

Masterfilter PESS filter cartridges manufactured with perfectly hydrophilic polyether sulfone symmetric membranes are specially designed to provide high flowrate with secure and reliable removal of spoilage microorganisms. Its unique construction structure allows optimal sterilization performances of a wide range of fluids in the Biopharmaceutical industry. Good inertia and low protein binding of **PESS** polyether sulfone membrane ensures perfect transmission of active ingredients.



Application

- SVL – LVP
- API's
- Ophthalmics
- Antibiotics
- Biological products
- Pharma grade water (PW & UPW)
- Mineral Water / Wine / Soft Drinks / Beer

Features and Benefits

- Broad chemical compatibility from 1-14 PH
- 100 % integrity tested before release
- Low preservatives and actives absorption
- Easy to wet ensures a reliable integrity testing
- Repeatedly integrity testable
- Wide range of removal ratings from 0,2 to 1,2 μm
- High flow rate and extended service life

Specifications

These products are manufactured in a quality management system certified to ISO 9001:2015 Practices Entire manufacturing process is performed in a ISO Class 8 clean area.

Each individual cartridge is tracked by lot number and individual serial for traceability and easy identification.

Integrity test value correlated with Bacterial Retention > 107 CFU/cm² Brevundimonas diminuta (ATCC 19146).

Each individual filter is integrity tested before final packaging.

Biological Safety & Quality Standard

- Meet the requirement of USP <87> In Vitro Cytotoxicity Test
- Non -Pyrogenic per USP Bacterial Endotoxin (<0,25 EU/ml)
- Non-fiber Releasing: Component materials meet the criteria for a "Non-fiber-releasing filter" as defined in 21 CFR 210.3 (b) (6)
- Component Material Toxicity: Meet the criteria of the USP <88> Biological Reactivity Test for Class VI-121°C plastics
- Comply with the relevant requirements of EU 1935/2004 and EU directive 2002/72/EC
- Effluent quality for cleanliness, TOC and Water Conductivity per USP Purified Water

PESS Series

Polyether sulfone cartridges

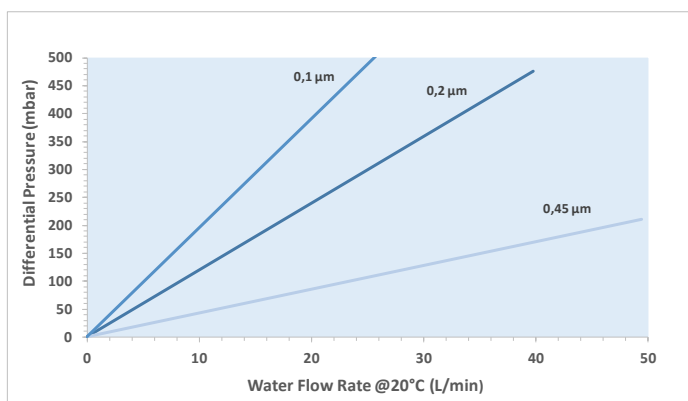


Materials of Construction

- **Filter media:** Polyether sulfone
- **Support Layers:** Polypropylene
- **Inner Core:** Polypropylene
- **Outer Cage:** Polypropylene
- **End Caps:** Polypropylene
- **Adaptor insert:** PTB
- **O-Rings:** Silicone, EPDM

Operating Parameters

- **Max differential:** 6,9 bar (25°C)
- **Pressure:** 2,4 bar (80°C)
- **reverse:** 3,0 bar (25°C)
- **Max operating temperature:** 90°C
- **Autoclave sterilization:** 200 cycles (130°C)
- **In-situ steam sterilization:** 100 cycles (30' – 134°C) < 0,3 bar pressure drop
- **Typical extractables per 10'':** < 10 mg in purified water after 24h extraction



Effective Filtration Area (EFA)

0,58 m² (6,2 ft²)

Part Numbers

PESS	020	-	10	-	HSF	-	S
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Code	Removal rating µm
010	0,10
020	0,20
045	0,45
065	0,65
120	1,20

Code	Length	
	mm	inch
05	65	5
10	254	10
20	508	20
30	762	30
40	1 016	40

Code	End caps
STC	Sartorius code 28
HTC	222 O-ring/flat (Code 3)
HSF	226 O-ring/fin (Code 7)
HSC	226 O-ring/flat top
STZ	dh Z
CP2	R-2"
CP1	R-1"
HSH	H code
HSU	MCY 1001
SLK	Sealkleen retrofit

Code	O-Rings
S	Silicone
E	EPDM

e.g. part number: PESS020-10-HSF-S

PESS filter, 0,2 µm, 10" length, Code 7 end caps, silicone O-rings