Purtrex* depth cartridge filters

Figure 1: Purtrex Depth Cartridge Filters

description and use

The Purtrex depth filter (Figure 1), is an exceptional value for general applications where long life, high purity and low change-out frequency are required. Produced through patented melt blown micro-fiber technology, Purtrex is a 100% pure polypropylene depth filter with exceptional dirt-holding capacity.

Purtrex' true-graded density filter matrix (lower density at the surface of the filter with progressively higher density toward the center) captures particles throughout the entire filter depth. This translates to longer life and fewer change-outs than existing string-wound or resin-bonded filters.

Purtrex contains no wetting agents, solvents, antistatic agents or binders, and meets the requirements of the FDA for food and beverage contact. The filter incinerates to trace ash for easy disposal.

typical applications

- Potable water filtration
- Chemical filtration - wide chemical compatibility
- Plating baths
- Amine Filtration
- Meets FDA requirements for food and beverage contact

general properties

Purtrex filters are available with a variety of nominal pore size ratings: 1, 3, 5, 10, 20, 30, 50 and 75 microns. Tables 1, 2, 3 and 4 provide additional details on materials of construction, dimensions, operating limits and flow performance.

Table 1: Materials of Construction

Description	Material of Construction
Filtration Media	Polypropylene
End caps and Adapters	Polypropylene

Table 2: Dimensions

Description	Material of Construction
Nominal Outside Diameter	2.50 inch (6.4 cm)
Nominal Inside Diameter	1 inch (2.5 cm)

Table 3: Operating Limits

Description	Operating Limits
Maximum Differential Pressure	35psi (2.4bar) at ≤100°F (38°C)
Maximum Temperature	160°F (71°C) at ≤15psid (1.0bar)
Recommended Maximum Water Flow	5 gpm (19L/min) per 10-inch length

Table 4: Flow Performance in Clean Water[1]
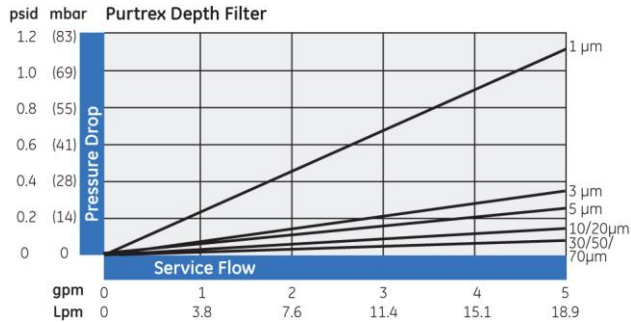
[1] Per 10-inch length of filter

The Purtrex element is tested and certified by NSF International against NSF/ANSI Standard 42 for material requirements only.

Purtrex filter cartridges are designed and manufactured for resistance to a wide range of chemical solutions. Conditions will vary with each application and users should carefully verify chemical compatibility. Please contact the vendor if you need assistance.

additional information

Purtrex cartridge filters are made from thermally bonded fibers of polypropylene. We certify that it uses no resin binders, lubricants, antistatic or release agents, in the manufacture of these filter cartridges. The resin used for manufacturing the filter media meet the food contact requirements of the U.S. FDA 21CFR 177.1520. Purtrex cartridge filters meet the safety requirements of Article 3 of the EU Framework Regulation No. 1935/2004/EC and may be used as intended in all of the EU Member states in full compliance with the EU Plastics Regulation No. 10/2011. Purtrex cartridge filters meet the criteria for USP class VI-121'C Plastics.

Table 5: Ordering Information

To order Purtrex filters with plain flat ends, select one item from each of the first three columns. Your model number will look like this: PX05-29 1/4. To order Purtrex filters with end adapters, make one selection from all applicable columns. Your model number will look like this: PX01-20-YYP, PX03-30-XK or PX05-40-EHB.

Type	Micron Rating –	Cartridge Length –	End #1 Adapter	End #2 Adapter	Elastomer Gaskets
PX	01 = 1 µm	9 3/4 inch (24.8 cm)	Y = 1 inch (2.54 cm) Open End Gasket	Y = 1 inch (2.54 cm) Open End Gasket	P = Santoprene[2] (Gasket Only)
	03 = 3 µm	9 7/8 inch (25.1 cm)			
	05 = 5 µm	10 inch (25.4 cm)	L = Extended Core	K = Self Seal Spring	
	10 = 10 µm	19 1/2 inch (49.5 cm)	E = 222 O-Ring	H = Fin Adapter	**O-Rings**
	20 = 20 µm	20 inch (50.8 cm)	X = Plain End (No Gasket)	S = Solid End	S = Silicone
	30 = 30 µm	29 1/4 inch (74.3 cm)			E = EPDM
	50 = 50 µm	30 inch (76 cm)			
	75 = 75 µm	40 inch (102 cm)			
		50 inch (127 cm)			

[2] Santoprene is licensed to Advanced Elastomer Systems, L.P