

DSCXLS

Slot diffuser

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Table of Contents

Overview of product versions ... 3
- Function and use ... 3
- Models ... 3
- Mounting ... 4
- Quick selection ... 4
- Blade position for air jet ... 4
- Processing ... 5
- Accessories ... 6

Dimensions ... 8
- Dimensions of frame profile ... 8
- Available lengths for the slot diffuser ... 8
- Slot diffuser connection in band design ... 9

Dimensions of accessories ... 10
- End pieces (-E00 / -E...1 / -E...2) ... 10
- Dummy piece (-BS0 / -BS1) ... 11
- Plenum box (-ASK-28) ... 12
- Rubber lip seal (-GD0 / -GD1), for ASK-28 ... 23
- Damper (-DK0 / -DK2), for ASK-28 ... 23
- Insulation (-I0 / -Ii / -Ia), for ASK-28 ... 24
- Corner angle 90° (-EW-28-...-090-...) ... 25

Fastening methods ... 26
- With plenum box ... 26
- Without plenum box ... 26

Assembly overview ... 28
- Mounting with counter pole brace (-GT) ... 28
- Mounting with clamp strap (-KB) ... 28
- Mounting with suspension lug (-AL) ... 29
- Adjusting the blade position ... 29
- Regulation of the damper ... 29

Technical data ... 30
- Pressure loss and noise level ... 30
- Maximum final jet velocity ... 31
- Critical throw ... 31
- Temperature and induction ratios ... 31
- Maximum penetration ... 32

Legend ... 33

Slot diffuser order code ... 34

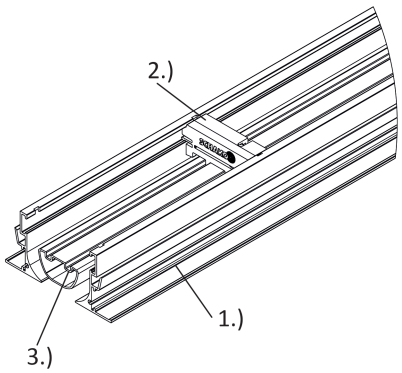
Plenum box order code ... 36

Order code corner angle ... 38

Specification text ... 39

OVERVIEW OF PRODUCT VERSIONS

DSCXLS-1-Z-… (supply air)

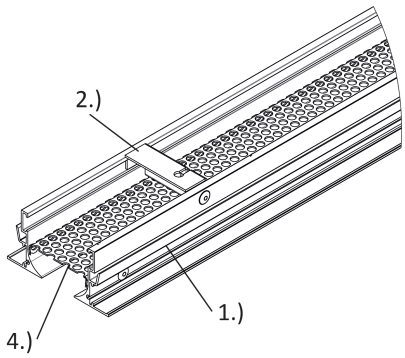


1.) Frame profile

2.) Connecting bridge

3.) Blade

DSCXLS-1-A-… (return air)



1.) Frame profile

2.) Connecting bridge

4.) Perforated plate

Function and use

The slot diffuser DSCXLS is suitable for use in rooms with a height between 2.6 m to 4 m with open visible mounting in the ceiling profile. The air deflection blades adjustable from below allow a versatile application. The outflow direction can be adjusted from a vertical throw in heating mode to a horizontal throw in cooling mode. A subsequent change of the air throw direction on site is possible at any time, even when the diffuser has already been fitted. If the desired air throw is specified in the order, it will be set at the factory. Without order details the blade position -L (horizontal left) is set.

Thanks to the aerodynamic profile of the blade, the maximum induction is achieved and the speed and temperature difference of the supply air jet are reduced effectively. Due to the central housing of the air deflection blade, the free cross-section always remains the same. Pressure loss and sound power level remain therefore constant even when the blades are adjusted. The resistance generated by the blades ensures that the supply air is distributed equally across the whole length of the slot diffuser.

The slot diffuser DSCXLS has one slot. The large free cross-section allows a greater volumetric flow compared with other slot diffusers. Thanks to its stable air jet and high induction, DSCXLS slot diffuser can be used in the cooling mode up to $\Delta T \leq 12$ K.

The slot diffuser is available either as a single piece or in band design. Accessories such as end pieces and corner angles enable a versatile use of the slot diffuser. The return air model is fitted with a black perforated plate for easy cleaning from below through the slots instead of air deflection blades.

The connection to the ductwork is done via the plenum box. 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.

Models

DSCXLS-1-…	single-slot, with 30 mm slot width
DSCXLS-…-Z	supply air (with blades)
DSCXLS-…-A	return air (without blades, with perforated plate)
DSCXLS-…-R0	STANDARD frame profile (with support profile, for visible installation on the ceiling)
DSCXLS-…-V	blades vertical throw
DSCXLS-…-L	blades with horizontal one-way throw to the left (standard)
DSCXLS-…-R	Blades with one-way horizontal throw to the right
DSCXLS-…-0	without blades, with perforated plate (for return air)
DSCXLS-…-N	single design (length max. 1500 mm)
DSCXLS-…-B	Band design (available lengths according to SCHAKO standard for band design)

Mounting

Without connection (-00)

- Only possible without plenum box

Permanent connection with plenum box (-FV)

- Only possible with plenum box
- Only for supply and return air model
- The slot diffuser is permanently connected to the plenum box.

Concealed mounting with plenum box (-VM, standard)

- Only possible with plenum box
- Only for supply and return air model
- The slot diffuser is screwed to the pole brace in the plenum box housing with concealed screws.
- Frame with foam gasket
- Plenum box mounted ex works

Mounting with counter pole brace (-GT)

- Only possible without plenum box
- Screws and pole brace traps are supplied loose (2 pieces).
- Pole brace traps consisting of folded galvanised sheet steel and pole brace made of extruded aluminium profile with DIN thread
- The slot diffuser is screwed to the counter pole brace (pole brace strap) with concealed screws (included in delivery).
- **For mounting, access on the rear is required!**

Mounting with clamp strap (-KB)

- Only possible without plenum box
- Screws and clamp straps are supplied loose (2 pieces)
- Clamp strap made of galvanised sheet steel
- The slot diffuser is screwed to the clamp strap with concealed screws (included in delivery).
- **For mounting, access on the rear is not required!**

Mounting with suspension lugs (-AL)

- Only possible without plenum box
- 4 pieces, supplied loose and not folded
- The slot diffuser is fastened to 4 suspension brackets.
- Suspension lug made of galvanised sheet steel, with holes for hook mounting

Fishplate (-VL)

- 4 pieces supplied loose
- made of aluminium sheet
- with band design for connection of:
  - Slot diffuser with slot diffuser
  - Slot diffuser with corner angle

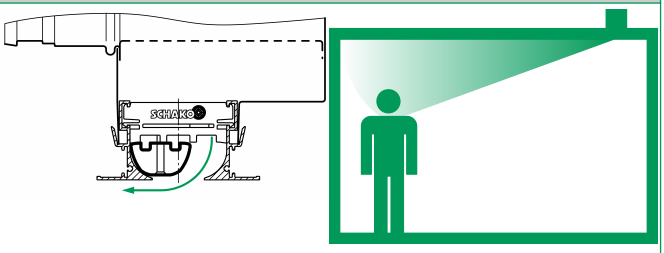
Quick selection

V_{ZU}		Zuluft (-Z)		Abluft (-A)	
		Δp_t	L_{WA}	Δp_t	L_{WA}
(m^3/h)	[l/s]	(Pa)	[dB(A)]	(Pa)	[dB(A)]
200	56	17	27	12	<20
250	69	27	33	18	25
300	83	39	36	27	30
350	97	53	39	37	35
400	111	69	42	48	38
450	125	88	46	60	42

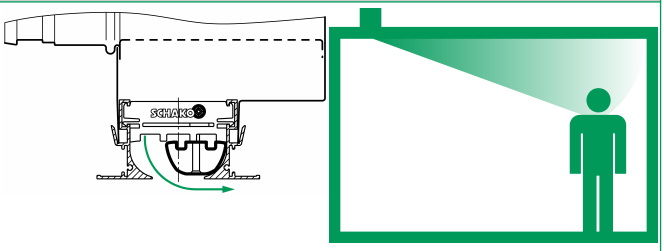
Values for length L = 1000 mm with plenum box

Blade position for air jet

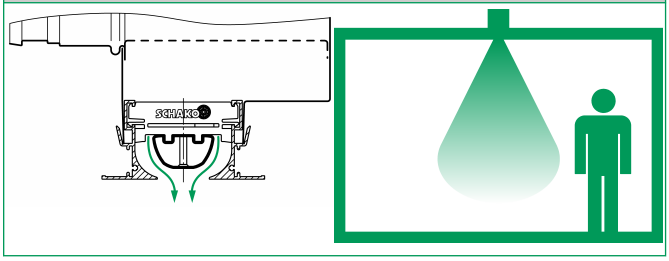
Blade position (-L) (Standard)
one-way horizontal throw to the left



Blade position (-R)
one-way horizontal throw to the right



Blade position (-V)
vertical throw



Processing

Frame surface

- Extruded aluminium profile:
  - natural colour anodised (-ELOX) (standard)
  - Painted to RAL colour 9010 (white) (-9010)
  - painted to the RAL colour 9011 (graphite black) (-9011)
  - painted to a different RAL colour, freely selectable (-xxxx, always with four digits)
- Connecting pipe made of aluminium

Blade colour

- for air throw return air **without blades with perforated plate**, made of painted sheet steel RAL 9011 (graphite black) (FQ = 46 %), as cover screen, fastened by means of rivets (-00000)
- for air throw **supply air with blades**, made of aluminium:
  - painted to the RAL colour 9010 (white) (-L9010)
  - painted to the colour RAL 9011 (graphite black, standard) (-L9011)
  - painted in a different RAL colour of your choice (-Lxxxx, always five-digit)

Connecting bridge

- Connecting bridges for the **blade holding device**:
  - **Supply air model**
    - made of plastic material, colour similar to RAL 9005 (black)
    - Number of connecting bridges:
      2x up to length ≤1200 / **3x** from length >1200 to ≤1500
  - **Return air model**
    - made of galvanised sheet steel (fastened by means of rivets)
    - Number of connecting bridges:
      2x up to length <1000 / **3x** from length ≥1000 to ≤1500
- Connecting bridges for the **plenum box sealing**:
  - only for **models with supply and return air with end piece and plenum box**
    - made of plastic material, colour similar to RAL 9005 (black)
    - Number of connecting bridges:
      2x single design and 2x band design

Connecting bridge details, see Page 11

Sealing bridge

- Sealing bridge made of plastic material, colour similar to RAL 9005 (black), on the connecting bridges for plenum box sealing
  - Seal, 1 mm thick
  - only for band design (-B) and end pieces (-E…)

Sealing bridge details, see Page 11

Accessories

End pieces (-E00 / -E…1 / -E…2)

- without end pieces (-E00) (standard)
- with end pieces (to obtain a visual impression of a continuous frame), with additional connecting bridge made of plastic material on the diffuser, mounted by means of two screws on the frame profile
  End piece models:
  - End piece, straight, made of galvanised sheet steel, painted to RAL colour of the frame profile:
    - supplied loose (-ES1, pair) (standard)
    - mounted ex works on both sides (-EB1)
    - mounted ex works on the left side (-EL1)
    - mounted ex works on the right side (-ER1)
  - Angle end piece, made of extruded aluminium profile, painted in the RAL colour of the frame profile
    - supplied loose (-ES2, pair) (standard)
    - mounted ex works on both sides (-EB2)
    - mounted ex works on the left side (-EL2)
    - mounted ex works on the right side (-ER2)

Dummy piece (-BS0 / -BS1)

- without dummy piece (-BS0) (standard)
- with dummy piece (-BS1):
  - made of sheet steel painted to RAL colour 9011 (graphite black)
  - possible from length L ≥ 300 mm
  - only possible without plenum box
  - Mounting only with counter pole brace (-GT), clamp strap (-KB) or suspension lugs (-AL)

Plenum box (-ASK-28)

Plenum box for DSCXLS (-28), model (number of slots) one-slot model (-1)

- 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, as required (-xxxxx, always five-digit) (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 from ≥ 400 mm to ≤ 1500 mm)
- Mounting of box:
  - permanent connection (-FV) (standard)
  - Concealed mounting (-VM)
- Material:
  - Galvanised sheet steel (-SV) (standard)
- Damper:
  - Without damper (-DK0) (standard)
  - with damper and cable-operated adjustment (-DK2), made of galvanised perforated plate (FQ = 36 %), in the connection spigot, adjustable, for simple air volume regulation
- Rubber lip seal:
  - without rubber lip seal (-GD0) (standard)
  - With rubber lip seal (-GD1) 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 on the outside of the plenum box
- Height of box:
  - Standard height of box (-KHS)
  - Height of box in mm, as required (-xxx, always three-digit) (minimum height [GH] with spigot position S1+S2 and standard box neck = spigot diameter øD + 82 mm / with spigot position S0 = 200 mm)
- Box neck:
  - standard box neck (-KVS) (KVS = 45 mm)
  - Box neck extension in mm, as required (-xxx, always three-digit), box neck (not adjustable) possible from ≥ 45 mm to 200 mm
- Spigot position:
  - Spigot from above (-S0)
  - Lateral spigot (-S1) (standard)
  - Lateral spigot located on the opposite side (-S2)
- Spigot diameter:
  - Standard spigot diameter (-SDS)
  - spigot diameter (øD) in mm, freely selectable (-xxx, always with three digits)
- Suspension:
  - without riveting nut (-E0) (standard)
  - with riveting nut (-EM), made of brass
- with air diffuser plate (FQ = 46 %), perforated plate made of galvanised sheet steel, for even distribution of the air flow (to stabilise the pressure in the plenum box)

Corner angle (-EW-28)

Corner angle for DSCXLS (-28), one-slot model (-1) with slot width 30 mm, with standard frame profile (-R0, with support profile, for visible installation on the ceiling)

- Frame surface, made of extruded aluminium profile:
  - natural colour anodised (-ELOX, standard)
  - Painted to RAL colour 9010 (white) (-9010)
  - painted to the RAL colour 9011 (graphite black) (-9011)
  - painted to another RAL colour, freely selectable (at an extra charge) (-xxxx)
- Connecting bridge made of galvanised sheet steel, fastened by means of rivets

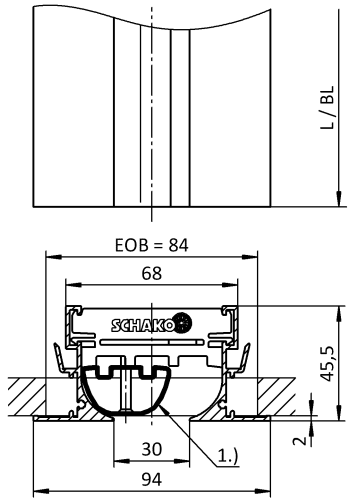
- Colour of cover plate:
  - sheet steel painted to RAL colour 9005 (black) (-B9005) (standard)
  - sheet steel painted to RAL colour 9010 (white) (-B9010)
  - Sheet steel painted in a different RAL colour of your choice (Bxxxx) (always five-digit)
- Angle between sides:
  - angle α = 90° (-090) (standard)
  - angle (α) as required (-xxx), values between α = 90° (-090, standard) and 170° (-170) are possible (always with three digits)
- Left side length (a):
  - standard length L = 250 mm (-000)
  - Length (L) in mm can be freely selected (-xxx) (minimum length = standard length) (always with three digits)
- Right side length (b):
  - standard length L = 250 mm (-000)
  - Length (L) in mm can be freely selected (-xxx) (minimum length = standard length) (always with three digits)
- with 4 fishplates (-VL, included in delivery) made of aluminium (same colour as frame), supplied loose
- Mounting:
  - with counter pole brace (-GT), screws and pole brace traps are supplied loose (2 pieces)
  - with clamp strap (-KB), screws and clamp straps are supplied loose (2 pieces)
  - with suspension lugs (-AL), supplied loose and not folded (4 pieces)

DIMENSIONS

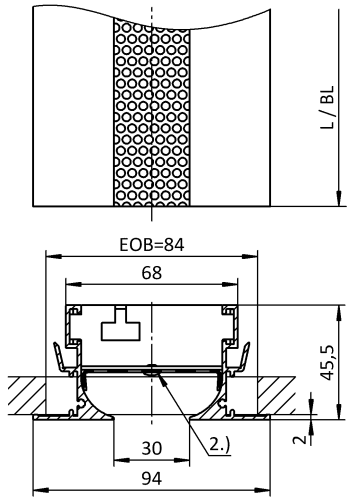
Dimensions of frame profile

Standard frame profile "R0"

DSCXLS-1-Z (supply air, one slot)



DSCXLS-1-A (return air, one slot)

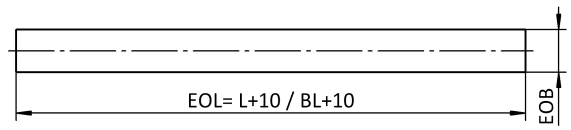


1.) Air deflection blade

2.) Perforated plate

In the return air model, a perforated plate is mounted instead of the air deflection blades.

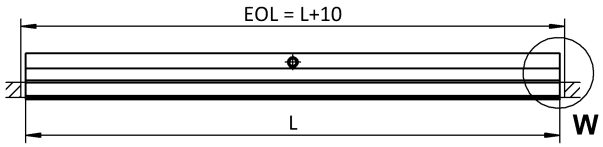
Installation opening



Available lengths for the slot diffuser

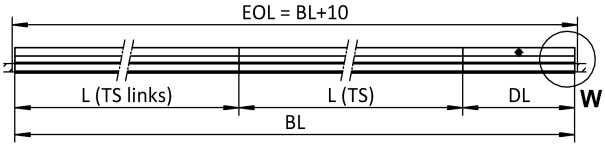
Single design (-N)

- length L = 1000 mm (-N-01000)
- length L = 1500 mm (-N-01500)
- length (L) in mm, freely selectable (-N-xxxxx) (always with five digits)
  (in case of single design, length L ≥ 400 mm to ≤ 1500 mm can be fitted with plenum box, dummy piece possible from length ≥ 300 mm)



Band design (-B)

- Length (BL) in mm, as required, as band (-B-xxxxx) (always five-digit)



Available lengths according to SCHAKO standard:

If the slot diffuser type DSCXLS is designed as a band, the total length BL is assembled from lengths (sections) of **1000 mm or 1500 mm**. The difference pieces DL are supplied in lengths **≥ 300 mm to < 1500 mm**. The difference pieces **from ≥ 300 mm to < 400 mm** are supplied as dummy pieces without plenum box.

TS	=	Section
TS left	=	Left section
L	=	Length
DL	=	Difference distance
BL	=	Length of band
EOB	=	Installation opening in the width section
EOL	=	Installation opening in the length section (EOL = L+10 / BL+10)

End pieces, for detail W, see Page 10

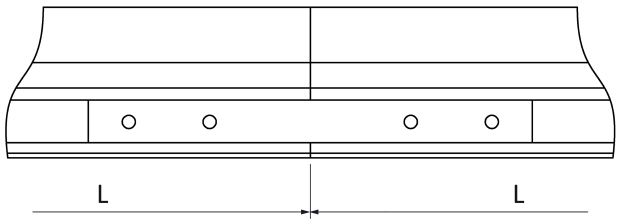
Slot diffuser connection in band design

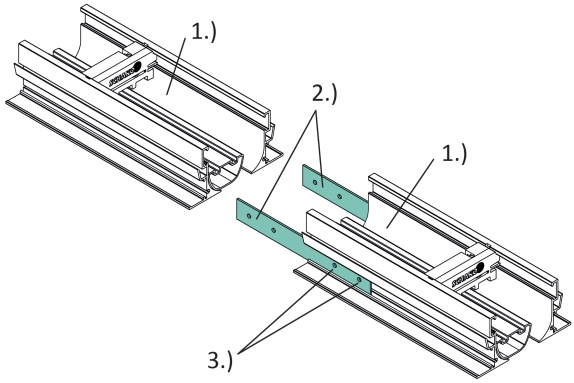
Slot diffuser – slot diffuser /

Slot diffuser – corner angle

With fishplates:

Supplied loose (2x for each connection)





1.) Slot diffuser

2.) Fishplates

3.) Riveted on site

DIMENSIONS OF ACCESSORIES

End pieces (-E00 / -E…1 / -E…2)

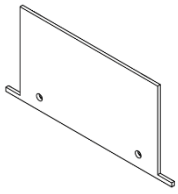
- without end pieces (-E00)
- with end pieces

  End piece models:
  - End piece, straight, made of galvanised sheet steel, painted to RAL colour of the frame profile:
    - supplied loose (-ES1, pair) (standard)
    - mounted ex works on both sides (-EB1)
    - mounted ex works on the left side (-EL1)
    - mounted ex works on the right side (-ER1)
  - Angle end piece, made of extruded aluminium profile, painted in the RAL colour of the frame profile
    - supplied loose (-ES2, pair) (standard)
    - mounted ex works on both sides (-EB2)
    - mounted ex works on the left side (-EL2)
    - mounted ex works on the right side (-ER2)

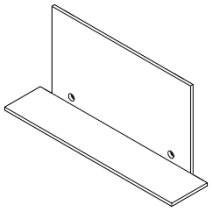
To give the impression of a continuous frame, lateral front end pieces can be fitted.

In the band design, the end piece is mounted to the left side of the section and to the right side of the difference length as a standard.

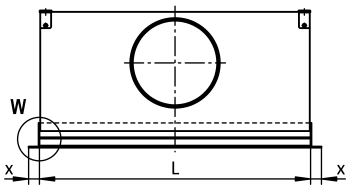
End piece, straight (-E…1):



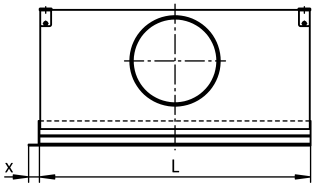
Angle end piece (-E…2):



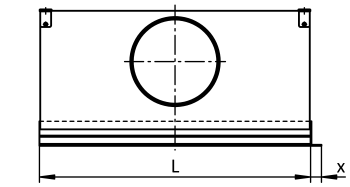
End piece on both sides



End piece on the left

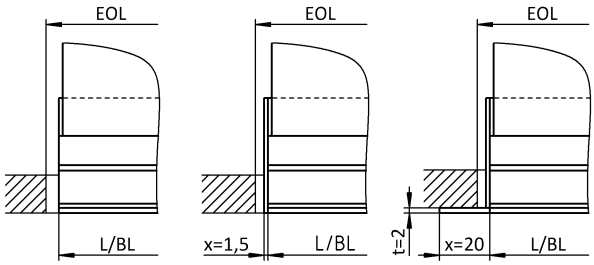


End piece on the right



Detail W

without end pieces (-E00)	**straight end piece (-E…1)**	**angular end piece (-E…2)**



Installation opening in the length section:

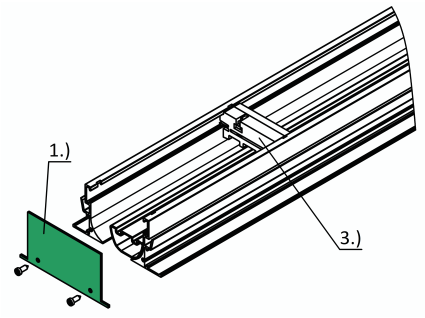
EOL = L+10 and BL+10

L = Length
BL = Length of band
EOL = Installation opening in the length section (EOL = L+10 / BL+10)

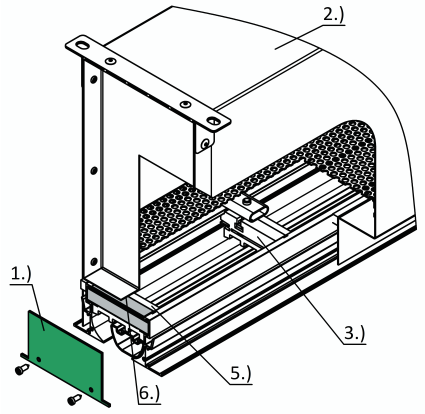
Mounting end piece:

DSCXLS-1-Z-… (supply air)

- without plenum box

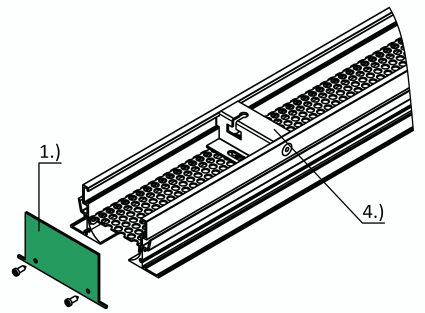


- with plenum box

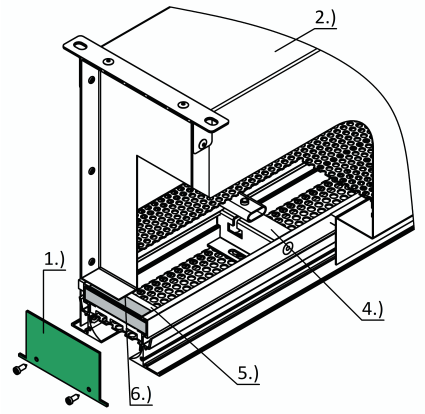


DSCXLS-1-A-… (return air)

- without plenum box



- with plenum box

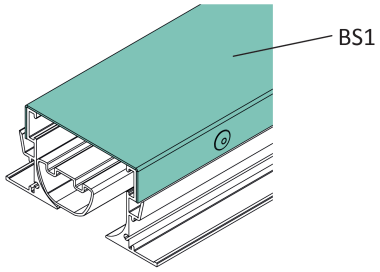


1. End piece
2. Plenum box
3. Connecting bridges for the blade holding device made of plastic material, colour similar to RAL 9005 (black)
   Number of connecting bridges:
   2x up to length ≤1200 / 3x from length >1200 to ≤1500
4. Connecting bridges for the blade holding device made of galvanised sheet steel
   Number of connecting bridges:
   2x up to length <1000 / 3x from length ≥1000 to ≤1500
5. Connecting bridges for plenum box sealing made of plastic material, colour similar to RAL 9005 (black)
   Number of connecting bridges:
   2x single design and 2x band design
6. Sealing bridge

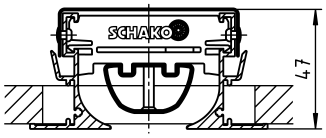
Dummy piece (-BS0 / -BS1)

- without dummy piece (-BS0) (standard)
- with dummy piece (-BS1):
  - made of sheet steel painted to RAL colour 9011 (graphite black)
  - possible from length L ≥ 300 mm
  - only possible without plenum box
  - Mounting only with counter pole brace (-GT), clamp strap (-KB) or suspension lugs (-AL)

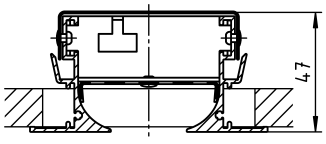
with dummy piece (-BS1)



for supply air: DSCXLS-1-Z



for return air: DSCXLS-1-A



For available lengths of slot diffuser, see Page 9

Plenum box (-ASK-28)

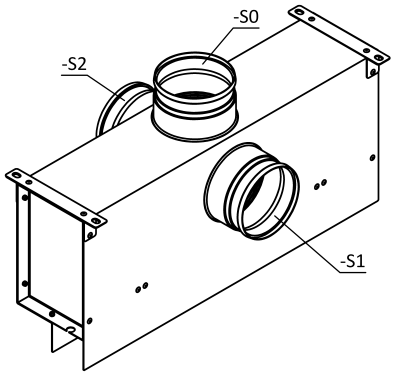
Spigot position

Spigot position in the plenum box for single and band design:

S0 = Spigot from above

S1 = lateral spigot (standard)

S2 = lateral spigot located on the opposite side



For dimensions of the plenum box, see Page 12 onwards

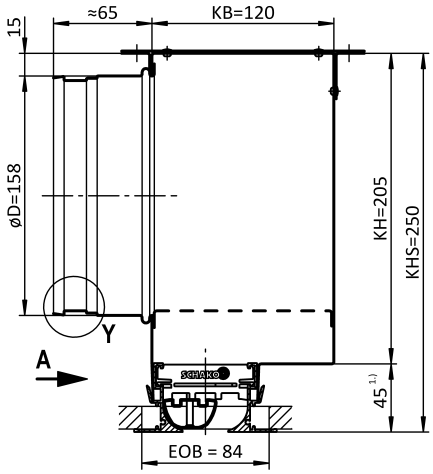
Plenum box – single design (-N)

Plenum box (-ASK-28-...-N-...-FV-...-S1/-S2-...)

- with fixed connection
- with lateral spigot / lateral spigot located on the opposite side
- The slot diffuser is permanently connected to the plenum box.

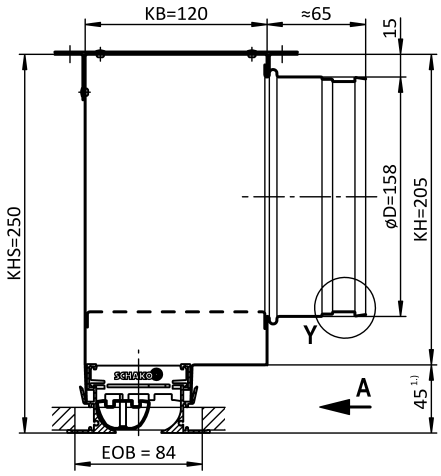
With lateral spigot (-S1, standard)

DSCXLS-1-...-ASK-28-...-N-...-FV-...-S1-...



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

DSCXLS-1-...-ASK-28-...-N-...-FV-...-S2-...



1.) KVS

Number of connection spigots

ØD		
L ≥ 400 to L ≤ 500	**L > 500 to L ≤ 1000**	**L > 1000 to L ≤ 1500**
1 x ø158	2 x ø158	3 x ø158

Available sizes

L	EOL	KL	Weight (kg)*
1000	1010	997	approx. 6.0
1500	1510	1497	approx. 9.0

* Air diffuser + plenum box

Plenum box in band design, see Page 20
For suspension position, view B, see Page 22
For plenum box suspension, detail X, see Page 22
For rubber lip seal, detail Y, see Page 23
Model with end pieces, W details see Page 10
Fastening methods, see Page 26
Assembly overview, see Page 28

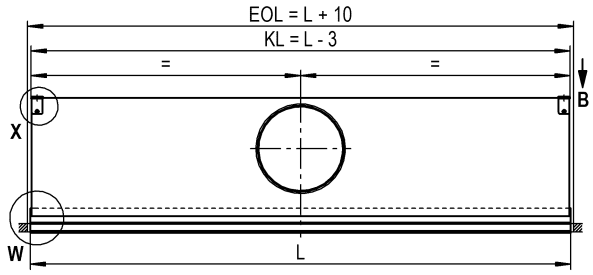
Available lengths plenum box (-ASK-28-...-N)

- 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 five digits)
  (Length of box KL = L-3, can be fitted with a plenum box in case of single design lengths from ≥ 400 mm to ≤ 1500 mm)

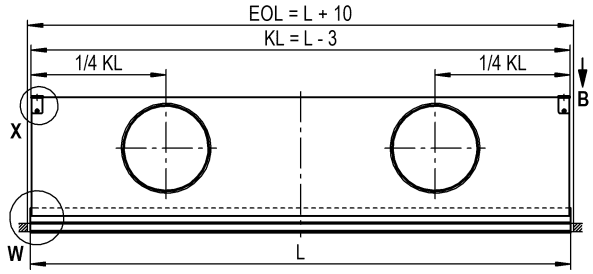
Spigot position:

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

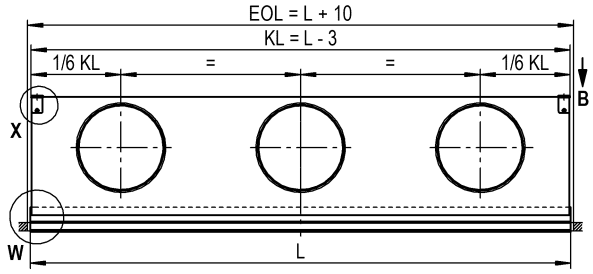
View A / with 1 spigot



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:
  For the spigot ø158, the height of box KHS can be reduced to 240 mm.
  Minimum height [GH] = spigot diameter øD + 82 mm

Box neck extension

- Standard box neck (KVS = 45 mm) (-KVS)
- Box neck extension in mm, as required (-xxx, always three-digit), box neck (not adjustable) possible from ≥ 45 mm to 200 mm

Spigot diameter:

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

Intermediate lengths and other spigot diameters on request.

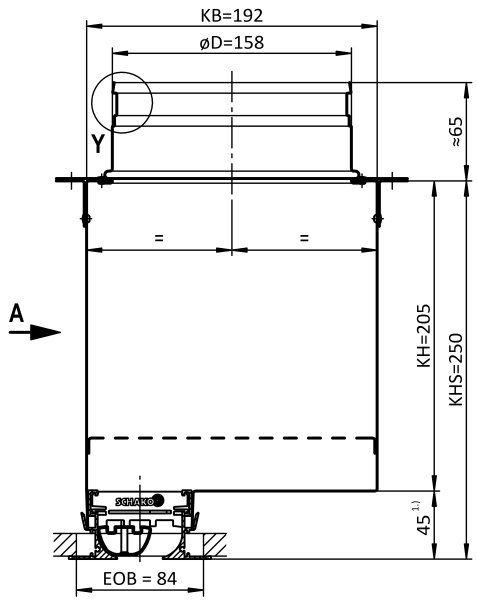
L = Length
KL = Length of plenum box
EOB = Installation opening in the width section
EOL = Installation opening in the length section (EOL = L+10 / BL+10)

Plenum box (-ASK-28-...-N-...-FV-...-S0-...)

- with fixed connection
- with spigot from above
- The slot diffuser is permanently connected to the plenum box.

With spigot from above (-S0)

DSCXLS-1-...-ASK-28-...-N-...-FV-...-S0-...



1.) KVS

Number of connection spigots

øD		
L ≥ 400 to L ≤ 500	**L > 500 to L ≤ 1000**	**L > 1000 to L ≤ 1500**
1 x ø158	2 x ø158	3 x ø158

Available sizes

L	EOL	KL	Weight (kg)*
1000	1010	997	approx. 6.0
1500	1510	1497	approx. 9.0

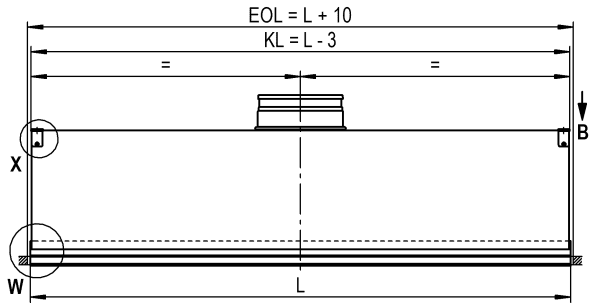
* Air diffuser + plenum box

Plenum box in band design, see Page 20
For suspension position, view B, see Page 22
For plenum box suspension, detail X, see Page 22
For rubber lip seal, detail Y, see Page 23
Model with end pieces, W details see Page 10
Fastening methods, see Page 26
Assembly overview, see Page 28
For available lengths of plenum box, see Page 13

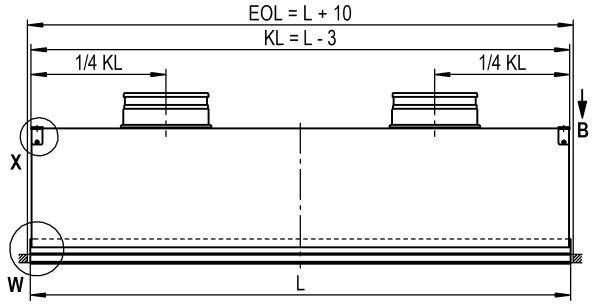
Spigot position

Spigot from above (-S0)

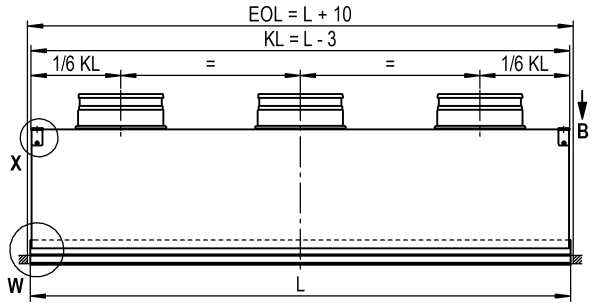
View A / with 1 spigot



View A / with 2 spigots



View A / with 3 spigots



L =Length
KL =Length of plenum box
EOB=Installation opening in the width section
EOL =Installation opening in the length section (EOL = L+10 / BL+10)

Plenum box height reduction (at an extra charge)

- for spigot position -S0 and standard box neck:
  The height of box [KHS] can be reduced from 250 mm (standard) to 200 mm.

Box neck extension

- Standard box neck (KVS = 45 mm) (-KVS)
- Box neck extension in mm, as required (-xxx, always three-digit), box neck (not adjustable) possible from ≥ 45 mm to 200 mm

Spigot diameter:

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

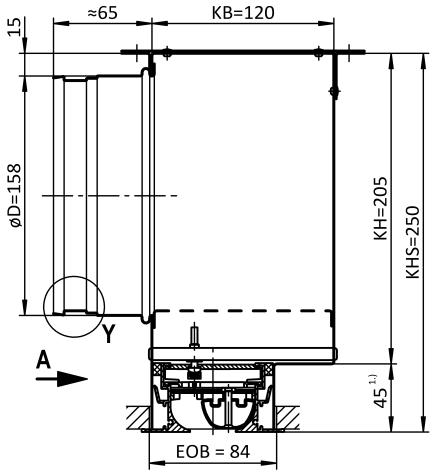
Intermediate lengths and other spigot diameters on request.

Plenum box (-ASK-28-…-N-…-VM-…-S1/S2-…)

- with concealed mounting
- with lateral spigot / lateral spigot located on the opposite side
- The slot diffuser is screwed to the pole brace in the plenum box housing with concealed screws.
- Frame with foam gasket
- Plenum box mounted ex works

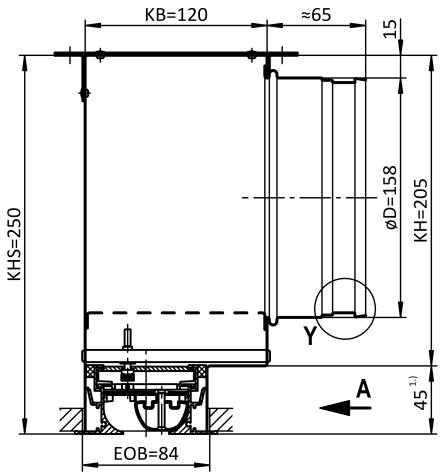
With lateral spigot (-S1, standard)

DSCXLS-1-…-ASK-28-…-N-…-VM-…-S1-…



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

DSCXLS-1-…-ASK-28-…-N-…-VM-…-S2-…



1.) KVS

Number of connection spigots

øD		
L ≥ 400 to L ≤ 500	**L > 500 to L ≤ 1000**	**L > 1000 to L ≤ 1500**
1 x ø158	2 x ø158	3 x ø158

Available sizes

L	EOL	KL	Weight (kg)*
1000	1010	997	approx. 6.0
1500	1510	1497	approx. 9.0

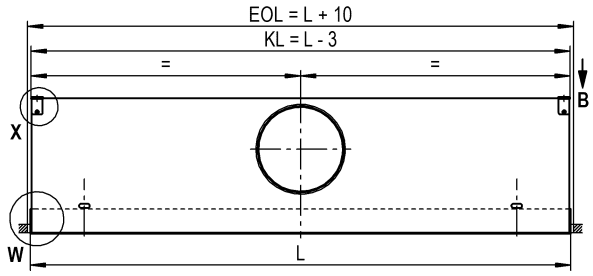
* Air diffuser + plenum box

Plenum box in band design, see Page 20
For suspension position, view B, see Page 22
For plenum box suspension, detail X, see Page 22
For rubber lip seal, detail Y, see Page 23
Model with end pieces, W details see Page 10
Fastening methods, see Page 26
Assembly overview, see Page 28
For available lengths of plenum box, see Page 13

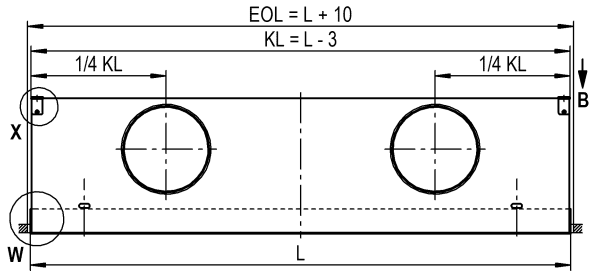
Spigot position

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

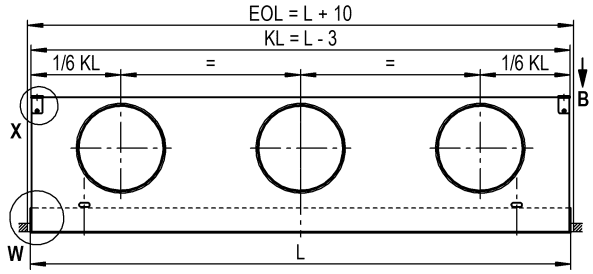
View A / with 1 spigot



View A / with 2 spigots



View A / with 3 spigots



L = Length
KL = Length of plenum box
EOL = Installation opening in the length section
EOB = Installation opening in the width section

Plenum box height reduction (at an extra charge)

- for spigot position -S1/-S2 and standard box neck:
  For the spigot ø158, the height of box KHS can be reduced to 240 mm.
  Minimum height [GH] = spigot diameter øD + 82 mm

Box neck extension

- Standard box neck (KVS = 45 mm) (-KVS)
- Box neck extension in mm, as required (-xxx, always three-digit), box neck (not adjustable) possible from ≥ 45 mm to 200 mm

Spigot diameter:

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

Intermediate lengths and other spigot diameters on request.

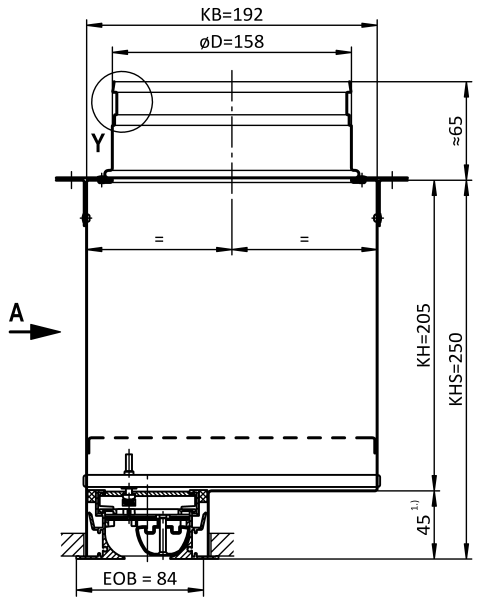
Attention: The maximum torque of the fastening screw is 0.5 Nm.

Plenum box (-ASK-28-…-N-…-VM-…-S0-…)

- with concealed mounting
- with spigot from above
- The slot diffuser is screwed to the pole brace in the plenum box housing with concealed screws.
- Frame with foam gasket
- Plenum box mounted ex works

With spigot from above (-S0)

DSCXLS-1-…-ASK-28-…-N-…-VM-…-S0-…



1.) KVS

Number of connection spigots

øD		
L ≥ 400 to L ≤ 500	**L > 500 to L ≤ 1000**	**L > 1000 to L ≤ 1500**
1 x ø158	2 x ø158	3 x ø158

Available sizes

L	EOL	KL	Weight (kg)*
1000	1010	997	approx. 6.0
1500	1510	1497	approx. 9.0

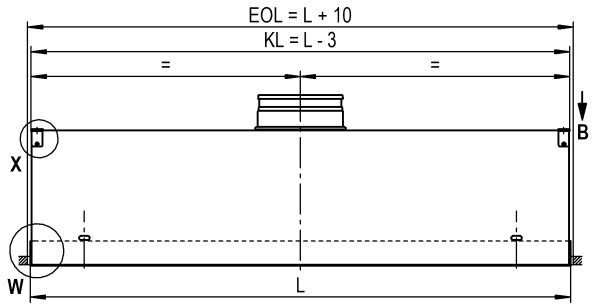
* Air diffuser + plenum box

Plenum box in band design, see Page 20
For suspension position, view B, see Page 22
For plenum box suspension, detail X, see Page 22
For rubber lip seal, detail Y, see Page 23
Model with end pieces, W details see Page 10
Fastening methods, see Page 26
Assembly overview, see Page 28
For available lengths of plenum box, see Page 13

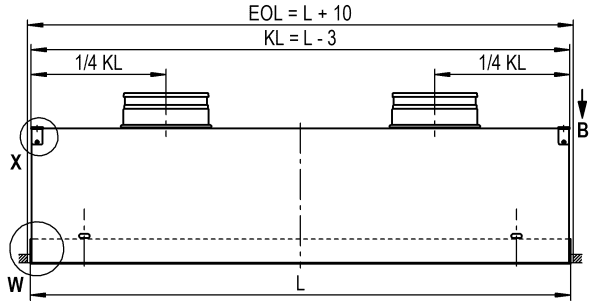
Spigot position

Spigot from above (-S0)

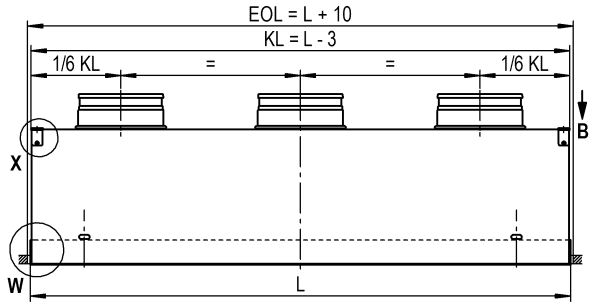
View A / with 1 spigot



View A / with 2 spigots



View A / with 3 spigots



L = Length
KL = Length of plenum box
EOB = Installation opening in the width section
EOL = Installation opening in the length section (EOL = L+10 / BL+10)

Plenum box height reduction (at an extra charge)

- for spigot position -S0 and standard box neck:
  The height of box [KHS] can be reduced from 250 mm (standard) to 200 mm.

Box neck extension

- Standard box neck (KVS = 45 mm) (-KVS)
- Box neck extension in mm, as required (-xxx, always three-digit), box neck (not adjustable) possible from ≥ 45 mm to 200 mm

Spigot diameter:

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

Intermediate lengths and other spigot diameters on request.

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

Plenum box – band design (-B)
Plenum box (-ASK-28-…-B-…-FV/VM-…)

With permanent connection (-FV, standard) / with concealed mounting (-VM)

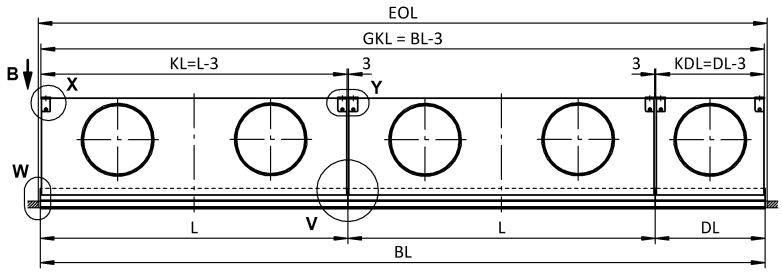
For concealed mounting, the slot diffuser is screwed to the plenum box housing (face part) with concealed screws.

Available lengths of plenum box (-ASK-28-…-B)

- Length (BL) in mm, as required (-B-xxxxx) (always five-digit) (total length of box GKL = BL-3)

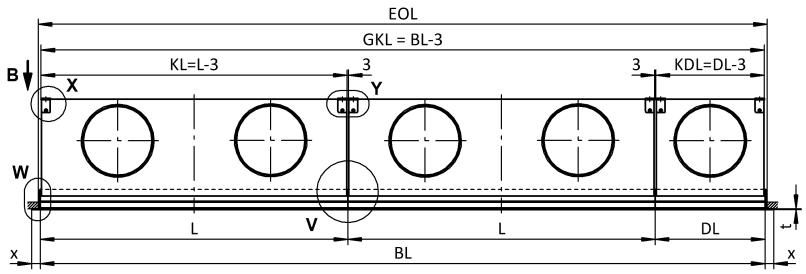
DSCXLS -…-ASK-28-…-B-…-FV/VM-…-S1/-S2-…-E00

(with lateral spigot or lateral spigot located on the opposite side, without end piece)



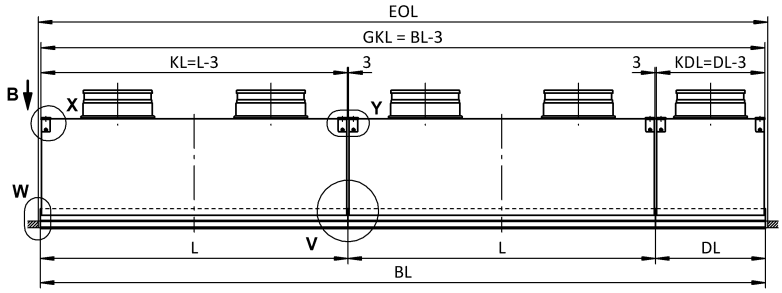
DSCXLS-…-ASK-28-...-B-…-FV/VM-...-S1/-S2-…-E…1/-E...2

(with lateral spigot or lateral spigot located on the opposite side, with end piece)



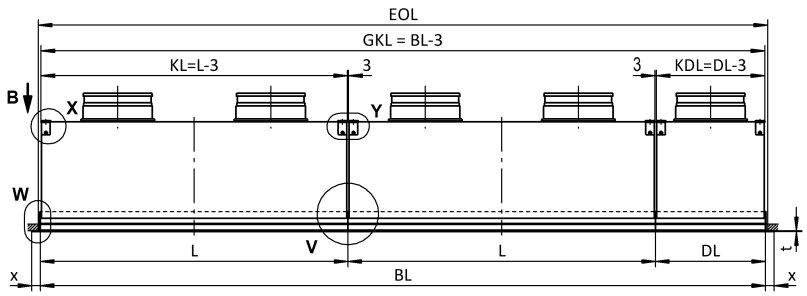
DSCXLS -…-ASK-28-…-B-…-FV/VM-…-S0-…-E00

(with spigot from above, without end piece)



DSCXLS -...-ASK-28-...-B-...-FV/VM-...-S0-...-E...1/-E...2

(with spigot from above, with end piece)



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**.

The difference pieces DL with length ≥ 400 mm to <1500 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 ≥ 300 mm to < 400 mm are supplied as dummy pieces without plenum box. A different band division is possible after consultation and when required by the customer.

	x	t
DSCXLS-...-E...1-...	1,5	-
DSCXLS-...-E...2-...	20	2

Number of connection spigots

L / DL	øD
≥ 300 to ≤ 500	1x ø158
> 500 to ≤ 1000	2x ø158
> 1000 to ≤ 1500	3x ø158

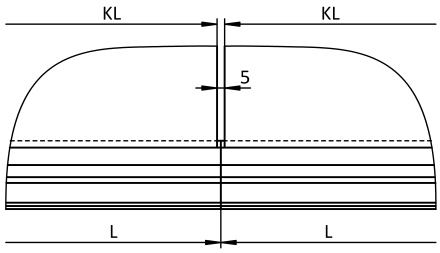
Installation opening in the length section:

EOL = BL + 10

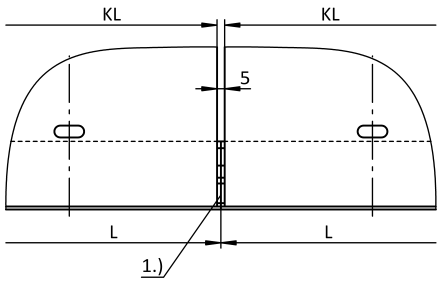
L = Length
DL = Difference distance
BL = Length of band
KL = Length of plenum box (KL = L-3)
KDL = Difference in length, plenum box (KDL = DL-3)
GKL = Total length of box (GKL = BL-3)
EOL = Installation opening in the length section

Butt joint of concealed mounting, for V details see Page 20
For plenum box mounting, detail X/detail Y, see Page 22
End pieces, for detail W, see Page 10
For the position of suspension holes view B, see Page 22
Available sizes for plenum box, see Page 12 onwards

Butt joint of permanent connection (-FV)
Detail V



Butt joint of concealed mounting (-VM)
Detail V



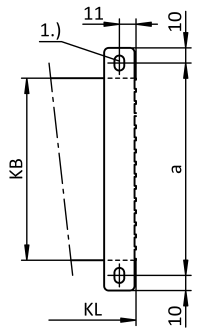
1.) Seal butt joint on site (sealing tape)

Construction subject to change. No return possible.

Position of the suspension holes

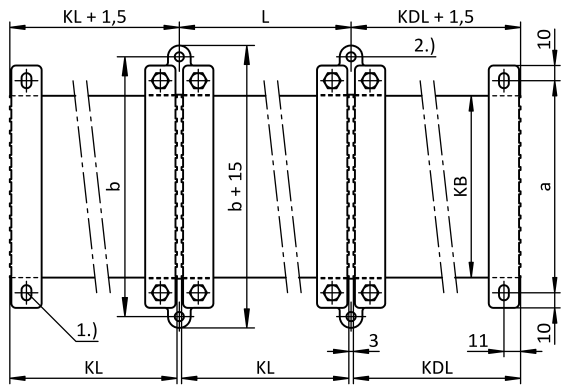
Single design

View B



Band design

View B



Connection plate



1.) Long hole Ø6.5x10
2.) Connection plate

Available sizes

Spigot position	KB	a	b
DSCXLS-...-S0-...	192	212	244
DSCXLS-...-S1-...	120	140	172
DSCXLS-...-S2-...	120	140	172

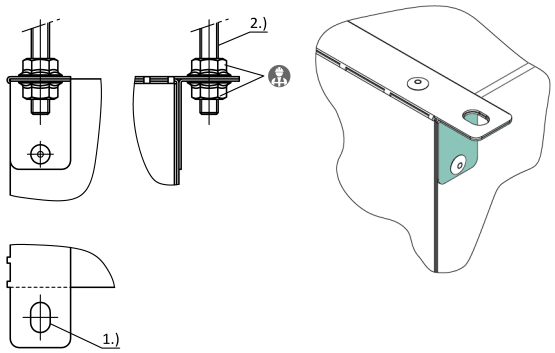
L = Length
DL = Difference distance
BL = Length of band
KL = Length of plenum box
KDL = Difference in length, plenum box

Plenum box suspension

Single design / band design

Detail X

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

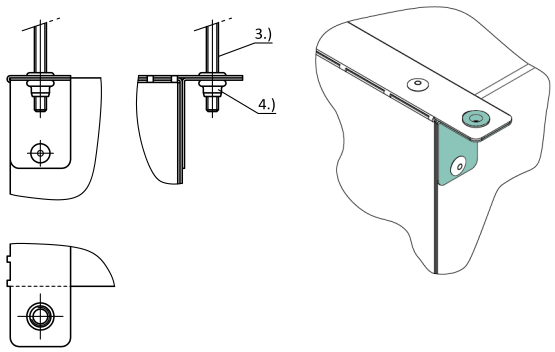


1.) Long hole ø6.5x10

2.) M6/On-site

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.



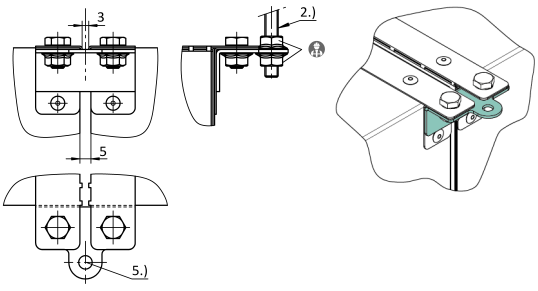
3.) M4/On-site

4.) Riveting nut M4

Band design

Detail Y

with pin hole ø6.1 (-E0, standard):

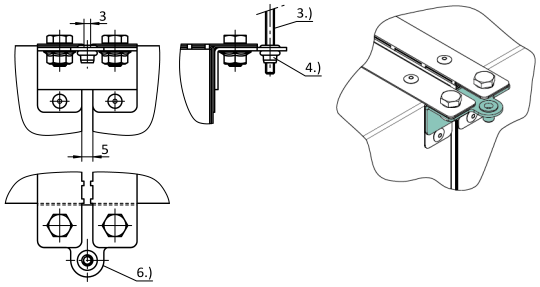


2.) M6/On-site

5.) Connection plate with pin hole ø6.1

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.



3.) M4/On-site

4.) Riveting nut M4

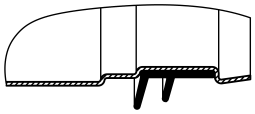
6.) Connection plate

Rubber lip seal (-GD0 / -GD1), for ASK-28

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

with rubber lip seal (-GD1)

Detail Y

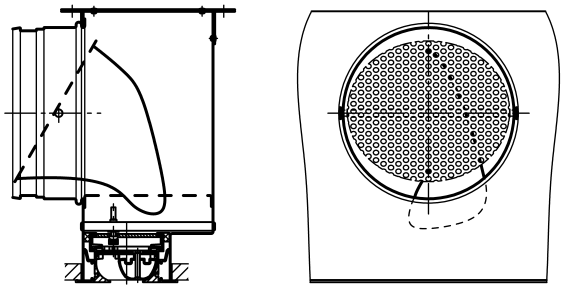


Damper (-DK0 / -DK2), for ASK-28

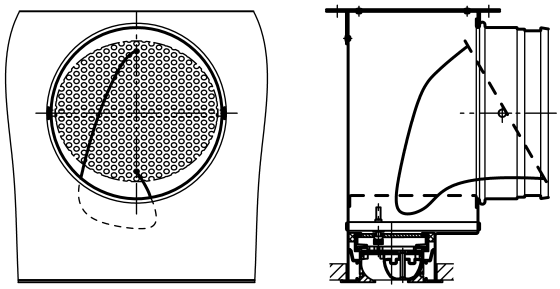
- Without damper (-DK0) (standard)
- with damper and cable-operated adjustment (-DK2)

with damper and cable-operated adjustment (-DK2)

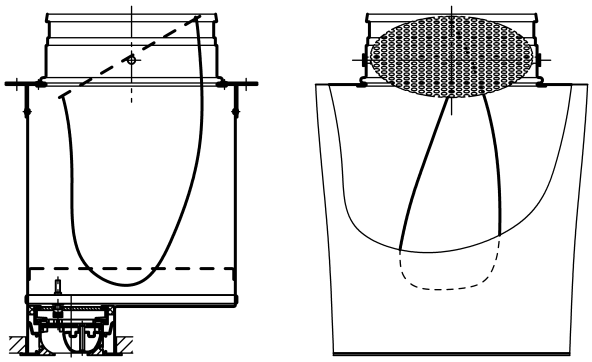
-DK2, lateral connection (-S1, standard)



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



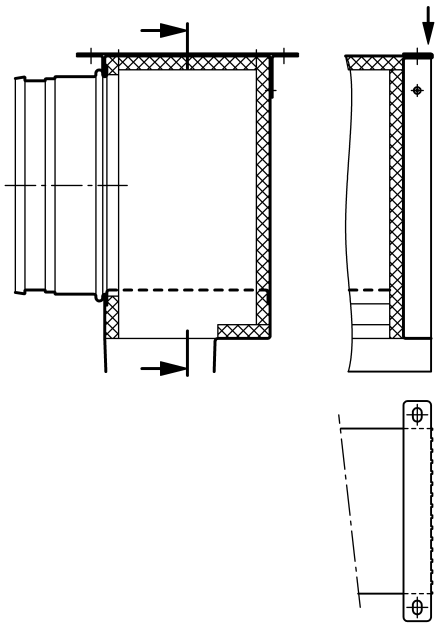
-DK2, connection from above (-S0)



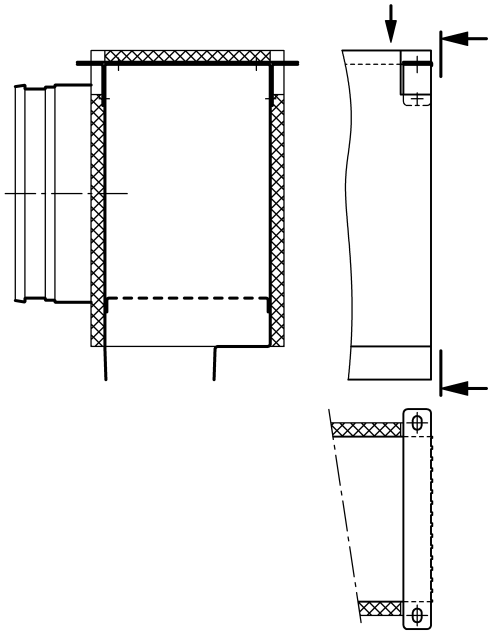
Insulation (-I0 / -Ii / -Ia), for ASK-28

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

with internal insulation (-Ii)



with external insulation (-Ia)



Corner angle 90° (-EW-28-...-090-...)

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

Mounting of the corner angles is performed using the counter pole brace (-GT), clamp straps (-KB) or suspension lugs (-AL).

Assembly overview, see Page 28

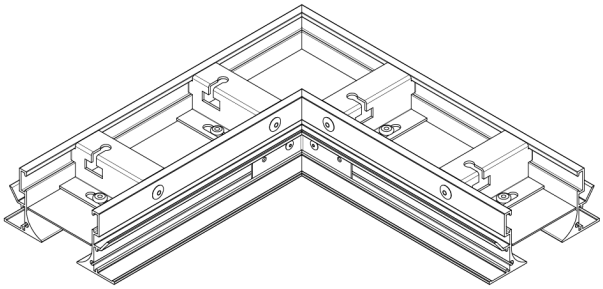
The connection between the diffuser and corner angle is performed by means of fishplates. 4 fishplates are included in delivery (2 for each connection). They are supplied loose.

The corner angle is supplied loose as standard.

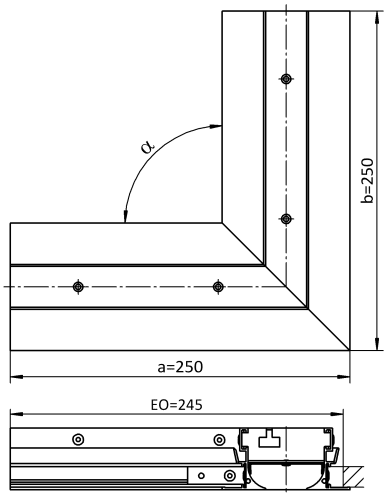
The standard angle has a 90° (α) angle and has a side length on the left (a) L=250 (-000) / right (b) L=250 (-000). Other side lengths (a / b) are available upon request (minimum length = standard length).

The standard side length on the left (a) or right (b) is 250 mm. Other side lengths (a/b) are available upon request (minimum length = standard length).

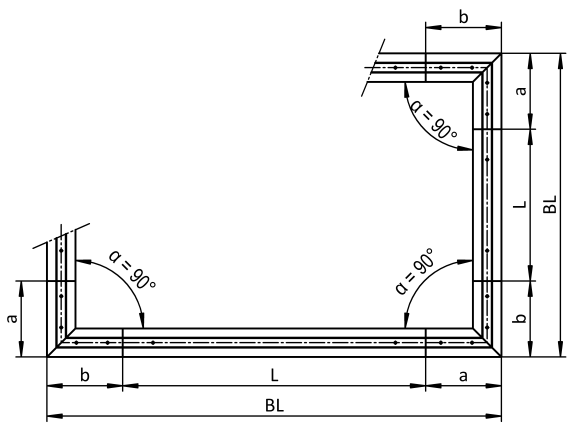
Values between α = 90° (-090, standard) and 170° (-170) are possible



a = left side length
b = right side length



Installation detail, corner angle in band design



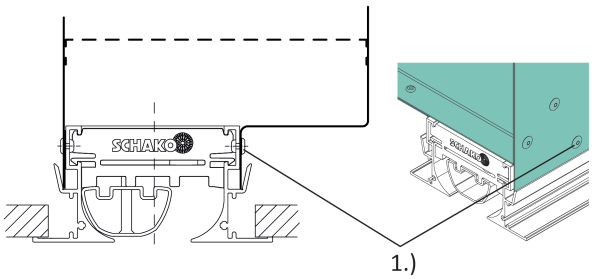
FASTENING METHODS

With plenum box

Permanent connection (-FV)

The slot diffuser is permanently connected to the plenum box.

(see Page 12 + Page 14)

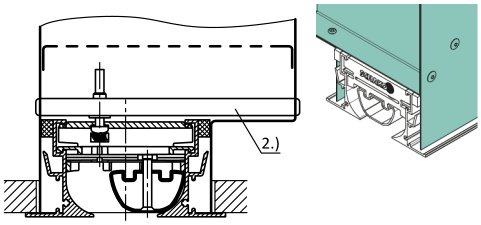


1.) Pop rivet

Concealed mounting (-VM)

The slot diffuser is screwed to the pole brace in the plenum box housing with concealed screws. Frame with foam gasket. Plenum box mounted ex works.

(see Page 16 + Page 18)



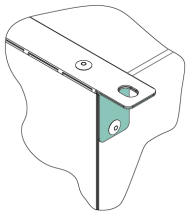
2.) Pole brace

Plenum box suspension

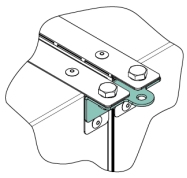
(see Page 22)

Without riveting nut (-E0):

Single design (-N)

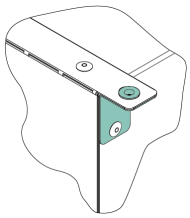


Band design (-B)

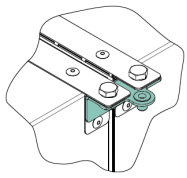


With riveting nuts (-EM):

Single design (-N)



Band design (-B)



Without plenum box

Mounting with counter pole brace (-GT)

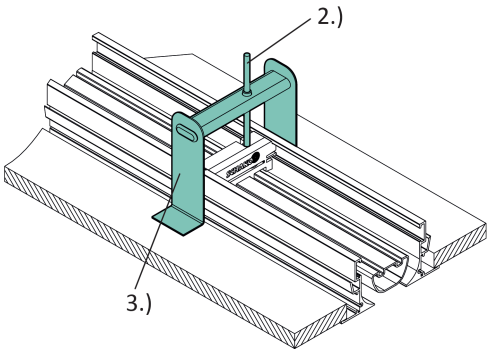
Only possible without plenum box

Screws and pole brace traps are supplied loose (2 pieces).

The slot diffuser is screwed to the counter pole brace (pole brace strap) with concealed screws (included in delivery).

For mounting, access on the rear is required!

(see Page 28)



2.) Screw

3.) Pole brace bracket

Mounting with clamp strap (-KB)

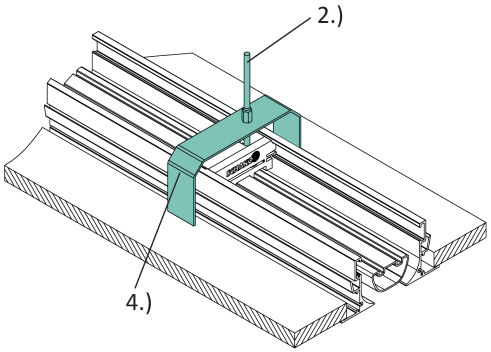
Only possible without plenum box

Screws and clamp straps are supplied loose (2 pieces).

The slot diffuser is screwed to the clamp strap with concealed screws (included in delivery).

For mounting, access on the rear is not required!

(see Page 28)



2.) Screw

4.) Clamp strap

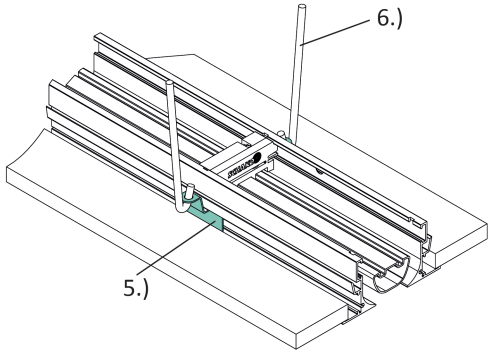
Mounting with suspension lug (-AL)

Only possible without plenum box

4 pieces, supplied loose and not folded

The slot diffuser is fastened to 4 suspension brackets.

(see Page 29)



5.) Suspension lug

6.) Suspension on site

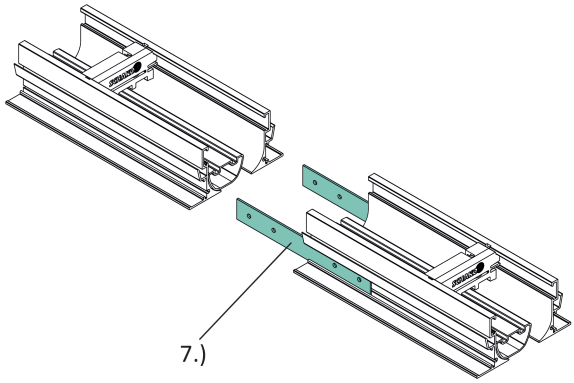
Fishplate (-VL)

4 pieces supplied loose

With band design for connection of (x2 per butt joint):

- Slot diffuser with slot diffuser
- Slot diffuser with corner angle

(see Page 9)



7.) Fishplate

ASSEMBLY OVERVIEW

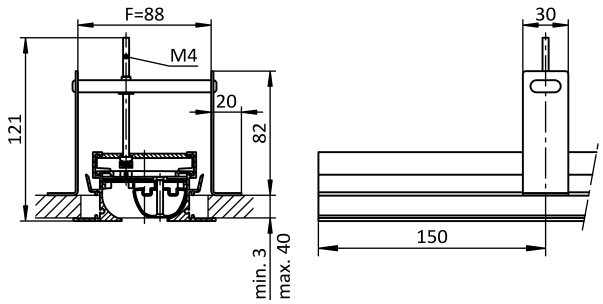
Mounting with counter pole brace (-GT)

Only possible without plenum box

Screws and counter pole brace are supplied loose.

The slot diffuser is screwed to the counter pole brace (pole brace strap) with concealed screws (included in delivery).

For mounting, access on the rear is required!



Mounting instructions Counter pole brace

Insert the screw into the slot of the connecting bridge.

Insert the slot diffuser with the screw into the ceiling and screw it to the counter pole brace which has been positioned on the ceiling against the longitudinal direction; the slot diffuser must be screwed tight to the ceiling so that it is firmly locked on it.

Attention: The maximum torque of the fastening screw is 0.5 Nm

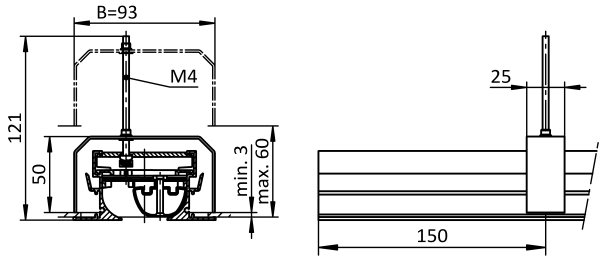
Mounting with clamp strap (-KB)

Only possible without plenum box

Screws and clamp straps are supplied loose.

The slot diffuser is screwed to the clamp strap with concealed screws (included in delivery).

For mounting, access on the rear is not required!



Mounting instructions for clamp strap

Insert the screw into the slot of the connecting bridge and screw it to the clamp straps. To insert the clamp straps into the ceiling, position them in the longitudinal direction. Insert the diffuser and clamp strap into the ceiling. Then pivot the clamp strap by about 90° by rotating the screw and lower it over the slot diffuser profile. Tighten the screw until the slot diffuser is firmly locked at the ceiling.

Attention: The maximum torque of the fastening screw is 0.5 Nm

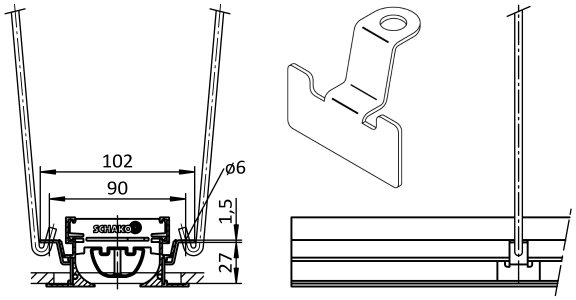
Mounting with suspension lug (-AL)

Only possible without plenum box

4 pieces, supplied loose and not folded.

The slot diffuser is fastened to 4 suspension brackets.

Suspension lug with holes ø6 for hook mounting.



Mounting instructions Suspension lug

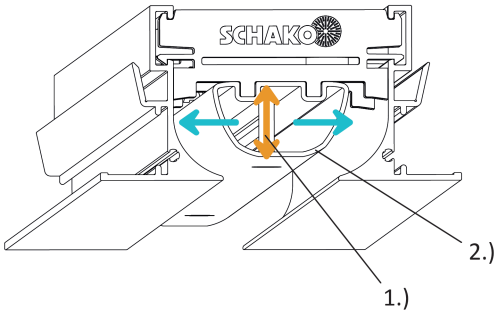
Bend the suspension lugs at the markings (e.g. by means of pliers) in such a way that they fit the profile and the available space. Insert the suspension lugs into the slot of the diffuser and position them close to the ends (two lugs per side). Insert the fastening hooks into the holes ø6 mm of the suspension lugs. Level the diffuser using the clamping system (on site).

NOTE

It is necessary to install the diffuser before the ceiling (e.g. technical ceilings) or make sure that there is access to it from above.

Adjusting the blade position

Loosen the screw [1] from below such that it can be moved. It is not necessary to remove the screws completely. Move the screw into the required position and screw it tightly again.



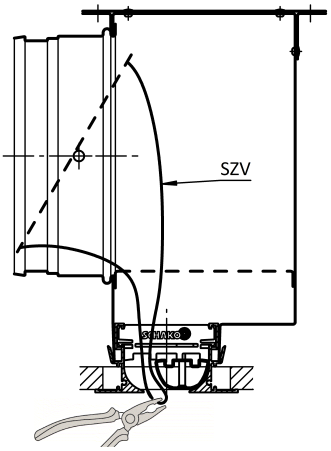
1.) Screw

2.) Blade

Regulation of the damper

The damper is adjusted by means of a cable. It is located behind the slot diffuser inside the plenum box. The cable is adjusted manually from below through the slot (possibly by means of a tool, such as a screwdriver or pliers). Pulling the cable to any side (changing of the angle for the damper) allows to adjust the required volumetric flow.

It is often no longer possible to perform volumetric flow measurement at the connection spigot in the ceiling cavity. The pressure measurement box is available for such cases (must be ordered separately). The pressure measurement box is connected to a suitable measurement instrument such as an inclined tube pressure gauge. The box is then pressed to the measurement points of the diffuser and the pressure measured at the gauge.



SZV = cable-operated adjustment

NOTE

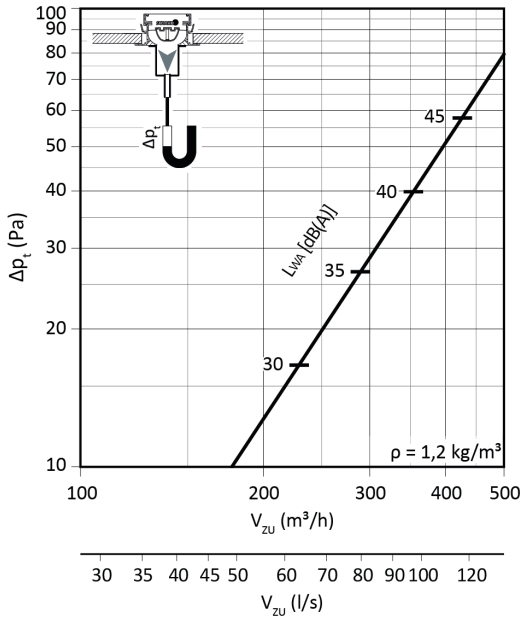
For adjustment and visual check of the damper position it may be useful to position the blades on the opposite side of the spigot.

TECHNICAL DATA

Pressure loss and noise level

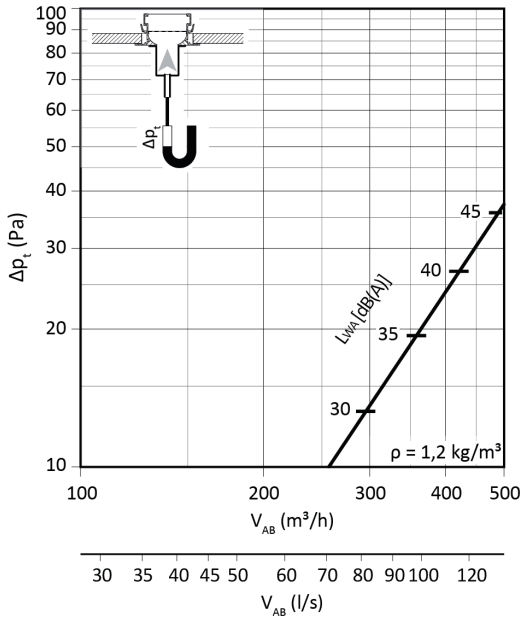
DSCXLS-1-Z-...-01000-...

(supply air, L = 1000 mm, without plenum box)



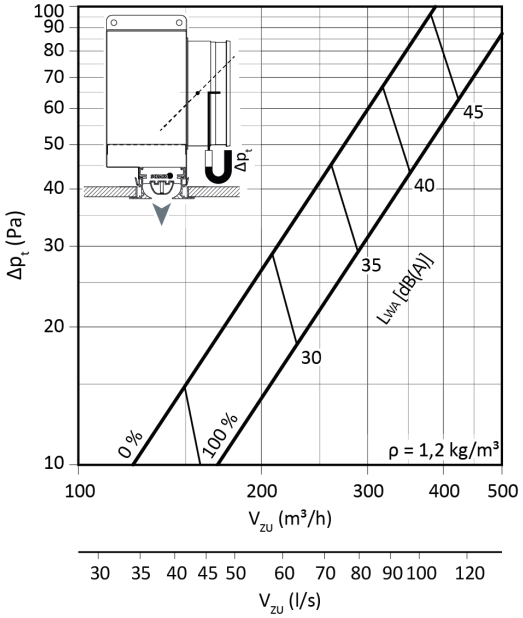
DSCXLS-1-A-...-01000-...

(return air, L = 1000 mm, without plenum box)



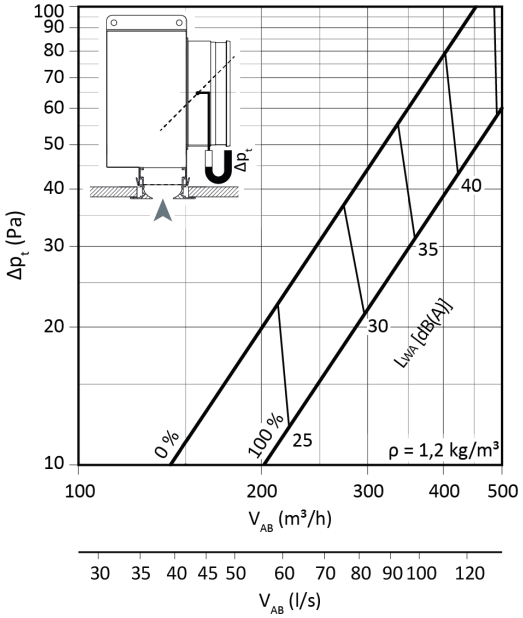
DSCXLS-1-Z-...-01000-...-ASK-28-...-DK2

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



DSCXLS-1-A-...-01000-...-ASK-28-...-DK2

(return air, L = 1000 mm, with plenum box, with damper)



Damper position (DS):

100% = OPEN

0% = CLOSED

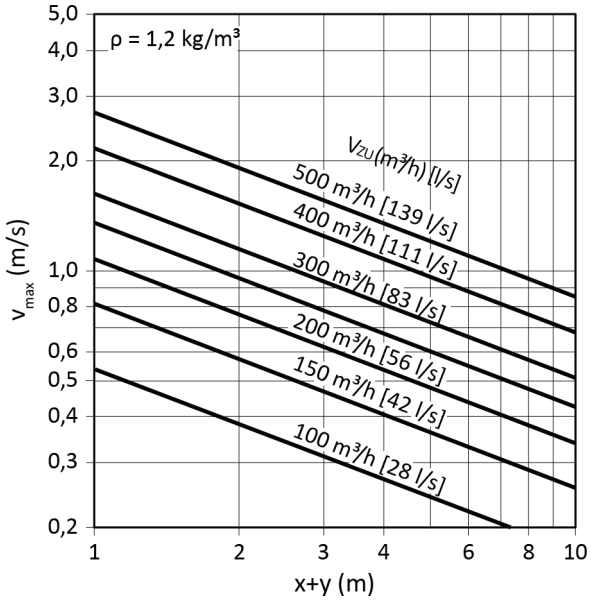
Octave band sound power level

L_{WA}	f_m (Hz)							
[dB(A)]	63	125	250	500	1k	2k	4k	8k
25	47	32	27	21	<15	<15	<15	<15
30	48	39	35	27	18	<15	<15	<15
35	48	44	40	33	25	<15	<15	<15
40	49	46	45	39	32	20	<15	<15
45	48	49	49	44	39	29	23	<15

Maximum final jet velocity

DSCXLS-1-Z-...-01000, with coanda effect

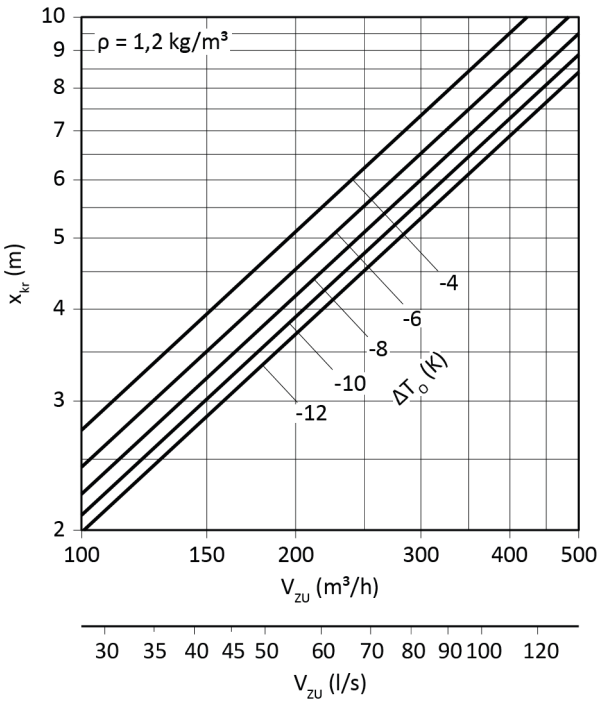
(supply air, L = 1000 mm)



Critical throw

DSCXLS-1-Z-...-01000, with coanda effect

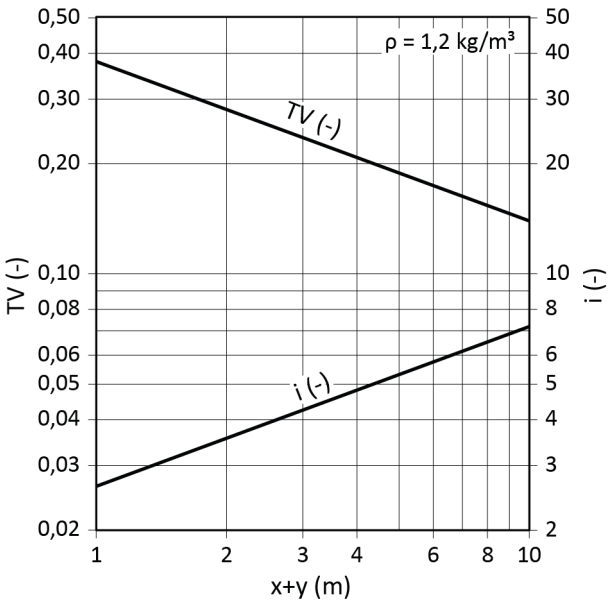
(supply air, L = 1000 mm)



Temperature and induction ratios

DSCXLS-1-Z-...-01000, with coanda effect

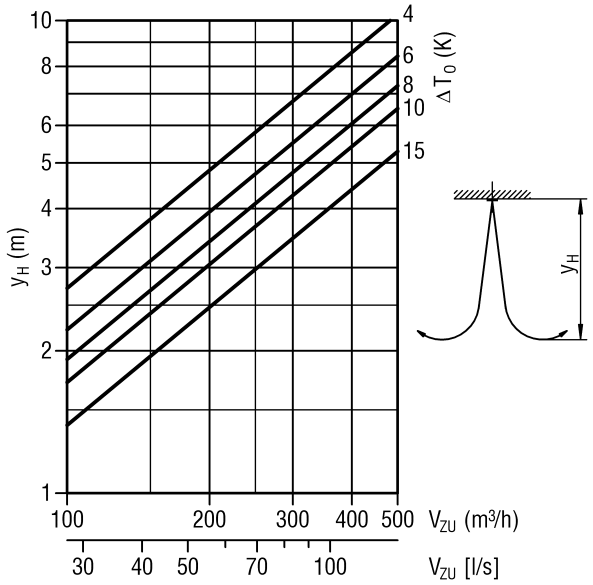
(supply air, L = 1000 mm)



Maximum penetration

DSCXLS-1-Z-...-01000-... (in heating mode)

(L = 1000 mm, supply air)



LEGEND

V_{ZU}	(m³/h) [l/s]	=	Supply air volume
V_{AB}	(m³/h) [l/s]	=	Return air volume
V_X	(m³/h) [l/s]	=	total volumetric flow at point x
L_W	(dB)	=	Sound power level (W_{ref} = 1 pW)
L_{WA}	[dB(A)]	=	A-weighted sound power level (W_{ref} = 1 pW)
f_m	(Hz)	=	Octave band centre frequency
v_{max}	(m/s)	=	Maximum end velocity of jet
v_{mittel}	(m/s)	=	Average end velocity of jet ($v_{average}$ = v_{max} x 0.5)
x	(m)	=	horizontal jet path
y	(m)	=	vertical throw
y_H	(m)	=	Maximum penetration depth in heating mode
x+y	(m)	=	Horizontal + vertical throw
x_{kr}	(m)	=	Critical throw
Δp_t	(Pa)	=	Total pressure loss
TV	(-)	=	Temperature ratio (TV = ΔT_X / ΔT_O)
i	(-)	=	Induction ratio (i = V_X / V_{ZU})
ΔT_O	(K)	=	Temperature difference between supply air temperature and room temperature (ΔT_O = t_{ZU} - t_R)
ΔT_X	(K)	=	Temperature difference at point x
t_R	(°C)	=	Room temperature
t_{ZU}	(°C)	=	Supply air temperature
ρ	(kg/m³)	=	Density
DS	(%)	=	Damper position
L	(mm)	=	Length
BL	(mm)	=	Length of band
KHS	(mm)	=	Total height
KB	(mm)	=	Width of plenum box
KH	(mm)	=	Height of box
D	(mm)	=	Diameter
TS	(mm)	=	Section
DL	(mm)	=	Difference distance
KL	(mm)	=	Length of box
KDL	(mm)	=	Difference in length, plenum box
EOB	(mm)	=	Installation opening in the width section
EOL	(mm)	=	Installation opening in the length section

SLOT DIFFUSER ORDER CODE

01	02	03	04	05	06
Type	Model	Air throw	Frame profile	Frame surface	Blade colour
Example					
DSCXLS	-1	-Z	-R0	-ELOX	-L9011

07	08	09	10	11	12
Blade position for air jet	Single / band design	Length	Mounting	End piece	Dummy piece
-L	-N	-01000	-VM	-E00	-BS0

Sample

DSCXLS-1-Z-R0-ELOX-L9011-L-N-01000-VM-E00-BS0

Slot diffuser DSCXLS | Single-slot, with 30 mm slot width | Supply air (with blades) | Standard frame profile | Aluminium natural colour anodised | Blades made of aluminium painted similar to RAL 9011 (graphite black) | Horizontal blades with one-way throw to the left | Single design | Length L = 1000 mm | Concealed mounting with box | Without end piece | Without dummy piece

Order details

01 - Type

DSCXLS = Slot diffuser DSCXLS

02 - Model

1 = single-slot, with 30 mm slot width

03 - Air throw

Z = supply air (with blades)

A = return air (without blades, with perforated plate)

04 - Frame profile

R0 = Standard frame profile (with support profile, for visible installation on the ceiling)

05 - Frame surface

ELOX = Natural colour anodised aluminium (standard)

9010 = Aluminium painted to RAL colour 9010 (white)

9011 = Aluminium, painted to RAL colour 9011 (graphite black)

xxxx = Aluminium, painted in a different RAL colour of your choice (at an extra charge, always four-digit)

07 - Blade colour

00000 = for air throw return air without blades with perforated plate, made of sheet steel painted in RAL 9011 (graphite black)

L9010 = for air throw supply air with blades, made of aluminium painted in RAL 9010 (white)

L9011 = for air throw supply air with blades, made of aluminium painted in RAL 9011 (graphite black) (standard)

Lxxxx = for air throw supply air with blades, made of aluminium painted in a different RAL colour of your choice (always five-digit)

07 - Blade position for air jet

0 = without blades, only for return air

V = blades vertical throw

L = blades with horizontal one-way throw to the left (standard)

R = Blades with one-way horizontal throw to the right

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)
With fishplates, supplied loose (2 for each connection)

09 - Length

01000 = Length L = 1000 mm

01500 = Length L = 1500 mm

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

10 - Mounting

00 = without connection (only possible without plenum box)
FV = permanent connection with plenum box (only possible with plenum box)
VM = concealed mounting with box (only possible with plenum box) (standard)
GT = Mounting with counter pole brace (only possible without plenum box, screws and pole brace traps are supplied loose, 2 pieces)
KB = Mounting with clamping strap (only without plenum box, screws and clamp straps supplied loose, 2 pieces)
AL = Suspension lugs (only possible without plenum box, supplied loose and not folded, 4 pieces)

11 - End piece

E00 = without end piece (standard)
ES1 = Straight end piece, supplied loose (pair)
EB1 = Straight end piece, mounted ex works on both sides
EL1 = Straight end piece, mounted ex works on the left side
ER1 = Straight end piece, mounted ex works on the right side
ES2 = Angle end piece, supplied loose (pair)
EB2 = Angle end piece, mounted ex works on both sides
EL2 = Angle end piece, mounted ex works on the left side
ER2 = Angle end piece, mounted ex works on the right side

In the band design, the end piece is mounted to the left side of the section and to the right side of the difference length as a standard.

End pieces are painted to RAL colour of the frame profile.

12 - Dummy piece

BS0 = without dummy piece (standard)
BS1 = with dummy piece made of sheet steel painted in RAL 9011 (graphite black)
Dummy piece only possible without plenum box. Possible from length L ≥ 300 mm. Mounting only with counter pole brace (-GT), clamp strap (-KB) or suspension lugs (-AL)

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	-28	-1	-N	-01000	-FV	-SV	-DK0

09	10	11	12	13	14	15
Rubber lip seal	Insulation	Height of box	Box neck	Spigot position	Spigot diameter	Suspension
-GD0	-I0	-KHS	-KVS	-S1	-SDS	-E0

Sample

ASK-28-1-N-01000-FV-SV-DK0-GD0-I0-KHS-KVS-S1-SDS-E0

Plenum box for slot diffuser | For DSCXLS | Single-slot | Single design | Length L = 1000 mm | Permanent connection | Galvanised sheet steel | Without damper| Without rubber lip seal | Without insulation | Standard height of box | Standard box neck | With lateral spigot | Standard spigot diameter | Without riveting nut

Order details

01 - Type

ASK = plenum box for slot diffuser

02 - Diffuser

28 = for DSCXLS

03 - Model

1 = single-slot

04 - Single / band design

N = Single design (length of box 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 five-digit) (length of box KL = L-3 / total length of box GKL = BL-3, length min. 400 mm / max. 1500 mm)

06 - Mounting of box

FV = permanent connection (standard)
VM = concealed mounting

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)
Ia = with internal insulation
Ii = With external insulation

11 - Height of box

KHS = Height of plenum box standard
xxx = Height of box in mm, freely selectable (-xxx, always three-digit) (minimum height [KHS] with spigot position S1+S2 and standard box neck = spigot diameter øD + 82 mm / with spigot position S0 = 200 mm)

12 - Box neck

KVS = Standard box neck
xxx = Box neck extension in mm, as required (-xxx, always three-digit), box neck (not adjustable) possible from ≥ 45 mm to 200 mm

13 – Spigot position

S0 = Spigot from above
S1 = lateral spigot (standard)
S2 = lateral spigot located on the opposite side

14 – Spigot diameter

SDS = Spigot diameter standard
xxx = spigot diameter (øD) in mm, freely selectable (always with three 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	-28	-1	-R0	-ELOX

06	07	08	09	10
Dummy plate colour	Angle between sides	Left-side length (a)	Right-side length (b)	Mounting
-B9010	-090	-000	-000	-GT

Sample

EW-28-1-R0-ELOX-B9010-090-000-000-GT

Corner angle for slot diffuser | For DSCXLS | single-slot, with slot width 30 mm | Standard frame profile | Aluminium natural colour anodised | Aluminium painted in RAL 9010 (white) | Angle α = 90° | Standard length (L = 250 mm) | Standard length (L = 250 mm) | Mounting with counter pole brace

Order details

01 - Type

EW = corner angle for slot diffuser

02 - Diffuser

28 = for DSCXLS

03 - Model

1 = single-slot, with 30 mm slot width

04 - Frame shape

R0 = Standard frame profile (with support profile, for visible installation on the ceiling)

05 - Frame surface

ELOX = Natural colour anodised aluminium (standard)
9010 = Aluminium painted to RAL colour 9010 (white)
9011 = Aluminium painted in RAL 9011 (graphite black)
xxxx = Aluminium, painted in a different RAL colour of your choice (at an extra charge, always four-digit)

06 - Colour of cover plate

B9005 = Sheet steel painted in RAL colour 9005 (black)
B9010 = Sheet steel painted to RAL colour 9010 (white) (standard)
Bxxxx = Sheet steel painted in a different RAL colour of your choice (always five-digit)

07 - Angle between sides

090 = Angle α = 90° (standard)
xxx = Angle as required (value between 90° [090] and 170° [170] possible) (always three-digit)

08 - Left-side length (a)

000 = standard length (L = 250 mm)
xxx = Length (L) in mm as required (minimum length = standard length; always three-digit)

09 - Right-side length (b)

000 = standard length (L = 250 mm)
xxx = Length (L) in mm as required (minimum length = standard length; always three-digit)

10 - Mounting

GT = Mounting with counter pole brace (screws and pole brace traps are supplied loose, 2 pieces)
KB = Mounting with clamp straps (screws and clamp straps supplied loose, 2 pieces)
AL = Mounting with suspension lugs (supplied loose and not folded, 4 pieces)

SPECIFICATION TEXT

Highly inductive slot diffuser, free cross-section, resistance and sound power level constant in all blade positions, suitable for use in rooms with a height between 2.6 m and 4 m

Slot diffuser, one-slot model (number of slots) (**-1**), with slot width 30 mm

Supply air model with air deflection blades made of aluminium:

- painted to the RAL colour 9010 (white) (**-L9010**)
- painted to the colour RAL 9011 (graphite black, standard) (**-L9011**)
- painted in a different RAL colour of your choice (**-Lxxxx**, always five-digit)

With connecting bridge made of plastic material, colour similar to RAL 9005 (black)

Product: SCHAKO type **DSCXLS-1-Z-…**

Return air model without air deflection blades (**-00000**), with perforated plate made of sheet steel painted in RAL 9011 (graphite black) (FQ = 46 %), as cover screen

With connecting bridge made of galvanised sheet steel

Product: SCHAKO type **DSCXLS-1-A-...**

Frame profile:

Standard frame profile (**-R0**, with support profile), for visible installation on the ceiling

Frame surface:

- Natural colour anodised aluminium (standard, **-ELOX**)
- aluminium painted to:
  - RAL colour 9010 (white) (**-9010**)
  - RAL colour 9011 (graphite black) (**-9011**)
  - painted in a different RAL colour of your choice (**-xxxx**) (always four-digit)

Blade position for air jet:

- without blades, for return air with perforated plate (**-0**)
- blades with vertical throw (**-V**)
- blades with horizontal one-way throw to the left (**-L**, standard)
- blades with one-way horizontal throw to the right (**-R**)

Length / Model:

<u>Single design (**-N**)</u>

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

<u>Band design (**-B**)</u>

- Length (BL) in mm, as band (**-B-xxxxx**)
  Available lengths according to SCHAKO standard for band design
  Length of individual elements max. 1500 mm
  With fishplates made of aluminium sheet, supplied loose (2 for each connection)

Mounting:

- without connection (**-00**)
  - only possible without plenum box
- Permanent connection with plenum box (-FV)
  - only possible with plenum box
  - The slot diffuser is permanently connected to the plenum box.
- Concealed mounting with plenum box (-VM, standard)
  - only possible with plenum box
  - The slot diffuser is screwed to the pole brace in the plenum box housing with concealed screws.
  - Frame with foam gasket
  - Plenum box mounted ex works
- Mounting with counter pole brace (-GT)
  - only possible without plenum box
  - Screws and pole brace traps are supplied loose (2 pieces).
  - Pole brace traps consisting of folded galvanised sheet steel and pole brace made of extruded aluminium profile with DIN thread
  - The slot diffuser is screwed to the counter pole brace (pole brace strap) with concealed screws (included in delivery).
  - **For mounting, access on the rear is required!**
- Mounting with clamp strap (-KB)
  - Only possible without plenum box
  - Screws and clamp straps are supplied loose (2 pieces).
  - Clamp strap made of galvanised sheet steel
  - The slot diffuser is screwed to the clamp strap with concealed screws (included in delivery).
  - **For mounting, access on the rear is not required!**
- Mounting with suspension lugs (-AL)
  - Only possible without plenum box
  - 4 pieces, supplied loose and not folded
  - The slot diffuser is fastened to 4 suspension brackets.
  - Suspension lug made of galvanised sheet steel, with holes for hook mounting

Accessories:

- End pieces (-E00 / -E…1 / -E…2)
  - without end piece (-E00) (standard)
  - with end pieces (to obtain a visual impression of a continuous frame), with additional connecting bridge made of plastic material on the diffuser, mounted by means of two screws on the frame profile
    End piece models:
    - End piece, straight, made of galvanised sheet steel, painted to RAL colour of the frame profile:
      - supplied loose (-ES1, pair) (standard)
      - mounted ex works on both sides (-EB1)

    - mounted ex works on the left side (-EL1)
    - mounted ex works on the right side (-ER1)
  - Angle end piece, made of extruded aluminium profile, painted in the RAL colour of the frame profile:
    - supplied loose (-ES2, pair) (standard)
    - mounted ex works on both sides (-EB2)
    - mounted ex works on the left side (-EL2)
    - mounted ex works on the right side (-ER2)
- Dummy piece (-BS0 / -BS1)
  - without dummy piece (-BS0) (standard)
  - with dummy piece (-BS1):
    - made of sheet steel painted to RAL colour 9011 (graphite black)
    - possible from length L ≥ 300 mm
    - only possible without plenum box
    - Mounting only with counter pole brace (-GT), clamp strap (-KB) or suspension lugs (-AL)
- Plenum box (-ASK-28), for DSCXLS, one-slot model (-1), made of galvanised sheet steel (-SV, standard), with mounting brackets
  - 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, as required (-xxxxx, always five-digit) (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 from ≥ 400 mm to ≤ 1500 mm)
  - Mounting of box:
    - permanent connection (-FV) (standard)
    - Concealed mounting (-VM)
  - Damper:
    - Without damper (-DK0) (standard)
    - with damper and cable-operated adjustment (-DK2), made of galvanised perforated plate (FQ = 36 %), in the connection spigot, adjustable, for simple air volume regulation
  - Rubber lip seal:
    - without rubber lip seal (-GD0) (standard)
    - With rubber lip seal (-GD1) at the connection spigot
  - Insulation:
    - Without insulation (-I0)
    - With internal insulation (-Ii), thermal insulation inside the plenum box
    - with external insulation (-Ia), thermal insulation on the outside of the plenum box
  - Height of box:
    - Standard height of box (-KHS)
    - Height of box in mm, as required (-xxx, always three-digit) (minimum height [KHS] with spigot position S1+S2 and standard box neck = spigot diameter øD + 82 mm / with spigot position S0 = 200 mm)
  - Box neck:
    - standard box neck (-KVS) (KVS = 45 mm)
    - Box neck extension in mm, as required (-xxx, always three-digit), box neck (not adjustable) possible from ≥ 45 mm to 200 mm
  - Spigot position:
    - Spigot from above (-S0)
    - Lateral spigot (-S1) (standard)
    - Lateral spigot located on the opposite side (-S2)
  - Spigot diameter:
    - Standard spigot diameter (-SDS)
    - spigot diameter (øD) in mm, freely selectable (-xxx, always with three digits)
  - Suspension:
    - without riveting nut (-E0) (standard)
    - with riveting nut (-EM)
  - with air diffuser plate (FQ = 46 %), perforated plate made of galvanised sheet steel, for even distribution of the air flow (to stabilise the pressure in the plenum box)
- Corner angle (-EW-28) for DSCXLS, one-slot model (-1) with slot width 30 mm, with standard frame profile (-R0, with support profile, for visible installation on the ceiling)
  - Frame surface, made of extruded aluminium profile:
    - natural colour anodised (-ELOX, standard)
    - Painted to RAL colour 9010 (white) (-9010)
    - painted to the RAL colour 9011 (graphite black) (-9011)
    - painted to another RAL colour, freely selectable (at an extra charge) (-xxxx)
  - Connecting bridge made of galvanised sheet steel, fastened by means of rivets
  - Colour of cover plate:
    - Sheet steel painted in RAL 9005 (black) (-B9005)
    - Sheet steel painted in RAL 9010 (white) (-B9010) (standard)
    - Sheet steel painted in a different RAL colour of your choice (Bxxxx) (always five-digit)
  - Angle between sides:
    - Angle α = 90° (-090)
    - angle (α) as required (-xxx), values between α = 90° (-090, standard) and 170° (-170) are possible (always with three digits)
  - Left side length (a):
    - standard length L = 250 mm (-000)
    - Length (L) in mm can be freely selected (-xxx) (minimum length = standard length) (always with three digits)
  - Right side length (b):
    - standard length L = 250 mm (-000)
    - Length (L) in mm can be freely selected (-xxx) (minimum length = standard length) (always with three digits)
  - with 4 fishplates (-VL, included in delivery) made of aluminium (same colour as frame), supplied loose

- Mounting:
  - with counter pole brace (-GT), screws and pole brace traps are supplied loose (2 pieces)
  - with clamp strap (-KB), screws and clamp straps are supplied loose (2 pieces)
  - with suspension lugs (-AL), supplied loose and not folded, 4 pieces