

GFB

HEPA FILTER BOX LOW CEILING



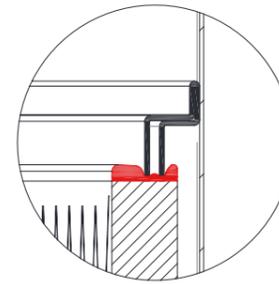
FEATURES

- ☞ GFB – HEPA FILTER BOX LOW CEILING is designed for sterile environments, operating rooms, and cleanrooms used in the pharmaceutical, chemical, and food industries.
- ☞ All HEPA filter boxes are tested in accordance with DIN 1946/4 and are supplied with a 100% leaktightness guarantee.
- ☞ With its wide product range, it fully meets the requirements of various application conditions.
- ☞ A dedicated test apparatus for gasket leakage testing is provided as a standard feature.
- ☞ It is equipped with differential pressure measuring ports to assess filter contamination.
- ☞ The interior of the unit is resistant to disinfection procedures.

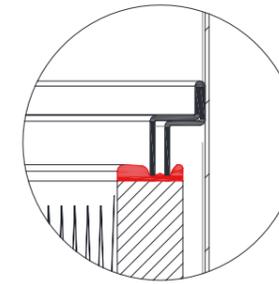


MATERIAL

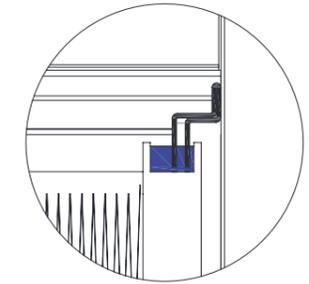
- ☞ The HEPA filter box is manufactured from galvanized steel (DKP) or, optionally, AISI 304-grade stainless steel.
- ☞ All accessories are corrosion-resistant.
- ☞ It is compatible with both flat-profile EPDM gaskets and gel-type filter gaskets used in HEPA filters.



1. Aluminum Housing with EPDM Gasket



2. MDF Housing with EPDM Gasket



3. Aluminum Housing with Gel Seal

- ☞ Aluminum, MDF, and aluminum gel-seal options are available for the HEPA filter frame. Additionally, the filter pleat heights can be selected as 50 mm or 125 mm, depending on the initial or operating pressure requirements of the HEPA filter.

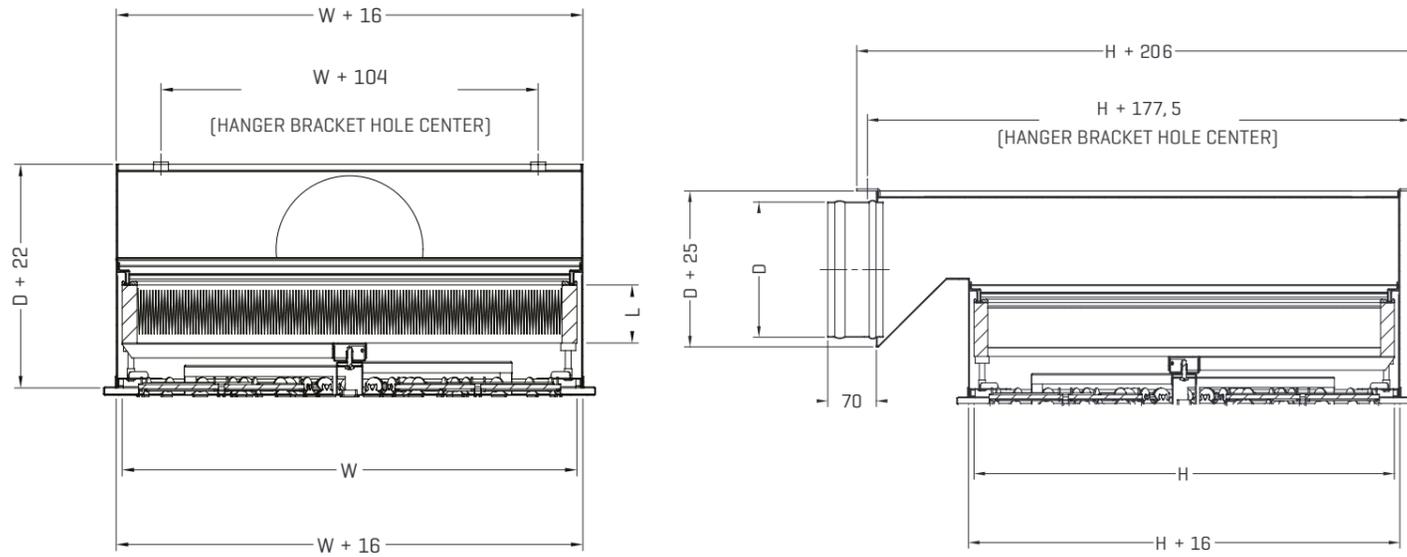
SURFACE COATING

- ☞ Standard: RAL 9010 electrostatic powder coating
- ☞ Optional
Other RAL color codes

INSTALLATION OPTIONS

- ☞ Center-Bolt Installation
- ☞ Corner-Mount Installation

STANDARD DIMENSIONS



Dimensions [W x H x L*] [mm x mm x mm]	
305 x 305 x 78	305 x 305 x 149
305 x 610 x 78	305 x 610 x 149
457 x 457 x 78	457 x 457 x 149
457 x 610 x 78	457 x 610 x 149
535 x 535 x 78	535 x 535 x 149
575 x 575 x 78	575 x 575 x 149
610 x 610 x 78	610 x 610 x 149
762 x 762 x 78	762 x 762 x 149

*L: Filter Height [mm]

Table 1: Standard Dimensions

Table 3: Sound Pressure Level Data

PERFORMANCE DATA

Dimensions [mm x mm x mm]	Pleat Height [mm]	Volumetric Flow Rate [m³/h]	Clean Filter Pressure Drop [Pa]		Dirty Filter Pressure Drop [Pa]		Recommended Flex Duct Diameter [mm]
			H13	H14	H13	H14	
305 x 305 x 78	50	150	100	125	200	250	Ø150
305 x 610 x 78	50	300	100	125	200	250	Ø180
457 x 457 x 78	50	340	100	125	200	250	Ø180
457 x 610 x 78	50	450	100	125	200	250	Ø200
535 x 535 x 78	50	465	100	125	200	250	Ø229
575 x 575 x 78	50	535	100	125	200	250	Ø255
610 x 610 x 78	50	600	100	125	200	250	Ø229
762 x 762 x 78	50	940	100	125	200	250	Ø280
305 x 305 x 149	125	150	55	70	110	140	Ø150
305 x 610 x 149	125	300	55	70	110	140	Ø180
457 x 457 x 149	125	340	55	70	110	140	Ø180
457 x 610 x 149	125	450	55	70	110	140	Ø200
535 x 535 x 149	125	465	55	70	110	140	Ø229
575 x 575 x 149	125	535	55	70	110	140	Ø255
610 x 610 x 149	125	600	55	70	110	140	Ø229
762 x 762 x 149	125	940	55	70	110	140	Ø280

Table 2: Performance Data

Note: The values in the table are valid for a filter face velocity of 0.45 m/s.

AIR DISTRIBUTION DATA

HEPA Filter Box Dimensions [mm x mm]	Air Distribution Equipment	Corresponding Equipment Size [mm x mm]	Maximum Airflow [m³/h]	Pressure Drop [Pa]
305x305	OSB - Swirl Diffuser with Adjustable Blades Type	355x355	150	20
	OAK - Square Ceiling Diffuser	201x201		3
305x610	OSB - Swirl Diffuser with Adjustable Blades Type	355x660	300	38
	OAP - Square Ceiling Diffuser	201x506		4
457x457	OSB - Swirl Diffuser with Adjustable Blades Type	507x507	340	14
	OAK - Square Ceiling Diffuser	353x353		2
457x610	OSB - Swirl Diffuser with Adjustable Blades Type	507x660	450	25
	OAK - Square Ceiling Diffuser	353x506		2
535x535	OSB - Swirl Diffuser with Adjustable Blades Type	585x585	465	13
	OAK - Square Ceiling Diffuser	431x431		2
575x575	OSB - Swirl Diffuser with Adjustable Blades Type	625x625	535	18
	OAK - Square Ceiling Diffuser	471x471		2
610x610	OSB - Swirl Diffuser with Adjustable Blades Type	660x660	600	23
	OAK - Square Ceiling Diffuser	506x506		2
762x762	OSB - Swirl Diffuser with Adjustable Blades Type	812x812	940	20
	OAK - Square Ceiling Diffuser	658x658		4

Table 3: Air Distribution Data

INSTALLATION TYPES

EXPLODED VIEWS

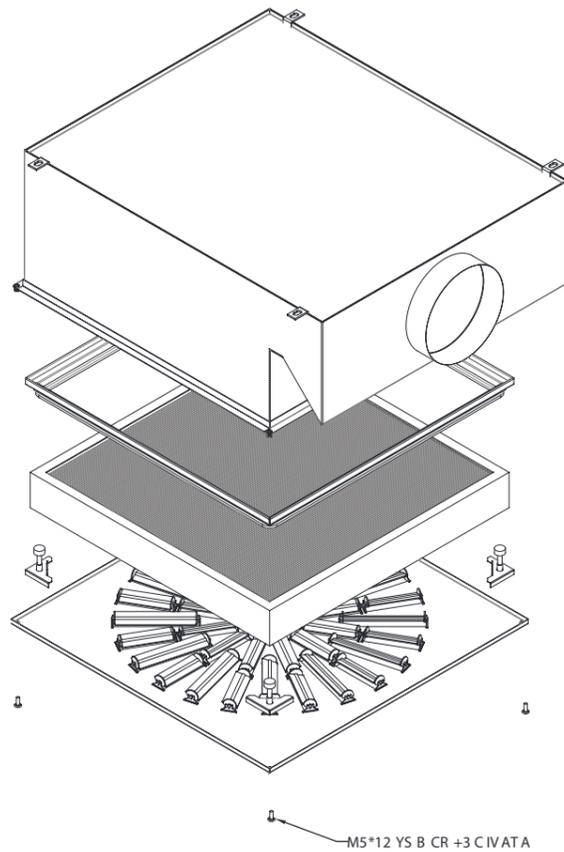


Figure 1: Corner-Bolt Installation

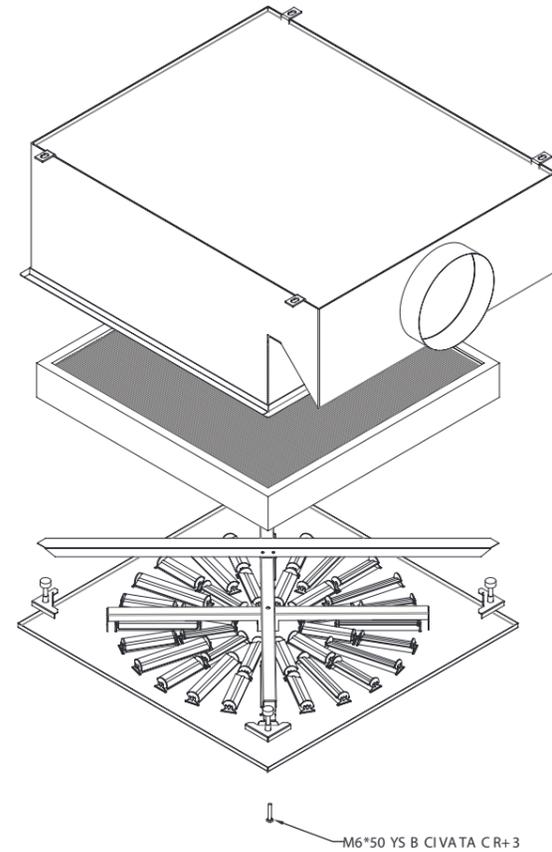
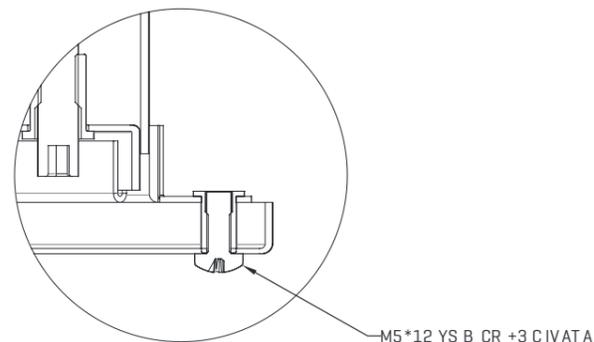
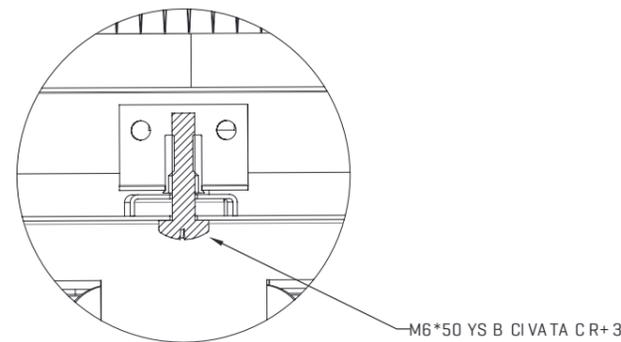


Figure 2: Center-Bolt Installation

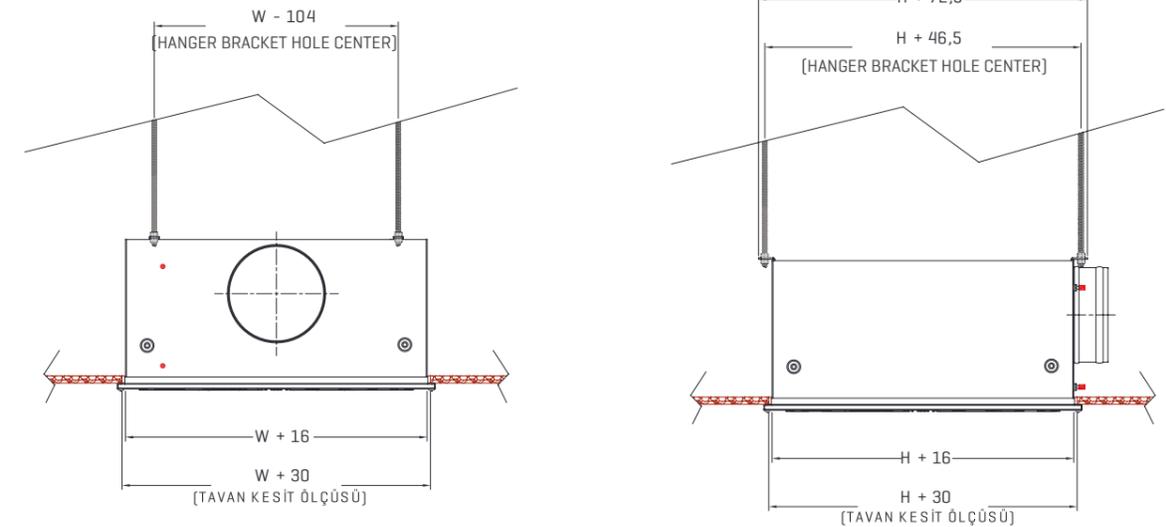
Corner-Bolt Connection Detail



Center-Bolt Connection Detail



HANGER INSTALLATION DETAIL



PRODUCT SELECTION

Example: The supply airflow of the HEPA filter has been specified as 450 m³/h. An H13 filter type with a pleat height of 50 mm will be selected. A swirl diffuser will be used as the air distribution device. Perform the product selection.

Solution:

From the performance data table [Table 3], for an airflow of 450 m³/h:

A suitable size is selected:

457 x 610 x 78

The corresponding clean filter pressure drop is 100 Pa.

For the air distribution device to be used in the product, the Air Diffuser Table [Table 4] is consulted.

For a swirl diffuser at 450 m³/h airflow, the pressure drop is 20 Pa.

Using the formula:

Total pressure drop = Filter Pressure Drop [Clean/Dirty] + Air Diffuser Pressure Drop

Total pressure drop = 100 Pa + 20 Pa = 120 Pa.

PRODUCT ORDER CODES

FILTER ORDER CODE

Filter Type	Filter Housing	Filter Length [mm]	Dimensions [mm x mm]							
			305 x 305	305 x 610	457 x 457	457 x 610	535 x 535	575 x 575	610 x 610	762 x 762
H13	MDF	78	F01	F09	F02	F94	F03	F04	F05	F20
	EPDM Gasket	149	F07	F48	F06	F94	F08	F14	F17	F20
	Aluminum	78	F21	H11	F22	H13	F23	F43	F24	F89
	EPDM Gasket	149	H01	F46	H02	H17	F93	H03	F91	H19
	Alüminyum	78	F27	H21	F28	H22	F29	F30	F31	H23
	Gel Gasket	149	H24	H25	H26	H27	H28	H29	H30	H31
H14	MDF	78	F60	F66	F61	H08	F62	F63	F64	F75
	EPDM Gasket	149	F68	H09	F69	H10	H04	F82	F65	F75
	Aluminum	78	F97	H12	F96	H14	F95	F18	F15	H15
	EPDM Gasket	149	H05	H16	H06	H18	F88	H07	F25	H20
	Aluminum	78	H32	H33	H34	H35	H36	H37	H38	H39
	Gel Gasket	149	H40	H41	H42	H43	H44	H45	H46	H47

You can place your orders according to the coding format shown below.

GFB.< A > . < B > . < C > . < D > . < E > . < F >

A	Raw Material Type	
	DKP	Painted Galvanized Steel [DKP Sheet]
	PAS	AISI 304 Grade Stainless Steel
B	Filter	
	F00	Without Filter
	XXX	Refer to the Filter Order Code Table
C	Installation Type	
	GC	Center-Bolt Installation
	KM	Corner-Mount Installation
D	Horizontal Dimension [W] [mm]	
	0000	Refer to the Standard Dimensions
E	Vertical Dimension [W] [mm]	
	0000	Refer to the Standard Dimensions
F	Flex Diameter [Ø] [mm]	
		100 - 125 - 150 - 160 - 180 - 200 - 229 - 250 - 255 - 280 - 300 - 315 - 350 - 356

Example Coding: GFB.DKP.F03.KM.0535.0535.0078.180

For the Future of Health FOCUS DOGU

With our R&D investments and competent team leading the HVAC sector, we are at the forefront of designing HVAC products that are both human-and environmentally-friendly.



SUSTAINABILITY SOLUTIONS AT DOGU HVAC



We offer supplementary health insurance to our employees to promote healthy living. We also plan health-focused initiatives such as smoking cessation programs.



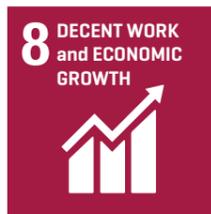
Through the DOGU HVAC CLUB project, we organize technical tours of our factory, participate in career events, and provide sponsorships to support the skill development of university and technical high school students.



In 2024, we increased female employment in our administrative and production departments. This step aims to contribute to gender equality by offering a workplace with equal rights for all employees.



Our R&D center's 2,500 m² solar panels and 0.6 MW annual capacity solar energy systems reduce our carbon footprint. We generate our electricity, ensuring a reliable, sustainable, and accessible clean energy source.



Decent Work and Economic Growth: As an employer brand, our primary goal is to protect our employees' rights and create a workplace founded on equality and justice for all employees.



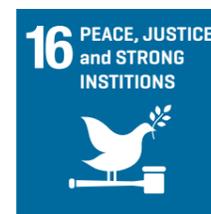
We enhance indoor air quality with environmentally friendly and energy-efficient products, ensuring adherence to European standards.



We minimize waste through lean production policies and emphasize recycling, simultaneously increasing efficiency in our production processes.



We support environmental protection through our eco-friendly, sustainable, energy-efficient product lines and R&D efforts focused on reducing waste that could contribute to climate change.



We value transparency and accountability, working with associations like ISKAV to prevent corruption and unfair competition, aligning with sectoral ethical values.



Venues Breathe With Us



Scan to watch our
promotional video