

C-1030

Fulflo® XTL™ Filter Cartridges

Technologically Advanced Wound Cartridge Design Doubles Cartridge Life and Improves Performance

The unique construction of Parker's patented* Fulflo® XTL™ (extended life) cartridges provides twice the average life of conventionally wound cartridges for process fluid filtration. Computer modeling has optimized the wound cartridge geometry maximizing the use of the internal cartridge surface area. The enhanced design provides improved dirt-holding capacity (twice the average) over standard wound cartridges, while providing true controlled-depth filtration.

Fulflo® XTL cartridges are available in nominal (90%) ratings of 1µm, 3µm, 5µm, 10µm, 20µm and 30µm.

Benefits

- XTL cartridges result in significant cost savings based on fewer system interruptions, decreased labor expenses for change outs, and reduced inventory and cartridge disposal costs
- Unique computer programming capability permits the design and manufacture of special cartridge constructions to suit the requirements of nearly any filtration application
- "M" polypropylene and "C" cotton materials are FDA listed as acceptable for potable and edible liquid contact according to CFR Title 21
- Continuous strand roving geometry provides performance consistency
- XTL wound cartridges fit all Fulflo vessels and most competitive vessels without compromising final



- product clarity or flow characteristics of the cartridge. The most noticeable difference is the extended life savings offered by XTL cartridges
- Extended center cores are available in tinned steel, 316 stainless steel and 304 stainless steel
 - A special snap-in extender is available for polypropylene cores
 - FDA grade polypropylene (DOE only) certified to ANSI/NSF61 standard for contact with drinking water components

Applications

- Potable Liquids
- Organic Solvents
- Process Water
- Photoprocessing
- Lubricants
- R.O. Prefiltration
- Amines
- Chemical Process



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Specifications

Materials of Construction:

Polypropylene
Cotton

Maximum Recommended Operating Conditions:

Temperature:

Polypropylene:

200°F (93°C) with tinned steel or stainless steel cores;

120°F (49°C) with polypropylene cores;

180°F (82°C) with glass-filled polypropylene cores

Cotton:

250°F (121°C) with tinned steel or stainless steel cores;

120°F (49°C) with polypropylene cores;

180°F (82°C) with glass-filled polypropylene cores

Recommended Maximum:

Change Out ΔP: 30 psi (2.4 bar)

Operating ΔP @ Ambient Temperature:

60 psi (4.1 bar)

Flow Rate: 5 gpm (18.9 lpm) per

10 in length

Dimensions:

1 in ID x 2-1/2 in OD (nominal) 10, 20, 30 and 40 in lengths nominal)

Filtration Ratings:

1μm, 3μm, 5μm, 10μm, 20μm and 30μm @ 90% nominal efficiency

XTL Length Factors

Length (in)	Length Factor
10	1.0
20	2.0
30	3.0
40	4.0
50	5.0

XTL™ Flow Factors (psid/gpm @ 1 cks)

Rating (μm)	Cotton	Polypropylene
1	2.00	0.75
3	0.63	0.33
5	0.36	0.24
10	0.19	0.14
20	0.11	0.09
30	0.09	0.07

Flow Rate and Pressure Drop Formulas

$$\text{Flow Rate (gpm)} = \frac{\text{Clean } \Delta P \times \text{Length Factor}}{\text{Viscosity} \times \text{Flow Factor}}$$

$$\text{Clean } \Delta P = \frac{\text{Flow Rate} \times \text{Viscosity} \times \text{Flow Factor}}{\text{Length Factor}}$$

Notes:

- Clean ΔP is PSI differential at start.
- Viscosity is centistokes. Use Conversion Tables for other units.
- Flow Factor is ΔP/GPM at 1 cks for 10 in (or single).
- Length Factors convert flow or ΔP from 10 in (single length) to required cartridge length.



Brand A @ 15 psid



XTL @ 15 psid

Most wound cartridges tend to surface load thus preventing the maximum use of their internal surface area. As a result of a unique design and manufacturing process, the XTL cartridge allows the maximum use of its internal surface area. Shown here are illustrations of typical dirt-loading characteristics of a standard wound cartridge and an XTL cartridge at 15 psi differential.

Ordering Information

XTL									
Cartridge Code "Extended Life" Wound Cartridge	Micron Rating (nominal) (μm) 1 3 5 10 20 30	Fiber Type C = Cotton (FDA) M = Polypropylene (FDA Grade) T = Polypropylene WC = White Cotton	Nominal Length (in) 9-4 = 9-7/8 10 = 10 19-4 = 19-1/2 20 = 20 29-4 = 29-1/4 30 = 30 39-4 = 39 40 = 40	Core Material No Symbol = Tinned Steel A = Polypropylene A3 = Glass-Filled Polypropylene G = 304 Stainless Steel S = 316 Stainless Steel	Core Cover Material No Symbol = No Cover V = Nonwoven Polyester Y = Polypropylene	End Treatment No Symbol = No Treatment L = Lacquer M - Singed	End Cap Configuration None = DOE (w/o gaskets) DO = Double open end (DOE) TC = 222 O-Ring/Flat TF = 222 O-Ring/Fin OB = Std. Open End/Polypropylene spring closed end SC = 226 O-Ring/Flat SF = 226 O-Ring/Fin XA = Poly/Extender XB = Ex. Core open end/ Polypropylene spring closed XC = Metal extender	Seal Material P = Poly Foam N = Buna-N E = EPR S = Silicone V = Viton* None = Standard DOE	Packaging Options Z = Individual Poly Bag

Specifications are subject to change without notification.
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