

# SIRION™ Mini

## Reverse Osmosis Systems

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

Flow rates from 10 to 90 l/hr.



### 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 unit; membrane protection
- Digital user interface; simple operation, monitoring of conductivity and temperature
- Dry run monitor; pump protection
- Treated water diverted at start-up; ensures water quality
- Timed recirculation rinse; reduces membrane fouling

### Options

- Output to PLC via analogue signal for conductivity monitoring

### Applications

- Industrial process water
- Boiler feed
- Micro Electronics
- Laboratory
- Hospitals
- Food and beverage industry
- Automotive industry

### 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.

## System Performance

Model		10-15 EP	10-40 EP	10-80 EP
Nominal Flows at 12°C*				
Permeate	l/hr	10-20	30-45	60-90
Feed	l/hr	40	90	170
Typical Salt Rejection	%	96-98	96-98	96-98
Pump Motor Size	kW	0.25	0.25	0.25

\*Flow rates are dependent on feed water quality, those quoted are typical values based on 1000 ppm TDS & SDI <3.

## System Dimension

Model		10-15 EP	10-40 EP	10-80 EP
Height	mm	697	697	697
Depth	mm	380	380	380
Width	mm	450	450	450
Weight	kg	53	60	63

## Pipe Connections

Model	10-15 EP	10-40 EP	10-80 EP
Feed Water (BSPP Male)	1/2"	1/2"	1/2"
Permeate (push in)	8 mm	8 mm	8 mm
Concentrate (push in)	8 mm	8 mm	8 mm

## Feed Water Supply Quality

Potable water free from organic contamination, chlorine and suspended matter. Softening may be required for hard water areas.

Supply Pressure	min. 2 bar	max. 6 bar
temperature	min. 2°C	max. 25°C

## Electrical Supply

All models 230V 50Hz standard.

For higher flow rate applications consult your local Veolia Water Technologies company, contact details below.

Visit our website: [www.veoliawatertechnologies.com/sirion/en/](http://www.veoliawatertechnologies.com/sirion/en/)

# SIRION™ Midi

## Reverse Osmosis Systems

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.

Flow rates from 90 to 800 l/hr.



### 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 start-up; ensures water quality
- Timed recirculation rinse; reduces membrane fouling

### Options

- Output to PLC via analogue signal for conductivity monitoring

### Applications

- Boiler feed
- Industrial process water
- Cleaning and rinse waters
- Reuse / recycling
- Healthcare
- Pharmaceuticals
- Laboratory

### 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 optimized plant operation.

## System Performance

Model		10-100 EP	10-200 EP	10-300 EP	10-500 EP	10-750 EP
Nominal Flows at 12°C*						
Permeate	l/hr	90-110	180-220	280-330	450-550	650-800
Feed	l/hr	150	300	450	750	1000
Typical Salt Rejection	%	96-98	96-98	96-98	96-98	96-98
Pump Motor Size	kW	0.56	0.56	0.56	1.5	1.5

\*Flow rates are dependent on feed water quality, those quoted are typical values based on 1000 ppm TDS & SDI <3.

## System Dimension

Model		10-100 EP	10-200 EP	10-300 EP	10-500 EP	10-750 EP
Height	mm	1010	1260	1260	1260	1260
Depth	mm	620	620	620	620	620
Width	mm	600	600	600	600	600
Weight	kg	59	61	68	73	95

## Pipe Connections

Model	10-100 EP	10-200 EP	10-300 EP	10-500 EP	10-750 EP
Feed Water (push in)	12 mm	12 mm	12 mm	15 mm	15 mm
Permeate (push in)	12 mm	12 mm	12 mm	15 mm	15 mm
First Permeate (push in)	12 mm	12 mm	12 mm	15 mm	15 mm
Concentrate (push in)	12 mm				

## Feed Water Supply Quality

Potable water free from organic contamination, chlorine and suspended matter. A softened water supply is normally required.

Supply Pressure	min. 2 bar	max. 6 bar
temperature	min. 2°C	max. 25°C

## Electrical Supply

10-100EP to 10-300EP models 230V, 1ph, 50 Hz standard

10-500EP & 10-750EP models 400V, 3ph-N-PE, 50 Hz standard

For higher flow rate applications consult your local Veolia Water Technologies company, contact details below.

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In keeping with the progressive nature of the company, we reserve the right to amend details without notice.

Veolia/SIRION™ Midi/AQF0009\_EN\_V3.2/Sept2014

# SIRION™ Maxi

## Reverse Osmosis Systems

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

Flow rates from 450 to 5000 l/hr.



### 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 start-up; ensures water quality
- Timed recirculation rinse; reduces membrane fouling

### Options

- Output to PLC via analogue signal for conductivity monitoring

### Applications

- Boiler feed
- Industrial process water
- Cleaning and rinse waters
- Reuse / recycling
- Healthcare
- Pharmaceuticals

### 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 optimized plant operation.

## System Performance

Model		14-500 EP	14-750 EP	14-1000 EP	14-1500 EP	14-2000 EP	14-2500 EP	14-3000 EP	14-4000 EP	14-5000 EP
Nominal Flows at 12°C*										
Permeate	l/hr	450-500	650-800	950-1100	1450-1600	1950-2100	2450-2600	2900-3100	3800-4000	4700-5000
Feed	l/hr	700	1000	1400	2000	2700	3300	4000	5200	6250
Typical Salt Rejection	%	96-98	96-98	96-98	96-98	96-98	96-98	96-98	96-98	96-98
Pump Motor Size	kW	2.2	2.2	2.2	4.0	4.0	4.0	4.0	4.0	5.5

\*Flow rates are dependent on feed water quality, those quoted are typical values based on 1000 ppm TDS & SDI <3.

## System Dimension

Model		14-500 EP	14-750 EP	14-1000 EP	14-1500 EP	14-2000 EP	14-2500 EP	14-3000 EP	14-4000 EP	14-5000 EP
Height	mm	1630	1630	1630	2358	2358	2358	2358	2950	2950
Depth	mm	1070	1070	1070	1070	1070	1145	1070	1200	1200
Width	mm	636	636	636	636	636	636	636	800	800
Weight	kg	200	220	240	290	330	370	410	300	325

## Pipe Connections

Model	14-500 EP	14-750 EP	14-1000 EP	14-1500 EP	14-2000 EP	14-2500 EP	14-3000 EP	14-4000 EP	14-5000 EP
Feed	DN 20	DN 20	DN 20	DN 25	DN 25	DN 32	DN 32	DN 40	DN 40
Concentrate	DN 15	DN 15	DN 15	DN 15	DN 15	DN 25	DN 25	DN 25	DN 25
Permeate	DN 15	DN 15	DN 15	DN 25	DN 25	DN 25	DN 25	DN 32	DN 32
First Permeate	DN 15	DN 15	DN 15	DN 25	DN 25	DN 25	DN 25	DN 32	DN 32

## Feed Water Supply Quality

Potable water free from organic contamination, chlorine and suspended matter. A softened water supply is normally required.

Supply Pressure	min. 2 bar	max. 6 bar
temperature	min. 2°C	max. 25°C

## Electrical Supply

All models 380/415V, 3 phase, 50 Hz standard

For higher flow rate applications consult your local Veolia Water Technologies company, contact details below.

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# SIRION™ Mega

## Reverse Osmosis Systems

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

Flow rates from 5 to 30 m<sup>3</sup>/hr.

### Options

- Anti-scalant/sodium bisulfate dosing equipment
- Output to PLC via analogue signal for conductivity monitoring
- pH control
- Concentrate rinse valve

### Features & Benefits

- Low energy membranes result in lower operating pressures; cost savings
- Frequency controlled variable speed pump can save up to 50% of the electrical power required by conventional systems
- 5µm pre-filtration included within the unit for membrane protection
- Programmable user interface; simple operation, monitoring and storage (14 days) of pressure, flow rate, conductivity and temperature values. (For PLC only).
- Modem & RS232 connections
- Dry run monitor; pump protection
- Treated water diverted at start-up; ensures water quality
- Timed recirculation rinse; reduces membrane fouling

### Applications

- Boiler feed
- Industrial process water
- Cooling water
- Reuse / recycling
- Healthcare
- Biotechnologies
- Electronics
- Hospitals
- Chemical industry
- Primary metals

### 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 plant operation.



## System Performance

Model		110 x 2	110 x 3	110 x 4	210 x 4	211 x 4	211 x 5	320 x 5
Nominal Flows at 12°C*								
Permeate	m <sup>3</sup> /hr	5	7.5	10	15	20	25	30
Feed	m <sup>3</sup> /hr	6.3	9.4	12.5	18.8	25	31.3	37.5
Typical Salt Rejection	%	96-98	96-98	96-98	96-98	96-98	96-98	96-98
Pump Motor Size	kW	7.5	11	11	15	18.5	22	30

\*Flow rates are dependent on feed water quality, those quoted are typical values based on 1000 ppm TDS & SDI <3.

## System Dimension

Model		110 x 2	110 x 3	110 x 4	210 x 4	211 x 4	211 x 5	320 x 5
Height	mm	1750	1850	1850	1850	2150	2255	2280
Depth	mm	900	900	900	900	900	900	900
Width	mm	4100	4100	4900	4900	4900	5900	5900
Weight (dry)	kg	980	1100	1150	1200	1350	1700	1700

## Pipe Connections

Model		110 x 2	110 x 3	110 x 4	210 x 4	211 x 4	211 x 5	320 x 5
Feed		DN 40	DN 40	DN 50	DN 50	DN 65	DN 65	DN 80
Permeate		DN 40	DN 40	DN 40	DN 50	DN 50	DN 65	DN 65
Concentrate		DN 40	DN 50					

## Feed Water Supply Quality

Potable water free from organic contamination, chlorine and suspended matter. A softened water supply is normally required.

Supply Pressure	min. 2 bar	max. 6 bar
temperature	min. 2°C	max. 30°C

## Electrical Supply

All models 380/415V, 3phase, 50 Hz standard

For higher flow rate applications consult your local Veolia Water Technologies company, contact details below.

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