# **Technical documentation**





Curved slot diffuser for plasterboard ceilings

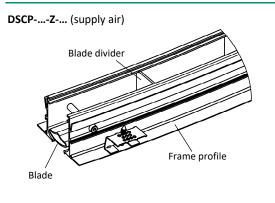
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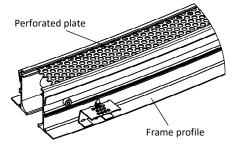
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# **OVERVIEW OF PRODUCT VERSIONS**



DSCP-...-A-... (return air)



FUNCTION AND USE

The curved ceiling slot diffuser type DSCP is suitable for use in rooms with a height between 2.6 m and 4 m for direct installation in plasterboard ceilings or ceiling cavities (pressure ceilings). The special shape of the frame profile allows good installation in the plasterboard ceiling.

Frame profiles are fitted with bores to allow them to be connected to the plasterboard ceiling using screws. Mounting brackets are supplied loose as a mounting aid. The air deflection blades adjustable from below allow a variety of throw adjustment options. In cooling mode, a one- or two-way air throw pattern can be set. 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. The large free cross-section allows a greater volumetric flow compared with other slot diffusers. Thanks to its stable air jet and high induction, the curved DSCP 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 curved slot diffuser can be manufactured as 1- or 2-slot model and is available either in single design or in band design.

# MODELS

DSCP-1	1-slot
DSCP-2	2-slot
DSCPZ	Supply air (with blades)
DSCPA	Return air (without blades, with perforated plate)
DSCPPL	Frame profile PLASTER
DSCPV	Blades with vertical throw
DSCPL	Blades with horizontal one-way throw toward the inside
DSCPR	Blades with horizontal one-way throw toward the outside
DSCPB	Blades with horizontal two-way throw (standard)
DSCP0	Without blades, with perforated plate (for return air)
DSCPN	Single design (curved length max. 1500 mm)
DSCPB	Band design (curved length distribution according to SCHAKO standard lengths for band design)

#### MOUNTING

-- without box mounting (-OM, standard)



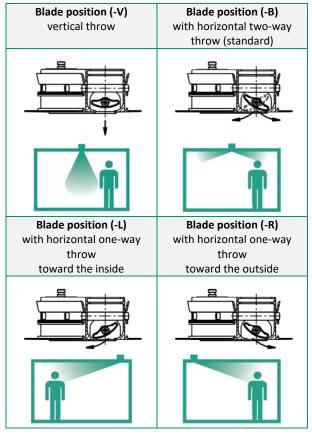
# **QUICK SELECTION**

#### Without plenum box

Values for curved length BoL = 1,000 mm

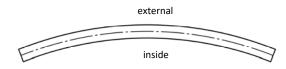
[	OSCP-1	. (1-slot)			OSCP-2	(2-slot)	
Vzu	J	Lwa	∆pt	Vzu	J	Lwa	∆pt
(m³/h)	[l/s]	[dB(A)]	(Pa)	(m³/h)	[l/s]	[dB(A)]	(Pa)
60	16.7	< 20	5	100	27.8	< 20	5
80	22.2	21	8	130	36.1	22	8
100	27.8	28	13	160	44.4	28	13
120	33.3	33	17	200	55.6	35	17

# **BLADE POSITION FOR AIR JET**



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

# Schematic diagram of a curved shape



### DSCP TECHNICAL DOCUMENTATION

Quick selection I Processing

# PROCESSING

# Frame surface

- frame profile PLASTER (-PL) made of:
  - natural aluminium (-ALRO) (standard)
  - Aluminium painted to:
    - RAL colour 9005 (-9005) (black)
  - a freely selectable RAL colour (-xxxx, always with 4 digits).
- central partition (only for 2-slot models):
- for supply air
  - for frame made of natural aluminium, same RAL colour as the blade.
  - for painted frame made of aluminium, same RAL colour as the frame.
  - for return air, made of aluminium painted to RAL 9005 (black).

### Blade colour

- Plastic (hard PVC):
  - Colour similar to RAL 9005 (black, standard) (-L9005)
  - Colour similar to RAL 9010 (white) (-L9010)
- Freely selectable RAL colour (-Lxxxx, always with 5 digits)
- 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), same colour as the blade.

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

-- Plastic (PA type 6), same colour as the blade.

#### External blade plates (end plates)

-- Plastic (ABS), same colour as the blade.

### Connecting pin

- Connection diffuser diffuser:
- -- Made of plastic material
- -- For band design only
- -- Supplied loose (2x for each connection)

#### End piece (-EP/-EB)

- -- With surrounding edge for plastering, mounted ex works on both sides (-EP) (standard).
  - made of galvanised sheet steel
- straight, mounted ex works on both sides (-EB).
   made of galvanised sheet steel

In the band design, the end piece is mounted to the left side of the section (left TS) and to the right side of the difference in curved length (DBolL) as a standard.

# Mounting bracket

- -- Made of perforated sheet steel
- -- Supplied loose
- -- For plasterboard ceiling:
  - ceiling depth T = 12.5 mm (-125) (standard)
  - ceiling depth T = 9.5 mm (-095)
  - ceiling depth (T) freely selectable (-xxx, always with 3 digits)
  - algits)
  - mounting aid for screw connection

#### Ceiling cutout template

- -- Cutout template for plasterboard ceiling
- -- Supplied loose
- -- made of galvanised sheet steel



# ACCESSORIES

# Plenum box (-ASK-46)

- -- Model (number of slots):
  - 1-slot (-1)
  - 2-slot (-2)
  - 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) (curved length of box KBoL=1000 mm)
  - curved length BoL = 1500 mm (-01500) (curved length of box KBoL=1500 mm)
  - curved length (BoL/BBol) in mm, freely selectable (xxxxx, always with 5 digits) (curved length of box KBoL = BoL / total curved length of box GKBoL = BBoL).
- Radius:
  - specify a radius R =  $\geq$ 2000 mm (-xxxx, always with 5 digits)
- Mounting of box:
- without diffuser mounting (-OM) (standard)
   Material:
  - Galvanised sheet steel (-SV) (standard)
- -- Damper:
  - without damper (-DK0) (standard)
  - With damper and cable-operated adjustment (-DK2) made of galvanised sheet steel, in the connection spigot, adjustable, for simple air volume regulation.
- -- Rubber lip seal:
  - without rubber lip seal (-GD0) (standard)
  - With rubber lip seal (-GD1) made of special rubber, at the connection spigot.
- -- Insulation:
  - without insulation (-I0) (standard)
  - With insulation outside (-la), thermal insulation at the outside of the plenum box.
- -- Height of plenum box:
  - Standard height of box (-KHS)
  - Height of box (KHS) in mm, freely selectable (-xxx) (always with 3 digits) (minimum height of box [KHS] with spigot position S1+S2 = spigot diameter øD + 82 mm / with spigot position S0 = 220 mm).
- -- Spigot position:
  - spigot from above (-SO)
  - inner lateral spigot (-S1) (standard)
  - outer lateral spigot (-S2)
- -- Spigot diameter:
  - standard spigot diameter (-SDS)
  - Spigot diameter (øD) in mm, freely selectable (-xxx, always with 3 digits).
- -- Suspension without riveting nut (-E0) (standard).
- -- With air diffuser plate, made of galvanised sheet steel.

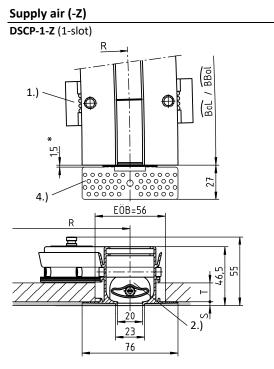
DSCP TECHNICAL DOCUMENTATION Accessories I

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

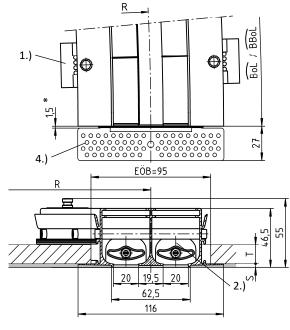
- -- without dummy piece (-BS0) (standard)
- -- with dummy piece (-BS1):
  - made of sheet steel painted to RAL colour 9005 (black).
  - possible from curved length BoL  $\geq$  200 mm.
  - only possible without plenum box ASK-46.
  - with fastening clip for mounting on the slot diffuser.



# DIMENSIONS



DSCP-2-Z (2-slot)



#### Filling

For screw connection: S = 4 mm

#### **Plasterboard ceiling**

T = 9.5 mm / 12.5 mm (standard) / can be freely selected. (See page 12)

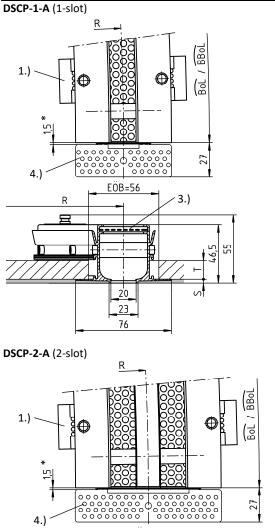
Frame profiles are fitted with bores to allow them to be connected to the plasterboard ceiling using screws. Mounting brackets are supplied loose as a mounting aid (see page 12). The number of brackets depends on the length (L).

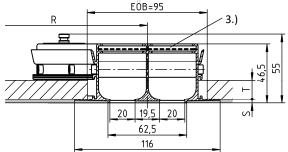
#### **Curved length distribution**

see Curved length distribution for slot diffuser (page 6).

# DSCP **TECHNICAL DOCUMENTATION** Dimensions I

# Return air (-A)





#### **Radius**

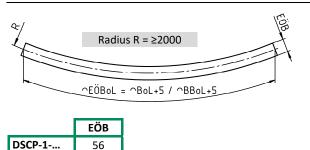
The radius R (for 1- / 2-slot) is always specified in the centre of the slot diffuser. Radius R = ≥2000

#### BoL =

- curved length (diffuser) curved length of band (diffuser) BBoL -
- 1.) Mounting bracket included in delivery
- 2.) Air deflection blade
- 3.) Perforated plate
- 4.) End piece
- Gap width between frame and end piece



# Installation opening



# Curved length distribution for slot diffuser

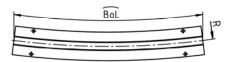
#### Single design (-N)

DSCP-2-...

- curved length **BoL = 1000 mm** (-N-01000)
- curved length BoL = 1500 mm (-N-01500)

95

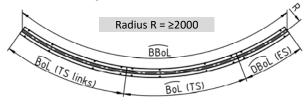
Curved length (BoL) in mm, freely selectable (-N-xxxxx) (always with 5 digits) (In case of single design with curved length BoL = ≥500 mm to <1500 mm can be fitted with a plenum box).</li>



#### Band design (-B)

 curved length (BBoL) in mm, freely selectable, as band (-Bxxxxx)

(total curved length of box GKBoL = BBoL)



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

When the slot diffuser type DSCP 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  $\geq$ **500 mm to <1500 mm**. The curved difference pieces from  $\geq$  **200 mm to < 500 mm** are designed as dummy pieces without plenum box.

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

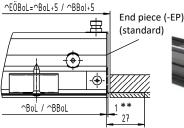
ES	=	end piece
TS	=	section
Left TS	=	left section
BoL	=	curved length (diffuser)
DBoL	=	difference in curved length (diffuser)
BBoL	=	curved length of band (diffuser)
KBoL	=	curved length of box (KBoL = BoL)
GKBoL	=	total curved length of box (GKBoL = BBoL)
EÖB	=	installation opening width
EÖBoL	=	curved length of the installation opening
		(EÖBoL = BoL+5 / BBoL+5)

# DSCP TECHNICAL DOCUMENTATION Dimensions I

# End piece (-EP / -EB)

- with end piece with surrounding edge for plastering, mounted ex works on both sides (-EP) (standard).
  - with straight end piece, mounted ex works on both sides (-EB).

# End piece (-EP) (standard)

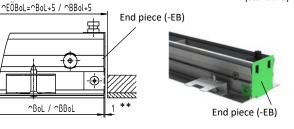


# EÖBoL = BoL+5 / BBoL+5









End pieces are mounted ex works on the slot diffuser, as plastering edge for elegant filling.

In the single design, the end pieces are fixed to the left and right front side of the slot diffuser.

In the band design, the end piece is mounted to the left side of the section (left TS) and to the right side of the difference in curved length (DBoL) as a standard.

# **Plasterboard ceiling**

For screw connection, mounting brackets (mounting aid) are supplied loose (see page 12).

The quantity depends on the curved length (BoL).

\*\* Material thickness end piece

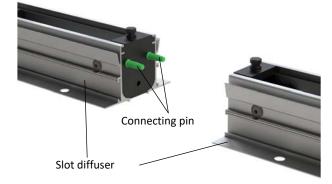
- Left TS = left section
- BoL = curved length (diffuser)
- BBoL = curved length of band (diffuser)
- DBoL = difference in curved length (diffuser)
- EÖBoL = curved length of the installation opening (EÖBoL = BoL+5 / BBoL+5)



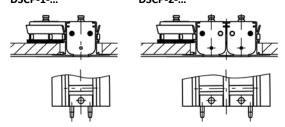
# Slot diffuser connection in band design

# Slot diffuser - slot diffuser

With connecting pin: Supplied loose (2x for each connection)



#### Arrangement of connecting pins DSCP-1-... DSCP-2-...



#### Attention:

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

Dimensions I Dimensions of accessories

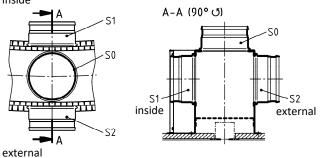
# **DIMENSIONS OF ACCESSORIES**

### Plenum box (-ASK-46)

#### **Spigot position**

- S0 = spigot from above, in the sheet housing case (in the middle of the curved length KBol or DKBoL).
- S1 = inner lateral spigot, in the sheet housing case (in the middle of the curved length KBol or DKBoL) (standard).
- S2 = outer lateral spigot, in the sheet housing case (in the middle of the curved length KBol or DKBoL).

#### inside



For dimensions of the plenum box, see page 8+9.

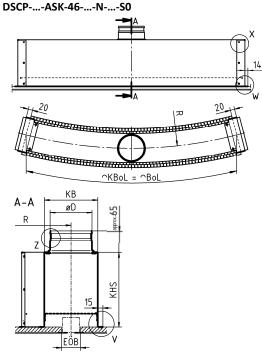


# Plenum box (-ASK-46)

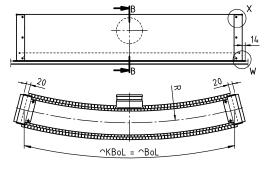
# Plenum box (-ASK-46-...-N-...) in single design

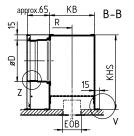
Mounting of box without diffuser mounting (-OM)

with spigot from above (-S0):



# with inner lateral spigot (-S1, standard): DSCP-...-ASK-46-...-N-...-S1





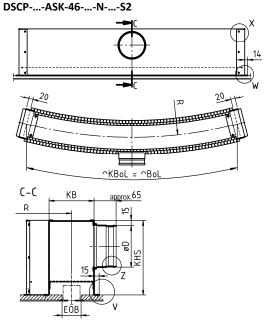
For rubber lip seal, detail Z, see page 10. For fastening detail, detail V and W, see page 10. For plenum box suspension, detail X, see page 10. For installation opening, see page 6.

BoL =		curved length (diffuser)
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KBoL	=	curved length of box (KBoL = BoL)

EÖB = installation opening width

with outer lateral spigot (-S2):



### Available sizes for plenum box (-ASK-46-...-N)

	EÖB	К	В	KHS		øD	
		-S0	-S1		KBoL		
			-S2		≤ 1040	> 1040 ≤	
						1540	
DSCP-1	56	157	132	220	1x ø98	1x ø123	
DSCP-2	95	172	172	280	1x ø138	1x ø138	
All dimensions in mm.							

BoL	EÖBoL	KBoL	Weight (kg)		
			DSCP-1	DSCP-2	
1000	1005	1000	4.5	5.5	
1500	1505	1500	6.8	8.3	

All dimensions in mm.

The plenum box ASK-46 is manufactured as standard in the box lengths KBoL = 1000 mm or 1500 mm.

Intermediate curved lengths and other spigot diameters are available upon request.

The radius R (for 1 - / 2-slot) is always specified in the centre of the slot diffuser or of the plenum box.

Radius R = ≥2000 mm

Minimum height of box [KHS] with spigot position S1+S2 = spigot diameter  $\phi$ D + 82 mm / with spigot position S0 = 220 mm.



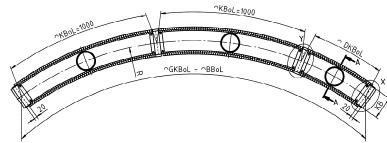
I Dimensions of accessories

# Plenum box (-ASK-46-...-B-...) in band design

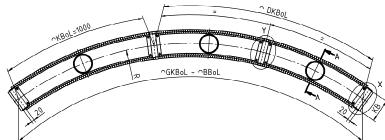
Mounting of box without diffuser mounting (-OM)

#### with spigot from above (-S0): DSCP-...-ASK-46-...-B-...-S0

Difference in length of box, 1-part (DKBoL =  $\geq$ 500 to  $\leq$ 1000)

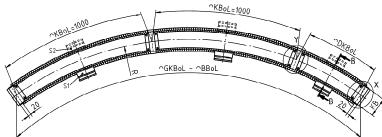


Difference in length of box, 2-part (DKBoL = >1000 to <1500)

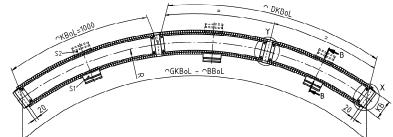


with inner lateral spigot (-S1) or outer lateral spigot (-S2): DSCPL-...-ASK-46-...-B-...-S1/S2

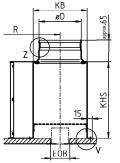
Difference in length of box, 1-part (DKBoL = ≥500 to ≤1000)



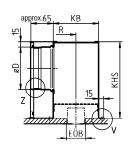
Difference in length of box, 2-part (DKBoL = >1000 to <1500)



Section A-A (90° ひ) with spigot from above (-S0) DSCP-...-ASK-46-...-B-...-S0



Section B-B (90° ひ) with inner lateral spigot (-S1) DSCP-...-ASK-46-...-B-...-S1



Available sizes for plenum box (-ASK-46-...-B)

	КВ		KHS	øD	EÖB
	-S0	-S1 / -S2			
DSCP-1	157	132	220	ø98	56
DSCP-2	172	172	280	ø138	95

All dimensions in mm.

### Available lengths according to SCHAKO standard:

For the plenum box in band design (BoL = > 1500 mm), the total curved length of the box GKBoL is divided into standard curved lengths KBoL = 1000 mm and one or two difference boxes.

The difference box is available in one piece from a curved length (DKBoL) of  $\geq$ 500 mm to  $\leq$ 1000 mm and in two pieces from a curved length (DKBoL) >1000 mm to <1500 mm.

#### A difference box with a curved length (DKBoL) <500 mm is not possible.

Box section and box front side fastening as well as a connecting angle must be provided on site. Intermediate lengths and other spigot diameters upon request

The radius R (for 1- / 2-slot) is always specified in the centre of the slot diffuser or of the plenum box.

#### Radius R = ≥2000 mm

Minimum height of box [KHS] with spigot position S1+S2 = spigot diameter ØD + 82 mm / with spigot position S0 = 220 mm.

For rubber lip seal, detail Z, see page 10. For fastening detail, detail V, see page 10. For plenum box suspension, detail X and Y, see page 10. For installation opening, see page 6.

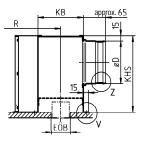
- total curved length of box (GKBoL = BBoL) curved length of band (diffuser) GKBoL = BBoL
  - = =
  - curved length of box (KBoL = BoL) difference in curved length
- DKBoL
  - width of box
- installation opening width EÖBoL
  - curved length of installation opening (EÖBoL = BoL + 5 / BBoL + 5)

Section B-B (90° ひ) with outer lateral spigot (-S2) DSCP-...-ASK-46-...-B-...-S2

KBoL

KB

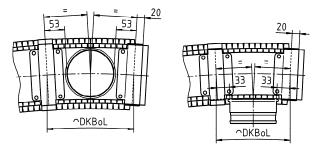
EÖB



Construction subject to change No return possible



#### Minimum distance between spigots in the plenum box with spigot from above (-S0): with lateral spigot (-S1):

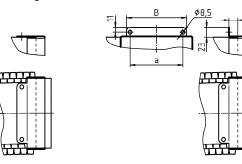


As standard, the plenum box difference pieces (DKBoL) have the same dimensions KHS / KB / ØD as the plenum box standard piece (KBoL).

#### **Plenum box suspension**

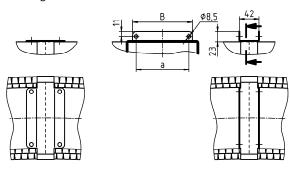
#### Single design / band design

Detail X (box front side) As-delivered condition On-site with bent fixing lug with fitted mounting bracket



### Band design

Detail Y (connecting bracket) As-delivered condition On-site with bent fixing lug with fitted mounting bracket



	Spigot position	КВ	а	В
DSCP-1	-S1/-S2	132	93.5	109.5
	-S0	157	118.5	134.5
DSCP-2	-S0/-S1/-S2	172	133.5	149.5

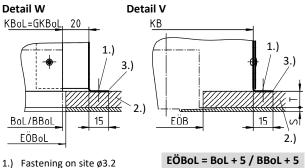
# DSCP **TECHNICAL DOCUMENTATION**

I Dimensions of accessories

### **Fastening details**

For suspension, the plenum box is provided with fixing holes. A permanent connection to the plasterboard ceiling via ø 3.2 bores is also possible. In this case, the plenum box must be additionally decoupled from the plasterboard ceiling using vibration dampening material.

A suitable filling compound must be provided on site.



- 2.) Plasterboard ceiling on site
- 3.) Decoupling (leak proofing on site)
- Т = depth of plasterboard ceiling
- = thickness of filling compound
- S EÖBoL = curved length of the installation opening (EÖBoL = BoL + 5 / BBoL+5)
- BoL
- curved length (diffuser)curved length of band (diffuser) BBoL
- KBoL = curved length of box (KBoL = BoL)
- = total curved length of box (GKBoL = BBoL) GKBoL
- = installation opening width EÖB = width of box KB

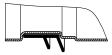
If a plenum box is used, make sure that it has no direct contact to the diffuser. The volumetric flow adjustment must be carried out on site.



# Rubber lip seal (-GD0/-GD1), for ASK-46

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

**Detail Z** 

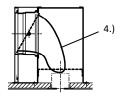


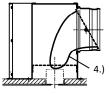
# Damper (-DK0/-DK2), for ASK-46

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

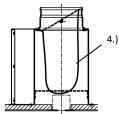
### -DK2 (with cable-operated adjustment):

Inner lateral spigot (-S1) Outer lateral spigot (-S2) (standard)





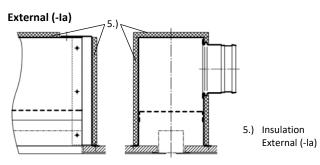
#### Spigot from above (-SO)



4.) With cable-operated adiustment (SZV)

# Insulation (-IO/-Ia), for ASK-46

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



# DSCP TECHNICAL DOCUMENTATION

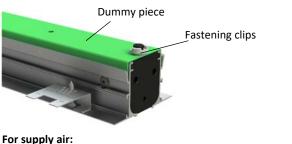
I Dimensions of accessories

# Dummy piece (-BS0/-BS1)

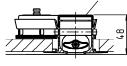
- without dummy piece (-BSO) (standard)
- -- with dummy piece (-BS1):
  - made of sheet steel painted to RAL 9005 (black)
  - possible from curved length BoL ≥ 200 mm.
  - only possible without plenum box ASK-46.
  - with fastening clips for mounting on the slot diffuser.

# with dummy piece (-BS1)

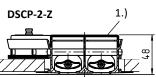
\_

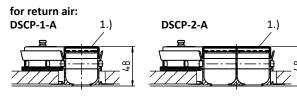






1.)





1.) Dummy piece

#### **Available lengths**

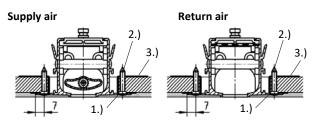
see Curved length distribution for slot diffuser, page 6.



# **FASTENING METHODS**

#### screw connection (on site)

Arrangement, number and size of the bores are the same for 1- and 2-slot models.



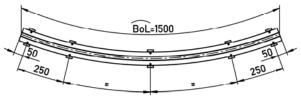
- 1.) Indentation ISO 15065-4
- 2.) Dry wall screw 3.5x35, use according to DIN EN 14566 on site.
- 3.) Mounting bracket

#### Number of indentations, single design

#### BoL= 1000 / with 8 indentations



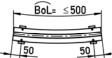
#### BoL= 1500 / with 10 indentations



#### Number of indentations, band design

For compensation pieces and sections

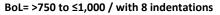
BoL= ≤500 / with 4 indentations

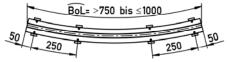


BoL= >500 to ≤750 / with 6 indentations

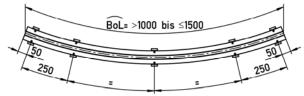








BoL= >1,000 to  $\leq$ 1,500 / with 10 indentations

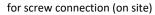


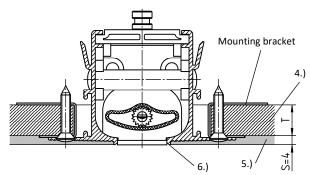
# DSCP TECHNICAL DOCUMENTATION

Fastening methods I Assembly detail

# **ASSEMBLY DETAIL**

#### With mounting bracket:



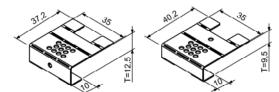


- 4.) Plasterboard ceiling
- 5.) Multiple filling on site (depending on quality level)
- 6.) Special plastering edge for elegant filling

#### Number of mounting brackets (mounting help)

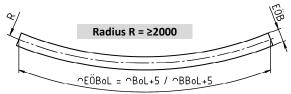
- 4 mounting brackets: BoL / DBoL = ≤500
- 6 mounting brackets: BoL / DBoL = >500 to  $\leq$ 750
- 8 mounting brackets: BoL / DBoL = >750 to ≤1000
- 10 mounting brackets: BoL / DBoL = >1000 to  $\leq$ 1500

#### Mounting bracket:



The mounting bracket is supplied loose and unbent. It will then be canted on site in order to fit the required ceiling depth. The single bore serves here as a marking for the ceiling depth T=12.5.

#### **Plasterboard ceiling**



The curved length of the installation opening (EÖBoL) refers to the middle of the slot diffuser.

Frame profiles are fitted with bores to allow them to be connected to the plasterboard ceiling using screws. Mounting brackets are supplied loose as a mounting aid. The quantity depends on the curved length (BoL).

### Filling

For screw connection: S = 4 mm

BoL	= curved length (diffuser)
BBoL	= curved length of band (diffuser)
DBoL	<ul> <li>difference in curved length (diffuser)</li> </ul>
EÖBoL	= curved length of the installation opening
	(EÖBoL = BoL + 5 / BBoL + 5)

EÖB = installation opening width



# **INSTALLATION INSTRUCTIONS**

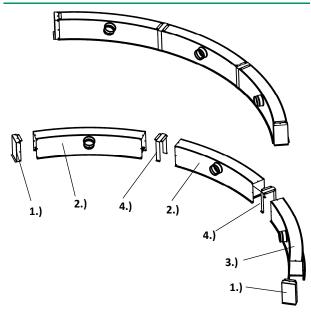
The installation of the DSCP / DSCPL / DSCL / DSCXL slot diffusers is identical (see installation instructions "DSCP / DSCPL / DSCL / DSCXL installation in plasterboard ceilings").



See video on YouTube:

https://www.youtube.com/jcFsmPI0D18

# **MOUNTING INSTRUCTIONS**



- 1.) Box front side
- 2.) Plenum box, band design, standard
- 3.) Plenum box, band design, difference piece
- 4.) Connecting angle

# DSCP TECHNICAL DOCUMENTATION

Installation instructions I Legend

# LEGEND

R	=	radius
KHS	=	height of box
GH	=	total height
KB	=	width of box
EÖB	=	installation opening width
Т	=	depth of plasterboard ceiling
S	=	thickness of filling compound
øD	=	diameter
TS	=	section
ES	=	end piece
BoL	=	curved length (diffuser)
DBoL	=	difference in curved length (diffuser)
BBoL	=	curved length of band (diffuser)
EÖBoL	=	curved length of installation opening
		(EÖBoL = BoL + 5 / BBoL+5)
KBoL	=	curved length of box (KBoL = BoL)
DKBoL	=	difference in curved length
GKBoL	=	total curved length of box
		(GKBoL = BBoL)



# SLOT DIFFUSER ORDER CODE

01	02	03	04	05	06	07
Туре	Model	Air throw	Frame profile	Frame surface	Blade colour	Blade position for air jet
Example						
DSCP	-2	-Z	-PL	-ALRO	-L9005	-V

08	09	10	11	12	13	14
Single /Band design	Curved length	Radius	Mounting	Ceiling depth	End piece	Dummy piece
Example						
-N	-01000	-02000	-OM	-125	-EB	-BSO

#### Sample

#### DSCP-2-Z-PL-ALRO-L9005-V-N-01000-02000-OM-125-EB-BS0

DSCP slot diffuser for plasterboard ceilings | 2-slot | supply air | frame profile PLASTER | natural aluminium | blades made of plastic material, similar to RAL 9005 (black) | blades with vertical throw | single design | curved length BoL = 1000 mm | radius 2000 mm | without box mounting | ceiling depth T = 12.5 mm | with end piece mounted ex works on both sides | without dummy piece

#### **ORDER DETAILS**

#### 01 - Type

DSCP = DSCP slot diffuser for plasterboard ceilings

#### 02 - Model

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

#### 03 - Air throw

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

#### 04 - Frame profile

PL = frame profile PLASTER

#### 05 - Frame surface

- ALRO = Natural aluminium (standard)
- 9005 = aluminium painted to RAL colour 9005 (black)
- xxxx = aluminium painted to a freely selectable RAL colour (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).
- 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

- O = 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)

#### 09 - 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) (In case of single design with curved length BoL = ≥500 mm to <1500 mm can be fitted with a plenum box)

#### 10 - Radius

XXXXX = specify a radius ≥ 2000 mm (e.g. 02000, always with 5 digits)

#### 11 - Mounting

OM = without box mounting (standard)

### 12 - Ceiling depth

- 125 = ceiling depth T = 12.5 mm (standard)
- 095 = ceiling depth T = 9.5 mm
- xxx = ceiling depth (T) can be freely selected (always with 3 digits).

#### 13 - End piece

- EP = with end piece, with surrounding edge for plastering, mounted ex works on both sides (standard).
- EB = with straight end piece, mounted ex works on both sides.

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.

#### 14 - Dummy piece

- BS0 = without dummy piece (standard)
- BS1 = with dummy piece made of sheet steel, painted to RAL colour 9005 (black) (possible from length L ≥ 200 mm, dummy piece only possible without plenum box, with fastening clips for mounting on the slot diffuser).



# PLENUM BOX ORDER CODE

-GD1

01	02	03	04	05	06	07	08
Туре	Diffuser	Model	Single / band design	Curved length	Radius	Mounting of box	Material
Example							
ASK	-46	-2	-N	-01500	-02000	-OM	-SV
09	10	11	12	13	14	15	i
Damper	Rubber lip seal	Insulation	Height of plenum bo	ox Spigot position	Spigot	diameter Su	spension

#### Sample

-DK2

#### ASK-46-2-N-01500-02000-OM-SV-DK2-GD1-I0-KHS -S1-SDS-E0

-10

-KHS

Plenum box for slot diffuser | 2-slot | single design | curved length BoL = 1500 mm | radius 2000 mm | galvanised sheet steel | with damper and cable-operated adjustment | with rubber lip seal | without insulation | standard height of box | with inner lateral spigot | standard spigot diameter | without riveting nut

#### **ORDER DETAILS**

01 -	Туре
------	------

ASK = plenum box for slot diffuser

#### 02 - Diffuser

46 = for DSCP

#### 03 - Model

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

#### 04 - Single / band design

- N = single design (curved length of box KBoL 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 (curved length of box KBoL = 1000 mm)
- 01500 = curved length BoL = 1500 mm (curved length of box KBoL = 1500 mm)
- xxxxx = curved length (BoL/BBoL) in mm, freely selectable (always with 5 digits) (curved length of box KBoL = BoL / total curved length of box GKBoL = BBoL).

#### 06 - Radius

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

#### 07 - Mounting of box

OM = without diffuser mounting (standard)

#### 08 - Material

SV = galvanised sheet steel (standard)

#### 09 - Damper

DK0 = without damper (standard)

DK2 = With damper and cable-operated adjustment (SZV)

#### 10 - Rubber lip seal

GD0 = without rubber lip seal (standard)

-SDS

-E0

GD1 = with rubber lip seal

#### 11 - Insulation

-S1

- IO = without insulation (standard)
- la = With external insulation

#### 12 - Height of plenum box

- KHS = standard height of box
- xxx = height of box (KHS) in mm, freely selectable (always with 3 digits) (minimum height of box [KHS] with spigot position S1+S2 = spigot diameter ØD + 82 mm / with spigot position S0 = 220 mm).

#### 13 - Spigot position

- S0 = spigot from above
- S1 = inner lateral spigot (standard)
- S2 = outer lateral spigot

#### 14 - Spigot diameter

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

#### 15 - Suspension

E0 = without riveting nut (standard)



# **SPECIFICATION TEXT**

Highly inductive curved 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 for direct installation in plasterboard ceilings or ceiling cavities (pressure ceilings). The special shape of the frame profile allows good installation in the plasterboard ceiling.

Frame with frame profile PLASTER (-PL), made of extruded aluminium profile.

Frame profiles are fitted with bores to allow them to be connected to the plasterboard ceiling using screws. Mounting brackets are supplied loose as a mounting aid.

**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 9010 (white) (-L9010)
- Freely selectable RAL colour (-LXXXX, always with 5 digits) Product: SCHAKO type **DSCP-...-Z-PL-...**

**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 **DSCP-...-A-PL-...** 

Volumetric flows in m <sup>3</sup> /h per m at:	35 dB(A)	40 dB(A)
DSCP-1	131	156
DSCP-2	203	242

#### Model (number of slots)

- 1-slot (-1)
- 2-slot (**-2**)

### Frame surface:

- consisting of:
- natural aluminium (-ALRO) (standard)
  - Aluminium painted to: - RAL colour 9005 (-9005) (black)
  - a freely selectable RAL colour (-xxxx, always with 4 digits).
- central partition (only for 2-slot models):
  - for supply air:
    - for frame made of natural aluminium, same RAL colour as the blade.
    - for painted frame made of aluminium, same RAL colour as the frame.
  - for return air, made of aluminium painted to RAL 9005 (black).

#### Blade position for air jet:

- without blades, for return air, with perforated plate (-0).

- With vertical throw (-V)
- With horizontal one-way throw toward the inside (-L)
- With horizontal one-way throw toward the outside (-R)
- with horizontal two-way throw (-B) (standard)

# Curved length / model:

Single design (-N)

- curved length BoL = 1000 mm (-N-01000) (curved length of box KBoL = 1000 mm)
- curved length BoL = 1500 mm (-N-01500) (curved length of box KBoL = 1500 mm)
- Curved length (BoL) in mm, freely selectable (-N-xxxxx, always with 5 digits) (In case of single design with curved length BoL = ≥500 mm to <1500 mm can be fitted with a plenum box).

DSCP TECHNICAL DOCUMENTATION Specification text I

#### Band design (-B)

 curved length (BBoL) in mm, freely selectable, as band (-Bxxxxx)

Curved length distribution according to SCHAKO standard lengths for band design. With connecting pins, supplied loose (2 for each connection).

#### Radius:

- ≥ 2,000 mm (-XXXXX, always with 5 digits)

#### Mounting:

without box mounting (-OM) (standard)

#### Ceiling depth of plaster board:

- ceiling depth T = 9.5 mm (-095)
- ceiling depth T = 12.5 mm (standard) (-125)
- ceiling depth (T) freely selectable (-xxx, always with 3 digits)

### End piece (-EP/-EB):

- with surrounding edge for plastering, mounted ex works on both sides (-EP) (standard).
  - made of galvanised sheet steel
- straight, mounted ex works on both sides (-EB). - made of galvanised sheet steel
- In the band design, the end piece is mounted to the left side of the section (left TS) and to the right side of the difference in curved length (DBoL) as a standard.

#### Accessories:

- Plenum box (-ASK-46), made of galvanised sheet steel (-SV), with mounting brackets, without riveting nut (-E0), with air diffuser plate, made of galvanised sheet steel.
  - Model (number of slots):
    - 1-slot (-1)
    - 2-slot (-2)
  - 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)
    - (curved length of box KBoL = 1000 mm)
    - curved length BoL = 1500 mm (-01500)
    - (curved length of box KBoL = 1500 mm) - curved length (BoL/BBoL) in mm, freely selectable
    - (-xxxx, always with 5 digits) (curved length of box KBoL = BoL / total curved length of box GKBoL = BBoL).
  - Radius:
    - specify a radius R = ≥2000 mm (-xxxxx, always with 5 digits)
  - Mounting of box:
    - without diffuser mounting (-OM) (standard)
  - Damper:
    - without damper (-DK0) (standard)
    - With damper and cable-operated adjustment (-DK2), made of galvanised sheet steel, in the connection spigot, adjustable, for simple air volume regulation.
  - Rubber lip seal:
    - without rubber lip seal (-GD0) (standard)
    - with rubber lip seal (-GD1), made of special rubber, at the connection spigot.
  - Insulation:
    - without insulation (-I0) (standard)
      - with external insulation (-Ia), thermal insulation at the outside of the plenum box.



- Height of plenum box:
  - standard height of box (-KHS)
  - Height of box (KHS) in mm, freely selectable (-xxx) -(always with 3 digits) (minimum height of box [KHS] with spigot position S1+S2 = spigot diameter øD + 82 mm / with spigot position S0 = 220 mm).
- Spigot position:
  - spigot from above (-S0) inner lateral spigot (-S1) (standard) -
  - outer lateral spigot (-S2)
- Spigot diameter:

  - standard spigot diameter (-SDS) spigot diameter (ØD) in mm, freely selectable -(-xxx, always with 3 digits).
- Dummy piece (-BS0/-BS1): without dummy piece (-BS0) (standard)
  - with dummy piece (-BS1):
    - made of sheet steel painted to RAL colour 9005 (black).
    - possible from curved length BoL  $\geq$  200 mm. -
    - only possible without plenum box ASK-46. -
    - with fastening clips for mounting on the slot \_ diffuser.