

Supor® EKV Sterilizing Grade Cartridge Filter

Description

Supor EKV polyethersulfone membrane cartridges are validated, 0.2 µm sterilizing grade filters with a unique combination of Pall® Ultipleat® filter construction and optimized built-in prefiltration to give longer filter life and lower filtration costs. The filters are suitable for sterile filtration of a wide range of fluids including buffers, biological fluids, tissue culture media, ophthalmic products and many others. The low protein and preservative binding of the **Supor** polyethersulfone membrane also ensures maximum transmission of active ingredients.

Key Features

- Hydrophilic polyethersulfone membrane for low adsorption and wide chemical compatibility
- Easy to wet for a reliable integrity test
- Patented **Ultipleat** filter construction for high area and good flow rates
- Built-in, asymmetric prefilter layer for long life and low filtration costs
- High strength construction tolerates up to 1 bar (14.5 psi) differential pressure during steam-in-place sterilization
- High strength design allows for multiple autoclave cycles and extended use

High Quality Standards

Forward Flow value correlated with sterile removal of *Brevundimonas diminuta* (ATCC 19146) at 10⁷/cm².

A comprehensive validation guide is available upon request.



Every filter is:

- Integrity tested during manufacture
- Identified by a lot number and a unique serial number for complete traceability of manufacturing history and for user's traceability system
- Supplied with a certificate of test confirming the quality standards and quality control tests performed by Pall
- Manufactured under a Quality Management System certified to ISO 9001:2000
- Meets USP Biological Reactivity Tests, *in-vivo*, in accordance with USP Class VI plastics at 121°C

Supor filters meet the following standards:

- Cleanliness per USP Particulate Matter in Injections after flushing*
- Non-Fiber-Releasing per 21 CFR after flushing*
- Non-Pyrogenic per USP Bacterial Endotoxins (0.25 EU/ml)
- USP limits for TOC and conductivity under Purified Water after flushing*

*Per lot sample soak or rinse-up flush aliquots

Materials of Construction

Membranes	Hydrophilic Polyethersulfone (PES)
Support/Drainage	Polypropylene
Core/end caps	Polypropylene
Cage	Polypropylene with TiO ₂ (white colored)
Internal adapter support ring	Stainless steel
O-rings	Silicone elastomer
Sealing Technology	Thermal bonding without adhesives

Operating Parameters¹

Maximum Differential Pressure (Forward Direction)	5.5 bar (80 psi) @ 40°C (104°F) 3.0 bar (43 psi) @ 80°C (176°F)
Maximum Differential Pressure (Reverse Direction)	2.0 bar (30 psi) @ 40°C (104°F)

¹ In compatible fluids which do not soften, swell, or adversely affect the filter or its materials of construction

Sterilization²

Autoclave	5 x 60 minutes cycles at 125°C (261°F) - slow exhaust
In Situ Steam	5 x 60 minutes cycles at 125°C (261°F)

² Contact Pall for confirmation of extended sterilization conditions. Maximum differential pressure during steam sterilization is 1 bar (14.5 psi) in forward direction

Physical Dimensions (nominal)

Lengths	254 mm (10"), 508 mm (20"), 762 mm (30"), 1016 mm (40")
Diameter	70 mm (2.75")

Ordering Information

Pall Part Number: AB

EKV

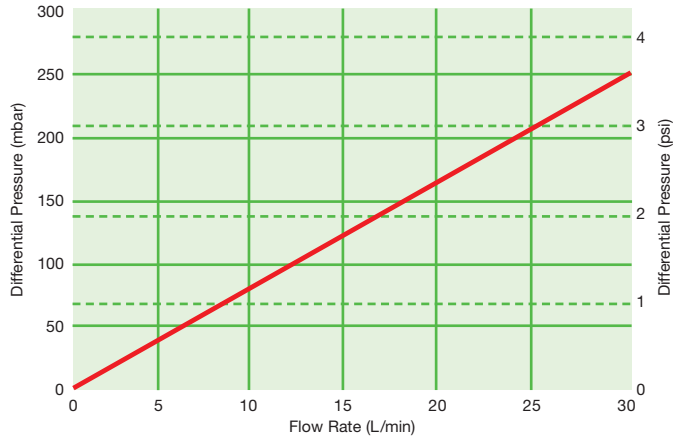
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Code	Nominal Length	Removal Rating	Cartridge Style	Pharmaceutical Grade	O-ring material
1	254 mm (10")	0.2 µm sterilizing grade	Pall code 7 double O-ring bayonet lock and fin	P suffix indicates optimized and qualified for pharmaceutical use, including 100% integrity testing and Certificate of Test provided	Silicone elastomer (Other material available on request)
2	508 mm (20")				
3	762 mm (30")				
4	1016 mm (40")				

Specifications and Availability: The information provided is a guide to the part number structure and possible options. Product availability may be subject to change without notice. All specifications are nominal. The literature was reviewed for accuracy at the time of publication. For additional information, consult your local Pall distributor.

Typical Liquid Flow Rates³ at 20°C (68°F)



³ For fluids at 1 cP viscosity. For other viscosities, divide flow rate by viscosity in cP. Determined on unused filters in laboratory testing

Typical Extractables* (Per 254 mm (10") module)

< 25 mg in water at 20°C (68°F) after 4 hours extraction

*Tested on elements without pre-flushing

Integrity Test Values:

Values for 254 mm (10 inch) filter at 20°C (68°F)

Max. allowable Forward Flow (air test gas): Water wet 17 mL/min at 2760 mbar (40 psi)

Contact Pall for multi-element integrity test values and recommended test procedures

Filter Area

Typical effective filtration area per 254 mm (10") module 0.6 m² (6.5 ft² per 10" module)



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