

Revolutionary Pulse-Flush Technology

KSRO System

The Ultra-High Flow
Reverse Osmosis System

- 💧 Fixed Recovery Rate of 65%
- 💧 High pure water production of 6000GPD (1000LPH)
- 💧 One Button Operation / Super Easy Operation
- 💧 No Regulation valves



About
KSRO:



KSRO Water System

Watch KSRO
on Youtube:



KSRO6000 x 10

Knowing
ROTEK:



ROTEK Water System

What is Pulse Flush?

Pulse Flush is KSRO's key feature enabling 100% recovery rate during production. The flush valve opens before concentrated water saturates and forms scale, while the sudden flow velocity change causes water hammers to remove foulants from the membrane surface, prolonging its cleanliness. The recovery rate formula is Recovery Rate = Permeate Flow / (Permeate Flow + Discharged Flush Flow).

Why choose KSRO?

KSRO Ultra-High Flow RO System 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 4000-6000 GPD (650-1000 LPH) of permeate water flow.

What are KSRO's 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-5TM RO Controller with adjustable flush time for recovery rate adjustment.
- No regulation valves to avoid misoperations from users.
- Easy to upgrade KSRO-4000 to KSRO 6000 for the needs.
- Multiple KSRO-6000 can be installed in parallel for projects of up to 20 units, providing advantages over traditional custom-made systems:
 - Equipment and shipment costs are reduced by 50%.
 - The flexible production capacity can be easily adjusted to meet actual water demand.
 - No interruption during maintenance.
 - This system requires less space than traditional 8040 membrane systems.
 - The unique pulse flush technology reduces the risk of operational errors.

Standard Features

- RO micro-computer controller with permeate TDS readout
- 300PSI stainless steel membrane housing+PE end caps
- ROTEK 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
- ROTEK XL-4040 RO Membrane (5000GPD)



Optional Features

- Without Membrane
- FRP membrane vessel
- Oasis Wifi RO Controller (IoT)
- Custom Brand
- The Upgrade Accessories Package (KSRO4000 upgrade to KSRO6000)

Specifications

Model	KSRO4000	KSRO6000
Fixed Recovery Rate	65%	
*Permeate Flow Rate	650LPH (10.5LPM)	1000LPH (16.7LPM)
Maximum Feed TDS	1000 ppm (mg/l)	
Working Pressure	10-12 Bar	
Start-Up Pressure	1.5 Bar	
Power Supply	220-240VAC 50Hz or 60Hz single phase	

* 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.

Package Information

- Each set of KSRO4000 hosts is packaged in a separate carton - 375 x 460 x 1310 mm (56Kg)
- The XL-4040 RO membrane is packaged individually - 160 x 155 x 1070 mm (3.70Kg)