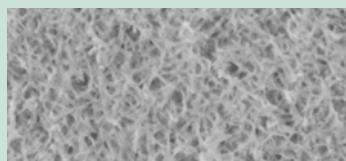


# EPM.K (KFM.K)

## Polyamide membrane Filter Cartridges and Capsules

For clarifying, final and biological filtration of liquids



### Description

EPM.K membrane filter cartridges are produced by the proprietary technology of Technofilter on the basis of the polyamide hydrophilic membrane with the micron ratings of 0.1-3 µm. Filter cartridges have high throughput and wide chemical compatibility. The hydrophilic polyamide membrane makes EPM.K the best option for application in the processes of filtration of water and alkaline solutions, liquids with low, normal and high pH level.

### Features and advantages

Features	Advantages
Proprietary polyamide hydrophilic membrane Nylon <sub>6+6</sub> with wide micron rating range	<ul style="list-style-type: none"> <li>Wide chemical compatibility;</li> <li>Easy to wet to perform the filtration and tests;</li> <li>Applied to solve a wide range of tasks – from preliminary purification to biological filtration and sterilization.</li> </ul>
Large filtration surface area (up to 0.9 m <sup>2</sup> /250 mm)	<ul style="list-style-type: none"> <li>High lifetime and filtration rate at low differential pressure.</li> </ul>
High strength of the structure of the cartridge	<ul style="list-style-type: none"> <li>Reliable maintenance of filter integrity in arduous conditions;</li> <li>In-line steam sterilization and autoclaving treatment.</li> </ul>
100 % control Non-toxic, apyrogenic	<ul style="list-style-type: none"> <li>Guaranteed integrity and efficient operation of the product;</li> <li>Provide full retention of particles and microorganisms in high flow filtration processes;</li> <li>Materials used in the filter structure passed tests for biological safety, contain minimal amount of extractable components and are qualified for contact with intravenous preparations and food products.</li> </ul>

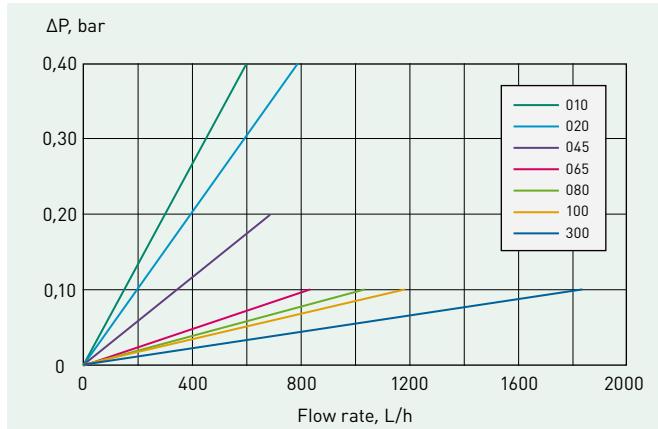
## Cartridge materials

Membrane	Nylon <sub>6+66</sub>
Draining layer	Polypropylene
Body, end parts, adapter	Polypropylene
O-rings	Silicone (Viton, EPDM – available on request)

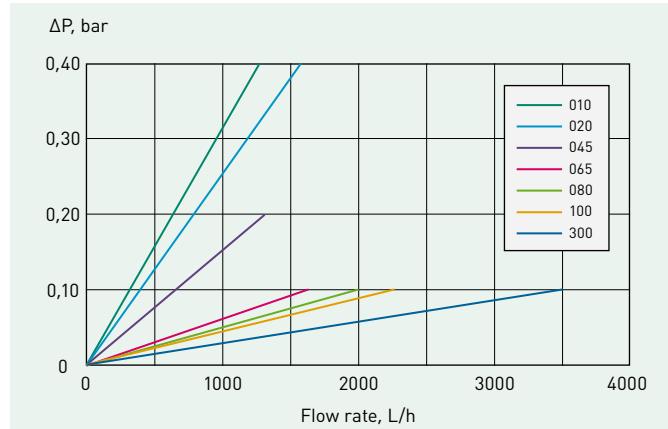
## Integrity test values of EPM.K with the height of 250 mm

Brand	Max. diffusion, ml/min	Test pressure, MPa (bar) at 20 °C
EPM.K-010	30	0.30 (3.0)
EPM.K-020	30	0.25 (2.5)
EPM.K-045	30	0.16 (1.6)
EPM.K-065	30	0.13 (1.3)
EPM.K-080	30	0.09 (0.9)
EPM.K-100	30	0.08 (0.8)
EPM.K-300	30	0.03 (0.3)

KFM.K, H = 60 mm

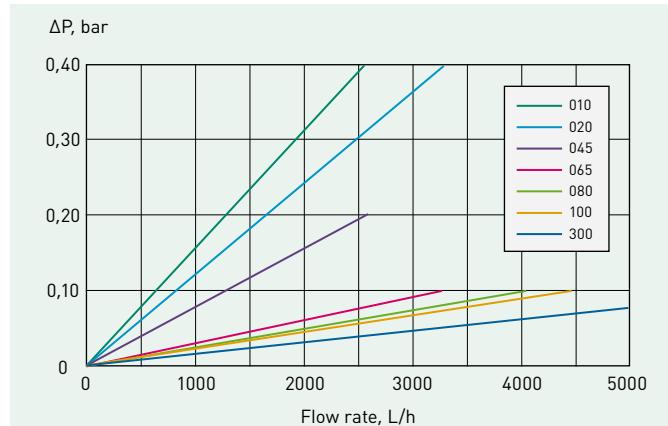


EPM.K and KFM.K, H = 125 mm



Flow Rates of EPM.K and KFM.K with micron rating of 0.10-3.00 µm

EPM.K and KFM.K, H = 250 mm



## Specifications

### Micron rating

0.1 µm  
0.2 µm  
0.45 µm  
0.65 µm  
0.8 µm  
1.0 µm  
3.0 µm

### Nominal Dimensions and Filter Areas

#### Filter Cartridges

H, mm	D, mm	S, m <sup>2</sup>
100 (4")	70	0.36
250 (10")	70	0.9
500 (20")	70	1.8
750 (30")	70	2.7
1000 (40")	70	3.6

#### Capsule filters

H, mm	D, mm	S, m <sup>2</sup>
250 (10")	94	0.9
125 (5")	92	0.44
60 (2,5")	92	0.2

**H** - height

**D** - diameter

**S** - filtration surface area

## 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 reverse differential pressure	0.1 MPa at 20 °C
Maximal operational temperature	80 °C

## Sterilization and washing

Direct flow wash out	Hot water (up to 80 °C) and chemical agents
Autoclaving	121 °C, 0.12 MPa, 30 min, 20 cycles (Filter Cartridges) 121 °C, 0.12 MPa, 30 min, 5 cycles (Capsules)
Steam sterilization*	121 °C, 0.12 MPa, 30 min, 10 cycles

\* Only for filter cartridges

## Filter Cartridges ordering information

EPM.K	045	D1	250	M
Brand	Micron rating	Adapter code	Cartridge height	Application
	Code	A	100 mm (4")	M - medicine and biopharmaceutical industry
	010 0.1 µm	D	125 mm (5")	
	020 0.2 µm	D1	250 mm (10")	
	045 0.45 µm	A1	500 mm (20")	P - food industry
	065 0.65 µm	A4	750 mm (30")	
	080 0.8 µm	V	1000 mm (40")	E - microelectronics industry
	100 1.0 µm	V(SI)		
	300 3.0 µm			

## Capsules ordering information

KFM.K	045	K	60
Brand	Micron rating	Connection type	Cartridge height
	Code	K – sanitary flange connection	60 mm
	010 0.1 µm		125 mm
	020 0.2 µm		250 mm
	045 0.45 µm	P – thread tapered connection	
	065 0.65 µm		
	080 0.8 µm		
	100 1.0 µm		
	300 3.0 µm		