



Camfil CamCarb XG is a plastic conical molecular air filter that provides high removal efficiency of molecular contaminants from supply, recirculation, or exhaust air systems.

Filter Construction

The proprietary conical shape of the CamCarb XG enables high removal efficiency while maintaining low-pressure drop. The patented design ensures optimal use of the adsorbent media, which extends the lifetime compared to standard cylinders. The unique combination provides the lowest total cost of ownership (TCO) of all loose-fill, thin-bed molecular air filters.

The CamCarb XG is filled using a unique vibratory technique to ensure the perfect packing density of the media. Filters installed in clean or sensitive applications will be supplied with an inner scrim and outlet scrim or sock depending on the type of media filled.

Versatility

The CamCarb XG can be filled with various types of media for the removal of acids, bases, VOCs, etc. In applications where a complex range of gases are to be removed, it may be appropriate to use a multi-stage filter installation with different types of media. Filters supplied by Camfil are tested according to ISO 10121-2:2013.

Lifetime

The achieved service life in any application is influenced by several factors, including airflow, concentration of the contaminant challenge, temperature, humidity, and amount of media.

To ensure the ongoing effectiveness of the molecular filter installation, a series of life analysis tests should be conducted on media samples to determine the remaining capacity.

Specialized Software for Lifetime Determination

The lifetime of the CamCarb XG can be simulated using Camfil's unique Molecular Contamination Control Lifetime Determination (MCCLD) software for molecular filtration. The purpose of this software is to provide 'best estimates' of the remaining filter life under selectable conditions that closely mimic real applications. Contact Camfil for a dedicated simulation report for your application.

- Engineered for optimized media utilization and lowest total cost of ownership (TCO)
- Universal pins for installation on existing cylinder hardware
- Wide range of ISO 10121-1-2013 tested adsorbent options
- Ultra-low outgassing with adhesive-free construction
- High cleanliness with internal scrim and external sock options

| Parameter | Unit | Specifications | |
|--|--------------------------|-------------------------|--------------------------|
| | | XG 2600 | XG 3500 |
| Nominal dimensions (diameter x length) | Inch (mm) | 5.7"x 17.8" (146 x 452) | 5.7" x 23.4" (146 x 595) |
| Rated airflow | CFM (m ³ /hr) | 1470 (2500) | 2000 (3400) |
| Nominal bed depth | Inch (mm) | 1" (25) | |
| Cylinder construction material | | ABS | |
| Number of cylinders per 24" x 24" area (610mm x 610mm) | | 16 | |

Performance Data

| Models ¹ | Pressure Drop ² (±15%) | | Nominal Weight | | Optimum Operating Conditions | | |
|---|--------------------------------------|--------|----------------|---------|------------------------------|---------|--------|
| | inches w.g. | Pa | lb | kg | Temperature | | RH (%) |
| | | | | | °F | °C | |
| CamCarb XG 2600/3500 Acids | 0.34/0.50 | 85/125 | 5.5/7.0 | 2.5/3.2 | 50-140 | 10-60 | 40-90 |
| CamCarb XG 2600/3500 Acids_H2S ³ | 0.34/0.48 | 85/120 | 7.8/9.8 | 3.5/4.4 | 50-140 | 10-60 | 40-90 |
| CamCarb XG 2600/3500 Aldehydes ³ | 0.34/0.48 | 85/120 | 7.8/9.8 | 3.5/4.4 | 50-140 | 10-60 | 40-90 |
| CamCarb XG 2600/3500 Bases | 0.38/0.50 | 95/125 | 6.0/7.5 | 2.7/3.4 | 50-140 | 10-60 | 40-90 |
| CamCarb XG 2600/3500 SO2_H2S ³ | 0.34/0.48 | 85/120 | 7.8/9.8 | 3.5/4.4 | 50-140 | 10-60 | 40-90 |
| CamCarb XG 2600/3500 Terpenes | 0.34/0.50 | 85/125 | 5.1/6.4 | 2.3/2.9 | Max. 104 | Max. 40 | 0-70 |
| CamCarb XG 2600/3500 VOC_03_Acid_H2S | 0.38/0.50 | 95/125 | 6.4/8.2 | 2.9/3.7 | 50-104 | 10-40 | 40-70 |
| CamCarb XG 2600/3500 VOC_03_H2S_SO2 | 0.38/0.50 | 95/125 | 6.4/8.2 | 2.9/3.7 | 50-104 | 10-40 | 40-70 |
| CamCarb XG 2600/3500 VOC_03_NO2_SO2 | 0.34/0.50 | 85/125 | 5.1/6.4 | 2.3/2.9 | Max. 104 | Max. 40 | 0-70 |

- Notes:**
1. Additional models with different media options are available. High-performance media will be selected in accordance to the type of application.
 2. Pressure drop at rated airflow for 16 cylinders.
 3. Filled with UL-approved media.

Operating Conditions

- CamCarb XG should not be used in conditions above 176°F (80°C) or below -5.8°F (-21°C).
- Filter performance will be affected if operated outside of optimum T and RH conditions.
- Condensing atmosphere should be avoided.
- For filters used for the removal of acids, sulfur compounds, and bases, condensation may result in chemical impregnation runoff.
- For removal of organic compounds susceptible to highly exothermic reactions such as ketones, please contact the factory for recommended conditions.
- To maximize service life, Camfil recommends effective prefiltration for all molecular filtration products. The efficiency of the prefilter should have a minimum rating of MERV 9A per ASHRAE 52.2 with Appendix J or ePM₁₀55% per ISO16890.



Acids, Terpenes and VOC_03_NO2_SO2



Bases



Aldehydes and SO2_H2S



Acids_H2S

Recommended Periodic Monitoring

- Camfil recommends media life analysis testing on a periodic basis to predict the remaining filter capacity.
- A series of tests over time can predict the recommended replacement schedule to maintain system performance.
- Contact the factory to find out more about the full range of available analytical services.

Packaging and Storage Conditions

- CamCarb XG cylinders are boxed in fours in a heat-sealed PE bag.
- The cylinders should be stored in a segregated, clean, and dry location.
- The storage area should be located as far as possible from any potential source of chemical contamination.
- Recommended maximum shelf life is one year from the date of manufacture.

Handling and Disposal

- CamCarb XG cylinders are constructed from fully incinerable plastic.
- Used cylinders must be disposed of in accordance with all site-local and national regulations relevant to the point of use. Disposal methods may differ based on media type, amount of chemical contamination, site location media quantity, and environmental regulations.



For detailed specifications, please consult your local Camfil distributor or representative. Refer to [Molecular Cylinders](#) to learn more about Camfil molecular cylinders. Camfil has a policy of uninterrupted research, development, product improvement and reserves the right to change designs and specifications without notice.