



**MINODSX**

Slot diffuser for small air volumes

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## OVERVIEW OF PRODUCT VERSIONS

### MINODSX-1



### MINODSX-2



## FUNCTION AND USE

The diffusers of the MINO series are diffusers for small air volumes which are suitable for supplying the hygienically required minimum fresh air volume per person in a controlled and reliable manner, for example for living space ventilation, hotels, treatment rooms, hospital rooms and single-axis offices.

The slot diffuser MINODSX is suitable for installation in closed ceiling systems, in rooms of heights 2.6 to 4.0 m.

Proper insertion of the air guide elements allows the diffuser to be used in cooling or heating mode. The high induction ensures fast reduction of the air outflow velocity and of the temperature difference in the cooling mode. In the heating mode, the vertical air throw ensures a high penetration depth. Thus, the room can be heated quickly and effectively. The free cross-section remains always the same in this case, therefore, the pressure loss and sound volume do not change.

The air guide elements are installed ex works and cannot be modified on site.

One-way or two-way horizontal and vertical air throw patterns are possible. If, on ordering, the desired air throw direction is specified, it will be set ex works. Unless stated otherwise, blade position LII (horizontal one-way throw) will be set. The throw direction can be changed easily by turning the diffuser plate without using any tools.

When used as a wall diffuser, a special blade position is set ex works. This application case must be specified when ordering.

The stable air jet means that the diffuser is suitable for VAV systems. Even at a volumetric flow of 40%, the jet still remains stable. The attached plenum box ensures a uniform distribution of the supply air over the whole area of the diffuser. At an extra charge, a damper adjustable from below can be installed in the connection spigot for air volume regulation.

## MODELS

MINODSX-1	Size 1
MINODSX-2	Size 2
MINODSX-...-V	Air guide element with vertical throw
MINODSX-...-L	air guide element with horizontal one-way throw to the left (standard)
MINODSX-...-R	air guide element with horizontal one-way throw to the right

### Discreet and reliable in function

Supply air diffuser for wall mounting or ceiling mounting, for small volumetric flow rates, stable horizontal air pattern and good room flushing.

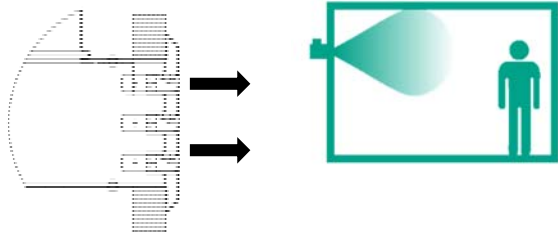
## PERFORMANCE DATA

		MINODSX-1	MINODSX-2
$V_{zu}$	$(m^3/h)$	69	105
	$[l/s]$	19.2	29.2
$L_{WA}$	$[dB(A)]$	35	35

## BLADE POSITION FOR AIR JET

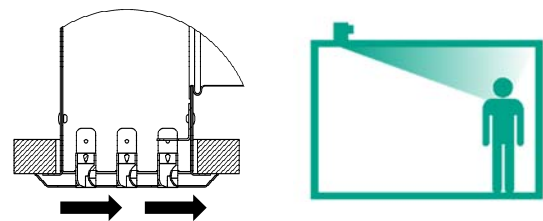
### Air guide element position (-V)

vertical throw



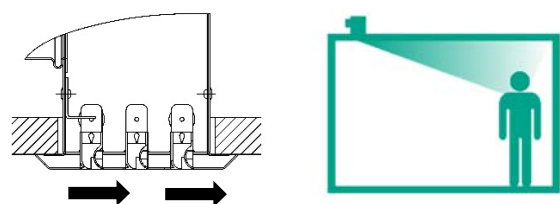
### Air guide element position (-L) (standard)

horizontal one-way throw to the left



### Air guide element position (-R)

horizontal one-way throw to the right



## PROCESSING

### Faceplate

- Sheet steel:
  - painted to the RAL colour RAL 9010 (white, standard) (-9010)
  - painted to a different RAL colour, freely selectable (-xxxx)

### Blade colour (air guide element)

- Plastic:
  - similar to RAL colour 9005 (black)(-L9005).
  - similar to RAL 9010 (white, standard) (-L9010).

### Plenum box

- Rectangular design.
- made of galvanised sheet steel.
- Housing with round lateral connection spigot and mounting brackets.

## ACCESSORIES

for plenum box

### Damper (-DK0/-DK1)

- without damper (-DK0) (standard).
- with damper (-DK1), made of galvanised sheet steel, in the plenum box housing, adjustable, for simple air volume regulation.

### Rubber lip seal (-GD0/-GD1)

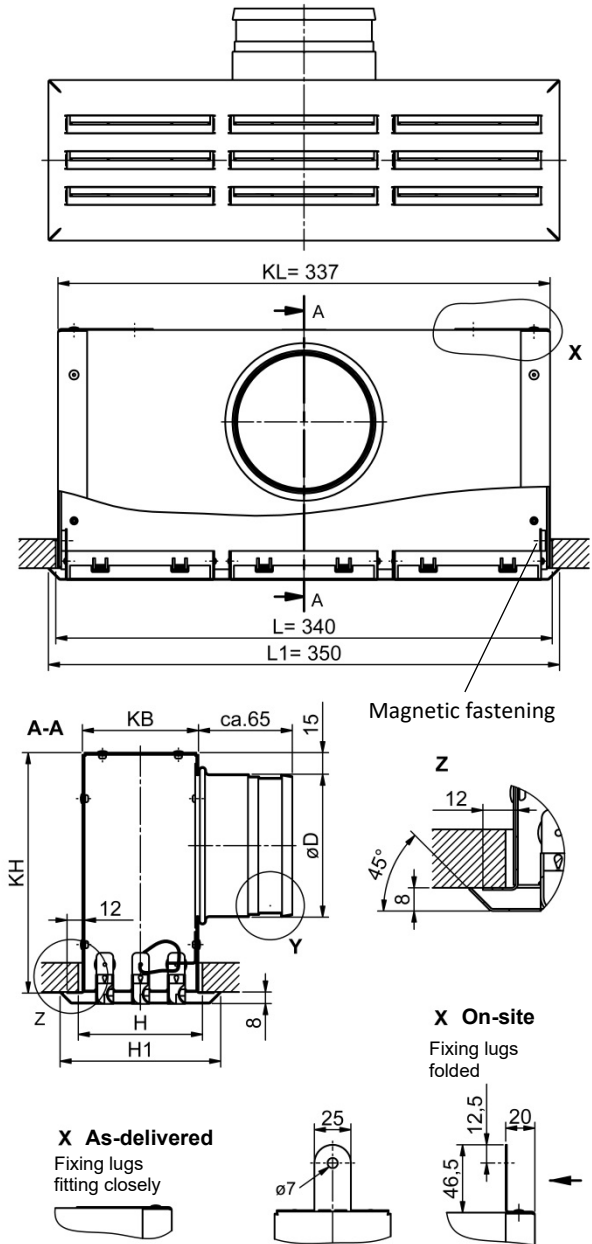
- without rubber lip seal (-GD0) (standard).
- with rubber lip seal (-GD1) made of special rubber, at the connection spigot.

### Universal fastening (-B0/-BU)

- without fastening (-B0) (standard).
- with universal fastening (-BU)
  - made of galvanised sheet steel.
  - Brackets and screws are supplied loose.

## DIMENSIONS

### MINODSX



### Available sizes MINODSX

	H	H1	KB	KH	$\phi D$	n
MINODSX-1-...	85	110	80	165	$\phi 98$	3
MINODSX-2-...	140	160	135	190	$\phi 123$	5

all dimensions in mm  
 n = number of slots in the height

**DIMENSIONS OF ACCESSORIES**

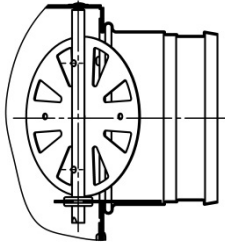
**Damper (-DK0/-DK1)**

DK0 = without damper (standard)

DK1 = with damper

To adjust the damper, the diffuser must be removed (without tools)

(lateral connection spigot)

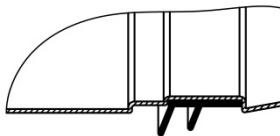


**Rubber lip seal (-GD0 / -GD1)**

GD0 = without rubber lip seal (standard)

GD1 = with rubber lip seal

Detail Y



**Universal fastening (-B0/-BU)**

B0 = without fastening (-B0) (standard).

BU = with universal fastening (-BU)



**INSTALLATION**

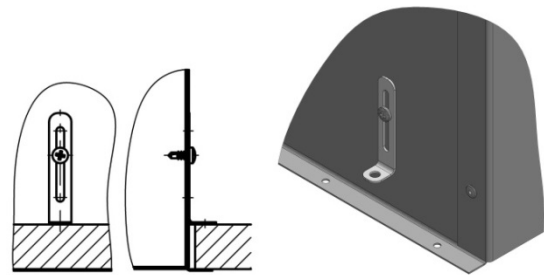
**Universal fastening on plenum box (-BU)**

(drawn without MINODSX)

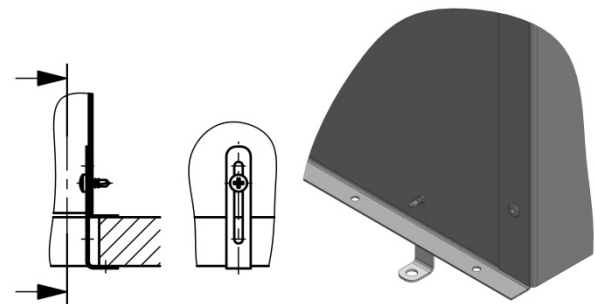
Mounting bracket and mounting screws (4 x DIN EN ISO 15481 – ST3.5x9.5) are supplied loose – attached on site, M4 threaded rods on site

**Installation proposals:**

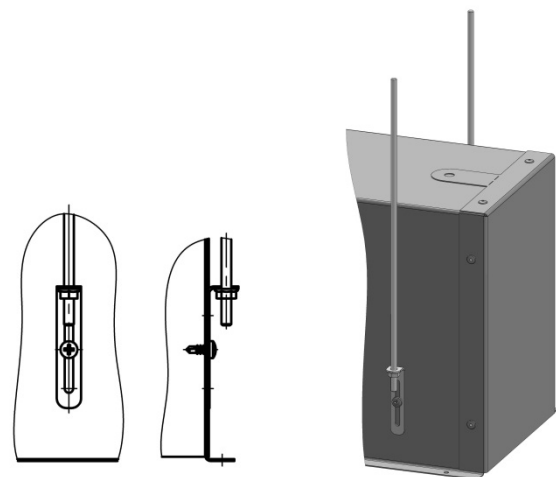
from behind



from the front



for suspension



## TECHNICAL DATA

### MINODSX-1

V <sub>ZU</sub>		L <sub>WA</sub> [dB(A)]	Δp <sub>t</sub> (Pa)	x+y (m) at v <sub>mittel</sub> 0.15 m/s
(m <sup>3</sup> /h)	[l/s]			
<b>52</b>	14.4	25	14	2.9
<b>60</b>	16.7	30	19	3.9
<b>69</b>	19.2	35	25	5.2
<b>80</b>	22.2	40	33	7.1

### MINODSX-2

V <sub>ZU</sub>		L <sub>WA</sub> [dB(A)]	Δp <sub>t</sub> (Pa)	x+y (m) at v <sub>mittel</sub> 0.15 m/s
(m <sup>3</sup> /h)	[l/s]			
<b>77</b>	21.4	25	11	2.3
<b>90</b>	25.0	30	15	2.7
<b>105</b>	29.2	35	20	3.3
<b>123</b>	34.2	40	27	4.0

## LEGEND

D	(mm)	= Diameter
H	(mm)	= Recess width
L	(mm)	= Recess length
H1	(mm)	= Faceplate width
L1	(mm)	= Faceplate length
KB	(mm)	= Width of box
KH	(mm)	= Height of box
KL	(mm)	= Length of box
n	(-)	= number of slots in the height
Δp <sub>t</sub>	(Pa)	= Pressure loss
L <sub>WA</sub>	[dB(A)]	= A-weighted sound power level
x	(m)	= Throw
V <sub>ZU</sub>	(m <sup>3</sup> /h) [l/s]	= Supply air volumetric flow
v <sub>mittel</sub>	(m/s)	= Average end velocity of jet

## ORDER CODE

01	02	03	04	05	06	07	08
Type	Model	Paint (faceplate)	Blade colour	Blade position for air jet	Mounting	Damper	Rubber lip seal
<b>Example</b>							
MINODSX	-1	-F9010	-L9010	-R	-BU	-DK0	-GD1

**Sample:**

**MINODSX-1-F9010-L9010-R-BU-DK0-GD1**

Slot diffuser MINODSX | size 1 | painted to RAL colour 9010 (white) | air guide element made of plastic similar to RAL 9010 (white) | air guide element with horizontal one-way throw to the right | with universal fastening | without damper | with rubber lip seal

## ORDER DETAILS

### 01 - Type

MINODSX = slot diffuser MINODSX

### 02 - Model

1 = Size 1  
 2 = Size 2

### 03 - Paint (faceplate)

F9010 = painted to the RAL colour RAL 9010 (white, standard)  
 Fxxxx = painted to another RAL colour, freely selectable (always with 5 digits)

### 04 – Blade colour (air guide element)

L9005 = Air guide element made of plastic, similar to RAL colour 9005 (black).  
 L9010 = Air guide element made of plastic similar to RAL 9010 (white) (standard).

### 05 - Blade position for air jet

V = Air guide element with vertical throw  
 R = Air guide blade with horizontal one-way throw to the right  
 L = Air guide element with horizontal one-way throw to the left (standard)

### 06 - Mounting

B0 = without fastening (standard)  
 BU = with universal fastening  
 (Brackets and screws are supplied loose)

### 07 - Damper

DK0 = without damper (standard)  
 DK1 = with damper

### 08 - Rubber lip seal

GD0 = without rubber lip seal (standard)  
 GD1 = with rubber lip seal

## SPECIFICATION TEXT

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The slot diffuser MINODSX is suitable for installation in closed ceiling systems, in rooms of heights 2.6 to 4.0 m. Proper insertion of the air guide elements allows the diffuser to be used in cooling or heating mode. The high induction ensures fast reduction of the air outflow velocity and of the temperature difference in the cooling mode. In the heating mode, the vertical air throw ensures a high penetration depth. In doing so, the free cross-section always remains constant. Likewise, the pressure loss and noise level do not change. A subsequent adjustment of the air jet pattern is not possible.

The slot diffuser consisting of faceplate with air guide elements and plenum box in rectangular design. Faceplate made of sheet steel. Plenum box with lateral round connection spigot and mounting brackets made of galvanised sheet steel. The faceplate is fastened on the plenum box using magnetic fastening.

Make: SCHAKO type **MINODSX**

### Model:

- Size 1 (-1)
- Size 2 (-2)

### Paint (faceplate):

- Sheet steel:
  - painted to RAL colour 9010 (white, standard) (-**F9010**).
  - painted to a different RAL colour, freely selectable (-**Fxxxx**) (always with 5 digits).

### Blade colour (air guide element)

- Air guide element made of plastic:
  - similar to RAL colour 9005 (black) (-**L9005**).
  - similar to RAL 9010 (white, standard) (-**L9010**).

### Blade position for air jet:

- vertical throw (-**V**)
- one-way horizontal throw to the right (-**R**)
- one-way horizontal throw to the left (-**L**) (standard)

### Accessories:

- Damper:
  - without damper (-DK0) (standard).
  - with damper (-DK1), made of galvanised sheet steel, in the plenum box housing, adjustable, for simple air volume regulation.
- Rubber lip seal:
  - without rubber lip seal (-GD0) (standard).
  - with rubber lip seal (-GD1) made of special rubber, at the connection spigot.
- Universal fastening:
  - Without fastening (-B0)
  - with universal fastening (-BU)