

Bevflo BW

- PES membrane with enhanced characteristics
- Highly effective filtration area with more retention capacity
- Easy to integrity test in situ
- Can steam in situ
- Sanitisable and cleanable
- Thermowelded construction
- EC- listed materials for Food contact
- FDA-listed materials per CFR21
- Increased service life to reduce filtration cost



The Bevflo BW filter element is designed for the treatment of water and aqueous products for human consumption. The new polyethersulfone membrane, offers a high filtering surface and specific pleating configuration, ensuring improved performance in terms of service life and effluent quality

The Bevflo BW cartridges can be repeatedly steam sterilised or sanitised with chemicals and can be regenerated with a hot solution of sodium hydroxide.

The removal of undesired microorganisms is guaranteed by the bacterial challenge test according to ASTM F 838-05.

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.

Materials of Construction

Membrane	Polyethersulfone (hydrophilic)
Upstream supports	Polypropylene
Downstream supports	Polypropylene
Internal Core	Polypropylene
External Cage	Polypropylene
End caps / Adapters	Polypropylene

Food Safety

Bevflo BW 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

They are produced under an ISO 9001 certified quality system to guarantee traceability of manufacturing records and integrity testing results.

Recommended Operating Conditions

- Maximum continuous temperature of 75°C
- Maximum cumulative number of steam sterilisation cycles ≥ 100 cycles at 121°C, ≥ 80 cycles at 125°C with max ΔP 0.3 bar
- Sanitisation with hot water 90°C maximum
- Sanitisation with chemicals. It can be sanitised by the usual chemical agents
- Regeneability NaOH solution up to 3% at 85°C
- Maximum differential pressure of 5.0 bar at 25°C and 1.0 bar at 90°C
- Recommended change out differential pressure of 2.0 bar at 25°C

Integrity Test Data

ABSOLUTE FILTRATION RATING IN LIQUIDS	PRESSURE HOLD VALUE *	TEST PRESSURE	MAX. DIFFUSION FLOW VALUE IN WATER FOR 10" CARTRIDGE (ml/min)
	8 cartridges of 30"		
0.2µm	≤ 0.11 bar	1.8 bar	≤16
0.45µm	≤ 0.11 bar	1.1 bar	≤20

*The values are related to a test time of 5 minutes and are indicative: they depend on the housing volume upstream the filter element.

Bacterial Retention

FILTRATION RATING micron	* BACTERIAL RETENTION $> 10^7$ per cm ²
0.2µm	<i>Pseudomonas aeruginosa</i> / <i>Escherichia coli</i> / <i>Enterobacteriaceae</i>
0.45µm	<i>Serratia marcescens</i> / <i>Clostridium perfringens</i> / <i>Oocystis</i> / <i>Cryptosporidium</i> / <i>Giardia</i>

* As per ASTM F838-05

Filtration rating 0.2 micron is able to retain 10^7 UFC of *Brevundimonas diminuta* for 10" cartridge.

Typical Flow Rate l/h for 10" Cartridge

MICRON RATING	$\Delta P = 0.1$ bar
0.2µm	1200
0.45µm	1500

Ordering Guide

Name	Micron Rating	Nominal Length	End Cap Type	Seal Type	Special
Bevflo BW	0.2µm	10"	03	E - EPDM	Biological grade tested and preflushed
	0.45µm	20"	04 - DOE	V - Viton	
		30"	07	S - Silicone	
		40"	08		
		28			

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