

V-Bank Activated Carbon Filter



PRODUCT FEATURES

- ▶ Use of high-absorption carbon fiber or carbon felt as the adsorption filter material, which has large adsorption capacity, fast adsorption speed and good purification effect.
- ▶ The adsorption material corresponding to acid, alkali and organic gas can be selected.
- ▶ Adopt pleated structure.

USING

- ▶ Mainly used in air-conditioning systems that emphasize indoor air quality. Such as office buildings, hospitals, airports, biotechnology, semiconductors, etc., used to remove odor and low-density gas phase pollutants, which can effectively remove odors in the air and save energy.

GRADES OF ADSORBED MATERIALS

Objective	Type	Filter Media	Object Gas
Acid	A	Activated carbon + non-woven fabric	Vulcanized acid, sulfuric acid, acetic acid, organic acid, etc
Alkaline	B	Activated carbon + non-woven fabric	Ammonia, nitrogen, etc
Organic	C	Activated carbon + non-woven fabric	Organic solvents, ozone, organic acids, carbon dioxide, etc

MATERIAL AND OPERATION CONDITIONS

Material	Media	Activated carbon particles
	Frame	ABS plastic / Galvanized / Stainless / Aluminum
	Separation	Hot melt adhesive / Cellular network
	Sealants	PU two-component polyurethane adhesive
	Sealing strips	Silica gel sponge
Condition Of Use	Maximum continuous use temperature (°C)	40
	The highest temperature at the moment of use (%RH)	70 (not exposed)

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TECHNICAL DATA

Size (mm) W x H x D	Filtration Area (m ²)	Air flow and initial resistance at different wind speeds			
		Air volume (m ³ /h)	Initial Prssure Drop (Pa)	Air volume (m ³ /h)	Initial Prssure Drop (Pa)
287 x 287 x 292/2V	4.58	750	75	900	90
490 x 287 x 292/3V	8.13	1300	75	1550	90
592 x 287 x 292/4V	9.91	1600	75	1900	90
287 x 490 x 292/ 2V	6.87	1100	75	1300	90
490 x 490 x 292/3V	12.20	2000	75	2400	90
592 x 490 x 292/4V	14.87	2400	75	2900	90
287 x 592 x 292/2V	9.16	1650	75	2000	90
490 x 592 x 292/3V	16.26	2650	75	3400	90
592 x 592 x 292/4V	19.83	3400	75	4100	90

Adsorption of odour : >95%

★ Data may change without notice. Other specifications and thickness are available on request.

Activated carbon selectively absorb gases rather than mechanically "filtering" impurities.

There are a large number of micropores on the surface of activated carbon, most of which are smaller than 500A(1A=10-10m).The total internal surface area of micropores per unit material is called "specific surface area",and the specific surface area can be as high as 700 ~ 2300m²/g.

When it comes to adsorption, the harmful gas in the air is called "adsorbent", and the activated carbon is called "adsorbent".The adsorbate adheres to the inner surface of the micropore due to the intermolecular attraction.If accompanied by chemical reaction, called chemical adsorption, otherwise for physical adsorption

When the adsorbent is adsorbed by the adsorbent, there will also be a part of the adsorbent from the adsorbent, called "desorption".the adsorption capacity will continue to weaken when increasing to a certain extent, activated carbon will scrap.

Sometimes, heating or steaming fumigation can make the adsorbent from the adsorbent to let the activated carbon relive.

