

# HFUG-2020AN

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

The HFUG-2020AN module is Toray's latest UF innovation that features hollow fibers with a smaller diameter but with improved membrane durability and performance. The result is an increased surface area per module for more production output.

Membrane Characteristics		Unit	Value
Membrane Material			PVDF (Polyvinylidene fluoride)
Nominal Pore Size		μm	0.01
Outer Membrane Surface Area (module)		m <sup>2</sup> (ft <sup>2</sup> )	90 (969)
Operating Parameters		Unit	Value
Maximum Feed water / Filtrate Flow		m <sup>3</sup> /h (gpm)	15 (66)
Maximum Backwash Flow		m <sup>3</sup> /h (gpm)	16.8 (74)
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 Trans-membrane 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 & 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

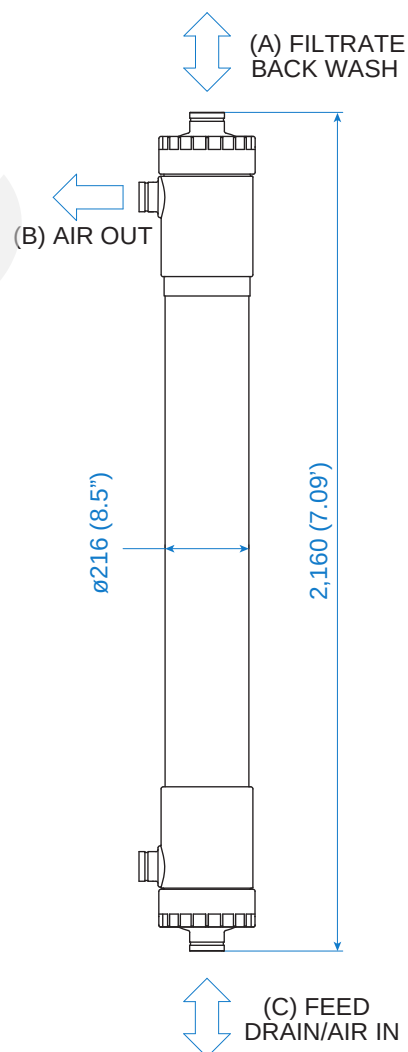
Drinking water, Industrial process water, Pretreatment for seawater RO desalination, Secondary and Tertiary wastewater

# HFUG-2020AN

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

Dimensions and Weight		Unit	Value
Diameter		mm (in)	216 (8.5)
Length		mm (ft)	2,160 (7.087)
Weight	Full of Water	kg (lbs)	92 (203)
	After Draining	kg (lbs)	49 (108)
Connections		Value	
(A) Filtrate Outlet		3" (89,1 mm)	
(B) Air Outlet		2"1/2 (76,3 mm.)	
(C) Feed Water / Air Inlet		3" (89,1 mm)	
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.

## Headquarters

Japan +81 3 3245 4542

## Asia Pacific

China (TBM) +86 10 8048 5216

Singapore (TAS) +65 6226 0525

Korea (TAK) +82 2 3279 7365

## Americas (TMUS)

USA +1 (858) 218 2360

## Europe & Sub-Saharan Africa

(TMEU)

Switzerland +41 61 415 8710

## Middle East (TMME)

Saudi Arabia +966 13 568 0091

U.A.E. +971 4 392 8811

LinkedIn YouTube

For more info, please visit  
**water.toray**