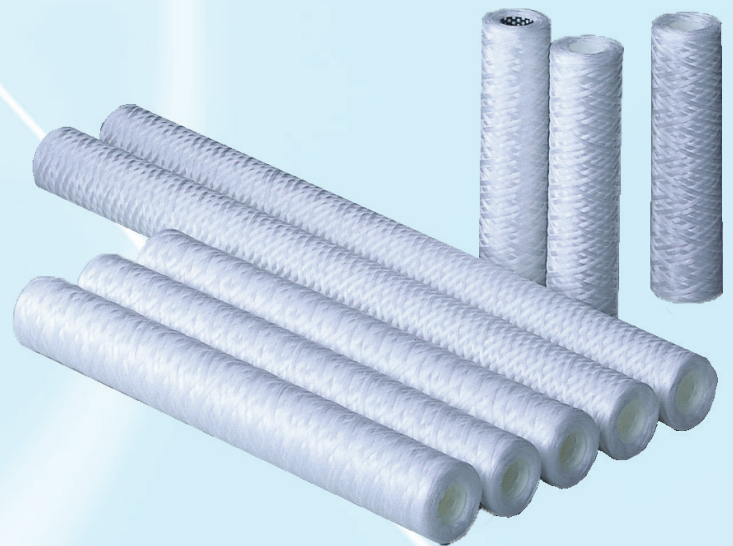


## POLYPROPYLENE WOUND CARTRIDGE FILTERS

### TCW-PP/PS Types



TCW-PP/PS Types

# POLYPROPYLENE WOUND CARTRIDGE FILTERS

Polypropylene Wound Cartridge Filters are formed by spinning endless polypropylene long fibers without wetting agents around a stainless core without being twisted. They minimize separation and elution of fiber.



## Features

- The filters are made with endless long fibers, which prevents separation of fibers from the filters.
- The filters have great chemical resistance, and handle acid, alkaline and many other organic solvents.

## Applications

- Filtration of intermediates and products manufactured in the petrochemical and chemical industries
- Filtration of fuel, turbine oil, cutting oil, lubricating oil used in the petroleum refining and machine industries
- Filtration of synthetic resins, and resins, coatings, and other highly viscous liquid used in the coating industry
- Filtration of water, syrups, flavoring agents, and cooking oil used or produced in the food, beverage and brewery industries
- Filtration of pure water and washing water used in the pharmaceutical and microelectronics industries
- Filtration of acid and alkaline solutions used in the plating industry
- Filtration of industrial water, waste water, and boiler water used or produced in a wide range of industries

## Specifications

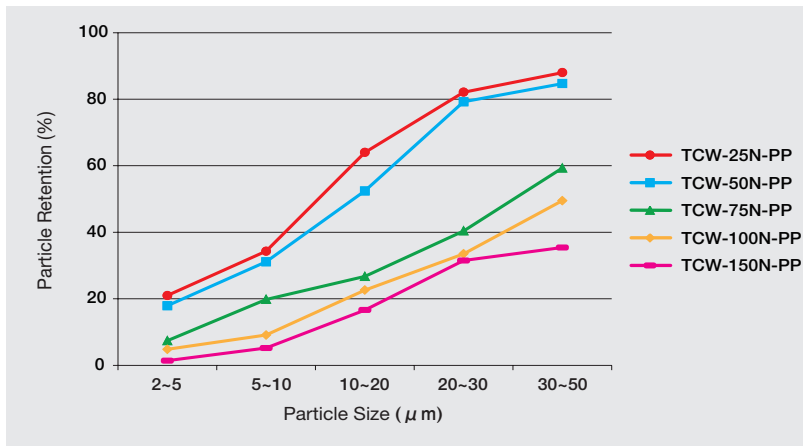
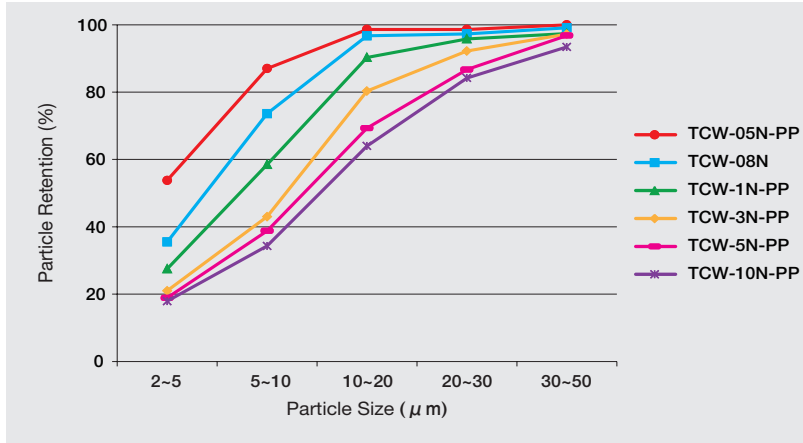
Product Name	TCW-□N-PPS	TCW-□N-PPD	TCW-□N-PPT	TCW-□N-PSS
Nominal Rating (μm)	0.5, 0.8, 1, 3, 5, 10, 25, 50, 75, 100, 150			
Maximum Differential Pressure*	0.49MPa (25°C)			
Maximum Operating Temperature*	80°C			
Materials	Polypropylene			
Core Materials	Polypropylene			SUS304
Length (mm)	250	500	750	250

\* 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.
- Store products away from high temperature and humidity, direct sunlight, and ultraviolet rays.

# POLYPROPYLENE WOUND CARTRIDGE FILTERS

## Particle Retention Performance



### Conditions

Test Solution: 0.5 mg/L latex dispersion water with Type-8 test powder specified by the JIS Z 8901.

Particle size distribution of Type-8 test powder is shown in the table below.

**Table: Particle Size Distribution for Type-8 Test Powder Specified by the JIS Z 8901**

Particle Size (μm)	<5	5~10	10~20	20~30	30~40	40~75	>75
Particle Size Distribution (%)	39	18	16	12	6	6	3

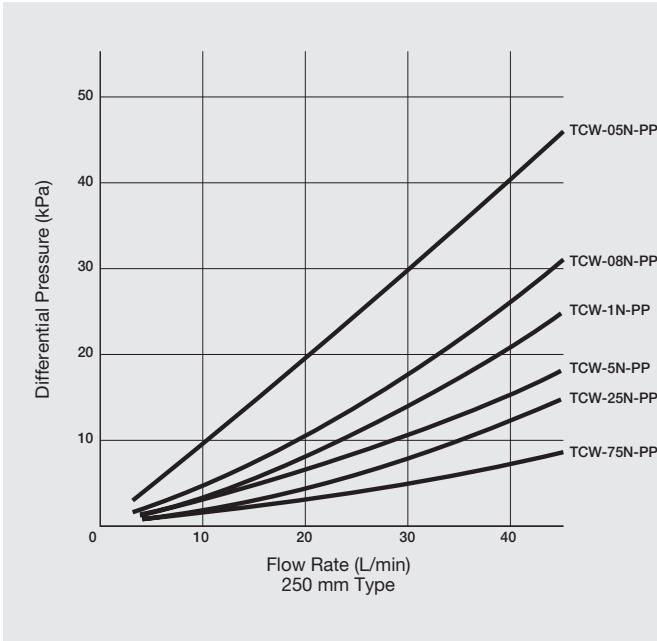
Flow Rate: 10L/min

Sampling: Unfiltered solution and 60L filtered solution

Measuring Method: Particle retention is calculated by counting the number of particles in the unfiltered and filtered solutions using an automatic particle counter.

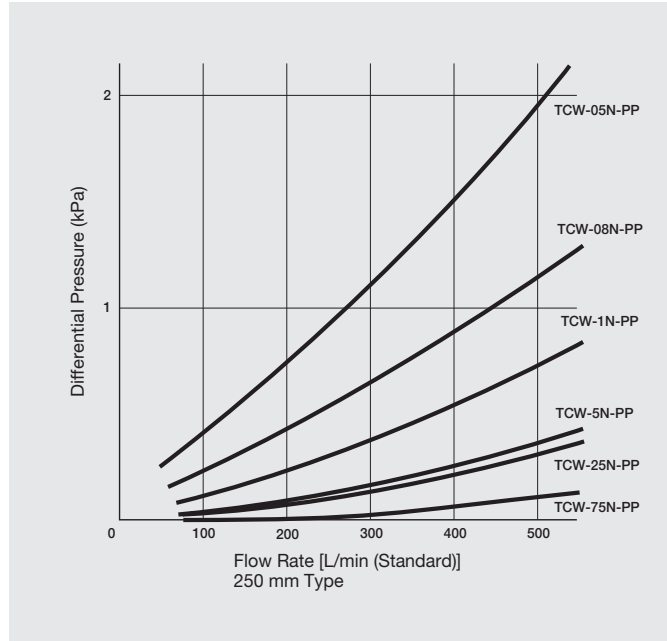
# POLYPROPYLENE WOUND CARTRIDGE FILTERS

## 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

## Fiber Separation Characteristics

	Number of Separated Fibers (Qty/mL)
TCW-100N-PPD (Non-Twisted Yarn)	1,120
100 μm Twisted Wound Yarn	517,000

Conditions  
 Test Solution : Ultrapure Water  
 Flow Rate : 10L/min  
 Filter Length : 500 mm  
 Sampling : Initial Flow  
 Fiber : Measuring a foreign substance whose length against thickness is threefold or greater.

- Specifications listed in this brochure are subject to change without notice.
- ADVANTEC is a trademark / registered trademark that belongs to Toyo Roshi Kaisha, Ltd. and its group companies in Japan and other countries.

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