

ETM Capsule Filters

PTFE Membrane



- Optimized for maximum filter life
- Designed for filtration of air and process gases
- Vent filtration for the protection of tank contents
- Final filtration of solvents, alcohols and other non-aqueous liquids

Applications

- ◆ Solvent Filtration
- ◆ Non-Aqueous Solutions
- ◆ Process Gas
- ◆ Compressed Air Filtration
- ◆ Tank Vents

ETM capsules are made with highly hydrophobic PTFE membrane. These capsules are designed for use in the filtration of non-aqueous liquids and aggressive solvents. ETM filters are also used as compressed gas filters and vent filters. Each capsule module is individually integrity tested before it is released from manufacture.

The capsule media surface area, filter core design, pleat configuration and pleat packing density are optimized to increase life and lower filtration operating costs.

ETM capsule filters are most often used as final filters for gases and non-aqueous liquids at the point-of-use, such as at tools. They are also ideal for vent filtration to prevent contaminants from reaching solutions in tanks.

ETM Capsule Filters - Filtration Area

Media	Capsule Length				
	2"	5"	10"	20"	30"
PTFE Membrane	1.0 ft ² (930cm ²)	3.0 ft ² (2788cm ²)	7.5 ft ² (6967cm ²)	15.0 ft ² (13934cm ²)	22.5 ft ² (20901cm ²)

Flow Rate / Filtration Area

The following table represents typical air and water flow at a one psi (69 mbar) pressure differential across a single 2 inch capsule with 1.0 ft² (930 cm²) of media with 1/2" FNPT ports. The liquid test fluid is water at ambient temperature. The gas test fluid is compressed air at ambient temperature. Higher pressure drops are acceptable, but as flows increase the pressure drop of the housing becomes more apparent.

Air/Gas Flow Rates						Liquid Flow Rates					
µm Rating	0.05 µm	0.10 µm	0.22 µm	0.45 µm	1.0 µm	µm Rating	0.05 µm	0.10 µm	0.22 µm	0.45 µm	1.0 µm
SCFM	3.0	3.7	5.6	9	11	GPM	0.15	0.25	0.40	0.76	1.2
						LPM	0.57	0.95	1.51	2.87	4.54

Construction Materials

Housing	Polypropylene
Filtration Media	PTFE Membrane
Media Support	Polypropylene
End Caps	Polypropylene
Center Core	Polypropylene
Outer Support Cage	Polypropylene
Sealing Method	Thermal Bonding

Maximum Operating Parameters

Liquid Operational Pressure	80 psi (5.5 bar) at 20 °C (68 °F)
Gases Operational Pressure	60 psi (4.1 bar) at 20 °C (68 °F)
Operating Temperature	43 °C (110 °F) at 30 psi (2.1 bar) in water
Forward Differential Pressure	50 psid (3.4 bard) at 20 °C (68 °F)
Reverse Differential Pressure	40 psid (2.7 bard) at 20 °C (68 °F)
Recommended Changeout Pressure	35 psid (2.4 bard)

