

PolyKey<sup>TM</sup>

# **PolyKey<sup>TM</sup>** 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

	Pr	oduct Co	de: 1 2	3	4 5		6					
1: Nominal		2: Pore Rating		3:	3: Version		4: Length (Nominal)		5: End Fitting		6: Seals	
PK	PolyKey™	P1	0.1µm	S	Standard Hard Cage	1	10" (254mm)	А	Code 3	e 3 🛛 🗛	Ethylene	
		P2	0.2µm					В	Code 7		Propylene	
		P45	0.45µm	N	Netted	2 3 4	20"	C D*	Code 8	В	Silicone	
		01	1µm				(508mm)		Plastisol /	С	Viton <sup>®</sup>	
		03	3µm				30" (762mm) 40" (1016 mm) K	PVC	D	Nitrile		
		05	5µm						(double open end)	J	DOE PTFE	
		10	10µm					К	Code 2			
		30	30µm			5	5"	м	DOE			
							(127mm)	* Whe	en an item has End	4		

Fitting option D it does not require a Seal.

# Ordering Information

# **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**

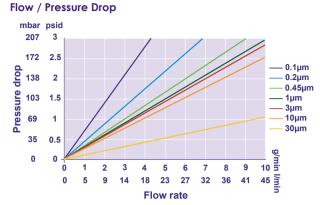
Filter media:	Polypropylene
Membrane support:	Polypropylene
End caps:	Polypropylene (thermal
	bonded)

#### **Operating Characteristics**

Maximum  $\Delta P$ : 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 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\*

Liquid Service										
Nominal	Particulate removal efficiency (Beta ratio)									
micron rating	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 1 $\mu$  and ISO fine test dust for 5 $\mu$ . 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.

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#### **Contact Information:**

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