

Liqua Flow D56

Ultrafiltration module for self-assembled racks

Product Features

- Advanced PES multi-layer membrane fibers:
- Permanently hydrophilic PES membrane fibers
- Produced by a dry-wet mixed spinning process.
- Excellent physical strength and chemical resistance.
- Ultra-high log removal of colloids, bacteria and viruses.
- Micro-flocculation can be applied to enhance removal of algae and organics.

Optimized membrane module design:

- Multi-zone 3D potting technology.
- No dead zones; uniform flow distribution during filtration and backwash.
- EPOX potting material for robustness and long service life.
- Can be stored dry without affecting performance.

Main Application Areas

- Municipal water purification and wastewater reuse.
- Water purification and reclaimed-water reuse in power, steel, petrochemical and other industries.
- Seawater desalination.
- Rural drinking water, livestock water purification and marine aquaculture.
- An ideal filtration solution for medium and large projects.



Membrane Module Specifications

Filtration Mode:	Dead-end or Cross-flow
Membrane Type:	Inside-out (Internal Pressure)
Membrane Material:	PESm Modified Polyethersulfone
Nominal Pore Size:	0.02 µm (80,000-100,000D)
Housing Material:	PVC-U, White

Dimensions		
Effective Membrane Area	56m ²	602.8ft ²
Membrane Module Length	1,900 mm	76.0 inch
Membrane Module Diameter (D)	219mm	9.76 inch
Weight and Volume		
Shipping Weight (Module Only)	28 kg	61.7 lbs.
Flooded Weight (Module and Piping)	83 kg	182.9 lbs.
Flooded Volume (In-line Cleaning = CIP)	78 L	3.55 gal

Recommended Operating Conditions

Typical Operating Parameters		
Filtration Flux	50-120 L/(m ² h)	29.4- 70.67 gfd
Backwash Flux	180-250 L/(m ² h)	106-147 gfd
Typical Transmembrane Pressure (TMP)	0.1 - 0.6 bar	1.5 - 8.7 psi
Typical Backwash Pressure (TMP)	0.3 – 1.5 bar	4.4 – 22.5 psi
Operating pH	3 - 11	—
Cleaning pH	1 - 13	—
Operating Temperature Range	1 - 40 °C	34 - 104 °F
Operating Limits (Maximum)		
Temperature Change Rate	5 °C/min	9 °F/min
Inlet Pressure	5 bar	73 psi
Pressure Change Rate	0.5 bar/sec	7.3 psi/sec
Filtration Transmembrane Pressure (TMP)	1.5 bar	22 psi
Backwash Transmembrane Pressure (TMP)	2.5 bar	37.5psi
Filtration Flux	180 L/(m ² h)	106 gfd
Filtration Flow Rate	6.7 m ³ /h	29.49 gpm
Backwash Flux	300 L/(m ² h)	176 gfd
Particle Size	300 µm	—
NaOCl Exposure Tolerance	≤ 250,000 ppm×h (at pH ≥ 9.5)	—
NaOCl Concentration	250 ppm	—

General Information

- During start-up, operation, shutdown, cleaning or any other process, avoid sudden pressure changes to prevent possible membrane damage. Maximum allowed pressure change rate is 0.5 bar/s.
- For installation, please contact us for the installation manual.
- Any warranty will be void if the operating limits and guidelines specified in this notice are not strictly followed.
- During prolonged system shutdown, the system must be cleaned and stored or preserved with a protective solution to inhibit microbial growth.

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