



SONODEC 250

ACOUSTICALLY AND THERMAL INSULATED DUCTING

The **SONODEC 250** series consists of a perforated aluminum laminate inner duct thermally and acoustically insulated with glass wool and is provided with an aluminium laminated outer jacket.

An anti-migration barrier between the duct and the insulation wool adds strength and prevents the diffusion of insulation particles, as well as the following functions: improves acoustical performance, avoids cold bridges, leakage, pressure loss, protecting the R-value to be effected by humidity influences and avoid grow of fungus in the insulation wool.

APPLICATION

- Air-conditioning systems
- Air supply systems
- Preventing condensation in air ventilation systems
- Decreasing of machine noises

SPECIFICATIONS

| | |
|--------------------------|------------------|
| Article code: | DSX{Ø} |
| Temperature range: | |
| Inner duct: | -30 °C to 250 °C |
| Outer jacket: | -30 °C to 140 °C |
| Operating pressure: | up to +3000 Pa |
| Operating air velocity: | max. 30 m/s |
| Min. bending radius: | 0.54 x Ø + 25mm |
| Standard diameter range: | 65 – 635 mm |
| Standard length: | 10 mtr |

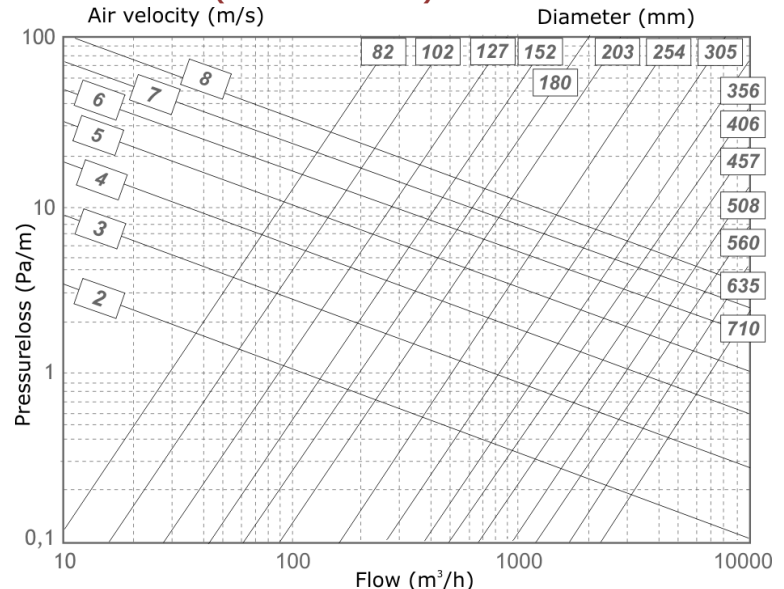
CONSTRUCTION

| | |
|---------------------|---|
| Inner duct: | alu/poly laminate |
| Barrier: | closed film |
| Glass wool blanket: | 25mm, 16kg/m ³ |
| Outer jacket: | alu/poly laminate |
| R-value glass wool: | 0.65 m ² K/W (ASTM C177-76) |
| Appearance: | aluminium |

CLASSIFICATIONS

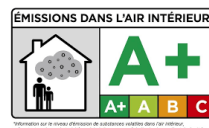
| | |
|----------------------|---------|
| EU (EN 13501-1): | B-s1,d0 |
| NL(NEN 6065/6066) | 1 |
| FR (NF): | M0/M1 |
| Marine certified MED | |

PRESSURE LOSS (STRAIGHT DUCT)



Regulation or protocol
French VOC Regulation

Conclusion



Version of regulation or protocol
Regulation of March and May 2011
(DEVL1101903D and DEVL1104875A)

The **SONODEC 250** fulfills all the requirements and are classified as specified within EN 13180:
Ventilation for buildings – Ductwork - Dimensions and mechanical requirements for flexible ducts.

The **SONODEC 250** is also available, on request, with a 50 mm glass wool layer, the article number is: DSX50{Ø}
R-value glass wool: 1.3 (50 mm) m² K/W (ASTM C177-76).

Reach/RoHs Compliant

Directive 2011/65/EU RoHS
Phthalates according to 1907/2006/EC REACH
Test result: Pass - The test items meets the requirements of the test specification



LIABILITY:

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PLEASE NOTICE:

The consultant is responsible for the actual installation and mounting of the product. The mentioned values with respect to temperatures are not appropriate to be used to determine the physical properties. These properties are also dependent on humidity and the temperature of the air inside and outside of the H.V.A.C. system.

TRADEMARKS:

SONODEC®, the DEC logo and DEC International are trademarks, or registered trademarks of Dutch Environment Corporation BV in the Netherlands and/or other countries.

RESTRICTIONS:

The SONODEC® ducts are not suitable for discharging combustion products from open fireplaces and oil-fired boilers. Neither are the SONODEC® ducts suitable for transporting air with a high concentration of acid and base.





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ACOUSTICALLY AND THERMAL INSULATED DUCTING

SOUND ATTENUATION
According to: **ISO 7235**

| SONODEC 250 | | (Test report nr. AB323-2 Peutz bv - The Netherlands) | | | | | |
|---------------------|---------|--|-----|-----|------|------|------|
| D _i (mm) | L (mtr) | Attenuation, dB - Mid-frequency, Hz | | | | | |
| | | 125 | 250 | 500 | 1000 | 2000 | 4000 |
| 82 | 1 | 16 | 25 | 34 | 38 | 30 | 20 |
| | 2 | 22 | 37 | 48 | 54 | 46 | 30 |
| | 3 | 30 | 43 | 41 | 43 | 55 | 43 |
| 102 | 1 | 11 | 25 | 31 | 36 | 23 | 15 |
| | 2 | 17 | 31 | 51 | 50 | 38 | 26 |
| | 3 | 20 | 44 | 51 | 52 | 51 | 33 |
| 127 | 1 | 11 | 19 | 23 | 27 | 25 | 19 |
| | 2 | 17 | 31 | 43 | 43 | 35 | 22 |
| | 3 | 21 | 40 | 45 | 48 | 47 | 27 |
| 160 | 1 | 15 | 26 | 22 | 27 | 18 | 13 |
| | 2 | 22 | 38 | 35 | 39 | 29 | 20 |
| | 3 | 33 | 43 | 39 | 43 | 39 | 27 |
| 203 | 1 | 6 | 13 | 15 | 18 | 11 | 10 |
| | 2 | 15 | 31 | 32 | 38 | 21 | 18 |
| | 3 | 16 | 36 | 40 | 42 | 28 | 24 |
| 254 | 1 | 9 | 11 | 12 | 10 | 7 | 11 |
| | 2 | 21 | 24 | 24 | 22 | 13 | 15 |
| | 3 | 29 | 33 | 31 | 30 | 19 | 24 |
| 315 | 1 | 8 | 8 | 8 | 7 | 6 | 8 |
| | 2 | 16 | 15 | 14 | 13 | 9 | 13 |
| | 3 | 23 | 23 | 21 | 19 | 12 | 17 |
| 457 | 1 | 8 | 8 | 6 | 6 | 5 | 7 |
| | 2 | 18 | 15 | 14 | 12 | 8 | 10 |
| | 3 | 24 | 21 | 20 | 18 | 11 | 15 |
| 508 | 1 | 7 | 8 | 7 | 7 | 6 | 7 |
| | 2 | - | - | - | - | - | - |
| | 3 | - | - | - | - | - | - |

| SONODEC 500 | | (Test report nr. AB323-5 Peutz bv - The Netherlands) | | | | | |
|---------------------|---------|--|-----|-----|------|------|------|
| D _i (mm) | L (mtr) | Attenuation, dB - Mid-frequency, Hz | | | | | |
| | | 125 | 250 | 500 | 1000 | 2000 | 4000 |
| 82 | 1 | 12 | 16 | 31 | 40 | 31 | 22 |
| | 2 | 18 | 31 | 50 | 58 | 48 | 37 |
| | 3 | 24 | 39 | 52 | 58 | 62 | 49 |
| 102 | 1 | 6 | 15 | 28 | 38 | 22 | 16 |
| | 2 | 18 | 31 | 50 | 59 | 36 | 26 |
| | 3 | 15 | 38 | 57 | 63 | 65 | 43 |
| 127 | 1 | 4 | 9 | 17 | 28 | 21 | 16 |
| | 2 | 10 | 20 | 42 | 54 | 29 | 21 |
| | 3 | 21 | 33 | 53 | 57 | 39 | 26 |
| 160 | 1 | 12 | 20 | 24 | 31 | 18 | 14 |
| | 2 | 21 | 38 | 45 | 51 | 28 | 20 |
| | 3 | 33 | 46 | 48 | 53 | 35 | 28 |
| 203 | 1 | 2 | 7 | 11 | 15 | 10 | 9 |
| | 2 | 11 | 19 | 34 | 41 | 20 | 17 |
| | 3 | 15 | 33 | 45 | 48 | 25 | 23 |
| 254 | 1 | 14 | 14 | 16 | 16 | 11 | 10 |
| | 2 | 27 | 27 | 29 | 22 | 11 | 15 |
| | 3 | 36 | 36 | 35 | 37 | 15 | 17 |
| 315 | 1 | 9 | 9 | 9 | 8 | 5 | 6 |
| | 2 | 19 | 19 | 20 | 15 | 10 | 14 |
| | 3 | 29 | 28 | 30 | 20 | 11 | 16 |
| 457 | 1 | 6 | 7 | 7 | 6 | 4 | 7 |
| | 2 | 18 | 18 | 19 | 13 | 8 | 11 |
| | 3 | 23 | 24 | 27 | 17 | 10 | 14 |
| 508 | 1 | 5 | 6 | 7 | 6 | 6 | 7 |
| | 2 | 16 | 14 | 15 | 9 | 8 | 8 |
| | 3 | 22 | 21 | 25 | 15 | 11 | 12 |

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