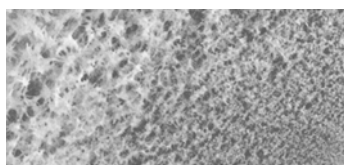


# EPM.PS (KFM.PS) Polyethersulphone (PES) membrane Filter Cartridges and Capsules

For fine, clarifying, biological filtration of liquids



## Description

EPM.PS membrane filters are produced on the basis of the one-layer hydrophilic asymmetric polyethersulphone membrane with the micron ratings of 0.2-0.8  $\mu\text{m}$ . The special structure of pores ensures uniform clogging of the membrane and makes it much easier to filter viscous liquids. Increased overall porosity of the membrane combined with high thermal and chemical resistance ensures high flow rate and reliable removal of mechanical particles, bacteria, suspended matters and colloids from liquids in a wide range of pH.

Minimal absorption of the polyethersulphone membrane makes EPM.PS the best choice for application in the processes of filtration of albumin containing solutions and biological liquids, especially in biopharmaceutical industry and beverages industry.

## Materials

Membrane	Polyethersulphone (PES)
Draining layer	Polypropylene
Body, end parts, adapter	Polypropylene
O-rings	Silicone (other materials available)

## Integrity test values of EPM.PS with the height of 250 mm

Brand	Max. diffusion, ml/min	Test pressure, MPa (bar)
EPM.PS-020	16	0.17 (1.7) at 20 °C
EPM.PS-045	16	0.14 (1.4) at 20 °C
EPM.PS-065	16	0.10 (1.0) at 20 °C
EPM.PS-080	16	0.06 (0.6) at 20 °C

## Operational parameters

Maximal differential pressure	0.5 MPa at 20 °C, 0.2 MPa at 80 °C (Filter Cartridges) 0.4 MPa at 20 °C, 0.2 MPa at 60 °C (Capsules)
Maximal back differential pressure	0.2 MPa at 20 °C
Maximal operational temperature	90 °C (Filter Cartridges)

## Specifications

### Micron rating

0.2 µm  
0.45 µm  
0.65 µm  
0.8 µm

### Nominal Dimensions and Filter Areas

#### Filter Cartridges

H, mm	D, mm	S, m <sup>2</sup>
125 (5")	70	0.4
250 (10")	70	0.8
500 (20")	70	1.6
750 (30")	70	2.4
1000 (40")	70	3.2

#### Capsule filters

H, mm	D, mm	S, m <sup>2</sup>
250 (10")	94	0.8
125 (5")	92	0.4
60 (2,5")	92	0.17

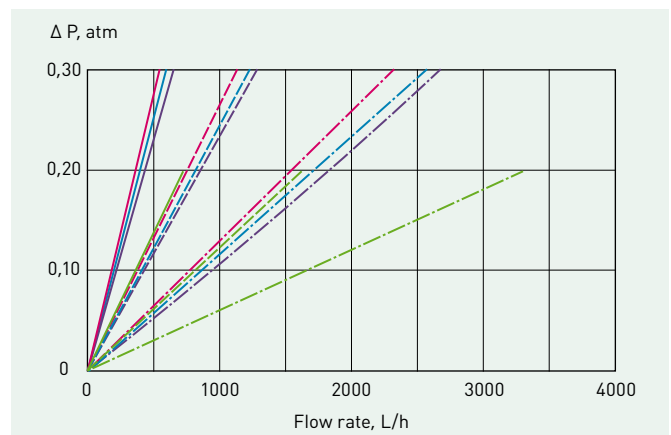
H - height  
D - diameter  
S - filtration surface area

## Sterilization and washing

Direct flow wash out	Hot water (up to 95 °C) and chemical agents compatible with membrane pH (1-14)
Autoclaving	121 °C, 0.12 MPa, 30 min, 80 cycles (Filter Cartridges) 132 °C, 0.2 MPa, 30 min, 20 cycles (Filter Cartridges) 121 °C, 0.12 MPa, 30 min, 10 cycles (Capsules)
Steam sterilization*	up to 132 °C, 30 min, 10 cycles

\* Only for filter cartridges

## Flow Rates of EPM.PS and KFM.PS



## Filter Cartridges ordering information

EPM.PS	045	D1	250	M
Brand	Micron rating	Adapter code	Cartridge height	Application
	Code	D	100 mm (4")	M - medicine and biopharmaceutical industry
	020 0.2 µm	D1	125 mm (5")	
	045 0.45 µm	A	250 mm (10")	P - food industry
	065 0.65 µm	A1	500 mm (20")	
	080 0.8 µm	A4	750 mm (30")	E - microelectronics industry
		B	1000 mm (40")	
		B(SI)		

## Capsules ordering information

KFM.PS	065	K	60
Brand	Micron rating	Connection type	Cartridge height
	Code	K – sanitary flange connection	60 mm
	020 0.2 µm		125 mm
	045 0.45 µm	P – thread tapered connection	250 mm
	065 0.65 µm		
	080 0.8 µm		