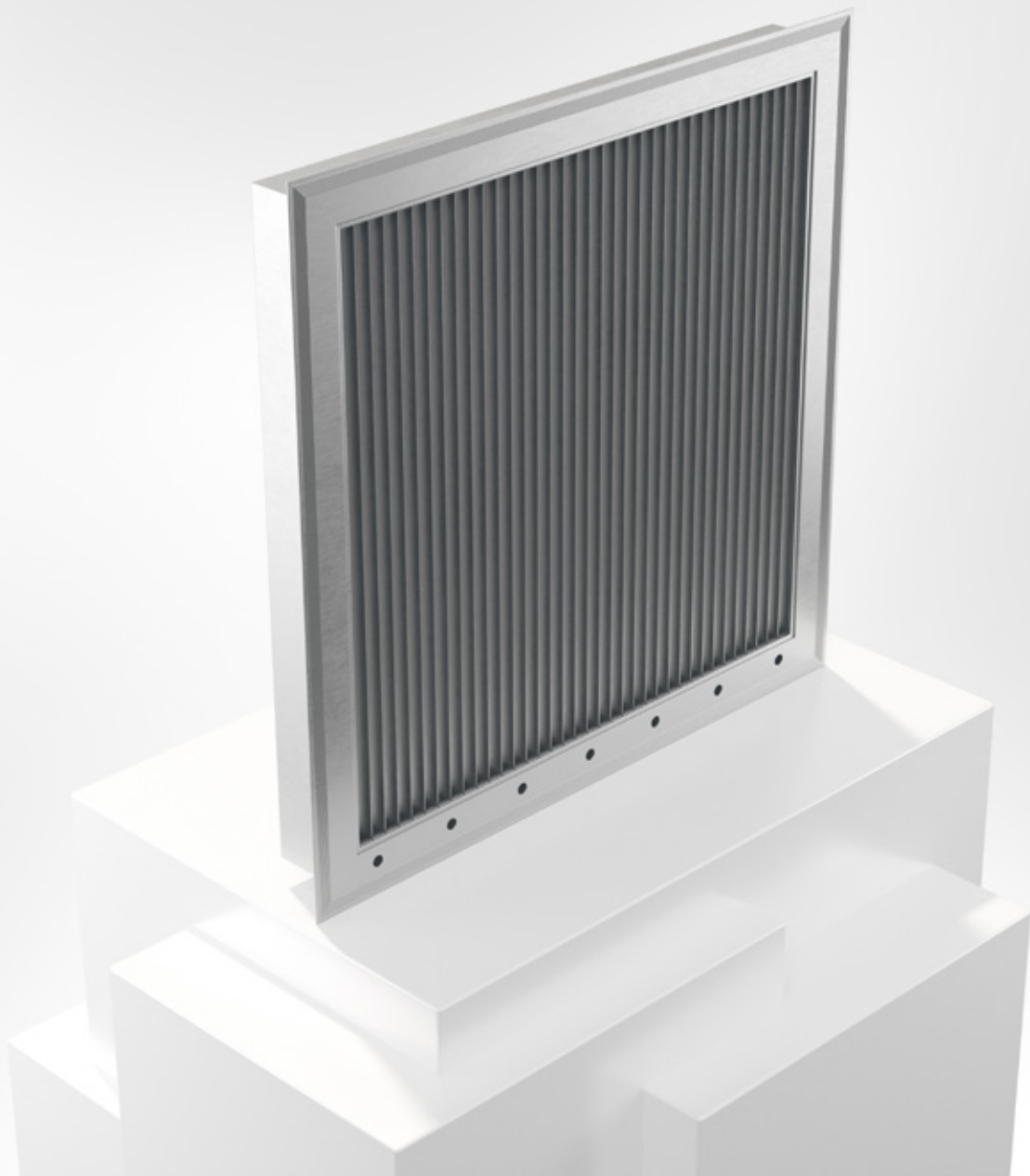


CALIGO

Outer wall louvre



LOUVRES



25/11/2020





Quick facts

- Sizes from 200-200 mm to 1600-1600 mm
- Can be made larger in split design
- Made of aluminium
- Can be supplied powder coated or in a natural finish
- Design with heating cable for defrosting and snow-proofing (see data sheet CALIGO with heating cable)
- Low pressure drop
- High separation of mist
- Low sound values

Use

CALIGO is a louvre with very good water separation capabilities. The louvre is made of vertical aluminium slats equipped with collection channels. Water that accompanies the air into the louvre is captured by the collection channels and is led via these to a drainage plate, which makes up the bottom of the louvre, which leads the water out into the open.

Louvres with one side larger than 1600 mm are delivered in a split version. Framework to mount between the louvre sections can be supplied as an accessory.

CALIGO can be ordered with width measurements in increments of 25 mm.

It's possible, if specified when ordering, to install the louvre with the insert out from the wall for smaller duct dimensions and high flows to utilise the entire flow surface.

CALIGO, where aesthetics requires it, can also be used as an exhaust air louvre. The pressure drop is then calculated using the same dimensioning diagram as for CALIGO for outdoor air.

Material, surface treatment

The louvre is made of extruded aluminium sections, corrosivity category C5. The louvre can also be supplied finished in any colour, refer to www.bevent-rasch.com

Water separation

CALIGO has a high capacity to separate drops from mist compared to a traditional outer wall louvre. The high separation capacity also allows salt particles to be separated, which is an advantage in coastal locations. CALIGO is tested according to the standard EN 13030:2001.

100% water separation is obtained at front speeds of up to 3.5 m/s across the connection area, which corresponds to class A. The recommended design speed is 2 m/s.



Accessories

Mounting post including cover plate for louvres that are split both in width and height.

Special

Louvres can be supplied in many different special designs in terms of size and the placement of drainage.

The louvres are supplied in split version if either of the sides are larger than 1600 mm.

If you have any questions about specials, contact Bevent Rasch



Specification

Example: **Outer wall louvre CALIGO - 600 - 400 - 0 - 0**

Size:
Width x Height, mm

Surface treatment:
Aluminium, natural = 0
Powder coated = 1*

* Colour code should be stated in plain text, see www.bevent-rasch.com

Heating cable:
Without heating cable = 0
With heating cable ** = 1

** For Caligo with heating cable, see separate data sheet.

Dimensioning diagram

The air speed is calculated based on the connection area.
The recommended design speed is 2 m/s.
For grilles with heating cable, we do not recommend that the speed exceeds 1.8 m/s

Sound data

Correction of sound power level, L_w , for different sizes

$$L_w = L_{wt} + K_1$$

Grille-area, m ²	0,12	0,25	0,5	1,0	2,0	3,0	4,0
K_1	-12	-6	-3	0	3	4,5	6

Correction of sound power level, L_{Wok} , in octave band

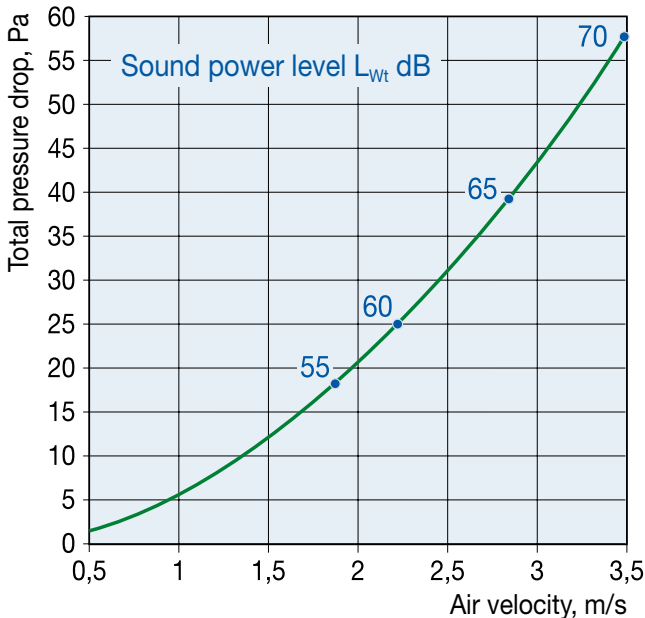
$$L_{Wok} = L_w + K_{ok}$$

Mid frequency Hz	63	125	250	500	1000	2000	4000	8000
K_{ok}	-9	-6	-6	-7	-11	-17	-25	-33

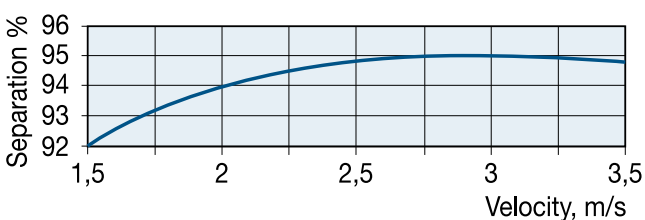
Reduction in sound pressure level depending on distance from outer wall louvre calculated on half-spherical propagation.

Distance, m	5	25	50	75	100	150
Reduction, dB(A)	-22	-36	-42	-45	-48	-52

Intake air



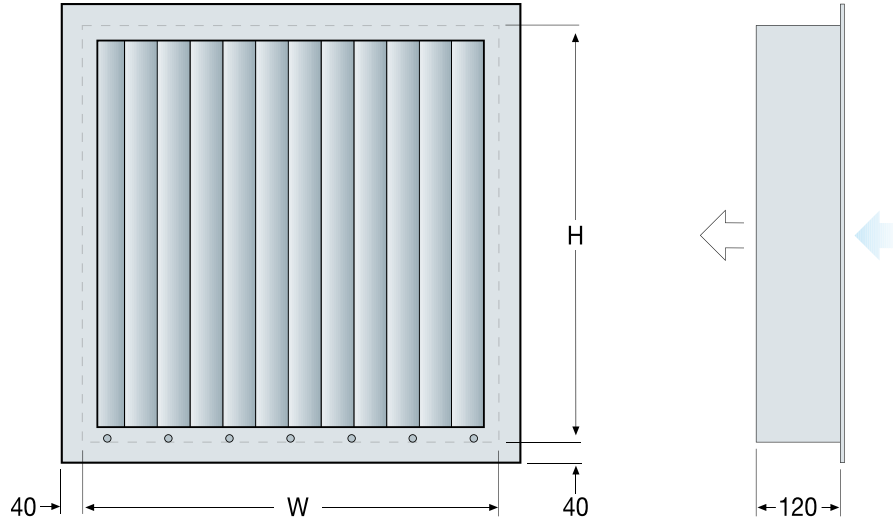
Separation of mist



The diagram refers to drop sizes 30-80 µm



Dimensions



W or H
200 - 300 - 400 - 500 - 600 - 700 - 800 - 900
1000 - 1100 - 1200 - 1300 - 1400 - 1500 - 1600

W x H = Cut-out dimensions

Louvres with any side larger than 1600 mm are delivered in a split version.
 A framework between louvre parts can be supplied as an accessory.
 Width measurements can be ordered in increments of 25 mm.

Weight, kg (excl. heating cable*)

H	W														
	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600
200	2	3	4	5	6	7	8	9	10	11	12	13	13	14	15
300	3	4	6	7	8	10	11	12	13	15	16	17	18	20	21
400	4	6	7	9	10	12	14	15	17	19	20	22	23	25	27
500	5	7	9	11	13	15	17	19	20	22	24	26	28	30	32
600	6	8	10	13	15	17	19	22	24	26	29	31	33	35	38
700	7	9	12	14	17	20	22	25	28	30	33	35	38	41	43
800	7	10	13	16	19	22	25	28	31	34	37	40	43	46	49
900	8	12	15	18	22	25	28	31	35	38	41	45	48	51	55
1000	9	13	16	20	24	27	31	35	38	42	46	49	53	57	60
1100	10	14	18	22	26	30	34	38	42	46	50	54	58	62	66
1200	11	15	19	24	28	32	37	41	45	50	54	58	63	67	71
1300	12	16	21	26	30	35	40	44	49	54	58	63	68	72	77
1400	13	18	23	28	33	38	43	48	53	58	63	68	73	78	83
1500	13	19	24	29	35	40	45	51	56	61	67	72	78	83	88
1600	14	20	26	31	37	43	48	54	60	65	71	77	82	88	94

* For louvres equipped with heating cable: Add 6 kg/m² to the above weights.



Quick facts

- Solves the problem of ice formation at the air intake
- Built-in heating cable provides efficient operation
- Self-regulatory
- Mounted junction box for easy handling
- If necessary, can be equipped with temperature control
- Can separate and melt snow
- Available in EX version

Use

CALIGO-1 with heating cable is developed to solve problems with ice and snow at the air intake. Ice and snow that is not dealt with correctly can cause the air intake to generate a high pressure drop, affect the air intake's ability to separate water droplets and have a negative impact on the property's energy consumption.

The product can also be supplied in EX version.

Function

In order to avoid unwanted problems at water freezing temperatures, CALIGO-1 has been equipped with a self-regulating heating cable to keep the surface temperature of the slats higher than that of the air flow to protect against icing on the louvre. The advantage of the cable being built into the slats is that you keep the louvre itself at the required temperature instead of heating up the air flow, which is not as effective.

The heating cable is self-regulating and must be activated when the surface temperature of the louvre approaches freezing point, the output is thus adjusted according to the need. It has built-in temperature protection that eliminates the risk of overheating and can be delivered in EX version if required.

As an accessory, there are simpler controls equipped with temperature sensors that can be mounted in any location. As an option, the junction box on the louvre can be removed and replaced with power cable adapter that is connected to the control cabinet.

In order to obtain adequate starting currents and facilitate electrical fuse protection of the installation, the heating cable is divided into several cable sections as shown in the table below.

Grille size	No. of cables	Start current
Up to and incl. 0,8m ²	1 cable	10A
>0,8m ² up to 1,6m ²	2 cables	2 x 10A
>1,6m ² up to 2,4m ² (max)	3 cables	3 x 10A

The cables are connected to a junction box for easy installation during installation. Only the power supply needs to be connected to the existing control system in the system. When using temperature control, the total power consumption of the system decreases. The recommended switching temperature is approx. +4°C.

Technical data

Lowest operating temperature: -20°C at duct speed 1,8 m/s

Supply to heating cable: 230V, max 10A

Fuse: C-type

Nominal output: Approx. 1300 W/m²

Wiring diagram

