DEC INTERNATIONAL TECHNICAL SPECIFICATIONS





TSD SEMI FLEXIBLE SOUND ATTENUATORS

The **TSD** consists of a corrugated perforated aluminium inner duct and a corrugated outer duct with end spigots made of aluminium. The space between the inner and outer duct is filled with 25mm sound absorbing material. At request a barrier to prevent particle migration can be added.

APPLICATION

- Air supply systems
- Air conditioning systems
- Insertion loss damper
- Sound attenuator
- Decreasing sound of machines

SPECIFICATIONS

Article code: $TSD\{\emptyset\}/L$ Temperature range: -30 °C to 250 °C Operating pressure: up to +3000 Pa Operating air velocity: max. 10 m/s Min. bending radius: 2 to 3 x D2 Standard diameter range: 80 - 450 mm Standard length: 0,5+0,75+1 mtr

CONSTRUCTION

Inner duct: Perforated

corrugated aluminium

Glass wool blanket: 25mm, 16kg/m³

Outer duct: Corrugated

aluminium

R-value glass wool: 0.65m² K/W

(ASTM C177-76)

Appearance: aluminium

Sound attenuation, Dimensions and Weights

| TSD (Test report nr. A1453-1 Peutz by - The Netherlands) | | | | | | | | | |
|--|-------|-------------------------------------|-----|-----|----|----|----|------|------|
| Dn | L | Attenuation, dB - Mid-frequency, Hz | | | | | | | W |
| (mm) | (mtr) | 125 | 250 | 500 | 1k | 2k | 4k | (dB) | (kg) |
| 080 | 1 | 6 | 8 | 19 | 40 | 64 | 40 | 22 | 0.8 |
| 100 | 1 | 3 | 7 | 15 | 37 | 68 | 33 | 20 | 1.0 |
| 125 | 1 | 5 | 8 | 16 | 31 | 51 | 22 | 20 | 1.2 |
| 160 | 1 | 1 | 4 | 9 | 24 | 50 | 18 | 15 | 1.5 |
| 180 | 1 | 2 | 11 | 22 | 41 | 28 | 18 | - | 1.8 |
| 200 | 1 | 2 | 5 | 9 | 22 | 29 | 12 | 15 | 1.9 |
| 250 | 1 | 1 | 3 | 8 | 21 | 18 | 8 | 13 | 2.3 |

 D_i = Average attenuation

According: ISO 7235

| Diameter ØD1 – Ø | L = | |
|------------------|-----------|---------------|
| ש – בטש | | |
| 080 - 130 | 224 - 280 | D< |
| 100 - 150 | 250 – 300 | L1 |
| 125 - 180 | 280 - 355 | L2 |
| 140 - 200 | 300 – 355 | |
| 150 – 200 | 315 – 355 | D <u>></u> |
| 160 – 200 | 355 – 400 | L1 |
| 180 – 224 | 400 – 450 | L2 |
| 200 – 250 | 450 - 500 | |

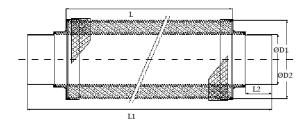
L = Effective length

D< Ø250

L1 = L + 120 mmL2 = 40 mm

D<u>></u> Ø250

L1 = L + 160 mm L2 = 60 mm



The **TSD25** fulfills all the requirements and are classified as specified within EN 13180: Ventilation for buildings – Ductwork - Dimensions and mechanical requirements for flexible ducts.



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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:

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RESTRICTIONS:

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

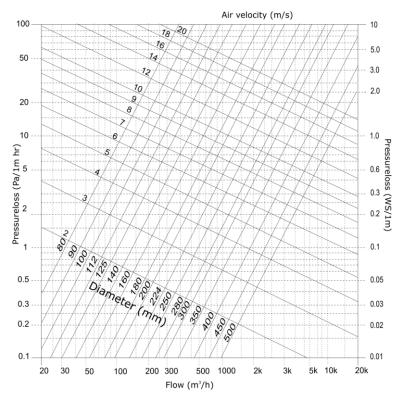
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PRESSURE LOSS (STRAIGHT DUCT)



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