



# aslan

TECHNOLOGIES

# SPV Series Reverse Osmosis

1 – 5USgpm SPECIFICATIONS

ASLAN TECHNOLOGIES SPV (single-pass, vertical array) Series Reverse Osmosis systems are available in **1-5USgpm** (5500-27500L/d) nominal capacities. Recovery up to 80% is possible by using adjustable recycle and high capacity pump which also ensures sufficiently high fluid velocities across the membranes to minimize fouling. Actual pressures and flow rates are dependent on source water quality. Contact your ASLAN TECHNOLOGIES representative for further information on operational parameters as they pertain to your water source.

## Features

- Custom specifications for high recovery based on source water
- Compact piping arrangement for ease of installation and operation
- Integral Carbon (GAC) and Cartridge Filters
- Automatic operation, low pressure flush, and Aslan™ Refresh system to reduce cleaning
- Flow indicators and pressure gauges on all critical points
- Rugged stainless steel piping, vessels, and frame for long-lasting, reliable operation
- Clean-in-place (CIP) tank, combination CIP/Feed pump, integral CIP plumbing
- Low feed pressure safety shutoff
- Sufficient pump pressure for cold water applications to meet rated flow

## Controls

- NEMA-4 control panel, fuse or circuit breaker protection on all power legs, inspected to UL or CSA standards (optional variable speed control)
- PLC controlled, alarm and status indication lamps with manual overrides
- Customer supplied contact closure initiates START sequence of the RO (tank level switch or pressure switch on a pressure retention tank)
- Customer supplied contact opening initiates STOP sequence of the RO
- Automatic feed flush and Refresh on shutdown
- Automatic timed Refresh every 30min during idle time

## Applications

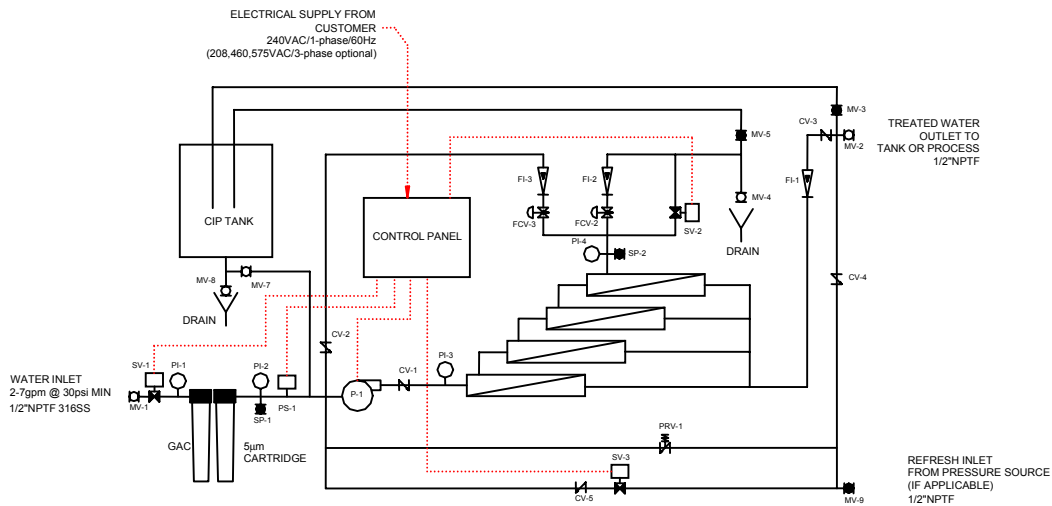
- Drinking water purification
- High quality industrial feed water
- Boiler feed water
- Beverage manufacturing
- Ice rinks
- Wastewater Recovery

## Options

- Pressure retention tank
- Colour touch-screen display
- Conductivity transmitter
- Product quality divert
- Electronic monitoring and data logging
- Integrated extended life pre-treatment
- Extra high pressure pump for very cold water applications
- Casters



# PROCESS FLOW DIAGRAM



# SPECIFICATIONS

Model No.	SPV-1-RO	SPV-2-RO	SPV-3-RO	SPV-4-RO
Permeate Flow	1.3	2.5	3.7	5.2
Reject Flow	1	0.8	1.2	1.7
Inlet Flow	2.2	3.3	4.9	6.7
Nominal Recovery	55%	75%	75%	75%
GAC Pre-filter	1x20"x2.5" (RFC-20)	1x20"x2.5" (RFC-20)	1x20"x2.5" (RFC-20)	1x20"x2.5" (RFC-20)
Sediment Pre-filter	1x20"x2.5"x5µm (GX05-20)	1x20"x2.5"x5µm (GX05-20)	1x20"x2.5"x5µm (GX05-20)	1x20"x2.5"x5µm (GX05-20)
Electrical Supply (Std.)	230/1/60	230/1/60	230/1/60	230/1/60
Pump Type	SS Submersible	SS Submersible	SS Submersible	SS Submersible
Pump Motor (Hp)	2	2	2	2
Membrane Model	AG-4040F	AG-4040F	AG-4040F	AG-4040F
Membrane Specs	4"x40"x90ft <sup>2</sup> (TFC)	4"x40"x90ft <sup>2</sup> (TFC)	4"x40"x90ft <sup>2</sup> (TFC)	4"x40"x90ft <sup>2</sup> (TFC)
Membrane Qty.	1	2	3	4
Vessel Qty.	1	2	3	4
Membranes/Vessel	1	1	1	1
Array Configuration	1	1-1	1-1-1	2-1-1
Inlet Pipe Size	1/2"	1/2"	1/2"	1/2"
Permeate Pipe Size	1/2"	1/2"	1/2"	1/2"
Reject Pipe Size	1/2"	1/2"	1/2"	1/2"
Feed Control	1/2" Auto Solenoid Valve	1/2" Auto Solenoid Valve	1/2" Auto Solenoid Valve	1/2" Auto Solenoid Valve
Reject Control	1/2" Needle Valve w/Flow Indicator	1/2" Needle Valve w/Flow Indicator	1/2" Needle Valve w/Flow Indicator	1/2" Needle Valve w/Flow Indicator
Recycle Control	1/2" Needle Valve w/Flow Indicator	1/2" Needle Valve w/Flow Indicator	1/2" Needle Valve w/Flow Indicator	1/2" Needle Valve w/Flow Indicator
Permeate Control	Flow Indicator	Flow Indicator	Flow Indicator	Flow Indicator
Approx Dim. (in)	30"L x 20"W x 48"H	30"L x 20"W x 48"H	30"L x 20"W x 48"H	30"L x 20"W x 48"H
Approx Weight (lbs)	260	290	320	350

