



EMAIL: FILTRATION@JOHNBROOKS.CA

HPPE Series Filter Cartridges

*“Absolute” Rated Economical
Pleated Filter Cartridges*



Product Specifications

Media: Polypropylene

Inner core, end caps, cage:
Polypropylene

Gaskets/O-Rings:

Buna-N, EPDM, Silicone, Viton, Teflon
Encapsulated Viton (O-Rings only)

Micron ratings:

0.2, 0.45, 1.0, 2.5, 5.0, 10, 25, 50 μm

Dimensions

Nominal lengths:

5" 9.75" 10" 20" 30" 40"
12.7 24.8 25.4 50.8 76.2 101.6 cm

Outside diameter: 2.55" (6.48 cm)

Inside diameter: 1.0" (2.54 cm)

Operating Parameters

Maximum operating temperature:
176°F (80°C)

Maximum differential pressure:
50 psid @ 70°F (3.4 bar @ 21°C)
25 psid @ 176°F (1.7 bar @ 80°C)

Recommended change-out pressure:
35 psid (2.4 bar)

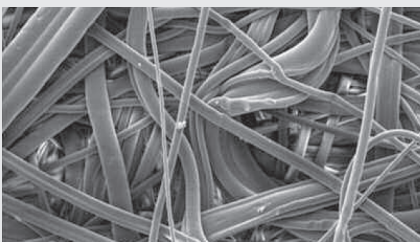
For cost driven applications, choose the HPPE Series to deliver absolute efficiency in a broad range of particle sizes. This all polypropylene filter is suitable for a wide range of applications and carries all the needed industry certifications to satisfy most critical requirements. In addition, the slightly smaller diameter ensures easy retrofit in installed housings designed to accept depth filters. The pleated construction provides high dirt holding capability and low pressure drops.

FEATURES & BENEFITS

- Micron ratings from 0.2 to 50 μm — Broad application range
- 2.55" diameter to fit installed housings with ease
- “Absolute” Efficiency — Rated at 99.98% (Beta 5000)
- Optimized surface area — High dirt holding for long service life
- Fixed pore structure — Eliminates dirt unloading at maximum differential pressure
- Polypropylene Construction — Inert to many process fluids
- Various Gasket/O-Ring materials — Compatible with a variety of fluids
- Manufactured in continuous lengths up to 40 inches

FEATURES & BENEFITS

- FDA Listed Materials — All materials comply with FDA Title 21 of the Code of Federal Regulations Sections 174.5, and 177.1520, as applicable for food and beverage contact.



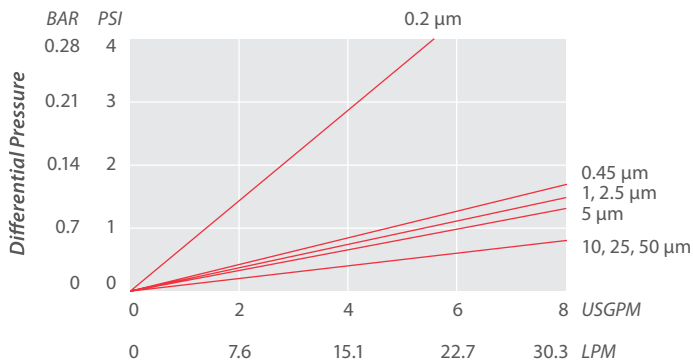
HPPE NOMENCLATURE INFORMATION

Filter Type	Retention Rating (microns)		Nominal Length (inches)		End Configuration		Gasket or O-Ring	
	HPPE Series	0.2	5	-5	-20	P	Double Open End	B
	0.45	10	-9.75*	-30	P2	226/Flat Single Open End	E	EPDM
	1	25	-10	-40	P3	222/Flat Single Open End	S	Silicone
	2.5	50			P7	226/Fin Single Open End	T	Teflon encap. Viton (O-Rings only)
					P8	222/Fin Single Open End	V	Viton
Example: HPPE 5-10P3B								
HPPE	5		-10		P3		B	

*Available only for DOE (P) configuration

HPPE FLOW RATE

Typical Flow Rate Clean Water at Ambient Temperature
(per 10" cartridge)



For liquids other than water, multiply pressure drop by the fluid viscosity in centipoise

REMOVAL EFFICIENCY

Beta Ratio Efficiency	Beta 5000 99.98%	Beta 10 90%
0.2 µm	0.20	0.08
0.45 µm	0.45	0.25
1 µm	1.0	0.5
2.5 µm	2.5	1.0
5 µm	5.0	1.8
10 µm	10.0	6.0
25 µm	25.0	11.0
50 µm	45.0	25.0

$$\text{Beta Ratio} = \frac{\text{Upstream particle counts}}{\text{Downstream particle counts}}$$

The micron ratings shown at various efficiency and beta ratio value levels were determined through laboratory testing, and can be used as a guide for selecting cartridges and estimating their performance. Under actual field conditions, results may vary somewhat from the values shown due to the variability of filtration parameters.

Testing was conducted using the single-pass test method, water at 3 gpm/10" cartridge. Contaminants included latex beads, coarse and fine test dust. Removal efficiencies were determined using dual laser source particle counters.



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