Cartridge filtering elements of type CFE

Cartridge filtering elements of type CFE are used for equipping cartridge self-cleaning filters, which are to be use in different branches of industry for cleaning of the aspiration air from different types of dusts.

The filtering elements might also to be used in the systems of air prepared for gas turbine and compressed air installations.

The filtering elements of these filters work in the modes of regeneration (self-cleaning), which is realized through the pulsed jet by compressed air.

CFE can be made of various filter media on the base of cellulose, synthetic fibers (polyester, polypropylene) and mix of cellulose and synthetic fibers as well.

Filter materials obtain high efficiency of cleaning and might be chosen according to requirements of the consumers.

The efficiency of standard CFE filters for most types of dusts is normally not less than 99.9%. For capturing of finely dispersed aerosols (plasma, laser sharpening of metals, etc) the high efficient synthetic medium with the efficiency of cleaning not less than 99.9% according to particles having size of 0,3-0,5 μkm can be used.

CHARACTERISTICS

№	Parameter	Marking				
		CFE-565	CFE-465	CFE-365	CFE-363	CFE-163
1.	External diameter (D), mm	510	420	325	325	155
2.	Length (L), mm *	600	600	600	600	600
3.	Depth of pleat (h), mm	55	55	55	32 (30)	32 (30)
4.	Area of filtering surface, m2	20,0	14,5	10,0	6,0	2,7
5.	Nominal air flow, m^3/h	1250	1000	600	350	160
6.	Range of air flow,m^3/h	600-1900	500-1500	300-900	170-550	80-240
7.	Pressure drop, Pa: nominal – minimum – maximum –	 85 50 140	 90 45 180	 96 50 360	 90 46 370	 120 56 450
8.	Final (recommended) resistance, Pa	1000	1000	1000	1000	1000

* - the length of cartridges may differ but not more than 1200 mm

NB: Other dimension types of filtering elements are produced by request.

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GENERAL DESIGN

Filtering element (refer to general view) is performed in the "cartridge" version and is represented as a hollow cylinder, the surface of the said is formed by the pleat filter medium (minipleated filtering package) 3.The metallic finishing disk 2 is located on one side of filtering element and there is a finishing ring 5 with rubber sealing 6 on the other side. The hermetic sealing of the filter media with the disk and ring is carried out by means of special sealant. Bandage belts 4 are used for tightening of pleats between them. Inside the body of the filtering element there is a metallic supporting mesh 1 attached to add rigidness to the structure.

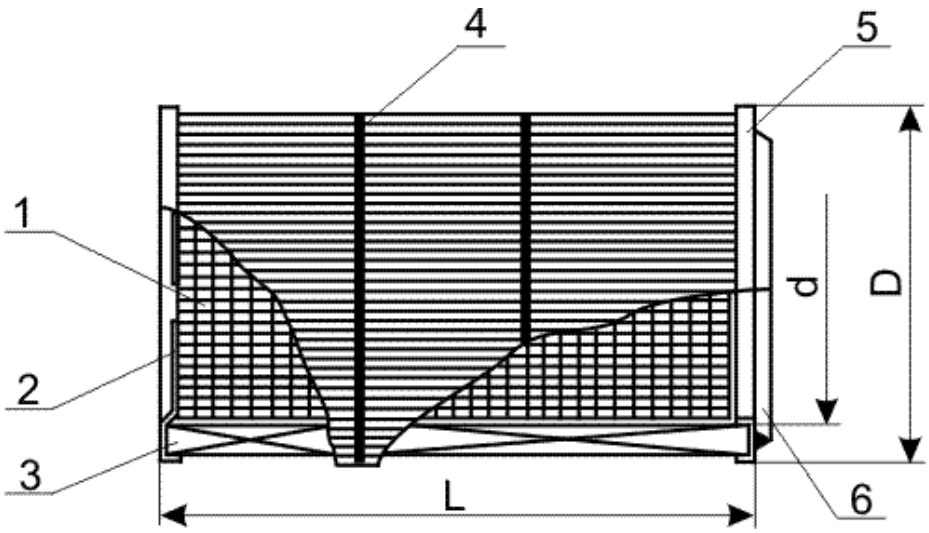

Fig. 1 Scheme of cartridge filtering element.
1 - supporting mesh; 2- metallic finishing disk;
3 - minipleated filtering package;
4 – bandage belt; 5 - finishing ring; 6 - rubber sealing