

Thermal & sound-insulated flexible duct with vapour proof membrane

ALSD-PE-L



Description

Similarly to the Sonoduct 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. 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. 0.75D (mm).

Temperature range: -20°C to +140°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.

Fire classification references: 2839.4/11/Z00NP and 2839.6/11/Z00NP

Available materials — Product code example

ALSD-PE-L-...-... — AW-1050A H24 aluminium sheet

Product code example

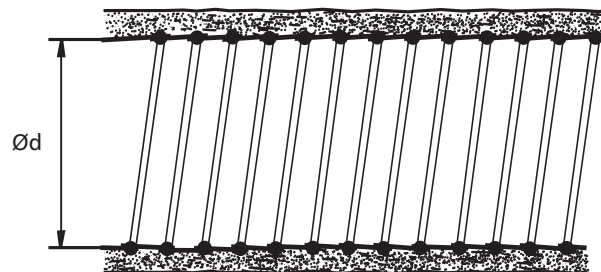
Product code: **ALSD-PE-L - aaa - bbb**

type

insulation thickness

Ød₁

Dimensions



| Ød _{1 nom} (mm) | Ød 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 |
| 560 | 568.0 | 2500 | + 4.0 |
| 630 | 638.0 | 2500 | + 4.0 |
| 710 | 718.0 | 2500 | + 4.0 |
| 800 | 810.0 | 2500 | + 4.0 |

SONODUCT/SONOLIGHT insulated ventilation ducts

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.

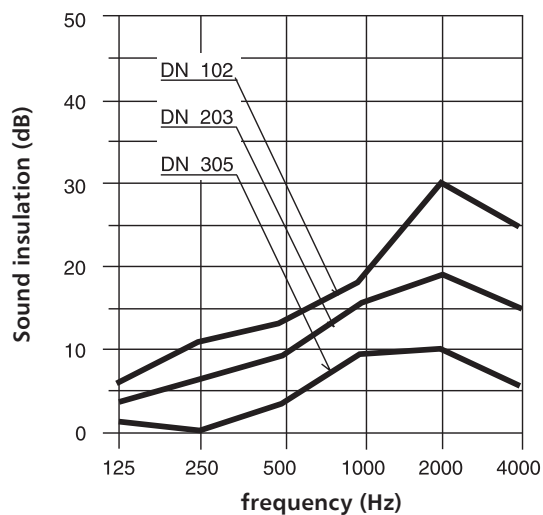


Chart 1: Noise levels in SONODUCT/SONOLIGHT
 Sound insulation thickness: 25 mm
 Duct section length: 500 mm

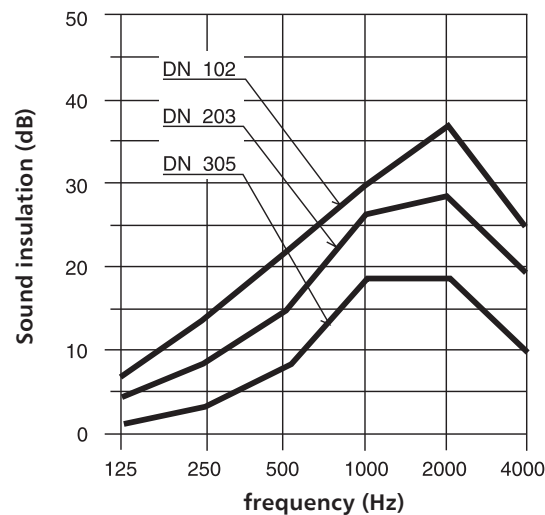


Chart 2: Noise levels in SONODUCT/SONOLIGHT
 Sound insulation thickness: 25 mm
 Duct section length: 1000 mm

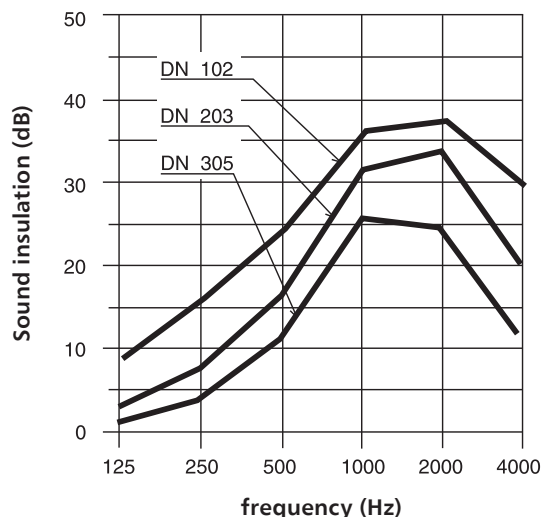


Chart 3: Noise levels in SONODUCT/SONOLIGHT
 Sound insulation thickness: 25 mm
 Duct section length: 1500 mm

IZODUCT/IZOLIGHT insulated ventilation ducts

Technical specifications

Flow resistance chart for IZODUCT/IZOLIGHT ducts

