

SIRION™ Sea Water

Reverse Osmosis Systems

SIRION™ Sea Water reverse osmosis systems are specifically designed to treat seawater. They reject over 99% of the salt contained within the feed water.

Flow rates for standard systems range from 1 to 41 m³/hr for feed waters of up to 36 000 ppm (TDS).

Features & Benefits

- Standardised and skid-mounted; short lead times and quick start-up
- Small footprint; easily integrated into existing plant
- Chemical pre-treatment; protects the RO membranes
- High pressure pump with variable frequency drive; efficient and quiet operation
- Energy recovery device for high flow rate models; energy savings of 35-55%
- State-of-the-art RO membranes
- Flushing and chemical cleaning system; removes salt deposits, prevents scaling and maintains system performance
- Touch screen interface for easy operation
- PLC control

Applications

- Production of potable water
- Agricultural irrigation
- Industrial process water

Related Services

Local after-sales service and support teams offer preventative and corrective maintenance programs to ensure the long-term, efficient operation of installed plant.

Hydrex® Chemicals

Hydrex® 4000 water treatment chemicals from Veolia Water Technologies should be used for optimised operation.



Equipment Performance & Dimensions

Model	Flow @ 20°C		Recovery	Dimensions		Membranes	Pump
	Feed	Permeate		Quantity	Power		
	m ³ /hr	m ³ /hr				%	WxDxH
			m	kg	-	kW	
D-25	5.30	1.06	20	3x1.7x2.2	1600	2	18.5
D-50	6.42	2.12	33	3x1.7x2.2	1700	4	22
D-75	7.95	3.18	40	4x1.7x2.2	1800	6	22
D-100	10.60	4.24	40	5x1.7x2.2	1900	8	2x15
D-125	13.25	5.30	40	6x1.7x2.2	2000	10	2x22
D-150	15.88	6.35	40	4x1.7x2.2	2100	12	2x22
D-190-PX	19.88	7.95	40	6.5x1.7x2.2	2200	15	22+2.2
D-230-PX	23.88	9.55	40	8x2x2.2	3100	18	30+2.2
D-270-PX	26.55	11.15	42	8.5x2x2.2	3400	21	2x18.5+3
D-360-PX	35.36	14.85	42	8.5x2x2.2	3700	28	2x22+3
D-450-PX	44.17	18.55	42	9x2x2.2	4025	35	2x30+4
D-530-PX	52.98	22.25	42	10x2x2.2	4325	42	55+5.5
D-620-PX	61.90	26.00	42	10x2.15x2.2	4525	49	55+5.5
D-710-PX	70.48	29.60	42	10x2.15x2.2	4530	56	75+7.5
D-800-PX	79.45	33.37	42	10x2.15x2.2	4535	63	75+7.5
D-890-PX	88.33	37.10	42	10x2.15x2.2	4600	70	90+7.5

Pipe Connections

Low Pressure	
Prefilter Housing	Polyamide (PA)
Filter Element	Polypropylene
Dosing Pumps	PVC head, teflon-coated EPDM diaphragm
Chemical Product Tanks	PE
Flushing and Chemical Cleaning Tank	FRP
Flushing and Chemical Cleaning Pump	Stainless steel
Piping and Accessories	PVC-U / PN-16
High Pressure	
High-Pressure Pump	Stainless Steel AISI 904-L / Super Duplex (depending on the model)
Pressure Vessels	FRP
RO Membranes	Link crossed aromatic polyamide (8")
Piping and Accessories	Stainless steel for seawater applications AISI 904-L (Standard) ZERON/ 254 SMO (Options)
Skid	Epoxy-painted carbon steel

Feed Water Supply Quality

Raw Water Design Temperature	°C	20
Raw Water Maximum Turbidity	NTU	1
Raw Water Minimum Pressure	bar	3
SDI		<3

For higher flow rates, or other filtration openings consult your local Veolia Water Technologies company, details below.

Visit our website: www.veoliawatertechnologies.com/sirion/en/