CamCarb CG

Cylindrical Molecular Filters

- **Strong fully welded and adhesive-free construction**
- **Maximum efficiency with leak free installation**
- **Wide range of ISO 10121-1:2014 tested adsorbent options**
- **Ideal for low airflow applications**
- **High product cleanliness with inlet and outlet scrim**

Camfil CamCarb CG filters are plastic cylindrical molecular filters. The compact filter is designed to remove gaseous contaminants for low air flow applications such as air cleaners and specialised equipments.

Filter construction

The filter consists of a pair of ABS concentric cylinders and inlet cap with two co-moulded TPE thermo-elastic gaskets. The inlet cap features a conical section which serves to improve air distribution and avoid internal leakage in the cylinders.

The cylinder is filled using a unique vibratory technique to ensure perfect packing density of the media. This ensures that the installation will be leak free. The media is deployed in an annular pattern with uninterrupted 360° geometry along the entire length of the filter to ensure even air distribution and maximum filter lifetime.

Versatile

The CamCarb CG can be filled with various types of media for removal of acids, bases, VOCs, etc. In some 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 10121-2:2014.

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.

Specialised software for Lifetime Determination

The lifetime of the CamCarb CG modules can be simulated using the unique Camfil's 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.

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Parameter	Unit	Specifications
		CG 1300
Nominal dimensions (Dia x Length)	mm (inch)	148 x 240 (5.7 x 9.4)
Rated air flow	m^3/hr (ft^3/min)	1250 (735)
Nominal Bed depth	mm (inch)	25 (1)
Cylinder construction material	-	ABS
Number of cylinders per 610 x 610 (2' x 2') area	-	16

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Models#1	Pressure drop (±15%) #2		Nominal Weight		Optimum Operating Conditions		
					Temperature		RH (%)
	Pa	IWG	kg	lb	°C	°F	
CamCarb CG 1300 SO2_H2S^3	80	0.32	2.4	5.3	10 – 60	50 – 140	40 – 90
CamCarb CG 1300 Acids_H2S^3	80	0.32	2.4	5.3	10 – 60	50 – 140	40 – 90
CamCarb CG 1300 VOC	80	0.32	1.6	3.6	Max. 40	Max. 104	0 – 70
CamCarb CG 1300 H2S_Mercaptans	80	0.32	1.6	3.6	10 – 60	50 – 140	40 – 90
CamCarb CG 1300 Acids	80	0.32	1.6	3.6	10 – 60	50 – 140	40 – 90
CamCarb CG 1300 VOC_O3_Acid_H2S	100	0.40	2.0	4.4	10 – 40	50 – 104	40 – 70
CamCarb CG 1300 VOC_03_NO2_SO2	60	0.24	1.5	3.3	Max. 40	Max. 104	0 – 70
CamCarb CG 1300 Bases	80	0.32	1.6	3.6	10 – 40	50 – 140	40 – 90

Note: #1 - Other 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 air flow for 16 cylinders.
^3 - Filled with UL approved media

Operating Conditions

CamCarb CG should not be used in conditions above 60°C (140°F) and below -21°C (-5.8°F).
Filter performance will be affected if used in conditions where T and RH are above or below the optimum conditions.
Condensing atmosphere must 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 Camfil for recommended conditions.

Camfil recommends effective pre-filtration for all molecular filtration products. The efficiency of the pre filter shall have a minimum rating of ePM1 55%. This is to prevent clog up of the molecular filtration media by dust or particulate matter.

Recommended Periodic Monitoring

Camfil recommends that the media is tested on a periodic basis for media life analysis. The test provides an indication of the remaining capacity of the media.

The usage of the media can either be maximized or the replacement of the media can be planned in advance before the overall performance of the system starts to deteriorate.

Contact Camfil to find out more about the full range of analytical services available.

Packaging and Storage Condition

CamCarb cylinders are packed in fours in a heat sealed PE bag and placed in a carton box

The cylinders should be stored in a segreated, clean and dry location. The storage area shall be located as far as possible from any potential source of chemical contamination.

Recommended maximum shelf life : 1 year from date of manufacturing.

Handling and Disposal

CamCarb cylinders are made of fully incinerable plastic.

Used cylinders must be disposed of in a responsible manner and in accordance with all site, local and national regulations relevant to the point of use. Disposal methods may differ based on different media types, amount of chemical contamination, site location, media quantity and environmental regulations.

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