Datasheet

Perma Filters

PermaFilters™

VI 3384-HS

Membrane Bioreactor Membrane Module

VI 3384-HS

Product Features

Patented Membrane Technology

Our advanced patented manufacturing process produces high-strength hollow fiber membranes with a tensile strength exceeding 600N.

Advanced Coating Technology

The membranes feature 0.03 μm separation pores with a uniform pore size distribution, ensuring excellent removal rates for particles, bacteria, viruses, and colloids.

Hydrophilic PVDF Material

The highly hydrophilic PVDF material guarantees stable high permeability during operation.

Robust Structural Design

The reliable product structure is designed to handle higher sludge concentrations and can withstand varying inlet water quality conditions.

Compatibility and Ease of Installation

The system is compatible with other ultrafiltration and microfiltration systems, ensuring straightforward installation.

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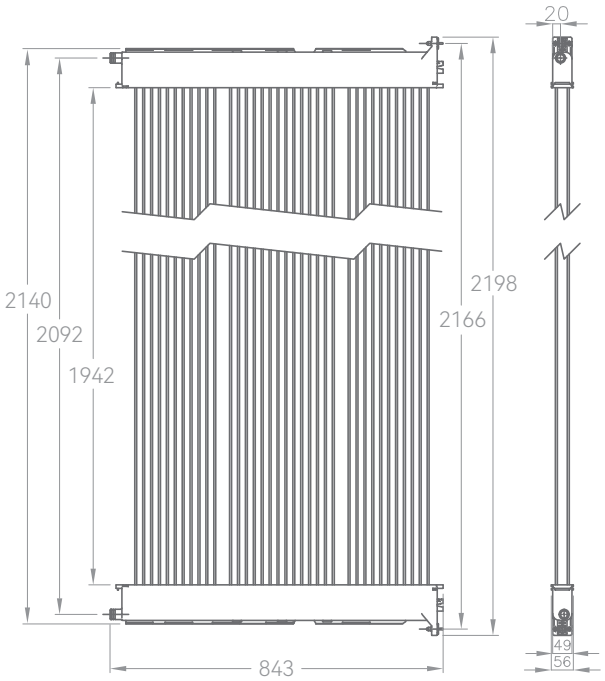
Product Specifications

Membrane Type	Hollow Fiber
Membrane Material	PVDF (Polyvinylidene fluoride)
Nominal Pore Size (μm)	0.03
ID/OD (mm)	1.0/2.0
Effective Membrane Area (m^2)	34.4/31.6
Housing/End Cap Material	UPVC/ABS
Operating Mode	Outside-In
Dimension(mm)	843×2198×49
Weight (Kg)	20



Operating Conditions

Operating pH Range	2-9.5
CIP pH Range	2-12
Temperature (℃)	1-40
Operating TMP (bar)	<0.3
Maximum TMP (bar)	<0.55
Recommended CIP concentration Sodium Hypochlorite (ppm)	2000

Important Information

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To ensure the stable operation, the water quality and instrumentation should be checked and confirmed before the initial use or after long-term disuse to ensure that the product operates within the appropriate range of use conditions. When the modules leave the factory, the membranes have been hydrophilized and transported in a dry state. Before being put into use, the modules must be soaked in clean water for at least 30 minutes. Only then can raw water containing activated sludge enter the membrane tank. The modules should not be dehydrated or dried once in operation, as this would reduce the flux and require restoration efforts. Modules should be stored flat, away from direct sunlight, within a temperature range of 5–40℃, and must not be immersed in water. Freezing is strictly prohibited. If it is unavoidable to transport and store in cold areas, the modules need to be protected with antifreeze protection liquid. For detailed antifreeze measures, please refer to the product technical manual.

In areas where sparks may occur from welding, fusing, or grinding, it is essential to cover the modules with a fireproof layer to prevent ignition. When storing membrane modules, avoid placing heavy objects on top or subjecting them to compression. While the modules are suspended in the activated sludge tank, continuous aeration is necessary. If disassembling the modules for storage, remove any adhering sludge and soak the modules in a sodium hypochlorite solution with an effective chlorine concentration of at least 100 ppm. Additionally, avoid prolonged direct exposure of the membrane modules to ultraviolet light and sunlight, as this can lead to accelerated aging.

Customers must strictly follow the operating conditions and requirements outlined in the product technical manual when designing, operating, and maintaining the system. Without written approval from Perma Filters, failure to adhere to the requirements in the product manual will be regarded as a voluntary waiver of warranty. For systems operating under harsh conditions or for special applications, it is recommended to seek technical clarifications. Please contact Perma Filters or visit the company website for further inquiries www.permafilters.com.