

#### FILTRATION | SEPARATION | PURIFICATION



#### **Product Specifications**

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),

Teflon (gaskets), Viton

O-Ring Insert: PBT

Micron ratings: 0.2, 0.45, 0.65  $\mu m$ 

#### **Dimensions**

#### Nominal lengths:

9.75" 10" 20" 30" 40"

24.8 25.4 50.8 76.2 101.6 cm

Outside diameter: 2.7" (6.9 cm)

Inside diameter: 1.0" (2.54 cm)

Surface area: 7.6 ft<sup>2</sup> (0.7 m<sup>2</sup>)

per 10" element

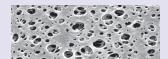
#### **Operating Parameters**

Maximum sustained operating temperature: 176°F (80°C) at 20 psid (1.38 bar)

Maximum differential pressure: 80 psid @ 70°F (5.5 bar @ 21°C) 40 psid @ 160°F (2.8 bar @ 71°C)

Maximum reverse differential pressure: 40 psid @ 70°F (2.8 bar @ 21°C)

Recommended change-out pressure: 35 psid (2.4 bar)



# ZTEC™ WB Series Filter Cartridges

### Pleated Polyethersulfone (PES) Membrane for Critical Filtration in Beverage Applications

Protect your beverage from spoilage. ZTEC WB cartridge filters utilize a special polyethersulfone membrane to provide consistent removal of spoilage organisms and inorganic particulate. The product offers excellent retention efficiency and extended on-stream life making it an ideal filter for the clarification of beer, wine and bottled water. PES membrane available with 0.2, 0.45 and 0.65  $\mu m$  pore sizes, is designed to meet and surpass the filtration criteria necessary to maintain product quality and characteristics. Produced in an ISO Class 7 cleanroom, the cartridges are integrity tested during production to assure performance and consistency.

#### **FEATURES & BENEFITS**

- Manufactured in an ISO Class 7 Cleanroom Environment
- 100% flushed with ultrapure DI water and integrity tested
- Low adsorption of protein, color and flavor components
- · Steamable/sanitizable for cleaning and reuse
- High log reduction values for spoilage organisms
- · PES membrane provides high capacity contaminant loading
- Complete qualification guide available
- Quick wet treatment available
- Every cartidge comes standard with an embedded O-ring support ring

#### **CERTIFICATIONS**

- USP Class VI: Meets USP Class VI Biological Test for Plastics
- FDA Listed Materials: All materials comply with FDA Title 21
  of the Code of Federal Regulations Sections 174.5, 177.1520
  (polypropylene), and 177.2440 (PES Resin) as applicable for food and beverage contact.
- European Directive for Food Contact: European Regulation No. 1935/2004 and European Regulation 10/2011: Tested for migration behavior and is suitable for contact with all kinds of foodstuffs with minimal rinse-up. Data available upon request.

#### TYPICAL APPLICATIONS

- White Wine
- Sparkling Wine

Red Wine

Wine/Malt Coolers

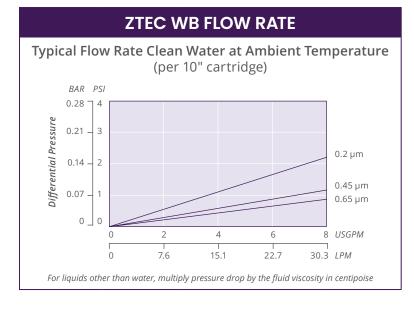
- Champagne
- Bottled Water
- Distilled Spirits
- Beer

#### 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).

ZTEC WB NOMENCLATURE INFORMATION								
Filter Type	Retention Rating (microns)	Nominal Length (inches)		End Configuration		Gasket or O-Ring		
ZTEC WB	0.2	-5	-20	Р	Double Open End	В	Buna-N	
Series	0.45	-9.75*	-30	P2	226/Flat Single Open End	Ε	EPDM	
	0.65	-10	-40	Р3	222/Flat Single Open End	S	Silicone	
				P7	226/Fin Single Open End	Т	Teflon encap. Viton	
				P8	222/Fin Single Open End	Т	(O-Rings only)	
				P28	222 w/3 tabs/Fin Single Open End		Teflon (gaskets)	
Example: ZTEC WB 0.45-20P2E			AM	Single Open End, Internal O-Ring	V Vi	Viton		
ZTEC WB	0.45	-20	,	P2		Е		

<sup>\*</sup>Available only for DOE (P) configuration



#### TYPICAL BACTERIAL RETENTION 0.2 µm LRV for *Pseudomon aeruginosa* ≥ 7.6 LRV for *Lactobacillus brevis* ≥ 7.52 $0.45 \mu m$

0.65 µm

## INTEGRITY TEST SPECIFICATIONS

LRV for *S. cerevisiae* ≥ 10.9

Minimum Bubble Point values and maximum Diffusive Air Flow (per 10-inch cartridge) values for ZTEC WB filters wet with water:

Pore Size	<b>Bubble Point</b>	Diffusive Air Flow			
0.2 μm	≥ 26 psig (2.1 bar)	≤ 35 cc/min @ 21 psig (1.7 bar)			
0.45 μm	≥ 20 psig (1.4 bar)	35 cc/min @ 16 psig (1.1 bar)			
0.65 µm	≥ 17 psig (1.2 bar)	≤ 35 cc/min @ 14 psig (1.0 bar)			

#### FOR MORE INFORMATION

GTX-373 9-24

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