



#### **BEVPURE® FILTER CARTRIDGES**

Hydrophilic PES membrane filters designed for reliable sterilization filtration at the most economical costs

# BEVPURE® FILTER CARTRIDGES

# HYDROPHILIC PES MEMBRANE FILTERS DESIGNED FOR ECONOMICAL STERILIZATION FILTRATION

BevPure® Filter Cartridges have a single-layer hydrophilic PES membrane which delivers sterilizing filtration at the most economical cost. Hydrophilic PES membrane filters require no pre-wetting and are ready to use. These filters are recommended for the sterile filtration on a wide range of liquids e.g. diluting water and beverages.

# **Industry Standard End Caps, Nominal Lengths**

BevPure® Filter Cartridges are available in a variety of industry-standard end fittings for easy installation into existing configurations. The filters are available from 5" to 40" lengths to meet all process flow needs.

BENEFIT	
No prewetting of filter is required	
Each filter is individually Integrity Tested prior to shipment	
Available in ratings 0.1 $\mu m$ , 0.22 $\mu m$ , and 0.45 $\mu m$ for bacterial and particle removal	
Steam sterilization up to 100 sterilization cycles ensures long-life microbiological process safety	
FDA 21CFR177-182 and 1935/2004 EC compliance to ensure process safety	

## **SPECIFICATIONS**

Filter media	PES membrane (single layer)
Supports/core/cage/end caps	Polypropylene
O-ring internal support	PBT
0-rings	Silicone, EPDM, FKM
Effective filtration area	0.58m² (6.5 ft²)/ Ø69-10 inch
Cartridge diameter	69 mm (2.7 in.)
Max. operating temperature	80°C
Max. differential pressure	Forward: 0.69 MPa (6.9 bar, 100 psi) at 25°C; 0.24 MPa (2.4 bar, 35 psi) at 80°C Reverse: 0.3 MPa (3 bar, 44 psi) at 25°C; 0.1 MPa (1 bar, 15 psi) at 80°C
Bubble point	0.45 µm: ≥0.22 MPa (2.2 bar, 32 psi) (water); 0.22 µm: ≥0.22 MPa (3.2 bar, 46 psi) (water)
Steam sterilization (saturated steam)	100 cycles for 30 minutes at 130°C at Max. Differential Pressure of 0.3 bar (4.3 psi)



# **Typical Applications**

- Beverage Filtration
- Water Filtration
- · Juice Filtration
- Wine Filtration

Chemical sanitization	30 minutes at 40 °C with 50 cycles in a mix solution of sodium hypochlorite (NaClO, 100 ppm) and peroxyacetic acid (100 ppm).
Hot water sterilization	85°C/30 min. at Max. Differential Pressure for 2 bar (29 psi)
Autoclave	200 cycles for 30 minutes at 130°C

## MICROBIOLOGICAL CONTROL

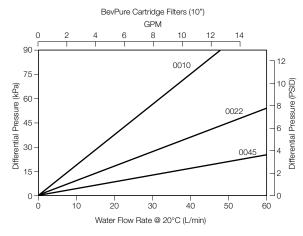
The primary purpose of a membrane filter cartridge in beverage processing is to effectively control spoilage microorganisms.

# **TYPICAL LOG REDUCTION VALUE (LRV)**

	Brevundimonas diminuta	Lactobaccilus brevis
0.1 µm	> 7/cm <sup>2</sup>	N/A
0.2 μm	> 7/cm <sup>2</sup>	N/A
0.45 μm	N/A	> 7/cm <sup>2</sup>

Log Reduction Values are calculated using the following formula: LRV=log<sub>10</sub> (total number of organisms entering the filter)

#### **FLOW RATES**



#### ORDERING INFORMATION

EXAMPLE: **BP-R0045HTC10S-F** =  $0.45 \mu m$ , 222/Flat, 10'' filter with silicone seals

