

# **SMV-X** sterilizing grade **PVDF** membrane filters

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

SMV-X filters provide reliable and efficient microbiological reduction throughout an extended service life. Its filter media consist of a double layer asymmetric, hydrophilic SMV 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:**

- Reliable reduction of microorganisms
- 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
- Filtration of eye care serums

## **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

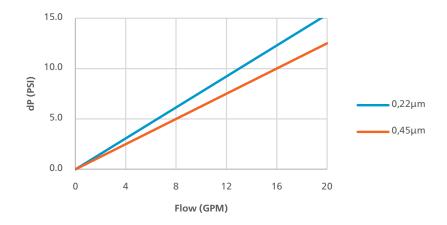
Atlas Copco's process filters optimize your productivity while protecting your process, product and consumers. Our portfolio of cartridges and housings covers all your filtration needs. The products are made from proven, high quality materials from reputable suppliers and manufactured in a controlled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



## **Product specifications**

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Materials of construction	
Filter media	Double layer polyvinylidene Fluoride (PVDF)
Support	Polypropylene
Core/Cage	Polypropylene
End caps	Polypropylene + reinforcement
Dimensions	
Diameter	2.72"
Typical surface area	7.10 ft <sup>2</sup> (2.72" - 10")
Integrity testing	
Bubble point	> 46 PSI (0.45 + 0.22 μm)
Diffusion flow	<23 ml/min/10" @ 41 PSI (0.45 + 0.22 μm)
Operating conditions	
Max. temperature	176°F
Max. differential pressure forward flow	65 PSI @ 70°F - 35 PSI @ 176°F
Recommended change out differential pressure	36 PSI
SIP/CIP	
Steam sterilization	≤ 100 cycles @ 275°F for 30 minutes @ dP 4 PSI
Hot water sanitization	185°F for 30 minutes @ dP 29 PSI
Cleaning solution	2% NaOH @ < 149°F

## Flow rate



Note: 10" cartridge tested with water @ 154°F, 1.005 cP (typical flow rate)

# **Product configuration**

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

Example: SMV-X 0,22 $\mu$ m 20" C7 S

