STERYDENE
High performance Hydrophilic PVDF

- 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
- Validation Guide available on request

STERYDENE filter element is designed and manufactured to satisfy and assure high quality and consistent performances in critical applications.
STERYDENE cartridge includes PVDF membrane at controlled porosity and provides high efficiency in bacteria retention.
The membrane is pleated with support and drainage layers in polypropylene which give high endurance versus thermal sterilization, hydraulic pulsation stress and excellent chemical compatibility.
Manufacturing is completed in a controlled environment; each filter is integrity tested.
STERYDENE filter element is available from 0.2 micron to 0.65 micron.

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 filter element 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).

QUALITY STANDARDS

Produced under a certified Quality System to guarantee traceability of manufacturing records and integrity testing results.

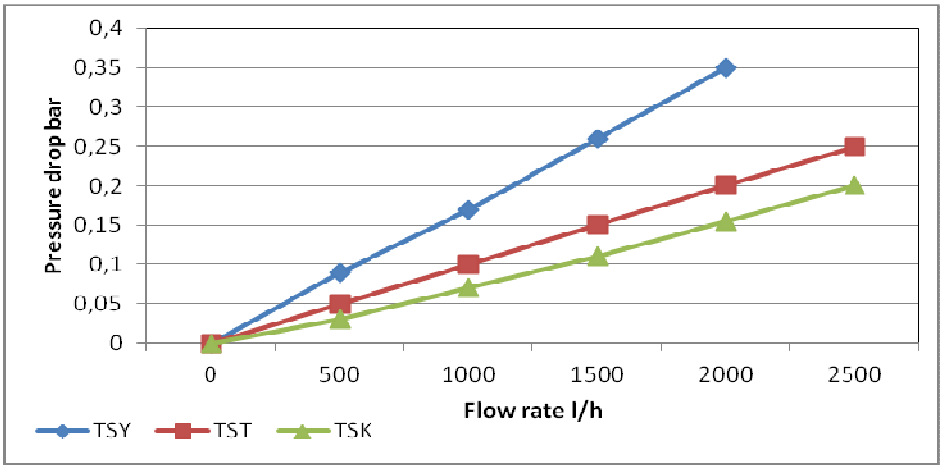
OPERATING CONDITIONS

- max. continuous temperature	85 °C
- max. cumulative time of steam sterilization	80 hours at 125 °C with cycles of 60 minutes />100 hours at 121°C
- sanitization with hot water	90 °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—0,3 bar 135 °C
- recommended change out differential pressure	2,0 bar at 25 °C
- recommended rinse up volume	3 liters/cartridge 10"

CODE	ABSOLUTE FILTRATION RATING IN LIQUIDS	BACTERIAL RETENTION OF MICRO-ORGANISM >10^{10} CFU/ 10" CARTRIDGE*	ACCEPTABLE LIMIT FOR DIFFUSION FLOW TEST WITH WATER FOR 10" CARTRIDGE (ml/min)
TSY	0,2 µm	Brevundimonas diminuta	≤ 25 @ 2,3 bar
TST	0,45 µm	Serratia marcescens	≤ 16 @ 1,5 bar
TSK	0,65 µm	Leuconostoc oenos	≤ 25 @ 0,9 bar

*as per ASTM F838-15

WATER FLOW RATE CURVES FOR 10" ELEMENT



STERYDENE ORDERING INFORMATION

S D P - 207 1 - TSY - BQ - SB - ☐

CODE	MEMBRANE
D	Hydrophilic PVDF

CODE	END CAP AND SUPPORT
P	Polypropylene

ABSOLUTE FILTRATION RATING micron	CODE
0,2	TSY
0,45	TST
0,65	TSK

CODE	GASKETS	
No code	Standard	Silicone
E	On request	EPDM
V	On request	VITON

CODE	PACKING TYPE
SB	Single box
MB	Multiple box

END FITTING	CODE
SOE: open end with (2) O-Ring 2.222. Blind end with flat top.	203
SOE: open end with (2) O-Ring 2.226 and 2 bayonet locks. Blind end with fin.	207
SOE: open end with (2) O-Ring 2.222. Blind end with fin.	208

CODE	NOMINAL LENGTH
1	10"
2	20"
3	30"
4	40"

CODE	PRODUCT GRADE
BQ	Biological Grade; tested and prefluxed. Quality Certification in the box.
PH	Biological Grade; tested and prefluxed with non-pyrogenic water. Quality Certification in the box.
PHH	Biological Grade; tested and prefluxed with non-pyrogenic water. Quality Certification, with serial number, in the box.

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