



EMAIL: FILTRATION@JOHNBROOKS.CA



# HDX Series Filter Cartridges

## *Two Stage Depth Filter Cartridge*

### Product Specifications

**Media:** Thermally bonded Polypropylene/polyethylene fiber

**End Caps:**  
Polypropylene (when used)

**Gaskets/O-Rings:**  
Buna-N, EPDM, Santoprene, Silicone, Teflon Encapsulated Viton (O-Rings only), Viton

**Micron rating:**  
0.5, 1, 3, 5, 10, 25  $\mu\text{m}$

### Dimensions

**Nominal lengths:**  
5" 9.75" 10" 20" 30" 40"  
12.7 24.8 25.4 50.8 76.2 101.6 cm

**Outside diameter:** 2.6" (6.5 cm)

**Inside diameter:** 1.0" (2.54 cm)

### Operating Parameters

**Maximum operating temperature:** 140 °F (60°C)

**Maximum differential pressure:**  
100 psid @ 70°F (7 bar @ 21°C)  
2 psid @ 176°F (0.14 bar @ 80°C)

**Recommended change-out pressure:** 35 psid (2.4 bar)

The HDX Depth Filter cartridge is an integral two stage depth filter. The first is made of nonwoven melt blown polypropylene to trap coarser particles. The second stage is composed of a bicomponent polypropylene and polyethylene fiber to provide fine particle retention. This unique design provides a true graded, two zone structure that offers a marked increase in useful life and dirt capacity. In addition, the rigid nature means there is no flexing of the cartridge and greatly reducing media migration and particle unloading.

### FEATURES & BENEFITS

- Two stage depth filter
- Maximum dirt holding and useful life
- Inert pure polyolefin construction, non-shedding media
- Broad chemical compatibility
- Low extractables
- Extensive range of lengths and configurations
- Rigid construction resists unloading

### CERTIFICATIONS

- USP Class VI: Meets USP Class VI Biological Test for Plastics
- FDA Listed Materials: All materials comply with FDA Title 21 of the Code of Federal Regulations Sections 174.5, and 177.1520, as applicable for food and beverage contact.

### TYPICAL APPLICATIONS

- Paint
- CMP Slurries
- Plating Solutions
- Perfumes
- Magnetic Slurries
- Pre R.O.
- Cutting Oils
- Corn Syrup
- Coatings

### PERFORMANCE SPECIFICATIONS

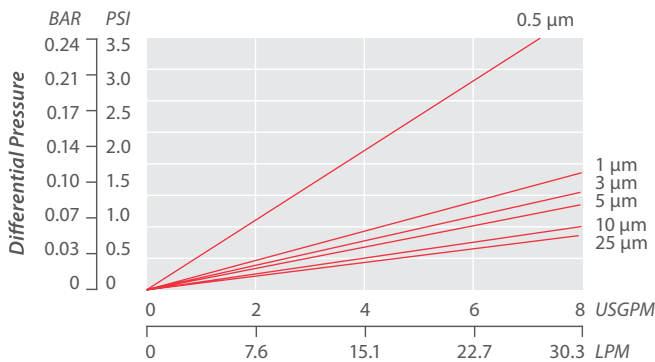
- Sanitization:
  - Hot water at 176°F (80°C) at 5 psid (0.35 bar) for 30 min
  - In-line steam at 257°F (125°C) at 1 psid (0.07 bar) for 30 min
  - Autoclavable at 257°F (125°C) for 30 min

## HDX NOMENCLATURE INFORMATION

Filter Type	Retention Rating (microns)		Nominal Length (inches)		End Configuration		Gasket or O-Ring	
	0.5	5	-5	-20	P	Double Open End (Hard Endcaps)	B	Buna-N
HDX Series	1	10	-9.75	-30	P2	226/Flat Single Open End	E	EPDM
	3	25	-10	-40	P3	222/Flat Single Open End	N	None
					P6	Self-Seal Spring on One End	S	Silicone
					P7	226/Fin Single Open End	T	Teflon encap. Viton (O-Rings only)*
					P8	222/Fin Single Open End	V	Viton
					PX	Extended Core		
					N	None		
					AM	Single Open End, Internal O-Ring		
<b>Example: HDX 25-40P3B</b>								
HDX	25		-40		P3		B	

### HDX FLOW RATE

Typical Flow Rate Clean Water at Ambient Temperature  
(per 10" cartridge)



*For liquids other than water, multiply pressure drop by the fluid viscosity in centipoise*

### REMOVAL EFFICIENCY

Beta Ratio Efficiency	Beta 100 99%	Beta 20 95%	Beta 10 90%
0.5 µm	4.0	2.0	0.5
1 µm	8.0	3.0	1.0
3 µm	12.0	5.0	3.0
5 µm	20.0	8.0	5.0
10 µm	30.0	13.0	10.0
20 µm	50.0	30.0	25.0

$$\text{Beta Ratio} = \frac{\text{Upstream particle counts}}{\text{Downstream particle counts}}$$



**1-877-624-5757**  
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