

# DHF Series

## Multi-Pleat

# High Flow Water and Liquid Filtration



Delta Pure DHF High Flow Filter cartridges process up to 500 GPM (1900 lpm) per filter. Several DHF filters can be installed in a Delta Pure HFH series housing to purify thousands of GPM of water or process liquid. The Delta Pure High Flow Filter cartridges provide excellent economics and highly efficient (99.98%) removal of designated contaminants. The six-inch (152 mm) outer-diameter filter design, available in lengths up to 60" (1520 mm) with pleated high-efficiency filtration medium enables:

- Greater surface area for longer life and reduced change-out frequency
- Smaller vessel-diameter designs for lower capital equipment cost
- Easy retrofitting into many current installations\*
- 99.98% removal efficiency for cleaner water and fluids.

The extra filter surface area we pleat into each DHF "Multi-Pleat" High Flow Filter cartridge can extend filter life in a disproportionate way – in other words, doubling filter area can increase filter life by at least 2x, and up to 4x! Our use of more surface area results in more uptime, less change-out labor, and fewer filter purchases. We also include pre-filtration layers to increase dirt-holding-capacity.

We offer absolute ratings of 0.45 to 135  $\mu\text{m}$  in a range of filter materials, including polypropylene, glass, and polyester.

\* Retrofits the Ultipleat® High Flow Series from Pall Corporation



***A single DHF series cartridge handles up to 500 GPM!***

## Benefits

- Longer filter life
- Smaller vessel footprint
- Retrofits many filter housings
- 99.98% absolute removal efficiencies
- Technical support and prompt deliveries
- Lower cost per gallon/liter of water

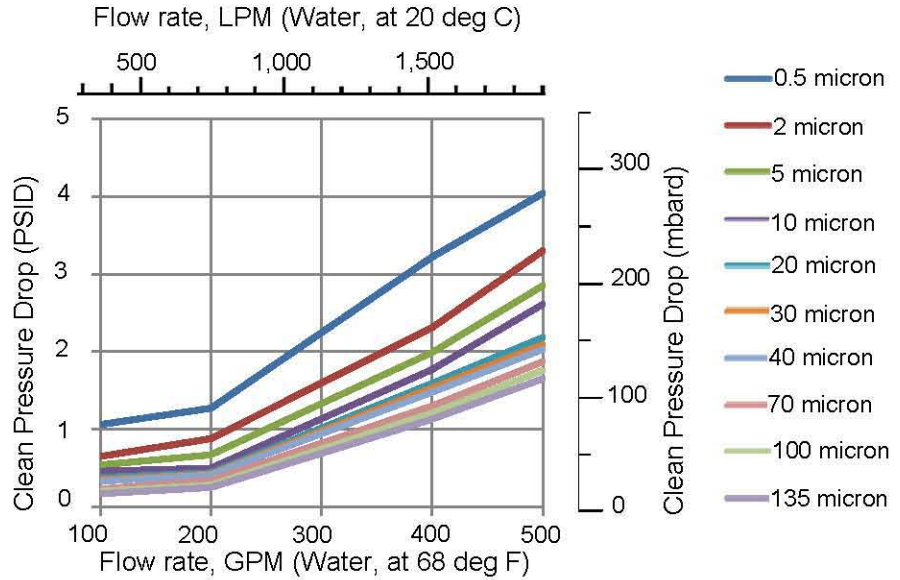
## Applications

- Process Water
- Potable Water
- Pre-filtration for RO membranes
- Amine, Glycol
- Oil and Gas Production
- Ground Water Remediation

# DHF High Flow Series Multi-Pleat Cartridge



## Approximate Initial (Clean) Pressure Drop vs. Water Flow Rate (Polypropylene Media, 60" Length Filter)



### Filter Specifications

**Maximum Operating Conditions:**  
185°F (85°C) Continuous Operating Temp

**Maximum Recommended Flow Rate:**  
500 GPM (1,900 lpm) per standard 60" filter

\* Optimal sizing should be determined on a case-by-case basis. A lower flux (for example, use of a larger filter assembly with more filters per housing) will, as a general rule, result in longer filter life.

**Maximum Recommended Differential Pressure:**  
35 PSID

**Filter Surface Area**  
20" length: 35 sq. ft  
40" length: 70 sq. ft  
60" length: 105 sq. ft  
(Surface areas are approximate.)

**Flow Direction**  
Inside to Outside

*Note: For 40" length, multiply delta P for a given flow by 1.5; for 20" length, multiply by 3.  
Example: 5 micron, 40" filter at 100 GPM water (68° F): 0.5 psid x 1.5 = 0.75 psid approx.*

### Typical Data for DHF Cartridges Containing Polypropylene Filter Medium

Micron Rating	0.45	2	5	10	20	30	40	70	100	135
<b>Smallest particle removed at 99.98% efficiency (absolute)</b>	0.45 µm	2 µm	5 µm	10 µm	20 µm	30 µm	40 µm	70 µm	100 µm	135 µm
<b>Smallest particle removed at 99% efficiency</b>	0.3 µm	1 µm	2 µm	5 µm	10 µm	15 µm	25 µm	40 µm	70 µm	100 µm
<b>Typical Dirt Capacity lb (kg) of Solids</b>	12.2 (5.5)	15.5 (7.0)	18.2 (8.3)	18.7 (8.5)	20.4 (9.3)	21.3 (9.7)	22.5 (10.2)	24 (10.9)	26.1 (11.9)	27.5 (12.5)

### Model/Code Ordering Information

CARTRIDGE TYPE	MICRON RATING 99.98%	FILTER MEDIUM	LENGTH INCHES	COMPONENT MATERIALS	OUTSIDE DIAMETER	O-RING SEAL
DHF - High Flow Multi-Pleat	045 - 0.45 µm	01-FDA Polypropylene	20	1- FDA Polypropylene cage, core, outer wrap <i>Other materials are available.</i>	K -6"	B- Buna E- EPDM V- FKM* S-Silicone T- PTFE* encapsulated FKM* <i>*Teflon® and Viton® are trademarks of Dupont.</i>
	2- 2 µm	13-Polyester	40			
	5- 5 µm		60			
	10- 10 µm		15-Fiberglass			
	20- 20 µm					
40- 40 µm						
	70- 70 µm					

**Example:** DHF-045-01-60-1-K-B

Delta Pure High Flow Filter, 0.45 micron at 99.98%, "FDA Grade" polypropylene filter medium, 60" length, polypropylene components, 6" outer diameter, Buna O-ring seal