



Filtertechnik

FTECH-PORE VP

PLEATED MEMBRANE FILTER CARTRIDGE

Ftech-Pore VP Microfiltration cartridges use a pleated high surface area Polyethersulphone membrane that has been designed for use in a wide range of liquid processing applications. The naturally hydrophilic PES membrane contains no wetting agents and has very low levels of extractables making this cartridge an ideal choice for systems requiring a reliable and consistent high-quality filtrate.

Product Features

Ftech-Pore VP cartridges feature:

- A naturally hydrophilic PES membrane
- Low protein-binding characteristics
- Exceptionally high flow rates with low clean pressure losses
- Bacterial retention data with LRVs using *Brevundimonas Diminuta* and *Serratia Marcescens*
- Wide chemical compatibility

All cartridges are thermally bonded and adhesive free. Each unit is preflushed with ultra pure water and integrity tested before final assembly

- Fast rinse-up time to 18 Megohm-cm*1
- Non Pyrogenic*2
- Materials meet US FDA Title 21 and USP Class VI requirements
- Meet current USP requirements for extractables

Available in a wide range of grades & absolute rated pore sizes:

- General Grade
- Electronics Grade
- Biological Grade

Suitable for most sanitisation regimes including steaming, autoclaving, hot water flush and most common sanitising agents.

- Validated*3 removal ratings for consistent and reliable performance
- Fully Integrity Testable - Bubble Point and Diffusional Flow values provided for all pore sizes*1
- Pleated PES membrane that exhibits exceptionally low protein-binding characteristics
- High surface area giving high flow rates and low initial pressure losses
- Wide chemical compatibility, meet FDA requirements
- Range of integrity testable ratings from 0.03 to 1.0µm (depending on grade)
- Thermal bonding process eliminates adhesives and ensures minimal extractables
- Identification mark on every cartridge
- Full product guide available

*1 E grades only *2 B grades only

*3 See product guides for further details stating test method and rated efficiencies

(Note: Steaming, autoclaving and hot water sanitisation must use the stainless steel support ring or the glass filled end-cap option) Filtertechnik Filters manufactures a comprehensive range of filter housings for Ftech-Pore VP cartridges including the industrial 50 and 60 Series and the 70 Series for hygienic applications.

Ftech-Pore VP FEATURES AND BENEFITS

- Validated*3 removal ratings for consistent and reliable performance
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- High surface area giving high flow rates and low initial pressure losses
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Technical data

Dimensions

Outside Diameter: 68.5mm
 Typical Surface Area: 0.65m² - 0.75m² (Per 10")
 Length: See ordering guide

Sterilisation and Sanitisation*4

Temperature: 150°C
 Recommended Maximum Differential Pressure:
 Forward Flow: 4.0 Bar @ 20°C
 Reverse Flow: 3.5 Bar @ 20°C

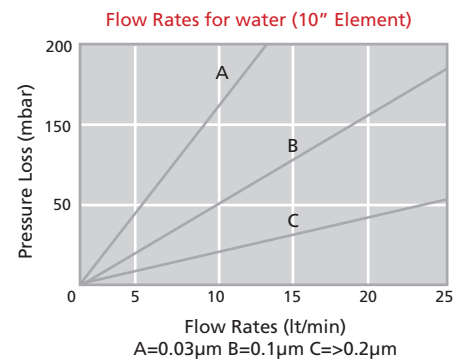
Product validation guide available on request. All Ftech-Pore VP cartridges are manufactured under strict control with batch number identification, giving full traceability on all components.

Materials of Construction

Filter Media: Polyethersulphone (PES)
 Cage, Core & End Caps: Polypropylene (PP)

Bacterial Challenge

16VPW002: LRV>1011 (Brevundimonas diminuta (ATCC 19146))
 16VPW004: LRV>108 (Serratia Marcescens (ATCC 14756))



Integrity Test Specification E and B Grades

Micron Rating	Bubble point in water	Diffusion Flow(cc/min/10") In 60/40 IPA/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	1310mBar (19 psi)	≤ 30 @ 1030mBar
0.8µm	1030mBar (15 psi)	≤ 30 @ 830mBar
1.0µm	690mBar (10 psi)	≤ 30 @ 550mBar

Ordering guide

FT-16

Media
 VP - Polyethersulphone / Polypropylene

Grade
 B - Biological
 E - Electronics
 G - General

Micron rating
 00A - 0.03µm
 001 - 0.10
 002 - 0.20
 004 - 0.45
 006 - 0.65
 008 - 0.80
 010 - 1.0

Length
 09 - 251mm
 20 - 510
 30 - 757
 40 - 1016

Connections
 0 - DOE
 A - Code A
 B - Code B*5
 S - Code S
 2 - Code 2
 3 - Code 3
 6 - Code 6
 7 - Code 7
 8 - Code 8
 9 - Code 9

Seal
 B - Buna
 E - EPDM
 F - FEP/Silicone
 S - Silicone
 V - Viton

A

Options
 S - St.St Insert
 G - Glass filled
 PP end cap

Example: 16VPG004-303SA = Polyethersulphone media with Polypropylene core, General Grade, 0.45µm, triple length 30" long, Code 3 end fitting with Silicone seal. *5 Code B - to fit Filtertechnik 50 Series housings only

Industries and applications

- Pharmaceutical:** Sterile filtration, WFI, Ophthalmics, Oral medications, Large volume parenterals
- Fine Chemicals:** Aqueous and Organic bulk feeds, Solvents, Bubble jet inks
- Electronics:** High purity water, Polishing loop return lines, Point of use
- Cosmetics:** Alcohol, Mouthwashes, Make up water