

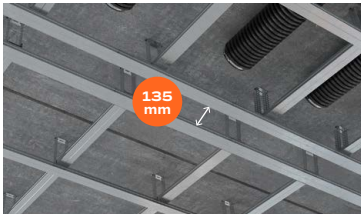
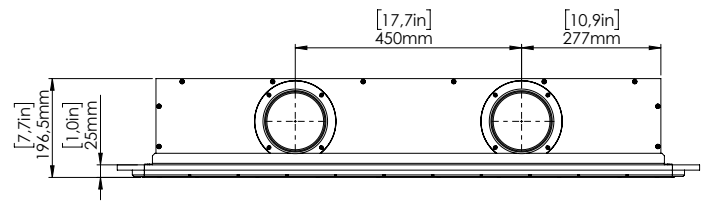
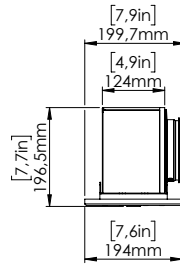
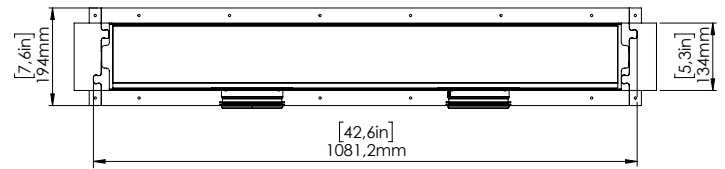
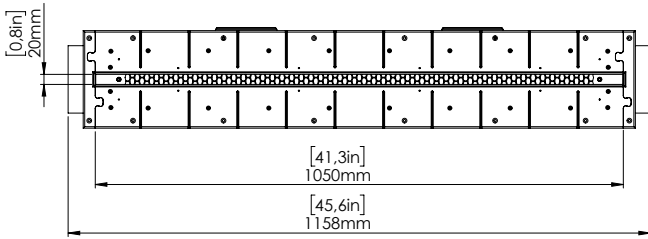
# LINEO PRO PUZZLE 125

Hidden linear diffuser is suitable for air-conditioning applications

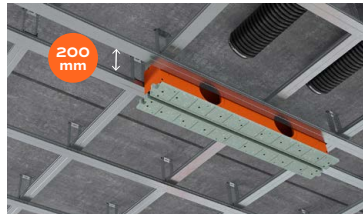


## 125 mm connections / 1 slot × 1050 mm × 20 mm / with damper

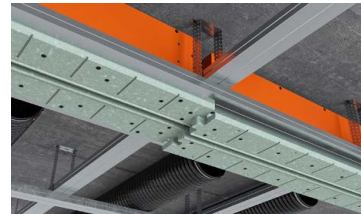
Hidden linear **ventilation/air-conditioning diffuser** for installation in gypsum board (drywall) ceilings. After installation, the diffuser is plastered flush and painted the same color as the ceiling or wall. Only a minimalist slot remains visible, serving as a discreet interior design detail. Units can be linked in a continuous line with other PUZZLE diffusers featuring 75 mm or 90 mm duct connections. The pressurized plenum/connection box is made from 10 mm PVC sheet, which provides good thermal-insulation properties. As a result, the diffuser is suitable not only for ventilation but also for air-conditioning.



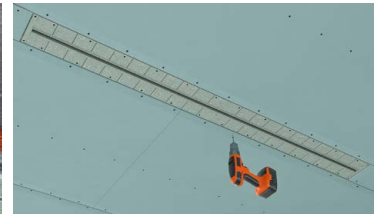
Installation width between profiles:  
135 mm / ≈ 5,31 in



Minimum installation height:  
200 mm / ≈ 7,87 in

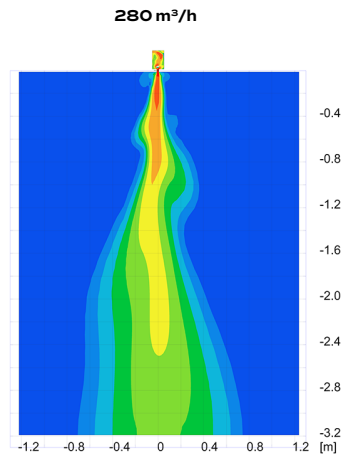
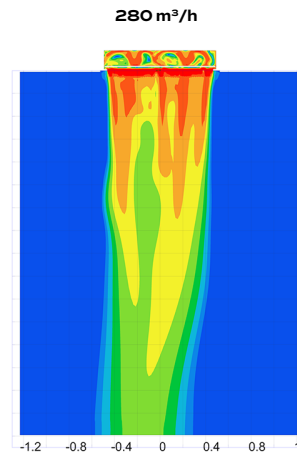
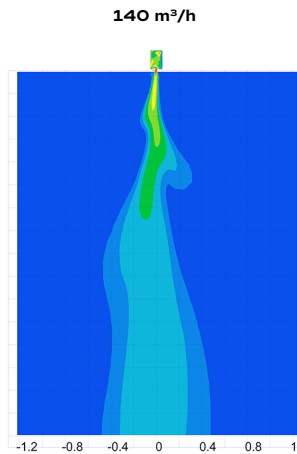
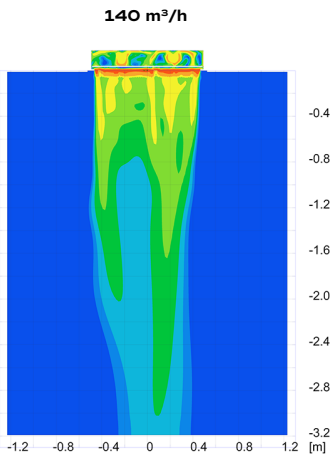


Patented technical solution: the PUZZLE LOCK system allows diffusers to be connected.



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

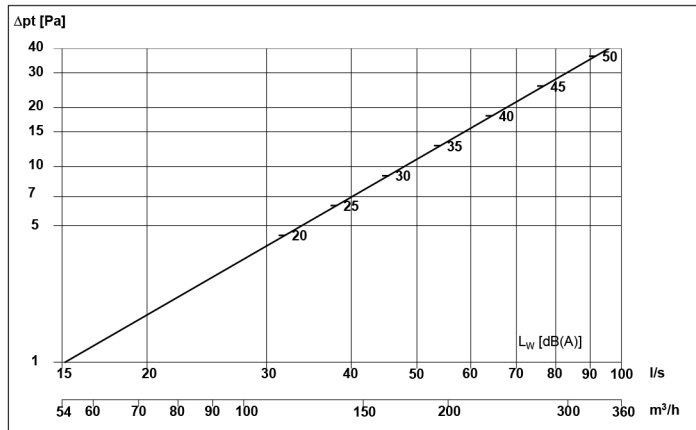
## THROW DISTANCE



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

## SUPPLY

Diagram for pressure and flow noise:



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

q [l/s]	D <sub>pt</sub> [Pa]	L <sub>WA</sub> [dBA]		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
-	-	33	K <sub>oct</sub>	-38	-2	0	1	-6	-20	-27	-24

Octave correction factors to the diagram are calculated at the listed value of either q, Δp<sub>t</sub> or L<sub>WA</sub>/L<sub>DA</sub>

Calculation of pressure and sound effect according to flow:

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

L<sub>W</sub> - sound effect [dB]

q - flow [l/s]

k - factor, sound effect [-]

K<sub>factor</sub> - factor, balancing [l/(s·√Pa)]

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

L<sub>0</sub> - addend, sound effect [-]

p<sub>t</sub> - pressuredifference, balancing [Pa]

Δp<sub>t</sub> - total pressuredrop [Pa]

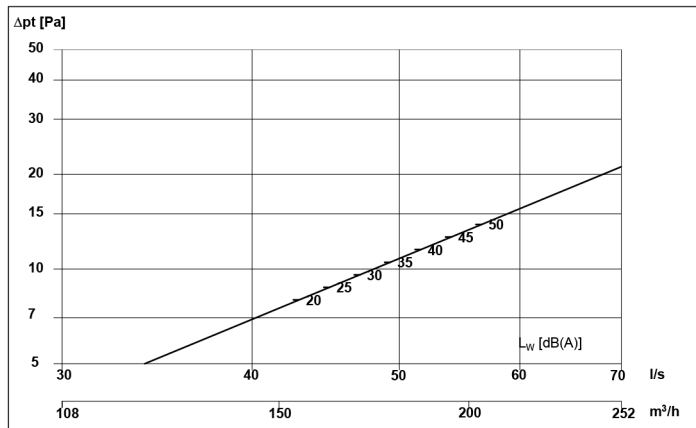
Balancing:  $q = K_{factor} \cdot \sqrt{p_i}$

c<sub>pt</sub> - factor, total pressuredrop [Pa·s<sup>2</sup>/l<sup>2</sup>]

	Total p c <sub>plot</sub>	Balancing K-factor		L <sub>WA</sub>	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
	0.0044	Not measured	k Lo	65.6 -78.7	16.9 6.6	56.4 -58.4	66.7 -75.1	69.5 -86.3	99.5 -151.3	89.0 -140.8	14.6 -11.3	14.8 -6.6

## EXTRACT

Diagram for pressure and flow noise:



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

q [l/s]	D <sub>pt</sub> [Pa]	L <sub>WA</sub> [dBA]		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
-	-	33	K <sub>oct</sub>	2	0	8	-11	-23	-24	-19	-14

Octave correction factors to the diagram are calculated at the listed value of either q, Δp<sub>t</sub> or L<sub>WA</sub>/L<sub>DA</sub>

Calculation of pressure and sound effect according to flow:

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

L<sub>W</sub> - sound effect [dB]

q - flow [l/s]

k - factor, sound effect [-]

K<sub>factor</sub> - factor, balancing [l/(s·√Pa)]

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

L<sub>0</sub> - addend, sound effect [-]

p<sub>t</sub> - pressuredifference, balancing [Pa]

Δp<sub>t</sub> - total pressuredrop [Pa]

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

c<sub>pt</sub> - factor, total pressuredrop [Pa·s<sup>2</sup>/l<sup>2</sup>]

	Total p c <sub>plot</sub>	Balancing K-factor		L <sub>WA</sub>	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
	0.0043	Not measured	k Lo	249.8 -387.9	0.0 34.7	-61.4 135.7	290.8 -449.5	144.3 -221.2	88.6 -139.6	8.2 -5.0	-1.5 16.1	-0.4 19.5

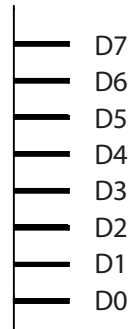
## AIRFLOW BALANCING

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.

