

Poliflo II Capsule PES & PTFE

PLEATED MEMBRANE FILTER CAPSULES

Poliflo microfiltration membrane capsules are fully disposable filter units for small and medium scale liquid and gas 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.

Poliflo are available with pleated PES (polyethersulphone) or PTFE membranes 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 127 mm to 824 mm long.

Poliflo II PES Capsule

- Naturally hydrophilic PES membrane
- Low protein binding
- 100% polypropylene hardware
- Available in a range of absolute removal ratings
- Integrity testable

Poliflo II PTFE Capsule

- Naturally hydrophobic PTFE membrane
- 100% polypropylene hardware
- Available in a range of absolute removal ratings
- Integrity testable

Product Features

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



POLIFLO II PES & PTFE CAPSULES FEATURES AND BENEFITS

- Fully disposable unit avoids the need to purchase a filter housing
- 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 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
- Venting and process air filtration
- Manufacturers of small or medium size batches of products where batch to batch cleaning is an issue
- Multi-purpose plants where flexibility is needed

TECHNICAL DATA

Dimensions

Outside Diameter: 90 mm

Filter Module Length	Nominal Capsule Length (Hose Barb connections)	Typical Surface Area	Capsule Volume (Litre)
50 mm (2")	127 mm	0.09 m ²	0.23
125 mm (5")	220 mm	0.28 m ²	0.57
250 mm (10")	339 mm	0.65-0.70 m ²	1.0
500 mm (20")	582 mm	1.3-1.40 m ²	1.9
750 mm (30")	824 mm	1.95-2.10 m ²	2.8

Sterilisation and Sanitisation

Autoclave: 127°C for 20 mins (multiple 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)

Material of Construction

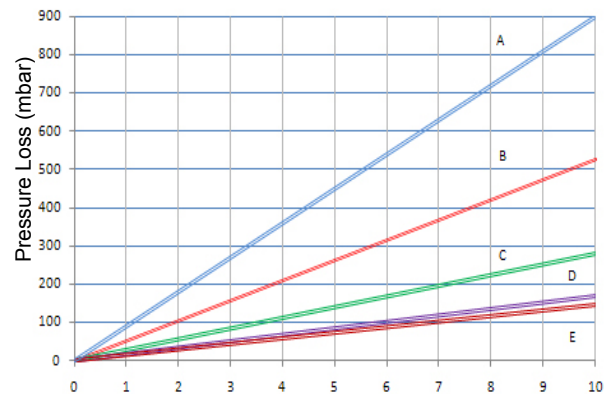
Filter media: V - Polyethersulphone (PES) or
 T - Polytetrafluoroethylene (PTFE)
 Media support: Polypropylene
 Capsule Assembly: Polypropylene
 Vent and Drain Valves: Polypropylene Luer-lok

Bacterial Challenge

CVB 0.2µ: LRV>10¹¹ (Brevundimonas diminuta (ATCC 19146))
 CVB 0.45µ: LRV>10⁸ (Serratia Marcescens (ATCC 14756))

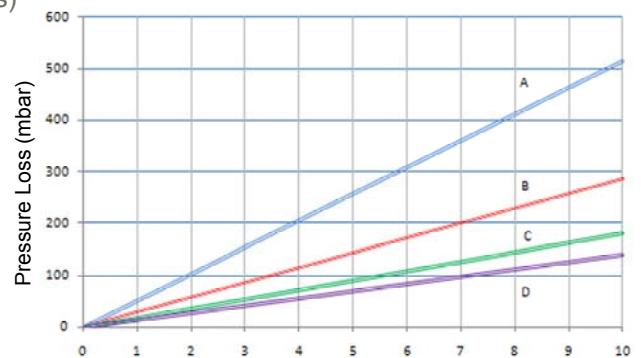
Validation guide and integrity test data available on request. All **Poliflo II Capsules** are manufactured under strict control with batch number identification, giving full traceability on all components.

Flow Rates For Water (2" Capsule)



CV Flow Rates (lt/min)

A=0.03µm B=0.1µm C=0.2µm D=0.45µm E=0.65-1.2µm



CT Flow Rates (lt/min)

A=0.1µm B=0.2µm C=0.45µm D=1/3µm

ORDERING GUIDE

Media	Grade	Length	Micron Rating	Inlet	Outlet	Option
V - Polyethersulphone T - PTFE	G - General B - Biological	02 - 127 mm 05 - 220 09 - 339 20 - 582 30 - 824	PES 00A - 0.03 µm 001 - 0.1 002 - 0.2 004 - 0.45 006 - 0.65 008 - 0.8 010 - 1.0 PTFE 001 - 0.1 µm 002 - 0.2 004 - 0.45 010 - 1.0 030 - 3.0	A - 8.5 - 16 mm Hosebarb B - 1/4" NPT 'M' C - 1/4" NPT 'F' D - 3/8" NPT 'F' E - 1/2" NPT 'M' F - 1/2" NPT 'F' G - 1/1 1/2" Sanitary Flange	A - 8.5 - 16 mm Hosebarb B - 1/4" NPT 'M' C - 1/4" NPT 'F' D - 3/8" NPT 'F' E - 1/2" NPT 'M' F - 1/2" NPT 'F' G - 1/1 1/2" Sanitary Flange	

Example: C-V-B20-002GAA = PES media 0.2 µm, 20" long, Sanitary Flange inlet and Hosebarb outlet.



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