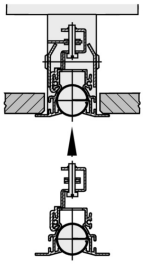
TROX® TECHNIK
The art of handling air

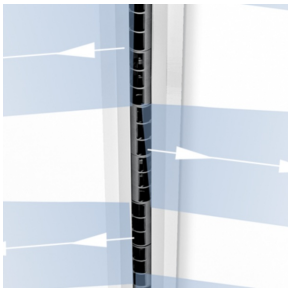
VSD35-1-AK

Nominal length up to 1500 mm: one spigot

INSTALLATION IN CONTINUOUS CEILINGS



CONCEALED SCREW FIXING



ALTERNATING HORIZONTAL AIR DISCHARGE

PLENUM BOX WITH DAMPER BLADE (OPTIONAL)

NUMEROUS VARIANTS FOR MANY DIFFERENT INSTALLATION SITUATIONS

Slot diffusers with 35 mm diffuser face (nominal width) and adjustable air control elements

- Nominal length from 600 to 1950 mm, 1 to 4 slots
- Volume flow rate range 15 – 135 (l/s)/m or 54 – 486 (m^3/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 VSD35 slot diffusers are used as supply air or extract air devices in comfort zones
- They blend in inconspicuously with continuous grid ceilings and plasterboard ceilings
- 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_N: 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

- VSD35-*: 1, 2, 3 or 4 slots
- VSD35-*-F: Diffuser face only
- VSD35-*-E: Corner section
- VSD35-...: Diffuser face without extended border
- VSD35-.../B00: Diffuser face with extended border

- VSD35-...: Black air control elements
- VSD35-.../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 plates and end angles 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