

REVERSE OSMOSIS SYSTEM

SRO-SYS

Materials of Construction

Frame:	Aluminium
Pump:	Stainless Steel
Membranes:	Thin Film Composite
Pressure Vessels:	PVC/GTX
Piping Systems:	Polyethylene Tube
Pre-filter Housing:	Polypropylene
Pre-filter:	Carbon Block
Valves:	Stainless Steel

Certification

1. CE Compliant

Construction Notes

1. The major components of the system are supported by a powder coated aluminium frame and designed in such a way to provide easy access for servicing, maintenance and monitoring system performance

Temperature Correction Factors

All data is collected from tests performed using feed water at 25°C. To calculate the permeate flow at a different temperature, multiply the rated permeate flow at 25°C by the temperature correction factor.

Water Temperature (°C)	Correction Factor
4	0.48
10	0.60
16	0.73
21	0.88
25	1.00
27	1.06
32	1.26

Reverse Osmosis Range

Available from the SPECTRUM Reverse Osmosis System range:

SRO-SYS-2.6
SRO-SYS-5.2
SRO-SYS-10
SRO-SYS-16
SRO-SYS-21



Performance

Product Code	Membrane Code	Avg Rejection (%)	Size (")	Avg. Permeate Flow Rate		Active Area (ft²)
				m³/day	lph	
SRO-SYS-2.6	HF4-2521	99 @ 6.9 bar	2.4 x21	3.74	156	14
SRO-SYS-5.2	SRO-4040-2500-LE	99 @ 6.9 bar	4 x 40	7.48	310	90
SRO-SYS-10				14.40	600	
SRO-SYS-16				23.04	960	
SRO-SYS-21				30.24	1,260	

REVERSE OSMOSIS SYSTEM

SRO-SYS

Technical Data

	SRO-SYS-2.6	SRO-SYS-5.2	SRO-SYS-10	SRO-SYS-16	SRO-SYS-21
Maximum Operating Temperature (°C)	48	48	48	48	48
Minimum Operating Temperature (°C)	4.4	4.4	4.4	4.4	4.4
Maximum Operating Pressure (bar)	10.3	10.3	10.3	10.3	10.3
Minimum Operating Pressure (bar)	6.8	6.8	6.8	6.8	6.8
Minimum Feed Pressure (bar)	3.1	3.1	3.1	3.1	3.1
Feed Water Source (ppm)	2000	2000	2000	2000	2000
Recovery with Concentrate Recycle (%)	50-75	50-75	50-75	50-75	50-75
Nominal Salt Rejection (%)	99	99	99	99	99
Permeate Flow Rate (lpm)	2.6	5.2	10.5	15.8	21.0
Maximum Feed Flow Rate (lpm)	22.7	52.9	52.9	52.9	52.9
Minimum Concentrate Flow Rate (lpm)	3.7	11.3	11.3	11.3	11.3
Concentrate Recycle (lpm)	up to 3.7	up to 18.9	up to 18.9	up to 18.9	up to 18.9
Feed (")	¾	¾	¾	¾	¾
Permeate (")	½	½	½	½	1
Concentrate (")	½	½	½	½	½
Membranes per Housing	1	1	1	1	1
Membrane Quantity	3	1	2	3	4
Membrane Size	2521	4040	4040	4040	4040
Housing Array	1:1:1	1	1:1	1:1:1	1:1:1:1
Pump Type	Sta-Rite SS	Sta-Rite SS	Sta-Rite SS	Sta-Rite SS	Sta-Rite SS
Motor HP	0.5	0.5	0.5	1.0	1.0
RPM @ Hz	2850	2850	2850	2850	2850
Voltage	220 VAC 50Hz	220 VAC 50Hz	220 VAC 50Hz	220 VAC 50Hz	220 VAC 50Hz
Amp Draw	12	12	12	10.4	10.4
L x W x H (mm)	457 x 457 x 1143	457 x 457 x 1143	457 x 457 x 1143	457 x 457 x 1143	457 x 457 x 1143
Weight (kg)	45	45	54	63	72
pH Range, Continuous Operation	5-11	5-11	5-11	5-11	5-11
pH Range, Short Term Cleaning	2-12	2-12	2-12	2-12	2-12
Maximum Feed Silt Density Index (SDI)	< 3	< 3	< 3	< 3	< 3
Chlorine Tolerance (ppm)	0	0	0	0	0
Maximum Feed Water Turbidity (NTU)	< 1	< 1	< 1	< 1	< 1