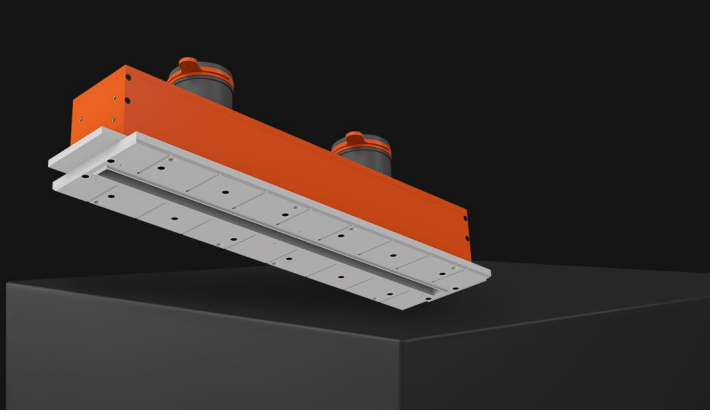
ERGOVENT

ERGOVENT LINEO-600 PROFILE VERTICAL

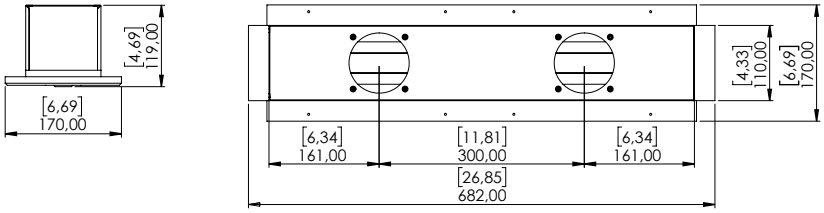
Hidden linear ventilation diffuser

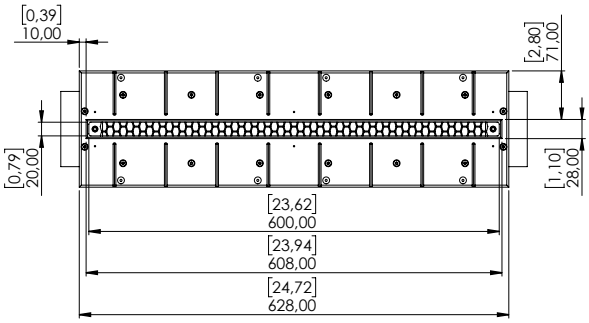


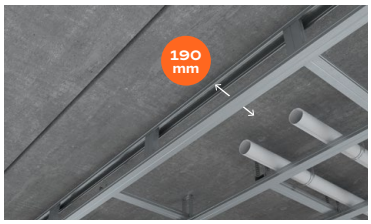
75 mm connections × 2 vnt / 1 slot × 600 mm × 20 mm / with damper

The hidden ventilation diffuser is designed for installation in plasterboard ceilings and walls. It connects to flexible 75 mm plastic air ducts, while the included adapters ensure a fast and airtight connection. After installation, the diffuser is finished and painted in the same color as the ceiling or wall, leaving only a minimalist slot visible - a subtle interior detail.

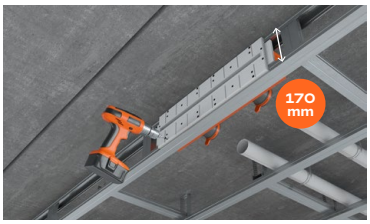
- Slot length: 600 mm (fixed length, non-connectable).
- Rigid lower finishing section, ready for painting - easily integrated into plasterboard surfaces.
- Aerodynamic airflow balancing damper - adjustable externally through the slot.
- Includes a damper position gauge and duct adapters for quick connection.
- Requires 17 cm installation depth; installation can be completed by one person in just a few minutes.





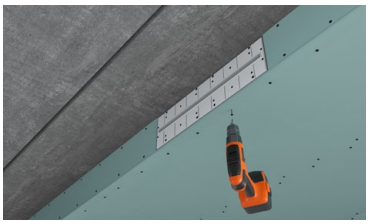


Installation width between profiles: 190 mm / ≈ 7,48".



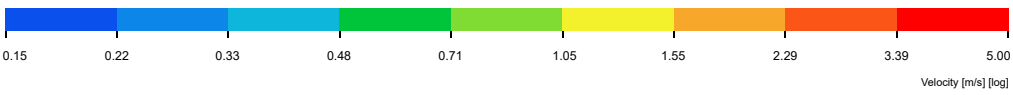
Minimum installation height: 170 mm / ≈ 6,69".

Installation: requires 17 cm clearance; one-person installation in minutes.

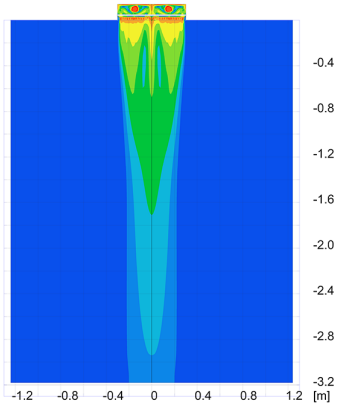


Important: During installation, **all fixing screws** must be fully tightened.

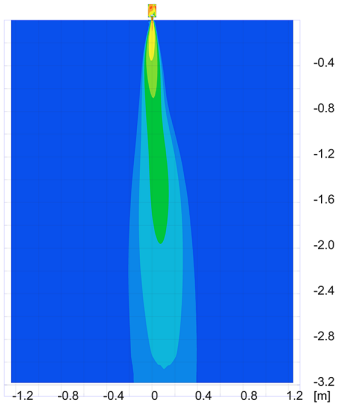
THROW DISTANCE



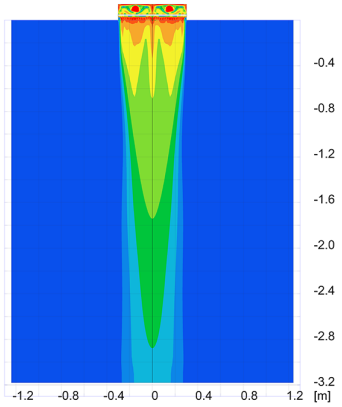
65 m³/h



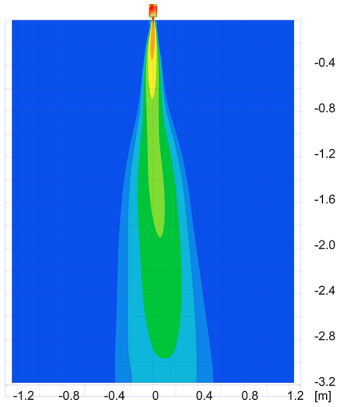
65 m³/h



95 m³/h



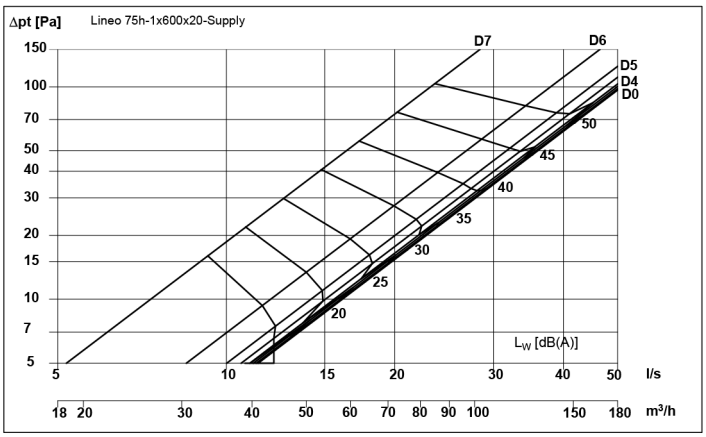
95 m³/h



FLOW NOISE (in accordance with ISO 3741) and PRESSURE DROP test report

AIR SUPPLY

Diagram for pressure and flow noise:



L_{Woct} [dB] = L_{WA} + K_{oct}

q [l/s]	Dp_t [Pa]	L_{WA} [dBA]			63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
-	-	33		K_{oct}	-7	-1	5	0	-12	-20	-22	-23

Octave correction factors to the diagram are calculated at the listed value of either q, Δp_t or L_{WA}/L_{DA}

Calculation of pressure and sound effect according to flow:

Sound effect: $L_{W(oct\ or\ A)} = k \cdot \log(q) + L_0$

Total pressuredrop: $\Delta p_t = c_{pt} \cdot q^2$

Balancing: $q = K_{factor} \cdot \sqrt{p_i}$

L_W - sound effect [dB]
k - factor, sound effect [-]
L_0 - addend, sound effect [-]
Δp_t - total pressuredrop [Pa]
c_{pt} - factor, total pressuredrop [Pa·s²/l²]
q - flow [l/s]
K_{factor} - factor, balancing [l/(s·√Pa)]
p_i - pressuredifference, balancing [Pa]

	Total p c_{ptot}	Balancing K-factor		LwA	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
D0	0.0385	Not measured	k	67.1	44.1	57.6	58.1	71.1	75.0	93.3	57.6	58.4
			Lo	-58.8	-35.3	-46.0	-42.2	-64.1	-81.2	-114.1	-67.3	-69.0
D1	0.0391	Not measured	k	57.5	69.9	66.9	51.8	57.5	71.5	94.3	58.0	58.7
			Lo	-44.1	-70.0	-59.0	-32.2	-43.6	-76.1	-115.4	-68.0	-69.6
D2	0.0400	Not measured	k	65.6	38.9	59.7	51.7	72.4	79.2	101.6	63.1	64.1
			Lo	-55.5	-26.1	-46.8	-30.8	-65.1	-87.2	-125.8	-75.0	-77.5
D3	0.0412	Not measured	k	48.2	65.8	62.5	44.3	45.0	69.9	91.9	49.5	50.8
			Lo	-29.8	-64.9	-49.8	-20.3	-24.7	-72.7	-110.5	-55.0	-55.9
D4	0.0443	Not measured	k	56.8	46.1	61.6	51.8	55.1	78.8	99.4	52.8	53.2
			Lo	-41.6	-36.5	-48.5	-30.4	-38.8	-84.5	-120.2	-58.7	-58.9
D5	0.0499	Not measured	k	59.7	38.4	67.6	48.1	63.3	69.9	96.7	58.4	59.1
			Lo	-45.0	-18.1	-56.1	-24.6	-49.6	-70.8	-114.4	-65.6	-66.8
D6	0.0695	Not measured	k	63.9	36.0	36.5	60.3	63.0	76.5	91.0	74.6	75.0
			Lo	-48.0	-19.7	-11.3	-39.4	-46.5	-75.8	-100.6	-83.6	-84.7
D7	0.1862	Not measured	k	74.1	42.9	59.0	51.8	75.9	76.4	99.4	96.2	96.9
			Lo	-51.6	-22.9	-36.5	-22.6	-54.7	-61.9	-92.8	-92.8	-100.3

AIRFLOW BALANCING

The diffuser is equipped with an airflow balancing damper. The **aerodynamic damper** is located inside the diffuser and is conveniently adjustable from the outside.

Setting the damper position with the gauge*:

- Insert the gauge through the diffuser grille until it contacts the balancing damper.
- Take the reading relative to the ceiling line.
- Damper positions are indicated on the gauge.

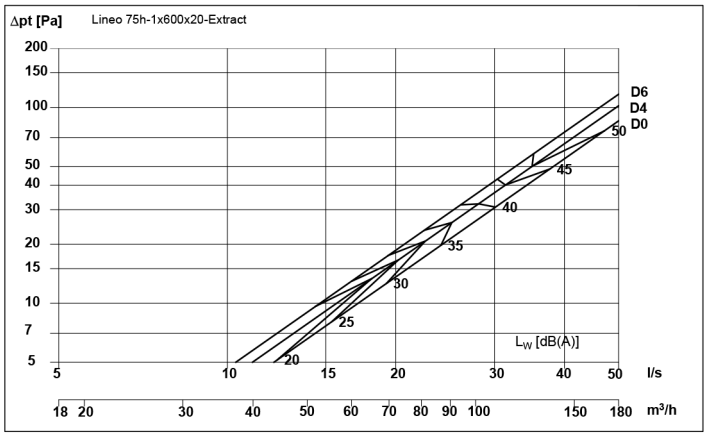
* The damper-position gauge is supplied with the diffuser.

D0 – damper fully open.
D7 – damper fully closed.

FLOW NOISE (in accordance with ISO 3741) and PRESSURE DROP test report

AIR EXHAUST

Diagram for pressure and flow noise:



$$L_{Woct}\,[dB] = L_{WA} + K_{oct}$$

q [l/s]	Dp_t [Pa]	L_{WA} [dBA]			63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
-	-	33		K_{oct}	-4	-10	7	-2	-16	-23	-21	-17

Octave correction factors to the diagram are calculated at the listed value of either q, Δp_t or L_{WA}/L_{pA}

Calculation of pressure and sound effect according to flow:

Sound effect: $L_{W(oct\ or\ A)} = k \cdot \log(q) + L_0$

Total pressuredrop: $\Delta p_t = c_{pt} \cdot q^2$

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L_W - sound effect [dB]
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Δp_t - total pressuredrop [Pa]
c_{pt} - factor, total pressuredrop [Pa·s²/l²]
q - flow [l/s]
K_{factor} - factor, balancing [l/(s·√Pa)]
p_i - pressuredifference, balancing [Pa]

	Total p c_{ptot}	Balancing K-factor		LwA	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
D0	0.0341	Not measured	**k**	51.4	5.4	247.2	42.7	68.5	78.6	102.2	4.9	5.2
			Lo	-36.0	22.6	-323.8	-15.8	-66.0	-92.8	-130.6	6.9	11.2
D4	0.0407	Not measured	**k**	104.7	50.0	71.4	135.6	64.8	91.8	110.4	32.5	32.7
			Lo	-111.7	-41.6	-68.4	-150.9	-54.7	-106.6	-140.8	-32.3	-29.7
D6	0.0466	Not measured	**k**	76.9	36.4	53.7	66.6	86.5	93.3	97.0	53.8	54.4
			Lo	-69.0	-20.0	-40.9	-48.7	-83.2	-105.4	-118.2	-61.4	-59.4

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