Slot diffusers for ceiling installation Type VSD15





Alternating horizontal air discharge

Installation in panelled ceilings



Installation in continuous ceilings

With slim diffuser face

Slot diffusers with 15 mm diffuser face (nominal width) and adjustable air control elements

- Nominal lengths from 600 to 1500 mm, 1 slot
- Volume flow rate range from 7 to 30 (l/s)/m or 25 to 108 (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

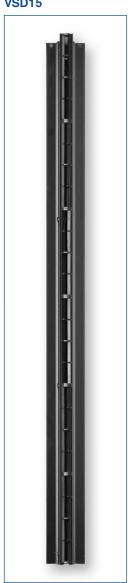
- Exposed diffuser face available in RAL CLASSIC colours
- Diffuser face with extended border
- Damper blade for volume flow rate balancing, can be adjusted through the diffuser face
- Plenum box with lining
- End angle, end seal
- White air control elements

Туре		Page
VSD15	General information	2.1 – 2
	Order code	2.1 – 8
	Quick sizing	2.1 – 10
	Dimensions and weight	2.1 – 11
	Installation details	2.1 – 14
	Specification text	2.1 – 15
	Basic information and nomenclature	2.3 – 1

Variants

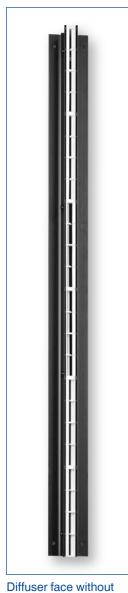
Product examples

VSD15



Diffuser face without extended border,

VSD15/.../WW



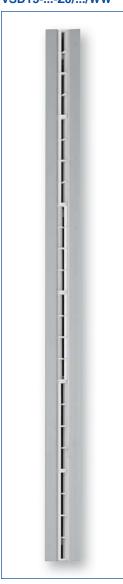
extended border, black air control elements white air control elements black air control elements white air control elements

VSD15-...-Z0



Diffuser face with extended border,

VSD15-...-Z0/.../WW



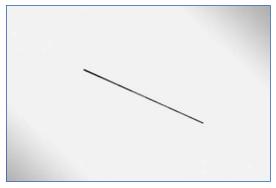
Diffuser face with extended border,

VSD15-A



Installation examples

VSD15-...-Z0/.../P1-RAL 9010, installation in continuous ceilings



Powder-coated RAL 9010, pure white

Description

Application

- Type VSD15 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
- Ideal for suspended panelled ceilings with standard 16 mm gaps
- Suitable for continuous linear arrangement

Variants

- VSD15-F: Diffuser face only
- VSD15-...: Diffuser face without extended border
- VSD15-...-Z0: Diffuser face with extended border
- VSD15-...: Black air control elements
- VSD15-.../WW: White air control elements

Connection

- A: Plenum box
- D: Plenum box with lining

Nominal sizes

- L_N: 600, 700, 800, 900, 1000, 1100, 1200, 1300, 1400, 1500 mm
- Diffuser face available in intermediate sizes from 300 to 2000 mm, in increments of 1 mm

Attachments

- M: Damper blade for volume flow rate balancing
- A9: End seal (only for diffuser face without extended border)
- CA: End angle (only for diffuser face with extended border Z0)

Accessories

Lip seal

Useful additions

- ED: Two end seals (only for diffuser face without extended border)
- EW: Two end angles (only for diffuser face with extended border Z0)
- To be ordered separately for continuous linear runs

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
- Ideal for suspended panelled ceilings with standard 16 mm gaps
- Suitable for continuous linear arrangement

Parts and characteristics

- Diffuser face with individually adjustable air control elements
- Plenum box for horizontal duct connection
- Connecting pins and alignment plates to connect and align slot diffusers for a continuous linear arrangement

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
- Lip seal made of rubber
- Lining is mineral wool
- Diffuser face without extended border is powder-coated RAL 9005, jet black
- Diffuser face with extended border is anodised, 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/EG
- Faced with glass fibre fabric as a protection against erosion through airflow velocities of up to 20 m/s
- Inert to fungal and bacterial growth

Installation and commissioning

- Preferably for rooms with a clear height up to 4.0 m
- Flush ceiling installation
- Horizontal duct connection
- Diffusers with a shorter plenum box as well as non-active diffusers require a rear blanking plate; length of blanking plate = L₁ - L₃
- For a continuous linear arrangement connect the diffusers with connecting pins and alignment plates
- If necessary, carry out volume flow rate balancing with the damper blade

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

Technical data

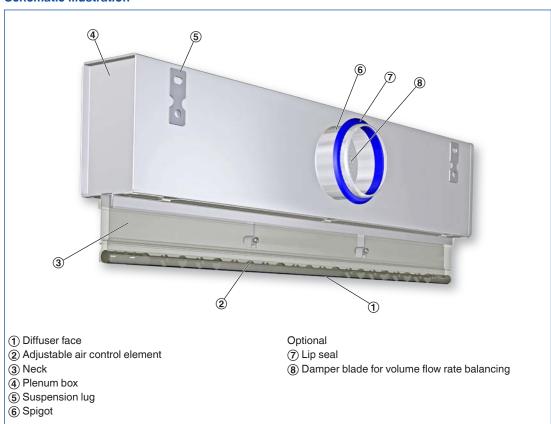
Nominal length	600, 700, 800, 900, 1000, 1100, 1200, 1300, 1400, 1500 mm
Number of slots	1
Minimum volume flow rate	7 (l/s)/m or 25 (m³/h)/m
Maximum volume flow rate, with $L_{WA} \cong 50 \text{ dB(A)}$	30 (l/s)/m or 108 (m³/h)/m
Supply air to room air temperature difference	–10 to +10 K

Function

Functional description

Slot diffusers direct the air from air conditioning systems into the room, either horizontally or at an angle. The resulting airflow induces high levels of room air, thereby rapidly reducing the airflow velocity and the temperature difference between supply air and room air. The result is a mixed flow ventilation in comfort zones, with good overall room ventilation, creating only very little turbulence in the occupied zone. Type VSD15 slot diffusers have adjustable air control elements. The air pattern can be adjusted to meet different local requirements. Air discharge is one-way or alternating horizontal. Heating mode with angled air discharge is also possible. The supply air to room air temperature difference may range from -10 to +10 K. A damper blade (optional) simplifies volume flow rate balancing for commissioning. To give rooms an aesthetic, uniform look, Type VSD15 diffusers may also be used for extract air.

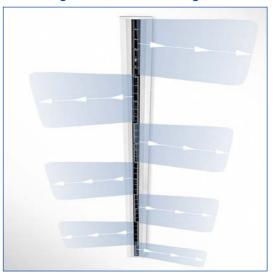
Schematic illustration



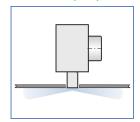
Air patterns

These are only schematic diagrams to illustrate the setting of the air control elements.

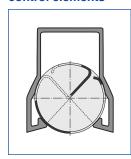
Alternating horizontal air discharge



Alternating horizontal (WH)



Setting of the air control elements

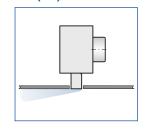


Alternating air control elements (200 mm) as shown

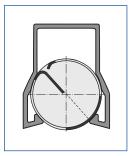
One-way horizontal air discharge to the left



One-way horizontal left (HL)



Setting of the air control elements

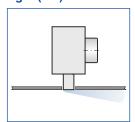


All air control elements as shown

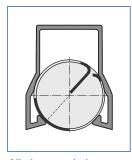
One-way horizontal air discharge to the right



One-way horizontal right (HR)



Setting of the air control elements

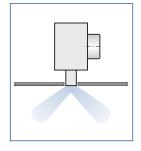


All air control elements as shown

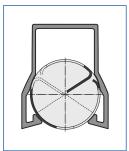
Alternating angled air discharge



Alternating angled (WS)



Setting of the air control elements



Alternating air control elements (100 mm) as shown

Order code

VSD15



1 Type

VSD15 Slot diffuser

2 Connection

F Diffuser face onlyA Plenum box

D Plenum box with lining

Diffusers with a shorter plenum box as well as non-active diffusers require a rear blanking plate Length of blanking plate = $L_1 - L_3$

3 Damper blade for volume flow rate balancing

No entry: none With (only for A, D)

4 Extended border

No entry: none

Z0 With extended border

5 Accessories

No entry: none

L With lip seal

6 Nominal size [mm]

Nominal length L_N

1100 1200

1300 1400

1500

7 End pieces

No entry: none

A9 End seals on both ends (VSD15)
 CA End angles on both ends (VSD15-Z0)
 To be ordered separately for slot diffusers for linear arrangement

8 Exposed surface

No entry:

VSD15 powder-coated RAL 9005, black VSD15-Z0 with anodised finish E6-C-0, natural colour

P1 Powder-coated,

specify RAL CLASSIC colour

Gloss level
RAL 9010 50 %
RAL 9006 30 %
All other RAL colours 70 %

9 Air pattern

No entry: alternating horizontal (WH)

WS Alternating angled HL Horizontal left

(opposite direction from spigot)

HR Horizontal right (same direction as spigot)

10 Colour of air control elements

No entry: similar to RAL 9005, black

WW Similar to RAL 9010, white

Order example

VSD15-A-M/900/A9/P1-RAL9010/WS/WW

Connection	Plenum box
Damper blade for volume flow rate balancing	With
Extended border	Without
Accessories	Without
Nominal size	900 mm
End pieces	End seals on both ends
Exposed surface	RAL 9010, pure white, gloss level 50 $\%$
Air pattern	Alternating angled
Colour of air control elements	White

Useful additions

VSD15



1 Type

VSD15 Slot diffuser

2 Extended border

No entry: none

Z0 With extended border

3 End pieces

No entry: none

ED Two end seals (only VSD15)

EW Two end angles (only VSD15-Z0)

Quick sizing tables provide a good overview of the volume flow rates and corresponding sound power levels and differential pressures.

The maximum volume flow rates apply to a sound power level of approx. 50 dB (A) with damper blade position 0°.

Exact values for all parameters can be determined with our Easy Product Finder design programme.

Quick sizing - sound power level and total differential pressure

			Damper blade position						
Nominal			0 °		45°		90°		
length			Δp _t	L_{WA}	Δp_t	L_{WA}	Δp _t	L_{WA}	
	I/s	m³/h	Pa	dB(A)	Pa	dB(A)	Pa	dB(A)	
	5	18	5	15	6	<15	10	<15	
600	10	36	20	34	24	32	39	32	
000	15	54	45	45	55	43	88	43	
	20	72	80	53	98	50	157	50	
	5	18	4	<15	5	<15	9	<15	
700	10	36	16	30	20	28	35	29	
700	15	54	35	41	45	39	78	39	
	20	72	62	49	80	47	139	47	
	6	22	5	<15	6	<15	11	<15	
800	15	54	29	38	39	36	72	37	
	20	72	51	46	69	44	128	45	
	25	90	80	52	108	50	200	50	
	7	25	5	15	7	<15	15	<15	
900	15	54	24	35	34	34	68	35	
	20	72	43	43	61	42	120	42	
	25	90	67	49	95	48	188	48	
	7	25	5	<15	7	<15	14	<15	
1000	10	36	9	22	14	21	29	22	
	20	72	37	41	55	39	115	40	
	30	108	84	51	125	50	258	51	
	8	29	5	<15	8	<15	18	<15	
1100	10	36	8	20	13	19	28	20	
	20	72	33	39	51	37	110	38	
	30	108	75	49	115	48	248	49	
	9	32	6	15	10	<15	22	15	
1200	15	54	17	29	27	28	60	29	
	25	90	47	43	75	42	167	43	
	35	126	92	52	147	51	328	52	
	9	32	6 16	<15	9	<15	21 59	<15	
1300	15	54		27	26	26		28	
	25 35	90 126	43 85	41 50	71 140	40 49	164 321	41 50	
								15	
	10 20	36 72	6 26	15	11 44	<15 33	26 103	34	
1400				33 44	98	43	103	34 45	
	30 40	108	58 103				231		
		144	103	52	175	51	411	52	
	10	36	6	<15	10	<15	25	<15	
1500	20	72	24	32	42	31	101	33	
	30	108	54	43	95	42	228	43	
	40	144	97	50	168	50	405	51	

TROX TECHNIK

Profiles

VSD15

9

VSD15-...-Z0

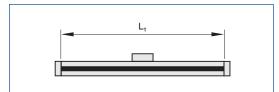
40

9

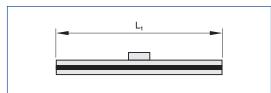


End pieces

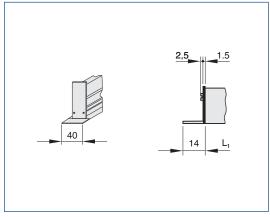
End pieces on both ends



Without end piece

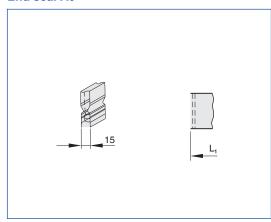


End angle CA



Only for diffuser face with extended border Z0

End seal A9



Only for diffuser face without extended border

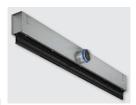
Dimensions

Nominal	L ₁	A _{eff}	A _{eff} WS		
length	mm	m	m²		
600	600	0.0021	0.0021		
700	700	0.0025	0.0025		
800	800	0.0028	0.0028		
900	900	0.0032	0.0032		
1000	1000	0.0035	0.0035		
1100	1100	0.0039	0.0039		
1200	1200	0.0042	0.0042		
1300	1300	0.0046	0.0046		
1400	1400	0.0049	0.0049		
1500	1500	0.0053	0.0053		

A_{eff}: One-way horizontal and alternating horizontal air discharge

A_{eff} WS: Alternating angled air discharge

VSD15-A



VSD15-A

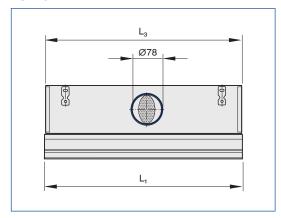
Variant

- Slot diffuser with plenum box

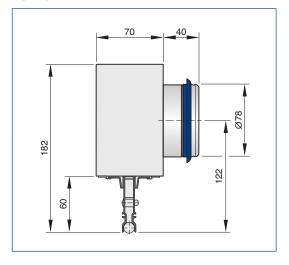
Parts and characteristics

- Plenum box for horizontal duct connection
- Damper blade (optional)
- Lip seal (optional)

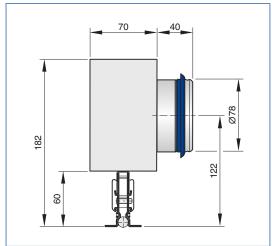
VSD15



VSD15-A



VSD15-A-Z0



Dimensions [mm] and weight [kg]

Nominal length	L ₁	L_3	m
Nominal length	m	kg	
600	600	595	1.8
700	700	695	2.2
800	800	795	2.5
900	900	895	2.8
1000	1000	995	3.1
1100	1100	1095	3.4
1200	1200	1195	3.7
1300	1300	1295	4.0
1400	1400	1395	4.3
1500	1500	1495	4.6

VSD15-D

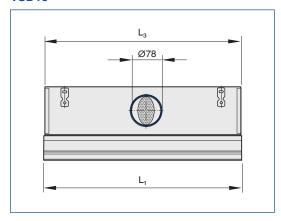
Variant

- Slot diffuser with plenum box
- Plenum box with lining

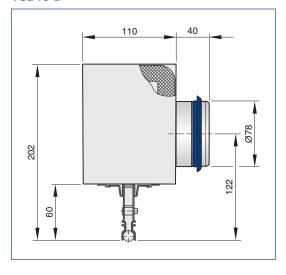
Parts and characteristics

- Plenum box for horizontal duct connection
- Thermal and acoustic insulation (lining)
- Damper blade (optional)
- Lip seal (optional)

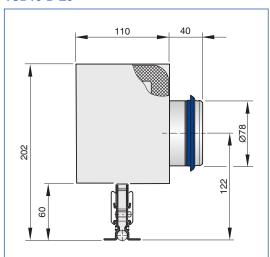
VSD15



VSD15-D



VSD15-D-Z0



Dimensions [mm] and weight [kg]

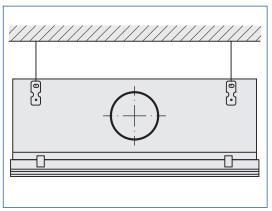
Nominal length	L ₁	L ₃	m
Nominal length	m	kg	
600	600	595	2.6
700	700	695	3.0
800	800	795	3.4
900	900	895	3.8
1000	1000	995	4.3
1100	1100	1095	4.7
1200	1200	1195	5.1
1300	1300	1295	5.6
1400	1400	1395	6.0
1500	1500	1495	6.4

Installation types

Installation with plenum box

For more installation details see Chapter K1 - 2.3

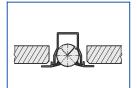
These are only schematic diagrams to illustrate installation details.

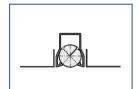


Ceiling systems

Continuous ceiling

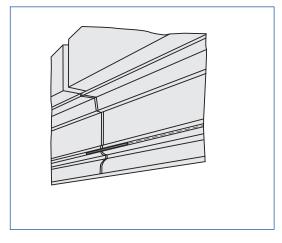
Panelled ceiling





Slot diffusers, linear run

Slot diffusers, linear run



Standard text

This specification text describes the general properties of the product. Texts for variants can be generated with our Easy Product Finder design programme. Slot diffusers with individually manually adjustable air control elements and an aesthetically shaped face section with one slot, for one-way horizontal, alternating horizontal or alternating angled air discharge. For supply air or extract air. For installation into suspended ceilings, particularly into panelled ceilings with standard 16 mm gaps. Ready-to-install component which consists of the diffuser face with individually adjustable black or white air control elements, and of a plenum box with side entry spigot and suspension lugs. Spigot suitable for circular ducts to EN 1506 or EN 13180. Sound power level of the air-regenerated noise measured according to EN ISO 5135.

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
- Ideal for suspended panelled ceilings with standard 16 mm gaps
- Suitable for continuous linear arrangement

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
- Lip seal made of rubber
- Lining is mineral wool
- Diffuser face without extended border is powder-coated RAL 9005, jet black
- Diffuser face with extended border is anodised, 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

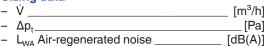
Mineral wool

- 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/EG
- Faced with glass fibre fabric as a protection against erosion through airflow velocities of up to 20 m/s
- Inert to fungal and bacterial growth

Technical data

- Nominal length: 600 1500 mm
- Number of slots: 1
- Minimum volume flow rate:
 7 (l/s)/m or 25 (m³/h)/m
- Maximum volume flow rate, with $L_{WA} \cong 50 \text{ dB}(A)$: 30 (l/s)/m or 108 (m³/h)/m
- Supply air to room air temperature difference:
 -10 to +10 K

Sizing data



Order options	1 Type		7 End p	ieces
		Slot diffuser		No entry: none
			□ A9	End seals on both ends (VSD15)
	2 Conr	nection	□ CA	End angles on both ends (VSD15-Z0)
	□F	Diffuser face only	_ 0,,	To be ordered separately
	\Box A	Plenum box		for slot diffusers for linear arrangement
	□ D	Plenum box with lining		ioi siot diliusers foi lillear afrangement
		oa sexg	8 Expos	sed surface
		Diffusers with a shorter plenum box	<u>U</u> =//po/	No entry:
		as well as non-active diffusers require		VSD15 powder-coated RAL 9005, black
		a rear blanking plate		VSD15-Z0 with anodised finish E6-C-0,
		Length of blanking plate = $L_1 - L_3$		natural colour
		Length of blanking plate = $L_1 - L_3$	□ P1	Powder-coated,
	3 Dam	per blade for volume flow rate balancing		specify RAL CLASSIC colour
	συσιπ	No entry: none		Specify HAL CLASSIC colour
	□М	With (only for A, D)		
	□ IVI	With (Only Iol A, D)		Gloss level
	 ■ Eyter	nded border		RAL 9010 50 %
	4 LXtel	No entry: none		RAL 9006 30 %
	□ Z 0	With extended border		All other RAL colours 70 %
	□ 20	with extended border		
	5 Acce	essories	9 Air pa	
	<u>5</u> 7.000	No entry: none		No entry: alternating horizontal (WH)
	□ L	•	□ WS	Alternating angled
		With lip seal	☐ HL	Horizontal left
	6 Nom	inal size [mm]		(opposite direction from spigot)
	0 110111	Nominal length L_N	☐ HR	Horizontal right
	□ 600	Normaniengur L _N		(same direction as spigot)
	□ 700		10 Colou	ır of air control elements
	□ 800			No entry: similar to RAL 9005, black
	□ 900		\square WW	Similar to RAL 9010, white
	□ 1000			
	□ 1100			
	□ 1200			
	□ 1300			
	□ 1400			
	□ 1500)		
Useful additions	1 Type	8 1	3 End p	
Order options	VSD15	Slot diffuser		No entry: none
•	[6] F.A.	adad bardar		Two end seals (only VSD15)
	2 Exter	nded border	□ EW	Two end angles (only VSD15-Z0)
		No entry: none		
	□ Z0	With extended border		

Slot diffusers Basic information and nomenclature



Slot diffusers

- Product selection
- Principal dimensions
- Nomenclature
- Sizing and sizing example
- Installation information
- Commissioning

Product selection

		Wall installation				
	VSD15	VSD35	VSD50	VSD35-Varyset	VSD50-1-LT	VSD35-3-AZ
Diffuser face						
Nominal width	15 mm	35 mm	50 mm	35 mm	50 mm	35 mm
Extended border	•	•	•	•	•	•
Aluminium	•	•	•	•	•	•
Diffuser fixing						
Concealed screw fixing		•	•			
Clamp fixing	•	•	•	•		
Spring clip fixing					•	•
Rigid connection	•					•
Air control elements				,		
Adjustable	•	•	•	•	•	•
Plastic, black and white	•	•	•	•	•	•
Air patterns						
Horizontal, one-way	•	•	•	•	•	•
Alternating horizontal	•	•	•	•		
Alternating angled	•	•	•	•		
Plenum box						
Galvanised sheet steel	•	•	•	•	•	•
Acoustic lining (cross talk reduction)	•	•	•		•	
Neck extension		•	•			
Asymmetric		•	•			
Attachments						
Damper blade	•	•	•		•	•
Accessories						
Lip seal	•	•	•		•	•
End plate		•	•	•		
End angles	•	•	•	•		•
End seal	•					
Nominal sizes						
Number of slots	1	1, 2, 3, 4	1, 2	1, 2, 3, 4	1	3
Nominal length	600, 700 800, 900 1000, 1100 1200, 1300 1400, 1500	600, 750 900, 1050 1200, 1350 1500, 1650 1800, 1950	600, 750 900, 1050 1200, 1350 1500, 1650 1800, 1950	900, 1050 1200, 1350 1500	550, 1175	600, 750 900, 1050 1200
Nominal size of spigot	80	100, 125 140, 160 200	125, 160 200	125, 160 180, 200	80, 100	80
Slot diffusers, linear run	•	•	•	•		
Corner section		•	•	•		
Technical data						
Volume flow rate range	7 – 30 (l/s)/m 25 – 108	15 – 135 (l/s)/m 54 – 486	20 – 120 (l/s)/m 72 – 432	8 – 90 (l/s)/m 29 – 324	10 – 70 l/s 36 – 252	8 – 40 l/s 30 – 144
	(m ³ /h)/m	(m³/h)/m	(m ³ /h)/m	(m ³ /h)/m	m ³ /h	m ³ /h
•	Possible	,		, ,		
	Not possible					

Principal dimensions

ØD [mm]

Outside diameter of the spigot

L₁ [mm]

Length of diffuser without end pieces

L_3 [mm]

Length of plenum box

P [mm]

Width of diffuser face – with extended border, if any

B_3 [mm]

Width of plenum box

H_3 [mm]

Height of slot diffuser with plenum box, from the lower edge of the suspended ceiling to the upper edge of the plenum box

Y [mm]

Neck extension – The neck length results from a fixed length plus the neck extension

A [mm]

Position of the spigot, defined by the distance of the spigot centre line to the lower edge of the suspended ceiling

C [mm]

Length of spigot

m [kg]

Weight

Nomenclature

f_m [Hz]

Octave band centre frequency

$L_{WA}[dB(A)]$

Sound power level of the air-regenerated noise

\dot{V} [m³/h] and [l/s]

Volume flow rate

Δp_t [Pa]

Total differential pressure

All sound power levels are based on 1 pW.

Basic information and nomenclature

Sizing with the help of this catalogue

This catalogue provides convenient quick sizing tables for slot diffusers. The tables give supply air volume flow rates for all nominal sizes. The maximum volume flow rates are for an open damper blade. A smaller opening of the damper blade results in higher sound power levels and a higher total differential pressure. The tables show values for damper blade positions 0°, 45° and 90°. Sizing data for other volume flow rates and damper blade positions can be determined quickly and precisely using the Easy Product Finder design programme.

Sizing example

Given data

 \dot{V} = 60 l/s (216 m³/h) Slot diffuser for ceiling installation Maximum sound power level 40 dB(A) with damper blade position 45° Alternating angled air discharge

Quick sizing

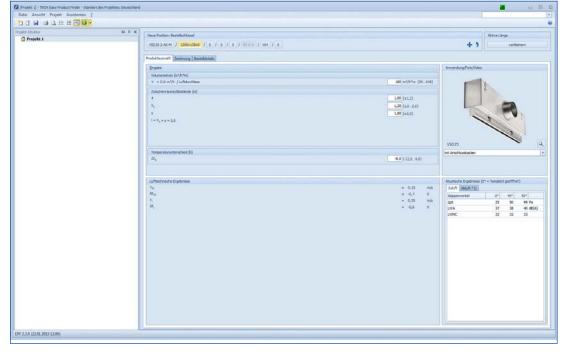
Type VSD35 Nominal sizes: VSD35-1/1950×123, VSD35-2/1200×138, VSD35-1/1500×123, VSD35-3/600×158, VSD35-3/750×138 Selected: VSD35-2/1200×138

Easy Product Finder



The Easy Product Finder allows you to size products using your project-specific data.

You will find the Easy Product Finder on our website.



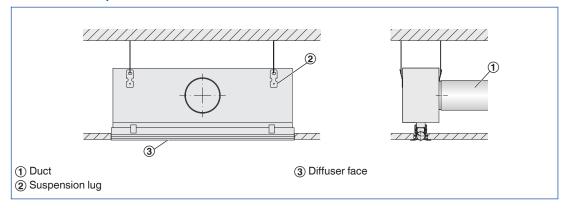
Description

Installation information

- Installation and making connections to be performed by others
- The optimum aerodynamic function is only achieved with flush ceiling installation
- The actual diffuser can be fixed to the plenum box in three ways: concealed screw fixing, clamp fixing or spring clip fixing

Installation types

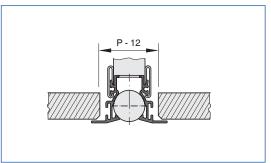
Installation with plenum box



- Horizontal duct connection
- Four suspension lugs
- Suspension with cords, wires or hangers, to be provided by others

Ceiling systems

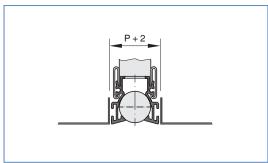
Continuous ceiling



Slot diffuser with extended border

- Fix the plenum box to the ceiling slabAdjust plasterboard ceiling tile as required

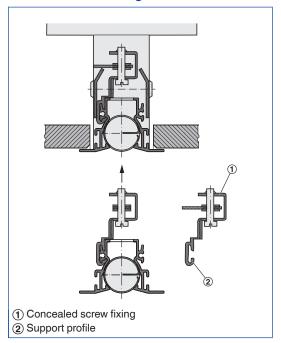
Ceiling panels with rectangular edges



Slot diffuser without extended border

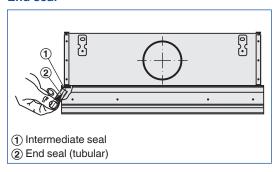
- Fix the plenum box to the ceiling slab
- The ceiling tile or panel of a panelled ceiling has no contact with the diffuser

Concealed screw fixing



- Concealed screw fixing with plenum box AS or DS
- Each slot diffuser is supplied with four concealed screw fixings
- If a slot diffuser with factory fitted end pieces has been supplied, first remove one of the end pieces
- Grasp each screw fixing by its support profile and slide the support profile onto the diffuser
- Position the screw fixings at regular distances on the diffuser
- Turn the tab of each screw fixing lengthways such that it is parallel to the diffuser face
- Push the diffuser face into the neck of the plenum box
- Turn the tab of each screw fixing by 90° and tighten the screws
- To remove the diffuser, follow the steps in reverse order

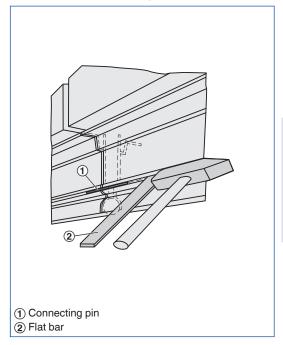
End seal



End seal for VSD15 only

- Continuous linear runs require an end seal on each end to ensure that no air leaks
- End seals can be either factory fitted or fitted by others
- Single diffusers require end seals on both ends
- End seals are suitable only for slot diffusers without extended border

Continuous linear arrangement



- Each slot diffuser (without end pieces) is supplied with two connecting pins
- Connecting pins are used to align slot diffusers for linear runs
- Insert the connecting pins into a slot diffuser
- Connect the next slot diffuser to it

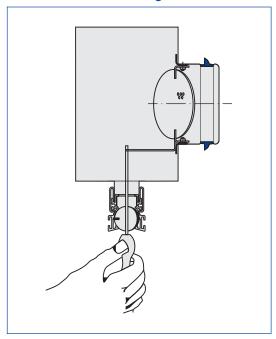
Commissioning

Volume flow rate balancing

When several diffusers are connected to just one volume flow controller, it may be necessary to balance the volume flow rates.

- Slot diffuser with plenum box and damper blade (variant -M): The damper blade can be adjusted even after the diffuser face has been installed.

Volume flow rate balancing



- Move the damper blade near the spigot in such a way that it is possible to insert a screw driver