

# Fulflo® SWC Filter Cartridges

Economical filtration solutions with string-wound depth cartridges

The 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 domick hunter 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.



## Contact Information

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## Benefits

- SWC's provide excellent compatibility with a variety of organic solvents and petroleum products
- 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 multi-cartridge 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
- ISO 9001 registered company

## Applications

- Prefilter for RO Membranes
- Water
- Alkalies
- Dilute Acids & Alkalies
- Organic Acids & Solvents
- Potable Liquids
- Petroleum Oils
- Mineral Acids



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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
  - Cotton: 250°F (121°C) with tinned steel or stainless steel cores; 120°F (49°C) with polypropylene cores
- Change Out ΔP: 30psi (2.1bar)
- ΔP @ Ambient Temperature: 60psi (4.1bar)
- Flow Rate: 5gpm (18.9 lpm) per 10 in. length

### Nominal Removal Ratings

- 90% efficiency from 1μm to 100μm

### Dimensions

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

## SWC Length Factors

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

### Flow Rate and Pressure Drop Formulas

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

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

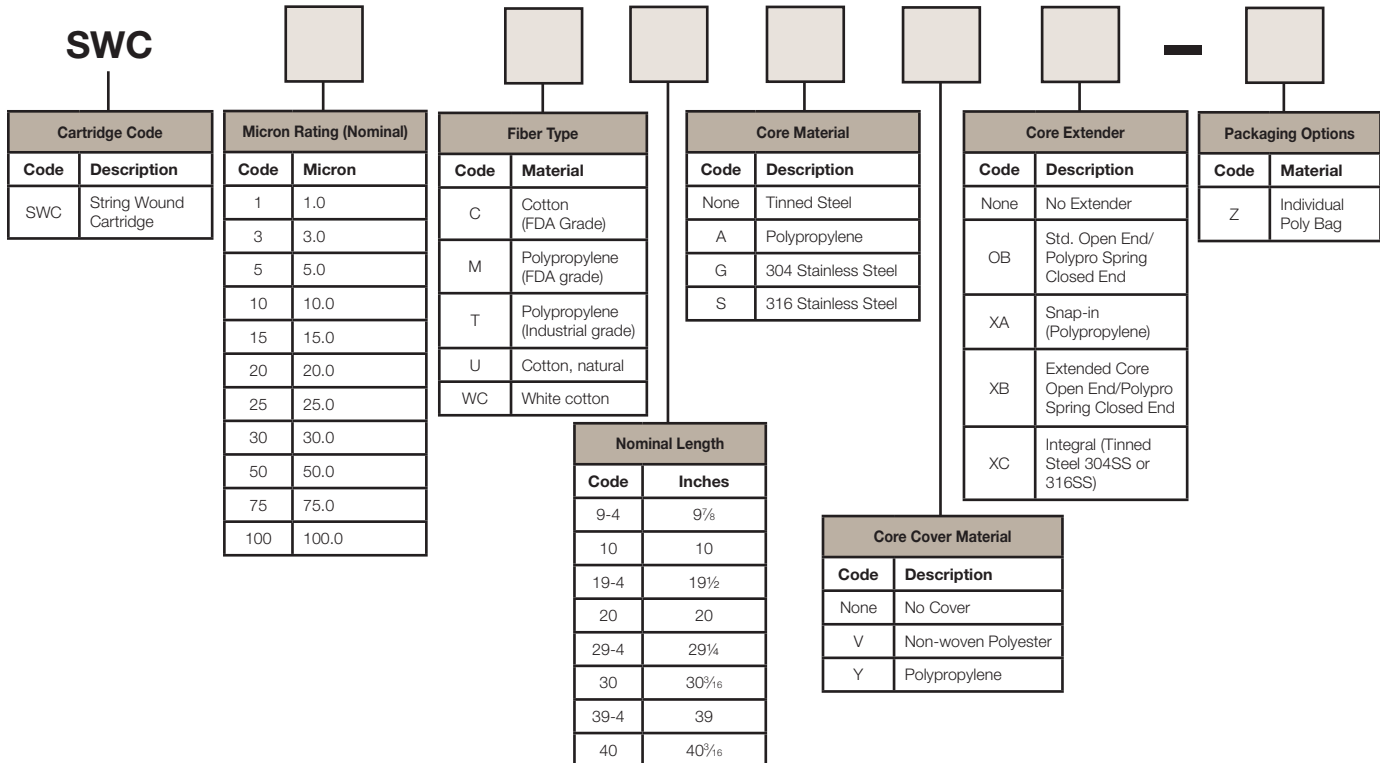
#### Notes:

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

## SWC Flow Factors (psid/gpm @ 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

## Ordering Information



Specifications are subject to change without notification.  
For User Responsibility Statement, see [www.parker.com/safety](http://www.parker.com/safety)

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