



FLUXA

Fluxa
Filtri
S.p.A.

V.le A. De Gasperi, 88/B-20017 Mazzo di Rho (MI)
Tel. 0293959.1 (15 linee)
Fax 02.93959.400/440/470
e-mail: info@fluxafiltri.com - www.fluxafiltri.com

PLEATED MEMBRANE FILTER CARTRIDGE

POLIFLO II 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

POLIFLO II 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 Megaohm-cm*¹
- Non Pyrogenic*²
- Materials meet US FDA Title 21 and USP Class VI requirements
- Meets the requirements for food contact as detailed in European Regulation (EC) Number 1935/2004
- 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.

(Note: Steaming, autoclaving and hot water sanitisation must use the stainless steel support ring or the glass filled end-cap option)

Fluxa manufactures a comprehensive range of filter housings for **POLIFLO II VP** cartridges including the industrial series and filters for hygienic applications. Please consult our Sales Office for further details on the full range.



POLIFLO II VP FEATURES AND BENEFITS

- 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

TECHNICAL DATA

Dimensions

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

Sterilisation and Sanitisation*⁴

Steam or Autoclave: 121°C for 15 mins (40 cycles)
 Hot Water: 90°C for 30 mins (0.2 bar Δp max)
 *⁴ Applies to single open end cartridges only. For all steaming and hot water applications, the Glass Filled end cap option must be used.

Maximum Operating Conditions

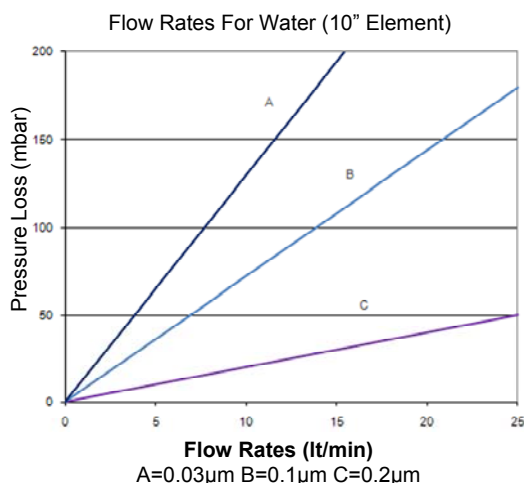
Temperature: 80°C
 Recommended Maximum Differential Pressure:
 Forward Flow: 4.0 Bar @ 20°C
 Reverse Flow: 3.5 Bar @ 20°C
 Product validation guide available on request. All **Poliflo II VP** cartridges are manufactured under strict control with batch number identification, giving full traceability on all components.

Materials of Construction

Filter Media: Polyethersulphone (PES)
 Cage, Core & End Caps: P - Polypropylene (PP)
 D - Polypropylene Cage and End caps, Glass Filled PP Core

Bacterial Challenge

E-VPW 0.2µm: LRV>10¹¹ (Brevundimonas diminuta (ATCC 19146))
 E-VPW 0.45µm: 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 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

E — ○ ○ — ○ — ○ ○ — ○ ○ ○ — ○ — ○ — ○

Media	Grade	Length (DOE)	Micron Rating	End Fittings	Seal Material	Options
VP - Polyethersulphone / Polypropylene	B - Biological	09 - 251 mm	00A - 0.03 µm	0 - DOE	B - Buna	G - Glass filled PP end cap
VD - Polyethersulphone / Polypropylene cage and Endcaps, Glass Filled PP core	E - Electronics	20 - 510	001 - 0.10	S - Code S	E - EPDM	
	G - General	30 - 757 40 - 1016	002 - 0.20 004 - 0.45 006 - 0.65 008 - 0.80 010 - 1.0	2 - Code 2 3 - Code 3 6 - Code 6 7 - Code 7 8 - Code 8 9 - Code 213 / Flat	F - FEP/Silicone S - Silicone V - Viton	

Example: E-VP-G - 30 - 004 3S = Polyethersulphone media with Polypropylene core, General Grade, 0.45µm, triple length 30" long, Code 3 end fitting with Silicone seal.

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