

MBCX Melt-Blown Filter

Polypropylene Depth Filtration - Partical Removal



Cobetter MBCX Filter Cartridges are made of non-woven polypropylene with no surfactants, binders, or adhesives. These filters have long service life & high dirt holding capacity. They are suitable for the water treatment industry.

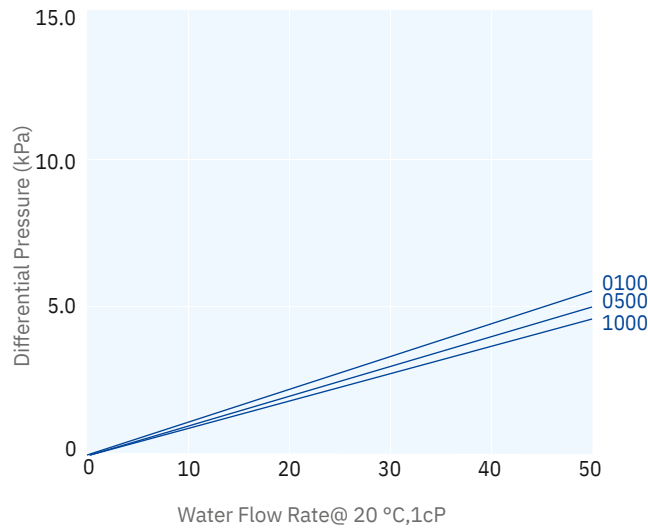
Features and Benefits

- 100% pure polypropylene depth filter with high dirt holding capacity.
- No wetting agents, solvents, surfactants, binders, or adhesives.
- Reduced filtration cost
- No fiber-releasing

Typical Applications

- Water treatment
- Potable water filtration
- Cooling water systems

Flow Rate Characteristics



Materials of Construction

Filter Media	Polypropylene
Inner Core	Polypropylene
End Caps and Adaptors	Polypropylene
Nominal O.D.	63 mm
Nominal I.D.	28 mm

Operating Conditions

Max. Operating Temperature	60°C
Max. Changeout Differential Pressure	35 psid (2.41 bar)

Ordering Information

MBCX	Removal Ratings	End Cap	Nominal Length	Seal Material
	0100=1.0µm	H = PE Gaskets	10 = 10"	S = Silicona
	0500=5.0µm	TC = 222 o-ring/ at cap	20 = 20"	E = EPDM
	1000=10 µm	TF = 222 o-ring/ n	30 = 30"	V = Viton
		SF = 226 o-ring/ n	40 = 40"	
		DOE = Double Open End	50 = 50"	

Depth Filtration

Meltgradient™ High-efficiency Depth Filter

Melt-Blown Cartridge with Absolute Filtration Rate

The Meltgradient™ series is a PP melt-blown cartridge with absolute filtration rate. The gradient pore configuration, together with it's depth structure makes for a more efficient filter. The cartridge is able to capture particles of different sizes, with a high flow rate & long service life. The polypropylene raw materials meet FDA requirements, with extensive chemical compatibility, suitable for filtering inks, coatings, solvents, deionized water & more.

Features & Benefits

- Particle interception efficiency is up to 99.9%. the inner layer of the gradient pore structure is interwoven with high density nano-fibers.
- Long service life & high flow rate
- Polypropylene fiber with different linear diameters & unique interwoven density control process.
- Meltgradient™ has a porosity far superior to similar products, which means lower pressure loss across the cartridge & higher dirt holding capacity.
- High purity due to long fibre fusion & spray process, resulting in a stable pore structure with no adhesives, surfactants or silicone oil and low precipitate.
- Extensive chemical compatibility.
- Full polypropylene structure with reinforced centre bar & optional external frame/end cover (68MBCY).
- Cartridge able to withstand 4 bar pressure difference.
- Wide range of filtration rates (0.3 - 120 µm) to meet a variety of operating conditions.

Applications

- Printing ink, inkjet ink, dyestuff
- Automotive paints, hard coatings
- Monomer, polymers, solvents
- D.I. water pre-filtration & post filtration
- R.O. water pre-filtration, makeup water

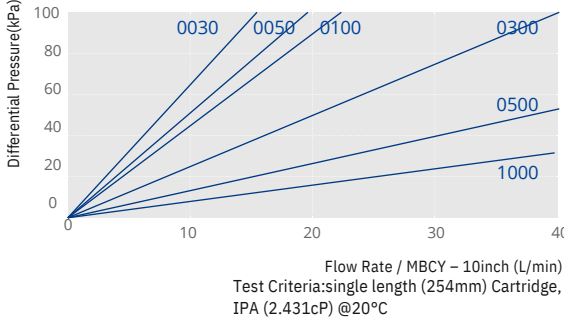
Materials of Construction

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

Operating Conditions

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

10" MBCY Flow Rate Characteristics



Filtration Efficiency

Particle Size MBCY(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

	Removal	End Cap	Core Material	Nominal Length	Seal Material	
MBCY	0010=0.1µm	DOE =Double Open End	P=Polypropylene	05=5''	S=Silicone	- 28C
68MBCY	0020=0.2µm	TG=222/Flat Cap		10=10''	E=EPDM	
	0030=0.3µm	TF=222/Fin Cap		20=20''	V=Viton	
	0050=0.5µm	SF=226/Fin Cap		30=30''	P=PFA	
	0100=1.0µm	SG=226/Flat Cap		40=40''	N=None	
	0300=3.0µm	N= No Gasket				
	0500=5.0µm	H= PE Gasket				
	0600=6.0µm					
	0700=7.0µm					

Please contact us for more information

Microbiological
Stability

Nanofiber
Meltblown
Final Filter Layer

Graded Pore Size
Prefilter Layer

High Service Time GUF (Guard Filter) Filter Cartridge

Rolled Polypropylene Depth Filter · Long Service Life

Rolled Polypropylene Depth Filtration

Cobetter High Service Time GUF (Guard Filter) Filter Cartridges are made of polypropylene non-woven material. They provide 3x greater lifetime than meltblown filters. These filters are generally used where longer lifetime, high dirt holding capacity, and low change-out frequency are required. They are suitable for use in the water treatment industry.

Features and Benefits

- 100% pure polypropylene depth filter with high dirt holding capacity
- 3x longer lifetime than meltblown filters
- No wetting agents, solvents, surfactants, or binders, or adhesives
- Reduce filtration cost
- No fiber-releasing

Typical Applications

- Guard Filter for RO System
- Potable Water Filtration
- Cooling Water System
- Plating Baths

Operating Conditions

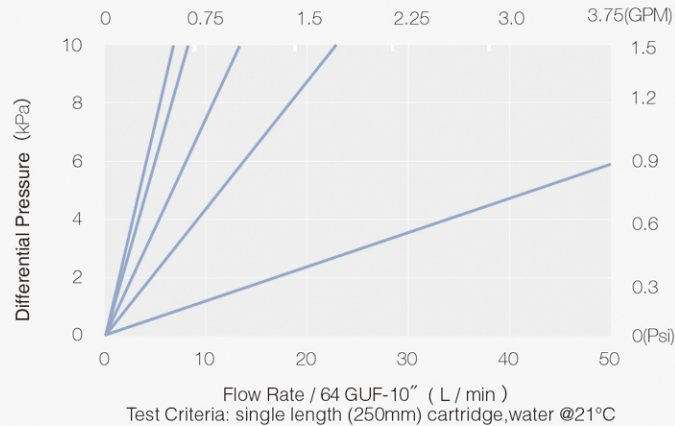
Max. Operating Temperature	158°F/70°C
Max. Pressure	3 bar / 70°F / 21°C 1.2bar/158°F/70°C
Recommended Design Flow Rate	0.5 m³/hr(10inch)

Materials of Construction

Filter Medium	Polypropylene
Inner Core	Polypropylene
End Caps and Adaptors	Polypropylene
Nominal O.D.	64mm
Nominal I.D.	30mm

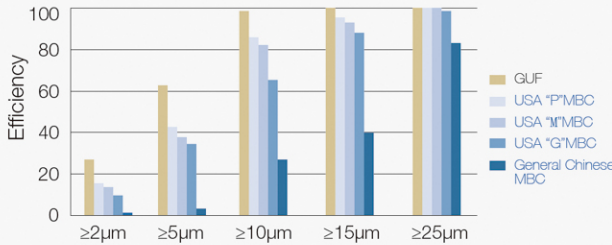


Flow Rate Characteristics

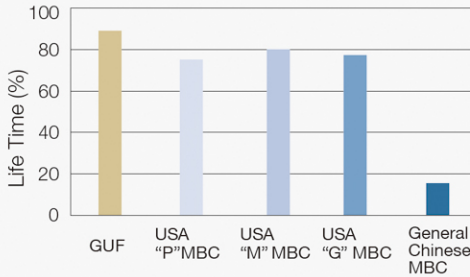


Filter Performance

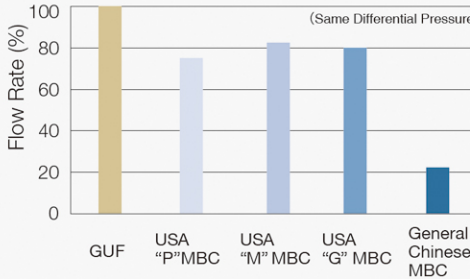
Efficiency Comparison of Filters



Life Time Comparison of Filters



Flow Rate Comparison of Filters



Particle Range	GUF 5µm	USA "P" MBC	USA "M" MBC	USA "G" MBC	General Chinese MBC
≥2µm	26.48%	14.49%	12.85%	9.81%	1.57%
≥5µm	64.21%	43.11%	36.44%	35.38%	5.36%
≥10µm	98.84%	86.74%	82.27%	64.87%	27.41%
≥15µm	99.88%	94.71%	92.73%	88.60%	40.38%
≥25µm	100%	100%	100%	98.21%	85.02%

Brand	Life Time (%)
GUF	90
USA "P" MBC	75
USA "M" MBC	80
USA "G" MBC	78
General Chinese MBC	17

Brand	Flow Rate (%)
GUF	100
USA "P" MBC	75
USA "M" MBC	85
USA "G" MBC	80
General Chinese MBC	25

Ordering Information

	Outer Diameter	Removal Ratings	End Cap	Nominal Length	Seal Material
GUF	Blank=64mm 68=68mm	0050=0.5µm 0100=1.0µm 0200=2.0µm 0300=3.0µm 0500=5.0µm 1000=10µm 2000=20µm	N = No Gasket (standard) H = PE Gaskets TC = 222 o-ring/flat cap TF = 222 o-ring/fin SF = 226 o-ring/fin DOE = Double Open End	10=10 " 20=20 " 30=30 " 40=40 " 50=50 "	S=Silicon E=EPDM

End Cap Configurations



DOE



222



226



WDC Filter Cartridges

String Wound Depth Filtration · Particle Removal

Cobetter WDC® Filter Cartridges are made of continuous string wound fiber media which ensures uniform flow throughout the entire filter. These filters have a high dirt holding capacity and flow rates designed for use in process water, beverage, and chemical applications.

Features and Benefits

- Continuously wound pattern
- High dirt holding capacity, high flow rates, and low pressure
- Good chemical compatibility
- FDA, CR 21 Compliant

Application

- Chemicals – acids, adhesives, organic solvents, paints, resin
- Food & Beverage – beer, soft drinks, syrups, oils



Materials of Construction

Filter Medium	Polypropylene/Bleached Cotton/ Glass Fiber/Washed Polypropylene
Inner Core	Polypropylene/SS304/SS316
Nominal I.D.	28 mm
Nominal O.D.	63 mm

Operating Conditions

Max. Temperature with SS Core	Cotton 149°C (300°F) Polypropylene 93°C (199°F) Glass Fiber 399°C (750°F)
Max. Temperature with Polypropylene Core	Cotton 60°C (140°F) Polypropylene 60°C (140°F)
Max. Differential Pressure	4 bar
Recommended Cartridge Change-Out	2 bar

Ordering Information

WDC	Filter Media	Removal Ratings		Core Type	Nominal Length
	P=Polypropylene	0050=0.5µm	2500=25µm	P=Polypropylene	05 = 127mm
	PW=Washed Polypropylene	0100=1.0µm	3000=30µm	S=304 SS	10A=250mm
	C = Bleached Cotton	0300=3.0µm	4000=40µm	SL=316L SS	10=254mm
	GF = Glass Fiber	0500=5.0µm	5000=50µm		20A=500mm
		1000=10µm	7500=75µm		20 = 254mm
		1500=15µm	100H=100µm		30A = 750mm
		2000=20µm	150H=150µm		30 = 762mm
			200H=200µm		40A = 1000mm
					40= 1016mm
					50 = 1270mm
					Q = Customized