

GR-B Filter Cartridges

GR-B Bioburden Reduction grade membrane cartridges provide highly consistent performance for bioburden reduction and particle removal across a wide range of beverage, pharmaceutical and biological fluids. The naturally hydrophilic PES membrane filters provide exceptional flow rates, long on-stream life, broad chemical compatibility and have no added surfactants to contribute to extractables. The cartridges are integrity testable and steamable to assure reliable service in critical applications.

Main Features:

- Manufactured in an ISO Class 7 Cleanroom Environment
- 100% flushed with ultrapure DI water and integrity tested
- Repeatably steamable/sanitizable
- High retentions up to 107/cm² challenged for bacteria and yeast
- Pore size, lot and serial number are stamped on each filter element for identification and traceability
- Complete qualification guide available

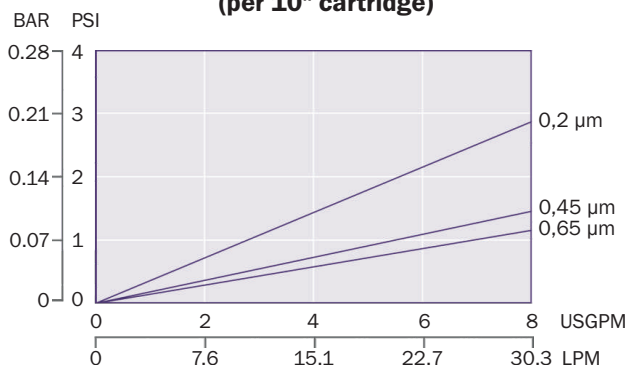


Applications

- Water Treatment
- Beverages
- Ophthalmic Solutions
- Culture Media
- Reagent Chemicals
- LVPs
- Buffers
- Cosmetics

GR-B FLOW RATE

Typical Flow Rate Clean Water at Ambient Temperature (per 10" cartridge)



General Technical Data

Media:	Asymmetric Polyethersulfone Membrane
Inner core, end caps, cage:	Polypropylene
Support layers:	Spunbonded Polypropylene
Gaskets/O-Rings:	Buna-N, EPDM, Silicone, Teflon Encapsulated Viton (O-Rings only), Viton
Micron ratings:	0.2 µm, 0.45 µm and 0.65 µm
Inside diameter:	25.4 mm
Outside diameter:	69 mm
Surface area:	0.7 m ² (per 10" element)
Maximum sustained operating temperature:	80 °C at 1.38 bar
Maximum differential pressure:	<i>forward:</i> Max. 4.14 bar @ 21 °C Max. 2.8 bar @ 71 °C <i>reverse:</i> Max. 2.8 bar @ 21 °C
Recommended change-out pressure:	2.4 bar

PERFORMANCE SPECIFICATIONS

- Hot DI Water:**

Filter cartridge will withstand temperatures of 185°F (85°C) for up to 30 consecutive minutes.

- Cleaning/Sanitization**

Compatible with most common chemical cleaning, sanitizing and sterilizing agents and with pH range from 1–14. Consult factory for specific compatibility information.

- Steam/Autoclave**

Cartridges may be steamed or autoclaved for at least 50 thirty-minute cycles @ 275°F (135°C).

- Typical Bacterial Retention**

0.2 µm: LRV for B. diminuta ≥ 7,8
 0.45 µm: LRV for S. marcescens ≥ 8,5
 0.65 µm: LRV for S. cerevisiae ≥ 11

INTEGRITY TEST SPECIFICATIONS

Pore Size	Bubble Point	Diffusive Air Flow
0.2 µm	≥ 2.8 bar	≤ 35 cm ³ /min @ 2.0 bar
0.45 µm	≥ 1.7 bar	≤ 35 cm ³ /min @ 1.4 bar
0.65 µm	≥ 1.2 bar	≤ 35 cm ³ /min @ 1.0 bar

Order Information:

GR25-B -



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End Configuration	
1	DOE
2	226/ Flat
3	222/ Flat
6	116 internal
7	226/ Fin
8	222/ Fin

Nominal Length	
93	9 3/4"
10	10"
20	20"
30	30"
40	40"

Retention Rating	
002	0,2 µm
004	0,45 µm
006	0,65 µm

Gasket or O-Ring	
0	Buna
1	EPDM
2	Silicone
4	Viton
5	Teflon encap. Viton (O-Rings only)

Order Example:

GR25-B-320-002-1