#### **DEC INTERNATIONAL TECHNICAL SPECIFICATIONS**



# **JUTCH ENVIRONMENT CORPORATIO**

### 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 Rvalue 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

DSX{Ø}

Decreasing of machine noises

#### SPECIFICATIONS

Article code: Temperature range: Inner duct: Outer jacket: Operating pressure: Operating air velocity: Min. bending radius: Standard diameter range: Standard length:

#### CONSTRUCTION

Inner duct: Barrier: Glass wool blanket: Outer jacket: R-value glass wool:

Appearance:

#### **CLASSIFICATIONS**

EU (EN 13501-1): NL(NEN 6065/6066) FR (NF): Marine certified MED

-30 °C to 250 °C -30 °C to 140 °C up to +3000 Pa max. 30 m/s 0.54 x Ø + 25mm 65 - 635 mm 10 mtr

alu/poly laminate

alu/poly laminate

closed film 25mm, 16kg/m<sup>3</sup>

0.65 m<sup>2</sup> K/W (ASTM C177-76)

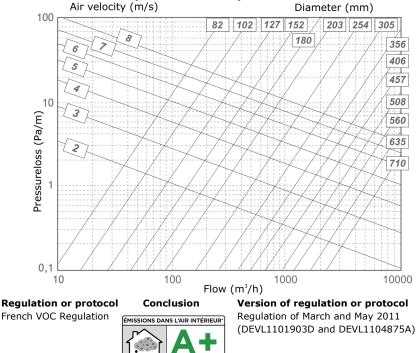
aluminium

B-s1,d0

M0/M1

1

#### PRESSURE LOSS (STRAIGHT DUCT)



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{ $\emptyset$ } R-value glass wool: 1.3 (50 mm) m<sup>2</sup> K/W (ASTM C177-76).

#### **Reach/RoHs Compliant**

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



#### RESTRICTIONS:

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<sup>®</sup> checking for any changes in materials and/or information after this brochure was published. 28/10/2024

#### PLEASE NOTICE:

The consultant is responsible for the actual installation and The consultant is responsible for the actual instaliation 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. DEC INTERNATIONAL - P.O. BOX 35 - NL-7500AA - ENSCHEDE - THE NETHERLANDS - WWW.DECINTERNATIONAL.COM

TRADEMARKS: SONODEC<sup>®</sup>, the DEC logo and DEC International are trademarks, or registered trademarks of Dutch Environment Corporation BV in the Netherlands and/or other countri

The SONODEC<sup>®</sup> ducts are not suitable 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.

#### **DEC INTERNATIONAL TECHNICAL SPECIFICATIONS**



# R DUTCH ENVIRONMENT CORPORATION

## SONODEC 250

ACOUSTICALLY AND THERMAL INSULATED DUCTING

#### SOUND ATTENUATION According: ISO 7235

SONODEC 250		(Test report nr. AB323-2 Peutz bv - The Netherlands)							
		Attenuation, dB - Mid-frequency, Hz							
$D_1$ (mm)	L (mtr)	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)							
	Attenuation, dB - Mid-frequency, Hz								
D1 (mm)	L (mtr)	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		



#### LIABILITY:

28/10/2024

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:

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. DEC INTERNATIONAL - P.O. BOX 35 - NL-7500AA - ENSCHEDE - THE NETHERLANDS - WWW.DECINTERNATIONAL.COM

#### TRADEMARKS:

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 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.