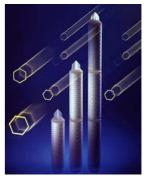


STERYFLUS TSP-PH

- Repeatedly steamable in situ or in autoclave
- Sanitizable
- Thermowelded construction
- EC-listed materials for Food contact
- FDA-listed materials per CFR21
- Bio-Safety per USP—Plastics
- Validation Guide available on request



STERYFLUS TSP-PH cartridges are final sterilizing filters for general applications in pharmaceutical industries; prefluxed with non-pyrogenic water and with certification of quality reporting the serial number, it is utilized in critical applications.

Steryflus cartridges have liquid absolute filtration ratings from 0,2 micron to 0,45 micron; 0,2 micron is available with single and double membrane.

Manufacturing is completed in a controlled environment; each cartridge is integrity tested and the limits of acceptability are monitored on regular basis by bacteria challenge test.

MATERIALS OF CONSTRUCTION

Filter media	Asymmetric PES membrane	
Upstream supports	polyester	
Downstream supports	polyester	
Internal Core	polypropylene	
External Cage	polypropylene	
End caps / Adapters	polypropylene	

FOOD-SAFETY

STERYFLUS TSP filter elements meet (EU) regulation 10/2011 and its subsequent amendments and regulations (EC) 1935/2004 and 1895/2005.

BIO-SAFETY

Filter media and components pass USP Biological Reactivity and Chemical-Physical tests for CLASS VI plastics.

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

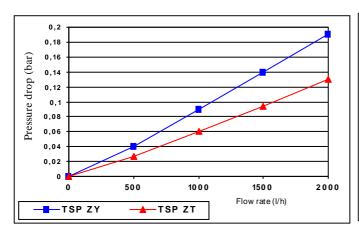
Produced under a certified Quality System to guarantee traceability of manufacturing records and integrity testing results.

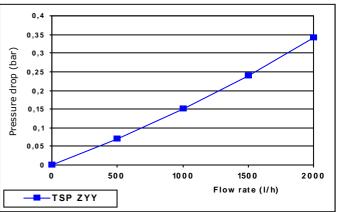
RECOMMENDED OPERATING CONDITIONS

- max. continuous temperature	65 °C	
- max. cumulative time of steam sterilization	20 hours at 125 °C or 40 hours at 121 °C with cycles of 30 minutes	
- 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 - 1,7 bar at 80 °C	
- recommended change out differential pressure 2,0 bar at 25 °C		
- recommended rinse up volume	3 liters/10" cartridge	

CODE	ABSOLUTE FILTRATION RATING IN LIQUIDS	BACTERIAL RETENTION >10 ⁷ CFU/cm ² *	ACCEPTABLE LIMIT FOR DIFFUSION TEST WITH WATER FOR 10" CARTRIDGE (ml/min)
ZYY	0,2 μm double membrane	Brevundimonas diminuta	≤ 16.5 @ 2,8 bar
ZY	0,2 μm	Brevundimonas diminuta	≤ 16.5 @ 2,8 bar
ZT	0,45 μm	Serratia marcescens	≤ 13 @ 1,7 bar
*as per ASTM F838-05			

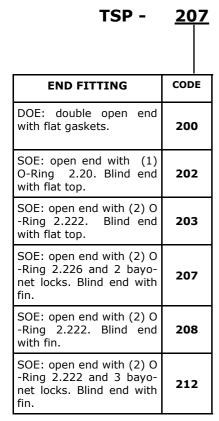
WATER FLOWRATE FOR 10" CARTRIDGE





<u>PH</u>

STERYFLUS TSP ORDERING INFORMATION



ABSOLUTE FILTRATION RATING micron	CODE
0,2 double membrane	ZYY
0,2	ZY
0,45	ZT

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

CODE	NOMINAL LENGTH
05	5″
1	10"
2	20"
3	30"
4	40"

CODE	GASKETS	
No code	Standard	Silicone

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.



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