

Precision Wound Filter Cartridges

Description

These filter elements deliver reliable and consistent filtration of fluids in a wide range of applications. The continuously graded pore structure of the filter creates a network tapered passages that capture contaminants throughout the media. The true depth filtration provided by the filter prevents the cartridge from blinding off when filtering fluids containing deformable particles or gels.

PURE-CLEAR Series filter elements are an excellent choice as a pre-filter to protect more expensive final filters. The cartridge's mechanical strength enables it to be used in demanding applications such as the filtration of well completion fluids or lubricating oils.

PURE-CLEAR Series elements are available in various materials of construction offering excellent chemical compatibility with a variety of fluids and temperature ranges. The extended core option eliminates the need for expensive housing hardware and allows for quick and easy cartridge change-out. These elements are available in a range of configurations to fit most commercially available filter housings.

Benefits

- A broad range of media and center core options provide excellent compatibility with a variety of fluids.
- Available in removal ratings from 0.5 to 300 µm.
- True depth filtration provides high dirt holding capacity, ideal for removing deformable particles or gels from process fluids.
- Polypropylene, Cotton, and other media available with FDA CFR Title 21 listed components suitable for food and beverage applications.
- Continuous length cartridges up to 50" minimize change-out times and eliminate the need for additional housing hardware.
- Large (4") diameter 10" and 20" length cartridges available for Plymouth Big Blue® Series filter housings.
- Extended core option eliminates the need for expensive housing center posts.



Applications

- Animal & Vegetable Oils
- Petroleum Oil and Lubes
- Dilute Acids and Alkalis
- Municipal & Potable Water Systems
- Metal Finish / Plating Solutions
- Pre-Polymer Filtration
- Pulp and Paper
- Aqueous Solutions
- Paints and Coatings

Materials of Construction

Filter Media	FDA Polypropylene, Polypropylene fibrillated, Industrial Polypropylene, FDA Cotton, Bleached Cotton, Natural Cotton, Polyester, Rayon, Nylon, Acrylic
Filter Media (optional)	Jute, Teflon, [®] Aramid Center Cores: Polypropylene, Heavy Wall Polypropylene, Tinned Steel, 304 Stainless Steel, /316 Stainless Steel, Nylon
Extended Core Option	Polypropylene extended cores available for quick and easy cartridge change-out.
Core Cover Options	Cover covers available to control fiber migration.
End Treatment Option	Various end treatments and O-ring sealing options are available to fit standard commercial filter housings.

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Performance Specifications

Micron Ratings	0.5, 1, 3, 5, 10, 15, 20, 25, 30, 40, 50, 75, 100, 150, 200, 300 µm
Maximum Temperature Ratings	See Selection Guide
Maximum Operating Pressure	50 psid (3.4 bar) @ 70° F (21° C)
Recommended Change-Out Differential Pressure	35 psid (2.3 bar) @ 70° F (21° C)
Outside Diameter (nominal)	Standard 2.5" (6.4 cm); Optional 4.5" (11.52 cm)
Inside Diameter (nominal)	1" (2.5 cm)
Lengths (nominal)	4.875, 5, 6, 9.75, 10, 12, 12.5, 19.5, 20, 29.5, 30, 39, 39.5, 40, 49.5, 50" (10.1, 12.4, 12.7, 15.2, 24.8, 25.4, 30.5, 49.5, 50.8, 74.9, 76.2, 99.1, 100.3, 101.6, 125.7, 127 cm)

Maximum Temperature Rating

Center Core	Metal	Polypropylene
FDA Polypropylene	200° F	140° F
Polypropylene	200° F	140° F
Fibrillated Polypropylene	200° F	140° F
FDA Cotton	250° F	140° F
Bleached Cotton	250° F	140° F
Natural Cotton	250° F	140° F
Rayon	250° F	140° F
Nylon	275° F	140° F
Acrylic	200° F	140° F
Polyester	275° F	140° F

Cartridge Ordering Information

Micron Rating	Filter Media	Length (Inches)	Core	Options
5	P	10	P	F
0.5, 1, 2, 3, 5, 10, 15, 20, 25, 30, 40, 50, 75, 100, 150, 200, 300	FDA Polypropylene = FP Polypropylene = P Polypropylene (Fibrillated) = PF FDA Cotton = FC Bleached Cotton = C Natural Cotton = CU Rayon = R Nylon = N Acrylic = A Jute = J (non-standard) Teflon = PTF (non-standard) Polyester = PE Aramid = AR	4.875, 5, 6, 9.75, 10, 12, 12.5, 19.5, 20, 29.5, 30, 39, 39.5, 40, 49.5, 50"	Polypropylene = P Tin = T 304 Stainless Steel = A 316 Stainless Steel = S Nylon = N Phenolic = H Polypropylene (Heavy Wall) = PH	FDA Approved Fiber = F Core Cover = C Extended Core = X End Treatment = E 4 1/2" OD = BB Standard Outside Diameter: 2 1/2" Standard Inside Diameter: 1.08" Others available