

# HFU-2020

## Pressurized Outside to In / Dead-end Filtration Ultrafiltration (UF) Membrane Module

Toray's PVDF membrane construction is highly resistant to chlorine and strong acids, which allows for better cleaning and optimization of filtration flux rates after cleaning. The hollow fiber modules effectively remove suspended solids, viruses, and bacteria and are certified for drinking water applications.

Membrane Characteristics		Unit	Value
Membrane Material			PVDF (Polyvinylidene fluoride)
Nominal Pore Size		μm	0.01
Outer Membrane Surface Area		m <sup>2</sup> (ft <sup>2</sup> )	72 (775)
Operating Parameters		Unit	Value
Maximum Feed water / Filtrate Flow		m <sup>3</sup> /h (gpm)	12 (53)
Maximum Backwash Flow		m <sup>3</sup> /h (gpm)	13.5 (59)
Maximum Air Flow		Nm <sup>3</sup> /h (scfm)	9.0 (5.3)
Maximum Inlet Pressure		kPa (psi)	300 (43.5)
Maximum Backwash Pressure		kPa (psi)	300 (43.5)
Normal Operating Transmembrane Pressure		kPa (psi)	0–200 (0–29)
Operating Temperature Range		°C (°F)	0–40 (32–104)
pH Range	During Filtration		1–10
	During Cleaning		0–12

\*Please contact Toray for operating manual and preliminary design, as capacity per module is highly dependent on feed water quality.

### Product Certifications and Compliances

- NSF/ANSI 61 for drinking water applications
- NSF/ANSI 419 to comply with the U.S. EPA's Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR), which allows membrane manufacturers to prove Cryptosporidium reduction.
- Association of Membrane Separation Technology of Japan

### Applications

Drinking water, Industrial process water, Pretreatment for seawater RO desalination, Secondary and Tertiary wastewater



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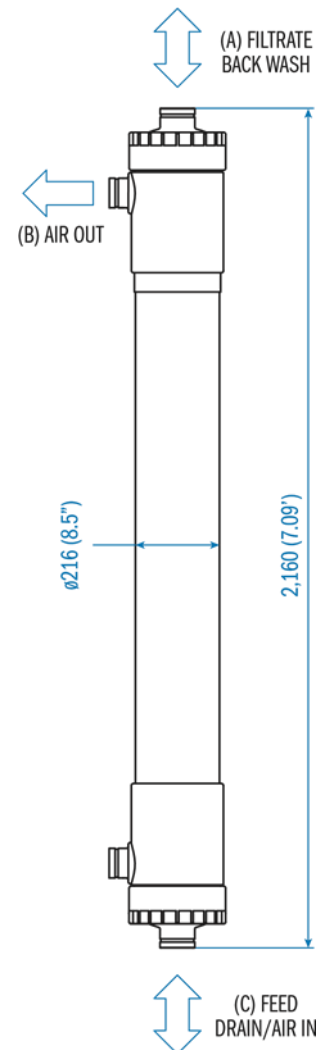
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Dimensions and Weight		Unit	Value
Diameter		mm	216 (8.5)
		(in)	
Length		mm	2,160 (7.087)
		(ft)	
Weight	Full of Water	kg (lbs)	92 (203)
	After Draining	kg (lbs)	49 (108)

Connections	Value
(A) Filtrate Outlet	80A
(B) Air Outlet	65A
(C) Feed Water / Air Inlet	80A

Material Specifications	
Description	Material
Casing	uPVC
Cap	uPVC
Potting	Epoxy resin
O-ring	EPDM

Please contact Toray for more detailed drawing and dimensions.



Toray accepts no responsibility for results obtained by the application of this information or the safety or suitability of Toray's products, either alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each product combination for their own purposes.

All data may change without prior notice, due to technical modifications or production changes. Please be sure to inquire about the latest product specifications.

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