



Product Information

- FilterPES cartridges use a pleated membrane made of polyethersulphone. The cartridges have high mechanical, thermal, and chemical resistance.
- The membrane has an asymmetrical structure and a large filtration surface. These features increase operating time and service life.
- The cartridge is made of polyethersulphone and polypropylene. These materials are chemically inert with proteins, colloids, aromas, and colour. They do not alter the filtered fluid.
- Filtration rate: 0.1 μm to 1.2 μm . Use the cartridge for sterilisation and microbiological stabilisation of pharmaceutical, biological, and chemical fluids.
- These fluids include solvents, perfumes, mouthwashes, water, wine, beer, and other beverages. Absolute retention: > 99.98% for particles at the specified filtration rate.

Quality Standards

- The product is designed, developed, and manufactured to an ISO 9001-certified quality management system.

Bio-Safety Standards

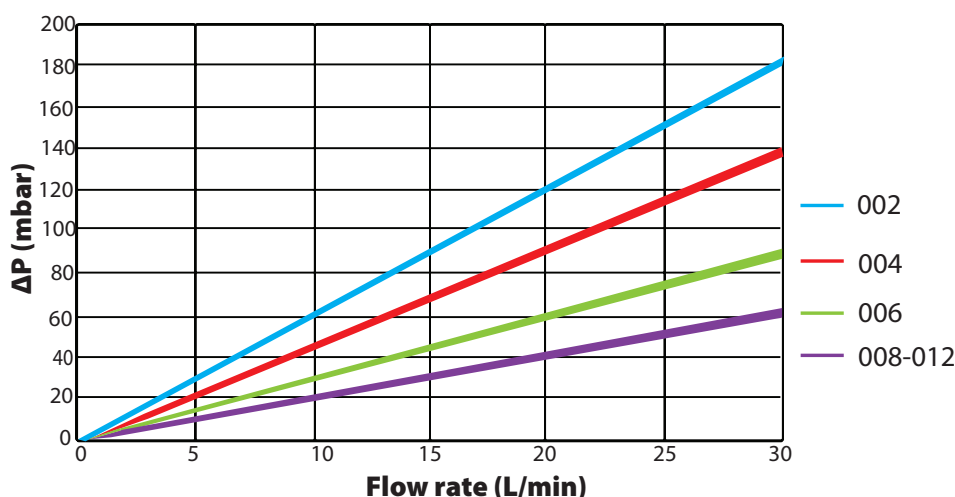
- The product is non-pyrogenic according to USP <85> Bacterial Endotoxins.
- The product passes the USP Plastic Class VI test and is non-fiber-releasing according to CFR21.

Regulatory Compliance

- FilterPES complies with the requirements for food contact materials.
- These requirements are specified in European Regulation (EC) No. 1935/2004 and in the Code of Federal Regulations, Title 21, paragraphs 170–199.

Typical Liquid Flow Versus Differential Pressure

Water at 20 °C per 10" module



Applications

- Final filtration of pharmaceutical liquids and gases.
- Final filtration of process liquids in wineries, bottled water plants, and spring water.
- Filtration of food and beverage products, such as juices, wine, dairy products, and water treatment.
- Chemical processing of acids and solvents.

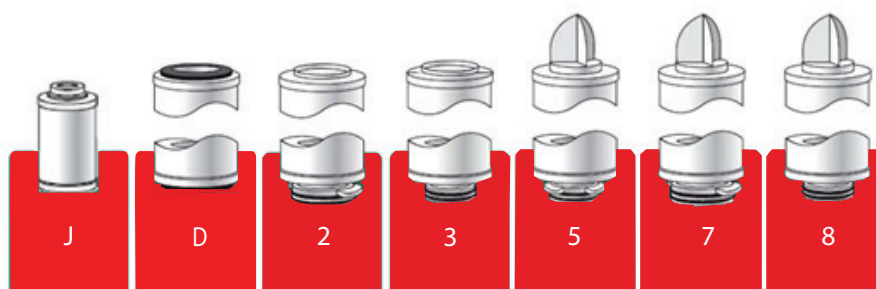
Technical Specifications

Materials of Construction		Microbial Retention Efficiency	
Filter Media	Polyethersulphone	0.2 µm	Brevundimonas diminutia TR > 10 ⁷ / cm ²
Support & Drainage Layers	Polypropylene	0.45 µm	Serratia marcessans TR > 10 ⁷ / cm ²
Cage	Polypropylene	0.45 µm	Saccaromices cerevisiae TR > 10 ⁷ / cm ²
Adapter Insert	AISI1316L	< 99.98% (ASTM 795)	Absolute rated filter

Operating Conditions		Sterilisation	
Maximum Operating Temperature	Up to 70 °C	Steam	Up to 130 °C per 30 minutes
Max Differential Pressure	5.0 bar at 24 °C	Hot Water	Up to 130 °C per 30 minutes
Max. Forward Flow Dp	1.8 bar at 50 °C		

Nominal Dimensions					Integrity Test Values
Junior					
Length	62 mm	125 mm	Diameter	56 mm	The Instructions for use on the cartridge packaging at delivery, show the specification values for each filtration rate.
Standard					
Length	250 mm	500 mm	Diameter	70 mm	
	750 mm	1000 mm			

Order Information



Adapter Types						
PPES	7	40	002	S	0	PH
Product ID	Adapter	Length	Filtration Rating	Gasket O-Ring Material	Insert	Version
PPES	D = DOE (double open end)				I = with (*)	PH = Pharma version
	2 = 226/2 bayonet/no fin	10 = 10"	001 = 0.1 µm	E = EPDM	0 = without	
	3 = 222/2 without fin	20 = 20"	002 = 0.2 µm	S = Silicone		
	5 = 222/3 bayonet with fin	30 = 30"	004 = 0.45 µm	V = FPM		
	7 = 226/2 bayonet with fin	40 = 40"	006 = 0.65 µm	X = FEP		
	8 = 222/2 with fin		008 = 0.8 µm		(*)When filter is to be sterilised with steam	
	J = JUNIOR	05 = 05"	012 = 1.2 µm			