



### Double-Open-End Liquid Filter Cartridges

**A. Bonded Gradient-Density Cartridges.** Ideal for removing a broad range of deformable and nondeformable particles. Rigid designs ideal for filtering high-solids, higher-viscosity fluids that require higher differential pressures. Polypropylene fiber medium is thermally bonded to a rigid core for added durability. Cartridges impart no taste, odor or color; suitable to 175°F (79°C).

µm rating, nominal	Flow rate†	Length	Catalog number	Price
1	2 GPM at <2 psid	10" (25.4 cm)	<a href="#">GH-01512-00</a>	
5			<a href="#">GH-01512-08</a>	
10			<a href="#">GH-01512-18</a>	
25			<a href="#">GH-01512-28</a>	
50			<a href="#">GH-01512-38</a>	
1	5 GPM at <2 psid	20" (50.8 cm)	<a href="#">GH-01512-02</a>	
5			<a href="#">GH-01512-12</a>	
10			<a href="#">GH-01512-22</a>	
25			<a href="#">GH-01512-32</a>	
50			<a href="#">GH-01512-42</a>	

**B. String-Wound Gradient-Density Cartridges.** Ideal for removing a broad range of deformable and non-deformable particles such as sand, silt, sludge, rust, and scale. String-wind pattern has lower pressure drop for higher flow. Polypropylene string is resistant to chemical and bacterial attack; suitable to 150°F (66°C).

µm rating, nominal	Flow rate†	Length	Catalog number	Price
5	10 GPM at <1 psid	10" (25.4 cm)	<a href="#">GH-01513-00</a>	
30			<a href="#">GH-01513-02</a>	
50			<a href="#">GH-01513-04</a>	

**C. Spun Gradient-Density Cartridges.** Ideal for removing a broad range of deformable and non-deformable particles such as sand, silt, sludge, rust, and scale. Polypropylene construction is resistant to chemical and bacterial attack. One-micron and five-micron cartridges are certified to NSF Standard 42 for materials and impart no taste, odor, or color. Suitable to 145°F (63°C).

µm rating, nominal	Flow rate†	Length	Cat. no.	Price
1	5 GPM at 0.6 psid	10" (25.4 cm)	<a href="#">GH-01509-14</a>	/ea
5	5 GPM at 0.2 psid		<a href="#">GH-01509-15</a>	/pk of 2
1	10 GPM at 0.6 psid	20" (50.8 cm)	<a href="#">GH-01509-37</a>	/ea
5	10 GPM at 0.6 psid		<a href="#">GH-01509-40</a>	/ea
25	10 GPM at 0.2 psid		<a href="#">GH-01509-41</a>	/ea

**D. High-Efficiency Pleated Filter Cartridges.** The pleated polypropylene (PP) design offers flow rates and dirt-loading capacities higher than spun or wound depth cartridges. Biologically safe and designed to meet FDA requirements for regulated industries. All-PP construction provides broad chemical compatibility. The gradient density microfiber media provides removal of a broader range of particle sizes than typical pleated filters. Suitable to 122°F (50°C).

µm rating, nominal	Flow rate†	Length	Catalog number	Price
0.2	2 GPM at 1 psid	10" (25.4 cm)	<a href="#">GH-29830-00</a>	
	2 GPM at <1 psid	20" (50.8 cm)	<a href="#">GH-29830-01</a>	

†psid refers to pounds per square inch pressure drop through the filter system.

For optimal performance, change cartridges at 25 psid.

‡To use with aqueous solutions, prewet with methanol, then rinse with water before use.

†††Pore sizes for polypropylene cartridges are nominal.

††††Filtration efficiency and chlorine reduction efficiency are reduced at higher flow rates; chlorine capacity based on 75% reduction using 2 ppm free chlorine feed concentration at 68°F (20°C).

**E. Extra-Strength Pleated Cellulose Cartridges.** This cellulose cartridge is blended with polyester for better wet strength. The polyester material allows more pleats to improve flow and dirt loading. Suitable to 165°F (74°C).

µm rating, nominal	Flow rate†	Length	Catalog number	Price
1	15 GPM at <1 psid	10" (25.4 cm)	<a href="#">GH-01509-11</a>	
5			<a href="#">GH-01509-09</a>	

**F. Filter Cartridges for Ultrapure Applications.** These cartridges are autoclavable to 250°F (121°C) and in-line sterilizable to 257°F (125°C) for up to 30-minute cycles. They are tolerant to an accumulated exposure of 10 hours. The filters may also be sanitized with compatible chemical agents. All cartridges are suitable to 180°F (82°C) at 10 psid.

The cartridges comply with U.S. CFR Title 21 guidelines for repeated food contact, comply with USP Class VI.121°C Plastics guidelines, and pass the MEM Elution Cytotoxicity Test. Aqueous extracts contain less than 0.25 EU/mL.

**Multi-Layer Nylon Cartridges.** These consist of two pleated nylon membranes with the top acting as a prefilter to increase cartridge life and efficiency.

**Glass Microfiber Cartridges.** Made of resin-bonded borosilicate glass microfibers that do not leach flavor-altering substances. Meet NSF Standard 53 for the reduction of cysts. Ideal as prefilters to protect membrane filter/RO systems.

**Polypropylene (PP) Cartridges.** Thermally bonded high-purity PP fiber. Economical for a chemically inert media with high dirt-loading capacity. Suitable for air/gas filtration; FDA-acceptable. Hydrophobic; prewet before liquid filtration.‡

**Pleated PTFE Cartridges.** Clean room-constructed using thermal welding instead of adhesives or additives. Ideal for the more aggressive liquid or air/gas filtration applications. Hydrophobic; prewet before liquid filtration.‡

**Semiconductor Cartridges.** Single-layer PES membrane over PP core. Each is flushed with high-purity water to leach less than 5 ppb TOC and less than 5 ppb trace metals. Ideal for any high-purity chemical or DI water application.

Cartridge type	µm rating††	Length	Catalog number	Price
Serial nylon	0.2	10" (25.4 cm)	<a href="#">GH-06479-16</a>	
	0.45		<a href="#">GH-06479-20</a>	
Glass fiber	3.0	10" (25.4 cm)	<a href="#">GH-06479-24</a>	
	1.0		<a href="#">GH-06479-32</a>	
Polypropylene	3.0	10" (25.4 cm)	<a href="#">GH-06479-36</a>	
	1.0		<a href="#">GH-06479-40</a>	
Polypropylene	5	10" (25.4 cm)	<a href="#">GH-06479-44</a>	
	10		<a href="#">GH-06479-48</a>	
PTFE	0.1	10" (25.4 cm)	<a href="#">GH-06479-48</a>	
	0.2		<a href="#">GH-06479-52</a>	
Semiconductor	0.2	10" (25.4 cm)	<a href="#">GH-06479-60</a>	

**G. Economical Carbon-Impregnated Cartridges.** These cellulose cartridges remove organic tastes/odors and chlorine, plus reduce sediment. Best suited for chemically neutral waters with lower chlorine concentrations. The 10" cartridge can treat approximately 2500 gallons at 1 GPM for chlorine†††. The 10" cartridge meets NSF Standard 42 for materials. Suitable to 125°F (52°C).

µm rating, nominal	Flow rate††	Length	Catalog number	Price
5	5 GPM at 4.0 psid	10" (25.4 cm)	<a href="#">GH-01509-25</a>	
	5 GPM at 1.0 psid	20" (50.8 cm)	<a href="#">GH-01509-27</a>	