



Camfil CamCarb CG filters are plastic cylindrical molecular filters used for high efficiency removal of molecular contaminants from supply air, recirculation air and exhaust air ventilation systems in sensitive buildings and process applications.

Filter Construction

The filter consists of a pair of ABS concentric cylinders and an inlet cap with two co-molded TPE thermoelastic gaskets. Cylinders are fully welded and adhesive-free. The inlet cap features a conical section that improves air distribution and eliminates internal leakage. A durable rubber gasket and three bayonet fittings facilitate simple installation into the base-plate mounting frame.

A unique vibratory filling technique ensures perfect packing density of the media and a leak-free installation. The media is deployed in an annular pattern with uninterrupted 360° geometry along the entire length of the filter for even air distribution and maximum filter lifetime. Inlet and outlet scrim ensures high cleanliness and enables the use of smaller, higher capacity media.

Versatility

The CamCarb CG can be filled with various types of media for 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 and media supplied by Camfil are tested according to ISO 10121-2:2014.

Lifetime

The achieved service life in any application will be influenced by several factors, including airflow, type and 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 CG cylinders 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 performance of molecular filtration products under selectable conditions that closely approximate real applications. Contact Camfil for a dedicated simulation report for your application.

- **Totally corrosion resistant ABS and low dusting construction**
- **Installed in a dedicated cylinder holding frame to provide an inherently leak-free design**
- **Contact time ranges from 0.1 to 0.2 seconds**
- **Combines highest removal efficiency and lowest pressure drop**
- **Typical target gases: VOCs, ozone, hydrogen sulfide, nitrogen dioxide, formaldehyde, other acids and bases**

Parameter	Unit	Specifications		
		CG 1300	CG 2600	CG 3500
Nominal Dimensions (Diameter x Length)	Inch (mm)	5.7 x 9.4 (148 x 240)	5.7 x 17.8 (148 x 452)	5.7 x 23.4 (148 x 595)
Rated air flow	CFM (m ³ /hr)	735 (1250)	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		
					Temperature		RH (%)
	inches w.g.	Pa	lb	kg	°F	°C	
CamCarb CG 1300/2600/3500 Acids	0.32/0.54/0.70	80/135/175	3.6/6.4/8.4	1.6/2.9/3.8	50 - 140	10 - 60	40 - 90
CamCarb CG 1300/2600/3500 Acids_H2S ³	0.32/0.54/0.70	80/135/175	5.3/9.7/12.6	2.4/4.4/5.7	50 - 140	10 - 60	40 - 90
CamCarb CG 1300/2600/3500 Aldehydes ³	0.32/0.54/0.70	80/135/175	5.3/9.7/12.6	2.4/4.4/5.7	50 - 140	10 - 60	40 - 90
CamCarb CG 1300/2600/3500 Bases	0.32/0.54/0.70	80/135/175	3.6/6.4/8.4	1.6/2.9/3.8	50 - 140	10 - 60	40 - 90
CamCarb CG 1300/2600/3500 H2S_Mercaptans	0.32/0.54/0.70	80/135/175	3.6/6.4/8.4	1.6/2.9/3.8	50 - 140	10 - 60	40 - 90
CamCarb CG 1300/2600/3500 SO2_H2S ³	0.32/0.54/0.70	80/135/175	5.3/9.7/12.6	2.4/4.4/5.7	50 - 140	10 - 60	40 - 90
CamCarb CG 1300/2600/3500 Terpenes	0.24/0.40/0.66	60/100/165	3.3/6.2/8.2	1.5/2.8/3.7	Max. 104	Max. 40	0 - 70
CamCarb CG 1300/2600/3500 VOC	0.32/0.54/0.70	80/135/175	3.6/6.4/8.4	1.6/2.9/3.8	Max. 104	Max. 40	0 - 70
CamCarb CG 1300/2600/3500 VOC_O3_H2S_SO2	0.40/0.60/0.84	100/150/210	4.4/7.9/10.4	2.0/3.6/4.7	50 - 104	10 - 40	40 - 70
CamCarb CG 1300/2600/3500 VOC_O3_NO2_SO2	0.24/0.40/0.66	60/100/165	3.3/6.2/8.2	1.5/2.8/3.7	Max. 104	Max. 40	0 - 70

- Notes:**
- Other models with different media options available. High-performance media will be selected based on the application.
 - Pressure drop at rated airflow for 16 cylinders.
 - Filled with UL-approved media.

Operating Conditions

- CamCarb CG should not be used in conditions above 140°F (60°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 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 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 $ePM_{10}55\%$ per ISO16890.

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 analytical services available.

Packaging and Storage Conditions

- CamCarb 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 date of manufacture.

Handling and Disposal

- CamCarb CG 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.



VOC_O3_NO2_SO2



VOC



SO2_H2S and Aldehydes



Acids_H2S



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