PALL CORPORATION

order on VWR.COM

Laboratory Vent Filters

Eliminate Contamination In and Around Your Work

Protecting People, Research, and the Environment

With our broad and innovative vent filter portfolio, we make it easy to maintain the sterility of your laboratory environment while protecting the atmosphere from contaminants.

Our self-contained, compact filter devices are ideal for the removal of airborne bacteria and particulate under dry or moist conditions. Pall vent filters contain hydrophobic media, which prevent the entry of water and aerosols into sensitive equipment and cultures. They act as high-efficiency barriers on gas lines and enable air to enter and exit vessels while maintaining environmental sterility. Pall vent filters are essential to ensuring worker safety and contamination-free research.

Pall Vent Filters: The Trusted Choice

The Pall team is focused on creating highly reliable vent filtration products so you don't have to worry about contamination and laboratory sterility. With Pall's heritage of industry leadership, we understand your workflow issues to protect you and your work.

Our self-contained, compact filter devices and high-performance membranes offer attractive benefits:

- Maximized air flow with effective filtration areas (EFAs) ranging from 7.5 cm^2 to 300 cm^2
- Gamma irradiation for sterile applications
- Membranes and materials that scale up from research to GMP manufacturing filtration
- Contamination-free exchange of gases for bioreactors' fermentation systems
- Rugged polypropylene housings and more for broad chemical compatibility
- Hydrophobic membrane choices including PTFE, PVDF, and glass laminate

A Vent Filter for Every Application

With our comprehensive line of vent filter products, we make it easy to match filter size and performance to your application's requirements.

Pall vent devices' hydrophobic membranes protect the laboratory's environment, equipment, and research programs. They are suitable for venting bioreactors, fermentation tanks, and carboys; purging the sterile gas of culture vessels; filtering sterile air for cell factories; venting sterile collection vessels; and filtering aggressive solvents.

Pall's Acro® 37 TF, Acro 50, and AcroPak™ 0.2 um vent filters are bacterial retentive* and integrity testable, making them ideal for applications where sterility is essential. These venting products are available with PTFE or PVDF membranes that offer a high level of hydrophobicity and assure the best performance when used as a sterile barrier. The bacterial air vent features economical glass laminate media that operates at high temperatures, pressure ratings, and air flow rates.

37 mm Bacterial Air Vent

This economical 37 mm, self-contained, compact vent filter features a 1 µm (nominal) pore size hydrophobic glass laminate membrane to reduce the risk of fiber contamination. It is available in gamma-irradiated and non-sterile versions. The device comes with a hose barb connection.

Acro 37 TF Vent Device

This lightweight, self-contained 37 mm vent filter incorporates a 0.2 µm PTFE membrane.

The non-sterile device is autoclavable at 121° C to 123° C (250° F to 253° F) for a maximum of 20 minutes. It can be integrity tested before and after use, and can withstand multiple cleaning cycles. The filter has a bacterial retention claim* and comes with a hose barb connection.

Acro 50 Vent Device with PTFE Membrane

These convenient filtration devices are designed for sterilization of air and gases or as a bacterial air vent in pharmaceutical research and laboratory processes. The filter is available in 0.2 µm, 0.45 µm, and 1 µm pore sizes. It is provided non-sterile, can be autoclaved, and can be integrity tested pre- and post-use.

The device is available with stepped hose barb, 1/8-inch MNPT, and 3/8-inch straight pipe connections. All are individually packaged (except PN 4250).

Acro 50 Vent Device with Emflon® II PVDF membrane

The Acro 50 vent filter's Emflon II PVDF membrane has a removal rating of 0.2 µm in liquid service and < 0.02 µm particulate for air/gas applications. It has a bacterial retention claim* to assure the sterile passage of air and gas.

The devices are stable with **gamma irradiation** up to 50 kilogray. They can be autoclaved and integrity tested pre- and post-use.

AcroPak 300 Capsule with PTFE Membrane

With its large effective filtration area (280 cm^2), the AcroPak 300 capsule is designed for bioreactor venting requiring high air flow rates or chemical and solvent filtration. The filter can be sterilized by autoclaving and can be integrity tested after each autoclave cycle and before use.

Vacushield™ Vent Device

Incorporating a hydrophobic PTFE membrane, the Vacushield vent device protects valves and pump components from damage due to liquids. The filter allows air and gases to pass through freely while blocking aqueous solutions and aerosol contaminants.

Integrity Test Kit

The integrity test kit includes pressure gauge, three-way valve and 10 mL syringe. This can be used to verify integrity of a vent device after autoclaving either by use of the Bubble Point Method or Water Breakthrough Test pre- or post-use. Please contact labcustomersupport@pall.com for assistance.

Select the Best Vent Filter for Your Application

BY APPLICATION

STERILE, BACTERIAL RETENTIVE FILTER*

- **Acro 50** Emflon II 0.2 µm
- **Acro 50** PTFE 0.2 µm

OTHER

- Multi-use (autoclavable): PTFE
- Gamma-irradiation suitable: Emflon II
- High system airflow:
  Acro 50 (Emflon II)
  AcroPak 300
  Bacterial Air Vent

GENERAL BACTERIA FILTER

- **37 mm bacterial air vent**

CARBOY VENTING

- **Acro 37**
- **Acro 50** w/PTFE (chemically resistant)
- **Acro 50** w/Emflon II (lightweight, prevents crimping)

LIQUID/AEROSOL PROTECTION

- **Vacushield**

SOLVENT

- **Acro 37, 50 & 300** PTFE

BY AIR FLOW

LOW (up to 10 L/min)

- **Acro 37** TF vent device w/ PTFE 0.2 µm
- **Acro 50** vent device w/ PTFE 0.2 µm
- **Vacushield** vent device

MEDIUM (up to 25 L/min)

- **Acro 50** vent device w/ PTFE 0.45 µm
- **Acro 50** vent device w/ PTFE 1.0 µm

HIGH (up to 40 L/min)

- **Acro 50** vent device w/ Emflon II (PVDF) 0.2 µm
- **AcroPak 300** capsule w/ PTFE 0.2 µm
- **Bacterial Air Vent** w/glass laminate 1 µm (nominal)

BY MEMBRANE TYPE

PTFE

- 0.2 µm PTFE membrane; all bacterial retention tested to assure sterile air/gas flow

PVDF

- **Emflon II** - Gamma irradiated, the 0.2 µm PVDF membrane can be bacterial-retention tested* with superior hydrophobicity

GLASS LAMINATE

- Economical choice plus provides highest air flow rates

UpScale ScaleUp

Pall's scale-up filtration streamlines workflows from cell line development to manufacturing

Pall Laboratory offers products that use the same membranes and materials that scale up from research and discovery to GMP manufacturing-scale filtration. This means scientists can research, develop, and validate their processes with lab-scale filters and then, as volumes increase or processes move to manufacturing scale, the same filters are available in larger sizes with pharmaceutical certificates. As life science workflows scale up in size, this advantage ensures the same filtration performance, chemical and biological compatibilities, and efficiencies – shortening redevelopment and accelerating time to market.

Ordering Information

US Cat. No.	EU Cat. No.	Description	Membrane Type	Connection	Pore Size	Diameter	Pack Size
28144-160	**514-4114**	Bacterial Air Vents - Sterile	Glass Laminate	Stepped Hose Barb	1 µm (nominal)	37 mm	10/pk
28145-553	**514-4107**	Bacterial Air Vents - Non-Sterile	Glass Laminate	Stepped Hose Barb	1 µm (nominal)	37 mm	24/pk
28143-514	**514-4117**	Acro 37 TF Vent Device	PTFE	Stepped Hose Barb	0.2 µm	37 mm	24/pk
28142-395	**514-4118**	Acro 37 TF Vent Device	PTFE	Stepped Hose Barb	0.2 µm	37 mm	200/pk
28144-111	**516-7600**	Acro 50 Vent Device	PTFE	Stepped Hose Barb	0.2 µm	50 mm	72/pk
28143-558	**514-4109**	Acro 50 Vent Device	PTFE	Stepped Hose Barb	0.2 µm	50 mm	18/pk
28143-955	**516-7627**	Acro 50 Vent Device	PTFE	1/8" MNPT	0.2 µm	50 mm	18/pk
28143-966	**516-7628**	Acro 50 Vent Device	PTFE	3/8" straight pipe	0.2 µm	50 mm	18/pk
28143-616	**514-4110**	Acro 50 Vent Device	PTFE	Stepped Hose Barb	0.45 µm	50 mm	18/pk
28143-718	**514-4111**	Acro 50 Vent Device	PTFE	Stepped Hose Barb	1 µm	50 mm	18/pk
16003-654	**515-0125**	Acro 50 Vent Device	PTFE	1/8" MNPT	1 µm	50 mm	18/pk
28143-838	**514-4227**	Acro 50 Vent Device	Emflon II (PVDF)	Stepped Hose Barb	0.2 µm	50 mm	3/pk
16003-656	**514-4228**	Acro 50 Vent Device	Emflon II (PVDF)	Stepped Hose Barb	0.2 µm	50 mm	100/pk
28146-200	**515-0143**	AcroPak 300 Capsule	PTFE	Stepped Hose Barb	0.2 µm	N/A	3/pk
76414-000	**PALL12085**	AcroPak 300 Capsule	PTFE	Stepped Hose Barb	0.2 µm	N/A	100/pk
55095-006	**514-4115**	Vacushield Vent Device	PTFE	Stepped Hose Barb	0.2 µm	73 mm	3/pk
28143-988	**516-8934**	Integrity Test Kit	N/A	N/A	N/A	N/A	1/pk

Maintain the sterility of your laboratory workflows and environment with Pall's innovative portfolio of high-performance vent filters. Pall is your trusted partner specializing in filtration solutions that eliminate contamination - in and around your work.

* Lot samples retain a minimum of 10^7 cfu / cm^2 of *B. diminuta* per modified ASTM F838, current revision

PALL CORPORATION

0921 Lit. No. 160230W