

# QuantumFlux™ S1015

## **Product Data Sheet**

# Submerged UF Membrane Data Sheet

LG QuantumFlux™ 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

#### **Demension Parameters**

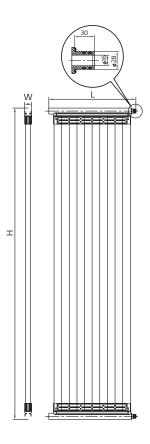
Membrane Material	PVDF (TIPS)
Nominal Pore Size (um)	0.04
Housing Material	ABS
Potting Material	Epoxy/Polyurethane
Wet Weight (kg) [lbs]	9 [20]
L* (mm) [inches]	571 [22.5]
W* (mm) [inches]	45 [1.8]
H* (mm) [inches]	1,040 [40.9]
Filtrate Pipe Port [inches] Pipe Port	DN20 [3/4] ABS OD28

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

## **Design and Operating Parameters**

Filtration Surface Area (m²) [ft²]	15 [161]
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 (m³/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

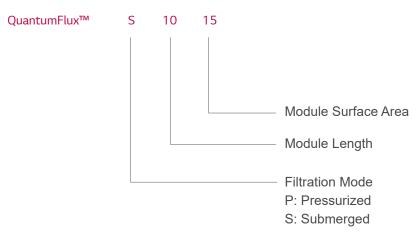
- 1. Flux selection depends on feed type and water quality. Please consult LG Water Solutions for flux selection.
- 2. Please consult LG Water Solutions for deviations.
- 3. The primary concern is sharp objects entering the treatment system such as branches, plastic pieces, sand, etc.



# **LG Water Solutions**



#### **Product Nomenclature**



The product performance is expressly conditioned on Buyer's storing, installing, operat ing, 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 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 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 LG Chem. All rights reserved. © LG Chem, Ltd.