

Duraclear® Filters



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Duraclear® Filters

Duraclear® is a nominal-rated PP microfiber filter uniquely suited for general applications where efficient, economical service is desirable. The filter's pleated construction delivers exceptional flow rates and high dirt-holding capacity with a long service life and low operational cost. The Duraclear® filter is cost-effective for prefiltration and clarification of water, beverages, flavorings, alcohols, solvents, coatings, metal finishing, inks, dyes, chemicals, and many other industrial process fluids.

Materials of Construction

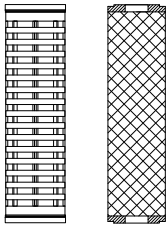
The Duraclear® filter is manufactured using high quality components made from non-toxic and biologically inert raw materials. All components of the Duraclear® filter are FDA listed for food contact use in the Code of Federal Regulations (CFR), Title 21 as below:

Components

Media:	Polypropylene	CFR Title 21, 177.1520
Upstream/Downstream support:	Polypropylene	CFR Title 21, 177.1520
Outer netting:	Polypropylene	CFR Title 21, 177.1520
Core:	Polypropylene	CFR Title 21, 177.1520
End caps:	Polypropylene	CFR Title 21, 177.1520
	FDA blue vinyl	CFR Title 21, 177.1010
Gaskets:	Buna, EPR or Silicone	CFR Title 21, 177.2600
	Polyethylene	CFR Title 21, 177.1520
	Teflon®	CFR Title 21, 177.1550
Sealing method:	Thermal bonding	

Configurations

Duraclear® can be ordered in a variety of cartridge filter configurations.



Cartridge

Dimensions

<u>Cartridge</u>	<u>Diameter</u>	<u>Length</u>
Vinyl end caps	2 5/8" (6,7 cm)	9.75" (24,8 cm)
Polypropylene end caps	2 3/4" (7,0 cm)	10" (24,5 cm) vinyl only 19.5" (49,5 cm) 20" (50,8 cm) 29.25" (74,3 cm) 30" (76,2 cm) 39" (99,1 cm) 40" (101,6 cm)

Operating Characteristics

Cartridges

Maximum Operating Temperatures and Pressures

80 psid @ 90 °F

(Δp 5,5 bar @ 32 °C)

50 psid @ 150 °F

(Δp 3,4 bar @ 66 °C)

20 psid @ 180°F

(Δp 1,4 bar @ 82 °C)

Cartridge Installation Instructions

Gaskets

Meissner filters are available in a number of size and gasket combinations designed to fit standard filter housings. The filter should fit snugly in the clean housing. Improper installation can impair filtration efficiency.

1. Verify that the correct filter part number for the application has been chosen.
2. Keep the filter in its plastic bag to avoid contaminating the cartridge as long as possible. Cut the bag open at one end.
 - a. If the housing uses a tie rod, remove the seal nut. While holding the bagged cartridge, center the gasket and cartridge over tie rod onto the seat cup. Do not force, jam or drop the cartridge into place. Remove the bag. Screw the seal nut back onto the tie rod. (Hand tightening is normally sufficient to obtain a positive seal.) Be certain the cartridge is centered; the end cap and gaskets should be aligned and properly seated. Reassemble the housing.
 - b. If a tie rod is not used, place the gasket and cartridge over the center post of the housing bowl. Do not force, jam or drop the cartridge into place. Remove the bag. Be certain the cartridge is centered and the end cap and gaskets are aligned. Reassemble the housing, lining up the cartridge with the central post in the housing head.

Storage and Shelf Life

Meissner manufactures a complete line of filter products. Products are suitably bagged and boxed for shipping and may be stored in the original packaging in a clean dry area between 0 °C and 40 °C (32 °F to 100 °F). The following gives the minimum shelf life expectancies for Duraclear® products.

Filters

The Duraclear® filter has an expected shelf life greater than 5 years in the cartridge filter configuration. Filter product age can be determined from the date on the original Certificate of Conformance.

Duraclear® Media Grade Description

D = This nominal rated, pleated, depth type filter is composed of continuous, self-bonded polypropylene microfibers. The heavy duty core and support components are constructed of 100% polypropylene or self-sealing vinyl. A Certificate of Conformance is available on a lot basis.

Cartridge Ordering Matrix Description

D		05	—	97	—	BK
D		<input type="text"/>	—	<input type="text"/>	—	<input type="text"/>
Filter Grade	Nominal Rating (µm)	—		Cartridge Length	End Cap Configuration	
D	01 = 1 µm 03 = 3 µm 05 = 5 µm 10 = 10 µm 15 = 15 µm 25 = 25 µm 50 = 50 µm	—		10 = 10" (25,5 cm) BK & FB end caps only	BK = Black, industrial grade vinyl end caps FB = Blue, FDA acceptable vinyl end caps	
		—		97 = 9.75" (24,8 cm)	PB = Polypropylene end caps with Buna gaskets	
		—		19 = 19.5" (49,5 cm)	PE = Polypropylene end caps with EPR gaskets	
		—		20 = 20" (50,8 cm)	PP = Polypropylene end caps with polyethylene gaskets	
		—		29 = 29.25" (74,3 cm)	PS = Polypropylene end caps with silicone gaskets	
		—		30 = 30" (76,2 cm)	PT = Polypropylene end caps with Teflon® gaskets	
		—		39 = 39" (99,1 cm)	PV = Polypropylene end caps with Viton® gaskets	
		—		40 = 40" (100,6 cm)		

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