

RL series RO System

ROTEK RL 3,000-50,000LPH Reverse Osmosis Systems

ROTEK RL Series RO Systems is designed to produce low dissolved solids water from tap or well water by using high efficiency reverse osmosis membranes. The RO product water is used in applications such as semiconductor, boiler feed, pharmaceutical, municipal, water reuse, food processing, bottling, and a wide variety of other applications for water purification. RL series RO systems are skid mounted with stainless steel frame, pre plumbed and pre-wired allowing for quick installation and start-up. Models are available with permeate outputs of between 3,000 and 50,000 litres/hr as shown in the specifications.



RL-6T

Advantages

- Specialized P.L.C. Control with Mimic Panel
- Fully Equipped and Customizable Automatic Membrane Flush with Permeate Water
- Low Energy Consumption
- High Flow Low-Energy Membranes
- Low Maintenance
- Compact Space Saving Design

Standard Features

- PLC control + mimic panel
- Conductivity meter for permeate water
- 300PSI FRP membrane housing
- Grundfos multistage booster pump
- 5 micron sediment pre-filter
- Rotek rotameters for permeate and concentrate stream
- Rotek pressure gauges for prefilter feed and RO feed
- Danfoss low pressure switch
- SS316 concentrate needle valve
- Concentrate recycling with flow meter
- Electro-plated SS304 skid frame
- Provision for CIP and chemical dosing
- Stainless steel pipeworks on high pressure side
- UPVC SCH80 pipeworks on low pressure side



RL-35T

Specifications

Models	RL-3T	RL-4T	RL-6T	RL-9T	RL-12T	RL-16T
Feed Water TDS	<2000ppm	<2000ppm	<2000ppm	<2000ppm	<2000ppm	<2000ppm
Recovery Rate*	50-75%	50-75%	50-75%	50-75%	50-75%	50-75%
Vessel Array	1	1:1	1:1	1:1:1	2:1	2:2
Vessel Size	8040 x 3	8080 x 2	80120 x 2	80120 x 3	80160 x 3	80160 x 4
Permeate Flow Rate (gpm/lpm)**	3-4	4-5	6-8	9-11	12-14	16-18
Feed Connection	1.5"	1.5"	2"	2"	2"	2"
Permeate Connection	1"	1"	1.5"	1.5"	2"	2"
Concentrate Connection	1"	1"	1"	1"	1"	2"
Flush Connection	3/4"	1"	1"	1.5"	1.5"	1.5"
Gross Dimension (mm)	4200*1000*1800	2700*1000*1800	4200*1000*1800	4200*1000*1800	5000*1000*1950	6000*1200*1950

Models	RL-20T	RL-24T	RL-30T	RL-35T	RL-48T	RL-60T
Feed Water TDS	<2000ppm	<2000ppm	<2000ppm	<2000ppm	<2000ppm	<2000ppm
Recovery Rate*	50-75%	50-75%	50-75%	50-75%	50-75%	50-75%
Vessel Array	1	1	1	1	1	1
Vessel Size	80200 x 4	80240 x 4	80240 x 5	80240 x 6	80240 x 8	80240 x 10
Permeate Flow Rate (gpm/lpm)**	20-23	24-28	30-34	35-39	48-52	60-64
Feed Connection	2.5"	2.5"	3"	4"	5"	5"
Permeate Connection	2"	2"	2.5"	3"	3"	4"
Concentrate Connection	1.5"	1.5"	1.5"	2.5"	3"	3"
Flush Connection	1.5"	1.5"	2"	3"	4"	4"
Gross Dimension (mm)	6000*1200*1950	7000*1200*1950	7200*1670*2075	8200*1670*2158	8200*1670*2363	8200*1670*2363

* Minimum recovery rate is calculated base on no concentrate recirculation, it is possible to increase the overall recovery rate by increasing the concentrate circulation flow.

** Permeate flow rate can be vary depends on type of membrane, raw water quality and recovery rate.