CDHb/CLHb

Installation – Commissioning – Maintenance

20210608

Installation

- There are four hanging eyes for suspended installation. Figure 1, 4 & 6
  - Installation fittings/hanger rods are not included.
  - It's important that all four hanger brackets are on the same horizontal plane (±1.0 mm) to ensure that the filter fits tightly. See figure 1.
- The rectangular duct connection has a flange design. See Figure 5.
- The circular connection has a insertion design. See Figure 4.
- Avoid leakage to/from area above the suspended ceiling:
  - Seal all joints between the air diffusers and ceiling system to prevent air in or out from/to the area above the suspended ceilin
  - Duct connections to CDH/CLH must be sealed, check for leakage.
  - Grid system 600x600. Important to mount the diffuser backing box's flange under the grid section. Important to ensure the tightness between the air diffuser and ceiling system too, see figures on page 2.

Commissioning

The product lacks a commissioning damper. It is recommended that the ducts before the diffuser are provided with some sort of commissioning.

Filter

- Recommended final residual pressure: 2x initial pressure drop for a clean filter.
- The filter may be subjected to a maximum pressure drop of 500 Pa
  NOTE! Degree of separation then is probably worse than H14
- The pressure drop across the filter is measured in the measurement tapping on the diffuser backing box flange and is measured in relation to atmospheric pressure, see figure 1.
- It is necessary to first remove the diffuser plate to access the measurement tapping.
- There is a test protocol in the filter packaging as well as product labels from the filter supplier.

Changing the filter

- Maintenance and care of filters, see page 4.
- Loosen the diffuser plate by carefully pulling it down to release it from its spring brackets.
- Filter replacement CDH rubber sealed filter:
  - Remove 4 M8x40 bolts from the U-beams that hold the filter against the air diffuser backing box, see figure 2. Install a new filter as described above but in the reverse order.
- Use a torque wrench to tighten the bolts with a torque of 4 Nm.
- Filter replacement CLH gel sealed filter:
  - Press in the springs that hold the filter in position, see figure 3. To install a new filter, carefully press the filter into position until the springs firmly grip the filter.
- NOTE! Max. temperature 70 °C in continuous operation.

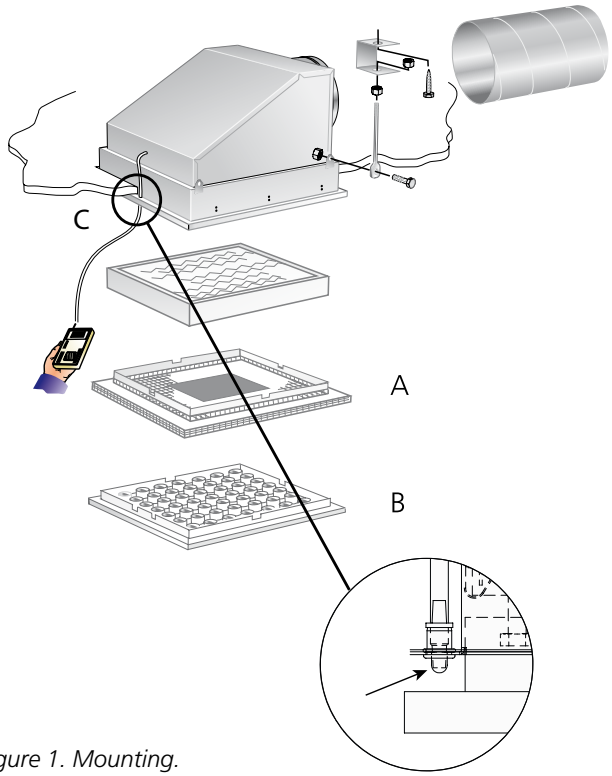


Figure 1. Mounting.
A = Perforated diffuser plate.
B = Diffuser plate with nozzles
C = Measurement tapping for DOP test) and pressure measurement across the filter.*

**) Test of leakage on the product and check of the filter's particle separation efficiency with DOP testing.*

DOP-testing

For DOP-testing, use the spigot hidden behind the diffusers front face.

Maintenance

The diffuser should be cleaned when necessary or routinely using either lukewarm water with detergent added or alcohol.

Swegon

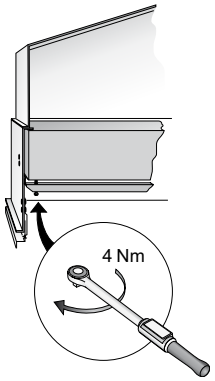


Figure 2. CDH, with rubber-sealed filter.

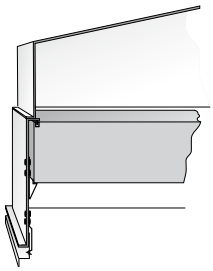


Figure 3. CLH, with gel-sealed filter.

CDH/CLH for 600x600 suspended ceilings

The flange on the diffuser backing box must be below the ceiling system's grid sections to access the nipple for pressure/DOP test.

- Seal all joints between the air diffusers and ceiling system to prevent air in or out from/to the area above.

Dimensions and weights

Circular connection

Size	Dimensions (mm)					Weight*) (kg)
	A	B	ØD	L	N	
33-160	390	339	159	130	320	8,1
60-315	595	547	314	130	475	18,7
66-315	693	642	314	130	475	18

*) Incl. filter

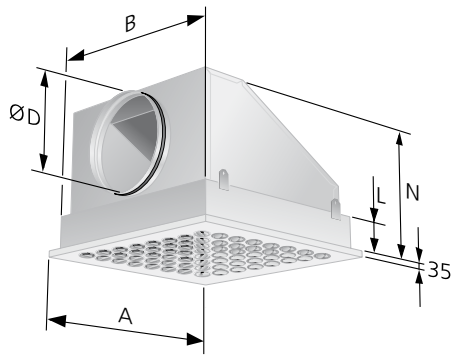


Figure 4. CDH/CLH, circular connection.

Rectangular connection

Size	Dimensions (mm)						Weight*) (kg)
	A	C x D	E x F	G	H	B1	
33-300x100	390	360x160	300x100	130	339	290	8,1
60-500x100	595	560x160	500x100	130	547	290	18,7
66-600x100	693	660x160	600x100	130	642	290	18

*) Incl. filter

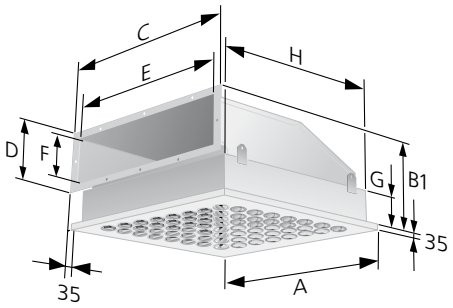


Figure 5. CDH/CLH, rectangular connection.

Number of nozzles for diffuser faces with nozzles

Size		Number of nozzles
Circular	Rectangular	
33-160	33-300x100	25
60-315	60-500x100	64
66-315	66-600x100	64

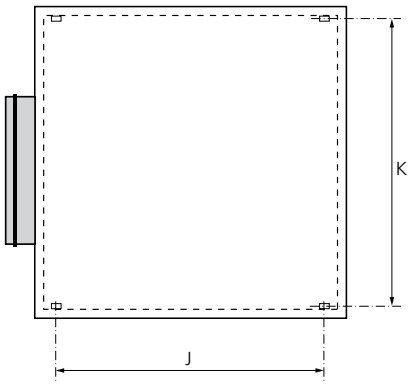


Figure 6. CDH/CLH, suspension (Measurements JxK in table Filter dimensions below).

Filter dimensions

Size		Length x Width x Height (mm)				Suspension measurements J x K (mm)
Circular	Rectangular	CDH-rubber seal	Weight (kg)	CLH-gel seal	Weight (kg)	
33-160	33-300x100	305 x 305 x 66	1,7	305 x 305 x 80	2,4	285x340
60-315	60-500x100	508 x 508 x 66	3,7	508 x 508 x 80	4,4	490x545
66-315	66-600x100	610 x 610 x 66	5,5	610 x 610 x 80	6,4	585x640

EPA, HEPA, ULPA Filters

Operating & maintenance instructions

The instruction applies to the following products:

- Absolute™
- Closepleat
- Megalam®

Storage instruction

- Stored with the folds, vertical, dry and free from frost
- Avoid direct sunlight, and not above 70 °C

Handling instruction

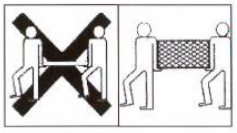
- The folds in a vertical position for transport and movement
- Handled with care during unpacking
- See symbols on the box
- Unpacking: Remove the box from the filter without touching the media
- Unpacking: Filter with packing, careful handling
- Avoid spillage and splashes from liquids

Installation instruction

- Use protective clothing/face mask during filter replacement
- Install the filter with the folds vertical
- Seals must not be damaged during installation

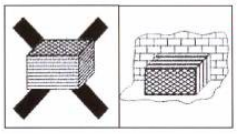
Maintenance instruction

- Not applicable (the filter is of a disposable type)
- Not washable
- Consumed filters are handled according to applicable local regulations



Transport vertical

Do not drop



Store vertical

Do not knock or hit the filter

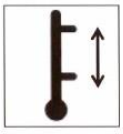
Prevent spillage and splashes

Do not walk on the filter

Do not press on the filter

Do not use a cardboard knife

Store in a clean and dry place



+ 40 °C
+ 5 °C
Storage

Nozzle settings

Standard nozzle setting is 4-way, throw length data according to the sizing diagram.

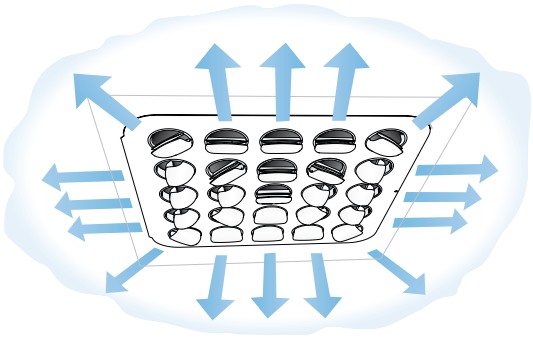
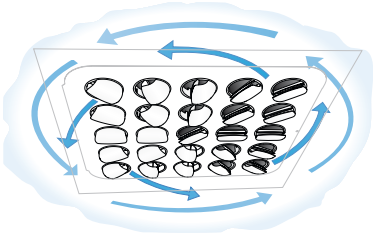


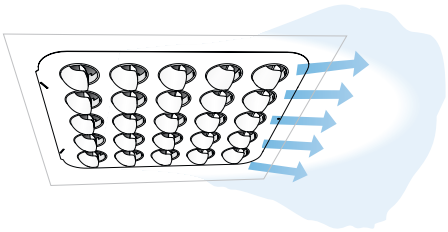
Figure 7. 4-way.

Alternative nozzle settings can be set according to the below. There is no throw length data for these.

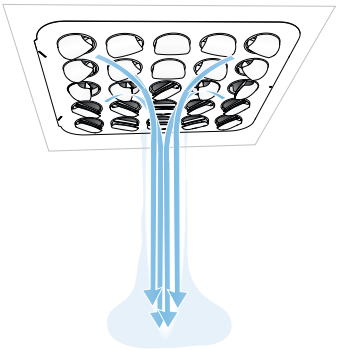
Rotation



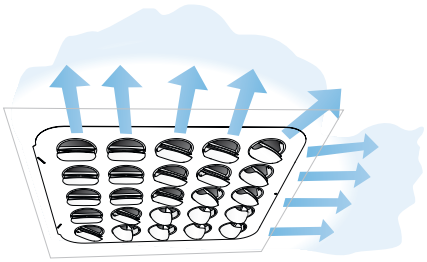
1-way



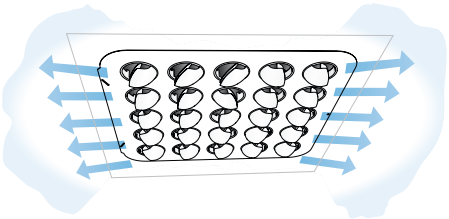
V1 Vertical concentrated



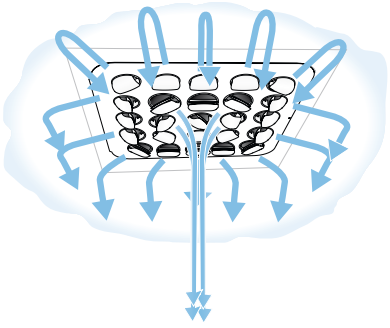
2C-way



2M-way



V2 Vertical diffused



3-way