

SUPAPORE VC

Pleated Membrane Filter Capsules



SupaPore VC microfiltration membrane capsules are fully disposable filter units for small and medium scale liquid processing applications. They are ready-to-use, avoiding the need to purchase or maintain filter housings and are easy to change-out with minimum downtime. The filtration unit is permanently enclosed inside the capsule shell to minimise post-use cleaning and operator exposure to process fluids.

SupaPore VC capsules are available with pleated PES (polyethersulphone) and offered with a range of inlet/outlet connections to suit most process systems.

The filters are supplied in a wide range of lengths from 50mm to 750mm long and two diameters of 75mm and 90mm.



SupaPore VC Capsules - PES

- Naturally hydrophilic PES membrane
- Low protein binding
- 100% polypropylene hardware
- Available in a range of Absolute removal ratings
- Integrity testable
- Presterilised option available (gamma irradiated at minimum 25 kGy)

Product Features

- Thermally bonded and adhesive free construction
- Capsules are non-pyrogenic and can be autoclaved multiple times
- Materials meet US FDA CFR Title 21 requirements
- Available in a range of grades and pore sizes
- Manufactured in clean room facilities under ISO quality system

Features and Benefits

- Fully disposable unit avoids the need to purchase a filter housing
- Presterilised option provides maximum convenience
- Ready to use for easy filter change-out and minimum downtime
- Enclosed filter unit minimises operator exposure and post-use cleaning
- Wide range of inlet and outlet connections available so suitable for most process systems
- All capsules feature Luer-lok vent and drain
- All polymer construction
- Full product validation guide available

Industries and Applications

- Development and pilot plant applications
- Equipment requiring filtration e.g. laboratory water treatment systems, printing equipment etc
- Hospital critical water applications e.g. endoscope washing machines, dialysis equipment
- Manufacturers of small or medium size batches of products where batch to batch cleaning is an issue
- Multi-purpose plants where flexibility is needed

SupaPore VC Technical Data

Dimensions

Outside Diameter: 90mm (JUNIOR capsule 75mm)

Filter Module Length	Nominal Capsule Length (Hose Barb connections)	Typical Surface Area	Capsule Volume (Litre)
JUNIOR 50mm (2")	117mm	0.05m ²	0.11
50mm (2")	147mm	0.11m ²	0.23
125mm (5")	220mm	0.32m ²	0.57
250mm (10")	339mm	0.65 - 0.70m ²	1.0
500mm (20")	582mm	1.3 - 1.40m ²	1.9
750mm (30")	824mm	1.95 - 2.10m ²	2.8

Sterilisation and Sanitisation* Applies to non gamma sterilised option only

Autoclave: 135°C for 30 mins (25 cycles)

Hot Water: Up to 90°C

Maximum Operating Conditions

Maximum Temperature: 43°C @ 2.0 Bar

Maximum Pressure: 5.5 Bar @ 20°C (Liquid)

4.1 Bar @ 20°C (Gas)

Max Differential Pressure: 3.4 Bar @ 20°C (Forward Flow)

2.7 Bar @ 20°C (Reverse Flow)

Recommended change-out differential pressure: 2.5 Bar

Standard Materials of Construction

Filter Media: Polyethersulphone (PES)

Media Support: Polypropylene

Assembly: Polypropylene

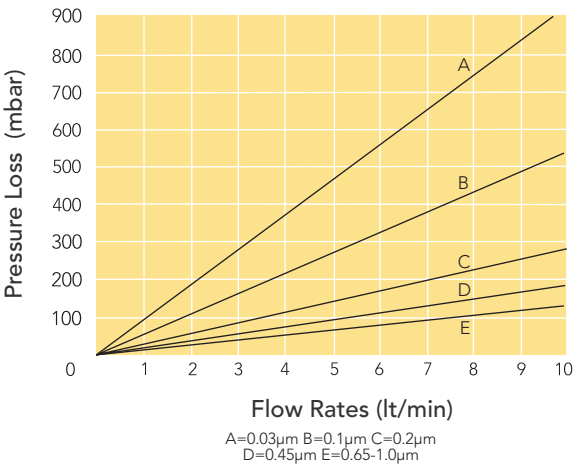
Microorganism Removal Efficiency (per 10" cartridge)

16VCB002: LRV >11 (*Brevundimonas diminuta* (ATCC 19146))

16VCB004: LRV >8 (*Serratia marcescens* (ATCC 14756))

Validation guide and Integrity test data available on request. All SupaPore capsules are manufactured under strict control with batch number identification, giving full traceability on all components.

Flow Rates For Water (2" Capsule)



Integrity Test Specification, B grade only

Micron Rating	Bubble Point In Water	Diffusion Flow (cc/min/10") In Water
0.03µm	5172mBar (75 psi)	≤ 30 @ 4138mBar
0.1µm	4140mBar (60 psi)	≤ 30 @ 3310mBar
0.2µm	3030mBar (44 psi)	≤ 30 @ 2410mBar
0.45µm	1720mBar (25 psi)	≤ 30 @ 1380mBar
0.65µm	1310Bar (19 psi)	≤ 30 @ 1030mBar
0.8µm	1030mBar (15 psi)	≤ 30 @ 830mBar
1.0µm	690mBar (10 psi)	≤ 30 @ 550mBar

Ordering Guide

16VC	G	001 -	09	A	A	A
Media	Grade	Micron Rating	Length	Inlet	Outlet	Branding
VC - Polyethersulphone VG - Gamma Sterilised PES	G - General B - Biological	00A - 0.03µm 001 - 0.1* 002 - 0.2 004 - 0.45 006 - 0.65 008 - 0.8 010 - 1.0	Junior J2 - 117 Standard 02 - 147mm 05 - 220 09 - 339 20 - 582 30 - 824	Junior Capsule H - 3mm Hosebarb Straight I - 6mm Hosebarb Straight J - 12mm Hosebarb Straight K - ½" Sanitary Flange BS4825 L - Luer-Lok Standard Capsule A - 8.5-16mm Hosebarb Tapered B - ¼" NPTM C - ¼" NPTF D - ¾" NPTF E - ½" NPTM F - ½" NPTF G - 1" Sanitary Flange BS4825	Junior Capsule H - 3mm Hosebarb Straight I - 6mm Hosebarb Straight J - 12mm Hosebarb Straight K - ½" Sanitary Flange BS4825 L - Luer-Lok Standard Capsule A - 8.5-16mm Hosebarb Tapered B - ¼" NPTM C - ¼" NPTF D - ¾" NPTF E - ½" NPTM F - ½" NPTF G - 1" Sanitary Flange BS4825	A - Amazon

Example: 16VCB002-20GAA = PES Media, 0.2µm, 20" long, Sanitary Flange inlet and Hosebarb outlet.

* G Grade only

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