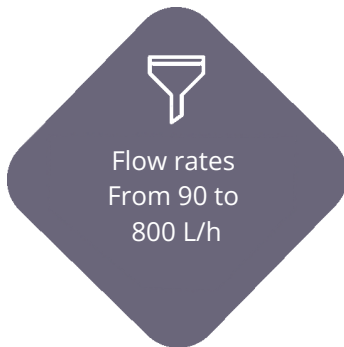


# SIRION™ Midi

Reverse Osmosis for Process Water

SIRION™ Midi reverse osmosis systems produce high purity water, removing up to 98% of dissolved inorganics and over 99% of large dissolved organics, colloids and particles.



## ✓ FEATURES & BENEFITS

- Low energy membranes result in lower operating pressures; cost savings
- Optimised flow:size ratio; space saving and efficient
- 1µm pre-filtration included within the unit; membrane protection
- Programmable user interface; simple operation, monitoring and storage (14 days) of flow rate, conductivity and temperature values. (For PLC only).
- Modem & RS232 connections
- Dry run monitor; pump protection
- Treated water diverted at startup; ensures water quality
- Timed recirculation rinse; reduces membrane fouling

### HYDREX™ CHEMICALS

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

## 💧 APPLICATIONS

- Boiler feed water treatment
- Industrial process water production
- Utility water
- Water recycling & reuse
- Hospital water for sterilization
- Analytical water grade 3 production

## + OPTIONS

Output to PLC via analogue signal for conductivity monitoring

### ASSOCIATED SERVICES

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





### System Operating Parameters

Model	Unit	10-100EP	10-200EP	10-300EP	10-500EP	10-750EP
Inlet Salinity TDS (NaCl)	mg/l	Up to 1000 mg/L				
Typical Design Flux	l/h/m <sup>2</sup>	25-32				
Permeate Nominal Flowrate	m <sup>3</sup> /h	0.09-0.11	0.18-0.22	0.28-0.33	0.45-0.55	0.65-0.8
Nominal Feed Flowrate	m <sup>3</sup> /h	0.15	0.30	0.45	0.75	1.00
Recovery	%	67 - 75				
Installed Power	kW	1	1	1	2	2

Flow rates are dependent on feed water quality, those quoted are typical values based on water at 12°C, 1000 ppm TDS & SDI <3.

### System Dimensions

Model	Unit	10-100EP	10-200EP	10-300EP	10-500EP	10-750EP
Total Installed Length	m	0.62				
Total Installed Width	m	0.60				
Total Installed Height	m	1.01	1.26	1.26	1.26	1.26
Operating Weight	kg	59	61	68	73	95

### Pipes Connections

Model	Unit	10-100EP	10-200EP	10-300EP	10-500EP	10-750EP
Feed	DN	12	12	12	15	15
Permeate	DN	12	12	12	15	15
Permeate diversion	DN	12	12	12	15	15
Concentrate	DN	12	12	12	12	12

### Materials of Construction

Low pressure Pipework	PA
High pressure Pipework	PA

### Feed water Requirements

Parameter	Unit	Value
Minimum water temperature	°C	5
Maximum water temperature	°C	30
Minimum supply pressure	barg	2
Maximum supply pressure	barg	6
Max Silt Density Index (SDI)	-	< 3
Max Oil and Grease	mg/l	0
Maximum Inlet Turbidity	NTU	< 1
Max inlet Free Chlorine Cl <sub>2</sub>	mg/l	< 0.1
Max inlet Iron Fe <sup>3+</sup>	mg/l	< 0.05
Max inlet Manganese Mn <sup>2+</sup>	mg/l	< 0.05
Max inlet Aluminium Al <sup>3+</sup>	mg/l	< 0.05

### Typical Treated Water Quality

Parameter	Unit	Value
Typical Salt Rejection	%	96-98
Permeate Pressure	barg	inlet pressure

### Environmental Conditions

Parameter	Unit	Value
Minimum ambient temperature	°C	5
Maximum ambient temperature	°C	40
Maximum humidity	%	90

### Power Requirements

Parameter	Unit	Value
Voltage	V	230
Frequency	Hz	50
Phases	-	1/N/PE