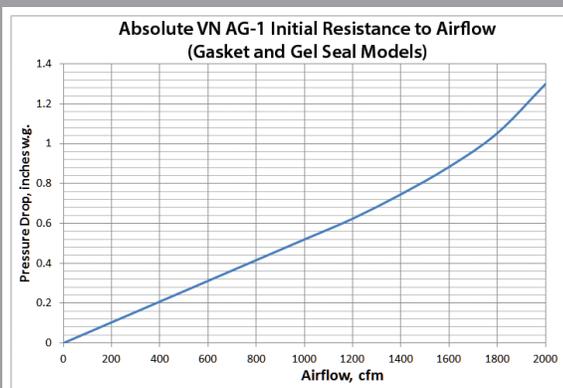




Increased airflow and longer service life in a standard size HEPA filter



The Absolute VN's increased surface area can reduce system resistance by more than 50% and offer three to four times the life-cycling of standard AG-1 HEPA filters.

Camfil nuclear-qualified AG-1 Absolute VN HEPA filters are manufactured per the ASME AG-1¹ Code and are UL-586² listed. They are manufactured from the highest quality components as prescribed in Section FC, Article 3000 of the ASME AG-1 code. Each design has been qualified per the requirements of Section FC, Article 5000. Every filter is manufactured under an audited and approved ASME NQA-1 Quality Program. Camfil provides a Certificate of Conformance as specified in Article FC-8200 of ASME AG-1.

Each nuclear grade AG-1 Absolute filter has a tested efficiency of not less than 99.97% on 0.2-0.3 micron size particles at 100% of rated airflow and at 20% of rated airflow. The label attached to each filter furnishes individual filter test results.

Every Camfil nuclear grade Absolute VN HEPA filter:

- Includes five V-banks (10 panels) of ASME AG-1, Appendix FC-1 qualified HEPA media in ASME AG-1, FC-1121 Type B pleat configuration. This configuration provides a minimum rated airflow of 2000 cfm at a maximum initial resistance of 1.3" w.g., as specified in ASME AG-1, Table FC-4110 for a Size 8 HEPA filter.
- Is highly resistant to moisture in high humidity environments.
- Uses a fire-retardant phosphorus-free polyurethane adhesive sealant, bonding the frame to the media pack.
- Has a 14-gauge ASTM³-A-240 Type 304 stainless steel enclosing frame.
- Includes face guards constructed of 1/4" pattern expanded and flattened 22-gauge ASTM A-240 Type 304 stainless steel on the air-entering and air-exiting sides of each media pack.
- Is available with a gasket seal (in accordance with ASME AG-1, FC-3121) or a gel seal (in accordance with ASME AG-1, FC-3122) to ensure a leak-free filter to housing or filter to frame seal.
- Gel seal models may include optional filter extraction clips to accommodate filter change in bag-in/bag-out containment systems.
- May be operated at continuous temperature of up to 250°F (121° C)
- Is labeled as specified in ASME AG-1, FC-9000 and in most recent DOE⁴ STD-3020.
- Includes special crating as described in most recent DOE STD-3020. These shipping crates are fabricated from wood components. The removable top lid and front are secured with removable fasteners for ease of removal and repackaging.

The Camfil AG-1 Absolute VN saves valuable space in any application reducing the equipment footprint because of its higher air handling capacity. Its extended life also reduces costly filter disposal expenditure.

¹ ASME - American Society of Mechanical Engineers

² UL - Underwriters Laboratories

³ ASTM - American Society for Testing and Materials

⁴ DOE - Department of Energy

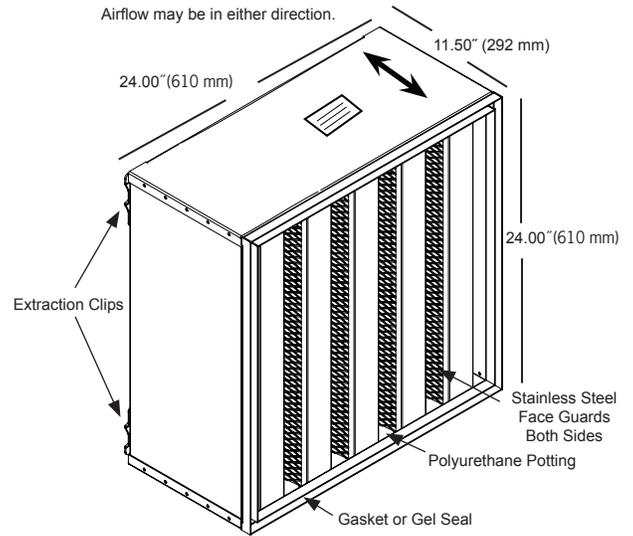
Performance

- ASME AG-1, Section FC Size Designator: 8
- 24" by 24" by 11-½" (610 mm by 610 mm by 292mm)
- Rated Airflow at 2000 acfm (3400m³/hr)
- Maximum initial Resistance: 1.30" w.g. (325 Pa)

Model Number	Seal location, with or without extraction clips
VN1560-05-10-44-55	Upstream gasket seal
VN1560-05-10-44-58	Downstream gasket seal
VN1570-05-10-09-44-56	Upstream gel seal with extraction clips
VN1570-05-10-09-44-57	Downstream gel seal with extraction clips

DATA NOTES

1. Rated airflow in ACFM based on tests indoors at atmospheric pressure.
2. Maximum continuous operating temperature 250°F (121°C).
3. Final operating resistance should not exceed 4.0" w.g.
4. Gel seal available without extraction clips, contact factory.
5. SME AG-1 Absolute VN HEPA filters meet all applicable requirements as published under in the following documents; ASME AG-1, NQA-1, N509, UL 586.
6. Camfil nuclear grade HEPA Filters have been qualified by the Edgewood Chemical Biological Center to meet the performance requirements of ASME AG-1 Sections FC-4000 & FC-5000, with the exceptions of FC-5150 Resistance to Heated Air and FC-5160 Spot Flame Resistance which have been qualified by the UL 586 listing of the product.
7. For complete construction components please contact a factory representative for sales submittal drawings



Specification

1.0 General

1.1 - Air filters shall be Camfil Model _____ ASME AG-1 qualified and UL 586 listed HEPA air filters with mini pleated ASME AG-1, Appendix FC-I qualified HEPA media in the ASME AG-1, FC-1121 Type B pleat configuration, formed into a V-bank configuration, polyurethane media-to-frame sealant, Type 304 stainless steel enclosing frame, Type 304 stainless steel media pack face guards and either a gasket or gelatinous seal on one or both faces.

1.2 - Overall dimensions shall be 24" high by 24" wide by 11-½" deep.

2.0 Construction

2.1 - The media shall be manufactured from waterproof boro-silicate glass micro fibers and a synthetic binder formed into a continuous flat sheet with physical and functional properties. The test results shall be traceable to manufacturing lot number, roll number and the serial number of the final product. The media shall be qualified in accordance with ASME AG-1, Appendix FC-I.

2.2 - The media shall be formed into individual mini pleat packs separated by glass thread fibers that are bonded to the media on both sides of the media pack, and assembled into a V-bank configuration. The packs shall be potted into the enclosing frame with a fire retardant polyurethane adhesive.

2.3 - The enclosing frame shall be of 14-gauge Type 304 stainless steel and bonded to the media pack to form a rugged and durable enclosure. Overall dimensional tolerance shall be +0/ - 1/8" on the face dimensions, +1/16" / - 0 on the depth dimension. The face shall be square within a tolerance of 1/8" when measured diagonally across the corners of both faces.

2.4 - The assembled filter shall include media pack face guards constructed of Expanded and flattened ¼" pattern made from ASTM A-240 Type 304 stainless steel. Screens shall be on the air-entering and air-exiting sides of each media pack.

2.5 - For Gasket seal applications, a ¼" x 11/16" epichlorohydrin gasket, in accordance ASME AG-1 FC-3121, will be applied to the upstream or downstream face flange. For Gelatinous seal applications, the filter shall include a continuous channel located upstream or downstream and filled with silicone gel in accordance with ASME AG-1, FC-3122. Four filter extraction clips shall be provided, (if specified), for filters installed in a bag-in/bag-out containment housing.

2.6 - Four filter extraction clips shall be provided, if specified for filters installed in a bag-in/bag-out containment housing.

3.0 Performance

3.1 - The filter shall be designed to meet the requirement of ASME AG-1 Section FC-4000 and qualified in accordance with ASME AG-1 Section FC-5000.

3.2 - The filter shall be listed by Underwriters Laboratories as UL 586 and labeled accordingly.

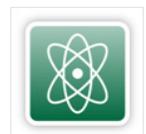
3.3 - The filter shall be capable of operating at 250° F (121° C) continuous.

3.4 - Manufacturer shall supply a Certificate of Conformance with each filter detailing manufacturers name, model number, unique filter serial number, resistance to airflow at rated capacity, percent penetration on particles 0.3 micron in size at 100% of rated airflow and at 20% of rated airflow. The filter shall be labeled as specified ASME AG-1, FC-9000 and most recent DOE STD-3020.

3.5 - Finished filters are securely packaged and are crated. Crating shall be constructed as described by most recent DOE STD-3020. These shipping crates shall be fabricated from wood components. The removable top lid and front shall be secured with removable fasteners for ease of removal and repackaging.



For detailed specifications please consult your local Camfil Distributor or Representative or [Absolute VN](#). Camfil has a policy of uninterrupted research, development and product improvement. We reserve the right to change designs and specifications without notice.



Camfil | 1 North Corporate Drive, Riverdale, NJ 07457 | Tel: (973) 616-7300