

SF-CH Specifications

Bag-in-Bag-out (BIBO) canister box

1. General

This description sets out the technical specifications of a Bag-in-Bag-out (BIBO) canister box, designed for the safe replacement of filters in environments containing toxic contaminants. The unit must meet the highest safety and performance standards in order to ensure the protection of personnel and the environment.

2. Application

The BIBO-type box is suitable for installations where the air is likely to contain toxic contaminants. The secure filter replacement procedure via the BIBO protocol ensures the protection of the operator and the environment during maintenance operations.

3. Materials and construction

The box is made of fully welded galvanised steel with a thickness of 2.0 mm for maximum strength and durability. The assembly has a RAL9010 epoxy paint finish that is oven-baked for a smooth, easy-to-clean surface.

The box is designed for indoor or outdoor installation and is equipped with flanges for connection to the network.

The filter clamping system consists of stainless steel eccentric cams for a secure and reliable closure. The airtightness of the door is ensured by a moulded seal. The closing hatch with fool-proofing system ensures that the filter is correctly positioned.

The maximum operating temperature for the standard version is 90°C.

The configuration takes into account the project specifications, namely: flow rate, type of pollutants to be filtered, necessary accessories, air direction, connections, etc.

4. Functionality and performance

Safe filter replacement via the BIBO protocol is ensured by a special, ultra-rip-resistant plastic bag with an integrated O-ring and arm passage.

The system is suitable for HEPA filters with a height of 150 or 292 mm and can be equipped with a pre-filtration stage (fine filter) with a height of 96, 150 or 292 mm.

Each filter is mounted in a separate box fitted with a flange (no one-piece or DUO version).

Lockable pressure taps are provided for each filter section to ensure a secure connection (quick connect) for pressure measurement.

Each HEPA section is equipped with a 100% pressure tap for filter integrity testing. The unit is compliant with the following airtightness classes: Class D (EN 12237), Class C (Eurovent 2/2) and L1 (EN 1886). The mechanical resistance is +/- 5000 Pa.



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5. Options

- Horizontal air flow.
- Top/bottom connection manifolds with adjustable support feet for flexible installation.
- Version in stainless steel (AISI 304L or AISI 316L) for corrosive applications.
- ATEX version for explosive environments.
- Built-in manual test scan (global or local) in accordance with ISO 14644-3 for non-intrusive filter integrity testing.
- Double unit with access door on each side (special design with single door possible depending on selected sizes).
- DUO type unit with integrated pre-filter.
- Removable maintenance table for easy servicing.
- Pressure gauge (analogue or digital) with pressure measurement console.
- Inspection window on the door for visual monitoring.
- Factory assembly or pre-assembly for quick installation.
- Individual test report in accordance with EN 12237 class D for assurance of conformity.
- Material certificates.
- A thermal welding machine for sealing the plastic bags.



6. Quality assurance

The system must comply with the standards and directives in force for clean room technology.

This technical description may be adapted and supplemented according to the specific requirements and wishes of the customer.

