

DSXL

Slot diffuser

SCHAKO KG
Steigstraße 25-27
D-78600 Kolbingen

+49 (0) 7463-980-0
info@schako.de
schako.com

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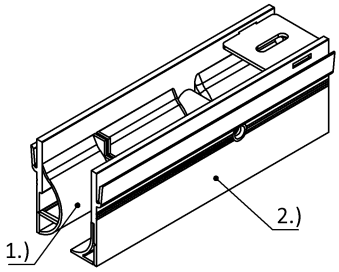
Plenum box order code 33

Order code corner angle 35

Specification text 36

OVERVIEW OF PRODUCT VERSIONS

DSXL-…-Z-… (supply air) / **DSXL-…-A-…** (return air)



1.) Air guide element for supply air/return air

2.) Frame profile

Function and use

The narrow 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 throw pattern to changed room conditions is possible. To adjust the position of the elements, each element 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, element 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 spigot for air volume regulation. The plenum box can also be insulated either internally or externally. Connection 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 Page 21). These fixing lugs can be provided with M4 (-EM) riveting nuts at an extra charge.

Construction subject to change. No return possible.

Models

DSXL-1-…	1-slot
DSXL-2-…	2-slots
DSXL-3-…	3-slots
DSXL-4-…	4-slots
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 with one-way horizontal throw on the left
DSXL-…-R	air guide elements with one-way horizontal throw on the right
DSXL-…-B	air guide elements with 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. 1,500 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

Suspension with plenum box

- Model:
  - with plenum box (-ASK-22)
- The plenum box is screwed to the 4 suspension brackets.

Connection element for band design

- via connection element and double air guide element
  - DSXL-...-ASK with DSXL-...-ASK, also with connection plate
  - DSXL-...-ASK with DSXL-...-BW
  - DSXL-...-ASK with DSXL-...-BS
  - DSXL-...-BW with DSXL-...-BW
  - DSXL-...-BW with DSXL-...-BS
  - DSXL-...-BS with DSXL-...-BS

Processing

Frame surface

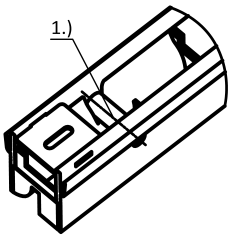
- natural colour anodised aluminium (-ELOX, standard for DSXL-...-P0 and DSXL-...-PB models)
- painted aluminium (standard for DSXL-...-S0 model and painted the same colour as blade colour of air guide element):
  - RAL 9005 (black) (-9005)
  - RAL 9010 (white) (-9010)
  - a different RAL colour, freely 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



1.) Spacer tube

Connection element

- for band design
- for connection between (see Page 23):

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**

- made of galvanised sheet steel
- supplied loose as standard

Accessories

Plenum box (-ASK-22)

- Model (number of slots):
  - 1-slot (-1)
  - 2-slots (-2)
  - 3-slots (-3)
  - 4-slots (-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 ≤ 1,500 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) on 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 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 øD + 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 ≥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 with DSXL-1-… and DSXL-2-…)
- Spigot diameter:
  - Standard spigot diameter (-SDS)
  - spigot diameter (øD) 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-slots (-2)
  - 3-slots (-3)
  - 4-slots (-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)
  - air guide element (double), mounted ex works, made of plastic material similar to dummy profile colour
- Angle between sides:
  - angle α = 90° (-090, standard)
  - angle (α) as required (-xxx), values between α = 90° (-090, standard) and 170° (-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 operation with overflow air:
  - 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

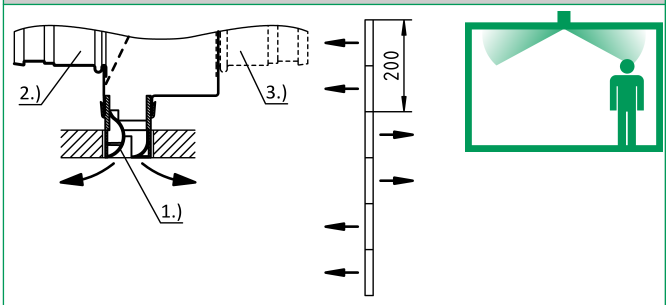
With models -BW and -BS as a band, additional connecting fishplates are supplied loose.

BLADE POSITION FOR AIR JET

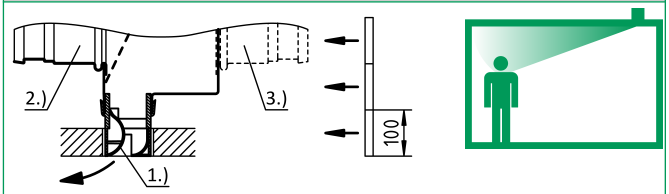
All adjacent blades will be set in one direction when ordering multi slot models.

Supply air and return air with air guide elements.

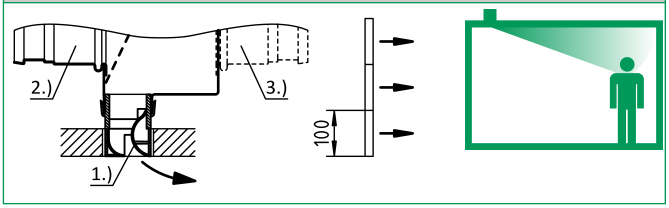
Air guide element position (-B, standard for supply air)
two-way horizontal throw



Air guide element position (-L, standard for return air**)**
one-way horizontal throw to the left



Air guide element position (-R)
one-way horizontal throw to the right



1.) Air guide element

2.) Lateral spigot (-S1)

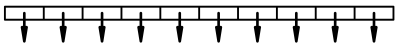
3.) Lateral spigot located on the opposite side (-S2)

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 (horizontal one-way throw on the left or on the right)

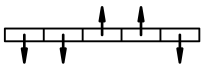
L=500 -1500



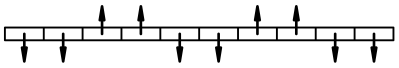
All air guide elements are adjusted in one direction.

DSXL-1-…-B (horizontal two-way throw)

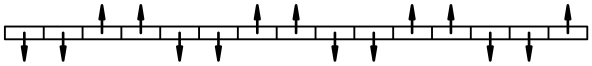
L=500



L=1000



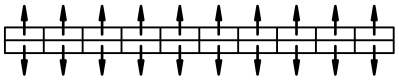
L=1500



In each case, 2 air guide element rows must be installed on the right, 2 air guide element rows on the left, etc. With 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)

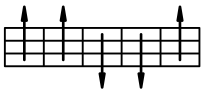
L=500 -1500



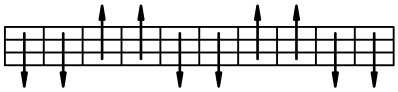
In each case, the complete slot rows must be set to one direction.

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

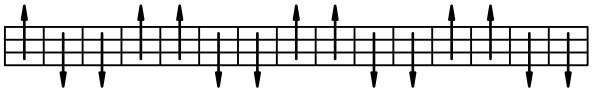
L=500



L=1000



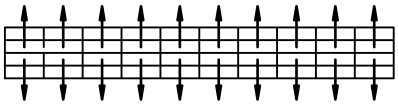
L=1500



In each case, 2 air guide element rows must be installed on the right, 2 air guide element rows on the left, etc. With 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 -B is supplied as standard. A different air throw pattern is possible according to the customer's specifications.

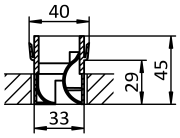
DIMENSIONS

Dimensions of frame profile

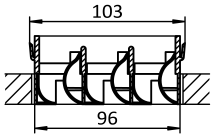
Narrow frame profile "S0" (standard)

For **invisible installation** in the joint of panelled ceilings.

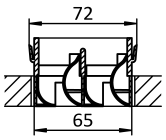
DSXL-1-...-S0



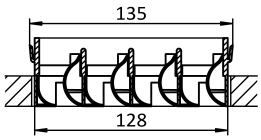
DSXL-3-...-S0



DSXL-2-...-S0



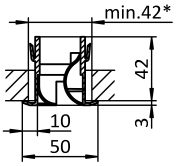
DSXL-4-...-S0



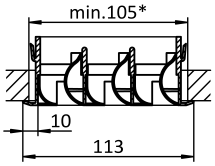
Frame profile "P0" (with support profile)

For **visible installation** in panelled ceilings.

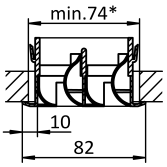
DSXL-1-...-P0



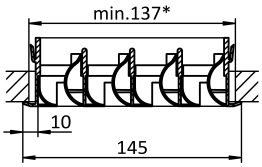
DSXL-3-...-P0



DSXL-2-...-P0



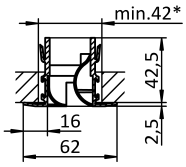
DSXL-4-...-P0



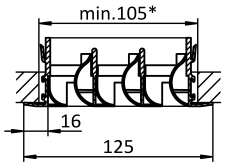
Frame profile "PB" (with support profile)

For **visible installation** in panelled ceilings.

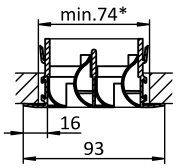
DSXL-1-...-PB



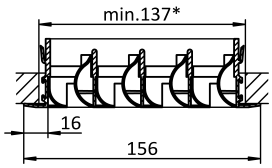
DSXL-3-...-PB



DSXL-2-...-PB

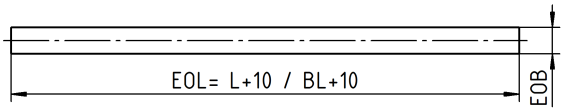


DSXL-4-...-PB



*EOB = installation opening width (minimum dimension)

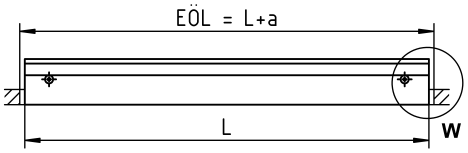
Installation opening



Available lengths for the slot diffuser

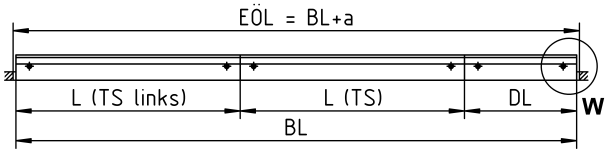
Single design (-N)

- length L = 1000 mm (**-N-01000**)
- length L = 1,500 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 ≤ 1,500 mm can be fitted with plenum box, dummy piece possible from length ≥ 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 **≥400 mm to <1500 mm**. The difference pieces **from ≥ 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
TS left	=	Left section
L	=	Length
DL	=	Difference distance
BL	=	Length of band
EOB	=	Installation opening width
EOL	=	Installation opening length (EOL = L+10/BL+10)

End pieces, for detail W see Page 10.

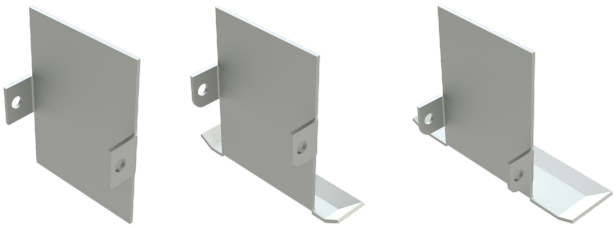
DIMENSIONS OF ACCESSORIES

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

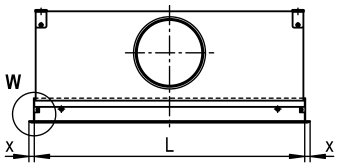
- without end pieces (**-E0**) (standard)
- with end pieces, made of aluminium (same colour as frame):
  - supplied loose (**-ES**, pair) (standard)
  - mounted ex works on both sides (**-EB**)
  - mounted ex works on the left side (**-EL**)
  - mounted ex works on the right side (**-ER**)

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

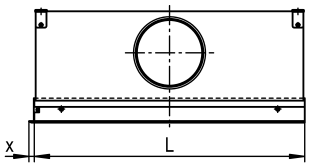
for DSXL-...-S0: **for DSXL-...-P0:** **for DSXL-...-PB:**



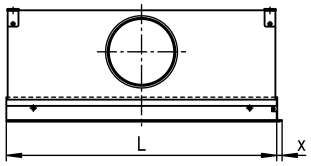
End piece on both sides (-EB)



End piece on the left (-EL)



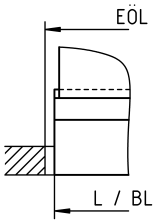
End piece on the right (-ER)



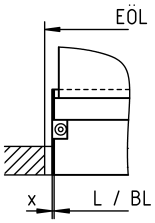
Detail W

DSXL-...-S0

without end pieces

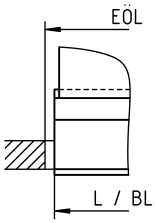


with end pieces

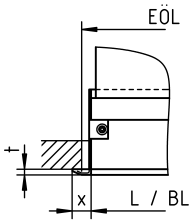


DSXL-...-P0 / DSXL-...-PB

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:

EOL = L + 10 or BL + 10

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

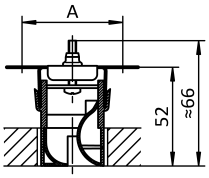
- without mounting bracket/without dummy piece (**-B0**)
- with mounting bracket (**-BW**), for operation with overflow air:
  - made of galvanised sheet steel
  - only possible without plenum box
  - possible from length L ≥ 200 mm
- with dummy piece (**-BS**):
  - made of galvanised sheet steel
  -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

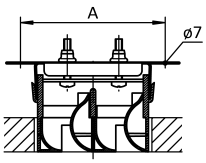
Mounting with suspension via mounting holes (4x) (see Page 19).

Mounting bracket (-BW)

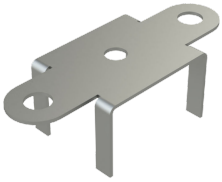
DSXL-1-…-BW



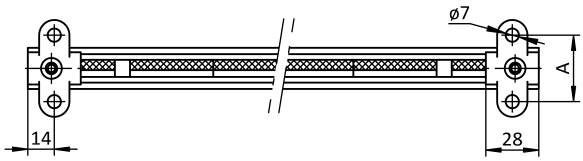
DSXL-2 to 4-…-BW



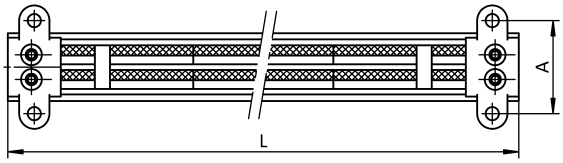
Mounting bracket



DSXL-1-…-BW

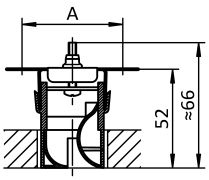


DSXL-2 to 4-…-BW

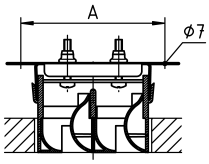


Dummy piece (-BS)

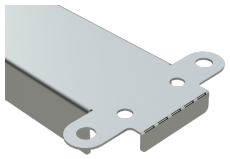
DSXL-1-…-BS



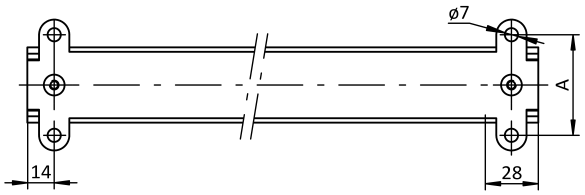
DSXL-2 to 4-…-BS



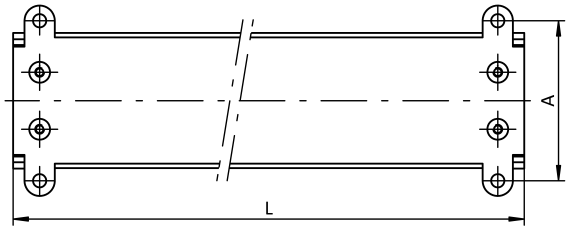
Dummy piece



DSXL-1-…-BS



DSXL-2 to 4-…-BS



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

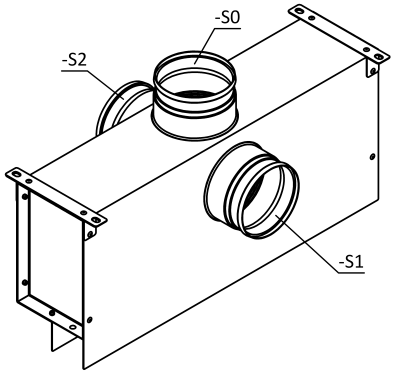
Plenum box (-ASK-22)

Spigot position

S0 = Spigot from above

S1 = lateral spigot (standard)

S2 = lateral spigot located on the opposite side



Plenum box – single design (-N)

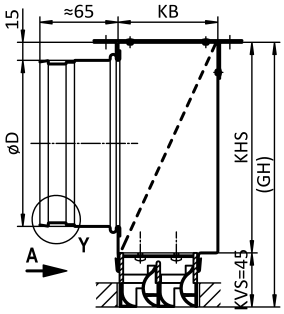
Plenum box (-ASK-22-…-N-…-VM-…-S1/S2-…)

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

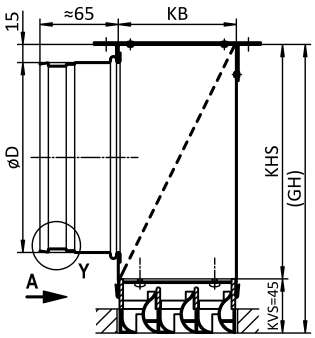
The slot diffuser is screwed to the plenum box housing (face part) with concealed screws.

With lateral spigot (-S1, standard)

DSXL-1/2-…-ASK-22-…-N-…-VM-…-S1-… (1- + 2-slots)

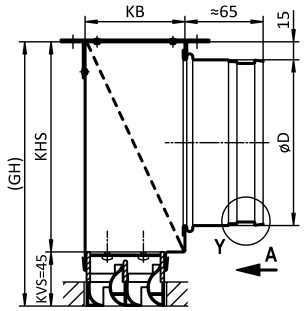


DSXL-3/4-…-ASK-22-…-N-…-VM-…-S1-… (3- + 4-slots)



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

DSXL-1/2-…-ASK-22-…-N-…-VM-…-S2-… (only 1- + 2-slots)



KVS = 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

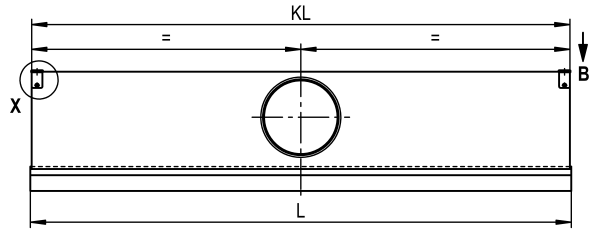
Available plenum box lengths (-ASK-22-...-N)

- 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 5 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.)

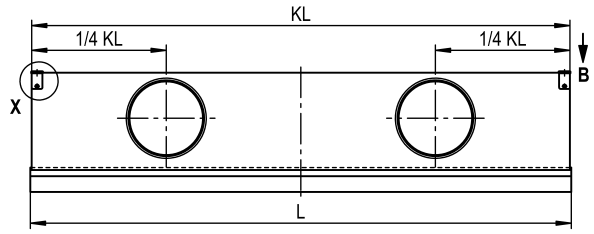
Spigot position:

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

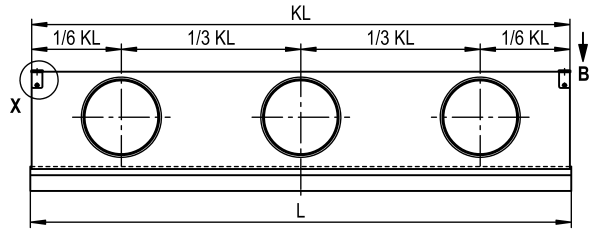
View A / with 1 spigot



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.

Construction subject to change. No return possible.

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

EOB = Installation opening width (see Page 9)
EOL = Installation opening length (EOL = L+10/BL+10)
KL = Length of box (KL = L-3)

For suspension position, view B, see Page 19
For plenum box suspension, detail X, see Page 21
For rubber lip seal, detail Y, see Page 17
See Page 19 for mounting
Plenum box in band design, see Page 15

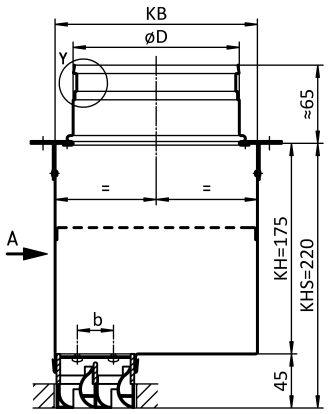
Plenum box (-ASK-22-...-N-...-VM-...-S0-...)

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-...



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

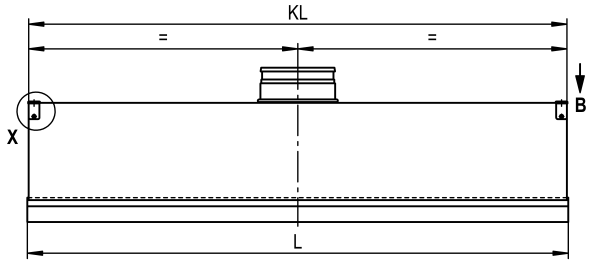
Available plenum box lengths (-ASK-22-...-N)

- length L = 1000 mm (**-N-01000**) (length of box KL = 997 mm)
- length L = 1,500 mm (**-N-01500**) (length of box KL = 1,497 mm)
- length (L) in mm, freely selectable (**-N-xxxxx**) (always with 5 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.)

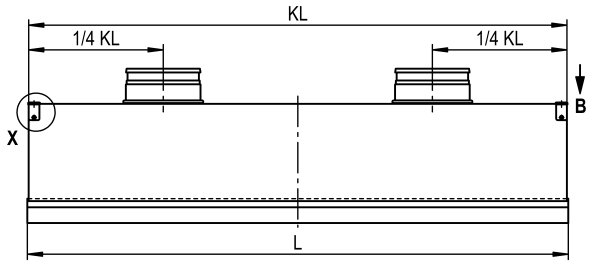
Spigot position:

Spigot from above (-S0)

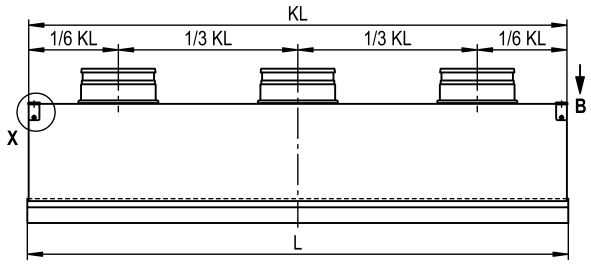
View A / with 1 spigot



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 maximum torque of the fastening screw is 0.5 Nm.**
EOB	=	Installation opening width (see Page 9)
EOL	=	Installation opening length (EOL = L+10/BL+10)
KL	=	Length of box (KL = L-3)

For the position of suspension in view B, see Page 19
For plenum box suspension, detail X, see Page 21
For rubber lip seal, detail Y, see Page 17
See Page 19 for mounting
Plenum box in band design, see Page 15

Plenum box – band design (-B)

Plenum box (-ASK-22-…-B-…-VM-…)

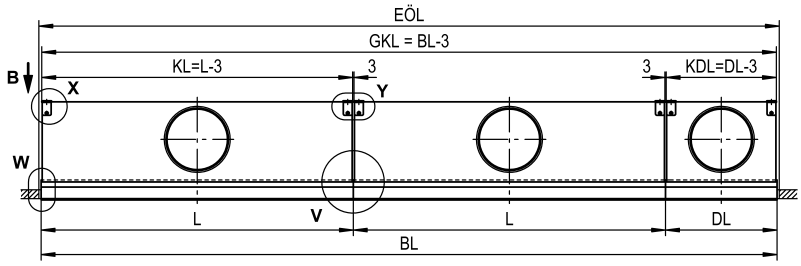
With concealed mounting.

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

Available lengths of plenum box (-ASK-22-…-B)

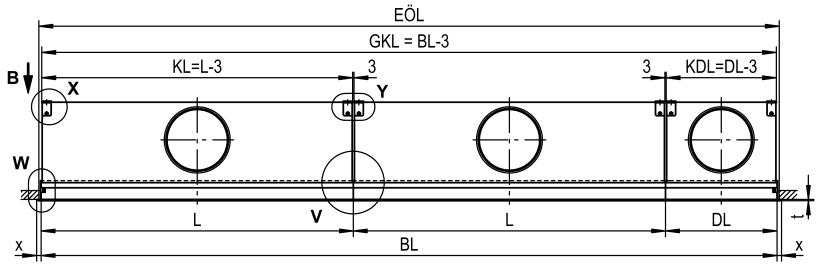
DSXL-…-ASK-22-…-B-…-VM-…-S1/-S2-…-E0

(with lateral spigot or lateral spigot located on the opposite side, without riveting nut)



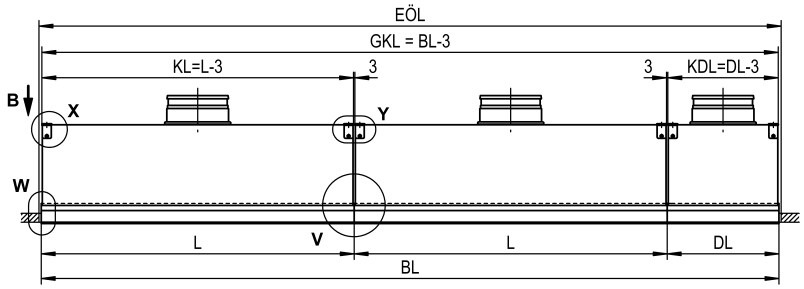
DSXL-…-ASK-22-…-B-…-VM-…-S1/-S2-…-ES/-EB/-EL/-ER

(with lateral spigot or lateral spigot located on the opposite side, with riveting nut)



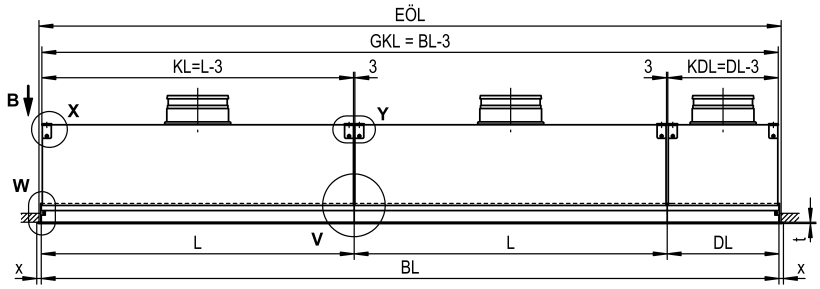
DSXL-…-ASK-22-…-B-…-VM-…-S0-…-E0

(with spigot from above, without riveting nut)



DSXL-…-ASK-22-…-B-…-VM-…-S0-…-ES/-EB/-EL/-ER

(with spigot from above, with riveting nut)



Available lengths according to SCHAKO standard

BL > 1,500 to < 2,000:

For models designed as a band (BL > 1,500 mm to < 2,000 mm), the total length BL is divided individually (division upon request).

BL ≥ 2,000:

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

The difference pieces DL with length > 1,500 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.

	x	t
DSXL-...-S0	1	-
DSXL-...-P0	10	3
DSXL-...-PB	16	2,5

Installation opening in the length section:

EOL = BL + 10

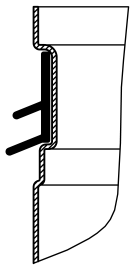
L = Length
DL = Difference distance
BL = Length of band
KL = Length of plenum box (KL = L-3)
KDL = difference in length, plenum box (KDL = DL-3)
GKL = Total length of box (GKL = BL-3)
EOL = Ceiling opening dimensions

Butt joint of concealed mounting detail V, see Page 19
For plenum box mounting, detail X/detail Y, see Page 21
End pieces, for detail W, see Page 10
For the position of suspension holes view B, see Page 19
Available sizes for plenum box, see Page 12

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

- without rubber lip seal (-GD0) (standard)
- With rubber lip seal (-GD1) on the connection spigot

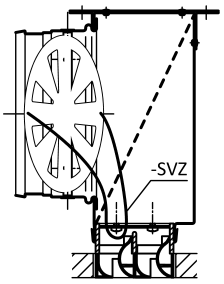
Detail Y



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

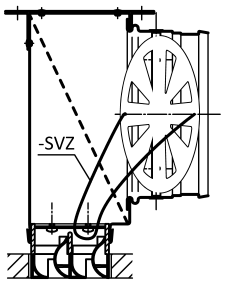
- Without damper (-DK0) (standard)
- with damper in the connection spigot, with cable-operated adjustment (-DK2)

-DK2, lateral connection (-S1, standard)

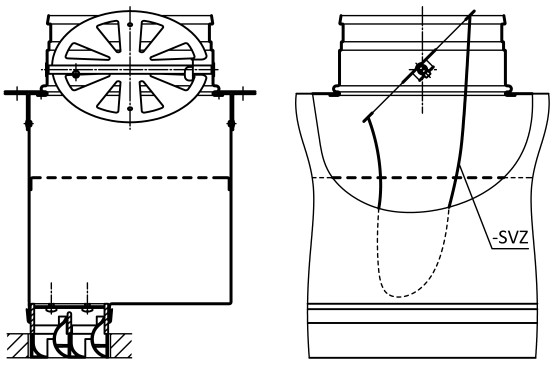


-DK2, lateral connection located on the opposite side (-S2)

only for 1- and 2-slot models.



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

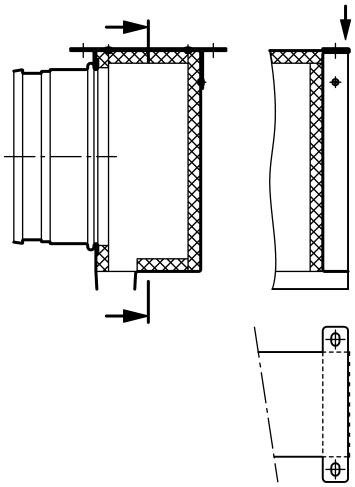


SZV = with cable-operated adjustment

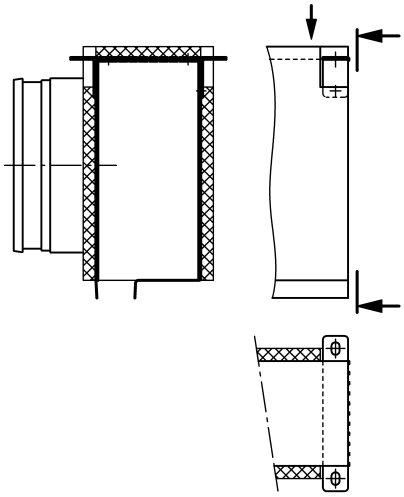
Insulation (-I0 / -Ii / -Ia), for ASK-22

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

Internal (-Ii)



External (-Ia)



Construction subject to change. No return possible.

Corner angle 90° (-EW-22-...-090-...)

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

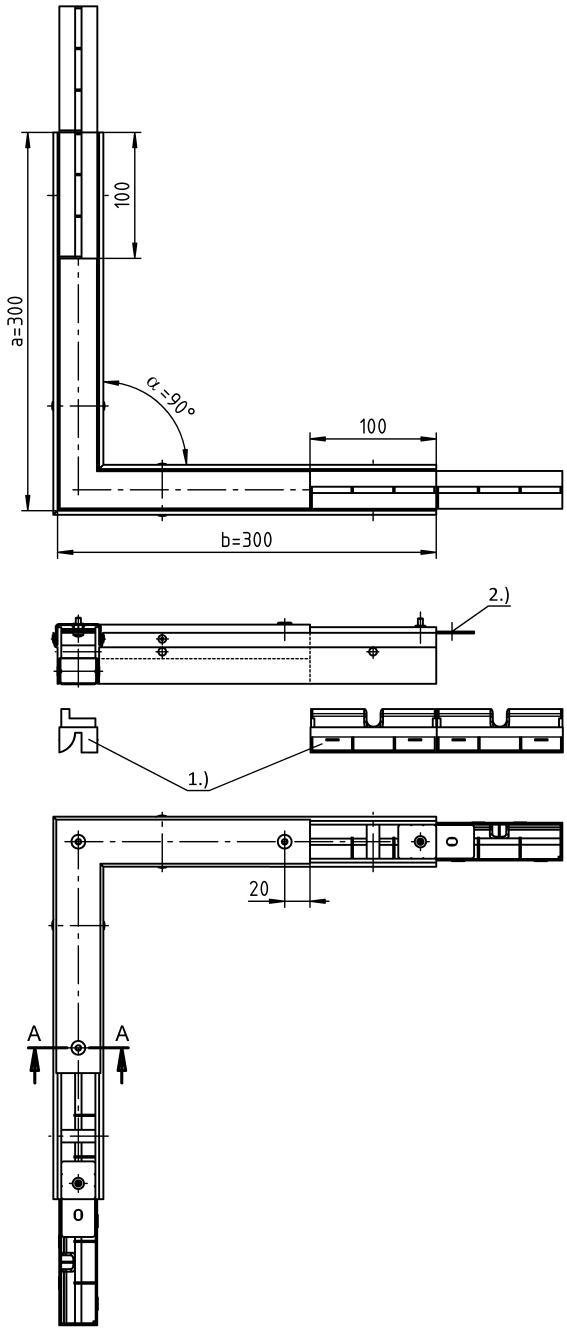
The double air guide element is supplied loose.

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).

Values between α = 90° (-090, standard) and 170° (-170) are possible.



a = left side length

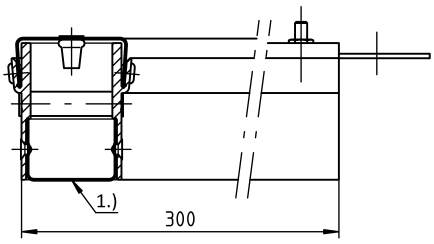
b = right side length

1.) Double air guide elements mounted ex works

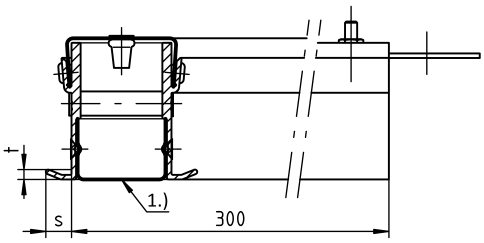
2.) Firmly screwed connecting element

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



Construction subject to change. No return possible.

MOUNTING

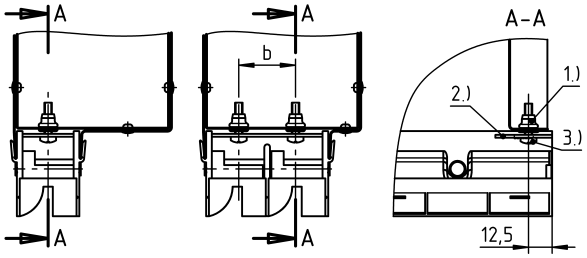
Without connection (-00)

- 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.

DSXL-1-… DSXL-2-… to DSXL-4-…



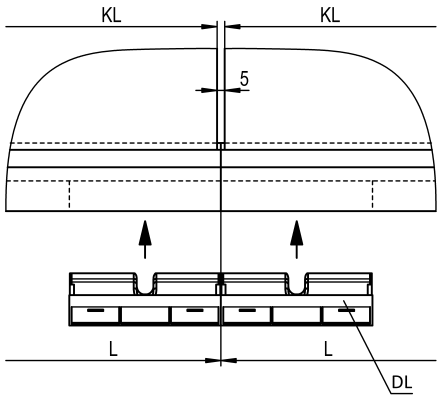
Number of fastening screws:
DSXL-1-… with 2 screws
DSXL-2-… to DSXL-4-… with 4 screws

	b
DSXL-1	-
DSXL-2	14
DSXL-3	28
DSXL-4	42

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

Butt joint of concealed mounting (-VM)

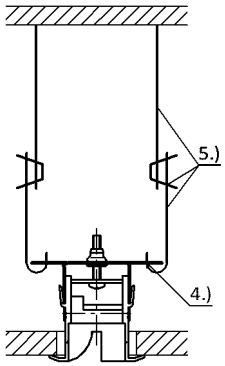
Detail V



DL = Double air guide element, supplied loose (assembly on site)

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



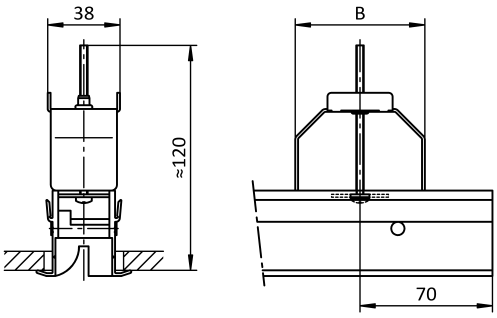
4.) Fastening holes in the dummy piece (-BS1) or in the mounting bracket (-BW)

5.) Suspension on site

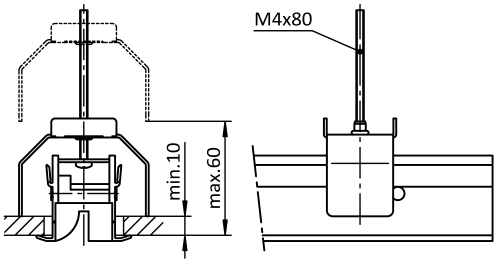
Clamp strap (-KB)

- For room side installation in finished pressure ceilings
- Only possible without plenum box
- screws and clamp straps are supplied loose (pair)
- possible with the models DSXL-…-P0 and DSXL-…-PB (not possible with 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!**

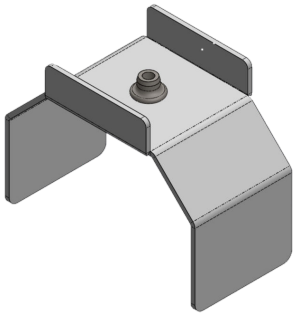
In mounting position



In clamping position



Detail of clamp strap



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

Montageanweisung

Die Klemmbügel werden standardmäßig lose geliefert.

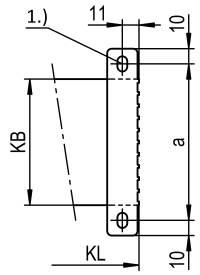
1. Luftführungselemente an den Enden herausnehmen.
2. Den Klemmbügel mit der Schraube so befestigen, dass dieser in Schlitzdurchlassrichtung steht (siehe Einbaustellung).
3. Dann den Schlitzdurchlass in die Druckdecke einführen.
4. Anschließend den Klemmbügel durch Drehen der Schraube um ca. 90° schwenken und über das Schlitzdurchlassprofil absenken (siehe Klemmstellung).
5. Die Schraube anziehen, bis der Schlitzdurchlass fest an der Decke arretiert ist.
6. Finally, re-insert the air guide elements removed in Item 1.

Suspension with plenum box

Position of the suspension holes

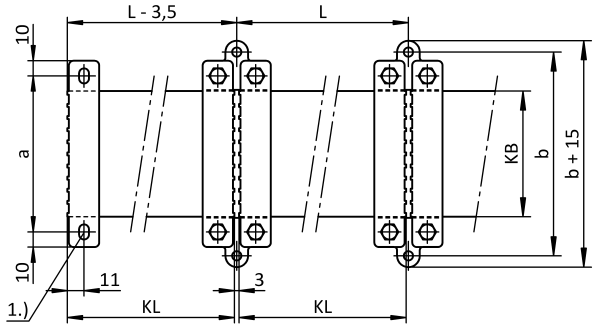
Single design

View B



Band design

View B



1.) Long hole Ø6.5x10

Available sizes

Lateral connection (-S1/-S2)

	L ≥ 400 - L ≤ 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)

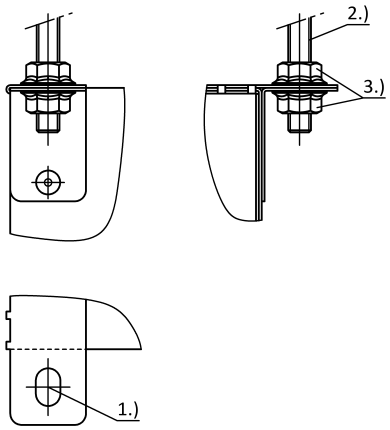
	L ≥ 400 - L ≤ 1500		
	KB	a	b
DSXL-1	168	188	220
DSXL-2	168	188	220
DSXL-3	188	208	240
DSXL-4	228	248	280

Plenum box suspension

Single design/Band design

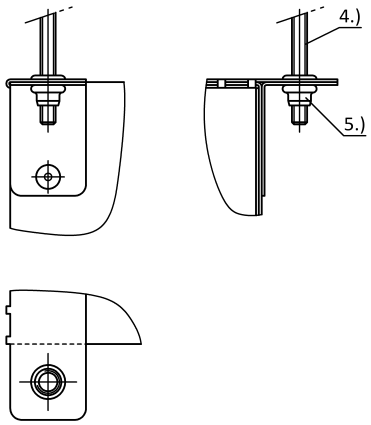
Detail X

with long hole ø6.5x10 (-E0, standard):



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

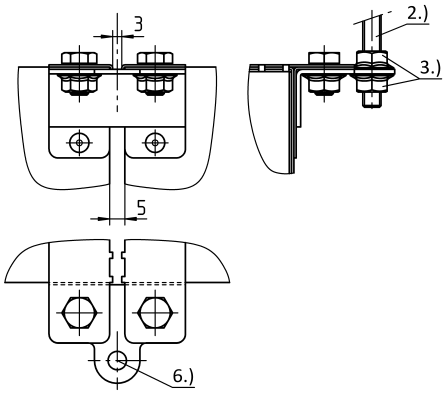
At an extra charge, the plenum boxes can be fitted with M4 riveting nuts to facilitate ceiling mounting.



Band design

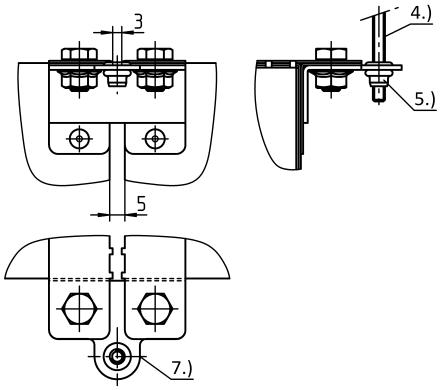
Detail Y

with pin hole ø6.1 (-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.



1.) Long hole ø6.5x10

2.) M6/On-site

3.) On-site

4.) M4/On-site

5.) Riveting nut M4

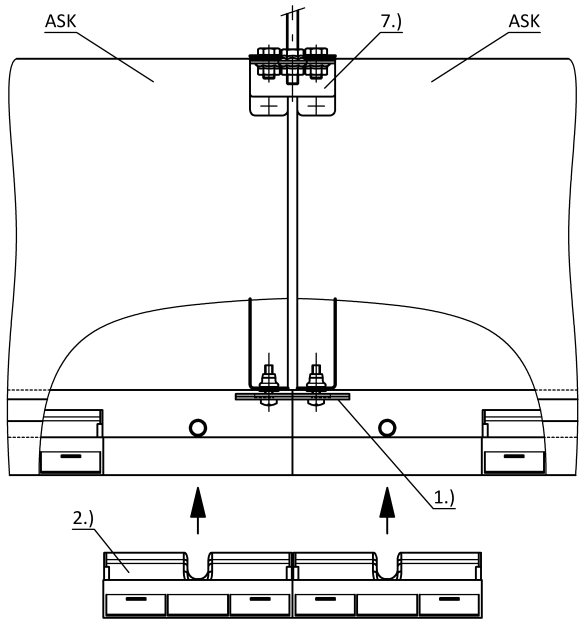
6.) Connection plate with pin hole ø6.1

7.) Connection plate

Connection element for band design

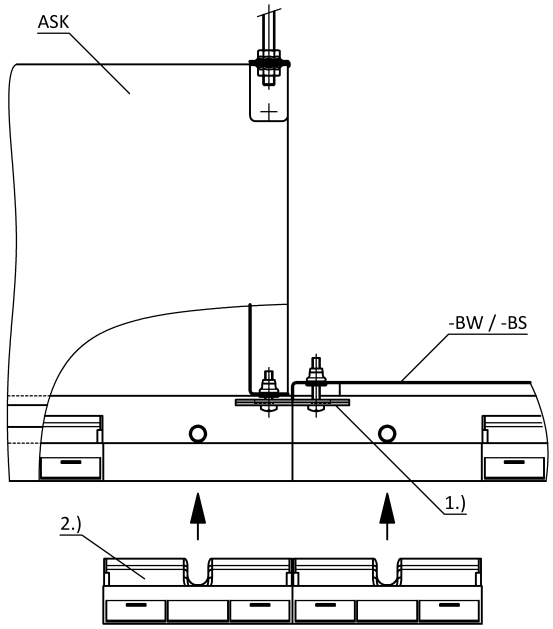
(supplied loose as standard)

DSXL-…-ASK with DSXL-…-ASK (active – active)



DSXL-…-ASK with DSXL-…-BW (active – active)

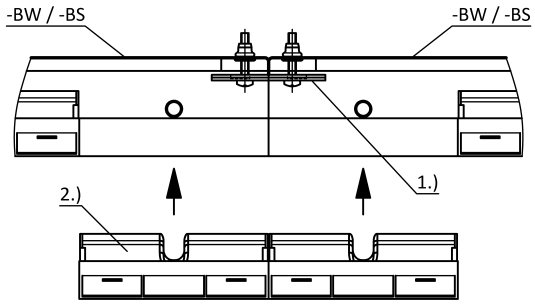
DSXL-…-ASK with DSXL-…-BS (active – passive)



DSXL-…-BW with DSXL-…-BW (active – active)

DSXL-…-BW with DSXL-…-BS (active – passive)

DSXL-…-BS with DSXL-…-BS (passive – passive)



1.) Connection element

2.) Double air guide element, supplied loose (assembly on site)

7.) Connection plate

Connection element for the connection between:

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**

Detail of connection element

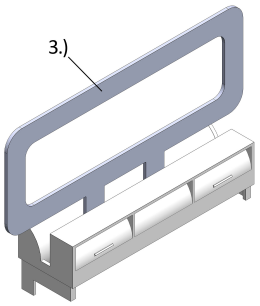


Detail of connection plate (connecting ASK to ASK)

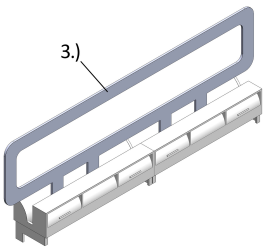


Mounting handle for air guide element

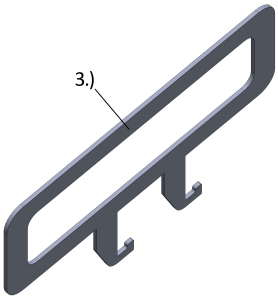
Air guide element
(standard)



Double air guide element
(for band design)



Claw alignment:

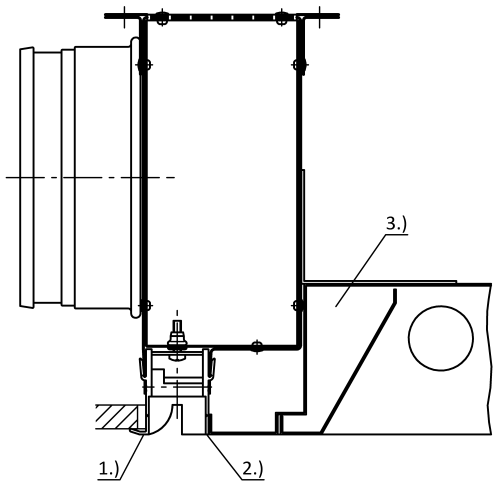


3.) Mounting handle

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.



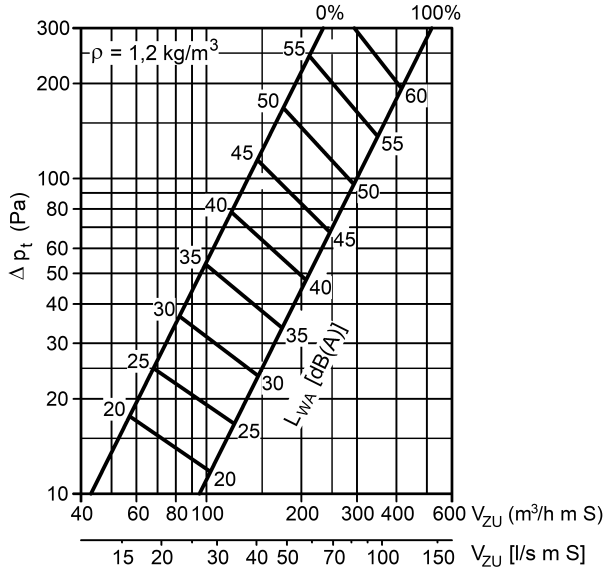
1. Frame profile DSXL-…-P0
2. Frame profile DSXL-…-S0
3. Air-handling light

TECHNICAL DATA

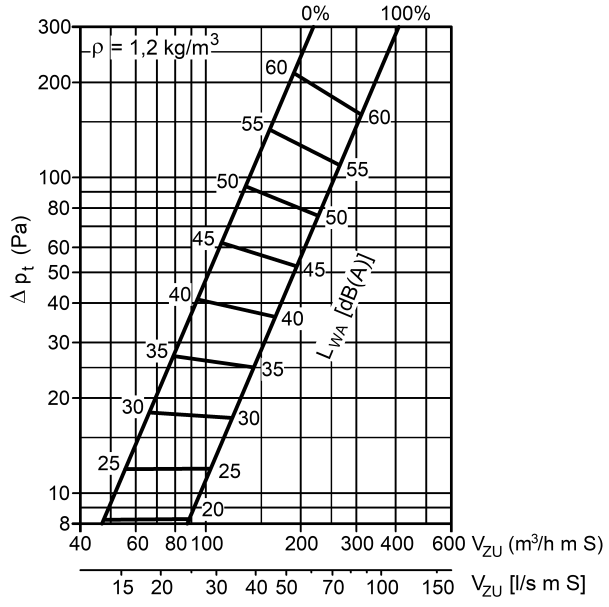
Pressure loss and noise level

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

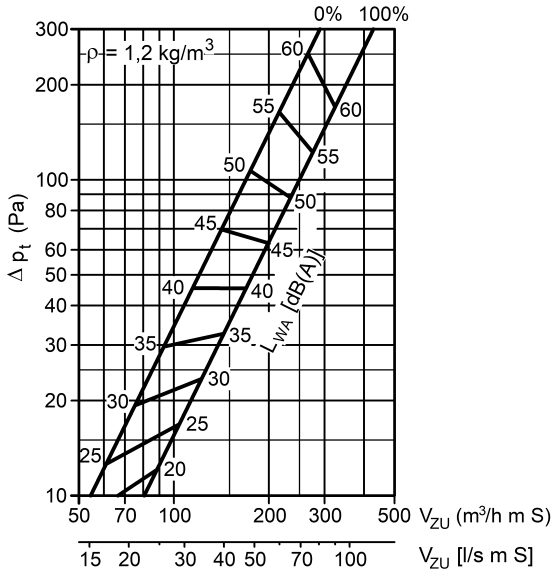
DSXL-1-Z-...-ASK-22-1-...



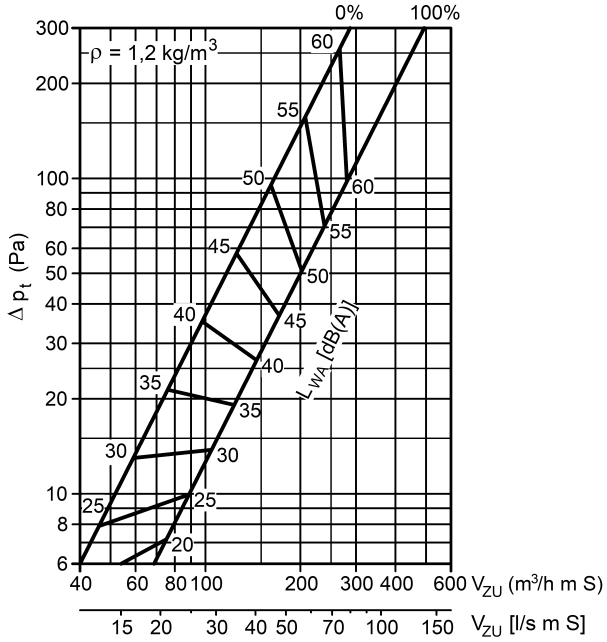
DSXL-3-Z-...-ASK-22-3-...



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



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



Damper position (DS):

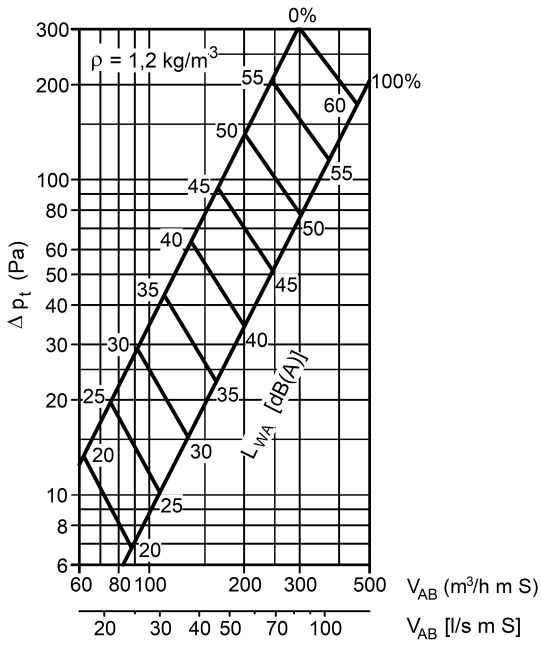
0% = CLOSED

100% = OPEN

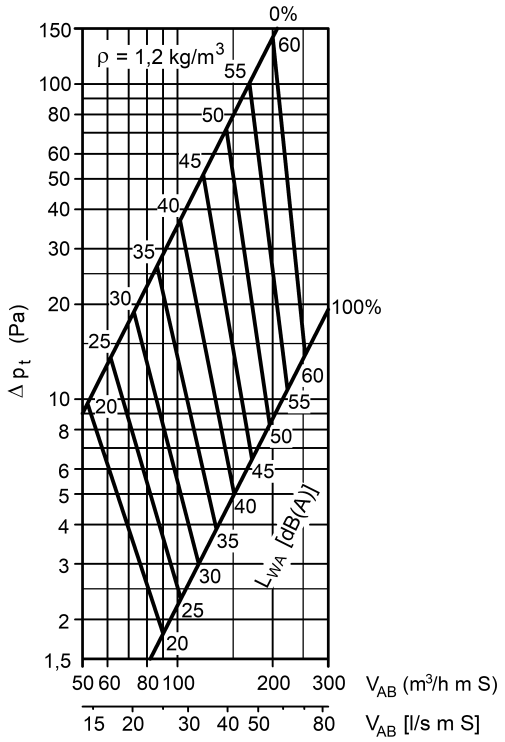
L = 1,000 (return air, with plenum box)

with air guide elements

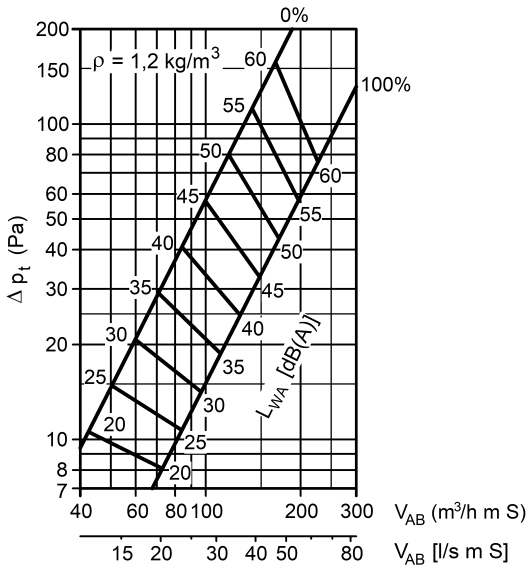
DSXL-1-Z-...-ASK-22-1-...



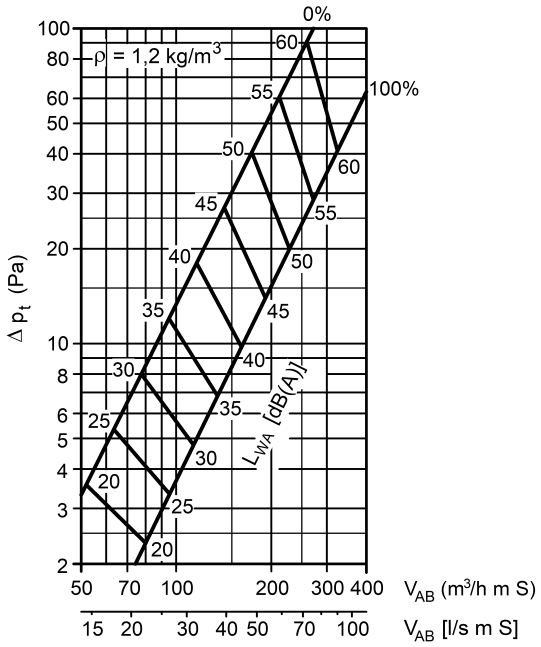
DSXL-3-Z-...-ASK-22-3-...



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



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



Damper position (DS):

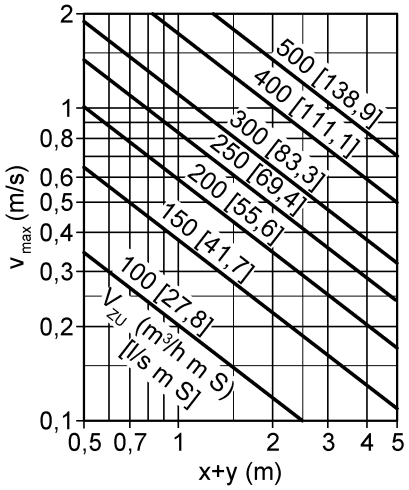
0% = CLOSED

100% = OPEN

Maximum final jet velocity

DSXL-1-...

L=1000, one-way throw



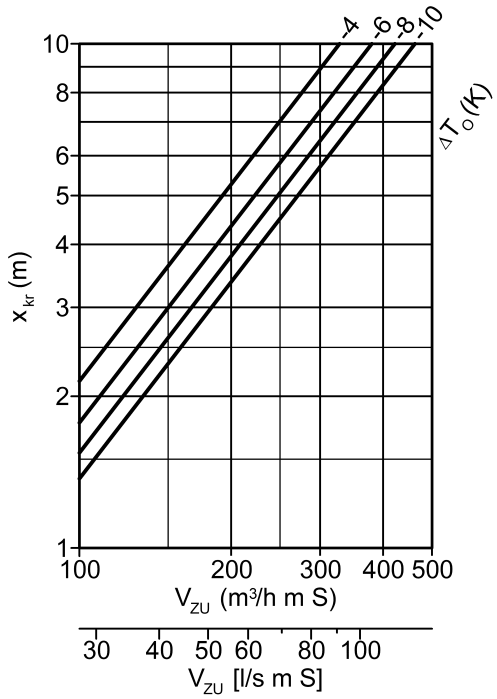
Correction factor maximum end velocity of jet

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

Critical throw

DSXL-1-...

L=1000, one-way throw



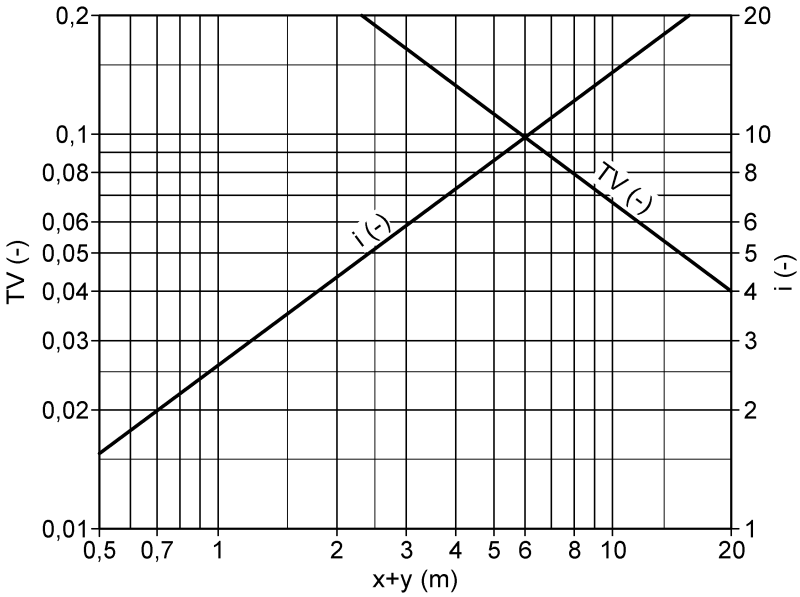
Correction factor critical throw

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

Induction ratios and temperature ratios

L=1000, one-way and two-way throw

DSXL-1-...



Correction factor induction ratio

DSXL-2-	i x 0.73
DSXL-3-	i x 0.76
DSXL-4-	i x 0.52

Correction factor temperature ratio

DSXL-2-	TV x 1.37
DSXL-3-	TV x 1.31
DSXL-4-	TV x 1.90

LEGEND

V_{ZU}	(m³/h m S) [l/s m S]	=	Supply air volumetric flow per metre per slot
V_{AB}	(m³/h m S) [l/s m S]	=	Return air volumetric flow per metre per slot
Δp_t	(Pa)	=	Pressure loss
ρ	(kg/m³)	=	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 = 1,000 mm
x_{kr}	(m)	=	Critical throw
ΔT_O	(K)	=	Temperature difference between supply air temperature and room temperature ($\Delta T_O = t_{ZU} - t_R$)
ΔT_X	(K)	=	Temperature difference at point x
v_{max}	(m/s)	=	Maximum end velocity of jet
TV	(-)	=	Temperature ratio ($TV = \Delta T_X / \Delta T_O$)
i	(-)	=	Induction ratio ($i = V_X / V_{ZU}$)
x	(m)	=	Horizontal jet path
y	(m)	=	Vertical throw
x+y	(m)	=	Horizontal + 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 plenum box
KHS	(mm)	=	Height of 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
Example					
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-slots
3 = 3-slots
4 = 4-slots

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 in an RAL colour, freely selectable (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, 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. 1,500 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 mounted ex works on the left

ER = with end piece mounted ex works on the right

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
Example							
ASK	-22	-2	-N	-01000	-VM	-SV	-DK2

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

Sample

ASK-22-2-N-01000-VM-SV-DK2-GD1-I0-KHS-KVS-S1-SDS-E0

plenum box for slot diffuser | for DSXL | 2-slot | single design | length L = 1,000 mm | concealed mounting | galvanised sheet steel | with damper with cable-operated adjustment | 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-slots
3 = 3-slots
4 = 4-slots

04 - Single / band design

N = single design (length of box KL max. 1,500 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. 1,500 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)

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 box

KHS = Height of plenum box standard
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 = Spigot diameter standard
xxx = spigot diameter (øD) in mm, freely selectable (always with 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
Example				
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 bracket for slot diffuser | for DSXL | 2-slot | narrow frame profile, without support profile, for invisible installation | natural colour anodised aluminium | aluminium painted RAL colour 9005 (black) | angle α = 90° | 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-slots
3 = 3-slots
4 = 4-slots

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

07 - Angle between sides

090 = angle α = 90° (standard).
xxx = angle (α) as required (value between 90° [090] and 170° [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 m³/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-slots (**-2**)
- 3-slots (**-3**)
- 4-slots (**-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 the same colour as blade colour of air guide element):
- RAL 9005 (black) (**-9005**)
- RAL 9010 (white) (**-9010**)
- 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**)

Construction subject to change. No return possible.

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 ≤ 1,500 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. 1,500 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
- Suspension via plenum box
  - Model:
    - with plenum box (-ASK-22)

- The plenum box is screwed to the 4 suspension brackets.
- Connection element for band design
  - via connection element and double air guide element
    - DSXL-…-ASK with DSXL-…-ASK, also with connection plate
    - DSXL-…-ASK with DSXL-…-BW
    - DSXL-…-ASK with DSXL-…-BS
    - DSXL-…-BW with DSXL-…-BW
    - DSXL-…-BW with DSXL-…-BS
    - DSXL-…-BS with DSXL-…-BS

Accessories:

- plenum box (-ASK-22), made of galvanised sheet steel (-SV).
  - Model (number of slots):
    - 1-slot (-1)
    - 2-slots (-2)
    - 3-slots (-3)
    - 4-slots (-4)
  - Single / band design:
    - single design (-N, length of box KL max. 1,500 mm)
    - Band design (-B, available lengths according to SCHAKO standard for band design)
  - Length:
    - length L = 1000 mm (-01000) (KL = 997 mm)
    - length L = 1,500 mm (-01500) (KL = 1,497 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) on 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 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 øD + 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 angles (-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-slots (-2)
    - 3-slots (-3)
    - 4-slots (-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)
    - Air guide elements (double), mounted ex works, made of plastic material similar to dummy profile colour.
  - Angle between sides:
    - angle α = 90° (-090) (standard)

    - angle (α) as required (-xxx), values between α = 90° (-090, standard) and 170° (-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)
- End pieces (-E0 / -ES / -EB / -EL / -ER)
  - without end pieces (-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)

  made of aluminium (same colour as frame)
- Mounting bracket (pair)/dummy piece (-B0/-BW/-BS)
  - without mounting bracket/without dummy piece (-B0)
  - with mounting bracket (-BW), for operation with overflow air:
    - 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.