HARMSCO®

PES FB

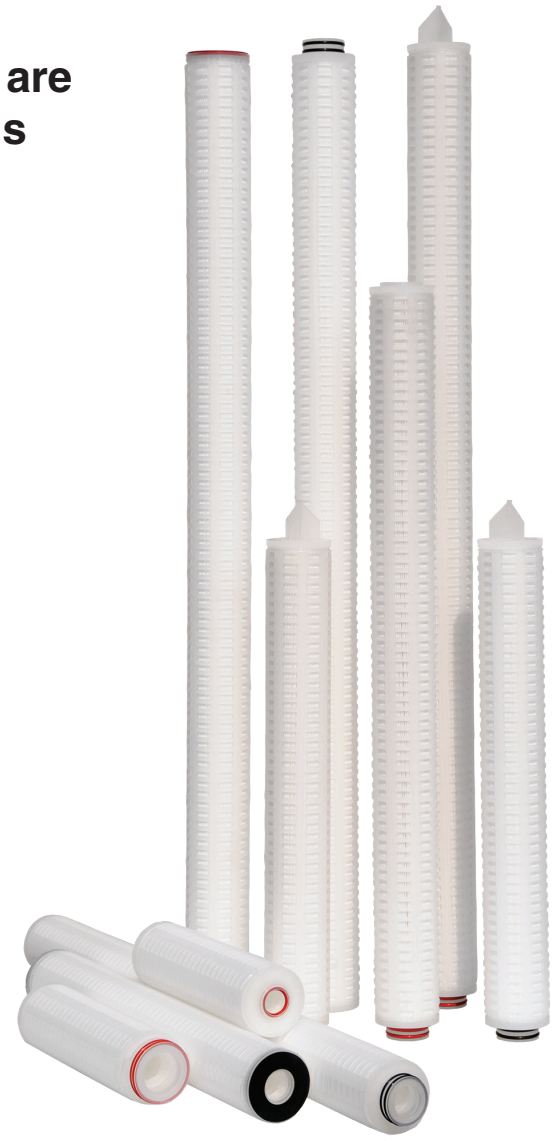
All-Poly Absolute Rated Food & Beverage Grade

Absolute Rated

Hydrophilic Polyethersulfone Membrane Cartridges

Harmsco® High Purity Pleated Cartridges are manufactured for use in most applications where absolute rated filtration is needed.

Long service life
High flow rates
Low pressure drop
High permeability



Pleated Hydrophilic Polyethersulfone Membrane Cartridges

Features

- Cartridge Assembly Materials are 100% polypropylene; avoids leaching or contamination
- High efficiency for critical filtration applications
- Pleated design for extended surface area
- Polypropylene end cap, thermally welded to media, cage and core
- USP Class VI - 121˚C (250˚F) for plastics
- Offered in multiple lengths and end cap configurations to fit in most filter housings
- FDA Listed Materials: Manufactured from materials which are listed for food contact applications in Title 21 of the U.S. Code of Federal Regulations

Applications

- Wine
- Beer
- Juices
- R/O Pre-filtration
- Soft Drinks
- Bottled Water
- Distilled Water
- Chemicals

All-Poly Absolute Rated

Specifications

Construction Materials

Membrane..... Polyethersulfone (PES)
Support Media ..... Polypropylene
End Caps..... Polypropylene
Center Core..... Polypropylene
Outer Support Cage ..... Polypropylene
O-rings/Gaskets.....Buna, Viton, EPDM, Silicone, Teflon® Encapsulated Viton

Toxicity

All components meet the specifications for biological safety per USP Class VI: 250˚F (121˚C) for plastics.

Dimensions

Length: 10 to 40 inches (25.4 to 101.6 cm) nominal
Outside Diameter: 2.7 inches (7.0 cm) nominal

Maximum Temperature Operating Conditions

Temperature.....176°F (80°C)

Maximum Differential Pressure

50 psid (3.4 bar) at 68°F (20°C)

FDA Listed Materials

Manufactured from materials which are listed for food contact applications in Title 21 of the U.S. Code of Federal Regulations.

Sanitization/Sterilization

Filtered Hot Water.....190°F (88°C) for 30 minutes

Steam Sterilization*: 250°F (121°C) for 30 minutes, multiple cycles

Chemicals: cartridges are chemically compatible with most chemicals and sanitizing agents

***Note**: stainless insert option needed for all cartridges being hot water sanitized or steam sterilized.*

Cartridge Selection/Sizing Guide

Packed 6 per case, with cartridges individually bagged and cartoned.

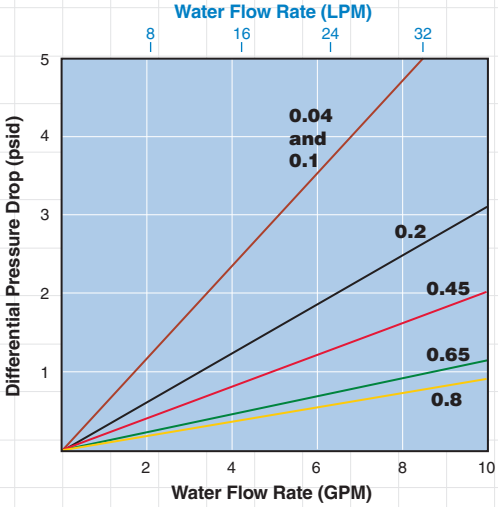
Model	Length	Micron Size	End Cap Code	O-Rings/Gaskets	Options
PES FB	10 **(10")**	0.04	DOE (double open end)	E (EPDM)*	I (stainless steel insert)
	20 **(20")**	0.1	213 (internal o-ring)	B (Buna)	HP (heavy poly core)
	30 **(30")**	0.2	222 (flat cap)	S (Silicone)	
	40 **(40")**	0.45	222-F (fin)	V (Viton)	
		0.65	226 (flat cap)	T (Teflon Encapsulated Viton)	
		0.8	226-F (fin)		

Example: PES FB – 20 – 0.2 – 222-F – E

EPDM is standard for all o-rings and gaskets, unless otherwise noted.

Flow Rate

10 inch (250mm) Cartridges



Cartridge End Cap Configurations

Fin

Flat Cap

226 (w/SS insert)

226

222 (w/SS insert)

222

Flat Cap

213 (internal o-ring)

PP Core Ext.

Spring

DOE (double open end)

Note: This publication is to be used as a guide. The data within has been obtained from many sources and is considered to be accurate. Harmsco does not assume liability for the accuracy and/or completeness of this data. Changes to the data can be made without notification. Temperature, Pressure, Flow Rates, Differential Pressures, Chemical Combinations and other unknown factors can affect performance in unknown ways. **Limited Warranty:** Harmsco warrants their products to be free of material and workmanship defects. Determination of suitability of Harmsco products for uses and applications contemplated by Buyer shall be the sole responsibility of Buyer. The end user/installer/buyer shall be liable for the product's performance and suitability regarding their specific intended applications. End users should perform their own tests to determine suitability for each application.

HARMSCO® Filtration Products
7169 49th Terrace North, Riviera Beach, FL 33407
(561) 848-9628 • Toll-free: (800) 327-3248 • E-mail: sales@harmsco.com
www.harmsco.com

Made in USA

10/26 Rev. 2