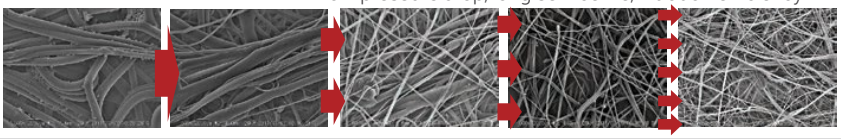
MultiPoly® FILTER CARTRIDGES

MULTI-LAYER PLEATED POLYPROPYLENE MEDIA FOR PRE-FILTRATION AND ELIMINATION OF CONTAMINANTS IN HIGHLY VISCOUS LIQUIDS, INCLUDING GELS AND AGGLOMERATES, COLLOIDS, AND SUSPENDED PARTICULATES

MultiPoly® Filter Cartridges are composed of multi-layered pleated polypropylene. These filters have a depth filter design that includes graded pore size and high contaminant holding capacity which eliminates contaminants (including gels and agglomerates) in highly viscous liquids, and avoids filter surface plugging. The graded pore size distribution from coarse (upstream) to fine (downstream) removes particles gradually and extends the filter's service life making it especially suited for suspended particulates, colloids, and viscous liquids.

FEATURE	BENEFIT
5 to 7 layers of PP media with graded pore size distribution	Enables additional particle loading and high contaminant holding capacity Low pressure drop, long service life, filtration efficiency
Multi-layer nano fiber media	Provides excellent removal of contaminants including gels and agglomerates
Polypropylene construction	Excellent chemical compatibility



Typical Applications

- Culture Medium
- Fermentation Broths
- Gel Materials
- High Viscosity Materials
- Serums

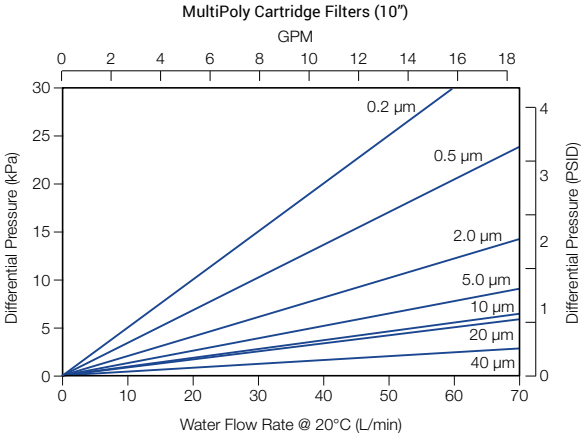
QUALITY STANDARDS

Quality Assurance	These products are manufactured in a facility which adheres to ISO 9001 Practices.
TOC / Conductivity at 25°C	Autoclaved filter effluent meets the USP <643> for Total Organic Carbon and USP <645> for Water Conductivity per WFI requirements after a UPW flush of specified volume.
Particle Shedding	Autoclaved filter effluent meets the requirements in USP <788> for large volume injections
Non-Fiber Releasing	Component materials meet the criteria for a "Non-fiber-releasing filter" as defined in 21 CFR 210.3 (b) (6)
Bacterial Endotoxin	Aqueous extraction of autoclaved filter contains < 0.25 EU/mL as determined by Limulus; Amebocyte Lysate (LAL), USP <85>.
USP <87> Cytotoxicity	Meet the requirement of USP <87> In Vitro Cytotoxicity Test
USP <88> Biological Toxicity	Meet the criteria of the USP <88> Biological Reactivity Test for Class VI-121°C plastics.
Indirect Food Additive	All component materials meet the FDA Indirect Food Additive requirements cited in 21 CFR 177–182, and EU framework regulation [1935/2004/EC].

SPECIFICATIONS

Filter media	Multi-Layer Nano Fiber Polypropylene
Supports/core/cage/end caps	Polypropylene
Effective filtration area	0.26 - 0.29m² (2.7 - 3.1ft²)/ 10" x Layers
O-rings	Silicone, EPDM, FKM, FEP/PFA encapsulated FKM
O-ring internal insert	PBT
Cartridge diameter	69 mm (2.7 in.)
Max. Operating pressure	0.69 MPa (6.9 bar, 100 psi) at 25°C 0.40 MPa (4.0 bar, 58 psi) at 60°C 0.24 MPa (2.4 bar, 35 psi) at 80°C
Max. Differential pressure	Forward: 0.69 MPa (6.9 bar, 100 psi) at 25°C 0.40 MPa (4.0 bar, 58 psi) at 60°C 0.24 MPa (2.4 bar, 35 psi) at 80°C Reverse: 0.3 MPa (3.0 bar, 44 psi) at 25°C 0.1 MPa (1.0 bar, 15 psi) at 80°C

FLOW RATES



ORDERING INFORMATION

EXAMPLE: **PFSA21000HSF10E-P** = 10 µm, 226/Fin, 10" filter with EPDM seals

PFSA2 [ ] [ ] [ ] [ ] **-P**

Removal Rating

0020 = 0.2 µm	1000 = 10 µm
0030 = 0.3 µm	2000 = 20 µm
0050 = 0.5 µm	4000 = 40 µm
0060 = 0.6 µm	5000 = 50 µm
0120 = 1.2 µm	7000 = 70 µm
0150 = 1.5 µm	9000 = 90 µm
0200 = 2.0 µm	15000 = 150 µm
0500 = 5.0 µm	

Connection

DOE = Double Open End, Flat Gasket
HTC = 222 O-ring/Flat (PBT insert)
HTF = 222 O-ring/Fin (PBT insert)
HSC = 226 O-ring/Flat (PBT insert)
HSF = 226 O-ring/Fin (PBT insert)

Nominal Length

05 = 5"
10 = 10"
20 = 20"
30 = 30"
40 = 40"

Seal Material

S = Silicone
E = EPDM
V = FKM
P = E-FKM (FEP/PFA encapsulated FKM)

BannerIndustries

www.bannerindustries.com | Technical Sales: filtration@bannerindustries.com

CBBPP1051 Rev. 12112019