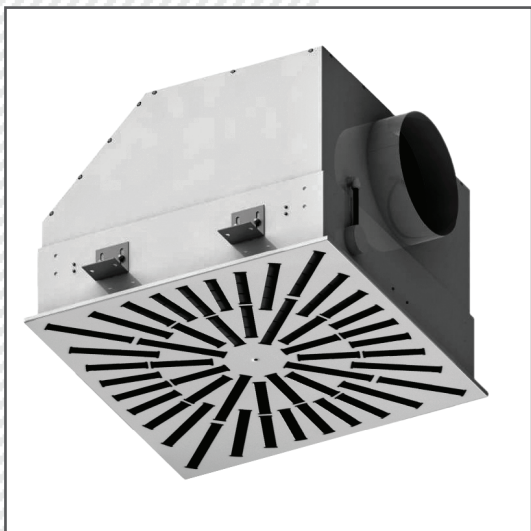




Characteristics

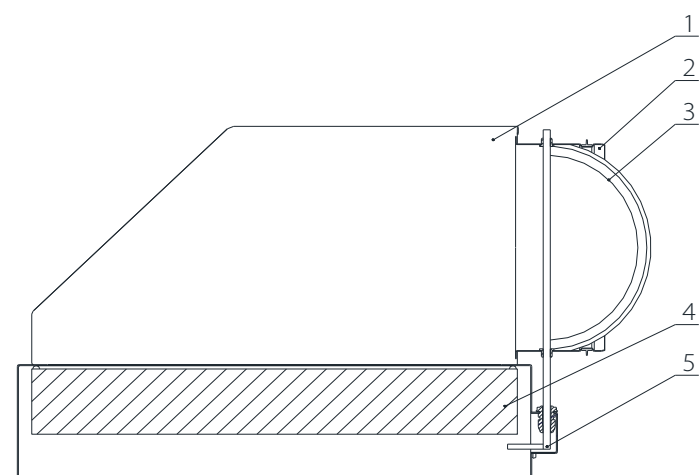
Ceiling HEPA units are used as the last stage of filtration for ventilation of rooms with higher hygiene requirements. They are suitable for filtration of aerosols, dust, viruses and bacteria. Use in medicine, pharmacy, biology and all affected technical fields.

Material

Filter housing, diffuser and spigot connection housing made of cold rolled steel. Holding brackets made of stainless steel. Filter holders made of galvanized steel.

Accessories

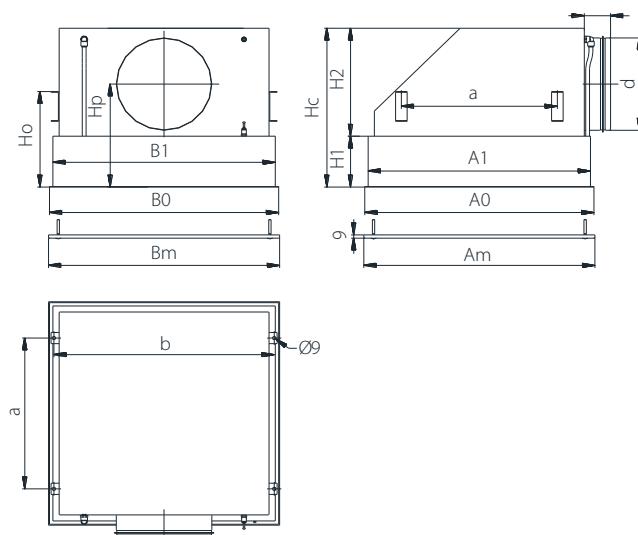
Cassette prefilter according to EN 779.
Pressure drop measurement devices on the filter.
"UPSTREAM" connection for scan test according to EN 14644-3.
Airtight/throttle hatch and pressure drop meter (analog, digital) with additional functions such as alarm indicators, output signals, etc.



1. Pressure chamber
2. Connection
3. Airtight / damper hatch
4. HEPA filter
5. Handle

The FAD unit can be equipped with an airtight/dampening hatch with manual control or with an NC actuator (Belimo actuators). The manually controlled damper, when equipped with a standard round side connection, can be controlled from the clean side, which means easier use when changing the HEPA filter (see picture).

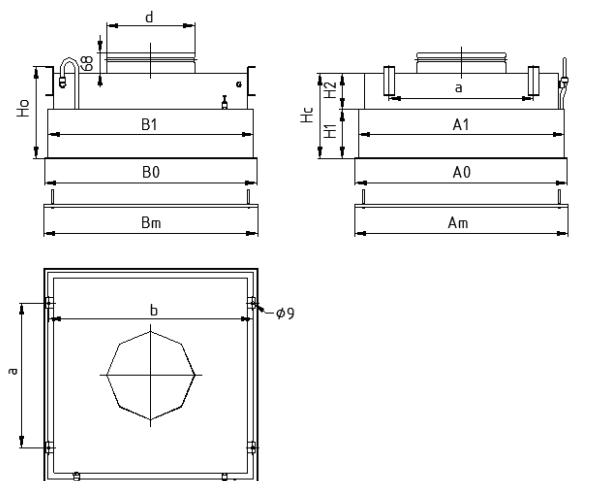
Dimensions: FAD-H (side round connector)



HEPA filter sizes

A	x	B	x	H	d	A0	A1	Am	a	B0	B1	Bm	b	H1	H2	Hc	Ho	Hp	Masa
305	x	305	x	78	158	355	337	360	165	355	337	360	332	137	200	337	257	232	6 kg
305	x	610	x	78	198	355	337	360	165	660	642	665	637	137	240	377	257	252	10 kg
457	x	457	x	78	198	507	489	512	317	507	489	512	484	137	240	377	257	252	10 kg
545	x	545	x	78	248	595	577	600	405	595	577	600	572	137	290	427	257	277	13 kg
610	x	610	x	78	248	660	642	665	470	660	642	665	637	137	290	427	257	277	14 kg
610	x	915	x	78	313	660	642	665	470	965	947	970	942	137	355	492	257	309	20 kg
610	x	1220	x	78	353	660	642	665	470	1270	1252	1275	1247	137	395	532	257	329	26 kg

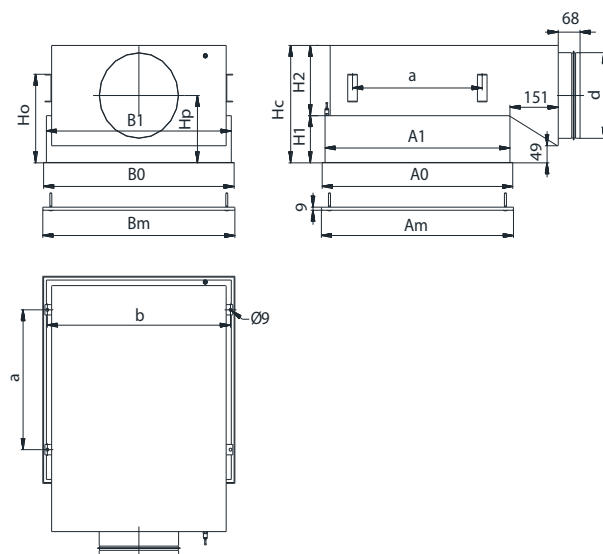
Dimensions: FAD-V (vertical round connector)



HEPA filter sizes

A	x	B	x	H	d	A0	A1	Am	a	B0	B1	Bm	b	H1	H2	Hc	Ho	Hp	Masa
305	x	305	x	78	158	355	337	360	165	355	337	360	332	137	100	237	257	/	5 kg
305	x	610	x	78	198	355	337	360	165	660	642	665	637	137	100	237	257	/	8 kg
457	x	457	x	78	198	507	489	512	317	507	489	512	484	137	100	237	257	/	8 kg
545	x	545	x	78	248	595	577	600	405	595	577	600	572	137	100	237	257	/	10 kg
610	x	610	x	78	248	660	642	665	470	660	642	665	637	137	100	237	257	/	11 kg
610	x	915	x	78	313	660	642	665	470	965	947	970	942	137	100	237	257	/	15 kg
610	x	1220	x	78	353	660	642	665	470	1270	1252	1275	1247	137	100	237	257	/	18 kg

Dimensions: FAD-H-N (lowered version with side round connection)



HEPA filter sizes

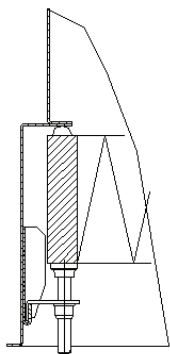
A	x	B	x	H	d	A0	A1	Am	a	B0	B1	Bm	b	H1	H2	Hc	Ho	Hp	Masa
305	x	305	x	78	158	355	337	360	165	355	337	360	332	137	114	250	257	150	7 kg
305	x	610	x	78	198	355	337	360	165	660	642	665	637	137	154	290	257	170	11 kg
457	x	457	x	78	198	507	489	512	317	507	489	512	484	137	154	290	257	170	12 kg
545	x	545	x	78	248	595	577	600	405	595	577	600	572	137	204	340	257	195	15 kg
610	x	610	x	78	248	660	642	665	470	660	642	665	637	137	204	340	257	195	17 kg
610	x	915	x	78	313	660	642	665	470	965	947	970	942	137	269	405	257	228	24 kg
610	x	1220	x	78	353	660	642	665	470	1270	1252	1275	1247	137	309	445	257	248	31 kg

Notes

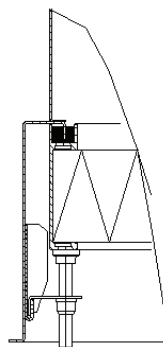
- Weight = body weight + diffuser weight + filter weight
- Weight tolerance: $\pm 10\%$
- Same dimensions for versions with GEL or PO HEPA filter

Detail of filter installation

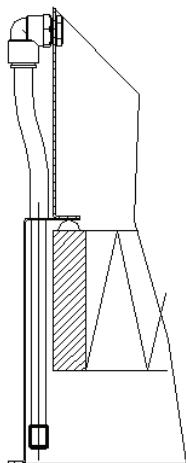
PT filter



GEL filter

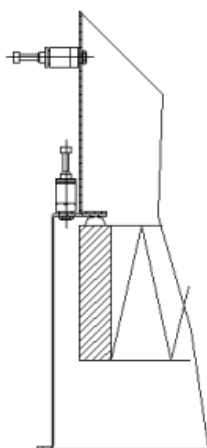


"UPSTREAM" connector



The "Upstream" connection with dimensions of $\varnothing 8$ is intended for measuring aerosol concentration before the HEPA filter.

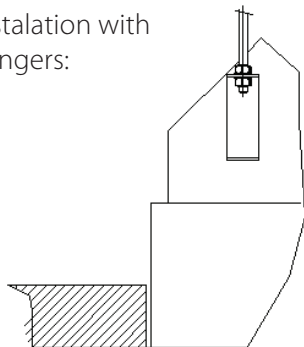
Δp of the connection



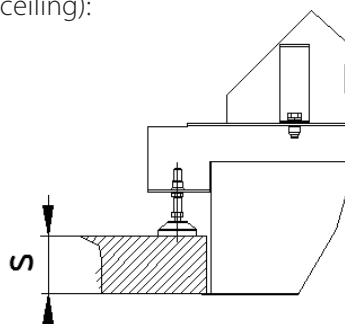
The Δp connections have dimensions of $\varnothing 6$ mm and are intended for measuring the pressure drop on HEPA filters.

Installation

Installation with hangers:



With brackets (for installation on a suspended ceiling):



Diffusers

- Perforated diffuser – DKP-Q.
- Swirl diffuser with moving (cooling/heating mode) plastic rollers – DVD-Q-Q.
- Swirl diffuser with fixed blades – DVP-Q.
- Nozzle diffuser – DKS-Q-Q.

	DKP-Q	DVD-Q-Q	DVP-Q	DKS-Q-Q
305 x 305				
305 x 610				
457 x 457				
535 x 535				
610 x 610				
610 x 915				
610 x 1220				

Selection table

Filter size [mm]	Filter with GEL seal H14 according to EN 1822-1		Filter with PO H13 according to EN 1822-1		Filter with PO H14 according to EN 1822-1	
	Nominal flow rate [m³/h]	Initial pressure drop on the filter [Pa]	Nominal flow rate [m³/h]	Initial pressure drop on the filter [Pa]	Nominal flow rate [m³/h]	Initial pressure drop on the filter [Pa]
305 x 305 x 80	150	125	300	250	150	120
305 x 610 x 80	300	125	600	250	300	120
457 x 457 x 80	340	125	680	250	340	120
535 x 535 x 80	480	125	950	250	475	120
610 x 610 x 80	600	125	1200	250	600	120
610 x 915 x 80*	900	125	1600	250	800	120
610 x 1220 x 80*	1200	125	2100	250	1050	120

*Available only with Aluminum or Galvanized frame..

Order key

FAD - PT - H - D - (A x B x C x D) - LD - M - D

- DKP-Q: perforated diffuser
DVD-Q-Q: swirl diffuser with plastic moving rollers
DVP-Q: swirl diffuser with fixed blades
DKS-Q-Q: diffuser with nozzles
- O: instalation with hangers
D: instalation with brackets
- O: without damper
LD 1: control damper with clean side control *
LZ 1: air-tight damper with clean side control *
LZ Belimo motor: air-tight damper with Belimo NC actuator
- Filtre size**:
305 x 305 x 80
305 x 610 x 80
457 x 457 x 80
545 x 545 x 80
610 x 610 x 80
610 x 915 x 80
610 x 1220 x 80
- Connector diameter
D158
D198
D248
D313
D353
- H: side connection
H-N: side connection-reduced version
V: vertical connection
- PT: semicircular gasket
G: GEL gasket
- FAD: RAL 9010
FAD-INOX: AISI 304

* Only available in H-D (side round connection) version.

** Other sizes on request.