Sirion™ Basic Midi

Reverse Osmosis for Process Water

Sirion™ Basic Midi reverse osmosis systems for the production of high purity water with analog instruments for local display of operating pressures and flow rates. The desalination rate is up to 96 - 98%.

Flow rate from 100 to 350 l/h



Pharma

Cosmetics

Food

Beverage

Power

Laboratory

Electronics

General Industry

Drinking water

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
- Dry run monitor; pump protection
- Easy operation with analog instruments for local display of operating pressures and flow rates
- Programmable user interface; simple operation, monitoring and storage of permeate conductivity
- Output to PLC via analogue signal for any analogue sensor
- RO7 controller including display and standard program
- Hubgrade™ compatible

APPLICATIONS

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

OPTIONS

- Monitoring and storage of permeate conductivity and temperature
- Treated water diverted at startup ensures water quality (Note: this option cannot be combined with option Raw water blending)
- Raw water automatic / manual blending

HYDREX® CHEMICALS

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

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	10-130	10-250	10-350
Inlet Salinity TDS (NaCl)	mg/l	Up to 750 mg/l		
Typical Design Flux	l/h/m²	25-32		
Permeate Nominal Flowrate	m³/h	0.1-0.13	0.2-0.25	0.3-0.35
Nominal Feed Flowrate	m³/h	0.175	0.335	0.47
Recovery	%	70-80		
Installed Power	kW	0.575		

Flow rates are dependent on feed water quality, those quoted are typical values based on water at 12°C, 750 mg/l TDS and SDI <3.

System Dimensions

Model	Unit	10-130	10-250	10-350
Total Installed Length	m	0.38		
Total Installed Width	m	0.61		
Total Installed Height	m	1.04	1.26	1.26
Empty Weight	kg	59	61	68
Operating Weight	kg	64	69	81

Pipe connections

Model	Unit	10-130	10-250	10-350
Feed	DN	12		
Permeate	DN	12		
Permeate diversion	DN	12		
Concentrate	DN	12		

Materials of Construction

Model	Value
Skid	Coated Carbon steel
Control Cabinet	ABS
Low pressure Pipework	PA
HIgh pressure Pipework	PA

Feed water Requirements

Parameter	Unit	Value
Minimum water temperature	°C	5
Maximum water temperature	°C	25
Minimum supply pressure	barg	2
Maximum supply pressure	barg	6
Max Silt Density Index (SDI)	-	< 3
Maximum Inlet Turbidity	NTU	< 1
Max inlet Iron Fe^{3+}	mg/l	< 0.05
Max inlet Manganese Mn^{2+}	mg/l	< 0.05
Max inlet Aluminium Al^{3+}	mg/l	< 0.05
Max Oil and Grease	mg/l	0
Max inlet Free Chlorine Cl_2	mg/l	< 0.1

Environmental Conditions

Parameter	Unit	Value
Minimum ambient temperature	°C	5
Maximum ambient temperature	°C	35
Maximum humidity	%	90

Power Requirements

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

Typical Treated Water Quality

Parameter	Unit	Value
Typical Salt Rejection	%	96-98
Max Permeate Pressure	barg	2

In keeping with the progressive nature of the company, we reserve the right to amend details without notice. VEOLIA/SOLYS/Sirion™ Basic Midi/06/October/2025

*Product manufactured by Solys whose quality system has been certified ISO 9001 by Bureau Veritas Certification.