



Circular spigot with lip seal



Internal measuring tube to sample particles for measurement



Test groove, detail



Pressure measurement point, detail



Conforms to VDI 6022

Particulate filter air terminal devices

KBEO



For critical air cleanliness and critical hygiene requirements, suitable for ceiling installation

Particulate filter modules for ceilings as a final filter stage with Mini Pleat filter panels for the separation of suspended particles. Use in laboratories, medical areas, or production rooms in the pharmaceutical and food industries.

- Individual casings can be combined modularly to form ceiling tiles
- Easy, time-saving, and secure filter change due to special press-in frame
- For mounting filters with flat or fluid seal
- With sealing integrity test facility for filter elements
- Integrated differential pressure measuring points
- Internal measuring tube to sample particles for measurement
- Spigot with lip seal
- Flexible suspension
- For air cleanliness classes 5 to 8 according to ISO 14644-1
- Meets the hygiene requirements of VDI 6022
- Leakage classes: L1 according to DIN EN 1886 and D according to DIN EN 15727

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General information

Application

- Particulate filter module type KBEO for ceiling installation as a final filter stage and for air distribution in clean room technology
- Fitting of filter elements for the separation of suspended particles such as aerosols, toxic dusts, viruses and bacteria from the supply or extract air.

Classification

- Hygiene-conformity according to VDI 6022
- Leakage classes: L1 according to DIN EN 1886 and D according to DIN EN 15727

Nominal sizes

- B × L [mm]

Useful additions

- Mini Pleat filter panels with flat seal or fluid seal
- Suitable filter elements to be ordered separately
- Assembly kit for screw connection of single casings to ceiling tiles

Special characteristics

- Single casings can be flexibly combined into ceiling tiles
- Inclusion of filters with flat or fluid seals
- High operational reliability due to sealing integrity test facility
- Compact construction with internal measuring units
- Spigot with lip seal
- Easy assembly due to flexible suspension

Construction features

- Pre-drilled connection points for easy assembly of several modules one below the other
- Special test groove enables filters with flat or fluid seals to be fitted
- Clamping mechanism with 2 or 4 fixing points for filter elements (depending on size)
- Integrated test device for checking the tightness of the filter
- Pressure measurement points to monitor the differential operating pressure
- Internal measuring tube to sample particles for measurement

- Spigot circular (arrangement at the top)

Material and surfaces

- Casing made of sheet steel, powder-coated RAL 9010 (pure white)
- Diffuser face plate made of perforated sheet metal with perimeter return edge, powder-coated RAL 9010 (pure white)
- Optional stainless steel construction

Installation and commissioning

- Variable suspension
- The filter element is mounted by using a clamping mechanism with 2 or 4 fixing points for filter elements (depending on size)
- Air terminal device with 4-point fixing

Standards and guidelines

- Hygiene meets the requirements of VDI 6022, VDI 3803, DIN 1946 Part 4, ÖNORM H 6021 and ÖNORM H 6020, SWKI VA 104-01 and SWKI 99-3, and EN 16798
- Leakage classes: DIN EN 1886, DIN EN 15727

Maintenance

- Easy removal of the air terminal device for filter change and decontamination

Disclosure of Chemicals

- RoHS EU Directive 2011/65/EU (RoHS)
 - This product or single variants comply with EU Directive 2011/65/EU (RoHS) on the restriction of the use of certain hazardous substances in electrical and electronic equipment. For more information, please refer to our Environmental Product Declarations.
- REACH 1907/2006 (EC Regulation REACH)
 - This product or single variants comply with the provisions of EC Regulation No. 1907/2006, also known as REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals). For more information, please refer to our Environmental Product Declarations.

Specification text

This specification text describes the general properties of the product. Texts for variants can be generated with our Easy Product Finder design programme.

Specification text

Particulate filter modules type KBEO for ceiling installation as a final filter stage and for air distribution in clean room technology. Individual casings with pre-drilled joints can be combined to form modular ceiling tiles. Fitting of filter elements for the separation of suspended particles such as aerosols, toxic dusts, viruses and bacteria from the supply or extract air. Casing with connection from above through spigot with lip seal. Flexible suspension with variable mounting points. Particulate filter module with special clamping mechanism with 2 fixing points for dimensions 600 × 600 or 4 fixing points for dimensions 600 × 900 and 600 × 1200. The KBEO casings are suitable for mounting filters with flat or fluid seals. Casing with integrated sealing seat testing facility; measuring tube inside for sampling for particle measurement; pressure measurement points for monitoring the operating pressure difference. Diffuser face plate made of perforated sheet metal with perimeter return edge, powder-coated RAL 9010 (pure white) with 4-point fixing. Leakage test for each casing.

Special features

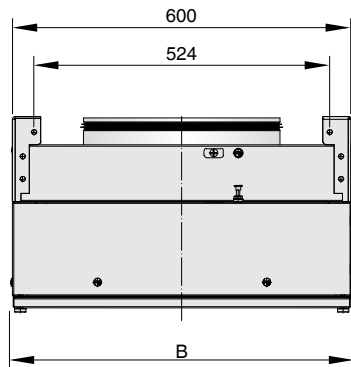
- Single casings can be flexibly combined into ceiling tiles
- Inclusion of filters with flat or fluid seals
- High operational reliability due to sealing integrity test facility
- Compact construction with internal measuring units
- Spigot with lip seal
- Easy assembly due to flexible suspension

Materials and surfaces

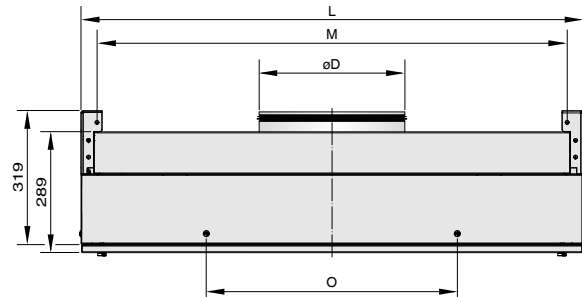
- Casing made of sheet steel, powder-coated RAL 9010 (pure white)
- Diffuser face plate made of perforated sheet metal with perimeter return edge, powder-coated RAL 9010 (pure white)
- Optional stainless steel construction

Dimensions

Dimensional drawing of KBEO



Dimensional drawing of KBEO



Product specific data

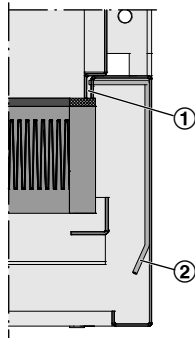
All weights are net, without packaging.

all weights are net, without packaging						
①		②	③	④	⑤	⑥
B [mm]	L [mm]	W × H × D [mm]	M	∅D	O	Kg
600	600	535 × 535 × 78	524	248	300	22
600	900	835 × 535 × 78	824	313	600	27
600	1200	1135 × 535 × 78	1124	348	600	34

① Nominal size ② Filter size ③ Top suspension, distance between holes ④ Spigot diameter ⑤ Screw hole pitch for mounting option for modular construction ⑥ ~ Weight

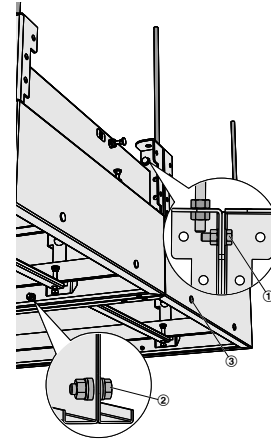
Product details

Test groove with sealing integrity test facility



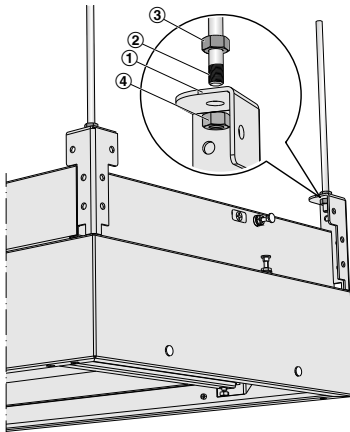
- ① Test groove
- ② Connection for sealing integrity test facility

Connecting to a ceiling tile



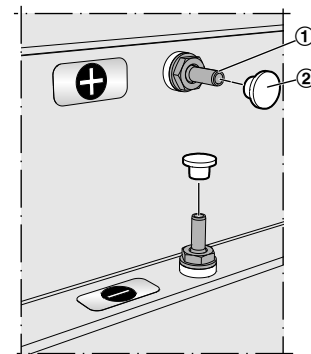
- ① Screw M8, U-discs (2x) and nut
- ② Screw M8, sealing washer (2x), U-discs (2x) and nut
- ③ Sealing plug

Mounting suspension



- ① Suspension lug with drilled hole $\varnothing$ 12 mm
- ② Threaded rod
- ③ Lock nut
- ④ Nut

Differential pressure measuring points



- ① Pressure measurement point
- ② Sealing plug

Modules combined



Ceiling tiles from single casings

Installation and commissioning

- The filter elements are pressed on by a clamping mechanism with 2 or 4 fixing points for filter elements (depending on size)
- Mounting kits (article number A000067468) are optionally available as accessories for the modular construction of ceiling tiles.