



**MELTGRADIENT™ PP DEPTH FILTERS  
WITH ABSOLUTE FILTRATION RATE**

Melt-blown polypropylene filters with inner layer of interwoven high-density nano-fibers. Ideal for filtering inks, coatings, solvents, water, etc.

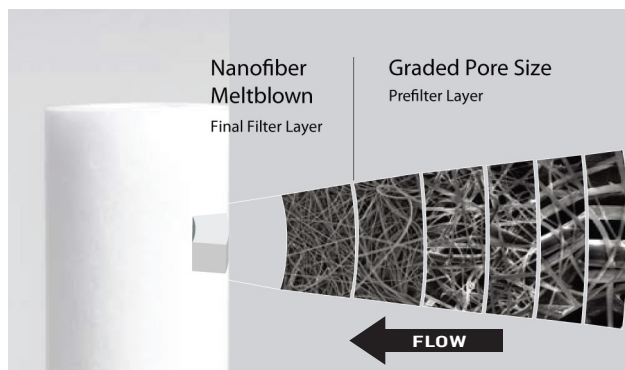
## MELTGRADIENT™ DEPTH FILTER

### POLYPROPYLENE MICROFIBER FOR FINAL FILTRATION OF PIGMENT-BASED INKS, CERAMIC INKS, AND DISPERSE INK JET INKS

Meltgradient™ Series Depth Filters are made of melt-blown polypropylene with gradient pores and an inner layer of interwoven high-density nano-fibers. The cartridge is capable of efficiently capturing particles of different sizes with a great flow rate and lifetime. The polypropylene raw material meets FDA requirements with extensive chemical compatibility, suitable for filtering inks, coatings, solvents, water, etc.



FEATURE	BENEFIT
<b>Melt-blown polypropylene media with gradient pores and inner layer of interwoven high-density nano-fibers</b>	Provides high contaminant hold capacity and high removal efficiency at low pressure drop
	>99.9% particle retention efficiency at rated pore size
	Long service life, high flow rate due to the different linear diameters and unique interwoven density control process. Meltgradient has a porosity far beyond that of similar products, which results in lower pressure loss across the cartridge and higher contaminant-holding capacity.
	Long fiber fusion and spray process with continuous fiber hot-melt interweave results in a rich and stable pore structure and high-purity filtration. No adhesive or surfactant, no silicone oil, low precipitate.
	All polypropylene construction provides excellent chemical compatibility. Fully polypropylene structure with reinforced center bar and optional external frame/end cover. Ruggedly constructed, the cartridge can withstand up to 4 bar differential pressure without core deformation.
	Wide range of filtration rates from 0.3 μm to 120 μm to meet various operation conditions.
<b>Quality Assurance</b>	Manufactured in a facility which adheres to ISO 9001 Practices. 100% Integrity tested and lot traceable.
<b>Particle shedding</b>	Autoclaved filter effluent meets the requirements in USP <788> for large volume parenterals.
<b>Non-fiber release</b>	Component materials meet the criteria for a "Non-fiber-releasing filter" as defined in 21 CFR210.3 (b) (6).



#### Typical Applications

- Pigment Inks
- Dye-based Inks
- UV Inks
- Ceramic Inks
- Disperse Inks

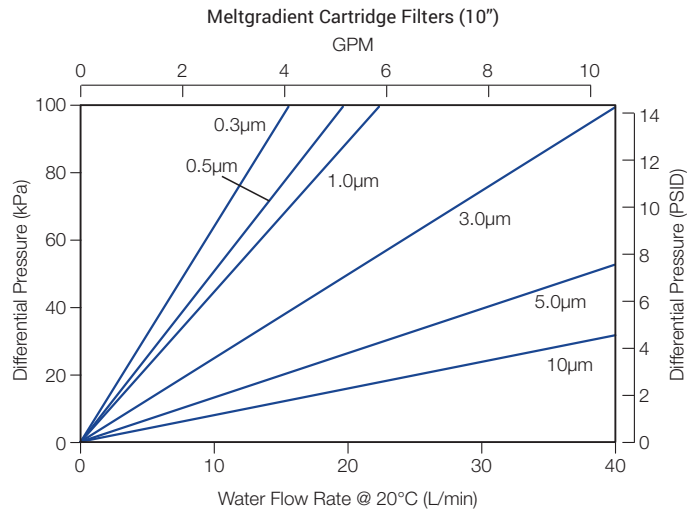
## SPECIFICATIONS

<b>Filter media</b>	Polypropylene (melt-blown) with interwoven high-density nano-fiber inner layer
<b>Support layer</b>	Polypropylene
<b>Core/cage/end caps</b>	Polypropylene
<b>Seal</b>	Silicone, EPDM, FKM, FEP/PFA encapsulated FKM, PE
<b>Diameter</b>	O.D.: 2.51" (64 mm) I.D.: 1.10" (28 mm)
<b>Max. operating temperature</b>	80°C
<b>Max. differential pressure</b>	0.40 MPa (4.0 bar, 58 psi) at 21°C

## RETENTION

Particle Range	Filter Code							
	0030 (0.3 µm)	0050 (0.5 µm)	0100 (1.0 µm)	0300 (3.0 µm)	0500 (5.0 µm)	1000 (10 µm)	1500 (15 µm)	3000 (30 µm)
≥0.3 µm	99.97%	99.89%	-	-	-	-	-	-
≥0.5 µm	99.99%	99.98%	95.73%	-	-	-	-	-
≥1.0 µm	100%	100%	99.98%	-	-	-	-	-
≥2.0 µm	100%	100%	100%	99.0%	97.3%	-	-	-
≥3.0 µm	100%	100%	100%	99.8%	98.3%	-	-	-
≥5.0 µm	100%	100%	100%	100%	99.9%	89.1%	-	-
≥8.0 µm	100%	100%	100%	100%	100%	99.2%	90.6%	-
≥10 µm	100%	100%	100%	100%	100%	99.9%	99.0%	-
≥12 µm	100%	100%	100%	100%	100%	100%	99.8%	86.5%
≥25 µm	100%	100%	100%	100%	100%	100%	100%	93.6%
≥35 µm	100%	100%	100%	100%	100%	100%	100%	99.9%
≥50 µm	100%	100%	100%	100%	100%	100%	100%	100%
≥70 µm	100%	100%	100%	100%	100%	100%	100%	100%
≥90 µm	100%	100%	100%	100%	100%	100%	100%	100%

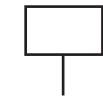
## FLOW RATES



## ORDERING INFORMATION

EXAMPLE: **MBCY0100TFP10EC** = 1.0 µm, 222/Fin, 10" length filter with EPDM seals

**MBCY**



### Removal Rating

0030 = 0.3 µm  
 0050 = 0.5 µm  
 0100 = 1.0 µm  
 0300 = 3.0 µm  
 0500 = 5.0 µm  
 1000 = 10 µm  
 3000 = 30 µm  
 4000 = 40 µm  
 7000 = 70 µm  
 9000 = 90 µm  
 9120H = 120 µm



### Connection

DOE = Double Open End,  
 Flat Gasket  
 TC = 222 O-ring/Flat  
 TF = 222 O-ring/Fin  
 SC = 226 O-ring/Flat  
 SF = 226 O-ring/Fin  
 N = No Gaskets  
 H = PE Gaskets (Double Open End)



### Core Material

P = PP core



### Nominal Length

05 = 5"  
 10 = 10"  
 20 = 20"  
 30 = 30"  
 40 = 40"



### Seal Material

S = Silicone  
 E = EPDM  
 V = FKM  
 P = E-FKM (FEP/PFA  
 encapsulated FKM)  
 \_ = Blank for PE or  
 no gasket option



### Application

C = Chemical



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CBBPP1079 Rev. 05052022

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