

FHMPP High-Flow Capacity PP Melt-blown Filter Cartridge



The FHMPP filter cartridge is a tubular filtration element manufactured from polypropylene resin through a series of processes including melting, extrusion, spinning, drawing, and forming. The cartridge can be reinforced with a center core to enhance mechanical strength, and is available with a variety of thermally bonded end cap configurations to suit different installation requirements. This cartridge series is widely used in water purification applications and offers excellent chemical compatibility, allowing filtration of strong acids, alkalis, and organic solvents. It is characterized by high dirt-holding capacity, long service life, and cost-effectiveness.

The FHMPP cartridge features exceptional contaminant retention capability. Its deep-layer structure captures particles through graded density filtration, effectively trapping contaminants at different depths. This high retention capacity translates into longer service life, reduced replacement frequency, and lower operating costs. The filter density is lower on the outer surface and gradually increases toward the inner core. This gradient design prevents surface blinding, ensures high flow rates, and minimizes the need for frequent replacements.

Product Features

- ❖ **High Filtration Precision:** The FHMPP cartridge filters progressively from the outside inward. As fluid flows toward the inner layer, the pore size gradually decreases, resulting in higher filtration precision.
- ❖ **High Flow Rate with Low Pressure Drop:** The three-dimensional tortuous-path micro-pore structure provides a large specific surface area and high porosity. Water passes through rapidly, achieving high flow rates while maintaining a low pressure differential across the cartridge.
- ❖ **Hygienic and Safe:** The cartridge is formed through fiber self-bonding without the use of chemical binders. It exhibits excellent chemical stability (resistant to acids, alkalis, and organic solvents), complies with food-grade hygiene standards, and prevents secondary contamination of the filtered liquid.

Product Parameters

Parameters	Specification		
Length (inch/mm)	20 (508)	40 (1016)	60 (1524)
Design Flow Rate (m ³ /h)	20	30	40
Specifications	Melt-blown (Standard Type, PP Frame Type)		
Connection	Standard Interface		
Filtration Accuracy (μm)	1、 5、 10、 20、 40、 70、 100		

Diameter (mm)	Outer Diameter: 152 ; Inner Diameter: 89
Maximum Operating Differential Pressure (MPa)	0.24@20°C、 0.34@82°C
Maximum Temperature (°C)	82

Applications



New Energy



Water Treatment



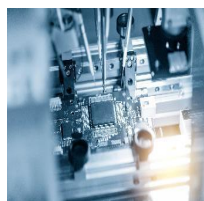
Iron and Steel
Metallurgy



Biomedicine



Food and Beverage



Precision Instruments



Equipment
Manufacturing



Daily Household Use



Farm Irrigation



Mining and Smelting

Precautions

Selection & Operation Guide

When selecting FHMPP filter cartridges, consider the following:

- ❖ **Structure and Type:** The cartridge surface is available in various configurations including flat, embossed, grooved, and needle-punched. Grooved types increase dirt-holding capacity through enhanced surface area, while needle-punched types improve particle retention through a perforated structure.
- ❖ **Quality and Weight:** The fiber density should be (well-balanced), with a dirt-holding capacity of 3–5 kg/m². Avoid products that are excessively heavy (which may indicate the presence of calcium carbonate fillers) or overly light (indicating insufficient density).
- ❖ **Material and Performance:** Made from food-grade polypropylene, the gradient structure enables filtration from coarse to fine, effectively capturing particles larger than 5 µm. It is resistant to acids and alkalis and contains no chemical binders.

Maintenance and Replacement

- ❖ **Replacement Cycle:** Residential applications: Recommended every 3–6 months. In cases of poor water quality or high water consumption, shorten the interval to 1–3 months. Industrial applications: Replace according to actual operating conditions and system requirements.
- ❖ **Replacement Indicators:** The filter element turns yellow or discolored. The flow rate drops by approximately one-third. System warning or alarm indicates a clogged filter.
- ❖ **Size Compatibility:** The listed cartridge lengths are standard dimensions. Dimensional deviations in actual use may affect sealing performance. Always confirm proper fit before installation.

*For specialized applications or customized solutions, please contact FFM Inc. directly.