

Filtering chamber of pocket filters of type FCPF

The filtering chamber of pocket filter of type FCPF is used for installation and hermetic sealing of pocket filters of type PF in systems of supply and extract ventilation and in air conditioning of household, administrative and industrial buildings. The filtering chamber is placed in the structure of a ventilating system and is its part. In the filtering chamber there are pocket filters of type PF with the frame size 500x500 mm or 592x592 mm of class from G3 to F9 and length of pockets up to 600 mm. FCPF filtering chamber of 2-nd type for filters with sizes of frame 592x592 compact filters of type CMPF can be installed.

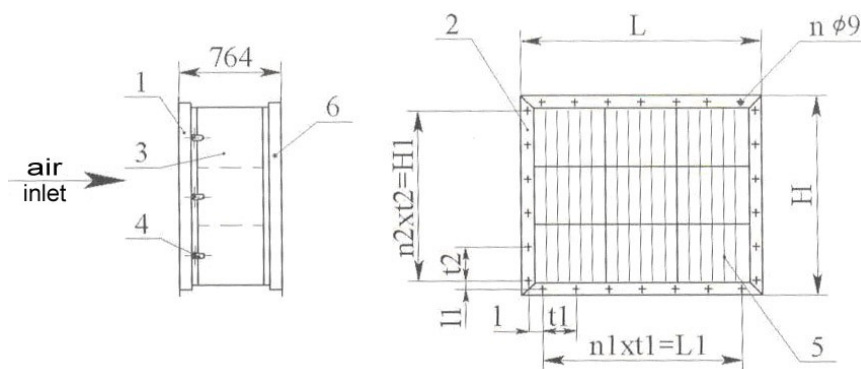


Fig.1 Scheme of the filtering chamber of pocket filters
1-body; 2- flange; 3- door; 4-clip;
5- pocket filter PF or CMPF; 6-connecting pipe

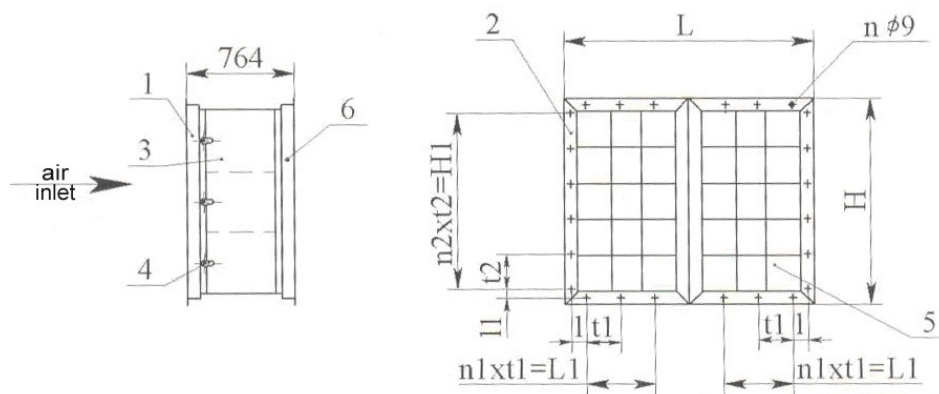


Fig.2 Scheme of the filtering chamber of a pocket filters FCPF 2/6x5
1-body; 2- flange; 3- door; 4-clip;
5- pocket filter PF or CMPF; 6-connecting pipe

GENERAL DESIGN

The filtering chamber of pocket filter consists of a metal body 1 (fig.) with flanges 2 at inlet and outlet for connecting to flanges of ventilating systems, by screwing through sealing rubber. On one of the sides the body of FCPF has a door 3 which is sealed against the body, due to a special seal placed on it, and clips 4.

Inside the body there are tiers of pocket filters, which are directed into the body by guides, placed above and below each tier. The sealing of pocket filter frames in the body guides is carried out by their pressing against the rubber seal pasted on a side of the guides. The sealing of filters PF, CMPF to each other within the tier and to the back wall of FCPF is

carried out by rubber seals, pasted on vertical faces of PF, CMPF frames. In an index of filters PF for equipment of FCPF the index "G"(for example PF7682G) designating presence of the specified seal, is added. The section has two connecting pipes 6 for attaching devices measuring pressure drop of filters.

CHARACTERISTICS

Table 1

Parameters	Value Code FCPF																			
	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2
	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	1	2	3	2	2	3	3	1	1	1	2	2	2	3	3	3	3	3	3	6
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	1	1	1	2	3	3	4	1	2	3	1	2	3	1	2	3	4	5	5	5
Nominal air flow for filter PF, m ³ /h		5	7	1																1
		0	5	0	1	2	3			1		1	2	1	2	3	4	5		0
		2	0	0	0	5	2	0	3	7	0	7	4	1	0	1	1	2	2	5
		5	0	0	0	0	5	0	5	0	6	0	0	5	0	5	0	5	0	0
		0	÷	÷	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	5	8	÷	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		÷	7	5	1	÷	÷	÷	÷	÷	÷	ч	ч	ч	ч	ч	ч	-	-	-
		2	0	5	1	1	2	3	4	8	1	8	1	2	1	2	3	4	6	1
		8	0	0	4	7	5	4	0	0	2	0	6	4	2	4	6	8	0	2
		5			0	1	6	2	0	0	0	0	0	0	0	0	0	0	0	0
	0			0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	
				0	0	0	0													0
Nominal air flow for filter CMPF for F6; F7; F8; F9		-	-	-				4	8	1										1
	-				-	-	-	2	5	2	8	7	5	2	5	8	1	3	7	2
								5	0	5	5	0	0	5	7	5	2	0	7	5
								0	0	0	0	0	0	0	0	0	0	5	5	0
																		0	0	0
Initial pressure drop at nominal air flow for filter PF for classes, Pa	G3	20 - 40																		
	G4	40 - 60																		
	F5	60 - 70																		
	F6	80 - 90																		
	F7	90 - 110																		
	F8/9	120 - 140																		
Initial pressure drop of filters CMPF for classes	F6	100																		
	F7	110																		
	F8	130																		
	F9	160																		
Number of filters PF; CMPF	1	2	3	4	6	9	12	1	2	3	2	4	6	3	6	9	12	15	30	
Recommended final pressure drop for classes	250																			
	G3чG4, Pa																			
F5чF9, Pa	450																			



DIMENSIONAL AND CONNECTING SIZES OF FILTERING CHAMBERS FCPF, mm

Table 2

Code FCPF	L	H	L ₁	H ₁	t ₁	t ₂	l	l ₁	n	n ₁	n ₂	Weight without the filters, kg
0/1x1	572	590	500	480	250	160	36	55	28	2	3	27,7
0/2x1	1075	590	1000	480	250	160	36	55	36	4	3	38,1
0/3x1	1578	590	1500	480	250	160	36	55	44	6	3	50,7
0/2x2	1102	1138	1000	1035	200	207	51	52	48	5	5	117
0/2x3	1102	1656	1000	1540	200	220	51	58	56	5	7	153
0/3x3	1606	1656	1505	1540	215	220	51	58	64	7	7	174
0/3x4	1606	2174	1505	2070	215	230	51	52	72	7	9	212
2/1x1	660	697	600	570	200	190	30	63,5	32	3	3	32
2/1x2	691	1322	600	1200	200	200	46	61	44	3	6	79
2/1x3	691	1932	600	1850	200	185	46	41	60	3	10	110
2/2x1	1285	710	1200	640	200	160	43	35	48	6	4	70
2/2x2	1285	1322	1200	1200	200	200	43	61	56	6	6	108
2/2x3	1285	1932	1200	1850	200	185	43	41	72	6	10	153
2/3x1	1862	710	1800	640	200	160	31	35	60	9	4	97
2/3x2	1862	1322	1800	1200	200	200	31	61	68	9	6	135
2/3x3	1862	1932	1800	1850	200	185	31	41	84	9	10	180
2/3x4	1890	2574	1800	2464	180	176	45	55	104	10	14	260
2/3x5	1890	3184	1800	3096	180	172	45	44	120	10	18	308
2/6x5	3784	3184	1800	3096	180	172	45	44	164	10	18	628

MARKING

Examples of marking of filtering chamber FCPF:

FCPF 0/3x1R(L)

0 - dimension type of a filtering chamber;

2 - dimension type of a filtering chamber;

3x1 - the number of filters (3 by width, 1 by height);

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).

NB: Filters are not included in the standard package of filtering chamber FCPF and are ordered separately with specifying of type, class, quantity of pockets and presence of condensation on a lateral side of a framework of filter of type PF or CMPF (index "G").

MAINTENANCE

When filters are in operation it is necessary to control their pressure drop read by a manometer attached to connecting pipes 6 of a filtering chamber FCPF.

Upon reaching the reading of a pressure difference specified in the project, or based on a pressure in a ventilating system, it is necessary to replace filters.

Filtering chamber FCPF 2/6x5 has 4 connecting pipes by 2 on each side for attaching devices measuring resistance of filters in each half of a filtering chamber (FCPF 2/3x5). In practice, it is enough to control only one side. At regular intervals distributing inlet of air, polluting of filters (increase of pressure drop) occurs in regular intervals.

Upon reaching pressure difference specified in the project, or based on available pressure in ventilating system, it is necessary to replace filters.

