

SME sterilizing grade PES membrane filters

Efficient removal of microorganisms from valuable liquids in food and pharmaceutical applications

SME filters provide reliable and efficient microbiological reduction throughout an extended service life. Its filter media consist of a single layer asymmetric, hydrophilic PES membrane with support layers integrated into a robust cage with reinforced core and end cap, making it suitable for nearly all operation, service and cleaning conditions.



Key features:

- High flow and low pressure drop
- Wide chemical compatibility
- No pre-wetting required, easy to use
- Low adsorption of protein, colors and flavor components
- Reinforced end cap

Applications:

- Cold stabilization of alcoholic beverages
- Sterilization of bottled and process water
- Final filtration in beer and wine production

Quality first:

- Manufacturing acc. ISO9001 in a controlled environment
- Comply with EU Regulation No. 1935/2004
- Materials used meet FDA title 21 and USP Class VI
- 100% integrity tested (Diffusion Flow)
- Full traceability

Protecting process, products and people

Atlas Copco's process filters optimize your productivity while protecting your process, product and consumers. Our portfolio of cartridges and housings covers all your filtration needs. The products are made from proven, high quality materials from reputable suppliers and manufactured in a controlled environment subjected to strict QA/QC procedures.



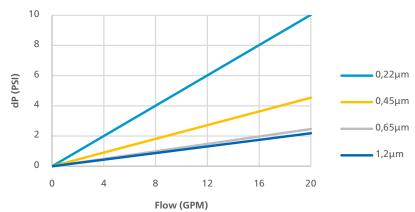
Product specifications

Materials of construction	
Filter media	Asymmetric polyethersulphone membrane
Support, Core, Cage	Polypropylene
End caps	Polypropylene + reinforcement
Dimensions	
Diameter	2.72"
Typical surface area	7.5 ft² (2.72" - 10")
Integrity testing	
Bubble point	> 49 PSI (0.22 μm), > 32 PSI (0.45 μm)
Diffusion flow	$<$ 30 ml/min/10" @ 36 PSI (0.22 μm), $<$ 28 ml/min/10" @ 23 PSI (0.45 μm)
Operating conditions	
Max. temperature	176°F
Max. differential pressure forward flow, reverse flow	58 PSI @ 70°F, 34.8 PSI @ 158°F, 29 PSI @ 70°F
Recommended change out differential pressure	36 PSI
SIP/CIP	
Steam sterilization	≤ 100 cycles @ 250°F for 30 minutes @ dP 4.35 PSI
Hot water sanitization	185°F for 30 minutes @ dP 29 PSI
Cleaning solution	2% NaOH @ < 149°F

Log Reduction Value

Rating	Brevundimonas Diminuta	Lactobaccilus Brevis	Saccharomyces Cerevisiae
0.1 μm	>7/cm²	-	-
0.2 μm	>7/cm²	-	-
0.45 μm	-	>7/cm ²	>7/cm ²
0.65 μm	-	>4/cm²	>7/cm²
1.2 μm	-	-	>7/cm ²

Flow rate



Note: 10" cartridge tested with water @ 68°F, 1.005 cP (typical flow rate)

Product configuration

Series	Rating	Length	End cap	Seal
SME	0.1 μm	5″	$C2 = 2 \times 226 \text{ O-ring} + 2 \text{ tabs/Flat}$	S = Silicone
	0.22 μm	10"	C3 = 2 x 222 O-ring/Flat	E = EPDM
	0.45 μm	20"	$C7 = 2 \times 226 \text{ O-ring} + 2 \text{ tabs/Fin}$	V = Viton
	0.65 μm	30"	C8 = 2 x 222 O-ring/Fin	
	0.8 μm	40"	$C28 = 2 \times 222 \text{ O-ring} + 3 \text{ tabs/Fin}$	
	1.2 μm		DOE = Flat + gasket/Flat + gasket	

Example: SME 0.22 μm 5" C8 V

