

Sirion™ Basic Maxi



Reverse Osmosis for Process Water

Sirion™ Basic Maxi 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 500 to
3,000 l/h



✓ FEATURES & BENEFITS

- Low energy membranes result in lower operating pressures; cost savings
- Optimised flow: size ratio; space saving and efficient
- 5µm 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

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

+ 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
- High pressure pump outlet pressure gauge

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.

Pharma



Cosmetics



Food



Beverage



Power



Laboratory



Electronics



General Industry



Drinking water





System Operating Parameters

Model	Unit	14-500	14-750	14-1000	14-1500	14-2000	14-2500	14-3000
Inlet Salinity TDS (NaCl)	mg/l	Up to 750 mg/l						
Typical Design Flux	l/h/m²	25-32						
Permeate Nominal Flowrate	m³/h	0.50	0.75	1.00	1.50	2.00	2.50	3.00
Nominal Feed Flowrate	m³/h	0.63	0.94	1.25	1.88	2.5	3.13	3.75
Recovery	%	80						
Installed Power	kW	1.847	1.847	1.847	1.847	2.627	3.510	3.510

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	14-500	14-750	14-1000	14-1500	14-2000	14-2500	14-3000
Total Installed Length	m	1.01						
Total Installed Width	m	0.67						
Total Installed Height	m	1.63	1.63	1.63	2.40	2.40	2.40	2.40
Empty Weight	kg	169	182	195	214	234	253	273
Operating Weight	kg	190	208	225	260	283	310	337

Pipe connections

Model	Unit	14-500	14-750	14-1000	14-1500	14-2000	14-2500	14-3000
Feed	DN	32	32	32	32	32	32	32
Permeate	DN	25	25	25	25	25	25	25
Permeate diversion	DN	25	25	25	25	25	25	25
Concentrate	DN	20	20	20	20	20	20	20

Materials of Construction

Model	Value
Skid	Coated Carbon steel
Control Cabinet	ABS
Low pressure Pipework	PVC-U
High pressure Pipework	Stainless Steel 1.4404

Environmental Conditions

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

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 Fe³⁺	mg/l	< 0.05
Max inlet Manganese Mn²⁺	mg/l	< 0.05
Max inlet Aluminium Al³⁺	mg/l	< 0.05
Max Oil and Grease	mg/l	0
Max inlet Free Chlorine Cl₂	mg/l	< 0.1

Power Requirements

Parameter	Unit	Value
Voltage	V	400
Frequency	Hz	50
Phases	-	3/N/PE

Typical Treated Water Quality

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