

Compact carbon filters of type CCF

Filters of type CCF are used for cleaning of supply, extract and recirculation air from gaseous contaminants as well as from odours in systems of general ventilation and air-conditioning in rooms of various purposes (administrative, households, medical, etc.)

Use of these filters allows to clear air up to sanitary and ecological norms, and also to raise the quality of supply air in rooms of higher comfort.

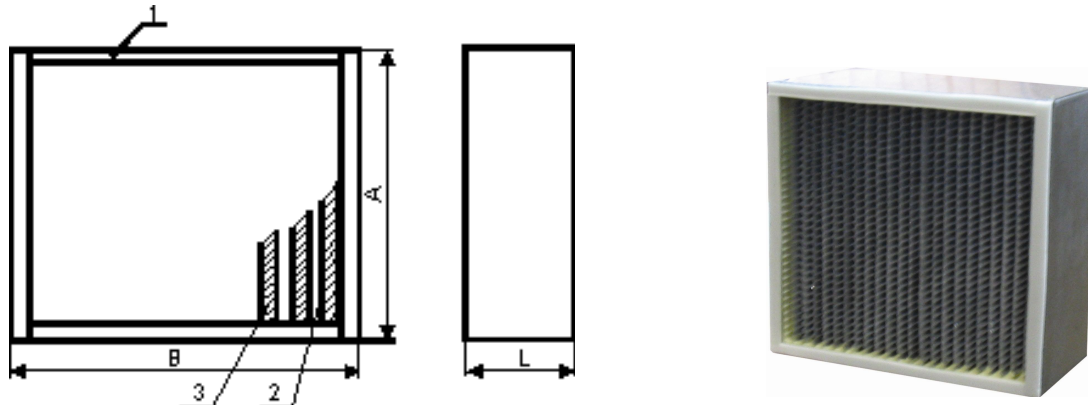


Fig. 1 Scheme of filter CCF

At cleaning of large volume air these filters can be placed in filtering chamber of folded filter of type FCPF (look the catalogue of company “Air Filters F”).

CHARACTERISTICS

Table 1

Characteristics	Index of filter CCF		
	302	304	301
Air flow, m ³ /h, not greater	3500	2900	1700
Initial pressure drop, Pa	130	130	130
Filtration area, m ² , not less	12	9	6,0
Activated carbon weight, kg	4,8	3,6	2,4
Recommended operation parameters, temperature, °C, not greater, humidity, %, not greater	30 60	30 60	30 60
Sorption capacity, g			
- for organic substances	150÷1000	110÷750	75÷500
- for inorganic substances (SO ₂)	110	80	50
Dimensions, mm:			
height	592	592	592
width	592	490	287
depth	292	292	292
Filter weight, kg	12	9,5	7

GENERAL DESIGN

The filter consists of body 1 (galvanized steel) inside which filtering material is stacked in folds. To prevent sticking of pleats of filter medium they are interlaid with goffered separators from aluminium foil 3. The filtering package including medium with interlaid separators is sealed in the body by lining with special tightening material or sealing on entire perimeter with special sealant.

The filtering medium consists of polyester fibres among which fine granules of the activated carbon are introduced. Polyester fibres in the given structure provide a framework and prevent carrying out of fine granules of the activated carbon from a filtering layer.

RECOMMENDED PRACTICES

As it was specified above, filters CCF are used for removal from cleared air of gaseous and fume contaminants, which are absorbed by developed fine pored structure of the activated carbon.

For normal operation of filters CCF, it is necessary to install before them filters of class F7 for clearing air from dust and aerosol pollution (for example filters PF, SPF or CMPF), which protect filtering layer of filters CCF from contamination by fine aerosols lowering sorption capacity of activated carbon.

During entire period of operation, pressure drop of filters CCF remains practically constant if aforementioned recommendations are followed.

