LG Water Solutions

LG Chem

QuantumFlux™

Product Data Sheet

Pressurized 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 Internal Design

Minimized solid accumulation and membrane fouling

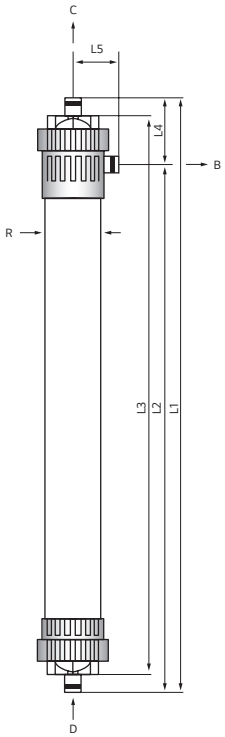
Outside-in Filtration

Versatile operation for a wider range of solid loadings

Dimension Parameters

Module Types	QuantumFlux™ P0717-S
Membrane Material	PVDF (TIPS)
Pore Size (µm)	0.04
Housing Material	uPVC/ABS
Potting Material	Epoxy/Polyurethane
Column Volume (L) [gal]	20 [5.3]
Empty Weight (kg) [lbs]	35 [77.2]
L1 (mm) [inches]*	1,919 [75.6]
L2 (mm) [inches]*	1,704 [67.1]
L3 (mm) [inches]*	1,800 [70.9]
L4 (mm) [inches]*	216 [8.5]
L5 (mm) [inches]*	145 [5.7]
R (mm) [inches]*	180 [7.1]
Port B (mm) [inches]*	Concentrate Port - DN40 [1 1/2]
Port C (mm) [inches]*	Filtrate Port - DN50 [2]
Port D (mm) [inches]*	Feed/Discharge/Air Inlet Port - DN50

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



Design and Operating Parameters

Filtration Surface Area (m^2) [ft^2]	56 [603]
Typical Filtrate Flowrate (m^3/hr) [gpm]	2.2–6.7 [9.7–29.5]
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]	5.1 [3.0]
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]	4 [58]
Oil Content in Feed Water (ppm)	< 2
Allowed Particle Size in Feed Water (mm)[2]	≤ 0.5 ≤ 0.12 for seawater

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. At temperatures of 40°C.

Please visit our website for regional contact information or e-mail waterinfo@lgchem.com www.lgwatersolutions.com