



### **Depth Pre Filtration**

# Meltgradient High Efficiency Depth Filter

## **The SMART choice for filtration**

#### Meltgradient<sup>™</sup> High-efficiency Depth Filter

Melt-Blown Cartridge with Absolute Filtration Rate



Nanofiber Meltbrown Final Filter Layer Graded Pore Size Prefilter Layer



## Microbiological Stability

Meltgradient series is the PP melt-blown cartridge with the absolute filtration rate. It adopts the reasonable gradient pores configuration, cooperating with the structure of "deep". The cartridge is capable of efficiently capturing particles of different sizes, and its flow rate and life are not inferior to the pleated cartridge. Polypropylene raw material that meets FDA requirements, with extensive chemical compatibility, suitable for filtering inks, coatings, solvents, deionized water, etc.

#### **Features and Benefits**

- Particle interception efficiency is up to 99.9%. For the structure with gradient pores, the inner layer is interwoven with high density nano-fibers.
- Long service life, high flow rate. Due to the polypropylene fiber with different linear diameters and unique interwoven density control process, Meltgradient TM has a porosity far beyond that of similar products, which means lower pressure loss across the cartridge and higher dirty holding capacity.
- High purity. Using long fiber fusion and spray process, continuous fiber hot melt interweave into rich and stable pore structure. No adhesive or surfactant, no silicone oil, low precipitate;
- Extensive chemical compatibility. Fully polypropylene structure, complete series with reinforced center bar and optional external frame/end cover, the 68MBCY type. The cartridge can withstand the pressure difference of 4Bar and avoid short circuit of material caused by deformation of cartridge core when using.
- Wide range of optional filtration rate. It is available from 0.3um to 120 um, which meets various operating conditions.



#### Application

- · Printing Ink, Inkjet Ink, Dyestuffs
- · Automotive Paints, Hard Coatings
- · Monomer, polymers, solvent
- · D.I. water prefiltration and post filtration, R.O. water prefiltratio, makeup water

#### **10"MBCY** Flow Rate Characteristic



Flow Rate / MBCY – 10inch (L/min) ingle length (254mm) Cartridge, IPA (2.431cP) @20°C

#### **Filtration Efficiency**

#### **Materials of Construction**

Filter Medium	Polypropylene
Core/Cage/End Caps	Polypropylene
O-Rings	Refer to ordering information
<b>O.D.</b> (mm)	2.51" (64mm)
<b>I.D.</b> (mm)	1.10" (28mm)

#### **Operating Conditions**

Max. Temperature	80°C
Max. Differential Pressure	4 bar / 21°C

<b>Particle Size</b> <b>MBCY</b> (µm)	0.3	0.5	1.0	3.0	5.0	10	15	30
≥0.5µm	99.99%	99.98 %	95.73%	\	\	\	\	\
≥1.0µm	100.0%	100.0%	99.98 %	\	\	\	\	\
≥2.0µm	100.0%	100.0%	100.0%	99.0%	97.3%	\	\	\
≥3.0µm	100.0%	100.0%	100.0%	99.8%	98.3%	\	\	\
≥5.0µm	100.0%	100.0%	100.0%	100.0%	99.9%	89.1%	\	\
≥8.0µm	100.0%	100.0%	100.0%	100.0%	100.0%	99.2%	90.6%	\
≥10.0µm	100.0%	100.0%	100.0%	100.0%	100.0%	99.9%	99.0%	\
≥12.0µm	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	99.8%	86.5%
≥25.0µm	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	93.6%
≥35.0µm	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	99.9%
≥50.0µm	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
≥70.0µm	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
≥90.0µm	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

#### **Ordering Information**

**0700**=7.0µm

Removal		End Cap	Core Material	Nominal Lengh	Seal Material	
MBCY 68MBCY 0010=0.1µm 0020=0.2µm 0030=0.3µm 0050=0.5µm 0100=1.0µm 0300=3.0µm 0500=5.0µm 0600=6.0µm	<b>1000</b> =10μm <b>2000</b> =20μm <b>3000</b> =30μm <b>4000</b> =40μm <b>7000</b> =70μm <b>9000</b> =90μm	DOE = Double Open End TC = 222/Flat Cap TF = 222/Fin Cap SF = 226/Fin Cap SC = 226/Flat Cap N = No Gasket H = PE Gasket	<b>P</b> =Polypropylene	<b>05</b> =5" <b>10</b> =10" <b>20</b> =20" <b>30</b> =30" <b>40</b> =40"	S =Silicone E =EPDM V =Viton P =PFA N=None	- 28C



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