

KERASIEV® +
Ceramic Membrane

Kerasiev® + Ceramic Membrane uPVC Module datasheet

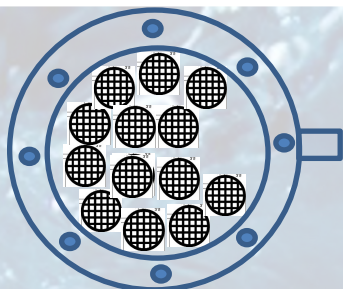
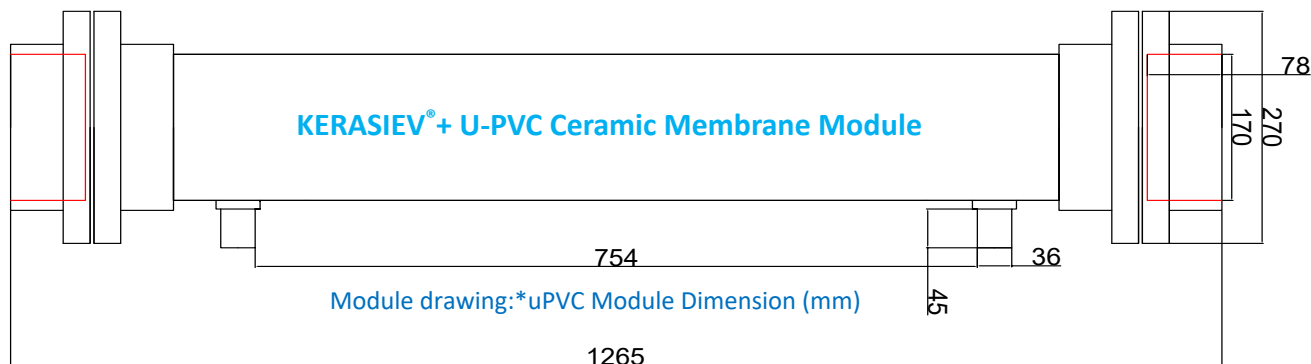


KERASIEV® + Ceramic Membrane Inside

KERASIEV® + U-PVC Ceramic Membrane Module specification



- Multichannel Tubular ceramic membrane inside uPVC housing (Proprietary design*).
- Ceramic membrane sealing agent: Polymer base resin
- Number of KERASIEV® Ceramic Membrane** inside uPVC housing: 13 nos.
- Can be retrofit in existing Crossflow Membrane plant.



**13 membranes inside uPVC module (top view)

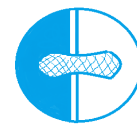


KERASIEV® Ceramic Membrane Drawing

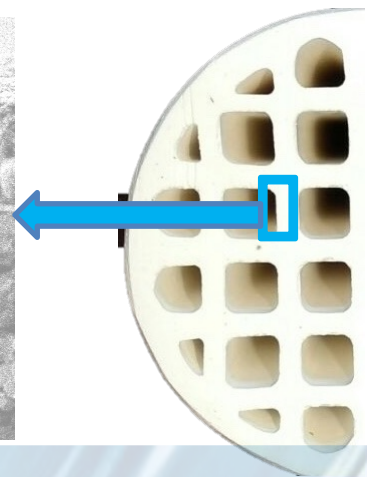
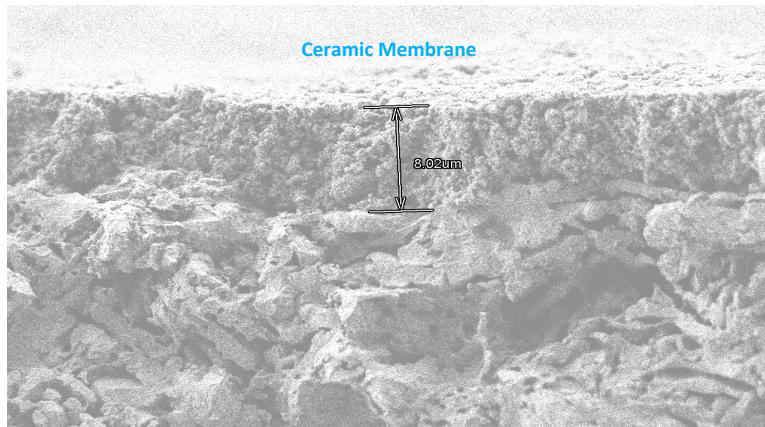
KERASIEV®+ Ceramic Membranes Specification

Membrane Trade Name	KERASIEV ®
Membrane [M] Material of Construction	Al ₂ O ₃
Membrane Type	Porous Multi hole tubular
Filtration type	Cross Flow/Dead end *
Number of hole/channels	416
Inner diameter of hole/channels	3.5 mm
Membrane length	1050mm
Flow Direction	Inside- out operation
Nominal Pore Size	0.3 µm pore size
Overall Module length	1265mm
Housing/Module dia (max)	270mm
Total Module surface area	4.94sq.m
pH- stability	1-10pH
Sealing Type & Material	Side sealing, Resin Base (uPCV Module)
Housing/Module	uPVC

Flux (LMH) vary from 50- 300 LMH with different application and flow velocity. For reference only. Application fluid-Surface water treatment. All membrane designs are suitable for chemical sterilization 5% (33%HCL) @≥ 45°C .



KERASIEV[®] +
Ceramic Membrane



System Design Parameters:

Type: Cross flow (velocity 0 m/s to 5m/s)

Flow: In to Out

Working Pressure (Max) : 2.7 bar

Temperature (Max): 45°C

Backwash Flow (Max) : Upto 2 times Permeate

Chemical cleaning & pH stability : 1 to 12pH (High pH CEB 30 min max)

TSS MAX:2000 mg/l



13 nos. Membrane
inside uPVC Module

APPLICATION



Pre-filtration for RO,UF and Softeners

Removal of Organic/Inorganic Total Suspended solid (TSS) from sea water for desalination plant

Domestic & Industrial drinking water purpose

Surface water polishing as TSS controller & Pathogen filtration, Ground water treatment.

Cooling tower feed filtration

Acid and basic solution filtration

Dairy, food (fruit juice) and pharmaceutical product process/pre treatment

Hydrolysate Protein separation

Metal recovery, ETP/STP

NEED INNOVATION

Gopalpur

District: South 24Pgs

Kolkata- 700150

West Bengal (India)

Phone: (+91) 7980807924, 6290298918, 9432849210

Email: mail@needinnovation.com, sd@needinnovation.com, needinnovation@gmail.com

Website: www.needinnovation.com

Facebook page: [@kerasiev](https://www.facebook.com/kerasiev)

Twitter page: [@NeedInnovation](https://twitter.com/NeedInnovation)