

PELICAN Ceiling HF

Installation – Commissioning – Maintenance

20200624

Accessories

Commissioning box:

ALS. The commissioning box is made of galvanized sheet steel and contains a removable commissioning damper, fixed measurement tapping and sound absorbing material^{*)} with reinforced surface layer.

^{*)} Fire resistance rated to B-s1,d0 in accordance with EN ISO 11925-2.

Frame:

SAR K, for aesthetic installation of a lowered diffuser section.

Adapter:

ADAPTER, for adaptation to various variants and makes of systemized false ceilings: Ecophon, Gyproc, Dampa, etc. Used also for adaptation to alternative sizes of systemized false ceilings, e.g. 625 x 625 or 675 x 675. Specification available in separate product sheet for ADAPTER.

Installation

To dismantle the front face, insert a thin object, for example a Quick Access card or the equivalent, in between the diffuser face and the diffuser backing box in order to release the springs. Move the card from the centre out towards the corner, see Figure 2.

The inlet spigot of the air diffuser backing box can be secured to the connecting duct by means of self-tapping screws or a blind rivets. For flush-mounting in fixed ceiling constructions, secure the air diffuser by means of screws into place in the framework through either the sides or top of the air diffuser backing box.

For mounting in modular suspended ceilings, it is advisable to select air diffusers with outer dimensions of 595 x 595 mm. Position these directly down in the T-bar framework, and then secure them to the duct system or to the commissioning box.

If an ALS commissioning box is used, it must be secured to the building structure by means of hangers or mounting brackets.

The distance between the commissioning box and the air diffuser can be increased by as much as 500 mm without having to lengthen the measuring tubes and damper adjustment cords. See Figure 3.

Commissioning

Commissioning should be carried out with the front face mounted. Pull the measuring tubes and damper adjustment cords through the front face. Then connect the manometer to the correct measuring tube. Always use the transparent tube for extract air.

The rated coefficient of performance of the air diffuser can be used in a calculation to determine the required commissioning pressure. Conclude commissioning by adjusting the damper to the correct blade position, tie a commissioning knot in the damper cords to indicate the damper position.

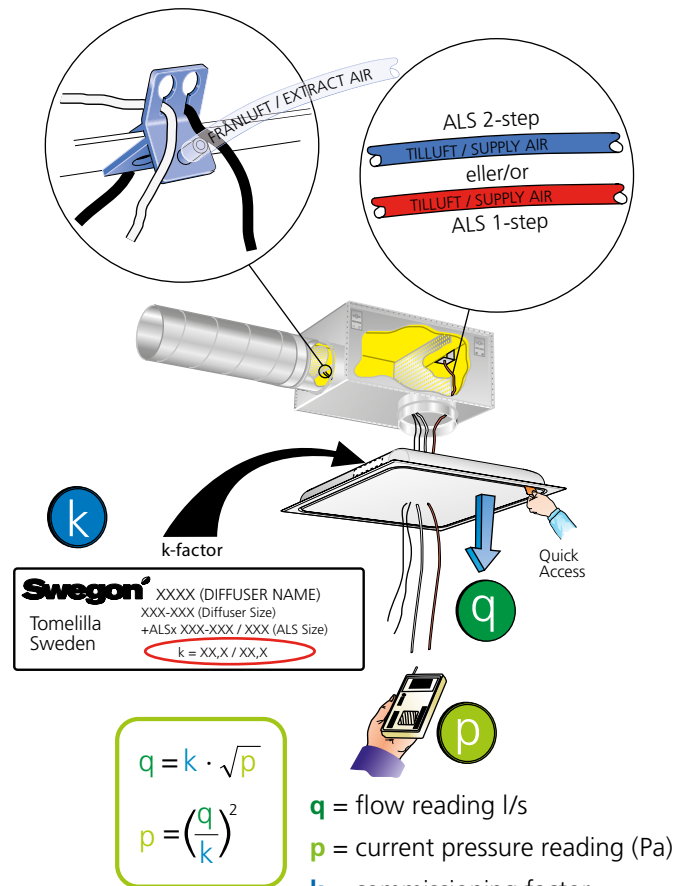


Figure 1. Commissioning.

Measurement accuracy and requirement on straight duct before the commissioning box, see Figure 3. The requirements of straight duct depends on the type of disturbance before the commissioning box. Figure 3 shows a bend, a dimensional change and a T-piece. Other types of disturbances requires at least 2xD straight (D = connection dimension) for measurement accuracy of $\pm 10\%$ of the flow.

The rated coefficient of performance (K-factor) is specified on the identification label of the product and in the relevant commissioning instructions at www.swegon.com.

Maintenance

The air diffuser can be cleaned, if necessary, using lukewarm water with dishwashing detergent added or by vacuum cleaning using a brush nozzle. The duct system can be reached for cleaning after opening the front face. If a type ALS commissioning box is used, swing the front face to the side on its hinges so that you then can grip the handle of the tubular damper casing and rotate it out of its holder. See Figure 4.

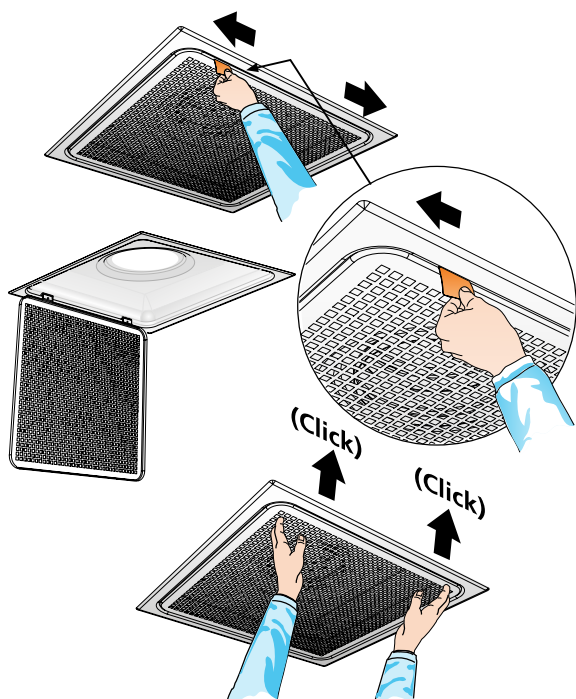


Figure 2. Quick Access.

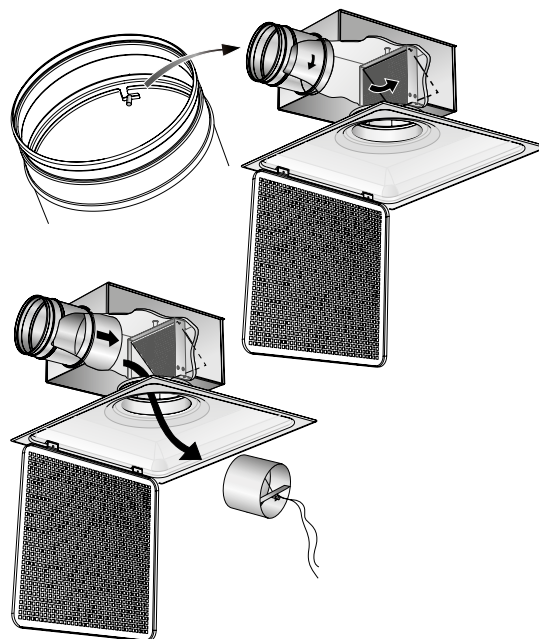


Figure 4. To dismantle the damper.

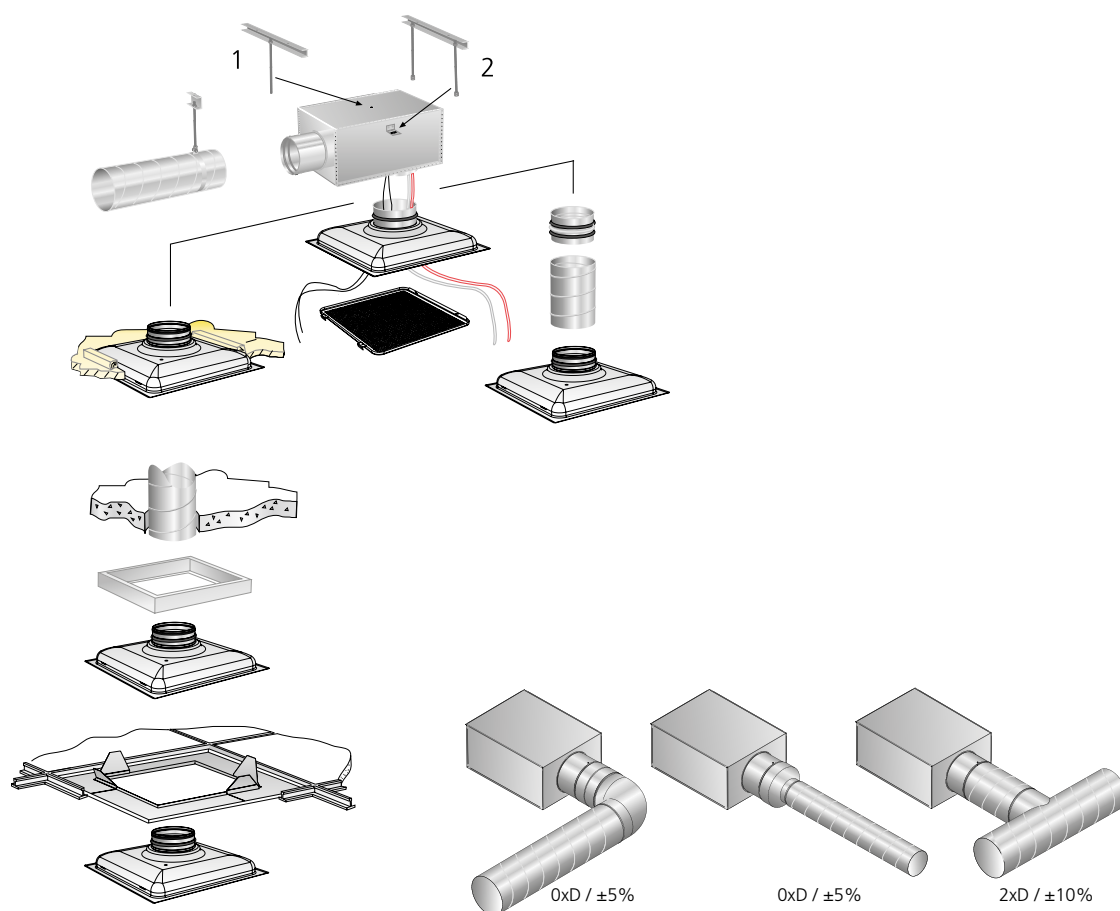


Figure 3. Installation alternatives.

Dimensions and weights

PELICAN Ceiling HF

Size	Dimensions (mm)				Weight (kg)
	A	Ød	I	M	
160-600	595	159	575	70	3.5
200-600	595	199	575	70	3.5
250-500	495	249	475	70	3,4
250-600	595	249	575	70	3.5
315-500	495	314	475	70	3,4
315-600	595	314	575	50	3.5
400-600	595	399	575	50	3.5

Dimensions of opening in ceiling = I x I
CL = Center line

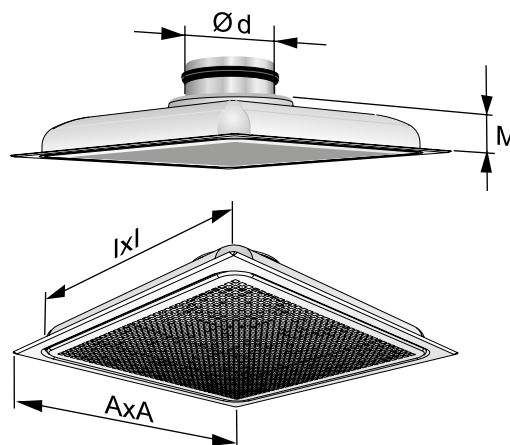


Figure 5. PELICAN Ceiling HF

PELICAN Ceiling HF + ALS – One step

Size	Dimensions (mm)											Weight (kg)
	A	B	C	ØD	Ød1	E	F	G	H	J	K	
160-600	595	342	252	124	160	279	113	188	315	40	80	6.2
200-600	595	404	288	159	200	314	113	205	375	40	100	7.0
250-500	495	504	332	199	250	354	113	225	465	40	115	8,2
250-600	595	504	332	199	250	354	113	225	465	40	115	8.7
315-500	495	622	388	249	315	395	93	230	575	40	140	11,8
315-600	595	622	388	249	315	395	93	230	575	40	140	11.8
400-600	595	767	488	314	400	455	93	262	712	40	175	15.0

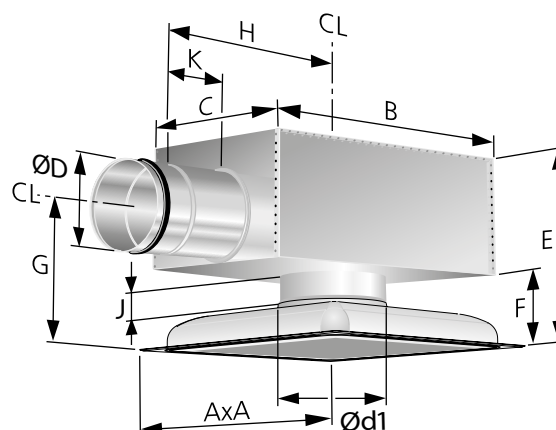


Figure 6. PELICAN Ceiling HF with ALS. CL = Centerline.

K-factor

ALS Size	PELICAN CE HF Size	Extract air	
		K-factor	Tube colour
125-160	160-600	8.1	Transparent
160-200	200-600	13.3	Transparent
160-250	250-500	14,7	Transparent
200-250	250-500	20,8	Transparent
200-250	250-600	20.5	Transparent
200-315	315-500	22,8	Transparent
250-315	315-500	32,5	Transparent
250-315	315-600	32.1	Transparent
315-400	400-600	49.6	Transparent

Number of measuring tubes: 1

SAR K – Frame

Size	Dimensions (mm)		Weight (kg)
	L	N	
500	495	75	1
600	595	75	1

When installing size 315-600 and 400-600 air diffusers, position the ALS box so that its branch extends 20 mm below the ceiling surface.

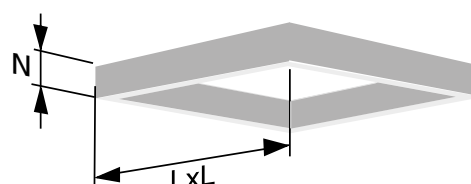


Figure 7. SAR K frame.