

Instructions for the BASIC BCFC Filter, Sizes 080–812

1. General

The BCFC filter section is available with a long, class F5 or F7 bag filter, or a shorter class G3 bag filter. The BCFC filter section is also available with carbon filter (see specification).

The BCFC consists of a number of cassettes of throwaway type. The dimensions of the cassettes are 592x592 mm.

All filter variants can be recycled.

Glass fibre is used as the filter medium in all the bag filters and the frame of the cassettes is as standard made of polypropylene plastic. The filter does not contain any metallic parts.

The BCFC filter section with active carbon medium is designed for improving the quality of indoor air by adsorption of gaseous, noxious or nasty-smelling substances. The active carbon in the filter is secured in an open structure by means of a new production technique, that offers maximum active surface for the adsorption of gas. It should be noted that one-hundred per cent elimination of odours cannot be guaranteed due to variations in impurities and mixtures of various chemical substances. The pleated filter medium is fitted in a V-shaped plastic frame and carefully sealed to prevent leakage. The filter has a very low pressure drop.

The cassettes run in guide rails made of aluminium-zinc coated sheet steel to environment class M3, and are easy to withdraw.

The filter retainers have sealing strips and expansion locking devices for effective sealing.

The casing of the filter section is equipped with measurement tappings for connection to a U-tube manometer.

1.1 Specification

The version, size, etc. are specified in the delivery documents.

2. Installation

Install the filter sections as indicated by the air flow direction arrow on the framework. Fit the filter cassettes with their filter-covered surface facing the direction of air flow.

Warning!

Do not open inspection doors on the pressurized side downstream of the fan while the fan is running. The door may otherwise fly open and cause personal injury.



3. Maintenance

3.1 Filter replacement

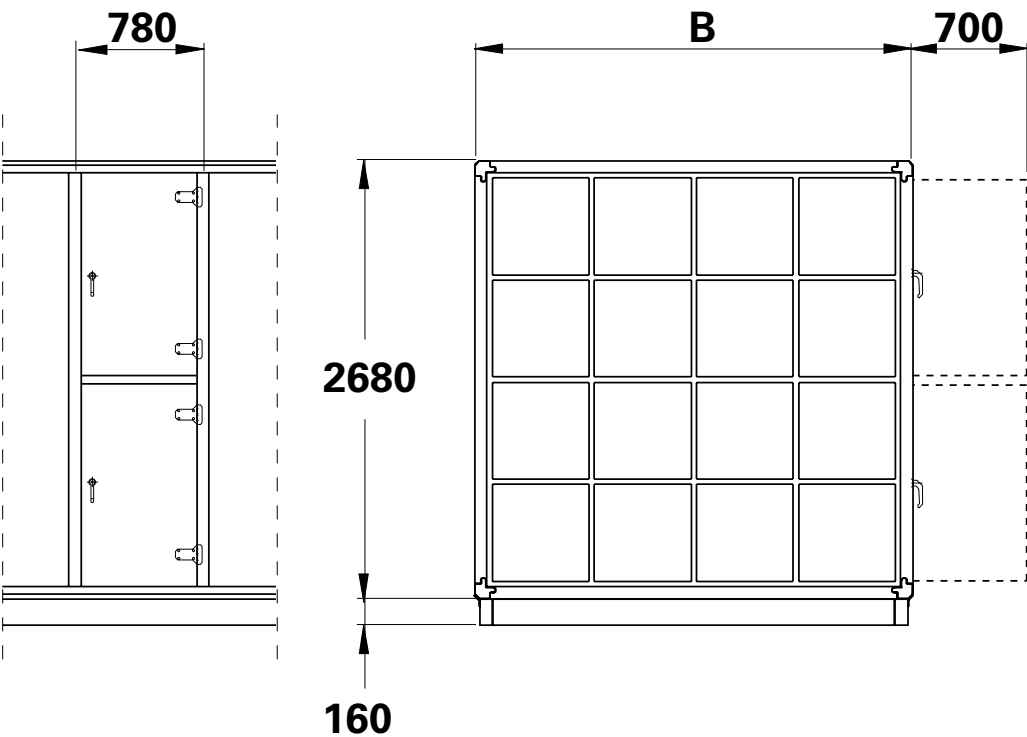
The filter bags must be changed when the pressure drop in the filter is at the rated final pressure drop. However, it is advisable that they be replaced at least every six months. The Swegon Air Handling Unit Selection Program PMWIN is an indispensable aid for calculating the final pressure drop of the filters.

4. Technical data

4.1 Quantity of filter cassettes for each size

Cassette size	080	100	120
592X 592	16	20	24

4.2 Dimensions



BCFC	B	Wgt.
080	2680	265
100	3390	310
120	3940	345

Base beams: Standard

4.3 Chemical substances

Some of the contaminants listed in the table are specific chemical compounds. Some represent classes of compounds and others are mixtures and of variable composition. Activated charcoal capacity for odours varies somewhat with the concentration in the air with humidity and temperatures. The numbers given represent typical or average conditions and might vary in specific instances. The capacity index has the following meaning:

4. High capacity for all materials in this category. One pound takes up about 20 % to 50 % of its own weight, (average 33.3%). This category includes most of the odour causing substances.
3. Satisfactory capacity for all items in this category. These constitute good applications but the capacity is not as high as for category 4. Adsorbs about 10 % to 25 % of its weight, (average 16.7 %).
2. Includes substances which are not highly adsorbed but which might be taken up sufficiently to given good service under the particular conditions of operation. These require individual checking.
1. Adsorption capacity is low for these materials. Activated carbon cannot be satisfactorily used under ordinary circumstances. *Impregnated carbon will greatly increase the adsorption ability.

Acetaldehyde*	2	Cigarette smoke odor	4	Floral scents	4	Methyl chloroform	3	Propionaldehyde*	3
Acetic acid	4	Citrus & other fruits	4	Fluorotrichloromethane	3	Methyl ether	3	Propionic acid	4
Acetic anhydride	4	Cleaning compounds	4	Food aromas	4	Methyl ethyl ketone	4	Propyl acetate	4
Acetone	3	Combustion odours	3	Formaldehyde*	2	Methyl formate	3	Propyl alcohol	4
Acetylene*	1	Cooking odours	4	Formic acid*	3	Methyl isobutyl ketone	4	Propyl chloride	4
Acrolein*	3	Corrosive gases	3	Fuel gases	3	Methyl mercaptan	4	Propyl ether	4
Acrylic acid	4	Cresote	4	Fumes	3	Methylcyclohexane	4	Propyl mercaptan	4
Acrylonitrile	4	Cresol	4	Gangrene	4	Methylcyclohexanol	4	Propylene*	2
Adhesives	4	Crotonaldehyde	4	Garlic	4	Methylcyclohexanone	4	Propane*	2
Air-Wick	4	Cyclohexane	4	Gasoline	4	Methylene chloride	4	Putrefying substances	3
Alcoholic beverages	4	Cyclohexanol	4	Heptane	4	Mildew	3	Putrescine	4
Amines*	2	Cyclohexanone	4	Heptylene	4	Mixed odours	4	Pyridine	4
Ammonia*	2	Cyclohexene	4	Hexane	3	Mold	3	Radiation products	2
Amyl acetate	4	Dead animal	4	Hexylen*	3	Monochlorobenzene	4	Rancid oils	4
Amyl alcohol	4	Decane	4	Hexyne*	3	Monofluorotri-		Resins	4
Amyl ether	4	Decaying substances	4	Hospital odours	4	chloromethane	4	Reodorants	4
Animal odor	3	Deodorants	4	Household smells	4	Moth balls	4	Ripening fruits	4
Anesthetics	3	Detergents	4	Hydrogen	1	Naptha (coal tar)	4	Rubber	4
Aniline	4	Dibromethane	4	Hydrogen bromide*	2	Naptha (petroleum)	4	Sauerkraut	4
Antiseptics	4	Dichlorobenzene	4	Hydrogen chloride*	2	Naphthalene	4	Sewer odors	4
Asphalt fumes	4	Dichlorodifluoromethane	4	Hydrogen cyanide*	2	Nicotine	4	Skatole	4
Automobile exhaust	3	Dichloroethane	4	Hydrogen fluoride*	2	Nitric acid*	3	Slaughtering odours	3
Bathroom smells	4	Dichloroethylene	4	Hydrogen iodide*	3	Nitro benzenes	4	Smog	4
Bleaching solutions*	3	Dichloroethyl ether	4	Hydrogen selenide*	2	Nitroethane	4	Soaps	4
Body odours	4	Dichloromonofluoromethane	3	Hydrogen sulfide*	3	Nitrogen dioxide*	2	Smoke	4
Borane	3	Dichloronitroethane	4	Incense	4	Nitroglycerine	4	Solvents	3
Bromine	4	Dichloropropane	4	Indole	4	Nitromethane	4	Sour milk	4
Burned flesh	4	Dichlorotetrafluoroethane	4	Industrial wastes	3	Nitropropane	4	Spitted beverages	4
Burned food	4	Diesel fumes	4	Iodine	4	Nonane	4	Spoiled food	4
Burning fat	4	Diethylamine*	3	Iodoform	4	Noxious gases	3	Stale odours	4
Butadiene	3	Diethyl ketone	4	Irritants	4	Octalene	4	Stoddard solvent	4
Butane	2	Dimethylaniline	4	Isophorone	4	Octane	4	Stiffness	4
Butonone	4	Dimethylsulfate	4	Isoprene*	3	Odorants	4	Styrene monomer	4
Butyl acetate	4	Dioxane	4	Isopropyl acetate	4	Onions	4	Sulfur dioxide*	2
Butyl alcohol	4	Dipropylketone	4	Isopropyl alcohol	4	Organic chemicals	4	Sulfur trioxide*	3
Butyl cellosolve	4	Disinfectants	4	Isopropyl ether	4	Ozone	4	Sulfuric acid	4
Butyl chloride	4	Embalming odours	4	Kerosene	4	Packing house odours	4	Tar	4
Butyl ether	4	Ethane	1	Kitchen odours	4	Paint and		Tarnishing gases*	3
Butylene*	2	Ether	3	Lactic acid	4	redecorating odours	4	Tetrachloroethane	4
Butyne*	2	Ethyl acetate	4	Lingering odours	4	Palmitic acid	4	Tetrachloroethylene	4
Butyraldehyde*	3	Ethyl acrylate	4	Liquid fuels	4	Paper deteriorations	4	Theatrical makeup odours	4
Butyric acid	4	Ethyl alcohol	4	Liquor odors	4	Paradichlorobenzene	4	Tobacco smoke odor	4
Camphor	4	Ethyl amine*	3	Lubricating oils and		Paste and glue	4	Toilet odours	4
Cancer odor	4	Ethyl benzene	4	greases	4	Pentane	3	Toluene	4
Caprylic acid	4	Ethyl bromide	4	Lysol	4	Pentanone	4	Toluidine	4
Carbolic acid	4	Ethyl chloride	3	Making agents	4	Pentylene*	3	Trichlorethylene	4
Carbon disulfide	4	Ethyl ether	3	Medicinal odours	4	Pentyne*	3	Trichloroethane	4
Carbon dioxide*	1	Ethyl formate	3	Melons	4	Perchloroethylene	4	Turpentine	4
Carbon monoxide	1	Ethyl mercaptan	3	Menthol	4	Perfumes and cosmetics	4	Urea	4
Carbon tetrachloride	4	Ethyl silicate	4	Mercaptans	4	Perspiration	4	Uric acid	4
Cellosolve	4	Ethylene*	1	Mesityl oxide	4	Persistent odours	4	Valeric acid	4
Cellosolve acetate	4	Ethylene chlorhydrin	4	Methane	1	Pet odours	4	Valeric aldehyde	4
Charred materials	4	Ethylene dichloride	4	Methyl acetate	3	Phenol	4	Varnish fumes	4
Cheese	4	Ethylene oxide	3	Methyl acylate	4	Phosgene	3	Vinegar	4
Chlorine	3	Essential oils	4	Methyl alcohol	3	Pitch	4	Vinyl chloride	3
Chlorobenzene	4	Eucalyptole	4	Methyl bromide	3	Plastics	4	Waste products	3
Chlorobutadiene	4	Exhaust fumes	3	Methyl buty ketone	4	Pollen	3	Wood alcohol	3
Chloroform	4	Fertilizer	4	Methyl cellosolve	4	Popcorn and candy	4	Xylene	4
Chloronitropropane	4	Film processing odours	3	Methyl cellosolve acetate	4	Poultry odours	4		
Chloropicrin	4	Fish odours	4	Methyl chloride	3	Propane	2		