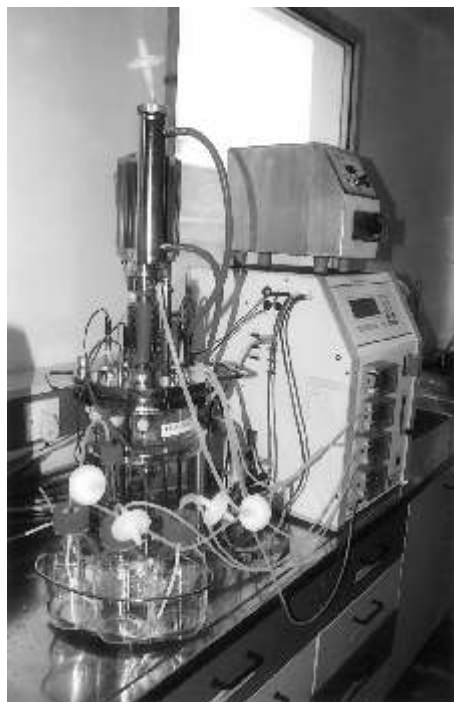


mdi Filters for Air / Gases

mdi offers a range of air filtration devices incorporating hydrophobic PTFE membrane. These filters are validated for absolute bacterial retention and heat stability and are ideal for sterile filtration and venting of air/gases.

The hydrophobic nature of PTFE membrane allows efficient flow of air/gases even under conditions of entrained moisture which would otherwise tend to wet the filter element and restrict the airflow.

mdi air filters are designed for long service life at low operating pressures and are suitable for a variety of applications such as sterile venting of culture vessels, bioreactors, incubators and autoclaves, and sterilization of air/gases for fermenters and bioreactors. The table below highlights some of the applications and suitable products.



Product	Key Features	Product Code/ Pore Size	Dia / Size	Application
PTFE vent filters	Hydrophobic	ITF	50mm	Air venting as well as sterile air filtration for bioreactors and small fermenters
		SY25TF	25mm	Air venting small media/ culture bottles
PTFE Membrane Capsule Filters	Hydrophobic	DTL / 0.2µm	1"	Air venting for autoclaves and sterile air filtration for bioreactors and fermenters
PTFE Membrane Capsule Filters	Hydrophobic	DTL / 1µm	1"	Air/gas filtration for instruments such as particle counters

mdi Inline Vent Filters

mdi disposable PTFE gas filters are convenient pre-fabricated devices used for inline sterilization of gases and as a bacterial air vent in various pharmaceutical and biotechnology processes.

Special Features

- High flow rates
- High heat stability
- Heat sealed
- Light weight and self supporting
- 100% Integrity tested

Types Available

- ITF: 50mm Vent
- SY25TF: 25mm Vent



Specifications

Type	ITF	SY25TF
Pore Size	0.2µm, 0.45µm	0.2µm, 0.45µm
EFA*	18cm ²	4.15cm ²
Length	67mm	23mm
Diameter	50mm	25mm
Inlet	1/4" - 3/8" stepped hose	Female luer lock
Outlet	1/4" - 3/8" stepped hose	Male luer slip
Retention Efficiency	0.2µm: LRV>7 for Br. diminuta 0.45µm: LRV>7 for Sr.marcescens	

Sterilization: 30 autoclave cycles of 30 minutes at 121°C

Maximum Operating Pressure : 5Kg/cm² @ 30°C

Biosafety: Passes the Biological tests for Class VI plastics as described in USP

Extractables with IPA: Within limits specified in USP

Oxidizable Matter: Passes test as per USP

Integrity Test Data (50% IPA Wetted)

Type	Pore Size	Bubble Point	
ITF	0.2µm	> 19psi	> 1.33Kg/cm ²
SY25TF	0.2µm	> 19psi	> 1.33Kg/cm ²

Air Flow Rates

Type	Pore Size	Air Flow Rates at DP = 10psi
ITF	0.2µm	30lpm
SY25TF	0.2µm	1lpm

Ordering Information

Type	Pore Size	Pack Size
ITF	0.2µm, 0.45µm	10
SY25TF	0.2µm, 0.45µm	100

To order please specify:

Type

Pore Size

Quantity

Example : ITF, 0.2µm 20pcs

mdi PTFE Membrane Capsule Filters

These Capsule filters employ 210cm² hydrophobic PTFE membrane making these useful for filtration of air/gases to laboratory fermentors and as sterile vent for autoclaves and vessels. Due to their compact design these are also useful for fitment in densely packed instruments requiring particle free air/gases for their operation.



Features

- Hydrophobic
- Compact design
- Large filter area

- Long service life
- 100% Integrity tested
- No elastomers or adhesives used in sealing
- Non-toxic materials of construction
- End connections to suit different needs

Specifications

Pore Size	0.2µm, 0.45µm, 1µm
Length	38mm without adapters
Diameter	42mm
Effective Filtration Area	210cm ²
Hold-Up Volume	<5ml
Retention Efficiency	0.2µm: LRV>7 for Br. diminuta 0.45µm: LRV>7 for Sr.marcescens

Sterilization: 100 autoclave cycles of 30 minutes at 121°C

Maximum Operating Pressure: 4Kg/cm² @ 30°C

Biosafety: Passes the Biological tests for Class VI plastics as described in USP

Extractables with IPA: Within limits specified in USP

Oxidizable Matter: Passes as per USP

Air Flow Rates

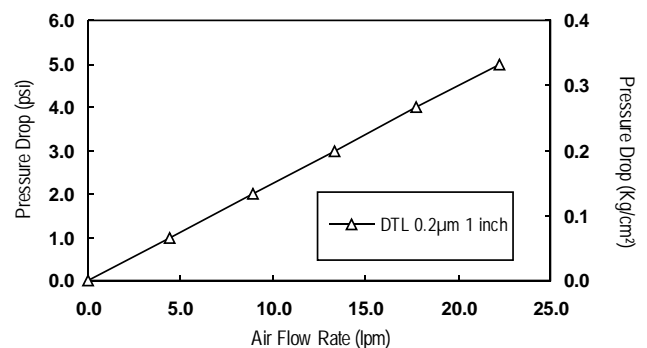


Figure 5: Air flow rates.

Integrity Test Data (50% IPA wetted)

Pore Size	Test Pressure	Max. Air Diffusion Flows
0.2µm DTL	10psi 0.7Kg/cm ²	≤ 1ml/min

Ordering Information

Type	Pore Size	End Connections	Size
DTL	1 0.2µm	A 1/4" stepped hose barb	1 1"
		B 1/4" MNPT	
	2 0.45µm	C 1/2" MNPT	
		D 1/2" hose barb	
		5 1µm	

To order please specify:

Type	Pore Size	Inlet Connection	Outlet Connection	Size
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Example: DTL1EA1

For capsule filters with larger filtration area please refer our Process Filtration Product Guide.