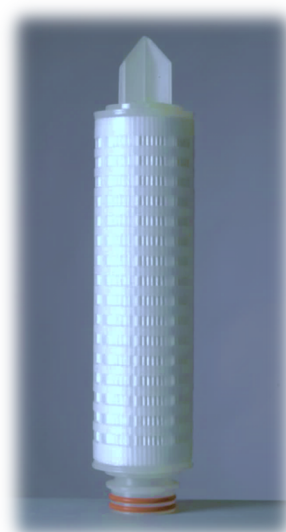


CANDEFILT - HVMX

Membrane filter cartridge for beverages applications

- new PES membrane with enhanced characteristics
- high effective filter area with more retention capacity
- repeatedly steamable in situ
- easy integrity testable in situ
- sanitizable and regenerable
- thermowelded construction
- EC listed materials for food contact
- FDA listed materials per CFR21



CANDEFILT - HVMX pleated PES (highly asymmetric hydrophilic polyethersulphone) membrane cartridges are specifically designed as final sterilizing filters for beverage filtration (Wine, beer, mineral and drinking water a other). This filter element provides the microbiological stability of the wine and the removal of undesired contaminants in the product, maintaining the flavours, the colour and all the other organoleptic characteristics typical for beverages like wine and beer. It can be easily tested with a minimum flushing volume before use. The new materials adopted and the innovative configuration provide additional service life. The construction is carried out in a controlled environment, with constant monitoring of all production parameters. The cartridges are 100% integrity tested and verified in production.

FEATURES & BENEFITS

- new generation of highly Asymmetric hydrophilic Polyethersulphone membrane fully bacterial retentive
- polypropylen drainage layers upstream and downstream
- interesting cost benefit ratio and great performance in cold microbiological stabilization
- increased service life to reduce filtration cost

MAERIALS OF CONSTRUCTION

Filter Media:	highly asymmetric polyethersulfone membrane
Upstream support	polypropylene
Downstream support:	polypropylene
Internal core:	polypropylene
External cage:	polypropylene
End caps / adapters:	polypropylene

FOOD-SAFETY

CANDEFILT - HVMX filter element materials meet (EU) regulation 10/2011 and its amendments, regulations (EC) 1935/2004 and 1895/2005. Construction materials are in compliance with FDA requirements according to CFR 21; par. 177-199.

QUALITY STANDARDS

Produced under an ISO 9001 certified Quality System to guarantee traceability of manufacturing records and integrity testing results.



RECOMMENDED OPERATING CONDITIONS

- max. continuous temperature 75°C
- max. cumul. time of steam sterilisation ≥100 hours at 121 °C,
≥80 hours at 125 °C (at max
Δp = 0,3 bar)
- sanitization with hot water short-term max. 90°C
- sanitization with chemicals can be sanitized by usual
chemical agents
- regenerability NaOH solution up to 3% at
85°C
- max. differential pressure 5,0 bar at 25°C and
1,0 bar at 90°C
- recommended change out diff. pressure 2,0 bar at 25°C

INTEGRITY TEST DATA

FILTRATION CODE	PRESSURE HOLD TEST VALUE* (RELATED TO 5 MIN - INDICATIVE)	TEST PRESSURE	MAX. DIFFUSION FLOW VALUE IN WATER FOR 10" CARTRIDGE (ml/min)
	8x 30" cartridges		
02	≤ 0,11 bar	1,8 bar	≤ 20
04	≤ 0,12 bar	1,1 bar	≤ 20
06	≤ 0,12 bar	0,8 bar	≤ 20
10	≤ 0,13 bar	0,7 bar	≤ 28
12	Not available	Not ava.	

* The values are related to 5 min. and are indicative as they depend on volume of the housing upstream the filter element.

FILTRATION RATINGS		TYP. WINE FLOW RATE FOR 10" CARTRIDGE	TYP. BEER FLOW RATE FOR 10" CARTRIDGE	TYP. WATER FLOW RATE FOR 10" CARTRIDGE
FILTR. CODE	F. RATING	l/h (Δp = 0,1 bar)	l/h (Δp = 0,1 bar)	l/h (Δp = 0,1 bar)
02	0,20 μm	N/A	N/A	1200
04	0,45 μm	750	750	1500
06	0,65 μm	850	850	N/A
10	1,00 μm	950	N/A	N/A
12	1,20 μm	1000	N/A	N/A

Flow rates for wine are indicative as they depend on the type of wine, sugar grade and pre-filtration treatment used.

WINE FILTRATION - BACTERIAL RETENTION

FILTRATION CODE	F. RATING (μm)	BACTERIAL RETENTION* >10 ⁷ per cm ²
04	0,45	Oenococcus oeni / Saccharomyces cerevisiae / Brettanomyces bruxellensis / Lactobacillus brevis
06	0,65	Saccharomyces cerevisiae / Brettanomyces bruxellensis
10	1,00	Saccharomyces cerevisiae
12	1,20	Saccharomyces cerevisiae

* As per ASTM F838 - filtration rating 0.45 micron is able to retain 10⁷ UFC of Oenococcus oeni for 10" cartridge



BEER FILTRATION - BACTERIAL RETENTION

FILTRATION CODE	F. RATING (µm)	BACTERIAL RETENTION* >10 ⁷ per cm ²
04	0,45	Acetobacter oeni / Pediococcus damnosus / Saccharomyces cerevisiae / Brettanomyces bruxellensis / Lactobacillus brevis
06	0,65	Saccharomyces cerevisiae / Brettanomyces bruxellensis

* As per ASTM F838 - filtration rating 0.45 micron is able to retain 10⁹ UFC of Serratia marcescens for 10" cartridge

WATER FILTRATION - BACTERIAL RETENTION

FILTRATION CODE	F. RATING (µm)	BACTERIAL RETENTION* >10 ⁷ per cm ²
02	0,20	Pseudomonas aeruginosa / Escherichia coli / Enterobacteriaceae
04	0,45	Serratia marcescens / Clostridium perfringens / Oocystis cryptosporidium / Giardia

* As per ASTM F838 - filtration rating 0.20 micron is able to retain 10⁷ UFC of Brevundimonas diminuta for 10" cartridge

CANDEFILT - HVMX ordering instruction:

HVMX	>porosity<	>adapter<	>length<	>gasket<
	02 > 0,20 µm	BS > 2,226 s	10 > 10"	S > silikon
	04 > 0,45 µm	S > 2,222 s	20 > 20"	
	06 > 0,65 µm	F > 2,222 f	30 > 30"	
	10 > 1,00 µm	TBS > 2,222 s	40 > 40"	
	12 > 1,20 µm			

Example:

HVMX 06 BS 30 S

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Certifikace:
ISO 9001
ISO 14001

