

# QuantumFlux™

Product Data Sheet

## Submerged UF Membrane Data Sheet

LG QuantumFlux™ UF hollow fiber membranes are manufactured using Polyvinylidene Fluoride(PVDF) chemistry through the TIPS\* process, ensuring exceptional chemical and mechanical durability. These membranes are offered in a range of module configurations, allowing users to select the optimal setup for new projects and enabling seamless retrofit in 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

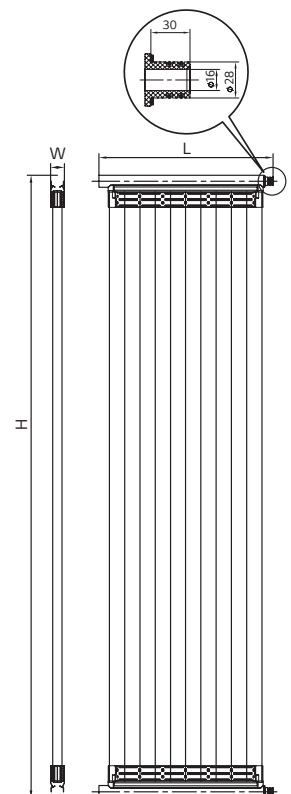
### Dimension Parameters

Module Types	QuantumFlux™ S1015	QuantumFlux™ S1522	QuantumFlux™ S2030
Membrane Material	PVDF (TIPS)		
Nominal Pore Size (um)	0.04		
Housing Material	ABS		
Potting Material	Epoxy/Polyurethane		
Wet Weight (kg) [lbs]	9 [20]	11 [24]	13 [29]
L* (mm) [inches]	571 [22.5]	571 [22.5]	571 [22.5]
W* (mm) [inches]	45 [1.8]	45 [1.8]	45 [1.8]
H* (mm) [inches]	1,040 [40.9]	1,540 [60.6]	2,040 [80.3]
Filtrate Pipe Port [inches] Pipe Port	DN20 [3/4] ABS OD28	DN20 [3/4] ABS OD28	DN20 [3/4] ABS OD28

\*Approximate dimensions. Check with LG Water Solutions for the most up-to-date and accurate values.

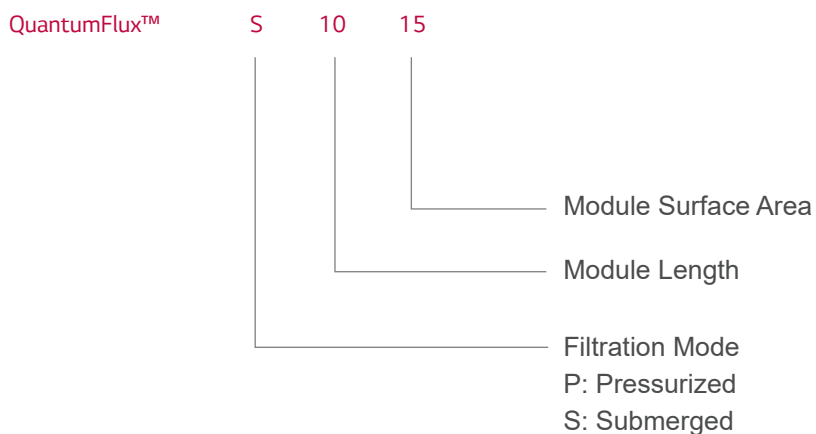
### Design and Operating Parameters

Filtration Surface Area (m <sup>2</sup> ) [ft <sup>2</sup> ]	15 [161]	22 [237]	30 [323]
Filtration Mode	Outside-in		
Typical Flux (LMH) [gfd] <sup>1</sup>	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) <sup>2</sup>	6,000–12,000, Recommended: 6,000–8,000		
Air Scour Rate (m <sup>3</sup> /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) <sup>3</sup>	≤ 2		



1. Flux selection depends on feed type and water quality. Please consult LG Water Solutions for flux selection.
2. Please consult LG Water Solutions for deviations.
3. The primary concern is sharp objects entering the treatment system such as branches, plastic pieces, sand, etc.

## Product Nomenclature



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.lgwatersolutions.com](http://www.lgwatersolutions.com) information and data contained herein are Deemed to be accurate and reliable and are offered in good faith, but without guarantee of performance. LG Chem assumes no liability for results obtained or damages incurred

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