

Thermal & sound-insulated flexible duct with vapour proof membrane

ALSDL-PE-L



Description

Similarly to the Sonolight AD-L, this model is based on the standard version of the Aluduct combined with thermal and sound insulation, and intended for building mechanical and heat recovery ventilation systems. Inner duct is made from aluminium polyester foil and reinforced with a helical coil of steel wire for better stiffness and shape stability. An added feature which makes this model stand out from the flexible ducts is the vapour barrier film laid between the inner ducts and the mineral wool insulation. The vapour barrier keeps all condensate resulting from temperature differences away from the mineral wool to keep it dry; otherwise, humidity might reduce the sound and thermal insulating performance of the material.



Caution!
The vapour barrier is not seamless along the circumference. At high volumes, some condensate may penetrate the insulating layer.

Packaging: 10 metre sections compressed to 1200 mm and packed in cardboard boxes.

Flexibility (winding diameter): Depends on the actual duct outer diameter, i.e. ca. 0.80D (mm).

Temperature range: -30 °C to +120 °C

Maximum acceptable vacuum: Depending on the duct routing. For straight runs, 1/3 of the pressure transferred at the specific diameter can be taken.

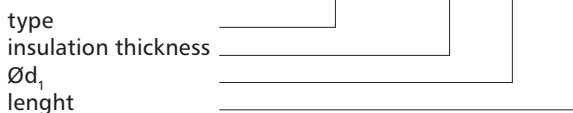
Sound insulation: See the enclosed diagram.

Fire classification references: 2839.5/11/Z00NP and 2839.7/11/Z00NP

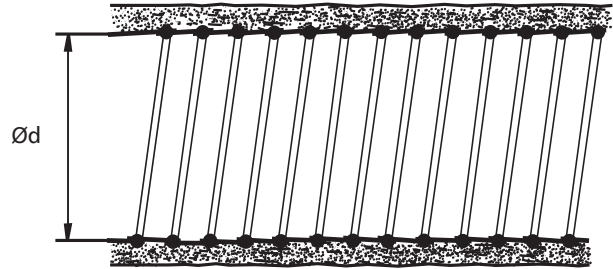
Available materials - Product code example
ALSDL-PE-L-...-...- AW-1050A H24 aluminium sheet

Product code example

Product code: **ALSDL-PE-L - aaa - bbb - cccc**



Dimensions



$\text{Ø}d_{1, \text{nom}}$ (mm)	$\text{Ø}d_{\text{out.}}$ (mm)	Max. acceptable pressure (Pa)	Tolerance (mm)
80	82,0	2000	+ 1.5
100	102,0	2000	+ 1.5
125	127,0	2000	+ 1.5
140	140,0	2000	+ 1.5
150	152,0	2000	+ 1.5
160	160,0	2000	+ 2.0
180	180,0	2000	+ 2.0
200	203,0	2000	+ 2.0
225	229,0	2000	+ 2.0
250	254,0	2000	+ 3.0
280	280,0	2000	+ 3.0
300	305,0	2000	+ 3.0
315	315,0	2000	+ 3.0
355	355,0	2000	+ 3.0
400	406,0	2000	+ 3.0
450	457,0	2000	+ 3.0
500	508,0	2000	+ 3.0

Technical specifications

Sound insulation performance charts

The charts show the noise levels for the SONODUCT and SONOLIGHT thermal and sound insulated ducts in relation to the duct section length sizes of 500 mm, 1000 mm and 1500 mm with the sound insulation thickness of ca. 25 mm.

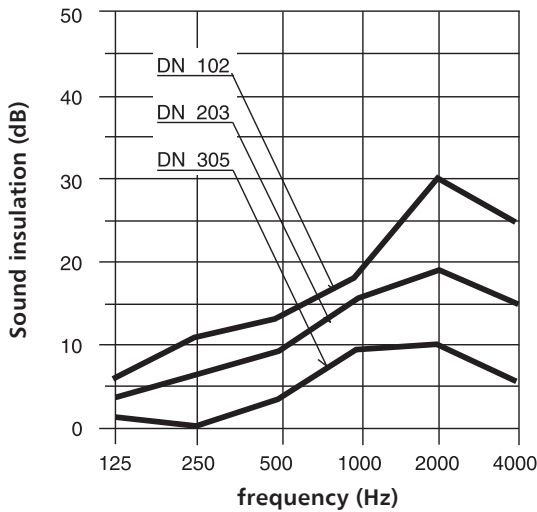


Chart 1: Noise levels in SONODUCT/SONOLIGHT
 Sound insulation thickness: 25 mm
 Duct section length: 500 mm

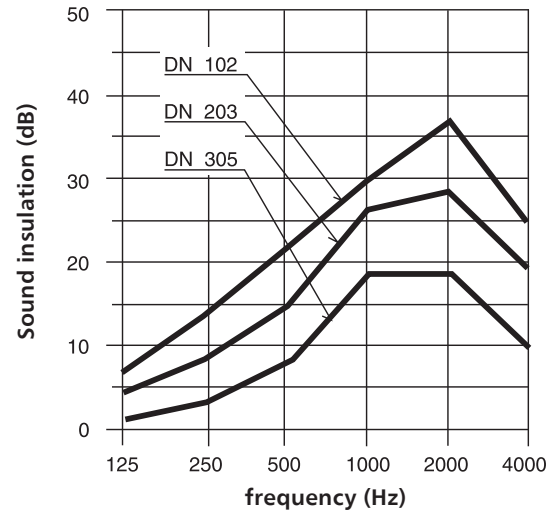


Chart 2: Noise levels in SONODUCT/SONOLIGHT
 Sound insulation thickness: 25 mm
 Duct section length: 1000 mm

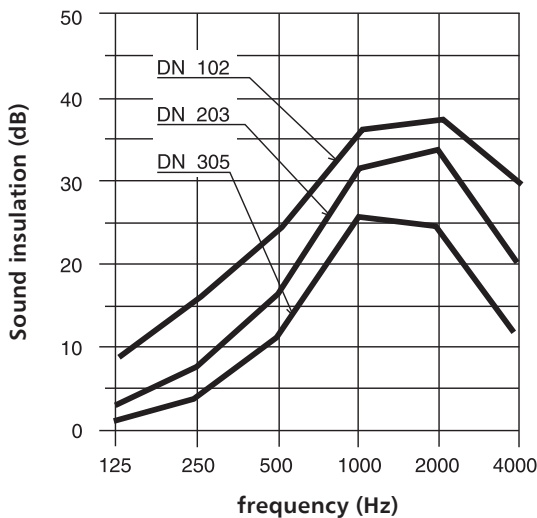


Chart 3: Noise levels in SONODUCT/SONOLIGHT
 Sound insulation thickness: 25 mm
 Duct section length: 1500 mm

Technical specifications

Flow resistance chart for IZODUCT/IZOLIGHT ducts

