

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
- PharmaceuticalsLubricants
- Cooking Oils
- Amines
- R.O. Prefiltration

Fulflo[®] XTL[™] Filter Cartridges

- Polypropylene
- Cotton

Wound Depth Series



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

Bulletin C-1030 Eff.11/99, Rev. 3/04 © 2000 Parker Hannifin Corporation All Rights Reserved Page 1 of 2 MARNING! FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE. This document and other information from Parker Hannilin Corporation, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application and review the information concerning the product or system in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection for the products and systems and assuring that all performance, safety and warning requirements of the application are met.



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

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.

- Change Out ∆P: 30 psi (2.4 bar)
 Operating ∆P @
- 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:

Flow Rate (gpm) = Clean $\triangle P \times Length Factor$ Viscosity x Flow Factor

Clean $\Delta P = Flow Rate x Viscosity x Flow Factor$ Length Factor

Notes:

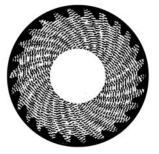
- 1. **Clean** $\Delta \mathbf{P}$ is <u>PSI</u> differential at start.
- Viscosity is centistokes.
 Use Conversion Tables for other units.
- 3. Flow Factor is $\Delta P/GPM$ at 1 cks for 10 in (or single).
- 4. Length Factors convert flow or ΔP from 10 in (single length) to required cartridge length.



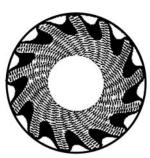
Length <i>(in)</i>	Length Factor
10	1.0
20	2.0
30	3.0
40	4.0

XTL[™] Flow Factors (psid/gpm @ 1 cks)

Rating <i>(µm)</i>	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



Brand A @ 15 psid



XTL @ 15 psid

Ordering Information

XTL Cartridge Code	10 Micron Rating (nominal, (µm)	C <i>Fiber Type</i>	30 Nominal Length (in)	A Core Material	Y Core Cover Material	M End Treatment	X A End Cap Configuration	 Seal Material	TIS Packaging Options
"Extended Life" Wound Cartridge	1 3 5 10 20 30	C = Cotton (FDA) M = Polypropylene (FDA Grade) T = Polypropylene WC = White Cotton	$\begin{array}{rrrr} 9{\text{-}}4 &= 9{\text{-}}7/8\\ 10 &= 10\\ 19{\text{-}}4 &= 19{\text{-}}1/2\\ 20 &= 20\\ 29{\text{-}}4 &= 29{\text{-}}1/4\\ 30 &= 30\\ 39{\text{-}}4 &= 39\\ 40 &= 40 \end{array}$	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 = Poly Foam N = Buna-N E = EPR S = Silicone V = Viton** None = Standard DOE	Z = Individual Poly Bag TIS = Tissue Wrap

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

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

Bulletin C-1030 Page 2 of 2 Process Filtration Division 6640 Intech Boulevard Indianapolis, Indiana 46278 Toll Free 1-888-238-5356 Telephone (317) 275-8300 Fax (317) 275-8410 http://www.parker.com/processfiltration

Parker Hannifin Corporation

