

# **CIP RO Station**

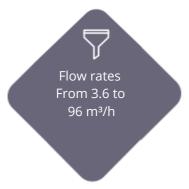
# For SIRION™ Advanced/Pro, Mega, Terion S and Terion

Clean In Place – CIP – Station for SIRION Advanced / Pro, Mega and Terion reverse osmosis systems.

Cleaning of fouled or scaled RO membranes.

Plug & play unit suitable for transportation into a container.

Suitable for Sirion Advanced/ Pro, Sirion Mega mk II and mk III, Terion S and Terion All Versions available according to European standards.



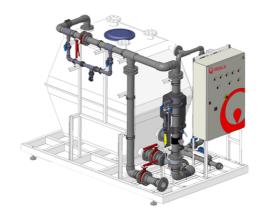


# **FEATURES & BENEFITS**

- · Manual operation as a standard
- Rectangular tank for easier manual chemicals filling
- CIP solution recirculation allows controlling solution flow in order to manage CIP on first stage or second stage of the RO with different flowrates.
- Dry run monitor; pump protection
- Frequency controlled variable speed pump can save up to 50% of electrical power required by conventional systems (option)
- Skid-mounted, standardized systems; short lead times, quick installation and start-up.
- Semi-auto CIP through Sirion Mega, Terion or Nurion HMI(option)
- CIP Small range, 110, 210 and 320 units skids over wheels for CIP mobility
- FAT tested

#### HYDREX™ CHEMICALS

Recommended chemicals according foulant: Inorganics colloids, Metal Oxides: Hydrex 4900 Sulphates, biological and organics: Hydrex 4501 Biological: Hydrex® 4201 - Hydrex® 4202









#### **APPLICATIONS**

CIP RO Station for Sirion Advanced / Pro, all Sirion Mega, Terion and Nurion units



#### **OPTIONS**

Option 1: Pump VFD

Option 2: Ejector for chemicals filling into CIP tank

Option 3: Electrical heater for better cleaning performances

Option 4: Flowmeter

Option 5: PLC Version for semi-auto CIP management through Sirion Mega HMI.

#### **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	Small Range	110	210	320	420	840	1260
Max Feed Flowrate <sup>(1)</sup>	m³/h	3.6	8.0	16.0	24.0	32.0	64.0	96.0
Installed Power <sup>(2)</sup>	kW	0.75 / 4.5	1.5 / 5.0	3.0 / 10.0	5.5 / 14.0	5.5 / 22.0	11.0 / 42.0	15.0 / 66.0

(1) @ 3.5 barg

(2) Without Heater / With Heater

# **System Dimensions**

Model	Unit	Small Range	110	210	320	420	840	1260
Total Installed Length	m	1.81	1.81	2.10	2.10	2.65	3.00	3.20
Total Installed Width	m	1.37	1.37	1.52	1.52	1.60	1.80	1.80
Total Installed Height	m	1.73	1.73	1.85	1.85	2.03	2.19	2.39
Empty Weight	kg	365	409	633	711	835	1129	2502
Operating Weight	kg	626	670	1340	1516	2427	4323	6774
CIP Tank total volume	L	240	240	650	850	1500	3000	4000

#### Pipes Connections(3)

Model	Unit	Small Range	110	210	320	420	840	1260
CIP outlet	DN	40	40	50	65	65	100	100
Concentrate return	DN	50	50	50	50	65	100	100
Permeate return	DN	50	50	50	50	65	80	80
Drain	DN	40	40	50	50	50	50	50
Permeate filling	DN	50	50	50	50	65	80	80

<sup>(3)</sup> Connection Spec: Flanges EN1092-1 PN10

# **Environmental Conditions**(4)

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

<sup>(4)</sup> Indoor Design. Non-corrosive atmosphere.

# **Feed water Requirements**

Parameter	Unit	Value
Minimum water temperature	°C	4
Maximum water temperature	°C	45
Operating pH range	-	1 - 12

#### **Materials of Construction**

Skid	Epoxy coated carbon steel
Pipework	U-PVC
Control Valves(5)	U-PVC - EPDM

<sup>(5)</sup> suitable for HCl solutions.  $H_2SO_4$  solutions on request

# **Power Requirements**

Parameter	Unit	Value
Voltage <sup>(6)</sup>	V	380 / 420 V
Frequency	Hz	50Hz
Phases	-	3

(6) Other voltage or frequency available on request. 50/60 Hz available when VFD option is selected