

Airdistributing modules of type ADM for HEPA filters

Airdistributing modules of type ADM (hereafter “the modules”) are used for accommodation of HEPA filters of type HEF of H10-H14 classes.

Modules are installed in a structure of a clean room: on walls or a ceiling, where they are sealed then.

Modules can be installed in clean rooms of medical establishments, in pharmaceutical, electronic, food, etc. enterprises.



Fig. 1 Airdistributing module of type ADM

GENERAL DESIGN

The module (fig. 2, 3, 4) consists of the body 1 made of steel having powder paint covering or of stainless steel. Inside the body the module has a base surface 2 to which filter HEF 3 is drawn in. Hermetic sealing is carried out due to the rubber seal pasted on the perimeter of filter HEF. The sealing of filter HEF with pressing surface 2 is carried out through installation frame by screws, mounted on it. The airdistributing grille 4 that carries out protective, decorative and airdistributing functions is installed at the outlet of the air. Airdistributing grille can be made of punched sheet or special airdistributing grille with airdistributing into 4 sides (fig. 5, 6). The inlet socket can be located in the body of the module – from above – vertically, from the – horizontally and from the side through a slit input to downsize the height of the module. There are clamps 9 with apertures for the purpose of mounting the module onto a ceiling. The ADM body of the module has two connecting pipes 8 for attaching manometers with the purpose of checking of filter pressure drop while operation process. The module has also two connecting pipes inside it for checking the hermetic quality of filter installation in the module.

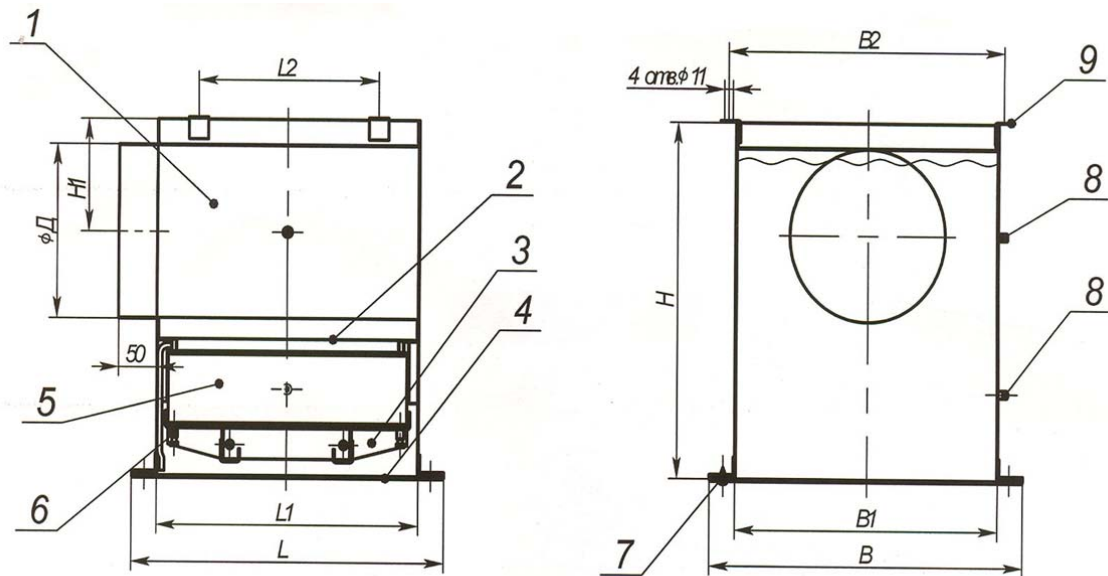


Fig.2 Scheme of airdistributing module of type ADM -H
1-body; 2-base surface; 3 installation frame; 4-airdistributing grille; 5-filter of type HEF;
6-screws; 7-screws for installation of grille; 8 - control pipes; 9-clamp

THE DIMENSIONAL AND CONNECTING SIZES OF MODULES OF TYPE ADM-H, mm

Table 1

Dimension type	Nominal air flow, m ³ /h	Filter dimensions	LxB	L ₁ xB ₁	L ₂	B ₂	Д	H	H ₁
ADM-H 005	150	305x305x78	395x395	335x335	230	360	200	415	133
ADM-H 002	450	530x530x78	620x620	560x560	455	585	250	465	158
ADM-H 05	300	610x305x78	700x395	640x335	535	360	250	465	158
ADM-H 06	600	610x610x78	700x700	640x640	535	665	250	465	158
ADM-H 105	150	305x305x150	395x395	335x335	230	360	200	487	133
ADM-H 102	450	530x530x150	620x620	560x560	455	585	250	537	158
ADM-H 15	300	610x305x150	700x395	640x335	535	360	250	537	158
ADM-H 16	600	610x610x150	700x700	640x640	535	665	250	537	158
ADM-H 305	500	305x305x300	395x395	335x335	230	360	250	687	158
ADM-H 302	1500	530x530x300	620x620	560x560	455	585	250	687	158
ADM-H 35	1000	610x305x300	700x395	640x335	535	360	250	687	158
ADM-H 36	2000	610x610x300	700x700	640x640	535	665	250	687	158
ADM-H 003	1200	1220x6100x78	700x1310	1250x640	1145	665	313	528	187
ADM-H 004	900	1130x530x78	1220x620	1160x560	1055	585	313	528	187

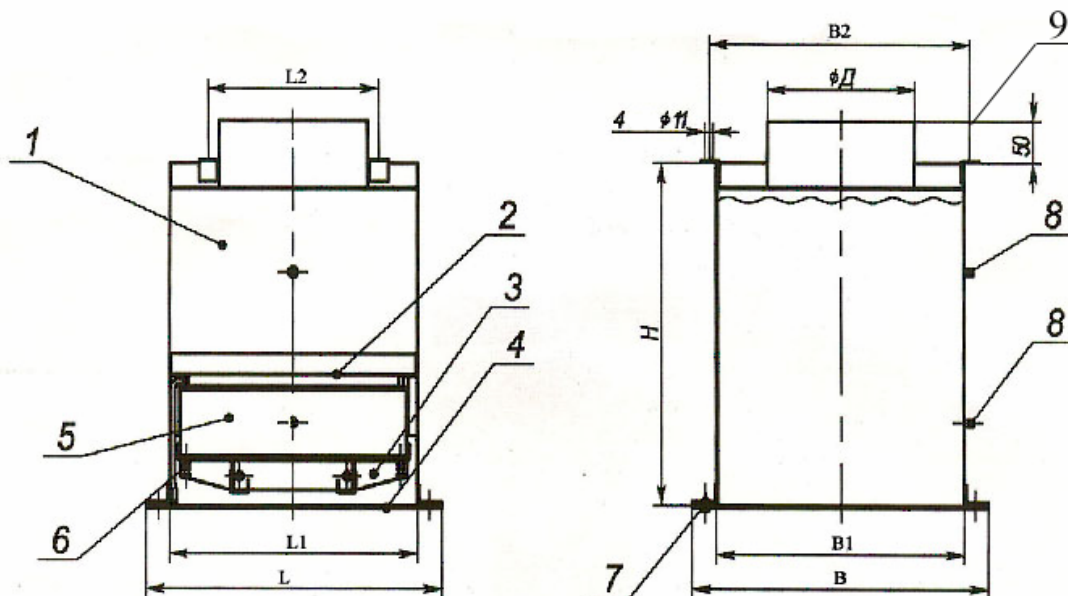


Fig.3 Scheme of airdistributing module of type ADM-V
1-body; 2-base surface; 3 installation frame; 4-airdistributing grille; 5-filter of type HEF;
6-screws; 7-control pipe; 8-pipe; 9-clamp

THE DIMENSIONAL AND CONNECTING SIZES OF MODULES OF TYPE ADM-V, mm

Table 2

Dimension type	Nominal air flow, m ³ /h	Filter dimensions	LxB	L ₁ xB ₁	L ₂	B ₂	Д	H
ADM-V 005	150	305x305x78	395x395	335x335	230	360	200	290
ADM-V 002	450	530x530x78	620x620	560x560	455	585	250	290
ADM-V 05	300	610x305x 78	700x395	640x335	535	360	200	290
ADM-V 06	600	610x610x78	700x700	640x640	535	665	250	290
ADM-V 105	150	305x305x150	395x395	335x335	230	360	200	362
ADM-V 102	450	530x530x150	620x620	560x560	455	585	250	362
ADM-V 15	300	610x305x150	700x395	640x335	535	360	200	362
ADM-V 16	600	610x610x150	700x700	640x640	535	665	250	362
ADM-V 305	500	305x305x300	395x395	335x335	230	360	250	512
ADM-V 302	1500	530x530x300	620x620	560x560	455	585	250	512
ADM-V 35	1000	610x305x300	700x395	700x335	535	360	250	512
ADM-V 36	2000	610x610x300	700x700	640x640	535	665	250	512
ADM-V 003	1200	1220x610x78	1310x700	1250x640	1145	665	313	290
ADM-V 004	900	1130x530x78	1220x620	1160x560	1055	585	313	290

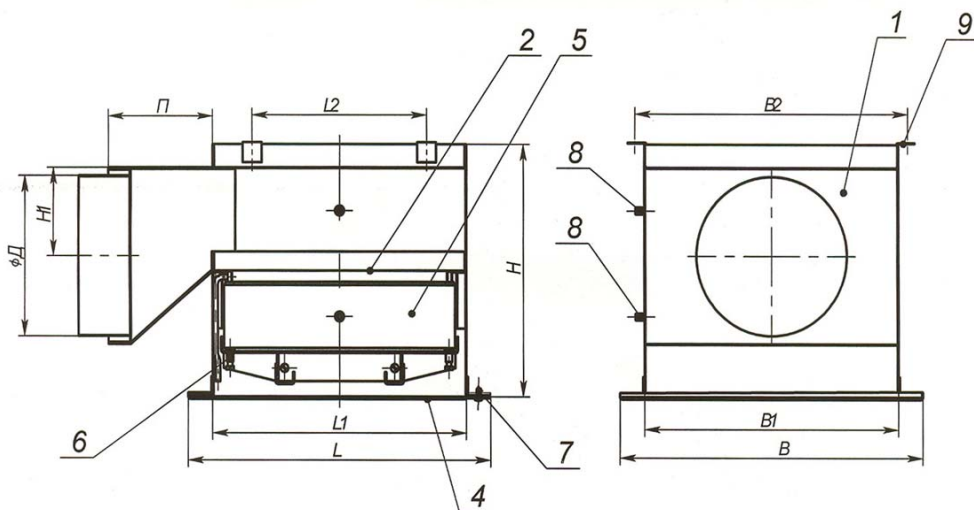


Fig.4 Scheme of airdistributing module of type ADM-HS
1-body; 2-base surface; 3 installation frame; 4-airdistributing grille; 5-filter of type HEF;
6-screws; 7-control pipe; 8-pipe; 9-clamp

THE DIMENSIONAL AND CONNECTING SIZES OF MODULES OF TYPE ADM-HS, mm

Table 3

Dimension type	Nominal air flow, m ³ /h	Filter dimensions	LxB	L ₁ xB ₁	L ₂	B ₂	Д	H	H ₁	Π
ADM-HS 005	150	305x305x78	395x395	335x335	230	360	200	315	110	140
ADM-HS 002	450	530x530x78	620x620	560x560	455	585	200	315	110	140
ADM-HS 05	300	610x305x 78	700x395	640x335	535	360	200	315	110	140
ADM-HS 06	600	610x610x78	700x700	640x640	535	665	250	315	135	140
ADM-HS 105	150	305x305x150	395x395	335x335	230	360	200	386	110	140
ADM-HS 102	450	530x530x150	620x620	560x560	455	585	200	386	110	140
ADM-HS 15	300	610x305x 150	700x395	640x335	535	360	200	386	110	140
ADM-HS 16	600	610x610x150	700x700	640x640	535	665	250	386	135	140
ADM-HS 305	500	305x305x300	395x395	335x335	230	360	200	545	110	140
ADM-HS 302	1500	530x530x300	620x620	560x560	455	585	313	545	165	140
ADM-HS 35	1000	610x305x 300	700x395	640x335	535	360	200	545	110	140
ADM-HS 36	2000	610x610x300	700x700	640x640	535	665	250	545	110	140
ADM-HS 003	1200	1220x610x 78	1310x700	1250x640	1145	665	200	315	110	140
ADM-HS 004	900	1130x530x 78	1220x620	1160x560	1055	585	200	315	110	140

MARKING

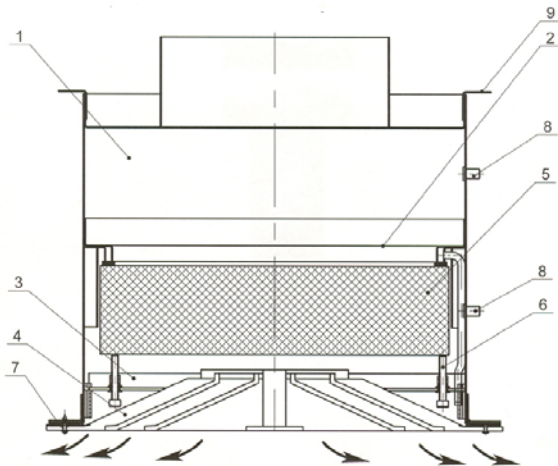
Example of marking: ADM-HS-006 S9

- H - a position of an feed socket
 - 006- dimension-type of module conforming to the marking of filters HEF (see tables 1, 2, 3)
 - SS- stainless steel sheet
- H- horizontal (side inlet);
 - V - vertical (from above inlet);
 - HS- horizontal with slit inlet.
 - “if there is no notation” – steel with powder painting;
 - SS- stainless steel sheet;

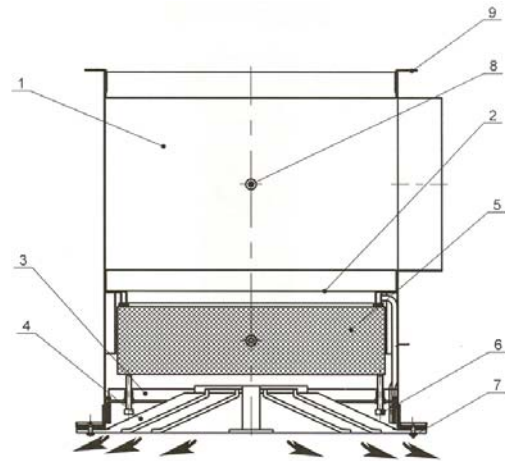


Fig. 5 Airdistributing grille for distributing of air into four sides

Scheme of airdistributing module of type ADM-V



Scheme of airdistributing module of type ADM-H



Scheme of airdistributing module of type ADM-HS

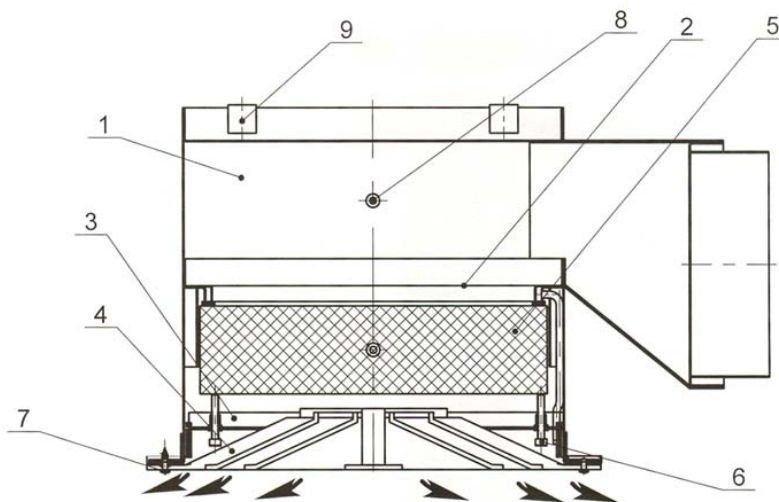


Fig. 6 Scheme of module of type ADM with airdistributing grille for distributing of air into four sides.
 1 – body; 2 – basic surface; 3- clamping rods; 4 – airdistributing grille with distributing of air into four sides;
 5 -filter of type HEF; 6 – adjusting screws; 7 – screws for installation of grille; 8 - pipe; 9- clamp