting
- Manufacturing
- Rinse Water
- Wide Variety of Other Applications

Why Applied Membranes?

- Over 10,000 commercial/industrial systems in operation
- Our products are being used in over 100 countries worldwide
- Our customers include major national and international companies in every field of application
- We stock more components for all sizes of RO systems than any other company
- We have earned an enviable reputation for our product quality, performance reliability and business integrity



**APPLIED
MEMBRANES INC.[®]**

Industry Leader in RO Expertise and Membrane Applications Since 1983™



Phone: (760) 727-3711 • Fax: (760) 727-4427 • www.appliedmembranes.com • sales@appliedmembranes.com

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Standard Equipment

- Thin Film Composite Membranes
- Stainless steel membrane pressure vessels
- 5 micron 20" cartridge filter & housing
- Feed water temperature gauge
- Automatic inlet feed solenoid valve
- Permeate, Concentrate & Recycle Flowmeters
- System control valve
- Recycle control valve
- Low pressure pump protection
- High pressure RO pump
 - L-12521 – L-24A: Brass Rotary Vane
 - L-34A – L-124A: SS multistage with throttling valve
- Automatic membrane flush
- 4) Liquid filled pressure gauges for filter in/out and system pressures
- Product TDS displayed on controller LED
- System on/off with 2-level tank floats
- Powder coated carbon steel frame
- Boxed and palletized for shipment

Microprocessor Controller for Automatic Operation

Monitors and/or Controls:

- Inlet valve
- Delayed start-up of high pressure pump
- Feed water flush at system shut-down
- Low pressure switch
- On/Off with tank level
- Permeate Water Quality (TDS)
- Pre-treatment backwash/lockout

Controller Features:

- Backlit LED Display
- LED indicator light for system status/alarm
- Front panel access port for calibration of TDS sensor
- LED indicator light for water quality (TDS)
- Start-up and shut-down with tank level
- Feed flush at shut-down
- Low pressure shut-down
- Low pressure automatic restart
- Delayed start-up of high pressure pump



UL Listing Optional

LED Display:

- Permeate TDS
- Operating Status
- Alarm Condition

Ordering Information

Model No.	System Capacity		Membrane Elements		Line Sizes (NPT, Inches)			System Dimensions (in/cm)			Approx. Shipping Weight (Lb/Kg)
	GPD	m ³ /day	Qty.	Size (Dia. x L)	Inlet	Perm.	Conc.	Length	Depth	Height	
L-12521A	300	1	1	2.5" x 21"	3/4"	3/8"	3/8"	20/51	24/61	55/140	230/104
L-125A	600	2	1	2.5" x 40"	3/4"	3/8"	3/8"	20/51	24/61	55/140	240/109
L-225A	1,200	5	2	2.5" x 40"	3/4"	3/8"	3/8"	20/51	24/61	55/140	250/113
L-14A	1,800	7	1	4" x 40"	3/4"	1/2"	1/2"	20/51	24/61	55/140	275/125
L-24A	3,000	12	2	4" x 40"	3/4"	1/2"	1/2"	20/51	24/61	55/140	300/136
L-34A	5,500	21	3	4" x 40"	3/4"	1/2"	1/2"	20/51	32/82	55/140	325/147
L-44A	7,000	27	4	4" x 40"	3/4"	1/2"	1/2"	20/51	32/82	55/140	350/159
L-54A	8,500	32	5	4" x 40"	3/4"	1/2"	1/2"	20/51	32/82	55/140	375/170
L-64A	10,000	38	6	4" x 40"	3/4"	1/2"	1/2"	20/51	32/82	55/140	400/181
L-74A	11,500	44	7	4" x 40"	3/4"	1/2"	1/2"	20/51	40/102	55/140	441/200
L-84A	13,000	49	8	4" x 40"	3/4"	1/2"	1/2"	20/51	40/102	55/140	466/211
L-94A	14,400	55	9	4" x 40"	3/4"	1/2"	1/2"	20/51	40/102	55/140	491/223
L-104A	16,000	60	10	4" x 40"	3/4"	1/2"	1/2"	20/51	46/117	55/140	516/234
L-114A	17,300	66	11	4" x 40"	3/4"	1/2"	1/2"	20/51	46/117	55/140	541/245
L-124A	19,000	72	12	4" x 40"	3/4"	1/2"	1/2"	20/51	46/117	55/140	566/257

Notes and Voltage/ Ordering Information

- **Recommended Pre-Treatment Equipment:** All pretreatment equipment and SDI test kits are available from Applied Membranes.
 - **Carbon Filter:** Chlorine must be removed with a carbon filter prior to the RO system, if present in the feed water.
 - **Water Softener:** Hardness must be removed if present in feed water prior to RO to avoid scaling the membranes.
 - **Multimedia filter:** If feed water exceeds <1 NTU turbidity, or silt density index (SDI) of 3, media filter pretreatment recommended.
- **Capacity Basis:** 24 hrs/day
- **Systems rated at:** 77°F (25°C) using 1000 ppm sodium chloride solution operating at approx. 200 psi (14 kg/cm²) pressure. For feed water with higher TDS refer to our Series HL brochure.
- **Minimum feed pressure to RO System:** 40-60 PSI. System capacity changes significantly with water temperature
- **Voltage:** Please add our voltage codes to the end of the model number when ordering. Example: L-12521-**116** = 110v, 1 ph, 60 hz.

Voltage Codes:	• 116 = 110v, 1ph, 60hz (up to L-24A only)	• 236 = 240v, 3ph, 60hz (L-34A+ Only)
	• 216 = 220/230v, 1ph, 60hz	• 235 = 240v, 3ph, 50hz (L-34A+ Only)
	• 215 = 220/230v, 1ph, 50hz	• 436 = 460v, 3ph, 60hz (L-34A+ Only)
- All dimensions and weights are approximate.

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