



ESPOR BW PES Filter Cartridges

- Liquid Filters
- Polyethersulfone Membrane

ESPOR BW sterilizing grade filter features a microbially retentive polyethersulphone membrane for fast, reliable and cost-effective sterile filtration for beverage industry.

Specially designed as a beverage grade cartridge, ESPOR BW utilizes an advanced highly asymmetric PES membrane which provides graded filtration throughout its unique pore morphology, resulting in high flow rates, long life, improved throughput and cost-effective performance.

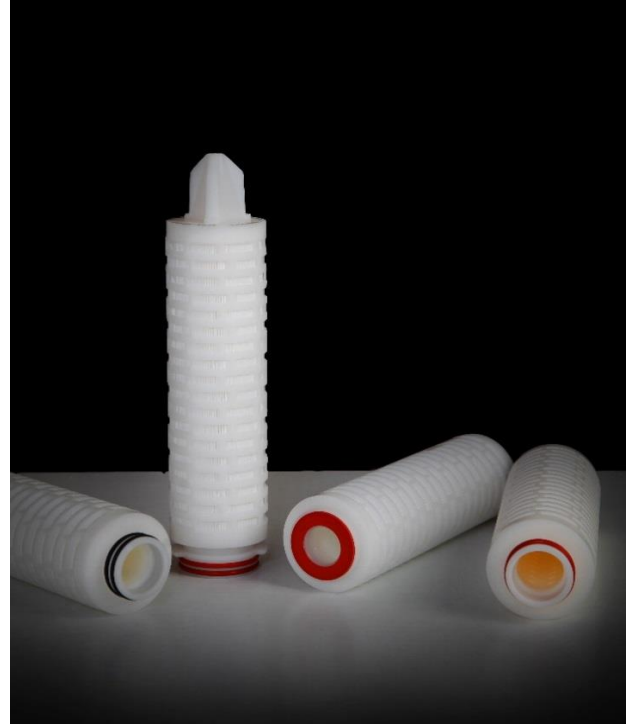
ESPOR BW all-polypropylene construction provides very low level of extractable, maximized mechanical strength and chemical compatibility enabling the filter to withstand repeated chemical cleaning and sterilization.

Features and Benefits

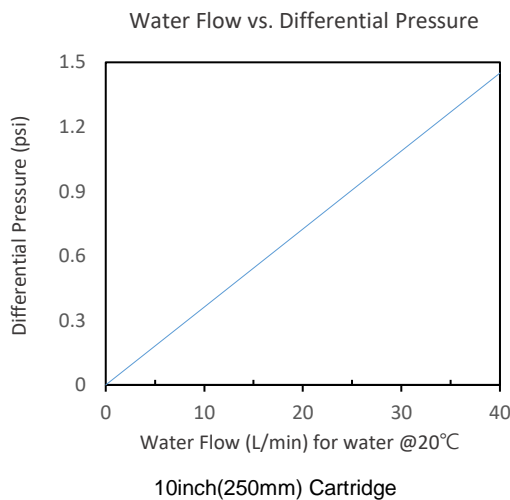
- Validated bacterial retention
- Extended service life
- High flow rate
- Low pressure drop
- high contaminant loading capacity
- Repeatedly integrity testable
- Cost-effective
- All polypropylene construction
- Very low extraction
- Excellent chemical compatibility

Applications

- Bottled Water
- Food & Beverages
- Microbial stabilization



Performance Characteristics



Specifications

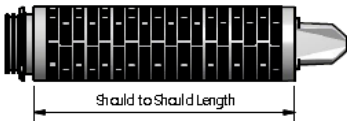
Materials of Construction

- Main Media : Polyethersulfone
- Upstream Support: Polypropylene
- Downstream Support: Polypropylene
- Inner Core: Polypropylene
- Outer Cage: Polypropylene
- End Caps: Polypropylene
- End Cap Insert*: 316L Stainless Steel
- * Available in 226 endcap
- Standard o-rings: Silicone

Nominal Dimensions

- Outside Diameter : 71.5mm
- Inner Diameter : DOE(27.0mm), SOE(31.0mm)
- S-S Length of 10" Cartridge : 237.5mm
- S-S Length of 20" Cartridge : 485.0mm
- S-S Length of 30" Cartridge : 732.5mm
- S-S Length of 40" Cartridge : 980.0mm

* S-S Length



Recommended Operation Conditions

- Up to 70°C continuous operating temperature and higher short-term temperature during CIP to the following limits :
- 5.0 bard (72.5psid) @ 20°C
- 4.0 bard (58.0psid) @ 40°C
- 3.0 bard (43.5psid) @ 60°C
- 2.0 bard (29.0psid) @ 80°C
- 1.0 bard (14.5psid) @ 90°C
- 0.3 bard (4.0psid) @ >100°C (steam)

Recommended Change out Pressure

- 2.4 bard (35psid)

Effective Filtration Area

- 0.74sqm / 10" cartridge

Cleaning and Sterilization

ESPOR BW can be repeatedly steam sterilized in situ or autoclaved at up to 130°C (226°F). They can be sanitized with hot water at up to 85°C (185°F) and are compatible with a wide range of chemicals.

Food Contact Compliance

All materials of construction are FDA listed and conform to the relevant requirements of 21 CFR Part 177.

Filtration Rating

- 0.2µm

Bacterial Retention

- > 10⁷ cfu/cm² Brevundimonas diminuta
- Carried out to methods specified in ASTM F838-05

Integrity Test Data

All filters are flushed with pharmaceutical grade purified water and integrity tested to the following limits. < 42cc/min at 2.2bar

Cleanliness

- TOC (USP 643) : <500ppb
- Conductivity (USP 645) : <1.3uS/cm
- Endotoxin (USP85) : <0.25EU/ml

Ordering Information

E S B W				A
	Nominal Length	Micron Rating	Endcaps	Seals
	1 : 10" (250mm) 2 : 20" (500mm) 3 : 30" (750mm) 4 : 40" (1000mm)	02 : 0.2micron	C : 226INS/FIN D : 222/FIN E : 222/FLAT F : 226INS/FLAT	S : Silicone E : EPDM