NANOH2O

Product Data Sheet

QuantumFlux™ P1020-S

Pressurized UF Membrane Data Sheet

QuantumFlux™ UF hollow fiber membranes are engineered with Polyvinylidene Fluoride (PVDF) chemistry through the TIPS* process, ensuring exceptional chemical and mechanical durability. Their wide range of module configurations enables users to select the optimal setup for new projects or seamlessly retrofit into existing installations.

*TIPS: Thermally Induced Phase Separation

Key Features & Benefits

Excellent Mechanical Durability

Exceptional mechanical strength reduces fiber breakage and extends fiber lifespan

Excellent Chemical Durability

Excellent resistance to acids, caustics and oxidants

Optimized Module Internal Design

Minimized solid accumulation and membrane fouling

Outside-in Filtration

Versatile operation for a wider range of solid loadings

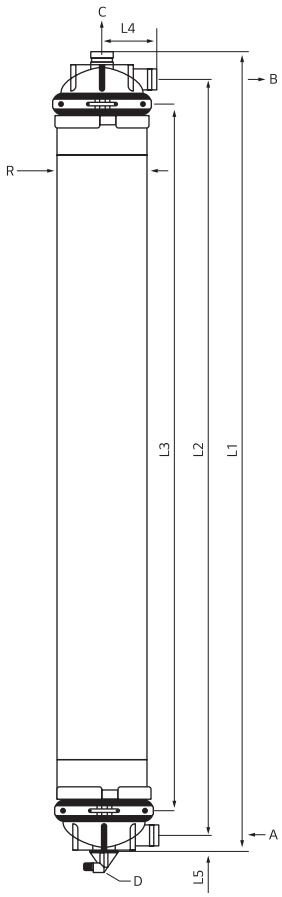
Material Specifications

Membrane Material:	PVDF (TIPS)	Pore Size:	0.04 µm
Housing Material:	uPVC/ABS	Potting Material:	Epoxy/Polyurethane

Dimension Parameters

Filtration Surface Area (m^2) [ft^2]	120 [1,290]
Column Volume (L) [gal]	55 [14.5]
Empty Weight (kg) [lbs]	71 [156.5]
L1 (mm) [inches]*	2,230 [87.8]
L2 (mm) [inches]*	2,109 [83.0]
L3 (mm) [inches]*	2,012 [79.2]
L4 (mm) [inches]*	173.5 [6.8]
L5 (mm) [inches]*	45 [1.8]
R (mm) [inches]*	250 [9.8]

*Approximate dimensions. Check with NanoH2O for the most up-to-date values and applicable drawings.



Port Configuration

Port A (mm) [inches]**	Feed/Drain - DN50 [2] Victaulic Grooved Pipe
Port B (mm) [inches]**	Filtrate - DN50 [2] Victaulic Grooved Pipe
Port C (mm) [inches]**	Concentrate - DN50 Victaulic Grooved Pipe
Port D	Air Inlet - Hose Adapter: 25 mm/19 mm (OD/ID)

**DN50 clamps not included

Design and Operating Parameters

Typical Filtrate Flowrate (m^3/hr) [gpm]	4.8–14.4 [21–63]
Filtration Mode	Outside-in
Typical Flux (LMH) [gfd][1]	40–120 [25–70]
Operating Temperature (°C) [°F]	5–40 [41–104]
pH Range	Operating: 2-12; Cleaning: 1-14
Air Scour Flowrate (m^3/hr/module) [cfm]	15 [9]
Instantaneous Chlorine Tolerance (ppm)	10,000
Maximum Lifetime Chlorine Tolerance (ppm-hrs)	3,000,000
Maximum Feed Turbidity (NTU)[2]	300
Maximum Transmembrane Pressure (bar) [psi]	2.0 [29]
Maximum Feed Pressure (bar) [psi][3]	3.0 [44]
Oil Content in Feed Water (ppm)	< 2
Allowed Particle Size in Feed Water (mm)[2]	≤ 0.5 ≤ 0.12 for Seawater Feeds

1. Flux selection depends on feed type and water quality. Please consult NanoH2O for flux selection.
2. Please consult NanoH2O for deviations.
3. At temperatures of 40°C.

Product Nomenclature

QuantumFlux™ P 10 20 -S

- -S: Filtrate Port Configuration
  - S: Single
  - D: Dual
- 20: Module Length
- 10: Module Diameter
- P: Filtration Mode
  - P: Pressurized
  - S: Submerged

The product performance is expressly conditioned on Buyer's storing, installing, operating, and maintaining Product in accordance with industry-accepted good practices and Seller's written instructions provided in the Seller's Technical Manual may be viewed and downloaded at www.nanoh2owater.com information and data contained herein are deemed to be accurate and reliable and are offered in good faith, but without guarantee of performance. NanoH2O assumes no liability for results obtained or damages incurred through the application of the information contained herein. Customer is responsible for determining whether the products and information presented herein are appropriate for the customer's use and for ensuring that customer's workplace and disposal practices are in compliance with applicable laws and other governmental enactments. Specifications subject to change without notice. QuantumFlux is the Trademark of NanoH2O.
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NSF

This product is certified to NSF/ANSI/CAN 61 for drinking water systems