ADVANTEC®

DEPTH CARTRIDGE FILTERS

TCPD Type

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ADVANTEC TOYO KAISHA, LTD.

DEPTH CARTRIDGE FILTERS

Depth type cartridge filters have a graded pore structure in which the pore size becomes smaller toward the core of a filter layer. They are good for clarification and filtration of solutions, and classification and filtration of emulsions and pigments.

TCPD Type

Features

- Filter porosity is high and a graded pore structure in which the pore size becomes smaller toward the core enables a longer product lifetime.
- Made with polypropylene, the filters have great chemical resistance, and handle acid, alkaline and many other organic solvents.
- The filter employs multilayer fusion-bonded polypropylene filaments, which minimize release and elution of fibers.
- These cartridge filters are highly reliable with a particle retention performance display.

Applications

- Filtration of pigment resist, overcoating agents, ultrapure water, solutions, chemical agents, electromagnetic slurry, and process gases used in the microelectronics industry
- Filtration of abrasive particles, resins, monomers, catalysts, and gases used in the chemical industry
- Pre- and final filtration of process water, solvents, intermediates, and products used in the pharmaceuticals and cosmetic industries
- Filtrations of water, syrups, and soft drinks used or produced in the food, beverage, and brewery industries

Specifications

Product Name	TCPD-008A, 01A, 02A, 03A, 05A
Maximum Differential Pressure*	0.49MPa (25°C)
Maximum Operating Temperature*	80°C
Sterilization Method	Autoclave Sterilization at 121°C for 30 minutes In-line Steam Sterilization at 126°C for 30 minutes Ethylene Oxide Gas Sterilization (Code N, H, K and J shapes can be sterilized with O-ring seal applied.)

*Maximum differential pressure and maximum operating temperature are set based on the results of test using water. These may differ depending on the combination of chemicals, differential pressure, temperature, and time; therefore, we recommend testing before use.

- This product is made of plastic and may deteriorate over time.
  In particular, long exposure to fluids containing oxidants such as chlorine may cause oxidative deterioration and lower the strength of filters and support media. The level of deterioration may differ depending on the conditions of temperature and pressure, and type of chemicals. Please ensure the periodic replacement of filters when using the products under severe conditions.

Particle Retention (Standard)

Product Name	Particle size					
	0.6µm	0.8µm	1µm	2µm	3µm	5µm
TCPD-008A	>99%	>99.9%				
TCPD-01A	90%	99%	>99.9%			
TCPD-02A			>99%	>99.9%		
TCPD-03A			95%	>99%	>99.9%	
TCPD-05A				95%	>99%	>99.9%

- Particle retention when filtering standard latex dispersion water (10L/min, 250 mm type)

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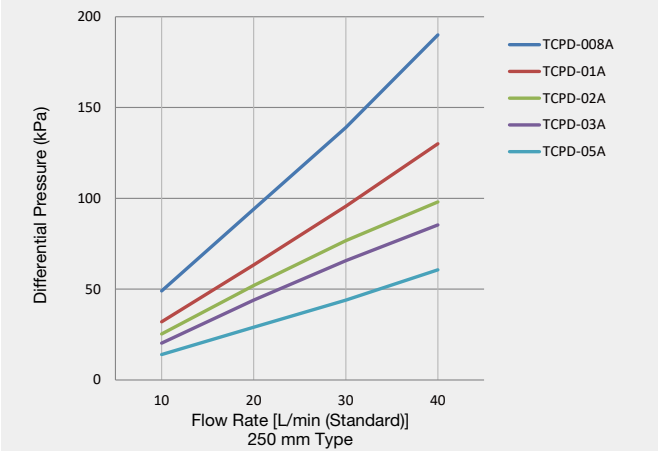
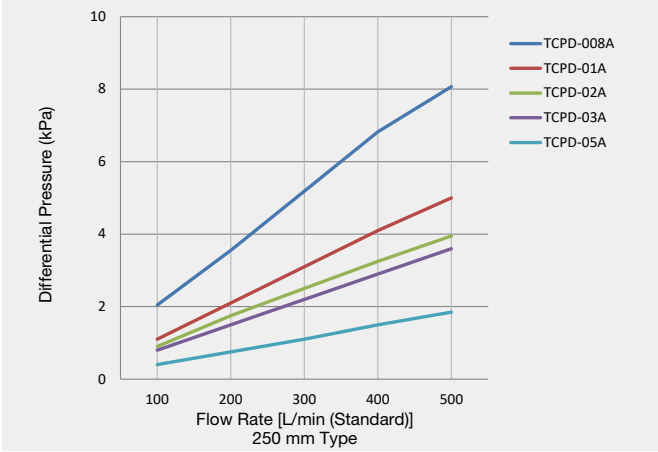
Typical Flow Rate (Water)



Conditions Pipe: 3/4 in. Housing: 1TWA-1S-FS Water Temperature: 20°C

Typical Flow Rate (Air)



Conditions Pipe: 3/4 in. Housing: 1TWA-1S-FS Air Supplied: 0.49 MPa

Product Name

TCPD- ☐ A- ☐ 1 ☐ ☐

Pore Size
008
01
02
03
05

Code	Length (mm)
S	250
D	500
T	750
Q	1,000

Code	Cartridge Filter Shape
F	Please check photos for details of the shape of each cartridge filter.
N	
M	
H	
R	
K	
P	
J	

Code	Gasket O-ring Polymer
E (Standard)*1	Ethylene Propylene
D	EPDM
N	Chloroprene
B	NBR
S*2	Silicone
V	FPM
H (Gasket only)	PTFE
F (O-ring only)	FEP Jacket

*1: Do not use ethylene propylene gaskets and O-rings for use associated with food.
*2: Standard for cartridge filter shape code H, K, and J

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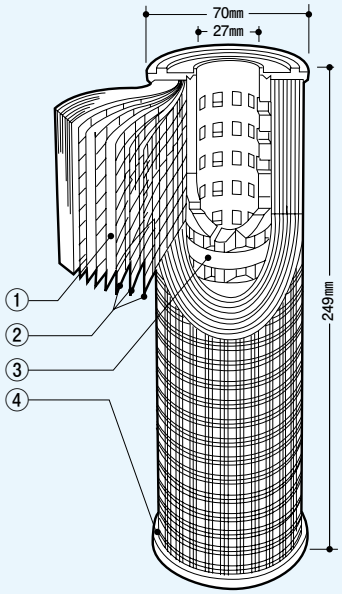
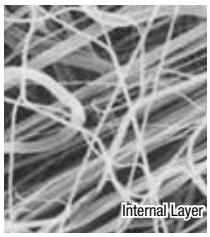
■Composition



■Materials

①Filter : Polypropylene
②Support Net : Polypropylene
③Core : Polypropylene
④Endcap : Polypropylene

■Surface of the Filtering Layer (Electron Micrography)



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