# Hytrex\* Depth Cartridge Filters



Figure 1: Hytrex Depth Cartridge Filters

#### **Description and Use**

The purity and reliability of Hytrex\* cartridge filters (Figure 1) ensure consistent results, time after time. Thermally bonded micro fibers create a strong secure cartridge that traps particles throughout its depth. Hytrex combines efficiency, long life and purity to create a high performance depth filter.

Pure polypropylene construction

Fast rinse -up in high purity applications

Meets the FDA requirement for food and beverage use

Wide chemical compatibility

Automated packaging for a clean finished product NSF Standard 42 certified

Patented, continuous process assures co nsistent product performance. Lot-to-lot, order-to-order, strict quality control assures r epeatability and reliability.

## **Typical Applications**

High Purity Chemicals
Bottled Water
Pre-treatment for Reverse Osmosis
Oil & Gas
Electronics

#### **General Properties**

Hytrex Filters are available in a wide range of nominal pore sizes: 1, 2, 5, 10, 20, 30, 50, 7 5 and 100 microns. Tables 1, 2, 3 and 4 provide additional details on filter construction and performance.

Table 1: Materials of Construction

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

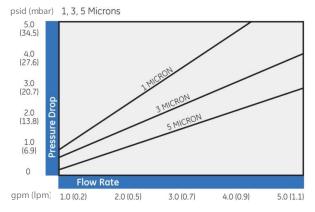
Table 2: Dimensions

Description	Dimensions
Nominal Outside Diameter	2.5 inch (6.4 cm)
Nominal Inside Diameter	1 inch (2.5 cm)

Table 3: Operating Limits

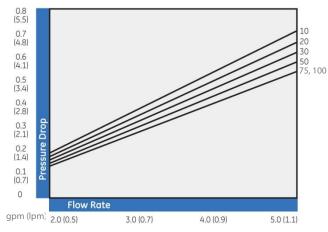
Description	Operating Limits
Maximum Differential Pressure	35psi (2.4bar) at ≤100°F (38°C)
Maximum Temperature	160 F (71 C) at ≤15psid (1.0bar)
Recommended Maximum Water Flow	5 gpm (19L/min) per 10-inch length

Table 4: Flow Performance in Clean Water 1





psid (mbar) 10 to 100 Microns



<sup>&</sup>lt;sup>1</sup> Per 10-inch length of filter

# Graded Density Design for High Dirt Holding Capacity

True-graded density which captures particles throughout entire filter depth

High dirt-holding capacity for longer life and fewer change-outs and lower costs

Lower density at the surface and progressively higher density toward the center

Improved resistance to surface blinding

### Wide Range of Lengths & Adapters

Standard lengths to fit most housings custom lengths can also be provided

Wide range of end-adapters including gaskets, extended cores and GE patented self-seal polypropylene springs

See Table 5 for specific ordering information.

#### Additional Information

Hytrex cartridge filters are made from thermally bonded fibers of polypropylene - no resin binders, lubricants, antistatic agents or release agents are used.

The polypropylene material used for manufacturing the Hytrex cartridge filters meets the U.S. FDA requirements for food contact per 21CFR177.1520.

Hytrex 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.

Hytrex cartridge filters meet the criteria for USP Class VI-121°C Plastics.

Hytrex cartridge filters are designed and manufactured for resistance to a wide range of chemicals; however, users should carefully verify chemical compatibility in each application. Please contact your GE representative if you need assistance.

Hytrex cartridge filters are tested and certified by NSF International against NSF/ANSI Standard 42 for material requirements only.

Table 5: Ordering Inform ation

To order Hytrex filters with plain flat ends, select one item from each of the first three columns. Your model number will look like this: GX05-29 1/4. To order Hytrex filters with end adapters, make one selection from all applicable columns. Your model number will look like this: GX01-20-YYP, GX03-30-XK or GX05-40-EHB.

Type	Micron Rating –	Cartridge Length –	End #1 Adapter	End #2 Adapter	Elastomer Gaskets
GX	$01 = 1 \mu m$	4 7/8 inch (12.4 cm)	Y = 1 inch (2.54 cm)	Y = 1 inch (2.54 cm)	$P = Santoprene^2$
	$03 = 3 \mu m$	9 3/4 inch (24.8 cm)	Open End Gasket	Open End Gasket	(Gasket Only)
	$05 = 5 \mu m$	9 7/8 inch (25.1 cm)	L = Extended Core	K = Self Seal Spring	
	$10 = 10 \mu m$	10 inch (25.4 cm)	E = 222 O-Ring	H = Fin	O-Rings
	$20 = 20 \mu m$	19 1/2 inch (49.5 cm)	Gasket)	S = Solid End	B = BUNA
	$30 = 30 \mu m$	20 inch (50.8 cm)		X = Plain End (No Gasket)	E = EPDM
	$50 = 50 \mu m$	29 1/4 inch (74.3 cm)			S = Silicone
	$75 = 75 \mu m$	30 inch (76 cm)			$V = Viton^3$
	$100 = 100  \mu m$	40 inch (102 cm)			
		50 inch (127 cm)			

<sup>&</sup>lt;sup>2</sup> Santoprene is licensed to Advanced Elastomer Systems, L.P. <sup>3</sup> Viton is a registered trademark of DuPont.

