

KITE CCa, CRa

Installation – Commissioning – Maintenance

20240506

Accessories

Commissioning boxes

ALS/REACT 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.

The ALS commissioning box is available with one or two differences in dimension between the inlet and the outlet and also a version for low installation where a low overall height is required. The ALS commissioning box is then supplied without outlet branch.

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

Blanking plate

SECTOR KITE CR

For blanking off a sector of the air distribution pattern in the square slot diffuser design (KITE CR), only standard installation height applies.

Installation

- The diffuser face is easily removed with a simple action, 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 blind rivets.
- For flush-mounting in fixed ceilings, secure the air diffuser to the building structure through the top of the backing box.
- The air diffuser and ALS commissioning box with low installation height are centred with each other using the supplied locking strip. The air diffuser is secured in the correct position with screws or blind rivets in the underside of the commissioning box, see figure 4.
- For installation in suspended ceilings with a framework, place the air diffuser directly down in the T-bar framework, and then fix it to the duct system or to the commissioning box.
- When an ALS or REACT 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 up to 500 mm with circular duct, without having to lengthen the measuring tubes and damper adjustment cords. See figure 3.

Commissioning with ALS

- Commissioning should be carried out with the diffuser face mounted.
- Pull the measuring tubes and damper adjustment cords out through the diffuser face.
- Connect a pressure gauge to the measuring tube/tubes.
- The red tube from the ALS commissioning box in the one-step design is used for supply air.
- The blue tube from the ALS commissioning box in the two-step design.
- For extract air, always use the transparent tube.

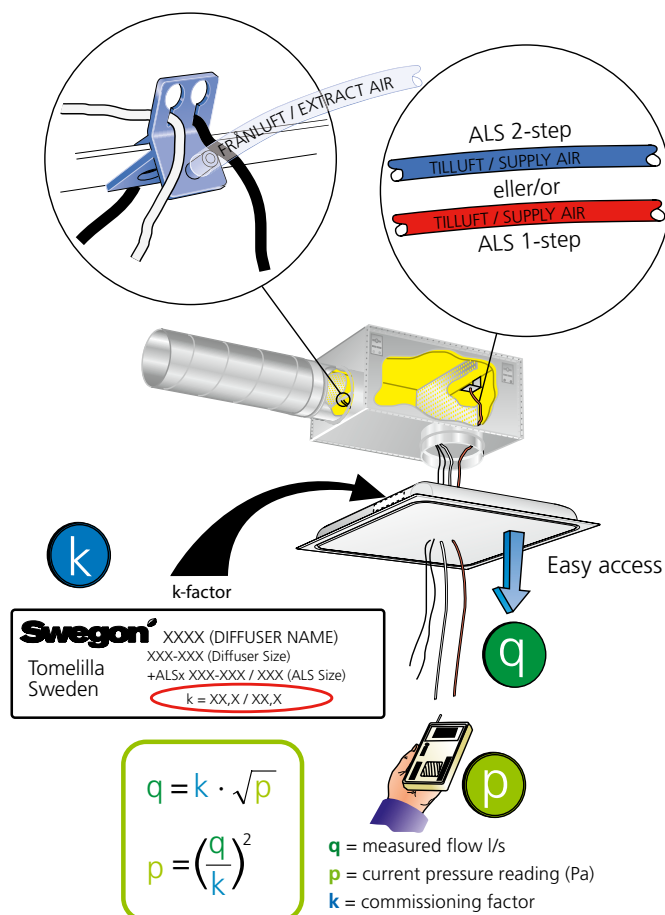


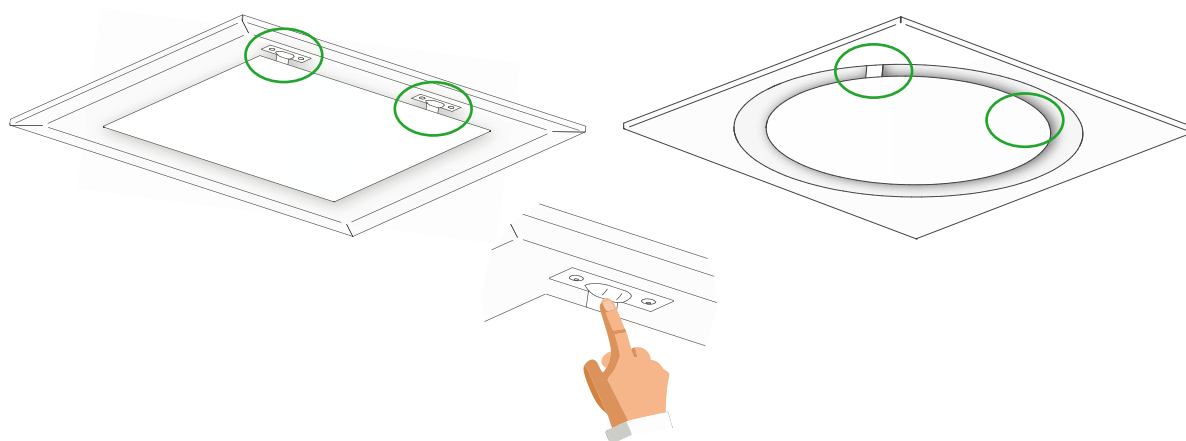
Figure 1. Commissioning.

- K-factor label is located in the backing box.
- The adjusted damper position is saved by tying together the damper cord in an adjustment knot.
- Measurement accuracy and straight section requirement before the commissioning box, see figure 3.
- Figure 3 shows a bend, a change in dimension and T-piece.
- Other types of disturbance require at least 2xD straight section (D= connection dimension) to obtain a measurement accuracy of $\pm 10\%$ on the flow.
- The K-factor is also specified in the relevant commissioning instructions at www.swegon.com.

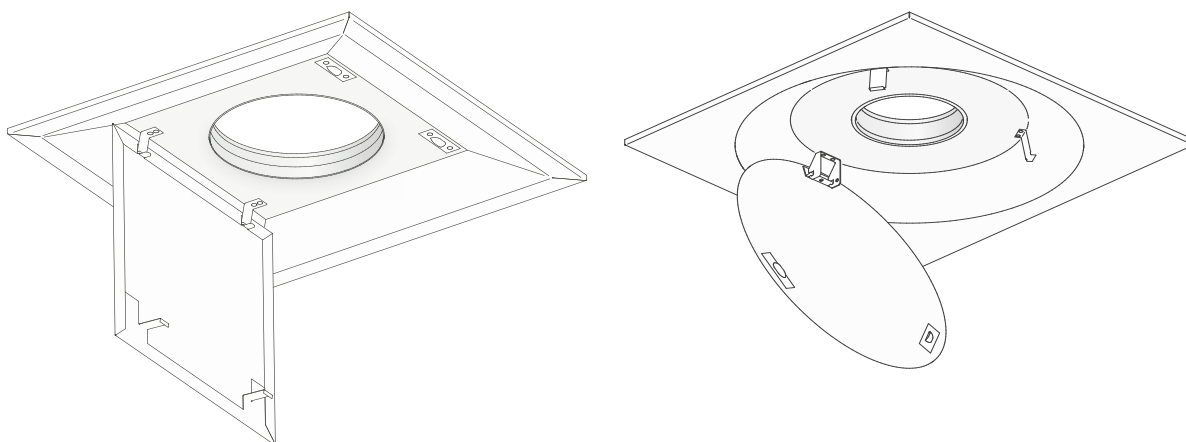
Maintenance

- 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 is cleaned by opening the diffuser face. If a REACT ALS or ALS commissioning box is used, pull the distributor plate aside and then grip and twist the damper unit from of its mounting. See figure 5.

Swegon



1. Locate the diffuser face's locking devices (2 pcs).
2. Press the spring fasteners (2 pcs) towards the centre of the diffuser, which releases the diffuser face.



3. The diffuser face hangs on the corresponding side by the hinge.

Figure 2. Easy Access, dismantling the diffuser face.

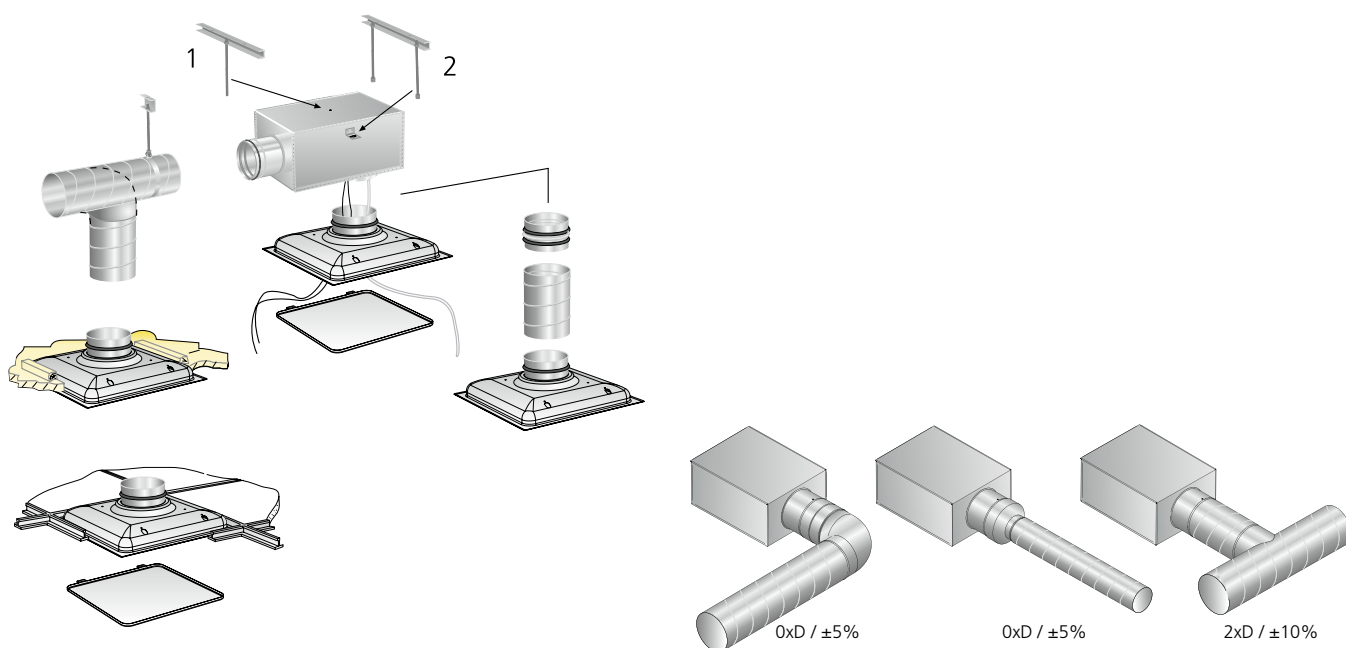


Figure 3. Installation options for the ALS commissioning box.
See the REACT ALS product sheet for installation options with active commissioning box.

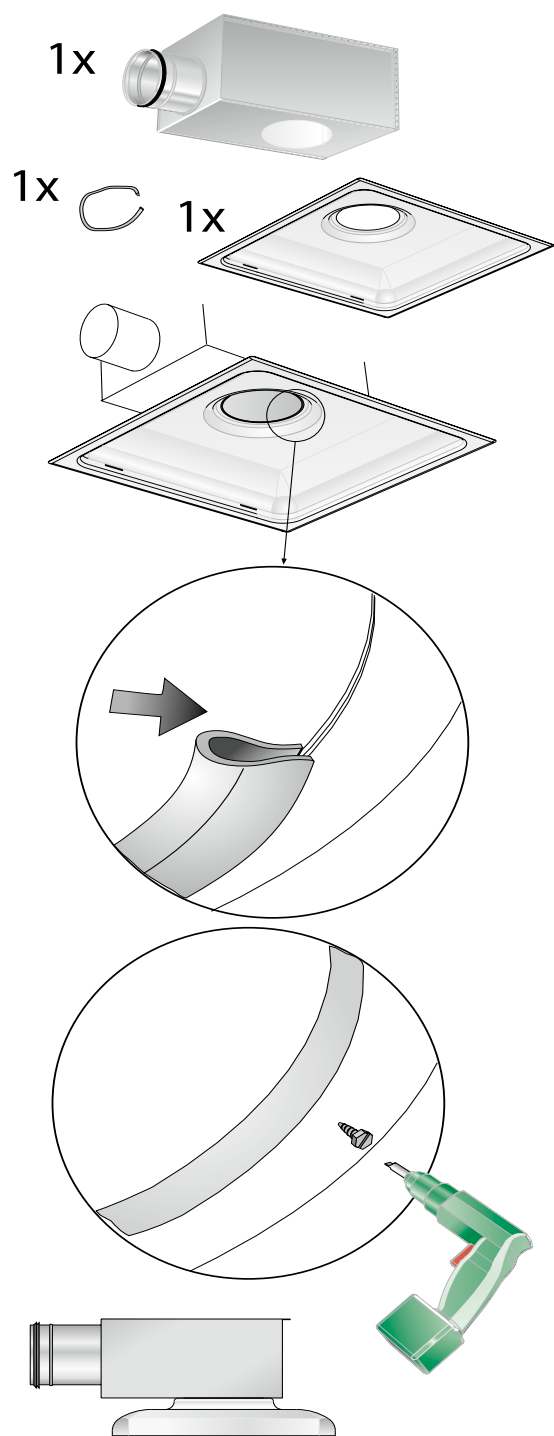


Figure 4. Installation of air diffuser and ALS commissioning box with low installation height.

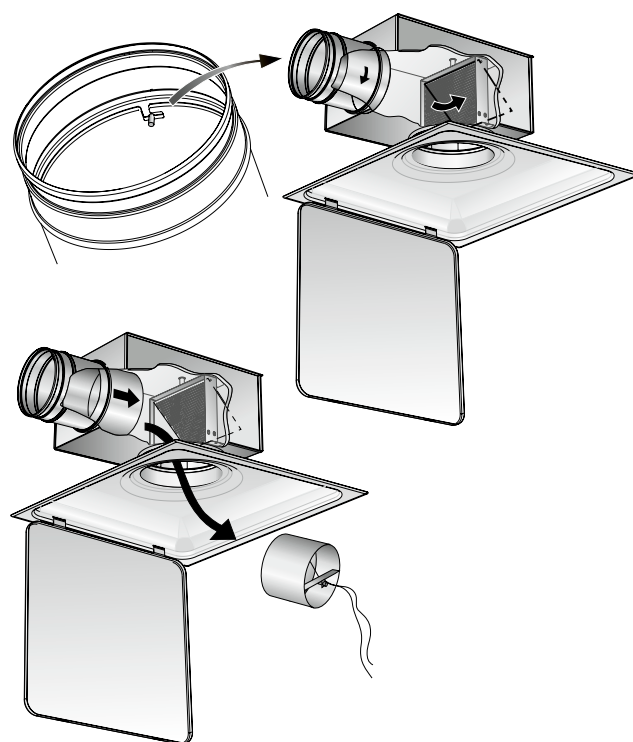


Figure 5. Dismantling the damper when using ALS and REACT ALS commissioning box.

Blanking off the air distribution pattern

Note: Blanking off only applies for KITE CR with standard installation height. A maximum of 2 blanking plates may be used.

To calculate the air stream diffusion, air velocities in the occupied zone or sound levels in rooms where blanking off is performed, please refer to our calculation software available on www.swegon.com.

Installation

The blanking plate is equipped with a magnet, which makes it easy and flexible to place it in the desired orientation.

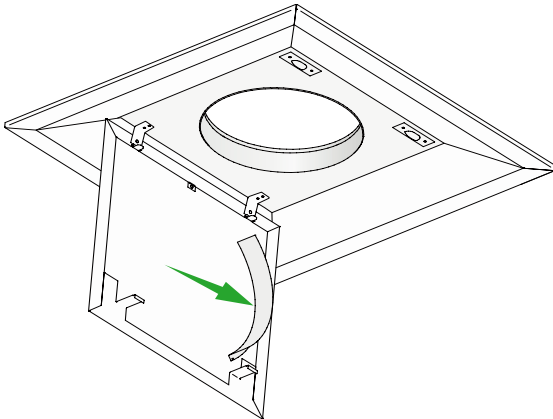


Figure 6. Alternative 1, blanking plate installed in the diffuser face.

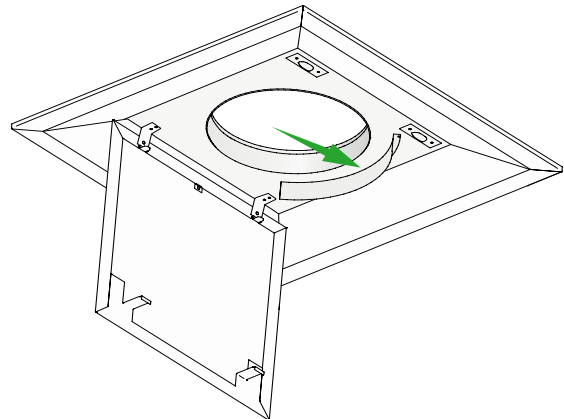


Figure 7. Alternative 2, blanking plate installed in the backing box.

Air distribution patterns with blanking plate installed

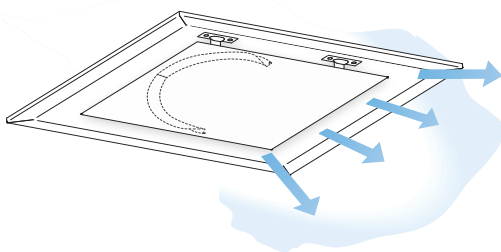


Figure 8. 1-way.
Two blanking plates installed side-by-side on the air diffuser, the joint between the blanking plates is placed in the center of the side.

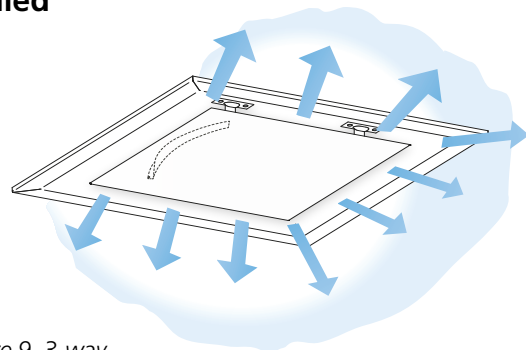


Figure 9. 3-way.
One blanking plate installed on optional side of the air diffuser.

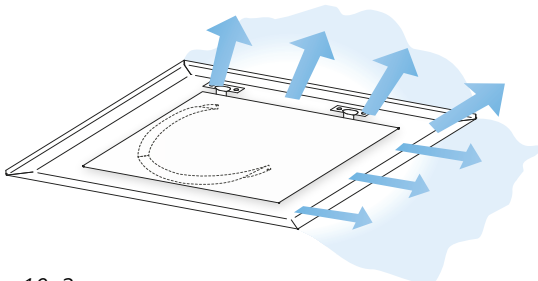


Figure 10. 2-way corner.
Two blanking plates installed side-by-side on the air diffuser, the joint between the blanking plates is placed directed at a corner.

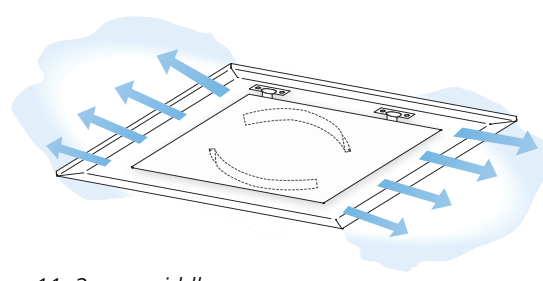


Figure 11. 2-way middle.
Two blanking plates installed on opposite sides of the air diffuser.

Dimensions and weights

KITE CC

Size	ØA	Weight, kg
125	125	3.4
160	160	3.4
200	200	3.4
250	250	3.3
315	315	3.3

Size of the opening = 520 x 520

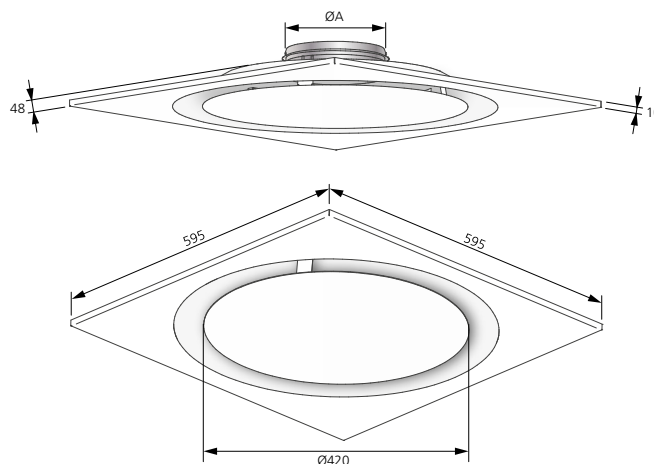


Figure 12. KITE CC.

KITE CC with ALS commissioning box - One step

Size	A	B	C	ØD	Ød	E1	E2	F1	F2	G1	G2	H	K	Weight, kg
125-600	595	282	217	99	125	233	190	91	48	153	110	270	80	5.3
160-600	595	342	252	124	160	257	214	91	48	166	123	315	80	6.0
200-600	595	404	288	159	200	292	249	91	48	183	140	375	100	7.0
250-600	595	504	332	199	250	332	289	91	48	203	160	465	115	8.3
315-600	595	622	388	249	315	393	350	91	48	228	185	575	140	11.1

KITE CC with ALS commissioning box - Two steps

Size	A	B	C	ØD	Ød	E1	E2	F1	F2	G1	G2	H	K	Weight, kg
160-600	595	342	252	99	160	233	190	91	48	153	110	315	80	5.6
200-600	595	404	288	124	200	257	214	91	48	166	123	355	80	6.4
250-600	595	504	332	159	250	292	249	91	48	183	140	450	100	7.5
315-600	595	622	388	199	315	332	289	91	48	203	160	550	115	9.8

KITE CC with REACT ALS active commissioning box

Size	A	B	C	ØD	Ød	E1	F1	G1	H	K	Weight, kg
250-600	595	504	332	159	250	292	91	192	450	100	8.2
315-600	595	622	388	249	315	391	91	243	575	140	11.1

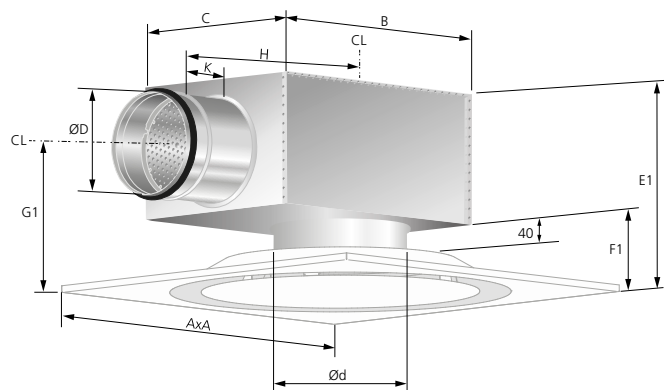


Figure 13. KITE CC with ALS or REACT ALS commissioning box.
CL = Centreline

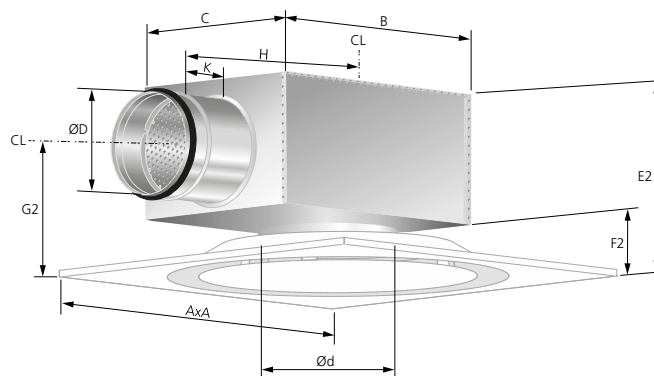


Figure 14. KITE CC with ALS commissioning box.
Low installation height.

KITE CR

Size	ØA	Weight, kg
125	125	3.4
160	160	3.3
200	200	3.3
250	250	3.3
315	315	3.3

Size of the opening = 520 x 520

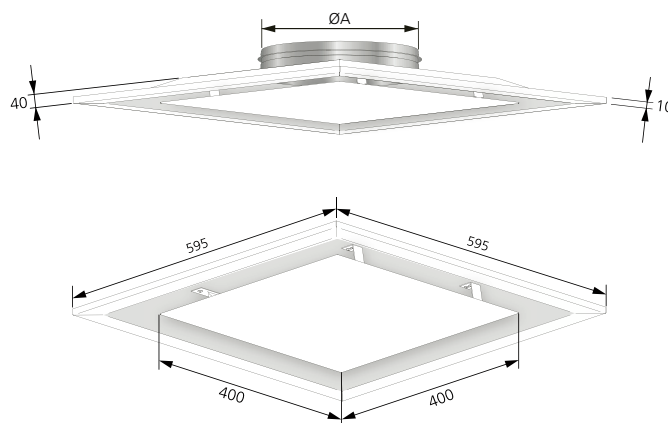


Figure 15. KITE CR.

KITE CR with ALS commissioning box - One step

Size	A	B	C	ØD	Ød	E1	E2	F1	F2	G1	G2	H	K	Weight, kg
125-600	595	282	217	99	125	225	182	83	40	145	102	270	80	5.2
160-600	595	342	252	124	160	249	206	83	40	158	115	315	80	5.9
200-600	595	404	288	159	200	284	241	83	40	175	132	375	100	6.8
250-600	595	504	332	199	250	324	281	83	40	195	152	465	115	8.2
315-600	595	622	388	249	315	385	342	83	40	220	177	575	140	10.9

KITE CR with ALS commissioning box - Two steps

Size	A	B	C	ØD	Ød	E1	E2	F1	F2	G1	G2	H	K	Weight, kg
160-600	595	342	252	99	160	225	182	83	40	145	102	315	80	5.5
200-600	595	404	288	124	200	249	206	83	40	158	115	355	80	6.2
250-600	595	504	332	159	250	284	241	83	40	175	132	450	100	7.4
315-600	595	622	388	199	315	324	281	83	40	195	152	550	115	9.7

KITE CR with REACT ALS active commissioning box

Size	A	B	C	ØD	Ød	E1	F1	G1	H	K	Weight, kg
250-600	595	504	332	159	250	284	83	184	450	100	8.1
315-600	595	622	388	249	315	383	83	235	575	140	10.9

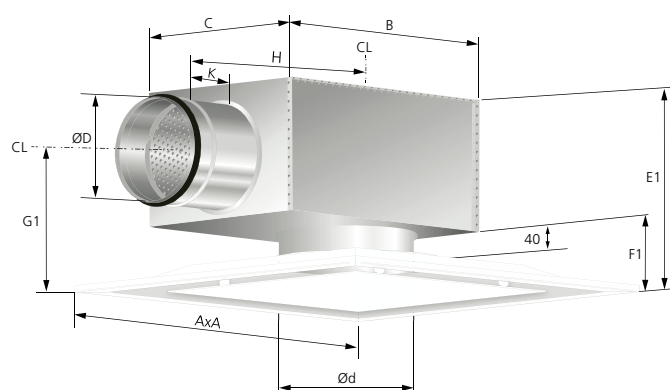


Figure 16. KITE CR with ALS or REACT ALS commissioning box.
CL = Centreline

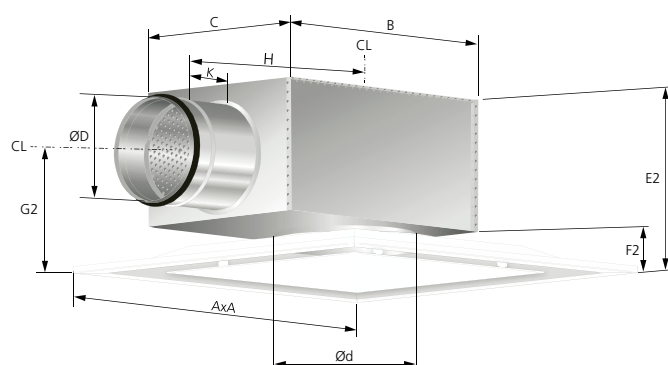


Figure 17. KITE CR with ALS commissioning box.
Low installation height.

K-factor

KITE CC with ALS commissioning box

Supply air

ALSd Size	KITE CC Size	Standard	Low version	Tube colour
100-125	125-600	9.7	8.5	Red
100-160	160-600	12.3	11.7	Blue
125-160	160-600	13.9	12.1	Red
125-200	200-600	17.2	15.6	Blue
160-200	200-600	19.5	17.1	Red
160-250	250-600	23.1	21.2	Blue
200-250	250-600	24.6	21.8	Red
200-315	315-600	28.6	26.8	Blue
250-315	315-600	28.7	26.8	Red

Number of measuring tubes: 1

Extract air

ALSd Size	KITE CC Size	Standard	Low version	Tube colour
100-125	125-600	4.8	4.0	Transparent
100-160	160-600	5.0	5.1	Transparent
125-160	160-600	7.5	6.5	Transparent
125-200	200-600	8.1	7.7	Transparent
160-200	200-600	11.0	9.9	Transparent
160-250	250-600	12.1	11.9	Transparent
200-250	250-600	14.3	14.4	Transparent
200-315	315-600	15.8	15.4	Transparent
250-315	315-600	17.2	16.5	Transparent

Number of measuring tubes: 1

KITE CR with ALS commissioning box

Supply air

ALSd Size	KITE CR Size	Standard	Blanking off		Low version	Tube colour
			3-way*	1-way/ 2-way**		
100-125	125-600	9.2	8.9	8.2	8.1	Red
100-160	160-600	12.8	11.6	9.9	11.2	Blue
125-160	160-600	13.9	12.7	10.6	11.6	Red
125-200	200-600	18.6	16.4	12.4	15.8	Blue
160-200	200-600	20.1	18.1	13.3	16.4	Red
160-250	250-600	24.5	19.7	13.8	20.4	Blue
200-250	250-600	25.6	21.0	14.2	20.3	Red
200-315	315-600	29.8	22.7	15.3	25.8	Blue
250-315	315-600	30.1	23.2	15.3	24.6	Red

Number of measuring tubes: 1

*When using 1 blanking plate.

**When using 2 blanking plates.

Extract air

ALSd Size	KITE CR Size	Standard	Low version	Tube colour
100-125	125-600	4.9	4.2	Transparent
100-160	160-600	5.0	4.7	Transparent
125-160	160-600	7.2	6.5	Transparent
125-200	200-600	8.3	7.8	Transparent
160-200	200-600	11.7	10.5	Transparent
160-250	250-600	13.1	12.4	Transparent
200-250	250-600	17.0	14.9	Transparent
200-315	315-600	19.0	17.5	Transparent
250-315	315-600	21.6	19.3	Transparent

Number of measuring tubes: 1