DEM PVDF-AG Water Filter

DEM PVDF-AG 10 series
DEM PVDF-AG 20 series

Importance of Water Filter for Drinking Water

Product Description

Introducing our versatile 10-inch and 20-inch multi-stage water filters, designed for flexibility and superior filtration. These systems are built to adapt to your changing water purification needs, allowing for seamless configuration and the addition of extra stages as required. Whether you need basic sediment filtration or advanced purification, these filters can be easily customized to deliver the level of filtration that best suits your environment.

Membrane filtration is an efficient technology for industrial wastewater treatment that utilizes a semipermeable membrane to effectively remove contaminants, solids, and other impurities. This process surpasses traditional treatment methods by delivering improved efficiency, lower costs, and superior water quality. De.mem leverages a portfolio of proprietary hollow fiber membrane technologies as a core component of their water and wastewater treatment systems, with a notable focus on microfiltration modules made from PVDF (polyvinylidene fluoride). These membranes have a molecular weight cut-off of approximately 300,000 Da.

De.mem's PVDF hollow fiber microfiltration membranes provide high-performance separation, characterized by excellent mechanical strength and minimal fouling tendencies. Their robust chemical and thermal stability makes them particularly suitable for various wastewater applications. Operating at low feed pressure further enhances their efficiency by significantly reducing energy consumption, which leads to lower operating costs and a smaller carbon footprint. The membranes are effective in removing fats, oils, grease, suspended solids, and microparticles, producing high-quality effluent ready for discharge. Notably, pre-treatment is essential for extending the lifespan of the membranes.

A key advantage of De.mem's PVDF membranes is their production using a specialty chemical that imbues advanced anti-fouling properties. This innovation effectively addresses fouling—a major challenge in filtration processes—ensuring stable filtration performance over extended periods. Consequently, users benefit from fewer necessary cleaning cycles, reduced downtime, and lower maintenance and replacement costs. In summary, De.mem's low-pressure membrane technology not only provides a more energy-efficient and cost-effective solution but also offers the flexibility needed for a diverse range of water treatment applications, maximizing overall performance while minimizing long-term operating expenses.

demem

Technical Features - Overview

PP Filter (10 micron)

NSF 42 certified

This filter is designed to effectively remove a wide range of contaminants, including various impurities, dirt, suspended solids, sediments, rust, and more from your water supply. By targeting these particles in the pre-filtration stage, the system not only ensures that your water is clean and safe but also significantly enhances the overall efficiency of the entire filtration process. This initial filtration step plays a crucial role in reducing the load on subsequent filters, thereby improving their performance and extending their operational lifespan.

Carbon Block (5 micron)

NSF 42 Certified

Carbon filtration is a highly effective method for eliminating chemicals and contaminants typically present in tap water. These carbon block cartridges excel at improving taste and odour while significantly reducing chlorine and chloramines. They are also highly efficient at removing organic compounds, lead, cysts, and a wide range of volatile organic compounds (VOCs), making them an outstanding choice for ensuring cleaner, safer, and better-tasting water.

PVDF Microfiltration Membrane with SHP (< 0.1 micron)

Building on the success of our advanced filtration solutions, De.mem introduces **Micro-Filtration PVDF Membranes with SUPER HYDROPHILIC POLYMER (SHP)**, a cutting-edge specialty additive designed to elevate membrane performance.

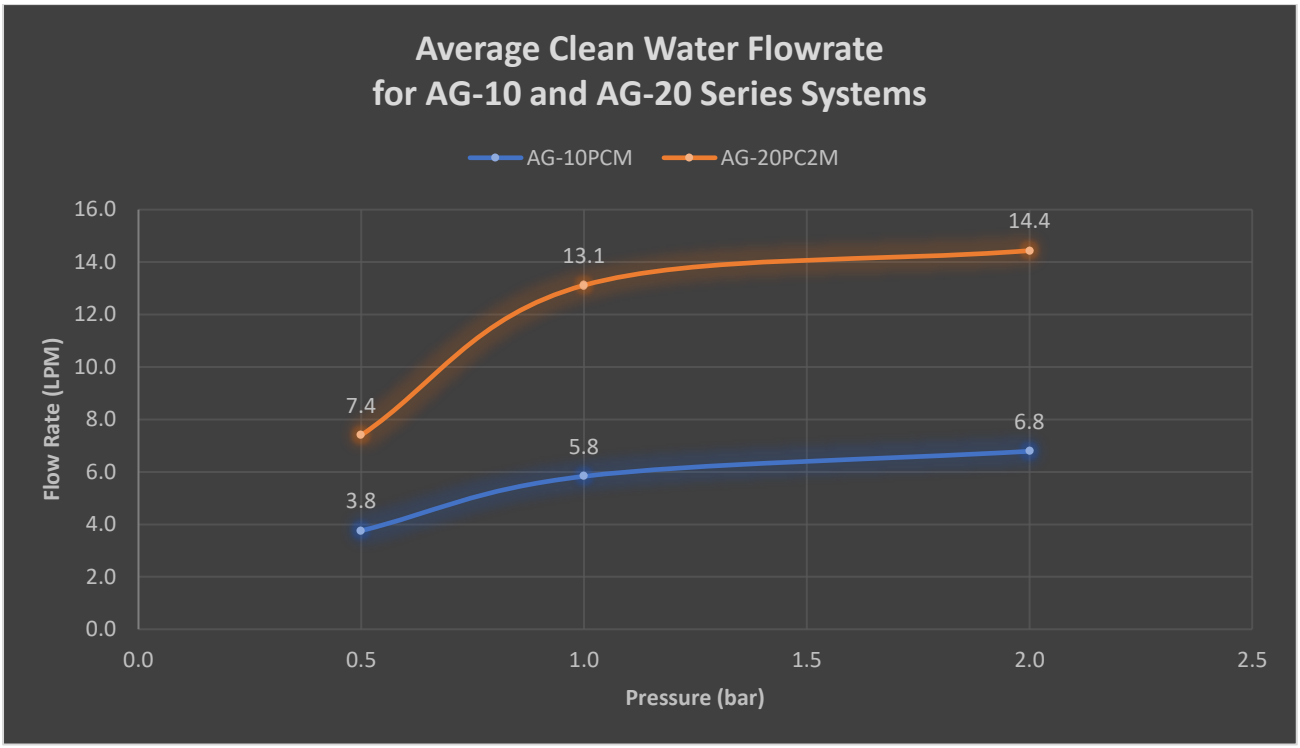
Why SHP?

1. **Enhanced Antifouling Properties**: SHP's unique formulation significantly reduces fouling from biological and chemical contaminants, ensuring prolonged operational efficiency and minimizing maintenance requirements.
2. **Longer-Lasting Durability**: With SHP's reinforcement, PVDF membranes demonstrate improved resistance to wear and tear, extending their service life even in challenging operational conditions.
3. **Broad Chemical Stability**: Compatible across a wide range of pH values, membranes with SHP offer reliable performance in both residential and industrial environments.
4. **Sustained High Water Flow Rates**: With superior filtration and antifouling features, SHP enables membranes to maintain excellent permeability, ensuring consistent water flow rates.

Model No.	DEM AG-10CM	APPLICATION
Size / mm	L530 x W200x H320	
Weight / KG	7.5 kg	Compact and easy to install
Flow Rate (2bar) / LPM	6.8 LPM	Only need to change the Filter Element for a lower maintenance cost
Capacity	5,000 Litres	Cartridges recommended to be replaced 5,000 litres or 18 months, whichever comes first.

demem

Model No.	DEM AG-20PCM	APPLICATION
Size / mm	L530 x W280 x H730	
Weight / KG	17 KG	Compact and does not take up space
Flow Rate (2bar) / LPM	14 LPM	Only need to replace Filter Element for a lower maintenance cost
Capacity	10,000 Litres	Cartridges recommended to be replaced 10,000 litres or 18 months, whichever comes first.



The chart above shows a comparison of flow rate between the standard DEM PVDF-AG 10 and 20 series water filter systems

For further information, please contact:
Email: info@dememb.com.sg
Office: +65 6265 2504
Website: www.dememb.com

Revision: Jun 24