Capsule Filters SMT-G CSIP

Product description

SMT-G CSIP capsule filters are designed for use in sterile air and gas filtration in biopharmaceutical applications. Composed of a hydrophobic PTFE membrane and polyetherimide housing, these capsule filters provide an alternative to filter cartridges with stainless steel housing and thus reduce operating costs and maintenance time. Polyetherimide housing allows for multiple SIP (steam-in-place) cycles at high pressures and temperatures.

Key features:

- Inherently hydrophobic PTFE membrane
- Low life cycle cost compared to filter cartridge/SS housings
- In place steam sterilizable with long service life
- Efficient mycoplasma, bacteria and particulate removal

Applications:

- Venting of fermenters, tanks, etc.
- Sterilization of air, oxygen, nitrogen, etc.

Qualifications:

- Manufacturing acc. ISO 9001 in a controlled environment
- Comply with EU Regulation No. 1935/2004
- Materials used meet FDA title 21
- 100% integrity tested
- Full traceability

Quality assurance

For each filter cartridge an electronic Certificate of Conformity is available, detailing relevant test data, biological safety information and product approvals against the specific batch number and part number for the filter.

The filter cartridges are manufactured in a controlled clean room environment that generally meets the requirements for ISO 14644-1 Class 8 Cleanrooms. Additionally, well defined and documented work instructions and quality plans are used to ensure that the highest quality and cleanliness standards are consistently maintained.

Product configuration

Series	Rating	Capsule style	Drain/Vent	Inlet/Outlet
SMT-G	0.01 µm	CSIP	HB = 6 mm hose barb	TC1.5”
			HBS = drain 6 mm hose barb, vent Staubli connector	
			S = Staubli connector	

Example : SMT-G 0.01 CSIP HB TC1.5”

Product information

Pore size	0,2 µm (in liquid)
Dimensions	
Length	159 mm
Diameter	81 mm
Effective filtration area	0.20 m^2
Materials of construction	
Filter media	Hydrophobic PTFE
Supports	Polypropylene
Cage/Core/End caps	Polypropylene
Housing	Polyetherimide
Outlet support ring	Stainless steel
O-rings	Silicone
Maximum temperature	80°C
Maximum working pressure	6.5 bar
Maximum differential pressure	
Forward	5.5 bar @ 25°C/1.0 bar @ 80°C
Reverse	2.1 bar @ 25°C
Biological safety	
Endotoxins	<0.25EU/ml/10inch filter
Bio-compatibility	Meet USP <87> in Vitro Cytotoxicity Test
	Meet USP <88> Biological Reactivity Test for plastic Class VI-121°C
Water Bubble Point at 20 °C	≥ 1.1 bar in 60% isopropanol (IPA) 40% water, Air
Bacterial Retention	Retention of 10^7 CFU/cm^2 Brevundimonas diminuta (ATCC® 19146) according to ASTM F838
Sterilization	
Steam in place	≤ 10 cycles @ 142°C for 30 minutes
Autoclave	≤ 50 cycles @ 131°C for 30 minutes
Indirect Food Additive	All materials meet the FDA Indirect Food Additive requirements cited in 21 CFR 177–182

Air flow rate