

PolyKey™

Polypropylene Cartridge Filters



A range of high-quality nominally-rated pleated polypropylene cartridge filters, suitable for challenging filtration environments, including chemical processing, process water and food and beverage.

PolyKey™ filter cartridges are manufactured from melt-blown and spun-bonded pleated polypropylene media, ensuring a highly efficient media with excellent particulate removal as well as low pressure drops.

Typical Applications

- Food and beverage
- Reverse osmosis pre-filtration
- Potable and de-ionised water
- Process water
- Chemical processing
- Coatings
- Oils

Ordering Information

Product Code:		1	2	3	4	5	6
1: Nominal	PK PolyKey™						
2: Pore Rating	P1	0.1µm					
	P2	0.2µm					
	P45	0.45µm					
	01	1µm					
	03	3µm					
	05	5µm					
	10	10µm					
	30	30µm					
3: Version	S	Standard					
		Hard					
		Cage					
	N	Netted					
4: Length (Nominal)	1	10"	(254mm)				
	2	20"	(508mm)				
	3	30"	(762mm)				
	4	40"	(1016 mm)				
	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					
6: Seals	A	Ethylene Propylene					
	B	Silicone					
	C	Viton®					
	D	Nitrile					
	J	DOE PTFE					

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

Standard Range

Features and Benefits

- Excellent chemical compatibility
- Variety of end caps
- High-efficiency design
- Outer guard in a single module
- Wide range of options

Specifications

Materials of Manufacture

Filter media: Polypropylene
 Membrane support: Polypropylene
 End caps: Polypropylene (thermal bonded)

Operating Characteristics

Maximum ΔP: 60psid (4.1bar) @ 140°F (60°C)
 Changeout recommended at 30psid (2.1bar)

Cartridge Dimensions (Nominal)

Effective Filtration Area:

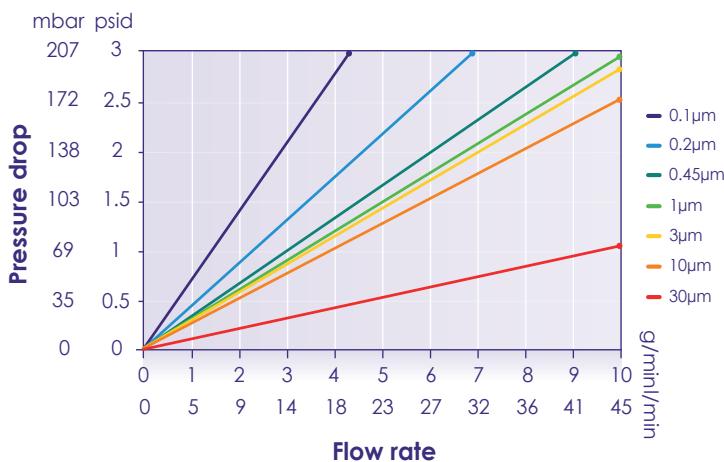
4.5ft² (0.4m²) per 10" length

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

Length: 5" (127mm)
 10" (254mm)
 20" (508mm)
 30" (762mm)
 40" (1,016mm)

Other lengths available on request.

Flow / Pressure Drop



Flow rates shown are for a nominal 10" (254mm) long cartridge. For fluids other than water, multiply the pressure drop by the fluid viscosity in centipoise.

Filter Retention Specifications*

Nominal micron rating	Liquid Service			
	90% (10)	99% (100)	99.9% (1,000)	99.99% (10,000)
0.1	0.1	0.45	0.8	1
0.2	0.2	0.6	1	2
0.45	0.45	1	2	3
1	1	3	7	10
3	3	7	10	15
10	7	10	15	25
30	30	40	50	60

* Data acquired by multi-pass testing. Ratings are based on laboratory tests using ISO ultra-fine test dust for 0.2, 0.45 and 1μ and ISO fine test dust for 5μ. Flow rate 1 gpm/sq.ft. at room temperature. Field results will be influenced by the type of fluid and contaminant as well as the flow rate and temperature.