F-Series Micro Filtration (MF) Process Spiral Elements

0.3µm and 0.5µm PVDF membrane for industrial applications

F-Series microfiltration process spiral elements are designed for industrial applications. F-Series membranes offer high resistance to fouling. The Polyvinylidene fluoride (PVDF) membrane provides excellent chemical and temperature resistance under a variety of process conditions.

Membranes Available

Membrane Type	Micron
FG	0.3µm
FH	0.5µm

Contact Information

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Benefits

- Increased resistance to oxidizing agents
- Element construction developed for enhanced durability & extended life
- Elements designed to conform to FDA/CFR Title 21 standards
- Certified EU1935/2004EC & Plastics Regulation 10/2011
- Available in standard diameter or custom configurations for maximum performance and optimal cleaning

Applications

- Clarification
- Fermentation broth/separation

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F-Series Micro Filtration (MF) Process Spiral Elements

Materials of Construction:

Membrane	Polyvinylidene fluoride
Backing Material	Polyester
Permeate Tube	Polysulfone

- Special element construction available for high temperature/high pressure conditions/non-standard pH ranges & validation requirements
- Stainless steel permeate tube configurations available
- Polysulfone ATD & interconnectors provided

Operating Parameters:

Maximum operating temperature*	145°F (63°C)
Typical inlet pressure**	100-140 psi (7-10 bar)
pH range, continuous	3 - 10
pH range, short-term cleaning***	1.8 - 11.5 @ 122°F (50°C)
Maximum chlorine concentration	180 ppm @ 9-11 pH
Other oxidizing agents****	Consult factory

* Temperature >40°C require reduced element differential
** Recommended cross flow rates and ΔP are dependent on various process parameters
*** Consult factory for cleaning chemical guidelines, and cleaning water quality documents
**** Consult with a Parker technical representative for specific limitations

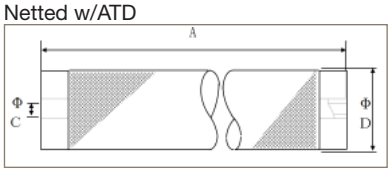
Notes:
- Elements can be high temperature sanitized, consult a Parker technical representative for details
- Separate specifications are available including UF cleaning guidelines and water quality documents

Element Dimensions

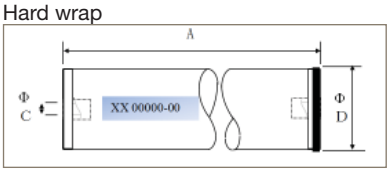
Model	Diameter (D)		Length (A)		Central Tube ID* (C)	
	(in)	(mm)	(in)	(mm)	(in)	(mm)
4040	4.0	101.6	40.0	1016	0.625	15.9
8040	7.9	201	40.0	1016	1.125	28.6

Other PWT ID available upon request, consult your Parker representative for details

Netted w/ATD



Hard wrap



Element Area

Model	Spacer																			
	Diamond														Parallel					
	K		P		B		O		L		A		M		Q		E		F	
	(24 mil) ft²	(.6 mm) m²	(28 mil) ft²	(.7 mm) m²	(31 mil) ft²	(0.8 mm) m²	(43 mil) ft²	(1.1 mm) m²	(65 mil) ft²	(1.7 mm) m²	(80 mil) ft²	(2.0 mm) m²	(100 mil) ft²	(2.5 mm) m²	(46 mil) ft²	(1.2 mm) m²	(65 mil) ft²	(1.7 mm) m²	(80 mil) ft²	(2.0 mm) m²
4040	73.6	6.8	68.5	6.4	71.7	6.7	57.4	5.3	41.6	3.9	35.9	3.3	30.1	2.8	57.4	5.3	41.6	3.9	35.9	3.3
8040	385	35.8	357.7	33.2	340.5	31.6	279.3	26.0	205.6	19.1	175.8	16.3	144.9	13.5	279.3	26.0	205.6	19.1	175.8	16.3

Ordering Information

Each element is identified with a product number and lot number for traceability. **Example Order Configuration: FG 4040 - BS - S**

Membrane Type	
Code	Micron
FG	0.3
FH	0.5

Nominal Diameter	
Code	Inches
40	4.0
80	7.9

Length	
Code	Inches
40	40

Feeder Spacer	
Code	Size
Diamond	
K	24 mil
P	28 mil
B	31 mil
O	43 mil
L	65 mil
A	80 mil
M	100 mil
Parallel	
Q	46 mil
E	65 mil
F	80 mil

Control Number
Consult a Parker representative for the specific code to match your application

Outer Wrap	
Code	Description
S	Std. full-fit (4in.)
ST	Reinforced full-fit
QT	Extra reinforced full-fit
H	Hard wrap

DS_SS_F-Series MF PVDF PSE 02/14 Rev. B

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