

Masterfilter PESA series

The Masterfilter *OptiPes* PESA series cartridges feature a unique single layer, asymmetric hydrophilic polyether sulphone membrane. This membrane is characterized by excellent throughput and higher durability in many beverage filtration applications, such as beer and wine. Higher flow rates than any other sterilizing grade filter cartridge offers, so Masterfilter PESA filter assures thereby the most economic design of filtration systems.

Applications

- Beverage – beer, wine

Features and Benefits

- Large filtration area and longer service life
- Constructed using asymmetric structure and high porosity offering excellent flux rates
- Graded density layer media providing full retention of the reference microorganism
- Totally inert materials with very low absorption
- Easy to wet membrane for repeated integrity testing

Materials of Construction

- Membrane: Asymmetric PES
- Support layers: Polypropylene
- Inner core: Polypropylene
- Outer cage: Polypropylene
- End caps: Stainless 304
- O-rings: Silicone, EPDM, Viton

Operating Parameters

- Max. differential pressure forward: 4.0 bar at 21 °C, 2.4 bar at 70 °C
- Hot water sanitisation: 85 °C
- Steam sterilisation: 100 cycles of 30 minutes at 121 °C, maximum allowable pressure drop of < 0.3 bar
- Filtration area 10" module: 0.58 m²



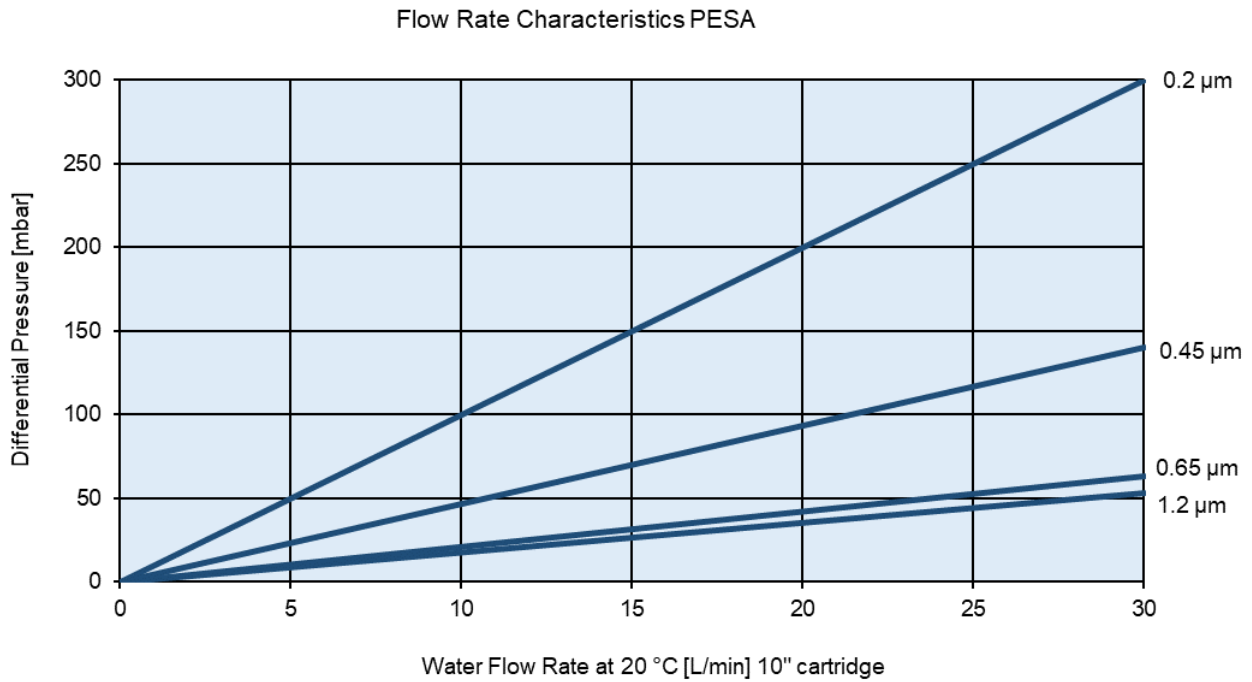
Quality Assurance

- Tested with *Brevundimonas Diminuta* (ATCC 19146) at 107 CFU/cm² according with ASTM-F838
- Cartridges is marked with unique serial number for identification and traceability
- All components meet the requirements of FDA 21 CFR and EU No. 1935/2004 and EU10/2011
- Manufactured under ISO 9001:2015 certified quality management system and cGMP

Biological Standards

- Component materials toxicity meets the USP <88> tests for Class VI-121°C and ISO 10993 equivalents
- Bacterial Endotoxin testing as per LAL test determined by USP <85> ≤ 0.25 EU/mL
- Component materials meet criteria for non-fibre releasing filter as defined in 21 CFR.3 (b) (6)
- Comply with EC food compliance requirements of EU 1935/2004 and EU directive EU10/2011

Flow Rate Characteristics



Part Numbers

PESA 065 - 10 HSF - S

Code	Removal rating [µm]
020	0.2
045	0.45
065	0.65
120	1.2

Code	Length	
	[mm]	[inch]
05	127	5
10	254	10
20	508	20
30	762	30
40	1016	40

Code	End caps
STC	Sartorius Code 28
HTC	222 O-ring/flat (Code 3)
HSF	226 O-ring/fin (Code 7)
HTF	222 O-ring/fin (Code 8)
STT	126 O-ring (T-code)
HST	MCY 4463 (Code 18)

Code	O-Ring
S	Silicone
E	EPDM
V	Viton

e.g. part number: PESA-065-10-HSF-S

PESA filter, 0.65 µm, 10" Length, End caps Code 7, Silicone O-rings