SteriLUX®

VMH0.4 Cartridge

Description

The SteriLUX® VMH grade 0.4 µm hydrophilic PVDF filter cartridge is manufactured using high quality components that are nontoxic and biologically inert.

Materials of Construction

All components of the SteriLUX® filter cartridge are either animal free or in compliance with EMEA/410/01 Rev. 3 (EDQM 5.2.8 07/2011:50208), and US Code of Federal Regulations 9 CFR 94.18 and 21 CFR 189.5. These materials are listed for food contact use in the Code of Federal Regulations (CFR), Title 21, as below:

Membrane:	Polyvinylidene fluoride	CFR Title 21, 177.2510
Upstream support:	Polypropylene	CFR Title 21, 177.1520
Downstream support:	Polypropylene	CFR Title 21, 177.1520
Outer guard:	Polypropylene	CFR Title 21, 177.1520
Core:	Polypropylene	CFR Title 21, 177.1520
End caps:	Polypropylene	CFR Title 21, 177.1520
O-rings:	Typically silicone	CFR Title 21, 177.2600
Sealing method:	Thermal bonding	

Pore Size 0.4 µm

Minimum Bubble Point 28 psi (1,9 bar), water

Maximum Diffusion Rate 15 mL/min @ 22 psi (1,51 bar) per 10" in water

Typical Water Flow Rate 0.25 psid/gpm per 10" (2,2 L/min at Δp 10 mbar per 25 cm)

Bacterial Retention >10^7 per cm^2 removal of *Serratia marcescens* per modified ASTM F838

Operating Characteristics

100 °F @ 80 psid	150 °F @ 60 psid	180 °F @ 30 psid
(38 °C @ Δp 5,5 bar)	(66 °C @ Δp 4,1 bar)	(82 °C @ Δp 2,1 bar)

Sterilization

Autoclave: 121 to 135 °C (15 to 30 psi, 1 to 2 bar), 30 to 60 min, ≥ 3 cycles
Steam in place: 121 to 135 °C (15 to 30 psi, 1 to 2 bar), 30 to 60 min, ≥ 3 cycles

Biological Safety

SteriLUX® filters meet the requirements as specified in the current USP Class VI plastics, physicochemical, oxidizable substances, and cytotoxicity tests. Bacterial endotoxin levels in aqueous extracts of SteriLUX® filters are less than 0.5 EU/mL, as determined using the *Limulus* amebocyte lysate (LAL) test. No binders, adhesives or surfactants are used in the construction of SteriLUX® filters. Filters comply with Commission Regulation (EU) No 10/2011.

Quality Assurance

SteriLUX® filters comply with the Food and Drug Administration Code of Federal Regulations, Title 21, Parts 210 and 211. Product is manufactured and packaged in a cleanroom facility that, through voluntary compliance, meets or exceeds FDA Good Manufacturing Practice Standards. To ensure product reliability, Meissner's Quality Assurance staff continually audits the manufacturing process for conformance to its Quality Management System. Each SteriLUX® filter is integrity tested during manufacture and is clearly marked with filter type, lot number and serial number.

MEISSNER FILTRATION PRODUCTS

Ordering Guide

O-ring Seal Material	
B	Buna
E	EPR
S	Silicone
T	Teflon® over Silicone
V	Viton®
X	Teflon® over Viton®

Reinforcement Ring Option	
(blank)	Standard, no reinforcement ring
R	Reinforcement ring required for autoclave/SIP applications

Cartridge Configuration*	
C2	SOE, 222 O-rings, button cap end
C6	SOE, 226 O-rings, button cap end
F2	SOE, 222 O-rings, fin end
F6	SOE, 226 O-rings, fin end

* See Green Docs for other configurations

Cartridge Length							
1	10"	2	20"	3	30"	4	40"

Product	Filter Grade	Retention Rating
SteriLUX® hydrophilic PVDF membrane	VMH	0.4

Additional information about SteriLUX® filter products is available in the Green Docs document which is viewable at https://www.meissner.com/downloads/sterilux-gd003.pdf

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