DesaltED Stack



Stack for Electro-Dialyses (reversal):

Flow Configuration:	Cross flow: two process flows (in/out), plus anolyte and catholyte circulating
Active membrane area:	100, 200 or 300 m ²
Spacer type:	Woven material, 480 µm thickness
Electrodes:	Standard Ti- electrodes with MMO coating
Remarks:	Stack mounting stand included







Model	Flow range (m ³ /h)	Nominal flow (m ³ /h)	Active membrane area (m ²)	D (m)	L (m)	Operating weight (kg)
DESALT-ED.8	4 - 12	8	100	0.80	0.60	250
DESALT-ED.12	6 - 18	12	150	0.80	0.75	325
DESALT-ED.16	8 - 24	16	200	0.80	0.90	400
DESALT-ED.20	10 - 30	20	250	0.80	1.20	500
DESALT-ED.24	12 - 36	24	300	0.80	1.50	600

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Construction materials:

PP, PVC, PES, GRP, SS 316L, EPDM, Viton

Stack features:

- Lowest energy consumption
- Patented cross-flow design for optimal salt removal
- > Patented flow distribution for optimised flow to the stack and prevention of ionic shortcuts
- Stacks are liquid-tight, no loss of liquids between internal compartments and to outside
- ▶ Flexible desalination: control of the product water salinity to meet the desired water specification
- Smart design for low footprint and low operating pressure requirements
- Modular design for easy expansion to higher flows
- Minimized gas accumulation due to vertical membrane pile arrangement

Operational Parameters	Unit	Value
Salt Removal Rate	%	~ 60% per stage
Temperature	°C	5 - 40
Maximum Feed Pressure	bar	2.0
Input Voltage	V	0 - 600
Input Amp	A	80 (250 upon request)

Typical Feed Water Requirements	Unit	Value
Typical Feed TDS	g/l	< 15
рН		3 to 12
Turbidity	NTU	< 2.0
Free chlorine (continuous)	ppm	< 0.5
ТОС	ppm	< 15
COD	ppm	< 50
Iron	ppm	< 0.3
Manganese, Aluminum	ppm	< 0.1
TSS (size)	μm	< 25

Typical applications for ED and EDR:

Industrial water reuse	TDS removal of tertiary treated waste water to be suitable
	for reuse in industrial processes
Cooling Tower Blowdown water	TDS removal to prevent scaling, without removal of active
	chemistry for microbial control.
Desalination of brackish water	Desalination of brackish surface- of groundwater for
	irrigation in agriculture
Oil & Gas produce water	TDS removal from production water in oil and gasfields
Metal Plating and Mining water	(Heavy) metal removal