# PolyPure-AB Absolute PP Pleated Cartridge Filter

## An Absolute Filters with Higher Removal Efficiency



## Description

PolyPure-AB Absolute PP Pleated Cartridge Filter uses the raw materials which have permitted by FDA CFR21. This type of cartridge tolerates a variety of chemical solvents, used in the filtration of ordinary or corrosive fluid. We offer absolute filtration pore size: 0.1~30μm, 10inch~40inch different length. Many kinds of connect types can be choose according to customer's requires. The high surface area PolyPure-AB filters ensure long service life and low initial pressure drops.
All cartridge hardware components are high purity polypropylene materi als for use in critical process applications.
PolyPure-AB cartridges are manufactured and assembled in a clean room environment to minimize the possibility of contamination. PolyPure-AB Series cartridges are available in a wide range of configurations to fit most commercially available filter housings.

### Regulatory Compliance

FDA 21 CFR 177
ISO 10993-Part 1, 5
EN 285:2015
Regulation (EC) No 1935/2004

### Application

- Fine and specialty chemicals
- Acids
- Plating baths
- Food & Beverage
- Bases
- Bottled water
- Ultrapure water
- Etch baths
- Pharmaceuticals

### Feature

- Filtration of colloidal products
- Filtration of fermentation broth and high viscosity materials
- Prefiltration of culture media, blood products
- Filtration of chemical intermediates, organic solvents, pure water

## Specifications

### Materials of Construction

| | |
|---|---|
| Filter Medium | Polypropylene |
| Inner support core | Polypropylene/SS 316L |
| Outer protection cage: | Polypropylene |
| End caps: | Polypropylene |

### Seal Materials

Gasket: Silicone/EPDM/NBR/FKM

O-Rings: Silicone/EPDM/NBR/FKM

Construction Method: Weld (No adhesives)

### Effective Filtration Area

5.6ft²(0.52m²)@10inch

### Steam sterilization

121℃ / 30 min

90℃ hot water daily sterilization during CIP phases

### Dimensions

Outside Diameter: 2-11/16 in (68 mm)

Inside Diameter: 1-1/4 in (33 mm)

Nominal Length: 10 inch, 20 inch, 30 inch, 40 inch

### Recommended Operating Conditions

Maximum Temperature: 80℃

Maximum Differential Pressure:

5.2bar(75psi)@25℃； 2.7bar(39psi)@80℃

### Micron Ratings

0.1μm, 0.2μm, 0.45μm, 0.65μm,1μm, 3μm, 4.5μm, 5μm, 8μm,

10μm, 20μm, 30μm,

### Filtration Efficiency

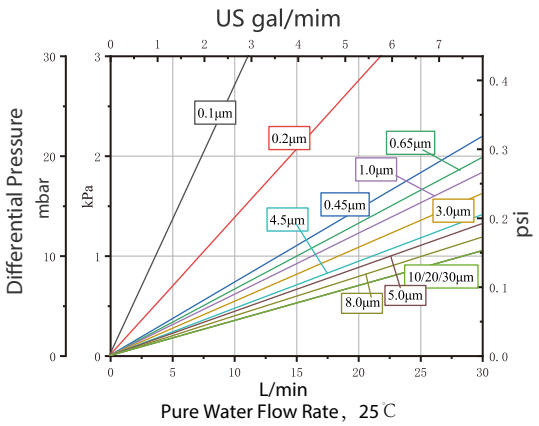
≥99.98%

## Liquid Particle Retention* (By the modle OSU-F2 test)

| Removal Rating(μm) | β=5,000 | β=1,000 | β=1,00 |
|---|---|---|---|
| | 99.98% | 99.9% | 99% |
| 0.1 | 0.1 | 0.1 | 0.1 |
| 0.2 | 0.2 | 0.1 | 0.1 |
| 0.45 | 0.45 | 0.3 | 0.1 |
| 0.65 | 0.65 | 0.5 | 0.4 |
| 1.0 | 1.0 | 0.9 | 0.65 |
| 3.0 | 3.0 | 2.8 | 1.8 |
| 4.5 | 4.5 | 3.6 | 3.2 |
| 5.0 | 5.0 | 4.2 | 3.8 |
| 8.0 | 8.0 | 7.2 | 5.2 |
| 10 | 10 | 9.5 | 6.5 |
| 20 | 20 | 22 | 16 |
| 30 | 30 | 27 | 20 |

*Data less than 1 is an extrapolated values

## Pressure and Flow Rate




Pure Water Flow Rate, 25℃

Unit conversion:
1bar=100KPa
Flow rate is for a 10inch cartridge.
For liquids other than water,
multiply differential pressure by fluid viscosity (cP)

## Ordering Information*

| Filter Media | Length | Pore Size | Adaptor | Sealing | Core |
|---|---|---|---|---|---|
| CRPPA:<br>Polypropylene | 005 = 5 inches<br>010 = 10 inches<br>020 = 20 inches<br>030 = 30 inches<br>040 = 40 inches | 010 = 0.1 μm<br>020 = 0.2 μm<br>045 = 0.45 μm<br>065 = 0.65 μm<br>100=1μm<br>300=3μm<br>450=4.5μm<br>500=5μm<br>800=8μm<br>H10=10μm<br>H20=20μm<br>H30=30μm | 0=DOE<br>1=222/Flat with SS insert<br>2=222/Flat<br>3=222/Fin<br>4=222/Fin with SS insert<br>5=226/Fin with SS insert<br>6=226/Fin<br>7=226/Flat<br>8=226/Flat with SS insert | S = Silicone<br>E = EPDM<br>F = FPM/FKM<br>N= NBR | Blank=PP<br>R=GF Reinforced PP<br>S=316L Stainless Steel |

* This information is a guide to the part number structure and possible options. For applications requiring autoclaving and sterilization, MS recommends the use of adaptor with SS insert to ensure filter sealing after cooling, If products that require autoclaving and sterilization use EPDM sealing rings and require customization. For availability of specific options and housing details, please contact MS.

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