HEPA Filter System, Type GS

Krantz Filter Systems and Dampers
A trademark of Caverion

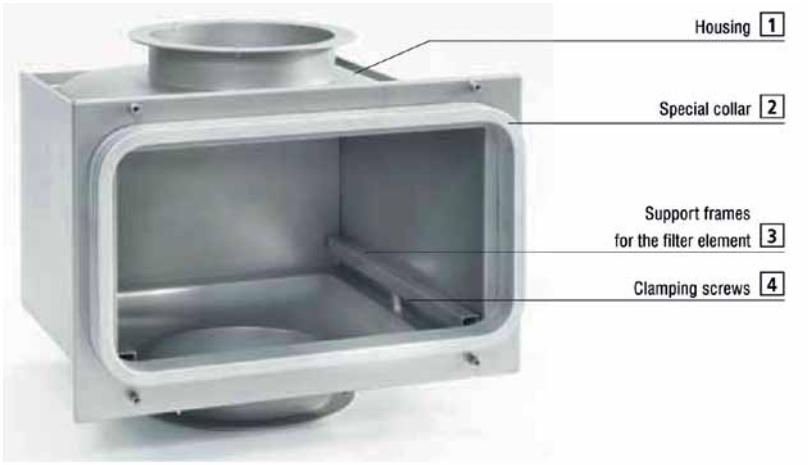
info.filter@krantz.de
www.krantz.de

HEPA Filter System, Type GS

- The HEPA filter system, type GS is used to take in HEPA filter elements.
- It is a less expensive alternative to the famous and reliable Krantz safe change filter housings type $SCF_{classic}$ and $SCF_{hightec}$. It is used where the requirements concerning the construction of the filter housing are less.
- The filter system can be used single or in combination with additional housings e.g. for pre-filter or sorption filter. For filtration of higher air flows some filter housings can be combined to large filter systems of any size.
- The connection is realised by a gastight duct system at both the top and bottom side of the housing. This allows the installation of one or more filter housings in circular duct systems one after the other.
- Both direction of airflow – „top-down“ or „bottom-up” can be choosen.
- Installation resp. fixing is done by either:
  - plugging on static fixed ducts,
  - attaching to wall brackets (available on request),
  - positioning on floor supports (available on request).
- The duct connection is designed as a machine-lip flange for pull-ring connection, e. g. Jacob system, DN 300.
- Also a welded flange according EN 12 220, DN 300, is available as an option.

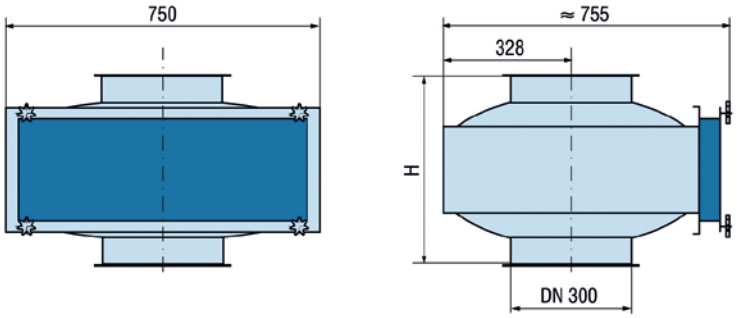
Design and funktion:

- All single parts of the filter housing type GS are made from stainless steel, material 1.4301 (AISI / SAE 304) and are connected gastight. Each filter housing has passed a detailed factory acceptance test (FAT).
- The HEPA filter housing [1] is equipped with a clamping system for the filter element. The clamping system is composed of two single operating and balancing support frames [3] at both sides of the housing with clamping screws [4] which can be operated from outside. The transmission of the clamping force is done springily. This means that losses of elasticity of the filter element sealing as well as manufacturing tolerances of the filter element hight will be leveled.
- The transition of the screws through the filter housing will be closed by a gastight plastic cover.
- The HEPA filter element will be installed into the housing absolutely gastight. The tightness proof frame of the filter element has a test groove acc. DIN 1946-4. A tube is leading from there to the outside of the housing and allows the connection of a leak test device in order to check the gastight seat of the filter element.
- Manometer points on both raw air and clean air side to connect pressure gauge for checking the pressure drop of the filter element.
- The filter housing for a pre-filter element is equal to the HEPA filter housing, but instead of the clamping devise a leaf spring is used.
- For the contamination free exchange of the filter elements (essential when filtering harmful air) a special collar [2] can be connected to the opening of the housing gastight. The collar has two undercut grooves for the fixation of the plastic bag by means of hollow rubber bands.
- Gastight maintenance cover fixed to the filter housing by means of screwing elements with a star shaped handle. This cover ensures a gastight closing of the insertion port a protection of the special collar and the rolled plastic bag. High operational safety is ensured by following the Krantz operating instruction.

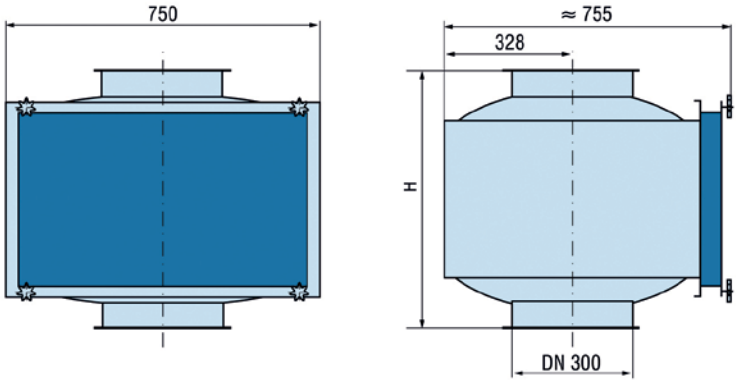


HEPA filter system, type GS, with welded flange (option on request)

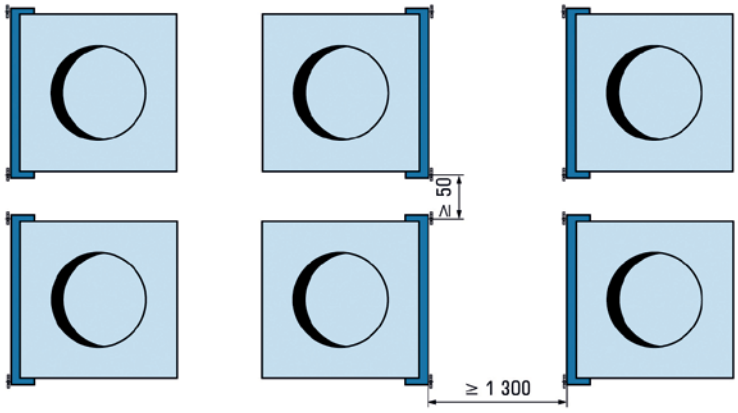
Pre-filter housing



HEPA filter housing



View from operating side | Lateral view



Minimum distance when using several housings

		Pre-filter		HEPA filter	
Dimension of filter elements	mm	610 x 610 x 50	610 x 610 x 150	610 x 610 x 150	610 x 610 x 292
Hight of housing	mm	348	443	473	615
Operating flow rate per housing	m³/h	1 800	1 800	1 000	1 800
Max. flow rate per housing[1)]	m³/h	2 200	2 200	1 200	2 200
Weight without filter elements kg (approx.)	kg (ca.)	20	24	26	32

1) According to the performance of the used filter elements. Technical data of the filter element manufacturer will apply.
Filter housing for higher flow rate above 2 200 m³/h on request!

Options:

- Differential pressure gauges for each filter housing or filter system
- Leak test device, type LTD
- Pre-filter and HEPA filter elements
- Plastic bags with hollow rubber bands
- Heat seal device for plastic bags, type HSD
- Gastight dampers for air-inlet and air-outlet
- Floor supports and wall brackets for the installation

Contacts

Caverion Deutschland GmbH
Riesstraße 25
80992 München, Germany
Phone: +49 89 374288-500
Fax: +49 89 374288-520

Krantz Filter Systems and Dampers
Uersfeld 24
52072 Aachen, Germany
Phone: +49 241 434-1
Fax: +49 241 434-500

Production workshop
Mallersdorf
Schillerstraße 16
84066 Mallersdorf-Pfaffenberg, Germany

Claus Schweinheim
Division Manager
Krantz Filter Systems and Dampers
Phone: +49 241 434-501
Fax: +49 241 434-500
Mobile: +49 173 3888718
email: claus.schweinheim@krantz.de

Reinhold Goettgens
Sales Manager
Phone: +49 241 434-269
Fax: +49 241 434-500
Mobile: +49 174 1658185
email: reinhold.goettgens@krantz.de