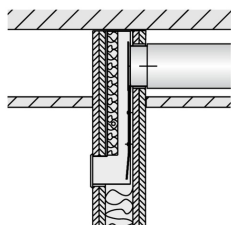


VSD50-1-LT-AZ-M-L/1175



INSTALLATION IN  
LIGHTWEIGHT PARTITION  
WALLS WITH METAL  
SUPPORT STRUCTURE



ANGLED ONE-WAY AIR  
DISCHARGE

## VSD50-1-LT

### FOR THE SPACE SAVING INSTALLATION INTO LIGHTWEIGHT PARTITION WALLS WITH A METAL SUPPORT STRUCTURE

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

- Nominal length: 550, 1175 mm, 1 slot
- Volume flow rate range 10 – 70 l/s or 36 – 252 m³/h
- Diffuser face made of extruded aluminium sections
- For variable and constant volume flows
- Installation into lightweight partition walls with a 50 mm wide metal support structure and a wall thickness of 100 mm
- 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
- Damper blade for volume flow rate balancing, can be adjusted through the diffuser face

## Application



### Application

- Type VSD50-1-LT slot diffusers are used as supply air or extract air devices or as supply and extract air combinations in comfort zones
- Angled one-way air discharge for 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 the space saving installation into lightweight partition walls with a 50 mm wide metal support structure and a wall thickness of 100 mm

### 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
- Internal acoustic lining that reduces room-to-room cross talk through the ductwork
- For easy and safe installation of the diffuser face after drywalling is complete

### Nominal sizes

- $L_N$ : 550, 1175 mm

## Description



### Variants

- VSD50 -1-LT: Slot diffuser for supply air or extract air
- VSD50 -1-LT-AZ: Slot diffuser as a supply and extract air combination (only  $L_N$  1175 mm)
- VSD50 -1-LT-.../WW: White air control elements

### Parts and characteristics

- Diffuser face with individually adjustable air control elements
- Plenum box for horizontal duct connection
- Internal acoustic lining to increase transmission loss
- Spring clip fixing

### Attachments

- Damper blade for volume flow rate balancing

### Accessories

- Lip seal

### 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 angle made of aluminium
- Lip seal made of rubber
- Acoustic lining of the cross-talk attenuator 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