

PESA Series

Polyether sulfone cartridges



Masterfilter PESA series

Masterfilter PESA filter cartridges feature a unique single layer, asymmetric hydrophilic polyether sulfone 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

Operating parameters

- Maximum differential pressure:
Forward 4,0 bar @ 21°C | 2,4 bar @ 70°C
- Hot Water sanitisation: 85°C
- Steam sterilisation: 100 cycles of 30' at 121°C @ maximum allowable pressure drop of <0.3bar
- Filtration Area 10" Module: 0,58 m²

Quality assurance

- Tested with *Brevundimonas Diminuta* (ATCC 19146) @ 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

PESA Series

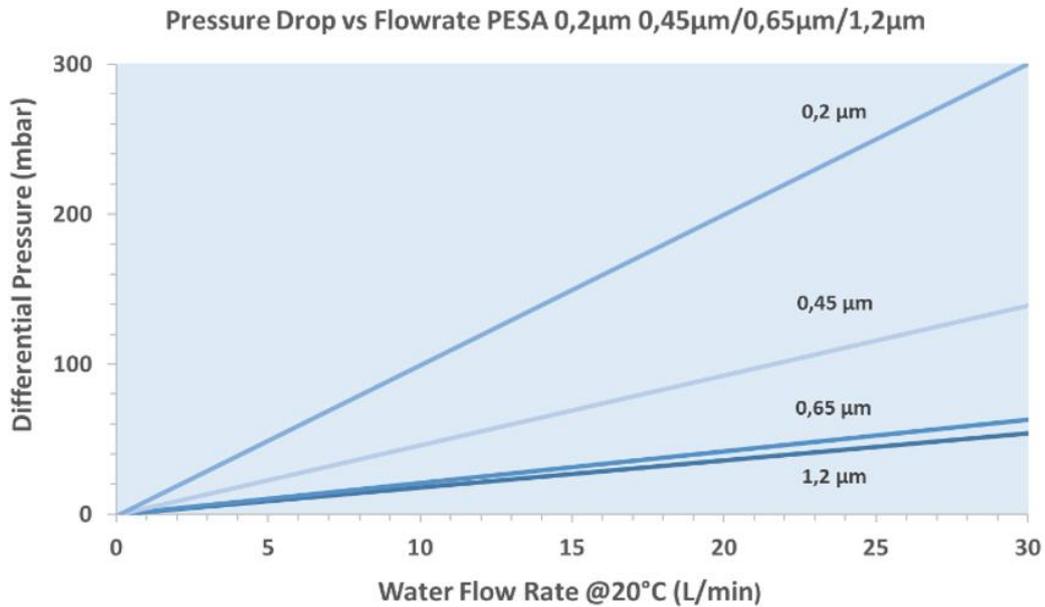
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Biological standards

- 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

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e.g. part number: PESA065-10-HSF-S

Multi layer PESA filter, 0,65µm, 10" length, Code 7 end caps, silicone O-rings