

## GR- P Membran Filter Cartridges

ZTEC P Sterilizing Grade membrane cartridges are validated for complete bacterial retention to yield product sterility in biopharmaceutical final filtration applications. The naturally hydrophilic and low protein binding characteristics of polyethersulfone membrane ensure maximum transmission of active ingredients making it ideal for a wide range of pharmaceutical and biological liquid applications, including the filtration of therapeutics, vaccines, antibiotics, bulk pharmaceutical and other critical biotechnology products. The double-layer PES 0.2 micron membrane filters are manufactured in a cleanroom environment, and integrity tested before shipment to assure consistent performance and quality.

### Main Features:

- Manufactured in an ISO Class 7 Cleanroom Environment
- 100% flushed with ultrapur DI water
- Meets ASTM Standards for Sterility
- Repeatably Steamable/Sanitizable
- 100% Integrity tested prior to release
- Pore size, lot and serial number are stamped on each filter element for identification and traceability
- Complete validation guide available

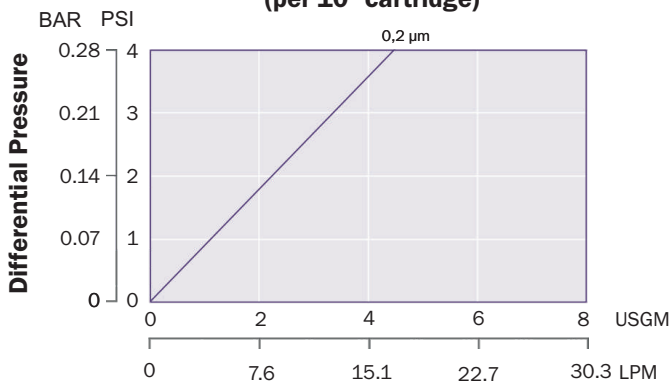


### Applications

- Diagnostics
- Ophthalmic Solutions
- Culture Media
- Reagent Chemicals
- LVPs
- Buffers
- Vaccines

### GR25-P 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, Viton, Teflon Encapsulated Viton
Micro Rating:	0,2 µm
Inside diameter:	25,4 mm
Outer diameter:	69 mm
Surface area:	0,63 m <sup>2</sup> (per 10" element)
Maximum sustained operating temperature:	80 °C at 1.38 Bar
Differential Pressure:	<u>forward:</u> Max. 4.14 Bar @ 21 °C Max. 2.8 Bar @ 71 °C
	<u>reverse:</u> Max. 2.8 Bar @ 71 °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 Performance**

Cartridges have been validated for the complete retention of *Brevundimonas diminuta* at a challenge level of 10<sup>7</sup> organisms/cm<sup>2</sup> as prescribed in ASTM 838-05..

### INTEGRITY TEST SPECIFICATIONS (per 10" Element)

Pore Size	Bubble-Point	Diffusive Air Flow
0.2 µm	≥ 2.8 bar	≤ 30 cc/min @ 2.2 bar

### Order Information:

GR25-P -



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End Configuration	
2	226/ Flach
3	222/ Flach
7	226/ Fin
8	222/ Fin

Length	
10	10"
20	20"
30	30"
40	40"

Retention Rating	
002	0,2 µm

Gasket or O-Ring	
0	Buna-N
1	EPDM
2	Silicone
4	Viton
5	Teflon encap. Viton

**Order Example:**

**GR25-P-320-002-1**