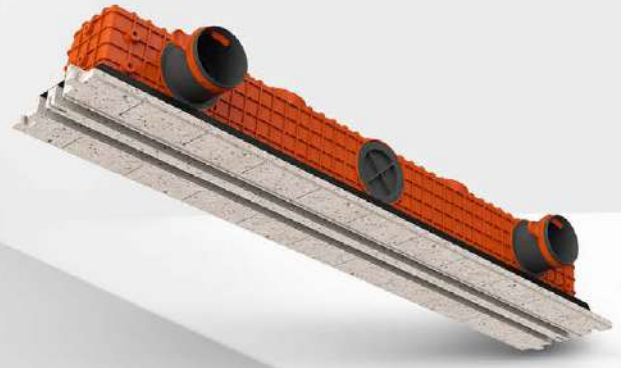


LINEO-PRO PUZZLE 75

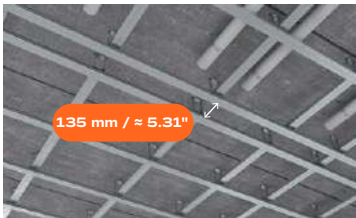
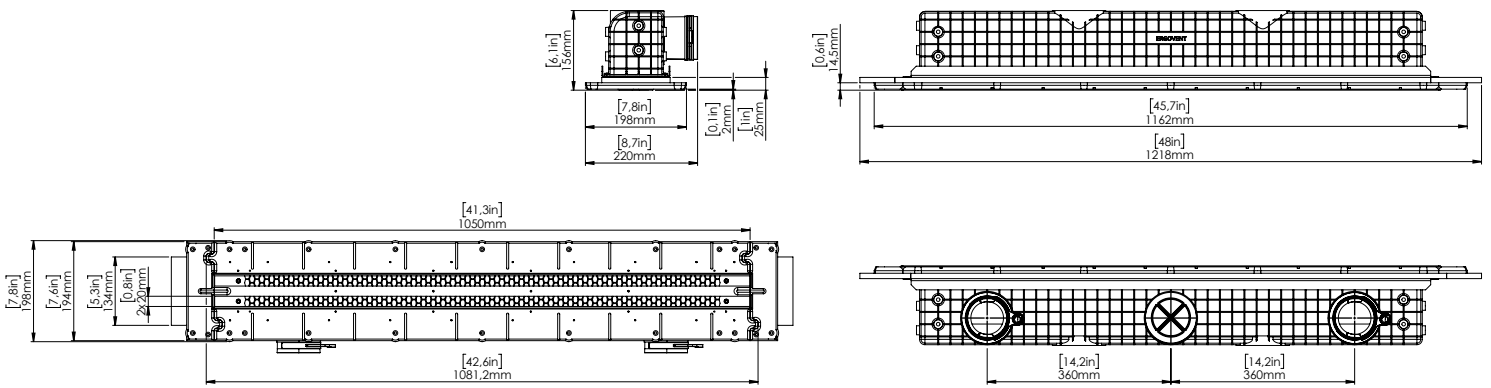
Hidden linear ventilation diffuser



75 mm connections / 2 slots × 1050 mm × 20 mm / with damper

ERGOVENT LINEO PRO PUZZLE two-slots is an innovative linear ventilation diffuser designed for seamless integration into plasterboard ceilings and walls. This model is attached directly to the gypsum profiles. Its minimalistic two-slots design remains visible after installation, adding a stylish detail to modern interiors.

- **Ergonomic air regulation** through built-in balancing valve
- **Multi-metre ventilation systems** can easily be assembled by using the puzzle lock



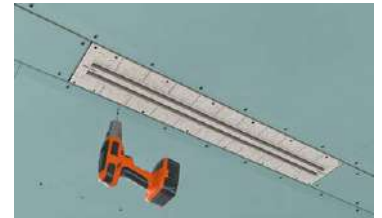
Installation width between profiles:
135 mm / ≈ 5.31"



Minimum installation height:
160 mm / ≈ 6.30"

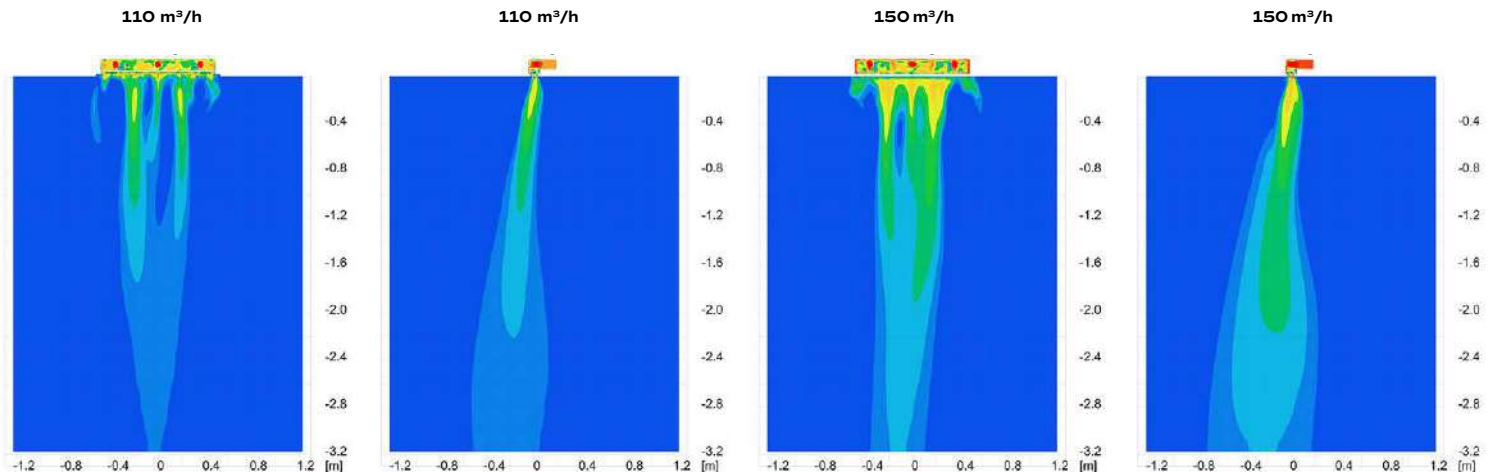
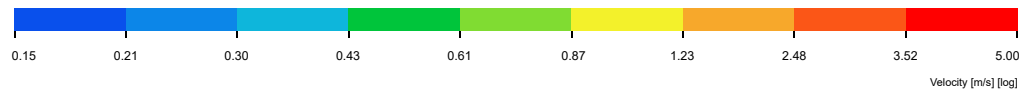


Patented technical solution: the PUZZLE LOCK system allows diffusers to be connected.



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

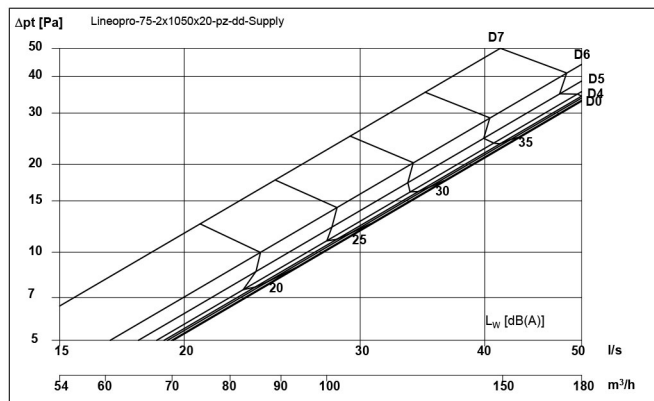
THROW DISTANCE



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

SUPPLY

Diagram for pressure and flow noise:



$$L_{Woct} [dB] = L_{WA} + K_{Oct}$$

q [l/s]	Δp _t [Pa]	L _{WA} [dBA]	K _{Oct}	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
-	-	33		-3	-2	4	0	-10	-19	-23	-27

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

Calculation of pressure and sound effect according to flow:

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

L_W - sound effect [dB]

q - flow [l/s]

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

k - factor, sound effect [-]

K_{factor} - factor, balancing [l/(s·√Pa)]

L₀ - addend, sound effect [-]

p_i - pressuredifference, balancing [Pa]

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

Δp_t - total pressuredrop [Pa]

c_{pt} - factor, total pressuredrop [Pa·s²/l²]

	Total p c _{ptot}	Balancing K-factor		L _{WA}	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
D0	0.0132	Not measured	k	60.1	51.1	77.7	38.2	65.1	65.7	91.6	76.0	76.9
			L ₀	-62.9	-50.9	-93.2	-22.8	-71.1	-81.3	-131.8	-111.2	-116.0
D1	0.0133	Not measured	k	67.3	62.8	90.8	58.7	65.5	79.8	98.7	90.4	91.1
			L ₀	-75.1	-67.0	-114.1	-57.1	-71.9	-105.0	-143.6	-135.1	-141.4
D2	0.0135	Not measured	k	61.2	44.1	91.4	46.9	60.7	69.1	97.7	86.0	86.8
			L ₀	-64.6	-43.0	-116.0	-37.4	-63.4	-87.0	-142.2	-127.8	-133.6
D3	0.0137	Not measured	k	61.1	43.9	88.9	49.4	59.7	67.6	92.7	80.1	81.2
			L ₀	-63.9	-37.8	-110.5	-41.0	-61.0	-83.9	-133.1	-117.3	-123.8
D4	0.0142	Not measured	k	59.7	55.9	91.3	46.5	60.7	69.2	91.0	78.5	79.0
			L ₀	-61.2	-54.5	-114.0	-35.4	-62.7	-86.8	-130.3	-114.5	-119.5
D5	0.0154	Not measured	k	65.8	74.9	74.2	69.7	57.9	79.6	90.9	80.2	80.9
			L ₀	-70.3	-88.9	-83.9	-74.2	-56.4	-103.0	-128.5	-116.0	-121.9
D6	0.0176	Not measured	k	65.2	80.1	70.8	50.7	64.6	80.7	99.0	76.7	77.3
			L ₀	-69.8	-98.8	-78.8	-42.3	-68.8	-104.2	-141.0	-108.9	-113.6
D7	0.0291	Not measured	k	66.5	48.3	60.8	54.9	67.6	83.5	108.1	85.3	86.3
			L ₀	-67.6	-43.2	-61.0	-45.9	-69.5	-102.6	-146.3	-115.4	-121.5

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.

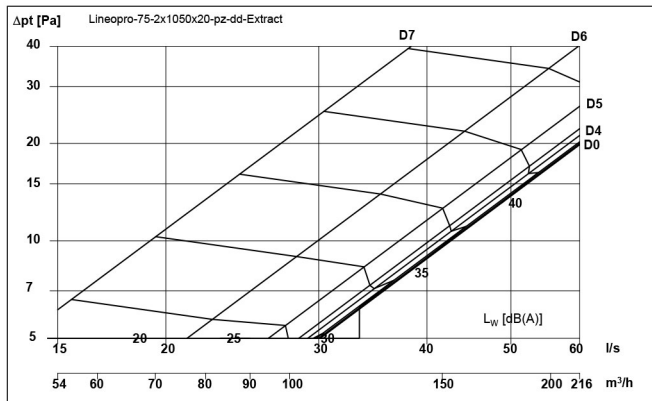
D0 – damper fully open.
D7 – damper fully closed.



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

EXTRACT

Diagram for pressure and flow noise:



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

q [l/s]	Δp _t [Pa]	L _{WA} [dBA]	K _{oct}	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
-	-	33		-9	-3	3	0	-6	-22	-30	-37

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

Calculation of pressure and sound effect according to flow:

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

L_W - sound effect [dB]

q - flow [l/s]

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

k - factor, sound effect [-]

K_{factor} - factor, balancing [l/(s·√Pa)]

L₀ - addend, sound effect [-]

p_i - pressuredifference, balancing [Pa]

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

c_{pt} - factor, total pressuredrop [Pa·s²/l²]

	Total p c _{ptot}	Balancing K-factor		L _{WA}	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
D0	0.0055	Not measured	k	46.2	46.8	45.9	32.8	41.5	50.1	81.2	88.8	89.4
			Lo	-38.0	-45.0	-44.1	-15.4	-29.2	-50.2	-114.6	-136.9	-146.7
D1	0.0056	Not measured	k	53.5	48.9	41.8	35.6	55.6	51.0	80.9	88.1	88.7
			Lo	-51.5	-54.5	-38.4	-19.6	-55.6	-52.1	-113.9	-135.1	-145.1
D2	0.0056	Not measured	k	60.2	63.1	44.6	47.2	66.2	44.5	95.4	94.7	95.2
			Lo	-64.1	-77.5	-42.4	-41.1	-75.2	-40.5	-140.9	-148.1	-157.2
D3	0.0059	Not measured	k	56.1	42.3	32.9	38.7	56.2	55.7	96.8	94.2	94.6
			Lo	-56.5	-43.4	-21.5	-25.4	-56.5	-61.0	-142.6	-146.4	-153.8
D4	0.0062	Not measured	k	54.3	61.2	32.9	43.4	50.9	53.7	88.9	88.9	89.2
			Lo	-53.4	-74.8	-21.9	-34.0	-47.4	-57.3	-128.6	-137.4	-143.7
D5	0.0073	Not measured	k	55.1	42.4	38.1	40.7	54.6	53.1	96.8	90.0	90.6
			Lo	-54.3	-37.4	-28.7	-28.1	-53.3	-56.1	-142.4	-139.0	-144.7
D6	0.0112	Not measured	k	51.6	40.5	30.4	32.9	54.2	64.7	92.9	83.1	84.2
			Lo	-44.9	-37.6	-13.4	-10.0	-48.9	-75.4	-133.4	-124.6	-131.1
D7	0.0272	Not measured	k	51.5	54.2	41.8	40.1	48.8	67.8	92.5	85.4	86.0
			Lo	-36.4	-51.2	-22.6	-15.3	-32.5	-69.4	-114.5	-112.2	-119.0

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.

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