



## TSDR

### SEMI FLEXIBLE SOUND ATTENUATORS

The **TSDR** consists of a corrugated perforated aluminium inner duct and a corrugated outer duct with end spigots made of aluminium with rubber sealing. 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: TSDR{Ø}/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+1,0+1,5 mtr

#### CONSTRUCTION

Inner duct: Perforated corrugated aluminium  
 Glass wool blanket: 25mm, 16kg/m<sup>3</sup>  
 Outer duct: Corrugated aluminium  
 R-value glass wool: 0.65m<sup>2</sup> K/W (ASTM C177-76)  
 Appearance: aluminium

#### Sound attenuation, Dimensions and Weights

TSDR (Test report nr. A1453-1 Peutz bv - The Netherlands)									
D <sub>n</sub> (mm)	L (mtr)	Attenuation, dB - Mid-frequency, Hz						D <sub>i</sub> (dB)	W (kg)
		125	250	500	1k	2k	4k		
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
200	1	2	5	9	22	29	12	15	1.9
250	1	1	3	8	21	18	8	13	2.3

D<sub>i</sub> = Average attenuation  
 According: **ISO 7235**

TSDR (Test report nr. A1453-1 Peutz bv - The Netherlands)							
D <sub>n</sub> (mm)	L (mtr)	Wall reduction, dB - Mid-frequency, Hz					
		125	250	500	1k	2k	4k
080	1	43	44	41	39	38	35
100	1	41	41	40	39	38	33
125	1	41	40	41	39	35	32
160	1	41	41	42	38	37	35
200	1	41	41	42	38	37	30
250	1	41	39	37	34	34	25

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

#### LIABILITY:

The information contained in this brochure was current on the publication date. DEC INTERNATIONAL reserves the right to make changes in details at any time without prior notice. In order to avoid misunderstandings, any interested party is advised to contact DEC INTERNATIONAL checking for any changes in materials and/or information after this brochure was published.

#### 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:

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 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.

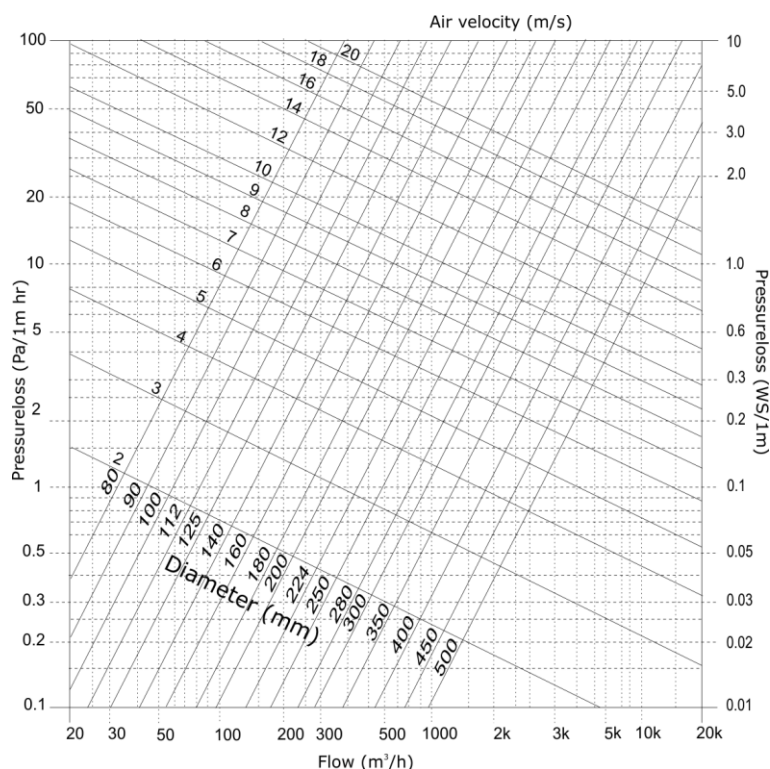




## TSDR

SEMI FLEXIBLE SOUND ATTENUATORS

### PRESSURE LOSS (STRAIGHT DUCT)



### Dimensions

#### Diameter (Dn) range ØD1 - ØD2 (mm)

080 - 130	224 - 280
100 - 150	250 - 300
125 - 180	280 - 355
140 - 200	300 - 355
150 - 200	315 - 355
160 - 200	355 - 400
180 - 224	400 - 450
200 - 250	450 - 500

L = Effective length

D < Ø250

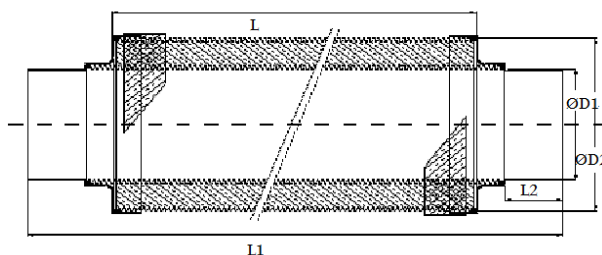
L1 = L + 120 mm

L2 = 40 mm

D ≥ Ø250

L1 = L + 160 mm

L2 = 60 mm



#### LIABILITY:

The information contained in this brochure was current on the publication date. DEC INTERNATIONAL reserves the right to make changes in details at any time without prior notice. In order to avoid misunderstandings, any interested party is advised to contact DEC INTERNATIONAL checking for any changes in materials and/or information after this brochure was published.

#### 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:

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 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.

