KAFDUCT HOUSING WITH H13 PARTICULATE FILTER







Characteristisc:

Duct housing with H13 particulate filter foreseen for installation in rectangular ventilation duct systems.

Intended use

The unit is installed in systems supplying air to aseptic rooms such as operating rooms, laboratories, advanced electronics or optics manufacturing facilities, etc. KAF housings do not replace within the ventilation system the inflow ceilings or inflow openings with particulate filters, however, they permit the extension of the operational lifetimes of the filters in these devices, constituting an initial filtration component. An additional advantage of using the KAF is the possibility of their installation outside of the 'clean' rooms. Thanks to this, replacement of the filter within the KAF does not cause contamination of the room and the necessity to shut it down.

Execution

The KAF housing has a zinc-coated steel body painted to RAL 9010 white. The body ends on both sides with flanges for the connection of rectangular ventilation ducts. One of the walls has a tight revision opening installed using M5 screws with a 4 mm hex recess. Inside the housing there is a class H13 air filter according to standard PN-EN 1822. The filter installed using four pressure screws with a 4 mm hex seat. The housing also has spigots installed in the duct housing permitting the supervision of the contamination level of the filter with the use of a differential pressure switch.

In order to ensure optimum operation of the inflow unit, the use of a differential pressure switch is recommended.

The KAF housing is equipped as standard with components serving the inspection of integrity/mounting of the filter and the execution of tests (tracer-gas leak testing method). The KAF housing allows the use of test methods in accordance with ISO 14644: Cleanrooms and associated controlled environments - Part 3: Test methods.

Guidelines for designing

KAF duct housings should be placed in such a way so as to permit easy opening of the inspection door and installation/removal of the air filter. For proper operation of the device please be advised that recommended airflow velocity through the filter class H13 and thickness 150 mm should not be greater than 0.75 m/s and for the filter class H13 and thickness 292 mm – not greater than 1,5 m/s. Final airflow resistivity 500Pa. Maximum operation temperature is 70 °C. It is recommended to replace the air filter when the pressure drop measured at the filter in use exceeds twice the value of pressure drop declared for the new filter.

Dimensions

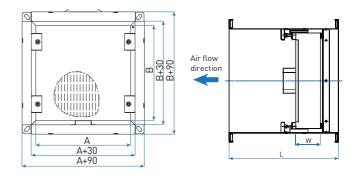


Figure 1. Dimensions of KAF housing with H13 filter.

Table 1. Dimensions, weights and selection of KAF.

Filter dimensions		Housing length	Capacity	Initial airflow resistivity	Weight with filter
AxB	W	L [mm]	[m³/h]	[Pa] ± 10%	[kg]
202x202	78/80	350	100	250	10
2022202	150	420	100	250	11
	78/80	350	250	250	12,5
305x305	150	420	250	250	14
	292	560	500	255	18
	78/80	350	500	240	20,5
305x610	150	420	500	240	23
	292	560	1000	250	30
405x405	78/80	350	440	235	14,5
403,403	150	420	440	235	18
440x540	78/80	350	650	225	16
4403340	150	420	650	225	20,5
457x457	78/80	350	560	230	15,5
437,437	150	420	560	230	20
535x535	78/80	350	770	225	18,5
3338333	150	420	770	225	24
575x575	78/80	350	890	220	18,5
5/5%5/5	150	420	890	220	24
	78/80	350	1000	220	21
610x610	150	420	1000	220	29
	292	560	2000	220	41
	78/80	350	1250	220	23
610x762	150	420	1250	220	28
	292	560	2500	220	43
	78/80	350	1500	220	26
610x915	150	420	1500	220	30
	292	560	3000	220	45



Installation

KAF can be mounted in any position, providing free space for filter replacement. During installation of the air filter, take note in particular not to damage the seals. After assembly, precisely check the tightening of the screw installing the filter in the clamps and the revision opening cover. These activities serve the purpose of avoidance of unwanted tightness losses.



KAF - Duct housing with H13 particulate filter

When ordering, please provide the information using the following method:

KAF - <A> x x <W> - SL<RAL> / <ADD>

Where:

Α	air filter width in [mm] from the table above
В	air filter length in [mm] from the table above
w	air filter thickness in [mm] from the table above
RAL	RAL coloc (default: RAL 9010)*
ADD	additional accessories shall be specified here:

Accessories

H13	narticulate filter		

^{*} optional values, default values will be used if optional values are not specified

Order example: KAF-305x305x150-SL9010 / H13