



# Fulflo® SWC Filter Cartridges

- Polypropylene
- Cotton

## Wound Depth Series

### Economical Filtration Solutions With String Wound Depth Cartridges

Parker Process Filtration's SWC Filter cartridge offers a wide range of fibers and core materials. Roving is wound onto a center core for strength. The diagonal pattern of the media forms a tight, interlocking weave. Parker Process Filtration has one of the world's largest manufacturing plants for wound cartridges, offering superior quality along with technical, engineering and marketing support.

Nominal removal ratings from 1µm to 100µm are available.

#### Applications

- Animal Oils
- Concentrated Alkalies
- Dilute Acids & Alkalies
- Organic Acids & Solvents
- Mineral Acids
- Oxidizing Agents
- Petroleum Oils
- Potable Liquids
- Vegetable Oils
- Water
- Prefilter for R.O. Membranes



#### Features and Benefits

- SWC's provide excellent compatibility with a variety of organic solvents, animal, petroleum and vegetable oils.
- Optional core covers available to assure fiber migration control.
- Multiple length cartridges minimize change out time, eliminate spacers and are available to fit competitive filter vessels.
- Cotton and polypropylene materials are FDA listed as acceptable for potable and edible liquid contact according to CFR Title 21.
- Continuous strand roving geometry provides performance consistency.
- Extended center core option eliminates the need for cartridge guides in competitive and Fulflo multicartridge vessels.
- One piece extended length 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.

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## Specifications

### Nominal Removal Ratings:

- 90% efficiency from 100µm to 1µm

### Materials of Construction:

- Polypropylene
- Cotton

### Dimensions:

- 1 in ID x 2-3/8 in OD
- 10, 20, 30 and 40 in lengths

### Maximum Recommended

#### Operating Conditions:

##### Temperature:

Polypropylene: 200°F (93°C) with tinned steel or stainless steel cores;  
120°F (49°C) with polypropylene cores;

Cotton: 250°F (121°C) with tinned steel or stainless steel cores;  
120°F (49°C) with polypropylene cores.

- Change Out ΔP: 30 psi (2.1 bar)
- ΔP @ Ambient Temperature: 60 psi (4.1 bar)
- Flow Rate: 10 gpm (38 lpm) per 10 in length

### SWC Length Factors

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

### SWC Flow Factors (psid/gpm @ 1 cks)

Rating (µm)	Cotton	All Synthetics
1	2.00	0.75
3	0.63	0.33
5	0.36	0.24
10	0.19	0.14
15	0.16	0.12
20	0.11	0.09
25	0.10	0.08
30	0.09	0.07
50	0.07	0.06
75	0.06	0.05
100	0.06	0.05

### 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.

## Ordering Information

SWC	10	C	10	A	V	XA	TIS
	Nominal Micron Ratings	Media	Nominal Length (in)	Core Material	Core Cover Material	Core Extender	Packaging Options
SWC = String Wound Cartridge	1 3 5 10 15 20 25 30 50 75 100	C = Cotton (FDA Grade) L = Polypropylene (Utility Grade) M = Polypropylene (FDA grade) T = Polypropylene (Industrial Grade) U = Cotton, Natural WC = White Cotton (Industrial Grade)	9-4 = 9-7/8 10 = 10 19-4 = 19-1/2 20 = 20 29-4 = 29-1/4 30 = 30-3/16 39 = 39 40 = 40-3/16	A = Polypropylene G = 304 Stainless Steel S = 316 Stainless Steel None = Tinned Steel	No Symbol = No Cover V = Non-Woven Polyester Y = Polypropylene	No symbol = None - OB = Std. Open End/ Polypro Spring Closed End XC = Integral (Tinned Steel 304SS or 316SS) XA = Snap-in (Polypropylene) - XB = Ext. Core Open End/ Polypro Spring Closed End	Z = Individual Poly Bag TIS = Tissue Wrap

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