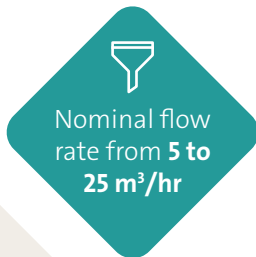


NURION™

Reverse Osmosis Systems for Water Ingredient

NURION™ reverse osmosis systems produce high purity ingredient water for the Food Industry. Plug & play unit suitable for transportation into a container. FAT tested unit. Ready for CIP operation (CIP valves included).



FEATURES & BENEFITS

- Low energy membranes result in lower operating pressures
- Frequency controlled variable speed pump
- Permeate line design and equipment following EHEDG hygienic design principles
- 1 µm pre-filtration
- Programmable user interface; simple operation, monitoring and storage
- Treated water diverted at start-up; ensures water quality
- All piping, fittings and valves on feed, reject and permeate line in stainless steel
- All non-metallic materials (pressure vessels, membranes, sealings/gaskets) are in accordance to at least one drinking water or FDA/NSF/ACS regulations
- 12" touchscreen panel with TFT widescreen colour display
- PLC with Ethernet connection (Siemens)
- Aquavista™* enabled⁽¹⁾



APPLICATIONS

- Ingredient water for food production



OPTIONS

- PLC + HMI Allen Bradley
- Inlet pH and ORP measurements
- Control cabinet in SS
- Frame in SS
- Concentrate recirculation line
- Witnessed FAT (with wet tests)

⁽¹⁾AQUAVISTA™ is a cloud based program that allows you to monitor your system performance, day or night, with secure, real-time data available over any internet or cellular connection.

HYDREX® CHEMICALS

Hydrex™ 4000 water treatment chemicals from Veolia Water Technologies are recommended for optimized plant operation.

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.

Subscription to Aquavista™ digital services (asset monitoring, benchmarking, improvement and management, digital training).





System Operating Parameters

	Unit	110x2	110x3	110x4	210x4	211x4	211x5
Feed water TDS (NaCl)	ppm	Up to 1000 ppm					
Typical design flux	l/m ² h	30.5					
Permeate flowrate @ 12°C*	m ³ /h	5	7.5	10	15	20	25
Feed water flowrate @ 12°C*	m ³ /h	6.3	9.4	12.5	18.8	25	31.3
Recovery	%	80					
Installed power*	kW	7.5	11	15	15	22	37

Selection of models must be done following RO projections based on project specific inlet water characteristics.

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

System Dimensions

Model	Unit	110x2	110x3	110x4	210x4	211x4	211x5
Length	mm	4000	4100	4850	4850	4850	5900
Width	mm	860	860	860	900	900	900
Height	mm	1650	1650	1750	1750	1920	1967
Empty weight	kg	990	1120	1240	1375	1625	2195

Pipes Connections

Model	110x2	110x3	110x4	210x4	211x4	211x5
Feed water	DN50	DN50	DN50	DN50	DN65	DN65
Permeate outlet (product)	DN40	DN40	DN40	DN50	DN50	DN65
Concentrate	DN40	DN40	DN40	DN40	DN40	DN40
CIP inlet	DN50	DN50	DN50	DN50	DN50	DN50
CIP outlet	DN40	DN40	DN40	DN50	DN50	DN50
Permeate outlet (to CIP)	DN40	DN40	DN40	DN50	DN50	DN50

Feed Water Supply Quality

Well water or surface water.

Parameter	Unit	Value
Min water temperature	°C	2
Max water temperature	°C	30
Min inlet pressure	bar.g	3
Max inlet pressure	bar.g	6
SDI max	-	3
Turbidity max	NTU	1
Iron and heavy metals	-	0
Oil, TSS and colloids	-	0
Free chlorine		Non detectable

Non corrosive water.

Typical Treated Water Specifications and Performances

Parameter	Unit	Value
Typical salt rejection	%	96 - 98
Product pressure	Bar	Pump feed pressure

Environmental Conditions

Parameter	Unit	Value
Min ambient temperature	°C	5
Max water temperature	°C	35
Max Humidity (non-condensing)	%	90

Indoor Design. Non-corrosive atmosphere.

Materials

Frame	Epoxy coated carbon steel frame
Pipes	SS 316

Power Requirements

Voltage	380 / 420 V
Frequency	50 Hz
Phases	3

Other voltage or frequency available on request.

Other Specifications

Parameter	Unit	Value
Service air requirement	bar.g	6 (max)
Permeate pressure	bar.g	= Inlet pressure

Other specs on request.