

Steridyne®

0.2 µm VTV-grade Filter Cartridge

Description

The Steridyne® VTV0.2 filter cartridge is a hydrophobic PVDF membrane filter optimized for critical air and gas applications. This liquid-rated, sterilizing grade filter is virus retentive and ideal for pharmaceutical gases, bioreactor air and sterile venting. The filter is 100% integrity tested during manufacture and has the added benefit of quality certification that meets the critical demands of the pharmaceutical, biotechnology, and related industries.

Materials of Construction

All components of the filter are either animal component free (ACF) or in compliance with EMA/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 (PVDF)	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 0.2 µm

Minimum Bubble Point 18 psi (1.24 bar) in 60% IPA/40% water, with air or nitrogen
17 psi (1.17 bar) in 70% IPA/30% water, with air or nitrogen

Maximum Diffusion Rate 15 mL/min per 10" (25 cm) @ 15 psi (1.03 bar), 60% IPA/40% water, with air

Maximum WIT Rate 0.4 mL/min water @ 20 psig (1.38 bar) per 10" (25 cm)
Specification can vary by instrumentation; consult factory.

Typical Water Flow Rate 0.6 psid/gpm per 10" (0.9 L/min @ Δp 10 mbar per 25 cm)

Typical Air Flow Rate 30 scfm @ 1 psid (37 Nm³/hr @ Δp 50 bar)

Bacterial Retention 10⁷ per cm² removal of *Brevundimonas diminuta* per ASTM F838

Operating Characteristics

Operating temperature range:	32 °F to 100 °F (0 °C to 38 °C)
Maximum temperature rating:	180 °F @ 30 psid (82 °C @ 2.1 bar)
Maximum operating pressure:	80 psid @ 100 °F (38 °C @ 5.5 bar)
Maximum reverse pressure:	15 psid @ 100 °F (1.0 bar @ 38 °C)

Sterilization

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

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

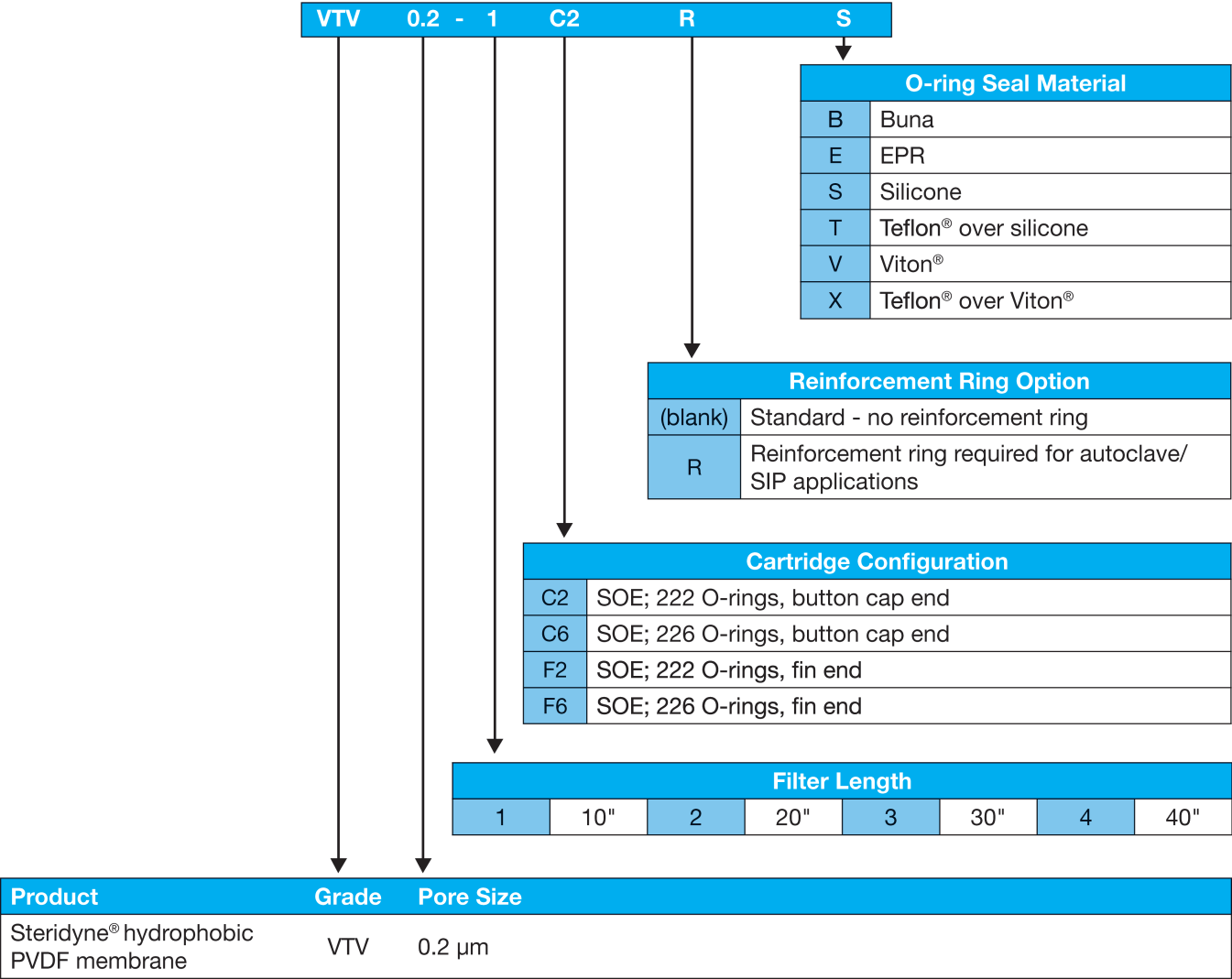
Biological Safety

Steridyne® filters meet the requirements as specified in the current USP <88> Class VI plastics, <87> cytotoxicity and pyrogenicity tests. No binders, adhesives, or surfactants are used in its construction. Filters comply with Commission Regulation (EU) No. 10/2011.

Quality Assurance

Steridyne® VTV0.2 filters are supplied with a Certificate of Quality verifying the high standards and superior performance of the product. Steridyne® 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 Steridyne® filter is integrity tested during manufacture and is clearly marked with filter type and lot number.

Ordering Guide



Additional information about this filter product is available in the Steridyne® Green Docs document at www.meissner.com/green-docs.