



Fulflo® XTL™ Filter Cartridges

- Polypropylene
- Cotton

Wound Depth Series

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.

Applications

- Potable Liquids
- Organic Solvents
- Process Water
- Photoprocessing
- Chemical Process
- Disposal Well
- Pharmaceuticals
- Lubricants
- Cooking Oils
- Amines
- R.O. Prefiltration



Features and 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.

Process Filtration Division



Wound Depth Series

Specifications

Filtration Ratings:

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

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

- Change Out ΔP: 30 psi (2.4 bar)
- Operating ΔP @ Ambient Temperature: 60 psi (4.1 bar)
- Flow Rate: 10 gpm (38 lpm) per 10 in length

Dimensions:

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

Flow Rate and Pressure Drop Formulae:

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

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

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.

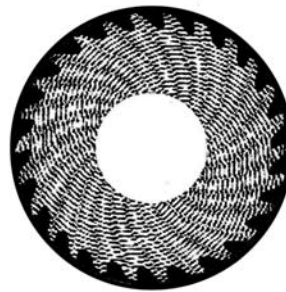
XTL Length Factors

| Length (in) | Length Factor |
|-------------|---------------|
| 10 | 1.0 |
| 20 | 2.0 |
| 30 | 3.0 |
| 40 | 4.0 |

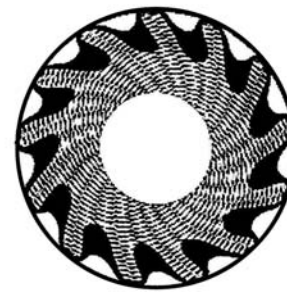
XTL™ Flow Factors (psid/gpm @ 1 cks)

| 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 |

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.



Brand A @ 15 psid



XTL @ 15 psid

Ordering Information

| XTL | 10 | C | 30 | A | Y | M | XA | — | — |
|---------------------------------|-------------------------------|---|--|--|---|---|---|---|---|
| Cartridge Code | Micron Rating (nominal) (µm) | Fiber Type | Nominal Length (in) | Core Material | Core Cover Material | End Treatment | End Cap Configuration | — | Seal Material |
| "Extended Life" Wound Cartridge | 1 3 5 10 20 30 | C = Cotton (FDA) M = Polypropylene (FDA Grade) T = Polypropylene WC = White Cotton | 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 | No Symbol = Tinned Steel A = Polypropylene A3 = Glass-Filled Polypropylene G = 304 Stainless Steel S = 316 Stainless Steel | No Symbol = No Cover V = Nonwoven Polyester Y = Polypropylene | No Symbol = No Treatment L = Lacquer M = Singed | - DO = DOE (w/ gaskets) - TC = 222 / Closed - TF = 222 / Fin - OB = Std. Open End/Polypro spring closed end - SC = 226 / Closed - SF = 226 / Fin - XA = Poly Extender - XB = Ex. Core Open End/ Polypro spring closed - XC = Metal Extender None = DOE (w/o gaskets) | — | A = Polyethylene N = Buna N E = EPR S = Silicone V = Viton** None = Standard DOE |

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* U.S. Patent No. 4,660,779

** A trademark of E. I. duPont de Nemours & Co.

