



COMBIDSC

Combination slot diffuser
for supply air and return air

Contents

Function and use	2
Models.....	2
Mounting.....	3
Blade position for air jet	3
Processing.....	4
Accessories	4
Dimensions	6
Dimensions of accessories.....	8
Fastening methods	19
Assemblyoverview	21
Technical data	22
Legend	23
Slot diffuser order code	24
Plenum box order code	26
Order code corner angle.....	27
Specification text	28

FUNCTION AND USE

COMBIDSC is a combined slot diffuser for supply and return air in one housing.

The slot diffuser consists of supply air slots for introducing the supply air into the room and return air slots for extracting the return air. The introduction of the supply air is carried out by means of high induction via adjustable blades and is suitable for VAV systems with variable volumetric flows.

The basis of this slot diffuser is the SCHAKO slot diffuser type DSC. The diffuser is suitable for cooling mode up to $\Delta 10K$.

The combination slot diffuser type COMBIDSC is suitable for use in rooms with a height between 2.6 and 4 m. The air deflection blades adjustable from below allow a versatile application.

The outflow direction can be adjusted from a vertical throw in heating mode to a horizontal throw in cooling mode. In cooling mode, only a one-way air throw pattern can be set. The maximum induction is achieved while the velocity and temperature difference of the supply air jet are effectively reduced.

Due to the central housing of the support profile blades, the free cross-section is always the same size. Pressure loss and sound power level remain therefore constant even when the blades are adjusted. A subsequent change of the air throw direction on site is possible at any time, even when the diffuser has already been fitted.

If the desired air throw is specified in the order, it will be set at the factory. Unless stated otherwise, the blade position S (one-way throw) will be set. The large free cross-section allows a high air throughput compared with other slot diffusers.

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 spigot for air volume regulation. An external insulation of the plenum box is also possible. Due to the stable air throw pattern, it can also be used in VAV systems from 100 to 40%.

Discreet and reliable in function

Combination slot diffuser for supply and return air, stable horizontal air pattern and good room flushing. With concealed screw mounting.

MODELS

COMBIDSC-2-...	2-slot (1 for supply air / 1 for return air)
COMBIDSC-4-...	4-slot (2 for supply air / 2 for return air)
COMBIDSC-...-ZA	Supply air (with blades) / return air (without blades, with perforated plate)
COMBIDSC-...-R0	With frame profile STANDARD (frame with R0 standard profile)
COMBIDSC-...-S0	With narrow frame profile (frame with S0 profile)
COMBIDSC-...-P0	With special frame profile (frame with P0 profile)
COMBIDSC-...-V	Blades with vertical throw
COMBIDSC-...-S	Blades with horizontal one-way throw (standard)
COMBIDSC-...-N	Single design (length max. 1500 mm)
COMBIDSC-...-B	Band design (available lengths according to SCHAKO standard for band design)
COMBIDSC-...-ASK	With plenum box (standard) (without dummy piece)
COMBIDSC-...-BS...	With dummy piece (only possible without plenum box)

Depending on use, the combination slot diffuser COMBIDSC is only available with plenum box or dummy piece.

PERFORMANCE DATA

COMBIDSC-2-ZA-...-ASK-26-2-...-S1/S2 (2-slot)

Plenum box with lateral spigot located on the opposite side (-S1)

Plenum box with lateral spigot (-S2)

Values for length L = 1000 mm

V		L _{WA} [dB(A)]			Δp [Pa]	
(m³/h)	[l/s]	Supply air	Return air	Sum	Supply air	Return air
77	21	25	<15	26	18	7
95	26	30	20	30	28	10
117	33	35	27	36	42	15
140	39	40	33	41	60	22
175	49	45	40	46	94	34

COMBIDSC-4-ZA-...-ASK-26-2-...-S1/S2 (4-slot)

Plenum box with lateral spigot located on the opposite side (-S1)

Plenum box with lateral spigot (-S2)

Values for length L = 1000 mm

V		L _{WA} [dB(A)]			Δp [Pa]	
(m³/h)	[l/s]	Supply air	Return air	Sum	Supply air	Return air
145	40	25	19	26	16	8
175	49	30	20	31	24	11
210	58	35	30	36	34	16
255	71	40	36	42	50	24
305	85	45	41	47	72	34

MOUNTING

Permanent connection with plenum box (-FV, standard)

- Only possible with plenum box.
- Standard for the models COMBIDSC-...-R0 / COMBIDSC-...-S0 and COMBIDSC-...-P0.
- The slot diffuser is permanently connected to the plenum box.

Concealed mounting with plenum box (-VM)

- Only possible with plenum box.
- Possible for the models COMBIDSC-...-R0 / COMBIDSC-...-P0 and COMBIDSC-...-S0-...-Z2 (with additional profile).
- Not possible for the models COMBIDSC-...-S0-...-Z0 / COMBIDSC-...-S0-...-Z1 / COMBIDSC-...-S0-...-Z3.
- The slot diffuser is screwed to the pole brace in the plenum box housing with concealed screws.

Mounting with clamp strap (-KB, standard)

- **Only possible for the model with dummy piece (-BS1) and without plenum box.**
- Screws and clamp straps are supplied loose.
- Possible for the models COMBIDSC-...-R0 / COMBIDSC-...-P0 and COMBIDSC-...-S0-...-Z2 (with additional profile).
- Not possible for the models COMBIDSC-...-S0-...-Z0 / COMBIDSC-...-S0-...-Z1 / -Z3.
- The slot diffuser is screwed to the clamp strap with concealed screws (included in delivery).
- **For mounting, access on the rear is not required!**

Mounting with counter pole brace (-GT)

- **Only possible for the model with dummy piece (-BS1) and without plenum box.**
- Screws and clamp straps are supplied loose.
- Possible for the models COMBIDSC-...-R0 / COMBIDSC-...-P0 and COMBIDSC-...-S0-...-Z2 (with additional profile).
- Not possible for the models COMBIDSC-...-S0-...-Z0 / COMBIDSC-...-S0-...-Z1 / -Z3.
- The slot diffuser is screwed to the counter pole brace (pole brace strap) with concealed screws (included in delivery).
- **For mounting, access on the rear is required!**

Fishplate (-VL)

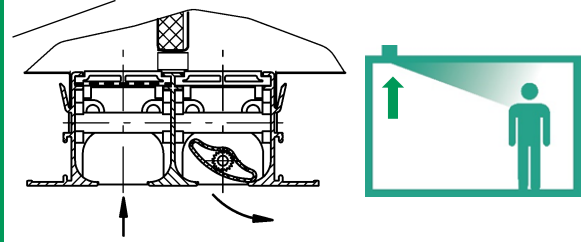
- 4 pieces, supplied loose.
- made of aluminium sheet.
- Only for connection of the corner angle to the slot diffuser in band design.
- The corner angle is fixed with the help of the fishplates (2 on each side).

Mounting with suspension lugs (-AL)

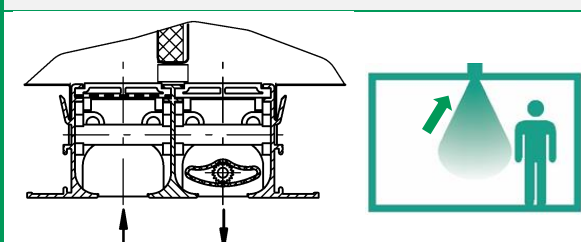
- Only possible for corner angle.
- 4 pieces supplied loose.
- Possible for the models EW-26-...-R0 and EW-26-...-P0.
- Not possible for the model EW-26-...-S0.
- The corner angle is screwed to the 4 suspension brackets.
- Suspension lug made of galvanised sheet steel, with holes for hook mounting.

BLADE POSITION FOR AIR JET

Blade position (-S) (standard) with horizontal one-way throw



Blade position (-V) vertical throw



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

- Supply air with blade made of plastic material (hard PVC) / return air without blade, with perforated plate made of painted sheet steel:
 - Blade colour similar to RAL 9005 (black) / perforated plate painted to RAL colour 9005 (black) (-L9005) (standard).
 - Blade colour similar to RAL 9006 (white aluminium) / perforated plate painted to RAL colour 9006 (white aluminium) (-L9006).
 - Blade colour similar to RAL 9010 (white) / perforated plate painted to RAL colour 9010 (white) (-L9010).
 - Blade and perforated plate painted to the same RAL colour, freely selectable (-Lxxxx, always with 5 digits).

Blade holding device

- Aluminium ducts

Internal blade divider (standard)

- Plastic (PA type 6):
 - for supply air painted to blade colour
 - for return air painted to RAL 9005

Internal blade divider (support for concealed mounting)

- Plastic (PA type 6):
 - for supply air painted to blade colour
 - for return air painted to RAL 9005

External blade plates (end plates)

- Plastic (ABS)
 - for supply air painted to blade colour
 - for return air painted to RAL 9005

Connecting pin

Connection diffuser - diffuser

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

Depending on use, the combination slot diffuser COMBIDSC is only available with plenum box or dummy piece.

ACCESSORIES

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

- Without end pieces (-EO).
- 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).

Additional profile (-Z0 / -Z1 / -Z2 / -Z3)

- Without additional profile (-Z0) (standard).
- with additional profile, made of aluminium (same colour as frame, only possible for COMBIDSC-...-S0):
 - Z I (-Z1): connection of ceiling panels.
 - Z II (-Z2): connection of panelled ceilings.
 - Z III (-Z3): connection of ceiling panels.

Dummy piece (-BS0 / -BS1)

- without dummy piece (-BS0) (standard, only possible in connection with plenum box).
- 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 length L ≥ 200 mm.
 - Mounting only possible with clamp strap (-KB, standard) or counter pole brace (-GT).

Plenum box (-ASK-26)

- Model (number of slots):
 - 2-slot (-2) (1 for supply air / 1 for return air)
 - 4-slot (-4) (2 for supply air / 2 for return air)
- Single / band design:
 - Single design (-N, length of box KL max. 1500 mm)
 - Band design (-B, available lengths according to SCHAKO standard for band design)
- Length:
 - Length L = 1000 mm (-01000) (KL = 997 mm)
 - Length L = 1500 mm (-01500) (KL = 1497 mm)
 - Length (L/BL) in mm, freely selectable (-xxxxx, always with 5 digits) (length of box KL = L-3 / total length of box GKL = BL-3, can be fitted with a plenum box in case of single design lengths L = ≥ 400 mm to ≤ 1500 mm.)
- Mounting of box:
 - Permanent connection (-FV) (standard)
 - Concealed mounting (-VM) (only possible for the models COMBIDSC-...-R0 / COMBIDSC-...-P0 and COMBIDSC-...-S0-...-Z2).
- 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 (only with lateral spigot position [-S1/-S2]) (-DK1).
 - in the connection spigot, with cable-operated adjustment (with spigot position from above [-S0]) (-DK2).

- 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 plenum box (-KHS)
 - Height of box in mm, freely selectable (-xxx, always with 3 digits) (minimum height [GH] with spigot position S1+S2 and standard box neck = spigot diameter $\varnothing D + 82$ mm / with spigot position S0 = 180 mm)
- Box neck:
 - standard box neck (-KVS) (KVS = 45 mm)
 - box neck extension in mm, freely selectable (-xxx, always with 3 digits), box neck (not adjustable) from ≥ 45 mm to 200 mm possible.
Can only be used with 2-slot models, 4-slot models don't have a box neck.
- Spigot position:
 - spigot from above (-S0)
 - lateral spigots on both sides (-S1) (standard)
 - lateral spigot on one side (-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)
 - With riveting nut (-EM), made of brass.

Corner angle (-EW-26)

- Model (number of slots):
 - 2-slot (-2) (1 for supply air / 1 for return air)
 - 4-slot (-4) (2 for supply air / 2 for return air)
- Frame profile:
 - STANDARD frame profile (-R0)
 - Narrow frame profile (-S0)
 - Special frame profile (-P0)
- Frame surface:
 - Natural colour anodised aluminium (-ELOX, standard).
 - Aluminium painted to:
 - RAL colour 9006 (white aluminium) (-9006).
 - RAL colour 9010 (white) (-9010).
 - a freely selectable RAL colour (-xxxx, always with 4 digits).
- Dummy profile colour:
 - Dummy profile made of painted aluminium:
 - colour similar to RAL 9005 (black) (-B9005, standard).
 - colour similar to RAL 9006 (white aluminium) (-B9006).
 - colour similar to RAL 9010 (white) (-B9010).
 - RAL colour freely selectable (-Bxxxx) (always with 5 digits).

- Angle between sides:
 - angle $\alpha = 90^\circ$ (-090) (standard)
 - angle (α) as required (-xxx), values between $\alpha = 90^\circ$ (-090, standard) and 170° (-170) are possible (always with 3 digits).
- Left-side length (a):
 - Standard length L=250 for 2-slot models / L=400 for 4-slot models (-000)
 - length (L) in mm, freely selectable (-xxx) (minimum length = standard length) (always with 3 digits).
- Right-side length (b):
 - Standard length L=250 for 2-slot models / L=400 for 4-slot models (-000)
 - length (L) in mm, freely selectable (-xxx) (minimum length = standard length) (always with 3 digits).
- Including 4 fishplates (-VL, included in delivery) made of aluminium (same colour as frame), supplied loose.
- Additional profile:
 - Without additional profile (-Z0).
- Mounting with suspension lugs (-AL), supplied loose.

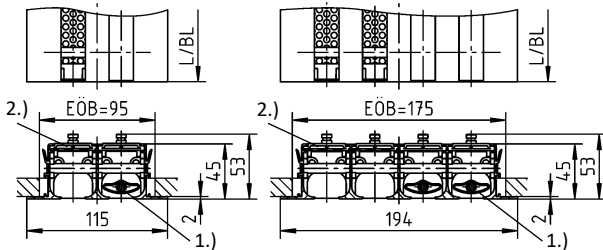
DIMENSIONS

Dimensions of frame profile

STANDARD frame profile (-R0)

COMBIDSC-2-ZA-R0-...

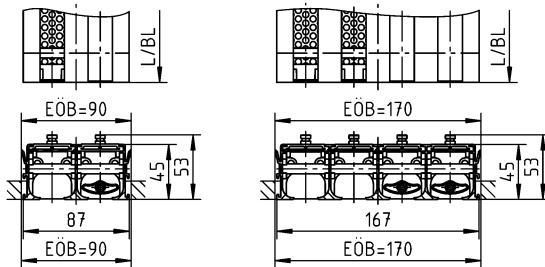
COMBIDSC-4-ZA-R0-...



Narrow frame profile (-S0)

COMBIDSC-2-ZA-S0-...

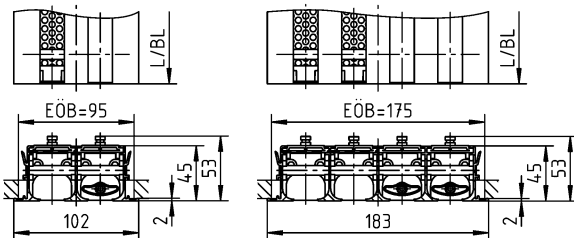
COMBIDSC-4-ZA-S0-...



Special frame profile (-P0)

COMBIDSC-2-ZA-P0-...

COMBIDSC-4-ZA-P0-...



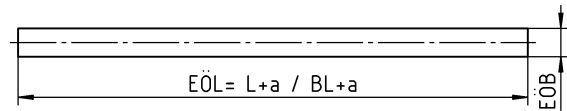
On the return air side, a perforated plate is mounted instead of the air deflection blades. The plate can be easily cleaned from below through the slots. To allow the volume setting mounted on top also to be cleaned more easily, the perforated plate is interrupted in the area of the connection pieces on a length L of $\varnothing D + 2$.

EÖB = installation opening width

- 1.) Air deflection blade
- 2.) Perforated plate

For available lengths of slot diffuser, see illustration on the right.

Installation opening



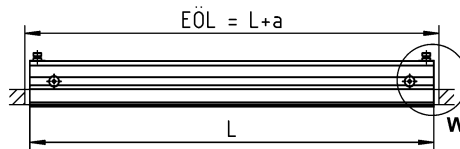
	n	EÖB	a
-R0	-2	95	10
	-4	175	
-S0	-2	90	15
	-4	170	
-P0	-2	95	15
	-4	175	

n = number of slots

Available lengths for the slot diffuser

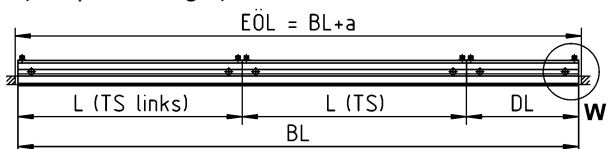
Single design (-N)

- Length L = 1000 mm (-N-01000) (length of box KL = 993 mm)
- Length L = 1500 mm (-N-01500) (length of box KL = 1493 mm)
- Length (L) in mm, freely selectable (-N-xxxxx) (always with 5 digits) (can be fitted with a plenum box in case of single design lengths $L \geq 400$ mm to ≤ 1500 mm, dummy piece possible from length ≥ 200 mm.)



Band design (-B)

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



Available lengths according to SCHAKO standard:

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

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

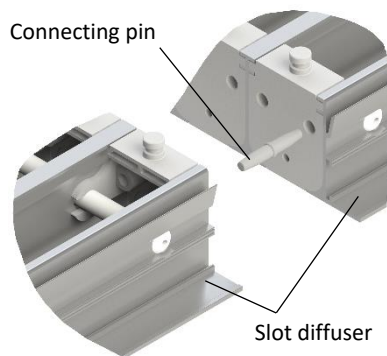
End pieces, for detail W see page 08.

Slot diffuser connection in band design

Slot diffuser - slot diffuser

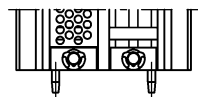
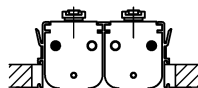
With connecting pin

supplied loose (2x for each connection)

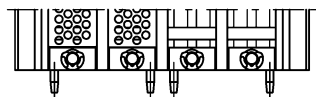
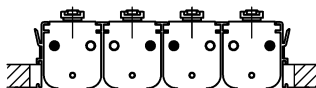


Arrangement of connecting pins

COMBIDSC-2-...



COMBIDSC-4-...



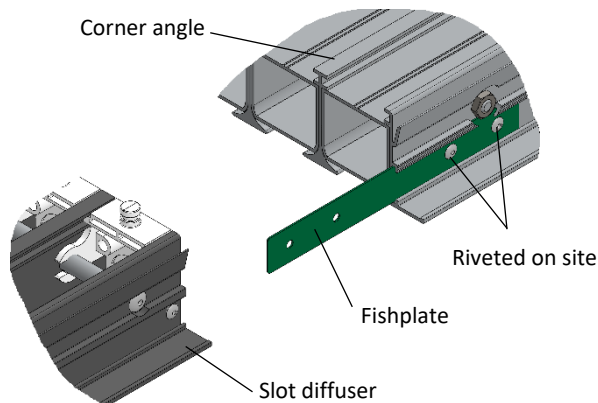
Attention:

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

Slot diffuser - corner angle

with fishplates:

supplied loose (2x for each connection)



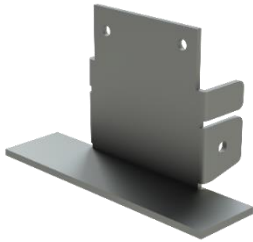
DIMENSIONS OF ACCESSORIES

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

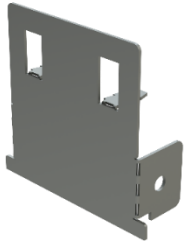
- without end piece (-E0) (standard).
- with end pieces, made of aluminium (same colour as frame):
 - supplied loose (-ES, pair) (standard for model with end piece).
 - Mounted ex works on both sides (-EB).
 - Mounted ex works on the left side (-EL).
 - Mounted ex works on the right side (-ER).

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

for COMBIDSC-...-R0 / COMBIDSC-...-P0:



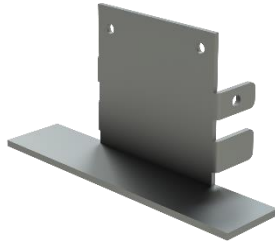
for COMBIDSC-...-S0-...-Z0:



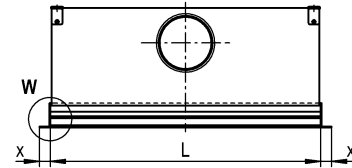
for COMBIDSC-...-S0-...-Z1:



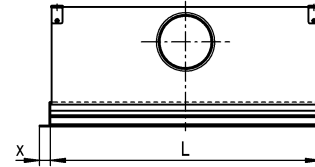
for COMBIDSC-...-S0-...-Z2 / COMBIDSC-...-S0-...-Z3:



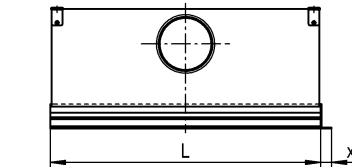
End piece on both sides



End piece on the left

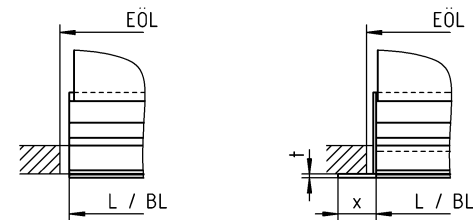


End piece on the right



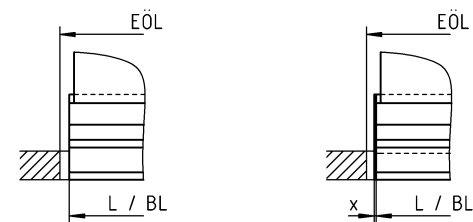
Detail W

COMBIDSC-...-R0 / COMBIDSC-...-P0 /
COMBIDSC-...-S0-...-Z2 / COMBIDSC-...-S0-...-Z3
without end pieces with end pieces



COMBIDSC-...-S0-...-Z0 / COMBIDSC-...-S0-...-Z1

without end pieces with end pieces



	x	t
COMBIDSC-...-R0	20	2
COMBIDSC-...-P0	16	2
COMBIDSC-...-S0-...-Z2 / COMBIDSC-...-S0-...-Z3	20	2
COMBIDSC-...-S0-...-Z0 / COMBIDSC-...-S0-...-Z1	1	-

Installation opening in the length section:

EÖL = L+a or BL+a

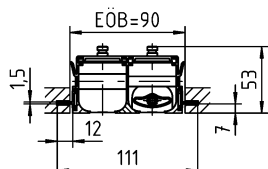
	a
COMBIDSC-...-R0	10
COMBIDSC-...-P0	15
COMBIDSC-...-S0	15

Additional profiles (-Z0 / -Z1 / -Z2 / -Z3)

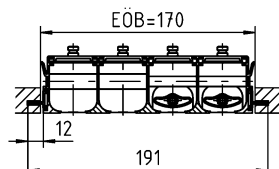
- Without additional profile (-Z0) (standard).
- with additional profile made of aluminium (same colour as frame, only possible for DSC-...-S0):
 - Z I (-Z1): connection of ceiling panels.
 - Z II (-Z2): connection of panelled ceilings.
 - Z III (-Z3): connection of ceiling panels.

with additional profile Z I (-Z1)

COMBIDSC-2

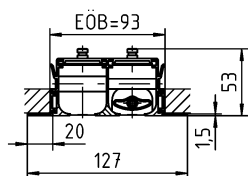


COMBIDSC-4

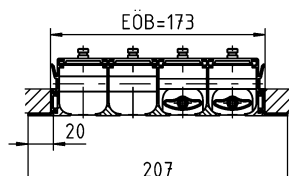


with additional profile Z II (-Z2)

COMBIDSC-2

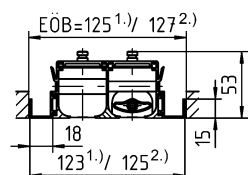


COMBIDSC-4

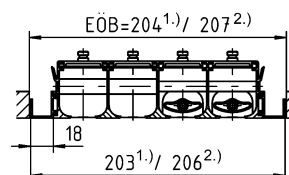


with additional profile Z III (-Z3)

COMBIDSC-2



COMBIDSC-4



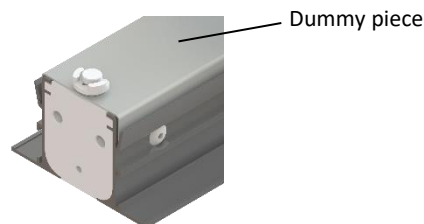
1. = anodised model
 2. = painted model
- EÖB = installation opening width

For the available lengths of the slot diffuser, see page 13.

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.
 - possible for all frame shapes (-R0 / -S0 / -P0).
 - with fastening clip for mounting on the slot diffuser.
 - possible from length $L \geq 200$ mm.
 - mounting only possible with clamp strap (-KB) or counter pole brace (-GT).

with dummy piece (-BS1)



COMBIDSC-2



COMBIDSC-4



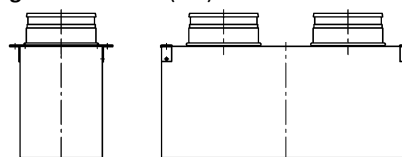
For the available lengths of the slot diffuser, see page 13.

Plenum box (-ASK-26)

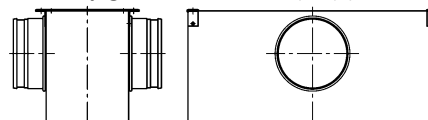
Spigot position

- S0 = spigot from above
- S1 = lateral spigots on both sides (standard)
- S2 = lateral spigot on one side

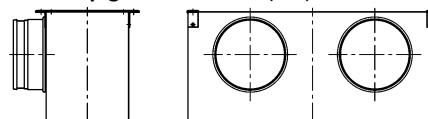
Spigot from above (-S0)



Lateral spigots on both sides (-S1) (standard)



Lateral spigot on one side (-S2)

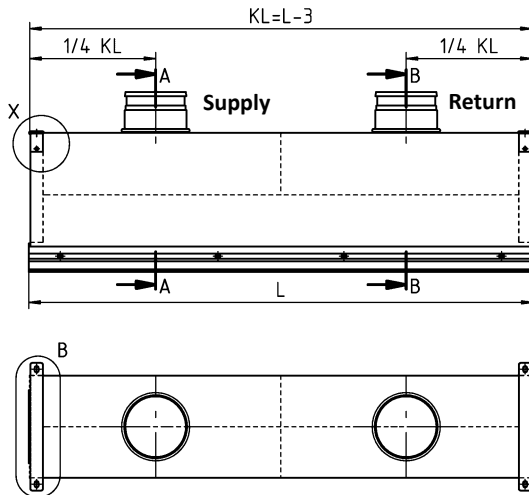


PLENUM BOX – SINGLE DESIGN (-N)

Plenum box with permanent connection (-ASK-26-...-N-...-FV-...)

- With permanent connection.
- Standard for the models COMBIDSC-...-R0 / COMBIDSC-...-S0 and COMBIDSC-...-P0.
- The slot diffuser is permanently connected to the plenum box.

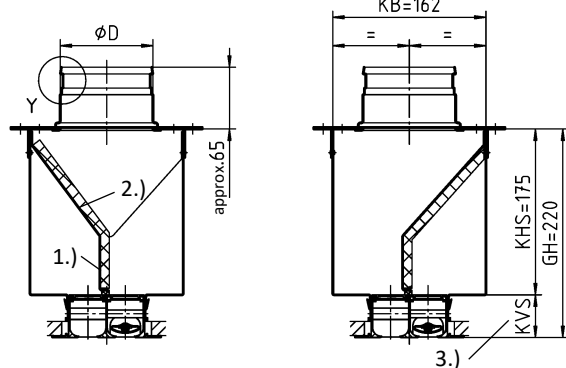
with spigot from above (-S0):



COMBIDSC-2-...-ASK-26-...-N-...-FV-...-S0-...

Section A-A / supply air

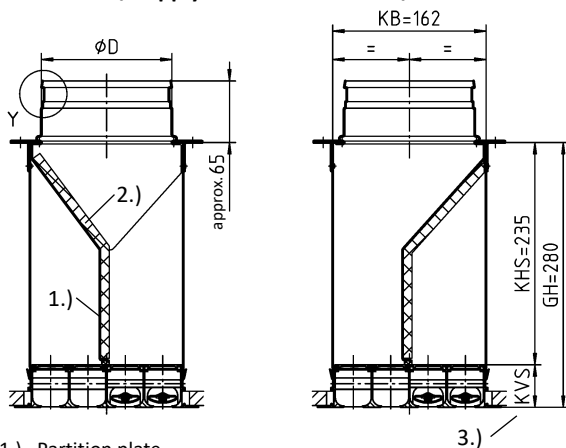
Section B-B / return air



COMBIDSC-4-...-ASK-26-...-N-...-FV-...-S0-...

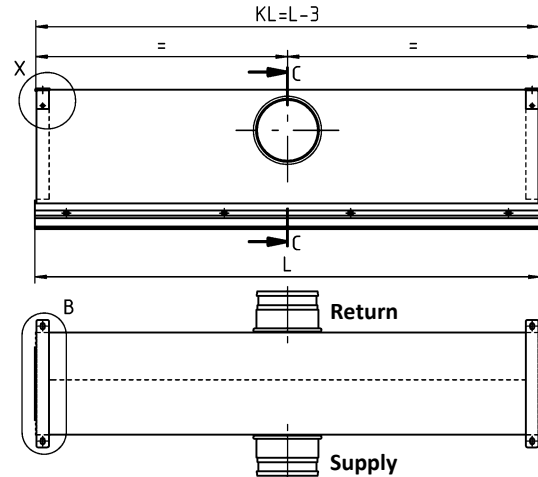
Section A-A / supply air

Section B-B / return air



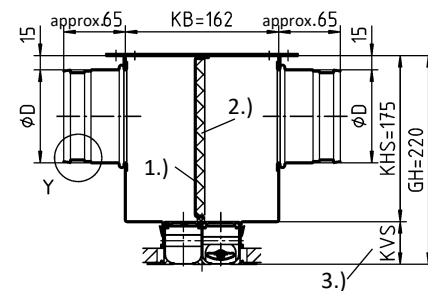
- 1.) Partition plate
- 2.) Foam
- 3.) Box neck

with lateral spigots on both sides (-S1):



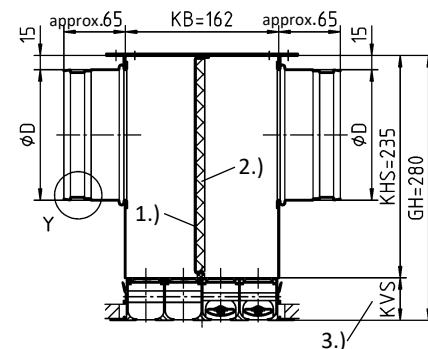
COMBIDSC-2-...-ASK-26-...-N-...-FV-...-S1-...

Section C-C



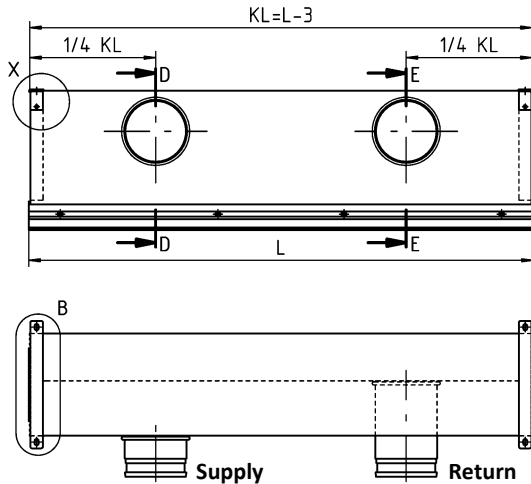
COMBIDSC-4-...-ASK-26-...-N-...-FV-...-S1-...

Section C-C



For the table of available sizes, see page 11.
For available lengths of plenum box, see page 11.
For installation opening length, see page 6.
For plenum box in band design, see page 14.
For suspension position, detail B, see page 15.
For plenum box suspension, detail X, see page 16.
For rubber lip seal, detail Y, see page 17.
For fastening methods, see page 19.
EÖB = installation opening width
EÖL = installation opening length

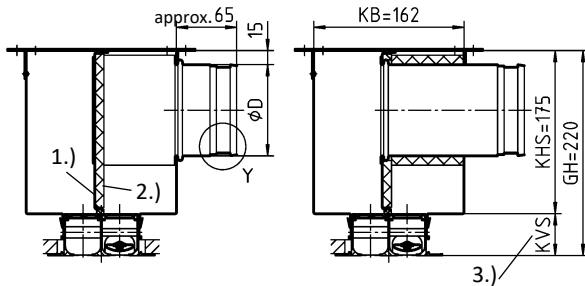
with lateral spigot on one side (-S2):



COMBIDSC-2-...-ASK-26-...-N-...-FV-...-S2-...

Section D-D / supply air

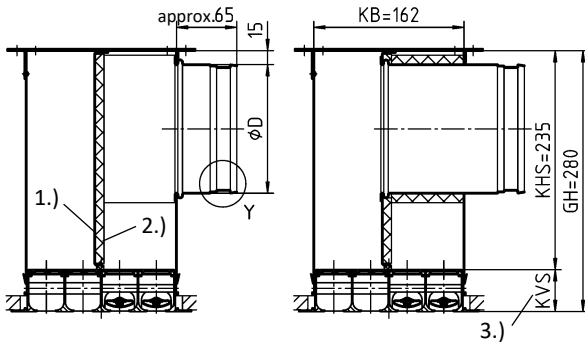
Section E-E / return air



COMBIDSC-4-...-ASK-26-...-N-...-FV-...-S2-...

Section D-D / supply air

Section E-E / return air



- 1.) Partition plate
- 2.) Foam
- 3.) Box neck

Available lengths plenum box (-ASK-26-...-N)

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

Available sizes for plenum box

(ASK-26-...-N-...-FV-...-S0/-S1/-S2-...)

	KB	GH	KHS	KVS	EÖB	
					...-R0	...-S0
					...-P0	
COMBIDSC-2	162	220	175	45	95	90
COMBIDSC-4	162	280	235	45	175	170

Number of connection spigots

	ØD	
	L ≤ 1000	L > 1000 to L ≤ 1500
DSC-2	2 x Ø98 *	2 x Ø123 *
DSC-4	2 x Ø138 *	2 x Ø138 *

* 1 x supply air / 1 x return air

L	KL	EÖL		Weight incl. plenum box (kg)	
		...-R0	...-P0	COMBIDSC-1	COMBIDSC-3
		...-S0			
1000	997	1010	1015	8.0	12.0
1500	1497	1510	1515	12.0	18.0

Plenum box height reduction (at an extra charge)

- for spigot position -S1/-S2 and standard box neck: Minimum height [GH] = spigot diameter ØD + 82 mm.
- for spigot position -S0 and standard box neck: The height of box [GH] can be reduced to 180 mm.

Box neck extension

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

Spigot diameter:

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

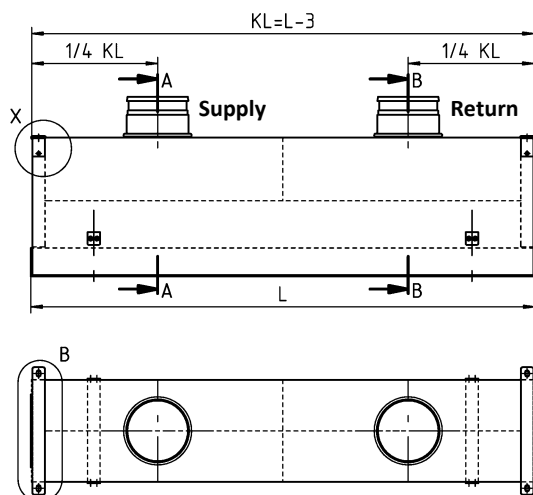
Intermediate lengths and other spigot diameters on request.

For installation opening length, see page 6.
 For plenum box in band design, see page 14.
 For suspension position, detail B, see page 15.
 For plenum box suspension, detail X, see page 16.
 For rubber lip seal, detail Y, see page 17.
 For fastening methods, see page 19.
 EÖB = installation opening width
 EÖL = installation opening length

Plenum box with concealed mounting (-ASK-26-...-N-...-VM-...)

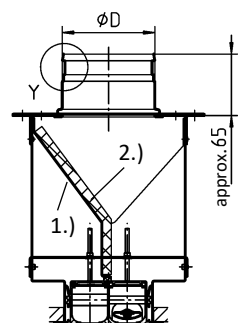
- With concealed mounting.
- Possible for the models COMBIDSC-...-R0 / COMBIDSC-...-P0 and COMBIDSC-...-S0-...-Z2 (with additional profile).
- Not possible for the models COMBIDSC-...-S0-...-Z0 / COMBIDSC-...-S0-...-Z1 / COMBIDSC-...-S0-...-Z3.
- The slot diffuser is screwed to the pole brace in the plenum box housing with concealed screws.
- Frame with foam gasket.

with spigot from above (-S0):

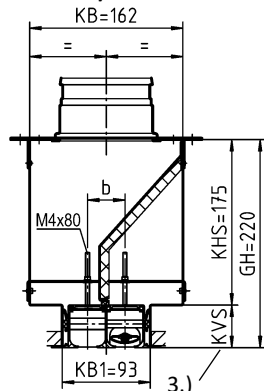


COMBIDSC-2-...-ASK-26-...-N-...-VM-...-S0-...

Section A-A / supply air

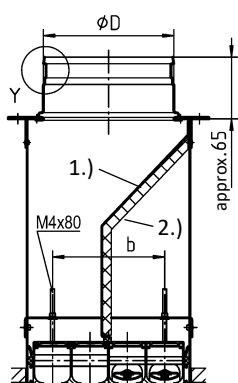


Section B-B / return air

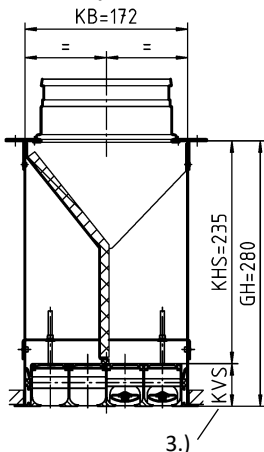


COMBIDSC-4-...-ASK-26-...-N-...-VM-...-S0-...

Section A-A / supply air

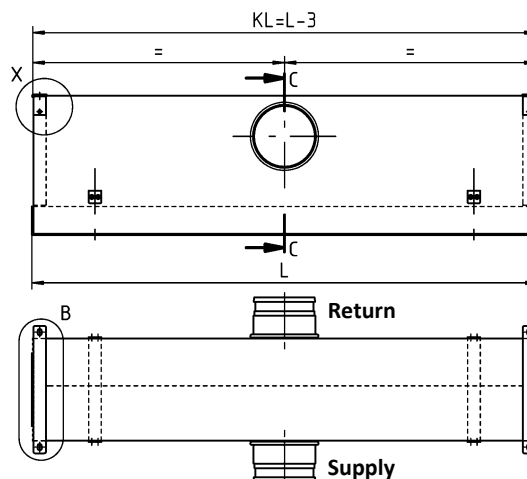


Section B-B / return air



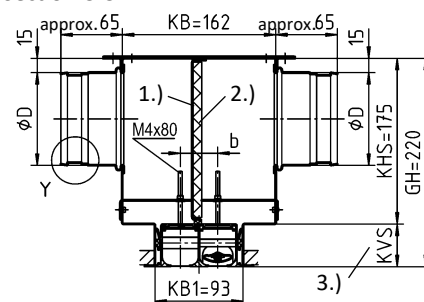
- 1.) Partition plate
- 2.) Foam
- 3.) Box neck

with lateral spigots on both sides (-S1):



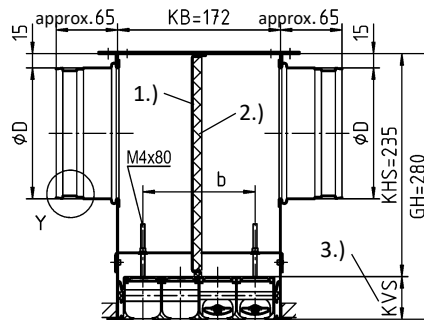
COMBIDSC-2-...-ASK-26-...-N-...-VM-...-S1-...

Section C-C



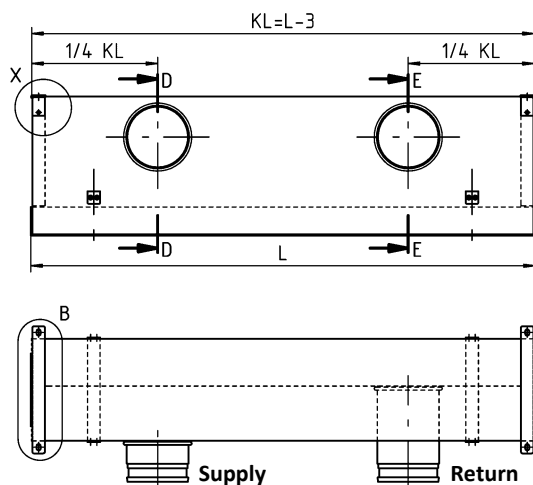
COMBIDSC-4-...-ASK-26-...-N-...-VM-...-S1-...

Section C-C



For the table of available sizes, see page 13.
For available lengths of plenum box, see page 13.
For installation opening length, see page 6.
For plenum box in band design, see page 14.
For suspension position, detail B, see page 15.
For plenum box suspension, detail X, see page 16.
For rubber lip seal, detail Y, see page 17.
For fastening methods, see page 19.
EÖB = installation opening width
EÖL = installation opening length

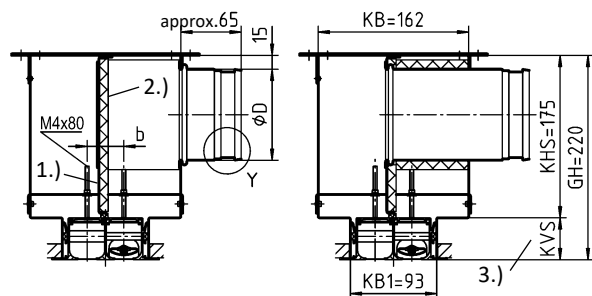
with lateral spigot on one side (-S2):



COMBIDSC-2-...-ASK-26-...-N-...-VM-...-S2-...

Section D-D / supply air

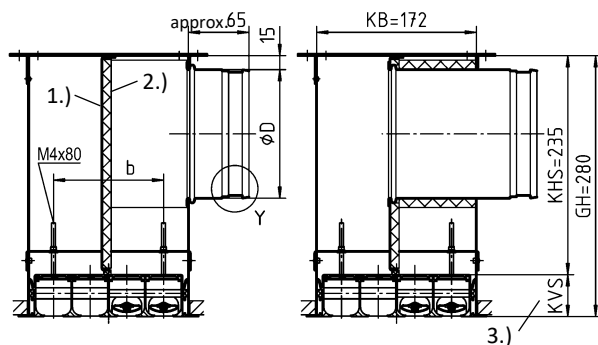
Section E-E / return air



COMBIDSC-4-...-ASK-26-...-N-...-VM-...-S2-...

Section D-D / supply air

Section E-E / return air



- 1.) Partition plate
- 2.) Foam
- 3.) Box neck

Available lengths plenum box (-ASK-26-...-N)

- Length L = 1000 mm (-N-01000) (length of box KL = 997 mm).
 - Length L = 1500 mm (-N-01500) (length of box KL = 1497 mm).
 - Length (L) in mm, freely selectable (-N-xxxxx) (always with 5 digits).
- (Length of box KL = L-3, can be fitted with a plenum box in case of single design lengths $L \geq 400$ mm to ≤ 1500 mm.)

Available sizes for plenum box

(ASK-26-...-N-...-VM-...-S0/-S1/-S2-...)

	KB	GH	KHS	KVS	...- R0 ...- P0 EÖB ...-S0-...-Z2	b	
COMBIDSC-2	162	220	175	45	95	93	40
COMBIDSC-4	172	280	235	45	175	173	119

Number of connection spigots

	øD	
	L ≤ 1000	L > 1000 to L ≤ 1500
COMBIDSC-2	2 x ø98 *	2 x ø123 *
COMBIDSC-4	2 x ø138 *	2 x ø138 *

* 1 x supply air / 1 x return air

L	KL	EÖL		Weight incl. plenum box (kg)	
		...-R0	...-P0 ...-S0-...-Z2	COMBIDSC- 1	COMBIDSC- 3
1000	997	1010	1015	8.0	12.0
1500	1497	1510	1515	12.0	18.0

Plenum box height reduction (at an extra charge)

- for spigot position -S1/-S2 and standard box neck:
Minimum height [GH] = spigot diameter $\varnothing D$ + 82 mm.
- for spigot position -S0 and standard box neck:
The height of box [GH] can be reduced to 180 mm.

Box neck extension

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

Spigot diameter:

- Standard spigot diameter (-SDS).
- Spigot diameter ($\emptyset D$) in mm, freely selectable (-xxx, always with 3 digits).

Intermediate lengths and other spigot diameters on request.

For installation opening length, see page 6.

For plenum box in band design, see page 14.

For suspension position, detail B, see page 15.

For plenum box suspension, detail X, see page 16.

For rubber lip seal, detail Y, see page 17.

For fastening methods, see page 19.

EÖB = installation opening width

EÖL = installation opening length

PLENUM BOX – BAND DESIGN (-B)

Plenum box (-ASK-26-...-B-...-FV/VM-...)

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

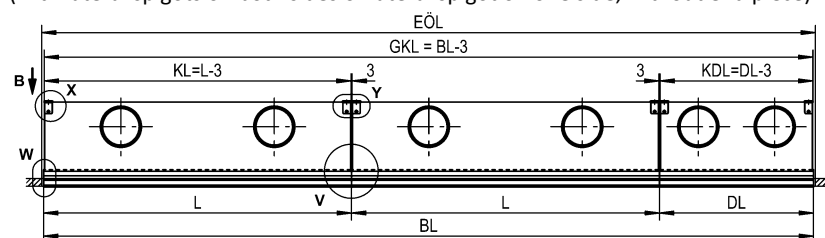
For concealed mounting, the slot diffuser is screwed to the plenum box housing (face part) with concealed screws.

Available lengths of plenum box (-ASK-26-...-B)

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

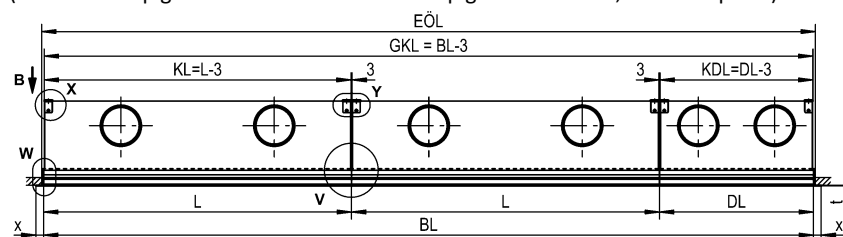
COMBIDSC-...-ASK-26-...-B-...-FV/VM-...-S1/-S2-...-E0

(with lateral spigots on both sides or lateral spigot on one side, without end piece)



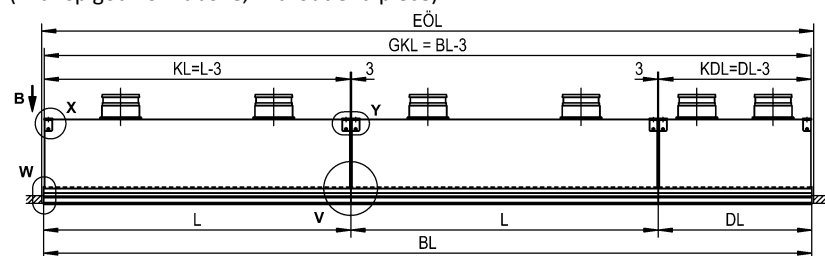
COMBIDSC-...-ASK-26-...-B-...-FV/VM-...-S1/-S2-...-ES/-EB/-EL/-ER

(with lateral spigots on both sides or lateral spigot on one side, with end piece)



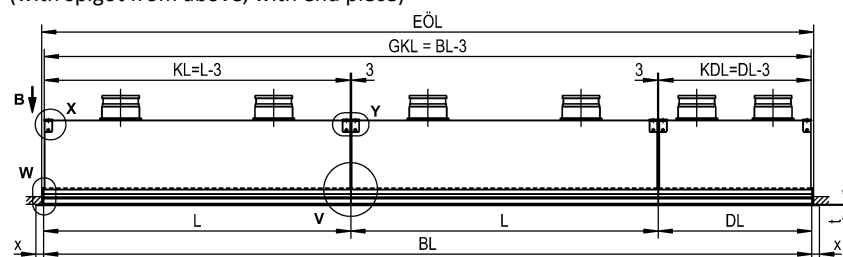
COMBIDSC-...-ASK-26-...-B-...-FV/VM-...-S0-...-E0

(with spigot from above, without end piece)



COMBIDSC-...-ASK-26-...-B-...-FV/VM-...-S0-...-ES/-EB/-EL/-ER

(with spigot from above, with end piece)



Available lengths according to SCHAKO standard

BL > 1500 to < 2000:

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

BL ≥ 2000:

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

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

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

The difference pieces from < 400 mm to ≥ 200 mm are supplied as dummy pieces without plenum box. A different band division is possible after consultation and when required by the customer.

	x	t	a
COMBIDSC-...-R0-...	20	2	10
COMBIDSC-...-P0-...	16	2	
COMBIDSC-...-S0-...-Z0-...	1	-	15
COMBIDSC-...-S0-...-Z1-...	1	-	
COMBIDSC-...-S0-...-Z2-...	20	2	
COMBIDSC-...-S0-...-Z3-...	1	-	

Installation opening in the length section:

$$EÖL = BL + a$$

L = length

DL = difference in length

BL = band length

KL = length of plenum box (KL = L - 3)

KDL = difference in length, plenum box (KDL = DL - 3)

GKL = total length of box (GKL = BL - 3)

EÖL = installation opening length

Butt joint of concealed mounting, for detail V see page 15.

For plenum box suspension, detail X / detail Y, see page 16.

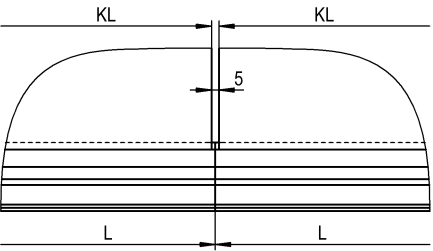
End pieces, for detail W see page 08.

For the position of suspension holes view B, see page 15.

For available sizes of plenum box, see pages 10 to 13.

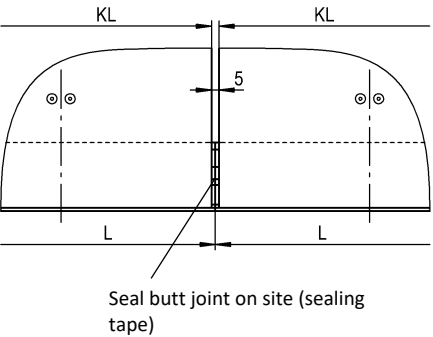
Butt joint of permanent connection (-FV)

Detail V



Butt joint of concealed mounting (-VM)

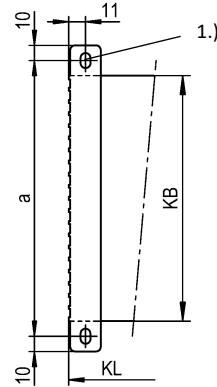
Detail V



Position of the suspension holes

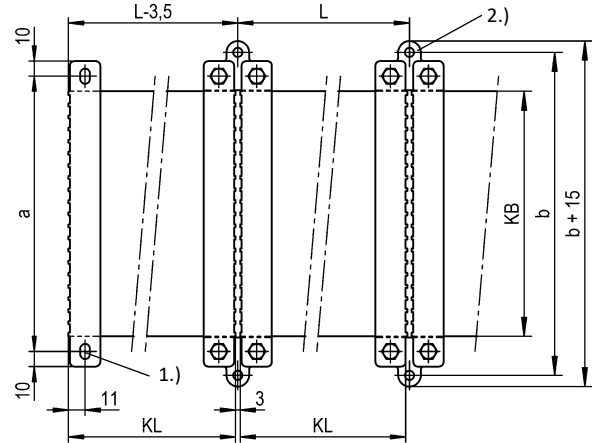
SINGLE DESIGN

View B



BAND DESIGN

View B



Connection plate



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

Available sizes

Lateral connection (-S0/-S1)

	Mounting of box					
	-FV			-VM		
	KB	a	b	KB	a	b
COMBIDSC-2	162	182	214	162	182	214
COMBIDSC-4	162	182	214	172	192	224

Lateral connection (-S2)

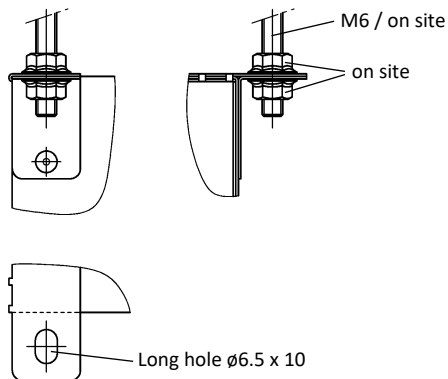
	Mounting of box					
	-FV			-VM		
	KB	a	b	KB	a	b
COMBIDSC-2	162	188	220	162	182	214
COMBIDSC-4	162	188	220	172	192	224

Plenum box suspension

SINGLE DESIGN / BAND DESIGN

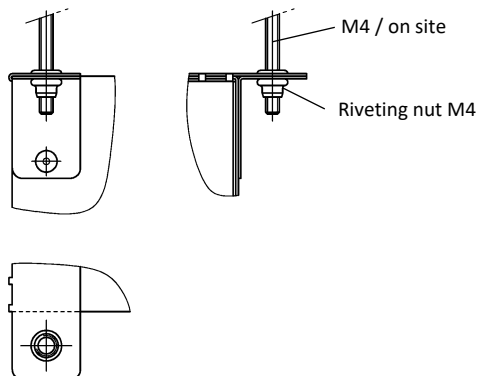
Detail X

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



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

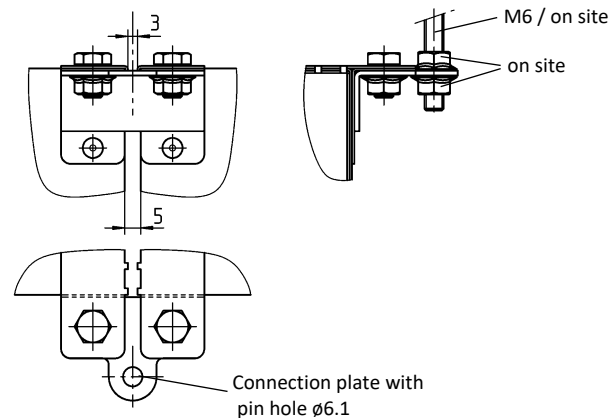
At an extra charge, the plenum boxes can be fitted with M4 riveting nuts to facilitate ceiling mounting.



BAND DESIGN

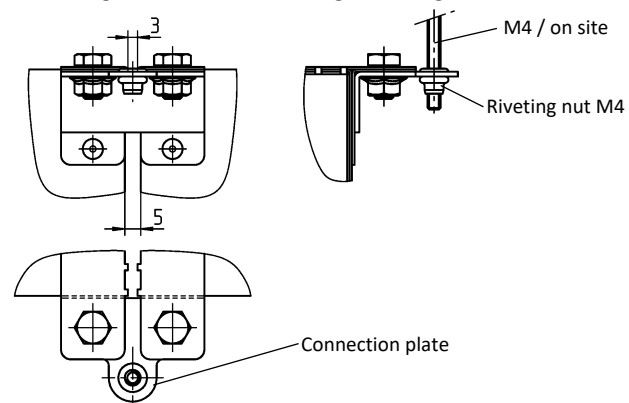
Detail Y

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



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

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

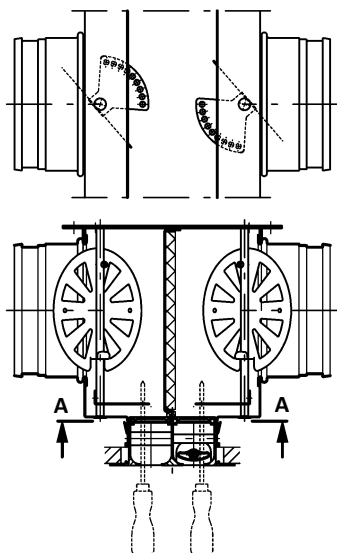


Damper (-DK0/-DK1/-DK2), for ASK-26

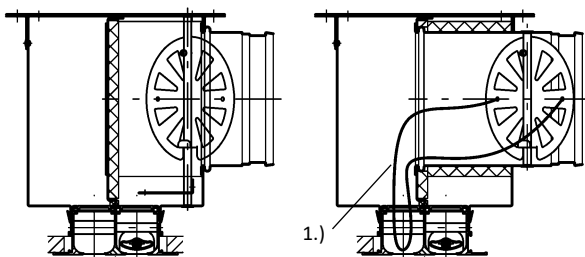
- without damper (-DK0) (standard)
- with damper in the plenum box housing (-DK1) (with spigot position S1 and S2)
- with damper in the connection spigot, with cable-operated adjustment (-DK) (only with spigot position S0)

-DK1, lateral connection on both sides (-S1, standard)

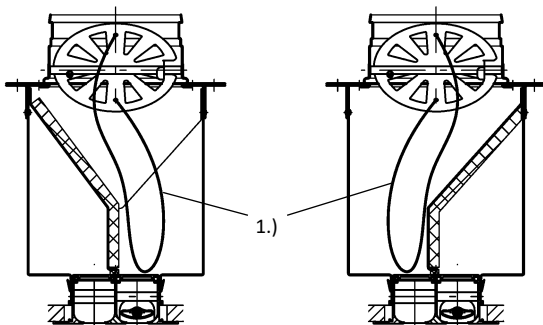
A-A (without slot diffuser)



-DK1, lateral connection on one side (-S2)



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



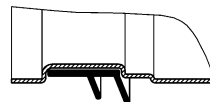
1.) With cable-operated adjustment (SZV)

Rubber lip seal (-GD0/-GD1), for ASK-26

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

with rubber lip seal (-GD1)

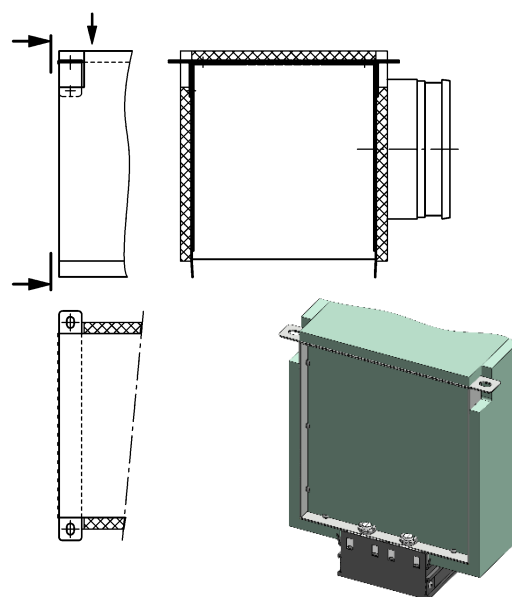
Detail Y



Insulation (-I0/-Ia), for ASK-26

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

with external insulation (-Ia)



Corner angle 90° (-EW)

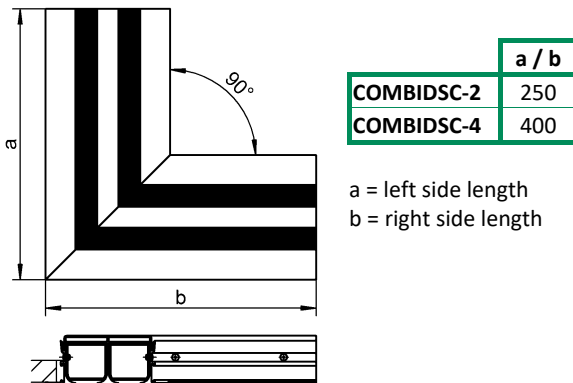
Corner angles can only be produced as dummy pieces, i.e., without a plenum box.

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

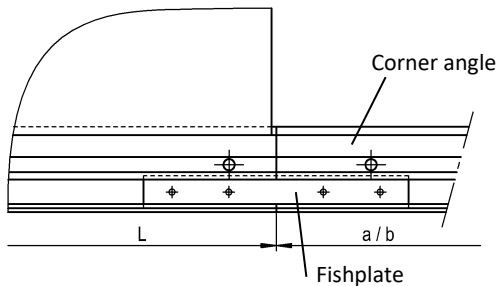
The corner angle is supplied loose as standard.

The standard side length on the left (a) or right (b) is 250 mm for COMBIDSC-2-... L and 400 mm for COMBIDSC-4-... L. Other side lengths (a / b) are available upon request (minimum length = standard length).

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



Fishplate (-VL), for band design

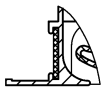


Detail fishplate corner angle

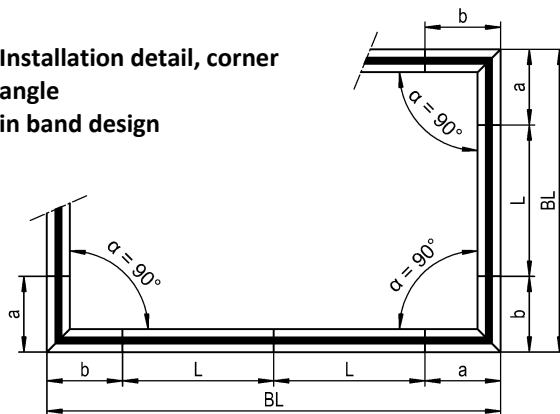
Frame profile:

COMBIDSC-...-R0 /
COMBIDSC-...-P0

COMBIDSC-...-S0-...-Z0



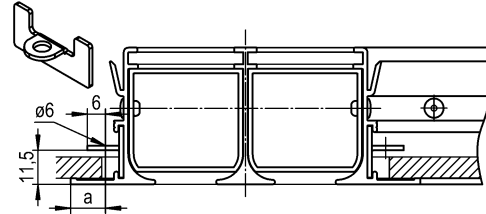
Installation detail, corner angle in band design



Suspension lugs (-AL), for EW-26

- Only possible for **corner angle**.
- 4 pieces supplied loose.
- Possible for the models EW-26-...-R0 and EW-26-...-P0.
- Not possible for the model EW-26-...-S0.
- The corner angle is screwed to the 4 suspension brackets.
- Suspension lug made of galvanised sheet steel, with holes for hook mounting.

(for fastening details, see page 20)



	a
EW-26-...-R0	11.5
EW-26-...-P0	5

FASTENING METHODS

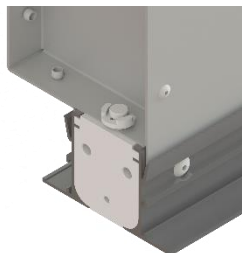
With plenum box

Permanent connection (-FV, standard)

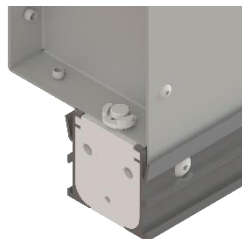
Standard for the models COMBIDSC-...-R0, COMBIDSC-...-S0 and COMBIDSC-...-P0.

The slot diffuser is permanently connected to the plenum box. (See pages 10 + 11)

COMBIDSC-...-R0 / COMBIDSC-...-P0



COMBIDSC-...-S0



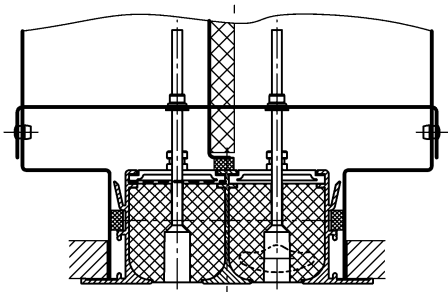
Concealed mounting (-VM)

Possible for the models COMBIDSC-...-R0 / COMBIDSC-...-P0 and COMBIDSC-...-S0-...-Z2 (with additional profile).

Not possible for the models COMBIDSC-...-S0-...-Z0 / COMBIDSC-...-S0-...-Z1 / COMBIDSC-...-S0-...-Z3.

The slot diffuser is screwed to the pole brace in the plenum box housing with concealed screws.

(See pages 12 + 13)



Without plenum box

Mounting with clamp strap (-KB, standard)

Only available for models with dummy piece.

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

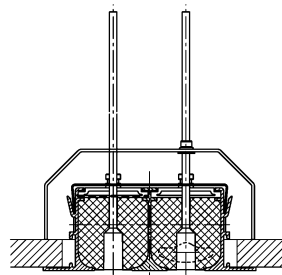
Possible for the models COMBIDSC-...-R0 / COMBIDSC-...-P0 and COMBIDSC-...-S0-...-Z2 (with additional profile).

Not possible for the models COMBIDSC-...-S0-...-Z0 / COMBIDSC-...-S0-...-Z1 / COMBIDSC-...-S0-...-Z3.

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

For mounting, access on the rear is not required!

(See page 21)



Mounting with counter pole brace (-GT)

with dummy piece (-BS...)

Only available for models with dummy piece.

Screws and counter pole brace are supplied loose.

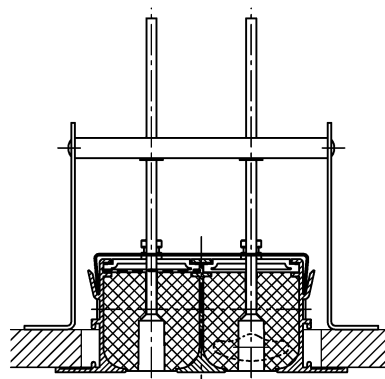
Possible for the models COMBIDSC-...-R0 / COMBIDSC-...-P0 and COMBIDSC-...-S0-...-Z2 (with additional profile).

Not possible for the models COMBIDSC-...-S0-...-Z0 / COMBIDSC-...-S0-...-Z1 / COMBIDSC-...-S0-...-Z3.

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

For mounting, access on the rear is required!

(See page 21)



with corner angle

Fishplate (-VL)

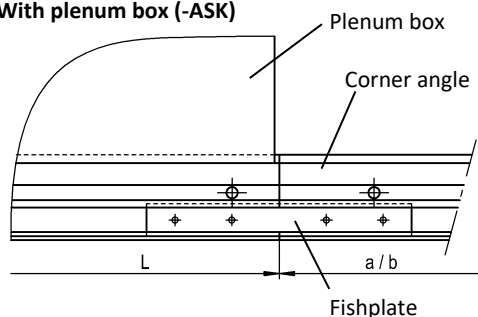
4 pieces, supplied loose.

Only for connection of the corner angle to the slot diffuser in band design.

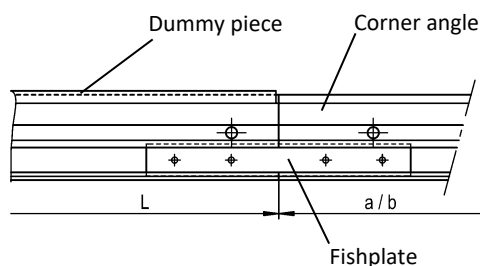
The corner angle is fixed with the help of the fishplates (2 on each side).

(See page 7)

With plenum box (-ASK)



with dummy piece (-BS...)



Mounting with suspension lugs (-AL)

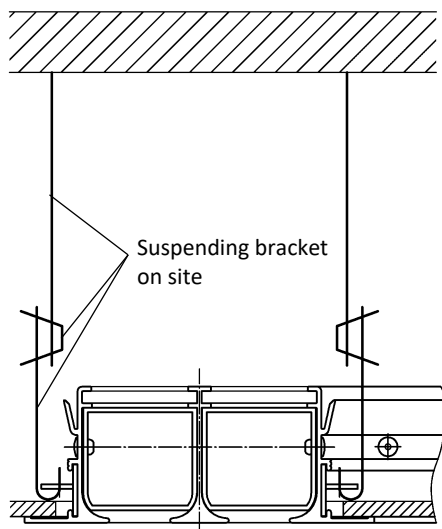
4 pieces, supplied loose.

Possible for the models DSC-...-R0 and DSC-...-P0.

Not possible for the model DSC-...-S0.

The slot diffuser is fastened to 4 suspension brackets

(See page 18)



ASSEMBLYOVERVIEW

MOUNTING WITH CLAMP STRAP (-KB)

Only possible for the model with dummy piece (-BS1) and without plenum box.

Screws and clamp straps are supplied loose.

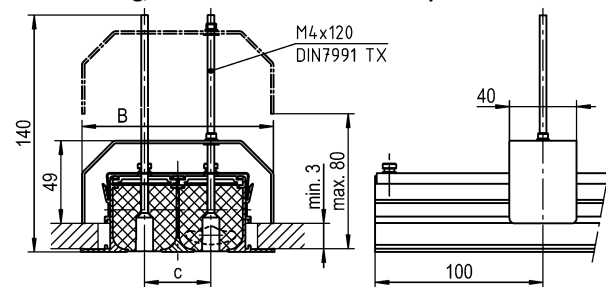
Only possible without plenum box.

Possible for the models COMBIDSC-...-R0 / COMBIDSC-...-P0 and COMBIDSC-...-S0-...-Z2 (with additional profile).

Not possible for the models COMBIDSC-...-S0-...-Z0 / COMBIDSC-...-S0-...-Z1 / COMBIDSC-...-S0-...-Z3.

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

For mounting, access on the rear is not required!



	B	c
COMBIDSC-2	114	40
COMBIDSC-4	194	119

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

MOUNTING WITH COUNTER POLE BRACE (-GT)

Only possible for the model with dummy piece (-BS1) and without plenum box.

Screws and counter pole brace are supplied loose.

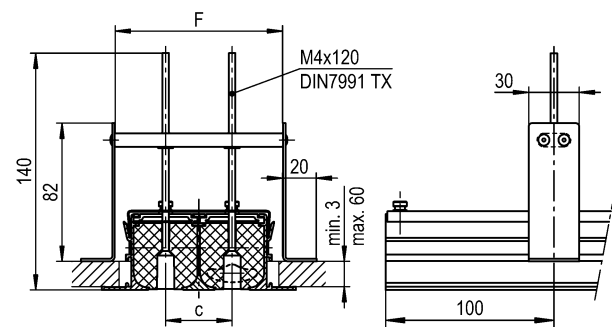
Only possible without plenum box.

Possible for the models COMBIDSC-...-R0 / COMBIDSC-...-P0 and COMBIDSC-...-S0-...-Z2 (with additional profile).

Not possible for the models COMBIDSC-...-S0-...-Z0 / COMBIDSC-...-S0-...-Z1 / COMBIDSC-...-S0-...-Z3.

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

For mounting, access on the rear is required!



	F	c
COMBIDSC-2	100	40
COMBIDSC-4	180	119

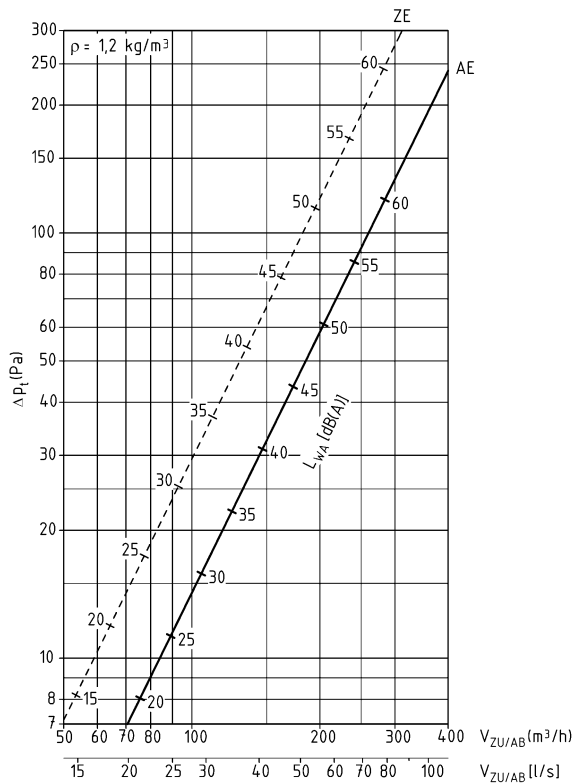
EÖB = installation opening width, see page 6.

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

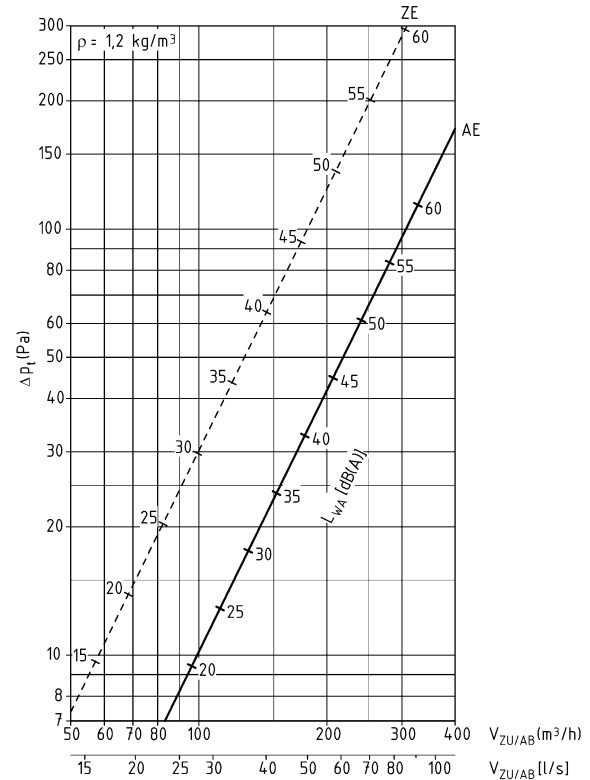
TECHNICAL DATA

Pressure loss and noise level

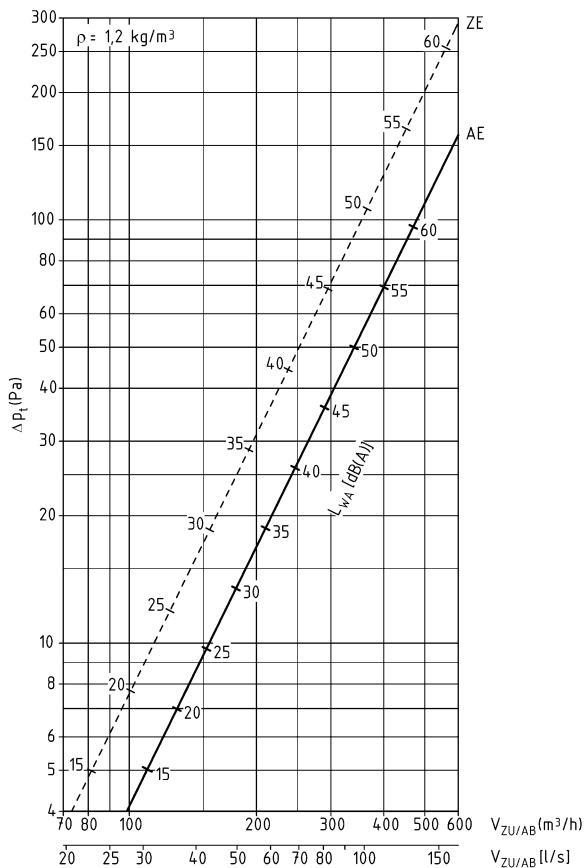
COMBIDSC-2-...-01000-...-ASK-26-2-...-S0-...



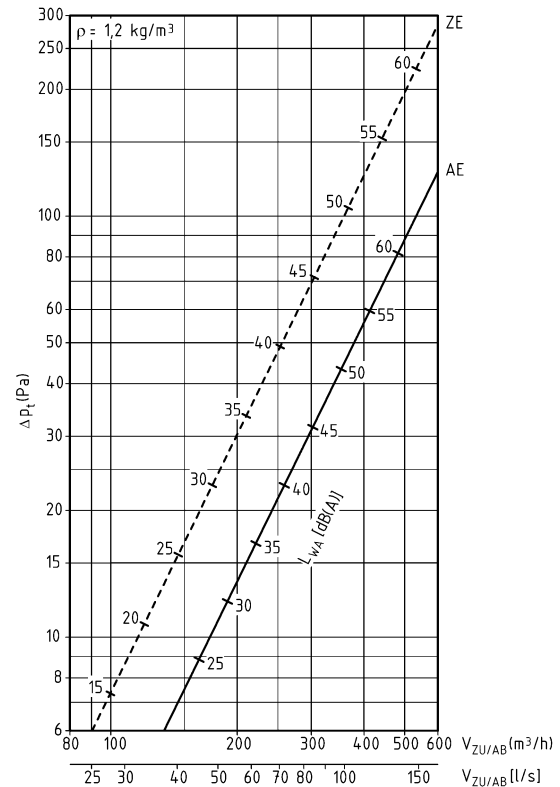
COMBIDSC-2-...-01000-...-ASK-26-2-...-S1/S2-...



COMBIDSC-4-...-01000-...-ASK-26-2-...-S0-...



COMBIDSC-4-...-01000-...-ASK-26-2-...-S1/S2-...



ZE = supply air unit
AE = return air unit

LEGEND

$V_{ZU/AB}$ (m ³ /h) [l/s]	=	supply air / return air volume
Δp_t (Pa)	=	Total pressure loss
ρ (kg/m ³)	=	Density
L_{WA} [dB(A)]	=	A-weighted sound power level
KF (-)	=	Correction factor
L (mm)	=	length
BL (mm)	=	Band length
DL (mm)	=	Difference in length
KH (mm)	=	Height of box
GH (mm)	=	Total height
KB (mm)	=	Width of box
KL (mm)	=	Length of box
D (mm)	=	Diameter
EÖB (mm)	=	Installation opening width
EÖL (mm)	=	Installation opening length

SLOT DIFFUSER ORDER CODE

01	02	03	04	05	06
Type	Model	Air throw	Frame profile	Frame surface	Blade colour
Example					
COMBIDSC	-2	-ZA	-R0	-9010	-L9005

07	08	09	10	11	12	13
Blade position for air jet	Single / band design	Length	Mounting	End piece	Additional profile	Dummy piece
Example						
-S	-N	-01000	-FV	-ES	-Z0	-BS0

Sample

COMBIDSC-2-ZA-R0-9010-L9005-S-N-01000-FV-ES-Z0-BS0

Combination slot diffuser COMBIDSC | 2-slot | supply air (with blades) / return air (without blades, with perforated plate) | STANDARD frame profile | aluminium painted to RAL colour 9010 (white) | supply air with blades made of plastic material (hard PVC) similar to RAL colour 9005 (black) - return air with perforated plate painted to RAL colour 9005 (black) | blades with horizontal one-way throw | single design | length L = 1000 mm | permanent connection to plenum box | with end piece | without additional profile | without dummy piece

ORDER DETAILS

01 - Type

COMBIDSC = COMBIDSC combination slot diffuser

02 - Model

2 = 2-slot (1 for supply air / 1 for return air)
 4 = 4-slot (2 for supply air / 2 for return air)

03 - Air throw

ZA = supply air (with blades) / return air (without blades, with perforated plate)

04 - Frame profile

R0 = Frame profile STANDARD
 S0 = Narrow frame profile
 P0 = Special frame profile

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 another RAL colour, at an extra charge (freely selectable, always with 4 digits).

06 - Blade colour

L9005 = supply air with blades made of plastic material (hard PVC) similar to RAL colour 9005 (black) / return air with perforated plate painted to RAL colour 9005 (black) (standard).
 L9006 = supply air with blades made of plastic material (hard PVC) similar to RAL colour 9006 (white aluminium) / return air with perforated plate painted to RAL colour 9006 (white aluminium).
 L9010 = supply air with blades made of plastic material (hard PVC) similar to RAL colour 9010 (white) / return air with perforated plate painted to RAL colour 9010 (white).
 Lxxxx = supply air with blades made of plastic material (hard PVC) painted to a freely selectable RAL colour / return air with perforated plate painted to the same colour as the blade (always with 5 digits).

07 - Blade position for air jet

V = Blades with vertical throw
 S = blades with horizontal one-way throw (standard)

08 - Single / band design

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

09 - Length

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

10 - Mounting

FV = permanent connection to plenum box (only possible with plenum box) (standard).
 VM = concealed mounting with plenum box (only possible with plenum box, possible for the models COMBIDSC-...-R0 / COMBIDSC-...-P0 and COMBIDSC-...-S0-...-Z2 [with additional profile]).
 KB = mounting with clamp strap (only possible without plenum box, possible for the models COMBIDSC-...-R0 / COMBIDSC-...-P0 and COMBIDSC-...-S0-...-Z2 [with additional profile]) (standard).
 GT = mounting with counter pole brace (only possible without plenum box, possible for the models COMBIDSC-...-R0 / COMBIDSC-...-P0 and COMBIDSC-...-S0-...-Z2 [with additional profile]).

11 - End piece

E0 = Without end piece (standard)
 ES = with end piece supplied loose (pair, standard for model with end piece).
 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.

12 - Additional profile

Z0 = without additional profile (standard)

Z1 = with additional profile Z I

Z2 = with additional profile Z II

Z3 = with additional profile Z III

Additional profiles only possible with frame profile

COMBIDSC-...-S0.

13 - Dummy piece

BS0 = without dummy piece (standard) (only possible in connection with plenum box.)

BS1 = with dummy piece made of sheet steel painted to RAL 9005 (black).

Dummy piece only possible without plenum box.

Mounting only possible with clamp strap (-KB, standard) or counter pole brace (-GT).

Depending on use, the combination slot diffuser COMBIDSC is only available with plenum box or dummy piece.

PLENUM BOX ORDER CODE

01	02	03	04	05	06	07	08
Type	Diffuser	Model	Single / Band design	Length	Mounting of box	Material	Damper
Example							
ASK	-26	-2	B	-11500	-FV	-SV	-DK1

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

Sample

ASK-26-2-B-01000-FV-SV-DK1-GD1-I0-KHS-KVS-S1-SDS-E0

Plenum box for slot diffuser | For COMBIDSC | 2-slot | Band design | Length 11,500 mm | Permanent connection | Galvanised sheet steel | With damper | With rubber lip seal | Without insulation | Standard height of box | Standard box neck | Lateral spigot | Standard spigot diameter | Without riveting nut

ORDER DETAILS

01 - Type

ASK = plenum box for slot diffuser

02 - Diffuser

26 = for COMBIDSC

03 - Model

2 = 2-slot (1 for supply air / 1 for return air)

4 = 4-slot (2 for supply air / 2 for return air)

04 - Single / band design

N = single design (length of box KL max. 1500 mm)

B = band design (available lengths according to SCHAKO standard for band design)

05 - Length

01000 = length L = 1000 mm

01500 = length L = 1500 mm

xxxxx = length (L/BL) in mm, freely selectable (always with 5 digits) (length of box KL = L-3 / total length of box GKL =

= BL-3, length min. 400 mm / max. 1500 mm)

06 - Mounting of box

FV = permanent connection (standard)

VM = concealed mounting (only possible for the models COMBIDSC-...-R0 / COMBIDSC-...-P0 and COMBIDSC-...-S0-...-Z2)

07 - Material

SV = galvanised sheet steel (standard)

08 - Damper

DK0 = without damper (standard)

DK1 = with damper (only with lateral spigot position [-S1/-S2]), in the plenum box housing)

DK2 = With damper and cable-operated adjustment (SZV) (only with connection from above [-S0], in the connection spigot)

09 - Rubber lip seal

GD0 = without rubber lip seal (standard)

GD1 = with rubber lip seal

10 - Insulation

I0 = without insulation (standard)

Ia = With external insulation

11 - Height of plenum box

KHS = standard height of box

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

12 - Box neck

KVS = Standard box neck

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

Can only be used with 2-slot models, 4-slot models don't have a box neck.

13 - Spigot position

S0 = spigot from above

S1 = lateral spigots on both sides (standard)

S2 = lateral spigot on one side

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)

EM = with riveting nut

ORDER CODE CORNER ANGLE

01	02	03	04	05
Type	Diffuser	Model	Frame profile	Frame surface
Example				
EW	-26	-2	-R0	-ELOX

06	07	08	09	10
Dummy profile colour	Angle between sides	Left-side length (a)	Right-side length (b)	Additional profile
-B9005	-090	-000	-000	-Z0

Sample

EW-26-2-R0-ELOX-B9005-090-000-000-Z0

Corner angle for slot diffuser | for COMBIDSC | 2-slot | STANDARD frame profile | natural colour anodised aluminium | aluminium painted similar to RAL colour 9005 (black) | angle $\alpha = 90^\circ$ | standard length (L=250 mm) | standard length (L=250 mm) | without additional profile

ORDER DETAILS

01 - Type

EW = corner angle for slot diffuser

02 - Diffuser

26 = for COMBIDSC

03 - Model

2 = 2-slot (1 for supply air / 1 for return air)

4 = 4-slot (2 for supply air / 2 for return air)

04 - Frame profile

R0 = Frame profile STANDARD

S0 = Narrow frame profile

P0 = Special frame profile

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 - Dummy profile colour

B9005 = aluminium painted similar to RAL colour 9005 (black) (standard).

B9006 = aluminium painted similar to RAL colour 9006 (white aluminium).

B9010 = aluminium painted similar to RAL colour 9010 (white).

Bxxxx = aluminium painted to a freely selectable RAL colour (always with 5 digits).

07 - Angle between sides

090 = angle $\alpha = 90^\circ$ (standard)

xxx = angle α as required (value between 90° [090] and 170° [170] possible) (always with 3 digits).

08 - Left-side length (a)

000 = standard length (2-slot L = 250mm / 4-slot L = 400 mm).

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

09 - Right-side length (b)

000 = standard length (2-slot L = 250 mm / 4-slot L = 400 mm).

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

10 - Additional profile

Z0 = without additional profile (standard)

SPECIFICATION TEXT

Combination slot diffuser for supply and return air suitable for wall or ceiling mounting. Highly inductive slot diffuser on the supply air side, free cross-section, resistance and sound power level constant in all blade positions.

Supply air element with pivoting air deflection blades. Return air element without blades, with perforated plate.

Product: SCHAKO type COMBIDSC-...-ZA-...

Model (number of slots):

- 2-slot (1 for supply air / 1 for return air) (-2)
- 4-slot (2 for supply air / 2 for return air) (-4)

Frame profile:

- STANDARD frame profile (-R0)
- narrow frame profile (-S0)
- special frame profile (-P0)

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 colour:

Supply air with blade made of plastic material (hard PVC) / return air without blade, with perforated plate made of painted sheet steel:

- Blade colour similar to RAL 9005 (black) / perforated plate painted to RAL colour 9005 (black) (-L9005) (standard).
- Blade colour similar to RAL 9006 (white aluminium) / perforated plate painted to RAL colour 9006 (white aluminium) (-L9006).
- Blade colour similar to RAL 9010 (white) / perforated plate painted to RAL colour 9010 (white) (-L9010).
- Blade and perforated plate painted to the same RAL colour, freely selectable (-Lxxxx, always with 5 digits).

Blade position for air jet:

- Blades with vertical throw (-V)
- Blades with horizontal one-way throw (-S) (standard)

Length / Model:

Single design (-N)

- Length L = 1000 mm (-N-01000)
- Length L = 1500 mm (-N-01500)
- Length (L) in mm, freely selectable (-N-xxxxx, always with 5 digits).
(Can be fitted with a plenum box in case of single design lengths $L \geq 400$ mm to ≤ 1500 mm.)

Band design (-B)

- Length (BL) in mm, as band (-B-xxxxx)
(Available lengths according to SCHAKO standard). With connecting pins, supplied loose (2 for each connection).

Depending on use, the combination slot diffuser COMBIDSC is only available with plenum box or dummy piece.

Mounting:

- Permanent connection with plenum box (-FV, standard).
 - Only possible with plenum box.
 - Standard for the models COMBIDSC-...-R0 / COMBIDSC-...-S0 and COMBIDSC-...-P0.
 - The slot diffuser is permanently connected to the plenum box.

- Concealed mounting with plenum box (-VM).
 - Only possible with plenum box.
 - Possible for the models COMBIDSC-...-R0 / COMBIDSC-...-P0 and COMBIDSC-...-S0-...-Z2 (with additional profile).
 - Not possible for the models COMBIDSC-...-S0-...-Z0 / COMBIDSC-...-S0-...-Z1 / COMBIDSC-...-S0-...-Z3.
 - The slot diffuser is screwed to the pole brace in the plenum box housing with concealed screws.
- Mounting with clamp strap (-KB, standard)
 - **Only possible for the model with dummy piece (-BS1) and without plenum box.**
 - Screws and clamp straps are supplied loose.
 - Possible for the models COMBIDSC-...-R0 / COMBIDSC-...-P0 and COMBIDSC-...-S0-...-Z2 (with additional profile).
 - Not possible for the models COMBIDSC-...-S0-...-Z0 / COMBIDSC-...-S0-...-Z1 / COMBIDSC-...-S0-...-Z3.
 - The slot diffuser is screwed to the clamp strap with concealed screws (included in delivery).
 - **For mounting, access on the rear is not required!**
- Mounting with counter pole brace (-GT)
 - **Only possible for the model with dummy piece (-BS1) and without plenum box.**
 - Screws and clamp straps are supplied loose.
 - Possible for the models COMBIDSC-...-R0 / COMBIDSC-...-P0 and COMBIDSC-...-S0-...-Z2 (with additional profile).
 - Not possible for the models COMBIDSC-...-S0-...-Z0 / COMBIDSC-...-S0-...-Z1 / COMBIDSC-...-S0-...-Z3.
 - The slot diffuser is screwed to the counter pole brace (pole brace strap) with concealed screws (included in delivery).
 - **For mounting, access on the rear is required!**

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)
- Additional profile (-Z0 / -Z1 / -Z2 / -Z3)
 - without additional profile (-Z0) (standard).
 - with additional profile, made of aluminium (same colour as frame, only possible for COMBIDSC-...-S0):
 - Z I (-Z1): connection of ceiling panels.
 - Z II (-Z2): connection of panelled ceilings.
 - Z III (-Z3): connection of ceiling panels.
- dummy piece (-BS0 / -BS1)
 - without dummy piece (-BS0) (standard, only possible in connection with plenum box)
 - 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 length $L \geq 200$ mm.
 - Mounting only possible with clamp strap (-KB, standard) or counter pole brace (-GT).

- Plenum box (-ASK-26), with mounting brackets.
 - Model (number of slots):
 - 2-slot (1 for supply air / 1 for return air) (-2)
 - 4-slot (2 for supply air / 2 for return air) (-4)
 - Single / band design:
 - Single design (-N, length of box KL max. 1500 mm)
 - Band design (-B, available lengths according to SCHAKO standard for band design)
 - Length:
 - Length L = 1000 mm (-01000) (KL = 997 mm)
 - Length L = 1500 mm (-01500) (KL = 1497 mm)
 - Length (L/BL) in mm, freely selectable (-xxxx, always with 5 digits)
(Length of box KL = L-3 / total length of box GKL = BL-3, can be fitted with a plenum box in case of single design lengths L = ≥ 400 mm to ≤ 1500 mm.)
 - Mounting of box:
 - Permanent connection (-FV) (standard)
 - Concealed mounting (-VM) (only possible for the models COMBIDSC-...-R0 / COMBIDSC-...-P0 and COMBIDSC-...-S0-...-Z2).
 - 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 (only with lateral spigot position [-S1/-S2]) (-DK1).
 - in the connection spigot, with cable-operated adjustment (with spigot position from above [-S0]) (-DK2).
 - 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)
 - 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 and standard box neck = spigot diameter $\varnothing D + 82$ mm / with spigot position S0 = 180 mm)
 - Box neck:
 - standard box neck (-KVS)
 - box neck extension in mm, freely selectable (-xxx, always with 3 digits), box neck (not adjustable) from ≥ 45 mm to 200 mm possible.
Can only be used with 2-slot models, 4-slot models don't have a box neck.
 - Spigot position:
 - Spigot from above (-S0)
 - lateral spigots on both sides (-S1) (standard)
 - lateral spigot on one side (-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)
 - With riveting nut (-EM), made of brass.
- Corner angles (-EW-26), frame and dummy profile made of extruded aluminium profile. Mounting with suspension lugs (-AL), supplied loose.
 - Model (number of slots):
 - 2-slot (1 for supply air / 1 for return air) (-2)
 - 4-slot (2 for supply air / 2 for return air) (-4)
 - Frame profile:
 - STANDARD frame profile (-R0)
 - Narrow frame profile (-S0)
 - Special frame profile (-P0)
 - Frame surface:
 - Natural colour anodised aluminium (-ELOX, standard)
 - Aluminium painted to:
 - RAL colour 9006 (white aluminium, -9006)
 - RAL colour 9010 (white, -9010)
 - a freely selectable RAL colour (-xxxx, always with 4 digits)
 - Dummy profile colour:
 - Dummy profile made of painted aluminium:
 - colour similar to RAL 9005 (black) (-B9005) (standard).
 - colour similar to RAL 9006 (white aluminium) (-B9005).
 - colour similar to RAL 9010 (white) (-B9010).
 - RAL colour freely selectable (Bxxxx) (always with 5 digits).
 - Angle between sides:
 - angle $\alpha = 90^\circ$ (-090) (standard)
 - angle (α) as required (-xxx), values between $\alpha = 90^\circ$ (-090, standard) and 170° (-170) are possible (always with 3 digits).
 - Left-side length (a):
 - standard length L=250 for 2-slot models / L=400 for 4-slot models (-000).
 - length (L) in mm, freely selectable (-xxx) (minimum length = standard length) (always with 3 digits).
 - Right-side length (b):
 - standard length L=250 for 2-slot models / L=400 for 4-slot models (-000).
 - length (L) in mm, freely selectable (-xxx) (minimum length = standard length) (always with 3 digits).
 - Including 4 fishplates (-VL, included in delivery) made of aluminium (same colour as frame), supplied loose.
 - Additional profile:
 - without additional profile (-Z0) (standard)