

EMAIL: FILTRATION@JOHNBROOKS.CA



### **Product Specifications**

#### Media: Polypropylene

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

**Polypropylene micron ratings:** 0.2, 0.25, 0.45, 0.5, 1.0, 2.0, 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: 2.7" (6.86 cm) Inside diameter: 1.0" (2.54 cm)

### **Operating Parameters**

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

**Maximum differential pressure:** 75 psid @ 70°F (5.2 bar @ 21°C) 30 psid @ 176°F (2.0 bar @ 80°C)

Maximum reverse pressure: 40 psid @ 70°F (2.8 bar @ 21°C)

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



# HPPC Series Filter Cartridges

Economically Efficient Pleated Filter Cartridges

This cost effective, disposable filter element can be used for a wide range of applications. The filter is constructed of pleated polypropylene filter media with high surface area that allows for greater system flow rate.

## **FEATURES & BENEFITS**

- Micron ratings from 0.2 to 50 μm Broad application range
- Fixed pore structures Resists unloading of captured contaminant
- Polypropylene Construction Inert to many process fluids
- Various Gasket/O-Ring materials Compatible with a variety of fluids
- Economically efficient filtration
- Manufactured in continuous lengths up to 40 inches

## CERTIFICATIONS

- USP Class VI: Meets USP Class VI Biological Test for Plastics
- 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.
- European Directive for Direct Food Contact: European Regulation No. 1935/2004 and European Regulation 10/2011: Tested for migration behavior and is suitable for contact with all kinds of foodstuffs with minimal rinse-up. Data available upon request.

HPPC NOMENCLATURE INFORMATION									
Filter Type	Retention Rating (microns)		Nominal Length (inches)		End Configuration		Gasket or O-Ring		
HPPC	0.2	2	-5	-20	Р	Double Open End	В	Buna-N	
Series	0.25	5	-9.75*	-30	P2	226/Flat Single Open End	Е	EPDM	
	0.45	10	–10	-40	P3	222/Flat Single Open End	S	Silicone	
	0.5	25			P7	226/Fin Single Open End	т	Teflon encap.	
	1	50			P8	222/Fin Single Open End		Viton (O-Rings	
				AM	Single Open End, Internal O-Ring	T	T Toflop Cosket		
Example: HPPC 2–20P8V					NPC	Double Open End, Internal O-Ring	V	Viton	
HPPC	2	_	-20		P8		V		

\*Available only for DOE (P) configuration

## **HPPC FLOW RATE**



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.

REMOVAL EFFICIENCY							
Beta Ratio Efficiency	Beta 50 98%	Beta 10 90%					
0.2 μm	0.28	0.20					
0.25 μm	0.35	0.25					
0.45 μm	0.6	0.45					
0.5 μm	0.7	0.5					
1 μm	1.5	1.0					
2 µm	2.7	2.0					
5 μm	7.0	5.0					
10 µm	12.0	10.0					
25 µm	32.0	25.0					
50 µm	70.0	50.0					
Upstream particle counts							

Beta Ratio =

**Downstream particle counts** 



1-877-624-5757 www.johnbrooks.ca