



Camfil CamCarb VG440 modules are plastic v-cell molecular filters. The primary use is control of acidic gases that are responsible for corrosion of electronic and electrical equipment in heavy process industries. They may also be used in odor removal applications in pulp and paper mills and wastewater treatment plants, or lighter applications such as airports, cultural heritage buildings and commercial offices. The modules may be filled with any Camfil media to suit the specific customer application.

Installation

CamCarb VG440 modules can be loaded in GlidePack CamCarb VG440 housings. They may also be used as replacements in many standard side and front access housings.

Versatility

The CamCarb VG440 modules 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 VG440 modules 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
- Several track options for standard industrial housings
- Fully welded and adhesive-free
- Typical target gases include: hydrogen sulfide, VOCs, ozone, formaldehyde, nitrogen dioxide, other acids and bases
- Ideal for recirculation air systems

Parameter	Unit	CamCarb VG440
Nominal dimensions (WxHxD)	inches (mm)	12 x 6 x 18 (300 x 150 x 440)
Nominal bed depth	inches (mm)	1 (25)
Recommended face velocity	ft/min (m/s)	500 (≤ 2.5)
Module construction material	-	ABS and PET
Number of modules per 2' x 2' (610 x 610) area	-	8

Models ¹	Pressure Drop (±15%) ²		Nominal Weight		Optimum Operating Conditions		
	Inches w.g.	Pa	lb	kg		Temperature	RH (%)
					°F	°C	
CamCarb VG440 Acids	0.59	146	10.0	4.5	50 - 140	10 - 60	40 - 90
CamCarb VG440 Acids_H2S ³	0.37	94	14.3	6.5	50 - 140	10 - 60	40 - 90
CamCarb VG440 Aldehydes ³	0.37	94	14.3	6.5	50 - 140	10 - 60	40 - 90
CamCarb VG440 Bases	0.59	146	10.0	4.5	50 - 104	10 - 40	40 - 90
CamCarb VG440 H2S_Mercaptans	0.59	146	10.0	4.5	50 - 140	10 - 60	40 - 90
CamCarb VG440 SO2_H2S ³	0.37	94	14.3	6.5	50 - 140	10 - 60	40 - 90
CamCarb VG440 VOC_H2S_SO2	0.96	120	12.2	5.5	50 - 104	10 - 40	40 - 70
CamCarb VG440 VOC	0.59	146	10.0	4.5	Max 104	Max 40	0 - 70
CamCarb VG440 VOC_O3_NO2_SO2	0.57	142	10.3	4.7	Max 104	Max 40	0 - 70

Note: 1 - Other models with different media options are available. High performance media will be selected based on the application.

2 - Pressure drop at rated velocity of 500 fpm (2.5 m/s).

3 - Filled with UL approved media.

Operating Conditions

- CamCarb VG440 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 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 ePM1055% 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 VG440 filters are individually packaged in a heat-sealed PE bag.
- The filters 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 VG440 filters are constructed from fully incinerable plastic.
- Used filters must be disposed of in a responsible manner and in accordance with all site local and national regulation 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, representative or [Camfil VG440](#). Camfil has a policy of uninterrupted research, development and product improvement. We reserve the right to change designs and specifications without notice.



VOC_03_NO2_SO2



VOC



SO2_H2S and Aldehydes



H2S