



FBA-3

Deburred, black lacquered, visible side turned over



FBA-3-*-SM

Adjustable dirt trap



FBA-4-*-KF

Trim ring with spring clip fixing



FBA-1-VF

With swirl element to adjust the air flow

FBA

ROUND ALUMINIUM AIR DIFFUSERS FOR INSTALLATION **IN FLOORS**

The different attachments allow a wide range of applications with different air flows, installation conditions and several options for volume flow balancing.

- Nominal sizes: 150, 200 mm
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 Volume flow range 1 59 l/s or 4 213 m³/h
 Annular diffuser contour with different surface structures
 For constant and variable volume flows
 For all types of raised floors
 Horizontal or vertical air flow
 Reduction element adjustable on the front or rear side

- Can be installed with and without trim ring
- The trim ring allows quick and easy installation and removal of the grille inserts for cleaning purposes
- High mechanical strength/breaking resistance > 17 kN
- Ideal for comfort zones

Optional equipment and accessories

- Swirl unit adjustable at the back for manual adjustment between vertical and horizontal air routing
- Trim ring with spring clip fixing to cover the installation opening
- Dirt trap can also be used as a reduction element
- Plenum box

Allgemeine Informationen

Application

- Floor diffusers as supply air diffusers for comfort areas
- Installation in raised floors without plenum box if it is constructed as a pressurised floor
- Installation in raised floors with plenum box to allow individual ventilation in rooms or zones
- Vertical supply air flow, with adjustable swirl unit also horizontal air flow
- · Variants with adjustable swirl units can be manually set to vertical or horizontal air routing
- · Attractive design element with various types of surfaces, for building owners and architects with demanding aesthetic requirements

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- Comfortable and energy-efficient airflow through supporting convection currents in the occupied zone
- · Thermal loads are effectively dissipated
- For constant and variable volume flows
- For supply air temperature differences of -12 +20 K

Special characteristics

- · Simple and quick assembly and covering of the installation opening when used with trim ring and spring clip fixing
- Installation in hard flooring requires a spacing ring The spacing ring is included in the delivery if no trim ring has been selected
- High crush resistance > 17 kN
- The grille insert is torsion-proof and centred in combination with trim ring
- With or without swirl unit to allow for various air patterns
- A dirt trap reduces contamination of the floor and facilitates volume flow rate balancing. It can be adjusted from the diffuser front and back surface

Nominal sizes

• 150, 200

Variants

Setting the air flow direction

- -*: no entry: vertical air flow, inalterable
- $\bullet\,\,$ -V: preset vertical swirling airflow, the swirl vane is manually adjustable
- -H: preset horizontal swirling airflow, the swirl vane is manually adjustable

Installation

- -*-: Floor diffuser with spacing ring
- -KF: Floor diffuser with trim ring and spring clip fixing

Dirt trap

- -*: no entry: without dirt trap
- -SM: with adjustable dirt trap Dirt trap adjustable on the back, the dirt trap can also serve as a reduction element for volume flow rate balancing
- -SV: with adjustable dirt trap Dirt trap adjustable from the diffuser face front, the dirt trap can also serve as a reduction element for volume flow rate balancing

Plenum box

- -*: no entry: without plenum box
- -A: with plenum box for connection to the on-site air duct system

Construction

Surface floor diffuser (floor grille and trim ring)

- -1: Deburred diffuser core
- -3: Deburred diffuser core, painted black, exposed surface overtightened
- -4: Deburred diffuser core, exposed surface overtigthened

Parts and characteristics

Grille insert Floor diffuser

- Ring spacing: 6 mm
- Height-adjustable dirt trap which serves as a reduction element for volume flow rate balancing
- Adjustable swirl unit for vertical or horizontal swirling air flow or air routing

Trim ring with spring clip fixing

- Rotation lock and centring grille insert
- Covers the installation opening
- Spring clip fixing enables different magnitude of the raised floor and the compensation of large cut-out tolerances when creating the installation openings. For the tightest possible fit of the trim ring, we recommend the minimum installation dimension Balancing with soft flooring, e.g. carpetWorks well with soft flooring, e.g. carpet

Attachments

- Spacing ring to hold the grille insert for variants without trim ring
- Trim ring with spring clip fixing to accommodate the grille insert and to attach the installation opening
- Adjustable swirl unit for vertical or horizontal swirling air flow
- Fixed swirl unit for vertical air flow (only for nominal size 200)
- Height-adjustable dirt trap which also serves as a reduction element for volume flow rate balancing

Accessories

Plenum box -A:

- For direct connection to the on-site air duct system
- With incorporated air distribution element for a steady flow to the floor diffuser
- Plenum box suitable for all nominal sizes

Material

- Grille insert and trim ring made of die-cast aluminium
- Spring clips made of stainless steel
- Adjustable swirl unit and dirt trap made of ABS plastic, UL94-V-0
- Spacing ring made of plastic ABS UL 94-V-0
- Dirt trap adjustment device and connective marterial made of galvanised steel
- Plenum box made of galvanised sheet steel

Technical data

- Nominal sizes: 150, 200 mm
- Volume flow rate range: 1 59 l/s or 4 213 m³/h Supply air temperature difference: -12 +20 K
- Crush resistance > 17 kN