

DELTAFLOW* – RO/EDI Combined

FACT SHEET

Flexible, Efficient, Reliable



Veolia offers one of the largest global fleets of combined reverse osmosis (RO) & electrodeionization (EDI) systems as part of our DELTAFLOW product line. DELTAFLOW supplies ultrapure water to industrial users on an emergency response, bridge system, or expert guidance basis.

High Treatment Capacity with Smaller Footprint

- Brackish to demineralized water in single process unit
- Compact, high capacity fleet allows you to get the most water production with a single fleet
- A highly efficient footprint and layout minimizes infrastructure requirements and cost
- Double pass or two trains operability in a single system

Flexible Systems

- 24/7 on demand rapid deployment of mobile assets to support customer needs
- Can combine with other Veolia's mobile water products to enhance system capability

InSight* Enabled Fleet

- Helps ensure Veolia's trailer systems are performing at optimal levels by enabling remote monitoring, trending and analysis of key operating details like water flow, capacity remaining, and water quality.
- Minimizes oversight of trailer operations and reduces operating costs by replacing manual tasks with automated daily or weekly reports.
- Provides additional peace of mind as customers can log into InSight at any time, day or night, and get real-time updates about the system and its performance. InSight's alarm feature also ensures that if problems do arise, Veolia's field service teams know immediately, and can act quickly to address them.

Technical Specifications

Capacity-Typical @ 15°C, process review required to validate ¹				
Model	Mode	EDI Product (m³/h)	Reject (m³/h)	Feed (m³/h)
GEN #1	1 Pass	48	28	76
	2 Pass	30	21	56
GEN #2	1 Pass	48	28	76
	2 Pass	30	21	48
GEN #3	1 Pass	48	28	76
	2 Pass	30	21	48
GEN #4	1 Pass	48	28	76
	2 Pass	30	21	48
GEN #5	1 Pass	70	40	110
	2 Pass	40	22	62
Performance				
RO Recovery (%)		Single Pass ~70 Double Pass ~60		
EDI Recovery (%)		85-95% ²		
Product Quality		<0.2µS/cm <20ppb silica		
Feed Water Parameters				
Max Conductivity (µS/cm)		<1500		
Max. Turbidity (NTU)		<1		
Max SDI		<3		
Water Pressure (Bar) (min / max)		2.0 to 4.0		
Water Temp. (°C) (min / max)		5 to 40		
Instrumentation & Control				
Feed		Flow, pressure, conductivity, pH, temperature, free chlorine or ORP,		
Product		Flow, conductivity, temperature, Silica (reactive)		
Alarms		Audible & visual		
Automation & Comms (via volt free contact)		Remote start, Common alarm Storage tank level ³		

All information is typical, some unit variation possible.

¹ Design capacity and performance to be validated by process review based on site conditions.

² GEN #3,4 &5, 100% EDI recovery, EDI rejects recycled to RO feed

³ Applies to GEN #4 & 5 model only

Additional Information

Model	GEN #1	GEN #2	GEN #3	GEN #4	GEN #5
Cartridge Filtration					
Filter House Quantity	3	3	3	4	4 - High Flow
Cartridge filter model	PX05-40	PX05-40	PX05-40	PX05-40	HF.Zs 01-40-FSB
Typical filtration	1µm	1µm	1µm	1µm	1µm
Cartridge filter length	102cm (40")	102cm (40")	102cm (40")	102cm (40")	102cm (40")
Cartridge filter Qty	7 / housing	7 / housing	7 / housing	7 / housing	1 / housing
E-cell Configuration					
Model	MK-3	MK-3X	MK-3X	MK-3X	MK-3X
Quantity	12	8	8	8	12
RO Configuration					
Membrane Vessel Qty / Material	15 / SS316	15 / SS316	15 / SS316	15 / FRP	16 / FRP
RO Membrane Array	Train#1; 4-3-2 Train#2; 3-2-1	Train#1; 4-3-2 Train#2; 3-2-1	Train#1; 4-3-2 Train#2; 3-2-1	Train#1; 5-3-2 Train#2; 3-2	Train#1; 6-4 Train#2; 4-2
Membrane Quantity	90	90	90	90	96

Engineering Specifications

Model	GEN #1	GEN #2	GEN #3	GEN #4	GEN #5
Installation & Utility Requirements					
Flange Connection Type	ANSI 150				
Inlet	4"	4"	4"	4"	6"
Product	4"	4"	4"	4"	4"
EDI Off-Spec/Rinse	4"	4"	4"	4"	4" See note 3
RO Concentrate & Off-Spec	4"	4"	2" See note 2	2" See note 2	3" See note 2
EDI Concentrate	1 ½"	N/A	N/A	N/A	N/A
EDI Electrode Blowdown	½"	N/A	N/A	N/A	N/A
Overflow/ Tank Drain	N/A	1"	1"	2"	4"
PSV Release	N/A	N/A	N/A	N/A	4"
CIP Waste	N/A	N/A	N/A	N/A	2" See note 4
Power Supply	400VAC, 3-phase,50Hz			400/460VAC, 3-phase,50/60Hz	
Panel Breaker Size	1 x 250A 1 x 80A See note 1	400A	400A	400A	400A
Full Load Amps	300A	315A	315A	343A	306A/278A
Container Lighting (230V,1ph,50Hz)	16A	N/A	N/A	N/A	N/A

Model	GEN #1	GEN #2	GEN #3	GEN #4	GEN #5
Dimensions and Weights					
Assembly In	Container	Container	Container	Container	Container
Size (Length, Width, Height) (m)	12.2 x 2.4 x 2.9	12.2 x 2.4 x 2.9	12.2 x 2.4 x 2.9	12.2 x 2.4 x 2.9	12.2 x 2.4 x 2.9
Weight In Transport (kg)	22,500	22,500	22,500	22,500	22,500
Weight In Operation (kg)	25,000	25,000	25,000	25,000	25,000
Additional Information					
Reference SAP Part Number	500503B	501032A	501290A	501649A	505225A

All information is typical, some unit variation possible.

Notes:

1. Single supply via junction box. Minimum recommended overcurrent protection 400A (by others)
2. RO concentrate only. RO off-spec is joined to EDI off-spec/rinse
3. GEN #5 EDI Off spec Rinse is connected with RO permeate bypass EDI
4. GEN #5 is with Build in heated CIP system and EDI reject recycle tank & pump
5. GEN #5 noise levels are up to 95.3dB

Veolia Water Technologies
Please contact us via:



info@lenntech.com Tel. +31-152-610-900
www.lenntech.com Fax. +31-152-616-289