



AQUEOUS
PRECISION IN PURIFICATION

Aqueous HF-S Series

PVDF Hollow Fibre Membranes – Standard



1. Product Overview

The AQUEOUS HF-S SERIES comprises standard-grade PVDF hollow fibre membranes designed for microfiltration (MF) and ultrafiltration (UF) applications in municipal and industrial water and wastewater treatment systems.

The series is optimised for high permeability, stable filtration behaviour, and efficient hydraulic performance under controlled mechanical loading and moderate MLSS conditions.

2. Membrane Material & Fibre Architecture

- Base polymer: Polyvinylidene fluoride (PVDF)
- Fibre configuration: Hollow fibre
- Fibre morphology: Asymmetric porous structure
- Surface property: Hydrophilic
- Filtration mode: Outside-in/ Inside-out
- Filtration mechanism: Surface-dominated

The fibre architecture consists of a selective outer layer supported by a porous sub-layer, enabling consistent separation performance with low intrinsic hydraulic resistance.

3. HF-S Product Variants

Product Variant	Filtration Grade	Nominal Pore Size	Typical Application Focus
HF-S-MF	Microfiltration	~0.1 μm	MBR, suspended solids & bacteria removal
HF-S-UF	Ultrafiltration	~0.02 μm	MBR, tertiary filtration, reuse polishing

Filtration grade selection does not alter fibre geometry or module compatibility.

4. Mechanical Performance Profile

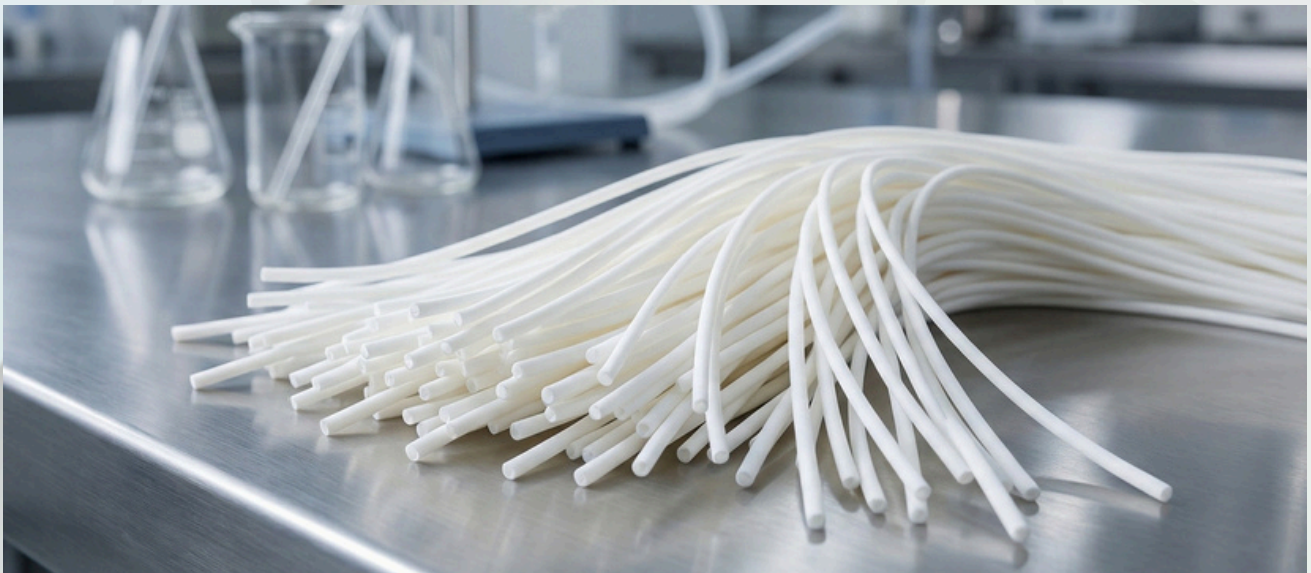
Attribute	HF-S SERIES
Tensile strength	Optimised
Elongation resistance	Standard
Fatigue resistance	Standard
Abrasion tolerance	Moderate
Long-term stability	High (under controlled loading)

5. Operating Envelope

Parameter	Value
Typical operating flux	Application dependent
Operating temperature	5 – 40 °C
Operating pH range	2 – 12
Backwash compatibility	Full hydraulic backwash
Chemical cleaning agents	Oxidants, organic acids
Aeration tolerance	Standard
MLSS suitability	Moderate

6. Standard Fibre Dimension Options.

Fibre Code	Outer Diameter (OD)	Inner Diameter (ID)	Wall Thickness
HF-S-21	~2.1 mm	~1.0 mm	~0.55 mm
HF-S-23	~2.3 mm	~1.1 mm	~0.60 mm
HF-S-25	~2.5 mm	~1.2 mm	~0.65 mm
HF-S-28	~2.8 mm	~1.3 mm	~0.75 mm



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