## **FILTER DATASHEET**

## **CMI FILTRATION**









# Global Delivery and Fulfillment

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### Polypropylene Membrane Cartridge

### **Description**

Polypropylene pleated filter cartridge is constructed of micro polypropylene media and nonwoven or silk net support.

Adaptors are thermally welded to cartridge without using any glue, so there is no second pollution caused by it.

It delivers high efficiency and consistent filtration for wide range of critical applications. Removal of particles from 0.2 to 50 micron, available in both nominal and absolute ratings.



### **Features**

- Excellent chemical compatibility
- Pleated structure increases filtration area
- Low pressure drop and long service life
- Full range of removal ratings
- Made of high purity polypropylene
- Pleated construction provides high flow rates, low initial
   Differential pressure and good dirt hold capacity
- Cartridge can be autoclaved for at least 5 times half-hour cycles @ 121°C (250°F)

### **Specifications:**

### Material:

Media: Pleated polypropylene

Inner core, cage, caps, support layer: polypropylene, Stainless Steel

O-ring: Buna N, EPDM, Viton, Silicone, FEP/Silicone, FEP/Viton

Micron ratings: 0.2,0.5,1,5,10,25,50,100 μm

Length: 10inch (254mm), 20inch(508mm), 30inch(762mm), 40inch(1016mm)

Outside Diameter: 2.36inch(60mm), 2.48inch (63mm), 2.56inch(65mm), 2.68inch(68mm)

### Max. differential pressure:

1.37 bar@93 $^{\circ}$ C(19.9psid@200 $^{\circ}$ F) 2.75 bar@60 $^{\circ}$ C(39.8psid@140 $^{\circ}$ F) 4.81 bar@21 $^{\circ}$ C(69.7psid@70 $^{\circ}$ F)

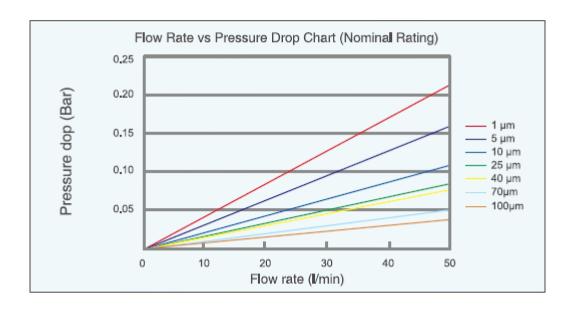
Recommended change pressure drop: 2.1 bar@21°C(30.5psid@70°F)

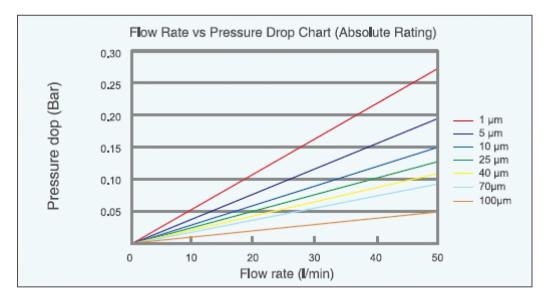
Max. Operating Temperature:93 °C



### Polypropylene Membrane Cartridge

Flow Rate of 10inch, for fluids with a dynamic viscosity of 1m Pa.s @20°C (68°F)





### Polypropylene Membrane Cartridge

### Ordering Table:

			OD		O-ring	End Connections
CODE	Media	Length		Micron	Material	
	Material			Rating		
CMPC	PP-	20-20inch	63-63mm	1-1µm	E-EPDM	D-Double Open End
	Polypropylene	40-40inch	60-60mm	5-5µm	V-Viton	2-222 flat, single Open
		60-60inch	65-65mm	10-10µm	B-NBR	End
			68-68mm	25-25µm	S-Silicon	2F-222 Fin, Single
						Open End
						6-226 flat, single Open
						End
						6F-226 Fin, Single
						Open End

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### **Nylon Membrane Cartridge**

### **Description**

CMI Nylon pleated filter cartridge is constructed of nylon 6.6 membrane, which do not contain any surfactants or wetting agents. This reduces the cleaning time and the cost of the membrane cartridge.

It delivers high efficiency and consistent filtration for wide range of critical applications. Removal of particles from 0.22 to 1 micron, available in both nominal and absolute ratings.



### **Features**

- Pleated hydrophilic nylon membrane material
- No surfactants or wetting agents
- Low pressure drop and long service life
- Full range of removal ratings
- Pleated construction provides high flow rates, low initial Differential pressure and good dirt hold capacity
- Material acc. to FDA compliance title 21
- Cartridge can be autoclaved for at least 5 times half-hour cycles @ 121℃(250°F)
- Various adaptors choices
- 100% integrity test

### Specifications:

### Material:

Media: Pleated hydrophilic Nylon 6.6 membrane

Inner core, cage, caps, support layer: polypropylene, Stainless Steel O-ring: Buna N, EPDM, Viton, Silicone, FEP/Silicone, FEP/Viton

Micron ratings: 0.22,0.45,1µm

Length: 10inch (254mm), 20inch(508mm), 30inch(762mm), 40inch(1016mm)

Outside Diameter: 2.36inch(60mm), 2.48inch (63mm), 2.56inch(65mm), 2.68inch(68mm)

Max. differential pressure:

1.37 bar@93 $^{\circ}$ C(19.9psid@200 $^{\circ}$ F)

 $2.75 \, \text{bar} @ 60 \, ^{\circ} \text{C} (39.8 \, \text{psid} @ 140 \, ^{\circ} \text{F})$ 

4.81 bar@21 $^{\circ}$ C(69.7psid@70 $^{\circ}$ F)

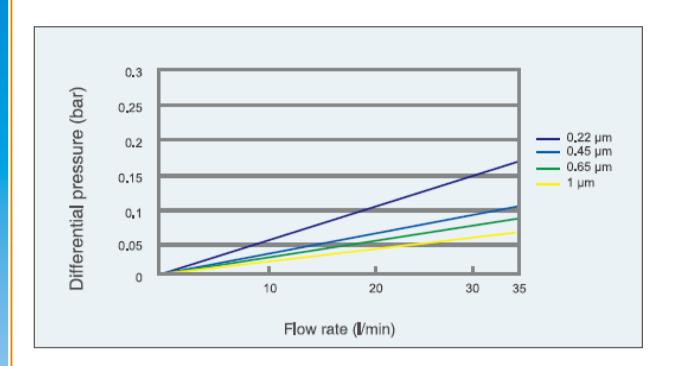
**Recommended change pressure drop:** 2.1 bar@21 $^{\circ}$ C(30.5psid@70 $^{\circ}$ F)

Max. Operating Temperature:93°C



### **Nylon Membrane Cartridge**

Flow Rate of 10inch, for fluids with a dynamic viscosity of 1m Pa.s @20°C (68°F)



			OD		O-ring	End Connections	
CODE	Media	Length		Micron	Material		
	Material			Rating			
CMPC	NY- Nylon	20-20inch	63-63mm	022-0.22µm	E-EPDM	D-Double Open End	
		40-40inch	60-60mm	045-0.45µm	V-Viton	2-222 flat, sing	le
		60-60inch	65-65mm	065-0.65µm	B-NBR	Open End	
			68-68mm	1-1 µm	S-Silicon	2F-222 Fin, Sing	le
						Open End	
						6-226 flat, sing	le
						Open End	
						6F-226 Fin, Sing	le
						Open End	



### Polyethersulfone Membrane Cartridge

### **Description**

CMI PES pleated filter cartridge is constructed of hydrophilic pleated polyethersulfone membrane. The asymmetric structure features a large surface area that allows for superior flow rates and high particle removal efficiency.

It delivers high efficiency and consistent filtration for wide range of critical applications. Removal of particles from 0.22 to 1 micron, available in both nominal and absolute ratings.



### **Features**

- Asymmetric, hydrophilic pleated polythersulfone membrane
- No surfactants or wetting agents
- Low pressure drop and long service life
- Pleated construction provides high flow rates, low initial Differential pressure and good dirt hold capacity
- Material acc. to FDA compliance title 21
- Cartridge can be autoclaved for at least 5 times half-hour cycles @ 121°C (250°F)
- Various adaptors choices
- 100% integrity test

### **Specifications**

Media: Pleated asymmetric, hydrophilic polyehersulfone membrane

Inner core, cage, caps, support layer: polypropylene(standard), Stainless Steel

O-ring: Buna N, EPDM, Viton, Silicone, FEP/Silicone, FEP/Viton

**Micron ratings:**  $0.04, 0.1, 0.2, 0.45, 0.65, 1.2 \mu m$ 

**Length:** 10inch (254mm), 20inch(508mm), 30inch(762mm), 40inch(1016mm)

Outside Diameter: 2.36inch(60mm), 2.48inch (63mm), 2.56inch(65mm), 2.68inch(68mm)

Max. differential pressure:

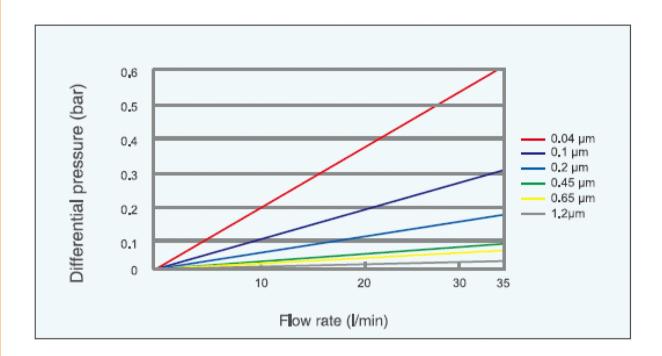
1.67 bar@80 $^{\circ}$ C(24.2psid@176 $^{\circ}$ F)  $5.39 \, \text{bar} @ 21 \, ^{\circ} \text{C} (78.2 \, \text{psid} @ 70 \, ^{\circ} \text{F})$ 

**Recommended change pressure drop:** 2.1 bar@21 $^{\circ}$ C(30.5psid@70 $^{\circ}$ F)



### Polyethersulfone Membrane Cartridge

Flow Rate of 10inch, for fluids with a dynamic viscosity of 1m Pa.s @20°C (68°F)



			OD		O-ring	End Connections
CODE	Media	Length		Micron	Material	
	Material			Rating		
CMPC	PES-	20-20inch	63-63mm	004-0.04µm	E-EPDM	D-Double Open End
	polythersulfone	40-40inch	60-60mm	01-0.1µm	V-Viton	2-222 flat, single
		60-60inch	65-65mm	02-0.2μm	B-NBR	Open End
			68-68mm	045-0.45µm	S-Silicon	2F-222 Fin, Single
				065-0.65µm		Open End
				1.2-1.2µm		6-226 flat, single
						Open End
						6F-226 Fin, Single
						Open End



### Hydrophilic PTFE Membrane Cartridge

### **Description**

CMI hydrophilic PTFE pleated filter cartridge is constructed of hydrophilic pleated polytetrafluoroethylene membrane. It has excellent chemical compatibility and corrosion resistance, and can be widely used for filtration of strong acids and bases in semiconductor industry application. The membrane is hydrophilic which can filter the liquid directly without pre-wetting to save the operation time.

### **Features**

- Absolute removal ratings >99.9%
- Excellent chemical resistance
- Low pressure drop and long service life
- Pleated construction provides high flow rates, low initial Differential pressure and good dirt hold capacity
- Material acc. to FDA compliance title 21
- Cartridge can be autoclaved for at least 5 times half-hour cycles @ 121°C (250°F)
- Various adaptors choices
- 100% integrity test

### **Specifications**

Media: hydrophilic pleated polytetrafluoroethylene membrane

Inner core, cage, caps, support layer: polypropylene(standard), PFA

O-ring: Buna N, EPDM, Viton, Silicone, FEP/Silicone, FEP/Viton

**Micron ratings:** 0.05,0.1,0.22,0.45,1μm

**Length:** 10inch (254mm), 20inch(508mm), 30inch(762mm), 40inch(1016mm)

Outside Diameter: 2.36inch(60mm), 2.48inch (63mm), 2.56inch(65mm), 2.68inch(68mm)

Max. differential pressure:

1.37 bar@93°C(19.9psid@200°F)

 $5.49 \, \text{bar} @ 21 \, ^{\circ} \text{C} (79.7 \, \text{psid} @ 70 \, ^{\circ} \text{F})$ 

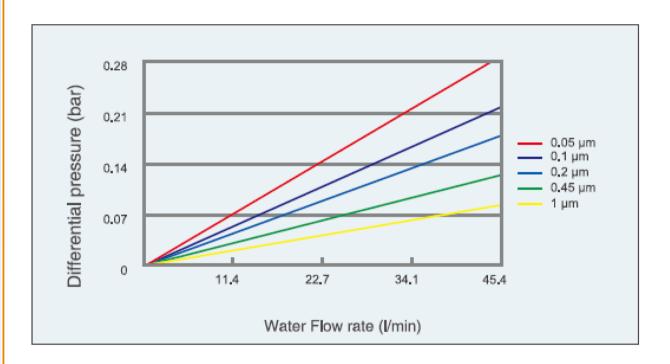
Recommended change pressure drop: 2.1 bar@21°C(30.5psid@70°F)

Max. Operating Temperature:  $93^{\circ}C(200^{\circ}F)$ ,  $185^{\circ}C(365^{\circ}F)$ 



### **Hydrophilic PTFE Membrane Cartridge**

Flow Rate of 10inch, for fluids with a dynamic viscosity of 1m Pa.s @20°C (68°F)



			OD		O-ring	End Connections	
CODE	Media	Length		Micron	Material		
	Material			Rating			
CMPC	IPTFE-	20-20inch	63-63mm	005-0.05µm	E-EPDM	D-Double Open End	
	hydrophilic	40-40inch	60-60mm	01-0.1µm	V-Viton	2-222 flat, sing	е
	PTFE	60-60inch	65-65mm	022-0.22µm	B-NBR	Open End	
			68-68mm	045-0.45µm	S-Silicon	2F-222 Fin, Sing	е
				1-1µm		Open End	
						6-226 flat, sing	е
						Open End	
						6F-226 Fin, Sing	е
						Open End	



### **Hydrophobic PTFE Membrane Cartridge**

### **Description**

CMI hydrophilic PTFE pleated filter cartridge is constructed of hydrophobic pleated polytetrafluoroethylene membrane. It has excellent chemical compatibility and corrosion resistance, and can be widely used for filtration of aggressive and oxidative liquid and gas, air filtration, and so on.

### **Features**

- Absolute removal ratings >99.9%
- Excellent chemical resistance
- Low pressure drop and long service life
- Pleated construction provides high flow rates, low initial
   Differential pressure and good dirt hold capacity
- Material acc. to FDA compliance title 21
- Cartridge can be autoclaved for at least 5 times half-hour cycles @  $121^{\circ}$ C ( $250^{\circ}$ F)
- Various adaptors choices
- 100% integrity test

### **Specifications**

### Material:

Media: hydrophobic pleated polytetrafluoroethylene membrane Inner core, cage, caps, support layer: polypropylene(standard) O-ring: Buna N, EPDM, Viton, Silicone, FEP/Silicone, FEP/Viton

**Micron ratings:** 0.1,0.22,0.45,1μm

Length: 10inch (254mm), 20inch(508mm), 30inch(762mm), 40inch(1016mm)

Outside Diameter: 2.36inch(60mm), 2.48inch (63mm), 2.56inch(65mm), 2.68inch(68mm)

Max. differential pressure:

1.37 bar@93°C(19.9psid@200°F)

 $5.49 \, \text{bar} @ 21 \, ^{\circ} \text{C} (79.7 \, \text{psid} @ 70 \, ^{\circ} \text{F})$ 

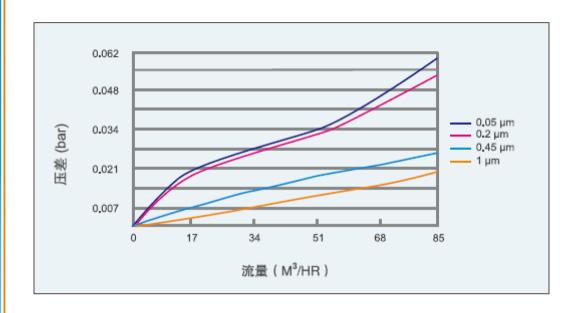
**Recommended change pressure drop:** 2.1 bar@21°C(30.5psid@70°F)

Max. Operating Temperature:93°C(200°F)

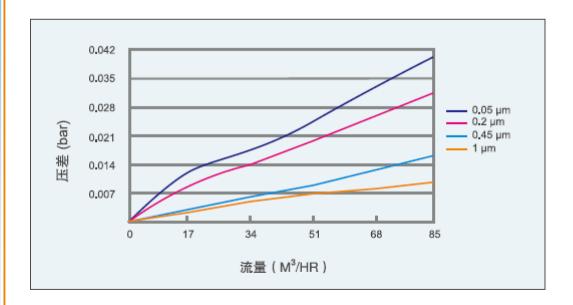


### Hydrophobic PTFE Membrane Cartridge

Air Flow Rate of 10inch, system pressure<10 psig, @18 $^{\circ}$ C (65 $^{\circ}$ F)



### Air Flow Rate of 10inch, system pressure=30 psig, @18°C (65°F)



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### **Hydrophobic PTFE Membrane Cartridge**

			OD		O-ring	End Connections
CODE	Media	Length		Micron	Material	
	Material			Rating		
CMPC	OPTFE-	20-20inch	63-63mm	005-0.05µm	E-EPDM	D-Double Open End
	hydrophobic	40-40inch	60-60mm	01-0.1µm	V-Viton	2-222 flat, single
	PTFE	60-60inch	65-65mm	022-0.22µm	B-NBR	Open End
			68-68mm	045-0.45µm	S-Silicon	2F-222 Fin, Single
				1-1µm		Open End
						6-226 flat, single
						Open End
						6F-226 Fin, Single
						Open End