

# Carbon filter of type CF

**Section of carbon filter** is used for cleaning air of gaseous, vaporous (molecular, organic, and inorganic) pollutants, as well as of odors in extract ventilation systems.



Fig. 1 General view of section of type CF

## CHARACTERISTICS

Parameters	Value					
	Code of CF					
	0/10	0/20	0/30	0/40	0/60	0/90
Nominal air flow, m <sup>3</sup> /h	2500	5000	7500	10000	15000	22500
Initial pressure drop, Pa	170 ±10					
Recommended operational conditions, temperature, not greater °C	60					
Humidity, not greater %	70					
Dimensions, mm						
height	605	605	605	1166	1656	1656
width	582	1076	1570	1112	1112	1606
depth	766	766	766	808	808	808
Weight, kg	87	134	199	288	398	554

## GENERAL DESIGN

Section of carbon filter consists of metal body 1 (Fig.1) with flange 2 at inlet and outlet. Flange apertures are for connecting CF with corresponding flanges of ventilation system with bolts through sealing rubber.

Section has door 3, for access to filter cells 5 inserted into body of CF and sealed in body after door is closed. Filter elements are filled with granulated activated carbon. The sealing of door with body is carried out by pressing door against the body with clips. The sealing of filtering elements 5 in body 1 occurs at the same time.

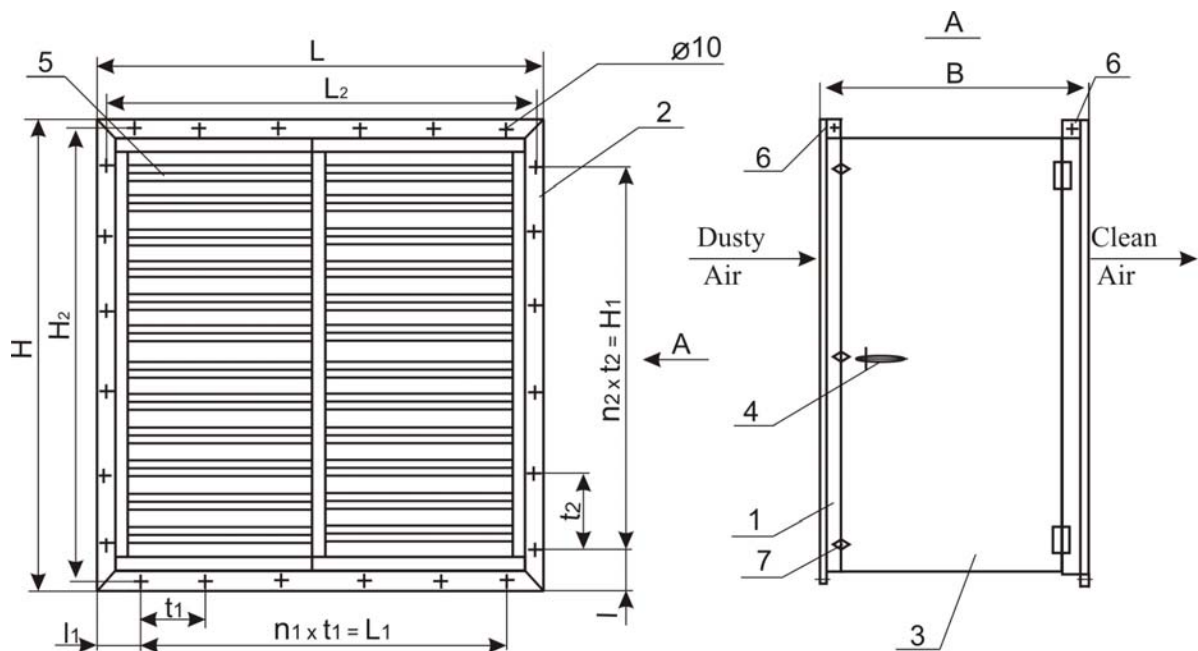


Fig.2 Scheme of section of carbon filter.

1 – body; 2 – flange; 3 – door; 4 – handle; 5 – filtering cell; 6 – hook for lifting of a cargo; 7 – clip

### Overall and connecting dimensions of sections CF, mm

Code of CУФ	L	L <sub>1</sub>	L <sub>2</sub>	H	H <sub>1</sub>	H <sub>2</sub>	B	t <sub>1</sub>	t <sub>2</sub>	l	l <sub>1</sub>	n	n <sub>1</sub>	n <sub>2</sub>
0/10	582	500	544	605	480	562	766	250	160	62,5	41	28	2	3
0/20	1076	1000	1047	605	480	562	766	250	160	62,5	38	36	4	3
0/30	1570	1000	1550	605	480	562	766	250	160	62,5	35	44	6	3
0/40	1112	1000	1072	1166	1035	1108	808	200	207	65,5	56	48	5	5
0/60	1112	1000	1072	1656	1540	1626	808	200	220	58	56	56	5	7
0/90	1606	1505	1576	1656	1540	1626	808	215	220	58	50,5	64	7	7

### MARKING

CF 0 / 10R - C- carbon;  
 F- filter;  
 0- dimension type of section;  
 10- the number of filtering cells;  
 R - right version (the door is on the right on a course of the air flow;  
 L - left version (the door is on the left on a course of the air flow).

### RECOMMENDED PRACTICES

As was said above, section CF is used for purification of air of gaseous and vaporous contaminants, which are absorbed by finely pored structure of activated carbon. For normal operation of CF, it is necessary to provide before it pre-cleaning from dust and finely dispersed aerosols to avoid contamination of activated carbon granules, which lowers sorption capacity of CF and, as a consequence, service life.

The filters for pre – cleaning must be minimum classes F7 (example section FCPF or FCCF).

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