



## KSRO-4000 RO Systems

ROTEK KSRO Series RO systems are specifically designed using the principle of **KISS** “Keep It Simple Stupid” noted by the U.S. Navy in 1960. On a commercial and industrial-sized RO system, KSRO Series RO systems are simple to install, operation and service, operation errors have been eliminated by the reliable ROTEK “Pulse Flush” design which consistently produces water of the desired flow and quality with no operator adjustments. It is designed with a fixed recovery rate of 60-65% using only one single extra-large flow RO membrane element that produces 4000 GPD (650 LPH) of permeate water flow.

## Advantages

- Designed for simple and reliable operation with only **One Power Button** to operate.
- Automatic high-frequency **Pulse Flush** that replaces the need for conventional concentrate flow regulation.
- **Compact Size** and weight for easy transportation.
- ROTEK XL-4040 membrane delivers the **Largest Flow** on the market.
- Patented ROTEK **C-5TM RO Controller** with adjustable flush time for recovery rate adjustment.
- Upgradable with Wifi RO controller.
- No regulation valves to avoid **Misoperations** from users.

## Specifications

Model	KSRO4000
Fixed Recovery Rate	65%
*Permeate Flow Rate	650LPH (10.5LPM)
Maximum Feed TDS	500 ppm (mg/l)
Working Pressure	10-12 Bar
Start-Up Pressure	1.5 Bar

\* Permeate Flow Rate is calculated based on Rotek XL-4040 membranes

It is also possible to use other brands of membranes with KSRO units, but the flow rate may vary.





## Pulse Flush

It is the key feature that allows KSRO to be operating at a 100% recovery rate during the production cycle. During the flush cycle, the flush valve opens before the saturation of concentrated water reaches the level when soft water or antiscalants can't prevent the scale formation anymore. Moreover, the sudden change of flow velocity across the membrane surface in such a short period of time causes water hammers that also help to shake off the foulants on the membrane surface in order to keep the membrane clean for a longer period of time.

KSRO system recovery rate is calculated based on the volume of flush water discharged

**Recovery Rate = (Permeate Flow / Permeate Flow + Discharged Flush Flow)**

## Standard Features

- RO micro-computer controller with permeate TDS readout
- 300PSI stainless steel membrane housing+PE end caps
- ROTTEK LPE 2-11 multistage pump
- 20" - 5 micron sediment pre-filter x 1
- Rotek rotameters for permeate stream
- Rotek pressure gauges for pre-filter outlet and RO feed
- low pressure switch
- Electro-plated SS304 skid frame
- UPVC SCH80 pipe works
- ROTTEK XL-4040 RO Membrane (5000GPD)

## Optional Features

- Without Membrane
- FRP membrane vessel
- Oasis Wifi RO Controller (IoT)
- Custom Brand