

Steridyne®

VMV0.2 Capsule

Description

The Steridyne® VMV grade 0.2 µm hydrophobic PVDF capsule filter is manufactured using high quality components that are nontoxic and biologically inert.

Materials of Construction

All components of the Steridyne® filter capsule 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 |
| Capsule housing: | Polypropylene | CFR Title 21, 177.1520 |
| Sealing method: | Thermal bonding | |

Pore Size 0.2 µm

Minimum Bubble Point 18 psi (1,2 bar), 60% IPA

Bacterial Retention >10⁷ per cm² removal of *Brevundimonas diminuta* per ASTM F838-05

Operating Characteristics

Operating temperature range: 32 °F to 100 °F (0 °C to 38 °C)

Maximum temperature rating: 160 °F @ 35 psig (71 °C @ 2,4 bar)

Maximum operating pressure (liquid service): 75 psig @ 100 °F (5,2 bar @ 38 °C)

Maximum operating pressure (gas service): 50 psig @ 100 °F (3,4 bar @ 38 °C)

Sterilization

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

Gamma irradiation: 25 to 40 kGy once. Do not autoclave irradiated capsules.

Capsules must not be steamed in place (SIP).

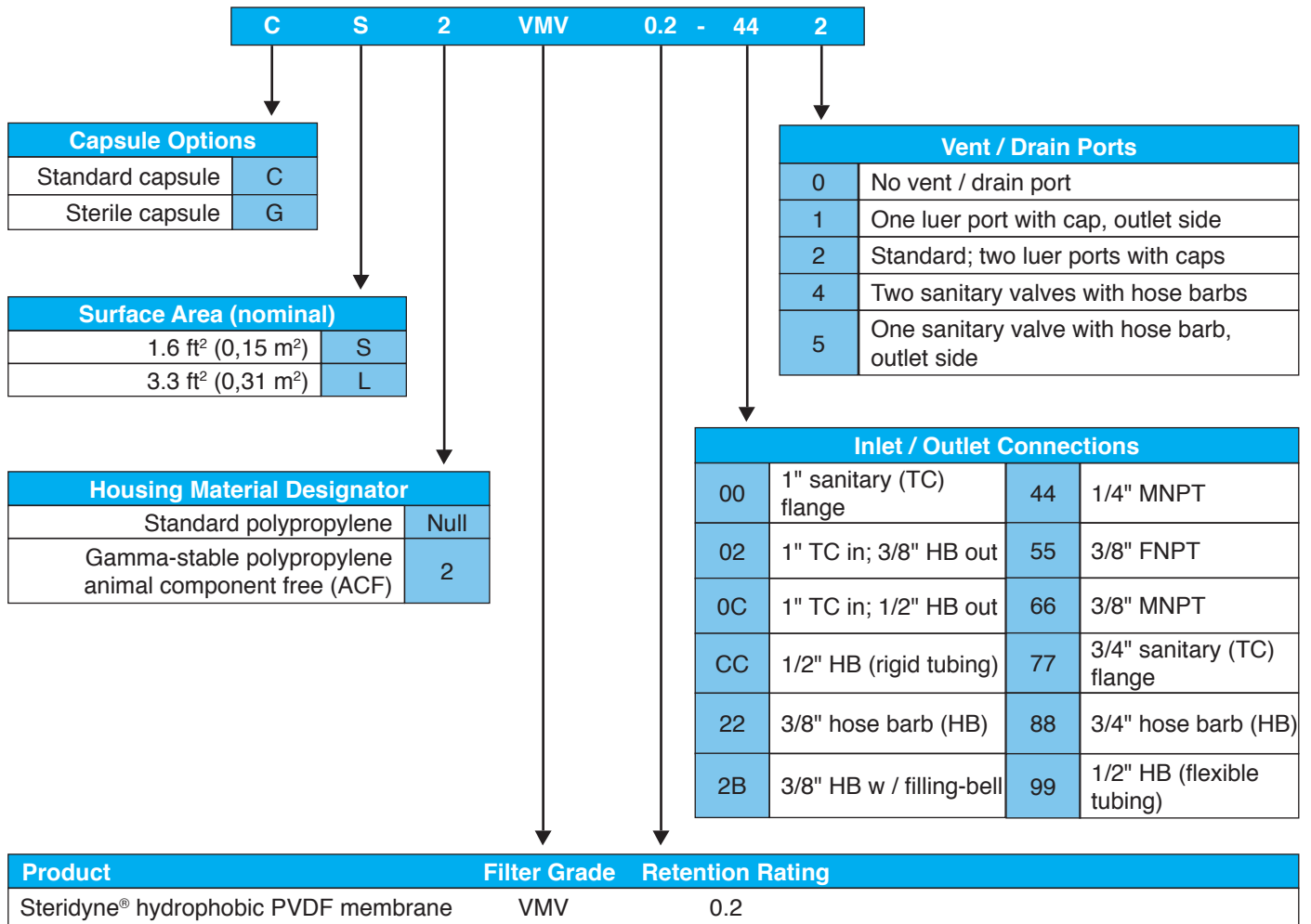
Biological Safety

Steridyne® 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 Steridyne® filters are less than 0.5 EU/mL, as determined using the *Limulus* amoebocyte lysate (LAL) test. No binders, adhesives or surfactants are used in the construction of Steridyne® filters. Filters comply with Commission Regulation (EU) No 10/2011.

Quality Assurance

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, lot number and serial number.

Ordering Guide



Additional information about Steridyne® filter products is available in the Green Docs document which is viewable at <https://www.meissner.com/downloads/steridyne-gd004-2.1.pdf>