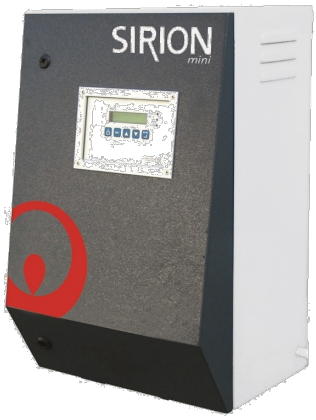
SIRION™ Mini

Reverse Osmosis for Process Water

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/h



Pharma
Cosmetics
Food
Beverage
Power
General Industry

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

APPLICATIONS

- Industrial process water
- Boiler feed
- Suitable for electronics, labs, hospitals, food & beverage, automotive industry

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	10-15-EP	10-40-EP	10-80-EP
Inlet Salinity TDS (NaCl)	mg/l	Up to 1000 mg/L		
Typical Design Flux	l/h/m²	18 - 36		
Permeate Nominal Flowrate	l/h	10-20	30-45	60-90
Nominal Feed Flowrate	l/h	40	90	170
Recovery	%	50		
Installed Power	kW	0.245		

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	10-15-EP	10-40-EP	10-80-EP
Total Installed Length	m	0.38		
Total Installed Width	m	0.45		
Total Installed Height	m	0.70		
Empty Weight	kg	30	32	35
Operating Weight	kg	53	60	63

Pipes Connections

Model	Unit	10-15-EP	10-40-EP	10-80-EP
Feed US Customary	in	3/4"		
Permeate	DN	8/6 mm		
Concentrate	DN	8/6 mm		

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 NTU
Max inlet Free Chlorine Cl_2	mg/l	< 0.1
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

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