

NEXED High Flow Electrodesalination Module

## NEXED™ HIGH FLOW ELECTRODESALINATION MODULES

### NEXED MODULE 3, 6, 12 M<sup>3</sup>/HR

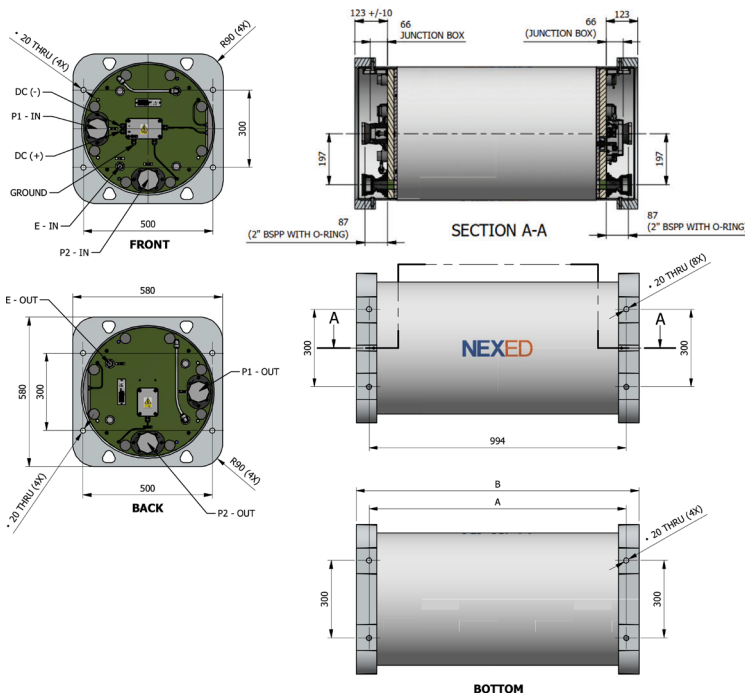
The NEXED™ modules provide a foundation to reimagine the possibilities of electrodialysis. Five modules ranging from 1.7 - 13.6 m<sup>3</sup>/hr (7.5 - 60 gpm) represent a substantial increase in efficiency and cost competitiveness for ED/EDR in higher salinity brackish water desalting applications. Proprietary flexmount connectors create a support for additional modules which simplifies skid construction.

Multiple modules can be used in parallel and series to meet brackish water salinity desalting requirements for flow rates up to, and greater than 1,000 gpm.

### NEXED Module Series Features

- Tunable control for selective water quality
- Flexible design to optimize for low energy or small footprint
- State-of-the-art ion-selective membranes
- High membrane utilization cross-flow design
- Automated manufacturing to optimize performance
- High recovery capability
- Low operating pressure reduces system cost
- On-board junction box

For additional information on our NEXED Module series call +1 866.876.3340 or visit our website at [www.nexedwater.com](http://www.nexedwater.com).



Model	Configuration	A	B	Flow Range m <sup>3</sup> /hr (gpm)
NEXED3-4A-3	2-pass	620 mm (24.4 inches)	720 mm (28.3 inches)	1.7 - 3.4 (7.5 - 15)
NEXED6-8A-3	2-pass	994 mm (39.1 inches)	1,094 mm (43.1 inches)	3.4 - 6.8 (15 - 30)
NEXED12-16A-3	2-pass	1,740 mm (68.5 inches)	1,840 mm (72.4 inches)	6.8 - 13.6 (30 - 60)

## OPERATING ENVIRONMENT

Installation should be indoors with no direct sunlight and should have a maximum ambient temperature of 45°C (113°F).

## CONSTRUCTION AND COMPLIANCE

- Housing is fiberglass reinforced plastic (FRP). Standard color is white with a glossy finish.
- The proprietary Flexmount bracket/end-block assembly is an epoxy painted aluminum casting suitable for securing modules to the frames and/or each other in Evoqua system approved configurations.
- CE marked, 2014/35/EU – Low Voltage Directive.

## ORDERING INFORMATION

Ordering part number	Model Number	Configuration
W3T429716	NEXED3-4A-3	2-pass
W3T425647	NEXED6-8A-3	2-pass
W3T436060	NEXED12-16A-3	2-pass

Each NEXED module has 6 process connections; feed, concentrate feed, product, concentrate, electrode inlet and electrode outlet. Note: polarity reversal applications utilize an A : B operation that changes the orientation of feed, concentrate feed, product and concentrate to mitigate fouling. PVC plugs and dust covers are provided with the module.

Module electrical connections are made through a single on-board junction box.

## DIMENSIONS

Diameter	Width	Height
510mm (20 in)	580mm (22.8 inch)	580mm (22.8 inch)

## MAXIMUM FEED WATER SPECIFICATIONS

Feed water salinity	< 15,000 ppm (< 7,000 optimal)
Product water salinity minimum	100 ppm
Temperature	5 - 45°C (40 - 113°F)
Inlet pressure	≤3.45 bar (≤50 PSI)
Free Chlorine (as Cl <sub>2</sub> )	0.5 mg/L continuous 30 mg/L intermittent
Iron (as Fe)	<0.3 mg/L
Manganese (as Mn)	<0.1 mg/L
Aluminum (as Al)	<0.1 mg/L
pH (Continuous)	3 - 10
Total hardness (as CaCO <sub>3</sub> )	Less than saturation limits
Total organic carbon (as C)	<15 mg/L optimal
Total suspended solids (size μm)	<25 μm
COD (as O <sub>2</sub> )	<50 mg/L
Grease or oil (IR method)	<2.0 mg/L

## TYPICAL MODULE OPERATING PARAMETERS

DC voltage	0 - 600
DC amperage	0 - 20
Recovery	up to 95%

## FLOW AND WEIGHTS

Model	Configuration	Product Flow Min m <sup>3</sup> /hr (gpm)	Product Flow Nominal m <sup>3</sup> /hr (gpm)	Product Flow Max m <sup>3</sup> /hr (gpm)	Shipping weight	Operating weight
NEXED3-4A-3	2-pass	1.7 (7.5)	3 (13)	3.4 (15)	117 kg (258 lbs)	128 kg (283 lbs)
NEXED6-8A-3	2-pass	3.4 (15)	6 (26)	6.8 (30)	173 kg (382 lbs)	197 kg (435 lbs)
NEXED12-16A-3	2-pass	6.8 (30)	12 (53)	13.6 (60)	287 kg (633 lbs)	335 kg (739 lbs)



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[www.nexedwater.com](http://www.nexedwater.com)

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