



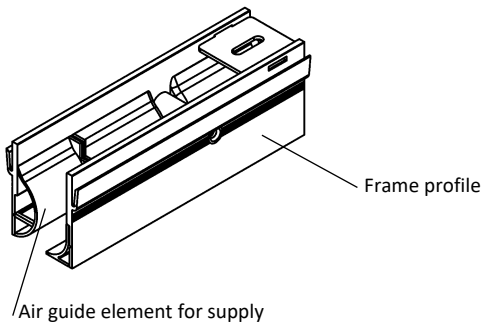
**DSXL**  
Slot diffuser

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## OVERVIEW OF PRODUCT VERSIONS

DSXL-...-Z-... (supply air) / DSXL-...-A-... (return air)



## FUNCTION AND USE

The small slot diffuser DSXL-...-S0 is suitable **for installation in closed ceiling systems**, in rooms of heights 2.6 to 4 m. In panelled ceilings, the use of the black (RAL 9005) air guide element allows an **approximately invisible installation** of the slot diffuser. The models DSXL-...-P0 and DSXL-...-PB with support profile are suitable for installation in ceiling panels.

The **high induction** ensures fast reduction of the air outflow velocity and of the temperature difference in cooling mode. The air outflow direction can also be adjusted from the room side, even when the diffuser has been installed. 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 to changed room conditions is possible. To adjust the position of the blades, each blade must be pulled out and inserted rotated in accordance with the desired air direction. One- or two-way horizontal air throw is possible. If, on ordering, the desired air throw direction is specified, it will be set ex works. Unless stated otherwise, blade position -B (two-way horizontal throw) will be set.

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 with air diffuser plate ensures a uniform distribution of 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. The plenum box can also be insulated either internally or externally. Connection to diffuseres combined with lighting is possible (price on request).

The slot diffuser DSXL is delivered with concealed mounting as standard.

For slot diffusers in band design with concealed mounting, the fastening effort is reduced by half, compared with the model without concealed mounting.

### Diffuser mounting

Fixing lugs are provided in the plenum box to allow the diffuser to be suspended (see pages 13 + 14). These fixing lugs can be provided with M4 (-EM) riveting nuts at an extra charge.

## MODELS

DSXL-1-...	1-slot
DSXL-2-...	2-slot
DSXL-3-...	3-slot
DSXL-4-...	4-slot
DSXL-...-Z	supply air
DSXL-...-A	return air (with air guide elements)
DSXL-...-S0	with narrow frame profile, without support profile, for invisible installation (standard)
DSXL-...-P0	with frame profile P0, with support profile, for visible installation
DSXL-...-PB	with frame profile PB, with support profile, for visible installation
DSXL-...-L	air guide elements one-way horizontal throw on the left
DSXL-...-R	air guide elements one-way horizontal throw on the right
DSXL-...-B	air guide elements two-way horizontal throw (standard)
DSXL-...-N	single design (length max. 1500 mm)
DSXL-...-B-...	band design (available lengths according to SCHAKO standard for band design, single element length max. 1500 mm). To lock the slot diffusers, double air guide elements are used at the butt joints (supplied loose, installation on site).

## MOUNTING

### Without connection (-00)

- Slot diffuser and plenum box are **not** connected to one another
- Standard with dummy piece (-BS) and with mounting bracket (-BW)

### Concealed mounting with plenum box (-VM, standard)

- Slot diffuser and plenum box are connected to one another ex works
- The slot diffuser is screwed to the plenum box housing (face part) with concealed screws

### Clamp strap (-KB)

- Only possible without plenum box
- Screws and clamp straps are supplied loose (pair).
- Possible for the models DSXL-...-P0 and DSXL-...-PB
- Not possible for model DSXL-...-S0
- The slot diffuser is screwed to the clamp strap with concealed screws (included in delivery)
- **For mounting, access on the rear is not required!**

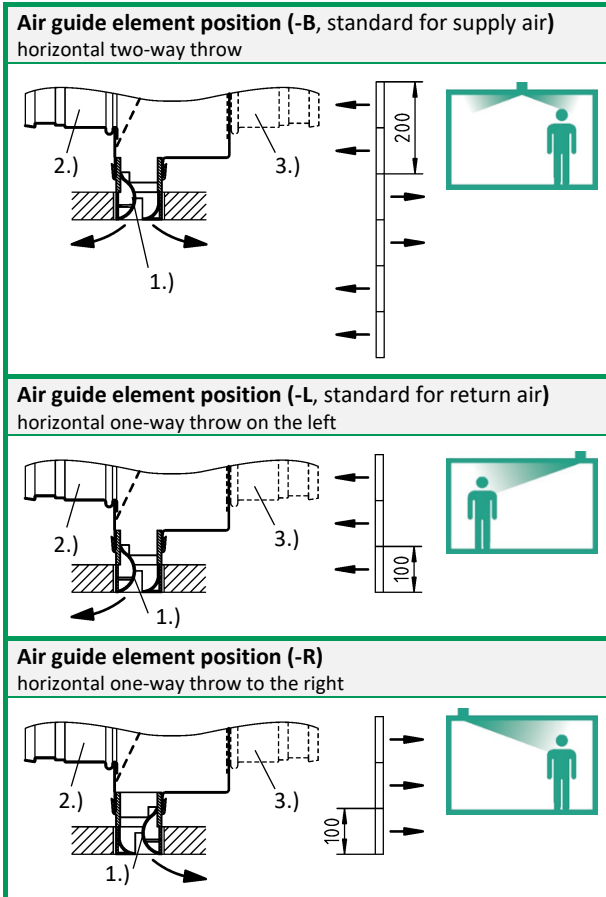
### Suspension via fastening holes

- Model:
  - dummy piece design (-BS)
  - mounting bracket design (-BW, pair)
- Only possible without plenum box
- The slot diffuser is fastened to 4 suspension brackets

**BLADE POSITION FOR AIR JET**

all adjacent blades will be set in one direction when ordering multi slot models

Supply air and return air with air guide elements.



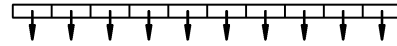
- 1.) Air guide element
- 2.) Lateral spigot (-S1)
- 3.) Lateral spigot located on the opposite side (-S2)

In each case, at least 2 elements one behind the other must have the same air flow direction, otherwise no stable horizontal air throw pattern will be obtained.

**AIR THROW PATTERN**

**DSXL-1 to 4-...-L/-R** (one-way horizontal throw on the left or on the right)

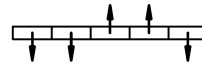
L=500 -1500



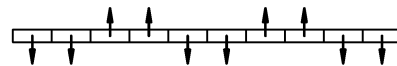
All air guide elements are adjusted in one direction.

**DSXL-1-...-B** (horizontal two-way throw)

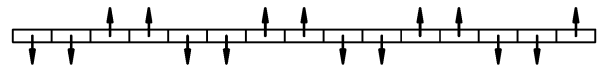
L=500



L=1000



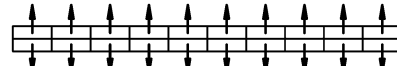
L=1500



In each case, 2 air guide element rows must be installed on the right, 2 air guide element rows on the left, etc. For L=500 and L=1500, the last air guide element row must be used opposite to the previous one.

**DSXL-2-...-B** (horizontal two-way throw)

L=500 -1500



In each case, the complete slot rows must be set to one direction.

**DSXL-3-...-B** (horizontal two-way throw)

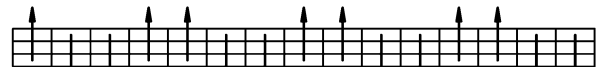
L=500



L=1000



L=1500



In each case, 2 air guide element rows must be installed on the right, 2 air guide element rows on the left, etc. For L=500 and L=1500, the last air guide element row must be used opposite to the previous one.

**DSXL-4-...-B** (horizontal two-way throw)

L=500 -1500



**Attention:** In each case, 2 complete slot rows must each be set to one direction.

In the return air model, the air throw pattern -LIII is supplied as standard. A different air throw pattern is possible according to the customer's specifications.

## PROCESSING

### Frame surface

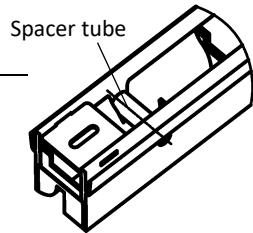
- Natural colour anodised aluminium (-ELOX, standard for DSXL-...-P0 and DSXL-...-PB models)
- Painted aluminium (standard for DSXL-...-S0 model and painted to the same colour as blade colour of air guide element):
  - RAL 9005 (black) (-9005)
  - RAL 9010 (white) (-9010)
  - painted to a different RAL colour, freely selectable (at an extra charge) (-xxxx, always with 4 digits)

### Blade colour (air guide element)

- Plastic:
  - Colour similar to RAL 9005 (black, standard) (-L9005)
  - Colour similar to RAL 9010 (white) (-L9010)
- Installation position for air guide element:
  - Standard installation position for supply air (air guide element position -B)
  - Standard installation position for return air (air guide element position -L)
  - Installation position for supply air and return air (air guide element position -R)
- Double air guide elements for band design (supplied loose)

### Spacer tube

- Aluminium



### Connection element

- for band design
- for connection between (see page 15):

DSXL-...-ASK	with	DSXL-...-ASK	<b>active - active</b>
DSXL-...-ASK	with	DSXL-...-BW	<b>active - active</b>
DSXL-...-ASK	with	DSXL-...-BS	<b>active - passive</b>
DSXL-...-BW	with	DSXL-...-BW	<b>active - active</b>
DSXL-...-BW	with	DSXL-...-BS	<b>active - passive</b>
DSXL-...-BS	with	DSXL-...-BS	<b>passive - passive</b>

- made of galvanised sheet steel
- supplied loose as standard

## ACCESSORIES

### Plenum box (-ASK-22)

- Model (number of slots):
  - 1-slot (-1)
  - 2-slot (-2)
  - 3-slot (-3)
  - 4-slot (-4)
- Single / band design:
  - Single design (-N, length of box KL max. 1500 mm)
  - Band design (-B, available lengths according to SCHAKO standard for band design)
- Length:
  - Length L = 1000 mm (-01000) (KL = 997 mm)
  - Length L = 1500 mm (-01500) (KL = 1497 mm)
  - Length (L/BL) in mm, freely selectable (-xxxx, always with 5 digits) (length of box KL = L-3 / total length of box GKL = BL-3, can be fitted with a plenum box in case of single design lengths L =  $\geq 400$  mm to  $\leq 1500$  mm)
- Mounting of box:
  - without connection (-00) (not connected to the slot diffuser, screws supplied loose)
  - concealed mounting (-VM) (connected to the slot diffuser ex works)
- Material:
  - Galvanised sheet steel (-SV) (standard)
- Damper:
  - without damper (-DK0) (standard)
  - with damper and cable-operated adjustment (-DK2) made of galvanised sheet steel, in the connection spigot, 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
- Insulation:
  - without insulation (-I0) (standard)
  - with internal insulation (-Ii), thermal insulation inside the plenum box
  - with external insulation (-Ia), thermal insulation at the outside of the plenum box
- Height of plenum box:
  - Standard height of box (-KHS)
  - Height of box in mm, freely selectable (-xxx, always with 3 digits) (minimum height [GH] with spigot position S1+S2 and standard box neck = spigot diameter  $\varnothing D + 82$  mm / with spigot position S0 = 180 mm)
- Box neck:
  - standard box neck (-KVS) (KVS = 45 mm)
  - Box neck extension in mm, freely selectable (-xxx, always with 3 digits). box neck (not adjustable) from  $\geq 45$  mm to 200 mm possible
- Spigot position:
  - spigot from above (-S0)
  - lateral spigot (-S1) (standard)
  - Lateral spigot located on the opposite side (-S2) (only possible for DSXL-1-... and DSXL-2-...)
- Spigot diameter:
  - standard spigot diameter (-SDS)
  - spigot diameter ( $\varnothing D$ ) in mm, freely selectable (-xxx, always with 3 digits)
- Suspension:
  - without riveting nut (-E0) (standard)
  - with riveting nut (-EM), made of brass
- with air diffuser plate, made of galvanised sheet steel, only for models with spigot from above
- Connection plate for band design (2x per butt joint), made of galvanised sheet steel. Number of suspension (without / with riveting nuts) per butt joint is reduced from 4x to 2x

### Corner angle (-EW-22)

- Model (number of slots):
  - 1-slot (-1)
  - 2-slot (-2)
  - 3-slot (-3)
  - 4-slot (-4)
- Frame profile:
  - narrow frame profile without support profile, for invisible installation (-S0, standard)
  - frame profile P0, with support profile, for visible installation (-P0)
  - frame profile PB, with support profile, for visible installation (-PB)
- Frame surface:
  - Natural colour anodised aluminium (-ELOX, standard for DSXL-...-P0 and DSXL-...-PB models)
  - Painted aluminium (standard for DSXL-...-S0 model and painted to the same colour as dummy profile / air guide element):
    - RAL 9005 (black) (-9005)
    - RAL 9010 (white) (-9010)
    - a freely selectable RAL colour (-xxxx, always with 4 digits)
- Dummy profile colour (air guide elements)
  - Dummy profile made of painted aluminium:
    - colour similar to RAL 9005 (black) (-B9005) (standard)
    - colour similar to RAL 9010 (white) (-B9010)
    - a freely selectable RAL colour (-Bxxxx) (always with 5 digits)
  - Air guide element (double), mounted ex works, made of plastic material similar to dummy profile colour
- Angle between sides:
  - angle  $\alpha = 90^\circ$  (-090, standard)
  - angle ( $\alpha$ ) as required (-xxx), values between  $\alpha = 90^\circ$  (-090, standard) and  $170^\circ$  (-170) are possible (always with 3 digits)
- Left-side length (a):
  - standard length L = 300 (-000)
  - length (L) in mm, freely selectable (-xxx) (minimum length = standard length) (always with 3 digits)
- Right-side length (b):
  - standard length L = 300 (-000)
  - length (L) in mm, freely selectable (-xxx) (minimum length = standard length) (always with 3 digits)
- with connecting element, firmly screwed:
  - made of galvanised sheet steel

### End pieces (-E0/-ES/-EB/-EL/-ER)

- without end pieces (-E0) (standard)
- with end pieces, made of aluminium (same colour as frame):
  - supplied loose (-ES, pair) (standard)
  - mounted ex works on both sides (-EB)
  - mounted ex works on the left side (-EL)
  - mounted ex works on the right side (-ER)

### Mounting bracket (pair) / dummy piece (-B0 / -BW / -BS)

- without mounting bracket / without dummy piece (-B0)
- with mounting bracket (-BW), for overflow operation:
  - made of galvanised sheet steel
  - only possible without plenum box
  - possible from length L  $\geq 200$  mm
- with dummy piece (-BS):
  - made of galvanised sheet steel
  - only possible without plenum box
  - possible from length L  $\geq 200$  mm

With models -BW and -BS as a band, additional connecting fishplates are supplied loose.

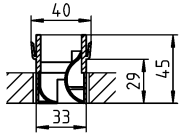
## DIMENSIONS

### Dimensions of frame profile

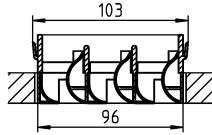
#### Narrow frame profile "S0" (standard)

For invisible installation in the joint of panelled ceilings.

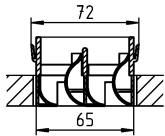
DSXL-1-...-S0



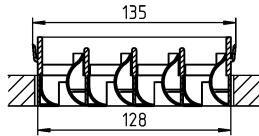
DSXL-3-...-S0



DSXL-2-...-S0



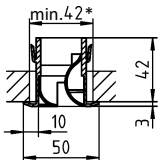
DSXL-4-...-S0



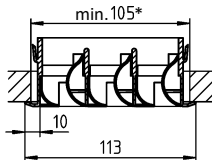
#### Frame profile "P0" (with support profile)

For visible installation in panelled ceilings.

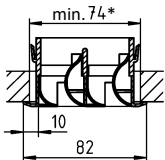
DSXL-1-...-P0



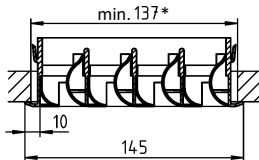
DSXL-3-...-P0



DSXL-2-...-P0



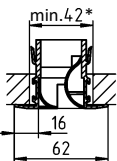
DSXL-4-...-P0



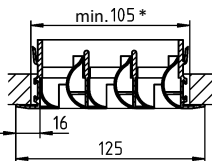
#### Frame profile "PB" (with support profile)

For visible installation in panelled ceilings.

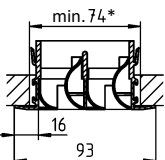
DSXL-1-...-PB



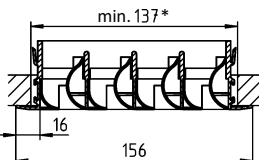
DSXL-3-...-PB



DSXL-2-...-PB

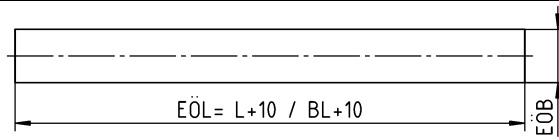


DSXL-4-...-PB



\* EÖB = installation opening width (minimum dimension)

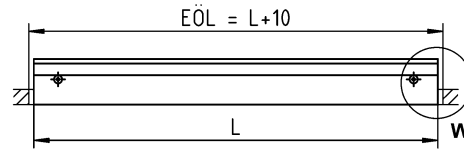
### Installation opening



### Available lengths for the slot diffuser

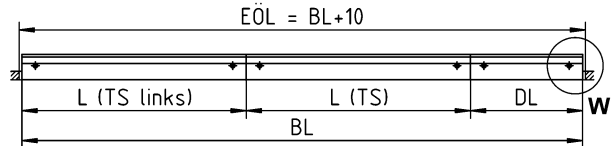
#### SINGLE DESIGN (-N)

- Length L = 1000 mm (-N-01000)
- Length L = 1500 mm (-N-01500)
- Length (L) in mm, freely selectable (-N-xxxxx) (always with 5 digits)  
 (in case of single design length  $L \geq 400$  mm to  $\leq 1500$  mm can be fitted with plenum box, dummy piece possible from length  $\geq 200$  mm)



#### BAND DESIGN (-B)

- Length (BL) in mm, freely selectable, as band (-B-xxxxx) (always with 5 digits)



#### Available lengths according to SCHAKO standard:

When the slot diffuser type DSXL is designed as a band, the total length BL is assembled from lengths (sections) of **1000 mm or 1500 mm** (standard). The difference pieces DL are supplied in lengths  $\geq 400$  mm to  $< 1500$  mm. The difference pieces from  $\geq 200$  mm to  $< 400$  mm are supplied as dummy pieces without plenum box.

To lock the slot diffusers, double air guide elements are used at the butt joints (supplied loose, installation on site).

TS	= section
Left TS	= left section
L	= length
DL	= difference in length
BL	= band length
EÖB	= installation opening width
EÖL	= installation opening length ( $EÖL = L+10 / BL+10$ )

End pieces, for detail W see page 8.

**DIMENSIONS OF ACCESSORIES**

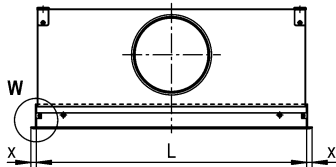
**End pieces (-E0/-ES/-EB/-EL/-ER)**

- without end pieces (-E0) (standard)
- with end pieces, made of aluminium (same colour as frame):
  - supplied loose (-ES, pair) (standard)
  - mounted ex works on both sides (-EB)
  - mounted ex works on the left side (-EL)
  - mounted ex works on the right side (-ER)

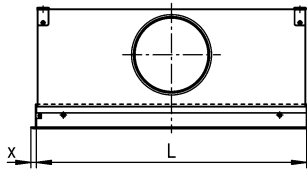
To give the impression of a continuous frame, lateral front end pieces can be fitted.



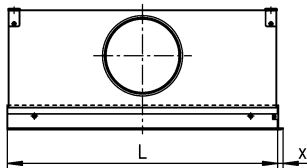
**End piece on both sides (-EB)**



**End piece on the left (-EL)**



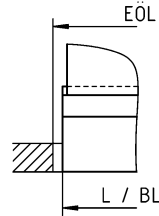
**End piece on the right (-ER)**



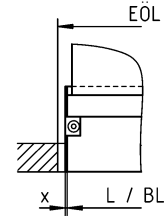
**Detail W**

**DSXL-...-S0**

without end pieces

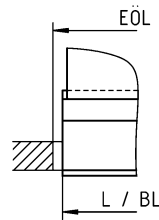


with end pieces

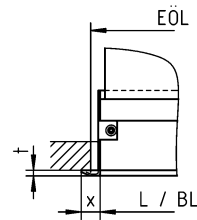


**DSXL-...-P0 / DSXL-...-PB**

without end pieces



with end pieces



	x	t
DSXL-...-S0	1	-
DSXL-...-P0	10	3
DSXL-...-PB	16	2.5

**Installation opening in the length section:**

**EÖL = L + 10 or BL + 10**



**Mounting bracket (pair) / dummy piece (-B0 / -BW / -BS)**

- without mounting bracket / without dummy piece (-B0)
- with mounting bracket (-BW), for overflow operation:
  - made of galvanised sheet steel
  - only possible without plenum box
  - possible from length  $L \geq 200$  mm
- with dummy piece (-BS):
  - made of galvanised sheet steel
  - only possible without plenum box
  - possible from length  $L \geq 200$  mm

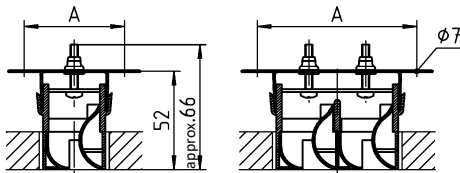
With models -BW and -BS as a band, additional connecting fishplates are supplied loose.

Mounting with suspension via mounting holes (4x) (see page 18).

**Mounting bracket (-BW)**

**DSXL-1...-BW**  
(1-slot)

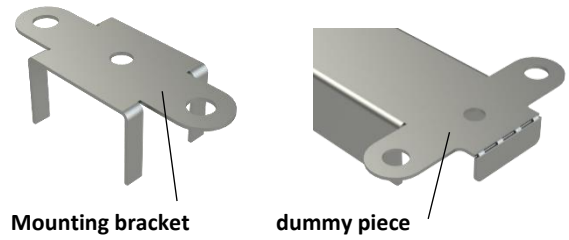
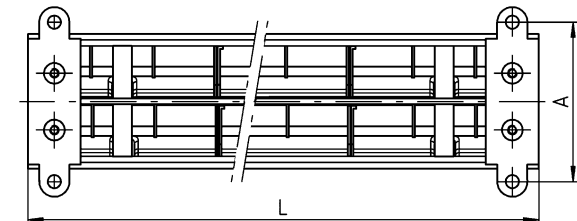
**DSXL-2 to 4...-BW**  
(2- to 4-slot)



**DSXL-1...-BW (1-slot)**



**DSXL-2 to 4...-BW (2- to 4-slot)**



Mounting bracket

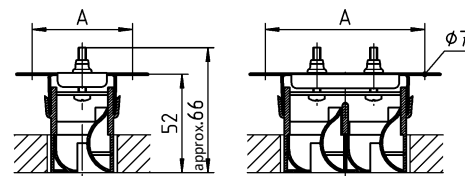
dummy piece

	DSXL-1...	DSXL-2...	DSXL-3...	DSXL-4...
A	54	84	116	147

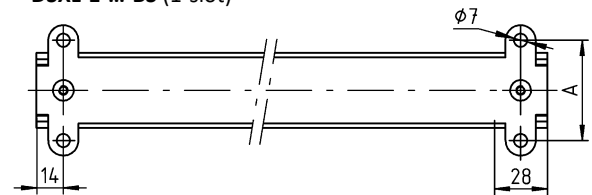
**Dummy piece (-BS)**

**DSXL-1...-BS**  
(1-slot)

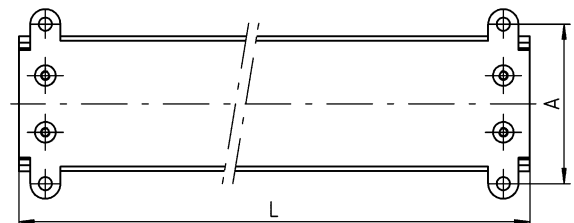
**DSXL-2 to 4...-BS**  
(2- to 4-slot)



**DSXL-1...-BS (1-slot)**



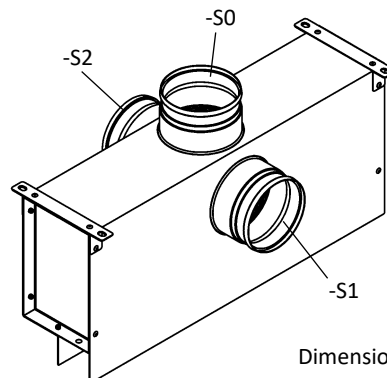
**DSXL-2 to 4...-BS (2- to 4-slot)**



**Plenum box (-ASK-22)**

**Spigot position**

- S0 = spigot from above
- S1 = Lateral spigot (standard)
- S2 = Lateral spigot located on the opposite side



Dimensions of plenum box see pages 10 to 12.

**PLENUM BOX – SINGLE DESIGN (-N)**

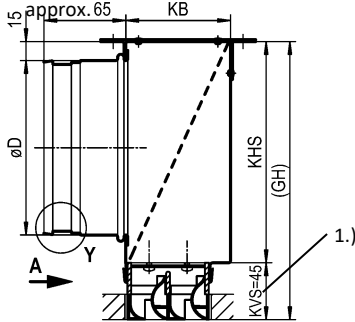
**Plenum box (-ASK-22-...-N-...-VM-...-S1/S2-...)**

With concealed mounting. With lateral spigot or lateral spigot located on the opposite side.

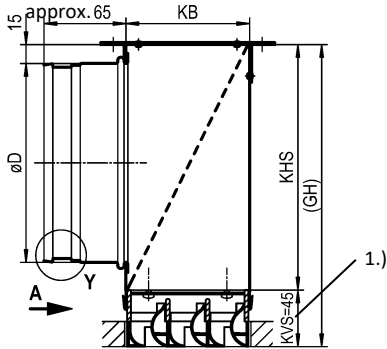
The slot diffuser is screwed to the plenum box housing (face part) with concealed screws.

**With lateral spigot (-S1, standard)**

DSXL-1/2-...-ASK-22-...-N-...-VM-...-S1-... (1- + 2-slot)

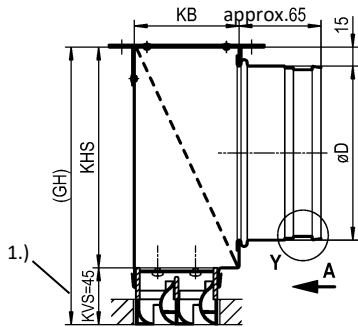


DSXL-3/4-...-ASK-22-...-N-...-VM-...-S1-... (3- + 4-slot)



**With lateral spigot located on the opposite side (-S2)**

DSXL-1/2-...-ASK-22-...-N-...-VM-...-S2-... (only 1- + 2-slot)



1.) Box neck

**Available sizes for plenum box (ASK-22-...-N-...-VM-...-S1/S2-...)**

	KB	GH	KHS	øD		
				L ≥ 400 to L ≤ 500	L > 500 to L ≤ 1000	L > 1000 to L ≤ 1500
DSXL-1	83	220	175	1 x ø138	1 x ø138	2 x ø138
DSXL-2	83	220	175	1 x ø138	2 x ø138	2 x ø138
DSXL-3	98	240	195	1 x ø158	2 x ø158	3 x ø158
DSXL-4	130	280	235	1 x ø198	2 x ø198	3 x ø198

L	KL	EÖL
1000	997	1010
1500	1497	1510

Construction subject to change  
No return possible

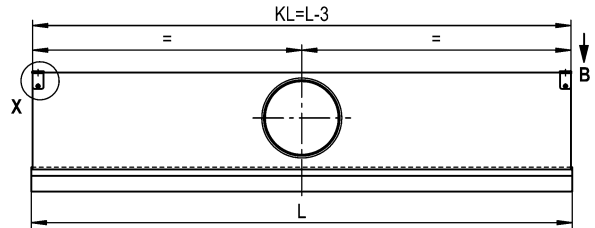
**Available lengths plenum box (-ASK-22-...-N)**

- Length L = 1000 mm (-N-01000) (length of box KL = 997 mm)
- Length L = 1500 mm (-N-01500) (length of box KL = 1497 mm)
- Length (L) in mm, freely selectable (-N-xxxxx) (always with 3 digits)  
(Length of box KL = L-3, can be fitted with a plenum box in case of single design lengths L = ≥400 mm to ≤1500 mm.)

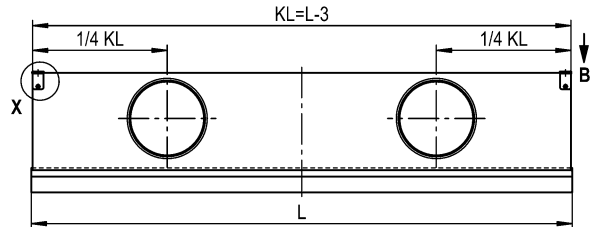
**Spigot position:**

lateral spigot (-S1) / lateral spigot located on the opposite side (-S2)

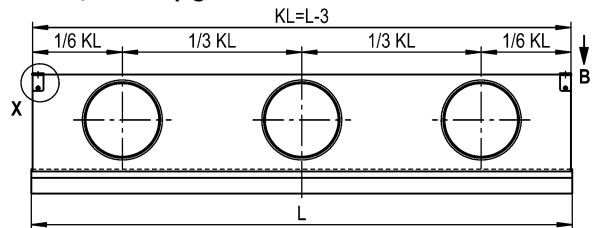
**View A / with 1 spigot**



**View A / with 2 spigots**



**View A / with 3 spigots**



**Plenum box height reduction (at an extra charge)**

- for spigot position -S1/-S2 and standard box neck:  
Minimum height [GH] = spigot diameter øD + 82 mm

**Box neck extension**

- Standard box neck (KVS = 45 mm) (-KVS)
- Box neck extension in mm, freely selectable (-xxx, always with 3 digits), box neck (not adjustable) from ≥45 mm to 200 mm possible.

**Spigot diameter:**

- standard spigot diameter (-SDS)
- spigot diameter (øD) in mm, freely selectable (-xxx, always with 3 digits)

Intermediate lengths and other spigot diameters on request.

**Attention: The max. torque of the fastening screw is 0.5 Nm.**

EÖB = installation opening width (see page 7)

EÖL = installation opening length (EÖL = L+10 / BL+10)

For the position of suspension in view B, see page 13.

For plenum box suspension, detail X, see page 14.

For rubber lip seal, detail Y, see page 16.

See page 18 for mounting.

For plenum box in band design, see page 12.

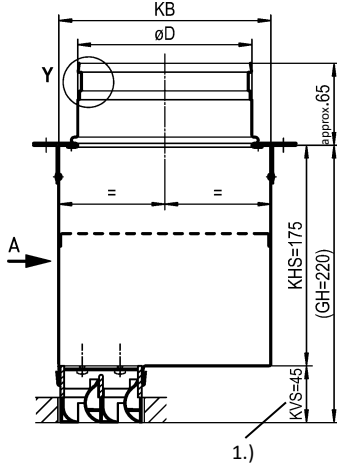
**PLENUM BOX - SINGLE DESIGN (-N)**

**Plenum box (-ASK-22-...-N-...-VM-...-S0-...)**

With concealed mounting. With spigot from above.  
The slot diffuser is screwed to the plenum box housing (face part) with concealed screws.

**with spigot from above (-S0)**

DSXL-...-ASK-22-...-N-...-VM-...-S0-...



1.) Box neck

**Available sizes for plenum box (ASK-22-...-N-...-VM-...-S0-...)**

	L ≥ 400 to L ≤ 500		L > 500 to L ≤ 1000		L > 1000 to L ≤ 1500	
	KB	øD	KB	øD	KB	øD
DSXL-1	168	1 x ø138	168	1 x ø138	168	2 x ø138
DSXL-2	168	1 x ø138	168	2 x ø138	168	2 x ø138
DSXL-3	188	1 x ø158	188	2 x ø158	188	3 x ø158
DSXL-4	228	1 x ø198	228	2 x ø198	228	3 x ø198

L	KL	EÖL
1000	997	1010
1500	1497	1510

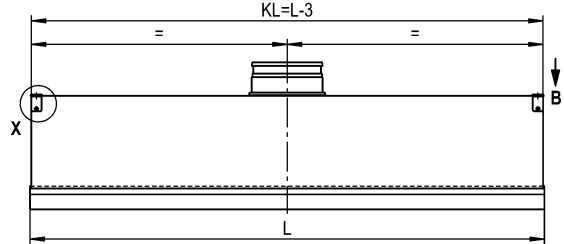
**Available lengths plenum box (-ASK-22-...-N)**

- Length L = 1000 mm (-N-01000) (length of box KL = 997 mm)
- Length L = 1500 mm (-N-01500) (length of box KL = 1497 mm)
- Length (L) in mm, freely selectable (-N-xxxxx) (always with 3 digits)  
(Length of box KL = L-3, can be fitted with a plenum box in case of single design lengths L = ≥400 mm to ≤1500 mm.)

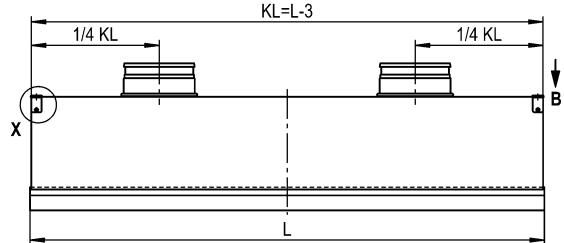
**Spigot position:**

Spigot from above (-S0)

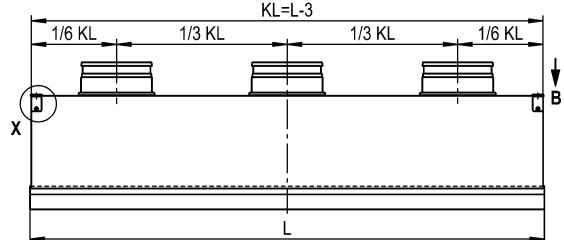
**View A / with 1 spigot**



**View A / with 2 spigots**



**View A / with 3 spigots**



**Plenum box height reduction (at an extra charge)**

- for spigot position -S0 and standard box neck:  
The height of box [GH] can be reduced to 180 mm

**Box neck extension**

- Standard box neck (KVS = 45 mm) (-KVS)
- Box neck extension in mm, freely selectable (-xxx, always with 3 digits, box neck (not adjustable) from ≥ 45 mm to 200 mm possible)

**Spigot diameter:**

- standard spigot diameter (-SDS)
- spigot diameter (øD) in mm, freely selectable (-xxx, always with 3 digits)

Intermediate lengths and other spigot diameters on request.

**Attention: The max. torque of the fastening screw is 0.5 Nm.**

- EÖB = installation opening width (see page 7)
- EÖL = installation opening length (EÖL = L+10 / BL+10)

For the position of suspension in view B, see page 13.  
For plenum box suspension, detail X, see page 14.  
For rubber lip seal, detail Y, see page 16.  
See page 18 for mounting.  
For plenum box in band design, see page 12.

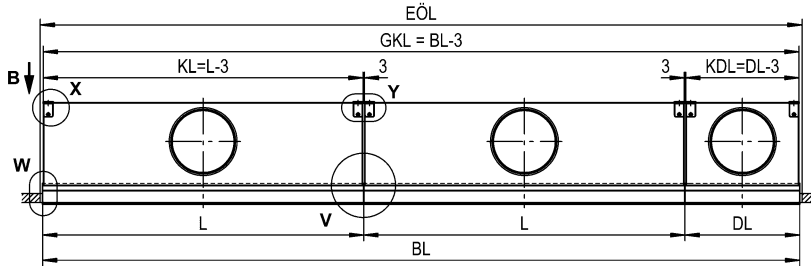
## PLENUM BOX – BAND DESIGN (-B)

### Plenum box (-ASK-22-...-B-...-VM-...)

With concealed mounting.  
 The slot diffuser is screwed to the plenum box housing (face part) with concealed screws.

### Available lengths of plenum box (-ASK-22-...-B)

**DSXL-...-ASK-22-...-B-...-VM-...-S1/-S2-...-E0**  
 (with lateral spigot or lateral spigot located on the opposite side, without riveting nut)



**Available lengths according to SCHAKO standard**

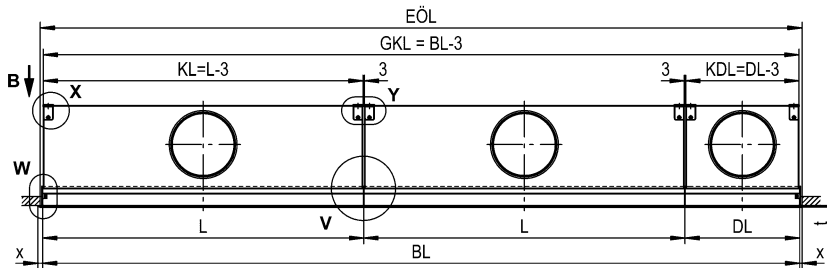
**BL >1500 to <2000:**

For models designed as a band (BL > 1500 mm to <2000 mm), the total length BL is divided individually (division upon request).

**BL ≥2000:**

For models designed as a band (BL > 2000 mm), the total length BL is assembled from standard lengths of **1500 mm**.

**DSXL-...-ASK-22-...-B-...-VM-...-S1/-S2-...-ES/-EB/-EL/-ER**  
 (with lateral spigot or lateral spigot located on the opposite side, with riveting nut)

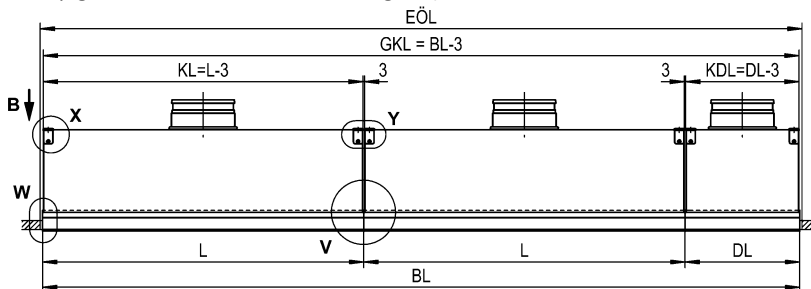


The difference pieces DL with length <1500 mm to ≥ 400 mm can be fitted with a plenum box.

**A plenum box (KL/KDL) with a length of <400 mm is not possible.**

The difference pieces from <400 mm to ≥200 mm are supplied as dummy pieces without plenum box. A different band division is possible after consultation and when required by the customer. Individual sections are connected (for mounting on site, see detail V) by using double air guide elements.

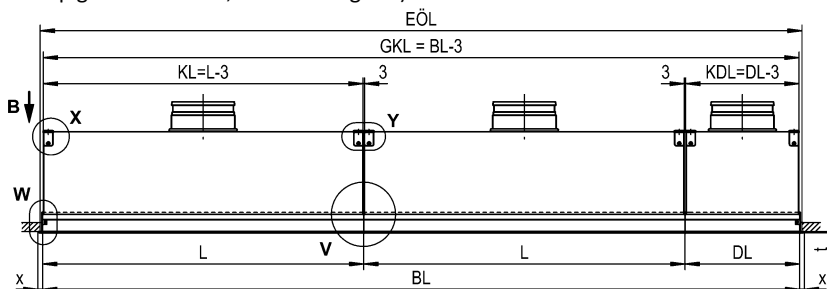
**DSXL-...-ASK-22-...-B-...-VM-...-S0-...-E0**  
 (with spigot from above, without riveting nut)



	x	t
DSXL-...-S0	1	-
DSXL-...-P0	10	3
DSXL-...-PB	16	2.5

**Installation opening in the length section:**  
**EÖL = BL + 10**

**DSXL-...-ASK-22-...-B-...-VM-...-S0-...-ES/-EB/-EL/-ER**  
 (with spigot from above, with riveting nut)



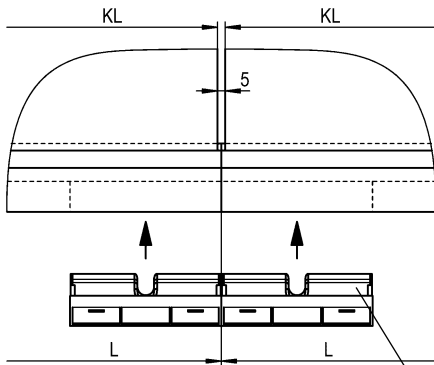
- L = length
- DL = difference in length
- BL = band length
- KL = length of plenum box (KL = L-3)
- KDL = difference in length, plenum box (KDL = DL-3)
- GKL = total length of box (GKL = BL-3)
- EÖL = ceiling opening dimensions

Butt joint of concealed mounting, for detail V see page 13.  
 For plenum box mounting, detail X / detail Y, see page 14.  
 End pieces, for detail W see page 8.

For the position of the suspension holes in view B, see page 13.  
 Available sizes for plenum box see pages 10 + 11.

**Butt joint of concealed mounting (-VM)**

Detail V

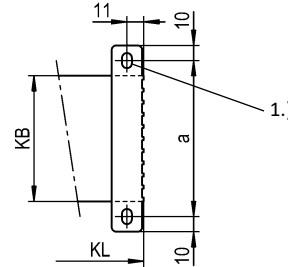


Double air guide element, supplied loose  
 (Assembly on site)

**Position of the suspension holes**

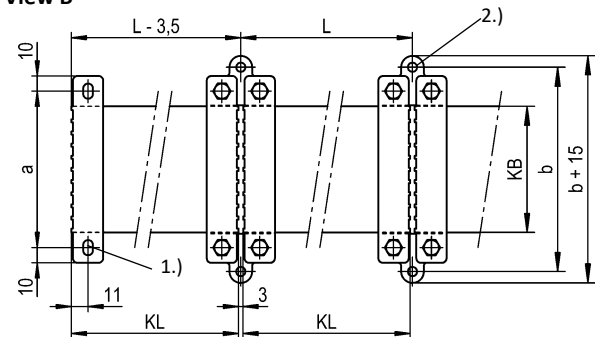
**SINGLE DESIGN**

View B



**BAND DESIGN**

View B



- 1.) Long hole  $\varnothing 6.5 \times 10$
- 2.) Connection plate

**Available sizes**

**Lateral connection (-S1/-S2)**

	L $\geq$ 400 - L $\leq$ 1500		
	KB	a	b
DSXL-1	83	103	134
DSXL-2	83	103	134
DSXL-3	98	118	150
DSXL-4	130	150	182

Connection plate



**Available sizes**

**Connection from above (-S0)**

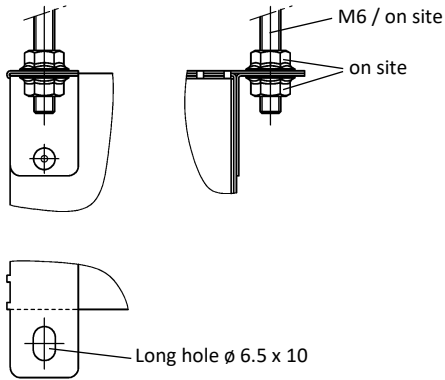
	L $\geq$ 400 - L $\leq$ 1500		
	KB	a	b
DSXL-1	168	188	220
DSXL-2	168	188	220
DSXL-3	188	208	240
DSXL-4	228	248	280

**Plenum box suspension**

**SINGLE DESIGN / BAND DESIGN**

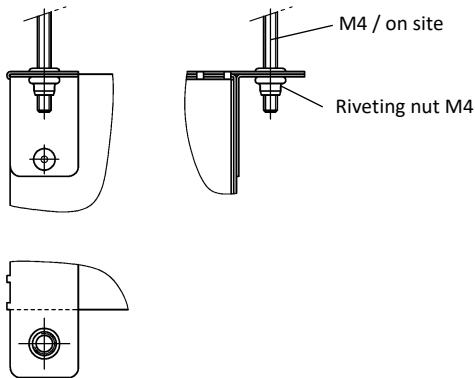
**Detail X**

**with long hole  $\varnothing 6.5 \times 10$  (-E0, standard):**



**with riveting nut M4 (-EM, at an extra charge):**

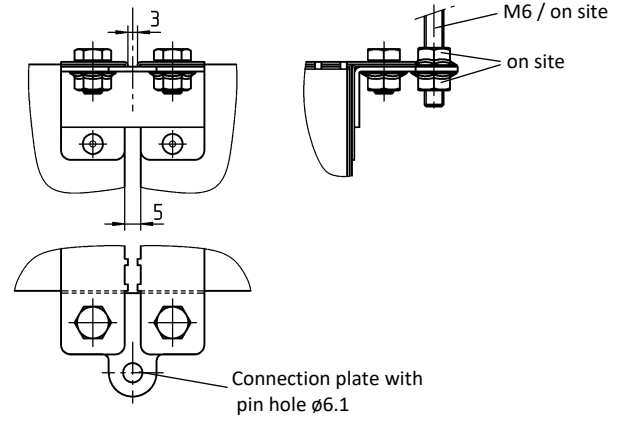
At an extra charge, the plenum boxes can be fitted with M4 riveting nuts to facilitate ceiling mounting.



**BAND DESIGN**

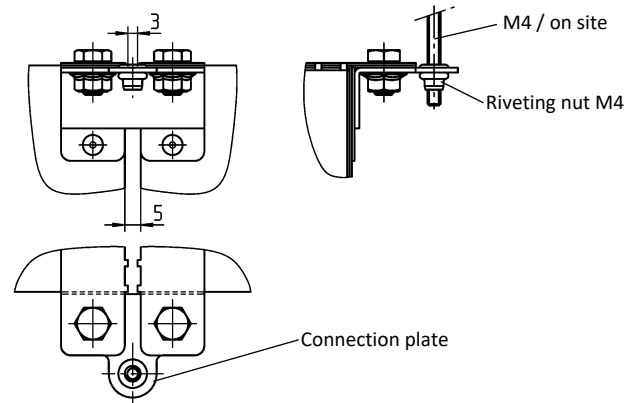
**Detail Y**

**with pin hole  $\varnothing 6.1$  (-E0, standard):**



**with riveting nut M4 (-EM, at an extra charge):**

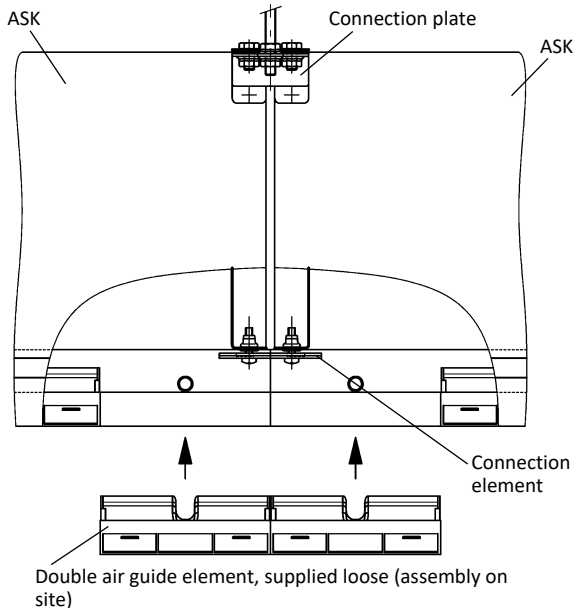
At an extra charge, the connection plates can be provided with M4 riveting nuts to facilitate ceiling mounting.



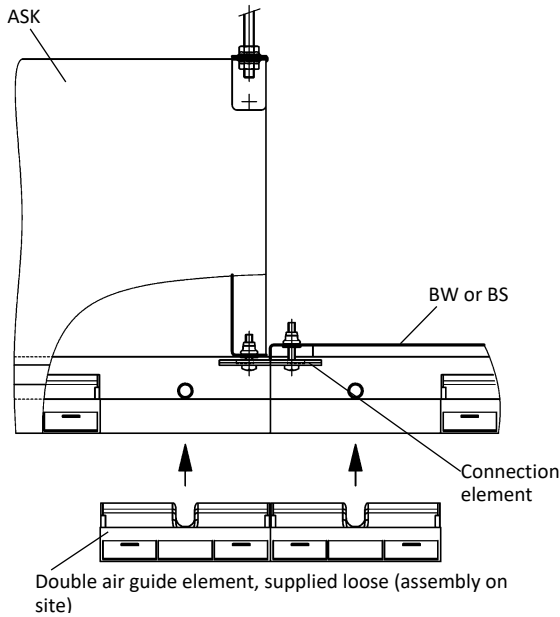
**Connection element for band design**

(supplied loose as standard)

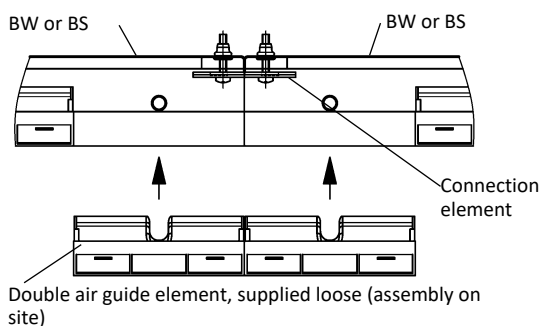
**DSXL-...-ASK with DSXL-...-ASK (active – active)**



**DSXL-...-ASK with DSXL-...-BW (active – active)**  
**DSXL-...-ASK with DSXL-...-BS (active – passive)**



**DSXL-...-BW with DSXL-...-BW (active – active)**  
**DSXL-...-BW with DSXL-...-BS (active – passive)**  
**DSXL-...-BS with DSXL-...-BS (passive – passive)**



**Connection element for the connection between:**

DSXL-...-ASK	with	DSXL-...-ASK	<b>active - active</b>
DSXL-...-ASK	with	DSXL-...-BW	<b>active - active</b>
DSXL-...-ASK	with	DSXL-...-BS	<b>active - passive</b>
DSXL-...-BW	with	DSXL-...-BW	<b>active - active</b>
DSXL-...-BW	with	DSXL-...-BS	<b>active - passive</b>
DSXL-...-BS	with	DSXL-...-BS	<b>passive - passive</b>

**Detail of connection element**



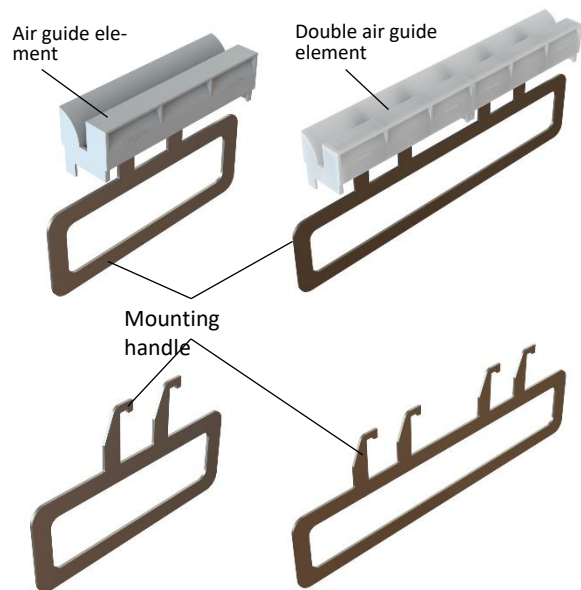
**Detail of connection plate (connecting ASK to ASK)**



**Mounting handle for air guide element**

**Air guide element**  
 (Standard)

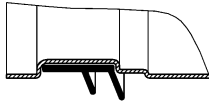
**Double air guide element**  
 (for band design)



### Rubber lip seal (-GD0/-GD1), for ASK-22

- without rubber lip seal (-GD0) (standard)
- with rubber lip seal (-GD1), made of special rubber

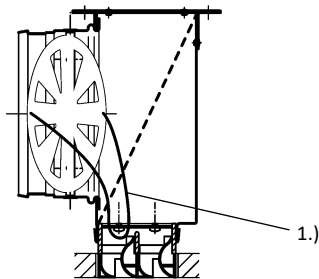
#### Detail Y



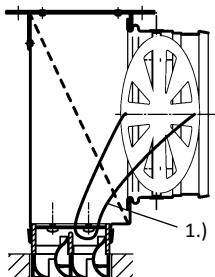
### Damper (-DK0/-DK2), for ASK-22

- without damper (-DK0) (standard)
- with damper in the connection spigot, with cable-operated adjustment (-DK2)

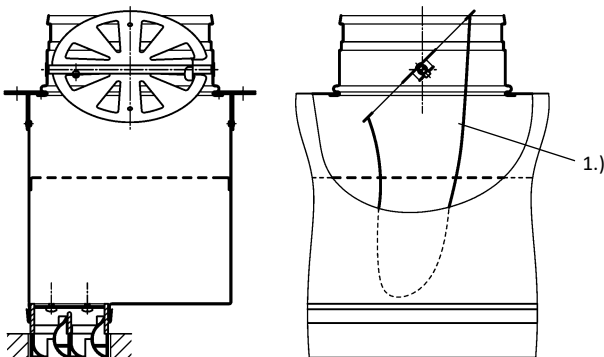
#### -DK2, lateral connection (-S1, standard)



#### -DK2, lateral connection located on the opposite side (-S2) only for 1- and 2-slot models.



#### -DK2, connection from above (-S0, with cable-operated adjustment)

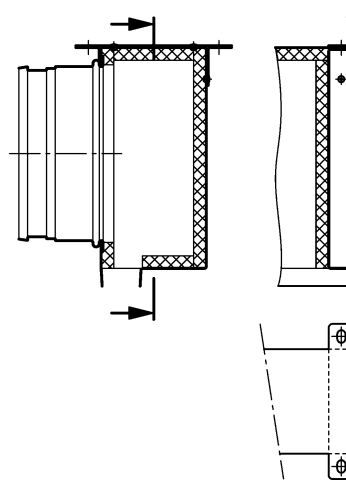


1.) With cable-operated adjustment (SZV)

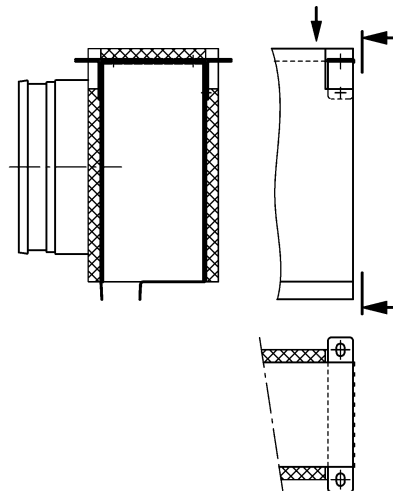
### Insulation (-I0 / -Ii / -Ia), for ASK-22

- without insulation (-I0) (standard)
- with internal insulation (-Ii)
- with external insulation (-Ia)

#### Internal (-Ii)



#### External (-Ia)





**Corner angle 90° (-EW-22-...-090-...)**

Corner angles can only be produced as dummy pieces, i.e., without a plenum box.

The double air guide element is supplied loose.

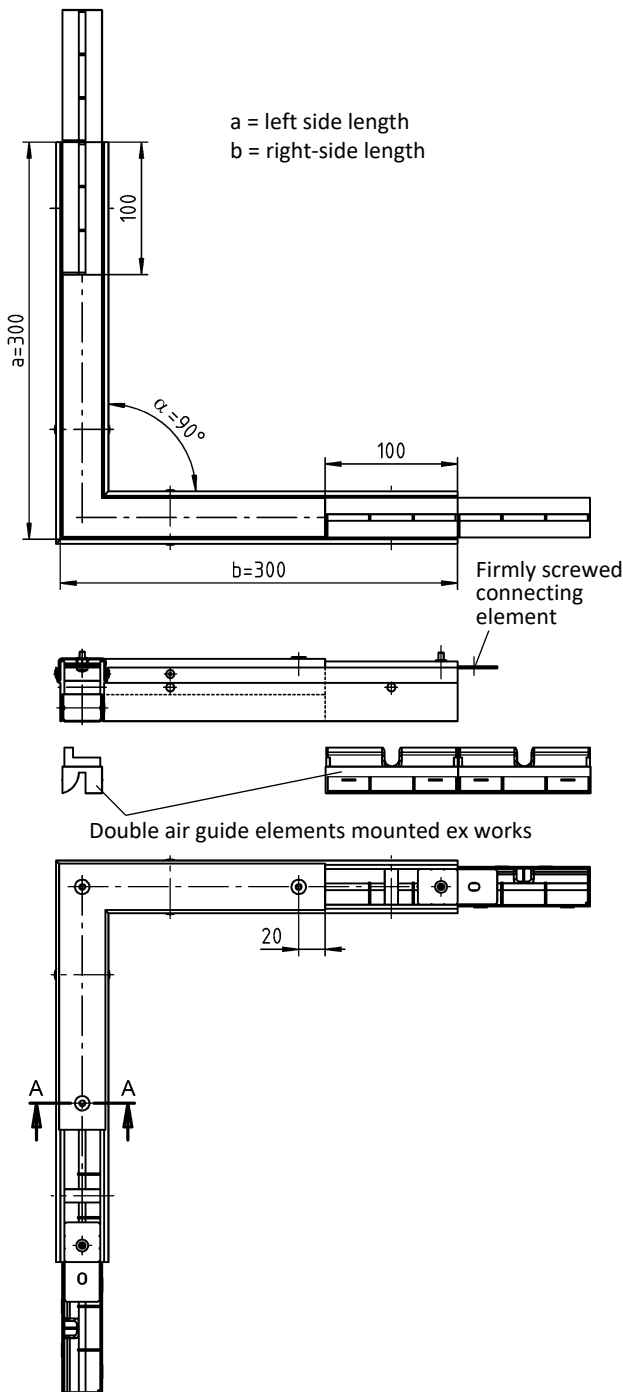
The connecting element is firmly screwed with the corner angle, for on-site connection to the slot diffuser.

The corner angle is supplied loose as standard.

Standard left-side length (a) L = 300 (-000) / right-side length (b)

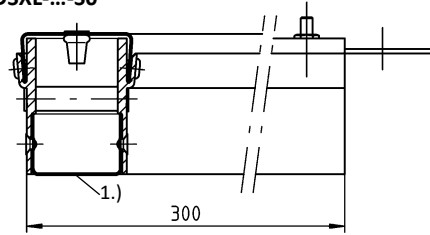
L = 300 (-000). Other side lengths (a/b) are available upon request (minimum length = standard length).

Angle values between  $\alpha = 90^\circ$  (-090, standard) and  $170^\circ$  (-170) are possible.

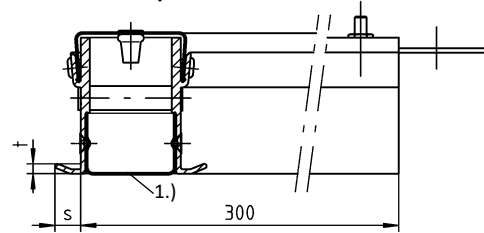


**Section A-A**

DSXL-...-S0



DSXL-...-P0 / DSXL-...-PB



1.) Dummy profile

	s	t
DSXL-...-S0	-	-
DSXL-...-P0	8.5	3
DSXL-...-PB	14.5	2.5

**Connection element**



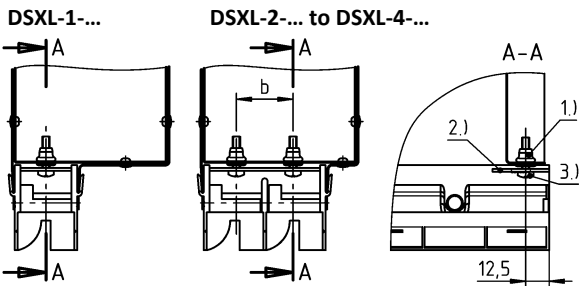
**MOUNTING**

**Without connection (-00)**

- Slot diffuser and plenum box are **not** connected to one another
- Standard with dummy piece (-BS) and with mounting bracket (-BW)

**Concealed mounting with plenum box (-VM)**

- Slot diffuser and plenum box are connected to one another ex works.
- The slot diffuser is screwed to the plenum box housing (face part) with concealed screws.



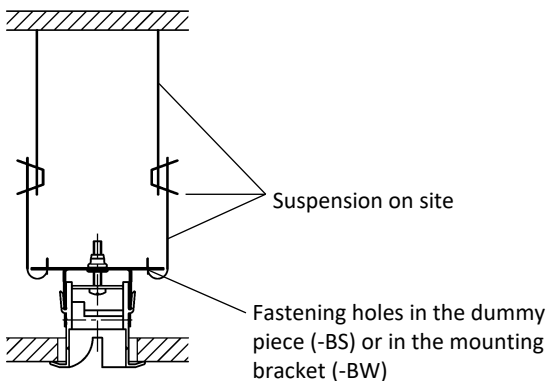
Number of fastening screws:  
 DSXL-1-... with 2 screws  
 DSXL-2-... to DSXL-4-... with 4 screws

- 1.) Riveting nut M4
- 2.) Connecting plate
- 3.) Torx screw M4 DIN 7991-TX

	b
DSXL-1	-
DSXL-2	30
DSXL-3	62
DSXL-4	93

**Suspension via fastening holes**

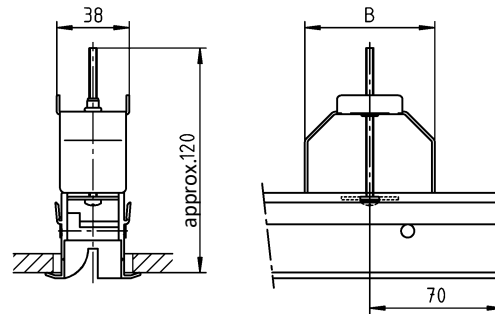
- For model:
  - dummy piece (-BS)
  - mounting bracket (-BW, pair)
- Only possible without plenum box
- The slot diffuser is fastened to 4 suspension brackets



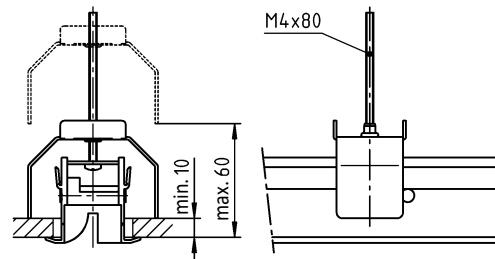
**Clamp strap (-KB)**

- For room side installation in finished pressure ceilings
- Only possible without plenum box
- screws and clamp straps are supplied loose (pair)
- possible for the models DSXL-...-P0 and DSXL-...-PB (not possible for model DSXL-...-S0)
- The slot diffuser is screwed to the clamp strap with concealed screws (included in delivery)
- **For mounting, access on the rear is not required!**

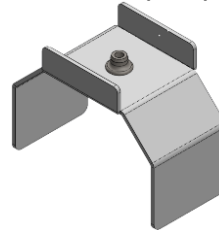
**In mounting position**



**In clamping position**



**Detail of clamp strap**



	B
DSXL-1-...-P0	69
DSXL-1-...-PB	69
DSXL-2-...-P0	100
DSXL-2-...-PB	100
DSXL-3-...-P0	132
DSXL-3-...-PB	132
DSXL-4-...-P0	163
DSXL-4-...-PB	163

**Mounting instructions**

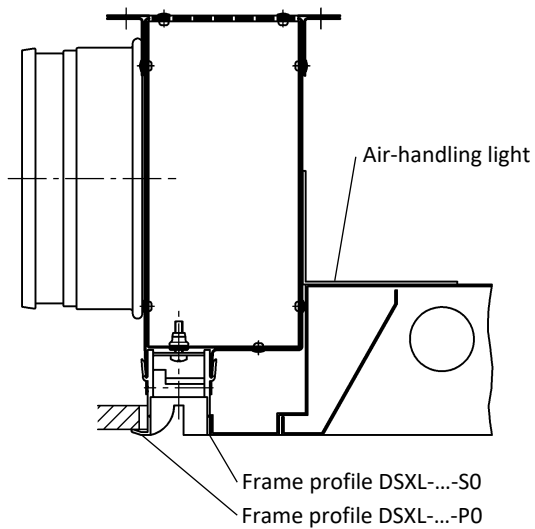
As standard, the clamp straps are delivered loose.

1. Take out the air guide elements at the ends.
2. Fasten the clamp strap with the screw such that it is positioned in the direction of the slot diffuser (see installation position).
3. Then introduce the slot diffuser into the pressure ceiling.
4. Then rotate the clamp strap by about 90° by rotating the screw and lower it over the slot diffuser profile (see clamping position).
5. Tighten the screw until the slot diffuser is firmly locked at the ceiling.
6. Finally, re-insert the air guide elements.

## TYPE OF INSTALLATION

### Fitting to air-handling lights

When attaching to diffusers combined with lighting, the external profile of the DSXL-...-S0 is attached to the mounting side to ensure a perfectly flush fit. Otherwise the measurements correspond to the standard plenum box.

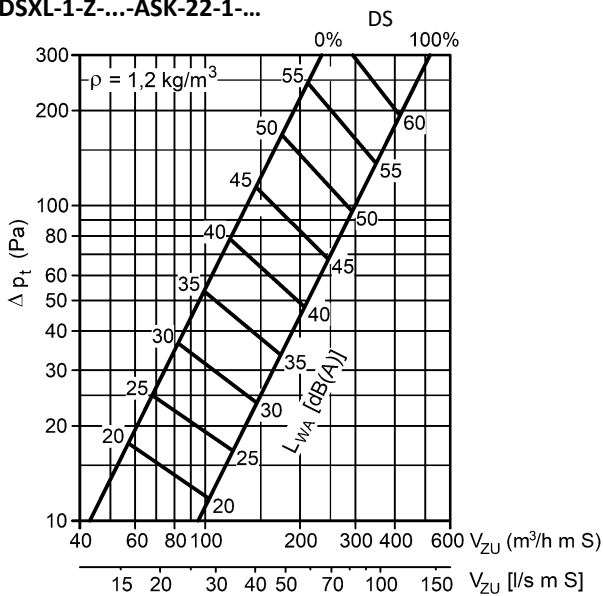


**TECHNICAL DATA**

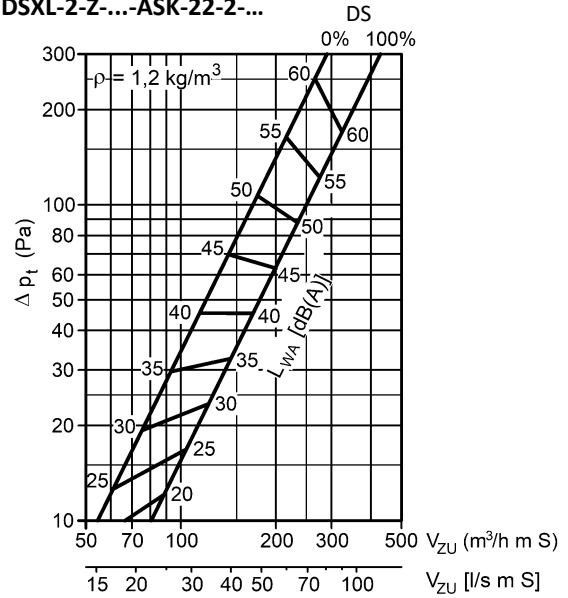
**Pressure loss and noise level**

L = 1000 mm (supply air, with plenum box)

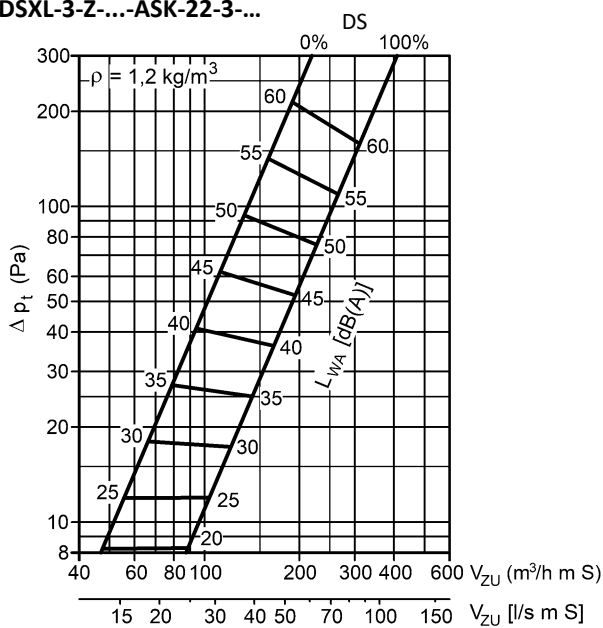
**DSXL-1-Z-...-ASK-22-1-...**



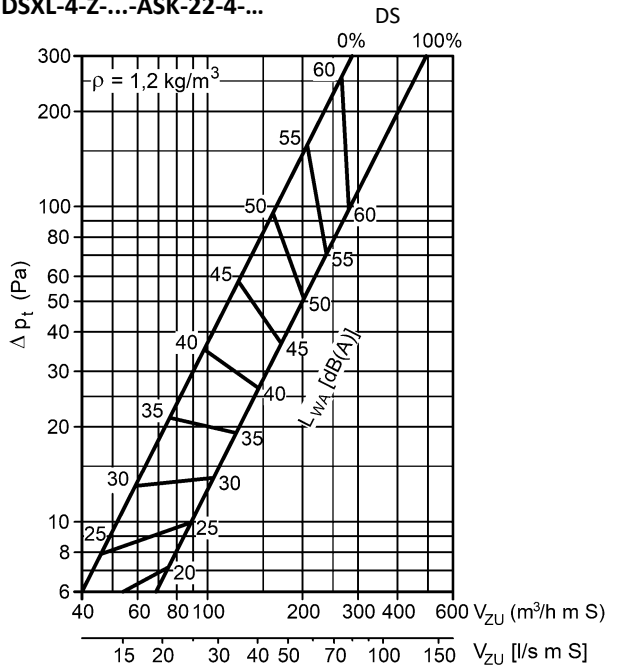
**DSXL-2-Z-...-ASK-22-2-...**



**DSXL-3-Z-...-ASK-22-3-...**



**DSXL-4-Z-...-ASK-22-4-...**



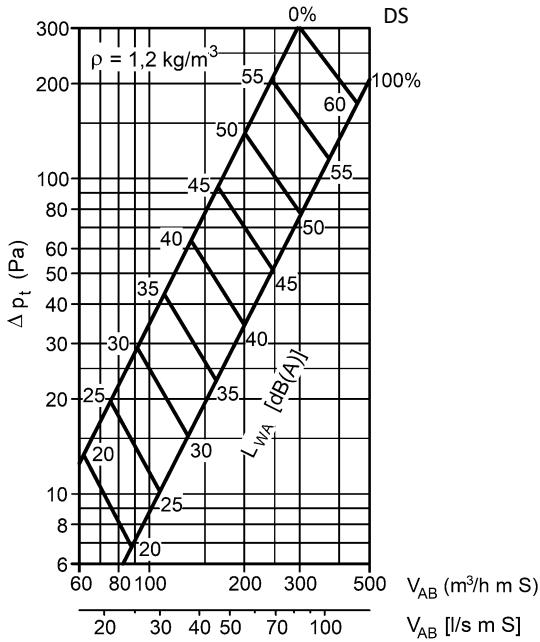
Damper position (DS):

CLOSED = 0 %

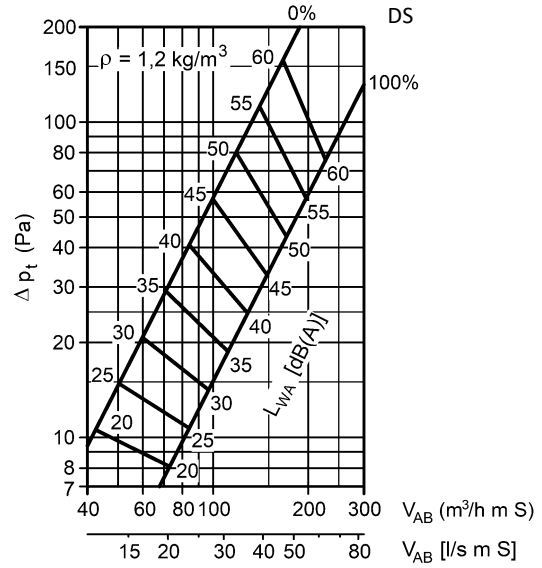
OPEN = 100 %

**L = 1000 (return air, with plenum box)  
 with air guide elements**

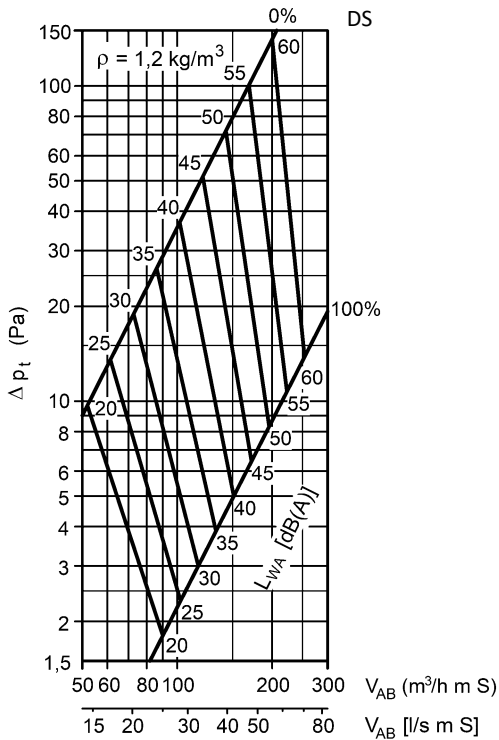
**DSXL-1-Z-...-ASK-22-1-...**



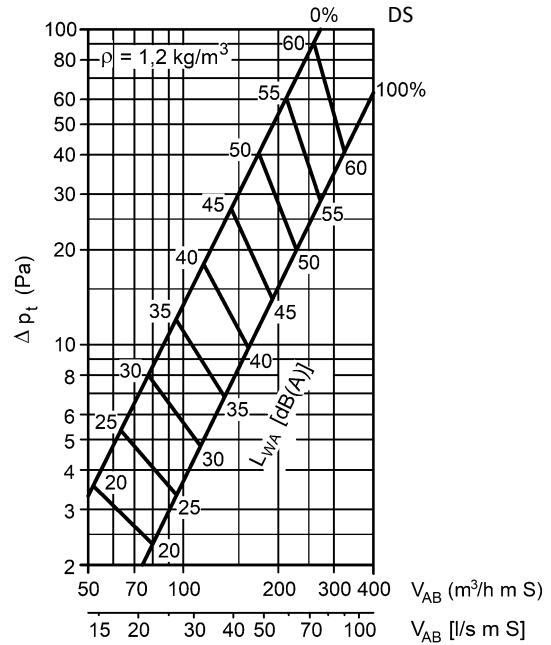
**DSXL-2-Z-...-ASK-22-2-...**



**DSXL-3-Z-...-ASK-22-3-...**



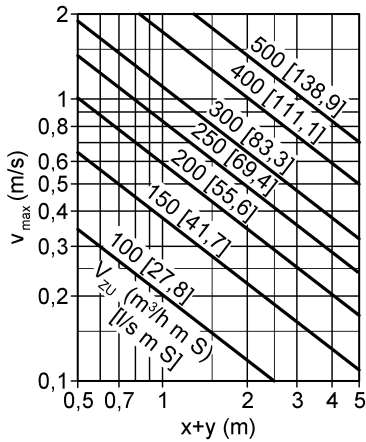
**DSXL-4-Z-...-ASK-22-4-...**



Damper position (DS):  
 CLOSED = 0 %  
 OPEN = 100 %

### Maximum final jet velocity

DSXL-1-...  
 L=1000, one-way throw

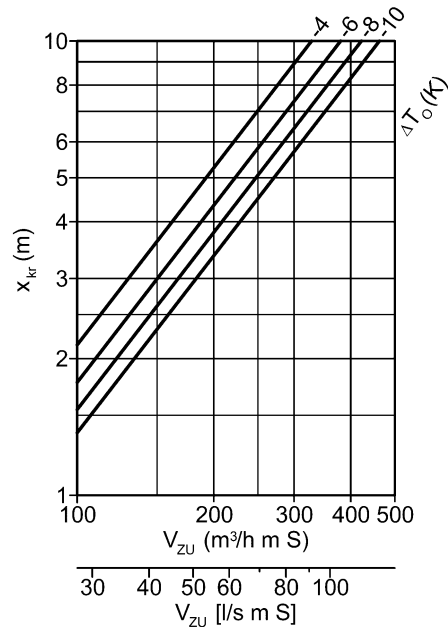


#### Correction factor maximum end velocity of jet

DSXL-2-...	one-way throw	$v_{max} \times 2.00$
DSXL-3-...	one-way throw	$v_{max} \times 2.31$
DSXL-4-...	one-way throw	$v_{max} \times 2.96$
DSXL-1-...	two-way throw	$v_{max} \times 0.82$
DSXL-2-...	two-way throw	$v_{max} \times 1.70$
DSXL-3-...	two-way throw	$v_{max} \times 1.91$
DSXL-4-...	two-way throw	$v_{max} \times 2.32$

### Critical throw

DSXL-1-...  
 L=1000, one-way throw

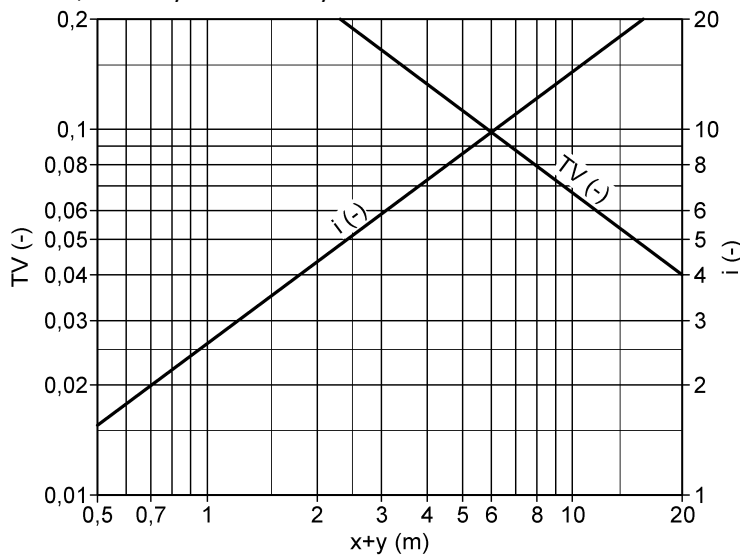


#### Correction factor critical throw

DSXL-2-...	one-way throw	$x_{kr} \times 1.45$
DSXL-3-...	one-way throw	$x_{kr} \times 1.51$
DSXL-4-...	one-way throw	$x_{kr} \times 2.14$
DSXL-1-...	two-way throw	$x_{kr} \times 0.54$
DSXL-2-...	two-way throw	$x_{kr} \times 0.85$
DSXL-3-...	two-way throw	$x_{kr} \times 1.23$
DSXL-4-...	two-way throw	$x_{kr} \times 1.28$

### Induction ratio and temperature ratios

DSXL-1-...  
 L=1000, one-way and two-way throw



#### Correction factor induction ratio

DSXL-2-...	$i \times 0.73$
DSXL-3-...	$i \times 0.76$
DSXL-4-...	$i \times 0.52$

#### Correction factor temperature ratio

DSXL-2-...	$TV \times 1.37$
DSXL-3-...	$TV \times 1.31$
DSXL-4-...	$TV \times 1.90$

## LEGEND

$V_{ZU}$	( $m^3/h$ m S) [l/s m S]	= Supply air volumetric flow per metre per slot
$V_{AB}$	( $m^3/h$ m S) [l/s m S]	= Return air volumetric flow per metre per slot
$V_x$	( $m^3/h$ ) [l/s]	= total air jet volume at point x
$\Delta p_t$	(Pa)	= pressure loss
$\rho$	( $kg/m^3$ )	= Density
$L_{WA}$	[dB(A)]	= A-weighted sound power level ( $L_{WA} - L_{WA1} + KF$ )
$L_{WA1}$	[dB(A)]	= A-weighted sound power level, relative to $L = 1000$
$x_{kr}$	(m)	= critical throw
$\Delta T_O$	(K)	= Temperature difference between supply air and room temperature ( $\Delta T_O = t_{ZU} - t_R$ )
$\Delta T_x$	(K)	= temperature difference at point x
$v_{max}$	(m/s)	= max. End velocity of jet
TV	(-)	= temperature ratio ( $TV = \Delta T_x / \Delta T_O$ )
i	(-)	= induction ratio ( $i = V_x / V_{ZU}$ )
x+y	(m)	= horizontal + vertical throw
x	(m)	= horizontal throw
y	(m)	= vertical throw
$t_{ZU}$	(°C)	= supply air temperature
$t_R$	(°C)	= room temperature
KF	(-)	= Correction factor
KL	(mm)	= Length of box
KB	(mm)	= Width of box
KHS	(mm)	= Height of plenum box
GH	(mm)	= total height
L	(mm)	= length
DS	(%)	= Damper position

**SLOT DIFFUSER ORDER CODE**

01	02	03	04	05	06
Type	Model	Air throw	Frame profile	Frame surface	Blade colour
<b>Example</b>					
DSXL	-2	-Z	-S0	-9010	-L9005

07	08	09	10	11	12
Blade position for air jet	Single / band design	Length	Mounting	End piece	Mounting bracket / dummy piece
-B	-N	-01000	-VM	-ES	-B0

**Sample**

**DSXL-2-Z-S0-9010-L9005-B-N-01000-VM-ES-B0**

Ceiling slot diffuser DSXL | 2-slot | supply air | narrow frame profile, without support profile, for invisible installation | aluminium painted to RAL colour 9010 (white) | air guide element made of plastic material, similar to RAL 9005 (black) | air guide element with horizontal two-way throw | single design | length L = 1000 mm | concealed mounting | with end piece | without mounting bracket and without dummy piece

**ORDER DETAILS**

**01 - Type**

DSXL = ceiling slot diffuser DSXL

**02 - Model**

- 1 = 1-slot
- 2 = 2-slot
- 3 = 3-slot
- 4 = 4-slot

**03 - Air throw**

- Z = supply air
- A = return air (with air guide elements)

**04 - Frame profile**

- S0 = narrow frame profile, without support profile, for invisible installation (standard, in same colour as blade colour)
- P0 = frame profile P0, with support profile, for visible installation
- PB = frame profile PB, with support profile, for visible installation

**05 - Frame surface**

- ELOX = natural colour anodised aluminium (standard for DSXL-...-P0 and DSXL-...-PB models)
  - 9005 = aluminium painted to RAL colour 9005 (black)
  - 9010 = Aluminium painted to RAL colour 9010 (white)
  - xxxx = aluminium painted to a freely selectable RAL colour (at an extra charge, always with 4 digits)
- (Painted aluminium, standard for DSXL-...-S0 model.)

**06 - Blade colour** (air guide element)

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

**07 - Blade position for air jet**

- L = air guide element with horizontal one-way throw to the left (standard for return air)
- R = air guide element with horizontal one-way throw to the right
- B = air guide element with horizontal two-way throw (standard for supply air)

**08 - Single / band design**

- N = single design (length max. 1500 mm)
  - B = band design (available lengths according to SCHAKO standard for band design, single element length max. 1500 mm)
- To lock the slot diffusers, double air guide elements are used at the butt joints (supplied loose, installation on site).

**09 - Length**

- 01000 = length L = 1000 mm
  - 01500 = length L = 1500 mm
  - xxxxx = length (L/BL) in mm, freely selectable (always with 5 digits).
- (can be fitted with a plenum box in case of single design lengths L = ≥400 mm to ≤1500 mm.)

**10 - Mounting**

- 00 = without connection (not connected to the plenum box, standard for BS and BW)
- VM = concealed mounting (standard, connected to the plenum box ex works)
- KB = clamp strap (not for use with plenum box), screws and clamp strap supplied loose (pair), only possible for DSXL-...-P0 and DSXL-...-PB.

**11 - End piece**

- E0 = Without end piece (standard)
- ES = With end piece (pair, supplied loose)
- EB = With end piece mounted ex works on both sides
- EL = With end piece on the left mounted ex works
- ER = With end piece on the right mounted ex works

**12 - Mounting bracket / dummy piece**

- B0 = without mounting bracket / without dummy piece
- BW = with mounting bracket made of galvanised sheet steel, for overflow operation (only possible without plenum box, possible from length L ≥ 200 mm). Mounting through suspension via mounting holes.
- BS = with dummy piece, made of sheet steel (only possible without plenum box, possible from length L ≥ 200 mm). Mounting through suspension via mounting holes.

With models -BW and -BS as a band, additional connecting fishplates are supplied loose.



**PLENUM BOX ORDER CODE**

01	02	03	04	05	06	07	08
Type	Diffuser	Model	Single / band design	Length	Mounting of box	Material	Damper
<b>Example</b>							
ASK	-22	-2	N	-01000	-VM	-SV	-DK1

09	10	11	12	13	14	15
Rubber lip seal	Insulation	Height of plenum box	Box neck	Spigot position	Spigot diameter	Suspension
-GD1	-I0	-KHS	-KVS	-S1	-SDS	-E0

**Sample**

**ASK-22-2-N-01000-VM-SV-DK1-GD1-I0-KHS-KVS-S1-SDS-E0**

Plenum box for slot diffuser | for DSXL | 2-slot | single design | length L = 1000 mm | concealed mounting | galvanised sheet steel | with damper | with rubber lip seal | without insulation | standard height of box | standard box neck | lateral spigot | standard spigot diameter | without riveting nut

**ORDER DETAILS**

**01 - Type**

ASK = plenum box for slot diffuser (rectangular design)

**02 - Diffuser**

22 = for DSXL (air diffuser must always be ordered separately)

**03 - Model**

- 1 = 1-slot
- 2 = 2-slot
- 3 = 3-slot
- 4 = 4-slot

**04 - Single / band design**

- N = single design (length of box KL max. 1500 mm)
- B = band design (available lengths according to SCHAKO standard for band design)

**05 - Length**

- 01000 = length L = 1000 mm
- 01500 = length L = 1500 mm
- xxxxx = length (L/BL) in mm, freely selectable (always with 5 digits). (Length of box KL = L-3 / total length of box GKL = BL-3, length min. 400 mm / max. 1500 mm)

**06 - Mounting of box**

- 00 = without connection (not connected to the slot diffuser, screws supplied loose)
- VM = concealed mounting (standard, connected to the slot diffuser ex works)

**07 - Material**

- SV = galvanised sheet steel (standard)

**08 - Damper**

- DK0 = without damper (standard)
- DK2 = With damper and cable-operated adjustment (SZV) (with spigot position from above [-S0], in connection spigot)

**09 - Rubber lip seal**

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

**10 - Insulation**

- I0 = without insulation (standard)
- Ii = With internal insulation
- Ia = With external insulation

**11 - Height of plenum box**

- KHS = standard height of plenum box
- xxx = height of box in mm, freely selectable (always with 3 digits) (minimum height [GH] with spigot position S1+S2 and standard box neck = spigot diameter ØD + 82 mm / with spigot position S0 = 180 mm)

**12 - Box neck**

- KVS = Standard box neck
- xxx = box neck extension in mm, freely selectable (always with 3 digits). Box neck (not adjustable) from ≥45 mm to 200 mm possible.

**13 - Spigot position**

- S0 = spigot from above
- S1 = Lateral spigot (standard)
- S2 = Lateral spigot located on the opposite side (only possible for DSXL-1-... and DSXL-2-... )

**14 - Spigot diameter**

- SDS = standard spigot diameter
- xxx = spigot diameter (ØD) in mm, freely selectable (always 3 digits)

**15 - Suspension**

- E0 = without riveting nut (standard)
- EM = with riveting nut

## ORDER CODE CORNER ANGLE

01	02	03	04	05
Type	Diffuser	Model	Frame profile	Frame surface
<b>Example</b>				
EW	-22	-2	-S0	-ELOX

06	07	08	09
Dummy profile colour (air guide elements)	Angle between sides	Left-side length (a)	Right-side length (b)
-B9005	-090	-000	-000

### Sample

**EW-22-2-S0-ELOX-B9005-090-000-000**

Corner angle for slot diffuser | for DSXL | 2-slot | narrow frame profile, without support profile, for invisible installation | natural colour anodised aluminium | aluminium painted to RAL colour 9005 (black) | angle  $\alpha = 90^\circ$  | standard length (L=300 mm) | standard length (L=300 mm)

### ORDER DETAILS

#### 01 - Type

EW = corner angle for slot diffuser

#### 02 - Diffuser

22 = for DSXL

#### 03 - Model

1 = 1-slot  
 2 = 2-slot  
 3 = 3-slot  
 4 = 4-slot

#### 04 - Frame profile

S0 = narrow frame profile, without support profile, for invisible installation (standard, in same colour as air guide element)  
 P0 = frame profile P0, with support profile, for visible installation  
 PB = frame profile PB, with support profile, for visible installation

#### 05 - Frame surface

ELOX = natural colour anodised aluminium (standard for DSXL-...-P0 and DSXL-...-PB models)  
 9005 = aluminium painted to RAL colour 9005 (black)  
 9010 = Aluminium painted to RAL colour 9010 (white)  
 xxxx = aluminium painted to a freely selectable RAL colour (at an extra charge, always with 4 digits)  
 (Painted aluminium, standard for DSXL-...-S0 model)

#### 06 - Dummy profile colour (air guide elements)

B9005 = aluminium painted similar to RAL colour 9005 (black) (standard)  
 B9010 = aluminium painted similar to RAL colour 9010 (white)  
 Bxxxx = aluminium painted to a freely selectable RAL colour (always with 5 digits)

Air guide elements (double), mounted ex works, made of plastic material similar to dummy profile colour.

#### 07 - Angle between sides

090 = angle  $\alpha = 90^\circ$  (standard)  
 xxx = angle ( $\alpha$ ) as required (value between  $90^\circ$  [090] and  $170^\circ$  [170] possible) (always with 3 digits)

#### 08 - Left-side length (a)

000 = standard length (L=300 mm)  
 xxx = length (L) in mm, freely selectable (minimum length = standard length) (always with 3 digits)

#### 09 - Right-side length (b)

000 = standard length (L=300 mm)  
 xxx = length (L) in mm, freely selectable (minimum length = standard length) (always with 3 digits)

## SPECIFICATION TEXT

The ceiling slot diffuser DSXL is suitable for installation in closed ceiling systems, in rooms of heights 2.6 to 4 m. It can be used in cooling or heating mode by adjusting the air guide elements which can also be adjusted from below when installed. Free cross-section, resistance and sound power level remain constant in all air guide element positions.

Volumetric flows in m <sup>3</sup> /h per m at:	35 dB(A)	40 dB(A)
DSXL-1	172	216
DSXL-2	293	344
DSXL-3	425	498
DSXL-4	492	581

**Supply** air model with air guide elements.

Installation position of air guide elements:

- air guide element position -B / -L / -R

Product: SCHAKO type **DSXL-...-Z-...**

**Return** air model with air guide elements.

Installation position of air guide elements:

- air guide element position -L

Product: SCHAKO type **DSXL-...-A-...**

**Model** (number of slots):

- 1-slot (-1)
- 2-slot (-2)
- 3-slot (-3)
- 4-slot (-4)

**Frame profile:**

- narrow frame profile, without support profile, for invisible installation (-S0, standard).
- frame profile P0, with support profile, for visible installation (-P0).
- frame profile PB, with support profile, for visible installation (-PB).

**Frame surface:**

- Natural colour anodised aluminium (-ELOX, standard for DSXL-...-P0 and DSXL-...-PB models)
- Painted aluminium (standard for DSXL-...-S0 model and painted to the same colour as blade colour of air guide element):
  - RAL 9005 (black) (-9005)
  - RAL 9010 (white) (-9010)
  - painted to a different RAL colour, freely selectable (at an extra charge) (-xxxx, always with 4 digits)

**Blade colour** (air guide element)

Air guide element made of plastic material:

- Colour similar to RAL 9005 (black, standard) (-L9005).
- Colour similar to RAL 9010 (white) (-L9010)

**Blade position** for air jet:

- one-way horizontal throw on the left (-L, standard for return air)
- one-way horizontal throw on the right (-R)
- two-way horizontal throw (-B, standard for supply air)

**Length / Model:**

Single design (-N)

- length L= 1000 mm (-N-01000)
- length L= 1500 mm (-N-01500)
- Length (L) in mm, freely selectable (-N-xxxxx) (always with 5 digits).  
(in case of single design length L ≥ 400 mm to ≤ 1500 mm can be fitted with plenum box, dummy piece possible from length ≥ 200 mm).

Band design (-B)

- Length (L) in mm, freely selectable, as band (-B-xxxxx) (always with 5 digits).  
(Available lengths according to SCHAKO standard).  
Single element length max. 1500 mm. With double air guide element (1x per connection) and connecting element, supplied loose. To lock the slot diffusers, double air guide elements are used at the butt joints (supplied loose, installation on site).

**Mounting:**

- without connection (-00)
  - Slot diffuser is **not** connected to the plenum box
  - Standard with dummy piece (-BS) and with mounting bracket (-BW)
- Concealed mounting with plenum box (-VM, standard)
  - Slot diffuser is connected to the plenum box ex works
  - The slot diffuser is screwed to the plenum box housing (face part) with concealed screws
- Clamp strap (-KB)
  - Only possible without plenum box
  - Screws and clamp straps are supplied loose (pair)
  - Possible for the models DSXL-...-P0 and DSXL-...-PB
  - Not possible for model DSXL-...-S0
  - The slot diffuser is screwed to the clamp strap with concealed screws (included in delivery)
  - For mounting, access on the rear is not required!
- Suspension via fastening holes
  - Model:
    - dummy piece design (-BS)
    - mounting bracket design (-BW, pair)
  - Only possible without plenum box
  - The slot diffuser is fastened to 4 suspension brackets

**Accessories:**

- Plenum box (-ASK-22), made of galvanised sheet steel (-SV).
    - Model (number of slots):
      - 1-slot (-1)
      - 2-slot (-2)
      - 3-slot (-3)
      - 4-slot (-4)
    - Single / band design:
      - Single design (-N, length of box KL max. 1500 mm)
      - Band design (-B, available lengths according to SCHAKO standard for band design)
    - Length:
      - Length L = 1000 mm (-01000) (KL = 997 mm)
      - Length L = 1500 mm (-01500) (KL = 1497 mm)
      - Length (L/BL) in mm, freely selectable (-xxxxx, always with 5 digits) (length of box KL = L-3 / total length of box GKL = BL-3, can be fitted with a plenum box in case of single design lengths L = ≥ 400 mm to ≤ 1500 mm)
    - Mounting of box:
      - without connection (-00) (not connected to the slot diffuser, screws supplied loose)
      - concealed mounting (-VM, standard) (connected to the slot diffuser ex works)
    - Damper:
      - without damper (-DK0) (standard)
      - With damper and cable-operated adjustment (-DK2), made of galvanised sheet steel, in the connection spigot, 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
    - Insulation:
      - without insulation (-I0, standard)
      - with internal insulation (-Ii), thermal insulation inside the plenum box.
      - with external insulation (-Ia), thermal insulation at the outside of the plenum box.
    - Height of plenum box:
      - Standard height of box (-KHS).
      - Height of box in mm, freely selectable (-xxx, always with 3 digits) (minimum height [GH] with spigot position S1+S2 and standard box neck = spigot diameter  $\varnothing D + 82$  mm / with spigot position S0 = 180 mm).
    - Box neck
      - Standard box neck (KVS = 45 mm) (-KVS)
      - Box neck extension in mm, freely selectable (-xxx, always with 3 digits). Box neck (not adjustable) from ≥45 mm to 200 mm possible.
    - Spigot position:
      - spigot from above (-S0)
      - lateral spigot (-S1) (standard)
      - lateral spigot located on the opposite side (-S2)
    - Suspension with mounting brackets:
      - without riveting nut (-E0) (standard)
      - with riveting nut (-EM), made of brass
    - with air diffuser plate, made of galvanised sheet steel
    - Connection plate for band design (2x per butt joint), made of galvanised sheet steel. Number of suspension (without / with riveting nuts) per butt joint is reduced from 4x to 2x.
  - Corner angle (-EW-22), frame and dummy profile made of extruded aluminium profile. Firmly screwed to the connecting elements, made of galvanised sheet steel.
    - Model (number of slots):
      - 1-slot (-1)
      - 2-slot (-2)
      - 3-slot (-3)
      - 4-slot (-4)
    - Frame profile:
      - narrow frame profile, without support profile, for invisible installation, (-S0, standard)
      - frame profile P0, with support profile, for visible installation (-P0)
      - frame profile PB, with support profile, for visible installation (-PB)
    - Frame surface:
      - Natural colour anodised aluminium (-ELOX, standard for DSXL-...-P0 and DSXL-...-PB models)
      - Painted aluminium (standard for DSXL-...-S0 model and painted to the same colour as dummy profile / air guide element):
        - RAL 9005 (black) (-9005)
        - RAL 9010 (white) (-9010)
        - a freely selectable RAL colour (-xxxx, always with 4 digits)
    - Dummy profile colour (air guide elements)
      - Dummy profile made of painted aluminium:
        - colour similar to RAL 9005 (black) (-B9005) (standard)
        - colour similar to RAL 9010 (white) (-B9010)
        - a freely selectable RAL colour (-Bxxxx) (always with 5 digits)
      - Air guide elements (double), mounted ex works, made of plastic material similar to dummy profile colour.
    - Angle between sides:
      - angle  $\alpha = 90^\circ$  (-090) (standard)
      - angle ( $\alpha$ ) as required (-xxx), values between  $\alpha = 90^\circ$  (-090, standard) and  $170^\circ$  (-170) are possible (always with 3 digits)
    - Left-side length (a):
      - standard length L = 300 (-000)
      - length (L) in mm, freely selectable (-xxx) (minimum length = standard length) (with 3 digits)
    - Right-side length (b):
      - standard length L = 300 (-000)
      - length (L) in mm, freely selectable (-xxx) (minimum length = standard length) (always with 3 digits)
  - End pieces (-E0 / -ES / -EB / -EL / -ER)
    - without end piece (-E0) (standard)
    - with end pieces:
      - supplied loose (-ES, pair) (standard)
      - mounted ex works on both sides (-EB)
      - mounted ex works on the left side (-EL)
      - mounted ex works on the right side (-ER)
  - Mounting bracket (pair) / dummy piece (-B0 / -BW / -BS)
    - without mounting bracket / without dummy piece (-B0)
    - with mounting bracket (-BW), for overflow operation:
      - made of galvanised sheet steel
      - only possible without plenum box
      - possible from length L ≥ 200 mm
    - with dummy piece (-BS):
      - made of galvanised sheet steel
      - only possible without plenum box
      - possible from length L ≥ 200 mm
- With models -BW and -BS as a band, additional connecting fishplates are supplied loose.