



- Strong fully welded and adhesive-free construction
- Different track options for standard industrial housing
- Significant reduction of loose media shedding with internal moulded mesh
- Suitable for various ISO 10121-1:2014 tested loose media
- Ideal for make-up and recirculation air systems

Camfil CamCarb VG 440 modules are plastic Vee-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 odour removal applications in pulp and paper mills and wastewater treatment plants, or lighter applications such as airports, cultural heritage building and commercial offices. The modules may be filled with any Camfil media to suit the specific customer application.

Installation

For the highest performance and a leak-free installation, CamCarb VG 440 modules must be installed in Camfil Positive Seal Side Access housings (PSSA). The unique approach to filter clamping and sealing with a compressive gasket ensures that the efficiency of the media is not compromised by internal bypass.

The modules may also be used as replacements in many traditional side and front access housings. CamCarb VG 440 modules are packed in cartons with LDPE liner to preserve media condition.

Versatile

The CamCarb VG 440 modules can be filled with various types of media for removal of acids, bases, VOCs, etc. The media base could be either carbon, alumina or a blend of both. All media supplied by Camfil are tested according to ISO 10121-1:2014.

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 VG 440 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.

Parameter	Unit	CamCarb VG 440
Nominal dimensions (WxHxD)	mm (inch)	300 x 150 x 440 (12 x 6 x 18)
Nominal bed depth	mm (inch)	25 (1)
Recommended face velocity	m/s (ft/min)	≤ 2.5 (500)
Module construction material	-	ABS and PET
Number of modules per 610x610mm (2'x2') area	-	8

Models ^{#1}	Pressure drop (±15%) ^{#2}		Nominal Weight		Optimum Operating Conditions		
	Pa	IWG	kg	lb	Temperature		RH (%)
					°C	°F	
CamCarb VG440 SO2_H2S ^{^3}	94	0.37	6.5	14.3	10 – 60	50 – 140	40 – 90
CamCarb VG440 Acids_H2S ^{^3}	94	0.37	6.5	14.3	10 – 60	50 – 140	40 – 90
CamCarb VG440 VOC	146	0.59	4.5	10.0	Max. 40	Max. 104	0 – 70
CamCarb VG440 H2S_Mercaptans	146	0.59	4.5	10.0	10 – 60	50 – 140	40 – 90
CamCarb VG440 Acids	146	0.59	4.5	10.0	10 – 60	50 – 140	40 – 90
CamCarb VG440 VOC_O3_Acid_H2S	120	0.48	5.6	12.5	10 – 40	50 – 104	40 – 70
CamCarb VG440 VOC_O3_NO2_SO2	142	0.57	4.7	10.3	Max. 40	Max. 104	0 – 70
CamCarb VG440 Bases	146	0.59	4.5	10.0	10 – 60	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 velocity of 2.5 m/s (500 fpm).

^{^3} - Filled with UL approved media.

Operating Conditions

VG 440 should not be used in conditions above 80°C (176°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.



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

The VG 440 module is individually packed in a PE bag and vacuum sealed. Two (2) modules packed in a carton box.

The modules should be stored in a segregated, 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

VG 440 module is made of fully incinerable plastic.

Used modules 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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