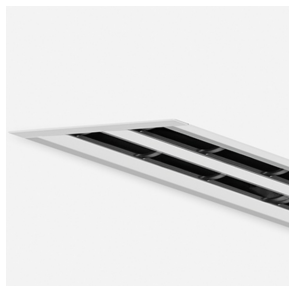
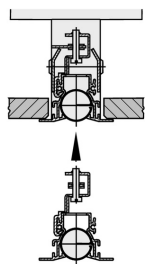




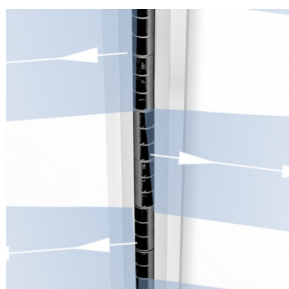
VSD50-1-AK



INSTALLATION IN  
CONTINUOUS CEILINGS



CONCEALED SCREW  
FIXING



ALTERNATING  
HORIZONTAL AIR  
DISCHARGE



PLENUM BOX WITH  
DAMPER BLADE  
(OPTIONAL)

## WITH WIDE DIFFUSER FACE FOR LARGER VOLUME FLOW RATES

Slot diffusers with 50 mm diffuser face (nominal width) and adjustable air control elements

- Nominal length from 600 to 1950 mm, 1 or 2 slots
- Volume flow rate range 20 – 120 (l/s)/m or 72 – 432 (m³/h)/m
- Diffuser face made of extruded aluminium sections
- For variable and constant volume flows
- Suitable for continuous linear arrangement
- High induction results in a rapid reduction of the temperature difference and airflow velocity
- Individually adjustable air control elements to meet individual local requirements

Optional equipment and accessories

- Exposed diffuser face available in RAL CLASSIC colours
- Diffuser face with extended border
- Damper blade for volume flow rate balancing, can be adjusted through the diffuser face
- Concealed screw fixing that simplifies installation of the diffuser after the ceiling has been completed
- Symmetric and asymmetric plenum boxes, with or without lining
- End plates, end angles, corner sections

## Application



### Application

- Type VSD50 slot diffusers are used as supply air or extract air devices in comfort zones
- Air discharge is one-way or alternating horizontal, or alternating angled; turbulent flow (mixed flow ventilation)
- High induction results in a rapid reduction of the temperature difference and airflow velocity (supply air variant)
- For variable and constant volume flows
- For supply air to room air temperature differences from -10 to +10 K
- For room heights up to 4 m (lower edge of suspended ceiling)
- For suspended ceilings; suitable for restricted ceiling voids due to the low overall height of the plenum box
- Suitable for continuous linear arrangement

### Special characteristics

- Individually adjustable air control elements to meet individual local requirements
- High induction results in a rapid reduction of the temperature difference and airflow velocity
- Diffuser face has been optimised for maximum volume flow rate at low sound power levels
- Suitable for continuous linear arrangement

### Nominal sizes

- L<sub>N</sub>: 600, 750, 900, 1050, 1200, 1350, 1500, 1650, 1800, 1950 mm
- Diffuser face available in intermediate sizes from 300 to 2400 mm, in increments of 1 mm

## Description



### Variants

- VSD50-\*: 1 or 2 slots
- VSD50-\*F: Diffuser face only
- VSD50-\*E: Corner section
- VSD50-...: Diffuser face without extended border
- VSD50-.../B00: Diffuser face with extended border
- VSD50-...: Black air control elements

- VSD50-.../WW: White air control elements

#### Plenum box and diffuser face fixing

- AK: Plenum box and clamp fixing
- DK: Plenum box with lining and clamp fixing
- AS: Plenum box and concealed screw fixing
- DS: Plenum box with lining and concealed screw fixing
- AA: Asymmetric plenum box and clamp fixing

#### Parts and characteristics

- Diffuser face with individually adjustable air control elements
- Plenum box for horizontal duct connection
- Concealed screw fixing (facilitates installation of the diffuser face) or clamp fixing
- Connecting pins and alignment plates to connect and align slot diffusers for a continuous linear arrangement

#### Attachments

- M: Damper blade for volume flow rate balancing
- C1, C2: Two end plates
- C5, C6: Two end angles

#### Accessories

- Lip seal

#### Useful additions

- EP: Two end plates
- EW: Two end angles
- To be ordered separately for continuous linear runs

#### Construction features

- Spigot suitable for circular ducts to EN 1506 or EN 13180
- Spigot with groove for lip seal (if accessory lip seal has been ordered)

#### Materials and surfaces

- Diffuser face made from extruded aluminium sections
- Air control elements made of plastic, UL 94, V-0, flame retardant
- Plenum box made of galvanised sheet steel
- End plate and end angle made of aluminium
- Lip seal made of rubber
- Lining is mineral wool
- Diffuser face with anodised finish, E6-C-0, natural colour
- P1: Powder-coated, RAL CLASSIC colour
- Air control elements similar to RAL 9005, black
- WW: Air control elements similar to RAL 9010, white

#### Mineral wool

- To EN 13501, fire rating class A1, non-combustible
- RAL quality mark RAL-GZ 388
- Biosoluble and hence hygienically safe according to the German TRGS 905 (Technical Rules for Hazardous Substances) and EU directive 97/69/EC
- Faced with glass fibre fabric as a protection against abrasion through airflow velocities of up to 20 m/s
- Inert to fungal and bacterial growth

#### Standards and guidelines

- Sound power level of the air-regenerated noise measured according to EN ISO 5135

#### Maintenance

- Maintenance-free as construction and materials are not subject to wear
- Inspection and cleaning to VDI 6022