

CamCarb XG

Conical Cylinder Molecular Filters



- Engineered for optimized media utilization and lowest TCO
- Universal pins for installation on existing cylinder hardware
- Wide range of ISO 10121-1:2014 tested adsorbent options
- Ultra-low outgassing with adhesivefree construction
- High cleanliness with internal scrim and external sock options

Camfil CamCarb XG is a plastic conical molecular air filter. The CamCarb XG provides high removal efficiency of molecular contaminants from supply, recirculation, and 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 of the filter compared to the standard cylindrical cylinders. This unique combination provides a 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 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

Versatile

The CamCarb XG 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 XG 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	Specifications			
		XG 2600	XG 3500		
Nominal dimensions (Dia x Length)	mm (inch)	146 x 452 (5.7 x 17.8)	146 x 595 (5.7 x 23.4)		
Rated air flow	m³/hr (ft³/min)	2500 (1470)	3400 (2000)		
Nominal bed depth	mm (inch)	25 (1)			
Cylinder construction material	-	ABS			
Number of cylinders per 610 x 610 (2' x 2') area	-	16			



CamCarb XG

Conical Cylinder Molecular Filters

Models#1	Pressure drop (±15%) ^{#2}		Nominal Weight		Optimum Operating Conditions		
					Temperature		RH (%)
	Pa	IWG	kg	lb	°C	°F	KH (/0)
CamCarb XG 2600/3500 S02_H2S ^{^3}	85/120	0.34/0.48	3.5/4.4	7.8/9.8	10 – 60	50 – 140	40 – 90
CamCarb XG 2600/3500 Acids_H2S ³	85/120	0.34/0.48	3.5/4.4	7.8/9.8	10 – 60	50 – 140	40 – 90
CamCarb XG 2600/3500 VOC	95/125	0.38/0.50	2.3/2.9	5.1/6.4	Max. 40	Max. 104	0 – 70
CamCarb XG 2600/3500 H2S_Mercaptans	95/125	0.38/0.50	2.4/3.0	5.3/6.7	10 – 60	50 – 140	40 – 90
CamCarb XG 2600/3500 Acids	95/125	0.38/0.50	2.7/3.3	6.0/7.5	10 – 60	50 – 140	40 – 90
CamCarb XG 2600/3500 VOC_03_Acid_H2S	95/125	0.38/0.50	2.9/3.7	6.4/8.2	10 – 40	50 – 104	40 – 70
CamCarb XG 2600/3500 VOC_03_NO2_S02	85/125	0.34/0.50	2.3/2.9	5.1/6.4	Max. 40	Max. 104	0 – 70
CamCarb XG 2600/3500 Bases	95/125	0.38/0.50	2.7/3.4	6.0/7.5	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 air flow for 16 cylinders.

^3 - Filled with UL approved media

Operating Conditions

CamCarb XG filters 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.

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

The conical cylinders 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

CamCarb XG cylinders are made of fully incinerable plastic.

Used conical cylinders must be disposed 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.









© Camfil AB, CamCarb XG / English ed. 1 / 2023-06-17 As part of our continuous improvement, Camfil reserve the right to change specifications without notice