

# F-Series Microfiltration (MF) Sanitary Spiral Elements

0.3µm and 0.5µm PVDF Membrane for  
Fat Removal; Casein Concentration;  
Whey Protein Separation



F-Series microfiltration sanitary spiral elements are designed for fat removal, and fractionalization of casein from whey proteins. F-Series membranes offer high resistance to fouling. The Polyvinylidene fluoride (PVDF) membrane provides excellent chemical and temperature resistance under a variety of process and sanitizing conditions.

## Membranes Available

Membrane Type	Micron
FG	0.3µm
FH	0.5µm



## Contact Information

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**Process Filtration - North America**  
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Oxnard, California, USA 93030

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[www.parker.com/sanitarymembranes](http://www.parker.com/sanitarymembranes)



## Benefits

- Increased resistance to oxidizing agents
- Element construction developed for enhanced durability & extended life
- Elements designed to conform to 3-A, FDA/CFR Title 21 & USDA standards
- Certified EU1935/2004EC & Plastics Regulation 10/2011
- Available in standard diameter or custom configurations for maximum performance and optimal cleaning
- Power Saver Spiral (PSS) option for increased cross-flow and reduced energy costs

## Applications

- Fat reduction in whey
- Casein separation from whey proteins in skim milk
- Concentration of cheese milk
- Clarification
- Bacteria removal

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# F-Series Microfiltration (MF) Sanitary 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
- Power saver spiral (PSS) optional

## Operating Parameters:

Maximum operating temperature*	145°F (63°C)
Typical inlet pressure**	20 psi (1.4 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  $\Delta P$  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 MF cleaning guidelines and water quality documents

## Element Area

Model	Spacer																	
	Diamond												Parallel					
	P		B		O		L		A		M		Q		E		F	
(28 mil) ft <sup>2</sup>	(.7 mm) m <sup>2</sup>	(31 mil) ft <sup>2</sup>	(0.8 mm) m <sup>2</sup>	(43 mil) ft <sup>2</sup>	(1.1 mm) m <sup>2</sup>	(65 mil) ft <sup>2</sup>	(1.7 mm) m <sup>2</sup>	(80 mil) ft <sup>2</sup>	(2.0 mm) m <sup>2</sup>	(100 mil) ft <sup>2</sup>	(2.5 mm) m <sup>2</sup>	(46 mil) ft <sup>2</sup>	(1.2 mm) m <sup>2</sup>	(65 mil) ft <sup>2</sup>	(1.7 mm) m <sup>2</sup>	(80 mil) ft <sup>2</sup>	(2.0 mm) m <sup>2</sup>	
3819*	-	-	28	2.6	22.9	2.1	-	-	-	-	-	-	-	-	-	-	-	-
3824*	-	-	37.5	3.5	30.6	2.8	-	-	-	-	-	-	-	-	-	-	-	-
3830*	-	-	48.6	4.5	39.7	3.7	-	-	-	-	-	-	-	-	-	-	-	-
3838	68.5	6.4	63.8	5.9	51.9	4.8	36.6	3.4	30.7	2.9	23.6	2.2	51.9	4.8	36.6	3.4	30.7	2.9
6419*	-	-	95.7	8.9	75	7.0	-	-	-	-	-	-	-	-	-	-	-	-
6424*	-	-	123.6	11.5	100	9.3	-	-	-	-	-	-	-	-	-	-	-	-
6430*	-	-	160.7	14.9	130	12.1	-	-	-	-	-	-	-	-	-	-	-	-
6438	223.5	20.8	210.1	19.5	172.4	16.0	125.2	11.6	103.9	9.7	79.9	7.4	172.4	16.0	125.2	11.6	103.9	9.7
7838	348.2	32.4	327.3	30.4	269.2	25.0	200.5	18.6	167.2	15.5	128.5	11.9	269.2	25.0	200.5	18.6	167.2	15.5
8024*	-	-	200.3	18.6	164.3	15.3	122.4	11.4	-	-	-	-	-	-	-	-	-	-
8030*	-	-	260.4	24.2	213.6	19.9	157.3	14.6	-	-	-	-	-	-	-	-	-	-
8038	357.7	33.2	340.5	31.6	279.3	26.0	205.7	19.1	175	16.3	134.5	12.5	279.3	26.0	205.7	19.1	175	16.3
8324*	-	-	224.6	20.9	184.2	17.1	136.1	12.6	-	-	-	-	-	-	-	-	-	-
8330*	-	-	222.3	20.7	239.4	22.2	176.9	16.4	-	-	-	-	-	-	-	-	-	-
8338	396.9	36.9	377.8	35.1	313.1	29.1	231.4	21.5	196.4	18.3	151	14.0	313.1	29.1	231.4	21.5	196.4	18.3
8438	396.9	36.9	377.8	35.1	313.1	29.1	231.4	21.5	196.4	18.3	151	14.0	313.1	29.1	231.4	21.5	196.4	18.3
9824*	-	-	311	28.9	257.8	24.0	190.5	17.7	-	-	-	-	-	-	-	-	-	-
9830*	-	-	392.4	36.5	325.1	30.2	236.3	22.0	-	-	-	-	-	-	-	-	-	-
9838	555.6	51.6	528.9	49.2	438.2	40.7	318.5	29.6	275.8	25.6	212	19.7	438.2	40.7	318.5	29.6	275.8	25.6

\*Other sizes available on request

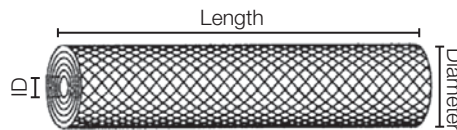
# F-Series Microfiltration (MF) Sanitary Spiral Elements

Element Dimensions

Model	Diameter*		Length		Central Tube ID	
	(in)	(mm)	(in)	(mm)	(in)	(mm)
3819	3.78	96.0	19.00	482.6	0.83	21.1
3824	3.78	96.0	24.00	609.6	0.83	21.1
3830	3.78	96.0	30.00	762.0	0.83	21.1
3838	3.78	96.0	38.00	965.2	0.83	21.1
6419	6.34	161.0	19.00	482.6	1.138	28.9
6424	6.34	161.0	24.00	609.6	1.138	28.9
6430	6.34	161.0	30.00	762.0	1.138	28.9
6438	6.34	161.0	38.00	965.2	1.138	28.9
7838	7.74	196.6	38.00	965.2	1.138	28.9
8024	7.92	201.2	24.00	609.6	1.125**	28.6
8030	7.92	201.2	30.00	762.0	1.125**	28.6
8038	7.92	201.2	38.00	965.2	1.125**	28.6
8324	8.25	209.6	24.00	609.6	1.138	28.9
8330	8.25	209.6	30.00	762.0	1.138	28.9
8338	8.25	209.6	38.00	965.2	1.138	28.9
8438	8.36	212.3	38.00	965.2	1.138	28.9
9824	9.70	246.4	24.00	609.6	1.138	28.9
9830	9.70	246.4	30.00	762.0	1.138	28.9
9838	9.70	246.4	38.00	965.2	1.138	28.9

\* Elements will fit housings that are not less than 0.010" larger or not greater than 0.040" larger than published diameter

\*\*1.138" PWT ID available upon request, consult factory



## Ordering Information

Each element is identified with a product number and lot number for traceability. **Example Order Configuration: FG 3838 - BS 03 - S**

Membrane Type		Nominal Diameter		Length		Feeder Spacer		Control Number Consult a Parker representative for the specific code to match your application	Outer Wrap-Sanitary	
Code	Micron	Code	Inches	Code	Inches	Code	Size		Code	Description
FG	0.3	38	3.78	19	19	<b>Diamond</b>			S	Full-fit
FH	0.5	64	6.34	24	24	P	28 mil			
		78	7.74	30	30	B	31 mil			
		80	7.92	33	33	O	43 mil			
		83	8.25	35	35	L	65 mil			
		84	8.36	355	35.5	A	80 mil			
		98	9.70	36	36	M	100 mil			
				38	38	<b>Parallel</b>				
				387	38.75	Q	46 mil			
						E	65 mil			
						F	80 mil			
								SP	Power Saver Spiral	
								ST	Reinforced full-fit	
								QT	Extra reinforced full-fit	

# Worldwide Filtration Manufacturing Locations

## North America

### Compressed Air Treatment

#### Gas Separation & Filtration Division

Airtek/Finite/dornick hunter/Zander  
Lancaster, NY  
716 686 6400  
[www.parker.com/faf](http://www.parker.com/faf)

Balston  
Haverhill, MA  
978 858 0505  
[www.parker.com/balston](http://www.parker.com/balston)

### Engine Filtration

#### Racor

Modesto, CA  
209 521 7860  
[www.parker.com/racor](http://www.parker.com/racor)

Holly Springs, MS  
662 252 2656  
[www.parker.com/racor](http://www.parker.com/racor)

### Hydraulic Filtration

#### Hydraulic & Fuel Filtration

Metamora, OH  
419 644 4311  
[www.parker.com/hydraulicfilter](http://www.parker.com/hydraulicfilter)

Laval, QC Canada  
450 629 9594  
[www.parkerfarr.com](http://www.parkerfarr.com)

Velcon  
Colorado Springs, CO  
719 531 5855  
[www.velcon.com](http://www.velcon.com)

### Process Filtration

#### dornick hunter Process Filtration SciLog

Oxnard, CA  
805 604 3400  
[www.parker.com/processfiltration](http://www.parker.com/processfiltration)

### Water Purification

#### Village Marine, Sea Recovery, Horizon Reverse Osmosis

Carson, CA  
310 637 3400  
[www.parker.com/watermakers](http://www.parker.com/watermakers)

## Europe

### Compressed Air Treatment

#### dornick hunter Filtration & Separation

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#### Parker Gas Separations

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### Engine Filtration & Water Purification

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#### Racor Research & Development

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#### Condition Monitoring Parker Kittiwake

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#### dornick hunter Process Filtration Parker Twin Filter BV

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