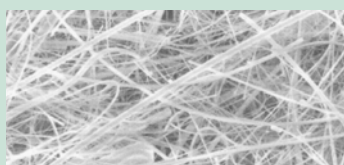
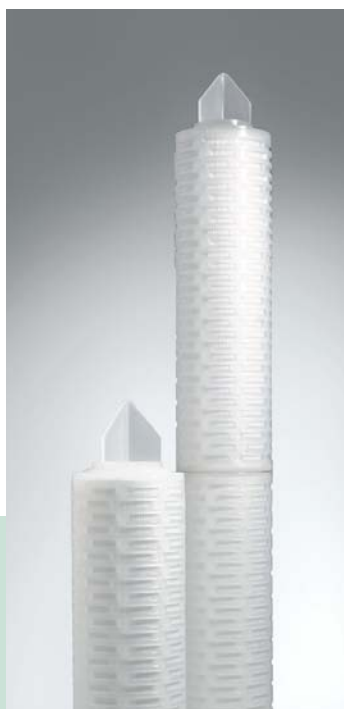


EPV.S (KFM.S)

Microfiberglass composite materials pleated Filter Cartridges and Capsules

For efficient protection of membrane filters and clarifying filtration of liquids



Description

The EPV.S cartridge is produced on the basis of the increased density pleated filter material made of microfine glass fibers. Increased mechanical strength of the filter material is provided by Special protection layers, it precludes the the problem of cross contamination because of superfine fibers dusting.

The filter material has high Flow rate, adsorbing Flow rate and thermochemical resistance, which is why, it provides effective filtration of solutions in a wide range of pH, Specially of hard-to-filter solutions with residual opalescence, serums, albumins from plasma, viscous biological liquids, oils.

EPV.S high filtration efficiency (almost as of a membrane filter) combined with increased contamination capability typical of depth filters ensures cost saving high quality filtration in the processes of deep clarification and bioburden reducing.

Features and advantages

Features	Advantages
Microfiberglass based pleated cartridge	<ul style="list-style-type: none"> • High filtration efficiency (> 99.5 %); • Stable biochemical properties; • Produced with 0.2, 0.5, 0.8 and 1 µm ratings; • Higher flow rates at low hydraulic resistance.
Excellent thermochemical resistance	<ul style="list-style-type: none"> • Withstands multiple wash outs and sterilizations.
High strength, the stable matrix of the cartridge	<ul style="list-style-type: none"> • Filter material structure precludes possibility of 'dusting' and medium migration; • Reliable maintenance of filter integrity under heavy duty operational conditions; • Longer element lifetime.

Materials

Membrane	Microfiberglass
Draining layer	Polypropylene
Body, end parts	Polypropylene
O-rings	Silicone (viton, EPDM and other materials available)

Specifications

Micron rating

0.2 µm
0.5 µm
0.8 µm
1.0 µm
3.0 µm

Nominal Dimensions and Filter Areas

Filter Cartridges

H, mm	D, mm	S, m ²
125 (5")	70	0.25
250 (10")	70	0.5
500 (20")	70	1.0
750 (30")	70	1.5
1000 (40")	70	2.0

Capsule filters

H, mm	D, mm	S, m ²
250 (10")	94	0.5
125 (5")	92	0.25
60 (2,5")	92	0.12

H - height
D - diameter
S - filtration surface area

Operational parameters

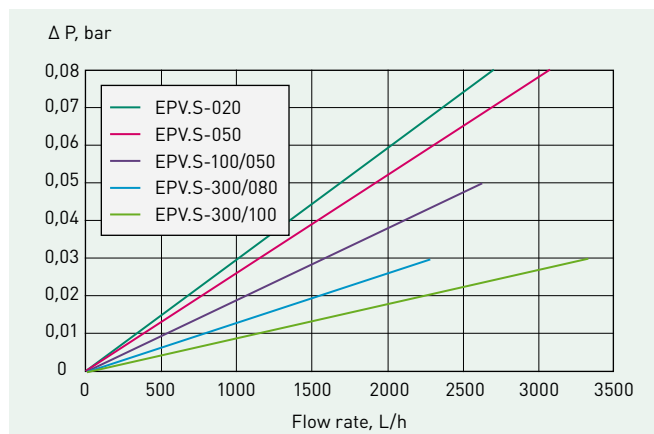
Maximal differential pressure	0.5 MPa at 20 °C, 0.2 MPa at 80 °C (Filter Cartridges) 0.4 MPa at 20 °C, 0.2 MPa at 60 °C (Capsules)
Maximal reverse differential pressure	0.2 MPa at 20 °C
Maximal operational temperature	90 °C (Filter Cartridges)

Sterilization and wash

Direct and back wash	Hot water (up to 95 °C), chemical reagents, CIP washing (Filter Cartridges)
Autoclaving	121-132 °C, 30 min, 50 cycles (Filter Cartridges) 121 °C, 0.12 MPa, 30 min, 10 cycles (Capsules)
Steam sterilization*	132 °C, 30 min, 50 cycles

* Only for filter cartridges

Flow Rates of EPV.S H = 250 mm



Filter Cartridges ordering information

EPV.S	050	D1	250
Brand	Micron rating	Adapter code	Cartridge height
	Code	A	125 mm (5")
	020 0.2 µm	D	250 mm (10")
	050 0.5 µm	D1	500 mm (20")
	100/050 1.0/0.5 µm	A1	750 mm (30")
	300/080 3.0/0.8 µm	A4	1000 mm (40")
	300/100 3.0/1.0 µm	B	
		B(SI)	

Capsules ordering information

KFM.S	020	K	60
Brand	Micron rating	Connection type	Cartridge height
	Code	K – sanitary flange connection	60 mm
	020 0.2 µm		125 mm
	050 0.5 µm	P – thread tapered connection	250 mm
	100/050 1.0/0.5 µm		
	300/080 3.0/0.8 µm		
	300/100 3.0/1.0 µm		