



## DSCU

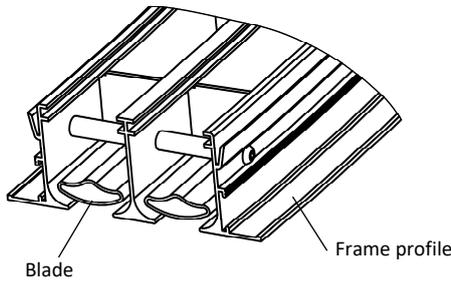
Curved slot diffuser

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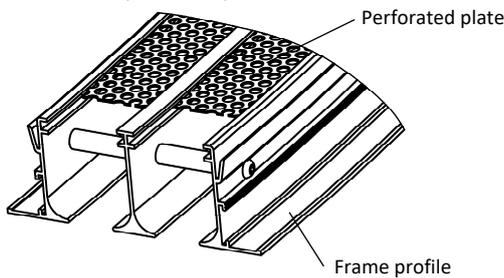
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## OVERVIEW OF PRODUCT VERSIONS

### DSCU-...-Z-... (supply air)



### DSCU-...-A-... (return air)



## FUNCTION AND USE

The curved slot diffuser DSCU is suitable for use in rooms with a height between 2.6 and 4 m. The air deflection blades adjustable from below allow a variety of throw adjustment options. Thus, the air throw pattern can be adjusted from a vertical throw in heating mode to a horizontal throw in cooling mode. In cooling mode, a one- or two-way air throw pattern can be set. A one-way air throw pattern in "outside" direction is preferred. The support profile blades produce a stable air jet. This achieves high induction while the velocity and temperature difference of the supply air jet are effectively reduced.

Due to the central housing of the blades, the free cross-section is always the same. Pressure loss and sound power level remain therefore constant even when the blades are adjusted. A subsequent change of the air throw pattern on site is possible at any time. If a desired blade position is specified in the order, it will be set at the factory. Unless stated otherwise in the order details, the blade position B (horizontal two-way throw) will be set. The large free cross-section allows a high air throughput compared with other slot diffusers. Thanks to its stable air jet and high induction, the DSCU slot diffuser can be used in cooling mode up to  $\Delta T_0 \leq -8$  K.

The resistance created by the blades ensures that the supply air is distributed equally across the whole curved length of the slot diffuser.

The slot diffuser can be manufactured as 1-, 2-, or 3-slot model and is available either as single piece or in band design. Accessories such as end pieces 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.

In addition, it can be combined with the slot diffuser DSC.

Due to the stable air throw pattern, the slot diffuser can also be used in VAV systems from 100 to 40%.

## MODELS

DSCU-...-1	1-slot
DSCU-...-2	2-slot
DSCU-...-3	3-slot
DSCU-...-Z	Supply air (with blades)
DSCU-...-A	return air (without blades, with perforated plate)
DSCU-...-R0	with STANDARD frame profile (frame with R0 standard profile)
DSCU-...-V	Blades with vertical throw
DSCU-...-L	Blades with horizontal one-way throw toward the inside
DSCU-...-R	Blades with horizontal one-way throw toward the outside
DSCU-...-B	blades with two-way horizontal throw (standard)
DSCU-...-0	Without blades, with perforated plate (for return air)
DSCU-...-N	Single design (curved length max. 1500 mm)
DSCU-...-B	Band design (curved length distribution according to SCHAKO standard lengths for band design)

## MOUNTING

Permanent connection with plenum box (-FV, standard)

- Only possible with plenum box.
- The slot diffuser is permanently connected to the plenum box.

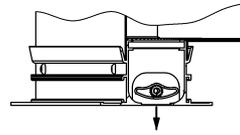
Mounting with clamp strap (-KB)

- 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!**

## BLADE POSITION FOR AIR JET

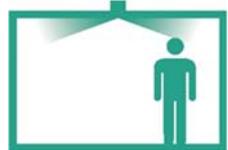
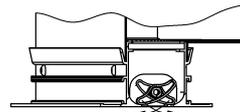
### Blade position (-V)

vertical throw



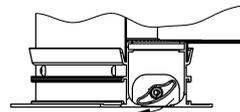
### Blade position (-B) (standard)

with horizontal two-way throw



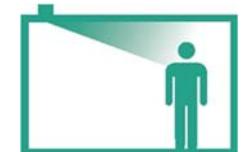
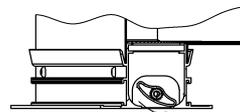
### Blade position (-L)

one-way horizontal left throw



### Blade position (-R)

one-way horizontal right throw



With blade positions (-L) and (-B), the concentric air throw toward the inside may result in greater velocities and turbulence.

## PROCESSING

### Frame surface

- Natural colour anodised aluminium (-ELOX, standard).
- Aluminium painted to:
  - RAL colour 9006 (white aluminium) (-9006).
  - RAL colour 9010 (white) (-9010).
  - a different RAL colour, freely selectable (at an extra charge) (-xxxx) (always with 4 digits).

### Blade colour

- Plastic (hard PVC):
  - Colour similar to RAL 9005 (black, standard) (-L9005).
  - Colour similar to RAL 9006 (white aluminium) (-L9006).
  - Colour similar to RAL 9010 (white) (-L9010).
  - painted to a freely selectable RAL colour (-Lxxxx)
- For return air without blade (-00000), with perforated plate made of sheet steel painted to RAL 9005 (black), as cover screen.

### Blade holding device

- Aluminium ducts

### Internal blade divider (standard)

- Plastic (PA type 6):
  - Similar to RAL colour 9005 (black) (standard for frame model in painted aluminium).
  - Similar to RAL colour 9006 (white aluminium) (standard for frame model in natural colour anodised aluminium).
  - Similar to RAL colour 9010 (white).

### Internal blade divider (support for clamp mounting)

- Plastic (PA type 6):
  - Similar to RAL colour 9005 (black) (standard for frame model in painted aluminium).
  - Similar to RAL colour 7040 (window grey) (standard for frame model in natural colour anodised aluminium).
  - Similar to RAL colour 9010 (white).

### External blade plates (end plates)

- Plastic (ABS), similar to RAL colour 9005 (black) (standard for frame model in painted aluminium).
- Plastic (ABS), colour similar to RAL colour 9006 (white aluminium) (standard for frame model: aluminium natural colour anodised).
- Plastic (ABS), similar to RAL colour 9010 (white).

### Connecting pin

Connection diffuser - diffuser

- made of plastic material.
- for band design only.
- supplied loose (2x for each connection).

## ACCESSORIES

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

- without end pieces (-EO) (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)

### Dummy piece (-BS0 / -BS1)

- without dummy piece (-BS0) (standard).
- with dummy piece (-BS1):
  - made of sheet steel painted to RAL 9005 (black).
  - Only possible without plenum box.
  - with fastening clip for mounting on the slot diffuser.
  - possible from curved length BoL  $\geq$  200 mm.
  - Mounting only possible with clamp strap (-KB).

### Plenum box (-ASK-45)

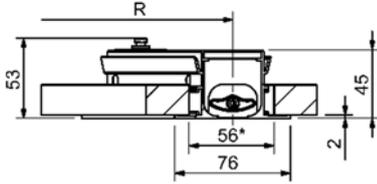
- Model:
  - 1-slot (-1)
  - 2-slot (-2)
  - 3-slot (-3)
- Single / band design:
  - single design (-N, curved length of box KBoL max. 1500 mm)
  - Band design (-B, curved length distribution according to SCHAKO standard lengths for band design)
- Curved length:
  - curved length BoL = 1000 mm (-01000) (KBoL = 997 mm)
  - curved length BoL = 1500 mm (-01500) (KBoL = 1497 mm)
  - curved length (BoL/BBoL) in mm, freely selectable (-xxxx, always with 5 digits)  
 (Curved length of box KBoL = BoL-3 / total curved length of box GKBoL = BBoL-3, in case of single design with curved length BoL =  $\geq$  400 mm to  $\leq$  1500 mm can be fitted with a plenum box).
- Radius:
  - specify a radius  $R \geq$  2000 mm (-xxxx, always with 5 digits)
- Mounting of box:
  - Permanent connection (-FV) (standard)
- Material:
  - Galvanised sheet steel (-SV) (standard)
- Damper:
  - without damper (-DK0) (standard)
  - With damper made of galvanised sheet steel, adjustable, for simple air volume regulation in the plenum box housing (-DK1).
- Rubber lip seal:
  - without rubber lip seal (-GD0) (standard)
  - With rubber lip seal (-GD1) made of special rubber, at the connection spigot.
- Insulation:
  - without insulation (-IO) (standard)
  - with external insulation (-Ia), thermal insulation at the outside of the plenum box.
- Height of plenum box:
  - Standard height of plenum box (-KHS)
  - height of box in mm, freely selectable (-xxx, always with 3 digits).  
 (Minimum height [GH] with spigot position S1+S2 = spigot diameter  $\varnothing D + 82$  mm).
- Spigot position:
  - inner lateral spigot (-S1) (standard)
  - Outer lateral spigot (-S2).
- Spigot diameter:
  - standard spigot diameter (-SDS)
  - Spigot diameter ( $\varnothing D$ ) in mm, freely selectable (-xxx, always with 3 digits).
- Suspension:
  - without riveting nut (-EO) (standard)
  - With riveting nut (-EM), made of brass.

## DIMENSIONS

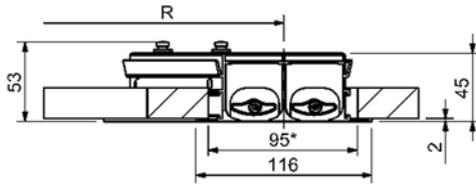
### Dimensions of frame profile

#### Standard frame profile "R0"

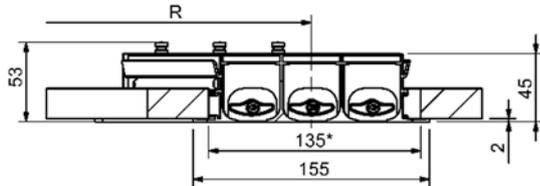
DSCU-1-Z (supply air, 1-slot)



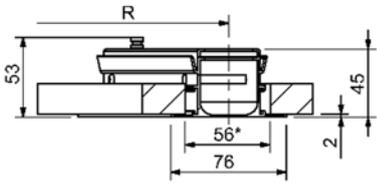
DSCU-2-Z (supply air, 2-slot)



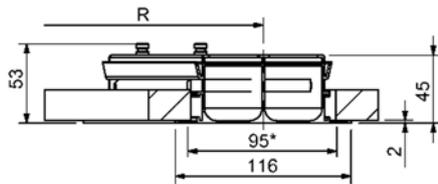
DSCU-3-Z (supply air, 3-slot)



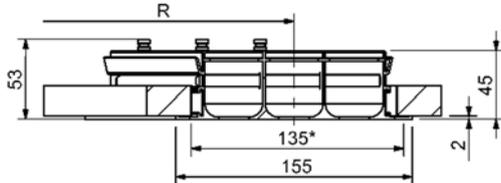
DSCU-1-A (return air, 1-slot)



DSCU-2-A (return air, 2-slot)



DSCU-3-A (return air, 3-slot)



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

\* EÖB = installation opening width

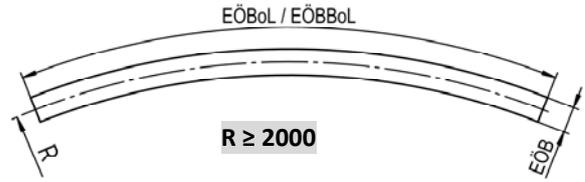
For curved length distribution for slot diffuser, see illustration on the right.

#### Radius

The radius R is always specified in the centre of the slot diffuser.  $R \geq 2000$  (1- / 2- / 3-slot).

Construction subject to change  
 No return possible

### Installation opening



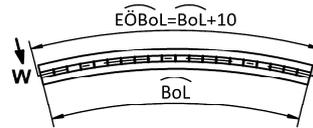
$$\begin{aligned} E\ddot{O}BoL &= BoL + 10 \\ E\ddot{O}BBoL &= BBoL + 10 \end{aligned}$$

BoL = curved length of diffuser  
 BBoL = curved length of diffuser, band design  
 EÖBoL = curved length of installation opening  
 EÖBBoL = curved length of installation opening, band design

### Curved length distribution for slot diffuser

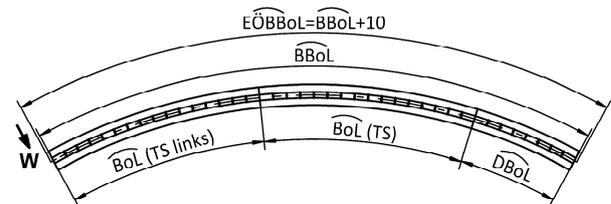
#### Single design (-N)

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



#### Band design (-B)

- curved length (BBoL) in mm, freely selectable, as band (-B-xxxxx) (always with 5 digits).



#### Curved length distribution according to SCHAKO standard:

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

TS = section  
 Left TS = left section  
 BoL = curved length of diffuser  
 DBoL = difference in curved length of diffuser  
 BBoL = curved length of diffuser, band design  
 EÖBoL = curved length of installation opening  
 EÖBBoL = curved length of installation opening, band design

For end pieces, detail W, see page 6.

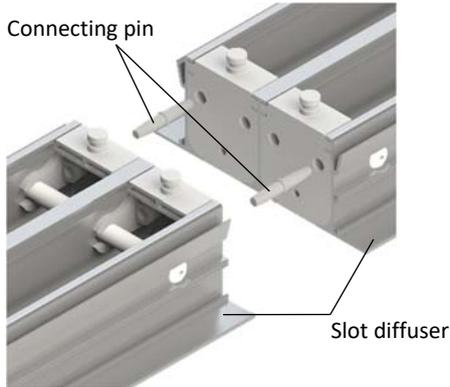
A different band division is possible after consultation and when required by the customer.

## Slot diffuser connection in band design

### Slot diffuser - slot diffuser

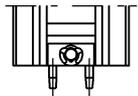
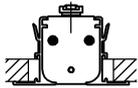
#### With connecting pin

supplied loose (2x for each connection)

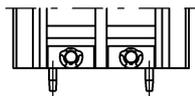
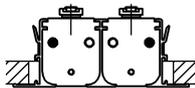


#### Arrangement of connecting pins

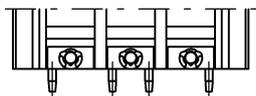
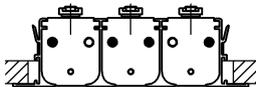
##### DSCU-1-...



##### DSCU-2-...



##### DSCU-3-...



#### Attention:

The connecting pins are only suitable for positioning and for force transmission.

## DIMENSIONS OF ACCESSORIES

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

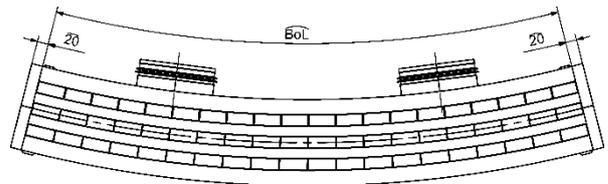
- without end piece (-E0) (standard).
- with end pieces, made of aluminium (same colour as frame):
  - Supplied loose (-ES, pair) (standard).
  - Mounted ex works on both sides (-EB).
  - Mounted ex works on the left side (-EL).
  - Mounted ex works on the right side (-ER).

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

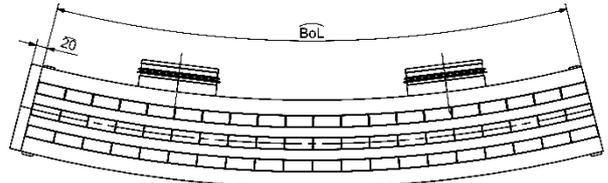


Please specify in your order whether end pieces are to be fitted (-EB) on both sides of the diffuser or on the left or right side.

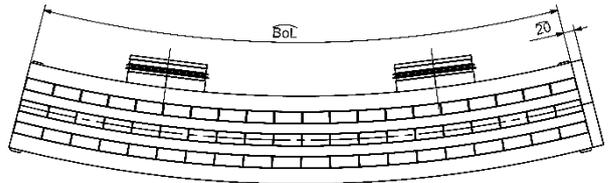
#### End piece on both sides



#### End piece on the left



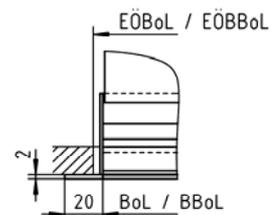
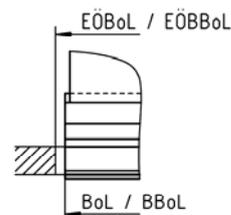
#### End piece on the right



#### Detail W

without end piece (-E0)

with end piece (-ES/-EB/-EL/-ER)



#### Curved length of installation opening:

$$E\ddot{O}BoL = BoL + 10$$

$$E\ddot{O}BBoL = BBoL + 10$$

BoL = curved length of diffuser

BBoL = curved length of diffuser, band design

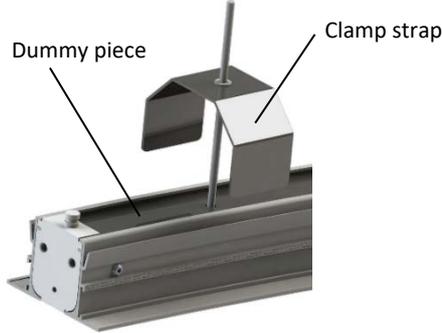
EÖBoL = curved length of installation opening

EÖBBoL = curved length of installation opening, band design

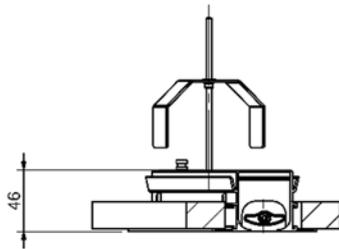
### Dummy piece (-BS0 / -BS1)

- without dummy piece (-BS0) (standard).
- with dummy piece (-BS1):
  - made of sheet steel painted to RAL 9005 (black).
  - Only possible without plenum box.
  - with fastening clip for mounting on the slot diffuser.
  - possible from curved length BoL  $\geq 200$  mm.
  - Mounting only possible with clamp strap (-KB).

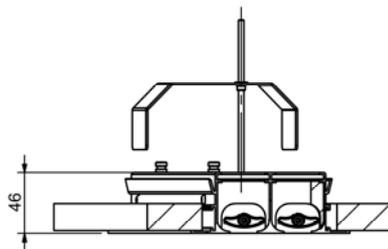
#### with dummy piece (-BS1)



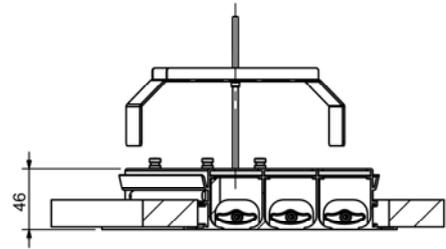
For supply air: DSCU-1-Z



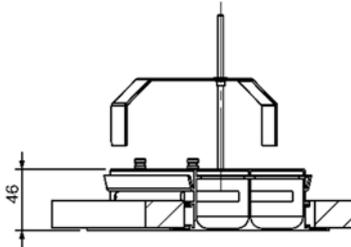
DSCU-2-Z



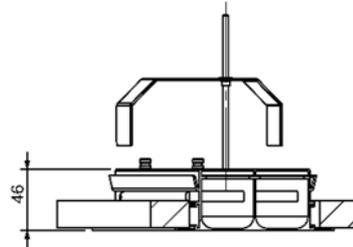
DSCU-3-Z



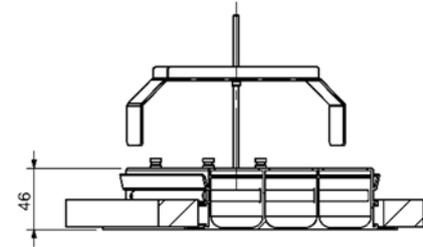
For return air: DSCU-1-A



DSCU-2-A



DSCU-3-A

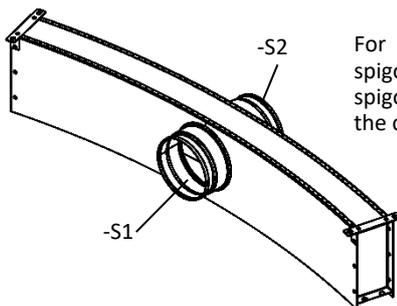


For curved length distribution for slot diffuser, see page 5.

### Plenum box (-ASK-45)

#### Spigot position

- S1 = inner lateral spigot (standard)
- S2 = outer lateral spigot



For models with one spigot (standard), the spigot lies in the middle of the curved length.

Dimensions of the plenum box: see pages 8 to 10.

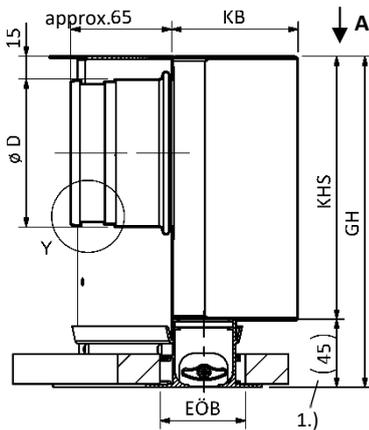
**PLENUM BOX – SINGLE DESIGN (-N)**

**Plenum box (-ASK-45-...-N-...-FV-...-S1-...)**

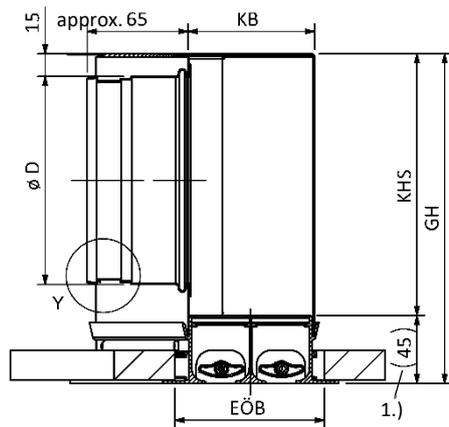
- With permanent connection
- With inner lateral spigot
- The slot diffuser is permanently connected to the plenum box.

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

**DSCU-1-...-ASK-45-1-...-N-...-FV-...-S1-...**



**DSCU-2/3-...-ASK-45-2/3-...-N-...-FV-...-S1-...**



**Available plenum box sizes  
 (ASK-45-...-N-...-FV-...-S1-...)**

	KB	GH	KHS	EÖB	øD	
					BoL	
					≤1000	>1000
DSCU-1	83	220	175	56	1 x ø98	1 x ø123
DSCU-2	83	220	175	95	1 x ø138	1 x ø138
DSCU-3	122	220	175	135	1 x ø138	2 x ø138

BoL	KBoL	EÖBoL	Weight (kg)		
			...-R0	DSCU-1	DSCU-2
1000	997	1010	5.71	6.40	7.99
1500	1497	1510	8.27	9.24	11.25

\*all dimensions in mm

**Curved length distribution of plenum box  
 (-ASK-45-...-N)**

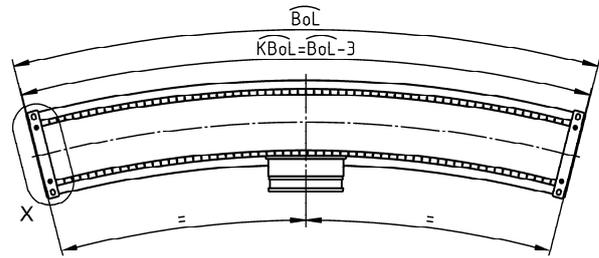
- curved length BoL= 1000 mm (-N-01000) (curved length of box KBoL = 997 mm)
- curved length BoL= 1500 mm (-N-01500) (curved length of box KBoL = 1497 mm)
- curved length (BoL) in mm, freely selectable (-N-xxxxx) (always with 5 digits)  
 (Curved length of box KBoL = BoL-3, in case of single design with curved length BoL = ≥ 400 mm to ≤1500 mm can be fitted with a plenum box)

**Spigot position:**

Inner lateral spigot (-S1)

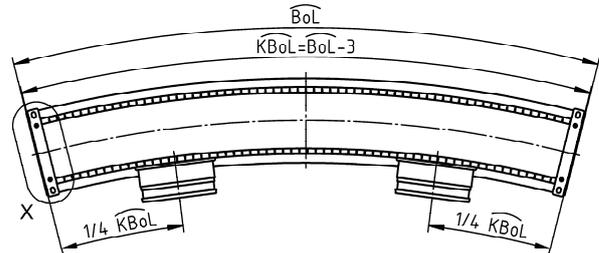
**View A / with 1 inner lateral spigot (-S1)**

- DSCU-1/DSCU-2: BoL = ≥ 400 mm to ≤ 1500 mm
- DSCU-3: BoL = ≥ 400 mm to ≤ 1000 mm



**View A / with 2 inner lateral spigots (-S1)**

- DSCU-1/DSCU-2: ---
- DSCU-3: BoL = ≥ 1000 mm to ≤ 1500 mm



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

- with spigot position -S1:  
 Minimum height [GH] = spigot diameter øD + 82 mm.

**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.

For installation opening, curved length, see page 5.

For plenum box in band design, see page 10.

For suspension position, detail X, see page 11.

For plenum box suspension, see page 12.

For rubber lip seal, detail Y, see page 13.

For fastening methods, see page 14.

BoL = curved length of diffuser

KBoL = Curved length of the plenum box

EÖBoL = curved length of installation opening

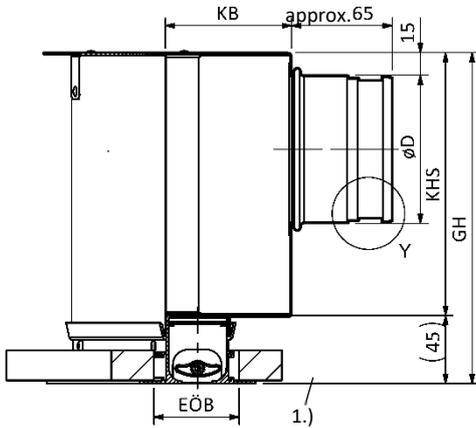
EÖB = installation opening width

**Plenum box (-ASK-45-...-N-...-FV-...-S2-...)**

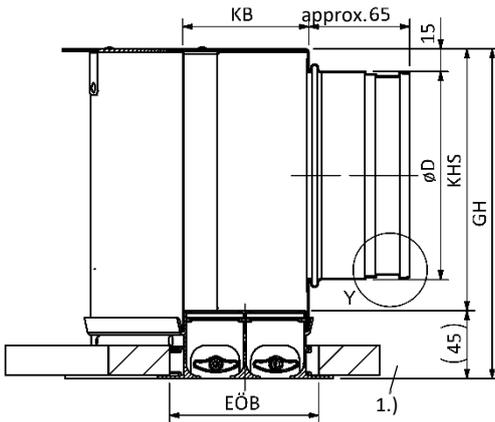
- With permanent connection
- With outer lateral spigot
- The slot diffuser is permanently connected to the plenum box.

**With inner lateral spigot (-S2, standard)**

DSCU-1-...-ASK-45-1-...-N-...-FV-...-S2-...



DSCU-2/3-...-ASK-45-2/3-...-N-...-FV-...-S2-...



**Available plenum box sizes  
 (ASK-45-...-N-...-FV-...-S2-...)**

	KB	GH	KHS	EÖB	øD	
					BoL	
					≤1000	>1000
DSCU-1	83	220	175	56	1 x ø98	1 x ø123
DSCU-2	83	220	175	95	1 x ø138	1 x ø138
DSCU-3	122	220	175	135	1 x ø138	2 x ø138

BoL	KBoL	EÖBoL	Weight (kg)		
			...-R0	DSCU-1	DSCU-2
1000	997	1010	5.71	6.40	7.99
1500	1497	1510	8.27	9.24	11.25

\*all dimensions in mm

**Curved length distribution of plenum box  
 (-ASK-45-...-N)**

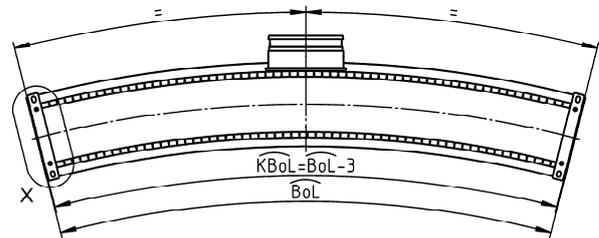
- curved length BoL= 1000 mm (-N-01000) (curved length of box KBoL = 997 mm)
- curved length BoL= 1500 mm (-N-01500) (curved length of box KBoL = 1497 mm)
- curved length (BoL) in mm, freely selectable (-N-xxxxx) (always with 5 digits)  
 (Curved length of box KBoL = BoL-3, in case of single design with curved length BoL = ≥ 400 mm to ≤1500 mm can be fitted with a plenum box)

**Spigot position:**

Outer lateral spigot (-S2)

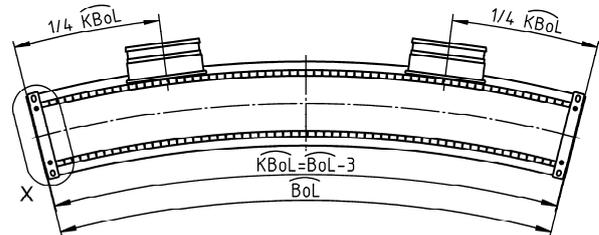
**View A / with 1 inner lateral spigot (-S2)**

DSCU-1/DSCU-2: BoL = ≥ 400 mm to ≤ 1500 mm  
 DSCU-3: BoL = ≥ 400 mm to ≤ 1000 mm



**View A / with 2 inner lateral spigots (-S2)**

DSCU-1/DSCU-2: ---  
 DSCU-3: BoL = ≥ 1000 mm to ≤ 1500 mm



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

- with spigot position -S1:  
 Minimum height [GH] = spigot diameter øD + 82 mm.

**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.

For installation opening, curved length, see page 5.

For plenum box in band design, see page 10.

For suspension position, detail X, see page 11.

For plenum box suspension, see page 12.

For rubber lip seal, detail Y, see page 13.

For fastening methods, see page 14.

- BoL = curved length of diffuser
- KBoL = Curved length of the plenum box
- EÖBoL = curved length of installation opening
- EÖB = installation opening width

## PLENUM BOX – BAND DESIGN (-B)

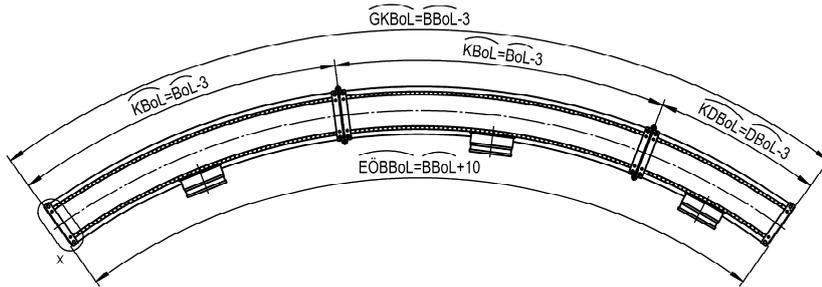
### Plenum box (-ASK-45-...-B-...-FV/VM-...)

With permanent connection (-FV, standard).

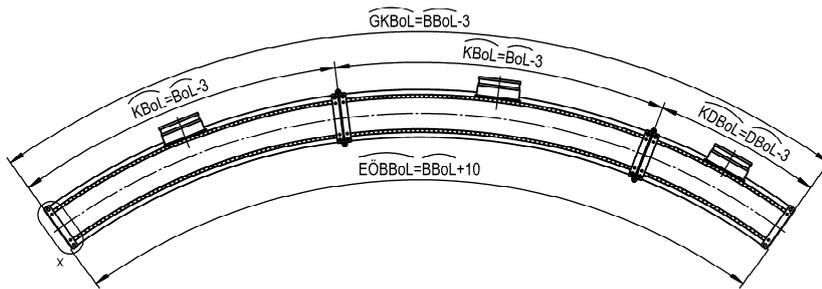
### Available lengths of plenum box (-ASK-45-...-B)

- Length (L) in mm, freely selectable (-B-xxxxx) (always with 5 digits).  
 (total curved length of box  $GKBoL = BL - 3$ )

**DSCU-...-ASK-45-...-B-...-FV-...-S1-...**  
 (with inner lateral spigot)



**DSCU-...-ASK-24-...-B-...-FV-...-S2-...**  
 (with outer lateral spigot)



### Curved length distribution according to SCHAKO standard

#### **BL >1500 to <2000:**

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

#### **BL ≥2000:**

For models designed as a band  $BBol ≥ 2000$  mm, the total curved length  $GKBoL$  is assembled from standard curved lengths of 1000 mm or 1500 mm.

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

**A plenum box ( $KBoL/KDBol$ ) 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.

### Installation opening in the length section:

**$EÖBBol = BBol + 10$**

$BoL$  = curved length of diffuser  
 $DBol$  = difference in curved length of diffuser  
 $BBol$  = curved length of diffuser, band design  
 $GKBoL$  = total curved length of box ( $GKBoL = BBol - 3$ )  
 $KBoL$  = curved length of plenum box ( $KBoL = BoL - 3$ )  
 $KDBol$  = difference in curved length of plenum box ( $KDBol = DBol - 3$ )  
 $EÖBBol$  = curved length of installation opening, band design

For DSCU dimensions as a band, see page 5.

For end pieces detail, see page 6.

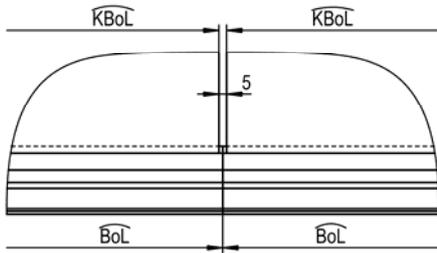
For available sizes of plenum box, see pages 8 to 10.

For butt joint of permanent connection, see page 11.

For the position of suspension holes, detail X, see page 11.

For plenum box suspension, see page 12.

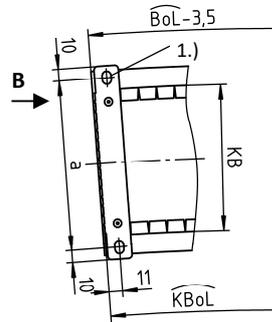
**Butt joint of permanent connection (-FV)**



**Position of the suspension holes**

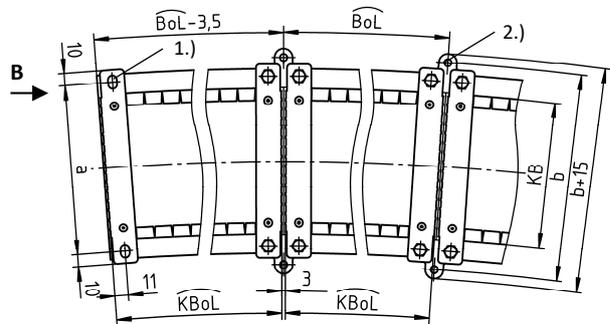
**SINGLE DESIGN**

**Detail X**



**BAND DESIGN**

**Detail X**



**Connection plate**



- 1.) Long hole  $\varnothing 6.5 \times 10$
- 2.) Connection plate with pin holes  $\varnothing 6.1$

**Available sizes**

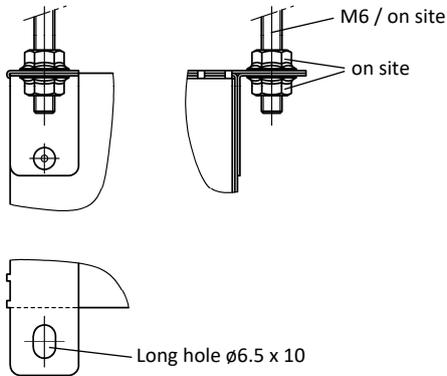
**Lateral connection (-S1/-S2)**

	Mounting of box -FV		
	KB	a	b
DSCU-1	83	103	135
DSCU-2	83	103	135
DSCU-3	122	142	174

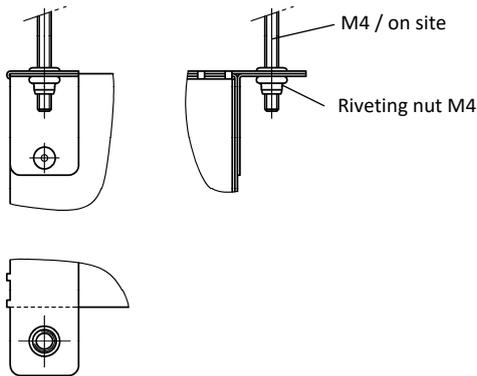
**Plenum box suspension**

**SINGLE DESIGN / BAND DESIGN**

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

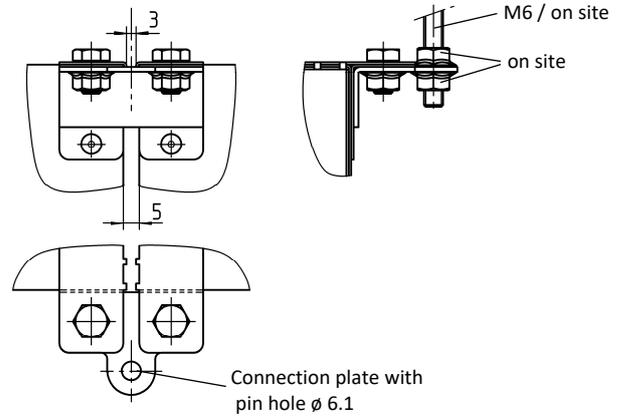


**with riveting nut M4 (-EM, at an extra charge):**  
 At an extra charge, the plenum boxes can be fitted with M4 riveting nuts to facilitate ceiling mounting.

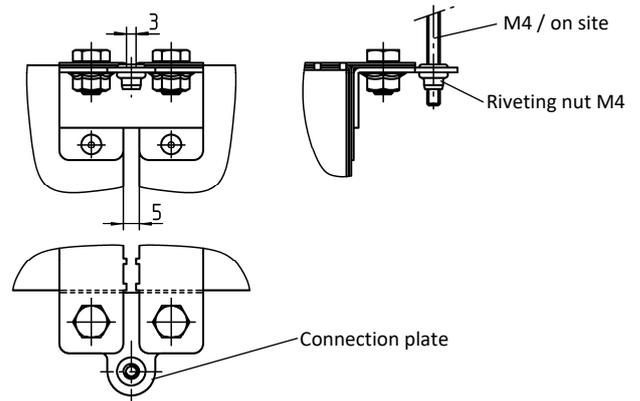


**BAND DESIGN**

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



**with riveting nut M4 (-EM, at an extra charge):**  
 At an extra charge, the connection plates can be provided with M4 riveting nuts to facilitate ceiling mounting.

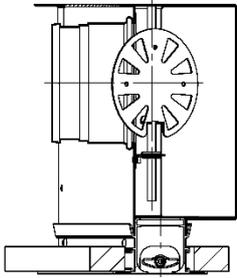


**Damper (-DK0 / -DK1), for ASK-45**

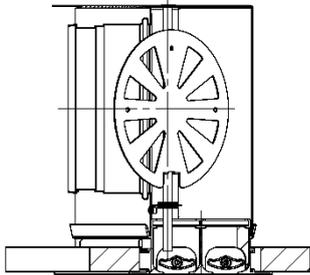
- without damper (-DK0) (standard)
- with damper (-DK1) (standard for spigot position -S1)

**-DK1, inner lateral connection (-S1, standard)**

DSCU-1-...-ASK-45-1-...-DK1-...-S1-...



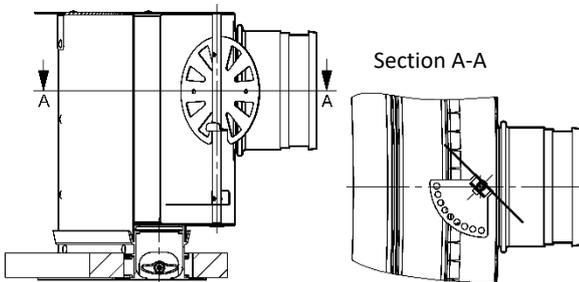
DSCU-2-...-ASK-45-2-...-DK1-...-S1-... /  
 DSCU-3-...-ASK-45-3-...-DK1-...-S1-...



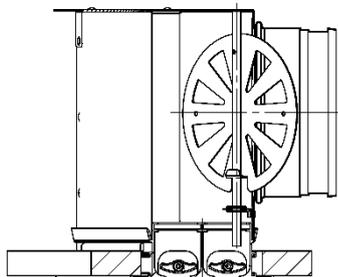
**-DK1, outer lateral connection (-S2)**

DSCU-1-...-ASK-45-1-...-DK1-...-S2-...

(only for 1-slot models)



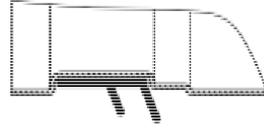
DSCU-2-...-ASK-45-2-...-DK1-...-S2-... /  
 DSCU-3-...-ASK-45-3-...-DK1-...-S2-...



**Rubber lip seal (-GD0 / -GD1), for ASK-45**

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

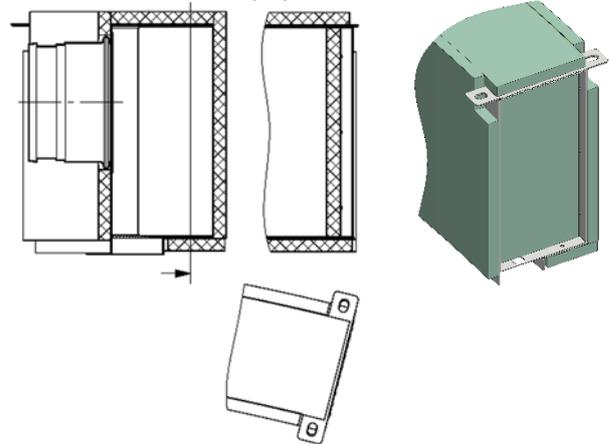
**Detail Y**



**Insulation (-I0 / -Ia), for ASK-45**

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

**with external insulation (-Ia)**



## FASTENING METHODS

### With plenum box

#### Permanent connection with plenum box (-FV)

Standard for the model DSCU-R0.

The slot diffuser is permanently connected to the plenum box. (see pages 8+9)

#### DSCU-...-FV-...



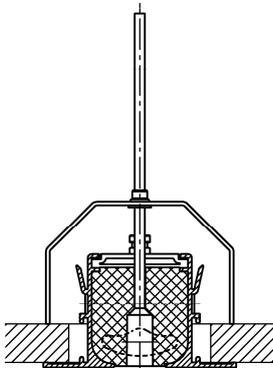
### Without plenum box

#### Mounting with clamp strap (-KB)

Screws and clamp straps are supplied loose (2 pieces). Only possible without plenum box.

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

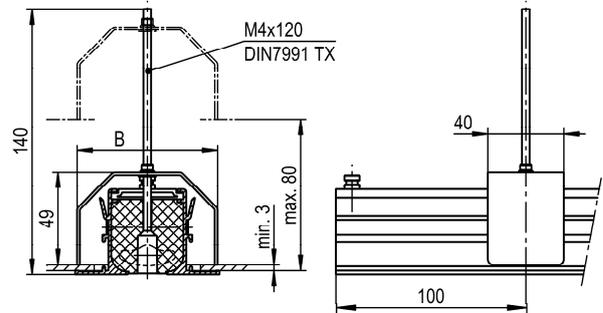
**For mounting, access on the rear is not required!** (see "Assembly overview" on the right)



## ASSEMBLYOVERVIEW

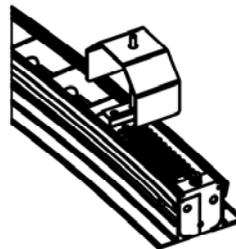
### MOUNTING WITH CLAMP STRAP (-KB)

#### DSCU-...-KB-...

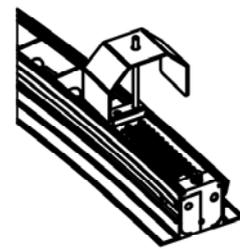


	B
DSCU-1	74
DSCU-2	114
DSCU-3	154

In mounting position:



In clamping position:



#### Mounting instructions for clamp strap

Introduce the screw through the plastic support for concealed mounting of the slot diffuser and screw it on the clamp strap. Position the clamp straps in longitudinal direction and introduce them, together with the slot diffuser, 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 max. torque of the fastening screw is 0.5 Nm.**

## TECHNICAL DATA

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See technical documentation of SCHAKO slot diffuser DSC.

## LEGEND

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R	=	radius
KHS	=	height of plenum box
GH	=	total height
KB	=	width of box
EÖB	=	installation opening width
TS	=	section
BoL	=	curved length of diffuser
DBoL	=	difference in curved length of diffuser
BBoL	=	curved length of diffuser, band design
EÖBoL	=	curved length of installation opening
EÖBBoL	=	curved length of installation opening, band design
KBoL	=	curved length of plenum box (KBoL = BoL - 3)
KDBoL	=	difference in curved length of plenum box (KDBoL = DBoL - 3)
GKBoL	=	total curved length of box (GKBoL = BBoL - 3)

## SLOT DIFFUSER ORDER CODE

01	02	03	04	05	06	07
Type	Model	Air throw	Frame profile	Frame surface	Blade colour	Blade position for air jet
<b>Example</b>						
DSCU	-1	-Z	-R0	-9010	-L9005	-B

08	09	10	11	12	13
Single / band design	Curved length	Radius	Mounting	End piece	Dummy piece
<b>Example</b>					
-N	-01000	-02000	-FV	-ES	-BS0

### Sample

DSCU-1-Z-R0-9010-L9005-B-N-01000-02000-FV-ES-BS0

DSCU slot diffuser | 1-slot | Supply air | Frame profile STANDARD | Aluminium painted to RAL colour 9010 (white) | Blade made of plastic material, similar to RAL 9005 (black) | Blades with horizontal two-way throw | Single design | Curved length 1000 mm | Radius 2000 mm | Permanent connection to plenum box | With end piece | Without dummy piece

### ORDER DETAILS

#### 01 - Type

DSCU = DSCU slot diffuser

#### 02 - Model

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

#### 03 - Air throw

Z = supply air (with blades)  
 A = return air (without blades)

#### 04 - Frame profile

R0 = Frame profile STANDARD

#### 05 - Frame surface

ELOX = Natural colour anodised aluminium (standard)  
 9006 = aluminium painted to RAL colour 9006 (white aluminium)  
 9010 = Aluminium painted to RAL colour 9010 (white)  
 xxxx = aluminium painted to a freely selectable RAL colour (at an extra charge, always with 4 digits)

#### 06 - Blade colour

L0000 = without blades (only for return air).  
 L9005 = blades made of plastic material (hard PVC) similar to RAL 9005 (black) (standard).  
 L9006 = blades made of plastic material (hard PVC) similar to RAL 9006 (white aluminium).  
 L9010 = blades made of plastic material (hard PVC) similar to RAL 9010 (white).  
 Lxxxx = blades made of plastic material (hard PVC), painted to a freely selectable RAL colour (always with 5 digits).

#### 07 - Blade position for air jet

0 = without blades, for return air, with perforated plate.  
 V = blades with vertical throw.  
 L = blades with horizontal one-way throw toward the inside.  
 R = blades with horizontal one-way throw toward the outside.  
 B = blades with horizontal two-way throw (standard).

#### 08 - Single / band design

N = single design (curved length max. 1500 mm).  
 B = band design (curved length distribution according to SCHAKO standard lengths for band design).

#### 09 - Curved length

01000 = standard curved length BoL = 1000 mm.  
 01500 = standard curved length BoL = 1500 mm.  
 xxxxx = curved length (BoL/BBOL) in mm, freely selectable (always with 5 digits, curved length min. 400 mm / max. 1500 mm).

#### 10 - Radius

xxxxx = specify a radius  $\geq 2000$  mm (e.g. 02000, always with 5 digits).

#### 11 - Mounting

FV = permanent connection to plenum box (only possible with plenum box) (standard).  
 KB = clamp strap (not for use with plenum box), screws and clamp strap supplied loose (pair).

#### 12 - 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 side.  
 ER = with end piece mounted ex works on the right side.

#### 13 - Dummy piece

BS0 = without dummy piece (standard).  
 BS1 = with dummy piece made of sheet steel painted to RAL 9005 (black).  
 Dummy piece only possible without plenum box. Possible from curved length BoL  $\geq 200$  mm. Mounting only possible with clamp strap (-KB).

## PLENUM BOX ORDER CODE

01	02	03	04	05	06	07	08
Type	Diffuser	Model	Single / band design	Curved length	Radius	Mounting of box	Material
<b>Example</b>							
ASK	-45	-1	-N	-01000	-02000	-FV	-SV

09	10	11	12	13	14	15
Damper	Rubber lip seal	Insulation	Height of plenum box	Spigot position	Spigot diameter	Suspension
-DK1	-GD1	-I0	-KHS	-S1	-SDS	-E0

### Sample

**ASK-45-1-N-01000-02000-FV-SV-DK1-GD1-I0-KHS-S1-SDS-E0**

Plenum box | for DSCU slot diffuser | 1-slot | Single design | Curved length 1000 mm | Radius 2000 mm | Permanent connection | Galvanised sheet steel | With damper | With rubber lip seal | Without insulation | Standard height of box | Inner lateral spigot position | Standard spigot diameter | Without riveting nut

### ORDER DETAILS

#### 01 - Type

ASK = plenum box

#### 02 - Diffuser

45 = for DSCU slot diffuser

#### 03 - Model

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

#### 04 - Single / band design

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

#### 05 - Curved length

01000 = curved length BoL = 1000 mm.  
 01500 = curved length BoL = 1500 mm.  
 xxxxx = curved length (BoL/BBoL) in mm, freely selectable (always with 5 digits)  
 (Curved length of plenum box KBoL = BoL - 3 / total curved length of box = BBoL - 3, in case of single design with curved length min. 400 mm / max. 1500 mm.)

#### 06 - Radius

xxxxx = specify a radius  $\geq 2000$  mm (e.g. 02000, always with 5 digits)

#### 07 - Mounting of box

FV = permanent connection (standard)

#### 08 - Material

SV = galvanised sheet steel (standard)

#### 09 - Damper

DK0 = without damper (standard)  
 DK1 = with damper

#### 10 - Rubber lip seal

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

#### 11 - Insulation

I0 = without insulation (standard)  
 Ia = with external insulation

#### 12 - Height of plenum box

KHS = standard height of plenum box  
 xxx = height of box in mm, freely selectable (always with 3 digits) (minimum height [GH] with spigot position  $S1 + S2 = \text{spigot diameter } \varnothing D + 82 \text{ mm}$ )

#### 13 - Spigot position

S1 = inner lateral spigot (standard).  
 S2 = outer lateral spigot.

#### 14 - Spigot diameter

SDS = spigot diameter standard.  
 xxx = spigot diameter ( $\varnothing D$ ) in mm, freely selectable (always with 3 digits)

#### 15 - Suspension

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

## SPECIFICATION TEXT

Highly inductive curved slot diffuser, free cross-section, resistance and sound power level constant in all blade positions.

**Supply air** model with pivoting air deflection blades in support profile shape made of plastic material (hard PVC):

- Colour similar to RAL 9005 (black, standard) (-L9005).
- Colour similar to RAL 9006 (white aluminium) (-L9006).
- Colour similar to RAL 9010 (white) (-L9010).
- painted to a freely selectable RAL colour (-Lxxxx, always with 5 digits).

Product: SCHAKO type DSCU-...-Z-...

**Return air** model without air deflection blades (-00000), with perforated plate made of sheet steel painted to RAL 9005 (black), as cover screen.

Product: SCHAKO type DSCU-...-A-...

**Model** (number of slots):

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

**Frame profile:**

- STANDARD frame profile (-R0)

**Frame surface:**

- Natural colour anodised aluminium (standard, -ELOX)
- Aluminium painted to:
  - RAL colour 9006 (white aluminium) (-9006).
  - RAL colour 9010 (white) (-9010).
  - a different RAL colour, freely selectable (-xxxx) (always with 4 digits).

**Blade position** for air jet:

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

**Curved length / model:**

Single design (-N)

- curved length BoL = 1000 mm (-N-01000)
- curved length BoL = 1500 mm (-N-01500)
- Curved length (BoL) in mm, freely selectable (-N-xxxxx, always with 5 digits) (In case of single design with curved length BoL =  $\geq 400$  mm to  $\leq 1500$  mm can be fitted with a plenum box.)

Band design (-B)

- Curved length (BBoL) in mm, as band (-B-xxxxx) (Curved length distribution according to SCHAKO standard, with connecting pins, supplied loose (2x for each connection)).

**Radius:**

- Radius  $\geq 2000$  mm (-xxxxx, always with 5 digits)

**Mounting:**

- Permanent connection with plenum box (-FV)
  - Only possible with plenum box (-ASK-45).
  - The slot diffuser is permanently connected to the plenum box.
- 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!

**Accessories:**

- End pieces (-E0 / -ES / -EB / -EL / -ER)
  - without end piece (-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).
- Dummy piece (-BS0 / -BS1)
  - without dummy piece (-BS0) (standard).
  - with dummy piece (-BS1):
    - made of sheet steel painted to RAL 9005 (black).
    - Only possible without plenum box.
    - with fastening clips for mounting on the slot diffuser.
    - possible from curved length BoL  $\geq 200$  mm.
    - Mounting only possible with clamp strap (-KB).
- Plenum box (-ASK-45), with mounting brackets.
  - Model (number of slots):
    - 1-slot (-1)
    - 2-slot (-2)
    - 3-slot (-3)
  - Single / band design:
    - single design (-N, curved length of box KBoL max. 1500 mm).
    - Band design (-B, curved length distribution according to SCHAKO standard lengths for band design).
  - Curved length:
    - curved length BoL = 1000 mm (-01000) (KBoL = 997 mm)
    - curved length BoL = 1500 mm (-01500) (KBoL = 1497 mm)
    - curved length (BoL / KBoL) in mm, freely selectable (-xxxxx, always with 5 digits) (Curved length of box KBoL = BoL-3 / total curved length of box GKBoL = BBoL-3, in case of single design with curved length BoL =  $\geq 400$  mm to  $\leq 1500$  mm can be fitted with a plenum box).
  - Radius:
    - specify a radius  $\geq 2000$  mm (-xxxxx, always with 5 digits)
  - Mounting of box:
    - Permanent connection (-FV) (standard).
  - Material:
    - Galvanised sheet steel (-SV) (standard).

- Damper:
  - without damper (-DK0) (standard)
  - With damper (-DK1) made of galvanised sheet steel, adjustable, for simple air volume regulation in the plenum box housing.
- Rubber lip seal:
  - without rubber lip seal (-GD0) (standard)
  - with rubber lip seal (-GD1), made of special rubber, at the connection spigot.
- Insulation:
  - without insulation (-I0) (standard)
  - with external insulation (-Ia), thermal insulation at the outside of the plenum box.
- Height of plenum box:
  - standard height of box (-KHS)
  - height of box in mm, freely selectable (-xxx, always with 3 digits) (minimum height [GH] for spigot position  $S1+S2 = \text{spigot diameter } \varnothing D + 82 \text{ mm}$ ).
- Spigot position:
  - inner lateral spigot (-S1) (standard)
  - outer lateral spigot (-S2)
- Spigot diameter:
  - standard spigot diameter (-SDS)
  - Spigot diameter ( $\varnothing D$ ) in mm, freely selectable (-xxx, always with 3 digits).
- Suspension:
  - without riveting nut (-E0) (standard)
  - With riveting nut (-EM), made of brass.