



# Aervent<sup>®</sup>-50 Capsule Filters

For small-scale sterile gas filtration

Aervent<sup>®</sup>-50 sterilizing-grade filters are designed for critical small-scale gas line and air venting applications. The hydrophobic Aervent<sup>®</sup> 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<sup>®</sup>-50 hydrophobic filter will remove particles and microorganisms greater than 0.2  $\mu m$  from gases and liquids. Aervent<sup>®</sup>-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 <sup>®</sup> -50 Filters
Filtration Area, m <sup>2</sup> (cm <sup>2</sup> )	0.00196 m <sup>2</sup> (19.6 cm <sup>2</sup> )
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 <sup>7</sup> CFU/cm <sup>2</sup> <i>Brevundimonas diminuta</i> (ATCC <sup>®</sup> 19146) per ASTM <sup>®</sup> 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 <sup>®</sup> 9001:2015 Quality Management Systems.

## Integritest<sup>®</sup> Manifold: for Parallel Integrity Testing

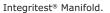
As a complement to the Aervent<sup>®</sup>-50 filter, we also offer the Integritest<sup>®</sup> Manifold that can be used with up to 10 filters to perform fast, reliable integrity testing in parallel. This manifold can be used with Aervent<sup>®</sup>-50 filters and Opticap<sup>®</sup> 50 filters containing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

The Integritest<sup>®</sup> 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<sup>™</sup> 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 <sup>®</sup> -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 <sup>®</sup> -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 <sup>®</sup> Manifold for Parallel Integrity Testing			P93795



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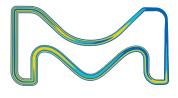
### **To Place an Order or Receive Technical Assistance**

Please visit EMDMillipore.com/contactPS

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