

# Duraclear®

PP Depth-type Microfiber Filter



# Duraclear® Filter Cartridge

Duraclear® filter cartridges are pleated polypropylene depth-type filters that are a superior alternative to string wound, molded, and polyspun depth filter cartridges. Duraclear® filters are an economical, multi-use, premium quality product available in nominal retention ratings from 1 to 50 µm.

Duraclear® filter media is composed of continuous, self-bonded polypropylene microfibers. It is manufactured by a unique process that controls the uniformity and density of the continuous microfibers. The Duraclear® filter has no resin binders that can break down and leach out. This prevents the typical problems of channeling and media migration that are characteristic of conventional depth filter media.

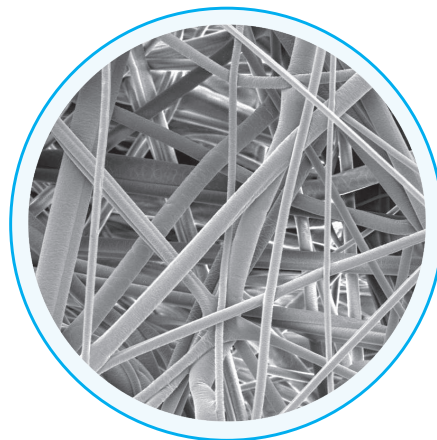
The Duraclear® filter's heavy-duty core and support components are constructed of 100% polypropylene with polypropylene end caps.

The Duraclear® filter is specifically designed to provide cost-effective high efficiency particle removal in aqueous and non-aqueous liquids.

The unique combination of cartridge design and media selection contributes to the Duraclear® filter's superior flow rate, lower pressure drop, exceptional contaminant holding capacity and longer operational life. These features distinguish Duraclear® as a superior, cost-effective alternative to string wound, molded, and polyspun depth filters.

## Features and Benefits

- Particle removal ratings of 1, 3, 5, 10, 15, 25, and 50 µm
- Self-bonded polypropylene filter media
- Contains no resin binders or surfactants
- Pleated construction
- Maximum effective surface area
- Superior flow characteristics
- High dirt-holding capacity
- Heavy-duty core
- Many lengths available
- Broad selection of the optimum filter media to meet application requirements
- Consistent porosity and particle removal; no channeling or migration of filter media
- Extractables are kept to a minimum; no pre-flushing is required
- Filter surface area is optimized
- High flow rates; high contaminant capacity
- Pressure loss is reduced; energy costs are minimized
- Long filter service life; lower operating costs; reduced maintenance costs
- Increased dirt holding capacity; withstands higher differential pressure
- Direct competitive replacement; fits most standard filter housings



Duraclear® SEM

## Typical Applications

Duraclear® filter cartridges can be used as prefilters or final filters for controlling contaminants in fluid processes. Duraclear® filters are most appropriate for use when high quality filtration and economy are important.

Typical applications for the polypropylene end cap configuration include:

- Chemicals
- Solvents
- Coatings
- Biologicals & diagnostics
- Food & beverage

# Product Specifications

## Materials of Construction

Filter Media:	Polypropylene
Upstream Support:	Polypropylene
Downstream Support:	Polypropylene
Core/Outer Guard:	Polypropylene
End Caps:	Polypropylene with buna, EPR, polyethylene, silicone, Teflon® or Viton® gaskets

Duraclear® filters are non-fiber-releasing as defined in 21 CFR 210.3(b)(6) and 211.72.

## Filtration Ratings

### Nominal Pore Sizes:

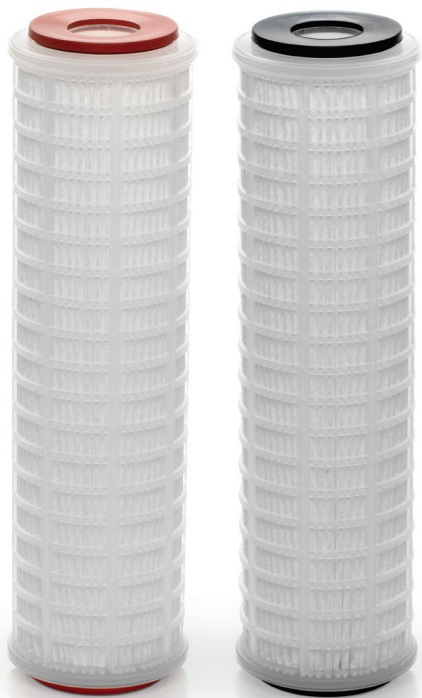
1 µm, 3 µm, 5 µm, 10 µm, 15 µm, 25 µm, and 50 µm

### Maximum Operating Temperatures and Pressures

Δp 80 psi @ 90 °F (Δp 5,5 bar @ 32 °C)

Δp 50 psi @ 150 °F (Δp 3,4 bar @ 66 °C)

Δp 20 psi @ 180 °F (Δp 1,4 bar @ 82 °C)



## Cartridge Dimensions (nominal)

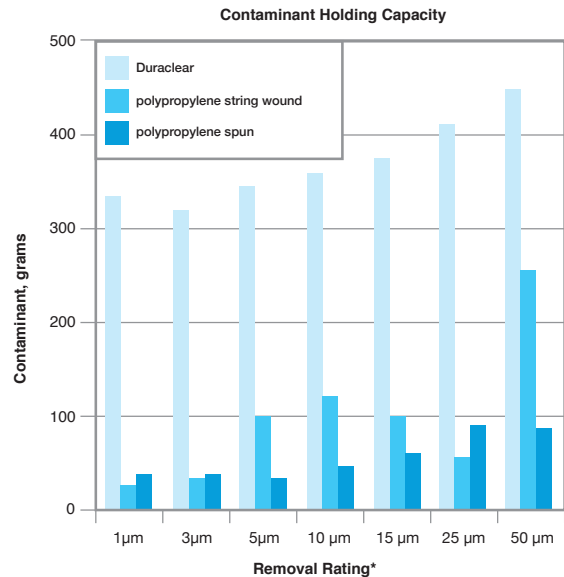
### Diameter:

2.75" (70 mm) with polypropylene end caps

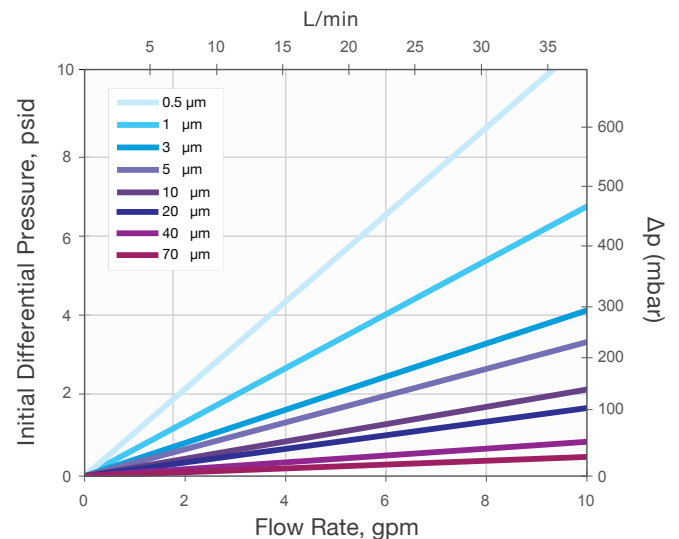
2.75" (70 mm) with polyurethane end caps

### Nominal Lengths:

9.75", 19.5", 20", 29.25", 30", 39", 40"  
(24,8 cm, 49,5 cm, 50,8 cm, 74,3 cm, 76,2 cm, 99,1 cm, 101,6 cm)



## Water Flow Rates per 10" Cartridge



# Ordering Information

Filter Media	Nominal Rating (µm)	Cartridge Length	End Cap Configuration
<b>D</b>	<b>15</b>	<b>97</b>	<b>PB</b>
<b>D</b> = poly-propylene microfiber	<b>01</b> = 1	<b>97</b> = 9.75" (24.8 cm)	<b>Double Open End (DOE)</b>
	<b>03</b> = 3	<b>19</b> = 19.5" (49.5 cm)	<b>PB</b> = Polypropylene end caps with Buna gaskets
	<b>05</b> = 5	<b>20</b> = 20" (50.8 cm)	<b>PE</b> = Polypropylene end caps with EPR gaskets
	<b>10</b> = 10	<b>29</b> = 29.25" (74.3 cm)	<b>PP</b> = Polypropylene end caps with polyethylene gaskets
	<b>15</b> = 15	<b>30</b> = 30" (76.2 cm)	<b>PS</b> = Polypropylene end caps with silicone gaskets
	<b>25</b> = 25	<b>39</b> = 39" (99.1 cm)	<b>PT</b> = Polypropylene end caps with Teflon® gaskets
	<b>50</b> = 50	<b>40</b> = 40" (100.6 cm)	<b>PV</b> = Polypropylene end caps with Viton® gaskets

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