

## PP5 POLYPROPYLENE FILTER SERIES

### Economically Efficient Pleated Filter Cartridges

This cost effective, disposable filter element can be used for a wide range of applications. The filter is constructed of pleated polypropylene filter media with high surface area that allows for greater system flow rate.

### Filter Features – Benefits

- Micron ratings from 0.2 to 50µ - broad application range
- Meets current USP Class VI biological test for plastics
- FDA listed materials of construction
- High filtration efficiency: 90% (Beta 10) rated
- Fixed pore construction – resists unloading of captured contaminant
- Polypropylene construction – inert to many process fluids
- Various gasket/o-ring materials – compatible with many fluids
- Economically efficient filtration
- Manufactured in continuous lengths up to 40 inches

### FILTER SPECIFICATIONS

Construction material:	Polypropylene
Gaskets/o-rings:	Buna-N, EPDM, Silicone, Viton, Teflon Encapsulated Viton (o-rings only)
Micron rating:	0.25, 0.25, 0.5, 0.5, 1.0, 2.0, 5.0, 10, 25 50µ
<b>Dimensions and Operating Parameters</b>	
Nominal lengths:	9.75", 10", 20", 30", 40" (24.7, 25.4, 50.8, 76.2, 101.6 cm)
Outside diameter:	2.7" (6.86 cm)
Inside diameter:	1" (2.54 cm)
Max. Operating temperature:	176° F (80° C)
Max. Differential pressure:	75 psid @ 70° F (5.2 bar @ 21° C) 40 psid @ 176° F (2.8 bar @ 80° C)
Recommended change out pressure:	35 psid (2.4 bar)



### Filter Removal Efficiency

Beta Ratio Efficiency	Beta 50	Beta 10
0.2 micron	0.28	0.2
0.25 micron	0.35	0.25
0.45 micron	0.6	0.45
0.5 micron	0.7	0.5
1.0 micron	1.5	1.0
2.0 micron	2.7	2.0
5.0 micron	7.0	5.0
10.0 micron	12.0	10.0
25.0 micron	32.0	25.0
50.0 micron	70.0	50.0

$$\text{Beta Ratio} = \frac{\text{Upstream particle counts}}{\text{Downstream particle counts}}$$

The micron ratings shown at various efficiency and beta ratio values were determined through laboratory testing, and can be used as a guide for selecting cartridges and estimating performance. Under actual field conditions, results may vary somewhat from the values shown, due to the variability of filtration parameters. Testing was conducted using the single-pass test method, water at 3 gpm/10" cartridge. Contaminants included latex beads, coarse and fine test dust. Removal efficiencies were determined using dual laser source particle counters.

**FDA Compliance:** All polypropylene material used in manufacturing complies with the regulations of the FDA title 21 of the Code of Federal Regulations Sections 174.5, 177.1520, and 177.1630, as applicable for food and beverage contact.

PP5 Nomenclature Information				
PP5	-2	-20	P8	V
<b>Filter type</b> PP5 Series Filters		<b>Nominal Length</b> (inches)		<b>Gasket or o-ring</b>
<b>Retention Rating (micron)</b>		-9.75	<b>End Configuration</b>	S Silicone
0.2		-10	P Double Open End	B Buna-N
0.25		-20	P2 226/Flat single open end	E EPDM
0.45		-30	P3 222/Flat single open end	V Viton
0.5		-40	P7 226/Fin single open end	T Teflon encap.
1			P8 222/Fin single open end	Viton (o-rings only)
2				T Teflon (gaskets only)
5			AM Single open end, internal o-ring	
10			NPC Double open end, internal o-ring	
25				
50				

Example: PP5-2-20P8V

