



## SONODEC 500

ACOUSTICALLY AND THERMAL INSULATED DUCTING

The **SONODEC 500** 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:	DSX50{Ø}/10
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 + 50mm
Standard diameter range:	085 – 254 mm
Standard length:	10 mtr

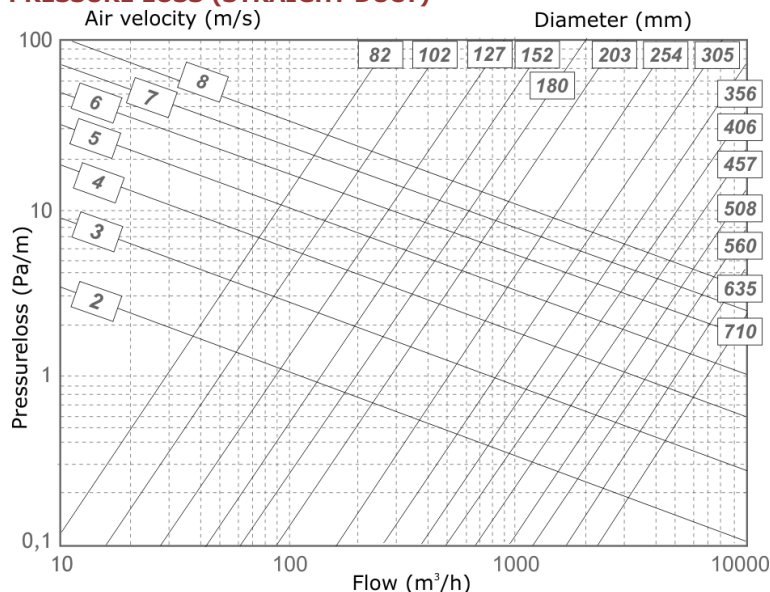
### CONSTRUCTION

Inner duct:	alu/poly laminate
Barrier:	closed film
Glass wool blanket:	50mm, 16kg/m³
Outer jacket:	alu/poly laminate
R-value glass wool:	1.3 m² K/W (ASTM C177-76)
Appearance:	aluminium

### CLASSIFICATIONS

EU (EN 13501-1):	B-s1,d0
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 500** 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 500** is also available, with a 25 mm glass wool layer, the article number is: DSX{Ø}  
R-value glass wool: 0.65 (25 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:

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:

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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### SOUND ATTENUATION

According to: **ISO 7235**

SONODEC 500		(Test report nr. AB323-5 Peutz bv - The Netherlands)					
D <sub>1</sub> (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

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