porvair filtration group

MicroKey™

Microfibreglass Cartridge Filters



A range of high quality pleated microfibreglass cartridge filters, suitable for challenging filtration environments.

MicroKey™ cartridge filters are manufactured from microfibreglass layered with spun-bonded polyester, to produce a highly efficient media with excellent particulate removal as well as low pressure drops.

Typical Applications

- High temperature
- Process water
- Produced water
- Coatings
- Printing
- Reverse osmosis pre-filtration
- Oils

Ordering Information

Product Code: 1 2 3 4 5 6

1: Nominal

MK	MicroKey™

2: Pore Rating

P1	0.1µm
P2	0.2µm
P45	0.45µm
01	1µm
10	10µm
30	30µm
50	50µm

3: Version

S	Standard Hard Cage
H	High temp.

4: Length (Nominal)

1	10" (254mm)
2	20" (508mm)
3	30" (762mm)
4	40" (1016mm)
5	5" (127mm)

5: End Fitting

A	Code 3
B	Code 7
C	Code 8
D*	Plastisol / PVC (double open end)
K	Code 2
M	DOE

** When an item has End Fitting option D it does not require a Seal.*

6: Seals

A	Ethylene Propylene
B	Silicone
C	Viton®
D	Nitrile
J	DOE PTFE

Features and Benefits

- Excellent compatibility at high temperature
- Maximum processing
- High-efficiency

Specifications

Materials of Manufacture

Filter mdia: Microfibreglass layered with spun-bonded polyester; 50 micron is 100% polyester

Membrane support: Polypropylene or polyester/Nylon

Nominal Micron Ratings

0.1, 0.2, 0.45, 1, 10, 30, 50

Ratings derived from independent laboratory tests using latex bead suspensions and particle counter readings.

Operating Characteristics

Effective Filtration Area:

4ft² (0.37m²)per layer per 10" length

Maximum **Δ**P:

75 psid (5.2 bar) @ 68°F (20°C)

40 psid (2.8 bar) @ 150°F (66°C)

Maximum Operating Temperature:

140°F (60°C) for standard version (S)

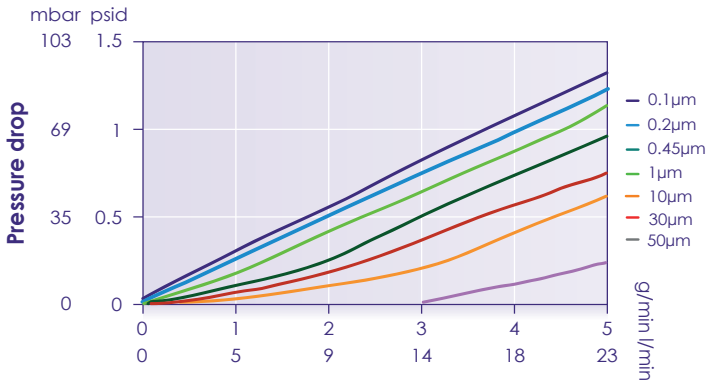
200°F (93°C) for high temperature version (H)

Cartridge Dimensions

Diameter: OD: 2.75" (70mm), ID 1" (25mm)

Nominal Lengths: 5" (127mm) to 40" (1,016mm)

Flow / Pressure Drop



Microfibreglass media in a pleated construction provides excellent flow rates with minimum pressure drop. Flow rates shown are for a nominal 10" (254mm) cartridge. For fluids other than water, multiply the pressure drop by the fluid viscosity in centipoise.

Filter Retention Specifications

Liquid Service					Gas service
Nominal micron rating	Particulate removal efficiency (Beta ratio)				DOP removal efficiency (%)
	90% (10)	99% (100)	99.9% (1,000)	99.99% (10,000)	
0.1	0.1	0.45	0.6	0.8	99.999
0.2	0.2	0.5	0.7	1	99.99
0.45	0.45	1	2	3	99.985
1	1	3	5	7	93
10	7	10	15	25	50
30	20	30	40	50	15
50	30	40	50	60	---

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