

TeknoPure-AB Absolute PP Pleated Filter Cartridge



TEKNOPURE

An Absolute Filters with Higher Removal Efficiency



Description

TeknoPure-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 TeknoPure-AB filters ensure long service life and low initial pressure drops. The specific CRY Cryptosporidium grade designed exclusively for food and beverage.

All cartridge hardware components are high purity polypropylene materials for use in critical process applications.

TeknoPure cartridges are manufactured and assembled in a clean room environment to minimize the possibility of contamination. TeknoPure-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
USP Class VI-121 °C
Regulation (EC) No 1935/2004

Specifications

» Materials of Construction

Filter Medium	Polypropylene
Inner Support Core	Polypropylene/SS 316L
Outer Protection Cage	Polypropylene
End Caps	Polypropylene

» 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

» Seal Materials

Gasket	Silicone/EPDM/NBR/FKM
O-Rings	Silicone/EPDM/NBR/FKM
Construction Method	Weld (No Adhesives)

» Recommended Operating Conditions

Maximum Temperature	80°C
Maximum Differential Pressure	5.2bar(75psi)@25°C; 2.7bar(39psi)@80°C

» Effective Filtration Area

5.6ft²(0.52m²)@10inch

» Micron Ratings

0.1µm, 0.2µm, 0.45µm, 0.65µm, 1µm, 3µm, 4.5µm, 5µm, 8µm, 10µm, 20µm, 30µm,

» Steam Sterilization

121°C / 30 min

» Filtration Efficiency

90°C Hot water daily sterilization during CIP phases ≥99.98%

Features

- Extensive chemical compatibility
- Gradient pore size design
- High efficiency particle retention rate to protect terminal filter sterilization safety
- No fiber shedding
- Specific CRY Cryptosporidium grade for food and beverage

Application

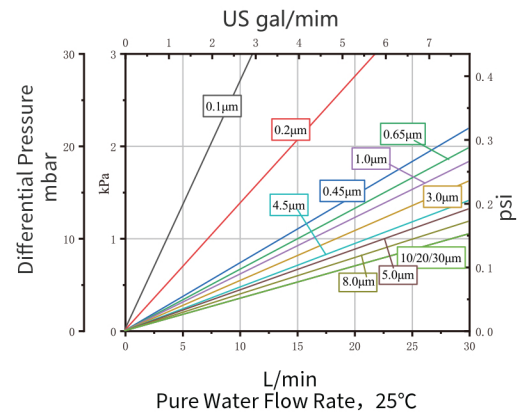
- Fine and specialty chemicals
- Acids
- Plating baths
- Food & Beverage
- Bases
- Bottled water
- Ultrapure water
- Etch baths
- Pharmaceuticals

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

Removal Rating(μm)	$\beta=5,000$	$\beta=1,000$	$\beta=1,00$
	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	18	16
30	30	27	20

*Data less than 1 is an extrapolated values

Pressure and Flow Rate



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*

Part Number: TPAB

(L) (R) (A) (S) (C)

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

* This information is a guide to the part number structure and possible options. For applications requiring autoclaving and sterilization, we recommends the use of adaptor with SS insert to ensure filter sealing after cooling. For availability of specific options and housing details, please contact us.