



Aervent[®]-50 Capsule Filters

For small-scale sterile gas filtration

Aervent[®]-50 sterilizing-grade filters are designed for critical small-scale gas line and air venting applications. The hydrophobic Aervent[®] PTFE membrane provides high flow rates and throughput, low extractables and particle shedding, and broad chemical compatibility. These filters are 100% integrity tested during manufacture to guarantee filter integrity and sterility assurance.



Typical Applications

The Aervent[®]-50 hydrophobic filter will remove particles and microorganisms greater than 0.2 μm from gases and liquids. Aervent[®]-50 filters will sterilize air or gas streams in:

Venting

Gas Filtration

- Bioreactor inlet and outlet filtration
- Filling vessels
- Carboys
- Autoclaves
- Transfer vessels

- Filling machines
- Utilities
- Fermentation
- Moisture-free gas supply lines
- Particulate removal





Figure 1. Typical air flow rates

Specifications

	Aervent [®] -50 Filters
Filtration Area, m ² (cm ²)	0.00196 m ² (19.6 cm ²)
Materials of Construction	
Filter Structural Components	Polypropylene housing; hydrophobic PTFE membrane
Maximum Inlet Pressure, bar (psid)	4.1 bar (60 psid) @ 25 °C
Maximum Differential Pressure, bar (psid)	2 bar (30 psid) @ 25 °C
Hydrocorr™ Test	≤ 0.03 mL/min @ 2.6 bar (38 psi)
Bubble Point	\geq 1100 mbar (16 psi) in 60% isopropanol 40% water at 25°C
Bacterial Retention	Quantitative retention of 10 ⁷ CFU/cm ² <i>Brevundimonas diminuta</i> (ATCC [®] 19146) per ASTM [®] F838 methodology
Bacterial Endotoxin	Aqueous extraction contains < 20 EU/unit as determined by the Limulus Amebocyte Lysate (LAL) Test
Autoclave Stability	Qualified for 10 times at 130 °C for 30 minutes, at 1.7 bar (25 psi); not in-line steam sterilizable
Toxicity	Component materials meet the criteria for USP <88> Biological Reactivity tests, Class VI.
Gravimetric Extractables	\leq 1 mg per unit after a 24 hour soak in 70/30 Isopropanol at ambient temperature
Quality Management System	These products are manufactured in a facility which is certified to ISO [®] 9001:2015 Quality Management Systems.

Integritest[®] Manifold: for Parallel Integrity Testing

As a complement to the Aervent[®]-50 filter, we also offer the Integritest[®] Manifold that can be used with up to 10 filters to perform fast, reliable integrity testing in parallel. This manifold can be used with Aervent[®]-50 filters and Opticap[®] 50 filters containing Millipore Express[®] SPG membrane to improve your efficiency when performing integrity tests such as HydroCorr[™] test (resistance to water intrusion) and/or Bubble point using an automated integrity tester.

The Integritest[®] Manifold is designed to offer a high degree of integrity test robustness while improving your testing efficiency. This manifold provides flexibility while maintaining ease of use with the following features:

- Easy connectivity (TC compatibility and Luer Adaptors)
- HydroCORR[™] test friendly
- Easy to drain, fast setup
- Easy air blow down of filters
- Leak free, easy to clean and sterilize
- Stainless steel welded construction; compatible with IPA
- Vertical design with minimal footprint and no moving parts

Ordering Information

Description	Connections, Inlet/Outlet	Diameter, cm (in)	Length, cm (in)	Catalogue No.
Aervent [®] -50 filters, 100/Pk				
	Hosebarb for 4 to 9.5 mm I.D. flexible tubing and Female Luer slip	6.2 (2.4)	7.1 (2.8)	MTGR05000
	19 mm (3/4 in.) Sanitary Flange	6.2 (2.4)	5.5 (2.16)	MTGR15000
	One side: 19 mm (3/4 in.) Sanitary Flange. Other side: Hosebarb for 4 to 9.5 mm I.D. flexible tubing and Female Luer slip	6.2 (2.4)	6.3 (2.48)	MTGR25000
	One side: 1/8 in. NPTM. Other side: Hosebarb for 6.5 to 9.5 mm I.D. flexible tubing	6.2 (2.4)	5.3 (2.1)	MTGR65000
	1/8 in. NPTM	6.2 (2.4)	5.7 (2.24)	MTGR75000
	Hosebarb for 6.5 to 9.5 mm I.D. flexible tubing	6.2 (2.4)	7.2 (2.84)	MTGR85000
Aervent [®] -50 filters, 10/Pk				
	Hosebarb for 4 to 9.5 mm I.D. flexible tubing and Female Luer slip	6.2 (2.4)	7.1 (2.8)	MTGR05010
	19 mm (3/4 in.) Sanitary Flange	6.2 (2.4)	5.5 (2.16)	MTGR15010
	One side: 1/8 in. NPTM. Other side: Hosebarb for 4 to 9.5 mm I.D. flexible tubing and Female Luer slip	6.2 (2.4)	6.4 (2.52)	MTGR55010
	One side: 1/8 in. NPTM. Other side: Hosebarb for 6.5 to 9.5 mm I.D. flexible tubing	6.2 (2.4)	5.3 (2.1)	MTGR65010
	1/8 in. NPTM	6.2 (2.4)	5.7 (2.24)	MTGR75010
	Hosebarb for 6.5 to 9.5 mm I.D. flexible tubing	6.2 (2.4)	7.2 (2.84)	MTGR85010
Accessories				
	Integritest [®] Manifold for Parallel Integrity Testing			P93795



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To Place an Order or Receive Technical Assistance

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