

# STERYDENE MINI CARTRIDGES HYDROPHILIC PVDF MEMBRANE

- Easy integrity testable in situ
- Repeatedly steamable in situ and in autoclave
- Thermowelded construction
- EC-listed materials for Food contact
- FDA-listed materials per 21 CFR
- Bio-Safety per USP—Plastics
- Low filter extractables even with solvents
- Validation Guide available on request



STERYDENE Mini filter element is a complementary compound to Sterydene series suitable to filter small batches.

Sterydene Mini is manufactured with hydrophilic PVDF membrane that has a controlled porosity and provides high efficiency in bacteria retention.

The membrane is pleated with support and drainage layers made of polypropylene which give high endurance versus thermal sterilization and hydraulic stress.

The good water wettability of the components allows easy integrity testability.

Manufacturing is performed in a controlled environment; each filter is integrity tested.

## **MATERIALS OF CONSTRUCTION**

Filter media	hydrophilic PVDF	
Upstream supports	polypropylene	
Downstream supports	polypropylene	
Internal Core	polypropylene	
External Cage	polypropylene	
End caps / Adapters	polypropylene	

#### **FOOD-SAFETY**

STERYDENE Mini filter elements materials meet (EU) regulation 10/2011 and its amendments, regulations (EC) 1935/2004 and 1895/2005.

### **BIO-SAFETY**

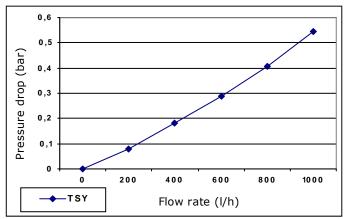
Filter media and components pass USP CLASS VI Biological Reactivity and Chemical-Physical tests for USP plastics. Specific for "PH" and "PHH" grade: the filter meets USP "Water for injection" requirements for particle release and the effluent is Non-Pyrogenic per USP Bacterial Endotoxins (< 0,25 EU/ml).

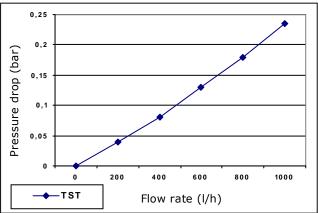
## **OPERATING CONDITIONS**

- max. continuous temperature	80 °C	
- max. cumulative time of steam sterilization	80 hours at 125 °C />100 hours at 121 °C (30 minutes cycles)	
- sanitization with hot water	80 °C max	
- sanitization with chemicals	Can be sanitized by standard chemical agents	
- max. differential pressure	5,0 bar at 25 °C—2,5 bar 80 °C	
- recommended change out differential pressure	2,0 bar at 25 °C	
- recommended rinse up volume	2 liters / cartridge	

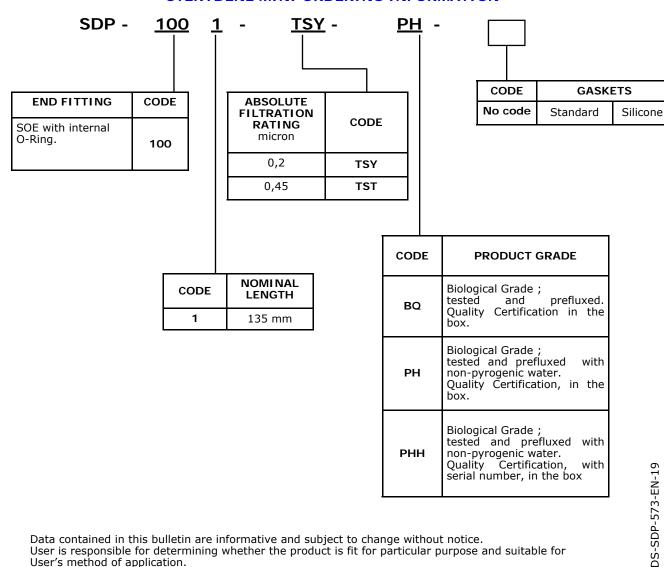
CODE	ABSOLUTE FILTRATION RATING IN LIQUIDS	BACTERIAL RETENTION OF MICRO-ORGANISM >10 <sup>10</sup> CFU PER CARTRIDGE *	ACCEPTABLE LIMIT FOR DIFFUSION FLOW TEST WITH WATER (ml/min)
TSY	0,2 μm	Brevundimonas diminuta	≤ 13 @ 2,3 bar
TST	0,45 μm	Serratia marcescens	≤ 8 @ 1,5 bar
*as per ASTM F838			

#### **WATER FLOW RATE**





## STERYDENE MINI ORDERING INFORMATION



Data contained in this bulletin are informative and subject to change without notice. User is responsible for determining whether the product is fit for particular purpose and suitable for User's method of application.

