

## PVDF Hollow Fiber Membrane Module

# FG Module

FG-0101-S4 / FG-0101-S6

Kuraray has developed a new hollow fiber membrane module with high permeability and unique module structure. FG module can be used for a wide range of applications with excellent filtrated water quality.

## Advantages

### ● High Water Permeability

- Small footprint (High filtration flux)
- Low operating pressure

### ● Air Backwashing

- High water recovery
- Air Backwashing Simple system design (No backwash pump, No filtrate tank)

### ● Applicable for Higher Turbidity

- Wide range of applications (direct filtration after coagulation, high turbidity waste water treatment/ recycle, etc.)

### ● Long Operation Life

- High mechanical strength and chemical resistance

## Examples of Applications

### ● Potable water production

- Replacement of traditional coagulation and sedimentation filtration

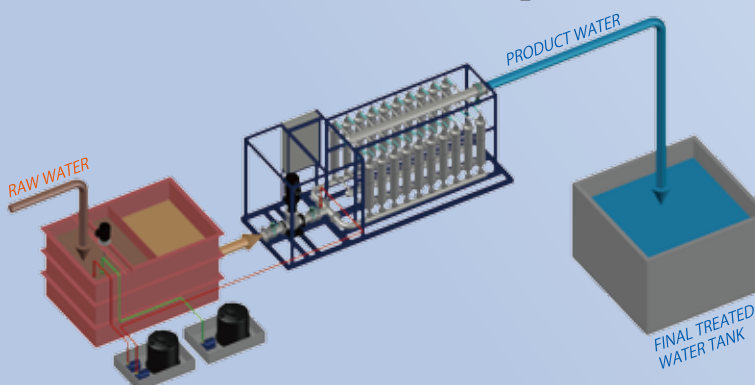
### ● Process water production

- Treatment of underground water, river water, and lake water
- Pretreatment of RO system

### ● Waste water/ Sewage recycle

- Ultra pure water recycle in Semiconductor industry
- Waste water recycle of effluent from biological treatment plant
- Sand filter backwashing waste water recycle

## Installation Example



## Specifications

Product name		FG module		
Module type		FG-0101-S4 (US02-125)	FG-0101-S6 (US02-125)	
Element	Type	FGE-0101 (US02-125)		
	Nominal pore size (90% cutoff)	0.02 μm		
	Effective membrane surface area (m <sup>2</sup> )	40		
	Standard designed flow rate (m <sup>3</sup> /hr/module)	1 to 13		
	Material	Hollow fiber membrane	Hydrophilic PVDF *1	
		Potting material	Polyurethane	
		Sheath	PVC	
		Center distributor	PVC	
Net		Polyethylene		
Packing	Silicon rubber			
Filling liquid	NaClO solution*2			
Housing	Type	FGH-S4	FGH-S6	
	Material	SUS304	SUS316	
	Dimensions (Max. D x H: mm)	φ207 × 1,421		
	Inner volume (L)	39		
Operating conditions	Filtration type	Outside-in, dead-end		
	Max. operating pressure (MPa)	0.5		
	Max. air pressure (MPa)	0.19		
	Max. TMP (MPa)	0.3		
	Temp. range (deg. C)	1 to 40		
	pH range	1 to 11 <sup>3</sup>		

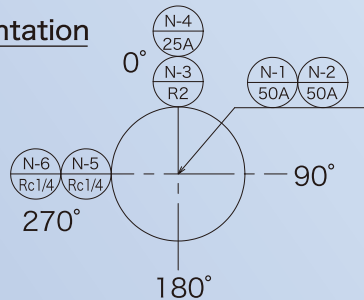
\*1 Polyvinylidene fluoride (PVDF) mixed with hydrophilic resin

\*2 The effective chlorine concentration of NaClO solution is as follows;

- Element: 25 mg/L
- Module: 5 mg/L

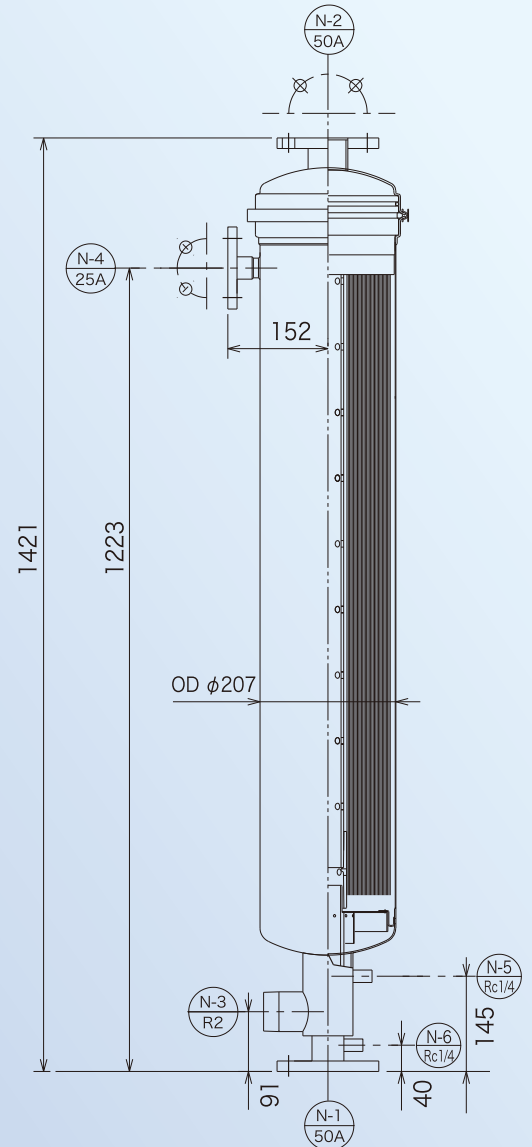
\*3 pH can exceed the above range during chemical cleaning.  
Contact us for details.

### Orientation



### List of nozzles

No.	Size	Applications
N-1	10K-50	Raw water inlet
N-2	10K-50	Treated water outlet
N-3	R2	Drain outlet
N-4	10K-25	Overflow port
N-5	Rc 1/4	Air inlet (aeration board)
N-6	Rc 1/4	Air inlet (Center distributor)



## Notes:

- 1) Specifications and the type of the element and housing may be changed without prior notice.
- 2) The nozzles shown in the above drawings are those confirming JIS

Manufacturer

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Distributor