

PESA Series Polyethersulfone cartridges

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

Features and Benefits

- High dirt holding
- Longer service life
- Excellent flow rates
- 100 % integrity tested
- Low adsorption
- Easy wetting PES membrane
- Repeatedly integrity testable
- Removal ratings from 0,2 to 1,2 µm



Applications

- Bottled water
- Juices
- Process water
- Wine

Effective Filtration Area

0,6 m² per 10" (250 mm)

Food and Biological Safety

Comply with the relevant requirements of EU 1935/2004 and EU directive 10/2011

Materials of construction

- Membrane: Polyethersulfone
- Support layer: Polypropylene
- Inner core: Polypropylene
- Outer cage: Polypropylene
- End caps: Polypropylene
- End cap insert: Stainless 304
- O-Rings: EPDM/Silicone

Operating Characteristics

Maximum Differential Pressure	4bar (20°C) 2,4bar (70°C)
Max. Temp.	90°C
In situ steam Sterilization	121°C 20min
Autoclaving	130°C 30min

Rating

Code	Removal rating micron
010	0,10
020	0,20
045	0,45
065	0,65
080	0,80
120	1,20

Available sizes

Code	length	
	mm	inch
10	254	10
20	508	20
30	762	30
40	1016	20

Connections

Code	end caps
STC	Sartorius code 28
HTC	222 O-ring/flat (Code 3)
HTF	222 O-ring/fin (Code 8)
HSF	226 O-ring/fin (Code 7)

O-Ring

Code	O-Rings
S	Silicone
E	EPDM

PESA				
10"				
Flow rate characteristics				
	Differential pressure (bar)			
Flow (LPM)	PESA 002	PESA 045	PESA 065	PESA 120
0	<i>0,000</i>	<i>0,000</i>	<i>0,000</i>	<i>0,000</i>
10	<i>0,104</i>	<i>0,102</i>	<i>0,089</i>	<i>0,056</i>
20	<i>0,208</i>	<i>0,204</i>	<i>0,178</i>	<i>0,112</i>
30	<i>0,313</i>	<i>0,305</i>	<i>0,268</i>	<i>0,168</i>
40	<i>0,417</i>	<i>0,407</i>	<i>0,357</i>	<i>0,224</i>
50	<i>0,521</i>	<i>0,509</i>	<i>0,446</i>	<i>0,280</i>
60	<i>0,625</i>	<i>0,611</i>	<i>0,535</i>	<i>0,336</i>