

QuantumFlux™ S1522

MBR & Submerged UF Membrane Data Sheet

QuantumFlux™ Submerged UF hollow fiber membranes are engineered with Polyvinylidene Fluoride (PVDF) chemistry through the TIPS* process, ensuring exceptional chemical and mechanical durability. Its 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 Design



High packing density to reduce system footprint

Dimension Parameters

Membrane Material	PVDF (TIPS)
Nominal Pore Size (µm)	0.04
Housing Material	ABS
Potting Material	Epoxy/Polyurethane
Filtration Surface Area (m ²) [ft ²]	22 [237]
Wet Weight (kg) [lbs]	9 [20]
L* (mm) [inches]	571 [22.5]
W* (mm) [inches]	45 [1.8]
H* (mm) [inches]	1,540 [60.6]
Filtrate Pipe Port (mm) [inches]	DN20 [¾] ABS OD28

* Approximate dimensions. Check with NANO H2O for the most up-to-date and accurate values.

Design and Operating Parameters

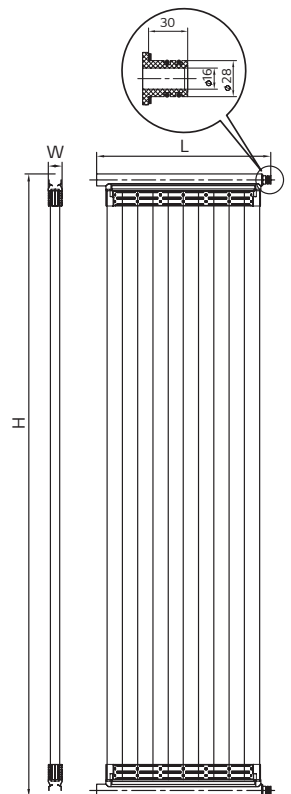
Filtration Mode	Outside-in
Typical Flux (LMH) [gfd] ¹	8–30 [5–18]
Operating Temperature (°C) [°F]	5–40 [41–104]
Oil Content in Feed Water (ppm)	< 2
pH Range	Operating: 1–12; Cleaning: 1–14
Membrane Tank MLSS (mg/L) ²	6,000–12,000, Recommended: 6,000–8,000
Air Scour Rate (m ³ /hr/module) [cfm/module]	2–3 [1.3–1.9]
Instantaneous Chlorine Tolerance (ppm)	10,000
Maximum Lifetime Chlorine Tolerance (ppm-hrs)	3,000,000
Maximum Transmembrane Pressure (bar) [psi]	0.5 [7]
Maximum Backwash Pressure (bar) [psi]	0.5 [7]
Allowed Particle Size in Feed Water (mm) ³	≤ 2

- Flux selection depends on feed type and water quality. Please consult NanoH2O for flux selection.
- Please consult NanoH2O for deviations. Applicable for MBR application only.
- The primary concern is sharp objects entering the treatment system such as branches, plastic pieces, sand, etc.

Product Nomenclature

QuantumFlux™ S 15 22

_____ Module Surface Area
 _____ Module Height
 _____ 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

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